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UNITED STATES DISTRICT COURT

DISTRICT COURT OF NEVADA

LISA MCALLISTER, an individual; BRANDON SUMMERS, an individual; and JORDAN POLOVINA, an individual,

Plaintiffs,

vs.

CLARK COUNTY, a political subdivision of the state of Nevada,

Defendant.

Case Number: 2:24-cv-00334

APPRENDIX OF EXHIBITS TO: PLAINTIFFS MOTION FOR SUMMARY JUDGMENT (ORAL ARGUMENT REQUESTED) VOLUME I OF V

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DATED: December 18, 2025.

/s/ Christopher Peterson

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CERTIFICATE OF SERVICE

I hereby certify that I electronically filed the foregoing **Appendix of Exhibits** with the Clerk of the Court for the United States District Court of Nevada by using the court's CM/ECF system on December 18, 2025. I further certify that all participants in the case are registered CM/ECF users and that service will be accomplished on all participants by:

☒ CM/ECF

☐ Electronic mail; or

☐ US Mail or Carrier Service

/s/ Christopher Peterson
An employee of ACLU of Nevada

Exhibit 1

Deposition of Kaizad Yazdani, 30(b)(6) Designee for Clark County

McAllister, et al. vs Clark County

Deposition of

KAIZAD J. YAZDANI

July 17, 2025



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UNITED STATES DISTRICT COURT

DISTRICT COURT OF NEVADA

LISA MCALLISTER, an individual; BRANDON SUMMERS, an individual; and JORDAN POLOVINA, an individual,

Plaintiffs,

vs.

CLARK COUNTY, a political subdivision of the State of Nevada,

Defendants.

Case No. 2:24-cv-00334

DEPOSITION OF KAIZAD J. YAZDANI

Taken on Thursday, July 17, 2025

At 9:02 o'clock a.m.

At 4362 West Cheyenne Avenue

North Las Vegas, Nevada 89032

Reported by: Ann Salisbury, RPR, CCR 185

for testifying about the 30(b)(6) topics for today?

A. No.

Q. All right. I'm going to ask you just some background information about the pedestrian bridges. How many publicly owned pedestrian bridges are there in the resort corridor?

A. I believe at this time there are 17 pedestrian bridges.

Q. Okay. Are those the publicly owned pedestrian bridges?

A. Publicly maintained, yes, pedestrian bridges.

Q. Is there a difference between being publicly owned and publicly maintained?

A. Probably not. The only reason I said that is because at one point the bridges at Tropicana were owned by Nevada Department of Transportation. So probably at this point it could be construed as the same thing.

Q. So that would have been a publicly owned bridge. It just wasn't owned by Clark County; is that correct?

A. Correct.

Q. Now, are there privately owned pedestrian bridges in the resort corridor?

A. Yes, there is.

Q. Is there a public easement in relation to

interaction, you automatically make it safer.

Q. Are you aware of any documentation discussing the County's decision to start building pedestrian bridges in the resort corridor?

A. No, I'm not.

MR. BROWNING: Objection. Foundation.

Q. (BY MR. PETERSON) Were the bridges intended to be part of the overall sidewalk system in the resort corridor?

A. That was always the intent.

Q. Do you know if any of the -- any of the bridges in the resort corridor have ever been removed?

A. Not to my knowledge.

Well, I stand corrected. Just recently a pedestrian bridge was removed by the A's for their reconstruction of the stadium. But they're going to reconstruct it with their improvement.

Q. Which bridge was removed?

A. It's the bridge that goes on the southwest corner -- the southeast corner.

Q. The southeast corner of?

A. Of Las Vegas Boulevard and Tropicana.

Q. Do you know why they removed it?

A. It's part of their reconstruction.

Q. And you said they intend to put it back up?

Q. Are you aware of any recorded instances of injury due to crowding on the pedestrian bridges?
A. No.
Q. Are you aware of any recorded instances where emergency personnel could not access an emergency occurring on the pedestrian bridges?
MR. BROWNING: What topic is this, Chris?
MR. PETERSON: This goes back to -- I'll pull it up. Statistics, studies, and analysis related to pedestrian bridges.
MR. BROWNING: It's kind of a stretch, but okay.
THE WITNESS: I'm sorry, can you repeat?
Q. (BY MR. PETERSON) Go ahead.
A. Can you repeat that?
Q. Yeah, sure.
Are you aware of any recorded instances where emergency personnel couldn't access an emergency occurring on the pedestrian bridges?
A. No, sir.
Q. I want to talk to you a bit about the design of the bridges. Actually, you know what? I'm going to come back to that.
Let me ask you first about -- we've talked about some different departments at the County that

Q. Okay. And they're designed with an understanding that people might stop and stand on them?

MR. BROWNING: Objection. Vague, form.

THE WITNESS: The idea is not always pedestrians standing on it. It's also equipment. We're designing for dead load on a ped bridge.

Q. (BY MR. PETERSON) Going back to the width of the bridge and the idea of a 15-foot pedestrian walkway, why 15 feet?

A. That's the study recommendations for Level of Service C. To maintain Level of Service C, they recommended that we have a 15-foot sidewalk, based on the observations that were made, that would accommodate a Level of Service C or better for pedestrian experience. And out of that study came a new change in code that requires, for any development on the Strip, developers have to build a 18 -- 15-foot effective sidewalk or 18-foot-wide sidewalk. That is put into the code they have to build that.

Q. Can you explain to me what level of service means?

A. So level of service is -- and if you refer to the pedestrian study, it provides you your comfort level; right? Level of Service A is me being in this room by myself with Joel. Level of Service B is we all

being here. Level of Service C is, okay, all chairs are occupied, okay. That gives you comfort. Now you start having people starting to stand up. That starts to get Level of Service D. That's not a desirable -- you wouldn't want people standing in your conference room. And I'm not talking down. I'm just trying to explain.

Q. I understand.

A. So that's where -- you don't want that scenario; right? So you don't want people in a crosswalk -- in a sidewalk where they're bumping each other as they walk. So the level of service is that happy medium where you have sufficient sidewalk width, where you have sufficient width provided so you have a good level for pedestrians to traverse each other or walk along the corridor to go from point A to point B. When you start dropping below Level of Service C, it starts to create an uncomfortable -- I don't want to get too close to your space; right?

Q. Yeah. How is level of service calculated?

A. It's calculated on density, but I believe the new MUTZD has changed it, and I'm not well-versed with that.

Q. And by density, you mean crowd density, people per surface area?

A. Right. It's based on available sidewalk width

and the number of people.

Q. Okay. And so the 15-foot walkway is based on maintaining Level of Service C; is that correct?

A. Correct.

Q. And that would be based on expected pedestrian use on the bridges; is that correct?

A. On the bridges as well as the sidewalk too. So when we did the study and we said, hey, we have below Level of Service C, why in this area. Oh, we have a five-foot sidewalk. When we went and widened the sidewalk after our 2012 study and came back and restudied it in 2015, it didn't show congestion. It fell off the Level of Service C because we widened the sidewalk.

Q. And that's based upon -- is that based upon average recorded usage or highest recorded usage; do you know?

A. I think that would be on highest recorded usage because that was is there any time of the day where this sidewalk falls below Level of Service C. Because if it did, then we would have to post a time, place, manner sign saying you can't be here between these times and this time because we don't have Level of Service C.

Q. And actually I'm going to talk about this a

bit more later. But the Kimley-Horn study actually documents when the Level of Service C standard is not being met at specific times on the pedestrian bridges; is that correct?

A. Correct.

Q. Okay. But obviously you can't -- you're designing the bridges for the worst-case scenario -- is that correct? -- as far as level of service?

A. For the most part, yes, that's how we do it.

Q. Now, I just mentioned it. Obviously the level of service evaluation that you're relying upon, those are the Kimley-Horn studies; is that correct?

A. That's correct.

Q. Are there any other studies you're relying upon in making that determination?

A. No.

Q. And why -- what expertise does Kimley-Horn have that you're relying upon here in making this determination?

A. They have professional -- they are professional engineers qualified to conduct these kind of studies.

Q. I think that's actually -- it wasn't -- I guess the question is what kind of company is Kimley-Horn, is sort of my question?

speculation.

THE WITNESS: No.

Q. (BY MR. PETERSON) Okay. Do you know approximately how long per day they're under Level of Service C?

MR. BROWNING: Objection. Vague as to time.

THE WITNESS: No.

Q. (BY MR. PETERSON) Using the Kimley-Horn study, can you predict at what times they're likely to be under Level of Service C?

MR. BROWNING: Objection. Vague, form.

THE WITNESS: Yes.

Q. (BY MR. PETERSON) It might make sense to talk a bit about the data that you have available to you in relation to pedestrian traffic. What has Clark County done to collect information about pedestrian traffic on the pedestrian bridges?

A. We've hired Kimley-Horn to do a pedestrian study.

Q. Can you tell me what those specific studies have been?

A. It's the pedestrian studies of 2012, 2015, 2016, 2022 that was finalized in 2024. And then the 1994 study that I was not part of.

Q. Okay. So who did the 1994 study?

A. I think it was Lee Engineering.
Q. Any other data that you've collected related to pedestrian traffic on pedestrian bridges?
A. None that I am aware of.
Q. Any reason to believe that the data included in any of the studies is inaccurate?
A. No.
Q. Are there any other studies that -- I'll take that back.
Now, as far as information related to pedestrian traffic on the pedestrian bridges, why would the County collect that information?
A. County collected that information to evaluate the level of service for the whole Strip corridor for the pedestrian experience and to see what betterments we can do to improve level of service. What is it that we're seeing on the Strip for pedestrian movement.
Q. So one clear purpose was ensuring a certain level of service throughout the pedestrian walkways in the Strip corridor; is that correct?
A. Yes. So we had a study in '94. There were some recommendations there to make sure we have Level of Service C. We -- being about 18 years we hadn't studied it, we went back and looked at the same corridor and said what is the pedestrian movement like,

bit later.

And the study -- just to be clear, the information you have about pedestrian volume is based on what's contained in the Kimley-Horn studies; is that correct?

A. That's correct.

Q. You wouldn't have any other source of information?

A. No, I wouldn't.

Q. Do you have any data indicating that conditions conducive to crowd crush had ever formed on the pedestrian bridges in the resort corridor?

A. No, I don't.

Q. Did Kimley-Horn ever warn you all that there may be a crowd crush risk with the pedestrian bridges?

A. Not that I can recollect.

Q. Do you have any data related to emergency response times on the pedestrian bridges?

MR. BROWNING: Objection. Scope, speculation.

THE WITNESS: No, I don't.

Q. (BY MR. PETERSON) Do you have any data on how often emergency personnel had problems reaching an emergency on the pedestrian bridges?

MR. BROWNING: Objection. Scope, speculation.

THE WITNESS: No, I don't.

Q. (BY MR. PETERSON) Do you have any information on -- excuse me. Do you have any data collected on people stopping or standing on pedestrian bridges?

A. I believe there is.

Q. Where would that data be?

A. It would be in the pedestrian studies.

Q. So specifically the Kimley-Horn studies?

A. That's correct, sir.

Q. Is there any other source of data related to people stopping or standing on the pedestrian bridges?

A. No.

Q. Just to be clear, when I'm talking about stopping or standing, would that be considered the non-permanent obstructions? Is that what that is?

A. That's correct.

Q. So if someone is considered a non-permanent obstruction, they're stopping or standing on the bridge; is that fair to say?

A. For us, the non-permanent obstruction was defined as somebody who was a street performer or somebody who was doing illegal business like selling water bottles. That's a non-permanent obstruction at the time we studied it. If you were to stand there, take a picture, you would not be counted as a non-permanent obstruction.

Q. So maybe I could clarify. If someone is labeled a non-permanent obstruction, that person is stopping or standing on the bridge for whatever reason; is that fair to say?

A. A non-permanent obstruction is a person who's a street performer or doing an illegal business activity on the bridge or sidewalk.

Q. Would they be considered a non-permanent obstruction if they were moving?

A. No.

Q. Maybe I can clarify my question. Not everyone stopping or standing on pedestrian bridges would be considered a non-permanent obstruction; is that correct?

A. That's correct.

Q. But anyone considered a non-permanent obstruction would necessarily be stopped or just standing on the pedestrian bridge; is that fair to say?

A. Repeat that again.

Q. You have to have actually stopped on the bridge to be considered a non-permanent obstruction; is that fair to say?

A. Yes.

Q. Okay. And just to be clear about what activities -- sorry. You had mentioned before you'd need to be street performing -- let me rephrase that.

Q. Okay. To your knowledge -- and just to be clear, LVMPD is not a county agency; is that correct?

A. I don't know -- I don't know if that's completely accurate.

MR. BROWNING: Calls for a legal conclusion.

Q. (BY MR. PETERSON) Okay. To your knowledge, do you know -- I mean -- I think the County would know whether or not LVMPD is under their hospice.

MR. BROWNING: You would think. But I had a deposition with Undersheriff Walsh where he believed he was an employee of the County. I think it's a matter of law in the Ninth Circuit that LVMPD is a separate legal entity.

MR. PETERSON: Okay. Just to be clear, I mean, can we just use it as a baseline for this conversation?

MR. BROWNING: Yes, that's fine.

Q. (BY MR. PETERSON) LVMPD is not -- is a separate governmental entity from Clark County. So you're not representing LVMPD as far as this deposition is concerned?

A. That's right.

Q. So I guess what I'm asking, as far as the County, who you're the designee for, does it have any data related to crime occurring on the pedestrian

bridges?

A. That's correct.

Q. Do you know if they have that data, the County?

A. I'm not aware that they have any data.

Q. Does the County have any data related to levels of, quote, criminal disorder, unquote, occurring on the pedestrian bridges?

A. I'm not aware of any.

Q. Are you familiar with the report that was produced by Dr. Sousa?

A. I skimmed through that.

Q. Okay. That report has some information related to disorder; is that correct?

A. Yes.

Q. So the County has that report; is that correct?

A. The -- I do not have -- I now have the report, but I -- before this deposition, I did not have that report.

Q. Okay. Besides what is contained in that report, does the County have any other data related to criminal -- criminal disorder occurring on their bridges?

A. Not that I'm aware of, sir.

Q. Okay. Besides the Kimley-Horn studies from 2012, 2015, the update in 2016, and the report from 2022, and in turn the pedestrian traffic study from 1994, does the County have any other data related to crowd density on the pedestrian bridges?

A. Not that I'm aware of, no.

Q. Besides the studies that I just listed, does the County have any data related to crowd crush or crowd crush risk occurring on the pedestrian bridges?

A. Not that I'm aware of.

Q. Okay. Does the County have any data on how long a person who stops to take a picture on the pedestrian bridges remains stationary?

A. No.

Q. Does the County have any data on how long a person who stops to sleep on a pedestrian bridge stays stationary?

A. Repeat that.

Q. So does the County have any data on how long a person who stops on a pedestrian bridge to sleep remains stationary on the bridge?

A. I'm not able to answer that because I don't know what was included in the Kimley-Horn raw data. So that could be there or it couldn't be there. I can't confirm either way.

Kimley-Horn in conducting its 2022 study?

A. No.

Q. So Kimley-Horn generated its own data?

A. Kimley-Horn did everything.

Q. How many drafts of the 2022 study were reviewed by Clark County employees?

A. I think there was only one draft, to the best of my recollection.

Q. Do you know when you received that draft?

A. No, I can't recollect, sir.

Q. Is there anything that would help you recollect when the drafts came in?

A. Probably came late '22, early '23, is what I can tell you.

Q. Did you make any changes to the draft that you received?

A. Nothing technical oriented. More like formatting, more like readjustment, or just like more to change the technical jargon to more simplistic way of explaining it. That's it.

Q. Did you suggest that they change any of their recommendations?

A. No. Actually, I don't think I remember having them change any of those. Because what -- many of the recommendations repeated themselves from the 2012, 2016

Q. (BY MR. PETERSON) All right. This is Exhibit 4. Is this an email exchange between you and employees at Kimley-Horn?

A. Which ones, sir?

Q. Just this email chain. Is that fair to say?

A. Yes.

Q. Okay. It's talking about a draft of the --

MR. BROWNING: Let me see it.

MR. PETERSON: Sorry. I'll hand it to opposing counsel. Here, I'll just give you a copy, Joel.

And actually, let me just state really clearly Exhibit 4 is CC 375998 through CC 376002.

Q. (BY MR. PETERSON) Do you recognize that document? You recognize that document?

A. Oh, this email? Yes. I'm sorry. Yeah.

Q. Now, turning to CC 376002, there's an email from Devin Moore to you; is that correct?

A. Yes.

Q. And here it's saying "Please see the attached draft 2022 Las Vegas Boulevard Pedestrian Study. Click here to download the draft report."

Did you look at that draft report?

A. Yes, I did.

Q. Okay. So you would have had a copy of that by

December 16th, 2022?

A. Yes, sir.

Q. Okay. Now after receiving that draft, did you make any substantive changes to the draft?

A. I don't believe so.

Q. Okay. Are you aware of any substantive changes made by Kimley-Horn after they sent you -- sorry. Let me rephrase that.

To your knowledge, did Kimley-Horn make any substantive changes to the draft after they sent it to you on December 16, 2022?

A. The only change they probably made on -- from the draft to the final report would have been the change in the code.

Q. Okay.

A. In the final appendices that were attached.

Q. What do you mean a "change in the code"?

A. The ordinance change that defined flow zone. So when the study was initiated and, I believe, the draft issued, I don't know if flow zone was adopted by the Board of County Commissioners.

Q. Would any of the data have changed?

A. I wouldn't think so.

Q. Now, if you turn to CC 376 -- actually, before I do that, I want to ask you this. Did you share this

ordinances -- or, I'm sorry. Let me rephrase it.

Is it fair to say that ordinances that ban obstructing walkways are only useful if they have an officer present to enforce them?

MR. BROWNING: Objection. Misstates prior testimony, calls for speculation, foundation, scope.

You can answer.

THE WITNESS: I don't know that for sure. Some may just comply with it.

Q. (BY MR. PETERSON) Now, according to these tables, looking at periods with -- where the hours were exceeding LOS -- let me rephrase this.

Before the 2022 pedestrian study -- actually, I'll take that back.

I guess my question -- there are grade-level sidewalks with longer periods where LOS is worse than C; is that correct?

A. That's correct.

Q. For example, the Casino Royale access drive to moving ramp would be an example; is that correct?

A. Yes, that's correct.

Q. To your knowledge, did Clark County contemplate having a permanent pedestrian flow zone in that area?

MR. BROWNING: Objection. Calls for

speculation.

THE WITNESS: I think we have the time, place, and manner sign for that.

Q. (BY MR. PETERSON) And that deals with that issue?

A. Should deal with that issue. That's one where you're constrained with what you can do with the improvements because it's so tight. But if it were to redevelop, they would have to put in an 18-foot sidewalk.

Q. How long has there been a time-based restriction for that stretch of sidewalk?

A. It's based on the study. There are signs out there.

Q. Where do you have the time-based restrictions currently at the grade-level sidewalk?

A. It's in the studies. It shows the maps where all those are, and you can see it in the field. I don't know that -- I'd have to look through the whole study to give you locations.

Q. So the time-based -- there's a map that shows where the current time-based restrictions are located?

A. It's physically out in the field, and it's shown in the table where the time, place sign should be.

Q. And that's reflected in the final study, which

would be Exhibit 5?

A. That is reflected in this study but has the signs that are based on the 2015 study.

Q. Are there plans to impose any additional time-based restrictions based upon the findings of the 2022 study?

A. Not at this time.

Q. Were there new locations identified that could benefit from time-based restrictions?

A. No. I think the locations, the times that were identified already existed.

Q. The time-based restriction signs, were those ever posted on the bridges?

A. Yes, they were posted on the bridges.

Q. Okay. And that was based on the previous Kimley-Horn studies?

A. That's correct.

Q. Did this study study whether or not those time-based restrictions were effective in dealing with LOS issues? Let me rewind.

Were the time-based restrictions on the pedestrian bridges that you're referencing, were those in place prior to the 2022 pedestrian study?

A. Yes.

Q. Did the 2022 pedestrian study evaluate whether

THE WITNESS: This pedestrian study was not to evaluate any of that.

Q. (BY MR. PETERSON) Okay. So, again, does the -- does Clark County have any data to support the contention that non-permanent obstructions contribute to crime on the pedestrian bridges?

A. No.

Q. Does Clark County have any data establishing that non-permanent obstructions contribute to disorder on the pedestrian bridges?

MR. BROWNING: Objection. Vague as to "data."

THE WITNESS: Define "disorder."

Q. (BY MR. PETERSON) The term's used in the Clark County Ordinance 16.13.010. So how the County's using the term.

A. Okay. No.

Q. Did the County discuss with Las Vegas Metropolitan Police Department about increasing enforcement of preexisting ordinances on the pedestrian bridges to address non-permanent obstructions prior to the passage of the pedestrian flow zone ordinance?

A. I'm sorry, can you repeat that one more time?

Q. Do you know whether or not the County --

MR. BROWNING: And, Chris, can I just make a belated objection. I'm looking at my list here, and I

flow zones?

A. No.

Q. Do you know who first made that request?

MR. BROWNING: Objection. Calls for speculation, scope.

MR. PETERSON: This also may belong to the other deponent, the history of the ordinance. That's fine. As far as who made that request or how that came about, we can save that for the other deponent.

Q. (BY MR. PETERSON) Did Public Works ever inform county management that it was concerned that emergency personnel could access the bridges in a timely fashion?

A. No.

Q. Did Public Works ever notify county management there was concern that crowd crush might occur on the pedestrian bridges?

A. No.

Q. Did Public Works ever notify county management that it had concerns the bridges might have higher crime rates than grade-level sidewalks?

MR. BROWNING: Objection. Calls for speculation.

THE WITNESS: No.

MR. PETERSON: I was going to ask if LVMPD

Q. Now, you had mentioned previously you were personally unaware of any recorded instances of crowd crushes on the bridges. Let me ask this. You said you were -- I want to clarify your answer there. Is Clark County unaware of any instances of crowd crush on the bridges?

A. That's correct.

Q. Okay. And is Clark County unaware of any recorded instances of injury due to crowding on the bridges?

A. That's correct.

Q. And is it correct to say that Clark County is unaware of any recorded instances where emergency personnel couldn't access a bridge to respond to an emergency?

A. That's correct.

Q. Now, I had asked you about a meeting you had with William Sousa and the calculations done there. I think that based upon your testimony today you do not recall the contents of that meeting?

A. Unfortunately, I don't.

Q. Okay. Would it be fair to say, though, that employees at Clark County would be familiar with the contents of that meeting potentially?

A. That would be me. The employee of that

CERTIFICATE OF WITNESS

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* * * * *

I, Kaizad J. Yazdani, witness herein, do hereby certify and declare under penalty of perjury that the within and foregoing transcript, including any corrections stated above, is a true and correct transcription of my testimony contained therein; that I have read, corrected, and do hereby affix my signature to said deposition taken on Thursday, July 17, 2025.

Executed this _____ day of _____, 2025, at _____.
(City/State)

_____
Kaizad J. Yazdani, Witness

CERTIFICATE OF REPORTER

STATE OF NEVADA)
SS:
COUNTY OF CLARK)

I, Ann Salisbury, Certified Court Reporter for the State of Nevada, do hereby certify:

That I reported the taking of the deposition of the witness, Kaizad J. Yazdani, commencing on Thursday, July 17, 2025, at 9:02 o'clock a.m.

That prior to being examined the witness was by me duly sworn to testify to the truth.

That the foregoing transcript is a true, complete, and accurate transcription of the stenographic notes of the testimony taken by me in the matter entitled herein to the best of my knowledge, skill, and ability.

That prior to the completion of the proceedings, the reading and signing of the transcript was requested by the witness or a party.

I further certify that I am not a relative or employee of an attorney or counsel of any of the parties, nor a relative or employee of an attorney or counsel involved in said action, nor a person financially interested in the action.

IN WITNESS WHEREOF, I have hereunto set my hand in my office in the County of Clark, State of Nevada, this 5th day of August, 2025.

Ann Salisbury

Ann Salisbury, RPR, CCR 185

Exhibit 2

Statement on X posted by @ClarkCountyNV regarding CCC 16.13.030 on Jan. 2, 2024, 6:30 PM, M-S 00031

Post

Clark County Nevada
@ClarkCountyNV

The Board of Clark County Commissioners today passed an ordinance that would allow for free movement on the pedestrian walkways to reduce crime and enhance safety along the Las Vegas Boulevard. The Pedestrian Flow Zone ordinance will help to ensure our world-class tourism destination remains a safe place for people to visit and transverse. Through this ordinance, to maintain the safe and continuous movement of pedestrian traffic, it is unlawful for any person to stop, stand, or engage in an activity that causes another person to stop or stand within any Pedestrian Flow Zone. This is not interpreted to mean that tourists and locals cannot take photos along the Boulevard while on a pedestrian bridge, but rather is intended to maintain the safe and continuous movement of pedestrians on the bridges to ensure pedestrian safety on the bridges.

The ordinance is narrowly written to accomplish the County's important objective of reducing the incidence and risk of crime and serious safety issues on pedestrian bridges and allows pedestrians to freely and safely get to their desired location.



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Exhibit 3

Deposition of Abigail Frierson, 30(b)(6) Designee for Clark County

McAllister, et al. v. Clark County

Deposition of:
Abigail Frierson

September 19, 2025

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UNITED STATES DISTRICT COURT

DISTRICT COURT OF NEVADA

* * * * *

LISA MCALLISTER, an individual; BRANDON SUMMERS, an individual; and JORDAN POLOVINA, an individual,	)	
Plaintiffs,	)	
vs.	)	CASE NO. 2:24-cv-00334
CLARK COUNTY, a political subdivision of the state of Nevada,	)	
Defendant.	)	

DEPOSITION OF ABIGAIL FRIERSON

Taken on Friday, September 19, 2025

At 9:09 a.m.

At 602 South Tenth Street

Las Vegas, Nevada

Reported by: Janice David, CCR No. 405

Q. Correct?
A. Uh-huh.
Q. And you're not here to testify on behalf of Metro.
A. Correct.
Q. Okay. The -- the -- we have a designee from Metro -- designees from Metro coming next week. But your testimony is not binding on Metro. But you understand it's binding on the county. Right?
A. Yes.
Q. Okay. So, the county -- the county did not look at any studies, data, or evidence other than that which was presented at the public hearings.
Is that correct?
A. To my knowledge, correct.
Q. And when you say to your knowledge, you understand that you are required today to have collective knowledge for the county.
A. Yes.
Q. Okay. Do you understand -- I didn't cover this during the rules, but your counsel may object from time to time today. And while this is a formal legal proceeding -- we don't have a judge here; right, to rule on objections?
A. Uh-huh.

the -- the contention was that they all stemmed from pedestrian crowding on pedestrian bridges. Right?

A. I don't know if I'd characterize it exactly like that. I think that it was one of the concerns. I don't know if that's the whole concern.

Pedestrian crowding does lead to some of the issues they were trying to resolve.

Q. What -- what does the -- the enacted ordinance, this ordinance, what does that ordinance address, besides stopping and standing or causing other people to stop and stand?

A. Well, I think specifically that's what it addresses in the -- the ordinance.

Are you asking why stopping and standing was what was in the ordinance?

Q. I'm ask -- I'm asking -- I'm trying to understand what the other things that it addresses, besides -- besides pedestrian crowding caused by people that are stopping and are standing or are causing other people to stop and stand and gather.

A. I think that it's meant to address the things caused by stopping and standing and crowding.

Q. Okay. So, yes, we're on the same page --

A. Okay. Yes.

Q. -- that they're -- that we talk -- there was

these other words. And I don't believe the word "disorder" came up until later when -- after you hired Dr. Sousa, but these concerns that we've been talking about, it's alleged that all of these concerns stem from pedestrian crowding caused if people aren't walking and moving. Right?

A. Yes.

Q. Okay. So, the purpose -- the purpose of both -- the reason the county was looking at both ordinances was -- was similar. Right?

A. I -- I believe they were similar.

Q. When -- so -- but let's just go back. I know we started talking about both. And it might get -- they might get jumbled together. But let's just talk about the -- the -- the abandoned ordinance. That kind of makes the ordinance seem so sad -- but the abandoned ordinance.

Do you recall what feedback -- what feedback the county received before it decided to introduce that ordinance, what feedback it had received from anyone that prompted the possible ordinance?

A. I don't -- you mean the feedback before what was received in the meeting?

Q. Correct.

A. I don't know if I know. I mean, as I -- I

know that there was feedback received that there was this concern about the pedestrian bridges. I mean, that would have prompted from Metro. But I think that what they received before was likely to have been what was presented in the hearing.

Q. Okay. So, I think it's fair to say -- and you didn't look at any studies, data, or evidence in preparation for today. And I'm not aware of any that the county has produced either. I think it's pretty clear and fair to say that the only data, evidence, and studies that the county looked at for either the abandoned ordinance or this ordinance, the enacted ordinance, was presented at the hearings. Right?

A. Yes.

MR. BROWNING: Objection: form, testifying.

THE WITNESS: I'm not aware. Sorry.

Do I answer?

MR. BROWNING: I -- I'm -- I was trying to figure out what the question was.

MS. MCLETCHIE: There was a comma, right, question mark, I think.

THE WITNESS: Sorry. Can you repeat the question?

BY MS. MCLETCHIE:

Q. Okay. So, the -- I think you answered it.

We -- can --

MS. MCLETCHIE: Do you want to read back the question, Court Reporter.

(Record read by reporter.)

MR. BROWNING: Objection. Same objections, also compound.

But you can --

THE WITNESS: There is two questions. So, yes, yes to the first question.

BY MS. MCLETCHIE:

Q. So, I'll just -- I'll make it easier. You've already answered it, but I'll re-ask -- I'll re-ask some questions to make the record clearer. Okay.

So, first we've already talked about the fact that you didn't look at any data, studies, or evidence that the county considered when looking at the abandoned ordinance or the enacted ordinance. Right?

A. Outside of the -- was -- was presented at the hearings, correct.

Q. And are you aware of any data, studies, or evidence that the county produced in litigation aside from what was discussed at public meetings on either the abandoned ordinance or the enacted ordinance?

A. No, I'm not.

Q. So, everything would be in the public record.

A. I'm not aware of anything that's not in the public record.

Q. Okay. And you understand that -- that you were required to -- to prepare today to answer questions about all the data, studies, and evidence the county looked at in -- in developing the enacted ordinance. Right?

A. Right.

Q. And when you -- so, when you say you're not aware of any, if there was any, you were required to look -- find it and look at it and tell me about it today. Right?

A. Correct.

Q. Okay. And you don't have any to tell me about.

A. Correct.

Q. Okay. I just want to make -- I want -- I don't want to belabor the point, but I just want to make it clear. Okay.

So -- so, in the -- it's my understanding -- I am not an expert on legislative process but -- at the county or otherwise, but the -- it's my understanding that -- that -- that before a ordinance gets introduced usually one of the commissioners has an -- somebody decides they want to introduce it and they

be a resolution by stipulation. And the parties discussed those issues and agreed that for Topics 7 and 10 -- Topic 7 is all studies, data, or evidence considered by defendant regarding pedestrian flow safety or other justifications for CCC 16.13.030. And Topic 10 is all facts relied -- you -- I'm sorry. Topic 10 is all facts you, i.e., the county, relied upon in enacting CCC 16.13.030.

For these two topics the parties have agreed that the county is bound by Ms. Frierson's testimony and it is the county's position that the -- any studies, data, or evidence considered by defendant regarding pedestrian flow safety or other justifications for CCC 16.13.030 and all facts the county relied upon in enacting CCC 16.13.030 are in the public record for 16.13.030 or the ordinance that has been referred to today as the abandoned ordinance, which is Bill No. 4-19-22-1.

Is that correct, Mr. Browning?

MR. BROWNING: That's correct.

BY MS. MCLETCHIE:

Q. Okay. While we're talking about it, the -- while we're talking about studies and -- and data, we're going to talk about some -- we're going to -- we may as well address some related topics.

aware of any studies other than a Kimley -- one Kimley-Horn study.

A. I guess I'm just a little stuck on the term "study." I -- I know that this is traffic studies that get done on the strip. I don't know if there has ever been any other studies, in the history of the county, that regards pedestrian bridges. But those are the -- those are the ones I'm aware of.

Q. Okay. So, the --

A. Me, the county.

Q. You, the county.

A. Uh-huh.

Q. So -- so -- because your testimony is a little unclear.

You're saying there must be other studies but that's the only study the county is aware of.

A. No. I just -- the question is just so broad. But -- but that's what the county is aware of.

Q. The -- okay. So, on topic -- on Topic 25 the -- well, let's stick on -- on Topic 8 for a second.

We've talked about criminal disorder, I believe is the term from Dr. Sousa's report.

A. Yes. I mean, there is a couple different disorders. I think there is social, physical, and

criminal disorder.

Q. Okay. What is social disorder?

A. I think that was -- I believe the examples were, like, prostitution, aggressive, panhandling, things like that. And then -- I'm sorry -- instead of moving on to other definitions. But that's what I -- those are the sort of conduct that I understood to be included in social disorder.

Q. Are some of those things also crimes?

A. Some of them are crimes but not all of them.

Q. What's physical disorder?

A. Physical disorder were more things like evidence of urination and defecation, broken glass.

Q. When you say "evidence," I'm asking -- I'm not asking about evidence. I'm just asking what the word means.

A. What evidence means?

Q. What -- no, what physical disorder means.

A. Oh. So, disorder in general, I think, was -- it could be crimes. It's low-level things that -- that can heighten people's fear and anxiety, thereby creating situations that could be unsafe.

Q. Okay. Are you aware of the -- can you provide any more clarity on what social disorder means?

A. So, I think it would be conduct that would --

incivilities or crimes that could make people -- heighten people's fear, thereby elicited reactions out of them that could be -- cause unsafe situations.

Q. I'm sorry. You said incivilities?

A. I think incivilities were words that they use as well. It could be something as simple as being rude, all the way up to crimes.

Q. Okay. So, people being rude, is that one -- is that -- was that your understanding, that that was one of the aims of -- avoiding people being rude, was that one of the aims of the ordinance?

A. No. I would say avoiding the situations that cause -- that elicit those reactions from people that can cause unsafe situations.

Q. So, it's -- it's -- I'm sorry. Can you say that again? Avoiding situations that can elicit those responses?

A. Yeah. It's -- the disorder elicits responses that are creating the -- that could create the unsafe situations.

Q. Okay. So, the disorder can create unsafe situations. And we talked about this earlier disorder. This disorder is caused by pedestrian crowding. Right?

MR. BROWNING: Objection: misstates prior

testimony.

THE WITNESS: I think crowding was one of the considerations but not the only consideration.

BY MS. MCLETCHIE:

Q. We talked earlier, and you mentioned -- I think you mentioned some things that had emanated the ordinance, like cleanliness concerns and elimination and safety on bridges, I think even a dog bite. And you talked about public safety, and you mentioned economic vitality. And -- but I believe that we agreed that those were all -- those were all concerns created by potential crowding and -- and people not moving on the pedestrian bridges.

Is that correct?

MR. BROWNING: Objection: form.

THE WITNESS: I don't believe disorder is just crowding. It -- maybe I'm misunderstanding your question.

BY MS. MCLETCHIE:

Q. So, how is the -- how does -- how does the -- how does -- how does the ordinance address disorder other than by avoiding people stopping and standing or crowding?

A. The ordinance creates pedestrian flow zones, which decrease crowding, which can increase disorder.

Q. Okay. So, at -- so, I understand -- and I still have to understand more about what disorder means. But -- so, I think -- I think we do agree that when you talk about disorder, the county was trying to address disorder created by a lack of pedestrian movement on the pedestrian bridges. Correct?

A. Yes.

Q. And lack of movement is crowding. Right?

MR. BROWNING: Objection: form, vague.

THE WITNESS: A lack of movement can cause crowding, which can increase disorder.

BY MS. MCLETCHIE:

Q. Okay. So, what other -- what other lack of movement, besides crowding, can cause disorder?

A. I think it wasn't just crowding. It was also blocking, causing a trapped feeling, which I think is increased on elevated, small spaces.

Q. Can you say that again? I'm sorry. Causing a crowd to...

A. Oh, I'm sorry.

Q. Causing --

A. What did I say?

Q. Causing a crowd to gather? Is that what you're referring to?

A. No, although I think that's one of the

concerns about crowding. I think when you're also concerned about blocking escape paths, blocking ingress and egress were -- were major considerations.

Q. Okay. And what else? What else can -- what other -- how else, besides crowding, can lack of movement cause disorder?

A. It can also decrease ability to respond, for law enforcement, to disorder.

Q. Because there is a crowd?

A. The -- the lack of movement --

Q. Right.

A. -- create situations that I think can make it more difficult to respond to disorder.

Q. Why -- how does lack of movement make it more difficult for police to respond?

A. Well, crowding and blocking, I think, impacts people's ability to get to whatever they're trying to get to.

Q. Okay. So, I just wanted to go back.

A. And ability to see --

Q. An ability to --

A. -- what's happening.

Q. Right. But it's -- the ability to see is -- is not caused by lack of movement by one person. It's caused by crowding and blocking. Right?

A. I'm sorry. I didn't know we were just talking about lack of movement by one person. I thought we were talking about lack of movement in general.

Q. Well, you -- I -- you had testified that there was something besides crowding that the ordinance was trying to address, and I asked what that was, and you said lack of movement. And so I thought you meant something different from crowding. So, I'm just trying to understand, because I -- I -- I'm not Dr. Sousa. I'm not smart enough to understand what disorder might mean. So, I'm trying -- I'm trying to have you help me -- help break it down for me.

And you said, besides -- my -- my understanding of it, my layman's understanding, was that the ordinance was trying to address crowding and that -- and -- and Dr. Sousa's report contends that there are conditions caused by crowding on the bridge. And when we've been talking about it, I think you've mentioned blocking escape paths, for example. And we mentioned causing a crowd, having a crowd gather. And we've talked about crowding.

What else? What else leads to possible -- I understand there is some different -- other concerns about disorder itself once I understand what disorder is, but they're all caused -- it seems like they're

all caused not by just lack of movement of one person but of pedestrian congestion or crowding. Right?

A. I think when we're discussing disorder on the pedestrian bridges specifically, I think those are the two primary -- or the three things I mentioned are the three primary ways. Lack of movement of potentially singular but multiple people can cause issues. But off the pedestrian bridge would probably be a different consideration.

Q. Okay. I'm not asking about off of a pedestrian bridge. But we can -- we'll talk about off the pedestrian bridges --

A. Sure.

Q. -- later, but I'm talking about on the pedestrian bridge.

When you say it could be caused by one person, do you mean the -- are we talking about blocking? Is that what -- is that -- is that what you indicated?

A. Yeah. I mean, we're talking general categories. It's hard to encapsulate every situation, scenario that could constitute disorder when you're talking about anything from incivilities, up to actual crimes.

Q. Okay. I understand. It is hard to -- to define disorder, but I'm not asking you -- right now

Q. Okay. But have you seen anybody -- well, let's say culinary wanted to -- to display protest signs on the pedestrian bridges.

Have you ever seen protest activity, not people that are protesting, crossing the street on the street level -- on the -- the street-level streets, but have you ever seen a protest where everyone is constantly moving?

A. I can't remember my days undergrad and Berkley. I think -- I don't know that I have personally ever seen one where no one has ever stopped, but I think that as long as protesters kept moving on the bridge, they have the ability to stop when they're down off the bridge, if they choose to do so.

Q. Okay. But protesters are not allowed -- is it -- are protesters allowed to stop on the pedestrian bridge?

A. No one is allowed to stop on the pedestrian bridge unless waiting, if their intent is to stop moving and their intent is for to stop someone else from moving, except for folks waiting for the elevator.

Q. Okay. I think the way you talked about it earlier was an exception, but it's now your testimony

from what you're saying. You think "but rather" clarifies it. I'm asking if it -- the intent of the county is that it is, in fact, the ordinance does mean that tourists and locals cannot take photos along the boulevard while on a pedestrian bridge so long -- if they are stopped.

MR. BROWNING: Objection: asked and answered.

THE WITNESS: Yeah. I can answer?

BY MS. MCLETCHIE:

Q. Can a tourist stop -- can a tourist or a local stop on the pedestrian bridge and take a photo?

MR. BROWNING: Objection. Objection: incomplete hypothetical, speculation.

Go ahead.

BY MS. MCLETCHIE:

Q. Yes or no?

A. Depends on the circumstances.

Q. And what are those circumstances?

MR. BROWNING: Objection again: speculation, incomplete hypothetical.

BY MS. MCLETCHIE:

Q. Is there an exception -- I'll ask my question a different way, Ms. Frierson.

A. Sure.

Q. Is there an exception, in the ordinance, on

the prohibition on stopping or standing -- is there a prohibition -- is there a prohibition for -- I'm sorry.

Is there an exception for taking photos?

A. There is no exception for taking photos in the ordinance.

Q. So, it is unlawful for any person to stop or stand within a pedestrian flow zone and take a photo; right, period?

A. If they had the requisite intent to stop or stand, yes.

Q. So, let's look at this ordinance for a second. I see -- I see two things that are criminalized.

A. Where are we looking?

Q. 16.13.030. It says -- it has two things; right, that it -- that are unlawful. One is to stop or stand with any -- with -- within any pedestrian flow zone. Right?

A. Right.

Q. And then the second, there is no -- it doesn't say with intent. Right?

A. It does not say with intent.

Q. And then separately it says in -- or engage in any activity while within a pedestrian flow zone with the intent of causing another person who's in a flow

Is that fair to say?

A. Yes. I think that's fair to say after our deliberative process.

Q. Okay. And we've already talked about there was no evaluation, through a study or other analysis of data or facts, about whether having a First Amendment exception would still allow the county to achieve its goals. Right?

A. Correct, because I think it's a legal discussion.

Q. Pardon me?

A. Because of we considered it a legal discussion.

Q. Do you have any reason to -- do you have any reason to believe that having a First Amendment exception would have thwarted the county's goals?

MR. BROWNING: Objection: calls for speculation.

BY MS. MCLETCHIE:

Q. You can answer.

A. Anything that impacts the pedestrian flow could have thwarted the goals to maintain -- to -- to promote safety on those pedestrian bridges.

Q. And what's the factual basis for the assumption that having a First Amendment exception

would impact pedestrian flow? There is no study. Right?

A. There was no study.

Q. So, is there any --

A. Outside of Dr. Sousa's study about pedestrian flow.

Q. But it didn't address specifically whether allowing First Amendment activity would impact pedestrian flow. Right?

A. I think it addressed whether stopping and standing would impact pedestrian flow. So, if the First Amendment activity you're discussing is stopping and standing, then, yes, it addressed it in that way.

Q. But he -- there -- okay. So, he generally looked at -- at stopping and standing, is your position.

A. Yes.

Q. But he did not look at whether stopping and standing for First Amendment activity in particular affected pedestrian flow. Right?

A. Correct. I believe it was all stopping and standing.

Q. And he never evaluated whether having an exception would -- would still allow for free pedestrian flow. Right?

A. Correct.
Q. And the county never asked him to.
A. No, not to my knowledge.
Q. Okay. The -- all right. Let's talk a little bit about the meaning of some of the terms.
The -- what does it mean to engage in activity that causes another person to stop or stand within any pedestrian flow zone?
A. I don't believe that's defined in the ordinance. I think it's described at a plain meeting.
Q. I -- so -- objection, move to strike, nonresponsive.
I didn't ask what the ordinance defines it. I'm asking what -- and this is on -- this is in Topics 3, 5, 6, and 22, asked for the county's definitions and understandings as well as the -- they asked for the county's understandings and intent with regards to certain terms.
So, you have to answer these questions. Your counsel has objected to discovery throughout this case. The court has disagreed with your counsel. We're here at this deposition. We have these topics in front of us. And so I would -- would appreciate it if you would not answer by way of objection and instead would respond to my questions.

Q. Okay. So, there is one more term. I'm not going to ask you about stopping or standing again. The -- but I do want to ask you about the term "disorder." And we talked about it -- we talked about it today. And I -- and then we -- and I think we talked about disorder -- I think we agreed that the concerns regarding disorder is -- are disorder -- or disorder is caused by pedestrian congestion or blocking of the pedestrian bridges. Right?

A. I think they could be contributing. I don't think that congestion always causes disorder.

Q. Right. But any of the disorders we're looking at, the core -- the core -- the core -- the core -- one of the core issues that creates the situation for disorder, at least my understanding of the whole purpose of the ordinance, is pedestrian congestion or blocking cause -- can lead to crowding and, therefore, disorder.

Is that the logic? Or if -- explain it to me if I don't have it right.

A. I think there are certain circumstances where congestion can lead to disorder. There are some instances where disorder can lead to disorder. It -- it depends, because disorder has such a wide range of definitions, from rudeness, incivility, all the way up

to actual crimes.

Q. Right. But the ordinance doesn't bar incivility. It's -- it's barring stopping and standing to reduce congestion or blocking in order to prevent disorder.

Is that a fair -- is that a fair read on the ordinance?

A. To prevent like safety concerns caused by disorder that can be contributed to by -- by congestion, is how I would phrase it more.

Q. Okay. But it's trying to control pedestrian movement and avoid pedestrian congestion or blocking in order to avoid potential harms caused by disorder. Right?

A. It could be harms caused not just by disorder. Like, there could be harms caused by other things as well, I think, is how I would read that.

Q. But is there anything -- is there anything targeted by the ordinance other than people -- it doesn't directly address any disorder. It doesn't create a new crime of disorder. Right? It -- it's addressing movement to avoid congestion or blocking and, therefore, hopefully disorder. Right?

A. Therefore, hope -- like, unsafe situations. But I don't know that the crush always causes

presumably congestion or blocking of other people. Right?

A. Those are examples that can contribute to the -- the circumstances we're trying to prevent.

Q. But -- okay. But -- but you're targeting standing and stopping, because standing and stopping can lead to congestion or blocking and then create conditions that could cause other harm. Right?

MR. BROWNING: Objection: asked and answered.

BY MS. MCLETCHIE:

Q. You're not stopping -- you're not saying standing itself causes disorder.

A. No.

Q. You're not saying stopping itself causes disorder.

A. No. Stopping in and of itself does not cause disorder.

Q. If it gets crowded because too many people are standing or stopping and there is congestion or blocking, that's the problem. Right?

MR. BROWNING: Objection: form.

THE WITNESS: Yes. Stopping and standing and preventing other people's movements can create circumstances that are unsafe, to include blocking and crowd congestion.

would be true, but yes.

Q. Okay. The county was trying to prevent unsafe conditions that could lead to disorder.

A. Or disorder that could lead to unsafe conditions. We're really preventing the unsafe conditions.

Q. Okay. Okay. So, what -- what unsafe conditions is the county trying to prevent?

A. Increased disorder, which can involve crimes being committed, inability of people to leave the area quickly in an emergency situation, inability for people in distress to get help from emergency personnel quickly and easily.

Q. Okay. So, can you please tell me what disorder means?

Because I'm -- I'm understanding -- I'm understanding that you're trying to prevent unsafe conditions that could lead to disorder and increased unsafe conditions.

A. And disorder is a range of conduct ranging from incivility, rude behavior, all the way up to crimes being committed.

Q. Okay.

A. And then in those three categories you got criminal disorder, physical disorder, social disorder.

Q. So, is it trying to prevent unsafe conditions, or is it trying to prevent disorder so we don't get unsafe conditions?

A. Yeah, partially. It's also trying to prevent unsafe emergency situations.

Q. Isn't that part of unsafe conditions?

A. Yes.

Q. Okay.

A. I'm sorry. When I misunderstood your question, I thought you were saying just those unsafe conditions would just include disorder.

Q. I'm just --

A. There are other categories.

Q. Okay. I'm just confused. Is it trying to prevent the disorder that can stem from unsafe conditions, or is it trying to prevent disorder so we don't get unsafe conditions?

A. It's both. It's one thing.

Q. Okay. And -- okay. So, let's just march through.

But it's not -- we talked about just prostitution as an example of disorder, but it's not designed to prevent all kinds of disorder. Right? There is all kinds of disorder.

A. Yes. There is all kinds of disorder.

Q. Okay. So, can you tell me what -- I mean, it sounds like to me disorder is bad things. Right? It's crimes. It's people not being nice to each other. It's fear of other people. And it's messes on the sidewalk. So, there is all kinds of things that can be -- we can call disorder.

A. Anything that elicit fear in individuals.

Q. Things that elicit fear?

A. Uh-huh.

Q. Such as?

A. Well, they listed like, when they talked about physical disorder -- I think they were talking about like broken glass and broken windows, people being too close, obviously crimes being committed, aggressive behavior.

Q. Like aggressive panhandling?

A. I think that was listed in there.

Q. That is one of the -- is that what -- I'm not asking what was listed in the report. I'm asking if aggressive panhandling is one of the things the county -- one of the types of disorder that the county was trying to prevent.

A. I think aggressive -- most behaviors, I think maybe even -- like all aggressive -- I don't know. Aggressive anything. Fill in the blank.

those behaviors on the pedestrian bridges can create circumstances where people's fear is heightened where disorder is occurring, which can create more disorder.

Q. Okay. So, disorder can cause more disorder. Bad things can cause more bad things.

A. Yes. I do think that. I -- I don't know if Dr. Sousa would like my characterization, but yes.

Q. But the conditions for this disorder, whatever disorder is, might be incivility. Right? You said that's --

A. Yes.

Q. You're not trying to prevent people from being rude to each other with this ordinance. Right?

A. Right.

Q. You talked about that example of disorder. Disorder is a really broad, big term. Right?

A. Right.

Q. Okay. You're not trying to prevent incivility. Right?

A. No. We're trying to create a safer environment for folks using those bridges.

Q. Okay. By preventing congestion and crowding. Right?

A. Most of our examples do go back to that.

Q. Okay. Can you think of an example that

BY MS. MCLETCHIE:

Q. So, let's go back on the record.

A. Okay.

Q. Did the county -- I just have a few more topics to cover.

Did the county ever consider imposing restrictions through the ordinance only on the high-traffic pedestrian bridges and not all pedestrian bridges?

A. I don't remember that being considered as part of the legislative history, and I do not believe we had an ordinance where it would only be the high-traffic pedestrian bridges.

Q. Did the county ever consider having an ordinance where there was a First Amendment exception for some pedestrian bridges?

A. I don't believe that was considered because of the -- the aspects of the pedestrian bridges that they share. So, no, we didn't consider doing one versus another.

Q. Were -- did the county take into consideration any Kimley-Horn studies showing that -- that there were -- that some pedestrian bridges had traffic -- high-traffic concerns and some street-level sidewalks had some high-level traffic concerns?

high-traffic pedestrian bridges; no, high-traffic sidewalks.

Q. Okay. Oh, I'm sorry. Did the county consider look -- included only the high-traffic pedestrian bridges and high-traffic sidewalks at any time?

A. Not to my knowledge.

Q. Okay. I apologize. I wasn't asking that -- that question -- that question clearly.

Did the county consider enacting an ordinance that only had -- that had time -- time-based restrictions for pedestrian bridges?

A. I believe prior to '22 the time-based restrictions had been tried and had been found ineffective. So, no. By -- and so, no, we didn't in the '22, '24 period.

Q. Okay. And is there evidence in the record from the 2022 and 2024 legislative history that the prior time-based restrictions were ineffective?

A. I -- I believe Metro's presentation was evidence that they were ineffective.

Q. Okay. That's the only record the county considered when looking at the time-based restrictions, or it just didn't consider them at all?

MR. BROWNING: Objection: form.

THE WITNESS: They were not considered during

the '22, '24 portion.

BY MS. MCLETCHIE:

Q. Okay. They -- they weren't considered at -- at that time. And there were -- other than Metro testimony, you're not -- the county didn't look at any studies or evaluation of time-based restrictions. Right?

A. No.

Q. When did you -- when did you first preserve documents and evidence for this case? Now I'm saying you Ms. Frierson.

A. County proper?

Q. No. I'm saying you Ms. Frierson.

A. Oh, me?

Q. Yeah.

A. Oh, I -- I don't do it once the county has a -- a DHO. There is a process where someone will collect my information for me.

Q. What's a DHO?

A. Destruction hold order, I think is what it stands for.

Q. And when did the destruction hold order get issued?

A. I believe it was after the '24 hearing, I would imagine, around the time of the lawsuit being

CERTIFICATE OF DEPONENT

I, ABIGAIL FRIERSON, deponent herein, do hereby certify and declare the within and foregoing transcription to be my deposition in said action, subject to any corrections I have heretofore submitted; and that I have read, corrected, and do hereby affix my signature to said deposition.

ABIGAIL FRIERSON, Deponent

STATE OF NEVADA)
) ss.
COUNTY OF CLARK)

Subscribed and sworn to before me this

_____ day of _____, _____.

Notary Public

CERTIFICATE OF REPORTER

I, Janice David, a Certified Court Reporter licensed by the State of Nevada, do hereby certify:

That I reported the deposition of the witness, ABIGAIL FRIERSON, commencing on September 19, 2025, at the hour of 9:09 a.m.;

That prior to being examined, the witness was by me first duly sworn to testify to the truth, the whole truth, and nothing but the truth; that I thereafter transcribed my related shorthand notes into typewriting and that the typewritten transcript of said deposition is a complete, true, and accurate record of testimony provided by the witness at said time.

I further certify (1) that I am not a relative or employee of an attorney or counsel of any of the parties, nor a relative or employee of any attorney or counsel involved in said action, nor a person financially interested in the action, and (2) that pursuant to Rule 30(e), transcript review by the witness was not requested.

IN WITNESS WHEREOF, I have hereunto set my hand in my office in the County of Clark, State of Nevada, this 16th day of October, 2025.

Janice David, CCR No. 405

Exhibit 4

Declaration of Brandon Summers

CHRISTOPHER M. PETERSON
Nevada Bar No.: 13932
JACOB T. S. VALENTINE
Nevada Bar No. 16324
AMERICAN CIVIL LIBERTIES UNION OF NEVADA
4362 W. Cheyenne Ave.
North Las Vegas, NV 89032
Telephone: (702) 366-1226
Facsimile: (702) 830-9205
Emails: peterson@aclunv.org
jsmith@aclunv.org

MARGARET A. MCLETCHIE
Nevada Bar No.: 10931
LEO S. WOLPERT
Nevada Bar No.: 12658
MCLETCHIE LAW
602 South Tenth Street
Las Vegas, NV 89101
Telephone: (702) 728-5300
Fax: (702) 425-8220
Email: maggie@nvlitigation.com

Attorneys for Plaintiffs

UNITED STATES DISTRICT COURT

DISTRICT OF NEVADA

LISA MCALLISTER, an individual; BRANDON SUMMERS, an individual; and JORDAN POLOVINA, an individual; Plaintiffs, vs. CLARK COUNTY, a political subdivision of the state of Nevada, Defendant	Case No.: 2:24-cv-00334 **DECLARATION OF BRANDON SUMMERS**

DECLARATION OF BRANDON SUMMERS

I, BRANDON SUMMERS, under penalty of perjury declare:

1. I have personal knowledge of the facts set forth in this declaration.
2. I make this declaration in support of the above-reference action.
3. I am a resident of the State of Nevada, County of Clark.
4. I am a musician and street performer.
5. I have played my violin on the Las Vegas Strip since 2009.
6. I also use an amplifier while playing.
7. I have often played my violin on the pedestrian bridges on the Las Vegas Strip.
8. Like many violin players, I stand stationary while performing.
9. While playing my violin in public, I use an amplifier to be heard above ambient sounds typically heard on public streets.
10. I cannot move, play my violin, and use my amplifier at the same time.
11. I solicit tips while performing, but I do not charge a fee.
12. I also cannot move if I am playing and soliciting tips at the same time.
13. I avoid impeding pedestrian traffic during performances by standing with my back against the wall of the pedestrian bridge and condensing my amplifier, donation box, speaker, and dolly to be as compact as possible.
14. I no longer perform on pedestrian bridges due to the risk of prosecution under CCC 16.13.030; instead, I now perform at grade-level sidewalk corners.
15. I received more donations and interacted with more people on the pedestrian bridges compared to grade-level sidewalks, where the location is less visible and there is more noise pollution.

16. Under CCC 16.13.030, I believe I would be accused of committing a crime if I stood in a Pedestrian Flow Zone to play my violin as a street performer even if I am not obstructing any pedestrians.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct. See 28 U.S. Code § 1746.

Executed on: December 18, 2025

/s/ Brandon Summers
Brandon Summers
(evidence of approval and consent to e-sign has been maintained according to LR IC 5-1(c) and is available upon request)

Exhibit 5

Declaration of Jordan Polovina

CHRISTOPHER M. PETERSON
Nevada Bar No.: 13932
JACOB T. S. VALENTINE
Nevada Bar No. 16324
AMERICAN CIVIL LIBERTIES UNION OF NEVADA
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Email: maggie@nvlitigation.com

Attorneys for Plaintiffs

UNITED STATES DISTRICT COURT

DISTRICT OF NEVADA

LISA MCALLISTER, an individual; BRANDON SUMMERS, an individual; and JORDAN POLOVINA, an individual;

Plaintiffs,

vs.

CLARK COUNTY, a political subdivision of the state of Nevada,

Defendant

Case No.: 2:24-cv-00334

DECLARATION OF JORDAN POLOVINA

DECLARATION OF JORDAN POLOVINA

I, JORDAN POLOVINA, under penalty of perjury declare:

1. I have personal knowledge of the facts set forth in this declaration.
2. I make this declaration in support of the above-reference action.
3. I am a resident of the State of Nevada, County of Clark.
4. I am a musician and street performer.
5. I have played my cello on the Las Vegas Strip since 2022.
6. I also use an amplifier while playing.
7. I have often played my cello on the pedestrian bridges on the Las Vegas Strip.
8. I cannot continuously move while performing because the size of my cello makes it impractical to carry while playing.
9. While playing my cello in public, I use an amplifier to be heard above ambient sounds typically heard on public streets.
10. I cannot move while using my amplifier.
11. I solicit tips while performing, but I do not charge a fee.
12. I cannot move if I am playing and soliciting tips at the same time.
13. I avoid impeding pedestrian traffic during performances by standing with my back against the wall of the pedestrian bridge and condensing my amplifier, donation box, speaker, and dolly to be as compact as possible.
14. Law enforcement has instructed me to stop performing and leave a pedestrian bridge while they were detaining another individual for violating CCC 16.13.030.
15. Separately, I have been identified and warned by law enforcement that my performance on a pedestrian bridge violates CCC 16.13.030.

16. I was actually cited for allegedly violating CCC 16.13.030. That matter is currently pending in the Las Vegas Township Justice Court.
17. I no longer perform on pedestrian bridges due to the risk of prosecution under CCC 16.13.030; instead, I now perform at grade-level sidewalk corners.
18. I received more donations and interacted with more people on the pedestrian bridges compared to grade-level sidewalks, where the location is less visible and there is more noise pollution.
19. I am unclear of what conduct is prohibited by CCC 16.13.030 due Clark County's statements about the ordinance since it was passed, especially as I have observed others stopping on the pedestrian bridges in front of Las Vegas Metropolitan Police Department officers without receiving a citation or warning.
20. Under CCC 16.13.030, I believe I would be accused of committing a crime if I stood in a Pedestrian Flow Zone to play my cello as a street performer even if I am not obstructing any pedestrians.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct. See 28 U.S. Code § 1746.

Executed on: December 18, 2025

/s/ Jordan Polovina
Jordan Polovina
(evidence of approval and consent to e-sign has been maintained according to LR IC 5-1(c) and is available upon request)

Exhibit 6

Polovina Citation

REGISTER OF ACTIONS

CASE NO. 25-CR-054145

State of Nevada vs. Polovina, Jordan Timothy

Case Type:	**Misdemeanor Citation CR**
Date Filed:	**06/26/2025**
Location:	
Case Number History:	**106273014**
	25-CR-054145
Metro Area Command Sector:	**M3**
Metro Event Number:	**250500083222**

PARTY INFORMATION

Defendant **Polovina, Jordan Timothy**
Other Agency Numbers
LV6705AB XID Subject Identifier, 8823973 Justice Court Scope ID Subject Identifier

DOB: [redacted]985

State of Nevada **State of Nevada**

CHARGE INFORMATION

Charges: Polovina, Jordan Timothy	Statute	Level	Date
1. Stop, stand or cause others to stop within pedestrian bridge [66203]	16.13.030	Misdemeanor	05/22/2025

EVENTS & ORDERS OF THE COURT

OTHER EVENTS AND HEARINGS

06/26/2025 Citation Image
06/26/2025 Supplemental Documentation Submitted with Citation
07/21/2025 **Arraignment** (8:30 AM) (Judicial Officer Letizia, Harmony)
NO BAIL POSTED

POLOVINA, JORDAN

M-S003040

25CR054145 3 7/21

State of Nevada
CLARK COUNTY
Las Vegas Metropolitan Police Department

TRAFFIC/CRIMINAL/CIVIL COMPLAINT

☐ In Municipal Court of
☒ In Justice Court of Clark County
Court Case #

☒ Adult ☐ Juvenile

☐ Traffic ☒ Criminal ☐ Civil Infraction
☐ Accident ☐ Meter #
☐ Parking

☐ School Zone ☐ Hazmat
☐ Construction Zone ☐ S.T.E.P.

☒ Urban ☐ Rural

Travel Direction: ☐ N ☐ S ☐ E ☐ W Beat/Area: M3 Mile Marker:

COURT

Event #: LV25050008322 0627301 4
ID #: NV 8823973

☐ Injuries ☒ Crime Report ☐ Officer's Report
☐ Evidence Logged ☐ Arrest
☐ Aircraft Clock Number ☐ Radar ☐ Other Explain:

At Location: LAS VEGAS BLVD/PARK AVE, LAS VEGAS, NV 89109
Violation Date: 5/22/25 Time: 2033 Issue Date: 5/22/25 Time: 2038

Day Code: ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☒ 5 ☐ 6 ☐ 7

Had Been Drinking: ☐ Yes ☒ No ☐ Unknown
Test Type: ☐ PBT ☐ Blood ☐ Breath ☐ UA
☐ Drugs Suspected Results: %

Defendant Type: ☐ Driver ☐ Passenger ☐ Pedestrian ☒ Other Explain: SUBJECT

THE UNDERSIGNED CERTIFIES AND SAYS THAT IN THE STATE OF NEVADA

NAME (Last, First, Middle): POLOVINA JORDAN TIMOTHY
Social Security #:
Address: ☒ Physical ☐ Mailing [redacted] City: NORTH LAS VEGAS State: NV [redacted] City: US
[redacted] 1985 Race: W Sex: M Height: 6'5" Weight: 248 Hair: BRO Eyes: HAZ
DL/ID #: 146788 3470 ☐ CDL State: NV Class: C Expiration: 9/17/32 Restrictions: B Endorsements: NONE
Vehicle has current proof of insurance? ☐ Yes ☐ No N/A Expiration Date of Insurance Card: N/A

DID OPERATE THE FOLLOWING VEHICLE/MOTOR VEHICLE AT THE ABOVE LISTED LOCATION:

☐ Commercial Vehicle ☐ 16+ Pass Vehicle | US DOT #: | VIN #:
Vehicle License: | Lic. State: | Expiration: | Year: | Make: | Model: | Type: | Color:
Reg. Owner: ☐ Same | Address:

DID THEN AND THERE COMMIT THE FOLLOWING OFFENSE(S):

1 Violation: STOP/STAND/CAUSE OTHERS TO STOP WITHIN PEDESTRIAN BRIDGE 66203
Posted Speed: — Actual Speed: — Cited Speed: —
☐ NRS ☐ CFR ☒ County Code ☐ Municipal Code
NRS/County/City #: 16.13.030
SUBJECT DID STOP AND PLAY INSTRUMENT IN THE MIDDLE (FACING NORTH WALL) OF A PEDESTRIAN BRIDGE (WITH SIGNS POSTED) IN THE RESORT CORRIDOR OF CLARK COUNTY NEVADA. PC

2 Violation:
To Wit:
☐ Municipal Code

25-CR-054145
CITIM
Citation Image
18291084

I certify (or declare) under penalty of perjury that I have reasonable grounds/probable cause to believe and do believe that the above-named defendant committed the above offense(s) contrary to the law.

Officer/Complainant's PRINTED Name: I. NYE | Officer/Complainant's Signature: | P#: 17672 | Bureau: CCDB

SEE REVERSE FOR ALL COURT INSTRUCTIONS – NOTE: CIVIL INFRACTIONS ARE NOT CRIMINAL OFFENSES

Las Vegas Municipal Court | Las Vegas Justice Court | ☒ Juvenile Justice Services | Goodsprings Justice Court | North Las Vegas Municipal Court | Henderson Municipal Court | Boulder City Municipal Court

Township/Justice Court: ☐ Court Mandatory Phone:

You are hereby ordered to appear to answer to the above charge(s): 21ST day of JULY year 2025 at 730 a.m./p.m.

WITHOUT ADMITTING HAVING COMMITTED THE ABOVE OFFENSE(S), I HEREBY PROMISE TO RESPOND AS DIRECTED ON THIS NOTICE AND WAIVE MY RIGHT TO BE TAKEN IMMEDIATELY BEFORE A MAGISTRATE (NRS 484A.630 AND NRS 484A.750).

Defendant's Signature X [signature] ☐ Interpreter Needed IMAGED LANGUAGE

Cellphone: (720) 611-2853 ☐ Refused Email PC ☐ Refused

BY PROVIDING THE ABOVE CONTACT INFORMATION YOU ACKNOWLEDGE THAT THE COURT MAY CONTACT YOU BY TEXT OR EMAIL.

LVMPD 64 3070 (REV 3/03)

1-0627301 4

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(This Page does ***NOT*** get printed)

IMAGED
PC

ARREST REPORT/NOTES FOR TESTIFYING IN COURT

On all offenses, complaints issued must have an arrest report hand-printed in the to-wit section on the front of the complaint or in the spaces provided below. This report must contain a sufficient amount of information to establish the corpus delicti, and physical evidence, witnesses, and any specific acts of defendant which increased the seriousness of the offense.

Body worn camera recording available.

Introduction:
On May 22, 2025, at approximately 2033 hours, Officer B. Bettencourt P#18042 and I, Officer T. Nye P#17052, while operating as marked bicycle patrol unit 7M76B, were patrolling the Resort Corridor on Las Vegas Blvd. South. We observed a male, later identified by his Nevada driver license as Jordan Polovina ([redacted]1985), playing an instrument with a speaker. Polovina was against the north wall, in the middle of the pedestrian bridge located at the intersection of Las Vegas Blvd. / Park Ave., Las Vegas, NV 89109. The pedestrian bridge is located in the Resort Corridor of Clark County, Nevada, and it has signs posted regarding the pedestrian flow zone. We conducted a person stop on Polovina for Stop/Stand/Cause Others to Stop Within Pedestrian Bridge under County Code 16.13.030.

Contact With:
We stopped Polovina, identified ourselves as police, and notified him that he was being stopped for loitering in the pedestrian flow zone. I asked him for identification, and he identified himself with a Nevada driver license. Polovina excitedly uttered that security had asked him to get away from the Denny's, where he usually plays music.

Record Check:
I conducted a record check to confirm Polovina's identity. The record check revealed that I had stopped Polovina for the same offense on 05/24/2024, on the same bridge, and given him a warning regarding loitering in the pedestrian flow zone.

IMAGED
PC

Conclusion:
Due to the fact Jordan Polovina (DOB [redacted]1985) did stop and play an instrument on a pedestrian bridge where signs were posted regarding the pedestrian flow zone, in the Resort Corridor of Clark County, Nevada, I cited him for Stop/Stand/Cause Others to Stop Within Pedestrian Bridge under County Code 16.13.030.

EVIDENCE: ☐ Yes ☒ No LOCATION:
WITNESSES: (include addresses and phone numbers)

FILED
Las Vegas Justice Court
JUN 26 2025
By: KG Deputy

RECEIVED
JUN 02 2025
CONVENTION CENTER
AREA COMMAND

JUVENILE'S PARENT(S) NOTIFIED ☐ Yes ☐ No | Parent/Guardian Name | Address

(REV. 1-23)

M-S003043

☐ In Municipal Court of
☒ Justice Court of Clark County
Court Case #

State of Nevada
CLARK COUNTY
Las Vegas Metropolitan Police Department

PROSECUTOR

Event # LLV250500083222
ID # 8823473 2730144

☐ Adult ☐ Juvenile

TRAFFIC/CRIMINAL/CIVIL COMPLAINT

☐ Traffic ☒ Criminal
☐ Accident ☐ Meter #
☐ Parking ☐ Civil Infraction

☐ School Zone ☐ Hazmat
☐ Construction Zone ☐ S.T.E.P.

☒ Urban ☐ Rural

☐ Injuries ☒ Crime Report
☐ Officer's Report

☐ Evidence Logged ☐ Arrest

☐ Aircraft Clock Number
☐ Radar ☐ Other
Explain:

Travel Direction: ☐ N ☐ S ☐ E ☐ W | Beat/Area: M3 | Mile Marker:

At Location: LAS VEGAS BLVD / PARK AVE, LAS VEGAS, NV 89109

Violation Date: 5/22/25 Time: 2033 Issue Date: 5/22/25 Time: 2038

Day Code: ☒ 1 ☒ 2 ☒ 3 ☒ 4 ☒ 5 ☒ 6 ☒ 7

Had Been Drinking: ☐ Yes ☒ No ☐ Unknown
Test Type: ☐ PBT ☐ Blood ☐ Breath ☐ UA
☐ Drugs Suspected Results: %

Defendant Type: ☐ Driver ☐ Passenger ☐ Pedestrian
☒ Other Explain: SUBJECT

THE UNDERSIGNED CERTIFIES AND SAYS THAT IN THE STATE OF NEVADA

NAME (Last, First, Middle): POLIVINA, JORDAN TIMOTHY | Social Security #:
Address: ☒ Physical ☐ Mailing: [redacted] | City: NORTH LAS VEGAS State: NV [redacted] City: US
DOB: [redacted] 1985 | Race: W | Sex: M | Height: 6'5" | Weight: 248 | Hair: BRO | Eyes: HAZ
DLN: 140 788 3470 ☐ CDL | State: NV | Class: C | Expiration: 9/11/32 | Restrictions: B | Endorsements: NONE
Vehicle has current proof of Insurance? ☐ Yes ☐ No N/A | Expiration Date of Insurance Card: N/A

DID OPERATE THE FOLLOWING VEHICLE/MOTOR VEHICLE AT THE ABOVE LISTED LOCATION:

☐ Commercial Motor Vehicle ☐ 16+ Pass Vehicle | US DOT #: | VIN #:

Vehicle License:	Lic. State:	Expiration:	Year:	Make:	Model:	Type:	Color:

Reg. Owner: ☐ Same | Address:

DID THEN AND THERE COMMIT THE FOLLOWING OFFENSE(S):

1 Violation: STAND/CAUSE OTHERS TO STOP WITHIN PEDESTRIAN BRIDGE

Posted Speed: | Actual Speed: | Cited Speed: | ☐ NRS ☐ CFR ☒ County Code ☐ Municipal Code

To Wit: SUBJECT DID STOP AND PLAY INSTRUMENT IN THE MIDDLE (FACING NORTH WEST) OF A PEDESTRIAN BRIDGE (WITH SIGNS POSTED) IN THE RESORT CORRIDOR OF CLARK COUNTY, NEVADA. | NRS/County/City #: 16.13.030 PC

2 Violation: | CODE

To Wit: | ☐ NRS ☐ CFR ☐ County Code ☐ Municipal Code | NRS/County/City #:

I certify (or declare) under penalty of perjury, under the laws of the State of Nevada that I have reasonable grounds/probable cause to believe and do believe that the above named person committed the above offense(s) contrary to the law.

Officer/Complainant's PRINTED Name: I. NYE | Officer/Complainant's Signature: | P#: 17667 | Bureau: CCDB

SEE REVERSE FOR ALL COURT INSTRUCTIONS – NEVADA CIVIL INFRACTIONS ARE NOT CRIMINAL OFFENSES

☐ Las Vegas Municipal Court ☐ Las Vegas Justice Court ☒ Juvenile Justice Services ☐ Goodsprings Justice Court ☐ North Las Vegas Municipal Court ☐ Henderson Municipal Court ☐ Boulder City Municipal Court

Township/Justice Court: | ☐ Court Mandatory | Phone:

You are hereby ordered to appear to answer to the above charge(s). 21ST day of JULY year 2025 at 730 a.m. p.m.

WITHOUT ADMITTING HAVING COMMITTED THE ABOVE OFFENSE(S), I HEREBY PROMISE TO RESPOND AS DIRECTED ON THIS NOTICE AND WAIVE MY RIGHT TO BE TAKEN IMMEDIATELY BEFORE A MAGISTRATE (NRS 484A.630 AND NRS 484A.750).

Defendant's Signature X [signature] ☐ Interpreter Needed? LANGUAGE

Cellphone (702) 671-2893 ☐ Refused | Email ☐ Refused

LVMPD 64 7031 (Rev 01/22) BY PROVIDING THE ABOVE CONTACT INFORMATION YOU ACKNOWLEDGE THAT THE COURT MAY CONTACT YOU BY TEXT OR EMAIL.

M-S003044

Las Vegas Metropolitan Police Department
400 S. Martin Luther King Blvd.
Las Vegas, NV 89106

Case Report No.: LLV250500083222

Administrative

Location: Las Vegas Blvd/ Park Ave LAS VEGAS, NV 89109
Occurred On (Date / Time): Thursday 5/22/2025 8:38:00 PM
Or Between (Date / Time):
Reporting Officer: T17052N - Nye, Timothy
Reported On: 5/22/2025
Entered By: T17052N - Nye, Timothy
Entered On: 5/22/2025 10:47:39 PM
Related Cases:
Sector /Beat: M3
Jurisdiction: Clark County
Traffic Report:
Place Type:
Accident Involved:

Offenses:

Stop/Stand/Cause Other To Stop W/I Ped Bridge(M)-CC 16.11.030
Completed: Yes
Domestic Violence:
Entry:
Premises Entered:
Weapons:
Criminal Activities:
Hate/Bias: None (No Bias)
Type Security:
Location Type: Other/Unknown
Tools:

Victims:

Name:

Victim Type: Society/Public
Victim of: 66203 - Stop/Stand/Cause Other To Stop W/I Ped Bridge(M)-CC 16.11.030
Written Statement:
Can ID Suspect:

DOB:
Age:
Sex:
Race:
Ethnicity:
Height:
Weight:
Hair Color:
Eye Color:
Employer/School:
Occupation/Grade:
Work Schedule:
Injury:
Injury Weapons:

Addresses
Phones

Offender Relationships
Notes:

25 - CR - 051145
SDS
Supplemental Documentation Submitted with 16291085

Arrestees:

Name: Polovina, Jordan Timothy
Alias:
Scope ID: new
DOB: [redacted]
Age: 40
Race: White
Ethnicity: Not Hispanic or Latino
Sex: Male
Height: 6' 5"
Weight: 248
Hair Color: Brown
Eye Color: Hazel
Employer/School:
Occupation/Grade:

Addresses
Residence: [redacted] United States

Phones
Notes:

TRUE AND CORRECT COPY
LAS VEGAS
METROPOLITAN
POLICE DEPARTMENT
BY: D204795
DATE: 6/24/25

Witnesses:

Other Entities:

Properties: ()

Narrative

Body worn camera recording available.

IMAGED
PC

Introduction:

On May 22, 2025, at approximately 2033 hours, Officer B. Bettencourt P#18042 and I, Officer T. Nye P#17052, while operating as marked bicycle patrol unit 7M76B, were patrolling the Resort Corridor on Las Vegas Blvd. South. We observed a male, later identified by his Nevada driver license as Jordan Polovina ([redacted]1985), playing an instrument with a speaker. Polovina was against the north wall, in the middle of the pedestrian bridge located at the intersection of Las Vegas Blvd. / Park Ave., Las Vegas, NV 89109. The pedestrian bridge is located in the Resort Corridor of

M-S003045

Clark County, Nevada, and it has signs posted regarding the pedestrian flow zone. We conducted a person stop on Polovina for Stop/Stand/Cause Others to Stop Within Pedestrian Bridge under County Code 16.13.030.

Contact With:

We stopped Polovina, identified ourselves as police, and notified him that he was being stopped for loitering in the pedestrian flow zone. I asked him for identification, and he identified himself with a Nevada driver license. Polovina excitedly uttered that security had asked him to get away from the Denny's, where he usually plays music.

Record Check:

I conducted a record check to confirm Polovina's identity. The record check revealed that I had stopped Polovina for the same offense on 05/24/2024, on the same bridge, and given him a warning regarding loitering in the pedestrian flow zone.

Conclusion:

Due to the fact Jordan Polovina (D[redacted]85) did stop and play an instrument on a pedestrian bridge where signs were posted regarding the pedestrian flow zone, in the Resort Corridor of Clark County, Nevada, I cited him for Stop/Stand/Cause Others to Stop Within Pedestrian Bridge under County Code 16.13.030.

IMAGED PC

M-S003046

CHRISTOPHER M. PETERSON
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JACOB T. S. VALENTINE
Nevada Bar No.: 16324
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Nevada Bar No.: 10931
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Nevada Bar No.: 12658
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Fax: (702) 425-8220
Email: maggie@nvlitigation.com
efile@nvlitigation.com

Attorneys for Plaintiffs

UNITED STATES DISTRICT COURT

DISTRICT COURT OF NEVADA

LISA MCALLISTER, an individual; BRANDON SUMMERS, an individual; and JORDAN POLOVINA, an individual,

Plaintiffs,

vs.

CLARK COUNTY, a political subdivision of the state of Nevada,

Defendant.

Case Number: 2:24-cv-00334

APPRENDIX OF EXHIBITS TO: PLAINTIFFS MOTION FOR SUMMARY JUDGMENT (ORAL ARGUMENT REQUESTED) VOLUME II OF V

INDEX OF EXHIBITS

Exhibit No.	Description	Volume
1	Deposition of Kaizad Yazdani, 30(b)(6) Designee for Clark County	**I**
2	Statement on X posted by @ClarkCountyNV regarding CCC 16.13.030 on Jan. 2, 2024, 6:30 PM, M-S 00031	**I**
3	Deposition of Abigail Frierson, 30(b)(6) Designee for Clark County	**I**
4	Declaration of Brandon Summers	**I**
5	Declaration of Jordan Polovina	**I**
6	Polovina Citation	**I**
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CERTIFICATE OF SERVICE

I hereby certify that I electronically filed the foregoing **Appendix of Exhibits** with the Clerk of the Court for the United States District Court of Nevada by using the court's CM/ECF system on December 18, 2025. I further certify that all participants in the case are registered CM/ECF users and that service will be accomplished on all participants by:

☒ CM/ECF

☐ Electronic mail; or

☐ US Mail or Carrier Service

/s/ Christopher Peterson
An employee of ACLU of Nevada

Exhibit 7

Clark County Pedestrian Study, December 2022

CLARK COUNTY
PEDESTRIAN STUDY
DECEMBER 2022

DRAFT

Las Vegas Boulevard
Russell Road to Sahara Avenue









Kimley»Horn

CC 383874

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DRAFT PEDESTRIAN STUDY

LAS VEGAS BOULEVARD

RUSSELL ROAD TO SAHARA AVENUE

Prepared for:

500 S. Grand Central Parkway
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December 2022

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Exhibit B	Right-of-Way/Pedestrian Easement Reference Numbers
Exhibit C	Pedestrian Volume Data
Exhibit D	Updated No Obstruction Zone Drawings
Exhibit E	Recommended Updates to the Clark County Comprehensive Master Plan Transportation Element Map 13

List of Acronyms

AADT	Annual Average Daily Traffic
CES	Consumer Electronics Show
HCM	Highway Capacity Manual
LF	Linear Feet
LOS	Level of Service
LVCC	Las Vegas Convention Center
LVCVA	Las Vegas Convention and Visitors Authority
MUTCD	Manual on Uniform Traffic Control Devices
NPO	Non-Permanent Obstruction

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1 Introduction

In an effort to continue to improve the Las Vegas Strip pedestrian experience, the Clark County Department of Public Works commissioned this study to document current pedestrian activity on Las Vegas Boulevard (the "Strip") between Russell Road and Sahara Avenue. This study builds upon the past findings and recommendations of the *Las Vegas Boulevard South Pedestrian Walkway Study (1994),* the *Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue (2012),* the *Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue (2015 Update)*, and the *Clark County Pedestrian Study, Las Vegas Boulevard: Tropicana Avenue to Spring Mountain Road* (2016 Update of Non-Permanent Obstructions).

To conduct this study, pedestrian volume data was collected on Saturday, May 28, 2022 (Memorial Day/Holiday Weekend), one of the busiest Saturdays on Las Vegas Boulevard. Data was also collected on Saturday, June 25, 2022 (Typical Summer Weekend). The observations were performed to capture and evaluate peak/holiday and typical weekend pedestrian conditions to determine pedestrian level of service (LOS). Non-permanent obstructions (NPOs) were also located, quantified, and classified to identify possible impediments to pedestrian movement and impacts to walkway LOS.

1.1 Study Purpose

The hospitality experience of the Las Vegas Strip relies upon the unobstructed movement of pedestrians along Las Vegas Boulevard. The purpose of this study is to review and revise, as needed, previously identified locations and time periods of pedestrian congestion along Las Vegas Boulevard to aid in the enforcement of the County's Obstructive Uses Ordinance (Chapter 16.11), with a focus on pedestrian bridges, elevators, and escalators.

1.2 Study Goals

The goals of this study are to identify locations of pedestrian walkway congestion by time of day and day of week (including holidays) for use in the enforcement of and/or revisions to County Code 16.11 - Obstructive Uses of Public Sidewalks. This study also includes information to revise the existing No Obstruction Zones based on the current pedestrian walkway volumes and obstructive use conditions on Las Vegas Boulevard.

1.3 Study Corridor

The study corridor of Las Vegas Boulevard from Russell Road to Sahara Avenue within the Las Vegas Valley is 4.2 miles long, shown in **Figure 1.1.** The inner portion of the corridor is considered to be from Tropicana Avenue to Spring Mountain Road. The corridor is located east of Interstate 15, south of US Highway 95 and north of Interstate 215 in Clark County, Nevada. The study corridor provides pedestrian access to several major retail centers and approximately 30 major resort casinos.



Figure 1.1 – Study Corridor

Pedestrian activity within the study corridor of Las Vegas Boulevard (the Strip) is primarily driven by the gaming and related tourist industry, which is a major source of revenue for Clark County. In 2021, gaming revenue from the Strip totaled over $7 billion according to the Las Vegas Convention and Visitors Authority (LVCVA).

As of 2021, the available room inventory in Las Vegas was reportedly 150,487 rooms and the number of annual visitors was reported as 32,230,600. Las Vegas currently has the highest number of hotel rooms of any city in the United States. The Strip contains 9 of the 10 largest hotels in the country by number of rooms. Gaming, sporting events, concerts, conventions, meetings, and trade shows all draw visitors to the Strip.

1.4 Literature Review

The literature review section provides a summary of the previous research that has been conducted on technical approaches for determining pedestrian LOS as well as findings from past pedestrian studies conducted along Las Vegas Boulevard within the Resort Corridor.

1.4.1 Technical Literature

Technical engineering literature that is relied upon in the development of this study is identified and summarized in the following subsections.

Pedestrian Planning and Design – Fruin 1971

Pedestrian Planning and Design by Dr. John J. Fruin (pictured in **Figure 1.2**) is one of the first publications to describe and quantify the space people need to walk and queue (stand in line). In this publication, Fruin introduced the concept of the body ellipse to define personal comfort zones of an individual.



Figure 1.2 – Pedestrian Planning and Design – Fruin 1971

His work also defined pedestrian flow volume for a walkway as the number of pedestrians per foot of walkway width per minute. The pedestrian flow volume was then used by Fruin to define walkway LOS by letter grade representing the freedom of walkway mobility. Another key factor in determining walkway conditions was to recognize that the "effective walkway" width is reduced from the total walkway width by the constricting effects of street impediments such as light standards, fire hydrants, and refuse enclosures.

To illustrate the concepts of LOS in relation to pedestrian volume and total walkway width (W_T), **Figure 1.3** was created pairing figures from *Pedestrian Planning and Design* by Fruin and pictures from the Strip during the data collection efforts for this study. This visualization demonstrates the perception of each LOS letter grade accompanied by the required square footage per person. According to Fruin, at LOS D, "the majority of persons would have their normal walking speeds restricted and reduced," and for LOS A through LOS C, only minor conflicts exist. LOS E and LOS F cause adjustment to

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walking gait, suggesting that the majority of the pedestrians would have to shuffle their feet to progress forward. At LOS E and LOS F, contact with others is frequent and forward progress is solely determined by those upstream of the pedestrian traffic flow.

The pedestrian walkway concepts identified by Fruin form the foundation of the 2022 Highway Capacity Manual (HCM 7) pedestrian LOS methodology.

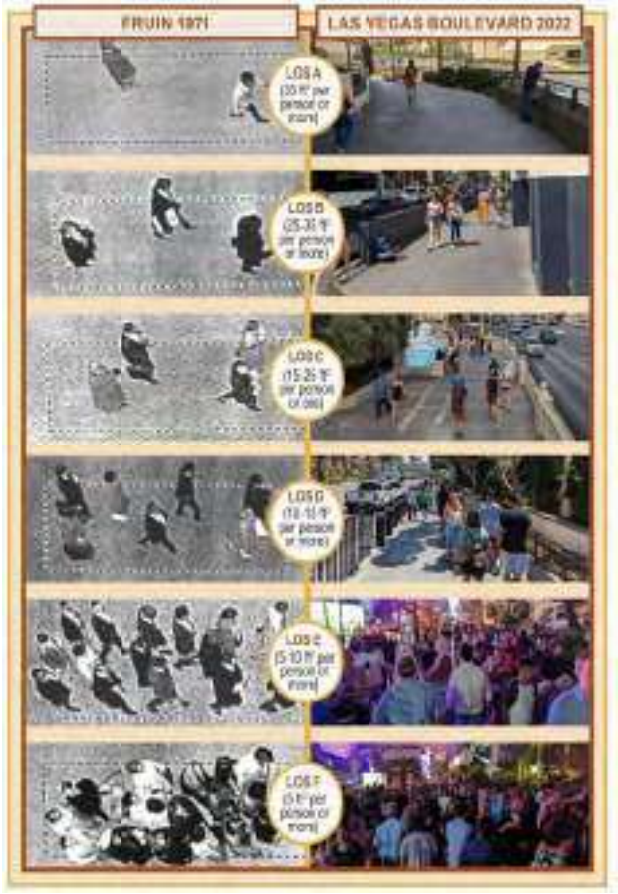


Figure 1.3 – Visual Comparison of Walkway LOS

2022 Highway Capacity Manual (HCM 7)

The research portrayed in the 1985 HCM has been updated in the recent 2022 edition of HCM 7 (pictured in **Figure 1.4**) with regard to body ellipses from the original work of Dr. Fruin.



Figure 1.4 – HCM 7

The previous 2010 HCM defined the average male human body as an 18" depth and a 24" shoulder breadth, necessitating 3.0 square feet standing still. The current edition, HCM 7, defines the pedestrian body ellipse as shown in **Figure 1.5.** The body ellipse of the is now larger based on recent research. The body ellipse for an average male is now has a 20" depth and a 24" shoulder breadth, necessitating 3.3 square feet standing still.

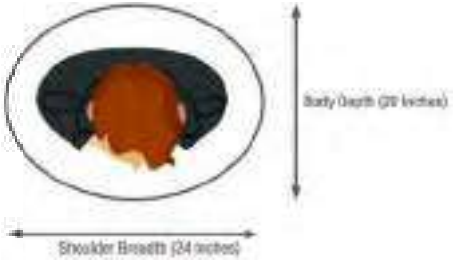


Figure 1.5 – Pedestrian Body Ellipse (Adapted from HCM 7)

The HCM 7 methodology for calculating LOS for exclusive off-street pedestrian facilities (like those provided along Las Vegas Boulevard) based on pedestrian flow rate involves the following steps:

- Step 1 – Determine the effective walkway width (W_E)
- Step 2 – Calculate the pedestrian flow rate
- Step 3 – Determine LOS

HCM 7 defines effective walkway width (W_E) as:

> "The portion of a walkway that can be used effectively by pedestrians. Various types of obstructions and linear features reduce the walkway area that pedestrians can effectively use.
>
> Linear features such as a street curb, a low wall, and a building face each have an associated shy distance, which is the buffer that pedestrians give themselves to avoid accidentally stepping off the curb, brushing against a building face, or getting too close to other pedestrians standing under awnings or window shopping. Fixed objects, such as a tree, have effective widths associated with them. The fixed-object effective width includes the object's physical width, any functionally unusable space (e.g., the space between a parking meter and the curb or the space in front of a bench occupied by people's legs and belongings), and the buffer given to the object by pedestrians" (Page 24-11, HCM 7).

Equation 1.1 is used to calculate effective walkway width.

Equation 1.1 – Effective Walkway Width (W_E)

$$W_E = W_T - W_O$$

W_E = effective walkway width (ft)

W_T = total walkway width at a given point along walkway (ft)

W_O = sum of fixed-point object effective widths and linear-feature shy distances at a given point along walkway (ft)

HCM 7 explains that walkway operational analysis typically evaluates the portion of the walkway with the narrowest effective width (W_E), as this section of walkway constrains pedestrian flow. HCM 7 also describes that design analysis identifies the minimum effective width that must be maintained to avoid pedestrian queuing or spillover. **Figure 1.6** illustrates how effective walkway width (W_E) is calculated.



Figure 1.6 – Walkway Width Adjustments (Adapted from HCM 7)

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Figure 1.6 also illustrates the effective length of a fixed object. As described by HCM 7:

> "The effective width of a fixed object extends over an effective length that is considerably longer than the object's physical length. The effective length represents the portion of the walkway that is functionally unusable because pedestrians need to move to one side ahead of time to get around a fixed object. The effective length of a fixed object is assumed to be five times the object's effective width" (Page 24-11, HCM 7).

Table 1.1 summarizes the effective widths of a variety of typical fixed objects found along pedestrian facilities, as documented in HCM 7. The values in **Table 1.1** can be used with professional judgment to estimate the impacts of walkway objects when specific walkway configurations are not available.

Once effective walkway widths (W_E) are established and pedestrian volumes are known, flow rates can be calculated, and LOS can be determined.

Table 1.1 – Typical Fixed-Object Effective Widths (HCM 7)

Fixed Object	Effective Width (ft)
Street Furniture	
Light pole	2.5 - 3.5
Traffic signal poles and boxes	3.0 - 4.0
Fire hydrants	2.5 - 3.0
Traffic signs	2.0 - 2.5
Parking meters	2.0
Trash cans (1.8 ft diameter)	3.0
Bus shelters (on sidewalk)	6.0 - 7.0
Landscaping	
Trees	3.0 - 4.0
Planter boxes	5.0

Equation 1.2 is used to calculate pedestrian flow rate per unit width of walkway.

Equation 1.2 – Pedestrian Flow Rate per Unit Width of Walkway

$$v_p = \frac{v_{15}}{15 \times W_E}$$

v_p = pedestrian flow per unit width (p/ft/min)

v_{15} = pedestrian flow rate during peak 15 min (p/h)

W_E = effective sidewalk width (ft)

Table 1.2 provides HCM 7 definitions of pedestrian LOS based on pedestrian flow rate (ped/min/ft). Of note, platoon-adjusted LOS criteria are more stringent. Platoon-adjusted criteria is applicable when platoons of pedestrians form, for example, due to crowds traveling to/from a special event or due to a signalized crosswalk.

HCM 7 recommends that off-street pedestrian facilities be designed to achieve LOS C to avoid pedestrian spillover and to achieve uncrowded walking conditions within the designated walkway (Page 24-7, HCM 7). Although Las Vegas Boulevard sidewalks parallel a relatively high vehicle volume street, many segments of the corridor are equipped with pedestrian containment measures, creating an atmosphere of an off-street pedestrian facility.

HCM 7 recognizes that its pedestrian LOS methodology is limited in that it does not address LOS for pedestrians with disabilities, including vision or mobility impairments.

Table 1.2 – Pedestrian LOS Definitions (HCM 7)

LOS	Flow Rate (ped/min/ft)	Comments
A	≤5	Ability to move in desired path, no need to alter movements
B	>5 - 7	Occasional need to adjust path to avoid conflicts
C	>7 - 10	Frequent need to adjust path to avoid conflicts
D	>10 - 15	Speed and ability to pass slower pedestrians restricted
E	>15 - 23	Speed restricted, very limited ability to pass slower pedestrians
F	Variable	Speeds severely restricted, frequent contact with other users

Of note, HCM 7 also includes an analysis methodology for links in urban street segments that yields a pedestrian LOS score. The methodology includes buffer width between the roadway and sidewalk and vehicle speeds on the adjacent roadway, among other factors. However, the methodology does not consider pedestrian volumes. Upon review of the calculations, the addition of bollards and the associated buffer space between pedestrians and vehicles nominally improves the segment LOS score.

The pedestrian LOS methodology for exclusive off-street pedestrian facilities for random flow was deemed to be most appropriate and is consistent with LOS calculations from the previous pedestrian studies of Las Vegas Boulevard walkways. It is recommended that future pedestrian studies of the Resort Corridor follow the HCM pedestrian LOS analysis methodology that is volume-based recognizing that the LOS score is a more qualitative measure.

1.4.2 Background Literature

The pedestrian activity along Las Vegas Boulevard from Russell Road to Sahara Avenue has steadily increased over the years. Clark County conducted a study of the Resort Corridor in 1993 which was followed by *Las Vegas Boulevard South Pedestrian Walkway Study (1994)* by Lee Engineering. The Lee Engineering study recommended specific measures to be implemented by Clark County to improve the pedestrian walkway system and pedestrian safety of Las Vegas Boulevard. Many of the study recommendations were implemented by Clark County and were included in *Title 16 Roads and Highways Chapter 16.11 Obstructive Uses of Public Sidewalks (1994)*.

Since the implementation of "No Obstruction Zones" in the 1994 ordinance, many issues relating to pedestrian movements have been voiced by resort operators, the public, and the Board of County Commissioners. In efforts to address these issues, a Resort Corridor Workgroup was formed by the Clark County Board of Commissioners to identify action items to improve pedestrian safety and the patron experience of the Strip, resulting in the *Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue (2012),* the *Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue (2015 Update)*, and the *Clark County Pedestrian Study, Las Vegas Boulevard: Tropicana Avenue to Spring Mountain Road* (2016 Update of Non-Permanent Obstructions).

The following subsections summarize key background literature directly related to the Strip.

An Analysis of Existing Walkway Pedestrian Capacities along Las Vegas Boulevard South: Methodology. Discussion and Future Data Collection Requirements – Clark County Department of Public Works Traffic Management Division – 1993

To quantify the ability of Las Vegas Boulevard walkways to carry pedestrians and its peak pedestrian characteristics, Clark County conducted a pedestrian analysis from Sahara Avenue south to what was then the Hacienda Hotel/Casino. The Hacienda Hotel/Casino has since been replaced by the Mandalay Bay Resort. The study corridor was approximately four miles in length. Four locations were selected to provide a representative sample of pedestrian activity along the Strip:

- Former O'Shea's Casino (now the LINQ Hotel) – north of the Flamingo Hotel/Casino
- Harrah's Las Vegas Hotel/Casino
- Casino Royale Hotel/Casino
- Former El Morocco (east of Resorts World)

Each of the pedestrian count sites was located on the east side of Las Vegas Boulevard. The distance from the southernmost data collection point to the northernmost data collection point was approximately 1.5 miles.

The study documented walkway widths along Las Vegas Boulevard to be generally 6, 7.5, 10 or 12 feet wide, although many sections contained physical objects which reduced their effective walkway width (W_E).

A total of seven observed hours of pedestrian data was collected during the first two weeks of April 1993. Three of the locations were counted on a weekday from 10:15 AM to 11:15 AM and from 3:00 PM to 4:00 PM while the fourth (O'Shea's) was only counted from 3:00 PM to 4:00 PM. Clark County relied on previous pedestrian counts that were collected at the MGM Grand Hotel/Casino in April 1991 to conclude that peak pedestrian volumes occur Saturday afternoons around 2:00 PM and late Saturday evenings, around 10:00 PM. The data from the 1991 MGM Grand Hotel/Casino study was also

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used to calculate conversion factors from weekday to weekend volumes. Clark County then used the adjustment factors from the 1993 weekday counts to estimate weekend peak volumes.

Clark County found that three of the four locations were "operating at unacceptable LOS for peak pedestrian volumes." These three sites were all located within 0.5 miles of each other suggesting that this congestion might not be representative along the entire four miles of the Strip. The study recommended that unnecessary obstructions be prohibited and that the elimination of "hawkers" (hand billers) and news racks was desired. A minimum effective walkway width (W_E) of 5.0 feet was also recommended in all "high volume pedestrian areas."

Las Vegas Boulevard South Pedestrian Walkway Study – Lee Engineering – 1994

In 1994, a pedestrian study was commissioned by the Nevada Resort Association. This study is considered to be the first comprehensive study of the Las Vegas Boulevard pedestrian walkway environment. Previous studies had been conducted, but with either a very narrow scope or a scope that was too broad. The study area extended a total of 2.75 miles from Circus Circus Drive/Riviera Boulevard (now Elvis Presley Drive) to 0.25 miles south of Tropicana Avenue. The study area included 31 resorts, two major retail properties, the Las Vegas Convention Center, and other small retail businesses and motels.

The study followed the methodology described in the 1985 HCM for calculation of pedestrian LOS and included:

- Initial field investigation
- Preliminary data collection
- Pedestrian volume collection
  - Pedestrian volume data collection site selection
  - Walking observations
  - Elevated vantage point observations
- Walkway inventory
- Fixed and temporary obstruction determination
- Dynamic obstruction experiment
- Preparation of as-built drawings
- LOS calculations

Pedestrian volume data was recorded at seven data collection sites (including a total of 31 data collection points) between the hours of 10:00 AM to 1:30 AM January 6 through January 9 (Thursday – Sunday). The data collection was scheduled to coincide with the Consumer Electronics Show (CES), a major convention event, in an attempt to analyze the peak pedestrian conditions. Three video cameras were used for the data collection and progressively moved from location to location to obtain representative samples of each data collection site. A total of 33 hours of video data was collected, which resulted in over 50 hours of individual pedestrian sidewalk cross section observations.

To reduce and summarize the video data, a computer program was written and used to count and classify the number of pedestrians in 30-second intervals using the following categories:

- Pedestrians on walkway
- Pedestrians pushing a stroller
- Wheelchairs
- Bicycles on walkway
- Pedestrians in the street
- Pedestrians off walkway
- Other (pedestrians on crutches, pedestrian pushing a grocery cart, skateboarder, etc.)

Although the 1985 HCM uses a 15-minute analysis period, this 1994 study analyzed LOS using a 30-second interval. The 1985 HCM equation for pedestrian flow is:

$$v = \frac{V_{p15}}{15W_E}$$

v = pedestrian flow rate in ped/min/ft

V_{p15} = peak 15-minute pedestrian count in ped/15-minute

W_E = effective walkway width in feet

The 1994 study used the following modified flow rate calculation:

$$v = \frac{2 * V}{W_E}$$

v = pedestrian flow rate in ped/min/ft

V = sum of pedestrians counted during that 30-second interval

W_E = effective walkway width in feet

The 1985 HCM summarizes LOS assignments based on flow rate (ped/min/ft) and other variables, as shown in **Table 1.3.**

Table 1.3 – Pedestrian LOS Definitions (1985 HCM)

LOS	Space (sq ft/ped)	Expected Flows and Speeds		
		Ave Speed, S (ft/min)	Flow Rate, v (ped/min/ft)	Vol/Cap Ratio, v/c
A	≥ 130	≥ 260	≤ 2	≤ 0.08
B	≥ 40	≥ 250	≤ 7	≤ 0.28
C	≥ 24	≥ 240	≤ 10	≤ 0.40
D	≥ 15	≥ 225	≤ 15	≤ 0.60
E	≥ 6	≥ 150	≤ 25	≤ 1.00
F	< 6	< 150	----Variable----	

The study showed considerable variation in pedestrian flow rates between 0.0 and 29.3 ped/min/ft. A major finding of the study was that pedestrians are likely to leave the defined walkway where flow rates reach 8 ped/min/ft, which equates to a LOS C (HCM 7 currently recommends that walkways be designed to meet LOS C to avoid pedestrian spillover).

The Lee Engineering study also noted that the heaviest observed pedestrian volumes were seen between the Treasure Island Hotel/Casino and the Mirage Hotel/Casino following the "Battle of Buccaneer Bay" show, which was converted to the "Sirens of TI" show in 2003 and then discontinued in 2013.

The study recommended "No Obstruction Zones" for the pedestrian walkways along Las Vegas Boulevard as written into Chapter 16.11 of the Clark County Code, including the use of No Obstruction Zones at intersections, mid-block crosswalks, and driveway entrances. Lee Engineering recommended that maintaining these areas free from obstructions increases the ability of drivers to see pedestrians and properly judge walking speeds. With increased visibility of pedestrians by drivers, public safety on the sidewalks is enhanced.

Lee Engineering also recommended a minimum effective walkway width (W_E) of ten feet for new construction along Las Vegas Boulevard to allow for sufficient total walkway width (W_T) to accommodate future pedestrian loads. This recommendation was adopted by Clark County and became a condition of development for all new casino and resort development along Las Vegas Boulevard (as a result of the *Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue (2012),* the minimum effective walkway width (W_E) was increased to 15 feet).

Obstructive Uses of Public Sidewalks – Chapter 16.11 – Clark County, Nevada, Code of Ordinances (2011)

Clark County adopted an ordinance in 1994 within their municipal code that stated that "the existing pedestrian environment is inadequate as a transportation system and lacking in many safety features." The ordinance goes on to say that "a great number of persons are engaged in uses of the public sidewalks which create undue obstruction, hindrance, blockage, hampering, and interference with pedestrian travel." The ordinance recognizes that when public sidewalks become congested, large numbers of pedestrians walk in the streets (Ord. 1617 § 1 (part), 1994). It also noted that traffic signal indications were at times ignored by pedestrians during periods of heavy pedestrian congestion, increasing pedestrian and vehicle conflicts. The ordinance identified specific uses that were permitted to obstruct the public sidewalk such as street signs, traffic signals, fire hydrants, construction equipment with permit, and any "construction, modification, addition or attraction abutting private property occurring or in place before May 1, 1994." Obstructive uses are not permitted if the use either causes the sidewalk to operate below LOS C or results in a significant threat to or degradation of pedestrian safety.

Warning signs are required under the ordinance to be posted at least every quarter mile along Las Vegas Boulevard stating, "RESORT DISTRICT: NO OBSTRUCTIVE USES PERMITTED ON PUBLIC SIDEWALKS AT LOCATIONS DESIGNATED BY A WHITE STRIPE, PURSUANT TO CLARK COUNTY CODE CHAPTER 16.11" (see **Picture 1.1**).

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Picture 1.1 – Existing Ordinance Sign on Las Vegas Boulevard

Following the recommendations of the Lee Engineering Pedestrian Study, No Obstruction Zones are also clearly defined within the ordinance in order to enhance safety at the following locations:

- On or within any crosswalk, including but not limited to all portions of a public sidewalk located in or on a median, traffic island or other structure within, across or over a public street or roadway
- In or within 150 feet of any mid-block crosswalk, as measured from the crosswalk parallel to the sidewalk curb toward the direction of approaching vehicular traffic
- In or within 50 feet of any mid-block crosswalk as measured from the crosswalk parallel to the sidewalk curb away from the direction of approaching vehicular traffic
- In or within 100 feet of any crosswalk located at an intersection of streets or highways, as measured parallel to the sidewalk curb in the direction of approaching vehicular traffic from the point of curvature of the curb or the marked edge of the crosswalk, whichever is less
- In or within 50 feet of any crosswalk located at an intersection of streets or highways, as measured parallel to the sidewalk curb away from the direction of approaching vehicular traffic from the point of curvature of the curb or the marked edge of the crosswalk, whichever is less
- In or within 50 feet of any driveway providing ingress into or egress from any private or non-public property, as measured parallel to the sidewalk curb outward from the point of the curb cut
- On or within any section of the public sidewalk which has been determined to have an average LOS of C or below, during the hours at which LOS declines below LOS C, as determined by a traffic study conducted by a registered professional engineer of the Clark County department of public works according to the methodology set forth in the Las Vegas Boulevard South Pedestrian Walkway Study

The designation of the No Obstruction Zones is delineated with a white painted line on the public sidewalk (illustrated in **Picture 1.2** through **Picture 1.5**). The painted line locations are identified on a map adopted by the Board of County Commissioners. Section 16.11.050 of the ordinance clearly states that:

> "Pavement markings on the public sidewalk or signs designating the limits of the no obstruction zones, or plaques, monuments or medallions placed in the public sidewalk marking areas deemed to be no obstruction zones on the basis of LOS, as set forth in Section 16.11.020, shall also specify the hours during which the area is a no obstruction zone."

The affixed penalty for violation according to the ordinance was a term not to exceed six months in county jail or a fine not to exceed $1,000, or both. A full text copy of the current ordinance is provided in **Exhibit A.**



Picture 1.2 – White Painted Line Delineating a No Obstruction Zone (Example 1)



Picture 1.3 – White Painted Line Delineating a No Obstruction Zone (Example 2)



Picture 1.4 – White Painted Line Delineating a No Obstruction Zone (Example 3)



Picture 1.5 – White Painted Line Delineating a No Obstruction Zone (Example 4)

2010 Caesars International Pedestrian Study

Caesars International conducted a comprehensive effort to observe pedestrians along Las Vegas Boulevard in 2010. The data from this private counting program was released to the County for use in the *Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue (2012)*. Pedestrian activity was counted from a video camera in front of the Imperial Palace Hotel/Casino (now The LINQ) from December 2009 through November 2010. Nearly 5,000,000 pedestrians were observed during a sampling of 90 count days. The pedestrian count summary contained the following relevant conclusions:

- Saturdays and Sundays experienced the highest pedestrian volumes, averaging 67,250 and 60,100 pedestrians per day respectively
- Wednesdays experienced the lowest pedestrian volumes averaging 49,000 pedestrians per day

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- Pedestrian flow rates are the lowest in the morning around 6:30 AM
- Pedestrian activity increases throughout the morning hours and into early afternoon until about 2:00 PM
- The pedestrian flow rates remain consistently high from 2:00 PM throughout the day until they begin to drop off after midnight
- The highest pedestrian volumes were experienced during the month of September
- December experienced the lowest monthly volumes

Summary graphs from the 2010 year-long pedestrian counting program for hourly, daily, and monthly observations are provided in **Figure 1.8.**

Temporal data from this study was used to inform the selection of data collection time periods for the *Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue (2012),* the *Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue (2015 Update)*, and this study.

Resort Corridor Workgroup - 2012

Under the direction of the Clark County Board of Commissioners, the Resort Corridor Workgroup was established in August 2011 to discuss and address issues along Las Vegas Boulevard from Sahara Avenue to Russell Road. This workgroup consisted of executives from the gaming community, representatives from the Las Vegas Metropolitan Police Department, the Nevada Resort Authority, and Clark County. Recommendations to enhance the pedestrian experience and safety were developed by the workgroup and presented to the Clark County Board of Commissioners for their consideration in April 2012. In relation to this study the workgroup recommended:

- The County should amend existing county code or adopt a new ordinance that restricts activities on the public sidewalks of the Resort Corridor that pose a potential risk to the safety of pedestrians. The ordinance might address the following issues, with exceptions for special events or permitted activities:
  - The use of unicycles, bicycles and other types of cycles, skateboards, roller skates, in-line skates, hula hoops larger than 4 feet in diameter and shopping carts.
  - The launching or throwing of projectiles or other objects into or through the air.
  - The use of items or engaging in actions that pose a potential risk to pedestrians (to be more specifically defined in the ordinance).
- In order to provide for pedestrian safety and to eliminate pedestrian congestion, each Resort Property is encouraged to work with the County to clarify the boundaries between public and private sidewalks.
- With respect to the provisions of Clark County Code Chapter 16.11 on obstructive uses of public sidewalks, the County should:
  - Revisit the criteria for the current designations of "no obstruction zones" and renew the enforcement of the "no obstruction zones" that still meet the criteria.
  - Review the provisions of Chapter 16.11 including contracting for a new pedestrian study.
  - Following the completion of a new pedestrian study, update the zones and amend provisions of Chapter 16.11 as necessary.
  - Amend the relevant provisions of Chapter 16.11 to clarify that pedestrian bridges are for the prompt and safe movement of pedestrians and that, like crosswalks, stopping and standing on pedestrian bridges are prohibited.
- After completion of the new pedestrian study provided for in the recommendation above, the County should consider adopting an ordinance that establishes time, place, and manner restrictions on First Amendment activities on public sidewalks along the Resort Corridor that would promote public safety, welfare, and other legally protected interests to the County.

Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue – Kimley-Horn – 2012

As the result of one of the recommendations of the 2012 Resort Corridor Workgroup, a 2012 pedestrian study (pictured in **Figure 1.7**) was prepared for Clark County Department of Public Works to document pedestrian activity on Las Vegas Boulevard (the Strip) between Russell Road and Sahara Avenue. The study expands upon the findings and recommendations of the 1994 Lee Engineering report *Las Vegas Boulevard South Pedestrian Walkway Study*.

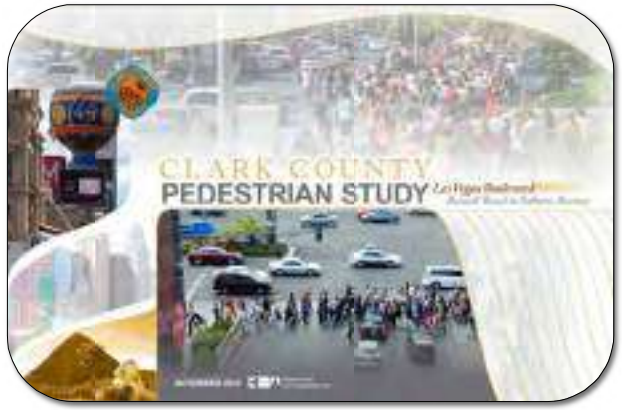


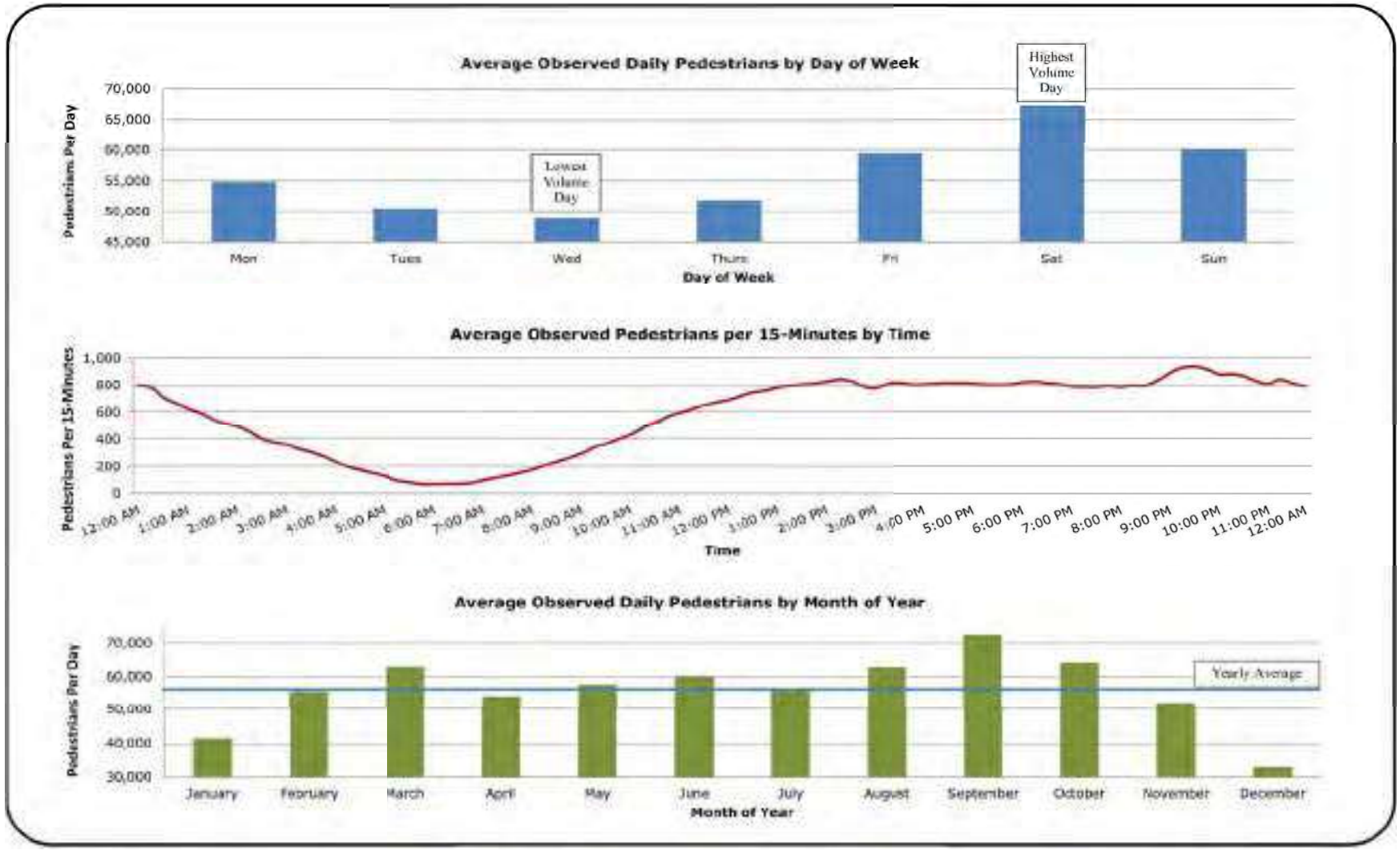
Figure 1.7 – Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue – Kimley-Horn – 2012

Pedestrian volume data was collected over Memorial Day Weekend (May 26, 2012) and on a typical summer Saturday (June 16, 2012) to capture and evaluate peak and typical pedestrian conditions. Pedestrian volumes and walking speeds were documented for comparison with calculated walkway capacity. NPOs were also located, quantified, and classified to identify possible impediments to pedestrian movement. As shown in **Figure 1.9**, 17 pedestrian walkway segments were found to exceed LOS C.

Conclusions and recommendations of the study included the following:

- The results of this study continue to support the no obstruction zone recommendations of the 1994 Lee Engineering Pedestrian Study as incorporated into Clark County Code Chapter 16.11 where obstructive uses are not permitted near a signalized intersection, access drive or mid-block crosswalk.
- Clark County entitlement requirements on new construction within the Resort Corridor should continue to require pedestrian walkways to be designed for a minimum effective walkway width (W_E) of ten feet (10′) or a pedestrian walkway LOS C or better. Based on the pedestrian volumes observed in this study, some future sidewalks within the central or inner portions of the study corridor will require walkway widths of over 15 feet (W_T). A walkway with 15 feet of effective width (W_E) can serve up to 2,250 pedestrians in 15 minutes while maintaining an LOS C.
- The study observed a significant number of individuals creating undue obstruction in the current no obstruction zones at intersections and driveways. This study provides additional support and justification to maintain these areas free from obstructions during peak walkway usage. Maintaining no obstruction zones at intersections, midblock crosswalks and access drive entrances reduces congestion which allows for increased visibility and enhanced walkway safety.
- The pedestrian bridges have constrained widths and are an integral part of the pedestrian walkway system. Based upon the observed pedestrian volumes, and walkway LOS, it is appropriate to designate the pedestrian bridges as no-obstruction zones. Pedestrian bridges should be maintained free of any obstructions, including obstructions like trash enclosures. In addition, the areas on and around stair landings, elevator waiting areas, along with escalator approach and departure landing zones should also be maintained free of any obstructions.
- New development and reconstruction projects should incorporate the removal, replacement and/or installation of no obstruction zone signs and white painted sidewalk markings as appropriate, into the projects' civil improvement drawings.
- When a driveway has been abandoned or is no longer in active use, the designation of no obstruction zone should be removed from that area.
- The conducted walking speed studies were useful in understanding tourist leisure walking speeds and the walking dynamics of Las Vegas Boulevard. However, the walking speed LOS procedures of the 2010 HCM were not found to be as effective in determining walkway congestion levels as the pedestrian volume LOS evaluation procedures. It is recommended that future studies of the pedestrian LOS along Las Vegas Boulevard continue to use only the pedestrian volume LOS evaluation procedures of the HCM.
- LOS evaluations at bus stops suggest that where insufficient queue area is identified, bus stops should be reserved for bus patrons by restricting NPOs. The LOS evaluations concluded that all Type 2 and Type 3 bus stops should allow the area between the queue area and the curb to be available for only queued and walking pedestrians with a delineated no obstruction zone. In addition, from field observations, all Type 1 bus stops should also be considered for no obstruction zones to encourage transit use by maintaining queue areas of LOS C or better and aiding pedestrian flow in front of Type 1 bus stops.

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Source: Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue (2012) – Figure 1.5

Figure 1.8 – Pedestrian Volume Trends Observed in 2010 at the Imperial Palace Hotel/Casino (Now The LINQ)

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Source: Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue (2012) – Figure 3.73

Figure 1.9 – Walkway Segments that Exceeded LOS C in 2012

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Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue – Kimley-Horn – 2015 Update

One of the key findings of the *Las Vegas Boulevard: Russell Road to Sahara Avenue (2012)* report was the identification of 17 segments of pedestrian walkway that were found to exceed LOS C (seen in **Figure 1.9**). After the completion of the 2012 study, the County in coordination with the resort properties undertook measures and completed significant projects to improve and enhance the walkway conditions within the Resort Corridor and within the 17 identified walkway segments exceeding LOS C. For the 2015 Update (pictured in **Figure 1.10**), pedestrian volume data was collected similarly to the 2012 study. Data was collected over Memorial Day Weekend (May 23, 2015) and on a typical summer weekend (June 20, 2015) to capture and evaluate 2015 peak and typical pedestrian conditions. As with the 2012 study, NPOs were located, quantified, and classified to identify possible impediments to pedestrian movement in comparison with previous observations. There were 13 walkway segments found to exceed LOS C in 2015 as shown in **Figure 1.12** and **Figure 1.13.**

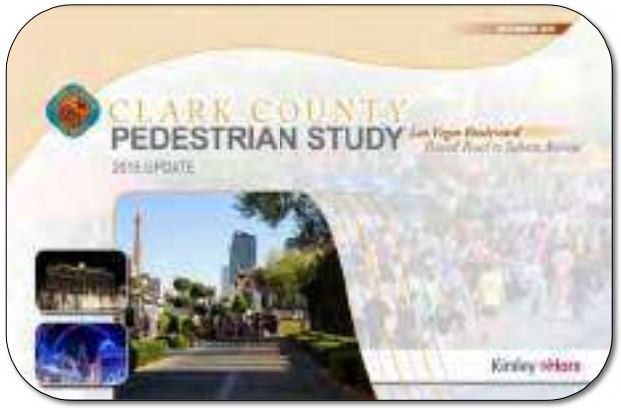


Figure 1.10 – Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue – Kimley-Horn – 2015 Update

Conclusions and recommendations of the study included the following:

- The results of this restudy continue to support the no-obstruction zone recommendations of the 1994 Lee Engineering Pedestrian Study as incorporated into Clark County Code Chapter 16.11 where obstructive uses are not permitted near a signalized intersection, access drive, or mid-block crosswalk.
- Clark County entitlement requirements on new construction within the Resort Corridor should continue to require pedestrian walks to be designed for a minimum effective walkway width (W_E) of fifteen feet (15′) or a pedestrian walkway LOS of C or better. Considering a typical 1.5-foot shy distance on each side of the walk (three (3) feet of total shy distance), a total of 18 feet of walkway width should be provided. A walkway with 15 feet of effective width (W_E) can serve up to 2,250 pedestrians in 15 minutes while maintaining an LOS C.
- Clark County entitlement requirements on new construction projects within the Resort Corridor should incorporate the removal, replacement, and/or installation of no obstruction zone signs and white painted sidewalk markings as appropriate, into the projects' civil improvement drawings. Depending on the scope of these improvements, the development should work with the Department of Public Works to update the "No Obstruction Zones" map for adoption by the Board of County Commissions.
- The study observed a significant number of individuals creating undue obstruction in the current no obstruction zones at intersections and driveways. This study provides additional support and justification to maintain these areas free from obstructions during peak walkway usage. Maintaining no obstruction zones at intersections, midblock crosswalks and access drive entrances reduces congestion which allows for increased visibility and enhanced walkway safety.
- The pedestrian bridges are an integral part of the pedestrian walkway system but have constrained widths. Based upon the observed pedestrian volumes and walkway LOS, it is appropriate at times to designate pedestrian bridges as no-obstruction zones. Pedestrian bridges should be maintained free of any obstructions, whether permanent or non-permanent in nature. In addition, the areas on and around stair landings, elevator waiting areas, as well as escalator approach, and departure landing zones should also be maintained free of any obstructions (permanent or non-permanent).
- Bus stops should be reserved for bus patrons by restricting NPOs. All Type 2 (In Front of Walk) and Type 3 (Behind Walk) bus stops should allow the area between the bus patron queue area and the curb to be available for only queued bus patrons and walking pedestrians with a delineated no obstruction zone. All Type 1 (Isolated) bus stops should also be considered for no obstruction zones to encourage transit use by maintaining queue areas of LOS C or better and aiding transit rider flow.
- With development or redevelopment within the Resort Corridor, the developer should work with the Las Vegas Valley Water District to relocate any water district facilities out of the pedestrian walkway by providing appropriate utility easements.
- Pedestrian containment measures should be standardized along the Resort Corridor including placement and design. Containment encourages the use of pedestrian bridges and signalized crosswalks. Containment installations should be installed recognizing the need to maintain intersection sight visibility zones, especially at driveway crossings.
- Pedestrian crosswalks within the resort corridor along Las Vegas Boulevard should be constructed to:
  - Accommodate the observed pedestrian volumes at the desired crossing location. This is especially important at signalized crossings in order to improve visibility of the crossing.
  - Be perpendicular to the sidewalk, when possible, in order to provide pedestrians the shortest path in crossing the street.
  - Consider median refuge islands for marked at-grade crosswalks with approved markings.
  - Discourage the use of "porkchop" right-turn islands for exclusive right-turn lanes to shorten pedestrian street crossing widths whenever applicable.

Clark County Pedestrian Study, Las Vegas Boulevard: Tropicana Avenue to Spring Mountain Road – Kimley-Horn – 2016 Update of Non-Permanent Obstructions

The purpose of the 2016 Update (pictured in **Figure 1.11**) was to specifically observe and document NPOs in 2016 with an increased law enforcement presence and provide a comparison to NPOs observed in the 2012 and 2015 Clark County Pedestrian Studies.

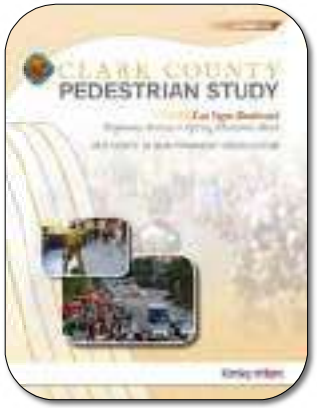
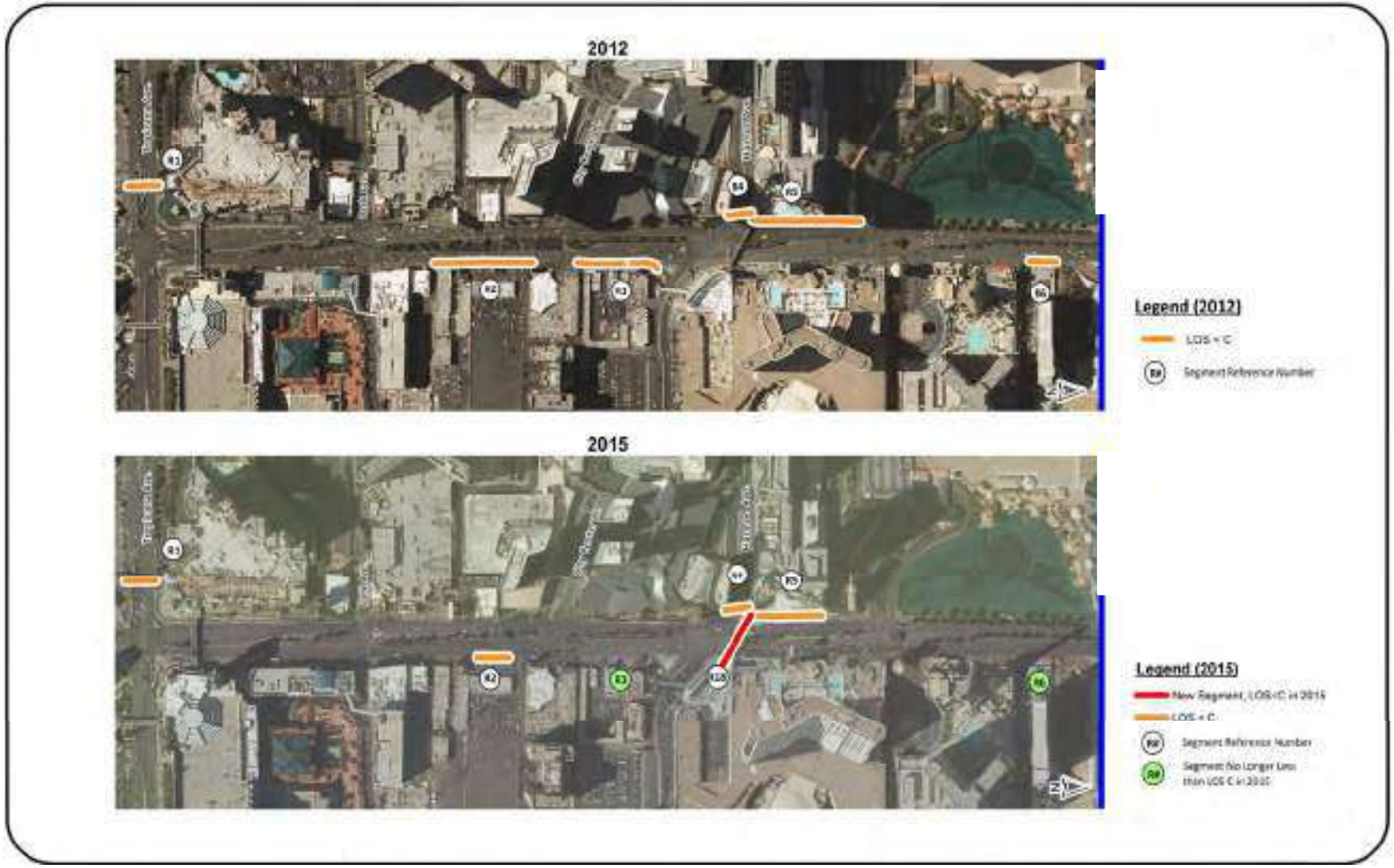


Figure 1.11 – Clark County Pedestrian Study, Las Vegas Boulevard: Tropicana Avenue to Spring Mountain Road – Kimley-Horn – 2016 Update of Non-Permanent Obstructions

Key findings of the 2016 Study included the following:

- The number of hand billers reduced from 2012 to 2016.
- Many hand billers were observed to be handing out literature for nightclubs, ride-sharing companies (such as Lyft, etc.) rather than the gentleman club cards seen in the past. This observation was more prevalent in the 1 PM - 4 PM and 5 PM - 8 PM data collection periods.
- The total number of vendors was consistent; however, the types of vendors changed. There was a reduction in ice chest water sales during the Summer 2016 counts. However, the number of vendors with ice chests appeared to have increased during the Fall 2016 counts. Most of these vendors offered both beer and water sales.
- Solicitors increased from 2012 to the Summer of 2016 but decreased in the Fall 2016 observations. Since 2012, there was an upward trend in the number of street performers. The number of performers during the Fall 2016 data collection was less than those from the Summer 2016 counts and consistent with the volumes observed in 2015.
- The total number of NPOs increased since 2012 partially due to the increase in street performers.
- The highest number of NPOs observed for a holiday Saturday was 248 between 9 PM and 12 AM, approximately 10.8% less than the 278 observed on the holiday weekend in 2015. The highest number of NPOs observed on the typical weekend was 264 in 2016, a 4.8% increase from the 252 observed on the typical Saturday in 2012.
- Most pedestrian bridges were clear of NPOs during the data collection. Several pedestrian bridges were observed with large numbers of solicitors and/or performers grouped together.
- The average stay of an NPO was found to be 118 minutes.
- The following walkway segments were found to have the maximum number of NPOs for the holiday weekend Saturday:
  - Tropicana Avenue North Pedestrian Bridge – 9 NPOs
  - Bellagio – 30 NPOs

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Source: Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue (2015 Update) – Figure 4.2

Figure 1.12 – Walkway Segments that Exceeded LOS C in 2012 and 2015 (Tropicana Avenue to Flamingo Road)

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Source: Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue (2015 Update) – Figure 4.3

Figure 1.13 – Walkway Segments that Exceeded LOS C in 2012 and 2015 (Flamingo Road to Spring Mountain Road)

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2 Existing Conditions

This section of the report describes in detail the 2022 existing conditions of the Las Vegas Boulevard Resort Corridor from Russell Road to Sahara Avenue including: attractions, pedestrian easements, existing walkways widths, newsracks, bus stops, pedestrian containment, bollards (new to this 2022 study), crash data, and annual average daily traffic (AADT). Significant pedestrian walkway LOS and safety improvements have been made to the corridor as a result of the 2012 and 2015 Clark County Pedestrian Studies.

2.1 Attractions

There are two recurring outdoor attractions within the study corridor that regularly draw a significant crowd: the Bellagio Fountains (shown in **Picture 2.1**) and the Mirage Volcano show (illustrated in **Picture 2.2**). Both attractions are free to the public.



Picture 2.1 – Bellagio Fountains – Daily Attraction



Picture 2.2 – Mirage Volcano – Daily Attraction

The Bellagio Fountains are located along the west side of Las Vegas Boulevard in front of the Bellagio Hotel/Casino, just south of Flamingo Road. On Saturdays, Sundays, and holidays, the fountain display occurs every 30 minutes from 12:00 PM to 8:00 PM and every 15 minutes from 8:00 PM to 12:00 AM, lasting approximately five (5) minutes.

The Mirage Volcano is located along the west side of Las Vegas Boulevard in front of the Mirage, between Siegfried and Roy Drive North and Siegfried and Roy Drive South. The Mirage Volcano show occurs daily depending upon weather conditions at 8:00 PM, 9:00 PM, 10:00 PM, and 11:00 PM, lasting about five (5) minutes.

2.2 Pedestrian Easements

In coordination with Clark County Public Works staff, an exhibit of existing pedestrian easements was prepared. **Exhibit B** provides the Clark County references and numbers to easement documents pertaining to the walkways along Las Vegas Boulevard from Russell Road to Sahara Avenue.

In many walkway areas along Las Vegas Boulevard paving distinctions between private property and the public walkway are provided (such as different textures and/or colors, as shown in **Picture 2.3**.



Picture 2.3 – Public Walkway/Private Property Distinction by Pavement Colors

2.3 Existing Walkway Widths (W_T)

In order to determine pedestrian LOS along Las Vegas Boulevard, total walkway widths (W_T) and effective walkway widths (W_E) were established. Through field measurements, evaluation of aerial imagery, records research, and reference to previous pedestrian studies, the study corridor walkway widths were documented. Specifically, the total walkway widths (W_T and W_E) were determined at each of the pedestrian volume data count locations and at various locations throughout the study corridor that were representative of the conditions along defined walkway segments.

At these locations, the effective walkway widths (W_E) were calculated using HCM 7 methodology as described in **Section 1.4.1.** Shy distances were applied to permanent obstructions (i.e., fences, landscaping, trash enclosures, utility poles, bus shelters, fire hydrants, etc.) with the resulting width being the effective walkway widths (W_E). A shy distance of 0.5 feet on the walkway side of the pedestrian security bollards was used based on observed pedestrian activity. The walkway width of 1.5 feet between the outer edge of the bollard and the face of curb was considered not to be a part of the functional walkway width for LOS calculations.

Figure 2.1 illustrates the typical effective walkway widths (W_E) on Las Vegas Boulevard from Russell Road to Sahara Avenue.

As a result of the *Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue (2012)* and the *Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue (2015 Update)*, the following was recommended:

> "Clark County entitlement requirements on new construction within the Resort Corridor should continue to require pedestrian walks to be designed for a minimum effective walkway width (W_E) of fifteen feet (15') or a pedestrian walkway LOS of C or better. Considering a typical 1.5-foot shy distance on each side of the walk (three (3) feet of shy distance), a total of 18 feet of walkway width should be provided. A walkway with 15 feet of effective width (W_E) can serve up to 2,250 pedestrians in 15 minutes while maintaining a LOS of C."

Since 2012, the above recommendation has been applied for the entire Resort Corridor for pedestrian walkway planning to accommodate existing and future pedestrian volumes. Current project entitlements within the Resort Corridor continue to require developments to provide a minimum clear walkway of 15 feet with appropriate shy distances, or a clear sidewalk width of 18 feet considering a typical shy distance of 1.5 feet on each side of the walk (three (3) feet total). Sidewalk width exceptions are recognized to accommodate existing conditions with engineering judgement based on average pedestrian volumes.

Picture 2.4 shows an example of an 18-foot clear sidewalk width providing 15 feet of effective walkway width.



Picture 2.4 – 18-Foot Clear Sidewalk, Caesars Colosseum

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Figure 2.1 – Typical Effective Walkway Width Per Segment (W_E)

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2.4 Physical Walkway Elements

Along Las Vegas Boulevard there are a number of physically constraining elements that impact the walkway width differently and a number of improvements have been implemented throughout the Resort Corridor to maximize the walkway width considering the physical elements that exist. The walkway widths along Las Vegas Boulevard are recommended to be free of permanent obstructions to eliminate reductions in the walkway widths as much as possible. **Picture 2.5** shows some typical walkway elements commonly found along the Resort Corridor. **Picture 2.6** illustrates how some permanent walkway elements create narrower walkways which result in pedestrian congestion.

This section considers physical walkway elements along the study corridor, including newsracks, bus stops, pedestrian containment, and bollards, that impact effective walkway width (W_E) and LOS calculations.



Picture 2.5 – Typical Walkway Elements on Resort Corridor



Picture 2.6 – Typical Walkway Elements on Resort Corridor

2.4.1 Newsracks

Newsracks affixed along the Las Vegas Boulevard study limits are owned and maintained by Clark County and were designed to provide a uniform color and appearance within the Resort Corridor, as shown in **Picture 2.7.** The peaked roof design discourages the top of the newsracks from being used as makeshift tables for collecting trash, stacking of handbilling materials, or other activities. Currently, there are 35 newsrack medallion locations (locations where newsracks are permitted) in place along the Resort Corridor study limits, as shown in **Figure 2.2. Picture 2.8** shows a typical newsrack medallion installation. The previous efforts of Clark County to provide uniformity of design and specificity as to permitted location of the newsracks has generally resulted in the newsracks not significantly impacting the effective walkway widths along the Resort Corridor.



Picture 2.7 – Newsrack within the Resort Corridor



Picture 2.8 – Typical Newsrack Medallion in Curb

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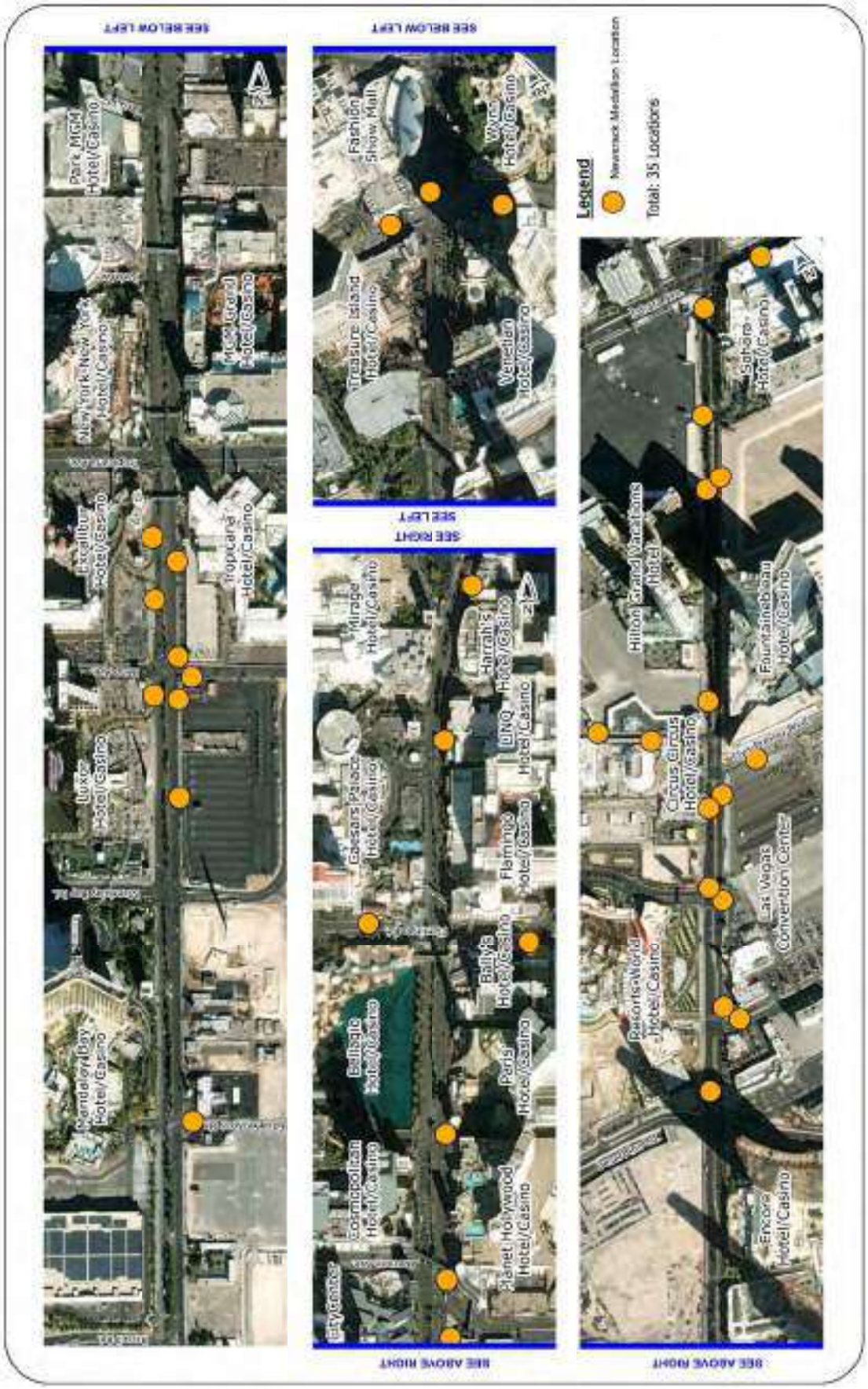


Figure 2.2 – Newsrack Medallion Locations as of 2022

2.4.2 Bus Stops

There are currently 28 bus stops within the study limits of the Resort Corridor along Las Vegas Boulevard from Russell Road to Sahara Avenue. The number and location of active bus stops on Las Vegas Boulevard frequently changes due to construction and the continuously changing streetscape of the Strip. As previously defined in the *Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue (2012)*, bus stop installation types are represented per the text, figures, and pictures below. **Figure 2.6** displays current bus stop locations labeled by the type of bus stop installation, five (5) Type 1 bus stops, 10 Type 2 bus stops, and 13 Type 3 bus stops were identified.

Type 1 – (Isolated) – These bus stops are separate from the main pedestrian walkway; typically, a separate walkway is provided from the main walkway to access the bus stop and shelter. Type 1 bus stops minimize conflict between bus patron queues and passing pedestrians.



Figure 2.3 – Type 1 (Isolated) Bus Stop Diagram

Type 2 – (Front of Walk) – These bus stops are typically located in front of the pedestrian walkway. Type 2 bus stops also minimize conflict between bus patron queues and passing pedestrians. However, large patron queues can spill back onto the adjacent through walkway.



Figure 2.4 – Type 2 (Front of Walk) Bus Stop Diagram

Type 3 – (Behind Walk) – These bus stops are typically located behind the pedestrian walkway. Type 3 bus stops route pedestrian traffic between the bus shelter or bus benches and the street. This is the least desirable type of bus stop for the Resort Corridor. As pedestrian volumes and bus patrons increase, conflicts occur on the walkway between the bus patrons and pedestrians walking by the stop.



Figure 2.5 – Type 3 (Behind Walk) Bus Stop Diagram



Picture 2.9 – Type 1 (Isolated) Bus Stop – Park MGM



Picture 2.10 – Type 2 (Front of Walk) Bus Stop – Resorts World



Picture 2.11 – Type 3 (Behind Walk) Bus Stop – Tropicana

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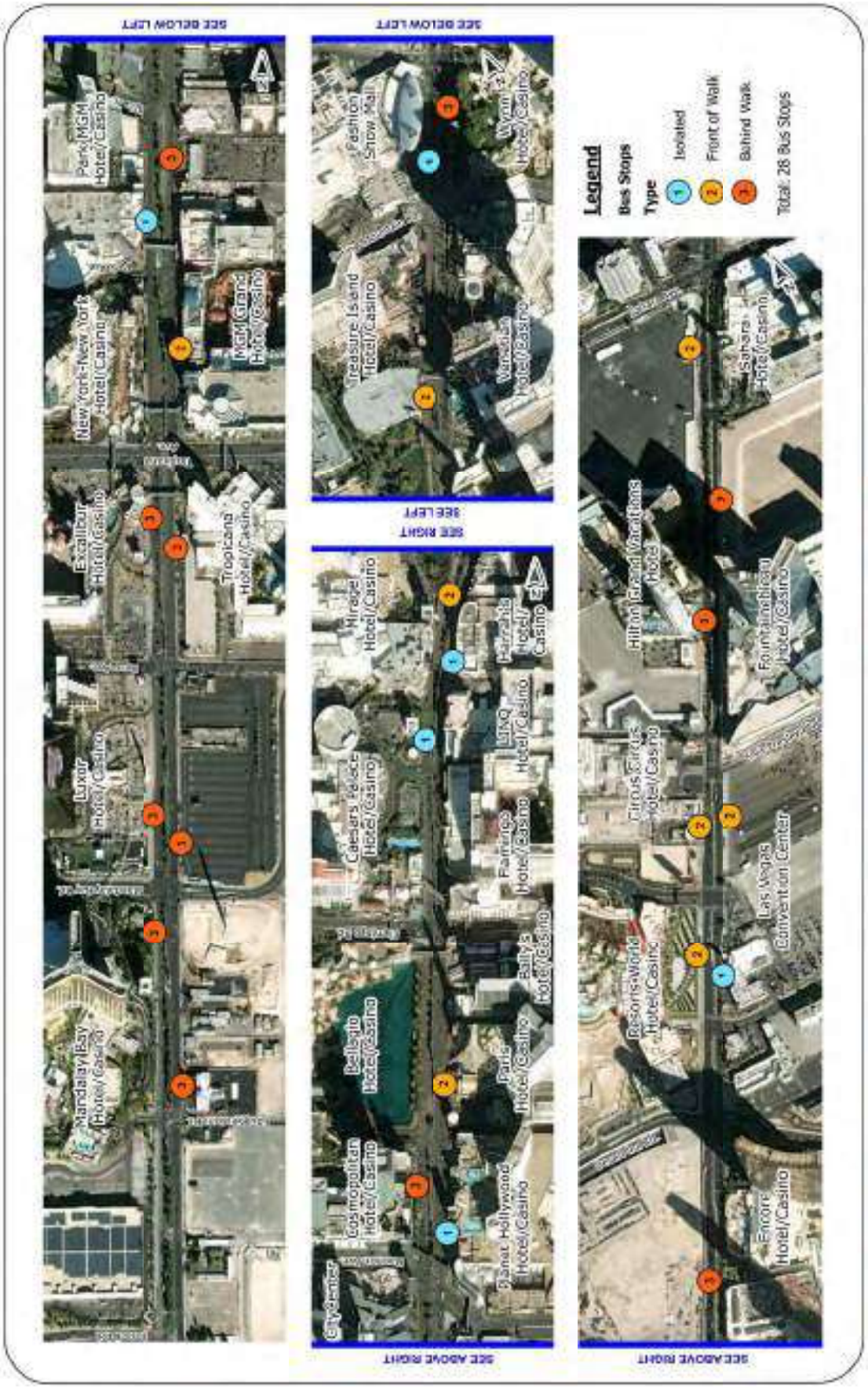


Figure 2.6 – Bus Stop Types and Locations as of 2022

2.4.3 Pedestrian Containment

Pedestrian containment is a physical barrier or a system of barriers that acts to restrict and direct pedestrian movements. They can also be used to separate pedestrians from adjacent hazards such as an adjacent roadway and its vehicle traffic. Pedestrian containment continues to evolve along Las Vegas Boulevard as new walkway and roadway projects are constructed. Pedestrian containment measures along the Resort Corridor have been developed over the years in many forms. Within the study corridor, pedestrian containment is located within the roadway median and on the curbside adjacent to the vehicle travel lanes of Las Vegas Boulevard. As shown in **Picture 2.12** through **Picture 2.18**, types of pedestrian containment measures along Las Vegas Boulevard include:

- Decorative concrete or brick walls
- Decorative metal fencing
- Concrete barriers
- Rope and cable barriers
- Elevated walkways
- Landscape treatments
- Standard Clark County loop fencing

As shown in **Figure 2.7** there is approximately 23,900 linear feet (LF) of pedestrian containment along Las Vegas Boulevard between Russell Road and Sahara Avenue (6,630 LF within the median and 17,270 LF along the curb). A total of 23,900 LF of containment fencing was documented within the Resort Corridor at the time of this study. This is an increase of approximately 2,600 LF from the total 21,300 LF of containment identified in the *Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue (2015 Update)*.



Picture 2.12 – Pedestrian Containment – Decorative Concrete Wall



Picture 2.13 – Pedestrian Containment – Decorative Metal Fencing



Picture 2.14 – Pedestrian Containment – Temporary Concrete Barrier



Picture 2.15 – Pedestrian Containment – Rope Barriers



Picture 2.16 – Pedestrian Containment – Elevated Walkway



Picture 2.17 – Pedestrian Containment – Landscape Treatment



Picture 2.18 – Pedestrian Containment – Standard Clark County Loop Fencing

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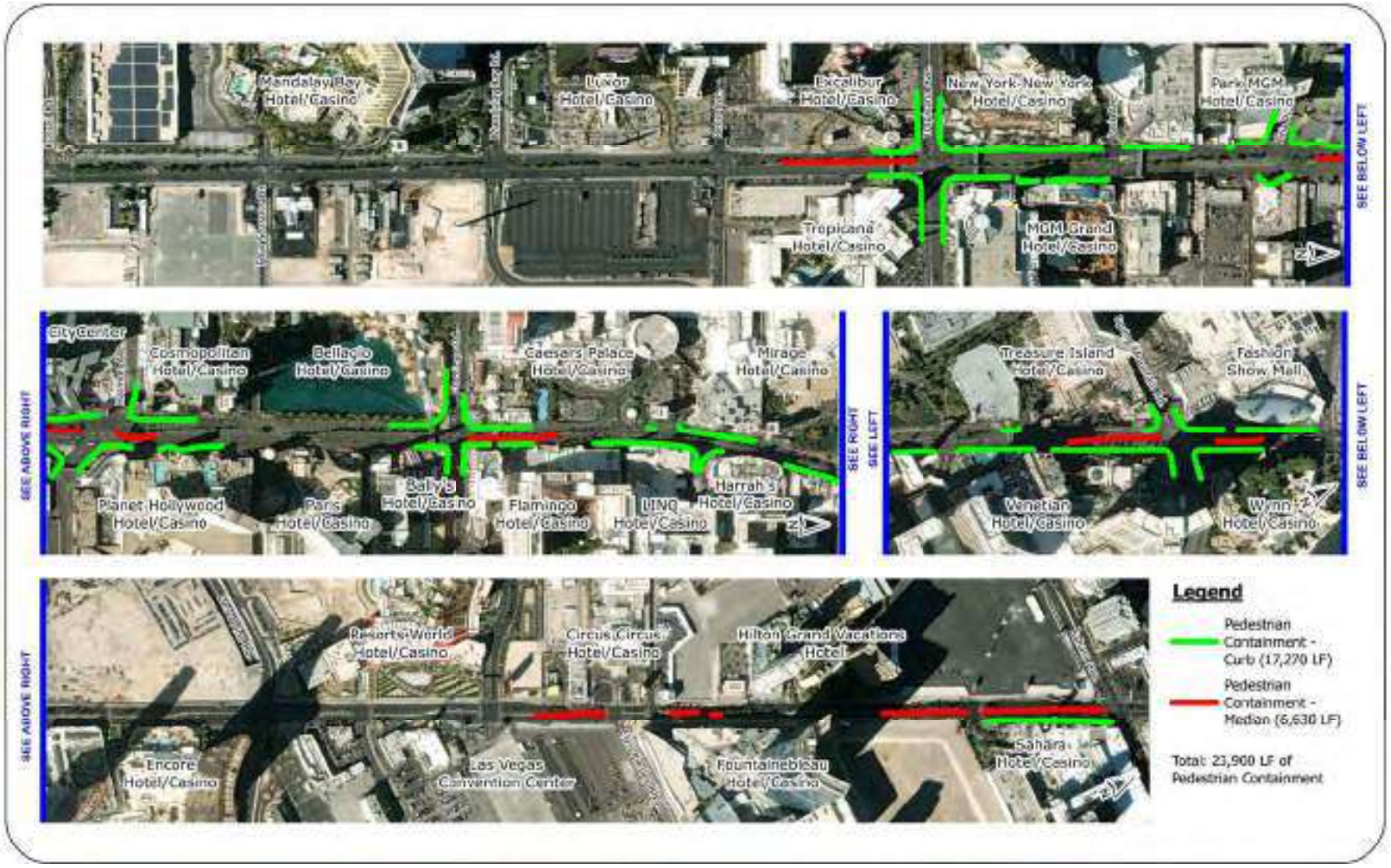


Figure 2.7 – Pedestrian Containment Installations as of 2022 – Russell Road to Sahara Avenue

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2.4.4 Bollards

Pedestrian safety bollards have been installed along the Resort Corridor from the Las Vegas Welcome Sign south of Russell Road to Sahara Avenue. The installed M50-P1 bollards provide a buffer between the pedestrian walkways and adjacent motor vehicles to protect pedestrians from potential hostile-vehicle pedestrian crashes.

Pedestrian protection measures continue to evolve along Las Vegas Boulevard as new walkway and roadway projects are constructed. **Picture 2.19** through **Picture 2.22** show typical bollards as installed along Las Vegas Boulevard.

Picture 2.23 and **Picture 2.24** show bollard vehicle crashes at the Bellagio Fountains and at the Paris Bus Stop, respectively. **Picture 2.23** and **Picture 2.24** illustrate that the bollards are an effective way to improve pedestrian safety as various vehicle crashes have occurred since their installation, which have reduced potential pedestrian fatalities or injuries.



Picture 2.19 – Typical M50-P1 Bollards



Picture 2.20 – Typical M50-P1 Bollards



Picture 2.21 – Typical M50-P1 Bollards with Pedestrian Containment (Example 1)



Picture 2.22 – M50-P1 Bollards with Pedestrian Containment (Example 2)



Picture 2.23 – Bollard Vehicle Crash – Bellagio Fountains



Picture 2.24 – Bollard Vehicle Crash – Paris Casino Bus Stop

As shown in **Figure 2.8**, approximately 32,875 LF of bollard security protection is present along Las Vegas Boulevard between Russell Road and Sahara Avenue in addition to other sidewalk protection measures.

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Figure 2.8 – Bollard Installations as of 2022 – Russell Road to Sahara Avenue

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2.5 Annual Average Daily Traffic (AADT) and Pedestrian Crashes

With significant vehicle and pedestrian traffic volumes along Las Vegas Boulevard, it is important to consider the vehicle AADT along Las Vegas Boulevard (the Strip) and the associated pedestrian crash data. As documented by Dr. Fruin, when LOS degrades past LOS C for pedestrians that is when pedestrians are more likely to move off the walkway, and potentially into the street. While there is significant pedestrian containment along the corridor, as previously documented, there are still a number of pedestrian crashes within the Resort Corridor. It is recommended that pedestrian containment continue to be deployed in the median of Las Vegas Boulevard throughout the study corridor where no adjacent sidewalk containment exists to encourage the use of pedestrian bridges and signalized crosswalks. **Figure 2.9** illustrates daily traffic patterns observed along Las Vegas Boulevard on the Holiday Saturday. Based on a review of historical AADT along Las Vegas Boulevard, traffic volumes within the Resort Corridor have been generally consistent over the past 10 years. **Figure 2.10** displays the 2021 AADT for Las Vegas Boulevard and the connecting street network.

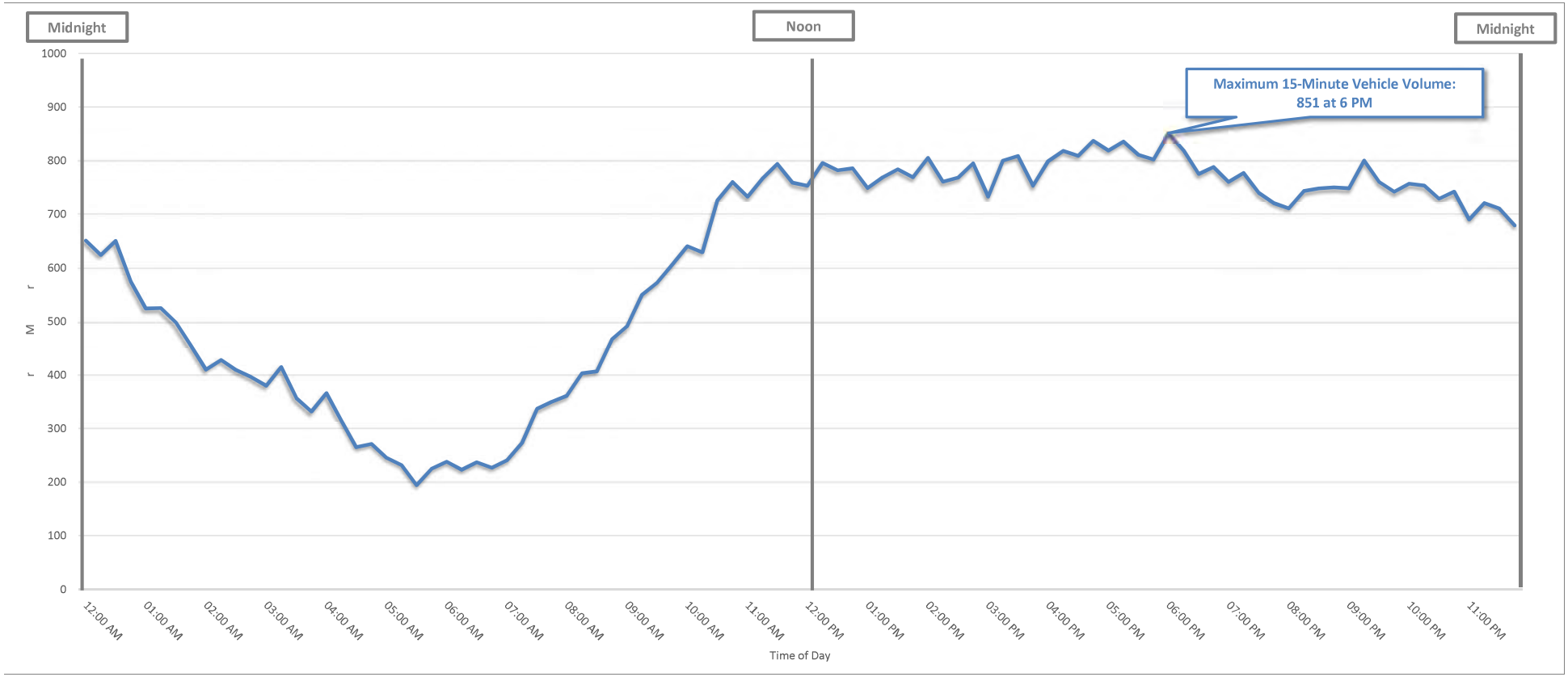


Figure 2.9 – Las Vegas Boulevard Traffic Volumes as Observed on Saturday, May 28, 2022 (Holiday Saturday)

A review of the most recent crash data from the Nevada Department of Transportation showed that from January 1, 2016, to January 1, 2021, 2,083 crashes between vehicles and pedestrians occurred within Clark County. Of those 2,083 crashes, 29 or 1.4% occurred on Las Vegas Boulevard in the 4.2-mile segment between Russell Road and Sahara Avenue. There was a total of 271 pedestrian/vehicle crashes in Clark County that resulted in fatalities for the five-year period. Of those 271 fatal crashes, only three (3), or 1.1% occurred within the study corridor. **Figure 2.11** shows the locations and severity of pedestrian/vehicle crashes within the study corridor. Pedestrian/vehicle crashes occur throughout the full length of the Strip from Russell Road to Sahara Avenue.

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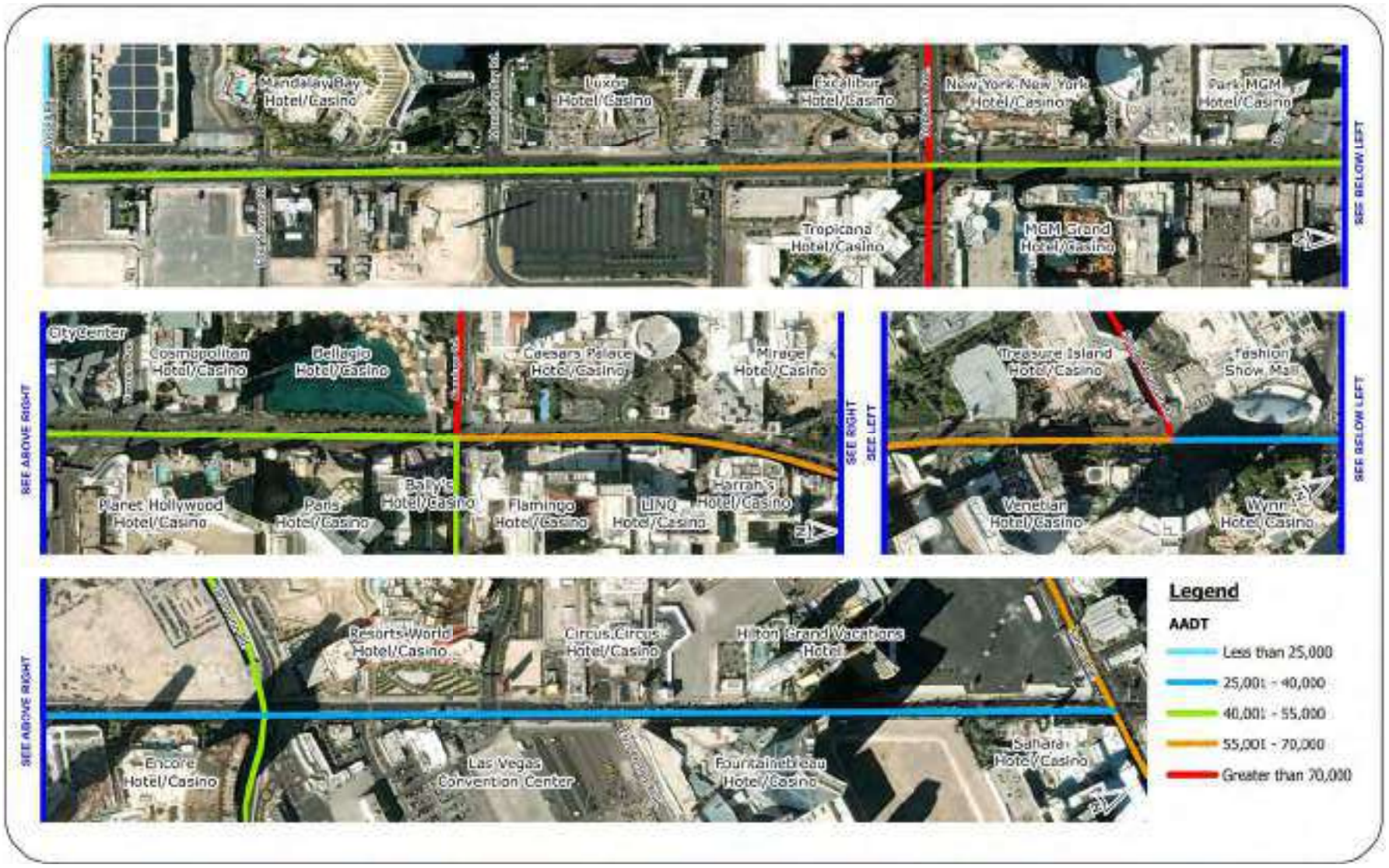


Figure 2.10 – 2021 Average Annual Daily Traffic (AADT)

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Figure 2.11 – Pedestrian Crash Location and Severity (January 1, 2016, to January 1, 2021)

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3 Data Collection

To capture the dynamic pedestrian activity along Las Vegas Boulevard from Russell Road to Sahara Avenue, a data collection program was established. The data collection program primarily focused on the collection of pedestrian volume data for the purpose of documenting the location of pedestrian congestion by time of day and day of week within the study corridor. The data collection effort was also intended to build and expand upon the findings and recommendations of the *Las Vegas Boulevard South Pedestrian Walkway Study (1994),* the *Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue (2012),* and the *Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue (2015 Update)*.

Non-Permanent Obstructions (NPOs) were also observed in order to quantify their impact on pedestrian LOS and update the existing No Obstruction Zones based on the current conditions on Las Vegas Boulevard, congestion locations, mid-block crosswalks, intersections, and driveways. It is important to note that the term "non-permanent obstruction," (NPO) for the purposes of the data collection phase of the study and for this report, is defined as an individual who could obstruct the pedestrian walkway while engaging in any of the following activities within the walkway: hand billing, performing, soliciting, or selling.

In consultation with Clark County and for consistency with previous pedestrian studies, the pedestrian volume data collection times for this study were identified to be Saturday, May 28, 2022 (Memorial Day Weekend) and Saturday, June 25, 2022 (Typical Weekend).

Memorial Day Weekend continues to be one of the most active periods within the Resort Corridor. **Picture 3.1** illustrates the activity level observed on Saturday, May 28, 2022 (Memorial Day Weekend) and **Picture 3.2** shows the activity level on Saturday, June 25, 2022 (Typical Weekend).



Picture 3.1 – Activity Level on May 28, 2022 (Memorial Day Weekend)



Picture 3.2 – Activity Level on June 25, 2022 (Typical Weekend)

3.1 Pedestrian Counts

The pedestrian count locations for this study were selected in coordination with Clark County to provide a comprehensive data set for analysis, consistent with previously conducted pedestrian studies. As listed in **Table 3.1**, 48 count locations were selected. These 48 locations included 16 pedestrian bridges and 32 walkway locations. A map of the pedestrian volume observation locations is provided in **Figure 3.1**.

Table 3.1 – Pedestrian Count Locations

Location ID	Count Location
1	Luxor
2	Tropicana
3	Excalibur
4	Tropicana Avenue South Pedestrian Bridge
5	Tropicana Avenue West Pedestrian Bridge
6	Tropicana Avenue East Pedestrian Bridge
7	Tropicana Avenue North Pedestrian Bridge
8	MGM Grand
9	New York - New York/Park MGM
10	Park Avenue Pedestrian Bridge
11	Metro Food Court
12	CityCenter – Crystals
13	Tex Mex
14	Harmon Avenue West Pedestrian Bridge
15	Harmon Avenue East Pedestrian Bridge
16	Harmon Avenue North Pedestrian Bridge

Table 3.1 – Pedestrian Count Locations (Continued)

Location ID	Count Location
17	Bellagio South
18	Paris
19	Bally's Hotel/Casino
20	Bally's Bazaar
21	Bellagio North
22	Flamingo Road South Pedestrian Bridge
23	Flamingo Road West Pedestrian Bridge
24	Flamingo Road East Pedestrian Bridge
25	Cromwell
26	Flamingo Road North Pedestrian Bridge
27	Caesars Palace
28	Flamingo-Margaritaville
29	The Colosseum
30	Forum Shops
31	Harrah's
32	Mirage
33	Venetian South
34	Treasure Island Bus Stop
35	Venetian North
36	Venetian Pedestrian Bridge
37	Treasure Island South
38	Treasure Island North
39	Spring Mountain Road West Pedestrian Bridge
40	Spring Mountain Road East Pedestrian Bridge
41	Wynn
42	Wynn Pedestrian Bridge
43	North of Fashion Show Drive
44	Resorts World
45	Convention Center
46	Circus Circus
47	Hilton Grand Vacations
48	Sahara

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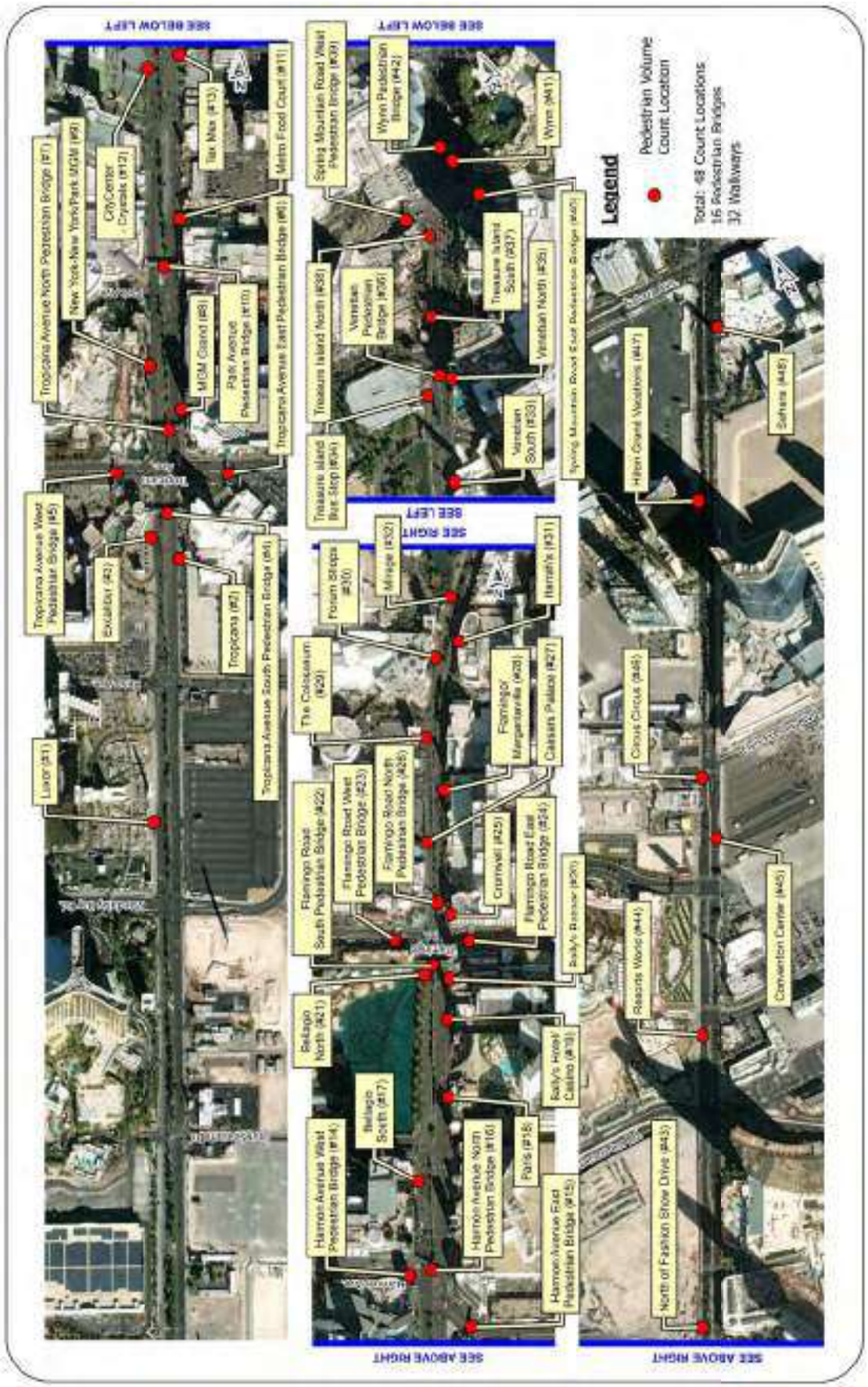


Figure 3.1 – Pedestrian Volume Count Locations

All locations were counted from 12:00 PM (Noon) to 12:00 AM (Midnight) on May 28, 2022 (the Memorial Day Holiday Weekend) and June 25, 2022 (Typical Weekend). Additionally, weeklong data was collected for New York-New York/Park MGM (#9) and Venetian South (#33) from 6:00 AM on Friday, May 27 through 6:00 AM on Friday, June 3, 2022, and from 6:00 AM on Friday, June 24 through 6:00 AM on Friday, July 1, 2022, to provide a representative understanding of hourly and weekly trends and variations. The cameras that were used to collect pedestrian volume data are shown in **Picture 3.3** through **Picture 3.5**.



Picture 3.3 – Data Collection Camera on Pedestrian Bridge



Picture 3.4 – Streetside Data Collection Camera



Picture 3.5 – Data Collection Camera by Pedestrian Bridge Light

3.2 Non-Permanent Obstructions (NPOs)

During the May 28, 2022 (Memorial Day Weekend) and June 25, 2022 (Typical Weekend) data collection periods, NPOs were observed by eight (8) individual Kimley-Horn data collection agents. NPOs are defined for this study as individuals who could obstruct the pedestrian walkway while hand billing, performing, soliciting, or selling. Under County Ordinance 16.11 (**Exhibit A**), an "obstructive use" is generally defined as "obstructing, delaying, hindering, blocking, hampering or interfering with pedestrian passage, including passage to or from private property" (Obstructive Uses of Public Sidewalks - 16.11.020 – General Definitions, Clark County).

The data collection agents were tasked with documenting the quantity, classification, and location of NPOs in the pedestrian walkways and on pedestrian bridges during three (3) study periods from 1:00 PM to 4:00 PM, 5:00 PM to 8:00 PM, and 9:00 PM to 12:00 AM. Crowds associated with the obstructions were also documented. NPOs were classified into the following four (4) categories for uniformity in data collection and consistency with the previous Clark County Pedestrian Studies:

- Hand billers – any person within the pedestrian walkway attempting to give away literature of any kind. No financial transaction occurs, and the hand biller does not expect anything in return for the literature that is given.
- Performers – any person within the pedestrian walkway attempting to entertain with the expectation of receiving a tip. Performers may include anyone dressed in a costume expecting tips for photographs, or any display of talent for a tip.
- Solicitors – any person within the pedestrian walkway soliciting donations. The solicitor provides nothing to those who donate.
- Vendors – any person within the pedestrian walkway with the intent of selling some item. There is a financial transaction that takes place, and some item is exchanged for money.

Individuals who were stopped and standing, sitting, or laying in the walkway were not recorded as NPOs unless they were involved in hand billing, performing, soliciting, or selling. For purposes of this 2022 study, per the direction of Clark County, specific data was collected identifying and locating individuals who were loitering, sleeping, or performing, selling, or soliciting beneath the pedestrian bridges at the elevator waiting areas.

In addition to the eight (8) data collection agents, a senior engineer assigned to the field documentation conducted general observations of the pedestrian activities within the study corridor between Russell Road and Sahara Avenue during the study periods. For consistency with previous studies, the agents participated in a training session to review data collection requirements and field classifications of individuals (see **Picture 3.6**).



Picture 3.6 – Data Collection Training

The NPO field data as completed by each agent for the study was compiled and summarized in **Section 5.4.** NPOs were summarized by observation period, side of street, and by location within the corridor in accordance with the following categories:

- Within 50 feet of an intersection, driveway, or crosswalk
- On a pedestrian bridge
- Within 15 feet of a pedestrian bridge landing
- Within 15 feet of a bus stop
- Within 15 feet of elevator/under bridge (*new to the 2022 study*)
- Other

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4 Las Vegas Background Conditions During Data Collection

The general background conditions of Las Vegas and the study area were reviewed to understand tourism/pedestrian activity levels and construction activities during the data collection weekends in May and June of 2022. The following sections describe Las Vegas tourism indicators, events, weather, construction, and escalator conditions leading up to and during the data collection weekends of May 28, 2022 (Memorial Day Weekend) and June 25, 2022 (Typical Weekend).

4.1 Tourism

The LVCVA tourism indicator data includes total passengers at Harry Reid International Airport (formerly McCarran International Airport), visitor volumes, Interstate 15 (I-15) traffic volumes, and hotel occupancy rates. The available tourism data for May and June is summarized in **Table 4.1** and **Table 4.2** for 2018, 2019, 2021, and 2022. Tourism data for 2020 was not included for comparison, as this was the year in which the COVID-19 pandemic most severely impacted Las Vegas tourism.

Table 4.1 – May Tourism Data Comparison

Tourism Measures	May 2022	May 2021	May 2019	May 2018
Total Passengers at Harry Reid International Airport	4,577,609	3,521,630	4,584,506	4,354,367
Visitor Volumes	3,446,900	2,878,200	3,691,100	3,630,400
I-15 Traffic Volumes	47,515	50,754	46,993	47,268
Citywide Weekend Hotel Occupancy	91.9%	87.8%	96.4%	96.0%
Las Vegas Strip Hotel Occupancy	85.5%	71.8%	92.2%	90.5%

Harry Reid International Airport experienced a total of 4,577,609 passengers in May 2022, compared to 3,521,630 passengers in May 2021, 4,584,506 passengers in May 2019, and 4,354,367 passengers in May 2018. Essentially, in May 2022, the airport saw approximately 30.0% more passengers compared with May 2021 and 5.1% more passengers compared with May 2018, while only experiencing 0.2% fewer passengers than the greatest total in May 2019.

In May 2022, Las Vegas experienced a total visitor volume of 3,446,900, compared to 2,878,200 visitors in May 2021, 3,691,100 visitors in May 2019, and 3,630,400 visitors in May 2018. Total visitor volume in May 2022 is up roughly 19.8% from 2021 and down roughly 6.6% and 5.1% compared with May 2019 and May 2018, respectively.

I-15 provides interstate connectivity between Las Vegas, Nevada and Los Angeles, California. Average daily automobile traffic on I-15 at the Nevada/California border in May 2022 was reported at 47,515 vehicles, compared to historical traffic volumes of 50,754, 46,993, and 47,268 vehicles in May 2021, May 2019, and May 2018, respectively.

In May 2022, Las Vegas obtained a citywide weekend hotel occupancy rate of 91.9%, compared to 87.8% in May 2021, 96.4% in May 2019, and 96.0% in May 2018. In May 2022, the Las Vegas Strip experienced a hotel occupancy rate of 85.5%, compared to 71.8% in May 2021, 92.2% in May 2019, and 90.5% in May 2018, respectively.

Table 4.2 – June Tourism Data Comparison

Tourism Measures	June 2022	June 2021	June 2019	June 2018
Total Passengers at Harry Reid International Airport	4,683,156	3,810,023	4,444,263	4,306,512
Visitor Volumes	3,324,800	2,971,000	3,607,400	3,565,400
I-15 Traffic Volumes	48,469	53,833	48,915	49,031
Citywide Weekend Hotel Occupancy	90.0%	89.4%	96.4%	95.8%
Las Vegas Strip Hotel Occupancy	86.1%	77.3%	93.4%	91.6%

As shown in **Table 4.2**, the visitor statistics in June followed similar patterns to the May data.

Based on the LVCVA tourism indicator data from total airport passengers and I-15 traffic volumes summarized in **Table 4.1** and **Table 4.2**, Las Vegas generally recovered from the impact of the COVID-19 pandemic. However, at the time of the data collection, the citywide hotel occupancy rates, Las Vegas Strip hotel occupancy rates, and visitor volumes had not fully recovered.

As further discussed in **Section 5.2**, reduced hotel occupancy rates appeared to be reflected in the generally lower pedestrian volumes in 2022 compared with those observed in the *Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue (2012)* and the *Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue (2015 Update)*.

4.2 Events

During and surrounding the data collection weekends of May 28, 2022 (Memorial Day Weekend) and June 25, 2022 (Typical Weekend), numerous events were attracting tourists to Las Vegas in addition to the wide variety of regularly scheduled shows, concerts, conferences, and events citywide, as summarized in the following subsections.

The identified events listed in **Section 4.2.1** and **Section 4.2.2** represent typical Las Vegas Resort Corridor activities and did not include any notable event management impacts to the pedestrian walkways during the data collection periods.

4.2.1 May 2022

- AEW Wrestling, Michelob ULTRA Arena at Mandalay Bay, May 25 and May 27
- The Doobie Brothers, Zappos Theater at Planet Hollywood, May 27 and May 28
- The Eagles, MGM Grand Garden Arena, May 28
- AEW Wrestling, T-Mobile Arena, May 29
- New Kids on the Block, Michelob ULTRA Arena at Mandalay Bay, May 29
- Jack White, The Chelsea at The Cosmopolitan, May 29

4.2.2 June 2022

- AJR, The Chelsea at The Cosmopolitan, June 24
- Los Dos Carnales, The Theater at Virgin Hotels, June 24
- Marca MP, MGM Grand Garden Area, June 24
- World Series of Poker, June 24 through June 26
- Primus, The Theater at Virgin Hotels, June 25
- Nick Cannon, MGM Garden Area, June 25
- Fantasy Sports-Con, Las Vegas Convention Center (LVCC), June 25
- International Esthetics Cosmetics & Spa Conference, LVCC, June 25 through June 27
- Aerosmith, Dolby Live at the Park MGM, June 26

4.3 Weather

On Saturday, May 28, 2022, the highest recorded temperature for the day was 93 degrees Fahrenheit and the lowest recorded temperature was 77 degrees Fahrenheit, as indicated at the Harry Reid International Airport Weather Station. The historical average high temperature for this day is 93.2 degrees Fahrenheit and the historical average low temperature is 70 degrees Fahrenheit. The weather was generally reported to be partly or mostly cloudy, with wind speeds ranging from 5 to 21 miles per hour.

The highest recorded temperature on June 25, 2022, was 104 degrees Fahrenheit for the day and the lowest recorded temperature was 79 degrees Fahrenheit. The historical average high temperature for this day is 102.1 degrees Fahrenheit and the historical average low temperature is 78.7 degrees Fahrenheit. The weather was generally reported to be fair, with wind speeds ranging from 0 to 10 miles per hour.

The weather conditions for the two observation days were typical and were not found to impact tourist/pedestrian activities or the data collection efforts along the Las Vegas Boulevard study corridor walkways.

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4.4 Study Area Construction

At the time of the data collection efforts on May 28, 2022 (Memorial Day Weekend) and June 25, 2022 (Typical Weekend), the following properties/locations had construction activity along Las Vegas Boulevard:

- East side of Las Vegas Boulevard north of Russell Road
- Fontainebleau Hotel/Casino
- Sahara Hotel/Casino
- West side of Las Vegas Boulevard from Wynn Boulevard/Genting Boulevard to Fashion Show Drive

Picture 4.1 through **Picture 4.4** show examples of construction activity as observed during the 2022 study.

The construction activity was observed to cause some additional delay for vehicle traffic, but pedestrian activity/routing was not observed to be impacted during the study periods.



Picture 4.1 – Construction on East Side of Las Vegas Boulevard north of Russell Road



Picture 4.2 – Fontainebleau Hotel/Casino Construction



Picture 4.3 – Sahara Hotel/Casino Construction



Picture 4.4 – Construction on West Side of Las Vegas Boulevard from Wynn Boulevard/Genting Boulevard to Fashion Show Drive

4.5 Escalators

The pedestrian bridges and associated escalators and elevators are an integral part of the Resort Corridor pedestrian network. Similarly to past pedestrian studies, during the data collection periods, non-operational escalators and elevators were recorded (illustrated in **Picture 4.5** through **Picture 4.8**).

There were a number of escalators that were not operational which required patrons to use the stairs and limited capacity of pedestrian movement and access to/from the pedestrian bridges.



Picture 4.5 – Out of Service Escalator Tropicana Avenue North Pedestrian Bridge, East Side



Picture 4.6 – Out of Service Escalator Spring Mountain Road West Pedestrian Bridge, North Side



Picture 4.7 – Out of Service Escalator Tropicana Avenue North Pedestrian Bridge, West Side

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Picture 4.8 – Out of Service Escalator Harmon Avenue East Pedestrian Bridge, South Side

The total number of escalators that were observed out of service can be seen in **Table 4.3.**

Table 4.3 – Out of Order Escalators

	Observed Out of Order (Up)		Observed Out of Order (Down)	
Time Period	**5/28/22**	**6/25/22**	**5/28/22**	**6/25/22**
1 PM - 4 PM	10	2	6	2
5 PM - 8 PM	6	1	1	1
9 PM - 12 AM	4	0	0	0
	County Out of Order (Up)		**County Out of Order (Down)**	
Time Period	**5/23/15**	**6/20/15**	**5/23/15**	**6/20/15**
1 PM - 4 PM	3	1	4	1
5 PM - 8 PM	2	1	1	1
9 PM - 12 AM	1	0	0	0

Figure 4.1 and **Figure 4.2** illustrate locations of observed out of order escalators on May 28, 2022, and June 25, 2022, respectively.

Based on observations and visitor comments, it is important that escalators are operating in the upwards direction whenever possible when maintenance is being performed. As discussed in the *Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue (2012)* and the *Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue (2015 Update)*, pedestrians on the Strip move at a leisurely pace. It is important therefore to maintain an atmosphere focused on the visitor experience. If one side of an escalator is not functional, it is desirable that the working side is set to move pedestrians upward. This further discourages pedestrians from illegally and unsafely crossing the street to avoid climbing stairs as well as prevents a queue from forming at the bottom of the stairs. Clark County currently does not have the option to reverse escalator travel directions without causing damage to the escalator equipment.

It is also recommended that escalator maintenance be planned and conducted outside the hours of 12 PM to 12 AM and not on weekends, to have the least impact on the pedestrian experience along the Resort Corridor.



Figure 4.1 – Observed Out of Service Escalators (May 28, 2022)



Figure 4.2 – Observed Out of Service Escalators (June 25, 2022)

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5 Data Evaluation

Quantitative and qualitative measures are important when addressing the pedestrian mobility, safety, and general experience. This section of the report presents both the numerical results from the data collection effort, as well as the qualitative assessments made by Kimley-Horn staff.

Numerical results are provided for the data collection and analysis with regard to pedestrian and resulting LOS values along Las Vegas Boulevard study corridor from Russell Road to Sahara Avenue. The results of the Non-Permanent Obstruction (NPO) data collection are also presented.

5.1 Data Analysis Methodology

This section details the methodology used to analyze the collected pedestrian volume data to determine pedestrian LOS throughout the Las Vegas Boulevard study corridor.

5.1.1 Pedestrian Volume Analysis – Level of Service (LOS) Calculations

HCM 7 methodology was used for calculating the pedestrian flowrate LOS in order to determine pedestrian LOS along the Strip. The analysis requires calculation of the following, as discussed in **Section 1.4.1**:

- Step 1 – Determine the effective walkway width (W_E)
- Step 2 – Calculate the pedestrian flow rate
- Step 3 – Determine LOS

The total walkway widths (W_T) and the factors that influence the determination of the effective walkway widths (W_E) were established through field measurements, evaluation of aerial imagery, records research, and reference to previous pedestrian studies (discussed in **Section 2.3**).

5.2 Pedestrian Volumes

Table 5.1 summarizes the peak pedestrian data collected within the study corridor on Saturday, May 28, 2022 (Memorial Day Weekend) and Saturday, June 25, 2022 (Typical Weekend). Maximum 15-minute volumes are provided for each count location along with the time that the maximum 15-minute volume occurred. **Figure 5.2** and **Figure 5.3** provide a visual intensity summary of the maximum 15-minute pedestrian volumes counted for the Holiday Saturday and the Typical Saturday, respectively. The pedestrian volume data as collected for this study is included as **Exhibit C. Picture 5.1** illustrates the general activity level of pedestrians along the Resort Corridor on any given Saturday.

The maximum number of pedestrians observed in a 15-minute period on Saturday, May 28, 2022, was 1,707 on the Flamingo Road West Pedestrian Bridge, while the maximum Saturday, June 25, 2022, was 1,852 on the Tropicana Avenue North Pedestrian Bridge. Of the 48 count locations, three (3) were observed with more than 1,500 pedestrians in 15 minutes on Saturday, May 28, 2022, compared to two (2) locations observed with more than 1,500 pedestrians in 15 minutes on Saturday, June 25, 2022. No locations were observed with more than 2,250 pedestrians in 15 minutes during the May 28, 2022, and July 25, 2022 data collection periods. A maximum volume of 2,250 pedestrians in 15 minutes can be accommodated with LOS C on an effective width walkway of 15 feet (the recommended width for new construction).

Table 5.2 provides a comparison of maximum 15-minute volumes in 2012, 2015, and 2022 for each count location (not all locations counted in 2022 were previously documented in 2012 or 2015). In general, volumes at the count locations have shown a decrease in 2022. This may be attributed to the redistribution of pedestrian flow on the Strip due to the construction/reconstruction of various properties. Additionally, pedestrian volumes may have still been recovering from the COVID-19 pandemic, as seen in the tourism indicator data discussed in **Section 4.1**. The data indicates that tourism in Las Vegas has generally recovered from the impact of the COVID-19 pandemic and has nearly returned to pre-pandemic levels.

Furthermore, weeklong data was collected for the New York-New York/Park MGM (#9) and Venetian South (#33) count locations from 6:00 AM on Friday, May 27 through 6:00 AM on Friday, June 3, 2022, and from 6:00 AM on Friday, June 24 through 6:00 AM on Friday, July 1, 2022, to provide a representative understanding of hourly and weekly trends and variations, consistent with the data collection of past studies on Las Vegas Boulevard. The weeklong count locations are illustrated in **Figure 5.1**.

The weeklong data is presented in **Figure 5.4** and used to inform the time-of-day restriction analysis further discussed in **Section 5.5**. Saturday, Monday, and Wednesday were found to have the highest pedestrian volumes during the holiday week, while Friday, Saturday, and Sunday were observed to have the highest pedestrian volumes during the typical week. Pedestrian volumes were generally highest between 12:00 PM and 12:00 AM daily. The observed day of week distribution for the typical week was generally consistent with the Imperial Palace pedestrian volume trends provided in **Figure 1.8** which was collected as a comprehensive effort to observe pedestrians along Las Vegas Boulevard in 2010, with Friday, Saturday, and Sunday being the days of the week with the highest observed volumes for typical weeks, while the holiday week saw Saturday with the highest volumes followed, by Monday, then Wednesday (with lower volumes on Friday and Sunday).



Picture 5.1 – General Saturday Activity Level in Resort Corridor



Figure 5.1 – Weeklong Count Locations

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Table 5.1 – Peak Pedestrian Volume Summary

Count Location ID	Location	Maximum 15-Minute Volume (Holiday Weekend)	Time of Max Volume (Holiday Weekend)	Maximum 15-Minute Volume (Typical Weekend)	Time of Max Volume (Typical Weekend)
1	Luxor	139	7:15 PM - 7:30 PM	54	8:45 PM - 9:00 PM
2	Tropicana	38	6:45 PM - 7:00 PM	64	8:30 PM - 8:45 PM
3	Excalibur	162	7:15 PM - 7:30 PM	107	9:00 PM - 9:15 PM
4	Tropicana Avenue South Pedestrian Bridge	223	6:00 PM - 6:15 PM	278	7:30 PM - 7:45 PM
5	Tropicana Avenue West Pedestrian Bridge	1,211	9:00 PM - 9:15 PM	1,011	9:00 PM - 9:15 PM
6	Tropicana Avenue East Pedestrian Bridge	296	8:30 PM - 8:45 PM	541	11:15 PM - 11:30 PM
7	**Tropicana Avenue North Pedestrian Bridge**	1,015	8:30 PM - 8:45 PM	**1,852**	**11:15 PM - 11:30 PM**
8	MGM Grand	738	8:45 PM - 9:00 PM	920	8:45 PM - 9:00 PM
9	New York - New York/Park MGM	627	8:45 PM - 9:00 PM	281	11:15 PM - 11:30 PM
10	Park Avenue Pedestrian Bridge	721	8:45 PM - 9:00 PM	548	8:30 PM - 8:45 PM
11	Metro Food Court	1,303	9:00 PM - 9:15 PM	992	11:30 PM - 11:45 PM
12	CityCenter - Crystals	435	9:30 PM - 9:45 PM	429	10:30 PM - 10:45 PM
13	Tex Mex	1,135	9:00 PM - 9:15 PM	916	10:30 PM - 10:45 PM
14	Harmon Avenue West Pedestrian Bridge	911	10:00 PM - 10:15 PM	988	9:15 PM - 9:30 PM
15	Harmon Avenue East Pedestrian Bridge	865	9:00 PM - 9:15 PM	931	9:00 PM - 9:15 PM
16	Harmon Avenue North Pedestrian Bridge	951	10:00 PM - 10:15 PM	1,033	8:45 PM - 9:00 PM
17	Bellagio South	1,346	9:30 PM - 9:45 PM	1,193	10:15 PM - 10:30 PM
18	Paris	1,105	7:00 PM - 7:15 PM	1,104	8:45 PM - 9:00 PM
19	Bally's Hotel/Casino	1,273	11:15 PM - 11:30 PM	929	8:30 PM - 8:45 PM
20	Bally's Bazaar	1,296	10:45 PM - 11:00 PM	1,056	10:30 PM - 10:45 PM
21	**Bellagio North**	1,240	9:45 PM - 10:00 PM	**1,530**	**11:00 PM - 11:15 PM**
22	Flamingo Road South Pedestrian Bridge	653	6:30 PM – 6:45 PM	753	8:45 PM - 9:00 PM
23	**Flamingo Road West Pedestrian Bridge**	**1,707**	**11:30 PM - 11:45 PM**	1,417	9:30 PM - 9:45 PM
24	Flamingo Road East Pedestrian Bridge	864	10:45 PM – 11:00 PM	1,383	10:15 PM - 10:30 PM
25	**Cromwell**	**1,634**	**9:15 PM - 9:30 PM**	1,185	11:45 PM - 12:00 AM
26	Flamingo Road North Pedestrian Bridge	476	11:30 PM - 11:45 PM	630	8:45 PM - 9:00 PM
27	Caesars Palace	759	9:30 PM - 9:45 PM	768	11:15 PM - 11:30 PM
28	Flamingo - Margaritaville	807	7:00 PM - 7:15 PM	786	6:45 PM - 7:00 PM
29	The Colosseum	1,270	9:15 PM - 9:30 PM	750	9:15 PM - 9:30 PM
30	Forum Shops	976	9:00 PM - 9:15 PM	1,469	9:00 PM - 9:15 PM
31	Harrah's	1,079	9:45 PM - 10:00 PM	909	10:30 PM - 10:45 PM

RED text indicates maximum volume observed. **BOLD text indicates volume over 1,500 and associated location and time of day.*

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Table 5.1 – Peak Pedestrian Volume Summary (Continued)

Count Location ID	Location	Maximum 15-Minute Volume (Holiday Weekend)	Time of Max Volume (Holiday Weekend)	Maximum 15-Minute Volume (Typical Weekend)	Time of Max Volume (Typical Weekend)
32	Mirage	813	11:00 PM - 11:15 PM	790	7:45 PM - 8:00 PM
33	**Venetian South**	**1,584**	**11:00 PM - 11:15 PM**	900	9:45 PM - 10:00 PM
34	Treasure Island Bus Stop	651	9:30 PM - 9:45 PM	713	11:00 PM - 11:15 PM
35	Venetian North	617	10:30 PM - 10:45 PM	584	11:00 PM - 11:15 PM
36	Venetian Pedestrian Bridge	499	11:15 PM - 11:30 PM	430	8:45 PM - 9:00 PM
37	Treasure Island South	776	11:45 PM - 12:00 AM	680	11:15 PM - 11:30 PM
38	Treasure Island North	401	11:00 PM - 11:15 PM	339	11:15 PM - 11:30 PM
39	Spring Mountain Road West Pedestrian Bridge	570	11:00 PM - 11:15 PM	450	8:30 PM - 8:45 PM
40	Spring Mountain Road East Pedestrian Bridge	646	6:30 PM - 6:45 PM	615	10:00 PM - 10:15 PM
41	Wynn	159	6:45 PM - 7:00 PM	121	9:45 PM - 10:00 PM
42	Wynn Pedestrian Bridge	361	2:30 PM - 2:45 PM	329	4:00 PM - 4:15 PM
43	North of Fashion Show Drive	373	11:15 PM - 11:30 PM	284	10:30 PM - 10:45 PM
44	Resorts World	241	10:15 PM - 10:30 PM	250	10:30 PM - 10:45 PM
45	Convention Center	41	11:15 PM - 11:30 PM	46	6:30 PM - 7:00 PM
46	Circus Circus	119	9:00 PM - 9:15 PM	88	10:00 PM - 10:15 PM
47	Hilton Grand Vacations	118	8:15 PM - 8:30 PM	87	11:45 PM - 12:00 AM
48	Sahara	78	6:00 PM - 6:15 PM	77	9:30 PM - 9:45 PM

RED text indicates maximum volume observed. **BOLD text indicates volume over 1,500 and associated location and time of day.*

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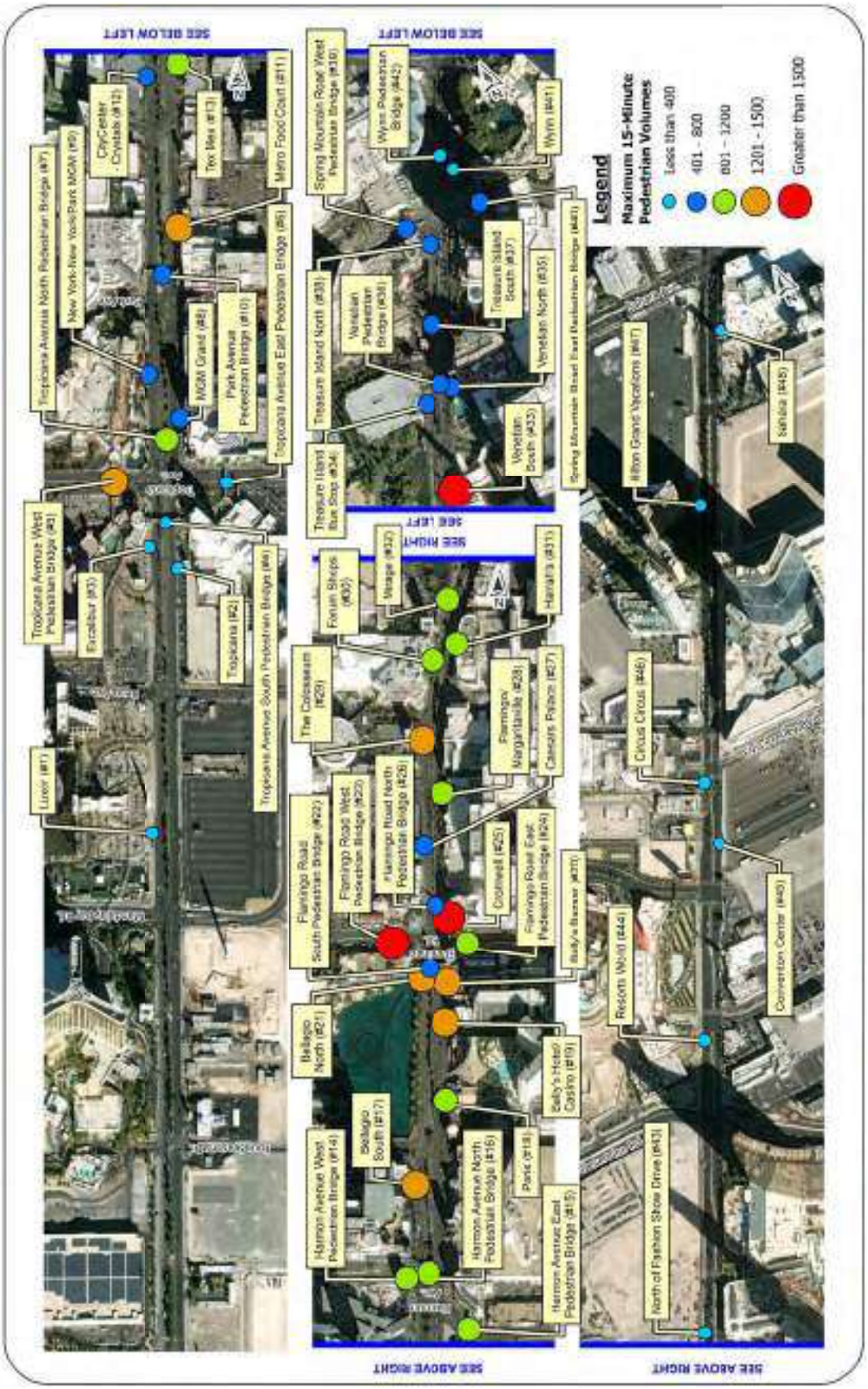


Figure 5.2 – Maximum 15-Minute Pedestrian Volumes on Saturday, May 28, 2022 (Holiday Saturday)

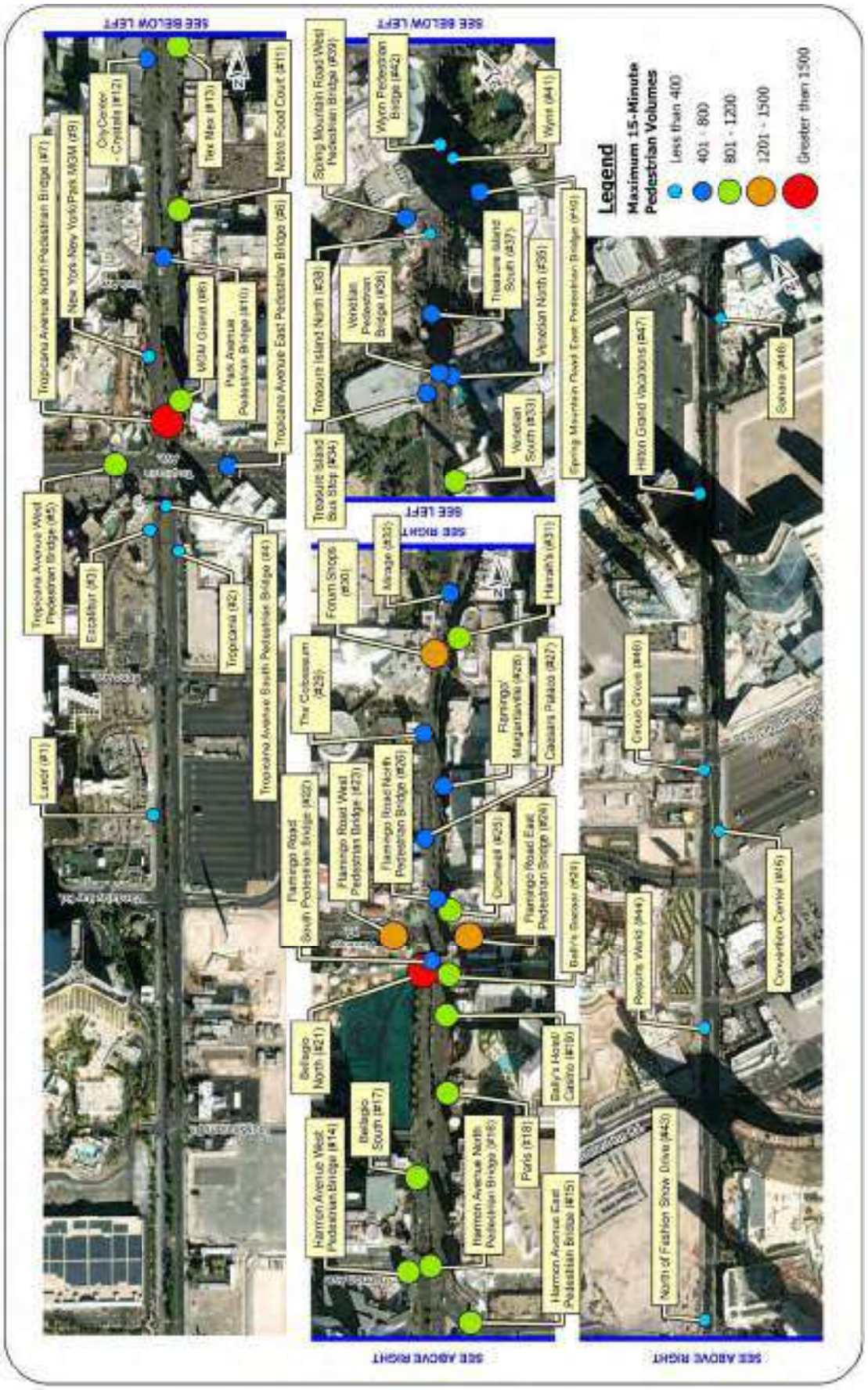


Figure 5.3 – Maximum 15-Minute Pedestrian Volumes on Saturday, June 25, 2022 (Typical Saturday)

Table 5.2 – Comparison of Maximum 15-Minute Pedestrian Volumes in 2012, 2015, and 2022

Count Location ID	Location	Holiday Weekend Maximum 15-Minute Volumes (2012)	Typical Weekend Maximum 15-Minute Volumes (2012)	Holiday Weekend Maximum 15-Min Volumes (2015)	Typical Weekend Maximum 15-Minute Volumes (2015)	Holiday Weekend Maximum 15-Minute Volumes (2022)	Typical Weekend Maximum 15-Minute Volumes (2022)
1	Luxor	121	-	-	-	139	54
2	Tropicana	68	-	-	-	38	64
3	Excalibur	200	-	-	-	162	107
4	Tropicana Avenue South Pedestrian Bridge	-	-	-	-	223	278
5	Tropicana Avenue West Pedestrian Bridge	-	-	1,036	918	296	541
6	Tropicana Avenue East Pedestrian Bridge	-	-	-	-	1,211	1,011
7	**Tropicana Avenue North Pedestrian Bridge**	-	-	-	-	1,015	**1,852**
8	MGM Grand	1,343	739	-	-	738	920
9	New York - New York/Park MGM	1,043	358	1,025	421	627	281
10	Park Avenue Pedestrian Bridge	-	-	-	-	721	548
11	**Metro Food Court**	-	-	**1,772**	1,059	1,303	992
12	CityCenter - Crystals	-	619	-	-	435	429
13	**Tex Mex**	1,140	1,290	**1,938**	859	1,135	916
14	**Harmon Avenue West Pedestrian Bridge**	-	-	**2,060**	1,447	865	931
15	Harmon Avenue East Pedestrian Bridge	-	-	-	-	911	988
16	**Harmon Avenue North Pedestrian Bridge**	-	-	**2,028**	893	951	1,033
17	**Bellagio South**	**2,633**	**1,595**	**2,189**	**1,544**	1,346	1,193
18	**Paris**	**2,124**	1,417	-	-	1,105	1,104
19	**Bally's Hotel/Casino**	**1,780**	880	**2,007**	1,350	1,273	929
20	**Bally's Bazaar**	-	-	**2,137**	1,414	1,296	1,056
21	**Bellagio North**	-	-	-	-	1,240	1,530
22	**Flamingo Road South Pedestrian Bridge**	-	**1,573**	-	-	653	753
24	**Flamingo Road West Pedestrian Bridge**	-	-	**2,238**	**1,841**	864	1,383
23	**Flamingo Road East Pedestrian Bridge**	-	-	-	-	**1,707**	1,417
25	**Cromwell**	-	-	**2,472**	1,263	**1,634**	1,185
26	**Flamingo Road North Pedestrian Bridge**	-	-	**2,044**	1,176	476	630
27	**Caesars Palace**	**1,684**	1,338	**1,977**	1,094	759	768
28	**Flamingo - Margaritaville**	1,459	-	**2,044**	1,176	807	786
29	**The Colosseum**	-	-	**1,953**	977	1,270	750
30	**Forum Shops**	**2,092**	**1,787**	**1,749**	679	976	1,469
31	Harrah's	1,242	1,152	1,364	843	1,079	909

RED text indicates maximum volume observed. **BOLD text indicates volume over 1,500 and associated location and time of day.*

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Table 5.2 – Comparison of Maximum 15-Minute Volumes in 2012, 2015, and 2022 (Continued)

Count Location ID	Location	Holiday Weekend Maximum 15-Minute Volumes (2012)	Typical Weekend Maximum 15-Minute Volumes (2012)	Holiday Weekend Maximum 15-Min Volumes (2015)	Typical Weekend Maximum 15-Minute Volumes (2015)	Holiday Weekend Maximum 15-Minute Volumes (2022)	Typical Weekend Maximum 15-Minute Volumes (2022)
32	**Mirage**	**1,963**	754	-	-	813	790
33	**Venetian South**	1,323	**1,737**	**1,767**	1,064	**1,584**	900
34	Treasure Island Bus Stop	-	-	1,331	802	651	713
35	Venetian North	-	-	1,385	1,047	617	584
36	Venetian Pedestrian Bridge	-	-	-	-	499	430
37	Treasure Island South	-	-	21	24	776	680
38	Treasure Island North	-	-	560	298	401	339
39	Spring Mountain Road West Pedestrian Bridge	-	-	-	-	646	615
40	Spring Mountain Road East Pedestrian Bridge	-	-	-	-	570	450
41	Wynn	264	324	-	-	361	329
42	Wynn Pedestrian Bridge	-	-	-	-	159	121
43	North of Fashion Show Drive	312	262	-	-	373	284
44	Resorts World	-	-	-	-	241	250
45	Convention Center	341	187	-	-	41	46
46	Circus Circus	216	201	-	-	119	88
47	Hilton Grand Vacations	-	-	-	-	118	87
48	Sahara	-	-	-	-	78	77

RED text indicates maximum volume observed. **BOLD text indicates volume over 1,500 and associated location and time of day.*

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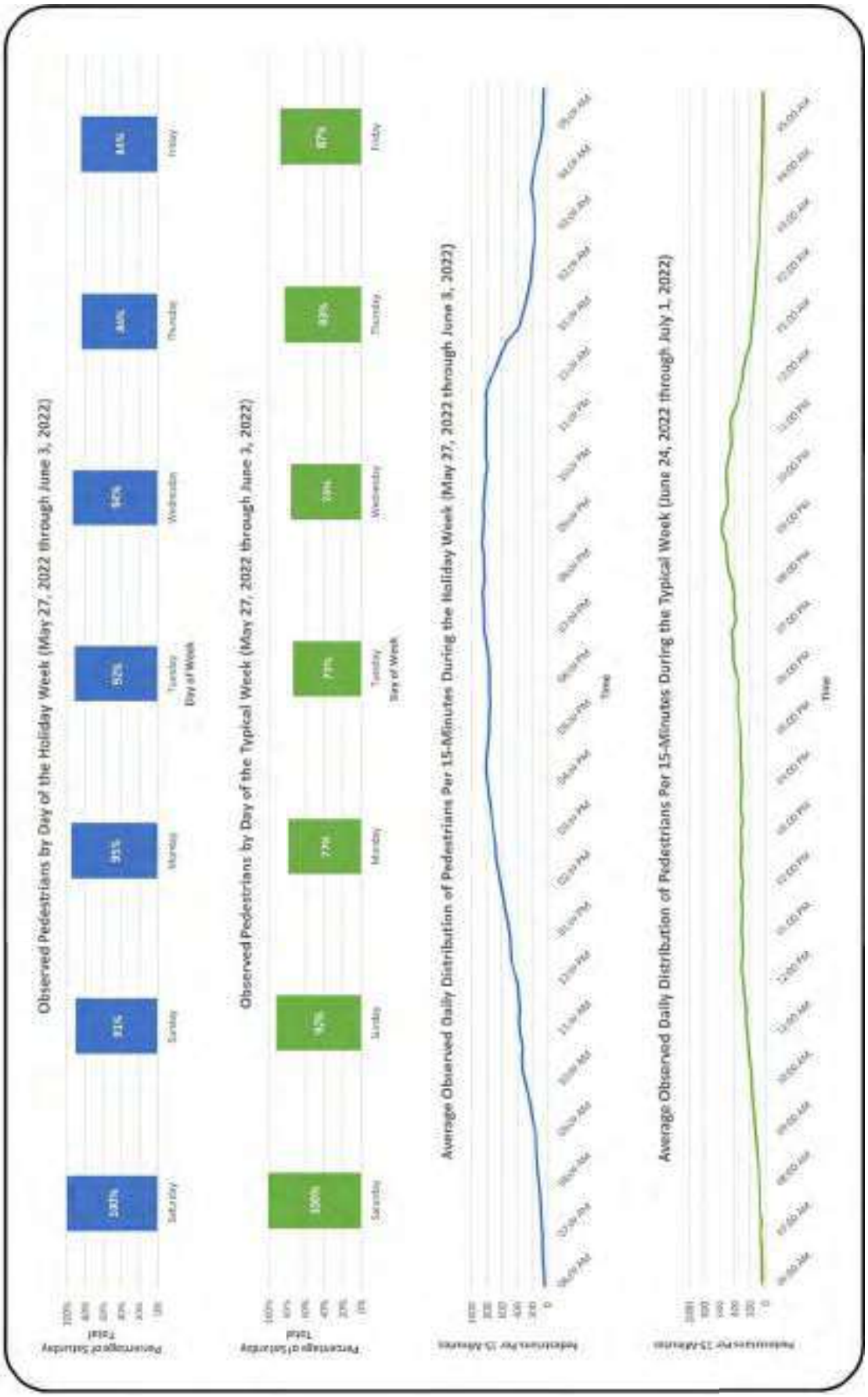


Figure 5.4 – Weeklong Pedestrian Volumes

5.3 Level of Service (LOS) Analysis Summary

The collected 15-minute pedestrian volume data was paired with the field verified effective walkway widths and LOS thresholds were calculated. As discussed in **Section 1.4.1**, HCM 7 LOS values are calculated as a numerical threshold based on effective walkway width (W_E); for example, a 15-foot effective walkway width (W_E=15') operating at LOS A can accommodate up to 1,125 pedestrians in 15 minutes and the same walkway can accommodate up to 2,250 pedestrians with LOS C. It is important to note that the LOS threshold values change depending on the available effective walkway width (W_E) of the sidewalk.

The following sections provide a summary of the calculated LOS for each count location in the outer corridor (Russell Road to Tropicana Avenue and Spring Mountain Road to Sahara Avenue), the inner corridor (Tropicana Avenue to Spring Mountain Road), and the pedestrian bridges. The study corridor is shown in **Figure 5.5**.



Figure 5.5 – Study Corridor

5.3.1 Outer Study Corridor

The pedestrian volumes within the outer portion of the study corridor (Russell Road to Tropicana Avenue and Spring Mountain Road to Sahara Avenue) were found to be lower than the pedestrian volumes within the inner portion. The maximum 15-minute pedestrian volume observed south of Tropicana Avenue was counted to be 162 at the Excalibur Hotel/Casino and the maximum 15-minute volume observed north of Spring Mountain Road was 373 near Fashion Show Drive. The existing walkway widths adequately serve the recorded pedestrian volumes in these areas with LOS A.

As summarized in **Table 5.3**, data was collected at 10 locations for the outer study corridor (shown in **Figure 5.6**). The calculated LOS is based on the pedestrian volume at each count location and the associated walkway widths at those locations.

The observed count locations within the outer study corridor were found to operate at LOS A on both Saturday, May 28, 2022 (Holiday Weekend) and Saturday, June 25, 2022 (Typical Weekend). The impact of NPOs on pedestrian LOS is discussed in **Section 5.4**.

Figure 5.7 through **Figure 5.16** provide a visualization of pedestrian volumes and LOS.

It is important to recognize that the pedestrian volumes and report study times do not reflect the special event activities at Allegiant Stadium and/or the North Festival Grounds. Pre-event and post-event pedestrian access volumes are significantly higher than those observed during this study's observation periods but the sidewalk widths within the outer study corridor have been observed in the past as providing adequate walkway width for the event pedestrian access.

Table 5.3 – LOS Summary for the Outer Study Corridor

Location ID	Location	W_E (ft)	LOS Holiday	LOS Typical
1	Luxor	9.0	A	A
2	Tropicana	9.1	A	A
3	Excalibur	6.0	A	A
41	Wynn	11.8	A	A
43	North of Fashion Show Drive	9.0	A	A
44	Resorts World	10.5	A	A
45	Convention Center	11.5	A	A
46	Circus Circus	11.0	A	A
47	Hilton Grand Vacations	1.6	A	A
48	Sahara	13.0	A	A



Figure 5.6 – Outer Study Corridor Count Locations

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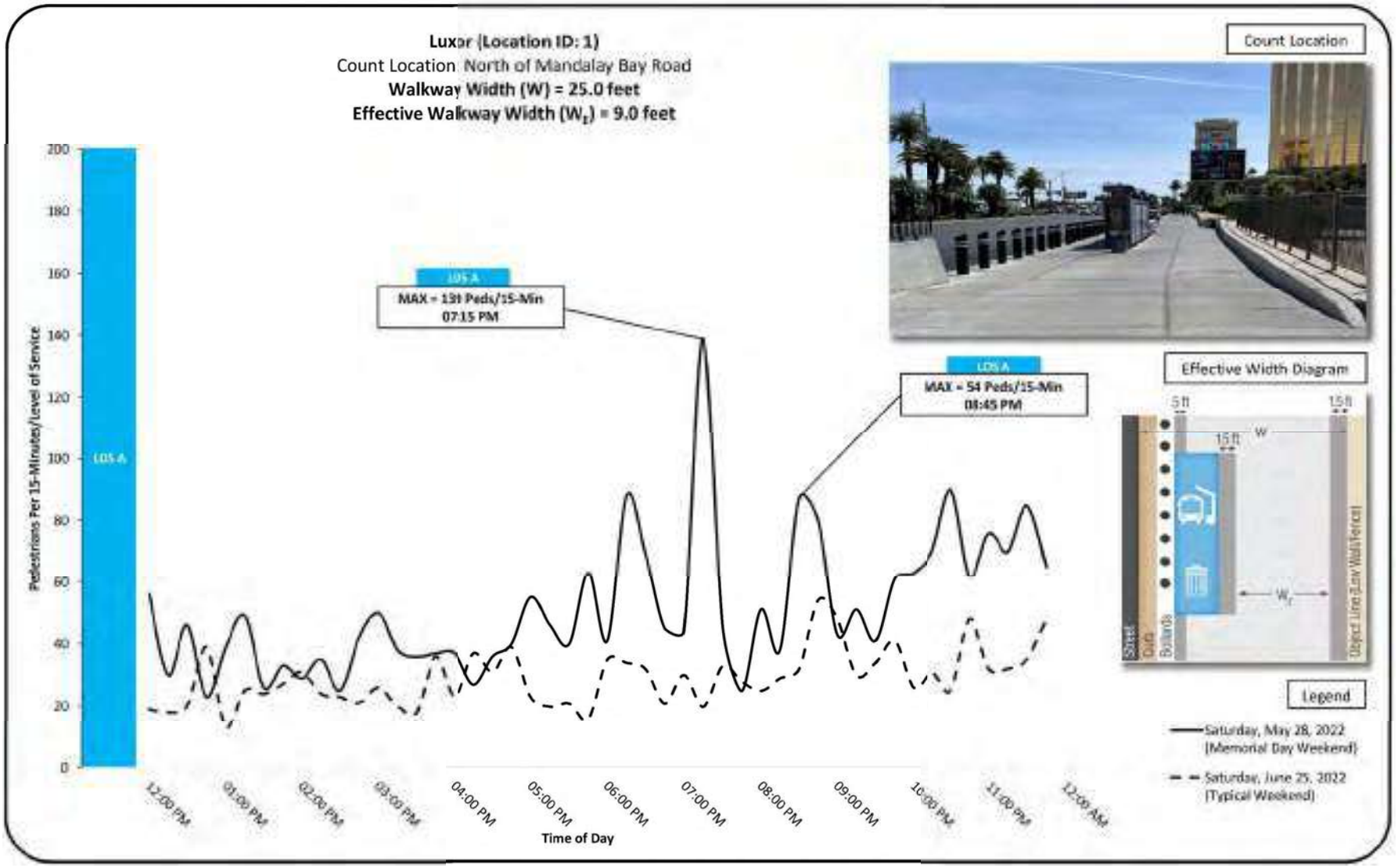


Figure 5.7 – Luxor (Location ID: 1) – Pedestrian Volume by Time of Day

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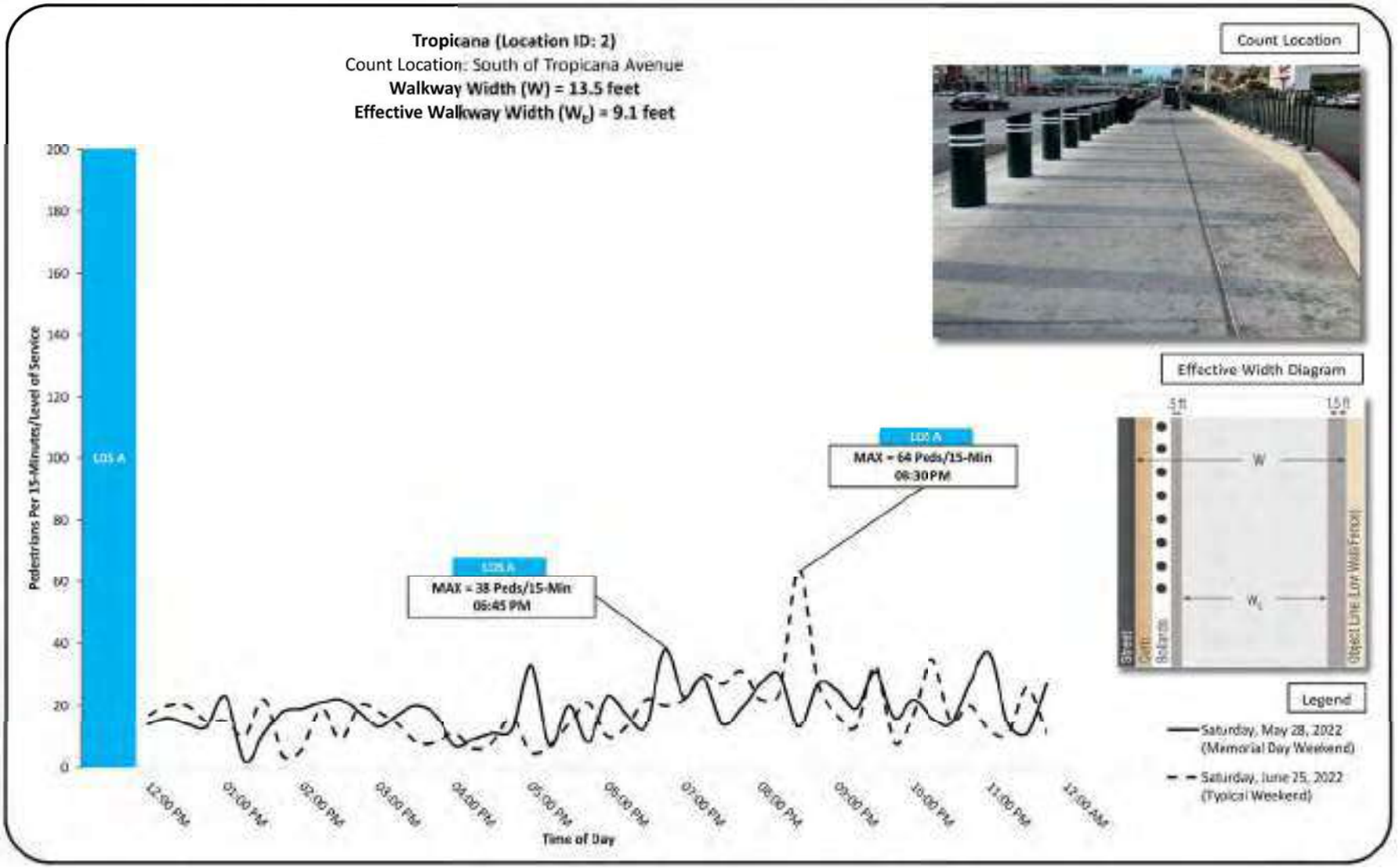


Figure 5.8 – Tropicana (Location ID: 2) – Pedestrian Volume by Time of Day

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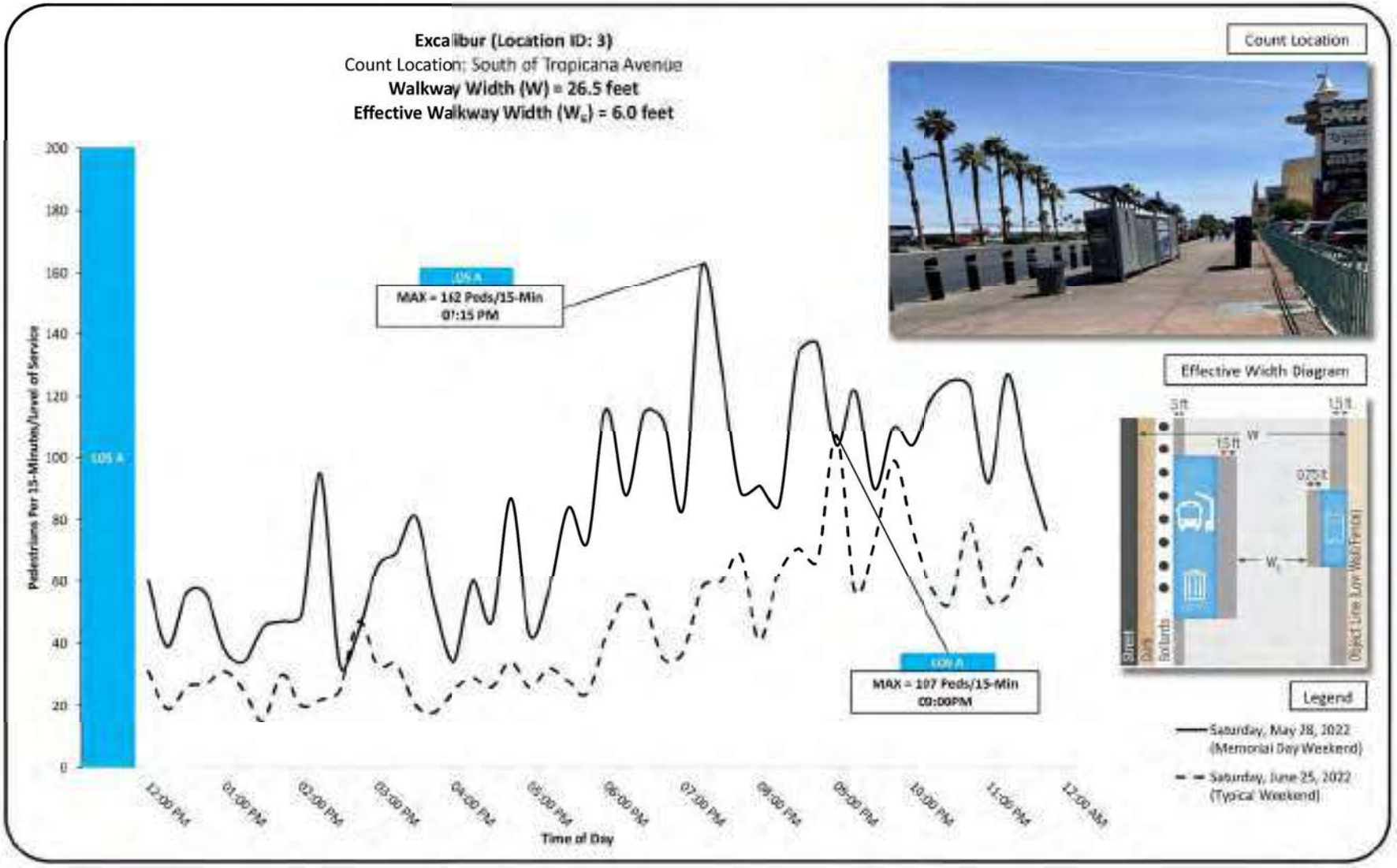


Figure 5.9 –Excalibur (Location ID: 3) – Pedestrian Volume by Time of Day

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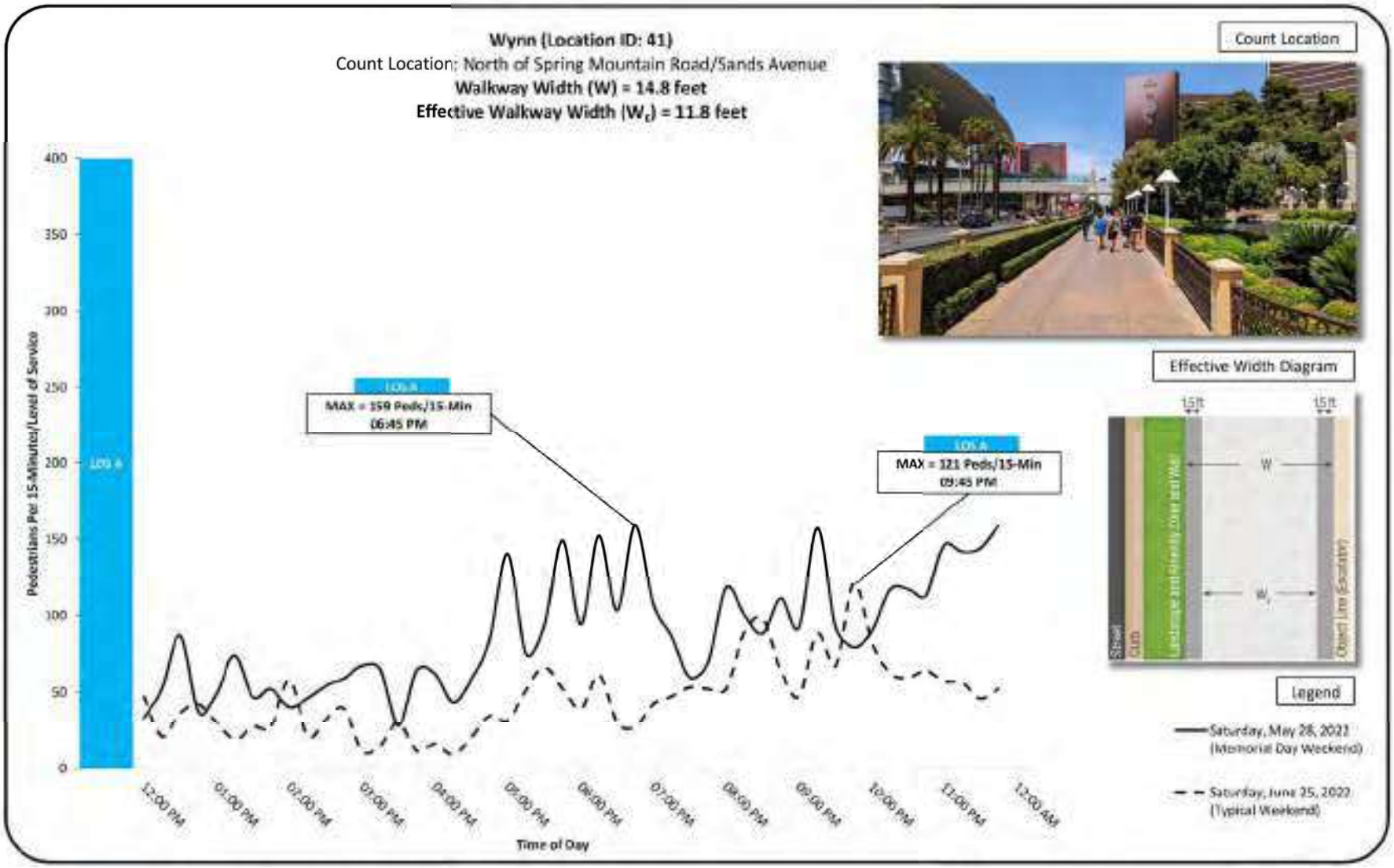


Figure 5.10 – Wynn (Location ID: 41) – Pedestrian Volume by Time of Day

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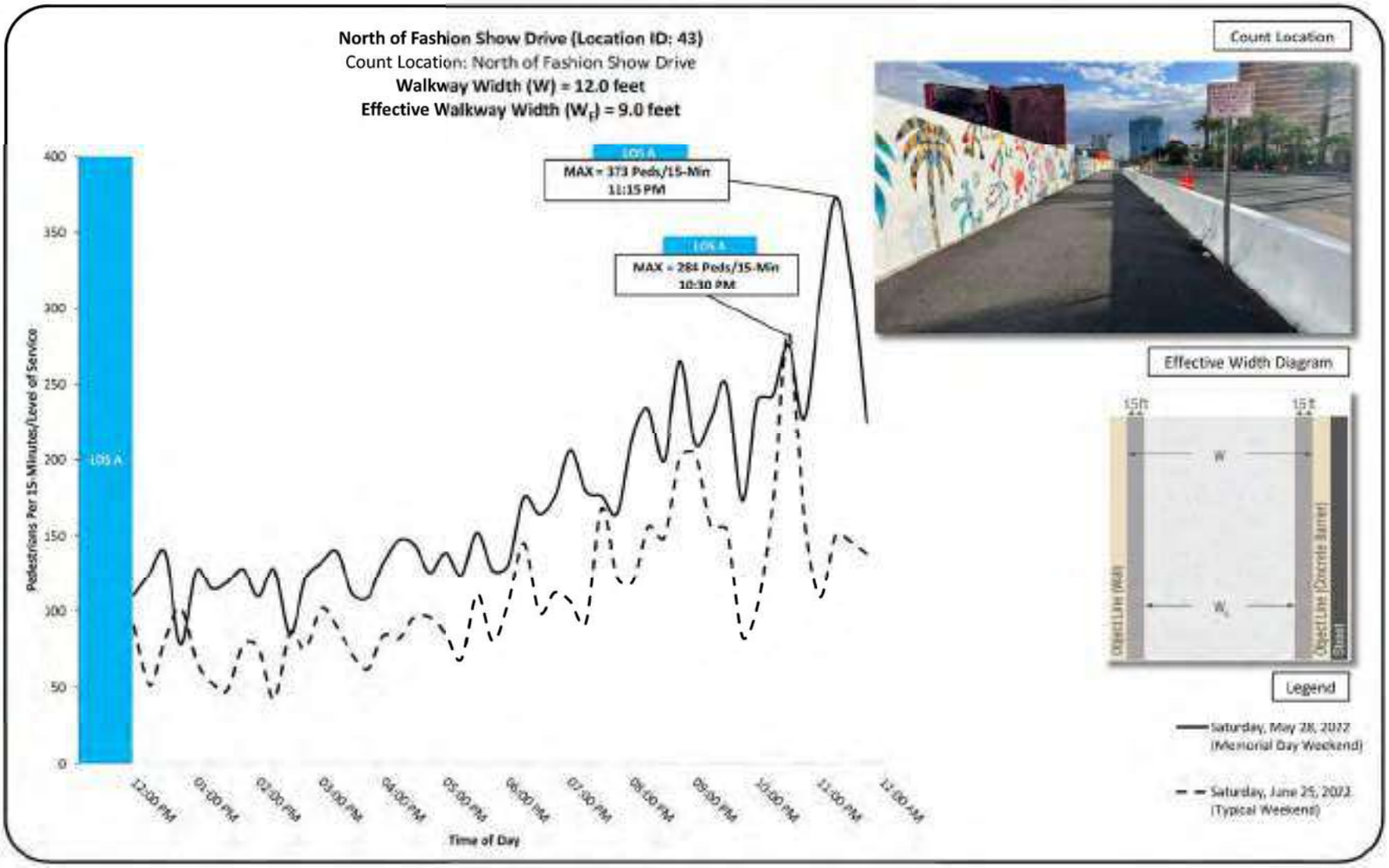


Figure 5.11 – North of Fashion Show Drive (Location ID: 43) – Pedestrian Volume by Time of Day

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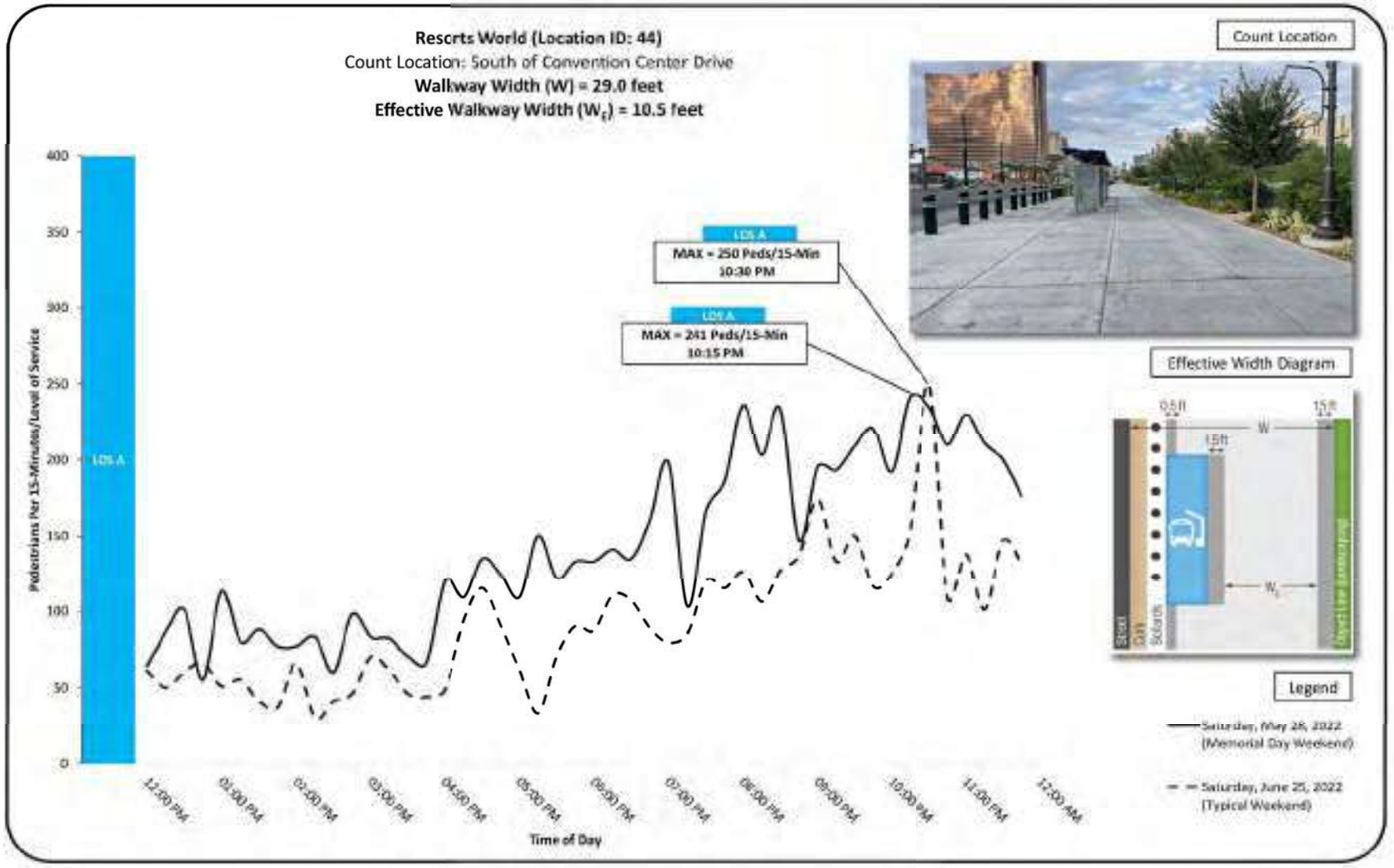


Figure 5.12 – Resorts World (Location ID: 44) – Pedestrian Volume by Time of Day

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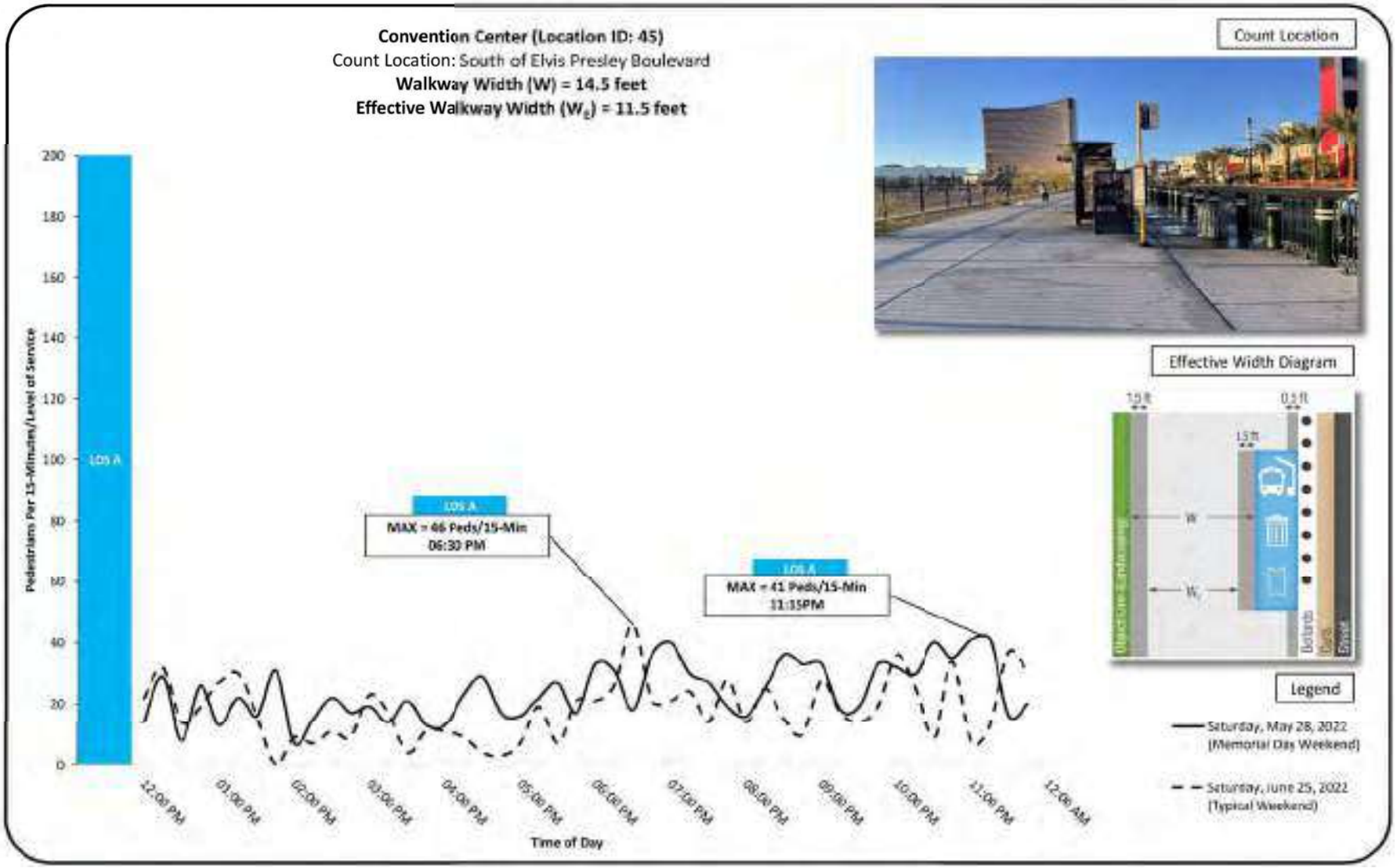


Figure 5.13 – Convention Center (Location ID: 45) – Pedestrian Volume by Time of Day

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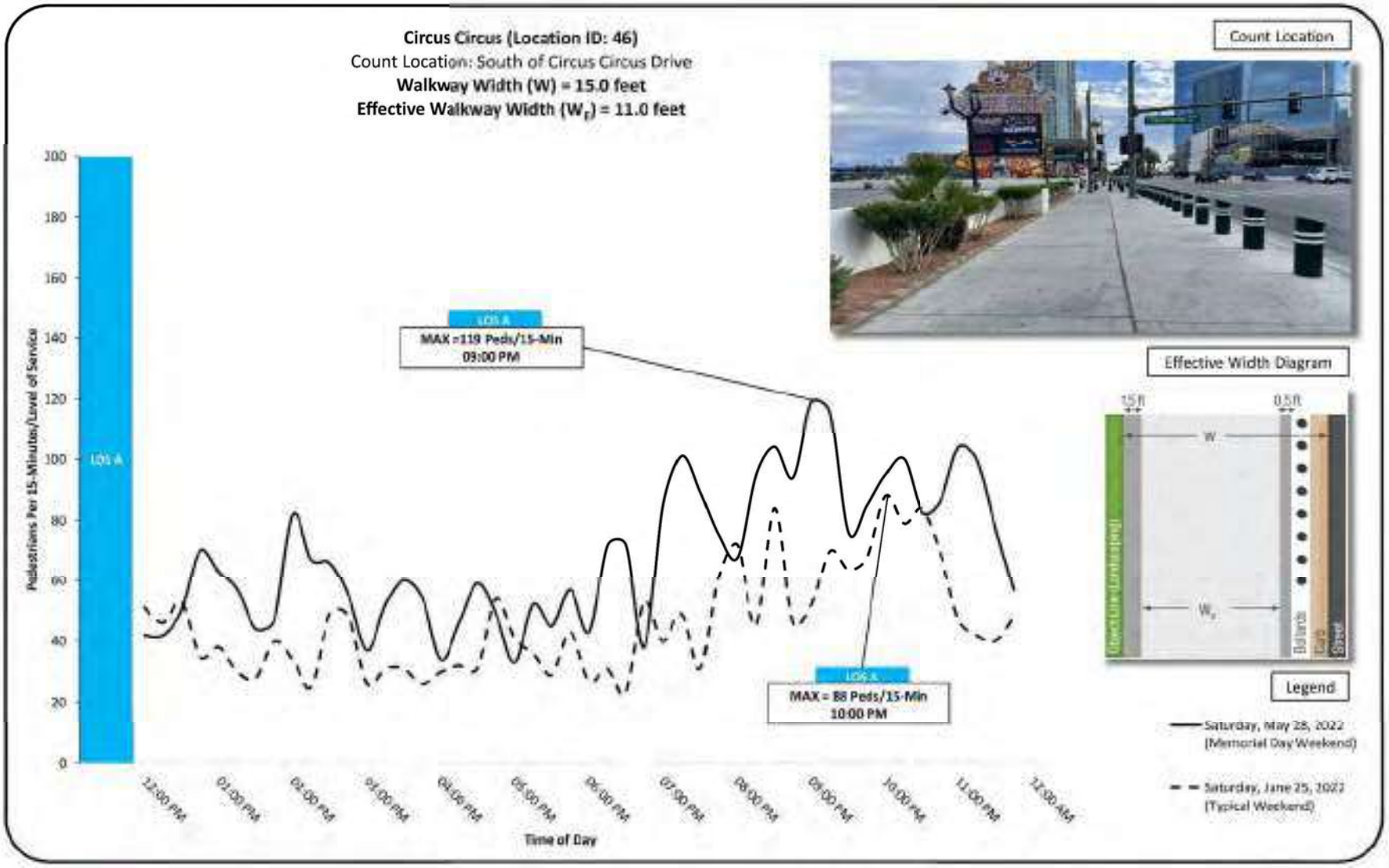


Figure 5.14 – Circus Circus (Location ID: 46) – Pedestrian Volume by Time of Day

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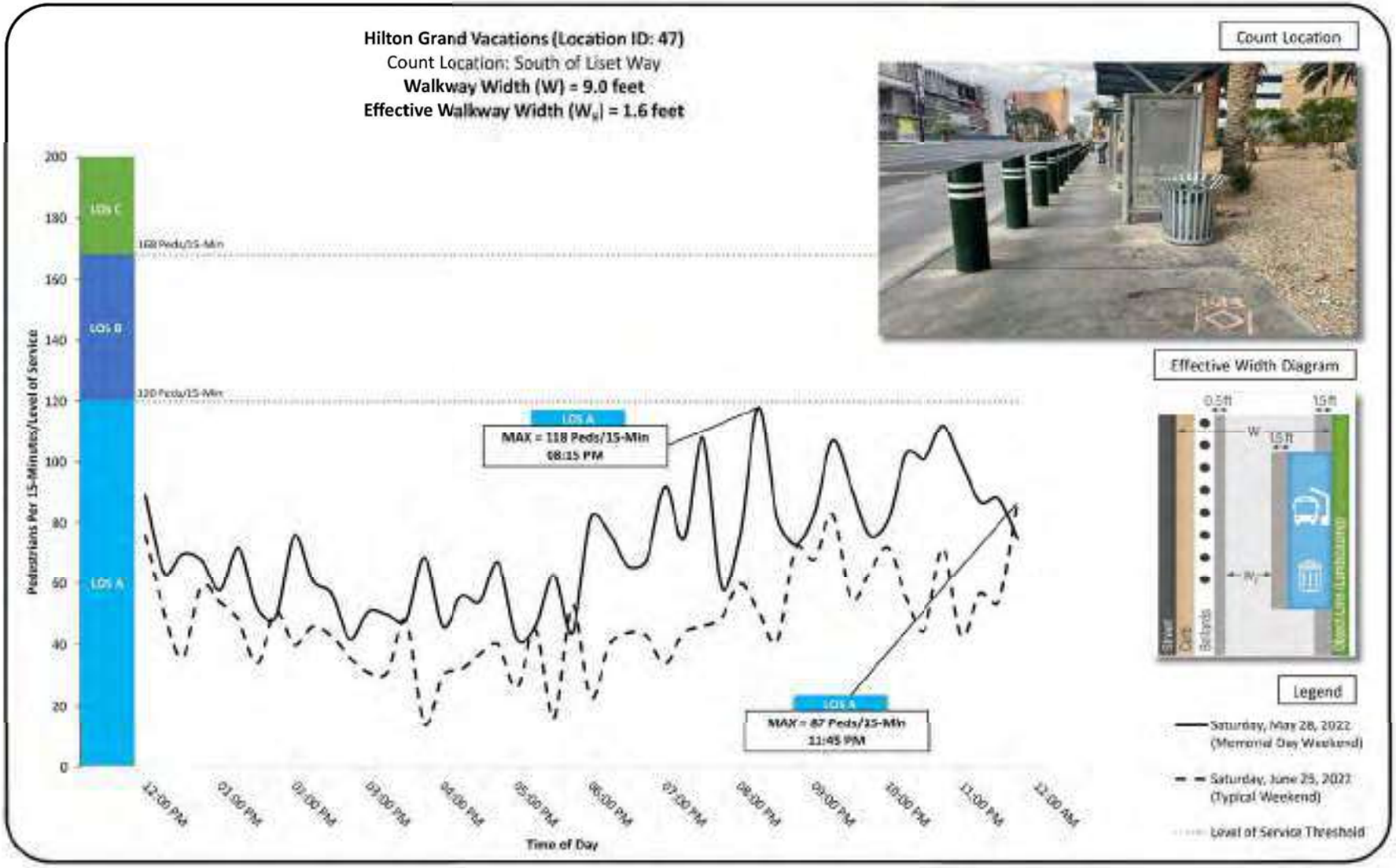


Figure 5.15 – Hilton Grand Vacations (Location ID: 47) – Pedestrian Volume by Time of Day

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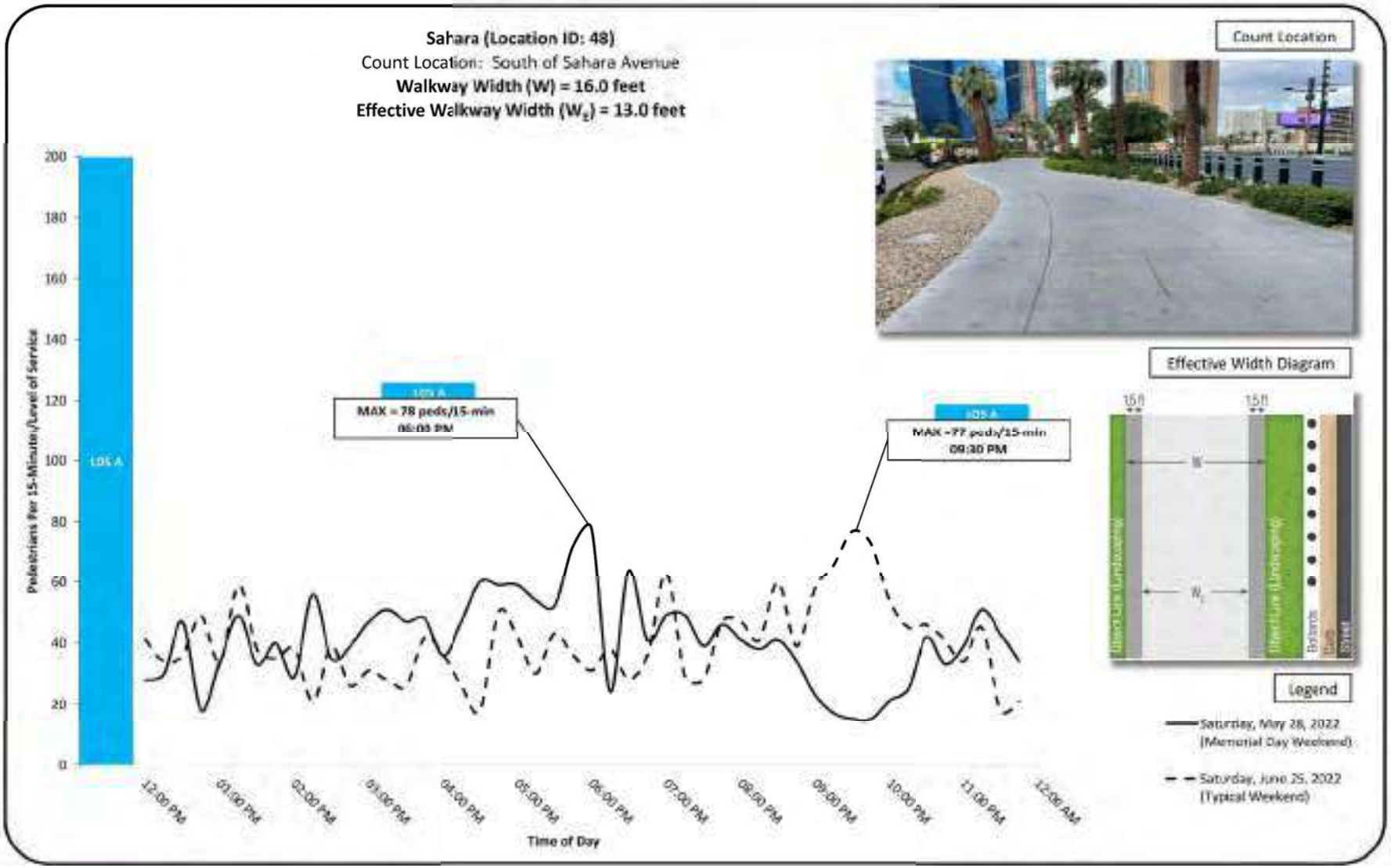


Figure 5.16 – Sahara (Location ID: 48) – Pedestrian Volume by Time of Day

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5.3.2 Inner Study Corridor

The inner portion of the study corridor between Tropicana Avenue and Spring Mountain Road experienced higher pedestrian volumes than the outer portion of the study corridor.

As summarized in **Table 5.4**, data was collected at 22 locations for the inner study corridor (shown in **Figure 5.17**). The calculated LOS is based on the pedestrian volume at each count location and the associated walkway widths at those locations. **Figure 5.19** through **Figure 5.40** illustrate pedestrian volume variations and resulting LOS for the count locations within the inner study corridor.

Table 5.4 – LOS Summary for the Inner Study Corridor

Location ID	Location	W_E (ft)	LOS Holiday	LOS Typical
8	MGM Grand	18.4	A	A
9	New York - New York/Park MGM	12.7	A	A
11	Metro Food Court	16.6	B	A
12	CityCenter - Crystals	17.7	A	A
13	Tex Mex	12.1	B	B
17	Bellagio South	16.3	B	A
18	Paris	16.0	A	A
19	Bally's Hotel/Casino	18.2	A	A
20	Bally's Bazaar	17.7	A	A
21	Bellagio North	15.0	B	B
25	Cromwell	11.5	C	B
27	Caesars Palace	7.6	B	B
28	Flamingo-Margaritaville	5.5	C	C
29	The Colosseum	15.0	B	A
30	Forum Shops	12.7	B	C
31	Harrah's	11.1	B	B
32	Mirage	13.0	A	A
33	**Venetian South**	6.3	**E**	C
34	Treasure Island Bus Stop	11.4	A	A
35	Venetian North	14.0	A	A
37	Treasure Island South	12.3	A	A
38	Treasure Island North	15.0	A	A

**RED text indicates LOS greater than C.*

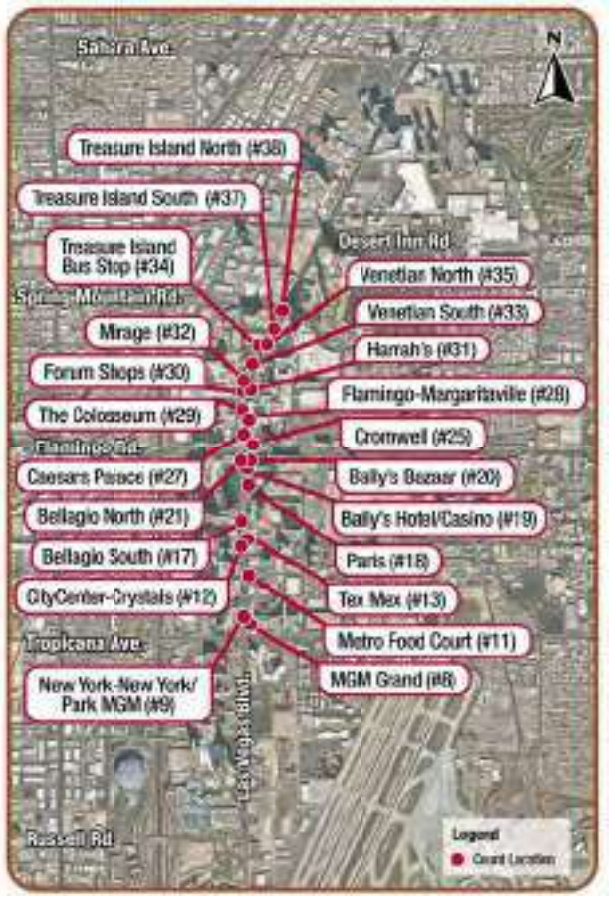


Figure 5.17 – Inner Study Corridor Count Locations

The observed count locations within the inner study corridor operated at LOS C or better on both the holiday weekend and the typical weekend, with the exception of Venetian South (#33) on the holiday weekend (see **Table 5.4**). The Venetian South count location is illustrated in **Picture 5.2** with the walkway width diagram provided in **Figure 5.18** and LOS illustrated in **Figure 5.36**. Throughout the conducted studies since 2012, the Venetian South has historically been a location of concern for pedestrian walkway congestion.



Picture 5.2 – Venetian South (#33) Count Location

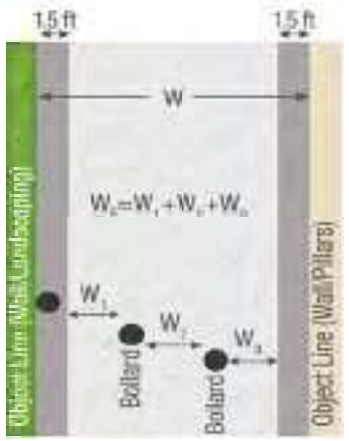


Figure 5.18 – Venetian South (#33) Walkway Diagram

In the *Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue (2015 Update)*, the Cromwell (#25), Flamingo-Margaritaville (#28), Caesars Palace (#27), Venetian South (#33), and Venetian North (#35) count locations were found to exceed LOS C during the holiday Saturday, while only the Venetian South (#33) count location was found to exceed LOS C during the typical Saturday.

The impact of NPOs on pedestrian LOS is examined in **Section 5.4.**

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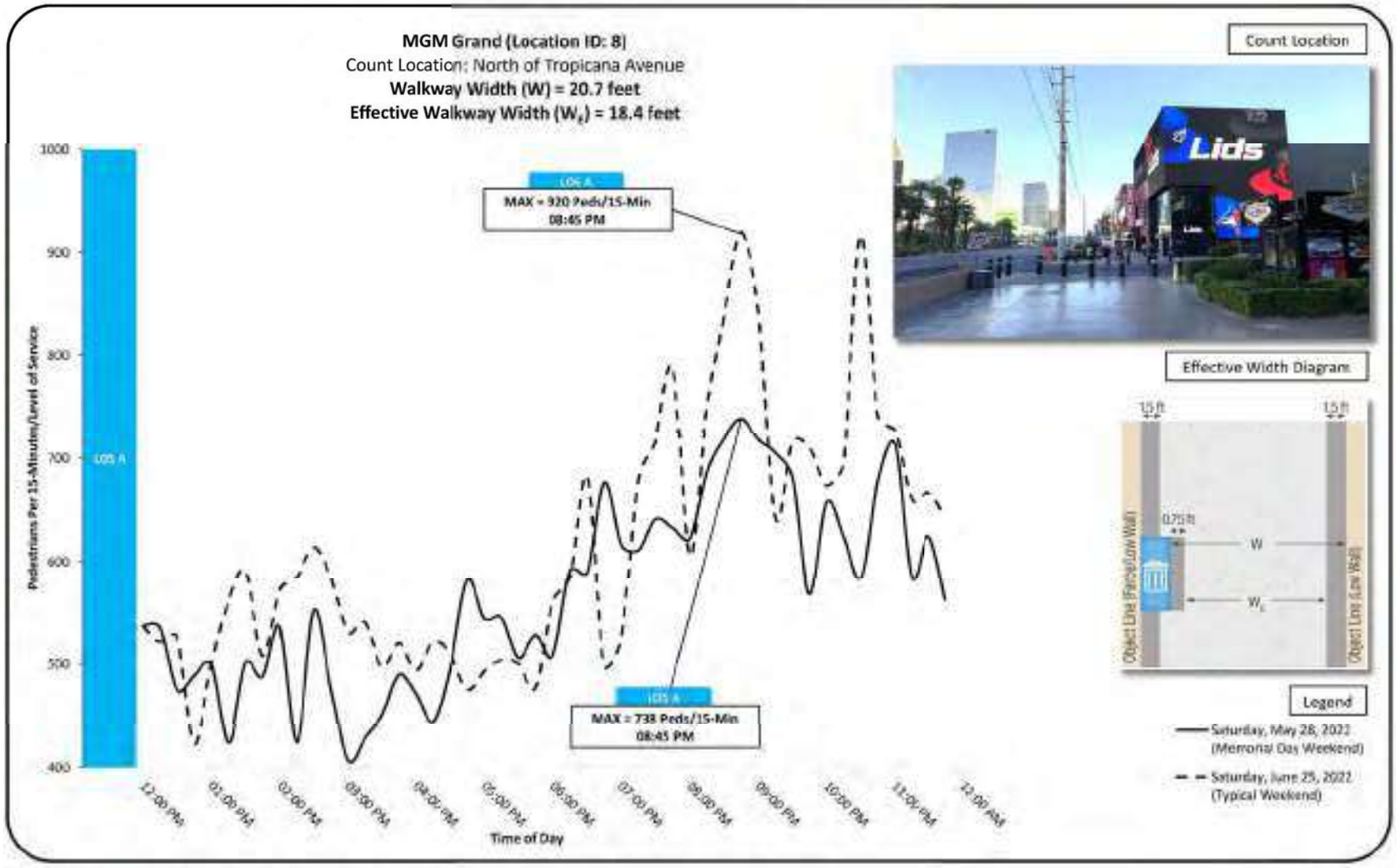


Figure 5.19 – MGM Grand (Location ID: 8) – Pedestrian Volume by Time of Day

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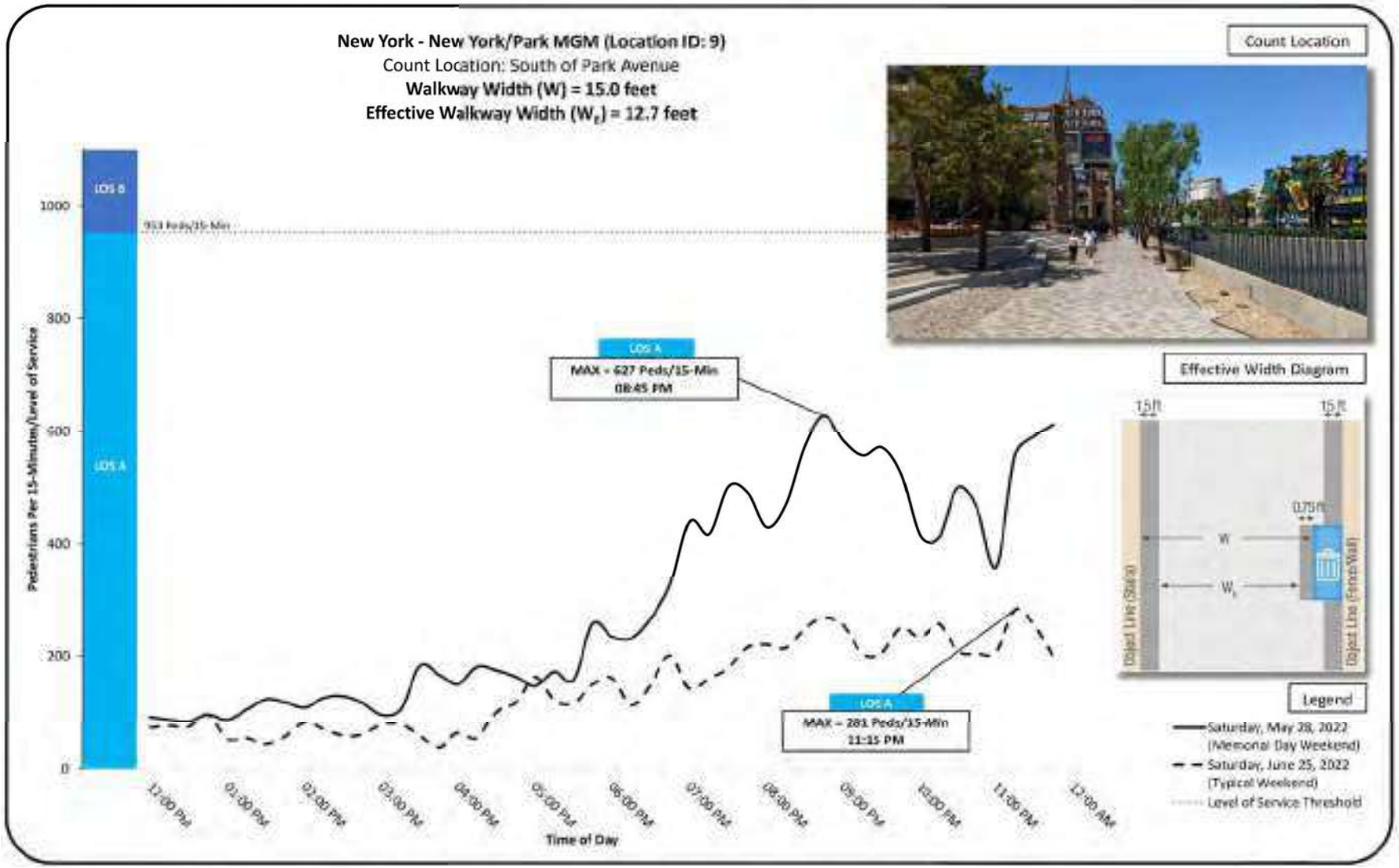


Figure 5.20 – New York-New York/Park MGM (Location ID: 9) – Pedestrian Volume by Time of Day

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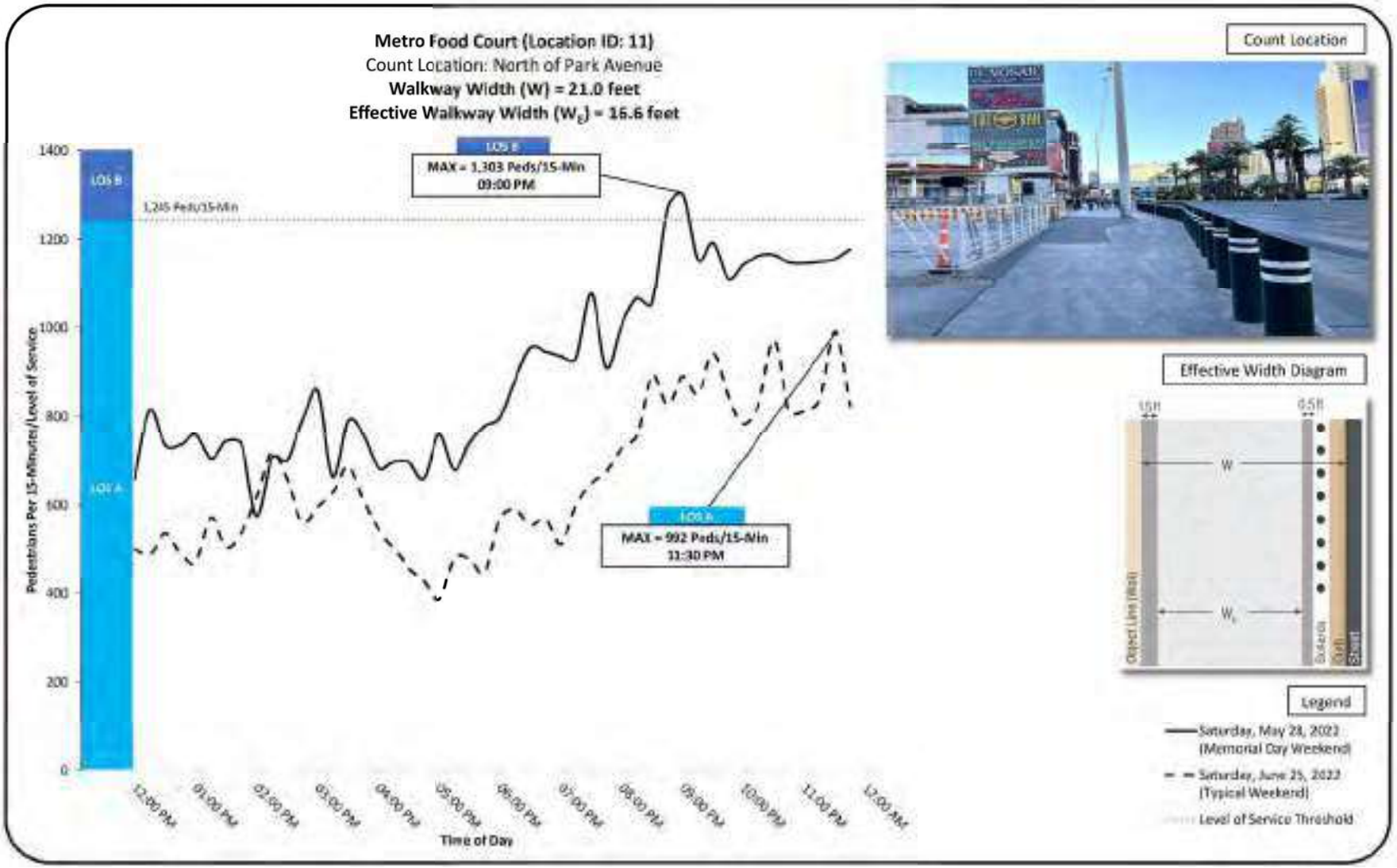


Figure 5.21 – Metro Food Court (Location ID: 11) – Pedestrian Volume by Time of Day

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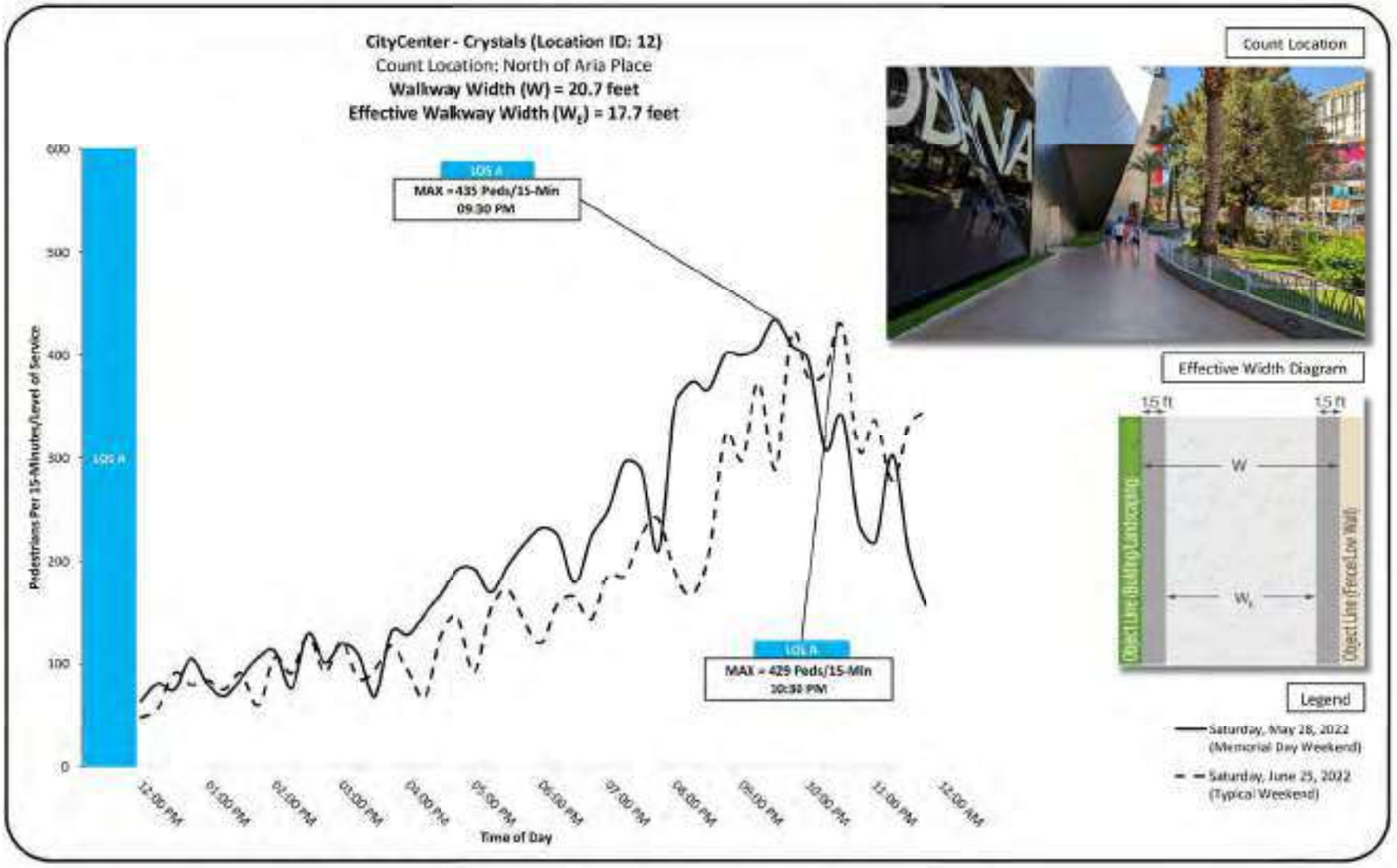


Figure 5.22 – CityCenter – Crystals (Location ID: 12) – Pedestrian Volume by Time of Day

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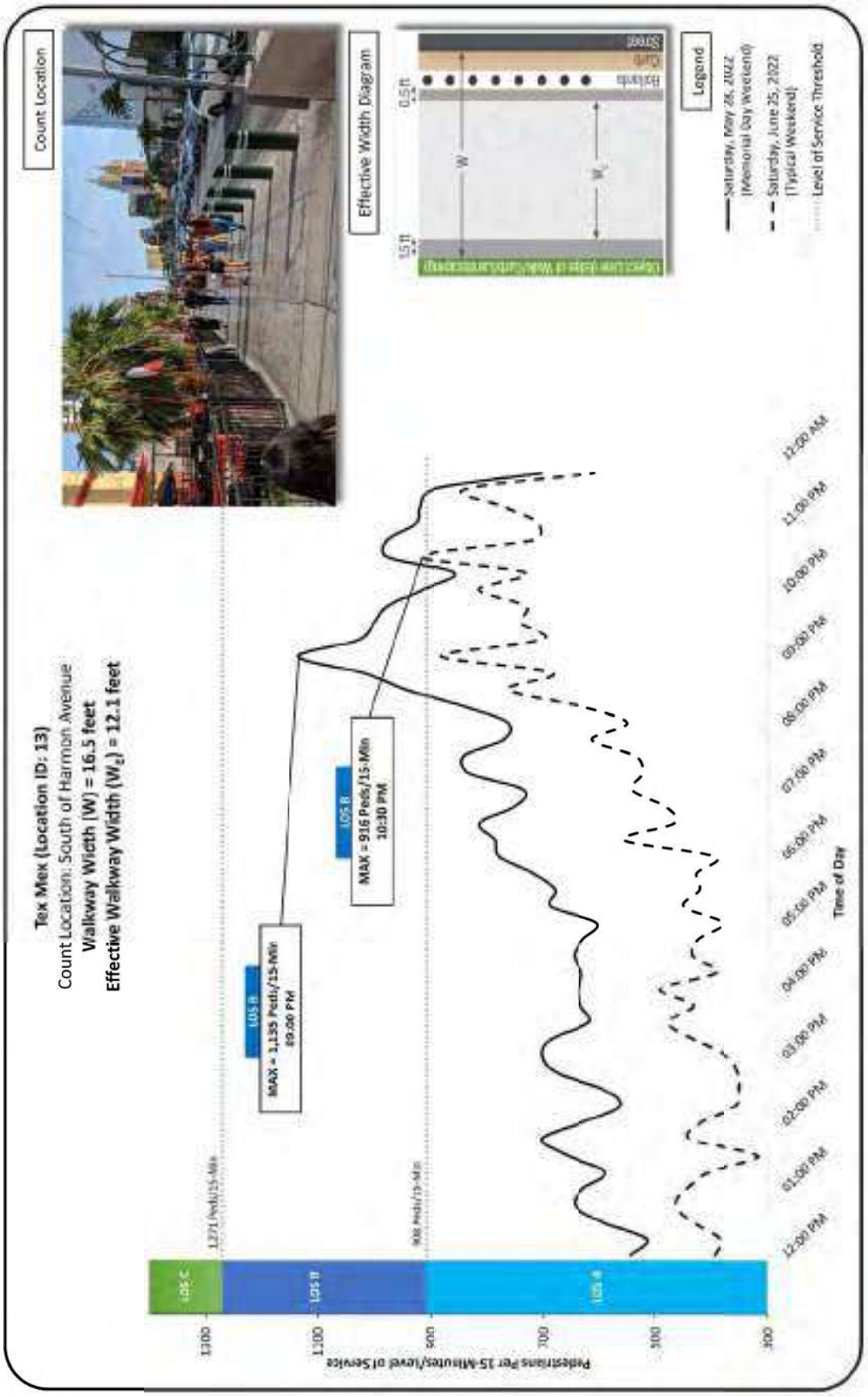


Figure 5.23 – Tex Mex (Location ID: 13) – Pedestrian Volume by Time of Day

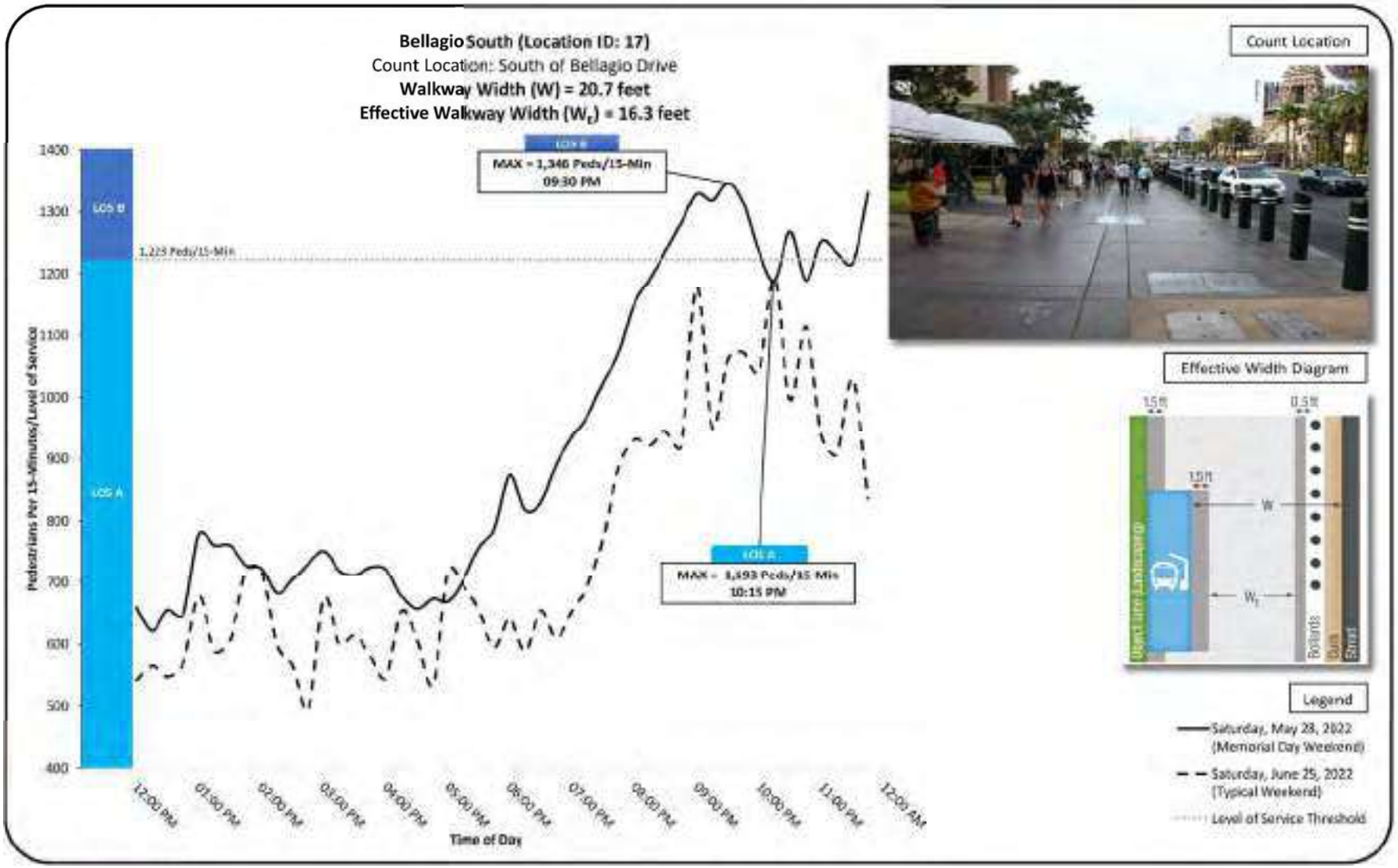


Figure 5.24 – Bellagio South (Location ID: 17) – Pedestrian Volume by Time of Day

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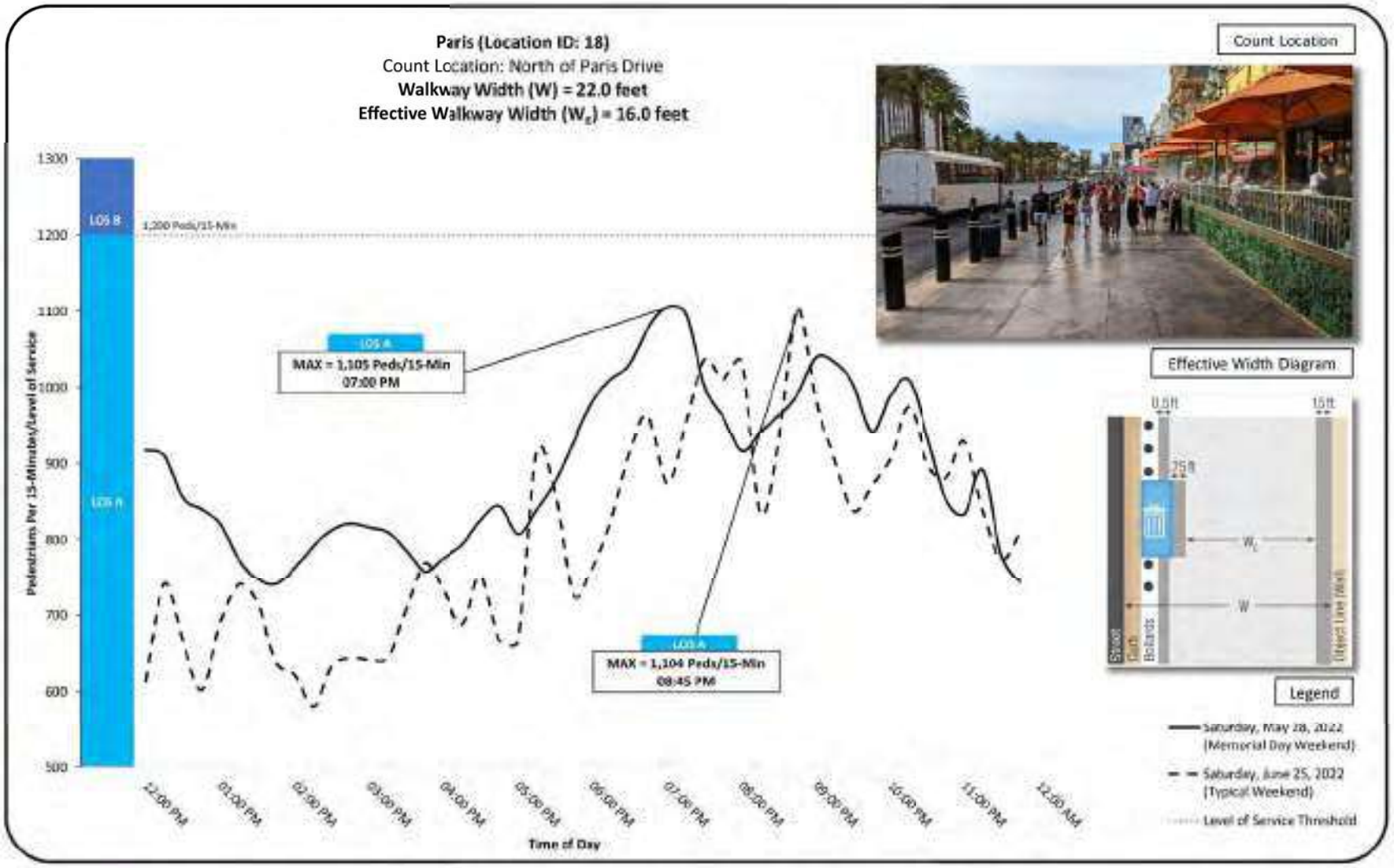


Figure 5.25 – Paris (Location ID: 18) – Pedestrian Volume by Time of Day

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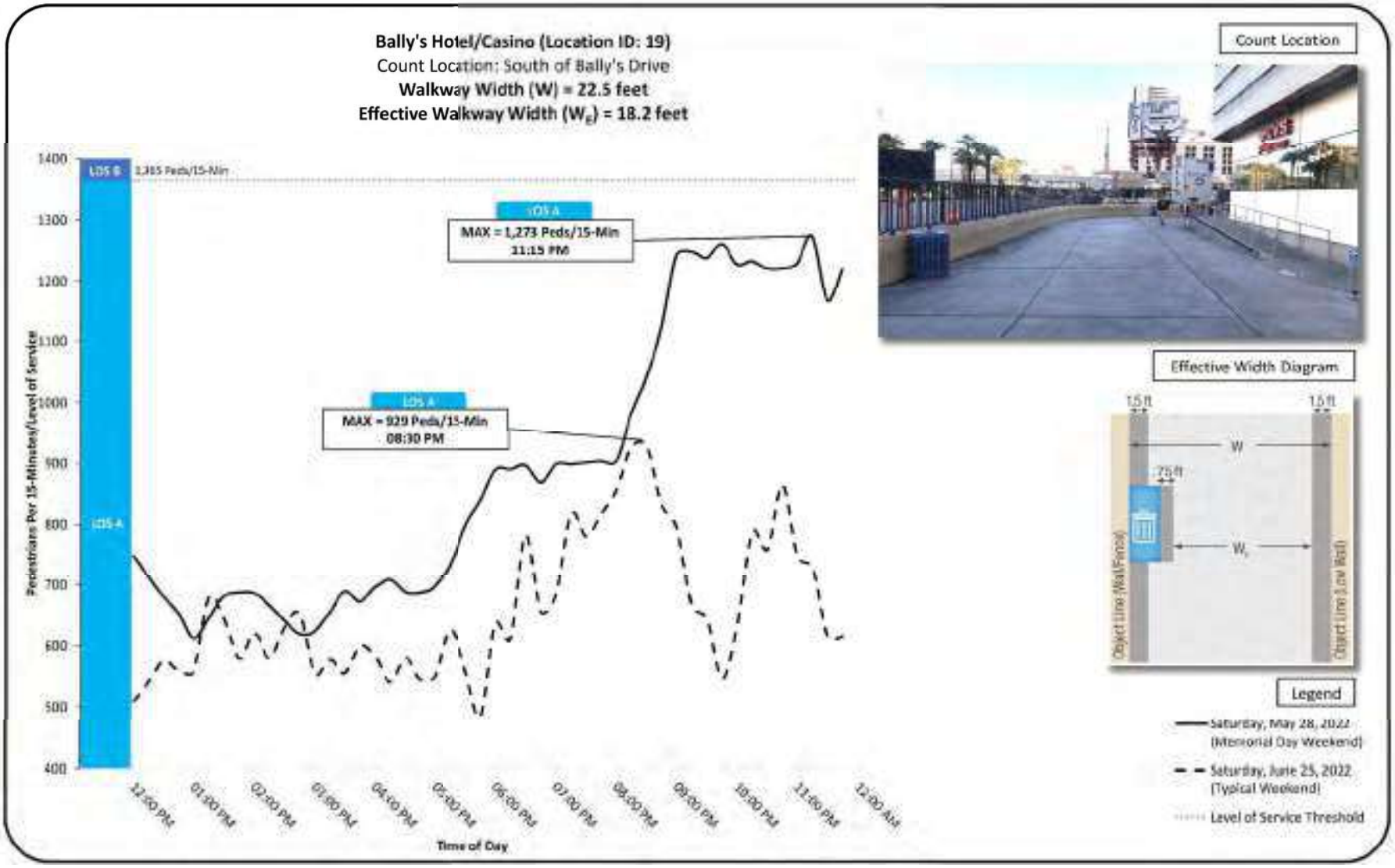


Figure 5.26 – Bally's Hotel/Casino (Location ID: 19) – Pedestrian Volume by Time of Day

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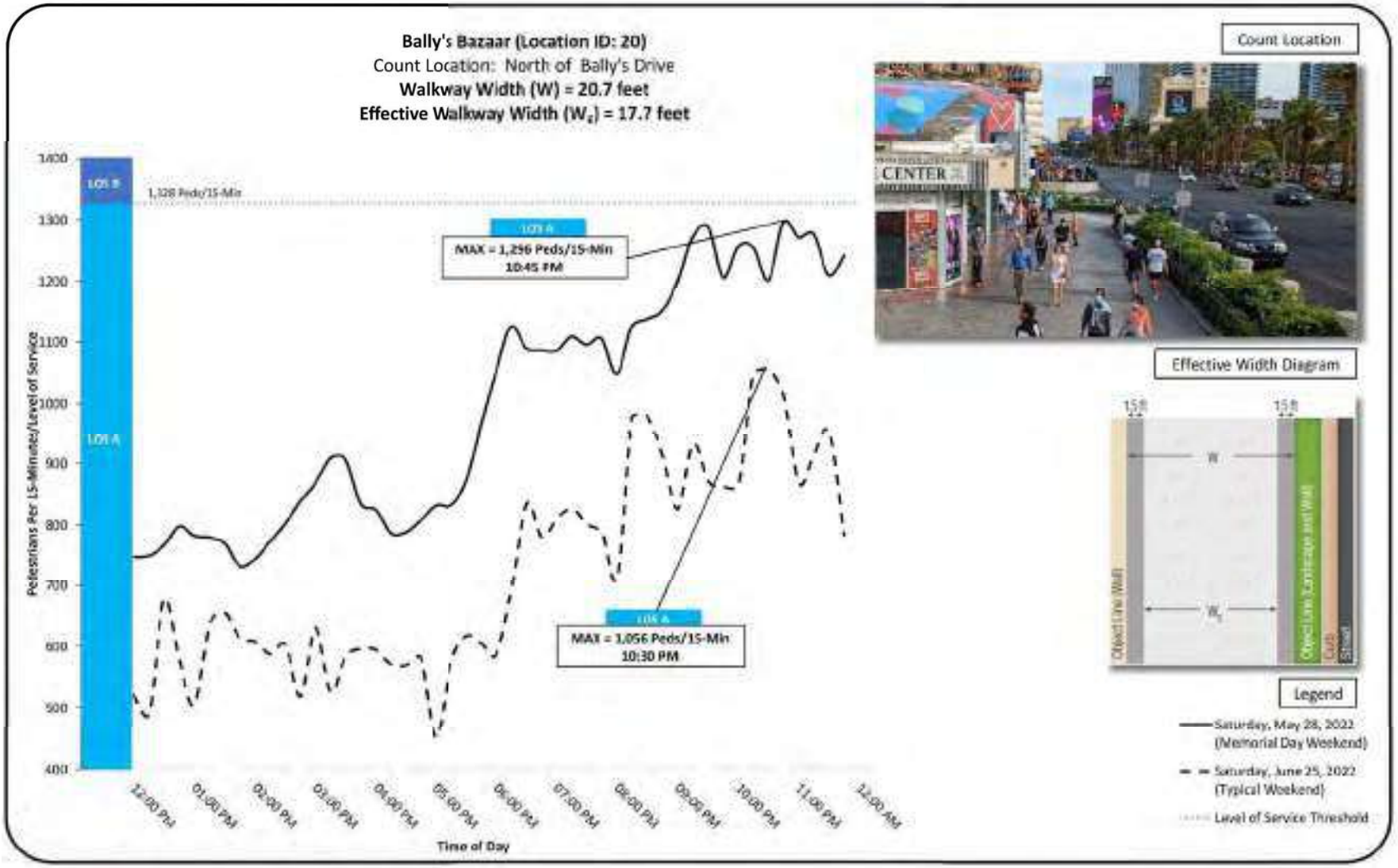


Figure 5.27 – Bally's Bazaar (Location ID: 20) – Pedestrian Volume by Time of Day

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Figure 5.28 – Bellagio North (Location ID: 21) – Pedestrian Volume by Time of Day

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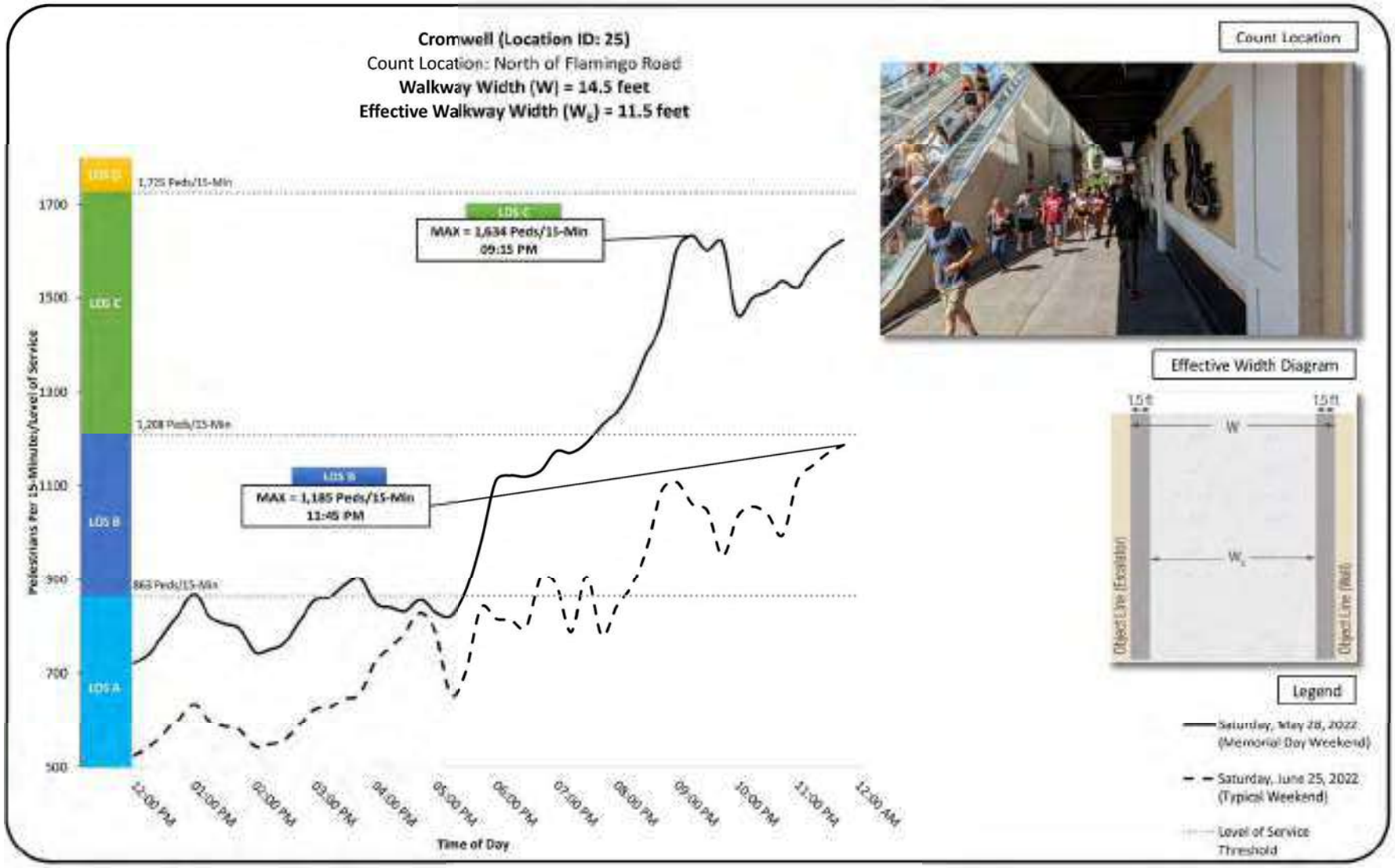


Figure 5.29 – Cromwell (Location ID: 25) – Pedestrian Volume by Time of Day

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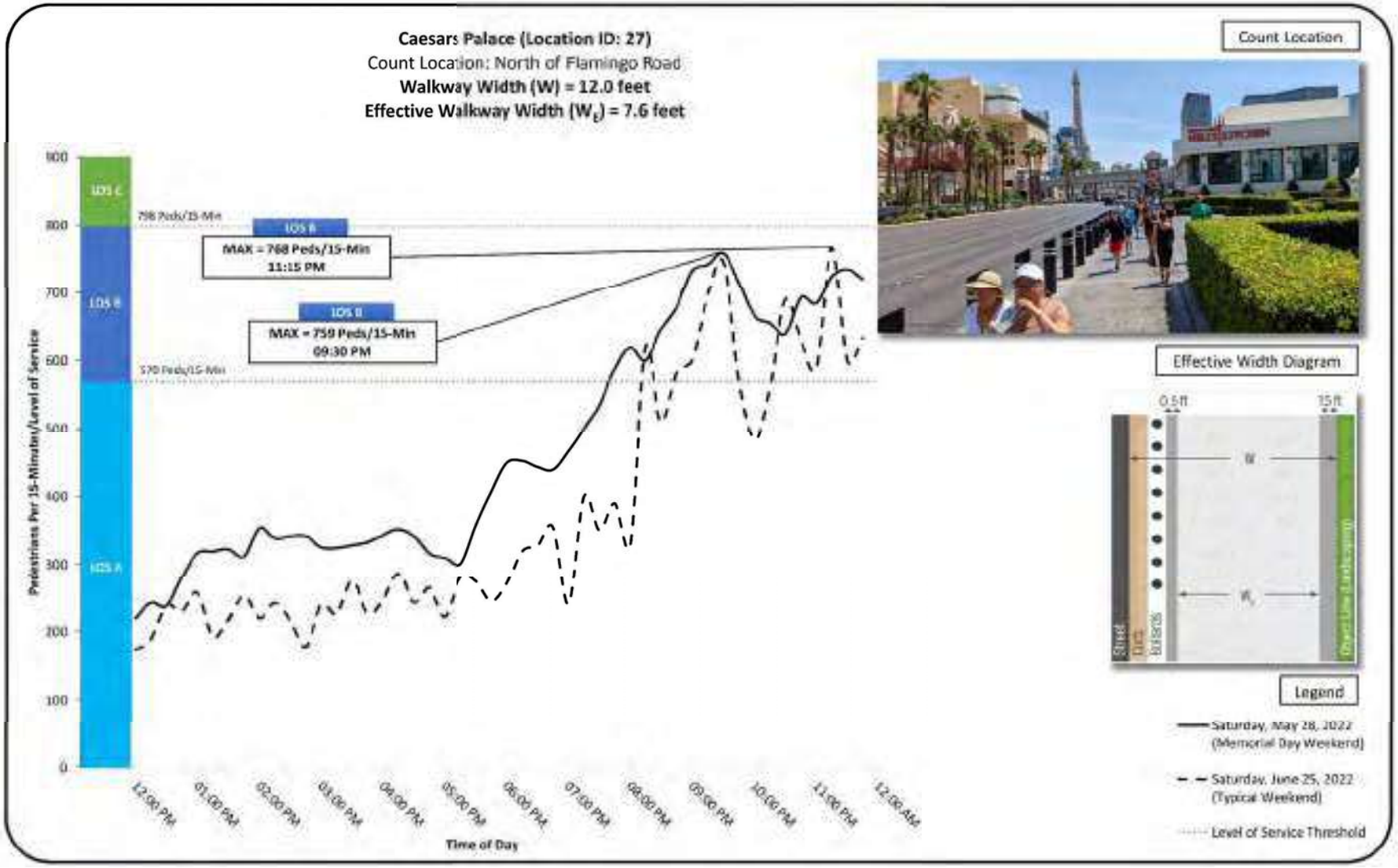


Figure 5.30 – Caesars Palace (Location ID: 27) – Pedestrian Volume by Time of Day

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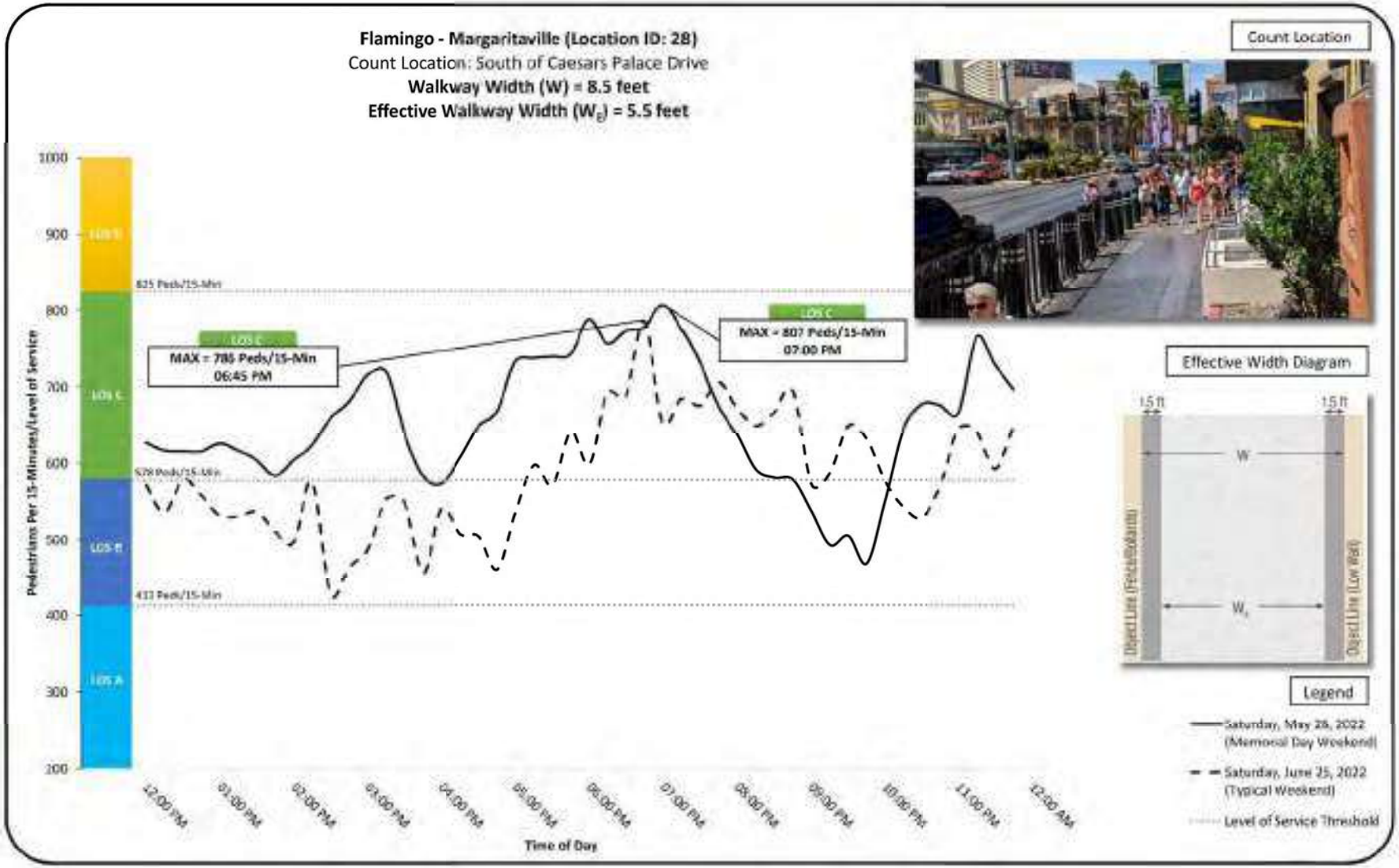


Figure 5.31 – Flamingo-Margaritaville (Location ID: 28) – Pedestrian Volume by Time of Day

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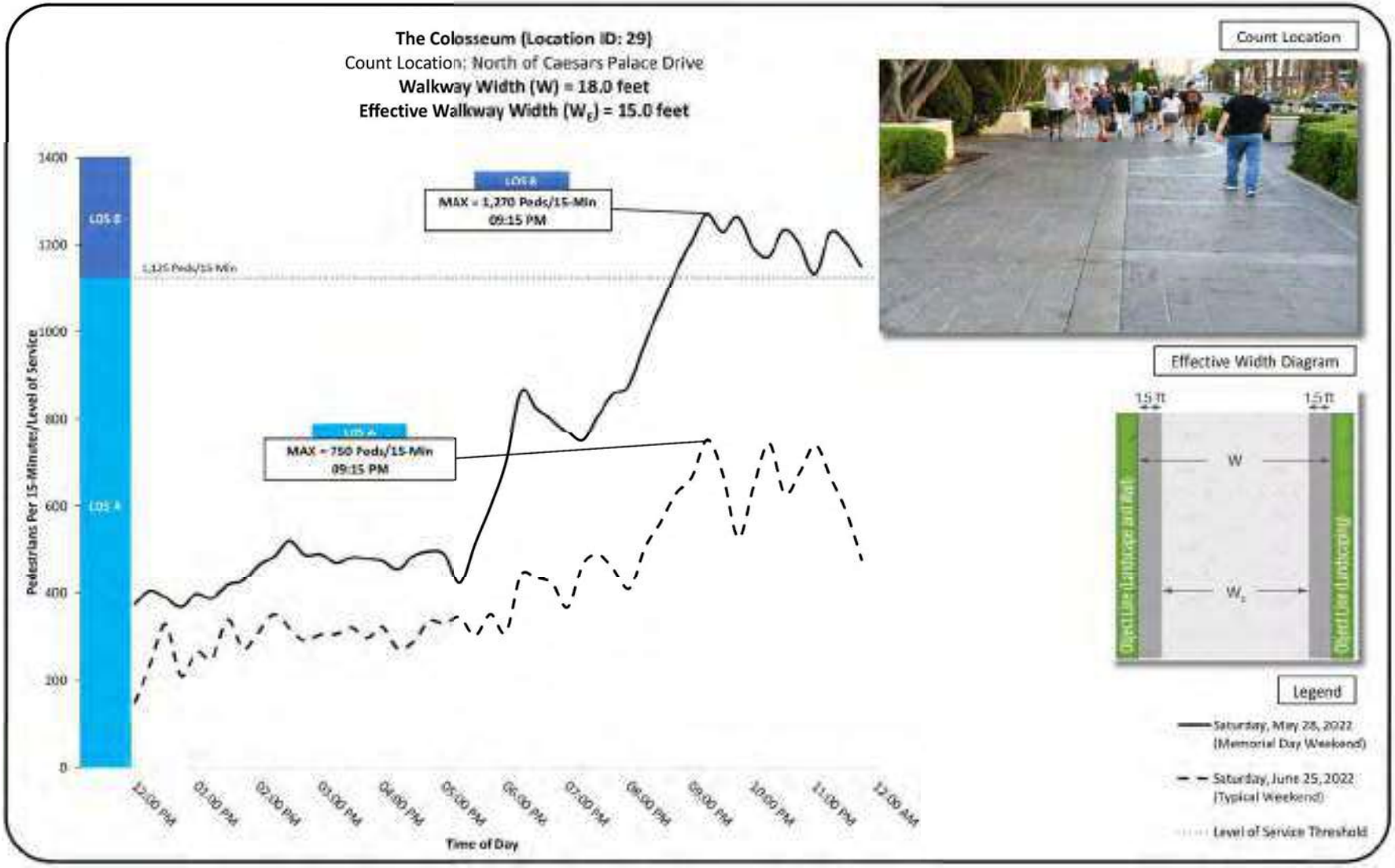


Figure 5.32 – The Colosseum (Location ID: 29) – Pedestrian Volume by Time of Day

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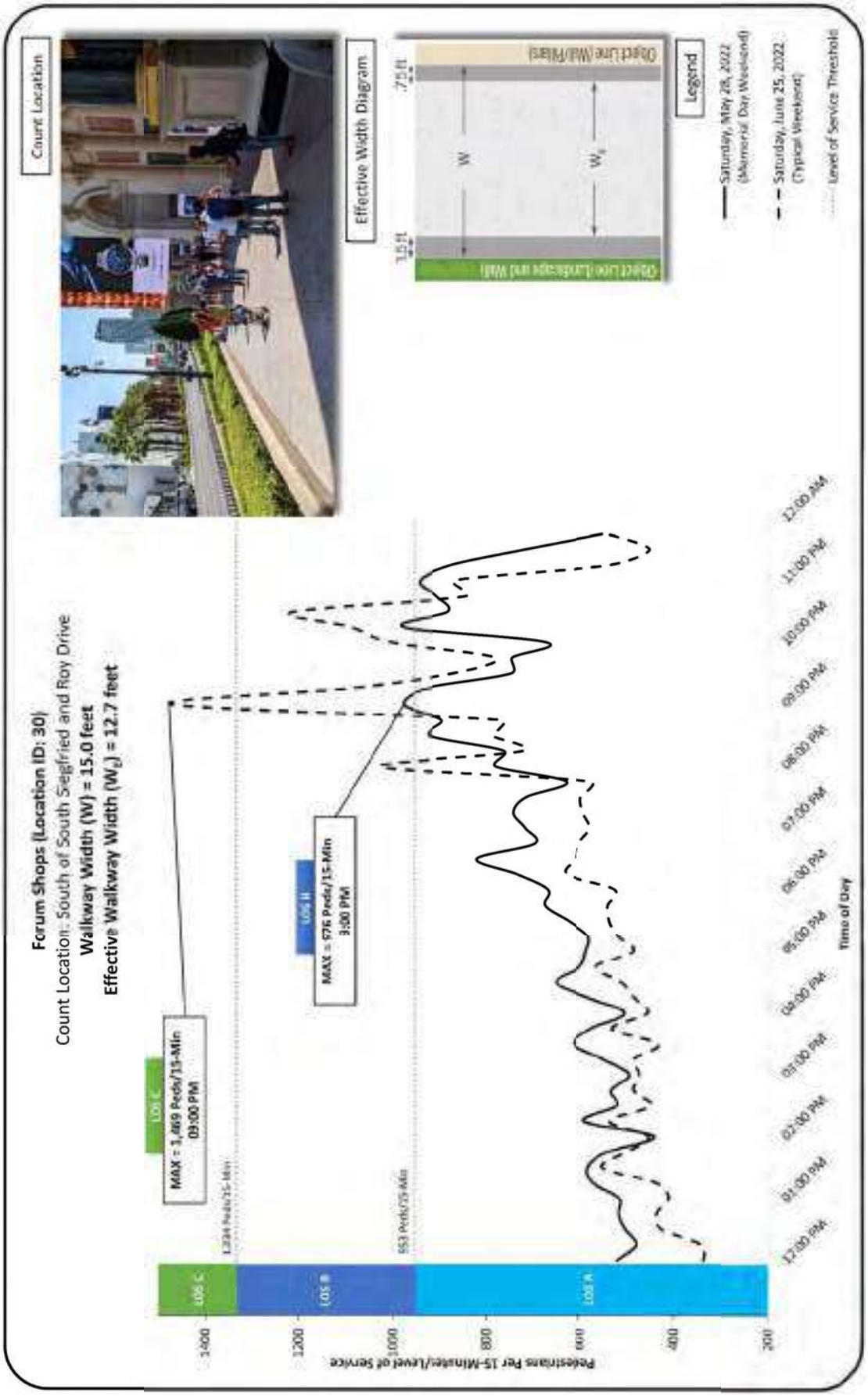


Figure 5.33 – Forum Shops (Location ID: 30) – Pedestrian Volume by Time of Day



Figure 5.34 – Harrah's (Location ID: 31) – Pedestrian Volume by Time of Day

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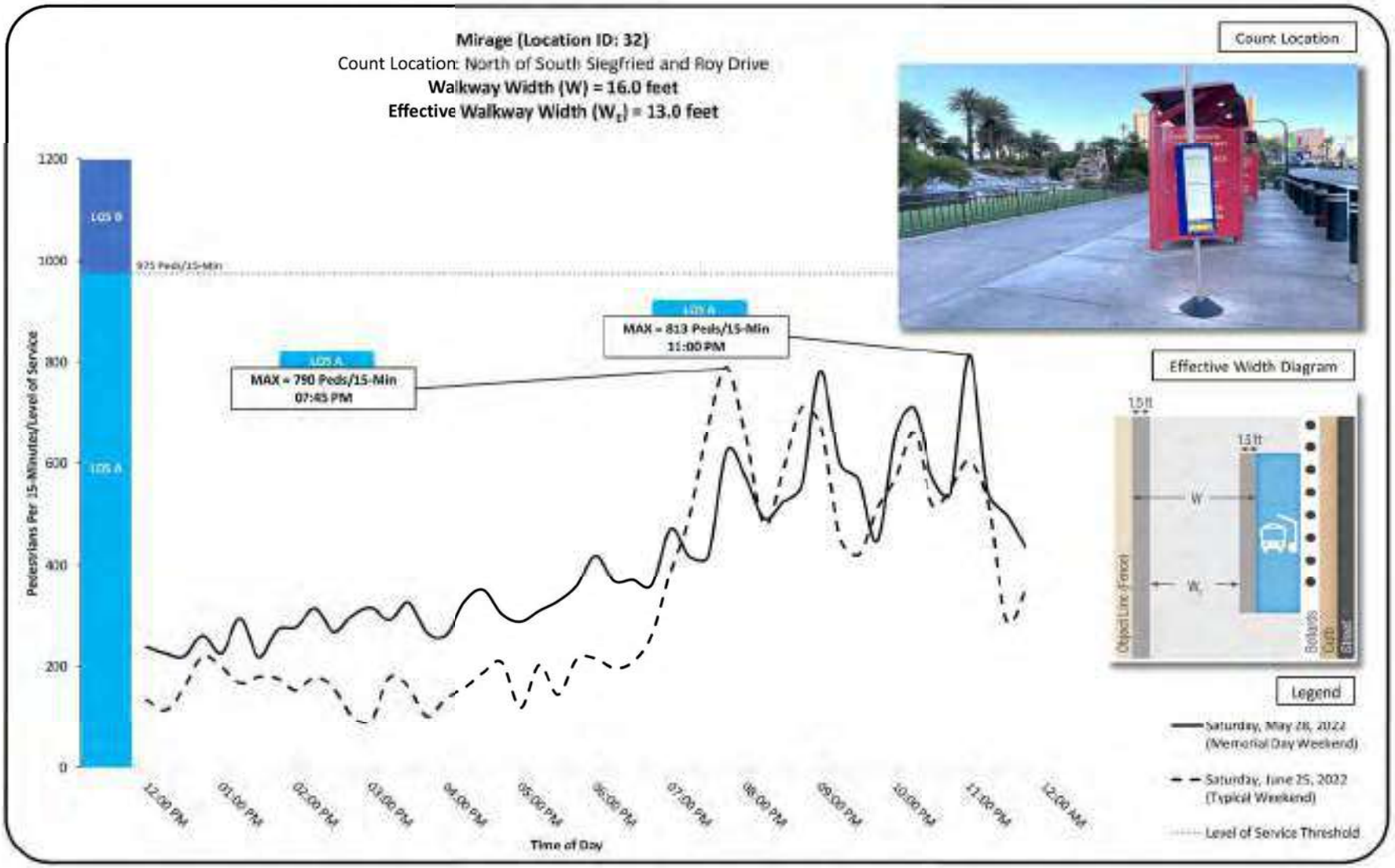


Figure 5.35 – Mirage (Location ID: 32) – Pedestrian Volume by Time of Day

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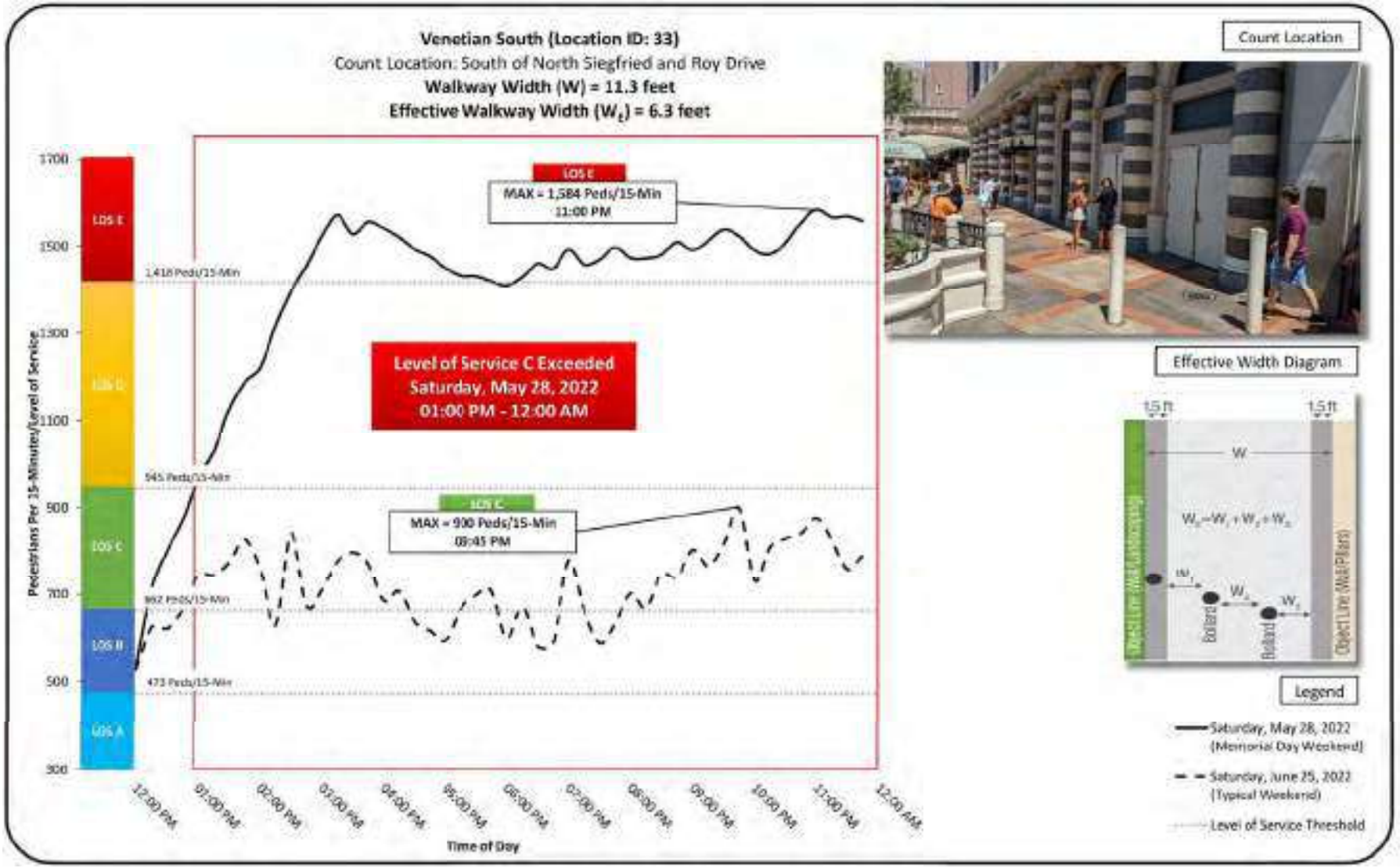


Figure 5.36 – Venetian South (Location ID: 33) – Pedestrian Volume by Time of Day

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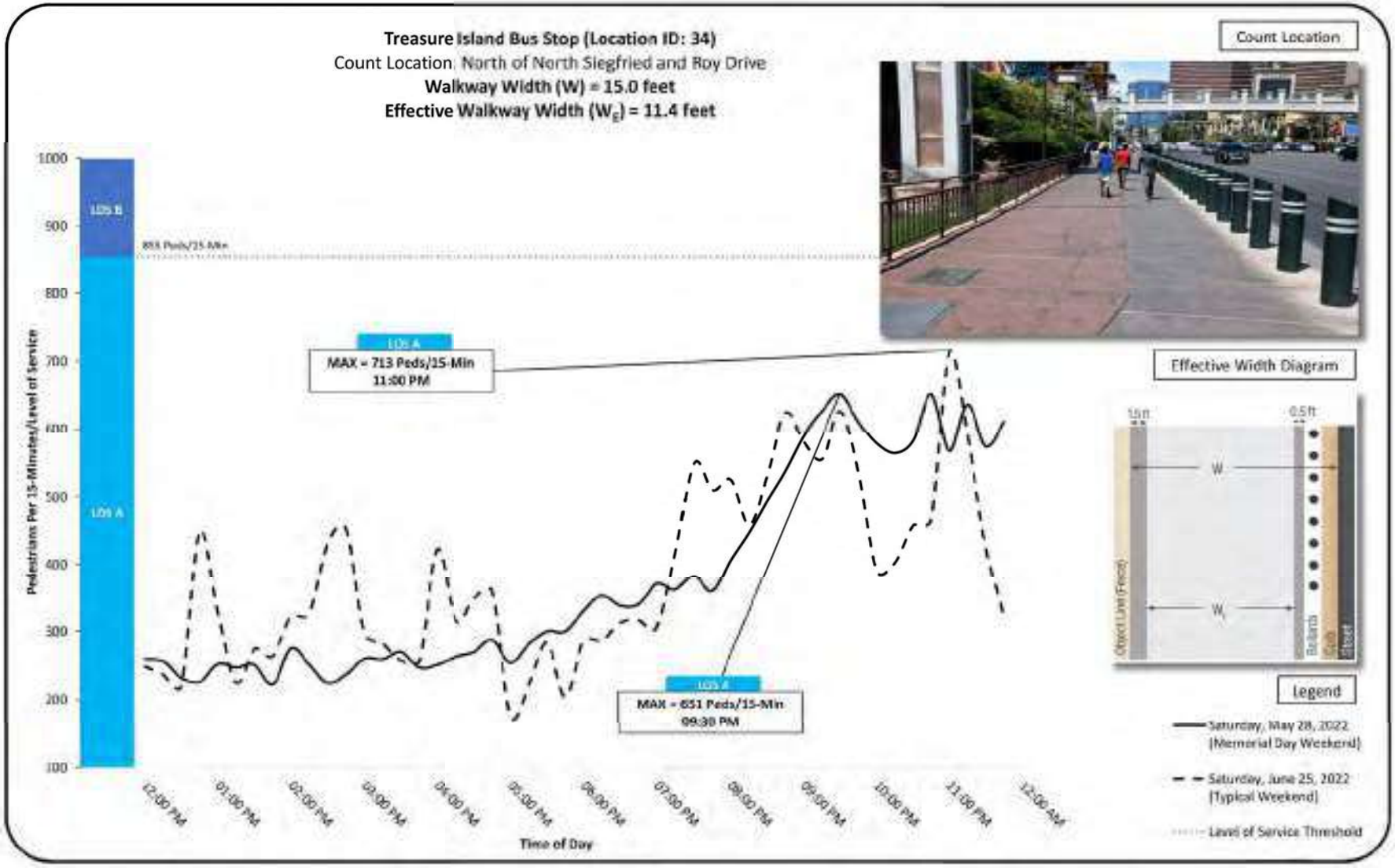


Figure 5.37 – Treasure Island Bus Stop (Location ID: 34) – Pedestrian Volume by Time of Day

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Figure 5.38 – Venetian North (Location ID: 35) – Pedestrian Volume by Time of Day

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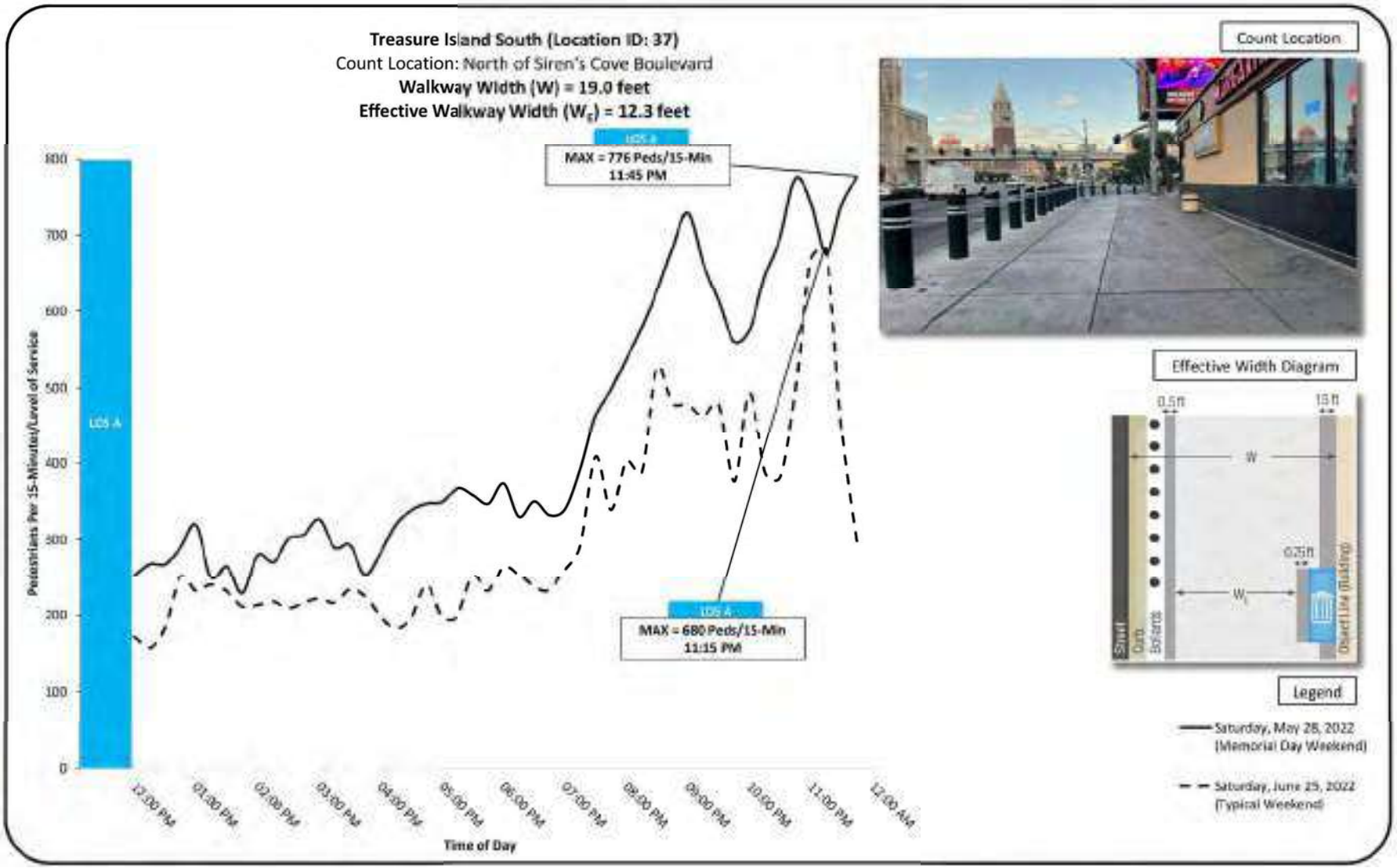


Figure 5.39 – Treasure Island South (Location ID: 37) – Pedestrian Volume by Time of Day

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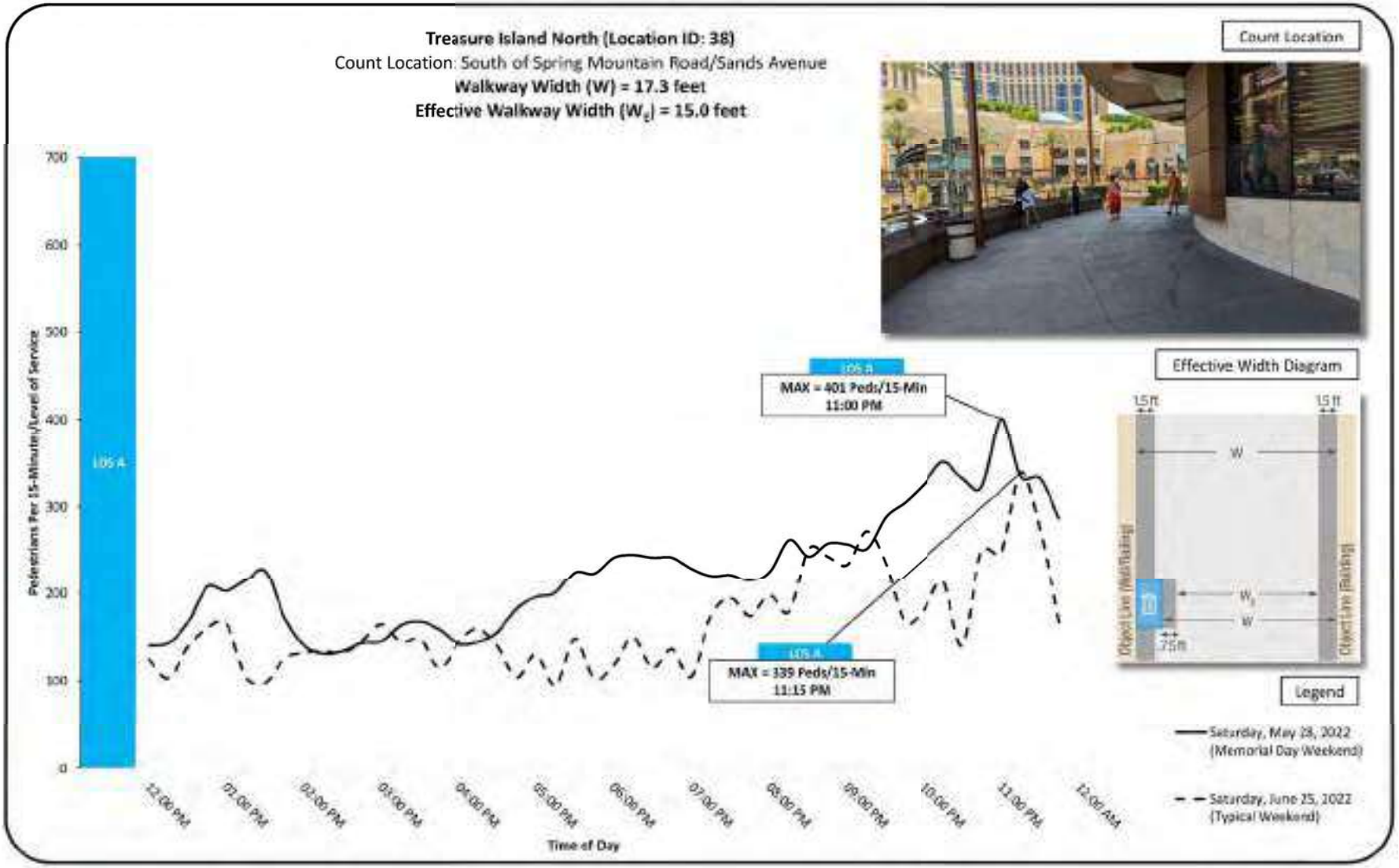


Figure 5.40 – Treasure Island North (Location ID: 38) – Pedestrian Volume by Time of Day

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5.3.3 Pedestrian Bridges

Data was collected at 16 pedestrian bridge locations within the study corridor, as summarized in **Table 5.5** and shown in **Figure 5.41.** The calculated LOS is based on the pedestrian volume at each bridge count location and the associated pedestrian bridge walkway widths at those locations**. Figure 5.42** through **Figure 5.57** provide a visualization of pedestrian volumes and LOS for the pedestrian bridge count locations**.**

Table 5.5 – LOS Summary for the Pedestrian Bridges

Location ID	Location	W_E (ft)	LOS Holiday	LOS Typical
4	Tropicana Avenue South Pedestrian Bridge	13.0	A	A
5	Tropicana Avenue West Pedestrian Bridge	13.0	B	B
6	Tropicana Avenue East Pedestrian Bridge	13.0	A	A
7	Tropicana Avenue North Pedestrian Bridge	13.0	B	C
10	Park Avenue Pedestrian Bridge	17.0	A	A
14	Harmon Avenue West Pedestrian Bridge	12.5	A	B
15	Harmon Avenue East Pedestrian Bridge	13.0	A	A
16	Harmon Avenue North Pedestrian Bridge	12.3	B	B
22	Flamingo Road South Pedestrian Bridge	11.8	A	A
23	Flamingo Road West Pedestrian Bridge	12.0	C	C
24	Flamingo Road East Pedestrian Bridge	11.0	B	C
26	Flamingo Road North Pedestrian Bridge	11.0	A	A
36	Venetian Pedestrian Bridge	13.5	A	A
39	Spring Mountain Road West Pedestrian Bridge	13.8	A	A
40	Spring Mountain Road East Pedestrian Bridge	17.0	A	A
42	Wynn Pedestrian Bridge	11.8	A	A

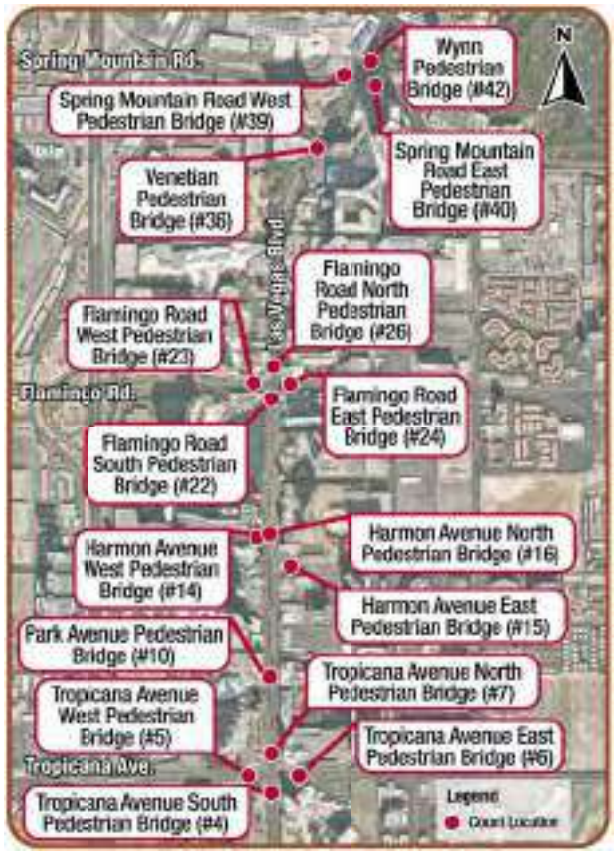


Figure 5.41 – Pedestrian Bridge Count Locations

All 16 observed pedestrian bridge count locations operated at LOS C or better on both Saturday, May 28, 2022 (Memorial Day Weekend) and Saturday, June 25, 2022 (Typical Weekend), with 10 bridges operating as LOS A on both the Holiday Saturday and the Typical Saturday**.**

The Flamingo Road West Pedestrian Bridge (#23), as observed on May 28, 2022 is shown in **Picture 5.3** and the Tropicana Avenue North Pedestrian Bridge (#7), as observed on June 25, 2022 is shown in **Picture 5.4.** The Flamingo Road West Pedestrian Bridge (#23) had the highest observed 15-minute pedestrian volume of all 48 count locations on the Holiday Saturday and the Tropicana Avenue North Pedestrian Bridge (#7) had the highest observed pedestrian volume on the Typical Saturday**.**



Picture 5.3 – Flamingo Road West Pedestrian Bridge (#23)
May 28, 2022



Picture 5.4 – Tropicana Avenue North Pedestrian Bridge (#7)
June 25, 2022

In the *Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue (2015 Update)*, the Tropicana Avenue West Pedestrian Bridge (#5), Harmon Avenue West Pedestrian Bridge (#14), Harmon Avenue North Pedestrian Bridge (#16), and Flamingo Road West Pedestrian Bridge (#23) were found to exceed LOS C during the Holiday Saturday, while only the Flamingo West Pedestrian Bridge (#23) was found to exceed LOS C during the Typical Saturday in 2015**.** Of note, since 2015, the recommendation to remove trash enclosures from pedestrian bridges has been implemented**.**

It should also be noted that the LOS calculations presented in this section are based on no NPOs being on the bridge and that the entire walkway being available for pedestrian movement**.** The impact of NPOs on pedestrian LOS is considered in **Section 5.4.**

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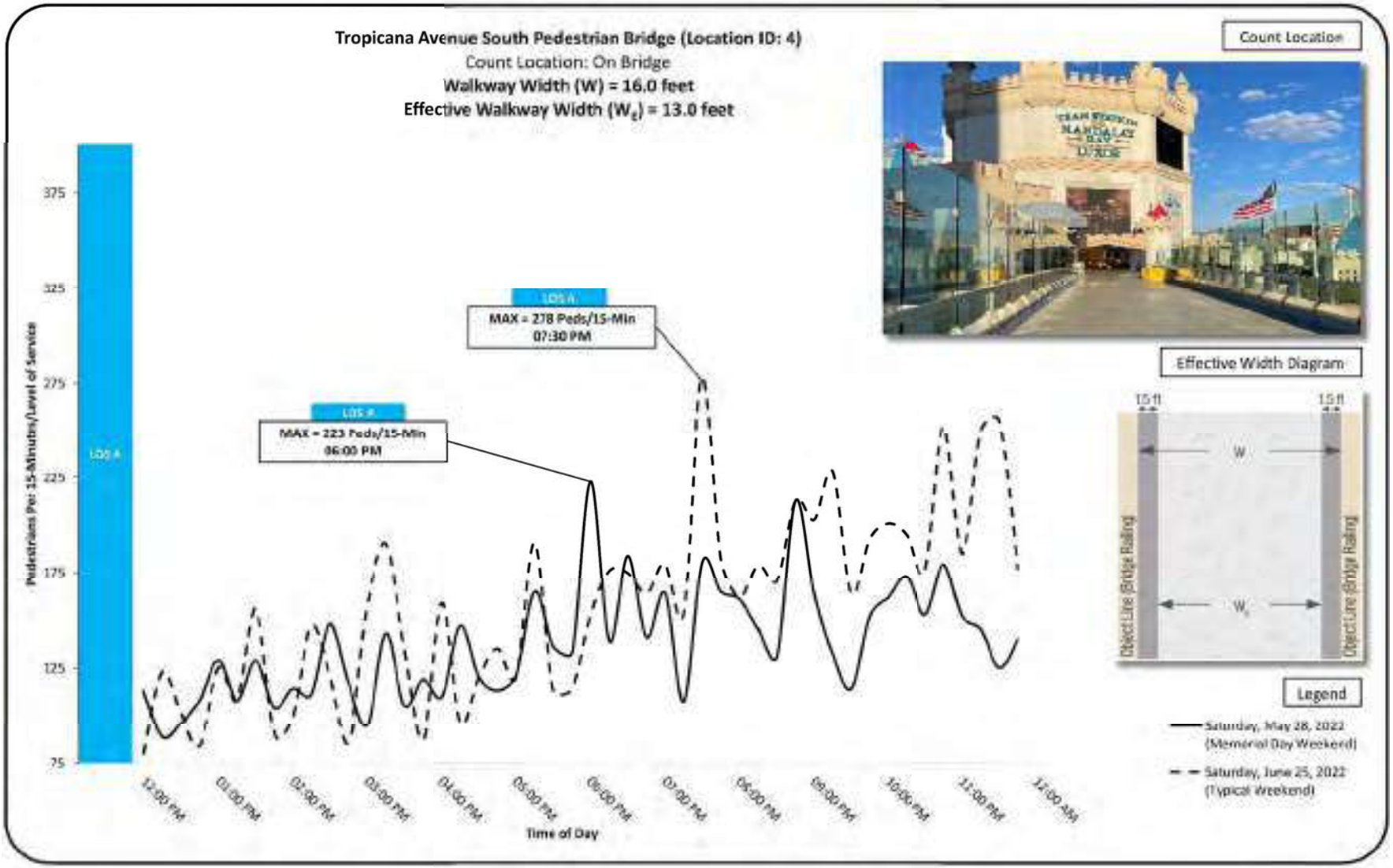


Figure 5.42 – Tropicana Avenue South Pedestrian Bridge (Location ID: 4) – Pedestrian Volume by Time of Day

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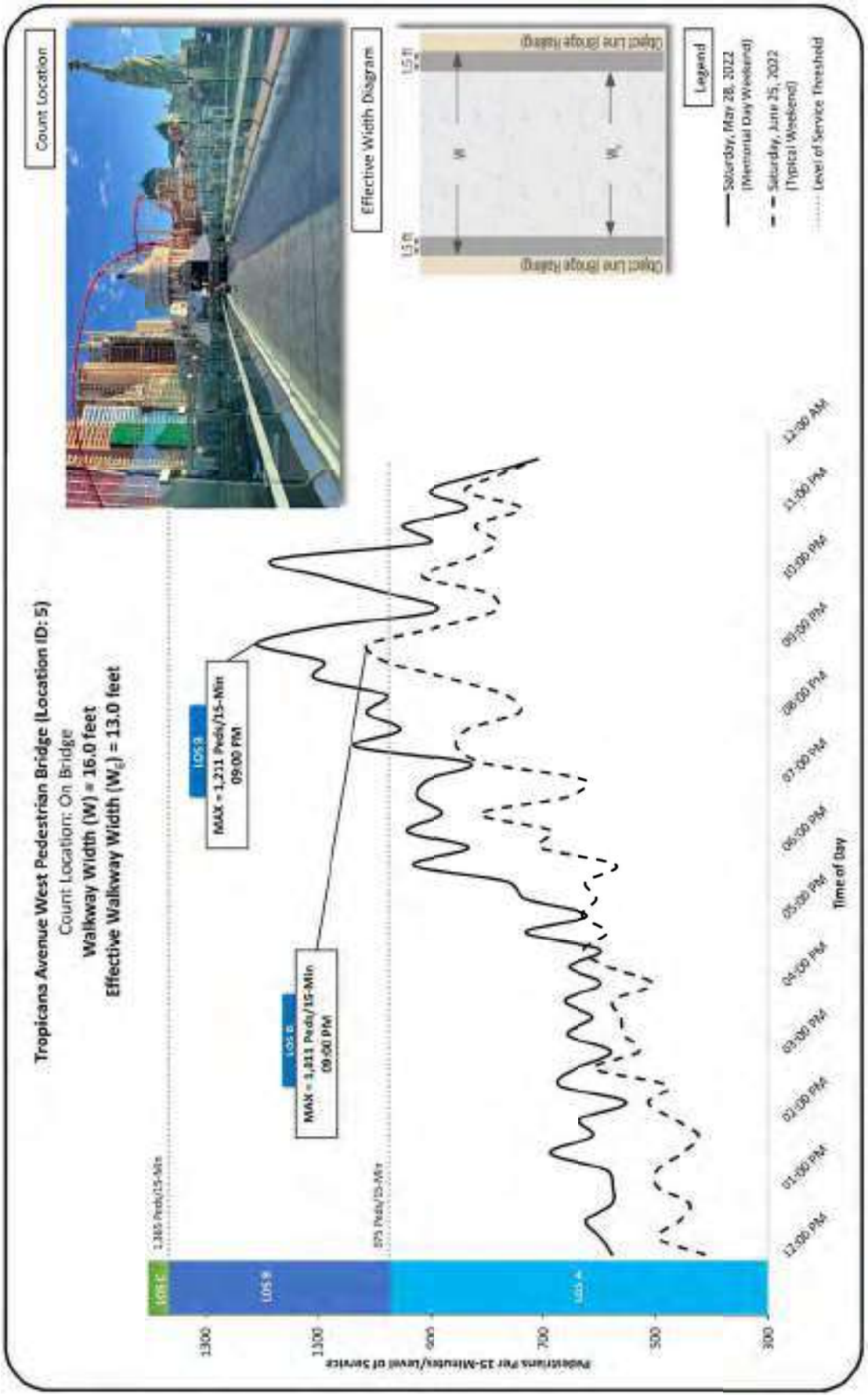


Figure 5.43 – Tropicana Avenue West Pedestrian Bridge (Location ID: 5) – Pedestrian Volume by Time of Day

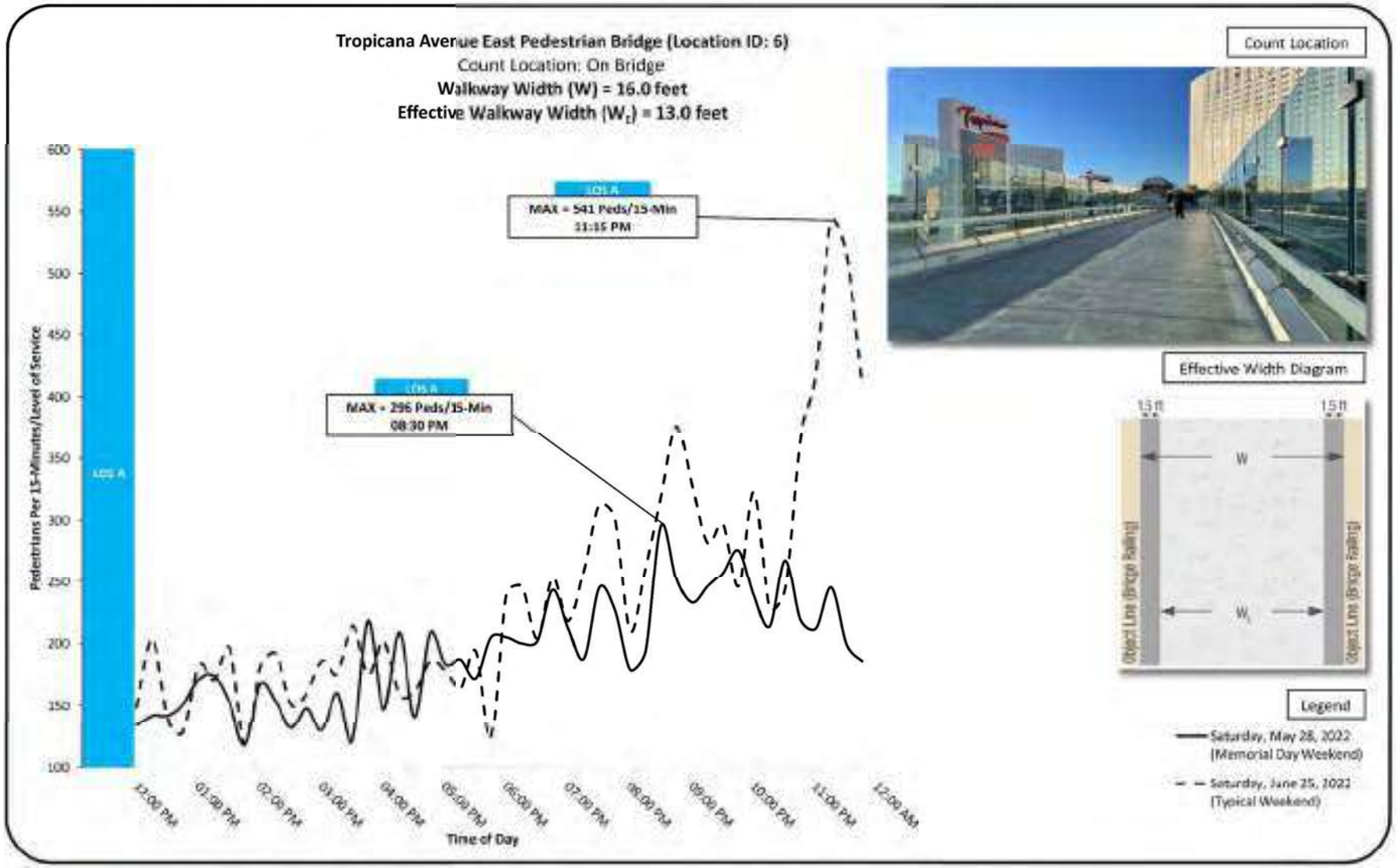


Figure 5.44 – Tropicana Avenue East Pedestrian Bridge (Location ID: 6) – Pedestrian Volume by Time of Day

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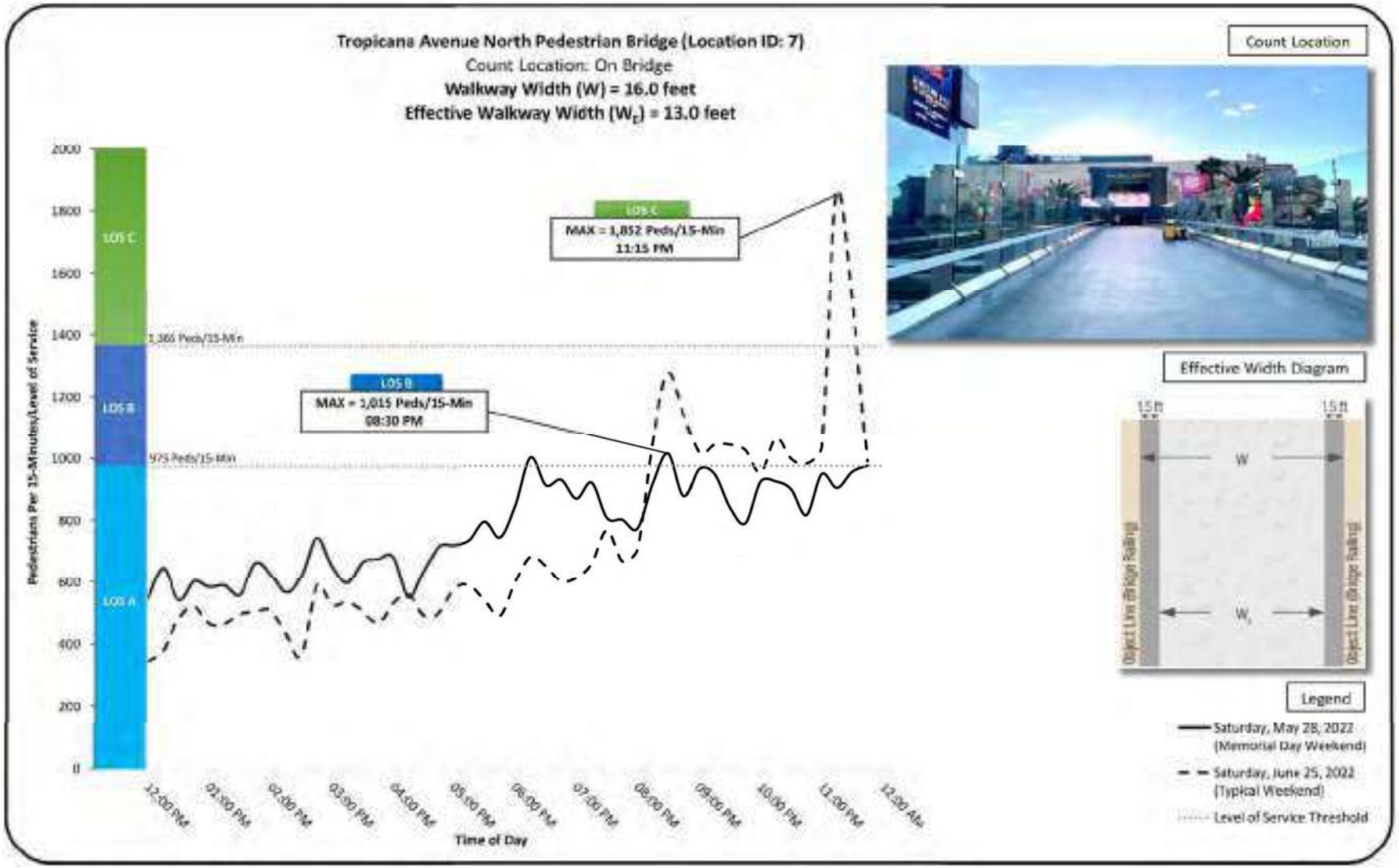


Figure 5.45 – Tropicana Avenue North Pedestrian Bridge (Location ID: 7) – Pedestrian Volume by Time of Day

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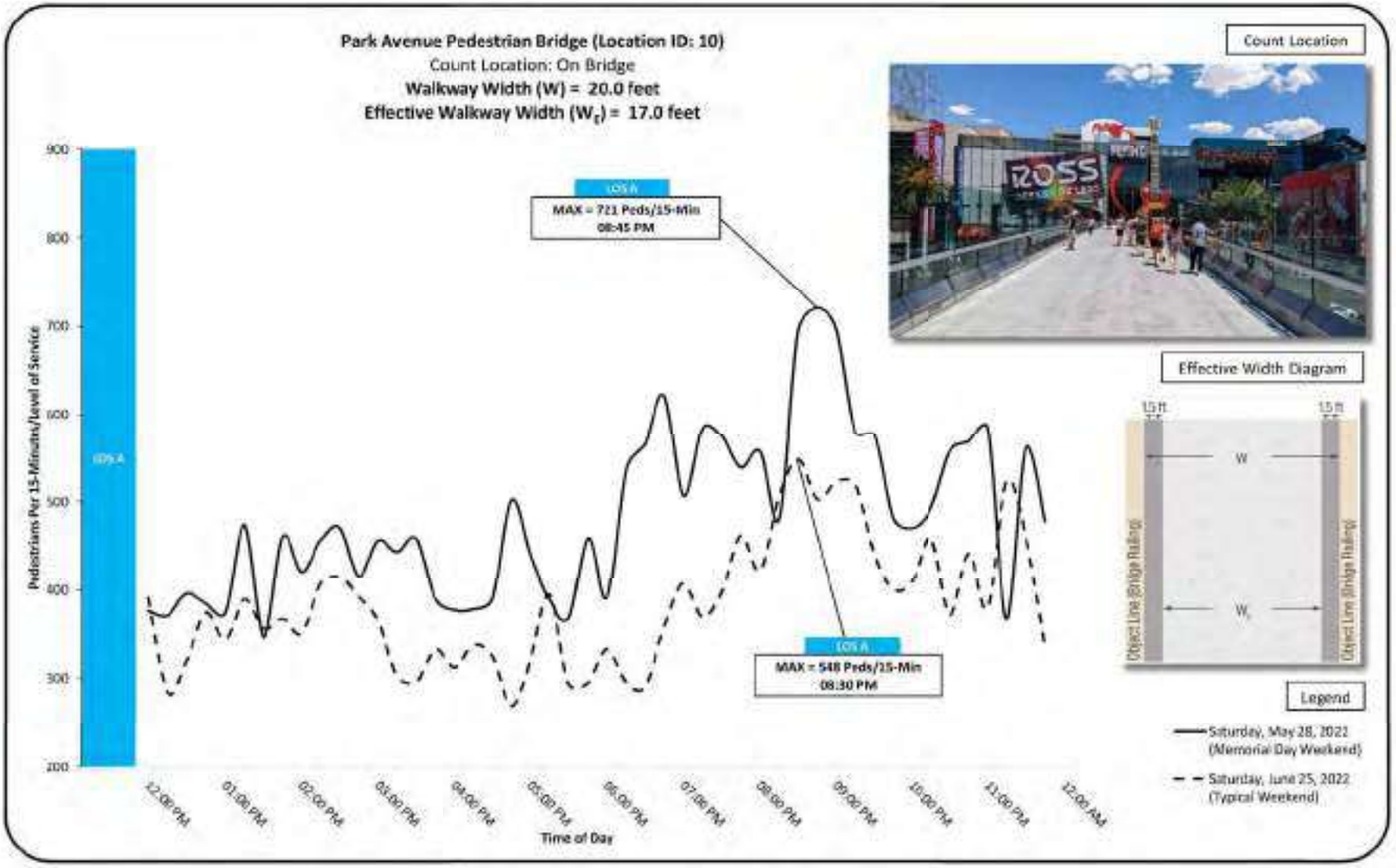


Figure 5.46 – Park Avenue Pedestrian Bridge (Location ID: 10) – Pedestrian Volume by Time of Day

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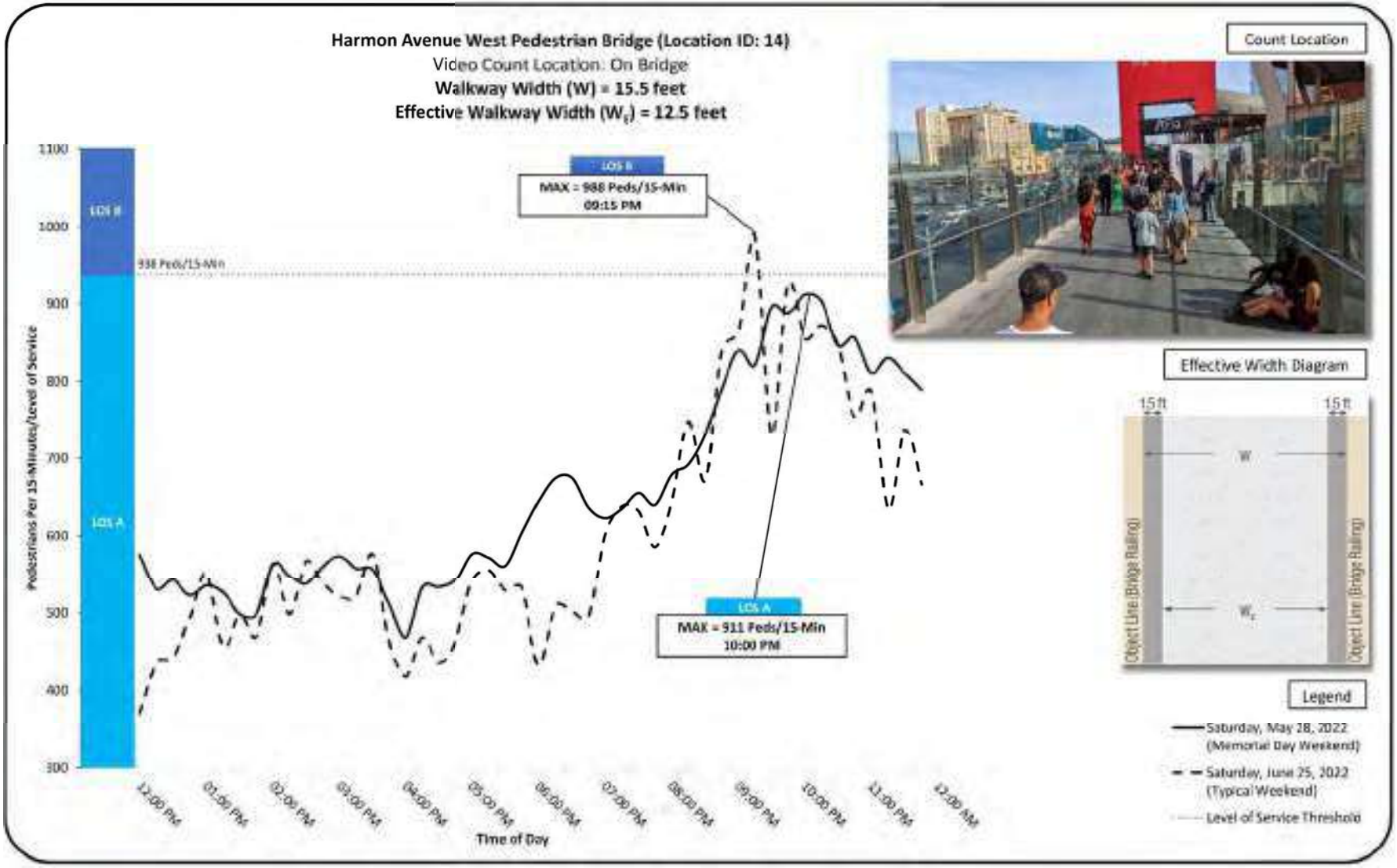


Figure 5.47 – Harmon Avenue West Pedestrian Bridge (Location ID: 14) – Pedestrian Volume by Time of Day

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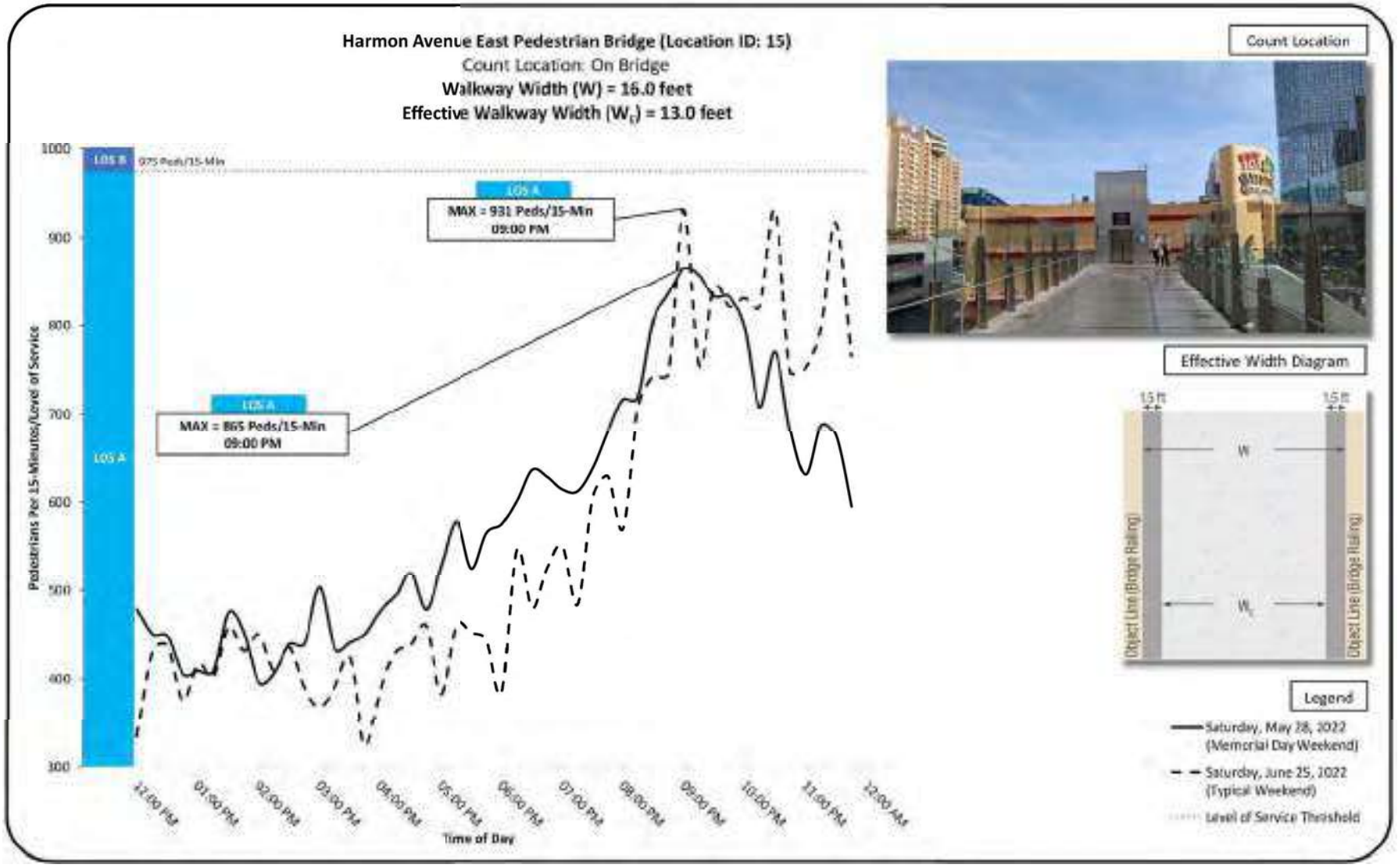


Figure 5.48 – Harmon Avenue East Pedestrian Bridge (Location ID: 15) – Pedestrian Volume by Time of Day

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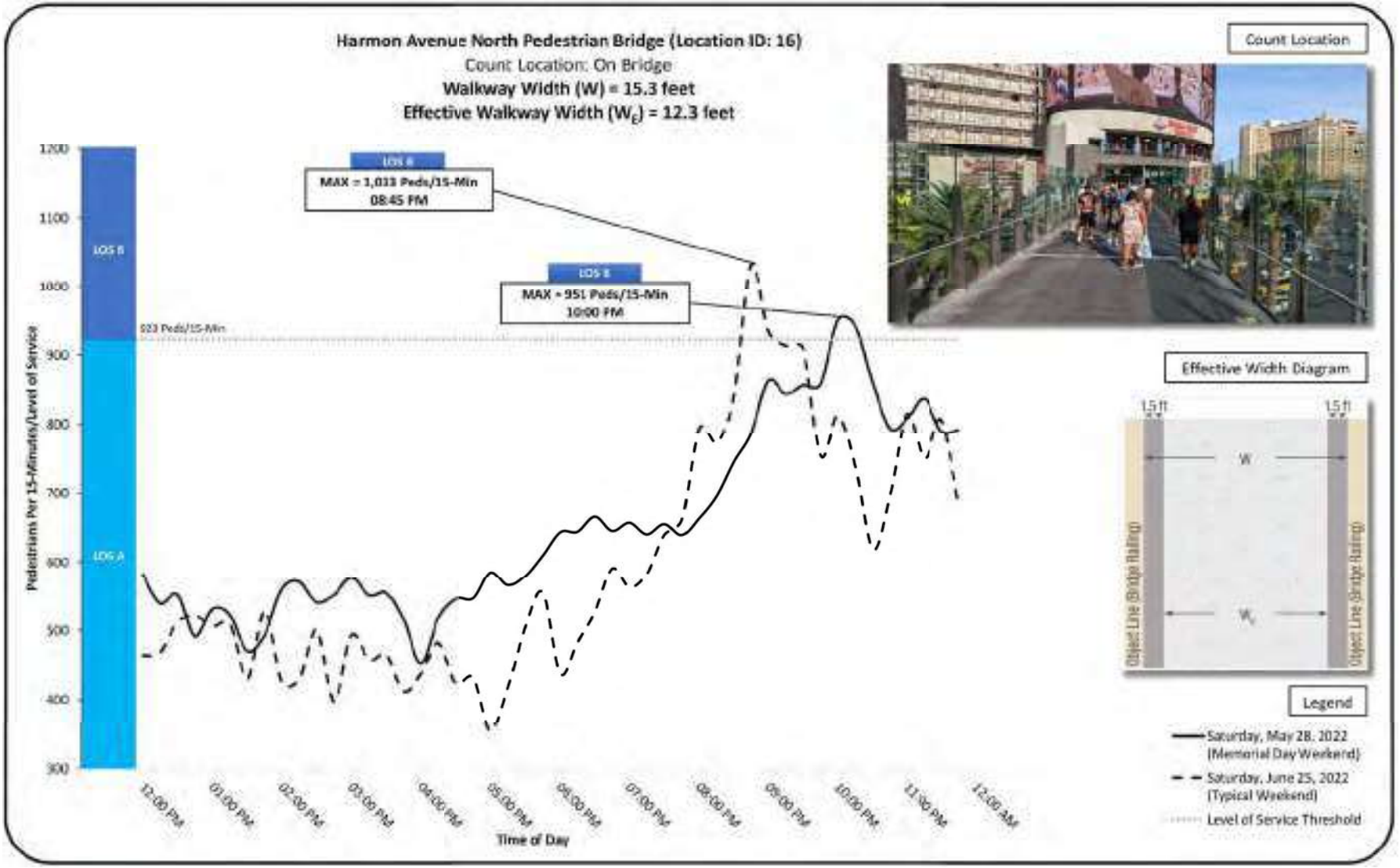


Figure 5.49 – Harmon Avenue North Pedestrian Bridge (Location ID: 16) – Pedestrian Volume by Time of Day

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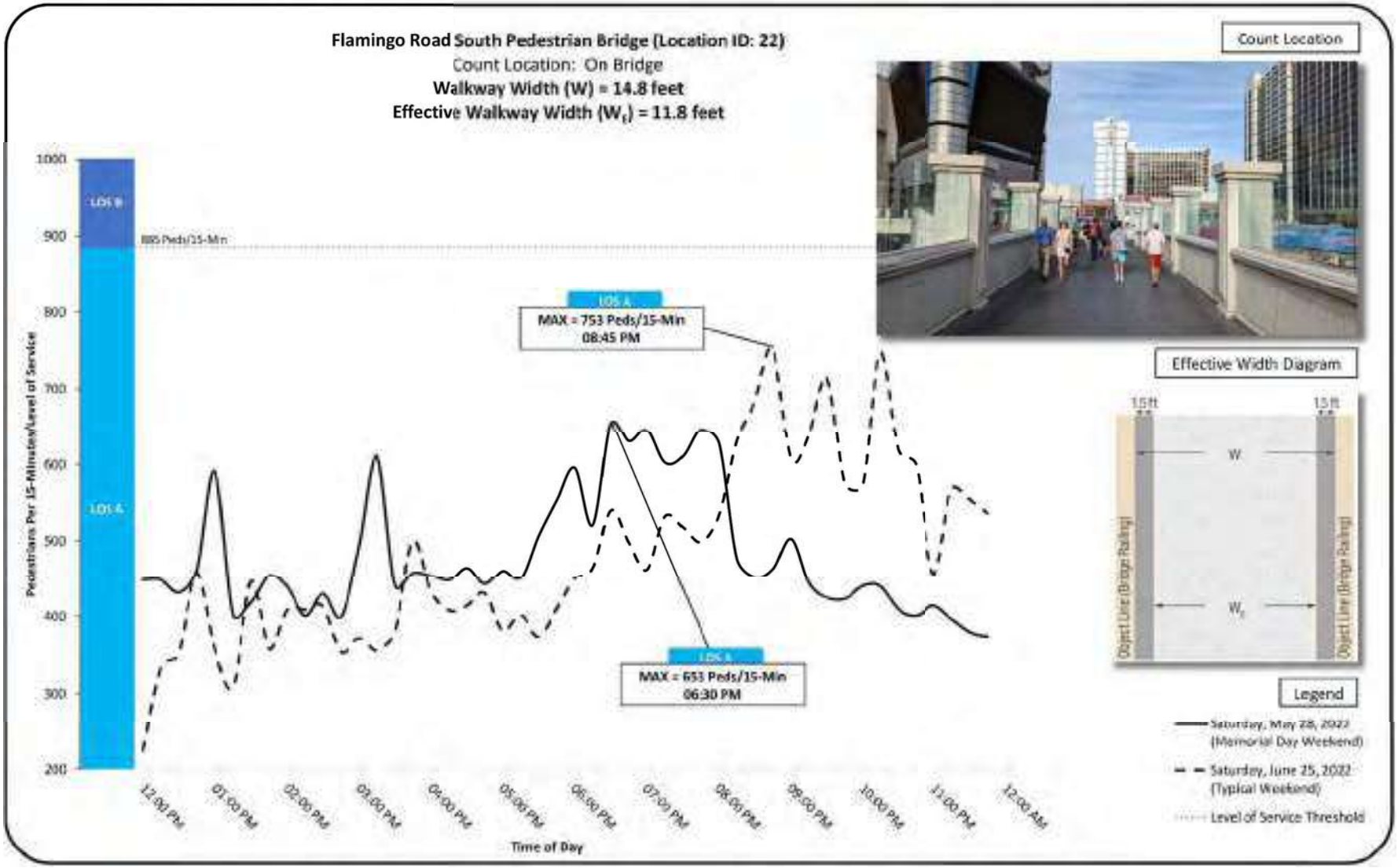


Figure 5.50 – Flamingo Road South Pedestrian Bridge (Location ID: 22) – Pedestrian Volume by Time of Day

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Figure 5.51 – Flamingo Road West Pedestrian Bridge (Location ID: 23) – Pedestrian Volume by Time of Day

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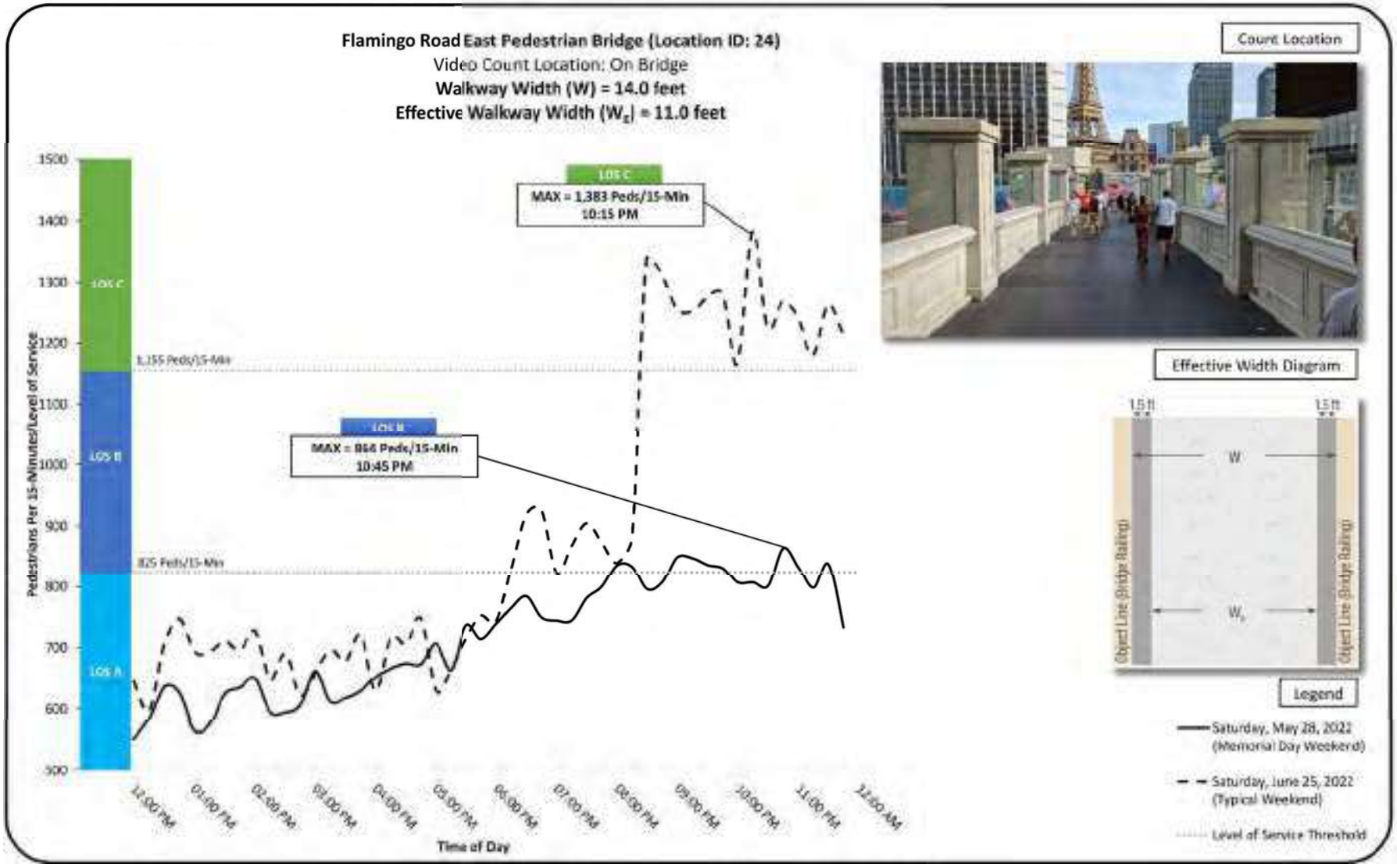


Figure 5.52 – Flamingo Road East Pedestrian Bridge (Location ID: 24) – Pedestrian Volume by Time of Day

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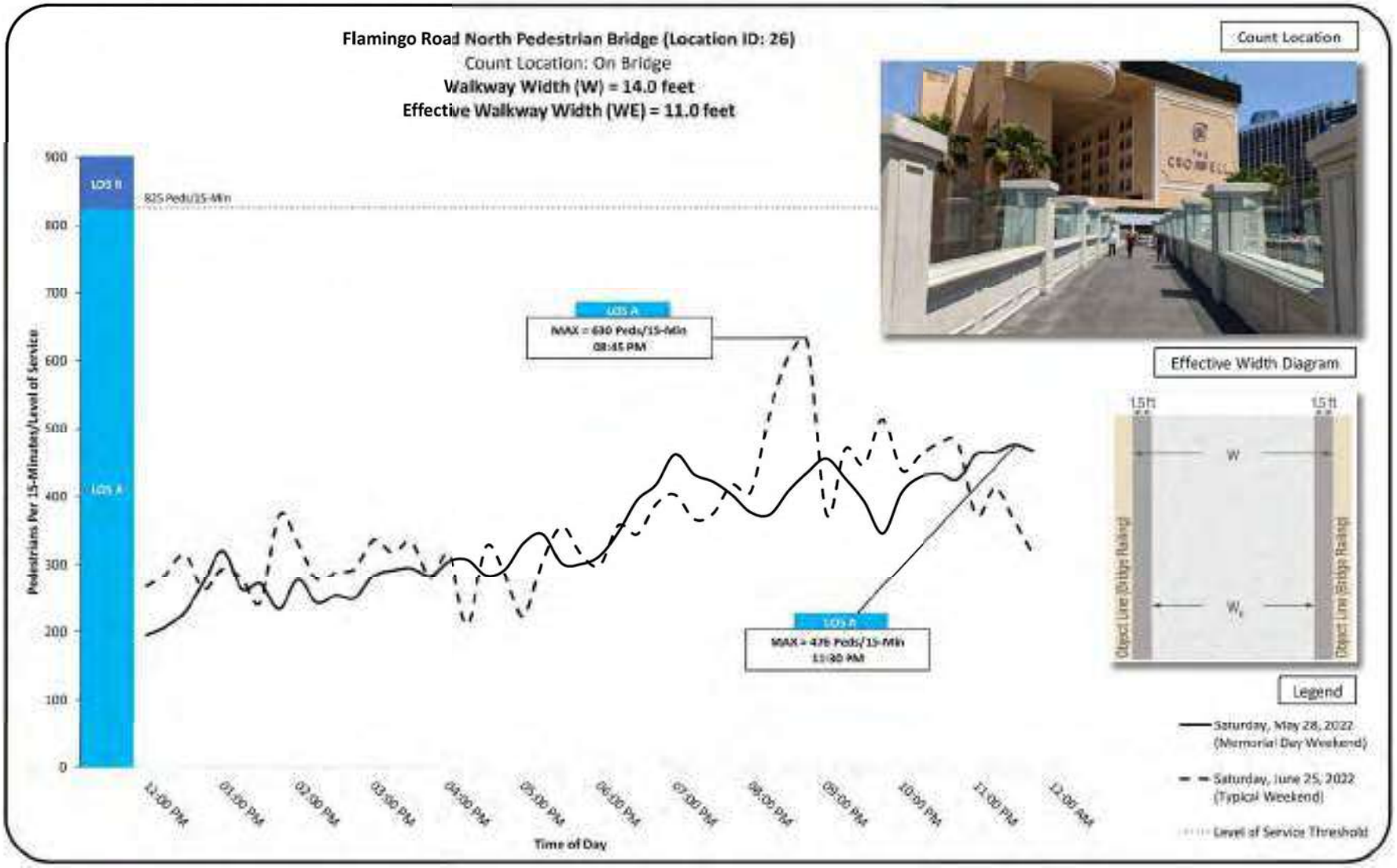


Figure 5.53 – Flamingo Road North Pedestrian Bridge (Location ID: 26) – Pedestrian Volume by Time of Day

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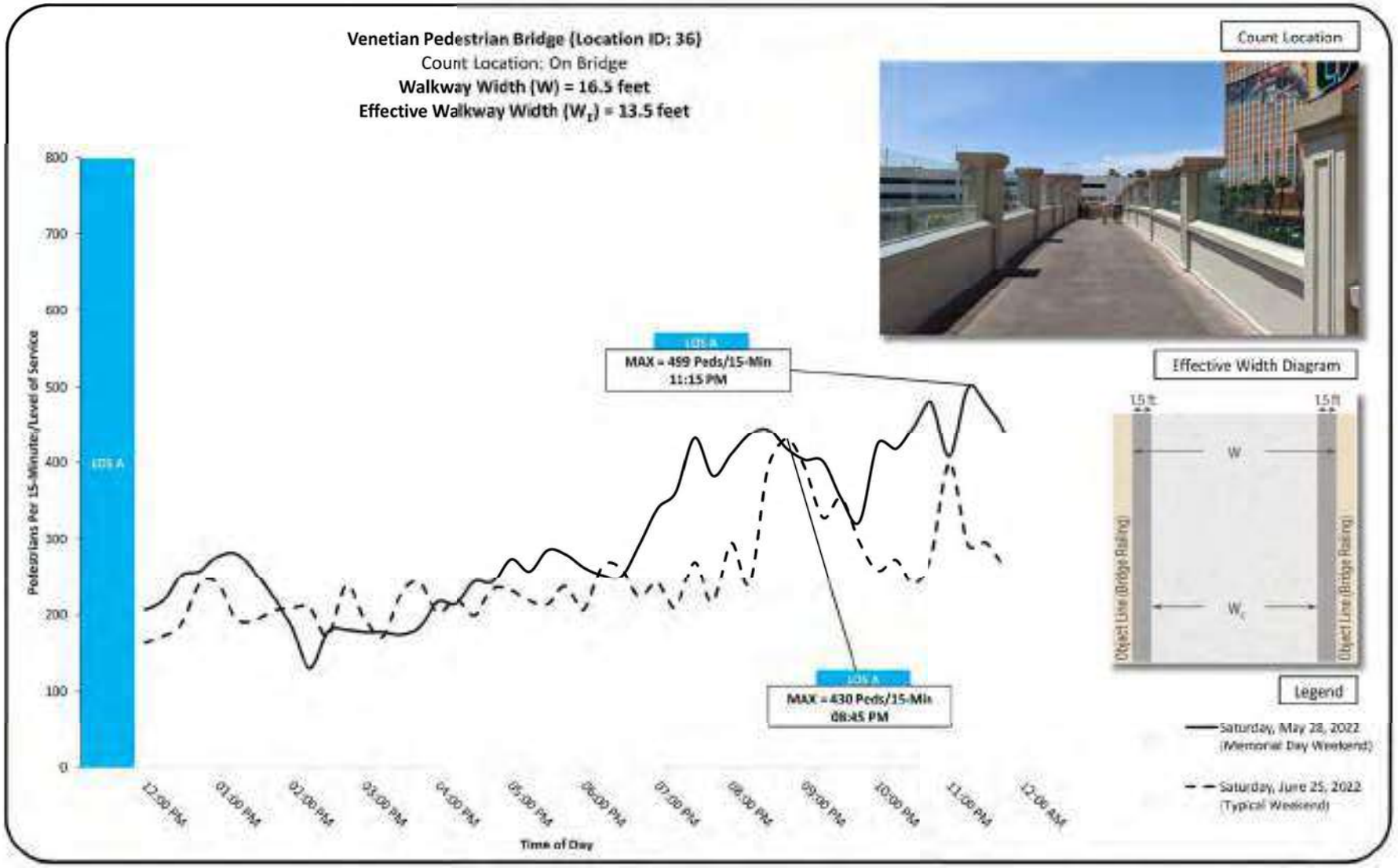


Figure 5.54 – Venetian Pedestrian Bridge (Location ID: 36) – Pedestrian Volume by Time of Day

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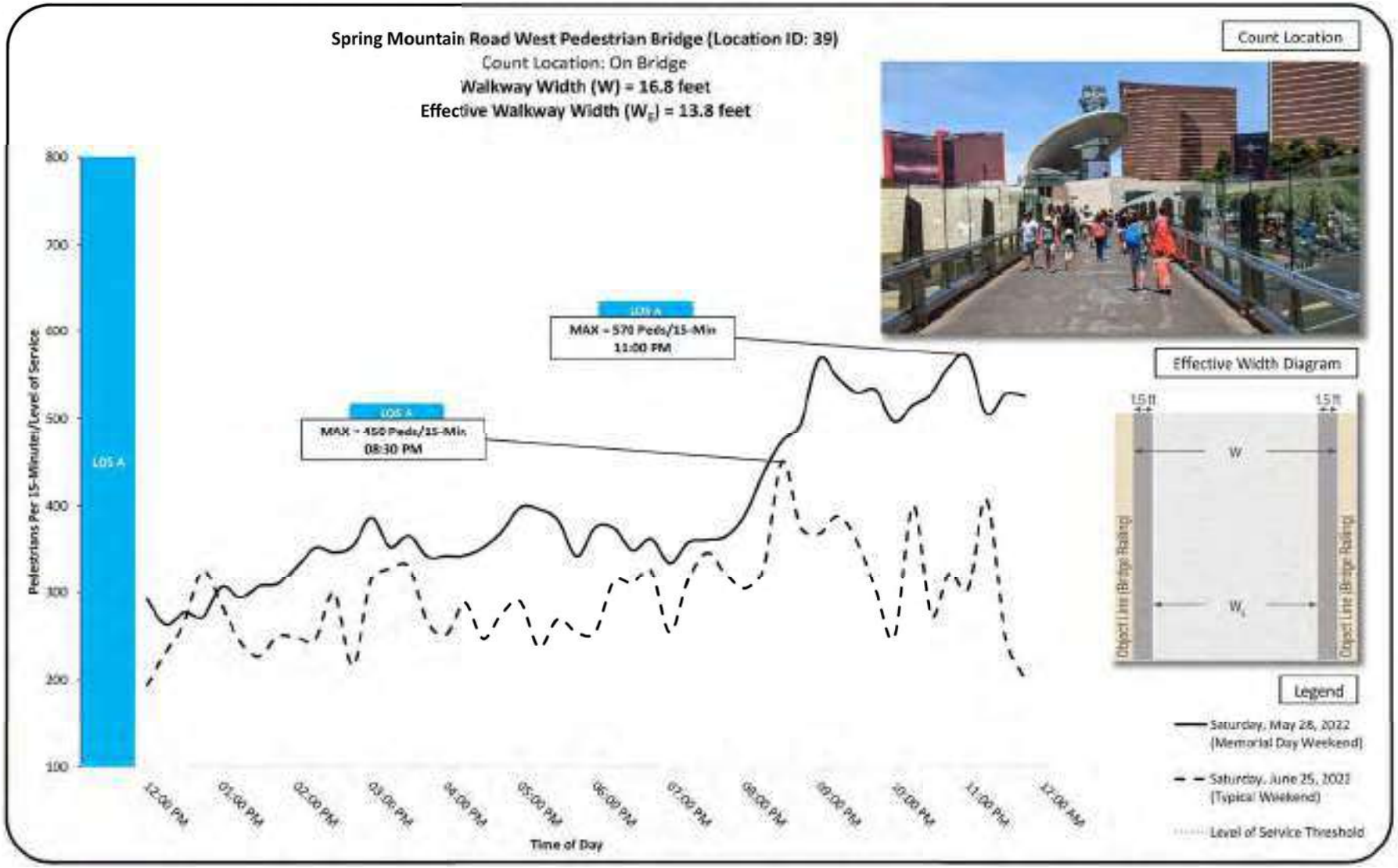


Figure 5.55 – Spring Mountain Road West Pedestrian Bridge (Location ID: 39) – Pedestrian Volume by Time of Day

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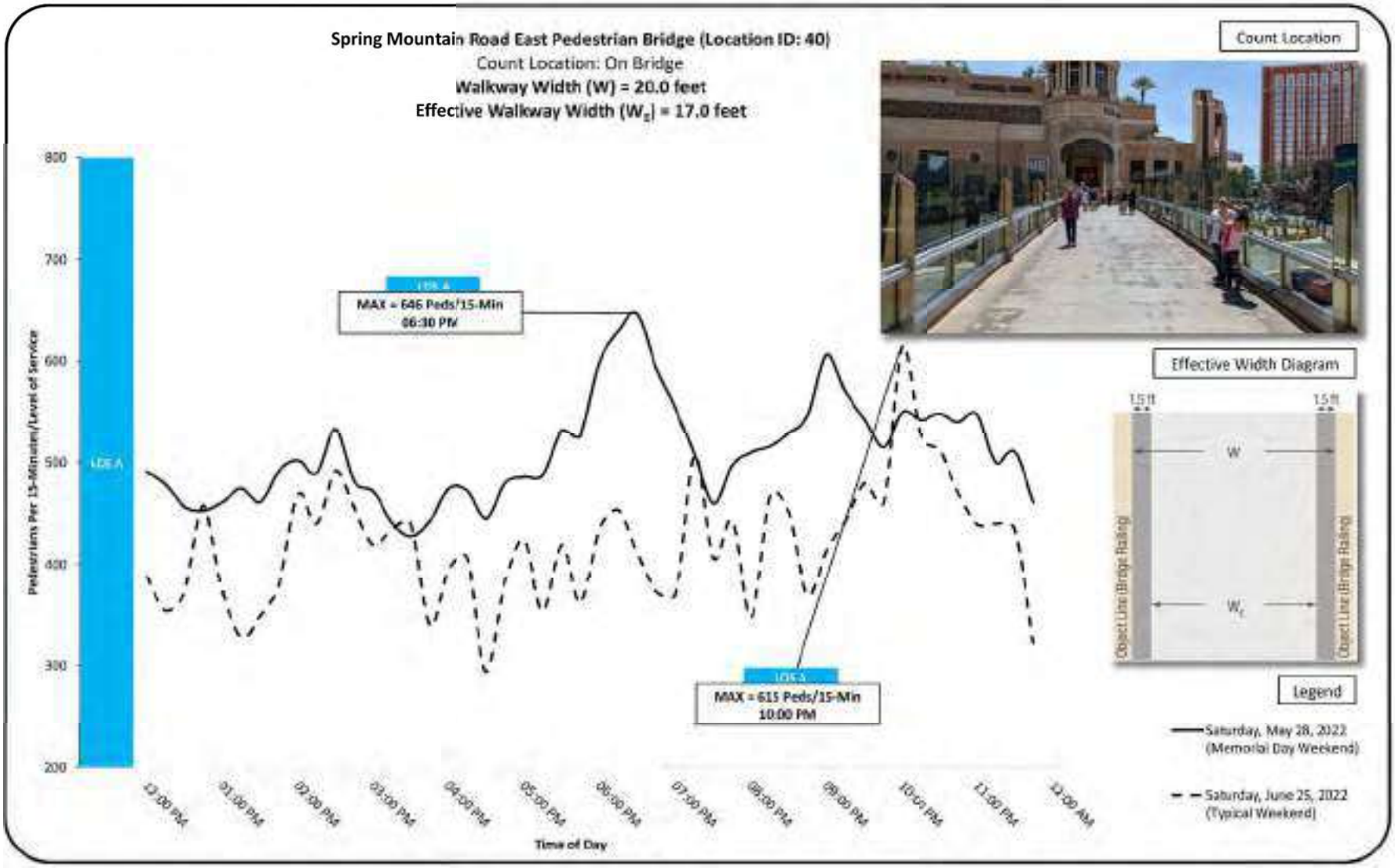


Figure 5.56 – Spring Mountain Road East Pedestrian Bridge (Location ID: 40) – Pedestrian Volume by Time of Day

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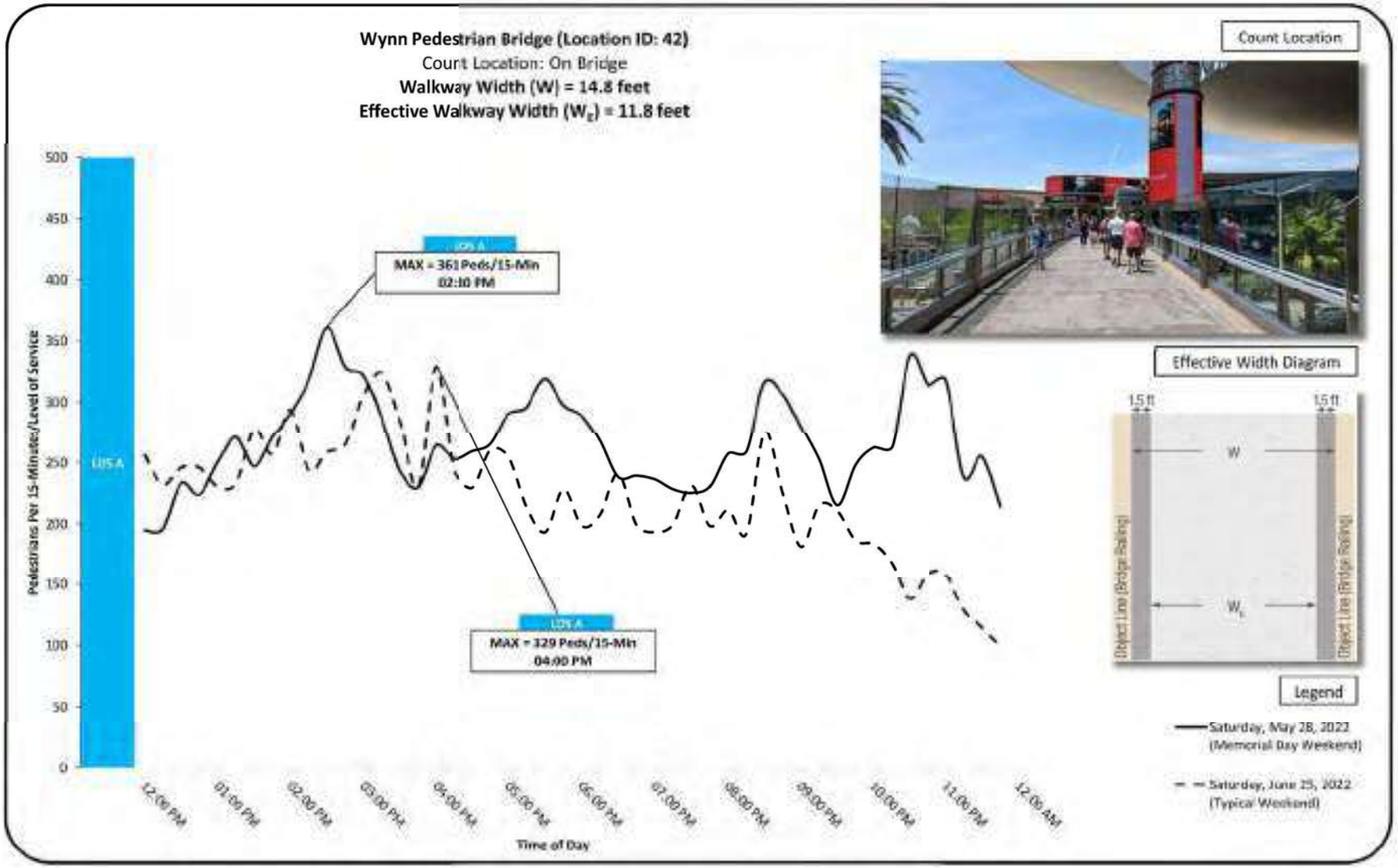


Figure 5.57 – Wynn Pedestrian Bridge (Location ID: 42) – Pedestrian Volume by Time of Day

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5.3.4 Count Location Exceeding LOS C

A review of the summary figures shows that of the 48 count locations, only one (1) location was found to exceed LOS C conditions, as summarized in **Table 5.6.** Recommendations for this location are discussed in **Section 6.**

Table 5.6 – Count Location Exceeding LOS C

Location ID	Location	W_E (ft)	LOS	Date/Time
33	Venetian South	6.3	E	May 28, 2022 (Memorial Day Weekend) 1:00 PM - 12:00 AM

It should be noted that the LOS calculations were prepared assuming the entire effective walkway width (W_E) was available for pedestrian traffic. In situations where an NPO was in the walkway, the calculated effective walkway width (W_E) would be reduced, and the LOS letter grade may also be reduced. The impact of NPOs on LOS is detailed in **Section 5.4.**

5.4 Non-Permanent Obstructions (NPOs)

The quantity, location, and classification of NPOs as observed during Saturday, May 28, 2022 (Memorial Day Weekend) and Saturday, June 25, 2022 (Typical Weekend) was summarized and analyzed to evaluate the impact of NPOs on pedestrian LOS.

Individuals that were identified as NPOs were summarized for three time periods (1 PM - 4 PM, 5 PM - 8 PM, and 9 PM - 12 AM), consistent with the findings of the 2012 and 2015 pedestrian studies.

It is important to note that during the data collection process, the field agents were instructed to not make judgement if the NPO counted was actually an obstruction to pedestrian flow.

5.4.1 Observed NPOs

Picture 5.5 through **Picture 5.15** provide pictorial examples of the four types of classified NPOs observed during the data collection periods.

The NPO field observations as completed by each agent for the study was compiled and summarized in the following tables. NPOs were summarized by observation period, side of street, and by location within the corridor in accordance with the following categories:

- Within 50 feet of an intersection, driveway, or crosswalk
- On a pedestrian bridge
- Within 15 feet of a pedestrian bridge landing
- Within 15 feet of a bus stop
- Within 15 feet of elevator/under bridge
- Other



Picture 5.5 – Hand Billers on Las Vegas Boulevard (Example 1)



Picture 5.6 – Hand Billers on Las Vegas Boulevard (Example 2)



Picture 5.7 – Hand Billers on Las Vegas Boulevard (Example 3)



Picture 5.8 – Performers on Las Vegas Boulevard (Example 1)



Picture 5.9 – Performers on Las Vegas Boulevard (Example 2)



Picture 5.10 – Performers on Las Vegas Boulevard (Example 3)

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Picture 5.11 – Performer on Las Vegas Boulevard (Example 4)



Picture 5.12 – Solicitor on Las Vegas Boulevard (Example 1)



Picture 5.13 – Vendor on Las Vegas Boulevard (Example 1)



Picture 5.14 – Vendor on Las Vegas Boulevard (Example 2)



Picture 5.15 – Vendor on Las Vegas Boulevard (Example 3)

Figure 5.58 and **Figure 5.59** summarize the quantity and location of NPOs observed along Las Vegas Boulevard from Russell Road to Sahara Avenue during the peak time period on Saturday, May 28, 2022 (Memorial Day Weekend) and on Saturday, June 25, 2022 (Typical Weekend), respectively. In general, a high concentration of NPOs was observed near MGM Grand, Bellagio Fountains, Caesars Palace, and Mirage. The majority of NPOs were observed within the inner study corridor, with few NPOs observed within the outer study corridor.

Table 5.7 and **Table 5.8** summarize the average number of NPOs observed along Las Vegas Boulevard for each data collection time period (1 PM - 4 PM, 5 PM - 8 PM, and 9 PM - 12 AM) on the Holiday Saturday and Typical Saturday, respectively, compared with NPO data collected as part of the *Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue (2012)* and the *Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue (2015 Update)*. The *Clark County Pedestrian Study, Las Vegas Boulevard: Tropicana Avenue to Spring Mountain Road (2016 Update)* was not included in the comparison of NPO data collected in this study since they had similar results to the 2015 update which are shown.

Table 5.7 – Average Number of NPOs within Study Corridor (Holiday Saturday)

Time Period	West Side			East Side			Total		
	2012	2015	2022	2012	2015	2022	2012	2015	2022
1 PM - 4 PM	65	104	60	104	164	87	169	268	147
5 PM - 8 PM	103	126	72	156	152	113	259	278	185
9 PM - 12 AM	92	117	119	133	141	91	224	258	**210**

Table 5.8 – Average Number of NPOs within Study Corridor (Typical Saturday)

Time Period	West Side			East Side			Total		
	2012	2015	2022	2012	2015	2022	2012	2015	2022
1 PM - 4 PM	51	61	35	88	62	61	139	123	96
5 PM - 8 PM	80	79	43	145	80	86	225	159	129
9 PM - 12 AM	103	131	91	149	95	85	252	226	**176**

As summarized in **Table 5.7**, the highest average number of NPOs observed in 2022 on the Holiday Saturday was 210 between 9 PM and 12 AM. This is an approximate 19% decrease from the average number of NPOs observed during the peak time period in 2012 (5 PM - 8 PM) and a 24% decrease from the average number of NPOs observed during the peak time period in 2015 (5 PM - 8 PM).

The highest average number of NPOs observed in 2022 on the Typical Saturday was 176 between 9 PM and 12 AM, as shown in **Table 5.8.** This is an approximate 30% decrease from the average number of NPOs observed during the peak time period in 2012 (9 PM - 12 AM) and a 22% decrease from the average number of NPOs observed during the peak time period in 2015 (9 PM – 12 AM).

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Figure 5.58 – Average NPOs Observed on Saturday, May 28, 2022 (Holiday Saturday)

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Figure 5.59 – Average NPOs Observed on Saturday, June 25, 2022 (Typical Saturday)

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Table 5.9 and **Table 5.10** show the percentage of NPOs by inner and outer study corridor, as well as by east and west side of Las Vegas Boulevard. **Table 5.9** shows that 3.8% of NPOs observed on the Holiday Saturday were in the outer study corridor and 96.2% of NPOs were in the inner study corridor. Per **Table 5.10**, 4.0% of NPOs on the Typical Saturday were observed within the outer study corridor and 96.0% of NPOs were in the inner study corridor.

Table 5.9 – NPOs by Inner vs. Outer Study Corridor on May 28, 2022 (Holiday Saturday)

	Outer	Inner	Total
West	3.3%	53.3%	56.6%
East	0.5%	42.9%	43.4%
Total	**3.8%**	**96.2%**	**100.0%**

Table 5.10 – NPOs by Inner vs. Outer Corridor on June 25, 2022 (Typical Saturday)

	Outer	Inner	Total
West	3.4%	48.3%	51.7%
East	0.6%	47.7%	48.3%
Total	**4.0%**	**96.0%**	**100.0%**

Table 5.11, **Table 5.12**, and **Table 5.13** summarize the NPOs by type and location observed within the study corridor from Russell Road to Sahara Avenue during the peak period of 9 PM to 12 AM on Saturday, May 28, 2022.

Table 5.11 shows that an average of 202 NPOs were observed within the inner study corridor and an average of 49 NPOs were observed in non-obstruction zones within 50 feet of an intersection, driveway, or crosswalk. **Table 5.12** documents that an average of only eight (8) NPOs were observed within the outer study corridor. Per **Table 5.13**, an average of 210 NPOs were observed along the entire study corridor, with an average of 50 NPOs in non-obstruction zones within 50 feet of an intersection, driveway, or crosswalk (24%).

Table 5.11 – Inner Study Corridor NPOs on May 28, 2022 9 PM - 12 AM (Holiday Saturday)

	Hand Biller	Performer	Solicitor	Vendor	Total
Within 50' of an intersection, driveway, or crosswalk	17	23	5	4	49
On pedestrian bridges	2	13	4	1	20
Within 15' of a pedestrian bridge landing	1	3	1	1	6
Within 15' of a bus stop	2	1	-	1	4
Within 15' of elevator/under bridge	-	4	4	3	11
Other	18	63	7	24	112
Total	**40**	**107**	**21**	**34**	**202**

Table 5.12 – Within Outer Study Corridor NPOs on May 28, 2022 9 PM - 12 AM (Holiday Saturday)

	Hand Biller	Performer	Solicitor	Vendor	Total
Within 50' of an intersection, driveway, or crosswalk	-	-	-	1	1
On pedestrian bridges	-	1	-	-	1
Within 15' of a pedestrian bridge landing	-	-	-	-	-
Within 15' of a bus stop	-	1	-	1	2
Within 15' of elevator/under bridge	-	-	-	-	-
Other	2	-	1	1	4
Total	**2**	**2**	**1**	**3**	**8**

Table 5.13 – Total Study Corridor NPOs on May 28, 2022 9 PM - 12 AM (Holiday Saturday)

	Hand Biller	Performer	Solicitor	Vendor	Total
Within 50' of an intersection, driveway, or crosswalk	17 (8%)	23 (11%)	5 (2%)	5 (2%)	50 (24%)
On pedestrian bridges	2 (1%)	14 (7%)	4 (2%)	1 (0%)	21 (10%)
Within 15' of a pedestrian bridge landing	1 (0%)	3 (1%)	1 (0%)	1 (0%)	6 (3%)
Within 15' of a bus stop	2 (1%)	2 (1%)	- (0%)	2 (1%)	6 (3%)
Within 15' of elevator/under bridge	- (0%)	4 (2%)	4 (2%)	3 (1%)	11 (5%)
Other	20 (10%)	63 (30%)	8 (4%)	25 (12%)	116 (55%)
Total	**42 (20%)**	**109 (52%)**	**22 (10%)**	**37 (18%)**	**210 (100%)**

Similarly, **Table 5.14**, **Table 5.15**, and **Table 5.16** summarize the NPOs observed within the study corridor from Russell Road to Sahara Avenue during the peak hour of 9 PM to 12 AM on Saturday, June 25, 2022.

Table 5.14 indicates that an average of 169 NPOs were observed within the inner study corridor with an average of 33 NPOs observed in non-obstruction zones within 50 feet of an intersection, driveway, or crosswalk. **Table 5.15** shows that an average three (3) NPOs were observed within 50 feet of a driveway, intersection, or crosswalk within the outer study corridor, out of a total of seven (7) NPOs. Per **Table 5.16** an average of 176 NPOs were observed along the entire study corridor, with an average of 36 NPOs in non-obstruction zones within 50 feet of an intersection, driveway, or crosswalk (20%).

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Table 5.14 – Inner Study Corridor NPOs on June 25, 2022 9 PM - 12 AM (Typical Saturday)

	Hand Biller	Performer	Solicitor	Vendor	Total
Within 50' of an intersection, driveway, or crosswalk	12	13	4	4	33
On pedestrian bridges	3	10	3	2	18
Within 15' of a pedestrian bridge landing	2	3	3	-	8
Within 15' of a bus stop	-	1	-	1	2
Within 15' of elevator/under bridge	4	5	1	2	12
Other	21	47	5	23	96
Total	**42**	**79**	**16**	**32**	**169**

Table 5.15 – Outer Study Corridor NPOs on June 25, 2022 9 PM - 12 AM (Typical Saturday)

	Hand Biller	Performer	Solicitor	Vendor	Total
Within 50' of an intersection, driveway, or crosswalk	1	1	-	1	3
On pedestrian bridges	-	1	-	-	1
Within 15' of a pedestrian bridge landing	-	-	-	-	-
Within 15' of a bus stop	-	-	1	-	1
Within 15' of elevator/under bridge	-	-	-	-	-
Other	1	1	-	-	2
Total	**2**	**3**	**1**	**1**	**7**

Table 5.16 – Total Study Corridor NPOs on June 25, 2022 9 PM - 12 AM (Typical Saturday)

	Hand Biller	Performer	Solicitor	Vendor	Total
Within 50' of an intersection, driveway, or crosswalk	13 (7%)	14 (8%)	4 (2%)	5 (3%)	36 (20%)
On pedestrian bridges	3 (2%)	11 (6%)	3 (2%)	2 (1%)	19 (11%)
Within 15' of a pedestrian bridge landing	2 (1%)	3 (2%)	3 (2%)	0 (0%)	8 (5%)
Within 15' of a bus stop	- (0%)	1 (1%)	1 (1%)	1 (1%)	3 (2%)
Within 15' of elevator/under bridge	4 (2%)	5 (3%)	1 (1%)	2 (1%)	12 (7%)
Other	22 (13%)	48 (27%)	5 (3%)	23 (13%)	98 (56%)
Total	**44 (25%)**	**82 (47%)**	**17 (10%)**	**33 (19%)**	**176 (100%)**

Table 5.17 and **Table 5.18** provide a comparison of distributions of NPOs by type and location for both the Holiday Saturday and a Typical Saturday, compared with NPO data from the 2012 and 2015 Clark County Pedestrian Studies.

Table 5.17 indicates that a decrease in the number of observed NPOs on the Holiday Saturday has occurred in all non-obstruction zones since 2015, while also highlighting that there were 11 NPOs observed within 15 feet of an elevator door or under a pedestrian bridge. Per **Table 5.18** a decrease has occurred in the number of observed NPOs in non-obstruction zones on the Typical Saturday since 2015, and also exhibits that the average number of observed NPOs underneath pedestrian bridges or within 15 feet of an elevator access was 12.

The NPO summary tables reflect the following trends:

- The majority (96%) of NPOs of all categories were observed within the inner portion of the study corridor (Tropicana Avenue to Spring Mountain Road) with few (4%) observed in the outer study corridor (Russell Road to Tropicana Avenue and Spring Mountain Road to Sahara Avenue).
- The total observed number of NPOs was less in 2022 than in 2015 by 24% on the Holiday Saturday and 22% on the Typical Saturday.
- NPOs situated within 50 feet of an intersection, crosswalk, or driveway were observed at a higher frequency than in any other non-obstruction zone (example shown in **Picture 5.16**).
- Performers accounted for more than half (52%) of all observed NPOs for both the Holiday Saturday and the Typical Saturday.
- 50 (24%) NPOs on the Holiday Saturday and 36 (20%) NPOs observed on the Typical Saturday were located within 50 feet of an intersection, driveway, or crosswalk.
- 21 (10%) NPOs on the Holiday Saturday and 19 (11%) NPOs observed on the Typical Saturday were located on pedestrian bridges.
- Six (6) (3%) NPOs on the Holiday Saturday and 8 (5%) NPOs observed on the Typical Saturday were located within 15 feet of a pedestrian bridge landing.
- Six (6) (3%) NPOs on the Holiday Saturday and 3 (2%) NPOs observed on the Typical Saturday were located within 15 feet of a bus stop.
- 11 (5%) NPOs on the Holiday Saturday and 12 (7%) NPOs observed on the Typical Saturday located within 15 feet of an elevator door, or under a pedestrian bridge.



Picture 5.16 – Hand Biller Within 50 feet of a Driveway

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Table 5.17 – NPOs on Holiday Saturday During Peak Period – Previous Study Comparison

Non-Permanent Obstruction Category	Within 50' of an intersection, driveway, or crosswalk			On pedestrian bridges			Within 15' of a pedestrian bridge landing			Within 15' of a bus stop			Within 15' of elevator/under bridge			Other			Total		
	2012	2015	2022	2012	2015	2022	2012	2015	2022	2012	2015	2022	2012	2015	2022	2012	2015	2022	2012	2015	2022
Hand Biller	110 (42%)	65 (23%)	17 (8%)	4 (2%)	5 (2%)	2 (1%)	3 (1%)	1 (0%)	1 (0%)	9 (3%)	5 (2%)	2 (1%)	Not Counted	Not Counted	0 (0%)	27 (10%)	40 (14%)	20 (10%)	154 (59%)	116 (42%)	42 (20%)
Performer	21 (8%)	18 (6%)	23 (11%)	9 (3%)	4 (1%)	14 (7%)	1 (1%)	15 (5%)	3 (1%)	1 (1%)	7 (3%)	2 (1%)	Not Counted	Not Counted	4 (2%)	43 (17%)	47 (17%)	63 (30%)	75 (29%)	91 (33%)	109 (52%)
Solicitor	4 (2%)	14 (5%)	5 (2%)	7 (3%)	16 (6%)	4 (2%)	1 (1%)	1 (0%)	1 (0%)	0 (0%)	0 (0%)	0 (0%)	Not Counted	Not Counted	4 (2%)	4 (2%)	11 (4%)	8 (4%)	16 (6%)	42 (15%)	22 (10%)
Vendor	5 (2%)	1 (0%)	5 (2%)	4 (2%)	4 (1%)	1 (0%)	0 (0%)	1 (0%)	1 (0%)	0 (0%)	1 (0%)	2 (1%)	Not Counted	Not Counted	3 (1%)	6 (2%)	22 (8%)	25 (12%)	15 (6%)	29 (10%)	37 (18%)
Total	**140 (54%)**	**98 (35%)**	**50 (24%)**	**24 (9%)**	**29 (10%)**	**21 (10%)**	**5 (2%)**	**18 (6%)**	**6 (3%)**	**10 (4%)**	**13 (5%)**	**6 (3%)**	**-**	**-**	**11 (5%)**	**80 (31%)**	**120 (43%)**	**116 (55%)**	**259 (100%)**	**278 (100%)**	**210 (100%)**

Table 5.18 – NPOs on Typical Saturday During Peak Period – Previous Study Comparison

Non-Permanent Obstruction Category	Within 50' of an intersection, driveway, or crosswalk			On pedestrian bridges			Within 15' of a pedestrian bridge landing			Within 15' of a bus stop			Within 15' of elevator/under bridge			Other			Total		
	2012	2015	2022	2012	2015	2022	2012	2015	2022	2012	2015	2022	2012	2015	2022	2012	2015	2022	2012	2015	2022
Hand Biller	113 (45%)	45 (20%)	13 (7%)	2 (1%)	45 (20%)	3 (2%)	4 (2%)	5 (2%)	2 (1%)	2 (2%)	4 (2%)	0 (0%)	Not Counted	Not Counted	4 (2%)	24 (10%)	19 (8%)	22 (13%)	145 (58%)	76 (34%)	44 (25%)
Performer	22 (9%)	32 (14%)	14 (8%)	5 (2%)	32 (14%)	11 (6%)	3 (1%)	1 (1%)	3 (2%)	2 (1%)	6 (3%)	1 (1%)	Not Counted	Not Counted	5 (3%)	38 (15%)	42 (19%)	48 (27%)	70 (28%)	81 (36%)	82 (47%)
Solicitor	6 (2%)	8 (4%)	4 (2%)	7 (3%)	8 (4%)	3 (2%)	0 (0%)	1 (0%)	3 (2%)	0 (0%)	0 (0%)	1 (1%)	Not Counted	Not Counted	1 (1%)	4 (2%)	10 (4%)	5 (3%)	17 (7%)	30 (13%)	17 (10%)
Vendor	5 (2%)	9 (4%)	5 (3%)	6 (2%)	9 (4%)	2 (1%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (1%)	Not Counted	Not Counted	2 (1%)	10 (4%)	17 (8%)	23 (13%)	21 (8%)	36 (16%)	33 (19%)
Total	**146 (58%)**	**94 (42%)**	**36 (20%)**	**20 (8%)**	**94 (42%)**	**19 (11%)**	**7 (3%)**	**7 (3%)**	**8 (5%)**	**4 (2%)**	**10 (4%)**	**3 (2%)**	**-**	**-**	**12 (7%)**	**76 (30%)**	**88 (39%)**	**98 (56%)**	**252 (100%)**	**226 (100%)**	**176 (100%)**

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5.4.2 NPOs on Pedestrian Bridges

A separate evaluation was conducted for NPOs observed on the 16 pedestrian bridges within the Resort Corridor study limits. The maximum number of NPOs observed on the pedestrian bridges was 10 on the Tropicana Avenue North Pedestrian Bridge (#7) on May 28, 2022 and five (5) on the Harmon Avenue West Pedestrian Bridge (#14) on June 25, 2022, as summarized in **Table 5.19** and **Table 5.20**, respectively.

Table 5.19 – NPOs on Pedestrian Bridges on May 28, 2022 (Holiday Saturday)

Number of NPOs – Holiday Saturday			
Pedestrian Bridge	**1 PM - 4 PM**	**5 PM - 8 PM**	**9 PM - 12 AM**
Tropicana Avenue South Pedestrian Bridge (#4)	1	1	2
Tropicana Avenue West Pedestrian Bridge (#5)	2	1	6
Tropicana Avenue East Pedestrian Bridge (#6)	1	-	1
Tropicana Avenue North Pedestrian Bridge (#7)	**2**	**2**	**10**
Park Avenue Pedestrian Bridge (#10)	-	3	3
Harmon Avenue West Pedestrian Bridge (#14)	4	4	2
Harmon Avenue East Pedestrian Bridge (#15)	3	-	3
Harmon Avenue North Pedestrian Bridge (#16)	5	3	3
Flamingo Road South Pedestrian Bridge (#22)	-	3	-
Flamingo Road West Pedestrian Bridge (#23)	2	1	1
Flamingo Road East Pedestrian Bridge (#24)	4	3	1
Flamingo Road North Pedestrian Bridge (26)	-	1	1
Venetian Pedestrian Bridge (#36)	-	1	1
Spring Mountain Road West Pedestrian Bridge (#39)	-	-	1
Spring Mountain Road East Pedestrian Bridge (#40)	2	3	-
Wynn Pedestrian Bridge (#42)	-	-	-
Total	**26**	**26**	**35**

The maximum number of observed NPOs was highest on the Holiday Saturday with 35 NPOs. There was a maximum of 23 NPOs observed on pedestrian bridges during the Typical Saturday.

Table 5.20 – NPOs on Pedestrian Bridges on June 25, 2022 (Typical Saturday)

Number of NPOs – Typical Saturday			
Pedestrian Bridge	**1 PM - 4 PM**	**5 PM - 8 PM**	**9 PM - 12 AM**
Tropicana Avenue South Pedestrian Bridge (#4)	1	-	-
Tropicana Avenue West Pedestrian Bridge (#5)	1	1	-
Tropicana Avenue East Pedestrian Bridge (#6)	-	-	1
Tropicana Avenue North Pedestrian Bridge (#7)	1	2	2
Park Avenue Pedestrian Bridge (#10)	-	2	1
Harmon Avenue West Pedestrian Bridge (#14)	**4**	**4**	**5**
Harmon Avenue East Pedestrian Bridge (#15)	3	-	4
Harmon Avenue North Pedestrian Bridge (#16)	4	1	3
Flamingo Road South Pedestrian Bridge (#22)	2	-	-
Flamingo Road West Pedestrian Bridge (#23)	2	1	2
Flamingo Road East Pedestrian Bridge (#24)	2	1	2
Flamingo Road North Pedestrian Bridge (26)	1	-	1
Venetian Pedestrian Bridge (#36)	-	-	-
Spring Mountain Road West Pedestrian Bridge (#39)	1	1	2
Spring Mountain Road East Pedestrian Bridge (#40)	1	1	-
Wynn Pedestrian Bridge (#42)	-	-	-
Total	**23**	**14**	**23**

The NPOs by type on the pedestrian bridges is provided in **Table 5.21** for the peak period of 9 PM to 12 AM on both the Holiday Saturday and Typical Saturday. The Holiday Saturday saw 52% more NPOs on pedestrian bridges compared with the Typical Saturday.

Table 5.21 – Distribution of NPOs on Pedestrian Bridges

Non-Permanent Obstruction Category	Holiday Saturday, May 28, 2022 (Peak Period 9 PM - 12 AM)	Typical Saturday, June 25, 2022 (Peak Period 9 PM - 12 AM)
Hand Biller	2 (6%)	4 (17%)
Performer	24 (69%)	14 (59%)
Solicitor	8 (22%)	3 (14%)
Vendor	1 (3%)	2 (10%)
Total	**35**	**23**

Table 5.22 and **Table 5.23** summarize the observed NPOs under pedestrian bridges along the study corridor for the peak period, when the highest number of individuals were observed (9 PM to 12 AM). As shown in **Table 5.22,** the greatest number of NPOs on the Holiday Saturday were under the Flamingo Road South Pedestrian Bridge (#22) with three (3) performers and one (1) solicitor in the peak period of 9 PM to 12 AM. Per **Table 5.23**, the most NPOs observed to be under a pedestrian bridge were seen at the Flamingo Road South Pedestrian Bridge (#22), with six (6) performers and three (3) vendors during the peak period of 9 PM to 12 AM on the Typical Saturday.



Picture 5.17 – Performer on Pedestrian Bridge

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Table 5.22 – NPOs Under Pedestrian Bridges (Holiday Saturday from 9 PM to 12 AM)

Number of NPOs – Holiday Saturday					
Pedestrian Bridge	**Hand Biller**	**Performer**	**Solicitor**	**Vendor**	**Total**
Tropicana Avenue South Pedestrian Bridge (#4)	-	-	-	-	-
Tropicana Avenue West Pedestrian Bridge (#5)	-	-	-	-	-
Tropicana Avenue East Pedestrian Bridge (#6)	-	-	-	-	-
Tropicana Avenue North Pedestrian Bridge (#7)	-	-	-	-	-
Park Avenue Pedestrian Bridge (#10)	-	-	-	-	-
Harmon Avenue West Pedestrian Bridge (#14)	-	-	2	-	2
Harmon Avenue East Pedestrian Bridge (#15)	-	-	-	-	-
Harmon Avenue North Pedestrian Bridge (#16)	-	-	-	-	-
Flamingo Road South Pedestrian Bridge (#22)	**-**	**3**	**1**	**-**	**4**
Flamingo Road West Pedestrian Bridge (#23)	-	-	-	-	-
Flamingo Road East Pedestrian Bridge (#24)	-	-	-	-	-
Flamingo Road North Pedestrian Bridge (26)	-	-	-	-	-
Venetian Pedestrian Bridge (#36)	-	-	1	-	1
Spring Mountain Road West Pedestrian Bridge (#39)	-	-	-	-	-
Spring Mountain Road East Pedestrian Bridge (#40)	-	-	-	-	-
Wynn Pedestrian Bridge (#42)	-	2	-	-	2
Total	**-**	**5**	**4**	**-**	**9**

Table 5.23 – NPOs Under Pedestrian Bridges (Typical Saturday from 9 PM to 12 AM)

Number of NPOs –Typical Saturday					
Pedestrian Bridge	**Hand Biller**	**Performer**	**Solicitor**	**Vendor**	**Total**
Tropicana Avenue South Pedestrian Bridge (#4)	-	-	-	-	-
Tropicana Avenue West Pedestrian Bridge (#5)	-	-	-	-	-
Tropicana Avenue East Pedestrian Bridge (#6)	-	-	-	-	-
Tropicana Avenue North Pedestrian Bridge (#7)	-	-	-	-	-
Park Avenue Pedestrian Bridge (#10)	-	-	-	-	-
Harmon Avenue West Pedestrian Bridge (#14)	-	-	-	-	-
Harmon Avenue East Pedestrian Bridge (#15)	-	-	-	-	-
Harmon Avenue North Pedestrian Bridge (#16)	-	-	-	-	-
Flamingo Road South Pedestrian Bridge (#22)	**-**	**6**	**-**	**3**	**9**
Flamingo Road West Pedestrian Bridge (#23)	-	-	-	-	-
Flamingo Road East Pedestrian Bridge (#24)	-	-	-	-	-
Flamingo Road North Pedestrian Bridge (26)	-	-	-	-	-
Venetian Pedestrian Bridge (#36)	-	-	1	-	1
Spring Mountain Road West Pedestrian Bridge (#39)	-	-	1	-	1
Spring Mountain Road East Pedestrian Bridge (#40)	-	-	-	-	-
Wynn Pedestrian Bridge (#42)	-	-	-	-	-
Total	**-**	**6**	**2**	**3**	**11**

The summary tables reflect the following trends:

- The greatest number of NPOs were observed during the 9 PM - 12 AM study period on both the Holiday Saturday and the Typical Saturday.
- During the 9 PM - 12 AM study period, performers accounted for more than half of the observed NPOs on pedestrian bridges on both the Holiday Saturday and Typical Saturday.
- The Holiday Saturday saw 52% more NPOs on pedestrian bridges compared with the Typical Saturday.
- The Flamingo Road South Pedestrian Bridge (#22) experienced the highest observed NPOs under a bridge for both the Holiday Saturday and Typical Saturday.
- A limited number of individuals were observed under the pedestrian bridges (example shown in **Picture 5.18**) and only five (5) of the 16 bridges were observed with at least one (1) NPO.

Figure 5.60 and **Figure 5.61** display the average number of NPOs observed on the pedestrian bridges for Holiday Saturday and Typical Saturday, respectively.



Picture 5.18 – Person Sitting under Pedestrian Bridge

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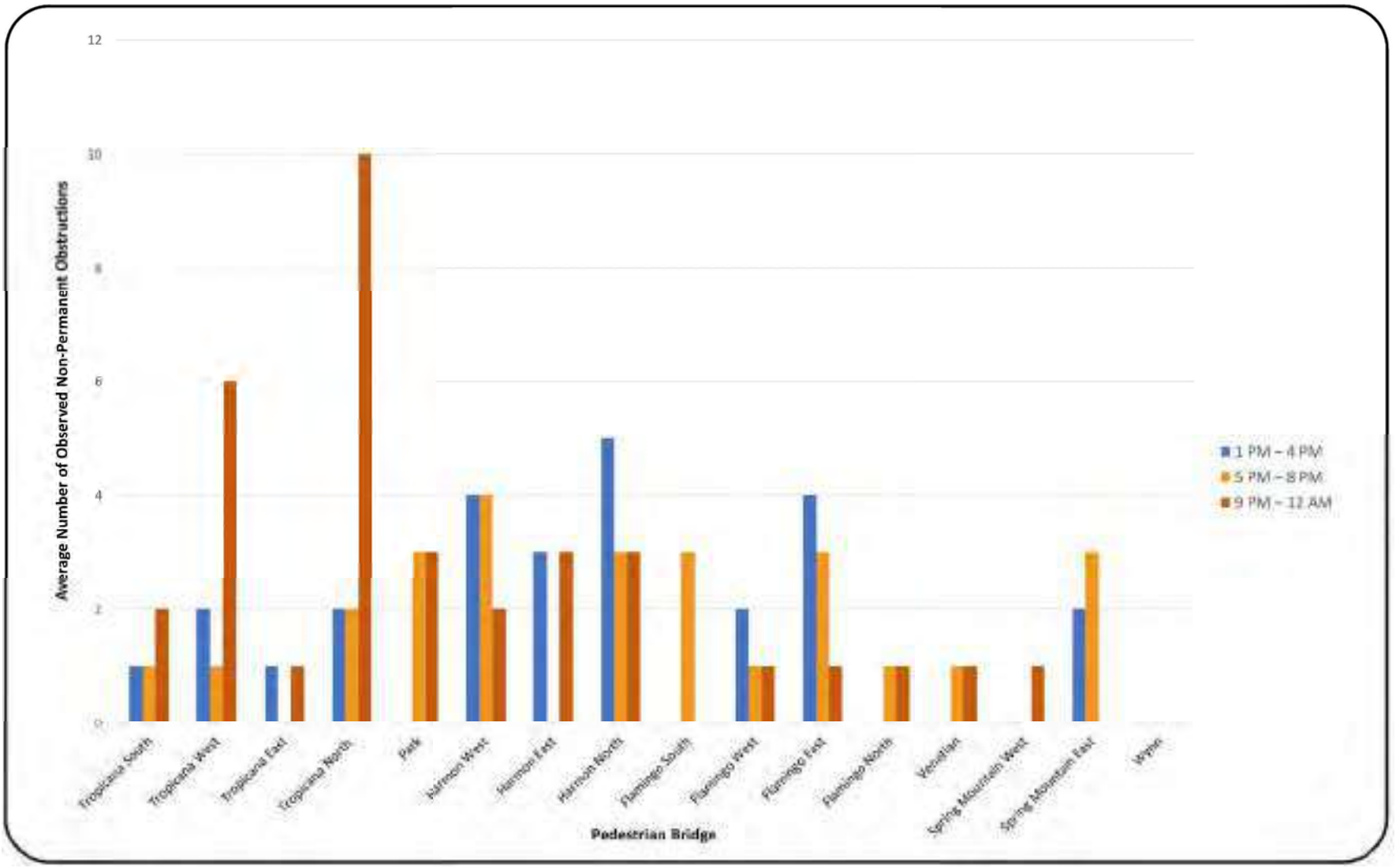


Figure 5.60 – NPOs by Pedestrian Bridge on Saturday, May 28, 2022 (Holiday Saturday)

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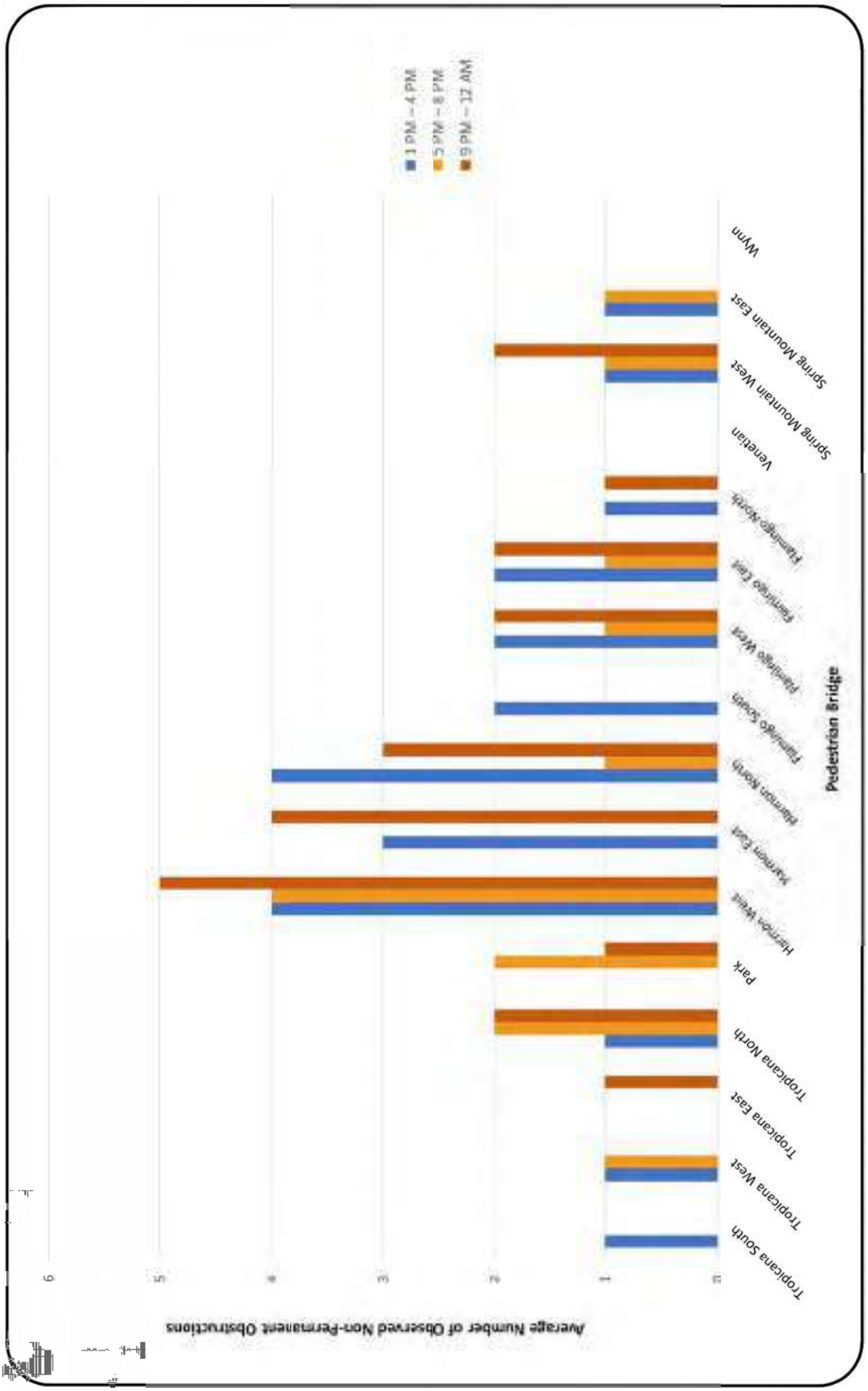


Figure 5.61 – NPOs by Pedestrian Bridge on Saturday, June 25, 2022 (Typical Saturday)

5.4.3 Theoretical Analysis of the Effect of NPOs on LOS

The LOS evaluation discussed in **Section 5.3** and the associated figures (**Figure 5.7** through **Figure 5.57**) were completed assuming the full effective walkway width (W_E) was available for pedestrian traffic, specifically at the count locations.

Using the count location pedestrian volume data for the walkway segments along the study corridor and the minimum typical effective walkway widths (excluding pinch points discussed in **Section 5.5**), no locations were found to exceed LOS C conditions. The calculated segment LOS without the presence of NPOs is illustrated in **Figure 5.65.**

It is of note that the overall sidewalk LOS within the study corridor has steadily improved since the *Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue (2012)*, with the implementation of its sidewalk width recommended improvements.

Based on information contained in HCM 7 (discussed in **Section 1.4.2**), an NPO along the edge of a walkway was considered to result in an effective width reduction of 2.5 feet and an NPO in the middle of the walkway was considered to result in an effective width reduction of 3.5 feet (illustrated in **Figure 5.62** and **Figure 5.63**, respectively).

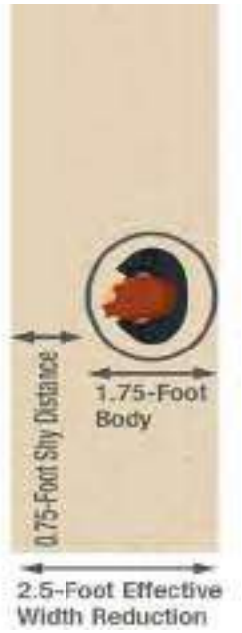


Figure 5.62 – NPO Dimensions (Along the Edge of the Walkway)



Figure 5.63 – NPO Dimensions (In the Middle of the Walkway)

In the event that one (1) or two (2) NPOs are theoretically present along the edge of a walkway, the effective walkway width (W_E) is reduced, and the LOS letter grade of the walkway may also be reduced. A theoretical analysis was conducted to determine the LOS impact of one (1) NPO standing along the edge of the walkway as well as two (2) NPOs standing on opposite sides of the walkway directly across from each other. **Figure 5.64** displays graphically the reduction in effective walkway width when zero, one (1), and two (2) NPOs are present along the edge of a walkway.

Figure 5.66 and **Figure 5.67** provide a theoretically calculated average segment LOS with 1 (one) and 2 (two) NPOs, respectively. As can be seen in the figures, with the addition of NPOs and the associated reduction in effective walkway width (W_E) some segments reduce in LOS letter grade to unacceptable levels.

It is important to note that the benefits of Clark County-implemented walkway improvements along the Strip may be significantly reduced when NPOs are present.

Segments operating below LOS C with NPOs are considered for time-of-day restriction analysis, discussed in **Section 5.5**, along with additional pinch point (narrow/restricted width sidewalk) locations that may operate below LOS C with or without NPOs.

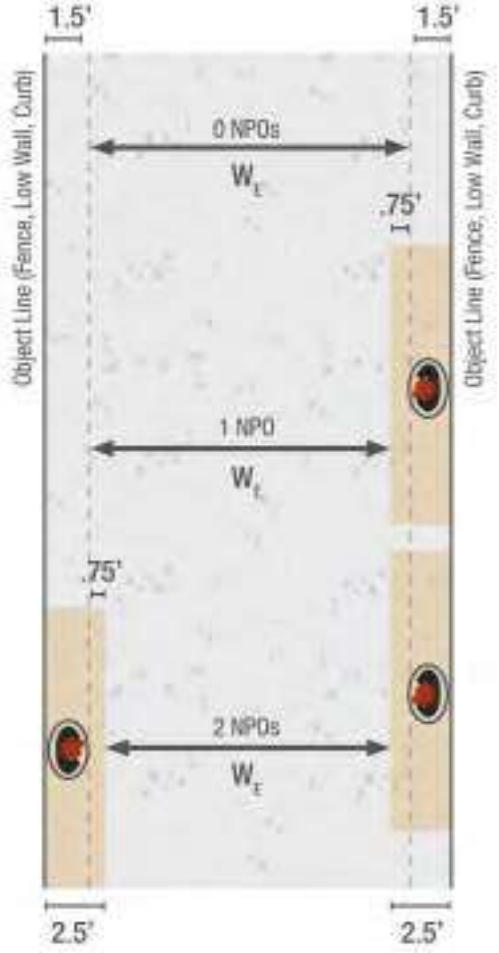


Figure 5.64 – Effective Walkway Width (W_E) with Zero, One, and Two NPOs

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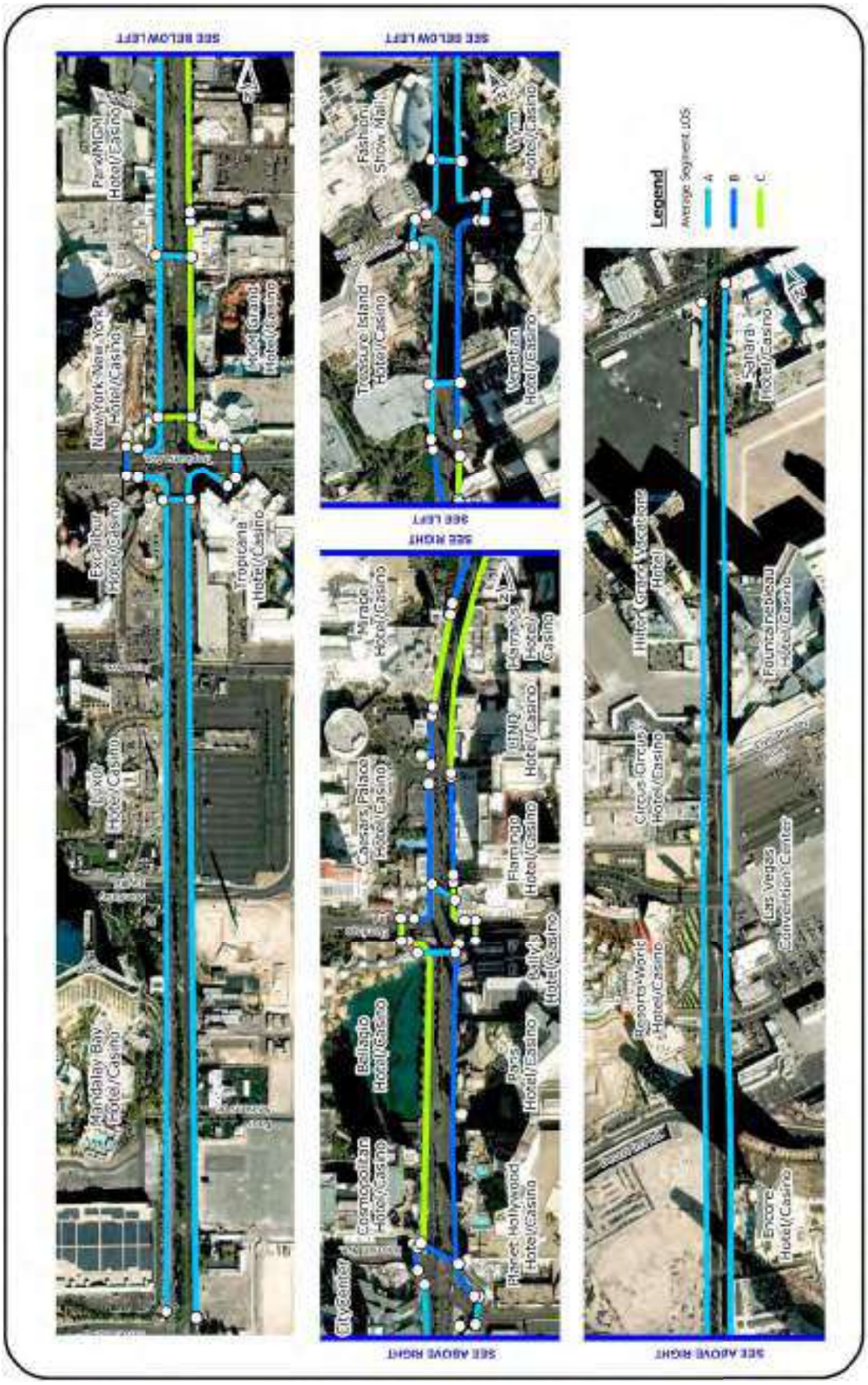


Figure 5.65 – Average Segment LOS with No NPOs



Figure 5.66 – Average Segment LOS with 1 NPO

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Figure 5.67 – Average Segment LOS with 2 NPOs

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5.5 Time-of-Day Restriction Analysis

Based on observed pedestrian volumes, calculated count location and segment LOS, walkway conditions and pedestrian safety concerns, nine (9) segments/pinch point locations were identified as shown in **Figure 5.68.** These locations should be considered for NPO restrictions during specific days of the week and times of the day**.** An example of existing code required signage is shown in **Picture 5.19.**



Picture 5.19 – Time-of-Day Restriction Sign

To identify the time of day, day of week, and month of year that locations within the study corridor should be considered for restriction of NPOs, the following steps were taken:

- Identified pinch point locations were considered and further analyzed to determine if the addition of one (1) or two (2) NPOs would result in the LOS deteriorating to worse than C**.** A reduction of the effective walkway width (W_E) of 2.5 feet associated with the obstruction of one (1) person standing on the side of the walkway and 5.0 feet for two (2) people standing along the edge of the walkway was applied for the analysis.
- The Saturday count data was adjusted using the weeklong data collected at the New York-New York/Park MGM (#9) and Venetian South (#33) count locations (see **Figure 5.4**) and the year-long data, provided by Caesars International (used in the 2012 and 2015 Clark County Pedestrian Studies and shown in **Figure 1.8**), to determine day of week and month of year adjustment factors**.** The adjustment factors were used to determine time periods when walkway segments were estimated to exceed LOS C for days other than those counted on Saturday May 28, 2022 (Memorial Day Weekend) and Saturday, June 25, 2022 (Typical Weekend)**.**

Table 5.25 through

Table 5.30 summarize the results of the analysis for possible time of day, day of week, and month of year no obstruction zone restrictions based on collected pedestrian volumes and documented walkway widths**.**

As discussed in **Section 5.2**, observed pedestrian volumes within the resort corridor were generally lower than the observed volumes collected as part of the *Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue (2012)* and the *Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue (2015 Update)***.**

Thus, it is recommended that time-of-day restrictions for no obstruction zones be put in place based on the most conservative analysis scenario: holiday weekend with 2 (two) NPOs (summarized in **Table 5.29**)**.** The recommended time-of-day restrictions are presented in **Table 5.24** and **Figure 5.69.** Recommended locations met a threshold of exceeding LOS C for a minimum of four (4) consecutive hours**.**

Table 5.24 – Recommended Time-of-Day Restrictions

Location Number	Count Location	Recommended Restrictions
R3	Flamingo Road West Pedestrian Bridge	8:00 PM - 12:00 AM (Saturday and Monday)
R6	Flamingo-Margaritaville Wall/Landscaping	12:00 PM - 12:00 AM (Friday-Monday)
R7	Casino Royale Access Drive to Moving Ramp	1:00 PM - 12:30 AM (Friday-Monday)
R9	Under Venetian Pedestrian Bridge (East)	9:30 AM - 3:00 AM (Friday-Monday)

Of note is the reduction in the number of sidewalk areas of concern from 17 segments identified in the *Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue (2012)* (17 restrictions during the Holiday Saturday and nine (9) on the Typical Saturday) to nine (9) smaller segments/locations in 2015 (nine (9) restrictions for the Holiday Saturday and two (2) for the Typical Saturday)**.** In the *Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue (2015 Update)*, the linear sidewalk areas with the potential for LOS time-of-day restrictions were reduced due to implemented infrastructure improvements**.**

The locations shown in **Table 5.24** and **Figure 5.69** illustrate the current 2022 locations of recommended time-of-day restrictions, which have been reduced to just four (4) locations (four (4) for the Holiday Saturday and two (2) for the Typical Saturday)**.**

5.5.1 Volume Adjustment Factor due to COVID-19 Recovery

As discussed in **Section 5.2**, observed pedestrian volumes within the resort corridor were generally lower than the observed volumes collected as part of the *Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue (2012)* and the *Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue (2015 Update)***.** Based on the LVCVA tourism indicator data presented in **Section 4.1**, at the time of the data collection efforts on Saturday, May 28, 2022 (Memorial Day Weekend) and Saturday, June 25, 2022 (Typical Weekend), Las Vegas was generally recovering from the impact of the COVID-19 pandemic and had nearly returned to pre-pandemic levels**.** However, the citywide hotel occupancy rates, Las Vegas Strip hotel occupancy rates, and visitor volumes had not fully recovered**.**

A volume adjustment factor was developed to examine how the LOS analyses may have been impacted when observed 2022 volumes are increased to theoretical pre-COVID levels**.** An adjustment factor of 1.05 and 1.07 was determined for May and June, respectively, based on the ratio of the 2019 pre-COVID citywide weekend hotel occupancy rates to the 2022 citywide weekend hotel occupancy rates (shown in **Table 4.1** and **Table 4.2**)**.**

Based on the adjusted volumes, the following segments would have exceeded LOS C, in addition to locations R1 through R9, as identified in **Section 5.5**:

- Stairs at MGM Grand Lion Statue
- Protruding Building Corners at Forum Shops

These two (2) locations are not recommended for time-of-day restrictions**.**

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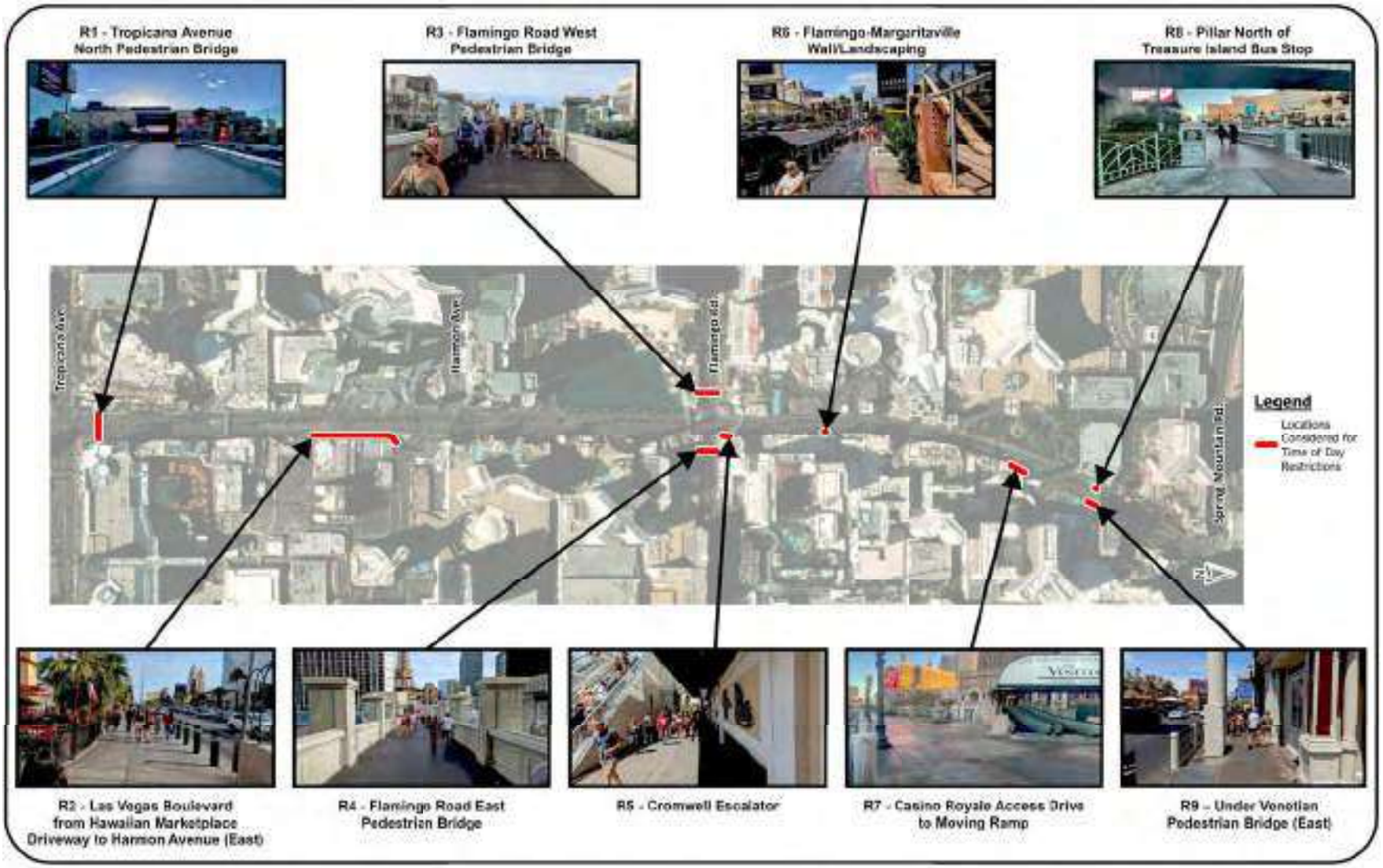


Figure 5.68 – Locations Considered for the Time-of-Day Restriction Analysis

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Table 5.25 – Locations Exceeding LOS C - Time of Day, Day of Week, and Month of Year (Holiday Weekend with No NPOs)

Location Number	Count Location	Friday LOS	Hours Exceeding LOS C	Saturday LOS	Hours Exceeding LOS C	Sunday LOS	Hours Exceeding LOS C	Monday LOS	Hours Exceeding LOS C	Jan	Feb - Nov	Dec	Recommended Restrictions Based on Holiday Weekend with No NPOs
R1	Tropicana Avenue North Pedestrian Bridge	-	-	-	-	-	-	-	-	-	-	-	-
R2	Las Vegas Boulevard from Hawaiian Marketplace Driveway to Harmon Avenue (East)	-	-	-	-	-	-	-	-	-	-	-	-
R3	Flamingo Road West Pedestrian Bridge	-	-	-	-	-	-	-	-	-	-	-	-
R4	Flamingo Road East Pedestrian Bridge	-	-	-	-	-	-	-	-	-	-	-	-
R5	Cromwell Escalator	-	-	-	-	-	-	-	-	-	-	-	-
R6	Flamingo-Margaritaville Wall/Landscaping	-	-	-	-	-	-	-	-	-	-	-	-
R7	Casino Royale Access Drive to Moving Ramp	D	3:15 PM - 12:00 AM	D	2:15 PM - 12:00 AM	D	2:45 PM - 12:00 AM	D	2:30 PM - 12:00 AM	-	X	-	2:00 PM - 12:00 AM (Friday-Monday)
R8	Pillar North of Treasure Island Bus Stop	-	-	-	-	-	-	-	-	-	-	-	-
R9	Under Venetian Pedestrian Bridge (East)	D	7:00 PM - 11:45 PM	D	5:00 PM - 12:00 AM	D	6:00 PM - 11:45 AM	-	-	-	X	-	5:00 PM - 12:00 AM (Sunday and Monday)

Table 5.26 – Locations Exceeding LOS C - Time of Day, Day of Week, and Month of Year (Typical Weekend with No NPOs)

Location Number	Count Location	Friday LOS	Hours Exceeding LOS C	Saturday LOS	Hours Exceeding LOS C	Sunday LOS	Hours Exceeding LOS C	Monday LOS	Hours Exceeding LOS C	Jan	Feb - Nov	Dec	Recommended Restrictions Based on Typical Weekend with No NPOs
R1	Tropicana Avenue North Pedestrian Bridge	-	-	-	-	-	-	-	-	-	-	-	-
R2	Las Vegas Boulevard from Hawaiian Marketplace Driveway to Harmon Avenue (East)	-	-	-	-	-	-	-	-	-	-	-	-
R3	Flamingo Road West Pedestrian Bridge	-	-	-	-	-	-	-	-	-	-	-	-
R4	Flamingo Road East Pedestrian Bridge	-	-	-	-	-	-	-	-	-	-	-	-
R5	Cromwell Escalator	-	-	-	-	-	-	-	-	-	-	-	-
R6	Flamingo-Margaritaville Wall/Landscaping	-	-	-	-	-	-	-	-	-	-	-	-
R7	Casino Royale Access Drive to Moving Ramp	-	-	-	-	-	-	-	-	-	-	-	-
R8	Pillar North of Treasure Island Bus Stop	-	-	-	-	-	-	-	-	-	-	-	-
R9	Under Venetian Pedestrian Bridge (East)	D	9:45 PM - 11:45 PM	D	6:15 PM - 6:30 PM, 9:00 PM - 11:45 PM	D	9:30 PM - 11:45 PM	D	11:00 PM - 11:15 PM	-	-	-	-

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Table 5.27 – Locations Exceeding LOS C - Time of Day, Day of Week, and Month of Year (Holiday Weekend with 1 NPO)

Location Number	Count Location	Friday LOS	Hours Exceeding LOS C	Saturday LOS	Hours Exceeding LOS C	Sunday LOS	Hours Exceeding LOS C	Monday LOS	Hours Exceeding LOS C	Jan	Feb-Nov	Dec	Recommended Restrictions Based on Holiday Weekend with 1 NPO Scenario
R1	Tropicana Avenue North Pedestrian Bridge	-	-	-	-	-	-	-	-	-	-	-	-
R2	Las Vegas Boulevard from Hawaiian Marketplace Driveway to Harmon Avenue (East)	-	-	D	9:00 PM - 9:15 PM	-	-	-	-	-	-	-	-
R3	Flamingo Road West Pedestrian Bridge	-	-	D	10:30 PM - 12:00 AM	-	-	-	-	-	-	-	-
R4	Flamingo Road East Pedestrian Bridge	-	-	-	-	-	-	-	-	-	-	-	-
R5	Cromwell Escalator	-	-	D	9:00 PM - 12:00 AM	-	-	-	-	-	-	-	-
R6	Flamingo-Margaritaville Wall/Landscaping	D	7:00 PM - 7:15 PM	D	2:45 PM - 12:00 AM	D	6:00 PM - 11:30 PM	D	3:00 PM – 11:45 PM	-	X	-	2:45 PM - 12:00 AM (Saturday-Monday)
R7	Casino Royale Access Drive to Moving Ramp	D	2:00 PM - 12:00 AM	D/E	1:15 PM - 12:15 AM	D	1:30 PM - 12:15 AM	D	1:30 PM - 12:15 AM	X	X	-	1:00 PM - 12:30 AM (Friday-Monday)
R8	Pillar North of Treasure Island Bus Stop	-	-	-	-	-	-	-	-	-	-	-	-
R9	Under Venetian Pedestrian Bridge (East)	D/E	1:00 PM - 12:15 AM	D/E	12:15 PM - 12:30 AM	D/E	12:30 PM - 12:15 AM	D/E	12:15 PM - 12:15 AM	X	X	-	12:15 PM - 12:30 AM (Friday-Monday)

Table 5.28 – Locations Exceeding LOS C - Time of Day, Day of Week, and Month of Year (Typical Weekend with 1 NPO)

Location Number	Count Location	Friday LOS	Hours Exceeding LOS C	Saturday LOS	Hours Exceeding LOS C	Sunday LOS	Hours Exceeding LOS C	Monday LOS	Hours Exceeding LOS C	Jan	Feb-Nov	Dec	Recommended Restrictions Based on Typical Weekend with 1 NPO Scenario
R1	Tropicana Avenue North Pedestrian Bridge	-	-	D	11:15 PM - 11:30 PM	-	-	-	-	-	-	-	-
R2	Las Vegas Boulevard from Hawaiian Marketplace Driveway to Harmon Avenue (East)	-	-	-	-	-	-	-	-	-	-	-	-
R3	Flamingo Road West Pedestrian Bridge	-	-	-	-	-	-	-	-	-	-	-	-
R4	Flamingo Road East Pedestrian Bridge	-	-	-	-	-	-	-	-	-	-	-	-
R5	Cromwell Escalator	-	-	-	-	-	-	-	-	-	-	-	-
R6	Flamingo-Margaritaville Wall/Landscaping	D	6:45 PM - 7:00 PM	D	6:15 PM - 9:00 PM	D	6:45 PM - 7:00 PM	-	-	-	-	-	-
R7	Casino Royale Access Drive to Moving Ramp	-	-	-	-	-	-	-	-	-	-	-	-
R8	Pillar North of Treasure Island Bus Stop	-	-	-	-	-	-	-	-	-	-	-	-
R9	Under Venetian Pedestrian Bridge (East)	D/E	6:00 PM - 12:15 AM	D/E	12:00 PM - 12:45 AM	D/E	12:00 PM - 12:15 AM	D/E	6:15 PM - 12:15 AM	X	X	-	12:00 PM - 1:00 AM (Friday-Monday)

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Table 5.29 – Locations Exceeding LOS C - Time of Day, Day of Week, and Month of Year (Holiday Weekend with 2 NPOs)

Location Number	Count Location	Friday LOS	Hours Exceeding LOS C	Saturday LOS	Hours Exceeding LOS C	Sunday LOS	Hours Exceeding LOS C	Monday LOS	Hours Exceeding LOS C	Jan	Feb-Nov	Dec	Recommended Restrictions Based on Holiday Weekend with 2 NPOs Scenario
R1	Tropicana Avenue North Pedestrian Bridge	-	-	-	-	-	-	-	-	-	-	-	-
R2	Las Vegas Boulevard from Hawaiian Marketplace Driveway to Harmon Avenue (East)	-	-	D	8:45 PM - 12:00 AM	D	8:45 PM - 9:15 PM	D	8:45 PM - 9:15 PM	-	-	-	-
R3	Flamingo Road West Pedestrian Bridge	-	-	D	7:45 PM - 12:00 AM	D	10:30 PM - 11:45 PM	D	8:15 PM - 12:00 AM	-	X	-	8:00 PM - 12:00 AM (Saturday and Monday)
R4	Flamingo Road East Pedestrian Bridge	-	-	-	-	-	-	-	-	-	-	-	-
R5	Cromwell Escalator	-	-	D	8:45 PM - 12:00 AM	D	8:45 PM - 12:00 AM	D	8:45 PM - 12:00 AM	-	-	-	-
R6	Flamingo-Margaritaville Wall/Landscaping	D	12:00 PM - 12:00 AM	D/E	12:00 PM - 12:00 AM	D	12:00 PM - 12:00 AM	D	12:00 PM - 12:00 AM	-	X	-	12:00 PM - 12:00 AM (Friday-Monday)
R7	Casino Royale Access Drive to Moving Ramp	D/E	1:30 PM - 12:15 AM	D/E	12:45 PM - 12:45 AM	D/E	1:00 PM - 12:30 AM	D/E	1:00 PM - 12:45 AM	X	X	X	1:00 PM - 12:30 AM (Friday-Monday)
R8	Pillar North of Treasure Island Bus Stop	-	-	D	9:15 PM - 12:00 AM	-	-	D	9:30 PM - 11:30 PM	-	-	-	-
R9	Under Venetian Pedestrian Bridge (East)	D/E/F	11:00 AM - 1:15 AM	D/E/F	10:00 AM - 1:45 AM	D/E/F	10:15 AM - 1:30 AM	D/E/F	10:15 AM - 1:45 AM	X	X	X	10:00 AM - 2:00 AM (Friday-Monday)

Table 5.30 – Locations Exceeding LOS C - Time of Day, Day of Week, and Month of Year (Typical Weekend with 2 NPOs)

Location Number	Count Location	Friday LOS	Hours Exceeding LOS C	Saturday LOS	Hours Exceeding LOS C	Sunday LOS	Hours Exceeding LOS C	Monday LOS	Hours Exceeding LOS C	Jan	Feb-Nov	Dec	Recommended Restrictions Based on Typical Weekend with 2 NPOs Scenario
R1	Tropicana Avenue North Pedestrian Bridge	-	-	D	11:15 PM - 11:30 PM	D	11:15 PM - 11:30 PM	-	-	-	-	-	-
R2	Las Vegas Boulevard from Hawaiian Marketplace Driveway to Harmon Avenue (East)	-	-	-	-	-	-	-	-	-	-	-	-
R3	Flamingo Road West Pedestrian Bridge	-	-	-	-	-	-	-	-	-	-	-	-
R4	Flamingo Road East Pedestrian Bridge	-	-	D	10:15 PM - 10:30 PM	-	-	-	-	-	-	-	-
R5	Cromwell Escalator	-	-	-	-	-	-	-	-	-	-	-	-
R6	Flamingo-Margaritaville Wall/Landscaping	-	5:45 PM - 12:00 AM	D	12:00 PM - 12:00 AM	D	12:30 PM - 12:00 AM	D	6:15 PM - 9:00 PM	-	X	-	12:00 PM - 12:00 AM (Friday-Sunday)
R7	Casino Royale Access Drive to Moving Ramp	-	-	D	9:45 PM - 11:15 PM	-	-	-	-	-	-	-	-
R8	Pillar North of Treasure Island Bus Stop	D	11:00 PM - 11:15 PM	D	8:45 PM - 11:15 PM	D	11:00 PM - 11:15 PM	D	-	-	-	-	-
R9	Under Venetian Pedestrian Bridge (East)	D/E/F	10:30 AM - 2:00 AM	D/E/F	9:30 AM - 2:45 AM	D/E/F	10:15 AM - 2:45 AM	D/E/F	10:45 AM - 2:00 AM	X	X	X	9:30 AM - 3:00 AM (Friday-Monday)

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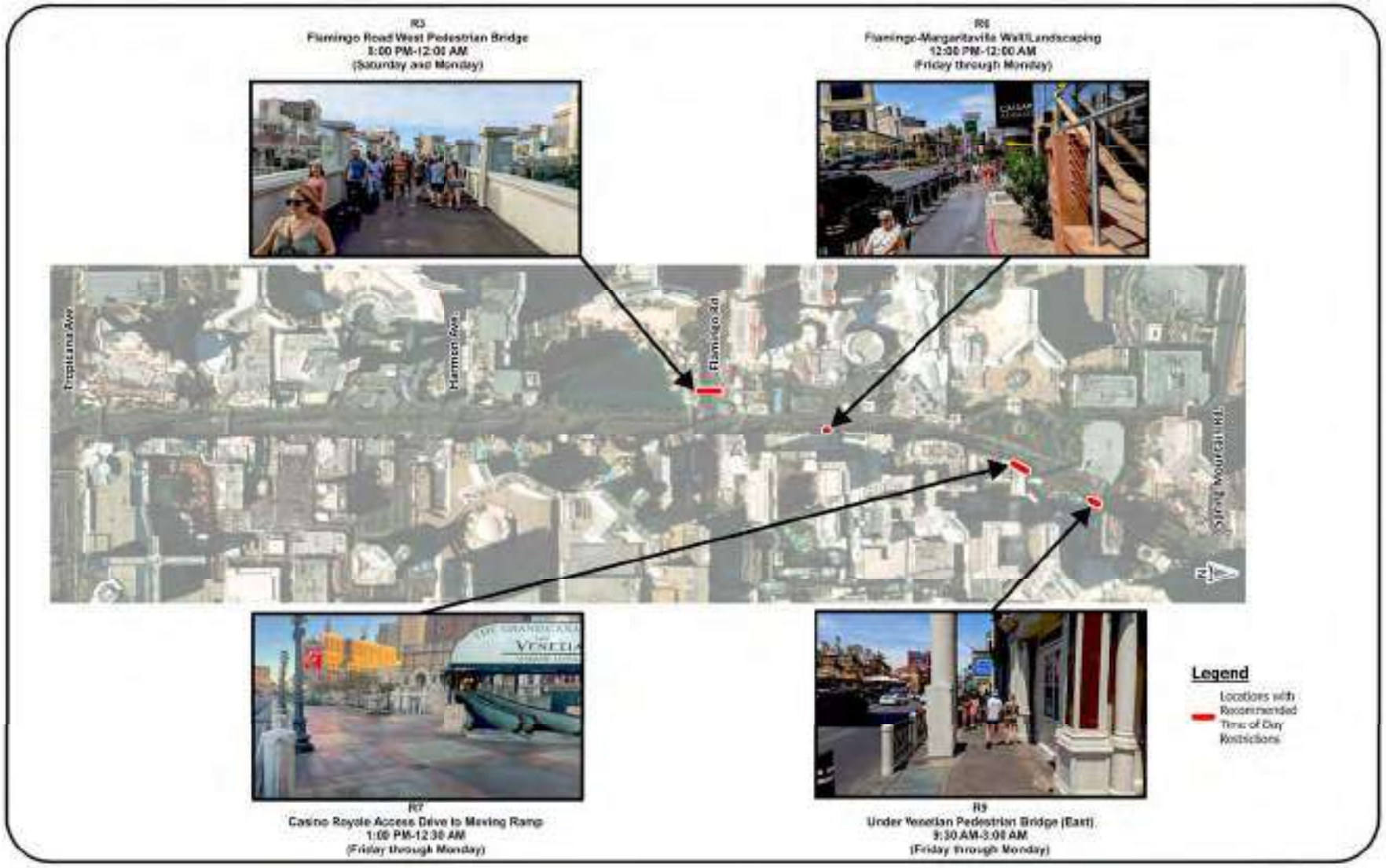


Figure 5.69 – Time of Day Restriction Recommendations

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6 Conclusions and Recommendations

General conclusions, specific recommendations, and best practices are discussed in this section based on the observation of over 2.1 million pedestrians, 162 hours of in-field observations and the detailed data analysis and evaluation conducted during this study. These conclusions and recommendations are provided to enhance pedestrian safety throughout the study corridor of Las Vegas Boulevard. Specific mitigation recommendations for physically constrained walkways are detailed in **Section 6.2** and recommendations are provided for consideration to update the current no obstruction zones as described in **Section 6.3**. **Section 6.4** summarizes best practices for continued improvement to the pedestrian experience along Las Vegas Boulevard.

6.1 General Conclusions

The following general conclusions are provided recognizing the importance of maintaining the economic vitality of Las Vegas Boulevard (the Strip) through the improvement and maintenance of a safe pedestrian walkway system.

- The sidewalk inventory conducted in this study documented the significant improvements that have been made to reduce the sidewalk areas experiencing pedestrian flow conditions of less than LOS C along Las Vegas Boulevard.
- The results of this study continue to support the no-obstruction zone recommendations of the 1994 Lee Engineering Pedestrian Study as incorporated into Clark County Code Chapter 16.11 where obstructive uses are not permitted near a signalized intersection, access drive, or mid-block crosswalk.
- Clark County entitlement requirements on new construction within the Resort Corridor should continue to require pedestrian walks to be designed for a minimum effective walkway width (W_E) of fifteen feet (15 feet) or a pedestrian walkway of LOS C or better. Considering a typical 1.5-foot shy distance on each side of the walk (3 feet of shy distance), a total of 18 feet of walkway width should be provided. A walkway with 15 feet of effective width (W_E) can serve up to 2,250 pedestrians in 15 minutes while maintaining LOS C.
- It is recommended that future pedestrian studies of the Resort Corridor follow the HCM pedestrian LOS analysis methodology that is volume-based recognizing that the newer LOS score methodology is a qualitative measure and does not incorporate pedestrian volumes.
- Clark County entitlement requirements on new construction projects within the Resort Corridor should incorporate the removal, replacement, and/or installation of no obstruction zone signs and white painted sidewalk markings as appropriate, into the projects' civil improvement drawings. Depending on the scope of these improvements, the development should work with Clark County Department of Public Works to update the "No Obstruction Zones" map for adoption by the Board of County Commissions.
- The study observed a significant number of individuals creating undue obstruction in the current no obstruction zones at intersections and driveways. This study provides additional support and justification to maintain these areas free from obstructions during peak walkway usage. Maintaining no obstruction zones at intersections, midblock crosswalks, and access drive entrances reduces pedestrian congestion which allows for increased visibility and enhanced walkway safety.
- The pedestrian bridges are an integral part of the pedestrian walkway system and they have constrained widths. Based upon the observed pedestrian volumes and walkway LOS, it is appropriate at times to designate pedestrian bridges as no-obstruction zones. Pedestrian bridges should be maintained free of any obstructions, whether permanent or non-permanent in nature. In addition, the areas on and around stair landings, elevator waiting areas at grade and at bridge level, as well as escalator approach, and departure landing zones should also be maintained free of any obstructions (permanent or non-permanent).
- Bus stops should be reserved for bus patrons by restricting Non-Permanent Obstructions (NPOs). All Type 2 (In Front of Walk) and Type 3 (Behind Walk) bus stops should allow the area between the bus patron queue area and the curb to be available for only queued bus patrons and walking pedestrians with a delineated no obstruction zone. In addition, all Type 1 (Isolated) bus stops should also be considered for no obstruction zones to encourage transit use by maintaining queue areas and aiding transit rider flow in front of Type 1 bus stops.
- With development or redevelopment within the Resort Corridor, the developer should work with the Las Vegas Valley Water District to relocate any water district facilities out of the pedestrian walkway by providing appropriate utility easements.
- Pedestrian containment measures should be standardized along the Resort Corridor including placement and design. Containment encourages the use of pedestrian bridges and signalized crosswalks. Containment should be installed recognizing the need to maintain intersection sight visibility zones, especially at driveway crossings.
- Include the installation of M50-P1 Bollards or equivalent walkway protection measures to protect pedestrians from hostile vehicles.
- Pedestrian crosswalks within the Resort Corridor along Las Vegas Boulevard should be constructed to:
  - Accommodate the observed pedestrian volumes at the desired crossing location. This is especially important at signalized crossings in order to improve visibility of the crossing.
  - Be perpendicular to the sidewalk when possible, in order to provide pedestrians the shortest path in crossing the street.
  - Consider median refuge islands for marked at-grade crosswalks with approved markings.
  - Discourage the use of "pork chop" right-turn islands for exclusive right-turn lanes to shorten pedestrian street crossing widths.
- With the constant growth, development, and improvements to the Las Vegas Strip, it is expected that pedestrian volumes will continue to shift and increase over the years to come, as seen from 2012 to 2015 to 2022. It is recommended that a Pedestrian Study be conducted every 5 (five) years in order to reexamine areas of potential concern for mitigation along the study corridor.

6.1.1 Safety Enhancements

During the study collection periods, general observations of the pedestrian activities and walkway conditions within the study corridor were conducted. The following measures are given as general safety enhancements based on study observations:

- Pedestrian containment should continue to be deployed in the median of Las Vegas Boulevard throughout the study corridor where no adjacent sidewalk containment exists to encourage the use of pedestrian bridges and signalized crosswalks.
- Currently, the RTC maintains a mobile application with real-time arrival times as well as a text message system with estimated arrival times. For the Strip, the RTC should consider implementing an additional system to display real-time arrival times for transit vehicles at each of the bus stops within the study corridor. Not only will this continue to enhance the transit system and the visitor experience, it will also help mitigate the motivation to step out into the street to see if a bus is coming. This is especially useful in the Resort Corridor due to the number of visitors and tourists who are unfamiliar with the local transit system, mobile application, and texting service.
- Supplemental pedestrian walkway lighting should be installed to eliminate dark alcoves and other dark areas within the Resort Corridor. Pedestrian bridge lighting should continue to be installed and lighting levels adjusted as appropriate to provide nighttime security and safety for the Las Vegas visitor experience.
- Pedestrian bridge stairwells should be designed, constructed, and illuminated to allow the users to be visible to surrounding public areas and walkways.

6.2 Infrastructure Improvement Recommendations

Following the acceptance of the *Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue (2012),* the *Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue (2015 Update)*, and the *Clark County Pedestrian Study, Las Vegas Boulevard: Tropicana Avenue to Spring Mountain Road* (2016 Update of Non-Permanent Obstructions), many of the previously identified short-term infrastructure areas of concern have been addressed or are in the process of being acted upon.

The following specific areas of concern (shown in **Figure 6.1** in relationship to the Resort Corridor) have been identified by field observations and data evaluations as part of this study.

Each measure is classified as short-, intermediate-, or long-term. Short-term measures are relatively low construction cost measures with estimated implementation times of less than one year. Intermediate measures may be more costly and require multi-agency and property coordination to implement. Intermediate measures can require one to three years to implement. Long-term measures require additional study and significant planning and design for implementation which would require more than three years to implement.

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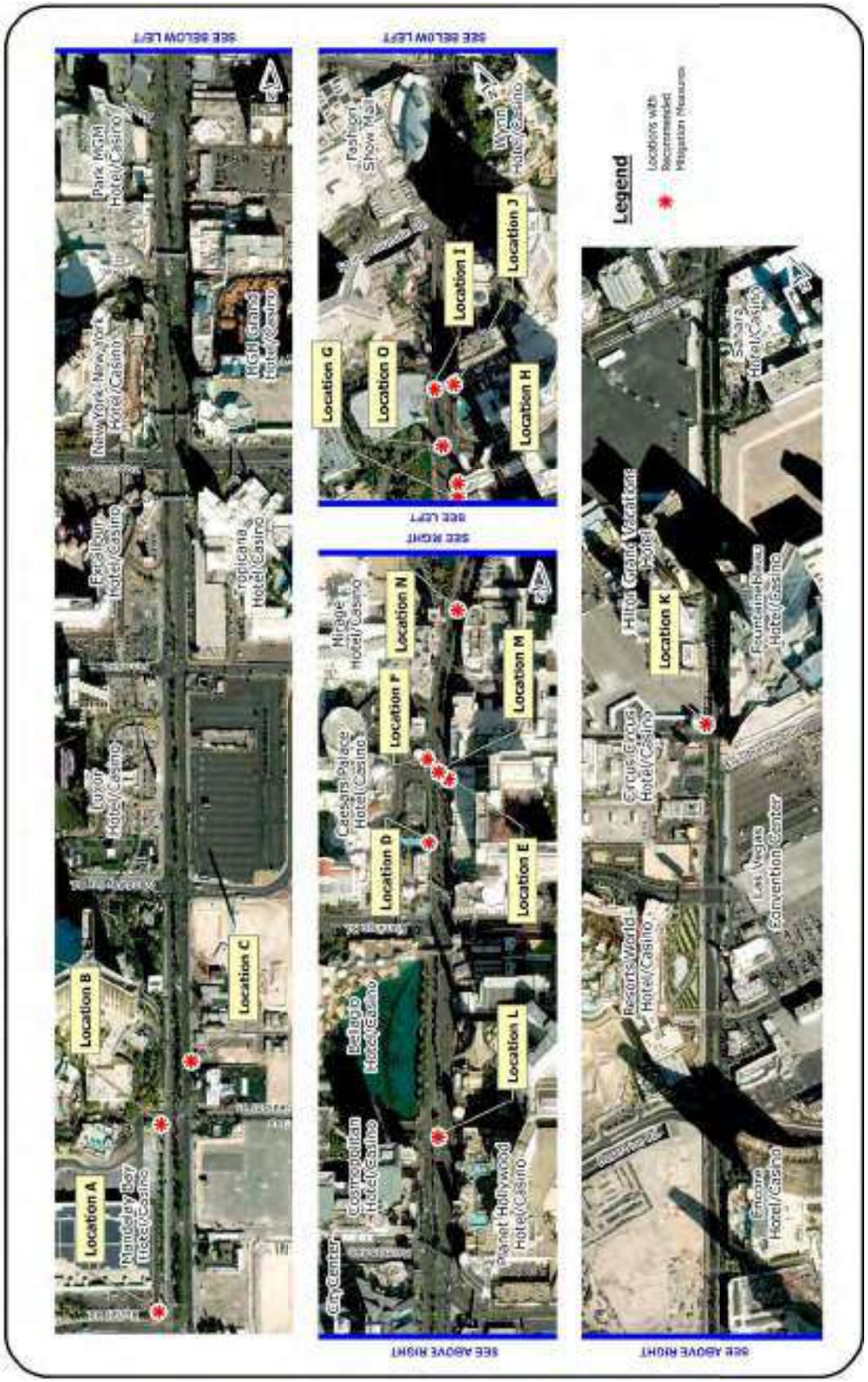


Figure 6.1 – Locations with Recommended Mitigation Measures

6.2.1 General Recommendations

Recommendation (Short-Term):

- Enforce the no obstruction zones within the Resort Corridor.
- Review and update the Transportation Element of the Clark County Comprehensive Master Plan to reflect the recommendations of this report section to provide additional pedestrian bridge systems within the Resort Corridor at the following locations (see **Exhibit D**):
  - Las Vegas Boulevard and Bellagio Drive/Paris Drive
  - Las Vegas Boulevard and Caesars Palace Drive
  - Las Vegas Boulevard and South Siegfried and Roy Drive
  - Las Vegas Boulevard and North Siegfried and Roy Drive

Recommendations (Intermediate/Long-Term):

- With Las Vegas Boulevard development, fire hydrants and other utility infrastructure facilities are to be relocated and/or constructed outside of adjacent pedestrian walkways.
- Construct pedestrian bridge systems to eliminate at-grade pedestrian crossings in compliance with or supplemental to the adopted Transportation Element of the Clark County Comprehensive Master Plan.

6.2.2 Constricted Walkway Width Locations

The following locations were identified as locations of constricted walkway width within the study corridor that may result in pedestrian flow conditions less than LOS C.

6.2.2.1 Location A: Las Vegas Boulevard at Russell Road



Picture 6.1 – Public Right-of-Way and Additional Walkway/Pedestrian Easement Provided on the West Side of Las Vegas Boulevard (Looking North at Russell Road)

Recommendations (Short-Term):

- Install ADA Route Designation signage at Russell Road for the additional walkway/pedestrian easement provided on the west side of Las Vegas Boulevard to discourage use of the constricted walkway adjacent to the Las Vegas Boulevard roadway.

6.2.2.2 Location B: Las Vegas Boulevard at Four Seasons Drive



Picture 6.2 – Public Right-of-Way and Additional Walkway/Pedestrian Easement Provided on the West Side of Las Vegas Boulevard (Looking South at Four Seasons Drive)

Recommendations (Short-Term):

- Install ADA Route Designation signage at Four Seasons Drive for the additional walkway/pedestrian easement provided on the west side of Las Vegas Boulevard to discourage use of the constricted walkway adjacent to the Las Vegas Boulevard roadway.

6.2.2.3 Location C: Fire Hydrant/Bollards North of Four Seasons Drive



Picture 6.3 – Fire Hydrants/Bollards North of Four Seasons Drive

Recommendations (Short-Term):

- Remove bollards, as appropriate, and relocate the fire hydrant out of the sidewalk or widen the existing sidewalk to provide a minimum of 5 feet of effective walkway width.

6.2.2.4 Location D: Caesars Palace Landscaping



Picture 6.4 – Caesars Palace Landscaping

Recommendations (Intermediate-Term):

- In coordination with Caesars Palace Hotel/Casino, landscaping should be modified to allow for sidewalk widening to obtain a minimum effective walkway width of 15 feet (7.6 feet is currently provided).

6.2.2.5 Location E: Flamingo-Margaritaville Wall/Landscaping



Picture 6.5 – Flamingo-Margaritaville Wall/Landscaping

Recommendations (Intermediate-Term):

- In coordination with the Flamingo Hotel/Casino, evaluate and implement options to widen existing walkway.

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6.2.2.6 Location F: Caesars Palace Rotunda



Picture 6.6 – Sidewalk Adjacent to Caesars Palace Rotunda

Recommendations (Short-Term):

- Study, in coordination with Caesars Palace Hotel/Casino, the feasibility to modify existing rotunda structure to widen adjacent sidewalk widths.

Recommendations (Intermediate-Term):

- Implement short-term study recommendations for this location to widen walkway on the northwest corner of the Las Vegas Boulevard/Caesars Palace Drive intersection.

6.2.2.7 Location G: Bollards at Casino Royale/Walgreens Driveway



Picture 6.7 – Venetian South Walkway

Recommendations (Intermediate-Term):

- In coordination with the Venetian Hotel/Casino, evaluate and implement options to widen effective walkway width by narrowing the adjacent planter.

6.2.2.8 Location H: Venetian Moving Ramp



Picture 6.8 – Venetian Moving Ramp

Recommendations (Intermediate/Long-Term):

- In coordination with the Venetian Hotel/Casino, study the feasibility of widening the effective walkway width at this location.

6.2.2.9 Location I: Pillar North of Treasure Island Bus Stop



Picture 6.9 – Pillar North of Treasure Island Bus Stop

Recommendations (Intermediate-Term):

- In coordination with Mirage Hotel/Casino and Treasure Island Hotel/Casino, evaluate and implement options to widen effective walkway width by removing the protruding pillar and landscaping.

6.2.2.10 Location J: Venetian Bus Stop (Under Venetian Pedestrian Bridge)



Picture 6.10 – Venetian Bus Stop (Under Venetian Pedestrian Bridge)

Recommendations (Long-Term):

- In coordination with the Venetian Hotel/Casino, widen the existing walkway width beneath the Las Vegas Boulevard pedestrian bridge. This may require bus stop relocation, traffic signal cabinet relocation, and/or landscape modifications.

6.2.2.11 Location K: Sidewalk at Mini Mart



Picture 6.11 – Sidewalk at Mini Mart

Recommendations (Intermediate-Term):

- Evaluate and implement options to widen existing walkway.

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6.2.3 Street Crossing Recommendations

It is important to note that HCM 7 also includes platoon-adjusted LOS criteria, which more stringent than the random-flow criteria used for the LOS analyses (as discussed in **Section 1.4.1**). Platoon-adjusted LOS criteria are applicable when platoons of pedestrians form, for example, due to crowds traveling to/from a special event or due to a traffic signal.

The following locations were identified as street crossing locations within the study corridor that may result in conditions of less than LOS C.

6.2.3.1 Location L: Las Vegas Boulevard and Bellagio Drive/Paris Drive



Picture 6.12 – Paris Drive Median Island



Picture 6.13 – Right-Turn Pork Chop Island on the Southwest Corner of Las Vegas Boulevard and Bellagio Drive

Recommendation (Short-Term):

- To accommodate the high level of pedestrian volumes at Las Vegas Boulevard and Bellagio Drive/Paris Drive, provide a 20-foot crosswalk along the east side of Las Vegas Boulevard across the Paris entry drive.

Recommendations (Intermediate-Term):

- In coordination with Bellagio Hotel/Casino, study the feasibility to remove the right-turn pork chop island on the southwest corner of the Bellagio/Paris - Las Vegas Boulevard intersection.
- Implement the construction of the Bellagio/Paris Las Vegas Boulevard pedestrian bridge.

6.2.3.2 Location M: Las Vegas Boulevard and Caesars Palace Drive



Picture 6.14 – Las Vegas Boulevard and Caesars Palace Drive (Looking West)



Picture 6.15 – Las Vegas Boulevard and Caesars Palace Drive (Looking South on the East Side of Las Vegas Boulevard)



Picture 6.16 – Las Vegas Boulevard and Caesars Palace Drive (Looking South on the West Side of Las Vegas Boulevard)



Picture 6.17 – Right-Turn Pork Chop Island on the Southwest Corner of Las Vegas Boulevard and Caesars Palace Drive

Recommendations (Intermediate-Term):

- In coordination with Caesars Palace Hotel/Casino, implement the County-planned removal of the right-turn pork chop island on the southwest corner of the intersection.

Recommendations (Long-Term):

- Study the feasibility of a pedestrian bridge system at this major intersection to eliminate the at-grade pedestrian crossings between Caesars Palace Hotel/Casino and LINQ Hotel/Casino.

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6.2.3.3 Location N: Las Vegas Boulevard and South Siegfried and Roy Drive



Picture 6.18 – Las Vegas Boulevard and South Siegfried and Roy Drive (Looking West)



Picture 6.19 – Las Vegas Boulevard and South Siegfried and Roy Drive (Looking North along the East Side of Las Vegas Boulevard)

Recommendations (Short-Term):

- In coordination with Mirage Hotel/Casino and Harrah's Hotel/Casino, study the feasibility of a pedestrian bridge system at this location to eliminate at-grade pedestrian crossings of Las Vegas Boulevard.

6.2.3.4 Location O: Las Vegas Boulevard and North Siegfried and Roy Drive



Picture 6.20 – Las Vegas Boulevard and North Siegfried and Roy Drive (Looking Northeast from the Mirage Pork Chop Island)



Picture 6.21 – Las Vegas Boulevard and North Siegfried and Roy Drive (Looking North from the Southwest Corner)

Recommendations (Intermediate-Term):

- In coordination with the Mirage Hotel/Casino, reevaluate the pedestrian crossing conditions after planned Hotel/Casino remodel and Volcano Show closure.

Recommendations (Long-Term):

- In coordination with Mirage Hotel/Casino and Venetian Hotel/Casino, study the feasibility of a pedestrian bridge system at this location to eliminate at-grade pedestrian crossings of Las Vegas Boulevard.

6.3 Recommended Updates - No Obstruction Zones

The following recommendations are provided based on the technical findings of this study and are presented for legal review and consideration by the Clark County Board of Commissioners for amendments to the existing no obstructive use ordinance (Clark County Code of Ordinances Title 16 – Roads and Highways Chapter 16.11 – Obstructive Uses of Public Sidewalks) shown in **Exhibit A**:

- No-obstruction zones should be applied to all construction zones affecting pedestrian walkways.
- To date, engineering judgement has been used to implement the no-obstruction zones within the unique sidewalk conditions along the Resort Corridor. The no-obstruction zones should be clarified so that dimensions for midblock crosswalks, intersections, and driveways are measured following the adjacent pedestrian walkway that does not always follow the back of curb. Exceptions to back of curb measurements should be addressed:
  - When the defined prohibition distance is greater than the distance to a nearby pedestrian containment object, the prohibition marking should end at these physical containment measures.
  - The no-obstructive zone delineation should follow the front of sidewalk if it veers away from or is separated by landscaping from the curb line.
  - Allow for engineering judgment to be used for unique and unusual walkway conditions.
- No-obstruction zones (shown in white in **Figure 6.2** through **Figure 6.4**) are recommended at bus stops:
  - For a bus turnout, the no obstruction zone should be for the entire bus turnout from the beginning to the end of the curb line deflections for the bus turnout (see **Figure 6.2**).
  - For curbside bus stops with bus shelters, the no obstruction zone should begin and end a minimum of 15 feet from each side of the shelter as installed (see **Figure 6.3**).
  - At curbside bus stops without a shelter, the no obstruction zone should begin 35 feet in the approaching direction and end 15 feet past the bus stop sign post (see **Figure 6.4**).
  - Ticket vending machines, bus stop signs, and trash cans are allowable obstructions as long as placed within shelter influence zone.
- Pedestrian Bridge Systems and their associated walkways should be clarified as no obstruction zones as they are an integral part of the public street network replacing at-grade crosswalks. Pedestrian bridges should be maintained free of any obstructions including permanent and NPOs. No-obstruction zones are also recommended in front of pedestrian bridge elevators and at the landing area of escalators and stairs. The no obstruction zones shown in red in **Figure 6.5** and **Figure 6.6** are recommended to be defined within the ordinance.
- The recommended updated no obstruction zones are provided in **Exhibit E**, including the time-of-day restrictions discussed in **Section 5.5**.

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Figure 6.2 – Bus Turnout No-Obstruction Zone



Figure 6.3 – Bus Shelter No-Obstruction Zone



Figure 6.4 – Bus Stop Sign Without Shelter No-Obstruction Zone

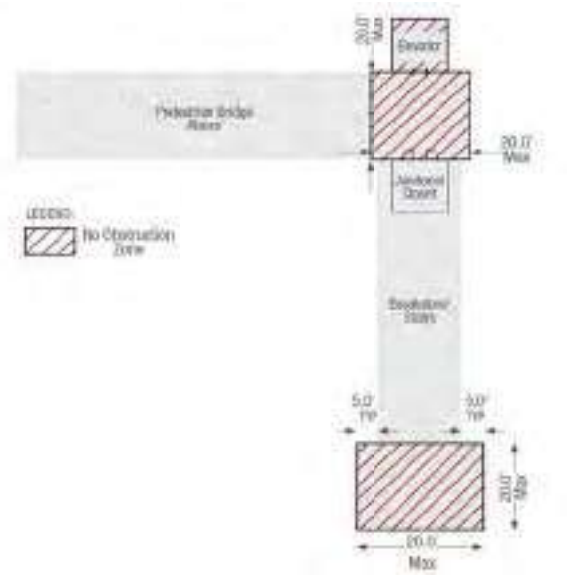


Figure 6.5 – Typical At-Grade Elevator/Escalator Landing No Obstruction Zones

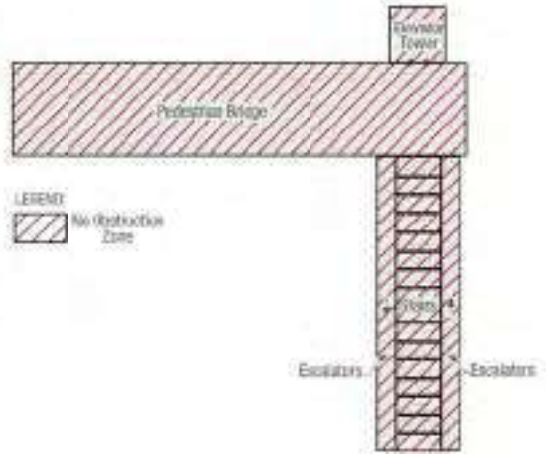


Figure 6.6 – Typical Above Grade Pedestrian Bridge/Escalator No Obstruction Zones

6.3.1 Identified Time, Place, and Manner Restrictions for No Obstruction Zones

The locations shown in **Figure 6.7** and summarized in **Table 6.1** have been identified as walkway segments in which NPO restrictions should be considered during specific times of the day, days of the week, and months of the year, per the analysis summarized in **Section 5.5.** The recommended updated no obstruction zones are provided in **Exhibit E**, including time-of-day restrictions.

Table 6.1 – Recommended Time-of-Day Restrictions

Location Number	Count Location	Recommended Restrictions
R3	Flamingo Road West Pedestrian Bridge	8:00 PM - 12:00 AM (Saturday and Monday)
R6	Flamingo-Margaritaville Wall/Landscaping	12:00 PM - 12:00 AM (Friday-Monday)
R7	Casino Royale Access Drive to Moving Ramp to Moving Ramp	1:00 PM - 12:30 AM (Friday-Monday)
R9	Under Venetian Pedestrian Bridge (East)	9:30 AM - 3:00 AM (Friday-Monday)

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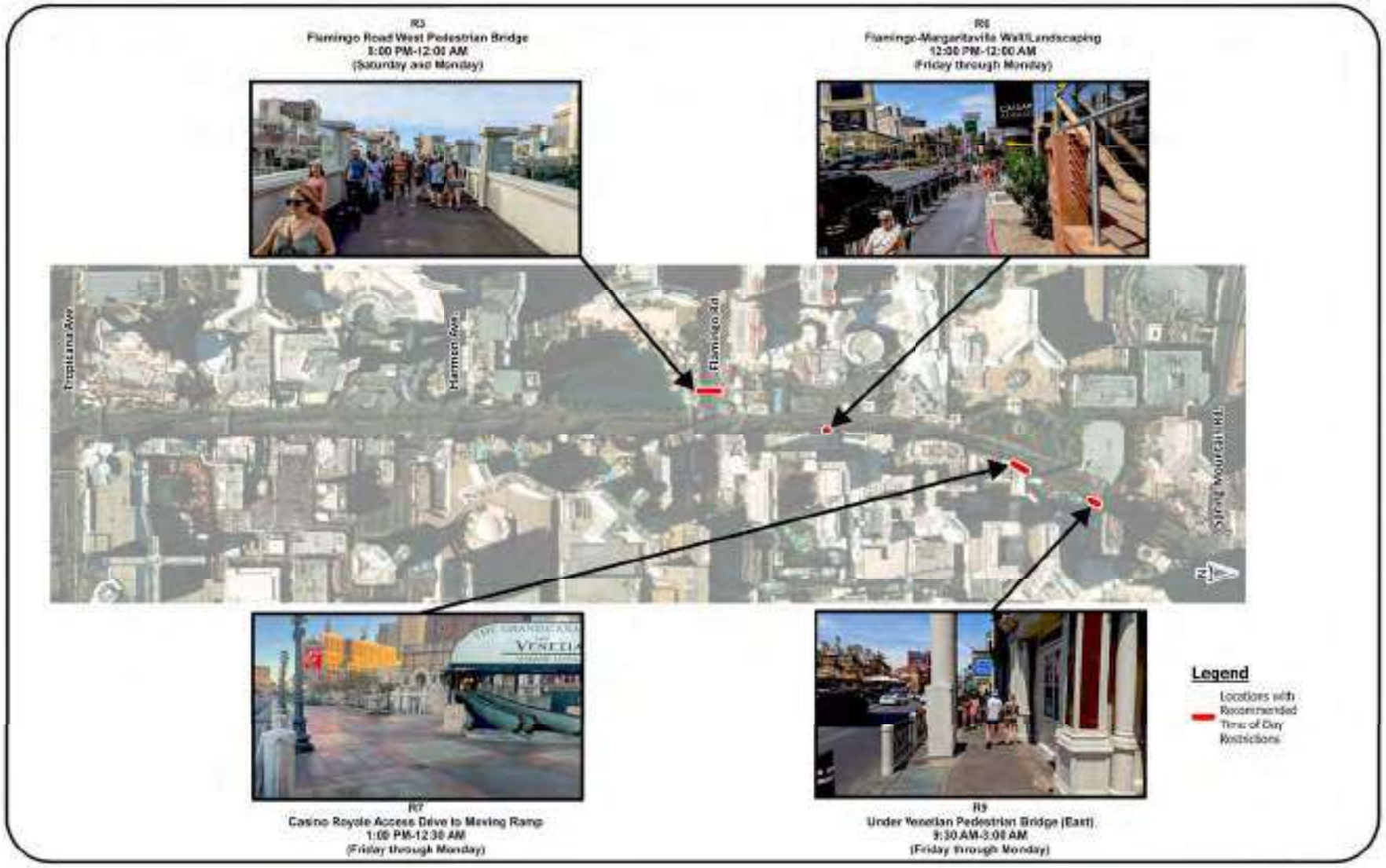


Figure 6.7 – Locations with Recommended Time-of-Day Restrictions

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6.4 Resort Corridor Best Practices

The following best practices are provided recognizing the positive measures taken by Clark County and Strip property owners and the importance of maintaining the economic vitality of the Resort Corridor and a positive visitor experience.

- With development and/or redevelopment within the Resort Corridor, sidewalks should be kept clear of permanent obstructions. This includes tripping hazards within the pedestrian walkway, fire hydrants, traffic signal and other equipment, and any other permanent obstructions that could impede pedestrian flow. In addition, service counters near the sidewalk should form their customer queue to the side away from the pedestrian walkway.
- Whenever possible, designs should avoid the need for installation of bollards within the walkway area. If the placement of bollards is deemed necessary, additional walkway width should be provided to recognize the loss of effective walkway (W_E) width due to the placement of bollards within the walkway.
- Signs should be placed 1.5 feet from the back of curb in landscaping areas where possible in accordance with Manual on Uniform Traffic Control Devices (MUTCD) standards.
- Pedestrian crosswalks along Las Vegas Boulevard should have ramps facing toward the direction of travel. The finished curb should be provided with tactile domes. Curb ramps may require custom designs to accommodate the desire to have perpendicular crosswalks to minimize street crossing widths.
- When a driveway has been abandoned or is no longer in use, the driveway should be replaced with curb, gutter, and sidewalk along with the removal of the associated driveway from the no obstruction zones.
- With new escalator installations, escalators should be routinely reversed to ensure even equipment wear. With even wear, if an escalator is down for repair, the adjacent escalator can be switched to a preferred upward direction. The desire is to have escalators always working in the upward direction even if the adjacent escalator is closed for maintenance. Pedestrian bridge escalators and elevators should continue to be maintained on a regular schedule that ensures a high reliability of service. It is important to have these facilities fully operational during holiday weekends. The capacity of the accompanying pedestrian bridges is severely impacted when the escalators are not functioning.
- It is recommended that escalator maintenance be planned and conducted outside the hours of 12 PM to 12 AM and not on weekends, to have the least impact on the pedestrian experience along the Resort Corridor.
- As development occurs within the Resort Corridor, bus stops should be modified to a Type 2 design placing the shelter and queuing area in front of the through pedestrian walkway. Ticket vending machines and signs should also be placed adjacent to the stop to reduce losses in effective walkway widths.
- Installation of pavement markings should follow the below criteria:
  - Markings within valley gutters should be avoided.
  - Medians should be painted and maintained according to MUTCD standards.
- Mature tree canopies for walkway shading should be encouraged while maintaining a minimum clearance height of 14 feet.
- Low landscaping heights should be used within sight visibility zones at intersection corners, especially at access drives.
- Landscaping and pedestrian walkway planning and design should recognize adjacent properties to provide walkway transition areas between properties so as not to negatively impact walkway widths. Alcoves should be avoided to reduce hidden areas and landscaping corners of 90 degrees at property boundaries should be avoided.
- Construction work zones should be planned so as to not negatively impact pedestrian flow on adjacent sidewalks, escalators, elevators, and pedestrian bridges.



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EXHIBIT A
CLARK COUNTY MUNICIPAL CODE CHAPTER 16.11 – OBSTRUCTIVE USES OF PUBLIC SIDEWALK

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Chapter 16.11 - OBSTRUCTIVE USES OF PUBLIC SIDEWALKS

Sections:

16.11.010 - Purpose.

The board finds that due to vehicle congestion, long delays and increasing costs, it has become increasingly more attractive for residents and visitors to use the public sidewalks on Las Vegas Boulevard South (the Strip) rather than to drive or to ride. Since, traditionally, the major emphasis along the Strip has been on automobile transportation and not on pedestrians, the existing pedestrian environment is inadequate as a transportation system and lacking in many safety features. Moreover, a great number of persons are engaged in uses of the public sidewalks which create undue obstruction, hindrance, blockage, hampering, and interference with pedestrian travel. Large numbers of pedestrians are walking in the streets when the public sidewalks become congested and many pedestrians are crossing against the traffic signal indications. In recognition of the need for improvement of the pedestrian environment and the need for accessible public sidewalks, it is necessary to enact the following regulations.

(Ord. 1617 § 1 (part), 1994)

16.11.020 - General definitions.

(a) "Pedestrian travel" includes nonvehicular travel by persons on foot, as well as vehicular travel by persons with disabilities in wheelchairs or similar devices.

(b) "Level of service" or "LOS" means a series of measures that define the relative degree of convenience for different pedestrian traffic volumes and densities, as determined by methodology set forth in Chapter 13 of the Highway Capacity Manual and the Las Vegas Boulevard South Pedestrian Walkway Study. Both documents are on file in the office of the clerk of Clark County, Nevada.

(c) "Crosswalk" means any above or below grade structure or surface portion of a roadway at an intersection or elsewhere distinctly indicated for pedestrian crossing by signs, lines or other markings on the surface.

(d) "Public sidewalk" means that portion of a highway between the curb lines, or the lateral lines of a roadway, and the adjacent property lines, intended for use of pedestrians, and shall also include crosswalks, medians and traffic islands. For the purposes of this chapter, "public sidewalk" shall include private property upon which a limited easement of public access has been granted. However, no provision of this chapter shall be construed to limit any right of the private property owner to restrict or limit the use of that private property.

(e) "Obstructive use" means:

(1) Placing, erecting or maintaining an unpermitted table, chair, booth or other structure upon the public sidewalk, if the placing, erecting, or maintaining of the table, chair, or booth is not protected by the First Amendment or if the placing, erecting, or maintaining of the table, chair, or booth is protected by the First Amendment but is actually obstructive;

(2) Forming a cordon or line of persons across the public sidewalk;

(3) Carrying banners or signs, upon the public sidewalk which actually causes an obstruction on the sidewalk;

(4) Placing or storing equipment, materials, parcels, containers, packages, bundles or other property upon the public sidewalk which actually causes an obstruction on the sidewalk;

(5) Placing, erecting or maintaining an unpermitted fixed sign upon the public sidewalk;

(6) Sleeping upon the public sidewalk;

(7) Obstructing, delaying, hindering, blocking, hampering or interfering with pedestrian passage, including passage to or from private property; or

(8) Any use of the public sidewalk that causes the LOS for the public sidewalk to decline below LOS C, as determined by the methodology used in Chapter 13 of the Highway Capacity Manual and Las Vegas Boulevard South Pedestrian Walkway Study.

(f) "LOS C" means a pedestrian flow on a sidewalk of less than or equal to ten pedestrians per minute per foot as specified and defined in the Highway Capacity Manual, Special Report 209, a copy of which is filed with the office of the county clerk.

(g) "Permitted obstructive use" means:

(1) Any obstructive use of the public sidewalk by public safety equipment, including but not limited to, street signs, traffic signals, fire hydrants, utility poles and street and sidewalk lighting; and

(2) Any obstructive use of the public sidewalk for purposes of construction, maintenance or repair of the public safety equipment, right-of-way (or equipment therein) or adjoining private property, conducted by or pursuant to a valid construction permit issued by the Clark County department of public works, Clark County building department or Nevada Department of Transportation;

(3) Any obstructive use of the public sidewalk resulting from:

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CC 784004

Any newsrack licensed pursuant to Clark County Code Chapter 16.08 unless such newsrack causes a degradation of the LOS to LOS C or less as provided in Section 16.11.040(e);

16.11.030 Establishment of the resort district.

16.11.040 Prohibition of obstructive uses.

less, and

less;

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factors set forth in Section 16.11.040 above.

placed in the public sidewalk marking areas deemed to be no obstruction zones on the basis of LOS, as set forth in Section 16.11.020 shall

16.11.060 Structures.

obstruction zone.

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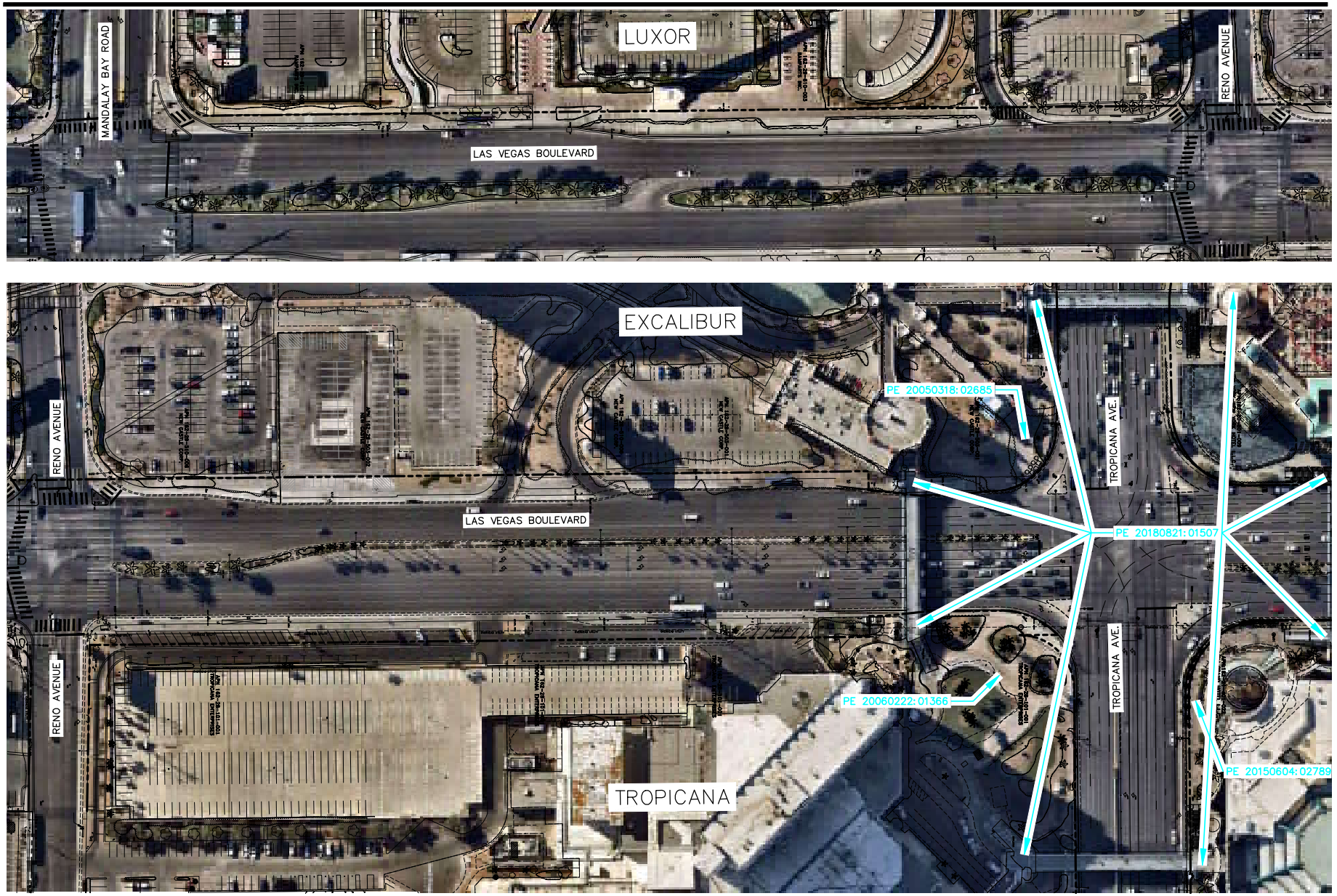
16.1.105 - Private enforcement.

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ID#: 784004

EXHIBIT B
RIGHT-OF-WAY/PEDESTRIAN EASEMENT REFERENCE NUMBERS

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MANDALAY BAY
LAS VEGAS BOULEVARD
DEWEY DRIVE
FOUR SEASONS DRIVE
RUSSELL ROAD
MANDALAY BAY ROAD
PE 20150618:02353
VAC 20160203:00750
GRAPHIC SCALE
1 inch = 40 feet
FIGURE 1
SHEET 1 OF 9
PEDESTRIAN STUDY - LAS VEGAS BOULEVARD
PEDESTRIAN EASEMENTS - RUSSELL ROAD TO MANDALAY BAY ROAD
2022
JOB No. 092061019
Kimley»Horn
NOTE: SURVEY PER ACE REGIONAL RAPID TRANSIT SYSTEM, RESORT CORRIDOR, PRELIMINARY ALTERNATIVE ANALYSIS REPORT DATED JULY 2008, AND UPDATES WERE INCLUDED AS PROVIDED ALONG THE RESORT CORRIDOR, AERIAL IMAGE PER CLARK COUNTY DATED 2013.



JOB No. 092061019

Kimley»Horn

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PEDESTRIAN STUDY - LAS VEGAS BOULEVARD
PEDESTRIAN EASEMENTS - MANDALAY BAY ROAD TO TROPICANA AVENUE
2022

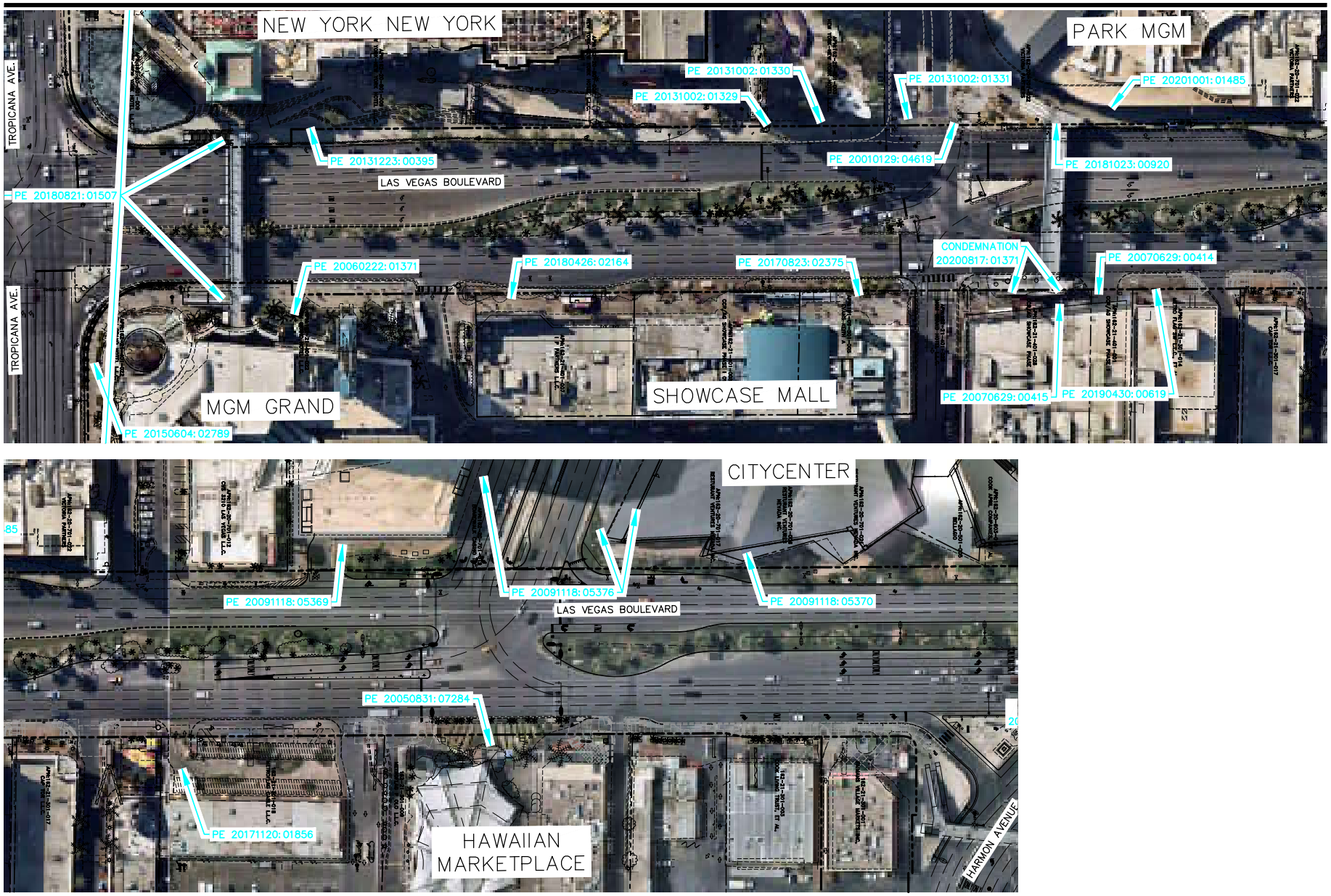
FIGURE 2

SHEET 2 OF 9

GRAPHIC SCALE
40 0 20 40 80
1 inch = 40 feet

CC 3-1907

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JOB No. 092061019

Kimley»Horn

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PEDESTRIAN STUDY - LAS VEGAS BOULEVARD
PEDESTRIAN EASEMENTS - TROPICANA AVENUE TO HARMON AVENUE
2022

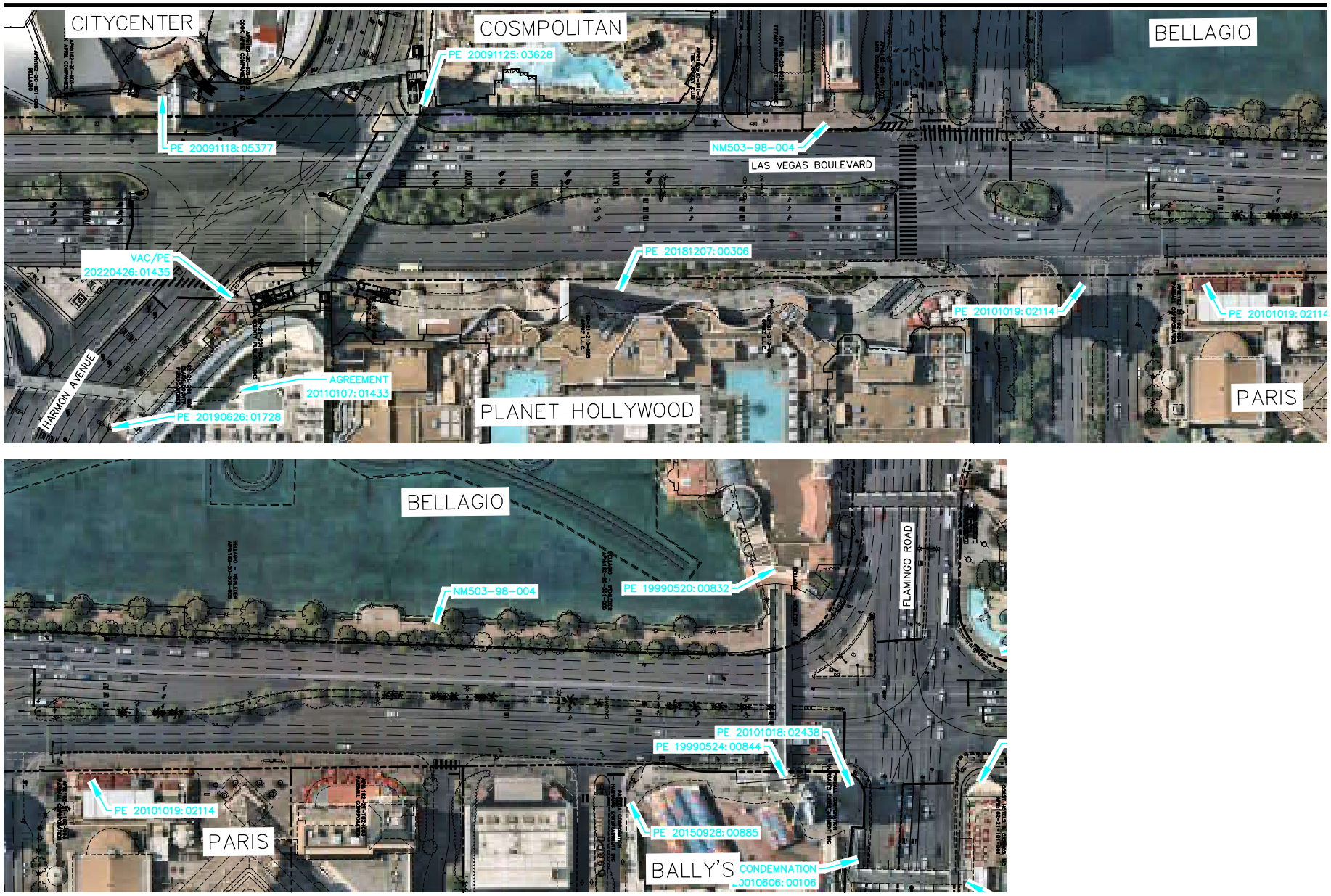
FIGURE 3

SHEET 3 OF 9

GRAPHIC SCALE
40 0 20 40 80
1 inch = 40 feet

CC 3849008

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JOB No. 092061019

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PEDESTRIAN STUDY - LAS VEGAS BOULEVARD
PEDESTRIAN EASEMENTS - HARMON AVENUE TO FLAMINGO ROAD
2022

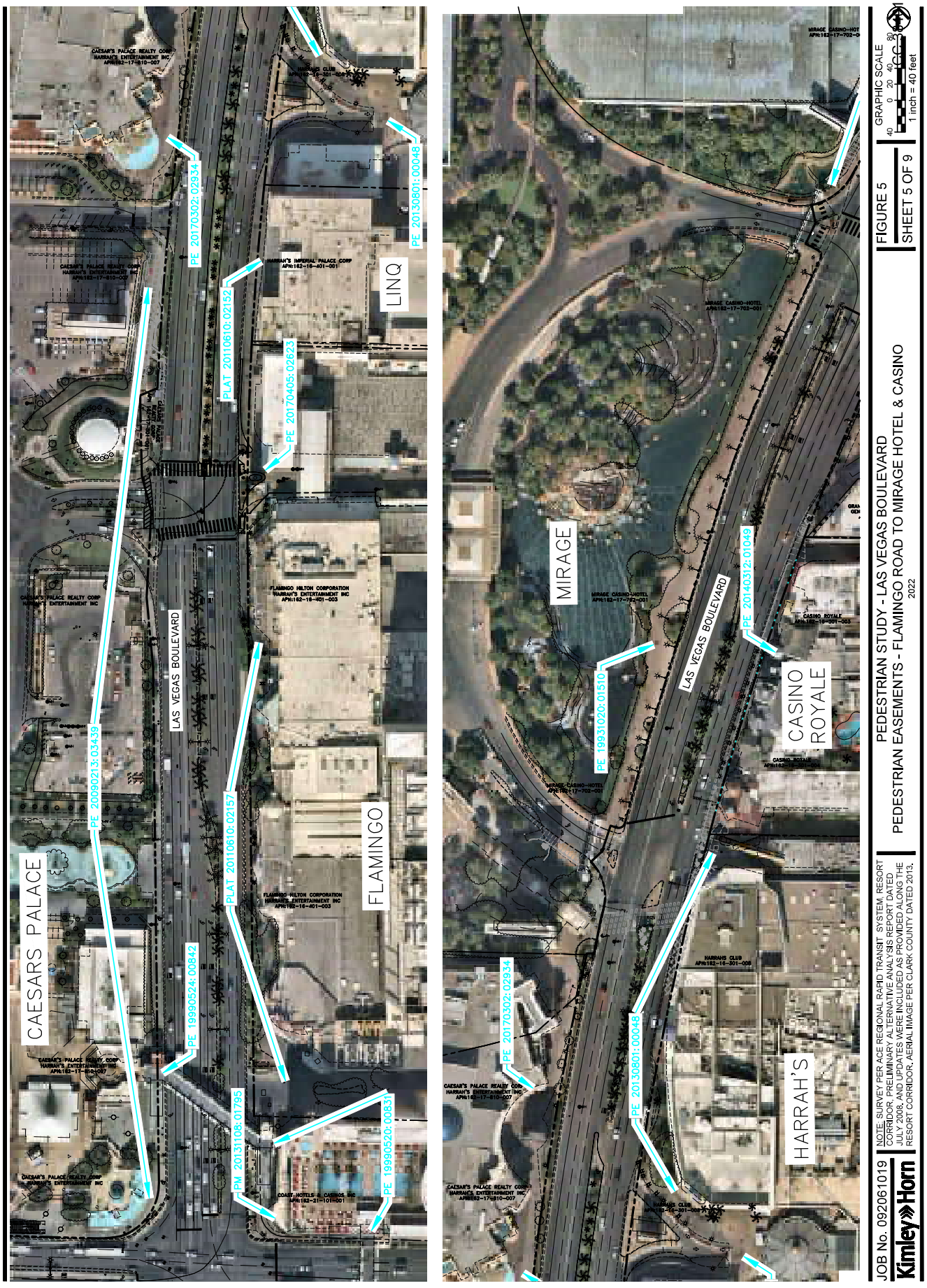
FIGURE 4

SHEET 4 OF 9

GRAPHIC SCALE
40 0 20 40 80
1 inch = 40 feet

CC 38 0009

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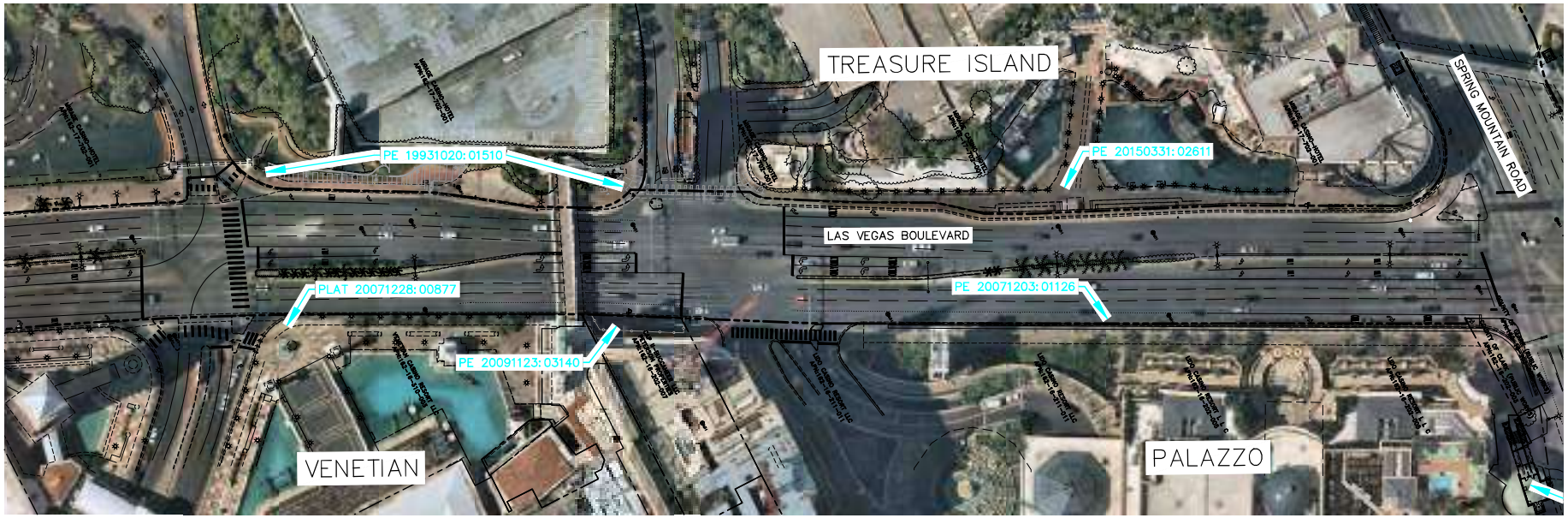
PEDESTRIAN STUDY - LAS VEGAS BOULEVARD
PEDESTRIAN EASEMENTS - FLAMINGO ROAD TO MIRAGE HOTEL & CASINO
2022

FIGURE 5
SHEET 5 OF 9

JOB No. 092061019

Kimley»Horn

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PEDESTRIAN STUDY - LAS VEGAS BOULEVARD
PEDESTRIAN EASEMENTS - MIRAGE HOTEL & CASINO TO FASHION SHOW DRIVE
2022

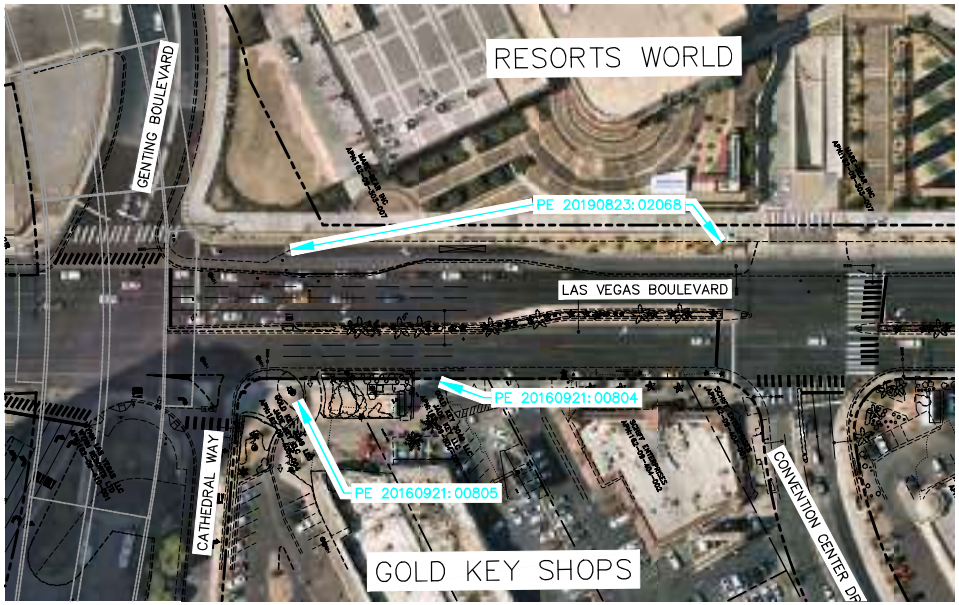
FIGURE 6

SHEET 6 OF 9

GRAPHIC SCALE
40 0 20 40 80
1 inch = 40 feet

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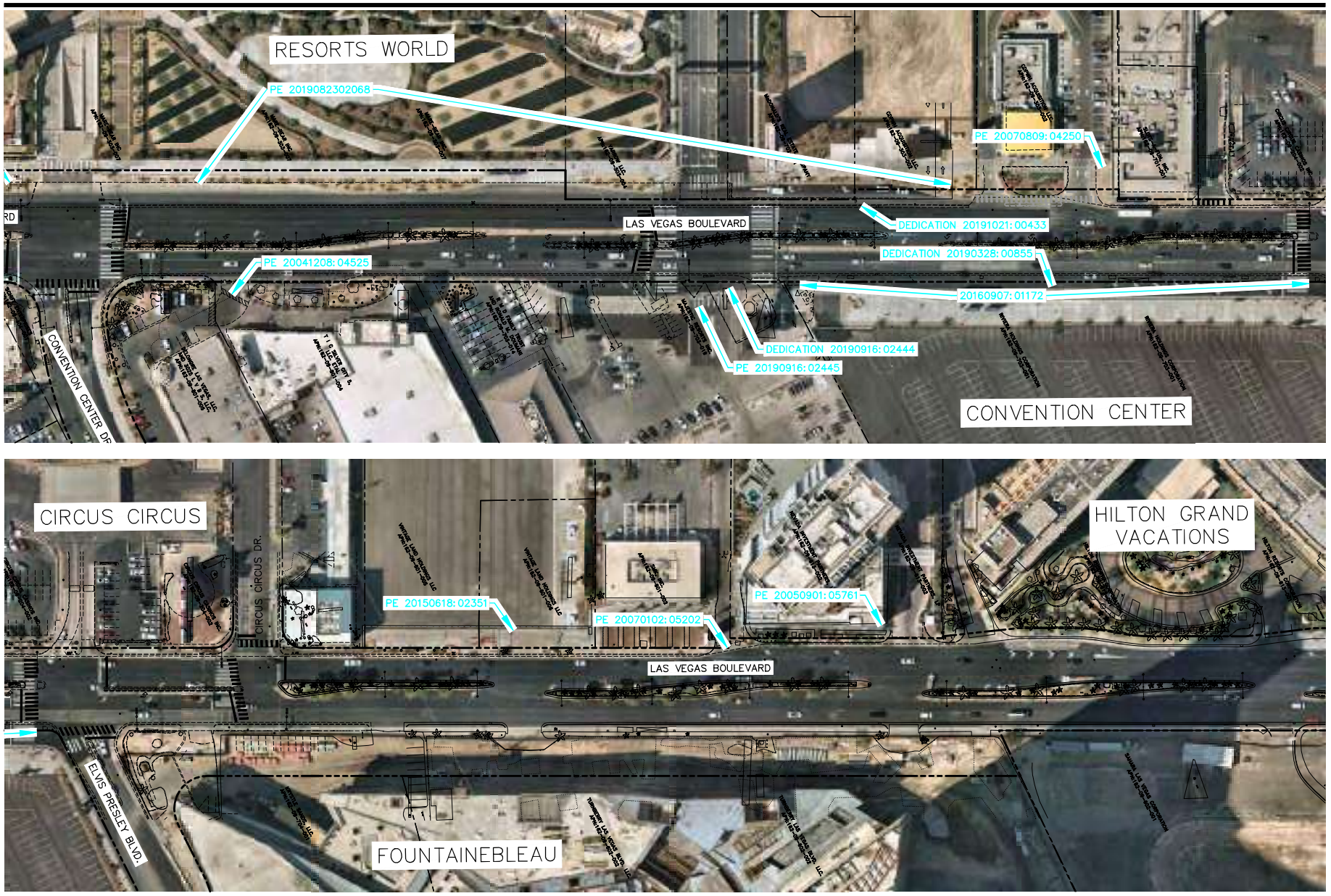
PEDESTRIAN STUDY - LAS VEGAS BOULEVARD
PEDESTRIAN EASEMENTS - FASHION SHOW DRIVE TO CONVENTION CENTER DRIVE
2022

FIGURE 7

SHEET 7 OF 9

GRAPHIC SCALE
40 0 20 40 80
1 inch = 40 feet

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Kimley»Horn

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PEDESTRIAN STUDY - LAS VEGAS BOULEVARD
PEDESTRIAN EASEMENTS - CONVENTION CENTER DRIVE TO HILTON GRAND VACATION
2022

FIGURE 8

SHEET 8 OF 9

GRAPHIC SCALE
40 0 20 40 80
1 inch = 40 feet

CC 3813

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JOB No. 092061019

Kimley»Horn

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PEDESTRIAN STUDY - LAS VEGAS BOULEVARD
PEDESTRIAN EASEMENTS - HILTON GRAND VACATION TO SAHARA AVENUE
2022

FIGURE 9

SHEET 9 OF 9

GRAPHIC SCALE
40 0 20 40 80
1 inch = 40 feet

EXHIBIT 14

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EXHIBIT C
PEDESTRIAN VOLUME DATA

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Tropicana Avenue South Pedestrian Bridge (#4)

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Tropicana Avenue East Pedestrian Bridge (#6)

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Tropicana Avenue North Pedestrian Bridge (#7)

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Bally's Hotel/Casino (#18)

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Flamingo Road South Pedestrian Bridge (#22)

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Flamingo Road East Pedestrian Bridge (#24)

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Flamingo Road North Pedestrian Bridge (#26)

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Mirage (#32)

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Treasure Island Bus Stop (#34)

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Venetian North (#35)

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Venetian Pedestrian Bridge (#36)

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Treasure Island South (#37)

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Treasure Island North (#38)

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Spring Mountain Road West Pedestrian Bridge (#39)

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Spring Mountain Road East Pedestrian Bridge (#40)

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North of Fashion Show Drive (#43)

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Resorts World (#44)

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Convention Center (#45)

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EXHIBIT D
RECOMMENDED UPDATES TO THE CLARK COUNTY COMPREHENSIVE MASTER PLAN TRANSPORTATION ELEMENT MAP 13

Case 2:24-cv-00334-JAD-NJK Document 107-1 Filed 12/18/25 Page 208 of 236
CC 384080



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EXHIBIT E
UPDATED NO OBSTRUCTION ZONE DRAWINGS

Case 2:24-cv-00334-JAD-NJK Document 107-1 Filed 12/18/25 Page 210 of 236

CLARK COUNTY

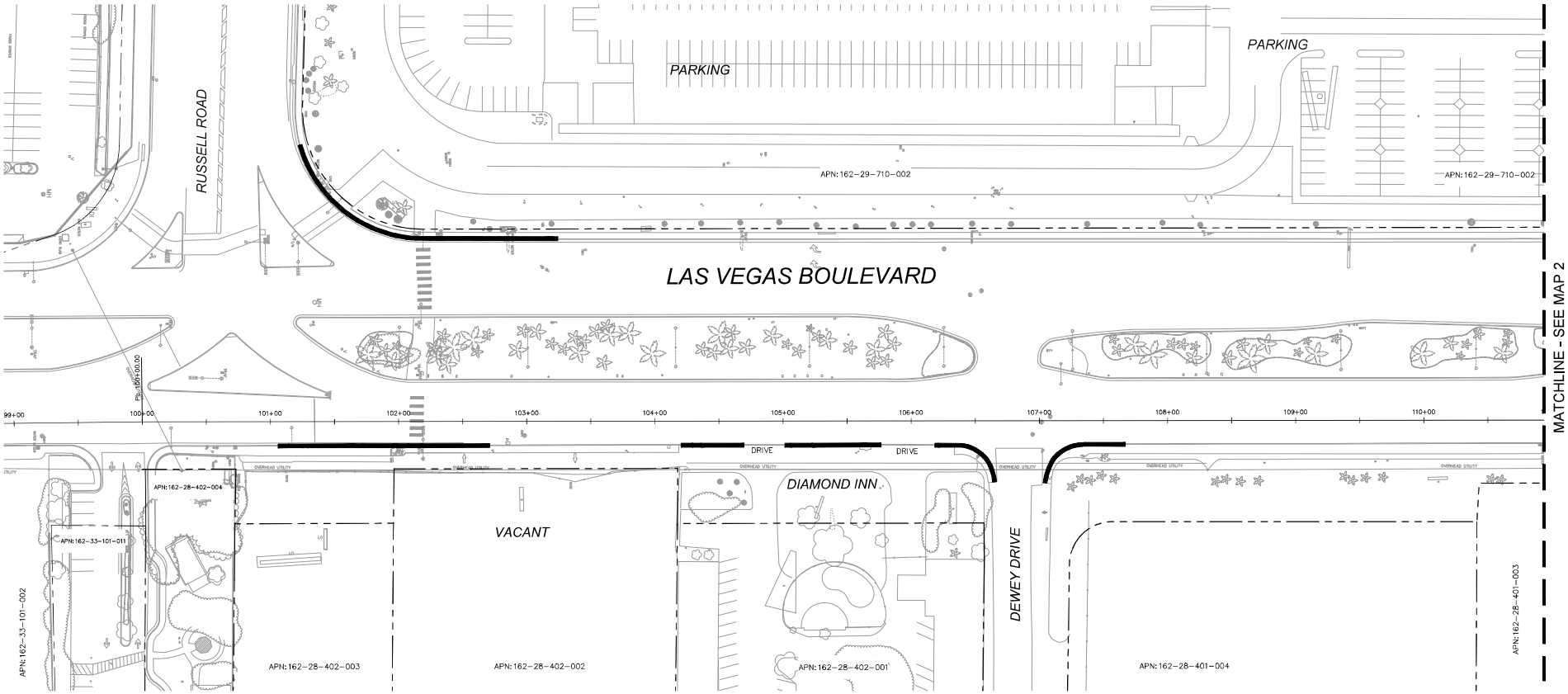
NO OBSTRUCTION ZONES

CC CODE 16.11

LAS VEGAS BOULEVARD

MAY 3, 2022

CC 384083



LEGEND

- PAINTED WHITE LINE
- TIME PERIODS LESS THAN LEVEL OF SERVICE C

NOTE:
TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS WAS DEVELOPED BASED ON A SEARCH OF BEST AVAILABLE RECORDS AND INFORMATION. LOCATIONS AND CONDITION OF IMPROVEMENTS SHOWN ARE SUBJECT TO CHANGE AND SHALL BE VERIFIED IN THE FIELD.

NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

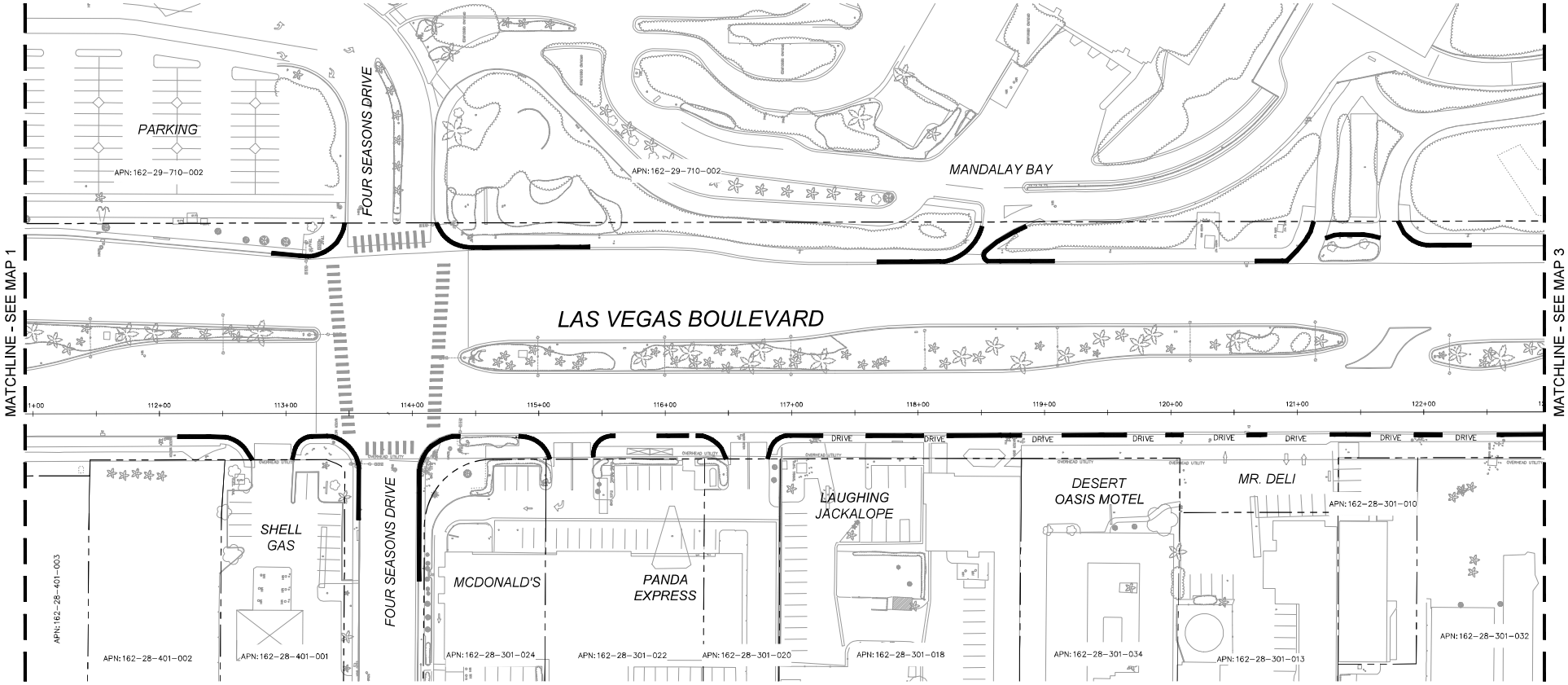
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET:	MAP 1
SCALE:	AS SHOWN
DATE:	MAY 3, 2022

GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

CC 384084

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LEGEND

- PAINTED WHITE LINE
- TIME PERIODS LESS THAN LEVEL OF SERVICE C

NOTE:
TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS WAS DEVELOPED BASED ON A SEARCH OF BEST AVAILABLE RECORDS AND INFORMATION. LOCATIONS AND CONDITION OF IMPROVEMENTS SHOWN ARE SUBJECT TO CHANGE AND SHALL BE VERIFIED IN THE FIELD.

NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET:	MAP 2
SCALE:	AS SHOWN
DATE:	MAY 3, 2022

NORTH

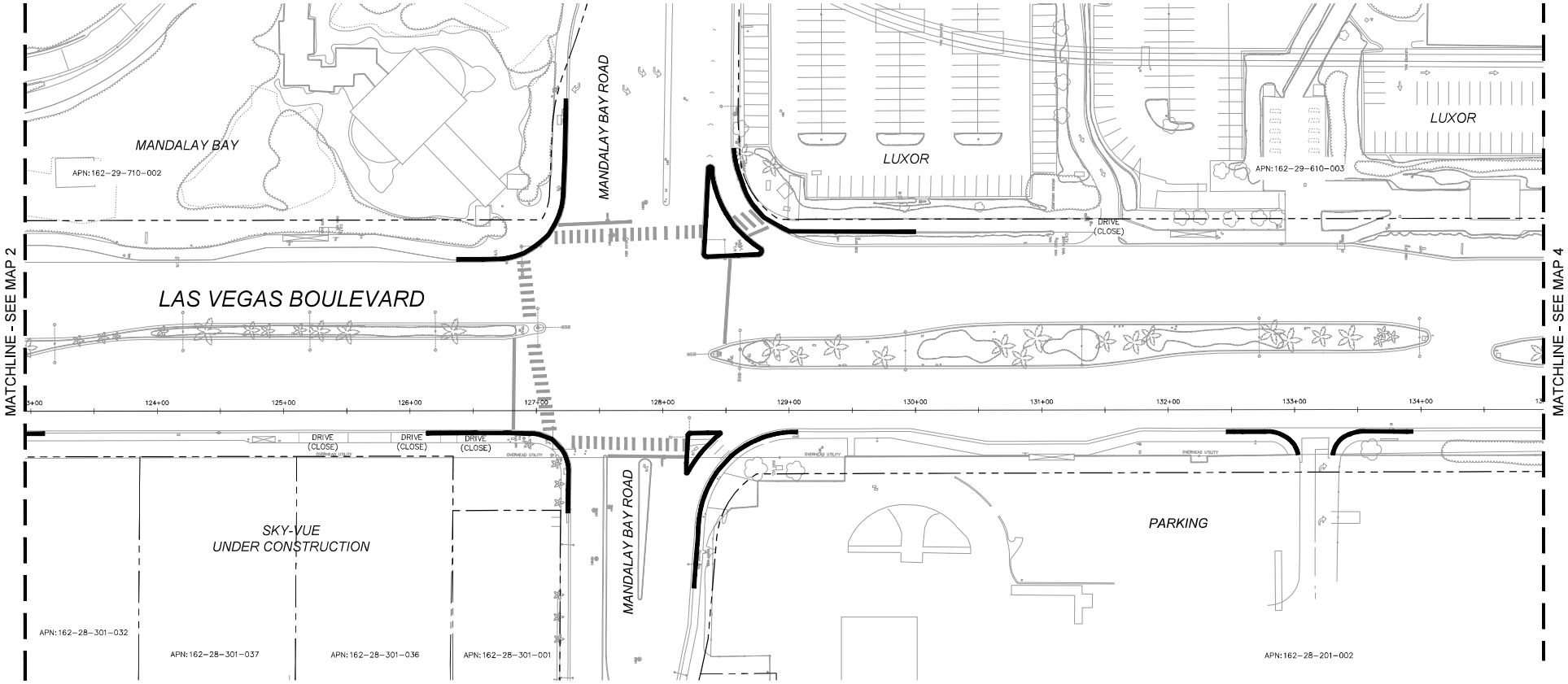
GRAPHIC SCALE

40 0 20 40 80

(IN FEET)
1 inch = 40 ft.

CC 384085

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LEGEND

- PAINTED WHITE LINE
- TIME PERIODS LESS THAN LEVEL OF SERVICE C

NOTE:
TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS WAS DEVELOPED BASED ON A SEARCH OF BEST AVAILABLE RECORDS AND INFORMATION. LOCATIONS AND CONDITION OF IMPROVEMENTS SHOWN ARE SUBJECT TO CHANGE AND SHALL BE VERIFIED IN THE FIELD.

NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

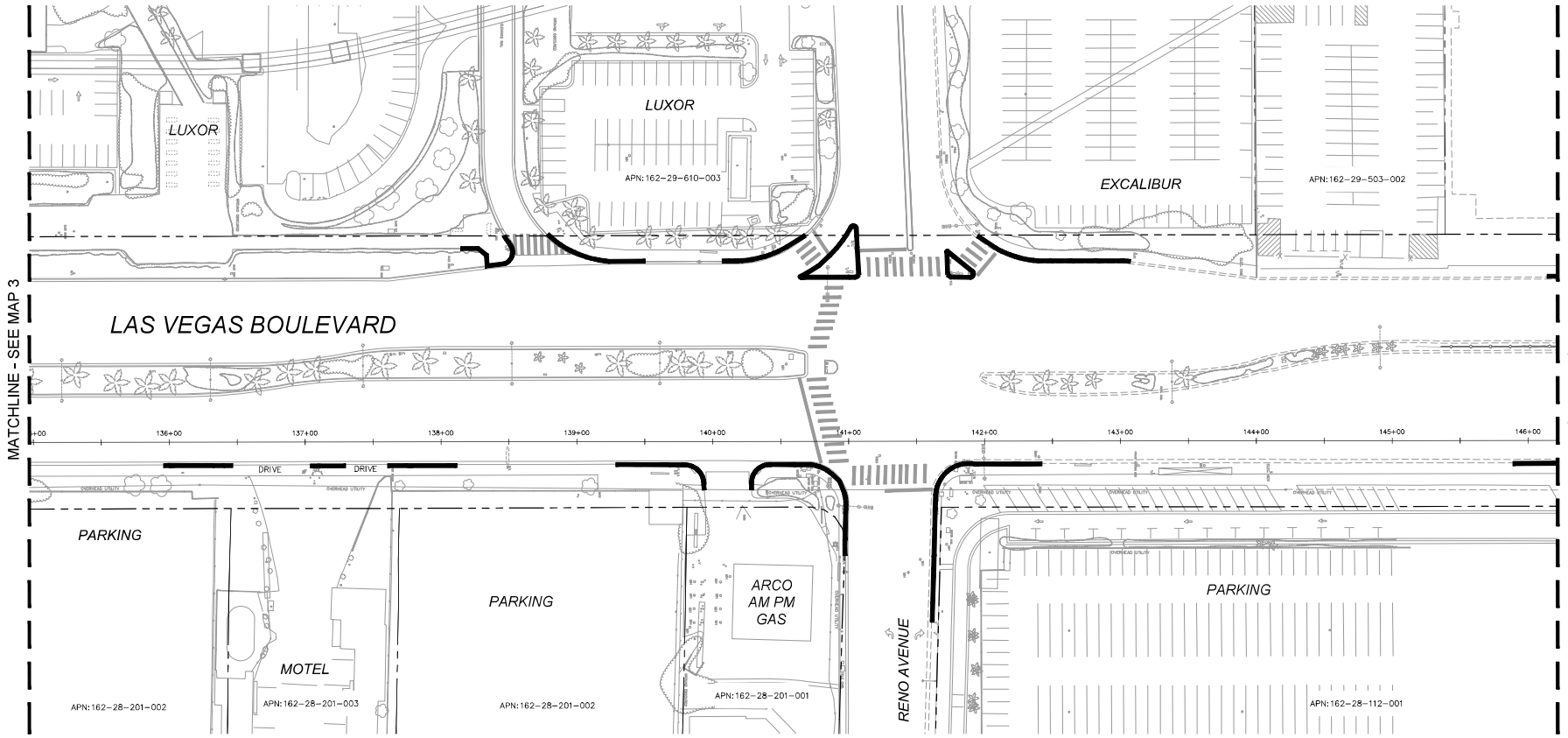
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET:	MAP 3
SCALE:	AS SHOWN
DATE:	MAY 3, 2022

GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

CC 384086

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LEGEND

- PAINTED WHITE LINE
- TIME PERIODS LESS THAN LEVEL OF SERVICE C

NOTE:
TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS WAS DEVELOPED BASED ON A SEARCH OF BEST AVAILABLE RECORDS AND INFORMATION. LOCATIONS AND CONDITION OF IMPROVEMENTS SHOWN ARE SUBJECT TO CHANGE AND SHALL BE VERIFIED IN THE FIELD.

NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

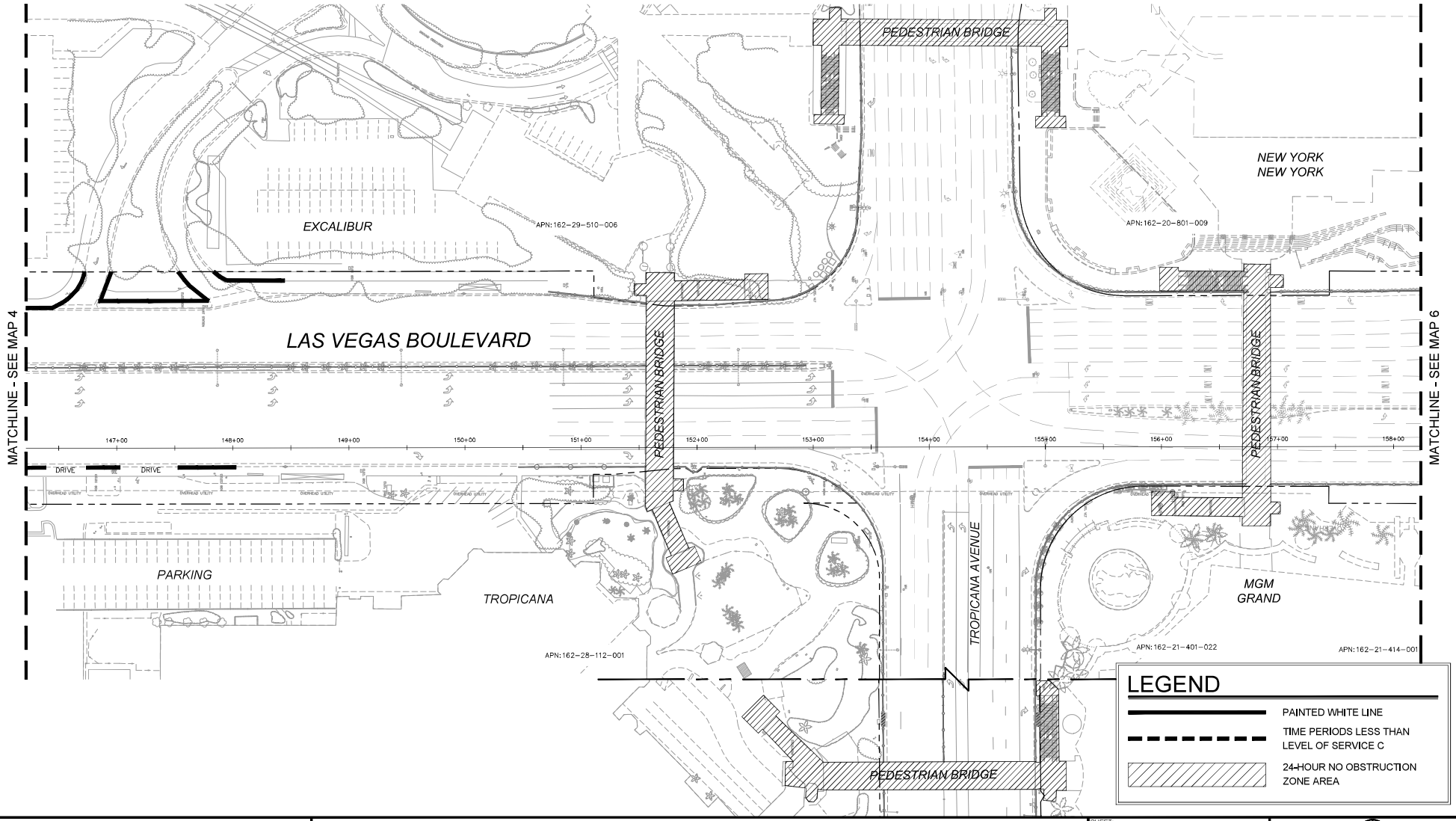
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 4
SCALE: AS SHOWN
DATE: MAY 3, 2022

GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

CC 384087

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NOTE:
TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS WAS DEVELOPED BASED ON A SEARCH OF BEST AVAILABLE RECORDS AND INFORMATION. LOCATIONS AND CONDITION OF IMPROVEMENTS SHOWN ARE SUBJECT TO CHANGE AND SHALL BE VERIFIED IN THE FIELD.

NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

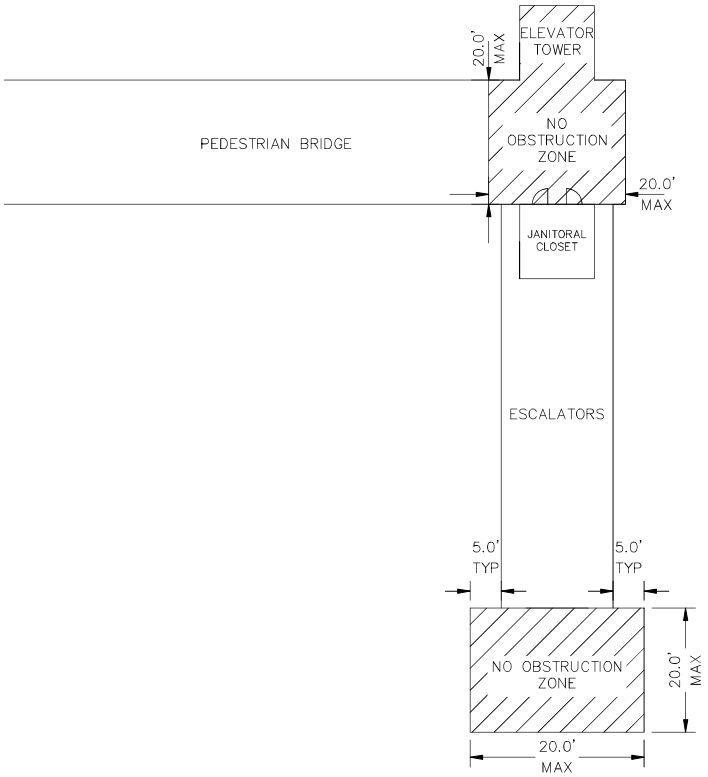
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 5A
SCALE: AS SHOWN
DATE: MAY 3, 2022

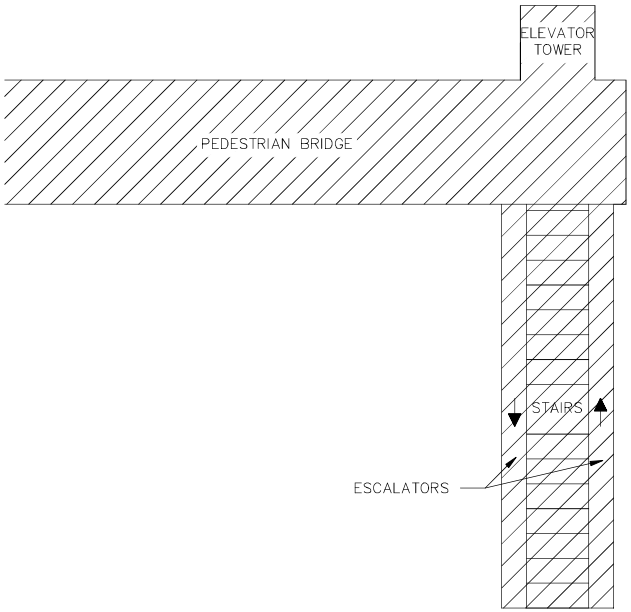
GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

CC 384088

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NO OBSTRUCTION ZONES
TYPICAL AT GRADE
ELEVATOR/ESCALATOR LANDING



NO OBSTRUCTION ZONES
TYPICAL ABOVE GRADE
PEDESTRIAN BRIDGE/ESCALATOR

LEGEND

24-HOUR NO OBSTRUCTION
ZONE AREA AT GRADE

NOTE:
TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS WAS DEVELOPED BASED ON A SEARCH OF BEST AVAILABLE RECORDS AND INFORMATION. LOCATIONS AND CONDITION OF IMPROVEMENTS SHOWN ARE SUBJECT TO CHANGE AND SHALL BE VERIFIED IN THE FIELD.

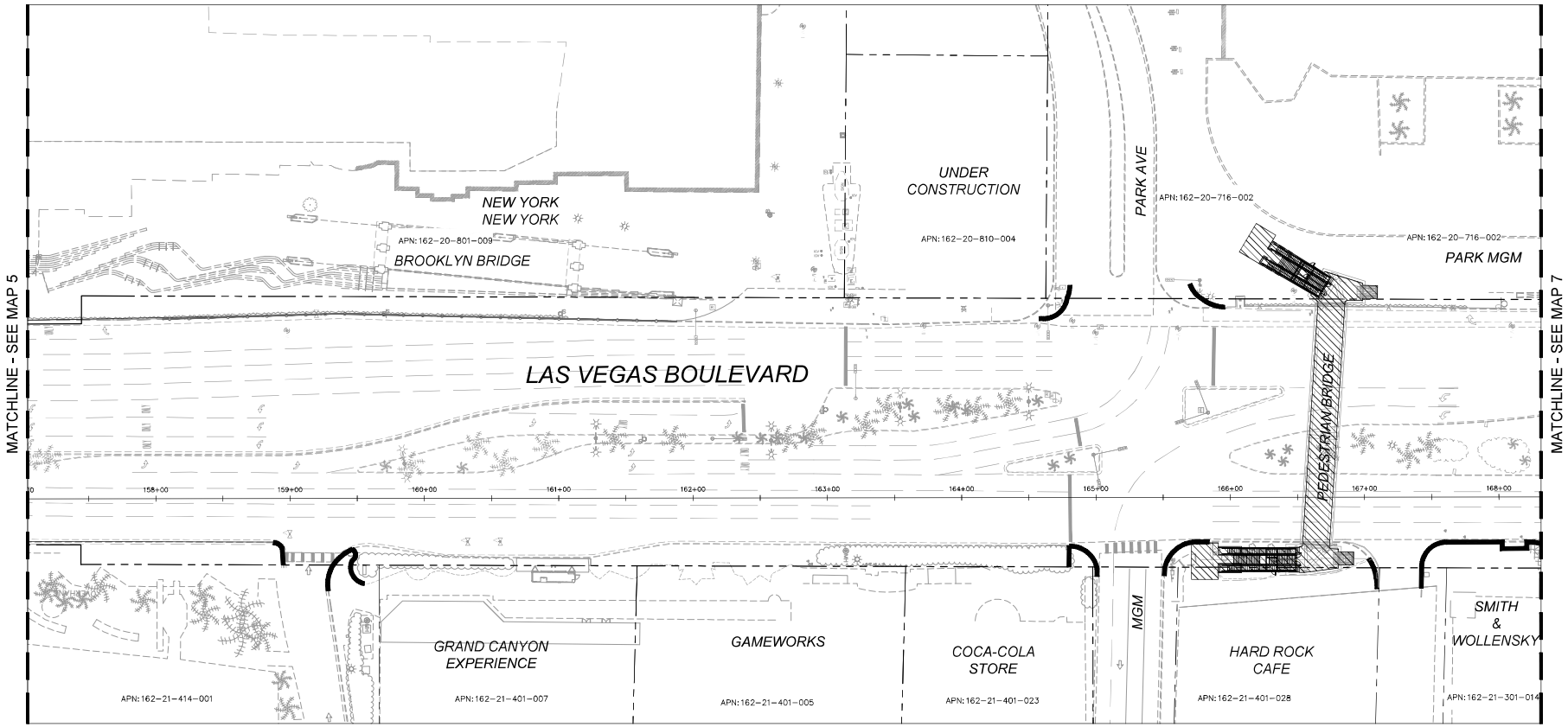
NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 5B
SCALE: AS SHOWN
DATE: MAY 3, 2022

CC 384089

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LEGEND

- PAINTED WHITE LINE
- TIME PERIODS LESS THAN LEVEL OF SERVICE C
- 24-HOUR NO OBSTRUCTION ZONE AREA

NOTE:
TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS WAS DEVELOPED BASED ON A SEARCH OF BEST AVAILABLE RECORDS AND INFORMATION. LOCATIONS AND CONDITION OF IMPROVEMENTS SHOWN ARE SUBJECT TO CHANGE AND SHALL BE VERIFIED IN THE FIELD.

NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

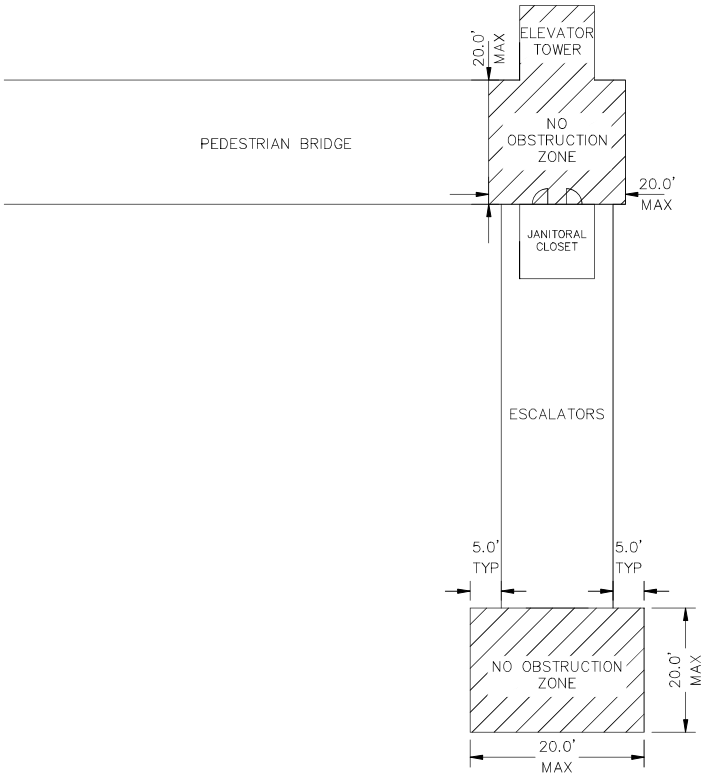
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 6A
SCALE: AS SHOWN
DATE: MAY 3, 2022

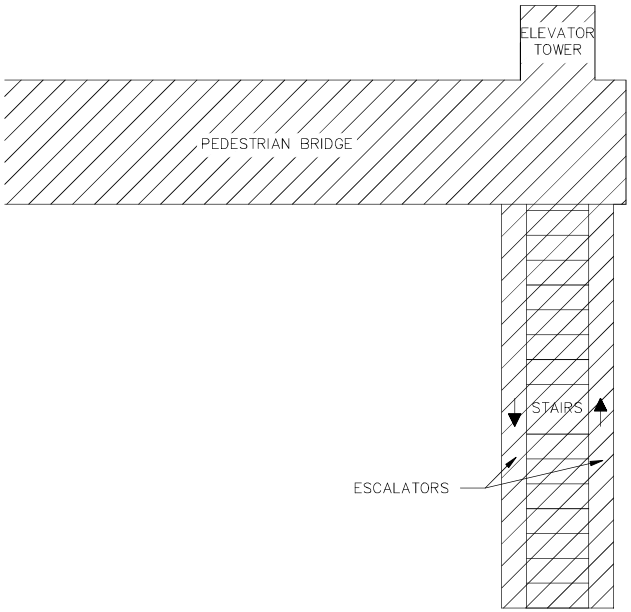
GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

CC 384090

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NO OBSTRUCTION ZONES
TYPICAL AT GRADE
ELEVATOR/ESCALATOR LANDING



NO OBSTRUCTION ZONES
TYPICAL ABOVE GRADE
PEDESTRIAN BRIDGE/ESCALATOR

LEGEND

24-HOUR NO OBSTRUCTION
ZONE AREA AT GRADE

NOTE:
TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS WAS DEVELOPED BASED ON A SEARCH OF BEST AVAILABLE RECORDS AND INFORMATION. LOCATIONS AND CONDITION OF IMPROVEMENTS SHOWN ARE SUBJECT TO CHANGE AND SHALL BE VERIFIED IN THE FIELD.

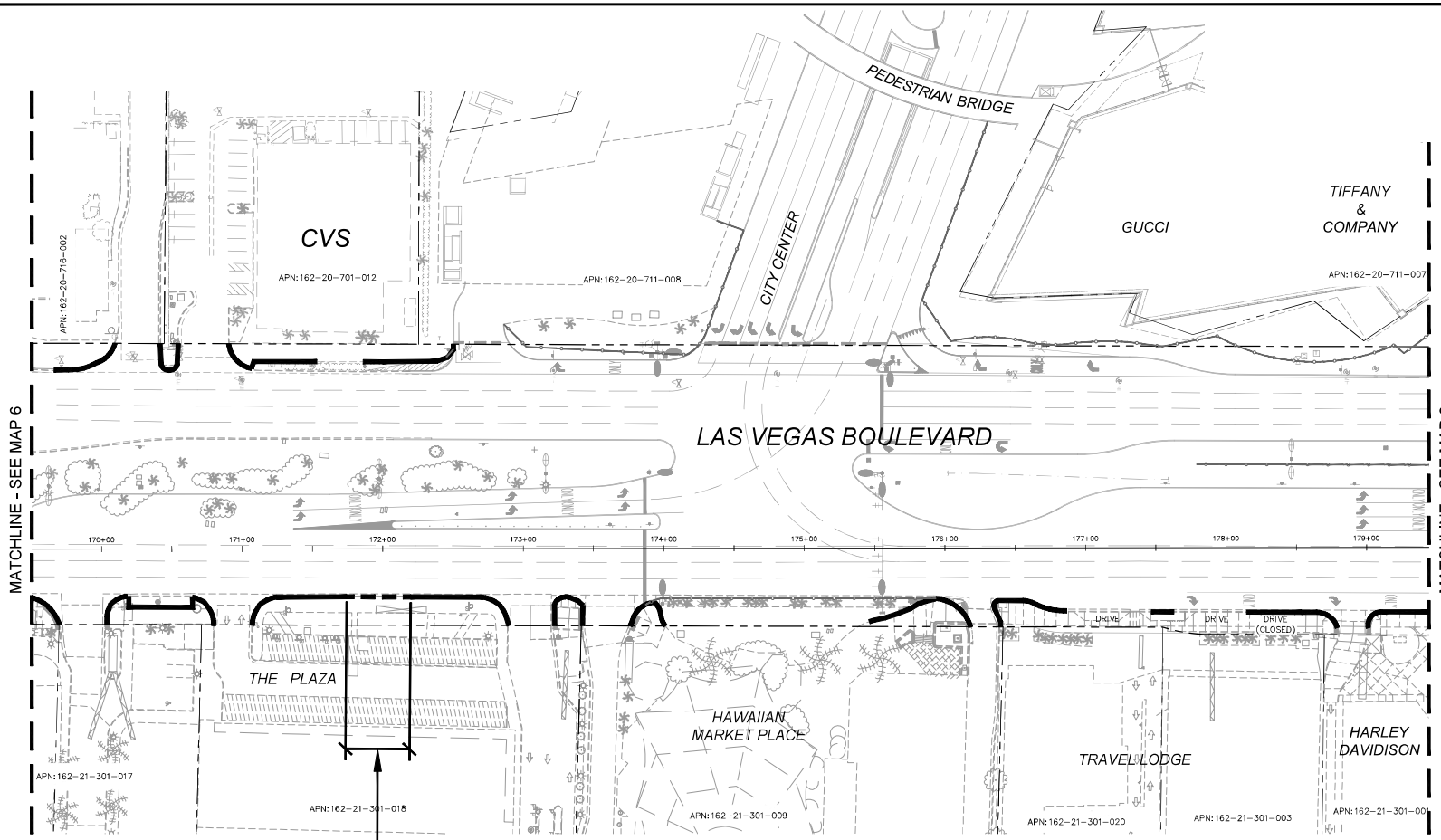
NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 6B
SCALE: AS SHOWN
DATE: MAY 3, 2022

CC 384091

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LEGEND

- PAINTED WHITE LINE
- TIME PERIODS LESS THAN LEVEL OF SERVICE C

NOTE:
TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS WAS DEVELOPED BASED ON A SEARCH OF BEST AVAILABLE RECORDS AND INFORMATION. LOCATIONS AND CONDITION OF IMPROVEMENTS SHOWN ARE SUBJECT TO CHANGE AND SHALL BE VERIFIED IN THE FIELD.

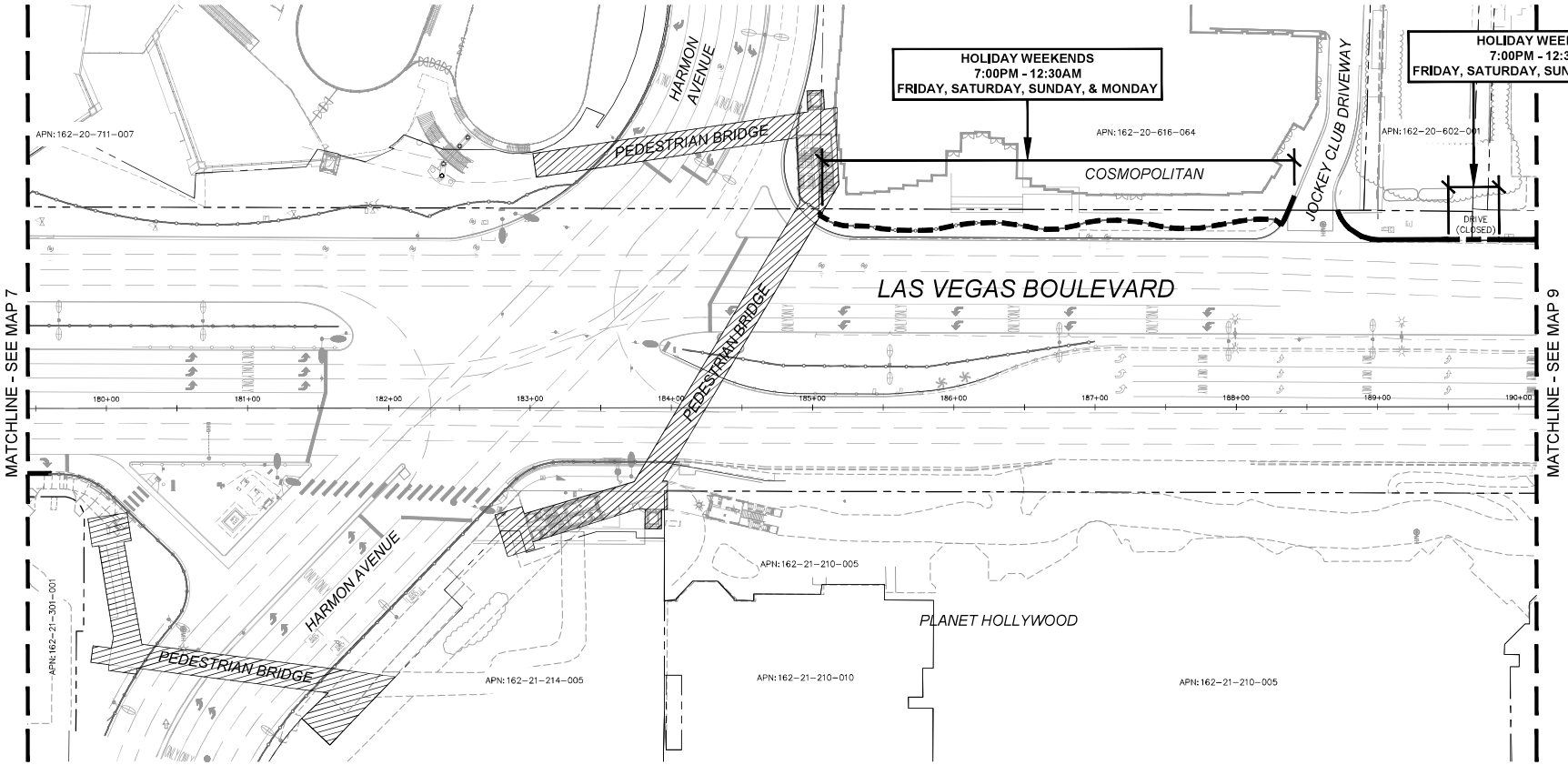
NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET:	MAP 7
SCALE:	AS SHOWN
DATE:	MAY 3, 2022

GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

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LEGEND

- PAINTED WHITE LINE
- TIME PERIODS LESS THAN LEVEL OF SERVICE C
- 24-HOUR NO OBSTRUCTION ZONE AREA

NOTE:
TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS WAS DEVELOPED BASED ON A SEARCH OF BEST AVAILABLE RECORDS AND INFORMATION. LOCATIONS AND CONDITION OF IMPROVEMENTS SHOWN ARE SUBJECT TO CHANGE AND SHALL BE VERIFIED IN THE FIELD.

NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

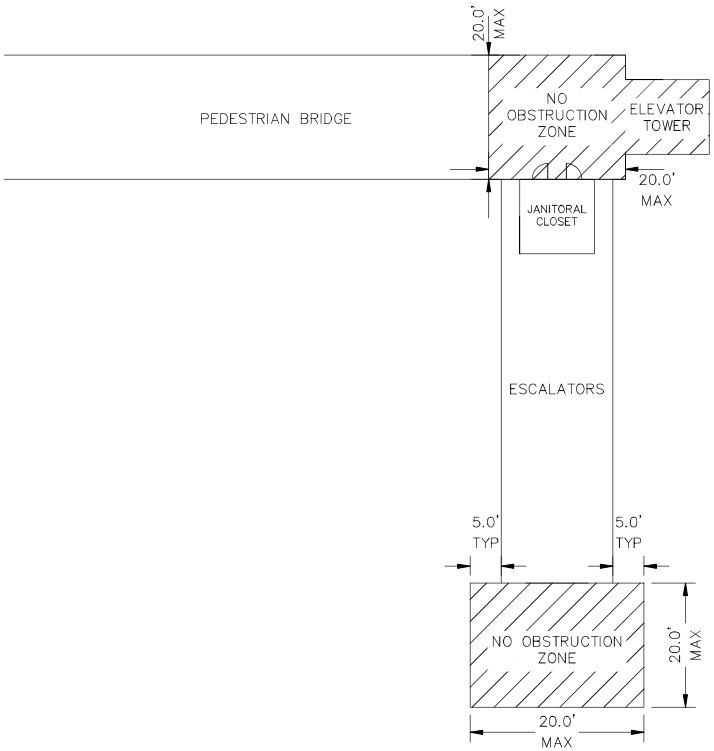
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 8A
SCALE: AS SHOWN
DATE: MAY 3, 2022

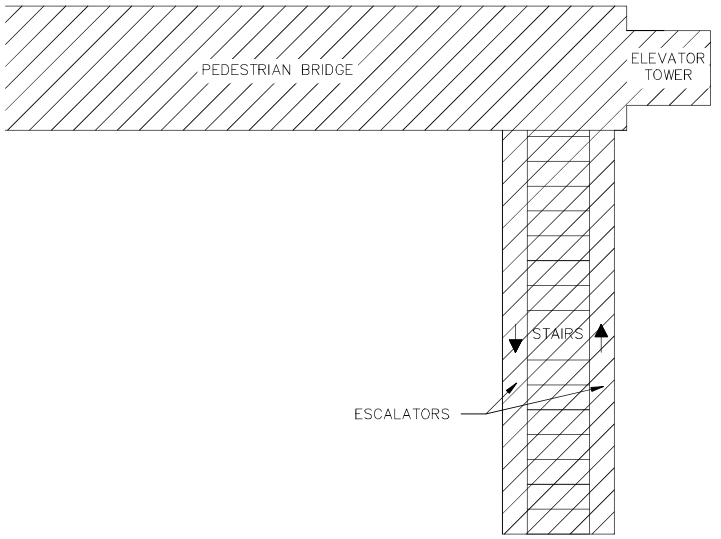
GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

CC 384093

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NO OBSTRUCTION ZONES
TYPICAL AT GRADE
ELEVATOR/ESCALATOR LANDING



NO OBSTRUCTION ZONES
TYPICAL ABOVE GRADE
PEDESTRIAN BRIDGE/ESCALATOR

LEGEND

24-HOUR NO OBSTRUCTION
ZONE AREA AT GRADE

NOTE:
TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS WAS DEVELOPED BASED ON A SEARCH OF BEST AVAILABLE RECORDS AND INFORMATION. LOCATIONS AND CONDITION OF IMPROVEMENTS SHOWN ARE SUBJECT TO CHANGE AND SHALL BE VERIFIED IN THE FIELD.

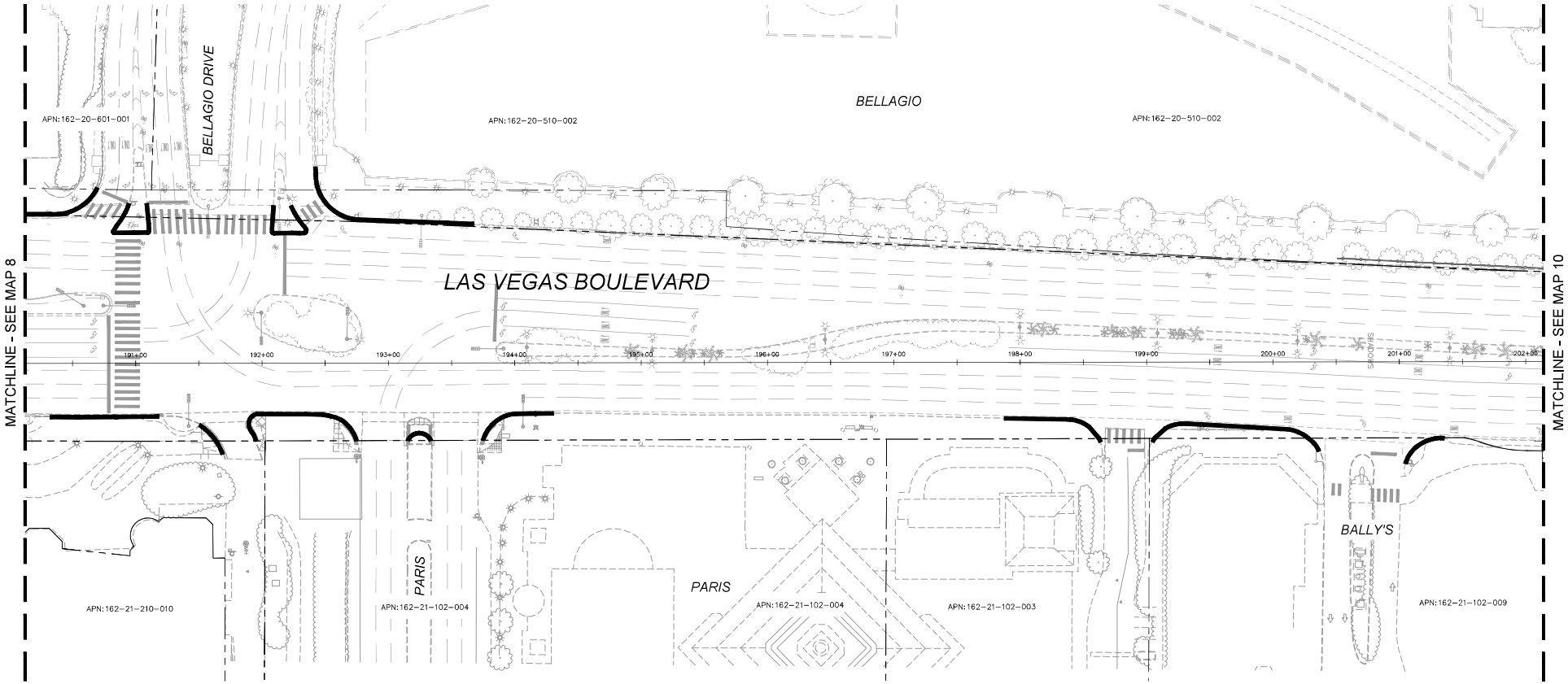
NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 8B
SCALE: AS SHOWN
DATE: MAY 3, 2022

CC 384094

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LEGEND

- PAINTED WHITE LINE
- TIME PERIODS LESS THAN LEVEL OF SERVICE C

NOTE:
TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS WAS DEVELOPED BASED ON A SEARCH OF BEST AVAILABLE RECORDS AND INFORMATION. LOCATIONS AND CONDITION OF IMPROVEMENTS SHOWN ARE SUBJECT TO CHANGE AND SHALL BE VERIFIED IN THE FIELD.

NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

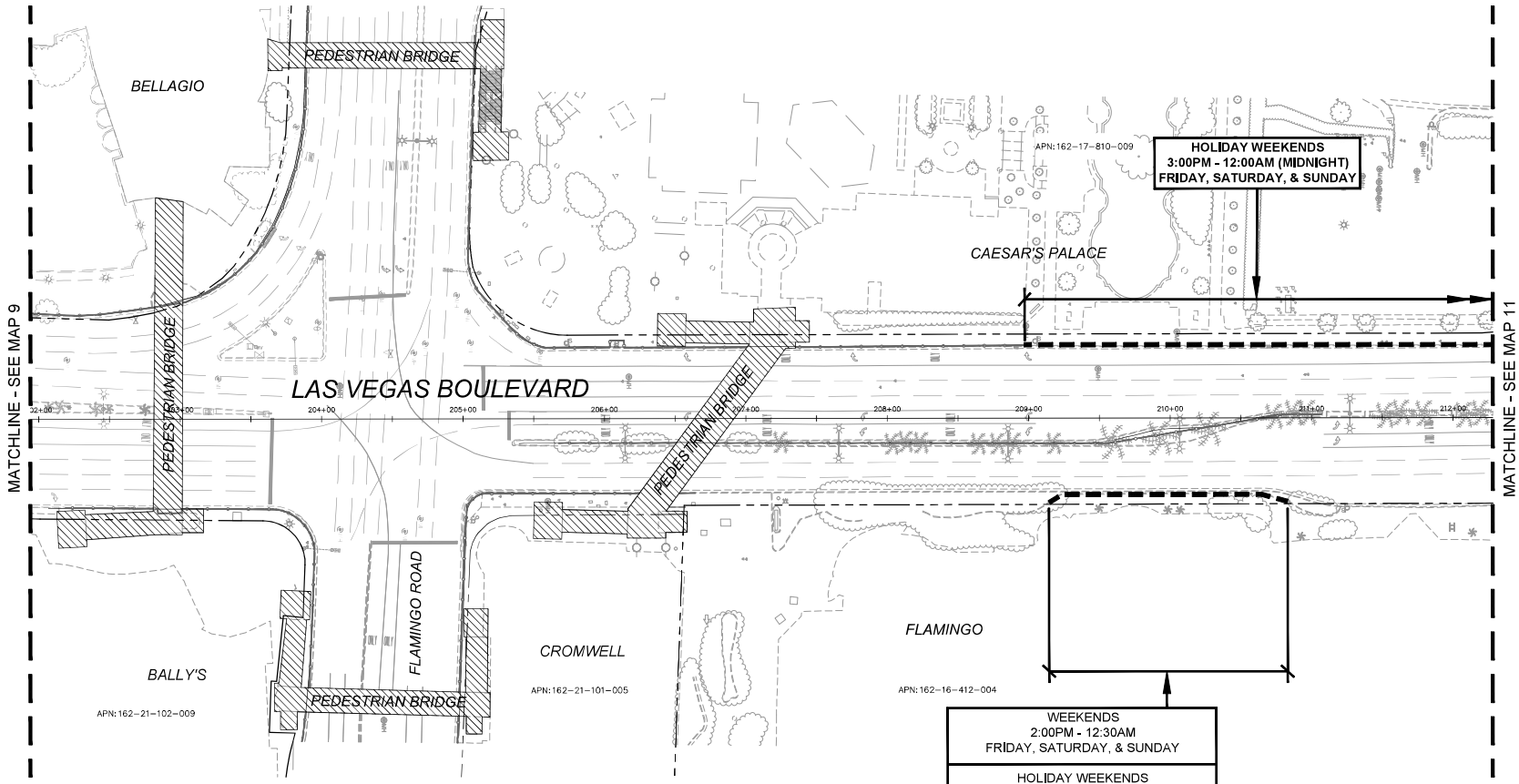
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET:	MAP 9
SCALE:	AS SHOWN
DATE:	MAY 3, 2022

GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

CC 384095

Case 2:24-cv-00334-JAD-NJK Document 107-1 Filed 12/18/25 Page 223 of 236



LEGEND

- PAINTED WHITE LINE
- TIME PERIODS LESS THAN LEVEL OF SERVICE C
- 24-HOUR NO OBSTRUCTION ZONE AREA

NOTE:
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NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

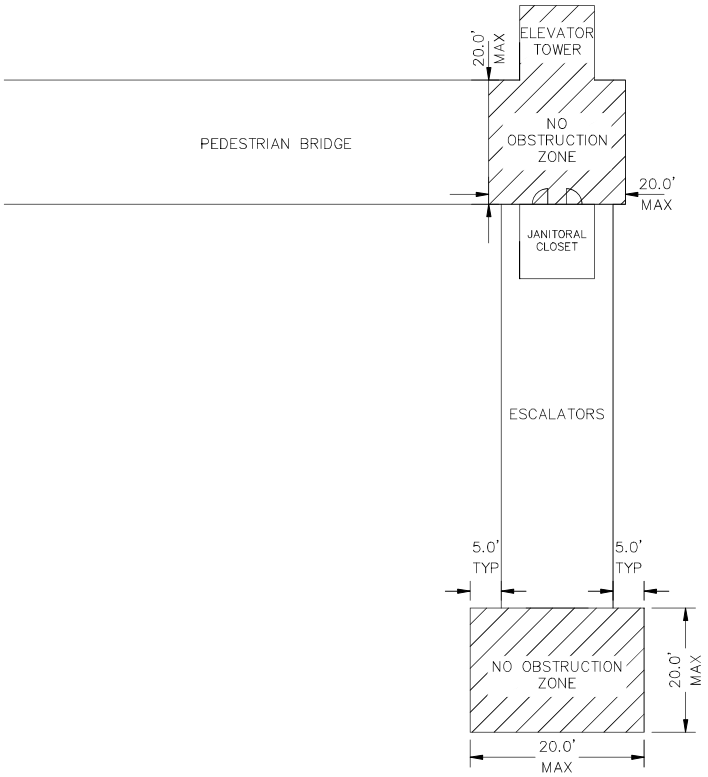
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET:	MAP 10A
SCALE:	AS SHOWN
DATE:	MAY 3, 2022

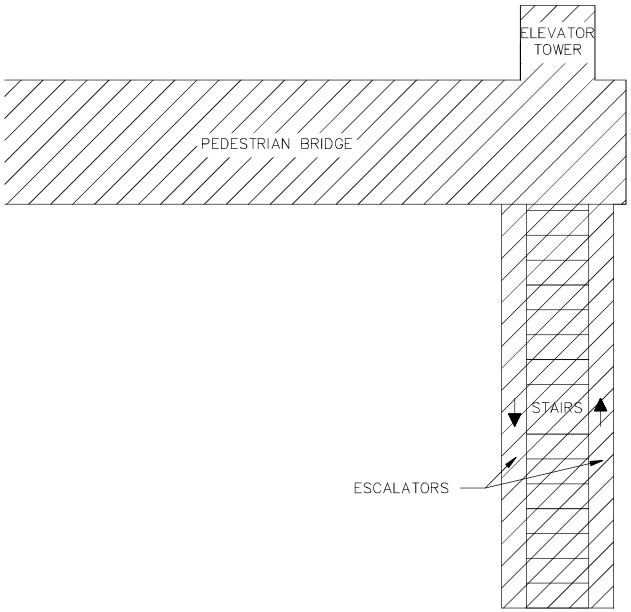
GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

CC 384096

Case 2:24-cv-00334-JAD-NJK Document 107-1 Filed 12/18/25 Page 224 of 236



NO OBSTRUCTION ZONES
TYPICAL AT GRADE
ELEVATOR/ESCALATOR LANDING



NO OBSTRUCTION ZONES
TYPICAL ABOVE GRADE
PEDESTRIAN BRIDGE/ESCALATOR

LEGEND

24-HOUR NO OBSTRUCTION
ZONE AREA AT GRADE

NOTE:
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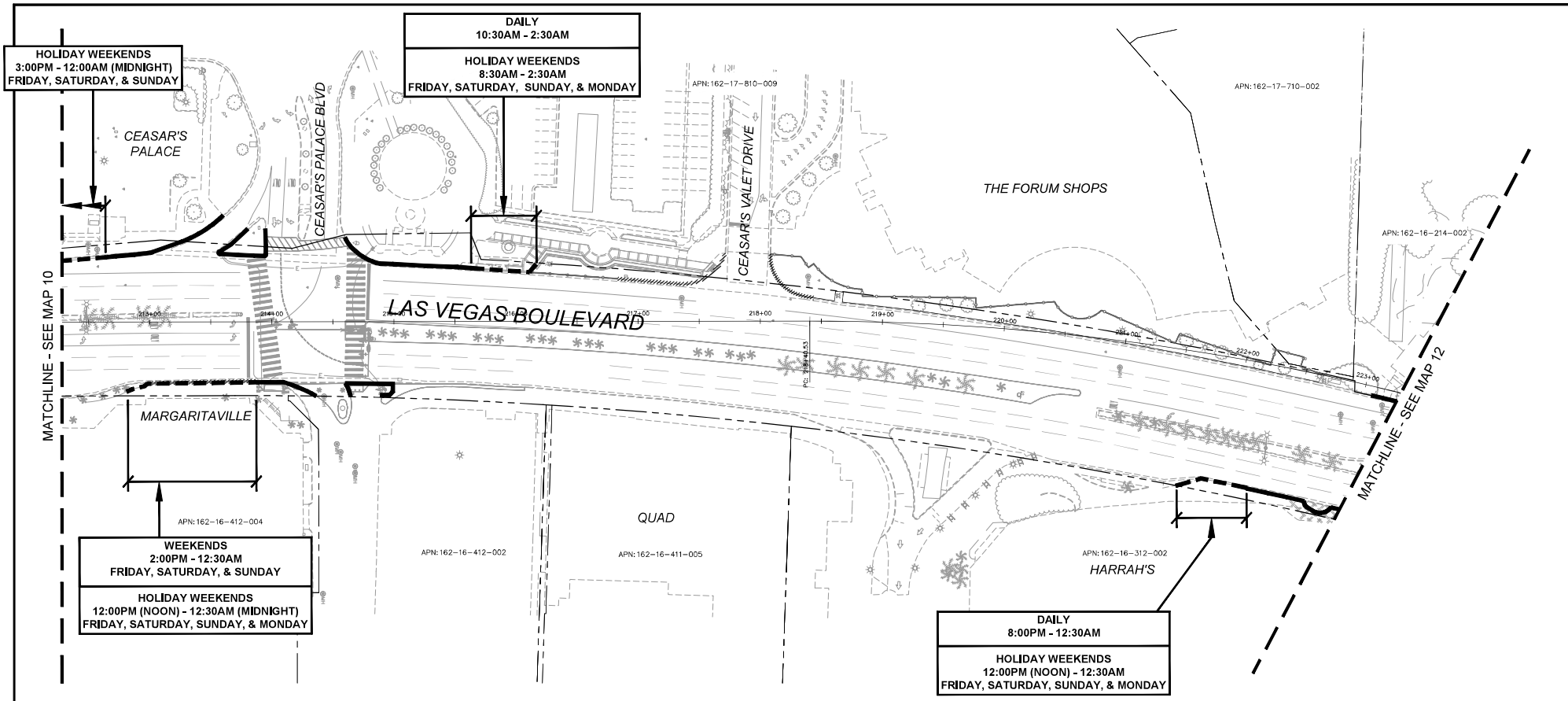
NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 10B
SCALE: AS SHOWN
DATE: MAY 3, 2022

CC 384097

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NOTE:
TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS WAS DEVELOPED BASED ON A SEARCH OF BEST AVAILABLE RECORDS AND INFORMATION. LOCATIONS AND CONDITION OF IMPROVEMENTS SHOWN ARE SUBJECT TO CHANGE AND SHALL BE VERIFIED IN THE FIELD.

NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

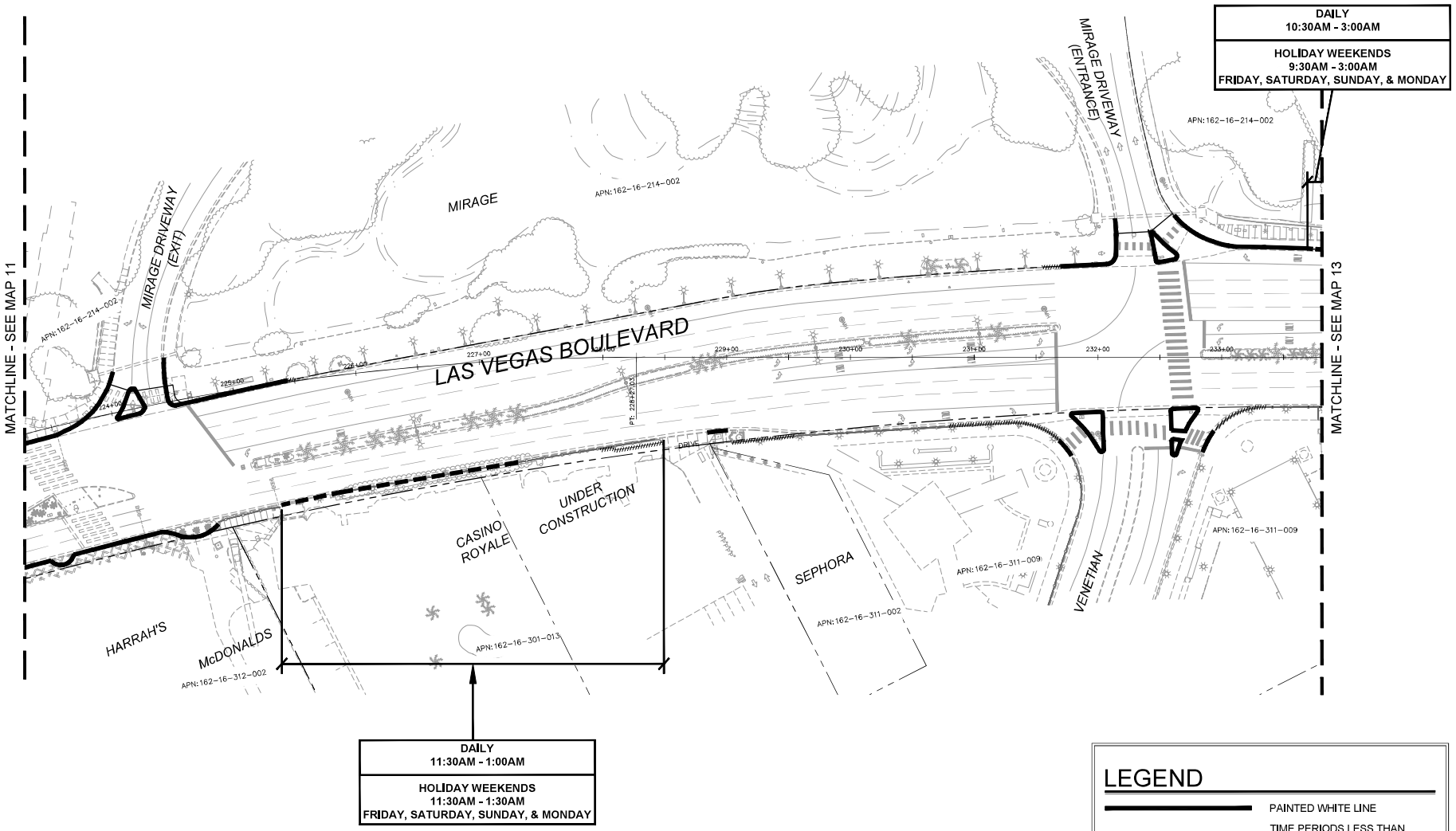
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 11
SCALE: AS SHOWN
DATE: MAY 3, 2022

GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

CC 384098

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NOTE:
TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS WAS DEVELOPED BASED ON A SEARCH OF BEST AVAILABLE RECORDS AND INFORMATION. LOCATIONS AND CONDITION OF IMPROVEMENTS SHOWN ARE SUBJECT TO CHANGE AND SHALL BE VERIFIED IN THE FIELD.

NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

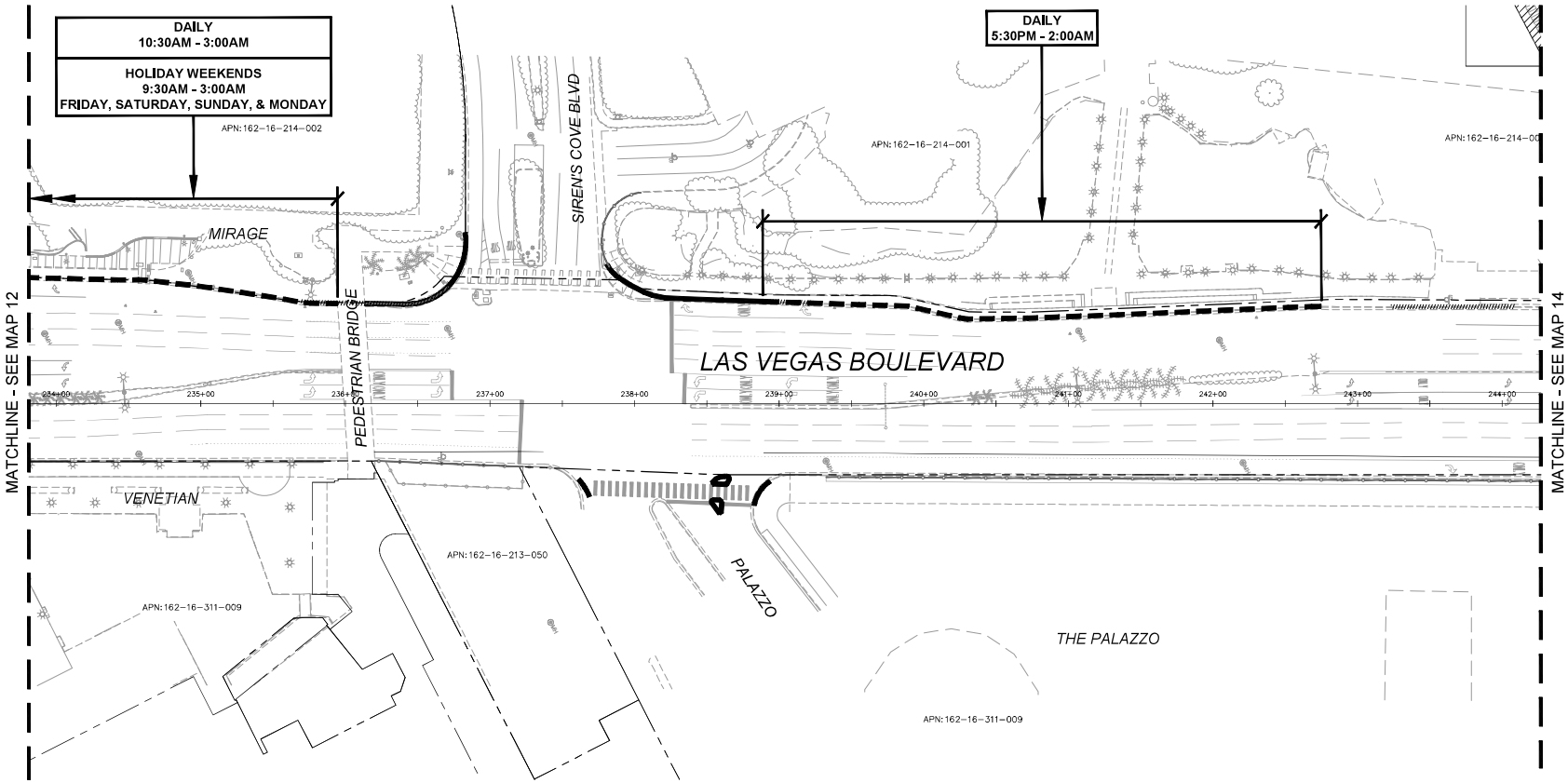
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 12
SCALE: AS SHOWN
DATE: MAY 3, 2022

GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

CC 384099

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LEGEND

- PAINTED WHITE LINE
- TIME PERIODS LESS THAN LEVEL OF SERVICE C

NOTE:
TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS WAS DEVELOPED BASED ON A SEARCH OF BEST AVAILABLE RECORDS AND INFORMATION. LOCATIONS AND CONDITION OF IMPROVEMENTS SHOWN ARE SUBJECT TO CHANGE AND SHALL BE VERIFIED IN THE FIELD.

NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

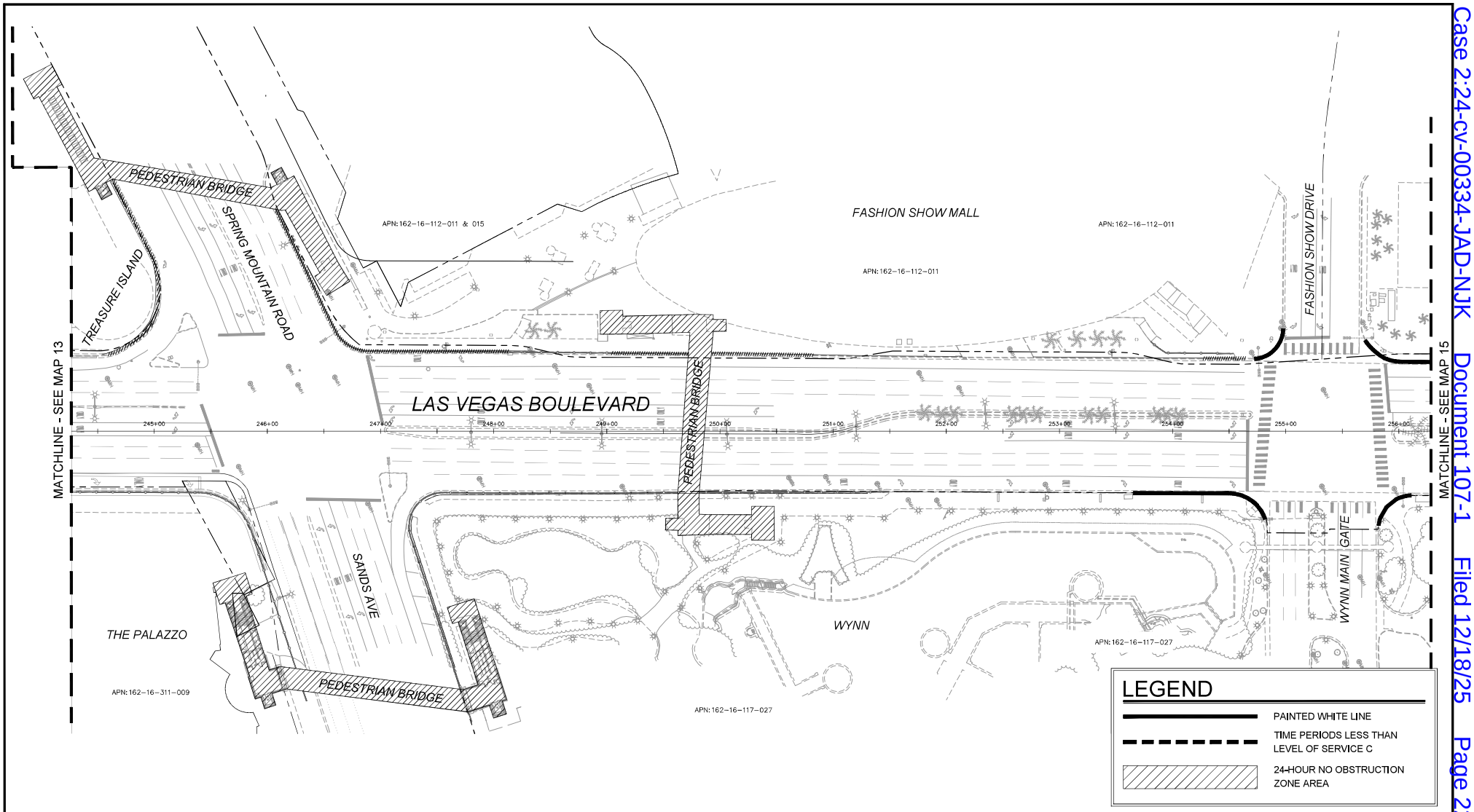
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 13
SCALE: AS SHOWN
DATE: MAY 3, 2022

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 ft.

CC 384100

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NOTE:
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NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

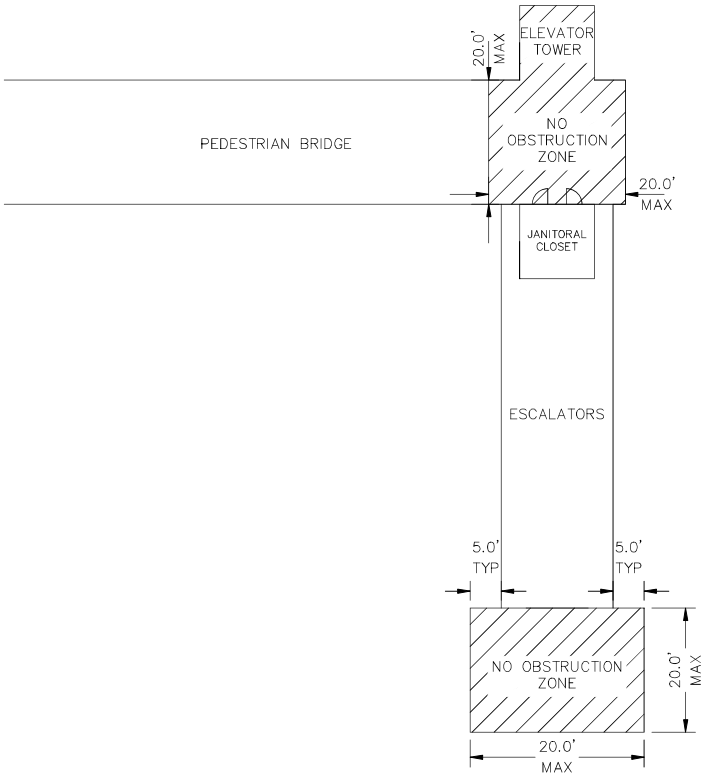
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 14A
SCALE: AS SHOWN
DATE: MAY 3, 2022

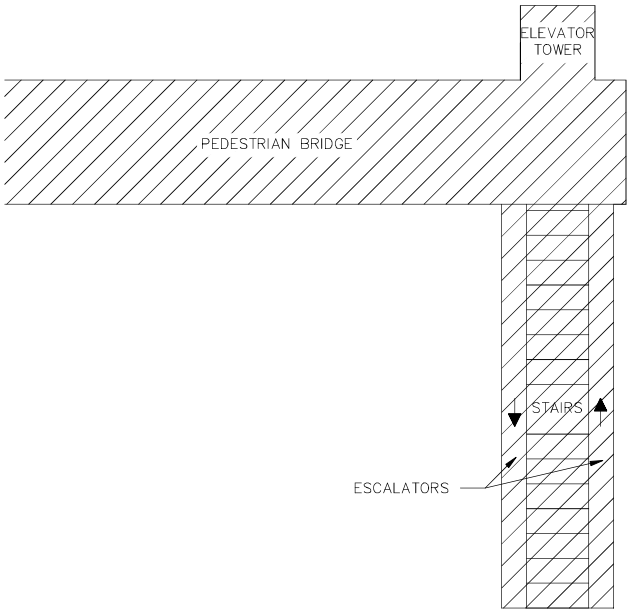
GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 ft.

CC 384101

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NO OBSTRUCTION ZONES
TYPICAL AT GRADE
ELEVATOR/ESCALATOR LANDING



NO OBSTRUCTION ZONES
TYPICAL ABOVE GRADE
PEDESTRIAN BRIDGE/ESCALATOR

LEGEND

24-HOUR NO OBSTRUCTION
ZONE AREA AT GRADE

NOTE:
TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS WAS DEVELOPED BASED ON A SEARCH OF BEST AVAILABLE RECORDS AND INFORMATION. LOCATIONS AND CONDITION OF IMPROVEMENTS SHOWN ARE SUBJECT TO CHANGE AND SHALL BE VERIFIED IN THE FIELD.

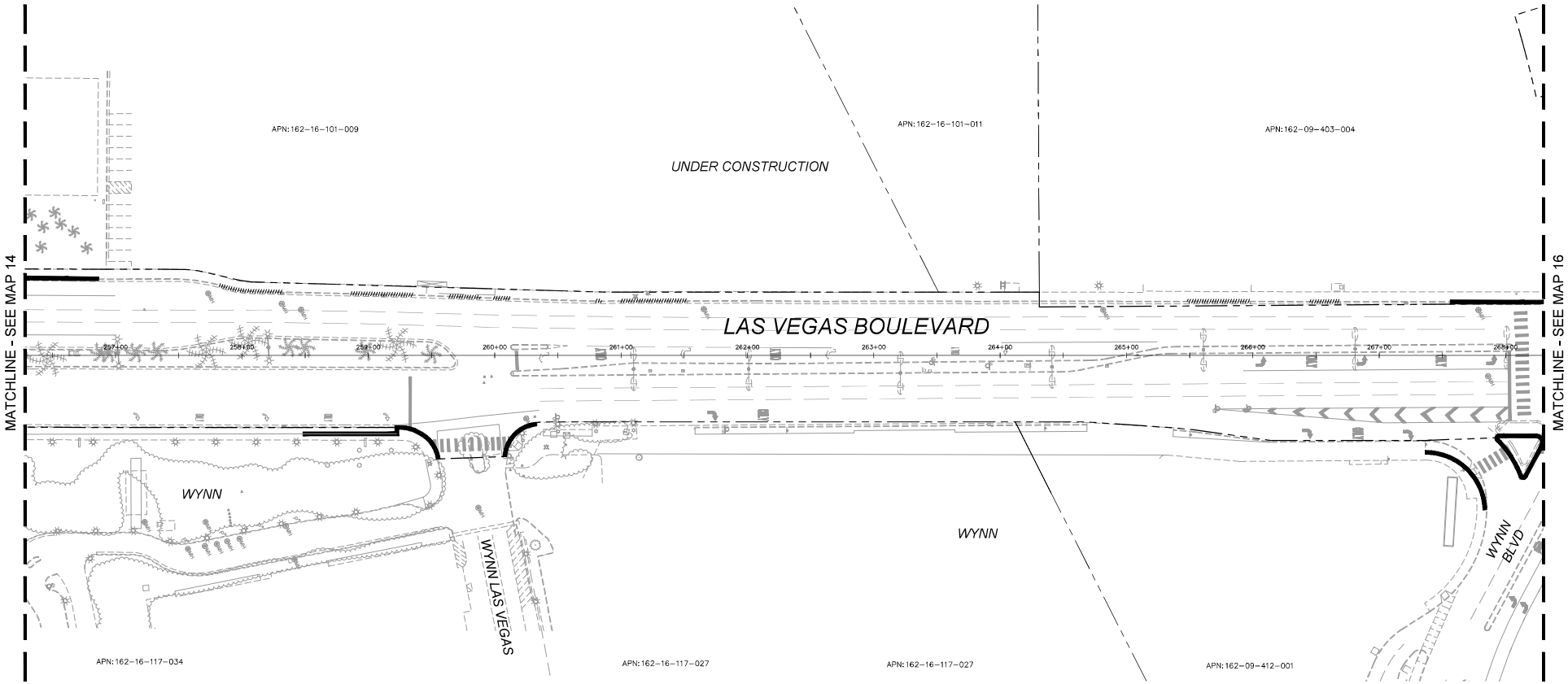
NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 14B
SCALE: AS SHOWN
DATE: MAY 3, 2022

CC 384102

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LEGEND

PAINTED WHITE LINE

TIME PERIODS LESS THAN LEVEL OF SERVICE C

NOTE:
TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS WAS DEVELOPED BASED ON A SEARCH OF BEST AVAILABLE RECORDS AND INFORMATION. LOCATIONS AND CONDITION OF IMPROVEMENTS SHOWN ARE SUBJECT TO CHANGE AND SHALL BE VERIFIED IN THE FIELD.

NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 15

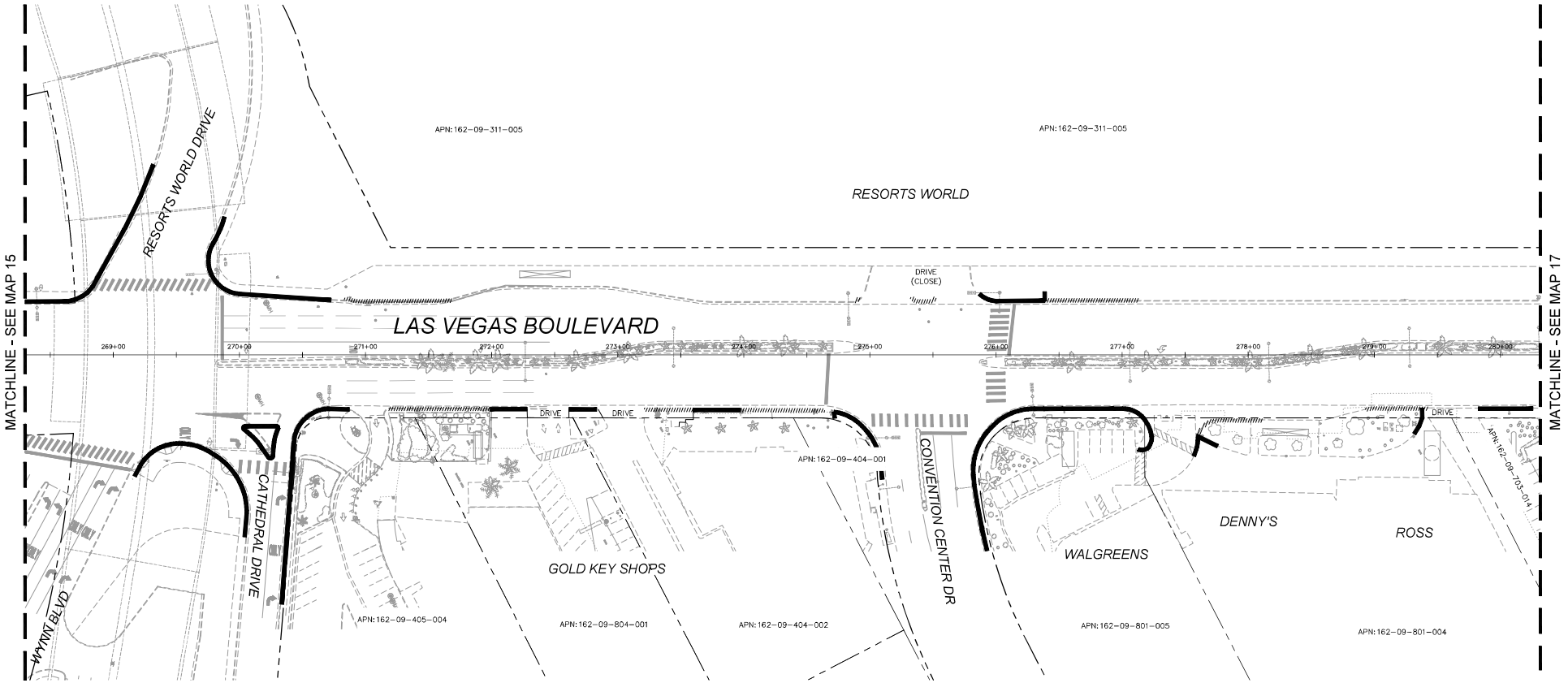
SCALE: AS SHOWN

DATE: MAY 3, 2022

GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

CC 384103

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LEGEND

- PAINTED WHITE LINE
- TIME PERIODS LESS THAN LEVEL OF SERVICE C

NOTE:
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NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

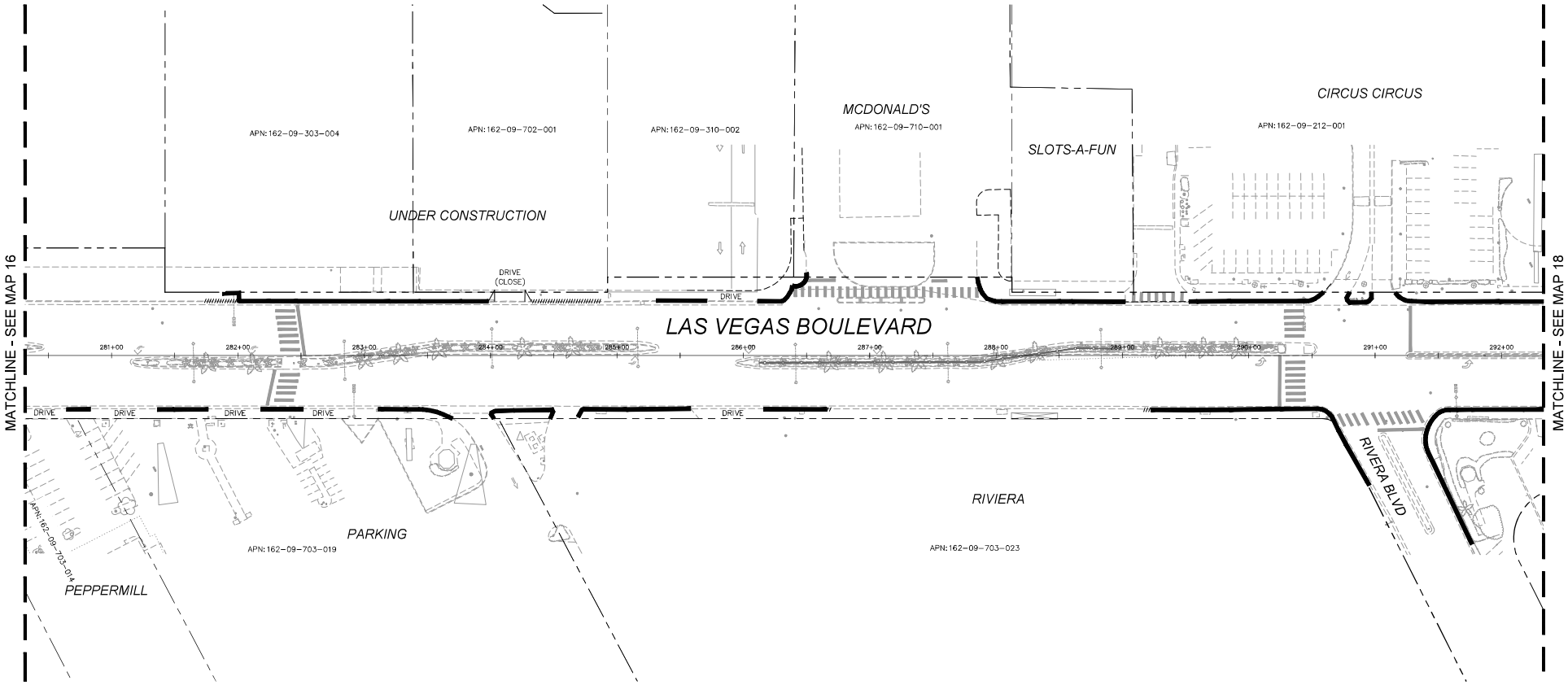
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 16
SCALE: AS SHOWN
DATE: MAY 3, 2022

GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

CC 384104

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LEGEND

PAINTED WHITE LINE

TIME PERIODS LESS THAN LEVEL OF SERVICE C

NOTE:
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NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 17

SCALE: AS SHOWN

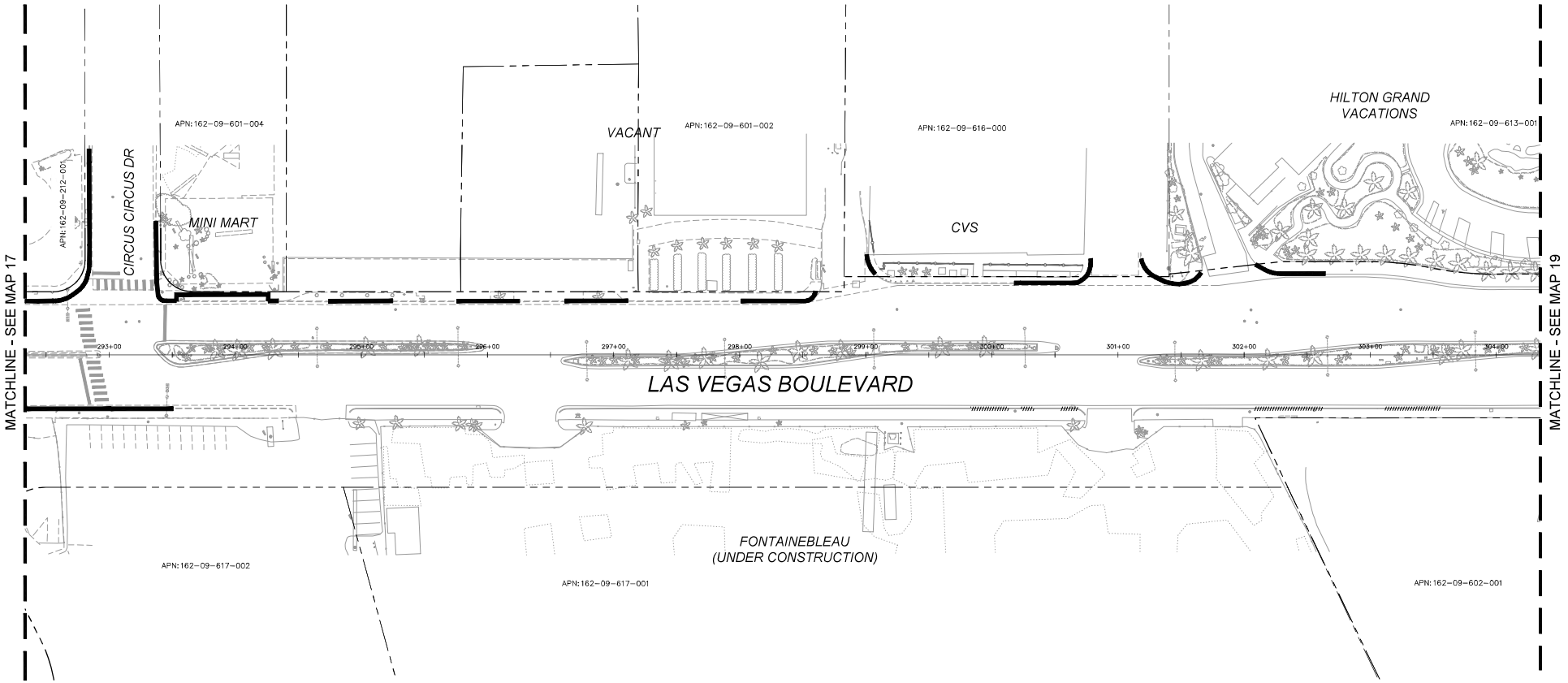
DATE: MAY 3, 2022

GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.

CC 384105

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LEGEND

- PAINTED WHITE LINE
- TIME PERIODS LESS THAN LEVEL OF SERVICE C

NOTE:
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NO OBSTRUCTION ZONES - LAS VEGAS BLVD RUSSELL ROAD TO SAHARA AVENUE

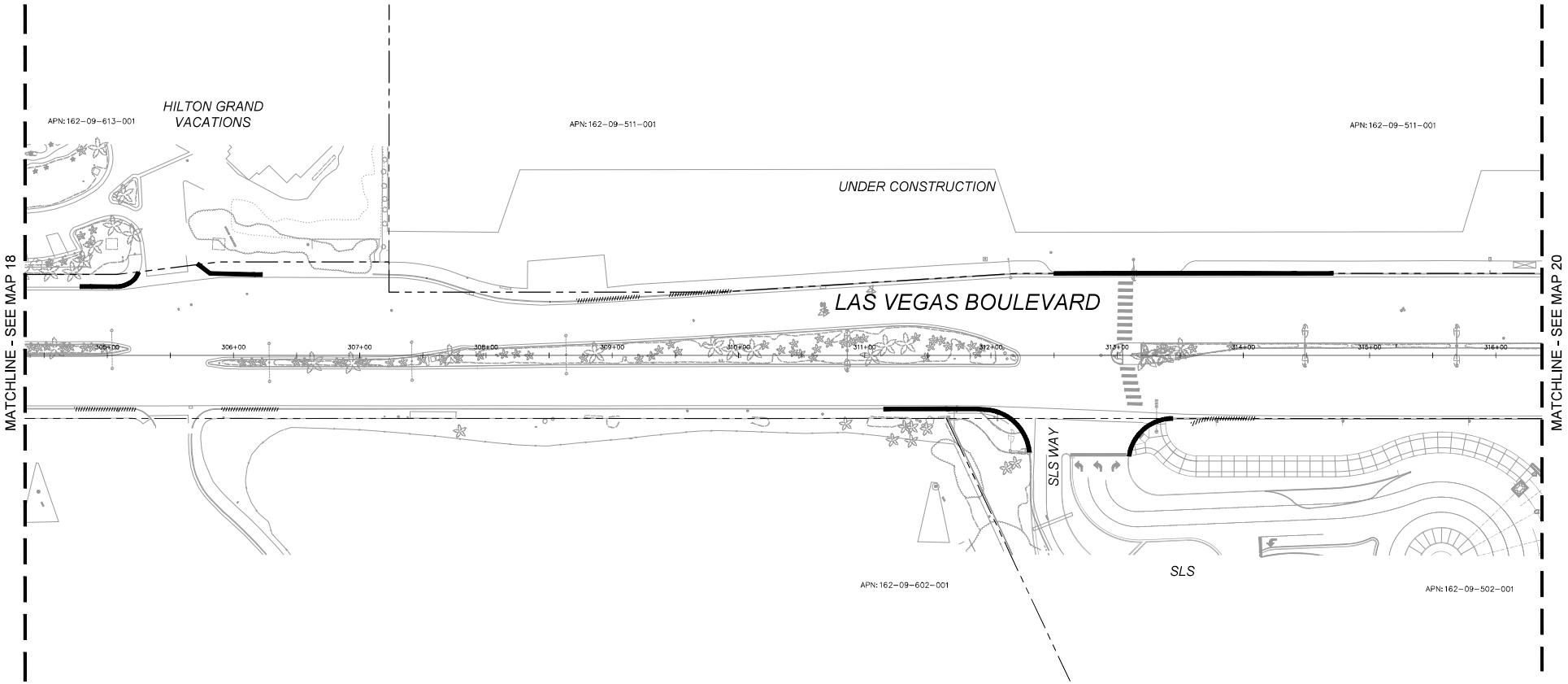
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 18
SCALE: AS SHOWN
DATE: MAY 3, 2022

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 ft.

CC 384106

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LEGEND

PAINTED WHITE LINE

TIME PERIODS LESS THAN LEVEL OF SERVICE C

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NO OBSTRUCTION ZONES - LAS VEGAS BLVD RUSSELL ROAD TO SAHARA AVENUE

CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 19

SCALE: AS SHOWN

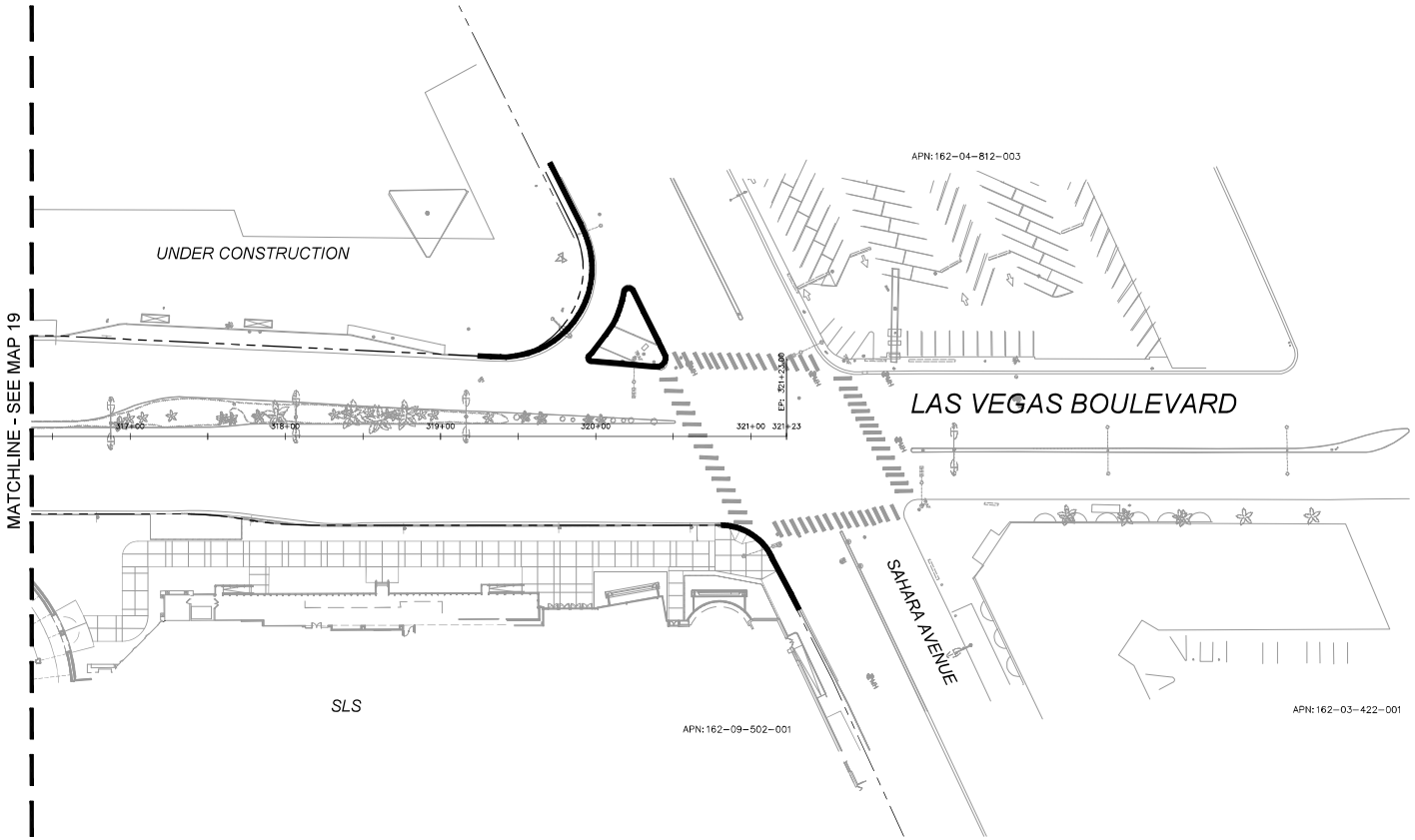
DATE: MAY 3, 2022

GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.

CC 384107

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LEGEND

- PAINTED WHITE LINE
- TIME PERIODS LESS THAN LEVEL OF SERVICE C

NOTE:
TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS WAS DEVELOPED BASED ON A SEARCH OF BEST AVAILABLE RECORDS AND INFORMATION. LOCATIONS AND CONDITION OF IMPROVEMENTS SHOWN ARE SUBJECT TO CHANGE AND SHALL BE VERIFIED IN THE FIELD.

NO OBSTRUCTION ZONES - LAS VEGAS BLVD RUSSELL ROAD TO SAHARA AVENUE

CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 20
SCALE: AS SHOWN
DATE: MAY 3, 2022

GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

CC 384108

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UNITED STATES DISTRICT COURT

DISTRICT COURT OF NEVADA

LISA MCALLISTER, an individual; BRANDON SUMMERS, an individual; and JORDAN POLOVINA, an individual,

Plaintiffs,

vs.

CLARK COUNTY, a political subdivision of the state of Nevada,

Defendant.

Case Number: 2:24-cv-00334

APPRENDIX OF EXHIBITS TO: PLAINTIFFS MOTION FOR SUMMARY JUDGMENT (ORAL ARGUMENT REQUESTED) VOLUME III OF V

INDEX OF EXHIBITS

Exhibit No.	Description	Volume
1	Deposition of Kaizad Yazdani, 30(b)(6) Designee for Clark County	**I**
2	Statement on X posted by @ClarkCountyNV regarding CCC 16.13.030 on Jan. 2, 2024, 6:30 PM, M-S 00031	**I**
3	Deposition of Abigail Frierson, 30(b)(6) Designee for Clark County	**I**
4	Declaration of Brandon Summers	**I**
5	Declaration of Jordan Polovina	**I**
6	Polovina Citation	**I**
7	Clark County Pedestrian Study, December 2022	**II**
8	Clark County Pedestrian Study, November 2012	**III**
9	Clark County Pedestrian Study, 2015 Update	**IV**
10	Pedestrian Study, 2016 Update of Non-Permanent Obstructions	**IV**
11	Deposition of Devlin Val Moore, 30(b)(6) Designee for Non-Party Kimley-Horn	**V**
12	Pedestrian Bridge Arrests	**V**
13	*State v. Mirabelli*, 25-CR-071740, Criminal Complaint	**V**
14	Clark County Board of Commissioners Meeting Agenda from November 21, 2023	**V**
15	Clark County Board of Commissioners Meeting Agenda from December 5, 2023	**V**
16	Clark County Board of Commissioners Meeting Agenda from January 2, 2024	**V**

17	Questions Related to Public Safety on Pedestrian Bridges, William H. Sousa, Ph. D.	**V**
18	Deposition of William H. Sousa	**V**
19	Deposition of Andrew Walsh, 30(b)(6) Designee for Non-Party Las Vegas Metropolitan Police Department	**V**
20	Declaration of Christopher M. Peterson	**V**

DATED: December 18, 2025.

/s/ Christopher Peterson

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Attorneys for Plaintiffs

CERTIFICATE OF SERVICE

I hereby certify that I electronically filed the foregoing **Appendix of Exhibits** with the Clerk of the Court for the United States District Court of Nevada by using the court's CM/ECF system on December 18, 2025. I further certify that all participants in the case are registered CM/ECF users and that service will be accomplished on all participants by:

☒ CM/ECF

☐ Electronic mail; or

☐ US Mail or Carrier Service

/s/ Christopher Peterson
An employee of ACLU of Nevada

Exhibit 8

Clark County Pedestrian Study, November 2012



CLARK COUNTY
PEDESTRIAN STUDY

Las Vegas Boulevard
Russell Road to Sahara Avenue



NOVEMBER 2012

Kimley-Horn and Associates, Inc.

CC 974

PEDESTRIAN STUDY

LAS VEGAS BOULEVARD

RUSSELL ROAD TO SAHARA AVENUE

Prepared for:

500 S. Grand Central Parkway
Las Vegas, NV 89115-4000

Prepared By:

Kimley-Horn and Associates, Inc.

6671 Las Vegas Boulevard South, Suite 320, Las Vegas, NV 89119
Tel 702-862-3600 www.kimley-horn.com

November 2012



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1 INTRODUCTION

As one of the recommendations of the Resort Corridor Workgroup, this study was prepared for Clark County Department of Public Works to document pedestrian activity on Las Vegas Boulevard (the "Strip") between Russell Road and Sahara Avenue. In an effort to improve the pedestrian experience, this study expands upon the findings and recommendations of the 1994 Lee Engineering report *Las Vegas Boulevard South Pedestrian Walkway Study* which helped enhance the walking environment of the "Strip" for the past 18 years. For this study, pedestrian volume data was collected over Memorial Day Weekend (May 26, 2012), one of the busiest Saturdays on Las Vegas Boulevard, and on a typical summer Saturday (June 16, 2012) to capture and evaluate peak and typical pedestrian conditions. Pedestrian volumes and walking speeds were documented for comparison with calculated walkway capacity. Non-permanent obstructions were also located, quantified and classified to identify possible impediments to pedestrian movement.

1.1 Study Purpose

The unobstructed movement of pedestrians along Las Vegas Boulevard is important in maintaining the economic vitality of Las Vegas. The purpose of the study is to identify locations and time periods of pedestrian congestion along Las Vegas Boulevard (the "Strip") to aid in the enforcement of the County's Obstructive Use Ordinance.

1.2 Study Goals

The goals of the study are to identify locations of pedestrian walkway congestion by time of day and day of week (including holidays) for use in the enforcement of and/or revisions to County Code 16.11-Obstructive Uses of Public Sidewalks. The study also updates the existing No Obstruction Zones based on the current conditions on Las Vegas Boulevard, congestion locations, mid-block crosswalks, intersections and driveways.

1.3 Study Corridor

The study corridor includes 4.2 miles of Las Vegas Boulevard from Russell Road to Sahara Avenue within the Las Vegas Valley. The corridor (Figure 1.1) is located east of Interstate 15, south of US Highway 95 and north of Interstate 215 in Clark County, Nevada. The study corridor provides pedestrian access to some 30 major casino/resorts and 3 major retail centers.

The pedestrian activity within the study corridor of Las Vegas Boulevard is primarily driven by the gaming and related tourist industry which is a major source of revenue for Clark County. In 2011 gaming revenue totaled $6.1 Billion according to the Las Vegas Convention and Visitors Authority (LVCVA).

Increases in Las Vegas Boulevard pedestrian activity can be associated with the growth in the number of hotel rooms and the number of visitors to Las Vegas. In 2001, the number of rooms in Clark County totaled 126,610 and the number of visitors was estimated at 35,017,317.

By 2011, the number of rooms in Clark County totaled 150,161 and the number of visitors was estimated at 38,928,708. The room inventory and number of visitors is expected to continue to increase with casino/resort expansions, new resort construction, and timeshare construction.

As of 2011, Las Vegas had the highest inventory of hotel rooms (150,161) out of any other city in the United States. In addition, the seventeen largest hotels in the United States are located within the study corridor. There were 41 casinos located on Las Vegas Boulevard with gross gaming revenue of at least $1 Million in 2011.

Conventions, trade shows, and meetings also contribute to pedestrian activity along the Las Vegas Boulevard. These functions draw nearly 5 million attendees annually to Las Vegas, or about 12% of all visitors during 2011. They have contributed billions of dollars in non-gaming revenue to the economy.

On any given day, approximately 106,500 people visit the Las Vegas Valley. Many of these are pedestrians on the "Strip" during their visit. According to the December 31, 2011 Las Vegas Visitor Profile Summary, these visitors and potential Las Vegas Boulevard pedestrians have the following characteristics: 84% are repeat visitors; there is an average of 2.1 adults in each party; 10% of the visitors brought children; and, visiting parties stayed an average of 3.7 nights. In addition, according to the Las Vegas Convention and Visitors Authority *4th Quarter 2011 Summary Marketing Bulletin,* 57% of all visitors came for vacation, pleasure or gambling, 16% for business/convention, and 27% for other reasons. The average expenditures per visitor for food and drink, shopping, shows, and sightseeing were approximately $526. Seventy-seven percent of all visitors gambled with an average gambling budget of approximately $447.

1.4 Literature Review

Las Vegas Boulevard (the "Strip") is a unique worldwide tourist destination. Research from other locations cannot be directly applied to this pedestrian environment. This section presents a review of relevant technical literature as it applies to this one-of-a-kind pedestrian environment and applicable background pedestrian literature for Las Vegas Boulevard.



Figure 1.1 – Study Corridor

1.4.1 Technical Literature

Technical engineering literature was reviewed and relevant literature was identified and summarized from the 1985 and 2010 editions of the Highway Capacity Manual (HCM) as well as other respected research on pedestrian movement.

Pedestrian Planning and Design – Fruin 1971

Pedestrian Planning and Design by Dr. John J. Fruin is one of the first publications to describe and quantify the space people need to walk and queue (stand in line). In this publication, Fruin introduced the concept of the body ellipse to define personal comfort zones of the individual.

His work also defined pedestrian flow volume for a walkway as the number of pedestrians per foot of walkway width per minute. The pedestrian flow volume was then used by Fruin to define walkway level of service by letter grade representing the freedom of walkway mobility. Another key factor in determining walkway conditions was to recognize that the "effective walkway" width is reduced from the total walkway width by the constricting effects of street impediments such as light standards, fire hydrants and refuse enclosures. The pedestrian walkway and queuing concepts identified by Fruin are the fundamental evaluation concepts used in this study.

To illustrate the concepts of LOS in relation to pedestrian volume and walkway width (W), Figure 1.3 was created pairing figures from *Pedestrian Planning and Design* by Fruin and pictures from the "Strip" during the data collection period. This visualization demonstrates the perception of level of service accompanied by the required square footage per person for each level. According to Fruin, at LOS D "the majority of persons would have their normal walking speeds restricted and reduced" and for LOS A thru C only minor conflicts exist. LOS E and F cause adjustment to walking gait, suggesting that the majority of the pedestrians would have to shuffle their feet to progress forward. At these levels of service contact with others is frequent and forward progress is solely determined by those upstream of the pedestrian traffic flow.

Highway Capacity Manual (HCM)

A significant amount of the research portrayed in the 1985 HCM and its most recent 2010 edition in regards to pedestrians and walkway level of service originated in the work of Dr. Fruin. The concept of the body ellipse defines the average male human body as an 18" depth and a 24" shoulder breadth, necessitating 3.0 square feet standing still (i.e., in a queue for a bus). The 2010 HCM also defined the pedestrian body ellipse which is shown in Figure 1.2 as adapted from the 2010 HCM.

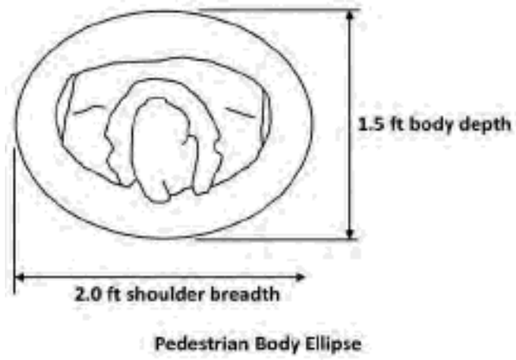


Figure 1.2 – 2010 Highway Capacity Manual Standards for Pedestrian Geometry



Picture 1.1 – Pedestrian Activity Level (Memorial Day Weekend 2012).



Source: Adapted from Fruin 1971.

Figure 1.3 – Level of Service Visual Comparison – Literature and Las Vegas Boulevard

Accounting for the body ellipse, the HCM defines pedestrians queuing LOS at seven square feet per person to provide a LOS C. Reducing the queue space down to three square feet per person provides a LOS D.

Level of service (LOS) is calculated differently for queued pedestrians versus walking pedestrians (where a walking space requirement is needed). The 2010 HCM has adopted two walking LOS scales, one determined by walking speed and the other by pedestrian flow rate.

Walking Speed LOS

Walking speeds in the 2010 HCM are developed from two studies that Fruin conducted identifying the average free-flow walking speed to be typically exceeding 145 feet per minute (or 2.4 ft/sec); speeds below that level should be considered restricted, causing "irregular human locomotion." Fruin's research found that the average walking speed varied between 3.5 and 4.5 ft/sec depending on the age of the pedestrian.

The 1985 HCM included, for the first time, in the manual a methodology for analyzing pedestrian level of service for walkways recognizing that "speed is an important level-of-service criterion because it can be easily observed and measured, and because it is a descriptor of the service pedestrians perceive." The 1985 HCM included the following statement regarding pedestrian walking speed and perceived service:

> "The analysis of pedestrian flow is generally based on *mean* or average, walking speeds of groups of pedestrians. Within any group, or among groups, there can be considerable differences in flow characteristics due to trip purpose, land use, type of group, age and other factors. Pedestrians going to and from work, using the same facilities day after day, exhibit higher walking speeds than shoppers [based on research conducted by Pushkarev and Zupan in 1975]. Older or very young persons will tend to walk at a slower gait than other groups. Shoppers not only tend to walk slower than commuters, but may decrease the effective walkway width by stopping to window shop. Thus in applying the techniques and numerical data the analyst should adjust pedestrian behavior which deviates from the regular pattern represented in the basic speed, volume and density curves" (HCM, 1985 pg. 13-6) (also included in HCM, 2010 pg. 4-29).

The above paragraph suggests that direct application of the LOS chart provided in the manual may not yield representative results and that a LOS C may not be the same for commuters as compared to tourists.

In describing the current pedestrian mode of travel, the current 2010 HCM makes a similar acknowledgement to walking speed as its proceeding editions:

> "Pedestrian walking speed is highly dependent on the characteristics of the walking population. The proportion of elderly pedestrians, and children in the population, as well as trip purpose, affect walking speed" (HCM, 2010 pg. 4-24).

The 2010 HCM also suggests that a default free-flow speed (i.e. an average pedestrian's speed on an otherwise empty sidewalk) of 5.0 ft/sec is appropriate based on average walking speeds. It should be noted that the 2009 Edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways" (MUTCD) has a recommended 3.5 ft/sec pedestrian walking speed to cross a street or highway, which is a decrease in walking speed of 4.0 ft/sec in previous editions. This slower walking speed is based on research conducted by the Transit Cooperative Research Program (TCRP), the National Cooperative Highway Research Program (NCHRP) and the Texas Transportation Institute (TTI). The LOS criteria included in the 2010 HCM equates a LOS rating of "C" to a minimum average walking speed of 4.0 ft/sec. If the MUTCD value of 3.5 ft/sec were used the corresponding LOS would be "E". This difference identifies the need for a more comprehensive study of existing walking speeds of Las Vegas Boulevard to document the average walking speed of a Las Vegas tourist. While flow rate, average space and volume/capacity ratios are used as LOS criterion in the 2010 HCM, average pedestrian speed is a reasonable measure of the service that pedestrians are receiving from a particular walkway.

The 2010 HCM suggests that generally a pedestrian speed of 4.0 ft/s or faster is considered desirable and a speed of 2.0 ft/s or less is considered undesirable. Again it should be noted that this "desirability" is generalized from national studies. These studies may or may not be representative of the pedestrians on Las Vegas Boulevard.

Table 1.1 displays the LOS criteria based on walking speed from the 2010 HCM.

Table 1.1 – Walking Speed LOS from 2010 HCM

LOS	Average Speed (ft/s)	Comments
A	>4.25	Ability to move in desired path, no need to alter movements
B	>4.17 - 4.25	Occasional need to adjust path to avoid conflicts
C	>4.00 - 4.17	Frequent need to adjust path to avoid conflicts
D	>3.75 - 4.00	Speed and ability to pass slower pedestrians restricted
E	>2.50 - 3.75	Speed restricted, very limited ability to pass slower pedestrians
F	≤2.50	Speeds severely restricted, frequent contact with other users

Pedestrian Volume/Flow Rate LOS

The 1985 HCM recommended an equation for finding pedestrian flow rate as:

$$v = \frac{V_{p15}}{15W_E}$$

where: v = pedestrian flow rate in ped/min/ft,

V_{p15} = peak 15-minute pedestrian count in ped/15-minute, and

W_E = effective walkway width in feet.

The 2010 HCM defines effective walkway width (W_E) as follows:

> "Effective walkway width is the portion of a walkway that can be used effectively by pedestrians. Various types of obstructions and linear features… reduce the walkway area that can be effectively used by pedestrian. The effective walkway width at a given point along the walkway is computed as follows:
>
> $$W_E = W - W_O$$
>
> where:
>
> W_E = effective walkway width (ft),
>
> W or W_T= total walkway width at a given point along the walkway (ft), and
>
> W_O = sum of fixed-point effective widths and linear-feature shy distances at a given point along walkway (ft)" (pg. 23-9, 2010 HCM).

As a reference, Figure 1.4 illustrates a portion of a sidewalk or walkway and the effective walkway width (W_E) created by fixed objects. According to the 2012 HCM:

> "Linear features such as the street curb, [a] low wall, [or a] building face each have associated shy distances. The shy distance is the buffer that pedestrians give themselves to avoid accidentally stepping off the curb, brushing against a building face, or getting too close to other pedestrians standing under awnings or window shopping. Fixed objects, such as [a] tree, have effective widths associated with them. The fixed-object effective width includes the object's physical width, any functionally unusable space (e.g., the space between a parking meter and the curb of the space in front

of a bench occupied by people's legs and belongings), and the buffer given the object by pedestrians" (pg. 23-9, 2010 HCM).

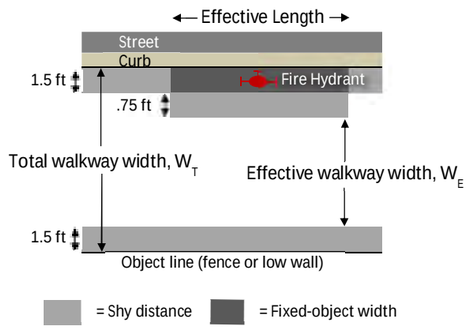


Figure 1.4 – Effective Walkway Width with Fixed Obstacles

Figure 1.4 also illustrates the effective length of a fixed object. As described by the 2010 HCM:

> "the effective width of a fixed object extends over an effective length that is considerably longer than the object's physical length. The effective length represents the portion of the walkway that is functionally unusable because pedestrians need to move to one side ahead of time to get around a fixed object. The effective length of a fixed object is assumed to be five times the object's effective width.
>
> "Typically, a walkway operational analysis evaluates the portion of the walkway with the narrowest effective width, since this section forms the constraint on pedestrian flow. A design analysis identifies the minimum effective walkway width that must be maintained along the length of the walkway to avoid pedestrian queuing or spillover" (pg. 23-10, 2010 HCM).

Table 1.2 summarizes the effective widths of a variety of typical fixed objects found along pedestrian facilities. The values in Table 1.2 can be used to estimate the impacts of walkway objects when specific walkway configurations are not available.

Once effective walkway widths (W_E) are established and hourly pedestrian demands are known, flow rates can be calculated and LOS determined.

The 2010 HCM recognizes that its pedestrian LOS methodology is limited in that it does not address LOS for pedestrians with disabilities, including vision or mobility impairments. Another limitation of the HCM methodology is the capacity of pedestrian facilities. Pedestrian facility capacity is based on research conducted on contained facilities where pedestrians cannot walk outside the designated walkway. Las Vegas Boulevard has many unconstrained walkway segments which allow pedestrians to step off the walkway into the street, resulting in a safety concern. The 2010 HCM states: "to avoid pedestrian spillover, it is desirable to design a walkway to achieve LOS C or better (i.e., a maximum of 10 ped/min/ft)".

Table 1.2 – Typical Fixed-Object Effective Widths from 2010 HCM

Fixed Object	Effective Width (ft)
Street Furniture	
Light pole	2.5-3.5
Traffic signal poles and boxes	3.0-4.0
Fire hydrants	2.5-3.0
Traffic signs	2.0-2.5
Parking meters	2.0
Trash cans (1.8 ft diameter)	3.0
Bus shelters (on sidewalk)	6.0-7.0
Landscaping	
Trees	3.0-4.0
Planter boxes	5.0

Table 1.3 defines pedestrian level of service (LOS) based on flow rate (ped/min/ft).

Table 1.3 – Flow Rate LOS from 2010 HCM

LOS	Flow Rate (p/min/ft)	Comments
A	≤5	Ability to move in desired path, no need to alter movements
B	>5 - 7	Occasional need to adjust path to avoid conflicts
C	>7 - 10	Frequent need to adjust path to avoid conflicts
D	>10 - 15	Speed and ability to pass slower pedestrians restricted
E	>15 - 23	Speed restricted, very limited ability to pass slower pedestrians
F	Variable	Speeds severely restricted, frequent contact with other users

The 2010 HCM suggests that LOS A through LOS C be typically applied to off-street pedestrian facilities based on pedestrian space, rather than for capacity conditions. Although Las Vegas Boulevard sidewalks parallel a relatively high vehicle volume street, various segments have constructed pedestrian buffers creating the atmosphere of an off-street pedestrian facility.

1.4.2 Background Literature

The pedestrian activity along Las Vegas Boulevard from Russell Road to Sahara Avenue has steadily increased over the years. Clark County conducted a study of the Resort Corridor in 1993 which was followed by an in depth pedestrian analysis of the "Strip" by Lee Engineering in 1994. The Lee study recommended specific measures be implemented by Clark County to improve the pedestrian walkway system and pedestrian safety of Las Vegas Boulevard. Many of the study recommendations were implemented by Clark County and were included in the 1994 ordinance of Title 16 Roads and Highways Chapter 16.11 Obstructive Uses of Public Sidewalks.

Since the implementation of "No Obstruction Zones" in the 1994 ordinance, many issues relating to pedestrian movements have been voiced by resort operators, the public, and the Board of County Commissioners. In efforts to address these issues, the Resort Corridor Workgroup was formed by the Clark County Board of Commissioners to identify action items to improve pedestrian safety and the experience of Las Vegas Boulevard (the "Strip"). The following is a summary of existing literature on the "Strip".

An Analysis of Existing Walkway Pedestrian Capacities along Las Vegas Boulevard South: Methodology. Discussion and Future Data Collection Requirements – Clark County Department of Public Works Traffic Management Division – 1993

In an attempt to quantify Las Vegas Boulevard's ability to carry pedestrians and its peak pedestrian characteristics, Clark County conducted a pedestrian analysis from Sahara Avenue to south of what was then the Hacienda Hotel/Casino. The Hacienda Hotel/Casino has since been razed and replaced by the Mandalay Bay Resort. The study corridor was approximately four miles in length. Four locations were selected to provide a representative sample of pedestrian activity along the "Strip":

- O'Shea's Casino – directly south of the Imperial Palace Hotel/Casino
- Harrah's Hotel/Casino
- Casino Royale Hotel/Casino
- El Morocco – directly south of the Riviera Hotel/Casino

Each of the pedestrian counting sites was located on the east side of Las Vegas Boulevard (the "Strip"). The distance from the southernmost data collection point to the northernmost data collection point was approximately 1.5 miles.

The study documented walkway widths along Las Vegas Boulevard to be generally 6, 7.5, 10 or 12 feet wide although many sections contained physical objects which reduced their effective width (W_E).

A total of seven observed hours of pedestrian data was collected during the first two weeks of April 1993. Three of the locations were counted on a weekday from 10:15 AM to 11:15 AM and from 3:00 PM to 4:00 PM while the fourth (O'Shea's) was only counted from 3:00 PM to 4:00 PM. The County relied on previous pedestrian counts that were collected at the MGM Grand Hotel/Casino in April 1991 to conclude that peak pedestrian volumes occur early Saturday afternoons around 2:00 PM and late Saturday evenings, around 10:00 PM. The data from the 1991 MGM Grand Hotel/Casino study was also used to calculate conversion factors from weekday to weekend volumes. Clark County then used the adjustment factors from the 1993 weekday counts to estimate weekend peak volumes.

Clark County found that three of the four locations were "operating at unacceptable LOS's for peak pedestrian volumes." These three sites were all located within 0.5 miles of each other suggesting that this congestion might not be representative along the entire four miles of the "Strip". The study recommended that unnecessary obstructions be prohibited and that the elimination of "hawkers" (hand billers) and news racks was desired. A minimum effective walkway width (W_E) of 5.0 feet was also recommended in all "high volume pedestrian areas."

Las Vegas Boulevard South Pedestrian Walkway Study - Lee Engineering – 1994

In 1994, a pedestrian study was commissioned by the Nevada Resort Association. This study is considered to be the first comprehensive study of the Las Vegas Boulevard pedestrian walkway environment. Previous studies had been conducted, but with either a very narrow scope or a scope that was too broad. The study area extended a total of 2 ¾, miles from Circus Circus Drive/Riviera Boulevard to one quarter mile south of Tropicana Avenue. The study area included 31 resorts, two major retail properties, the Las Vegas Convention Center and other small retail businesses and motels.

The study followed the methodology described in the 1985 Highway Capacity Manual (HCM) for calculation of pedestrian level of service and included:

- Initial field investigation
- Preliminary data collection
- Pedestrian volume collection
  - Pedestrian volume data collection site selection
  - Walking observations
  - Elevated vantage point observations
- Walkway inventory
- Fixed and temporary obstruction determination
- Dynamic obstruction experiment
- Preparation of as-built drawings
- LOS calculations

Pedestrian volume data was recorded at seven data collection sites (including a total of 31 data collection points) between the hours of 10:00 AM to 1:30 AM January 6 through January 9 (Thursday – Sunday). The data collection was scheduled to coincide with the Consumer Electronics Show in an attempt to analyze the peak pedestrian conditions. Three video cameras were used for the data collection and progressively moved from location to location to obtain representative samples of each data collection site. A total of 33 hours of video data was collected which resulted in over 50 hours of individual pedestrian sidewalk cross section observations.

To reduce and summarize the video data, a computer program was written and used to count and classify the number of pedestrians in 30-second intervals using the following categories:

- Pedestrians on walkway;
- Pedestrians pushing a stroller;
- Wheelchairs;
- Bicycles on walkway;
- Pedestrians in the street;
- Pedestrians off walkway; and
- Other (pedestrians on crutches, pedestrian pushing a grocery cart, skateboarder, etc.)

Although the 1985 HCM uses a 15-minute analysis period, this 1994 study analyzed LOS using a 30-second interval. The 1985 HCM equation for pedestrian flow is:

$$v = \frac{V_{p15}}{15W_E}$$

where: v = pedestrian flow rate in ped/min/ft,

V_{p15} = peak 15-minute pedestrian count in ped/15-minute, and

W_E = effective walkway width in feet.

The 1994 study used the following modified flow rate calculation:

$$v = \frac{2 * V}{W_E}$$

where : v = pedestrian flow rate in ped/min/ft,

V = sum of all pedestrians counted during that 30-second interval, and

W_E = effective walkway width in feet.

The 1985 HCM summarizes level of service (LOS) assignments based on flow rate (ped/min/ft) and other variables in Table 1.4.

Table 1.4 – Pedestrian Level of Service from 1985 Highway Capacity Manual

		Expected Flows and Speeds		
Level of Service	Space (sq ft/ped)	Ave Speed, *S* (ft/min)	Flow Rate, *v* (ped/min/ft)	Vol/Cap Ratio, *v/c*
A	≥ 130	≥ 260	≤ 2	≤ 0.08
B	≥ 40	≥ 250	≤ 7	≤ 0.28
C	≥ 24	≥ 240	≤ 10	≤ 0.40
D	≥ 15	≥ 225	≤ 15	≤ 0.60
E	≥ 6	≥ 150	≤ 25	≤ 1.00
F	< 6	< 150	----Variable----	

The study showed considerable variation in pedestrian flow rates between 0.0 and 29.3 ped/min/ft. A major finding of the study was that pedestrians are likely to leave the defined walkway where flow rates reach 8 ped/min/ft, which equates to a LOS C. This is less than the 2010 HCM pedestrian flow rate maximum of 10 ped/min/ft to avoid spillover (the LOS D threshold).

The Lee Engineering study also noted that the heaviest observed pedestrian volumes were seen between the Treasure Island Hotel/Casino and the Mirage Hotel/Casino following the Buccaneer Bay show, which has since been converted to the Siren show.

The study recommended no-obstruction zones for the pedestrian walkways along Las Vegas Boulevard as written into Chapter 16.11 of the Clark County Code, including the use of no-obstruction zones at intersection, mid-block crosswalks and driveway entrances. Lee Engineering made the recommendation that maintaining these areas free from obstructions increases the ability of drivers to see pedestrians and properly judge walking speeds. With increased visibility of pedestrians by drivers, public safety on the sidewalks is enhanced.

Lee Engineering also recommended an effective walkway width (W_E) of ten feet minimum for new construction along Las Vegas Boulevard to allow for sufficient walkway width (W) to accommodate future pedestrian loads. This recommendation has been adopted by Clark County and has become a condition of development for all new casino and resort development along Las Vegas Boulevard.

Obstructive Uses of Public Sidewalks – Chapter 16.11 – Clark County, Nevada, Code of Ordinances

Clark County adopted an ordinance in 1994 within their municipal code that stated that "the existing pedestrian environment is inadequate as a transportation system and lacking in many safety features." The ordinance goes on to say that "a great number of persons are engaged in uses of the public sidewalks which create undue obstruction, hindrance, blockage, hampering, and interference with pedestrian travel." The ordinance recognizes that when public sidewalks become congested, large numbers of pedestrians are walking in the streets (Ord. 1617 § 1 (part), 1994). It also noted that traffic signal indications were at times being ignored by pedestrians during periods of heavy pedestrian congestion, increasing pedestrian and vehicle conflicts. The ordinance identified specific uses that were permitted to obstruct the public sidewalk such as street signs, traffic signals, fire hydrants, construction equipment with permit, and any "construction, modification, addition or attraction abutting private property occurring or in place before May 1, 1994." Obstructive uses are not permitted if the use either "causes the LOS for the sidewalk to decline below LOS C; or result in a significant threat to or degradation of the safety of pedestrians."

Warning signs are required under the ordinance to be posted at least every quarter mile along Las Vegas Boulevard stating "RESORT DISTRICT: NO OBSTRUCTIVE USES PERMITTED ON PUBLIC SIDEWALKS AT LOCATIONS DESIGNATED BY A WHITE STRIPE, PURSUANT TO CLARK COUNTY CODE CHAPTER 16.11" (see Picture 1.2).



Picture 1.2 – Existing Ordinance Sign on Las Vegas Boulevard.

Following the recommendations of the Lee Engineering Pedestrian Study, obstructive use zones are also clearly defined within the ordinance in order to enhance safety at the following locations:

- In or within 150 feet of any mid-block crosswalk, as measured from the crosswalk parallel to the sidewalk curb toward the direction of approaching vehicular traffic;
- In or within 50 feet of any mid-block crosswalk as measured from the crosswalk parallel to the sidewalk curb away from the direction of approaching vehicular traffic;
- In or within 100 feet of any crosswalk located at an intersection of streets or highways, as measured parallel to the sidewalk curb in the direction of approaching vehicular traffic from the point of curvature of the curb or the marked edge of the crosswalk, whichever is less;
- In or within 50 feet of any crosswalk located at an intersection of streets or highways, as measured parallel to the sidewalk curb away from the direction of approaching vehicular traffic from the point of curvature of the curb or the marked edge of the crosswalk, whichever is less;
- In or within 50 feet of any driveway providing ingress into or egress from any private or non-public property, as measured parallel to the sidewalk curb outward from the point of the curb cut; and
- On or within any section of the public sidewalk which has been determined to have an average LOS of C or below, during the hours at which LOS declines below LOS C, as determined by a traffic study conducted by a registered professional engineer of the Clark County department of public works according to the methodology set forth in the Las Vegas Boulevard South Pedestrian Walkway Study.

The designation of the "No Obstruction Zones" is delineated with a white painted line on the public sidewalk. The painted line locations are identified on a map adopted by the Board of County Commissioners. Section 16.11.050 of the ordinance clearly states that "pavement markings on the public sidewalk or signs designating the limits of the "No Obstruction" zone, or plaques, monuments or medallions placed in the public sidewalk marking areas deemed to be no obstruction zones on the basis of level of service (LOS), as set forth in Section 16.11.020 shall also specify the hours during which the area is a no obstruction zone." The affixed penalty for violation according to the ordinance was a term not to exceed six months in county jail or a fine not to exceed $1,000, or both. A full text copy of the ordinance is provided in Exhibit C.

Resort Corridor Workgroup

Under the direction of the Clark County Board of Commissioners, the Resort Corridor Workgroup was established in August 2011 to discuss and address issues along Las Vegas Boulevard from Sahara Avenue to Russell Road. This workgroup consists of executives from the gaming community, representatives from the Las Vegas Metropolitan Police Department, the Nevada Resort Authority, and Clark County. Recommendations to enhance the pedestrian experience and safety were developed by the workgroup and presented to the Clark County Board of Commissioners for their consideration in April 2012. In relation to this study the workgroup recommended:

- The County should amend existing county code or adopt a new ordinance that restricts activities on the public sidewalks of the Resort Corridor that pose a potential risk to the safety of pedestrians. The ordinance might address the following issues, with exceptions for special events or permitted activities:
  - The use of unicycles, bicycles and other types of cycles, skateboards, roller skates, in-line skates, hula hoops larger than 4 feet in diameter and shopping carts.
  - The launching or throwing of projectiles or other objects into or through the air.
  - The use of items or engaging in actions that pose a potential risk to pedestrians (to be more specifically defined in the ordinance).
- In order to provide for pedestrian safety and to eliminate pedestrian congestion, each Resort Property is encouraged to work with the County to clarify the boundaries between public and private sidewalks.
- With respect to the provisions of Clark County Code Chapter 16.11 on obstructive uses of public sidewalks, the County should:
  - Revisit the criteria for the current designations of "no obstruction zones" and renew the enforcement of the "no obstruction zones" that still meet the criteria.
  - Review the provisions of Chapter 16.11 including contracting for a new pedestrian study.
  - Following the completion of a new pedestrian study, update the zones and amend provisions of Chapter 16.11 as necessary.
  - Amend the relevant provisions of Chapter 16.11 to clarify that pedestrian bridges are for the prompt and safe movement of pedestrians and that, like crosswalks, stopping and standing on pedestrian bridges are prohibited.
  - After completion of the new pedestrian study provided for in the recommendation above, the County should consider adopting an ordinance that establishes time, place and manner restrictions on First Amendment activities on public sidewalks along the Resort Corridor that would promote public safety, welfare and other legally protected interests to the County.

Previous Las Vegas Boulevard Pedestrian Studies

With the planning of pedestrian bridges and County requirements for site development traffic impact studies to evaluate existing and future sidewalks with new construction, numerous pedestrian counts have been conducted along Las Vegas Boulevard. Table 1.5 is a partial summary of past pedestrian volume counts conducted along Las Vegas Boulevard.

Table 1.5 – Pedestrian Counts along Las Vegas Boulevard

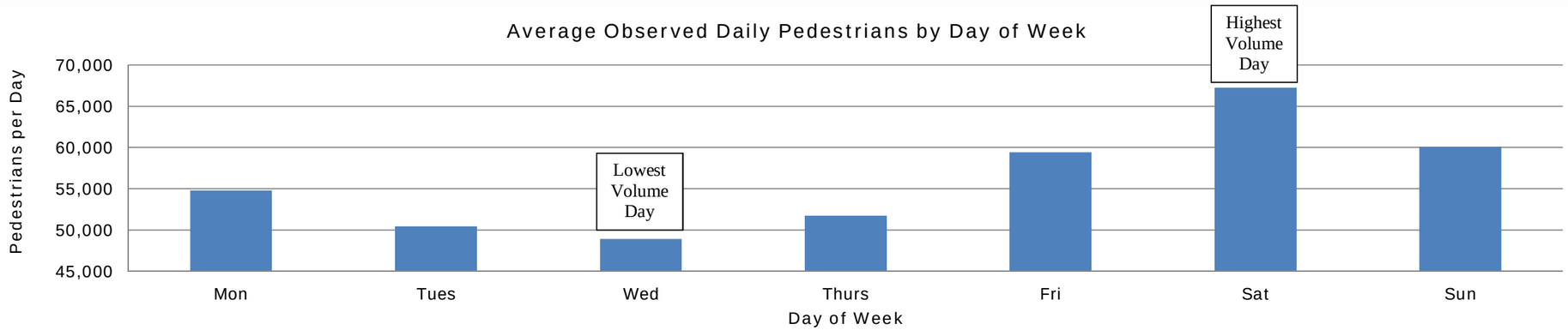
Date	Location	15-minute Peak Volume
May 1997	New York-New York	605
July 2003	Tropicana	78
August 2007	Hilton Grand	119
March 2006	Paris	1,088
May 2007	Sahara	162
September 2007	CityCenter	866
April 2009	Showcase Mall	984
September 2011	Imperial Palace	1,027

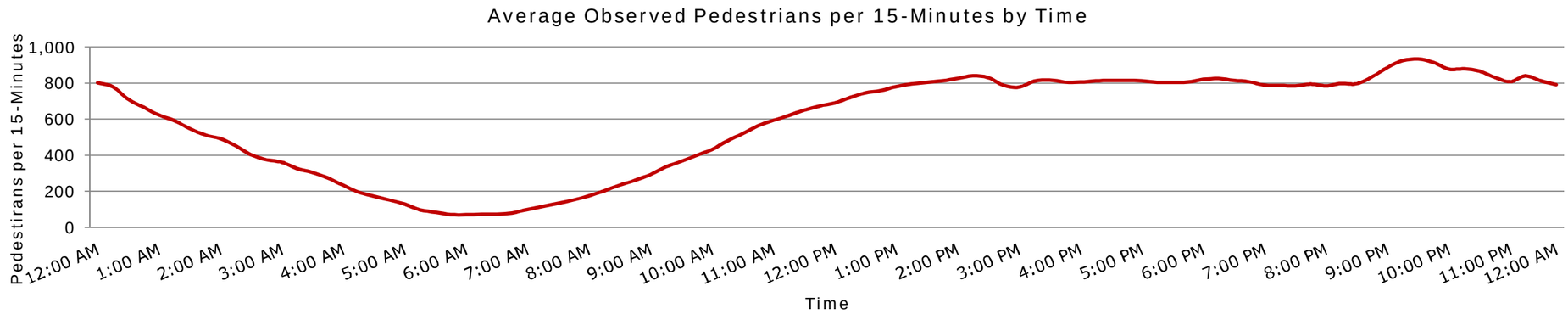
2010 Caesars International Pedestrian Study

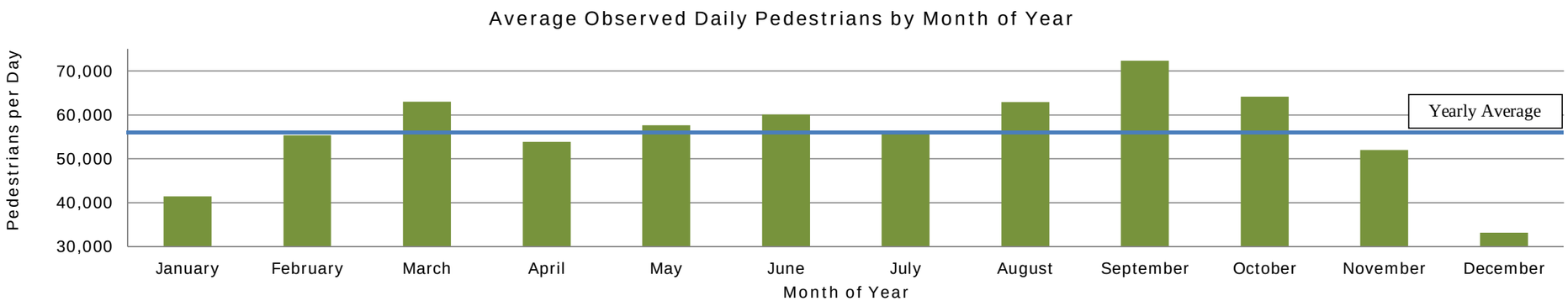
One of the most comprehensive efforts to observe pedestrians along Las Vegas Boulevard was conducted by Caesars International. The data from this private counting program was released to the County for use in this study. Pedestrian activity was counted from a video camera in front of the Imperial Palace Hotel/Casino from December 2009 through November 2010. Nearly 5,000,000 pedestrians were observed during a sampling of 90 count days. The pedestrian count summary contained the following relevant conclusions:

- Saturdays and Sundays experienced the highest pedestrian volumes, averaging 67,246 and 60,112 pedestrians per day respectively.
- Wednesdays experienced the lowest pedestrian volumes averaging 48,966 pedestrians per day.
- Pedestrian flow rates are the lowest in the morning around 6:30 AM.
- Pedestrian activity increases throughout the morning hours and into early afternoon until about 2:00 PM
- The pedestrian flow rates remain consistently high from 2:00 PM throughout the day until they begin to drop off after midnight.
- The highest pedestrian volumes were experienced during the month of September.
- December experienced the lowest monthly volumes.

Summary graphs from the year-long pedestrian counting program for hourly, daily and monthly observations are provided in Figure 1.5.







PEDESTRIAN VOLUME TRENDS OBSERVED AT IMPERIAL PALACE

FIGURE 1.5

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2 Study Approach and Methodology

The study approach was developed to achieve the goal of identifying locations of pedestrian walkway congestion by time of day and day of week along Las Vegas Boulevard from Russell Road to Sahara Avenue. To achieve this goal and to provide additional information on the Las Vegas Boulevard pedestrian environment, the following key study tasks were identified:

- Documentation of Existing Walkway Conditions
- Observation of Pedestrian Volumes
- Documentation of Pedestrian Walking Speeds
- Locations of Non-Permanent Obstructions
- Analysis and Evaluation of Collected Data
- Summarization of Conclusions and Recommendations

The study methodology for data collection was based on previous pedestrian observations that had determined Saturday to be the day of highest pedestrian activity on the "Strip". The data collection effort was also structured to identify variations in pedestrian activity by time of day and day of week including a Monday holiday weekend. The approach and method of pedestrian walkway volume and walking speed analysis was based upon the pedestrian level of service (LOS) procedures of the 2010 Highway Capacity Manual. Even though through the literature review there are recognized limitations to the manual's evaluation procedures, the use of the nationally recognized Highway Capacity Manual to evaluate and categorize pedestrian activity by its level of service metric is considered appropriate for this study. Upon reviewing the collected data and its associated LOS calculations, study recommendation and conclusions were developed.

2.1 Existing Conditions

Kimley-Horn and Associates conducted an inventory of existing conditions along the study corridor of Las Vegas Boulevard between Russell Road and Sahara Avenue. These efforts included the collection of existing pedestrian volume and walking speed data, historical vehicle volume data, walkway widths, location of news racks, bus stops, transit ridership, pedestrian containment, pedestrian/vehicle crash data and coordination with Clark County to document sidewalks in the public right-of-way and those within private easements.

The field inventory was performed in April and May 2012 by Kimley-Horn and Associates staff. The staff members walked the length of the study corridor a total of eight times to gather a comprehensive inventory of the pedestrian realm along Las Vegas Boulevard from Russell Road to Sahara Avenue. The field review included:

- Identification of permanent obstructions
- Non-functional driveways
- Existing no-obstructive use zones and accompanying white stripe
- Existing County ordinance 16.11 signs
- Existing sidewalk widths
- News rack locations
- Bus stop locations (and classification)
- Pedestrian containment (both on the walkway and in the median)
- General safety observations

The following sections detail the inventory of existing conditions along Las Vegas Boulevard from Russell Road to Sahara Avenue. The conducted research of public right-of-way and pedestrian easements, pedestrian/vehicle accident data, and vehicle volume data are also discussed.

2.1.1 Public Right-of-Way and Pedestrian Easements

Research conducted in close coordination with Clark County Public Works staff yielded a comprehensive exhibit that was prepared of the existing public walkways and the privately owned and maintained pedestrian walkways that are available to the public for pedestrian access. Exhibit A displays the existing public right-of-ways and pedestrian easements along Las Vegas Boulevard from Russell Road to Sahara Avenue. It should be noted that this exhibit is the summation of the best available information for this study. Picture 2.1 illustrates a location with both public and privately maintained walkways with a public pedestrian easement.

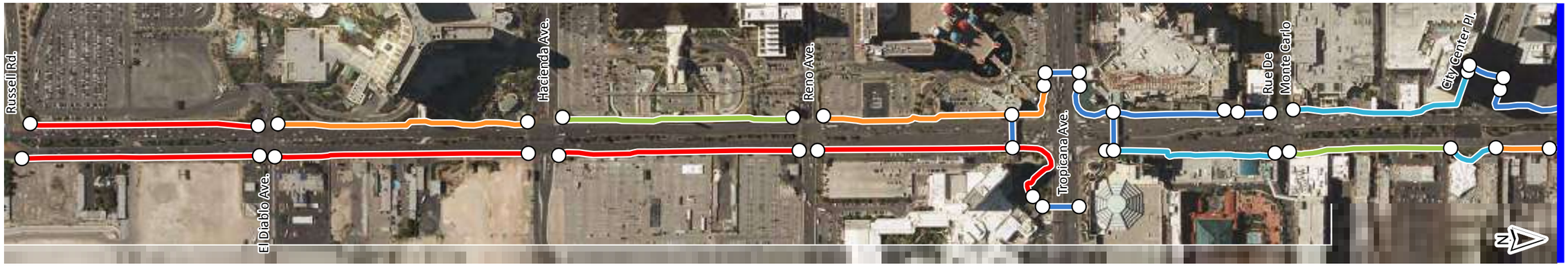


Picture 2.1 – Example of walkway with public ROW, pedestrian easement and private walkway.

2.1.2 Existing Walkway Widths (W)

To determine a pedestrian level of service along Las Vegas Boulevard, the total walkway width (W) and effective walkway width (W_E) need to be established. Through field measurements and survey records research, the walkway widths along study corridor were documented. Specifically, the walkway widths (W and W_E) were documented at each of the pedestrian volume data count locations and at various locations throughout the study corridor that were representative of the conditions along defined walkway segments. At these locations, the effective walkway widths (W_E) were calculated using the 2010 HCM methodology as described in Section 1.4.1. Shy distances were applied to permanent obstructions (i.e. fences, landscaping, trash enclosures, utility poles, bus shelters, fire hydrants, etc.) with the resulting width being the effective walkway widths (W_E).

Figure 2.1 shows the typical effective walkway widths (W_E) on the east and west sides of Las Vegas Boulevard. As a reference, the current design requirement for new construction within the Resort Corridor is to provide a minimum of ten feet of effective walk width (W_E) for all pedestrian facilities.



TYPICAL EFFECTIVE WALKWAY WIDTH (W_E) PER SEGMENT

FIGURE 2.1

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2.1.3 Newsracks

The study corridor of Las Vegas Boulevard has many permitted obstructive uses per Clark County Code 16.11 on its walkways. One example of a permitted obstruction is the newsrack. Newsracks allow pedestrians to obtain various forms of literature, either free or for a nominal fee. Newsracks are only permitted in locations licensed by Clark County. These permitted locations are referred to as "medallion" locations. The location of each newsrack in the study corridor was field verified on April 18, 2012. A total of 237 individual newsracks at 40 locations were observed during the field visit, with 138 newsracks at 23 locations on the east side and 99 newsracks at 17 locations on the west. At all locations except one, the individual newsracks are clustered together in a group of six. At the time of the field study, one location (southernmost location on the west side of Las Vegas Boulevard within the study corridor) was found to have a cluster of only three newsracks. The locations of medallion and non-medallion newsracks are shown in Figure 2.2.

Newsracks are installed in various locations in relation to the walkway. Newsracks were typically placed at the front of the walkway (between the street and the walkway), at the back of the walkway or against a pedestrian containment barrier. Picture 2.2 through Picture 2.4 illustrate examples of these typical installations.



Picture 2.2 – Newsracks at Front of Walkway.



Picture 2.3 – Newsracks at Back of Walkway.



Picture 2.4 – Newsracks against Pedestrian Containment.









Legend

News Racks

- Medallion Locations
- Non-Medallion Locations

NEWSRACK LOCATIONS

FIGURE 2.2

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2.1.4 Bus Stops

The study corridor of Las Vegas Boulevard is serviced by two bus routes, the DEUCE and the SDX. Picture 2.15 shows both the typical double decker DEUCE bus and the SDX bus at the Wynn bus stop.



Picture 2.5 – SDX and DEUCE Buses at Wynn Bus Stop.

Twenty-Nine (29) bus stops are located along Las Vegas Boulevard between Russell Road and Sahara Avenue, two of which do not have a shelter structure. These 29 bus stops were all field-verified and classified into the following three types:

- Type 1 – (Isolated) – These bus stops are separate from the main pedestrian walkway; typically, a separate walkway is provided from the main walkway to access the bus stop and shelter. Figure 2.3 illustrates both graphically and pictorially a Type 1 bus stop. A total of five (5) Type 1 bus stops were found within the study corridor, with their locations shown on Figure 2.6.

- Type 2 – (Front of Walk) – Bus stops were classified as Type 2 if the pedestrian walkway was located behind the bus shelter. Figure 2.4 illustrates both graphically and pictorially a Type 2 bus stop. A total of ten (10) Type 2 bus stops were found within the study corridor, with their locations shown on Figure 2.6.



Figure 2.3 – Type 1 (Isolated) Bus Stop Example



Figure 2.4 – Type 2 (Front of Walk) Bus Stop Example

- Type 3 – (Behind Walk) – This classification was applied to bus shelters and 2 bus benches that are located behind the pedestrian walkway. Type 3 bus stops route pedestrian traffic between the bus shelter or bus benches and the street. Figure 2.5 illustrates both graphically and pictorially a Type 3 bus stop. A total of fourteen (14) Type 3 bus stops were found within the study corridor, with their locations shown on Figure 2.6.



Figure 2.5 – Type 3 (Behind Walk) Bus Stop Example

Table 2.1 summarizes the 29 bus stops by type, location and transit direction of travel.

Table 2.1 – Bus Stop Summary

BUS STOP NAME	Type 1 (Isolated)	Type 2 (In Front of Walk)	Type 3 (Behind Walk)
	Sky Condominiums (S)	Riviera (N)	Sahara (S)
	Convention Center (N)	Circus Circus (S)	Hilton Grand Vac. (N)
	Fashion Show (S)	Venetian (N)	Hilton Grand Vac. (S)
	Planet Hollywood (N)	Mirage (S)	Turnberry Place (N)
	MGM-Showcase (N)	Caesars Palace (S)	Convention Center (S)
		Flamingo (N)	Encore (S)
		Paris (N)	Wynn (N)
		Monte Carlo (S)	Treasure Island (S)
		Excalibur (S)	Bellagio (S)
		Four Seasons (N)	Polo Towers (N)
			Tropicana (N)
			Luxor (S)
			Luxor (N)
			Mandalay Bay (S)

(N) – Northbound Transit Stop, Eastside of Las Vegas Boulevard
(S) – Southbound Transit Stop, Westside of Las Vegas Boulevard

To supplement the field inventory data, ridership at each stop within the study corridor was obtained from the Regional Transportation Commission of Southern Nevada (RTC). Boarding and alighting data was provided by the RTC for Saturday, May 26 and Saturday, June 16, 2012.



Legend

Bus Stop

- 1 Type 1 (Isolated)
- 2 Type 2 (In Front of Walk)
- 3 Type 3 (Behind Walk)

BUS STOP TYPE AND LOCATION

FIGURE 2.6

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2.1.5 Pedestrian/Vehicle Crash Data

With large numbers of pedestrian and vehicle traffic along Las Vegas Boulevard, pedestrian safety is an important issue. Figure 2.7 displays the 2010 Average Annual Daily Traffic (AADT) for Las Vegas Boulevard and the connecting street network. With vehicle demands of over 50,000 vehicles each day, pedestrian safety is inherently a concern.

A summary of the most recent crash data from the Nevada Department of Transportation (NDOT) showed that from October 2008 to September 2011, 2,433 crashes between vehicles and pedestrians occurred within Clark County. Of those 2,433 crashes, 63 or 2.6% occurred on Las Vegas Boulevard in the four-mile segment between Russell Road and Sahara Avenue. There were a total of 124 pedestrian/vehicular crashes in Clark County that resulted in fatalities for the three year period. Of those 124 crashes, 1 or 0.8% occurred within the study corridor. Picture 2.6 shows emergency vehicles on Las Vegas Boulevard.



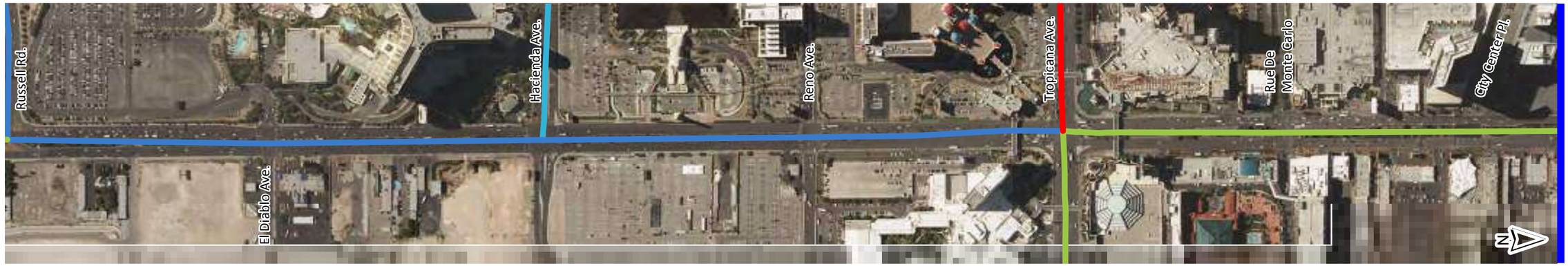
Picture 2.6 – Emergency Vehicles on Las Vegas Boulevard.

Figure 2.8 shows the locations and severity of the pedestrian/vehicle crashes within the study corridor.

Upon reviewing Figure 2.8, one can see that the pedestrian/vehicle crashes occur throughout the full length of the “Strip” from Russell Road to Sahara Avenue. It can also be seen that 11 crashes occurred within intersections served by pedestrian bridges constructed with pedestrian containment measures. Picture 2.7 shows the typical evening traffic on the “Strip”.



Picture 2.7 – Vehicle Activity on Holiday Saturday of Memorial Day Weekend 2012.









Legend

2010 AADT

- 25,000 or Less
- 25,001 - 50,000
- 50,001 - 75,000
- 75,001 - 100,000
- Greater than 100,000

2010 AVERAGE ANNUAL DAILY TRAFFIC (AADT) - VEHICLES

FIGURE 2.7

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Legend

Pedestrian/Vehicle Crash Severity

- Pedestrian Fatality
- Pedestrian Injury
- Property Damage Only

Source: NDOT Safety Engineering
Locations are approximate based on NDOT georeferencing

PEDESTRIAN CRASH LOCATION AND SEVERITY - OCTOBER 2008 TO SEPTEMBER 2011

FIGURE 2.8

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2.1.6 Pedestrian Containment

Pedestrian containment is a physical barrier or a system of barriers that act to restrict and direct pedestrian movements. They can also be used to separate pedestrians from adjacent hazards such as an adjacent roadway and its vehicle traffic. Pedestrian containment continues to evolve along Las Vegas Boulevard as new walkway and roadway projects are constructed. Pedestrian containment measures along Las Vegas Boulevard (the "Strip") have been developed over the years in many forms. Within the study corridor, pedestrian containment is located within the roadway median and on the curbside adjacent to the travel lanes of Las Vegas Boulevard. Pictures Picture 2.8 through Picture 2.12 show the types of containment barriers that have been constructed that include:

- Decorative concrete or brick walls
- Decorative metal fencing
- Concrete median barriers
- Rope and Cable barriers
- Elevated walkways
- Landscape treatments

The location and length of existing pedestrian containment was field verified as part of this study and is illustrated in Figure 2.9. A total of 13,360 linear feet of curbside containment was identified, along with 3,100 linear feet of median containment.



Picture 2.8 – Back of Curb Concrete Wall and Landscape Treatment.



Picture 2.9 – Metal Fence Median Barrier.



Picture 2.10 – Concrete Median Barrier.



Picture 2.11 – Back of Curb Cable Barrier.



Picture 2.12 – Back of Curb Elevated Landscaping Barrier.



Legend

Pedestrian Containment

- Curb - 13,360 LF
- Median - 3,100 LF

PEDESTRIAN CONTAINMENT LOCATIONS

FIGURE 2.9

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2.1.7 Construction Activities

Another key element documented during the course of the study, was the location of construction and maintenance activities within the study corridor that could influence walking speeds and pedestrian volumes during the observation periods. Some of the noted activities included:

- Renovations at the MGM Grand Hotel/Casino
- The Caesars Linq project along the frontage of the former O'Shea's Casino and Imperial Palace Hotel/Casino
- Sidewalk reconstruction at the Venetian Hotel/Casino
- Building / signage modifications at Harmon Center

Picture 2.13 through Picture 2.21 illustrate some of the construction and maintenance activities encountered during the data collection phase of the study.



Picture 2.13 – South Entrance to Pedestrian Walkway through Linq Construction.



Picture 2.14 – Pedestrian Walkway through Linq Construction.



Picture 2.15 – Pedestrian Bridge Detour at Harmon Center from Cosmopolitan Hotel/Casino.



Picture 2.16 – Caesars Linq Construction.



Picture 2.18 – Venetian Hotel/Casino Walkway Construction.



Picture 2.20 – MGM Grand Hotel/Casino Renovation Detour.



Picture 2.17 – Bus Turnout Construction at Harrah's Hotel/Casino.



Picture 2.19 – Building/Signage Modifications at Harmon Center.



Picture 2.21 – Landscaping/Utility Construction at the Flamingo Hotel/Casino.

2.2 Data Collection

To capture the variations in pedestrian activity and the pedestrian environment along Las Vegas Boulevard from Russell Road to Sahara Avenue, a data collection program was established for the study. The data collection program primarily focused on the collection of pedestrian volume data and walking speeds for the purpose of documenting the location of pedestrian congestion by time of day and day of week within the study corridor. The data collection effort was also intended to build upon and update the findings of the 1994 Lee Engineering *Las Vegas Boulevard South Pedestrian Study*. During the data collection phase of the study, non-permanent obstructions were observed. It is important to note that the term "non-permanent obstruction", for the purposes of the data collection phase of the study and for this report, is defined as an individual who could obstruct the pedestrian walkway while engaging in any of the following activities within the walkway: hand billing, performing, soliciting or selling.

Several factors influenced the development of the data collection program:

- Determination of observation times (Day of week – Time of day)
- Location of pedestrian observation sites
- Method of pedestrian counting
- Method of walking speed determination
- Observation of non-permanent obstructions

From the conducted literature review, Saturday was first identified in the 1993 Clark County Public Works study as the day of peak pedestrian volume. The peak time periods of the day were reported to occur around 2:00 PM and in the late evening around 10:00 PM. These findings were reconfirmed by the year-long 2010 Caesars International Pedestrian Study (see Figure 1.5). The Caesars study also confirmed the peak pedestrian times could be expected to occur between 2:00 PM and midnight. In consultation with the County, the primary pedestrian volume data collection times for this study were identified for a Saturday of a holiday weekend and on a typical Saturday. Based upon the study schedule, May 26, 2012, the Saturday of Memorial Day Weekend, and June 16, 2012 were selected.

Memorial Day Weekend provided congested pedestrian conditions for Las Vegas Boulevard (the "Strip"). According to Priceline.com and Orbitz.com, the number one travel destination for Memorial Day Weekend 2012 was Las Vegas. Information complied by the Las Vegas Convention and Visitors Authority determined the Resort Corridor hotel occupancy for the 2012 Memorial Day weekend as 96.0% (this total includes some hotels not located on Las Vegas Boulevard and within the study corridor). A number of large events were scheduled at numerous venues along the study corridor including concerts, comedians, and an Ultimate Fighting Championship (UFC) event. Picture 2.22 illustrates the activity level observed on Saturday, May 26, 2012.

The Las Vegas Convention and Visitors Authority verified June 16 as a typical summer Saturday with no significant events occurring and reported the Resort Corridor hotel occupancy for the 2012 weekend of June 16 as 94.7% (this total also includes some hotels not located on Las Vegas Boulevard and within the study corridor).



Picture 2.22 – Activity Level on Memorial Day Weekend.

To verify the daily and weekday pedestrian characteristics reported in the 2010 Caesars International Study for the sidewalk in front of Imperial Palace Hotel/Casino were applicable for other sections of the study corridor; additional seven-day pedestrian counts were included in the data collection program. Six video cameras were used to observe pedestrian activities for 14 days each. Four video cameras were installed by Clark County for the study and two Metropolitan Police Department observation cameras were used for the data collection. The seven-day observations were programmed to occur between May 25 – May 30 and June 15 – June 21 (including the two primary study days). The six observation sites selected to represent the study corridor include:

- Westside sidewalk at New York-New York Hotel/Casino
- Eastside sidewalk at Harley Davidson Cafe
- Westside sidewalk at Bellagio Hotel/Casino
- Pedestrian Bridge between Caesars Palace Hotel/Casino and Bill's Gamblin' Hall & Saloon
- Eastside sidewalk at Venetian Hotel/Casino
- Westside sidewalk at Treasure Island Hotel/Casino

The pedestrian observation sites for the data collection program were selected based upon the goal of documenting variations in pedestrian volumes along Las Vegas Boulevard between Russell Road and Sahara Avenue. The preferred method of pedestrian observation for the study was to use video recordings. Coordination with the gaming industry proved extremely helpful in identifying locations where existing surveillance cameras could be made available for the data collection program. Where video observation coverage was not available, manual count locations were identified. The pedestrian count locations identified for the study are summarized in Figure 2.10. The locations are on the east and west sides of Las Vegas Boulevard as well as the pedestrian bridges for the entire 4.2 miles of the study corridor. The observed pedestrians during the video and manual counts were classified as assisted or unassisted. The assisted pedestrians were defined as pedestrians who use canes, wheelchairs or scooters. By classifying the pedestrian flow, the collected data can determine the percentage of individuals who may be traveling at a slower walking speed.

The pedestrian volume data used in this study is the result of a total of 192 hours of manual counts and 2,568 hours of recorded video at 38 unique locations within the study corridor. These 38 locations included 12 pedestrian bridges (9 video and 3 manual) and 24 walkway locations (14 video and 10 manual). This report and its conclusions are based upon approximately 4,835,000 observed pedestrians within the study corridor as counted between May 25 and June 22, 2012.

A walking speed study was developed to document variations in pedestrian walking speeds as a part of the data collection program. During the peak pedestrian periods (1:00 PM to 12:00 AM) of the primary pedestrian volume observation days, pedestrian walking speeds were observed. To be able to compare peak period walking speeds with non-congested conditions, a free-flow walking study was also conducted. The free-flow walking speed study was programed to occur at the time of low (non-congested) pedestrian volumes within the study corridor. Using the year-long 2010 Caesars International Pedestrian Study (see Figure 1.5), 9:00 AM Wednesday morning was selected to observe free-flow walking speeds. For the study, Wednesday, April 25 was selected to conduct the free-flow study.

The collected pedestrian walking speed data for this study is the result of 160 man-hours of data collection by agents (walking individuals) walking a total of 355 miles. These efforts include completing 80 walking trips between Russell Road and Sahara Avenue. During these trips, a total of 4,329 time points were recorded. These time points represented 56 unique locations on the eastside and 55 locations on the west side of Las Vegas Boulevard. The time points and the distance between them determined the walking speeds for various segments of walkway (including all nine north/south pedestrian bridges) within the study corridor for the free-flow and peak period walking studies.

The following sections provide additional detail on the data collection program and its implementation during the study.



Legend

		Total
✱	Data Collection Sites '94 Lee Study (For Reference)	
★	24-7 Count Camera Locations	6
●	24-Hour Camera Count Locations	12
▲	24-Hour Ped. Bridge Camera Counts	10
■	12-Hour Manual Count Locations	10

Count Location Name (Reference #)

PEDESTRIAN VOLUME COUNT LOCATIONS

FIGURE 2.10 22

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2.2.1 Pedestrian Counts - Video

According to the "Manual of Transportation Engineering Studies" (1994) by the Institute of Transportation Engineers (ITE), the use of video data collection allows for greater accuracy than other volume data counting methods. Video recordings create a permanent record that can be viewed repeatedly in slow motion for counting accuracy. Video data collection can also be less labor intensive requiring fewer observers in the field. Through close coordination with the gaming industry, property owners, Metropolitan Police Department, and Clark County Public Works, 29 surveillance cameras were made available for the study. The following properties contributed video recordings:

- MGM Resorts International (including the MGM Grand, Mandalay Bay, Luxor, Excalibur, New York-New York, City Center, the Bellagio, Mirage and Circus Circus),
- Caesars Entertainment (including Bally's, the Flamingo and Harrah's),
- InterContinental Alliance Resorts (including the Venetian and the Palazzo),
- Riviera Hotel/Casino, and
- The Forum Shops.

In addition, the Metropolitan Police Department (Metro) provided two surveillance cameras for the study. The Metro cameras were used to observe 14-days of pedestrian activity on the pedestrian bridge between Ceasars Palace Hotel/Casino and Bill's Gamblin' Hall & Saloon at Flamingo Road and at a known geometrically constrained walkway location near the Harley Davidson Cafe at Harmon Avenue (see camera locations on Figure 2.10). Camera observation views for each location were selected by Kimley-Horn staff to assure that all video footage would provide suitable data for collecting pedestrian volume counts. It should be noted that as data was analyzed there were segments of time that were not available for pedestrian counting. Occasionally, the participating property owners required their cameras for surveillance functions. Once the security issue was resolved, the camera was returned to the study observation position and the data collection resumed. Clark County deployed four additional cameras for video data collection. Kimley–Horn coordinated with the County to install the cameras in strategic locations for video coverage at locations that were not covered by other cameras or manual counting. Each camera was manually adjusted to the desired location before each week-long study period. The cameras were removed following each data collection session and the video data was subsequently downloaded from the cameras. A typical camera installation is shown for the Treasure Island Hotel/Casino north of Siren's Cove Boulevard and south of Spring Mountain Road in Picture 2.23.



Picture 2.23 – Clark County Camera at Treasure Island Hotel/Casino.

Once the video data was collected by Kimley-Horn in cooperation with the individual property owners and their surveillance/security departments, the videos were viewed and pedestrian volumes were documented in 15-minute increments by trained counting staff. Assisted walkers (pedestrians using canes, walkers, wheelchairs or scooters) were also identified in the videos and separately counted as part of the existing pedestrian conditions.

The video data collection effort for the study is summarized below by date and total hours observed for the study.

- Private Camera Locations

18 locations	5/26/2012	=	400 hours
20 locations	6/16/2012	=	427 hours

- Metro Camera Locations

2 locations	5 /25-6/1/2012	=	336 hours
2 locations	6/15-6/22/2012	=	336 hours

- County Camera Locations

4 locations	5/26-6/1/2012	=	491 hours
4 locations	5/26-6/1/2012	=	578 hours
			2,568 hours

2.2.2 Pedestrian Counts - Manual

Manual pedestrian counts were collected at various locations on Las Vegas Boulevard from Russell Road to Sahara Avenue to supplement the video data. The manual counts were conducted from 12:00 PM to 12:00 AM (noon to midnight) on both Saturday, May 26 and Saturday, June 16, 2012. Picture 2.24 shows a manual counter documenting pedestrian traffic on the pedestrian bridge between the Harmon Center and the Cosmopolitan Hotel/Casino.



Picture 2.24 – Manual Counter on Pedestrian Bridge.

The manual counts were conducted by trained counting staff. JAMAR count boards (see Picture 2.25) were used to accurately record the volume of pedestrians passing a single point on the walkway at each count location. Manual counters were strategically placed on walkways and pedestrian bridges where video observation was not available. As a part of the manual counting, assisted walkers (pedestrians using canes, walkers, wheelchairs or scooters) were also identified and documented.

The 12-hour count period allowed the capture of pedestrian volume peaks in both the early afternoon and evening when pedestrian volumes have historically been the highest. In addition, during the May 26 count period when a high pedestrian volume location was identified, the counting staff was increased to assure an accurate count was obtained.

Figure 2.10 shows the location of each of the manual count locations numbered from south to north starting with M1. The Clark County cameras are labeled beginning with “CC1” and the Metro cameras are labeled “Metro1” and “Metro2”. 38 locations were used for data collection throughout the study corridor.



Picture 2.25 – JAMAR Count Board for Manual Pedestrian Volume Counts.

Following the Saturday, May 26 Memorial Day weekend count, the manual count data was reviewed. The purpose of the review was to maximize the efficiency of the manual counting effort for the June 16 data collection. Recognizing that the highest pedestrian volumes were most likely observed on May 26, the data was evaluated to identify count locations that maintained a level of service (LOS) of C. From the Memorial Day Weekend count data, all manual count locations that recorded 200 pedestrians or less during a 15-minute count period and also maintained an acceptable sidewalk LOS of C or better were removed from the counting program for Saturday, June 16. Four manual count locations and one video location were removed from further observation. The locations are identified on Figure 2.10, and included:

- 1 - Luxor Hotel/Casino - Video
- M1 - Tropicana Hotel/Casino
- M2 - Excalibur Hotel/Casino
- M9 - Fontainebleau Hotel/Casino
- M10 - Hilton Grand Vacations

As seen in Figure 2.10, these counting locations are either on the far north or south ends of the study corridor (see Picture 2.26 and Picture 2.27).

The manual data collection effort for the study is summarized below by date and total hours observed for the study.

- Manual Pedestrian Volume Counts

10 locations	5/26/2012	=	120 hours
6 locations	6/16/2012	=	72 hours
			192 hours



Picture 2.26 – Typical Pedestrian Conditions at North end of Study Corridor.



Picture 2.27 – Typical Pedestrian Conditions at South end of Study Corridor.

2.2.3 Pedestrian Walking Speeds

To supplement 2010 HCM methodology for calculating LOS based upon walkway volume, an in-field walking speed study was conducted along the entire length of the study corridor. From the literature review conducted for this study, no research was found that documented the average walking speed of a tourist, or specifically a pedestrian on Las Vegas Boulevard (the "Strip"). To document this walking speed and compare the "perceived level of service" that is provided by the existing walkway conditions, "agents" (walking individuals – see Picture 2.28 and Picture 2.29) were used to collect average walking speeds. The use of the word "agent" in this report refers to a trained engineer who travels in the pedestrian stream and walks with the surrounding pedestrians along the study corridor to collect average walking speed data.

The methodology followed for the pedestrian walking speed field study was adapted from the "Floating-car technique" as described in the Institute of Transportation Engineers "Manual of Transportation Engineering Studies". Using this technique requires that the agent "float" with the pedestrian traffic by safely passing as many pedestrians as pass the agent. The agent is to adjust their personal walking pace to match the individuals around them. This technique best reflects the pedestrian traffic stream under investigation and provides an "average" walking speed.



Picture 2.28 – Pedestrian Agent during Walking Data Collection (west "Strip" northbound).

Walking speed study work sheets were prepared for the study corridor. A set of four worksheets were prepared for the study. The four worksheet sets were organized for walking on either the east or west sides of Las Vegas Boulevard and from starting the walk from either the north or south ends of the study corridor. The clipboard size sheets provided a graphical representation of the walking route, data recording boxes at time points along the walk, and instructions for recording the location of non-permanent obstructions. A sample walking speed data collection worksheet is shown in Figure 2.11.

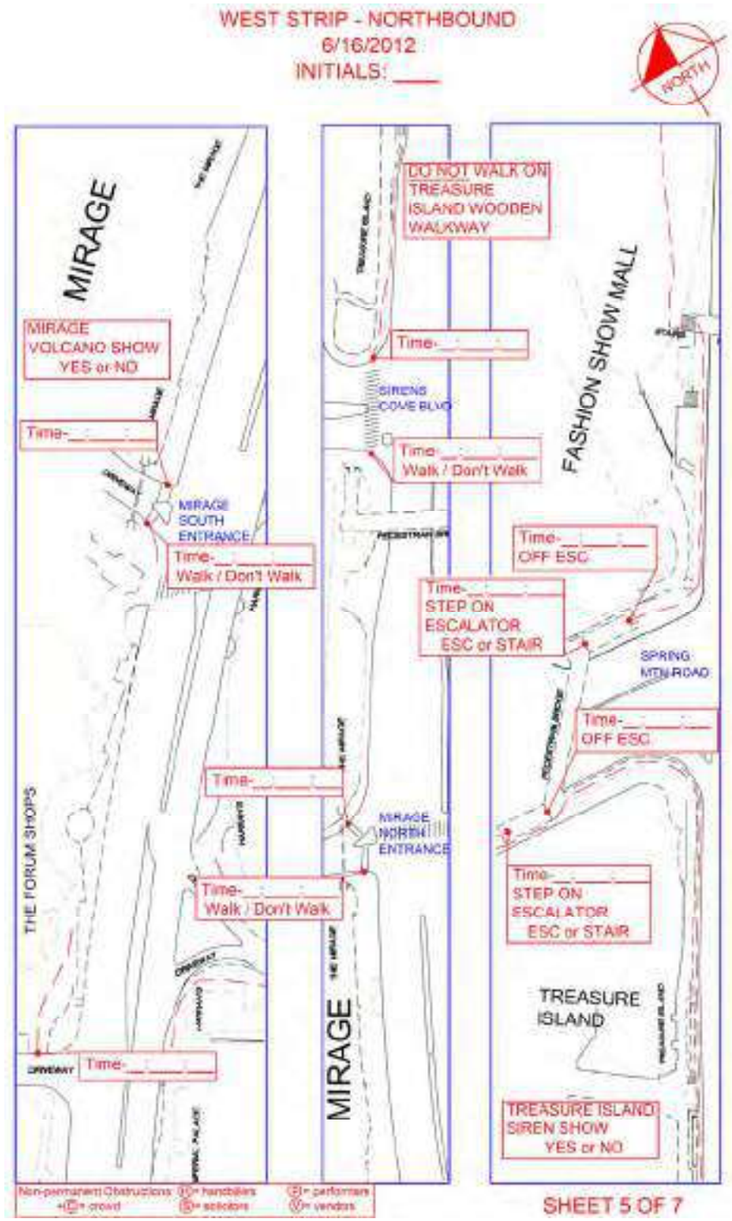


Figure 2.11 – Walking Speed Data Collection Worksheet

At the beginning of each walk, the agent would start a stop watch and record the continuous running clock time at each time point on the data collection form. These time points represented 56 unique locations on the eastside and 55 locations on the west side of Las Vegas Boulevard. The recorded time points and the distance between them determined the walk speeds for various segments of walkway. If needed, for a break, the agent could time themselves out and in to the walking speed study. The east and west sides of the study corridor were separated into segments by the time points. Twenty-five west segments and twenty-eight east segments were identified for the walk study, generally between signalized intersections and across pedestrian bridges (see Figure 2.12).

To conduct the free-flow walking speed study, four agents were used for the Wednesday, April 25 study. At the 9:00 AM start time, two agents began walking north from Russell Road, on each side of Las Vegas Boulevard, and two agents began walking south from Sahara Avenue on each side of Las Vegas Boulevard. The agents recorded their travel time at specified time point locations along the walk. Specific instructions and briefings were provided to each of the agents.



Picture 2.29 – Pedestrian Agent during Walking Data Collection (east "Strip" southbound).









Legend

- Segment Limits
- West Segments - 25
- East Segments - 28

WALKING SPEED SEGMENTS

FIGURE 2.12

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To ensure consistency in the pedestrian walking speed data collection effort, briefing sessions were held with each group of data collection agents prior to commencing the field studies. The following guidance was given to the agents and questions were clarified to ensure a unified approach to the data collection process:

- On the provided data collection worksheet – fill out all corresponding information for the before and after sections prior to beginning and after completing each walk.
- Walk the entire length of the study corridor, between Russell Road and Sahara Avenue.
- Record the time from the stopwatch at each signalized intersection, both upstream and downstream and at other locations specified on the data collection worksheets.
- Do not stop your progress unless continuing would put yourself in danger.
- Safety first. Obey all "DO NOT WALK" signals, even if other pedestrians are not doing so.
- Do not walk up escalators, let them carry you.
- Do not cross Las Vegas Boulevard, remain on your assigned side of the street.
- This is not a race; walk at the same pace as those around you, the data is not about you; it is about the pedestrians/tourists walking along Las Vegas Boulevard.
- If you encounter a stopped crowd (viewing an attraction, etc.), do your best to continue traveling through the crowd (i.e. do not stop to watch the fountains at the Bellagio), but remember to stay on the sidewalk, do not step into the street to pass people, safety first.
- Stay on the public sidewalk – follow the walking paths provided
  - Do not cross the Brooklyn Bridge at the New York-New York
  - Do not enter the roped-off area at Treasure Island
- Follow the floating-agent methodology for walking speed.
- The purpose of the field study is to document the average walking speed of a pedestrian on the Las Vegas Boulevard "Strip" at every location along the "Strip". Do not walk as fast or as slow as you can, remember the floating-agent technique, if someone passes you, pass someone else and try to be representative of the average pedestrian walking speed.

Following the above methodology and procedure, 12 agents were used to document travel times along the study corridor during peak periods (1:00 PM to 12:00 AM) on Saturday, May 26 (the Saturday of the Memorial Day Holiday weekend) and again on Saturday, June 16 (a non-holiday weekend). To capture walking characteristics during peak pedestrian activity, agents were deployed in each direction (northbound and southbound) on both sides of Las Vegas Boulevard starting at 1:00 PM, 5:00 PM and 9:00 PM. The agents were divided into three four-person teams starting 20 minutes apart from each other. This methodology allowed data to be collected over the span of 60 minutes on both sides of the street in both the northbound and southbound directions. The resulting walking speeds for each segment were calculated and summarized.

2.2.4 Non-Permanent Obstructions

During the peak period walking speed study, non-permanent obstructions were also observed by the 12 walking speed agents. For the study, non-permanent obstructions (obstructive uses) are defined as individuals who could obstruct the pedestrian walkway while hand billing, performing, soliciting or selling. Under County Ordinance 16.11, an "obstructive use" means "obstructing, delaying, hindering, blocking, hampering or interfering with pedestrian passage, including passage to or from private property" (Obstructive Uses of Public Sidewalks - 16.11.020 – General Definitions, Clark County). On May 26 and June 16, the data collection agents were tasked with documenting the quantity, classification and location of non-permanent obstructions in the pedestrian walkway during each of their data collection walks. For the study, non-permanent obstructions were classified into four categories with the following definitions for uniformity in data collection:

- Hand billers – any person within the pedestrian walkway attempting to give away literature of any kind. No financial transaction occurs and the hand biller does not expect anything in return for the literature that is given.
- Performers – any person within the pedestrian walkway attempting to entertain with the expectation of receiving a tip. Performers may include anyone dressed in a costume expecting tips for photographs, or any display of talent for a tip.
- Solicitors – any person within the pedestrian walkway soliciting donations. The solicitor provides nothing to those who donate.
- Vendors – any person within the pedestrian walkway with the intent of selling some item. There is a financial transaction that takes place and some item is exchanged for money.

Picture 2.30 through Picture 2.33 illustrate various activities and their classification. Not all activity was considered to be a non-permanent obstruction as shown in Picture 2.34. Individuals who were stopped in the walkway were not documented as non-permanent obstructions unless they were involved in hand billing, performing, soliciting, or selling. These pictures were used to brief the agents prior to their data collection walks.

Recognizing the twelve walking speed agents collected data only along the north/south walkways and pedestrian bridges of the study corridor, an additional data collector/observer was included in the study to capture information on the east/west pedestrian bridges. The senior engineer assigned to these observations also conducted general observations of the pedestrian activities within the study corridor between Tropicana Avenue and Spring Mountain Road.

The walking speed study work sheets and associated non-permanent obstruction field data as completed by each agent for the study were compiled in the office and summarized in a spreadsheet format. Non-permanent obstructions were summarized by observation period, side of street, and by location within the corridor into the following categories:

- Within 50 feet of an intersection, driveway or crosswalk
- On pedestrian bridges
- Within 15 feet of a pedestrian bridge landing
- Within 15 feet of a bus stop
- Other



Picture 2.30 – Examples of Hand billers observed on Las Vegas Boulevard.



Picture 2.31 – Examples of Performers observed on Las Vegas Boulevard.



Picture 2.32 – Examples of Solicitors observed on Las Vegas Boulevard.



Picture 2.33 – Examples of Vendors observed on Las Vegas Boulevard.



Picture 2.34 – Example of Individuals not considered for this Study as Non-Permanent Obstructions.

2.3 Data Analysis Methodology

This section details the methodology used to analyze the collected pedestrian volume, walking speed, and bus stop queuing data to determine pedestrian Level of Service (LOS) throughout the study corridor.

2.3.1 Pedestrian Volume Analysis – Level of Service Calculations

The 2010 Highway Capacity Manual (HCM) methodology was used for calculating the pedestrian flowrate LOS as used to determine an overall pedestrian level of service along the "Strip", as well as LOS at specific locations of walkway restrictions ("pinch-points" or "bottlenecks") along the study corridor. The analysis requires calculation of the following:

1. Determine the effective walkway width (W_E)
2. Calculate the pedestrian flow rate
3. Determine LOS

Determine the effective walkway width (W_E)

The following equation is for the calculation of effective walkway width:

Equation 2.1 – Effective Walkway Width (W_E)

$$W_E = W - W_O$$

where: W_E = effective walkway width (ft),

W *or* W_T = total walkway width at a given point along walkway (ft), and

W_O = sum of fixed-point object effective widths and linear-feature shy distances at a given point along walkway (ft).

The total walkway widths (W or W_T) for Equation 2.1 and the factors that influence the determination of the effective walkway widths (W_E) in Equation 2.1 were found using a combination of aerial imagery, available topographic surveys and field measurements. The 2010 HCM defines effective walkway width (W_E) as:

> "the portion of a walkway that can be used effectively by pedestrians. Various types of obstructions and linear features… reduce the walkway area that can be effectively used by pedestrians… Linear features such as the street curb, [a] low wall, [or a] building face each have associated shy distances. The shy distance is the buffer that pedestrians give themselves to avoid accidentally stepping off the curb, brushing against a building face, or getting too close to other pedestrians standing under awnings or window shopping. Fixed objects, such as [a] tree, have effective widths associated with them. The fixed-object effective width includes the object's physical width, any functionally unusable space (e.g., the space between a parking meter and the curb of the space in front of a bench occupied by people's legs and belongings), and the buffer given the object by pedestrians" (pg. 23-9, 2010 HCM).

The 2010 HCM recommends that walkway operational analysis evaluate "the portion of the walkway with the narrowest effective width (W_E), since this section forms the constraint on pedestrian flow" (pg. 23-10, 2010 HCM). Figure 2.13 shows graphically how effective walkway width (W_E) is calculated (adapted from the 2010 HCM).

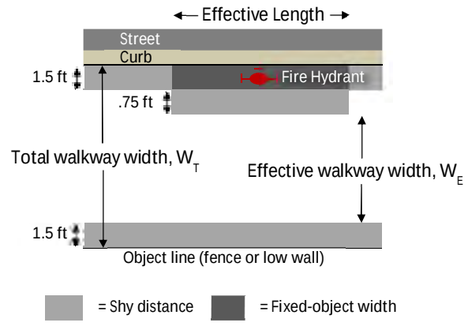


Figure 2.13 – Effective Walkway Width (W_E) Diagram

Table 1.2 as presented in Section 1.4.1 of the study, summarizes the HCM recommended effective width of various objects. The summation of the shy distances from each object within a cross section of walkway is subtracted from the total walkway width (W) to determine the effective walkway width (W_E) for that section of walkway.

The effective walkway widths (W_E) for the study corridor were calculated at each pedestrian volume count location and for restricted sidewalk locations as identified during the field inventory of the study corridor. The typical effective walkway widths (W_E) on the east and west sides of Las Vegas Boulevard as summarized in Figure 2.1 were geocoded in a Graphical Information System (GIS) database.

Using Equation 2.2, the walkway characteristics for the observed pedestrian volumes can be used to determine the walkway level of service.

Equation 2.2 – Pedestrian Flow Rate per Unit Width of Walkway

$$v_p = \frac{v_{15}}{15 \times W_E}$$

where: v_p = pedestrian flow per unit width (p/ft/min),

v_{15} = pedestrian flow rate during peak 15 min (p/h), and

W_E = effective sidewalk width (ft).

Table 2.2 from the 2010 HCM shows the level of service threshold criteria for pedestrian flowrates.

Table 2.2 – Pedestrian Level of Service

LOS	Flow Rate (p/min/ft)	Comments
A	≤5	Ability to move in desired path, no need to alter movements
B	>5 - 7	Occasional need to adjust path to avoid conflicts
C	>7 - 10	Frequent need to adjust path to avoid conflicts
D	>10 - 15	Speed and ability to pass slower pedestrians restricted
E	>15 - 23	Speed restricted, very limited ability to pass slower pedestrians
F	Variable	Speeds severely restricted, frequent contact with other users

To estimate the level of service for the sidewalks along Las Vegas Boulevard for the entire study corridor, the observed pedestrian flow rates were interpolated between data collection sites. Using computational spreadsheets to support a GIS database, the resulting sidewalk levels of service (LOS) were calculated for the two Saturdays of observation and for various times of day. Effective walkway width (W_E) calculations summarized in Figure 2.1 did not consider or include and potential reduction in walkway width due to non-permanent obstructions or bus stop queues. The LOS calculations are based on the existing walkway width less permanent obstructions. This approach allows for the calculation of the study corridor walkway level of service (LOS) without the variable impacts from non-permanent obstructions.

2.3.2 Walking Speed Analysis Methodology

Each walking speed data point collected by the agents was imported into Excel spreadsheets and analyzed to find the average walking speed for each segment of the study corridor. The free-flow walking speed, established during uncongested conditions, allowed for a comparison of each walkway segment through a range of pedestrian activity levels. Average walking speeds were also identified for each of the pedestrian bridges. The walking speed data on both the east and west sides of Las Vegas Boulevard were analyzed to identify variations in walking speeds. Overall walking speeds were evaluated to determine which segments of the study corridor may experience LOS less than C. With the determination of walking speeds by segment, the walking LOS can be categorized using the 2010 HCM. The HCM defines a walking speed LOS based upon the values in Table 2.3.

Table 2.3 – LOS and Average Speed Values

LOS	Average Speed (ft/s)	Comments
A	> 4.25	Ability to move in desired path, no need to alter movements
B	> 4.17 - 4.25	Occasional need to adjust path to avoid conflicts
C	> 4.0 - 4.17	Frequent need to adjust path to avoid conflicts
D	> 3.75 - 4.0	Speed and ability to pass slower pedestrians restricted
E	> 2.5 - 3.75	Speed restricted, very limited ability to pass slower pedestrians
F	≤ 2.5	Speeds severely restricted, frequent contact with other pedestrians

The walking speeds on the east and west sides of the “Strip” for the 1:00 PM period, 5:00 PM period, and 9:00 PM period were imported into GIS. Within GIS, the data was analyzed to create visual representations of the data at different times of day along the Resort Corridor. The use of GIS allowed the analysis to be performed continuously from Russell Road to Sahara Avenue on both sides of Las Vegas Boulevard displaying average pedestrian walking speeds for each walkway segment.

The following section details the statistical analysis of the walking speed data for use in determining a walking speed LOS.

Statistical Analysis

A t-test statistical analysis with a 95% confidence level was conducted and found that northbound travel and southbound travel were not statistically different. The same analysis of the east “Strip” and west “Strip” showed a statistical difference in walking speeds. These conclusions allowed the analysis of the walking data to be aggregated into east “Strip” walking speeds and west “Strip” walking speeds as no difference in northbound and southbound travel was found for either side of the “Strip”.

Data Aggregation

The statistically supported aggregation of northbound and southbound walking speed data allowed each segment walking speed to be averaged between six agents’ observed speeds on each side of the “Strip” in each data collection time. To illustrate, while 12 agents collected walking speed data between 1:00 PM and 4:00 PM, the aggregated data provides two representative samples, one for each side of the “Strip” (east and west). Aggregating the data is beneficial in representing the average walking speed as outliers and individual interpretation of the agents is combined. Along with average walking speeds at each point along the Resort Corridor, an overall “tourist” walking speed on the “Strip” was calculated using the data from 12 agents at three times throughout the day on two data collection Saturdays (May 26 and June 16, 2012).

2.3.3 Bus Stop Queuing Analysis Methodology

As of June 16, 2012, there were 29 bus stops on Las Vegas Boulevard in the Resort Corridor between Russell Road and Sahara Avenue (15 southbound and 14 northbound). Figure 2.6 shows the locations of the 29 bus stops. An analysis was conducted for bus stop queuing using the following methodology.

Ridership data was provided by the Regional Transportation Commission of Southern Nevada (RTC) for both Saturday, May 26, 2012 and Saturday, June 16, 2012. This ridership data was an aggregation of the two transit lines that serve the Resort Corridor (“DEUCE on The Strip” and “Strip & Downtown Express - SDX”). The express bus utilzes only four stops in the southbound direction and four stops in the northbound direction while the DEUCE stops at each of the 15 southbound stops and 14 northbound stops. Table 2.4 lists the stops shared between the two transit lines:

Table 2.4 – Shared Bus Stops within Resort Corridor

Southbound	Northbound
Fashion Show Mall	Wynn
Bellagio	Paris
Excalibur	Showcase Mall/MGM Grand
Mandalay Bay	Mandalay Bay

The DEUCE operates on headways between 12 and 15 minutes from 7:00 AM to 11:30 PM and the SDX runs on 12-15 minute headways between 9:00 AM and 10:30 PM. The aggregated data from the RTC was collected in 15 minute time increments and was separated into bus boardings and alightings. This data was used to determine the maximum number of bus riders queued at each of the 29 bus stops by using the maximum boardings in a 15 minute time period.

The maximum boardings were then used to determine the space required to provide a LOS C or better queuing area based on the 2010 HCM queuing space requirements.

2.4 Pedestrian Simulation Model

To more fully understand the impact of obstructions to the LOS provided by Las Vegas Boulevard, pedestrian simulation modeling was used. An analysis of the collected data revealed certain areas of concern and interest for inclusion in the simulation models. Simulation models at four locations were created to simulate the effects of an obstruction on the pedestrian flows.

2.4.1 Model Background

In order to analyze various walkway segments with and without obstructions, the Advanced Land-Transportation Performance Simulation™ (ALPS™) software was utilized. ALPS™ is a suite of modeling and analysis programs that have been under development by Kimley-Horn and Associates, Inc., for over 30 years and allows the modeler to create simulations that encompass the various pedestrian and vehicular movements within a multi-modal transportation environment. ALPS embodies a unique demand modeling and operational analysis system that has been developed for studies of airport environments, multimodal travel corridors, transportation systems, urban districts/major activity centers, and intermodal facilities.

ALPS is an integrated suite of computer programs that have been created and applied with a “systems engineering” perspective, meaning that the multimodal systems that are modeled are viewed as interrelated subsystems. The ALPS model is demand driven, with activity generated based on pedestrian data. ALPS™ simulates pedestrian activity based on pedestrian volumes, speeds, and group size, among other variables. The assembly of roadways, curbfronts, parking facilities, transit systems, pedestrian walkways, elevators, ticket processing counters, security screening points, concession areas, and other such subsystems can all be simulated to study how changes to one subsystem affect the performance and operation of all other subsystems.

ALPS has been used for numerous types of projects throughout the United States (i.e., baseball stadiums, casinos, airports, downtown environments, etc.) for detailed modeling of transportation operations (including roadways, terminal curbfronts, ground transportation centers, rental car facilities, and parking facilities), terminal operations and planning, and transit system evaluation and operational analysis. The latest ALPS models include animations which provide great benefit in communicating alternatives to clients and other stakeholders.

2.4.2 Model Methodology

The pedestrian volumes were used along with the geometric constraints of each location to provide a visual and mathematical model of pedestrian movement within the study corridor at walkway segments of interest. For each of the four models differing scenarios were contemplated, with no obstructions and with obstructions. Conservative analysis assigned a 2.25-foot reduction to the effective walkway width at each location for an obstruction.

3 Data Evaluation

Quantitative and qualitative measures are important when addressing safety concerns and general experience enhancements. This section of the report presents both the numerical results from the data collection effort, as well as the qualitative assessments made by Kimley-Horn and Associates staff.

Numerical results are provided for the data collection and analysis with regard to pedestrian volumes from the video and manual counts and resulting level of service values along the entire study corridor from Russell Road to Sahara Avenue. The results from the pedestrian walking speed study and non-permanent obstructions data collection are also presented. In addition, bus stop queuing analysis results are summarized, along with a discussion on the results of the pedestrian simulation models and their implications.

3.1 Pedestrian Volumes

The pedestrian volume data from each count location was evaluated and plotted graphically to show peak periods of pedestrian traffic and identify maximum volumes. (The pedestrian volume data collected for this study is included on a CD at the back of the report.)

Figure 3.1 and Figure 3.2 show a summary of the maximum 15-minute pedestrian volumes at each count location from the Luxor Hotel/Casino near the south end of the study area and continuing to the Hilton Grand Vacations near the north end of the study area on the Memorial Day weekend holiday Saturday and a typical Saturday respectively.

The individual count location data was separated into three sections for ease of data comparison as follows:

- Outer Study Area (Russell Road – Flamingo Road and Spring Mountain Road – Sahara Avenue)
  (see Figure 3.4 through Figure 3.12)
- Inner Study Area (Flamingo Road – Spring Mountain Road)
  (see Figure 3.13 through Figure 3.27)
- Pedestrian Bridges
  (see Figure 3.28 through Figure 3.41)

Figure 3.4 and Figure 3.41 provide a visual summary of the maximum 15-minute pedestrian volume at each count location for each count day (May 26 and June 16, 2012).

In determining the pedestrian volumes, individuals using wheel chairs, scooters or walkers were categorized as “assisted walkers”. This was done to document the number of assisted walkers in the pedestrian stream. Evaluation of the data showed that a limited number of pedestrians were assisted walkers. For example, the 24-hour count conducted at the Bally’s Plaza recorded 99,346 pedestrians of which 46 were assisted walkers or 0.05% of the daily volume (and only 0.17% of the peak hour volume). The maximum number of assisted walkers (see Picture 3.1) observed within the collected data set for a 15-minute period was a total of three. Although the percentage of assisted walkers was found to be minimal, their presence demonstrates the importance of providing accessible walkways. The walking speed analysis was not adjusted to reflect assisted walkers as they are not expected to cause significant walking speed level of service reductions. Assisted walkers are included in the reported total pedestrian volumes.

The maximum number of pedestrians observed in a 15-minute period was 2,633 between Bellagio South and the Cosmopolitan Hotel/Casino during the time of 9:30 PM and 9:45 PM on Saturday, May 26, 2012 of Memorial Day weekend. The east side of Las Vegas Boulevard was found to have a maximum 15 minute pedestrian volume of 2,124 in front of the Paris Hotel/Casino between 4:00 PM and 4:15 PM also on Saturday, May 26, 2012. A total of 11 (of 38) locations were observed with more than 1,500 pedestrians in 15-minutes on May 26, 2012. This is compared to a total of 5 (of 32) locations observed with more than 1,500 pedestrians in 15-minutes during June 16, 2012. A maximum volume of 1,500 pedestrians in 15 minutes represents a pedestrian LOS C on an effective width walkway of 10 feet.



Picture 3.1 – Assisted Walker.

3.1.1 Evaluation Summary

Generally, on the holiday Saturday of May 26, 2012, a LOS of B or better was provided in the outer areas of the study corridor from Russell Road to Tropicana Avenue and from Spring Mountain Road to Sahara Avenue. The following evaluation is based solely on the volume at each count location and the associated walkway widths at those locations. Within the inner portion of the study corridor, from Tropicana Avenue to Spring Mountain Road the LOS calculations generally showed that the walkways provided a pedestrian volume LOS C or better except for the following count locations:

- Metro1 – Harley Davidson Cafe – LOS E
- 11 – Flamingo Road West Pedestrian Bridge – LOS D
- 12 – Flamingo Hotel/Casino – LOS D
- M6 – Caesars Palace Hotel/Casino – LOS D
- 13 – Forum Shops – LOS D
- 14 – Harrah’s Hotel/Casino – LOS D
- 15 – Mirage Hotel/Casino – LOS E
- CC3 – Venetian Hotel/Casino – LOS E

It is important to note that the LOS evaluation and the associated figures (Figure 3.4 through Figure 3.41) were completed assuming the full effective walkway width (W_E) was available for pedestrian traffic. When a non-permanent obstruction is present, the effective walkway width (W_E) is reduced and the LOS of the walkway can also be reduced. In some cases, the LOS F threshold can be exceeded for the observed pedestrian volumes. With the presence of one non-permanent obstruction standing on the side of the walkway within the pedestrian flow, a reduction of 2.25 feet from the effective walkway width (W_E) was applied. Under these conditions the following count locations were calculated to degrade to LOS F:

- Metro 1 – Harley Davidson Cafe
- CC3 – Venetian Hotel/Casino
- CC4 – Treasure Island Hotel/Casino

Weeklong Data

Figure 3.3 summarizes the weekly and hourly count data collected within the study corridor. As illustrated in the figure, the day of week and average hourly variations are generally consistent with the findings from the Caesars International year-long study in front of the Imperial Palace Hotel/Casino. The exception is that Monday was found to have less pedestrian volume and was found to be similar to Tuesday, Wednesday, or Thursday daily pedestrian volumes for the average data collected at six locations from Tropicana Avenue to Spring Mountain Road. The additional daily count data at multiple locations within the study corridor confirms the Caesars International data to be reasonably representative of the study corridor.

Typical Saturday

Data collected on the typical Saturday (June 16, 2012) showed similar characteristics as the data collected on the holiday Saturday (May 26, 2012). The main distinction between the two days was that the total pedestrian volumes on the typical Saturday were generally lower than those of the holiday Saturday. The pedestrian volume peaking hourly trends were generally the same and in many cases the maximum peak 15-minute period at a count location was observed at the same time of day.









Legend

Max. 15-Minute Pedestrian Volume at Count Locations

- 200 or Less
- 201 - 800
- 801 - 1,400
- 1,401 - 2,000
- Greater than 2,000

PEDESTRIAN VOLUME - MAX 15 MINUTES
MAY 26, 2012

FIGURE 3.1 32

Kimley-Horn and Associates, Inc.









Legend

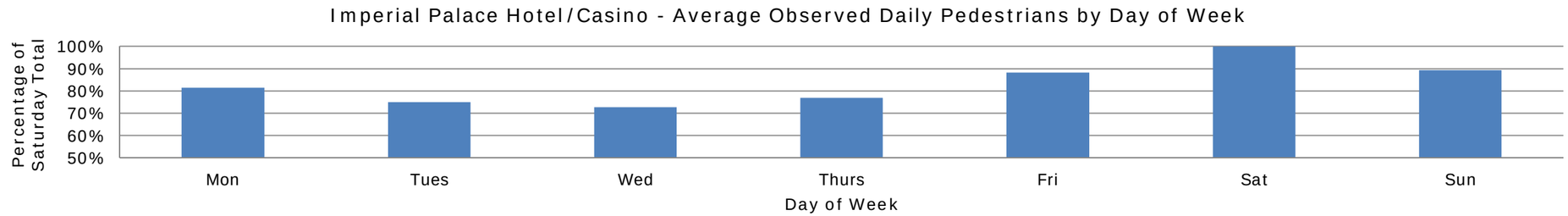
Max. 15-Minute Pedestrian Volume at Count Locations

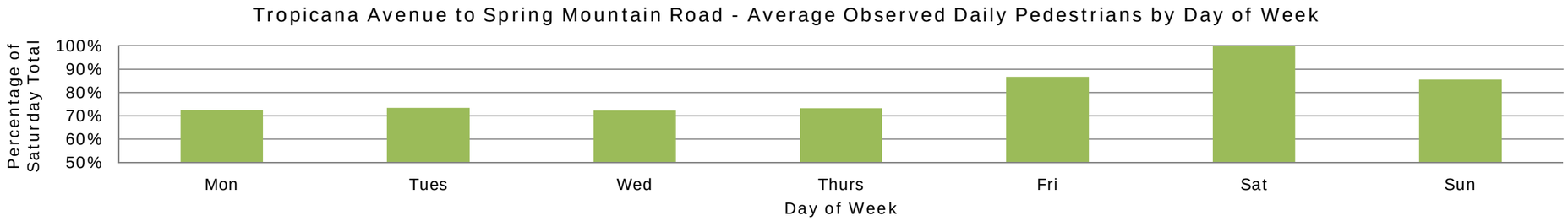
- 200 or Less
- 201 - 800
- 801 - 1,400
- 1,401 - 2,000
- Greater than 2,000

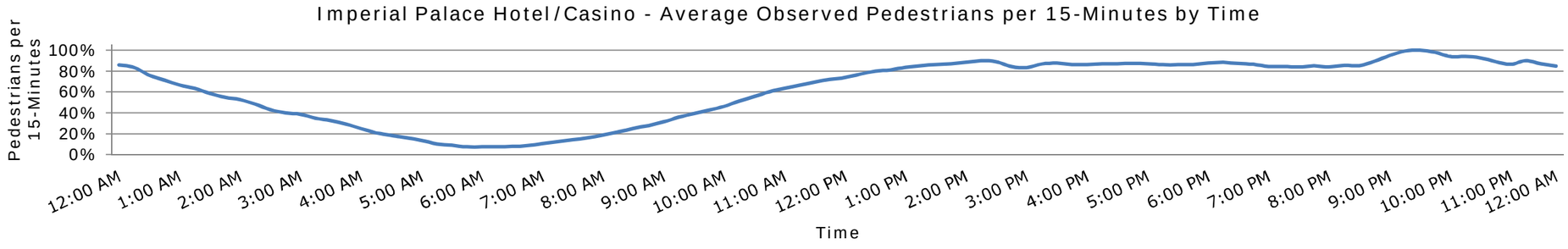
PEDESTRIAN VOLUME - MAX 15 MINUTES
JUNE 16, 2012

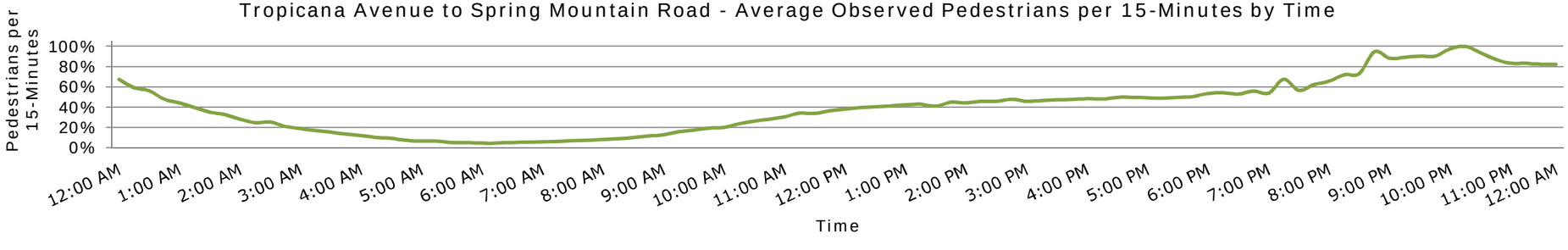
FIGURE 3.2 33

Kimley-Horn and Associates, Inc.









PEDESTRIAN VOLUME TREND COMPARISON

FIGURE 3.3

Kimley-Horn and Associates, Inc.

3.1.2 Outer Portion of the Study Corridor

The pedestrian volumes within the outer portion of the study corridor (Russell Road to Tropicana Avenue and Spring Mountain Road to Sahara Avenue) were generally lower than the inner portion. The maximum 15-minute pedestrian volume observed south of Tropicana Avenue was 200 at the Excalibur Hotel/Casino and the maximum north of Spring Mountain Road was 341 at the Riviera Hotel/Casino. The existing walkway widths adequately serve the observed pedestrian volumes in these areas. An acceptable LOS of B or better was observed throughout the outer portion of the study corridor throughout all of the study observations. Picture 3.2 and Picture 3.3 show the typical conditions of the outer portion of the study corridor.

Data was collected at a total of nine locations in the outer portion of the study area, which were:

- 1 – Luxor Hotel/Casino - Figure 3.4
- M1 – Tropicana Hotel/Casino - Figure 3.5
- M2 – Excalibur Hotel/Casino - Figure 3.6
- 18 – Wynn Hotel/Casino - Figure 3.7
- M8 – North of Fashion Show Drive - Figure 3.8
- 20 – Riviera Hotel/Casino - Figure 3.9
- 21 – Circus Circus Hotel/Casino - Figure 3.10
- M9 – Fontainebleau Hotel/Casino - Figure 3.11
- M10 – Hilton Grand Vacations - Figure 3.12

Table 3.1 summarizes the maximum 15-minute pedestrian volumes and the LOS for each count location on both the Holiday and Typical Saturday. As discussed in Section 2.2.2, count locations with a maximum 15-minute pedestrian volume less than 200 were not counted on the typical Saturday. Pedestrian volumes data was collected on both May 26 and June 16, 2012 at the following locations:

- 18 – Wynn Hotel/Casino
- M8 – North of Fashion Show Drive
- 20 – Riviera Hotel/Casino
- 21 – Circus Circus Hotel/Casino



Picture 3.2 – Typical Pedestrian Activity on South end of Study Corridor.



Picture 3.3 – Typical Pedestrian Activity on North end of Study Corridor.

Table 3.1 – Data Summary for Outer Portion of the Study Corridor

Holiday Saturday - May 26, 2012

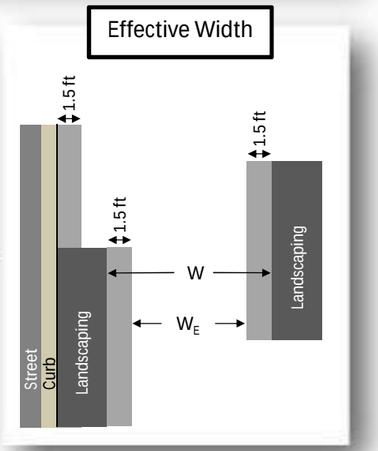
West Side						East Side					
ID	Name	W_E	Max 15-min Volume	Time of Max Volume	LOS	ID	Name	W_E	Max 15-min Volume	Time of Max Volume	LOS
1	Luxor	7.0	121	12:15PM - 12:30PM	A	M1	Tropicana	3.5	68	11:00PM - 11:15PM	A
M2	Excalibur	9.8	200	10:45PM - 11:00PM	A	18	Wynn	11.8	264	12:30AM - 12:45AM	A
M8	N of Fashion Show	3.2	312	10:15PM - 10:30PM	B	20	Riviera	13.8	341	8:45PM - 9:00PM	A
21	Circus Circus	8.7	216	9:45PM - 10:00PM	A	M9	Fontainebleau	5.3	129	5:30PM - 5:45PM	A
M10	Hilton Grand	6.7	75	4:30PM - 4:45PM	A						

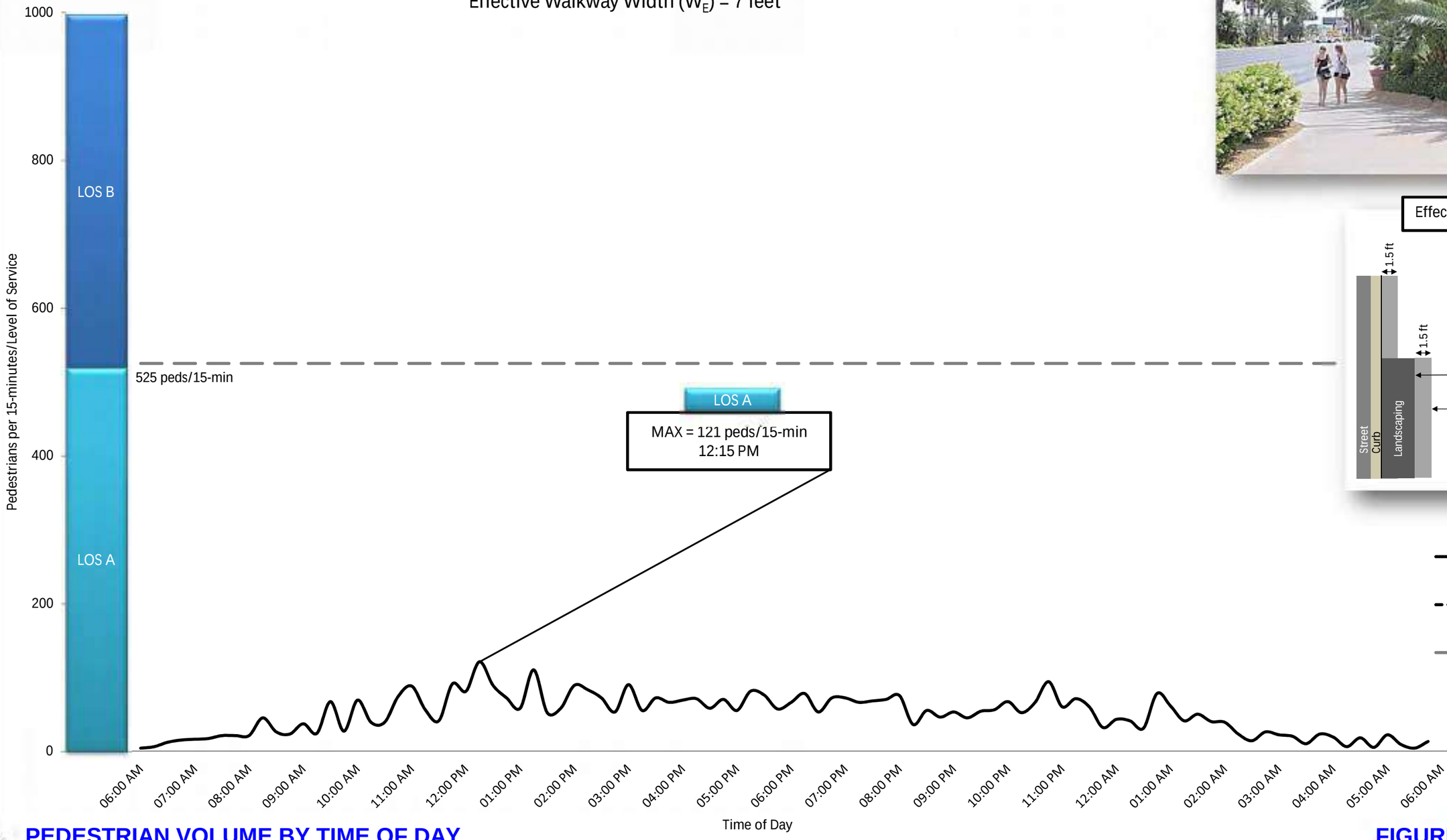
Typical Saturday - June 16, 2012

West Side						East Side					
ID	Name	W_E	Max 15-min Volume	Time of Max Volume	LOS	ID	Name	W_E	Max 15-min Volume	Time of Max Volume	LOS
M8	N of Fashion Show	3.0	262	10:15PM - 10:30PM	B	18	Wynn	11.8	324	12:00AM - 12:15AM	A
21	Circus Circus	8.7	201	10:00PM - 10:15PM	A	20	Riviera	13.8	187	9:15PM - 9:30PM	A

Luxor Hotel/Casino (Location ID: 1)
Video Count Location: 2,040 ft. South of Tropicana Avenue
Walkway Width (W) = 10 feet
Effective Walkway Width (W_E) = 7 feet







PEDESTRIAN VOLUME BY TIME OF DAY

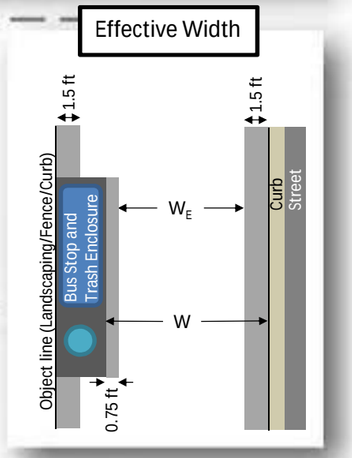
FIGURE 3.4

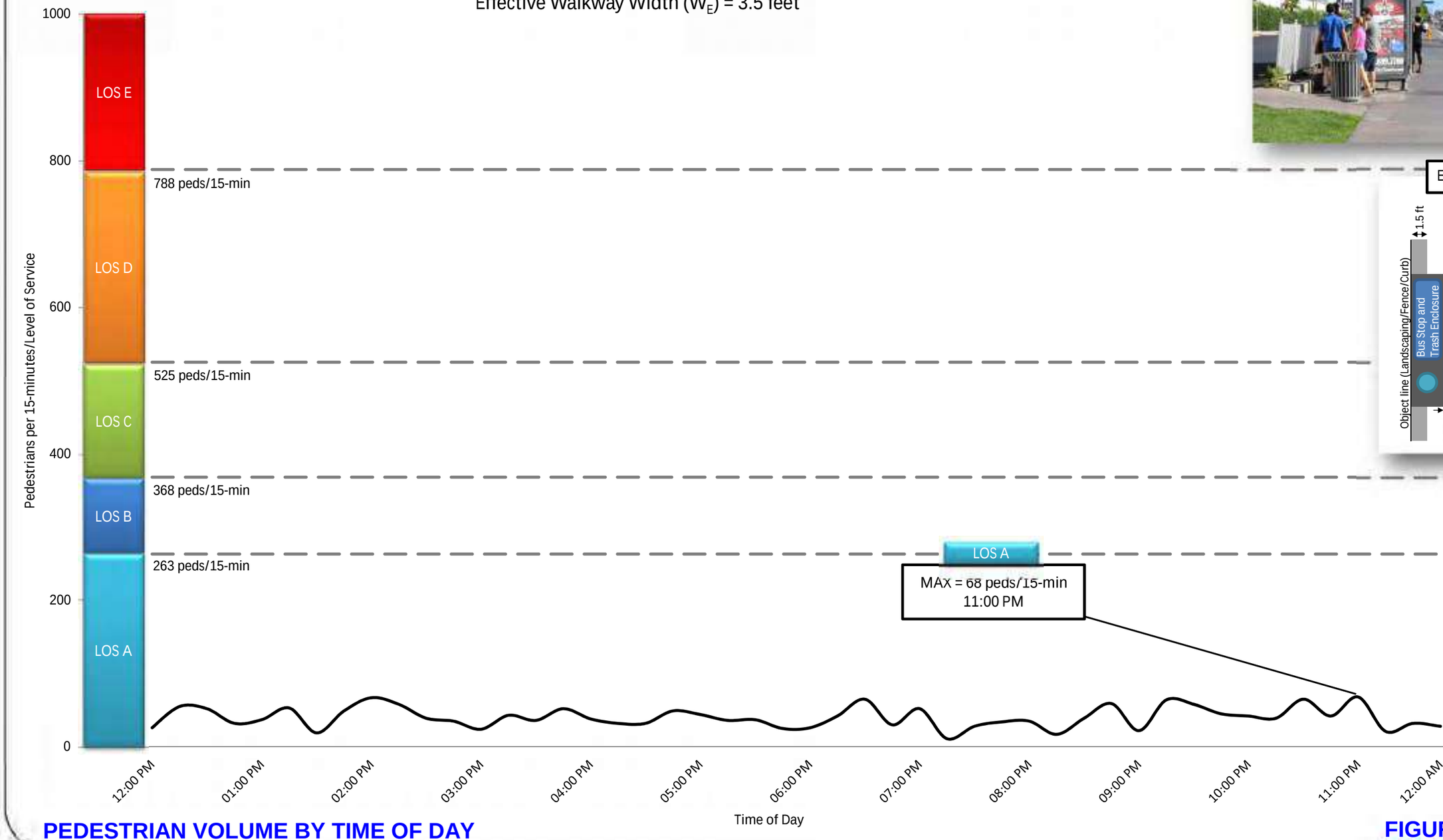
Kimley-Horn and Associates, Inc.

CC 1017

Tropicana Hotel/Casino (Location ID: M1)
Manual Count Location: 530 ft. South of Tropicana Avenue
Walkway Width (W) = 5.8 feet
Effective Walkway Width (W_E) = 3.5 feet







PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.5

Kimley-Horn and Associates, Inc.

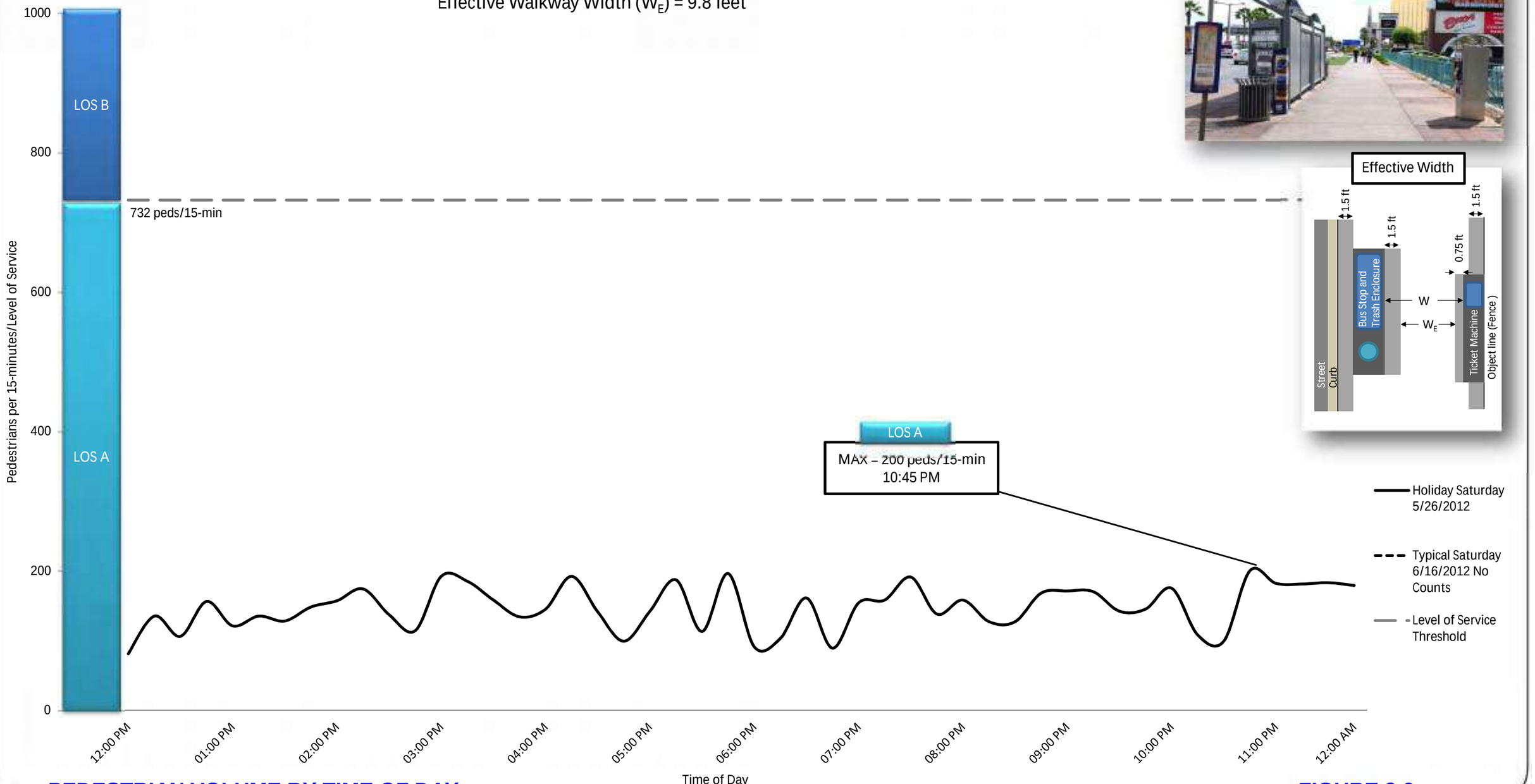
Excalibur Hotel/Casino (Location ID: M2)

Manual Count Location: 370 ft. South of Tropicana Avenue

Walkway Width (W) = 12 feet

Effective Walkway Width (W_E) = 9.8 feet





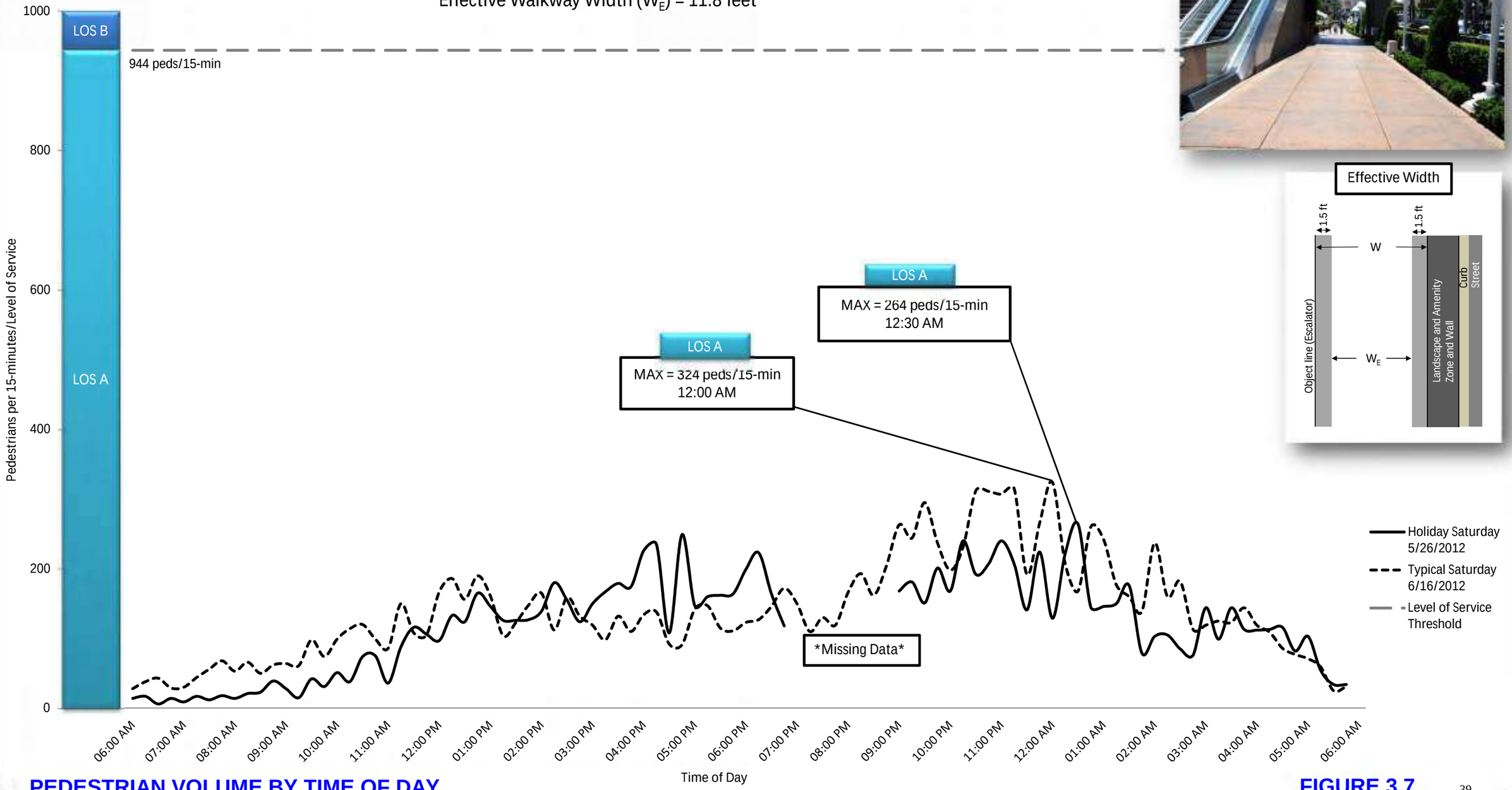
PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.6

Kimley-Horn and Associates, Inc.

Wynn Hotel/Casino (Location ID: 18)
Video Count Location: 390 ft. North of Spring Mountian Road
Walkway Width (W) = 14.8 feet
Effective Walkway Width (W_E) = 11.8 feet





PEDESTRIAN VOLUME BY TIME OF DAY

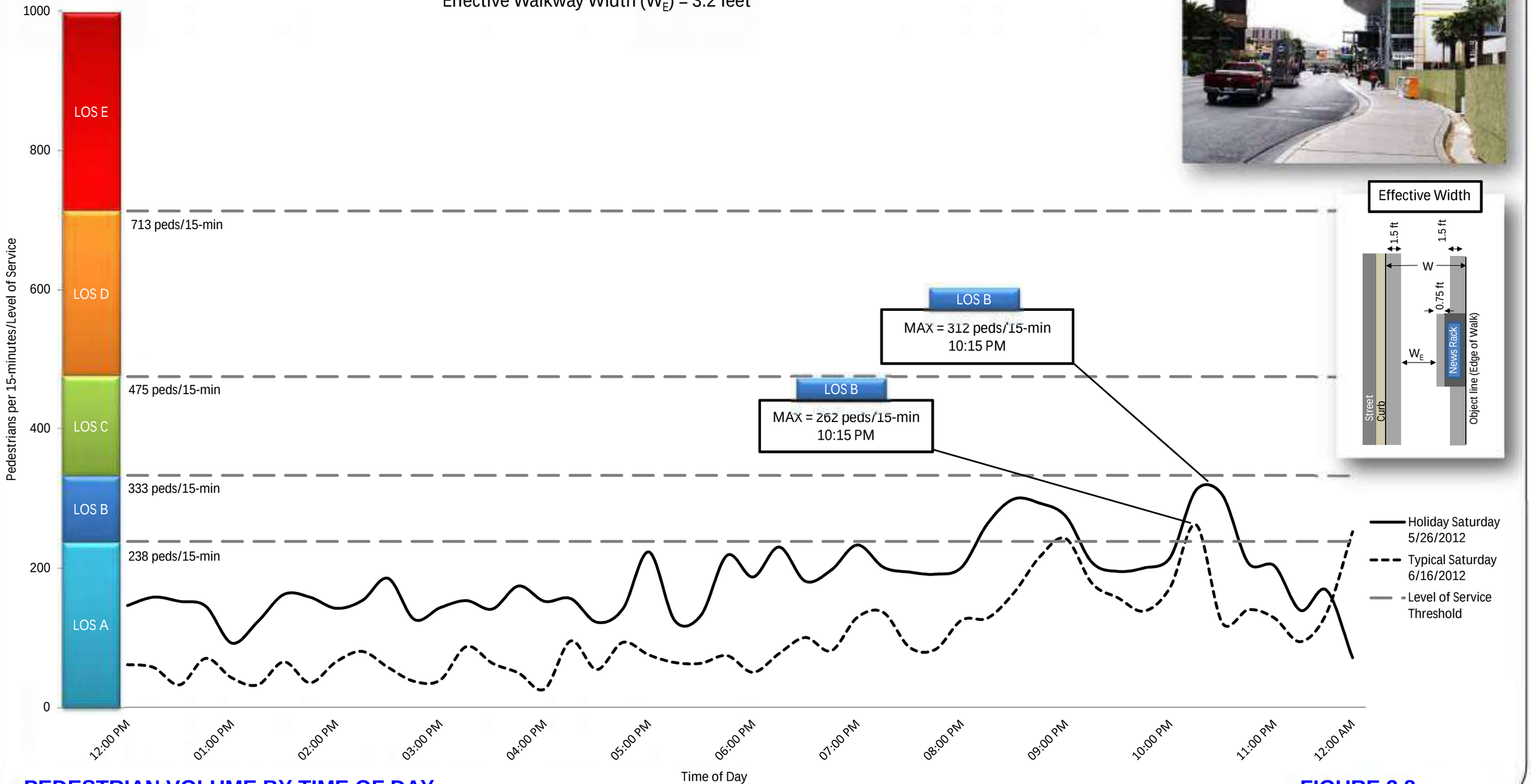
FIGURE 3.7

Kimley-Horn and Associates, Inc.

CC 1020

North of Fashion Show Drive (Location ID: M8)
Manual Count Location: 250 ft. North of Fashion Show Drive
Walkway Width (W) = 6.2 feet
Effective Walkway Width (W_E) = 3.2 feet





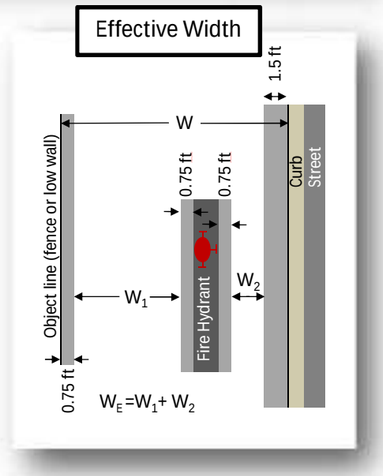
PEDESTRIAN VOLUME BY TIME OF DAY

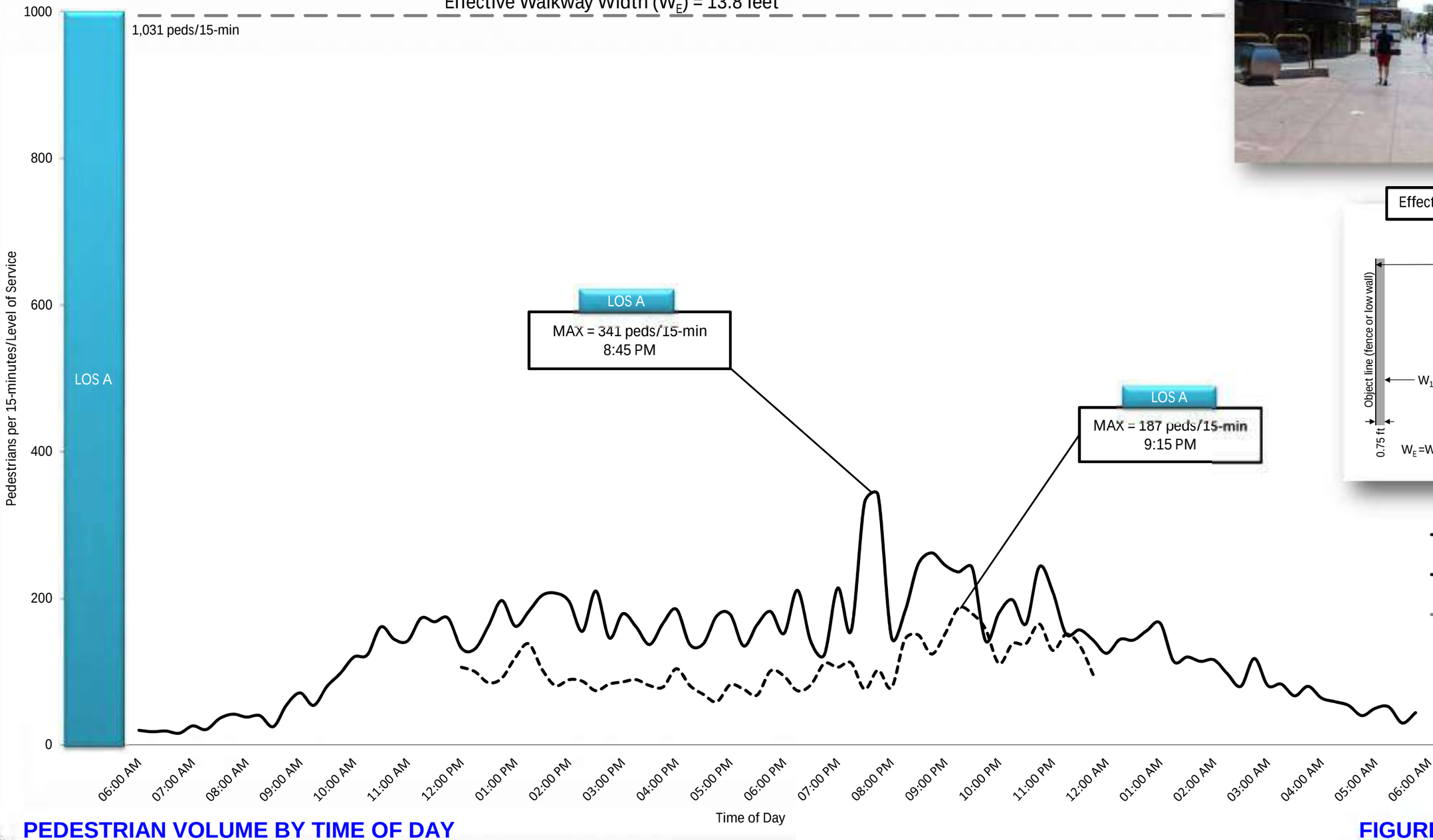
FIGURE 3.8

Kimley-Horn and Associates, Inc.

Riviera Hotel/Casino (Location ID: 20)
Video Count Location: 1,700 ft. North of Desert Inn Road
Walkway Width (W) = 19 feet
Effective Walkway Width (W_E) = 13.8 feet







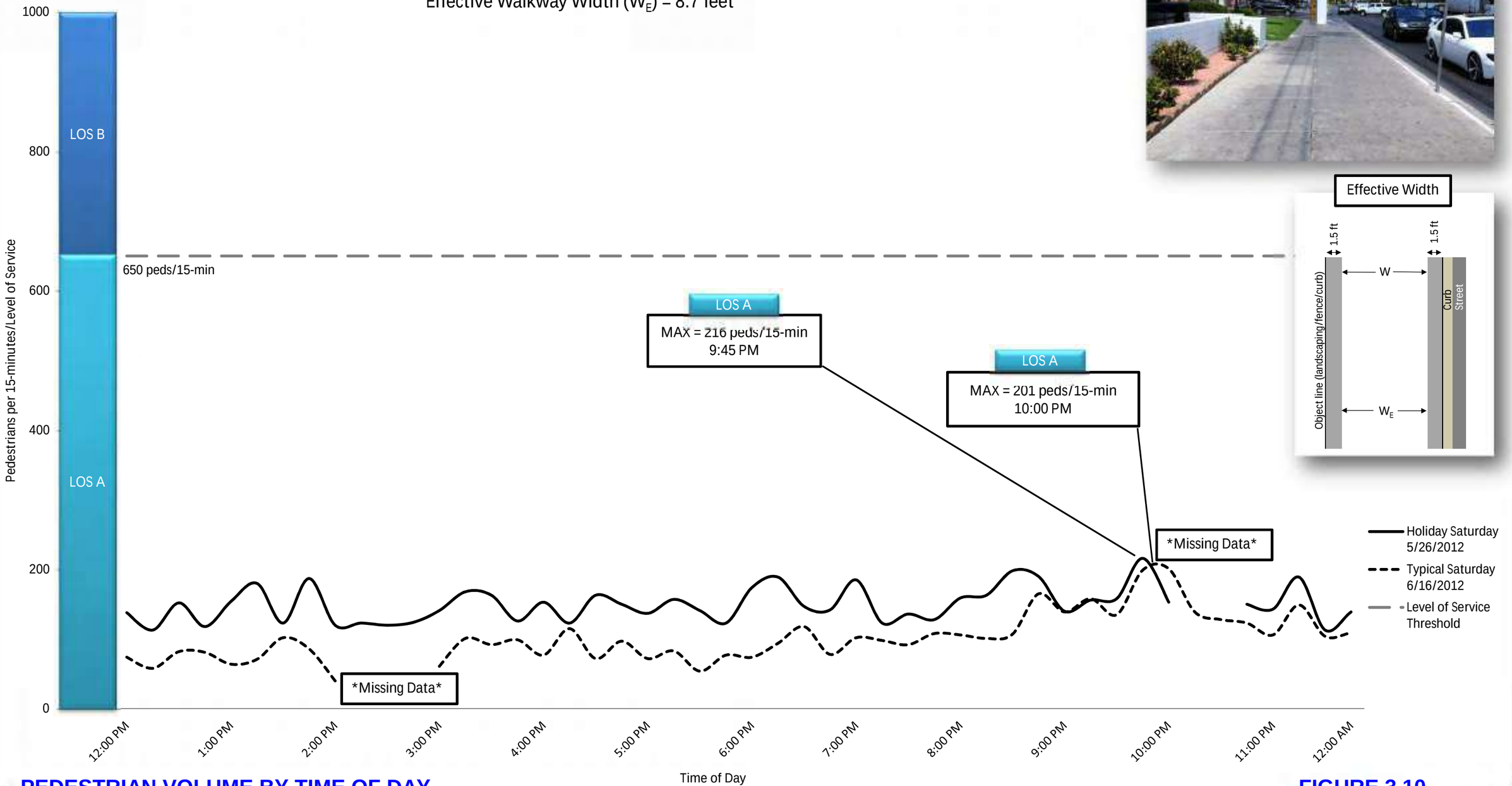
PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.9

Kimley-Horn and Associates, Inc.

Circus Circus Hotel/Casino (Location ID: 21)
Video Count Location: 2,100 ft. North of Desert Inn Road
Walkway Width (W) = 11.7 feet
Effective Walkway Width (W_E) = 8.7 feet





PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.10

Kimley-Horn and Associates, Inc.

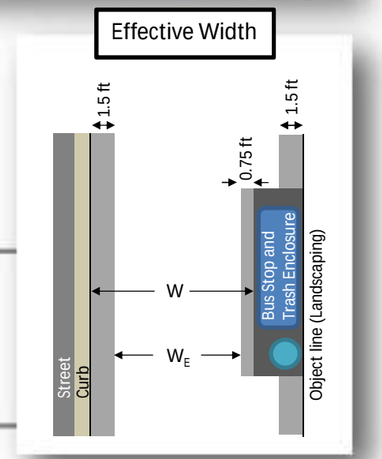
Fontainebleau Hotel/Casino(Location ID: M9)

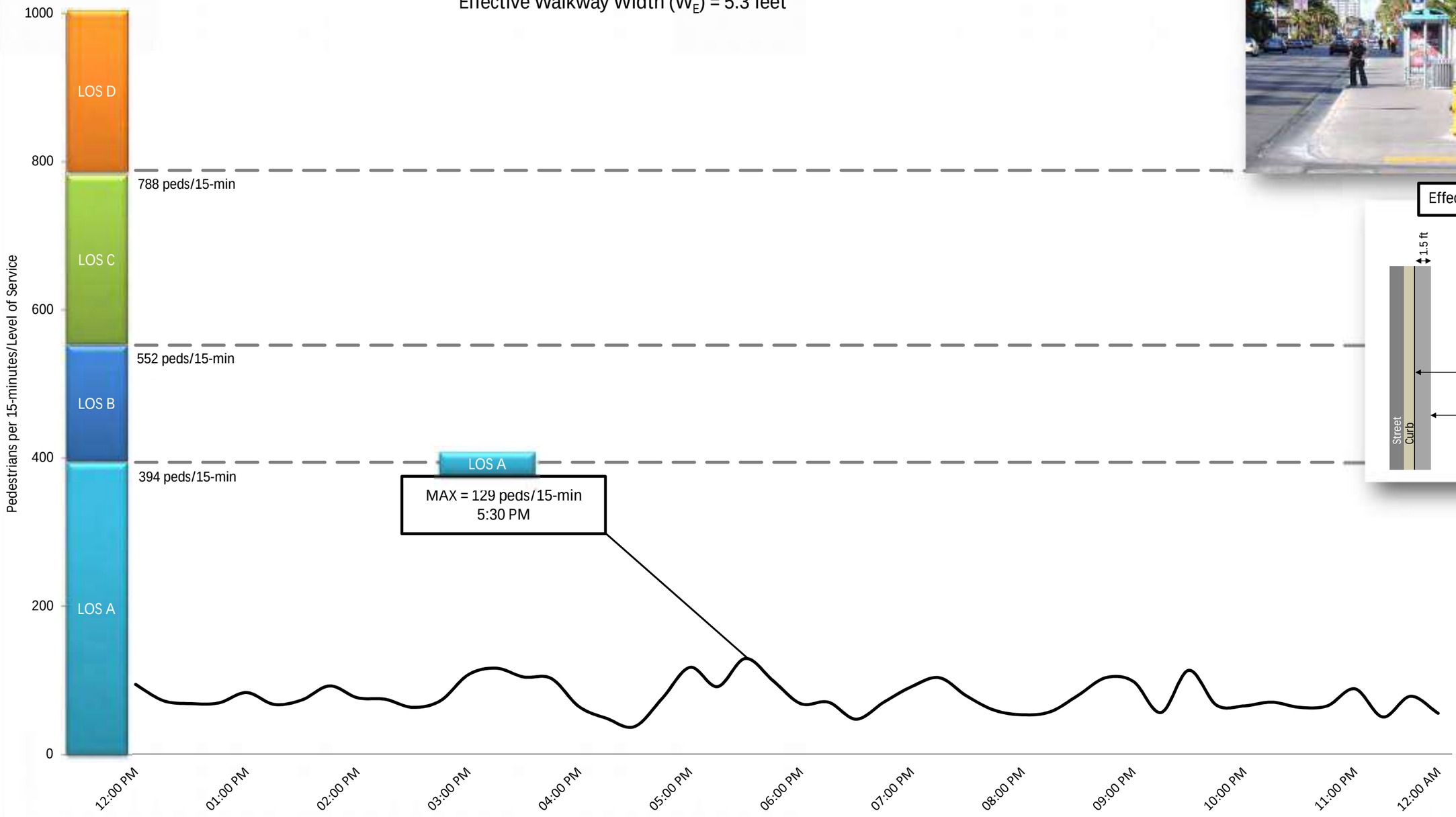
Manual Count Location: 1,330 ft. South of Sahara Avenue

Walkway Width (W) = 7.5 feet

Effective Walkway Width (W_E) = 5.3 feet







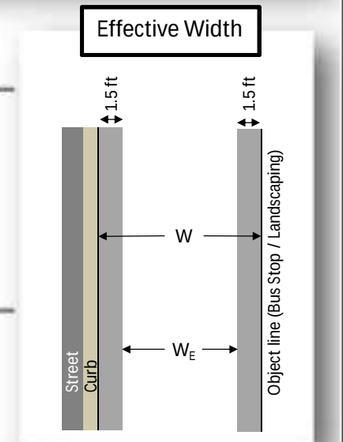
PEDESTRIAN VOLUME BY TIME OF DAY

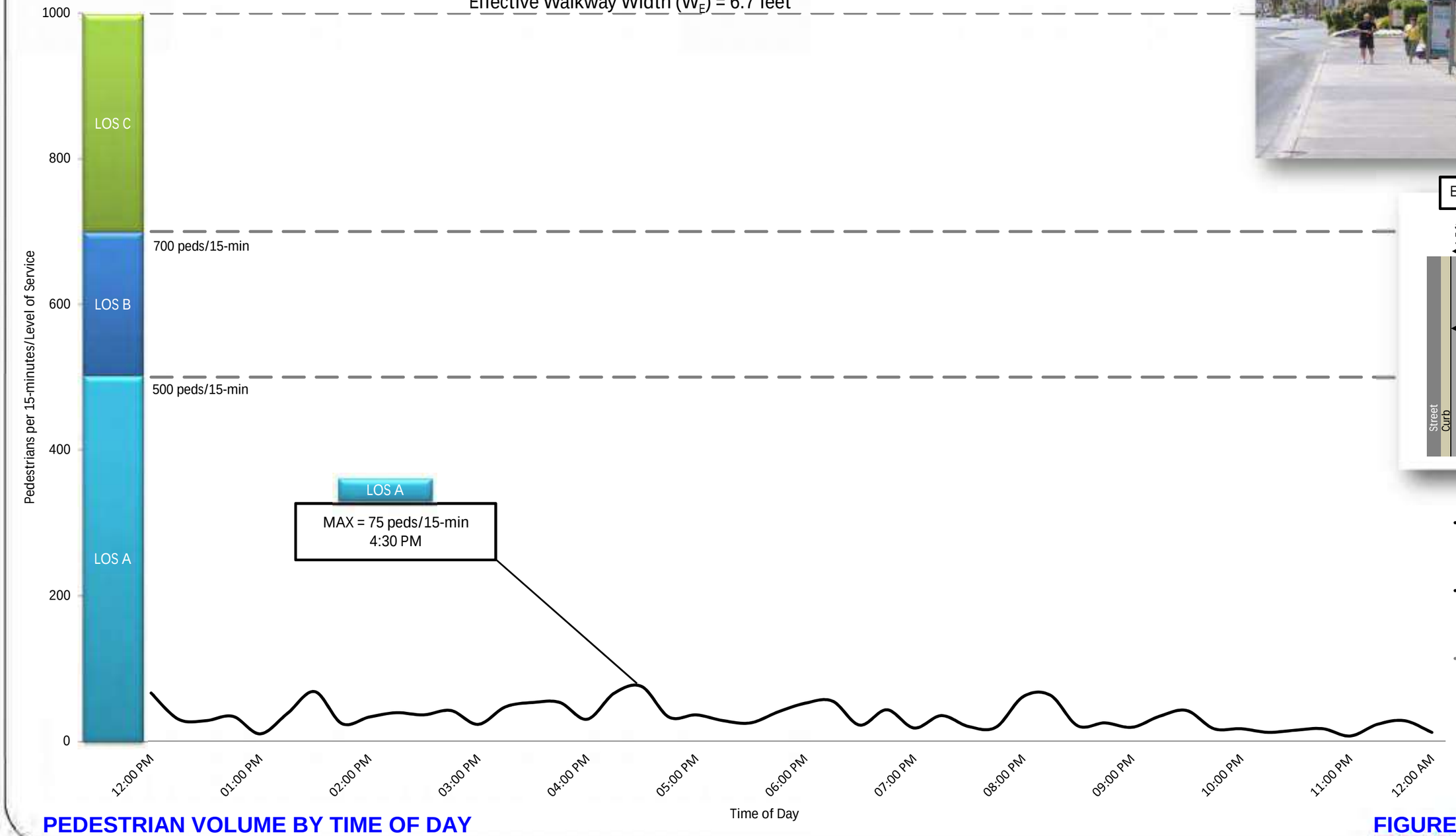
FIGURE 3.11

Kimley-Horn and Associates, Inc.

Hilton Grand Vacations (Location ID: M10)
Manual Count Location: 1,460 ft. South of Sahara Avenue
Walkway Width (W) = 9.7 feet
Effective Walkway Width (W_E) = 6.7 feet







PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.12

Kimley-Horn and Associates, Inc.

3.1.3 Inner Portion of the Study Corridor

The inner portion of the study corridor between Tropicana Avenue and Spring Mountain Road generally experienced higher pedestrian volumes than the outer portion of the study corridor.

Within the inner portion of the study corridor significant short term pedestrian volume peaking was observed near Tropicana Avenue and the MGM Grand Hotel/Casino around 9:15 PM on May 26, 2012. These peaks were attributed to the UFC event that was held at the MGM Grand Garden Arena during the data collection period. The event concluded around 9:00 PM and resulted in recognizable pedestrian peaks on the Tropicana Avenue south pedestrian bridge (see Figure 3.28) as well as other surrounding walkways and pedestrian bridges.

There are three recurring outdoor attractions within the inner portion of the study corridor on the "Strip". They are located on the west side of Las Vegas Boulevard and are free to the public. These attractions draw the attention of passers-by and are also destinations for pedestrians intending on watching the free shows. The attractions are listed below as well as their duration and show schedule during the data collection period.

- The Bellagio Fountain - Picture 3.4
  - Approximate 5 minute duration
  - Every 30 minutes from 12:00 PM to 7:00 PM
  - Every 15 minutes from 7:00 PM to 12:00 AM



Picture 3.4 – Bellagio Fountains – Daily Attraction.

- The Mirage Volcano - Picture 3.5
  - approximate 5 minute duration
  - Hourly from 8:00 PM to 12:00 AM



Picture 3.5 – Mirage Volcano – Daily Attraction.

- The Sirens of Treasure Island - Picture 3.6
  - Approximate 18 minute duration
  - Every 90 minutes from 7:00 PM to 11:30 PM



Picture 3.6 – Sirens of Treasure Island – Daily Attraction.

The Mirage Volcano and the Sirens of Treasure Island attractions were observed to impact pedestrian traffic. Pedestrians slow their walking speed during the attractions to move through the crowds and to also catch a glimpse of the show. Walking speeds are also significantly slower immediately following the end of the show, as in many cases there is a significant crowd of pedestrians exiting the show area. Figure 3.25 (Saturday May 26, 2012 - Memorial Day weekend) shows the impact to pedestrian volumes in front of the Mirage due to the volcano attraction. The graph illustrates three peaks in pedestrian volume. The 8:00 PM and 9:00 PM shows combined into a single peak with walkway volumes dropping off after the 9:00 PM show. Two additional peaks were observed after the, 10:00 PM and 11:00 PM Mirage Volcano shows. The LOS E threshold is exceeded after the 8:00 PM show at the Mirage Hotel/Casino which corresponds with the maximum 15-minute peak pedestrian volume of 1,963 pedestrians for Saturday, May 26, 2012 of Memorial Day weekend.

Pedestrian volume data was collected at the following 15 locations between Tropicana Avenue and Spring Mountain Road:

- CC1 – New York-New York Hotel/Casino - Figure 3.13
- 5 - MGM Grand Hotel/Casino - Figure 3.14
- 6 – City Center – Crystals - Figure 3.15
- Metro1 – Harley Davidson Café - Figure 3.16
- CC2 - Bellagio Hotel/Casino South - Figure 3.17
- M5 - Paris Hotel/Casino - Figure 3.18
- 9 – Bally's Hotel/Casino - Figure 3.19
- 11A – Bellagio Hotel/Casino - Figure 3.20
- 12 - Flamingo Hotel/Casino - Figure 3.21
- M6 – Caesars Palace Hotel/Casino - Figure 3.22
- 13 – Forum Shops - Figure 3.23
- 14 – Harrah's Hotel/Casino - Figure 3.24
- 15 – Mirage Hotel/Casino - Figure 3.25
- CC3 – Venetian Hotel/Casino - Figure 3.26
- CC4 – Treasure Island Hotel/Casino - Figure 3.27

Pedestrian volumes were found to exceed LOS C at the following locations:

- Metro1 – Harley Davidson Cafe
- 12 - Flamingo Hotel/Casino
- M6 – Caesars Palace Hotel/Casino
- 13 – Forum Shops
- 14 – Harrah's Hotel/Casino
- 15 – Mirage Hotel/Casino
- CC3 – Venetian Hotel/Casino

The time periods when LOS C was found to be exceeded are identified by a red rectangle on the volume graph with the time periods identified.

Table 3.2 shows the summary of data collected within the inner portion of the study corridor. Note that private video data was not provided for every location on both the holiday and typical Saturday. Picture 3.7 through Picture 3.9 show typical walkway activity for the inner portion of the study corridor.

Table 3.2 - Data Summary for Inner Portion of the Study Corridor

Holiday Saturday - May 26, 2012

West Side						East Side					
ID	Name	W_E	Max 15-min Volume	Time of Max Volume	LOS	ID	Name	W_E	Max 15-min Volume	Time of Max Volume	LOS
CC1	New York-New York	8.3	1043	11:00PM - 11:15PM	C	5	MGM Grand	18.4	1343	9:30PM - 9:45PM	A
CC2	Bellagio South	21.5	2633	9:30PM - 9:45PM	C	Metro1	Harley Davidson	5.0	1140	4:00PM - 4:15PM	E
M6	Caesars Palace	6.8	1684	9:15PM - 9:30PM	D	M5	Paris	10.3	2124	4:15PM - 4:30PM	C
13	Forum Shops	12.0	2092	11:30PM - 11:45PM	D	9	Bally's	28.0	1780	4:15PM - 4:30PM	A
15	Mirage	8.7	1963	8:45PM - 9:00PM	E	12	Flamingo	8.5	1459	9:45PM - 10:00PM	D
						14	Harrah's	6.7	1242	2:30PM - 2:45PM	D
						CC3	Venetian	6.3	1323	8:45PM - 9:00PM	D

Typical Saturday - June 16, 2012

West Side						East Side					
ID	Name	W_E	Max 15-min Volume	Time of Max Volume	LOS	ID	Name	W_E	Max 15-min Volume	Time of Max Volume	LOS
CC1	New York-New York	8.3	358	11:30PM - 11:45PM	C	5	MGM Grand	18.4	739	10:00PM - 10:15PM	A
6	Crystals	17.7	619	10:00PM - 10:15PM	A	Metro1	Harley Davidson	5.0	1290	10:00PM - 10:15PM	E
CC2	Bellagio South	21.5	1595	10:00PM - 10:15PM	A	M5	Paris	10.3	1417	10:00PM - 10:15PM	B
11A	Bellagio	15.0	1573	10:30PM - 10:45PM	B	9	Bally's	28.0	880	12:30PM - 12:45PM	A
M6	Caesars Palace	6.8	1338	9:15PM - 9:30PM	C	14	Harrah's	6.7	1152	9:00PM - 9:15PM	D
13	Forum Shops	12.0	1787	10:15PM - 10:30PM	C	CC3	Venetian	6.3	1737	11:15PM - 11:30PM	E
15	Mirage	8.7	754	8:00PM - 8:15PM	B						
CC4	Treasure Island	1.7	287	10:15PM - 10:30PM	D						



Picture 3.7 – Pedestrian Activity at New York-New York Holiday Saturday.



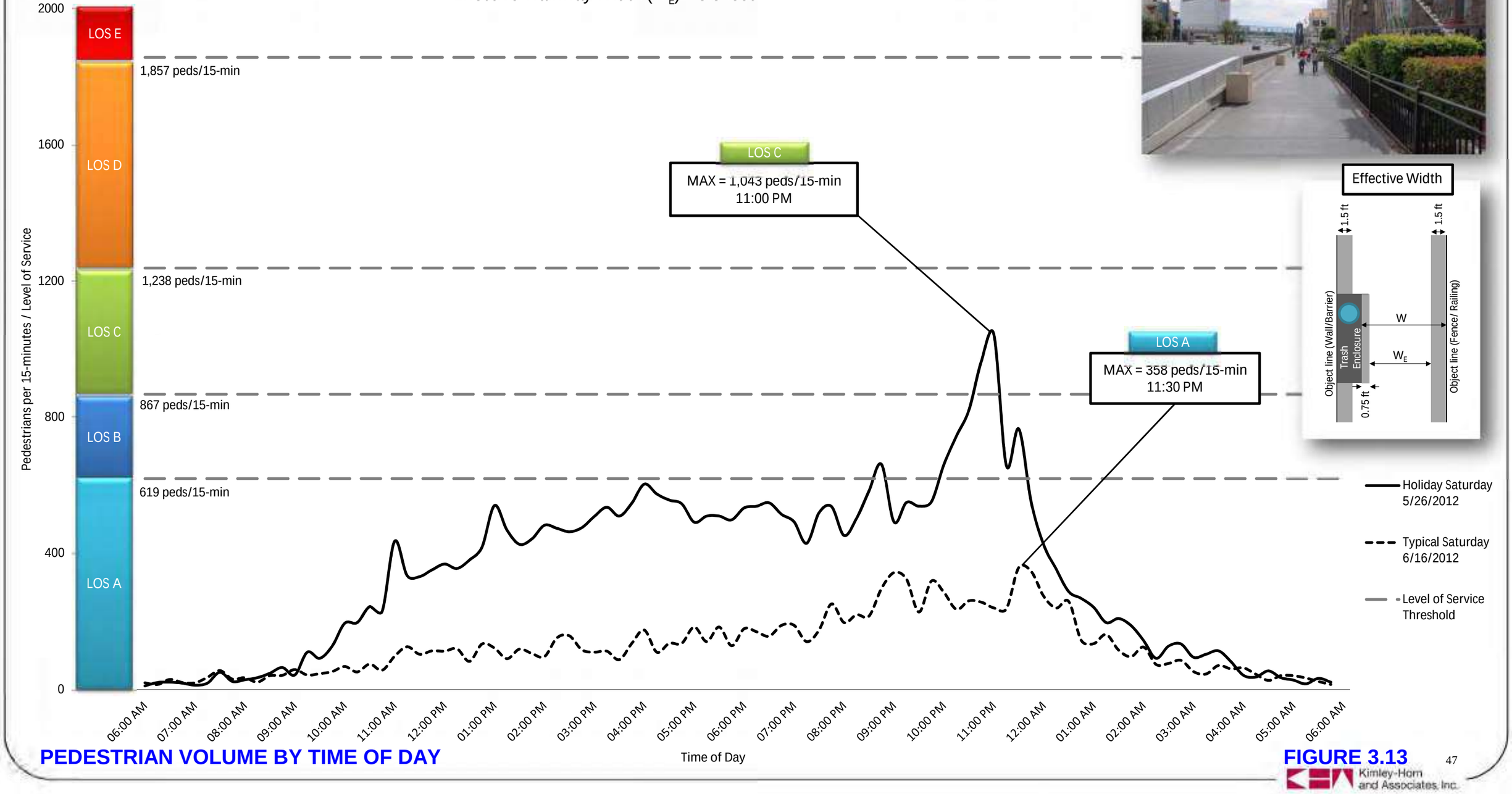
Picture 3.8 – Pedestrian Activity at Venetian Hotel/Casino Holiday Saturday.



Picture 3.9 – Pedestrian Activity at Bellagio Hotel/Casino South Typical Saturday.

New York New York Hotel/Casino (Location ID: CC1)
Video Count Location: 780 ft. North of Tropicana Avenue
Walkway Width (W) = 10.5 feet
Effective Walkway Width (W_E) = 8.3 feet





PEDESTRIAN VOLUME BY TIME OF DAY

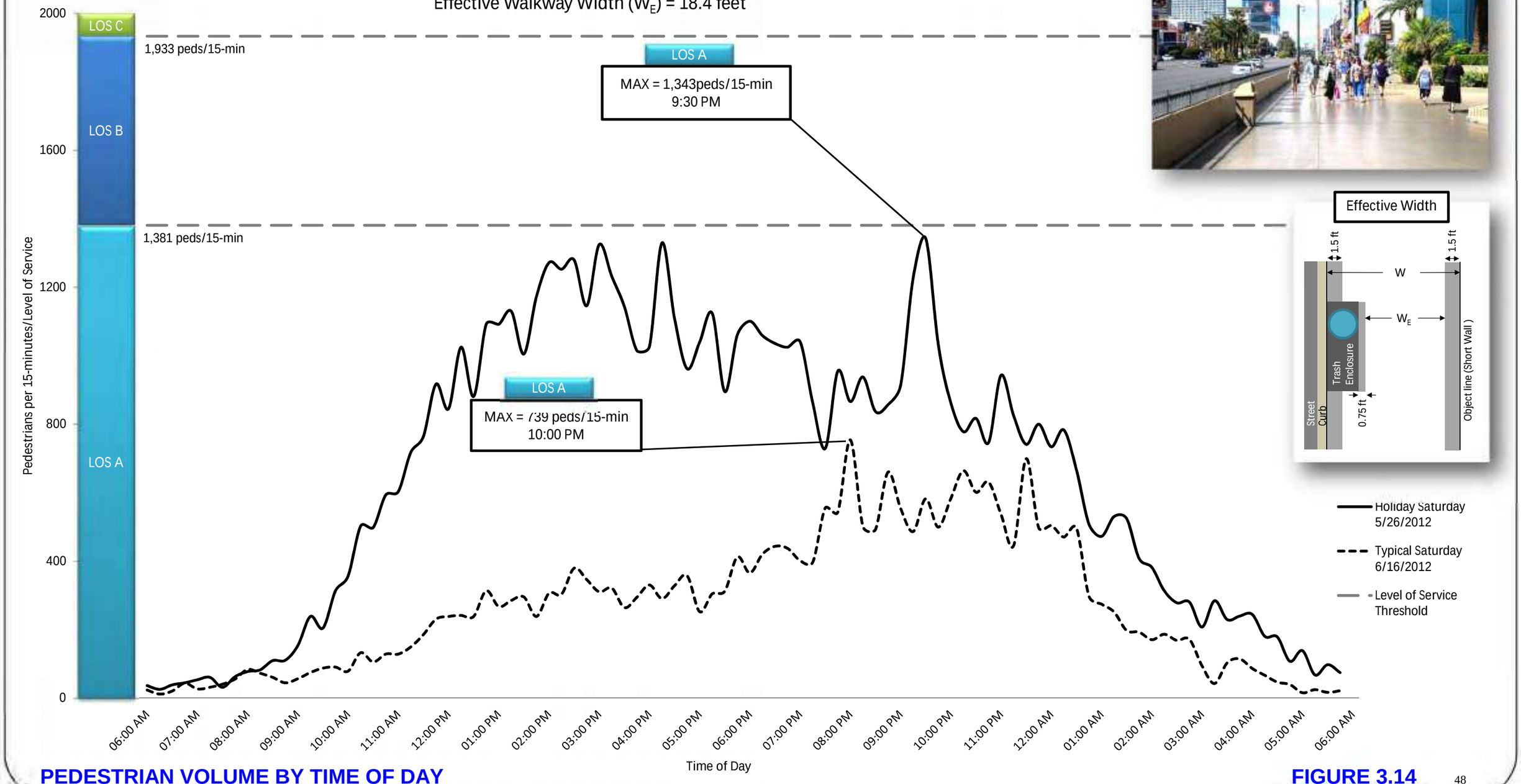
FIGURE 3.13

Kimley-Horn and Associates, Inc.

CC 1028

MGM Grand Hotel/Casino (Location ID: 5)
Video Count Location: 310 ft. North of Tropicana Avenue
Walkway Width (W) = 20.7 feet
Effective Walkway Width (W_E) = 18.4 feet





Holiday Saturday 5/26/2012
Typical Saturday 6/16/2012
Level of Service Threshold

PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.14

Kimley-Horn and Associates, Inc.

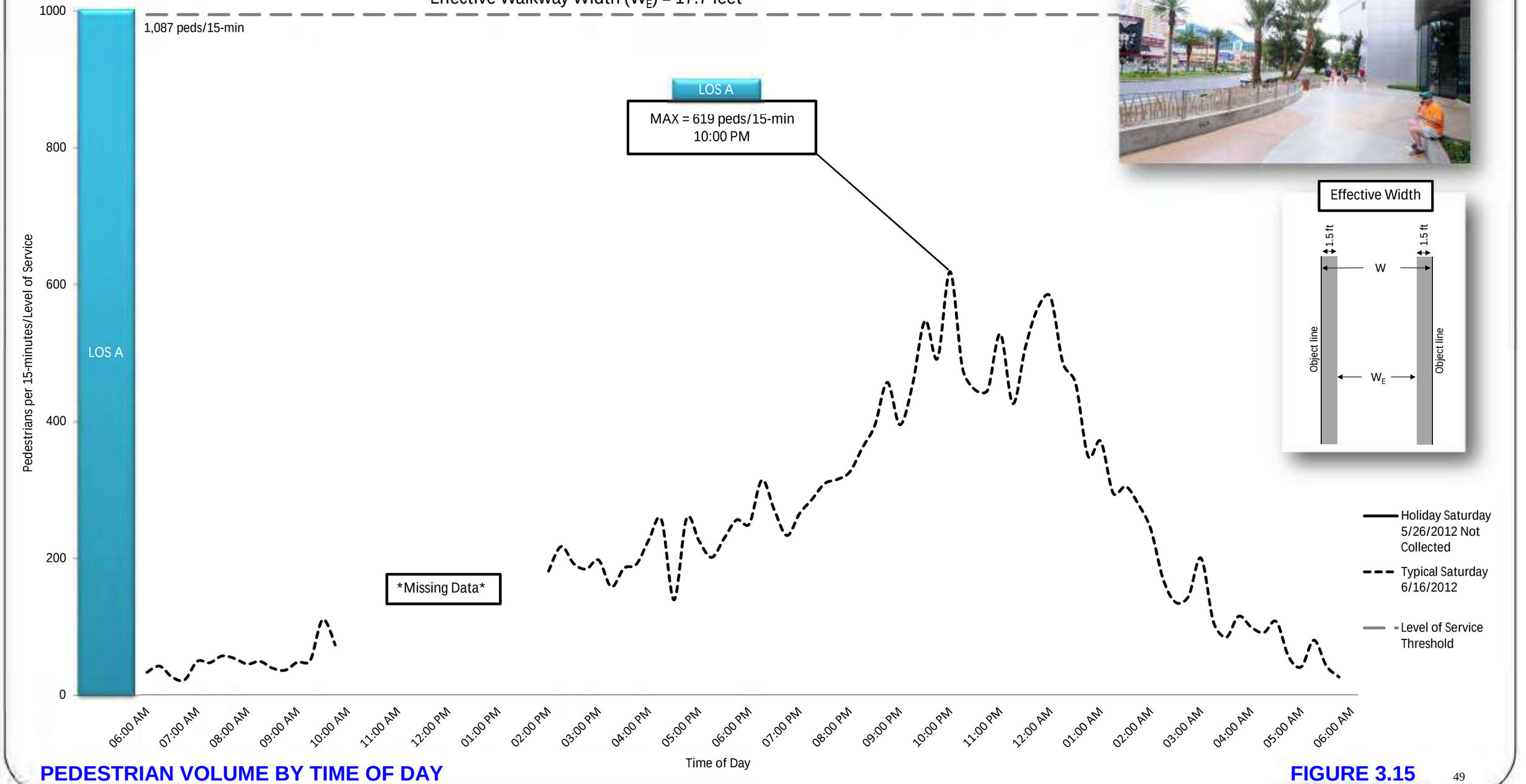
City Center - Crystals (Location ID: 6)

Video Count Location: 460 ft. South of Harmon Avenue

Walkway Width (W) = 20.7 feet

Effective Walkway Width (W_E) = 17.7 feet





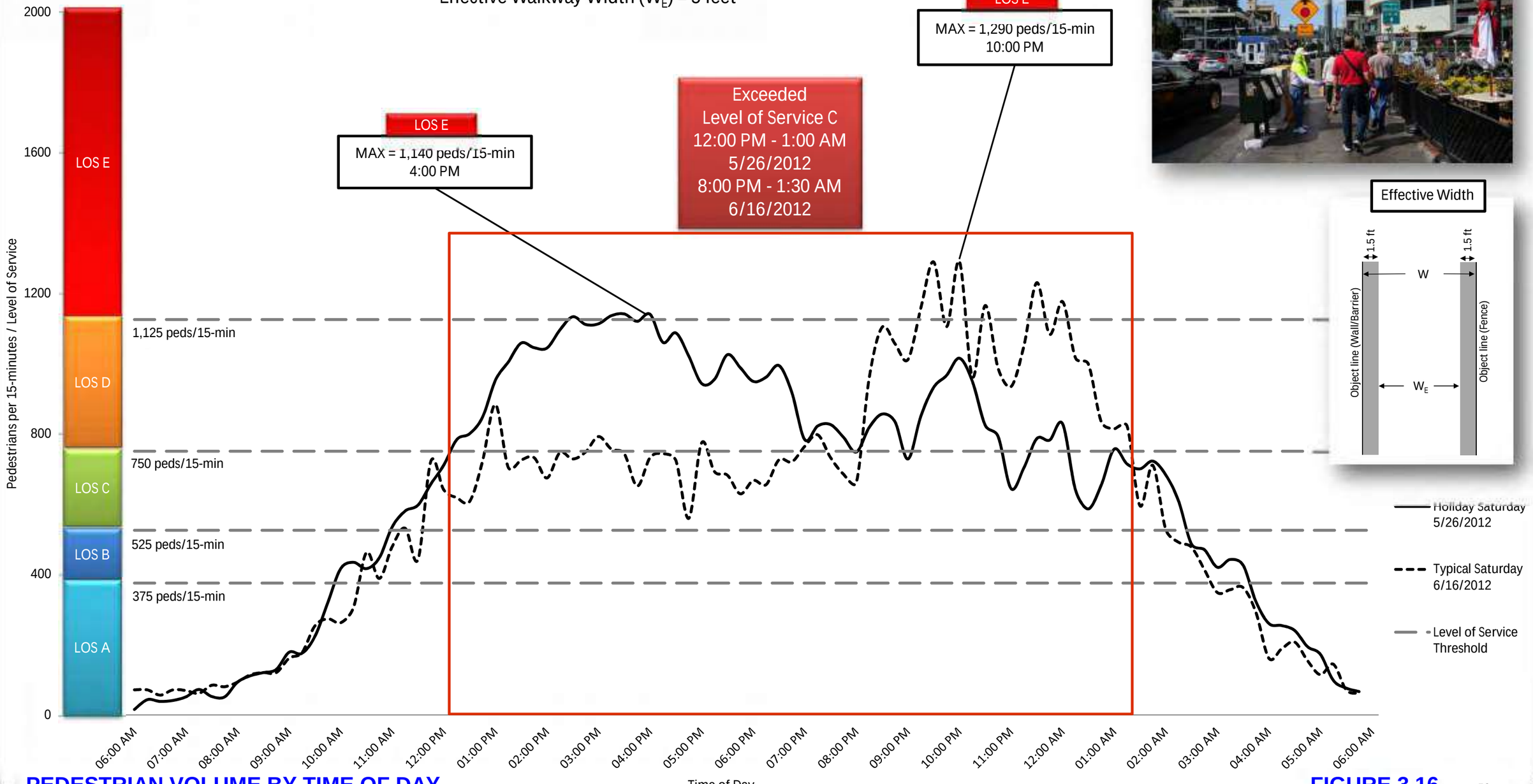
PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.15

Kimley-Horn and Associates, Inc.

Harley Davidson Cafe (Location ID: Metro1)
Video Count Location: 270 ft. South of Harmon Avenue
Walkway Width (W) = 8 feet
Effective Walkway Width (W_E) = 5 feet





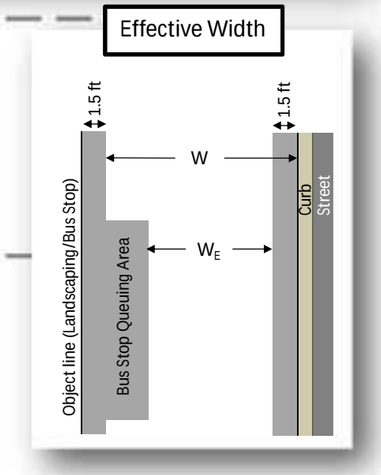
PEDESTRIAN VOLUME BY TIME OF DAY

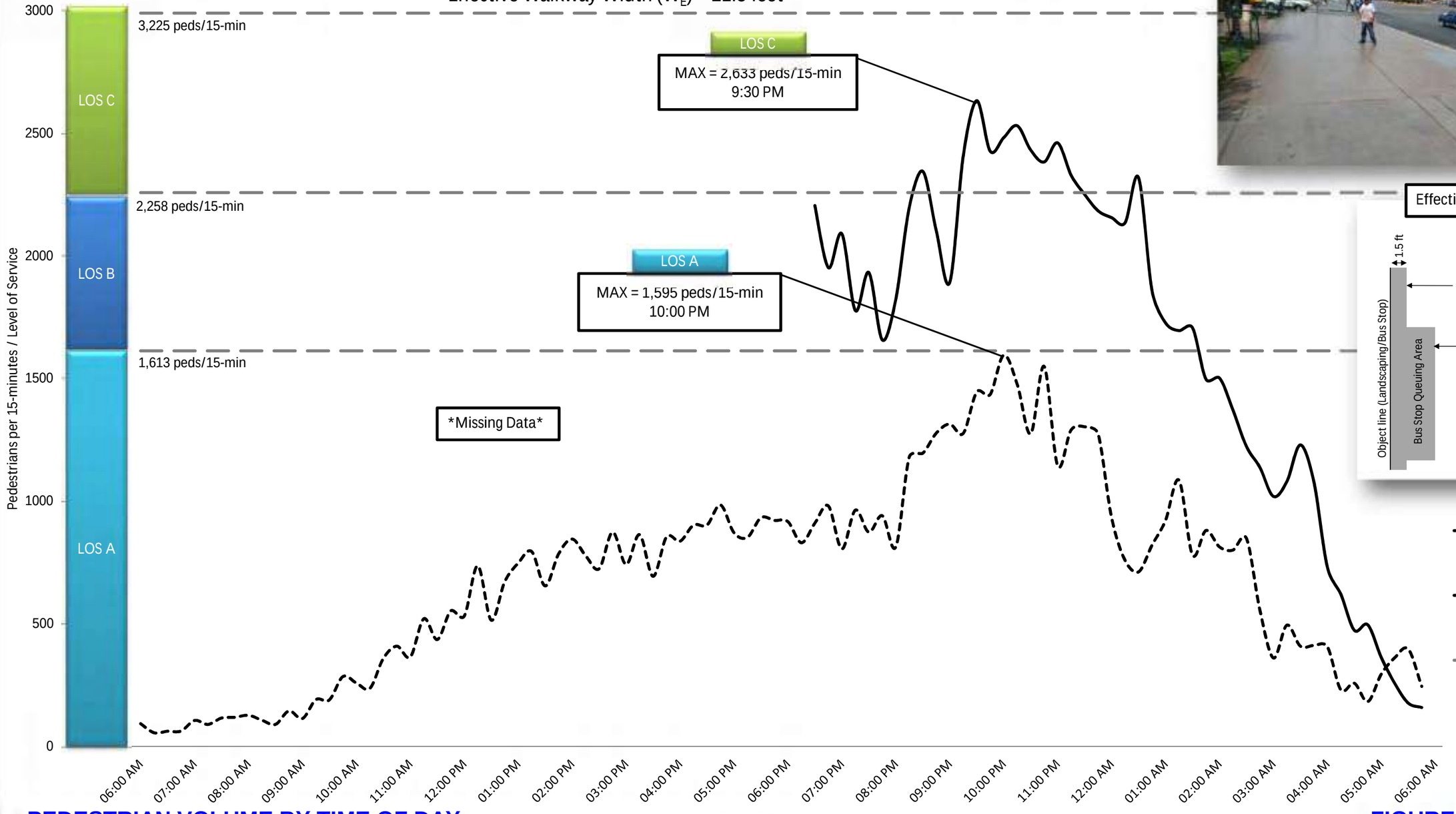
FIGURE 3.16

Kimley-Horn and Associates, Inc.

Bellagio Hotel/Casino South (Location ID: CC2)
Video Count Location: 580 ft. North of Harmon Avenue
Walkway Width (W) = 27 feet
Effective Walkway Width (W_E) = 21.5 feet







PEDESTRIAN VOLUME BY TIME OF DAY

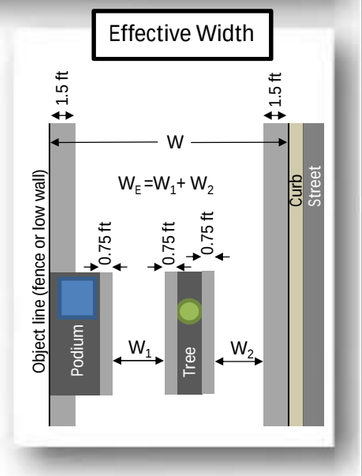
FIGURE 3.17

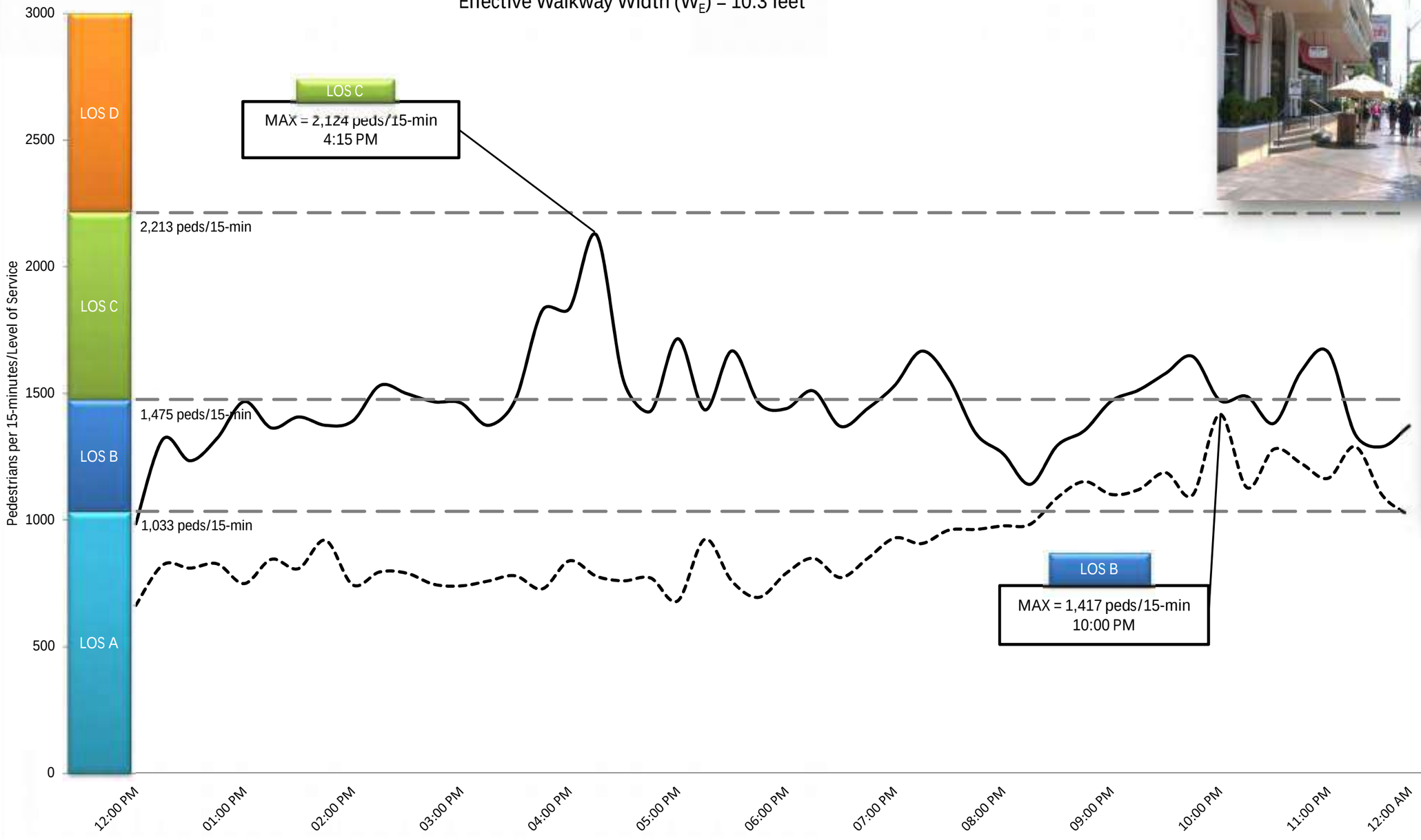
Kimley-Horn and Associates, Inc.

CC 1032

Paris Hotel/Casino (Location ID: M5)
Manual Count Location: 970 ft. South of Flamingo Road
Walkway Width (W) = 16.8 feet
Effective Walkway Width (W_E) = 10.3 feet







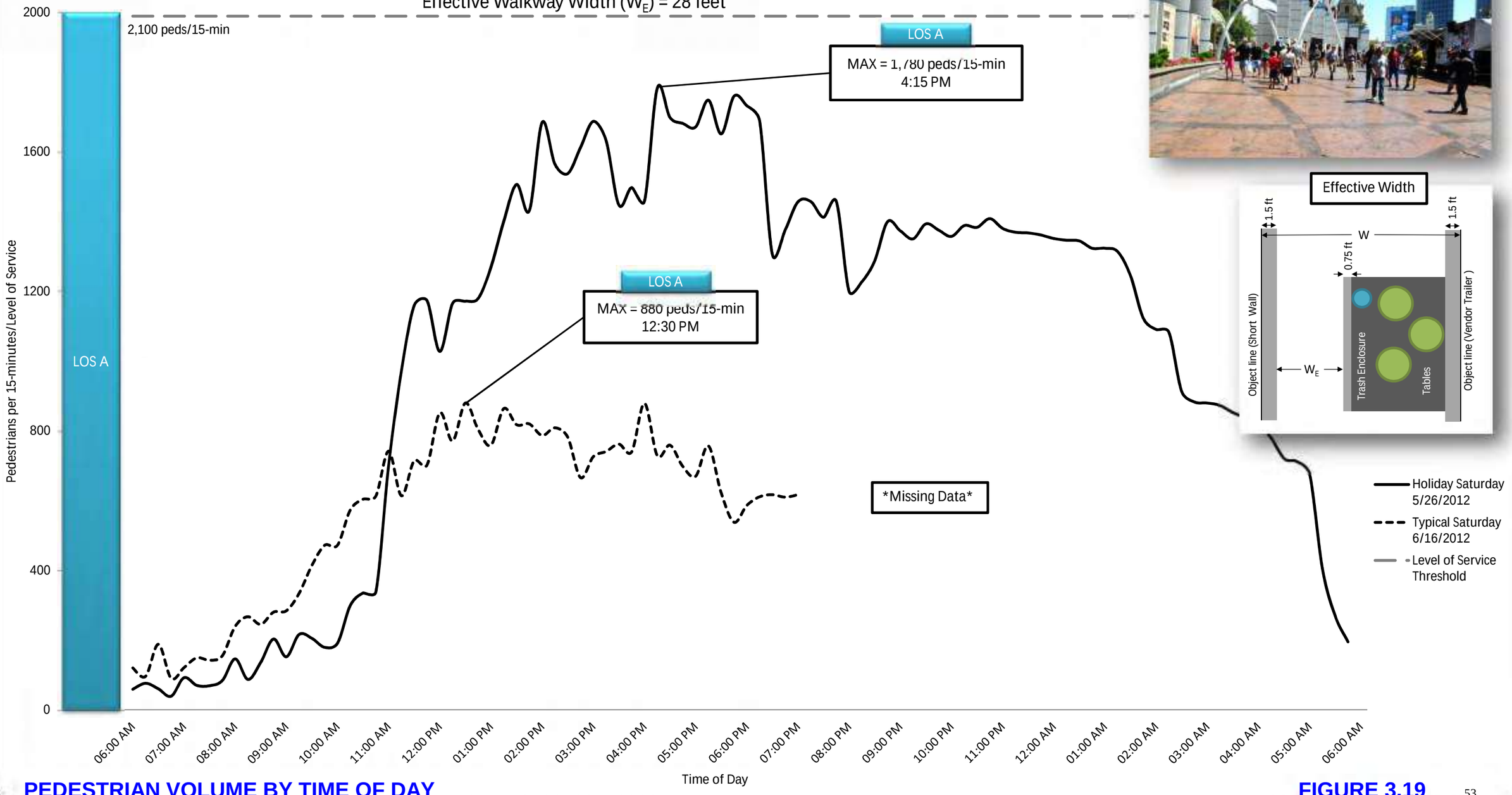
PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.18

Kimley-Horn and Associates, Inc.

Bally's Hotel/Casino (Location ID: 9)
Video Count Location: 170 ft. South of Flamingo Road
Walkway Width (W) = 43.5 feet
Effective Walkway Width (W_E) = 28 feet





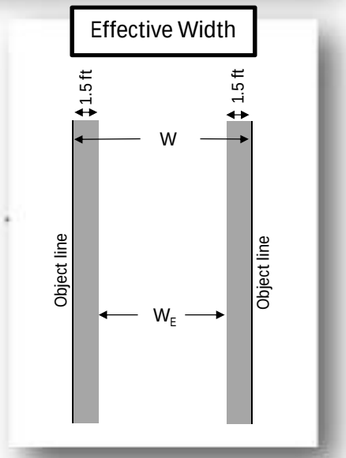
PEDESTRIAN VOLUME BY TIME OF DAY

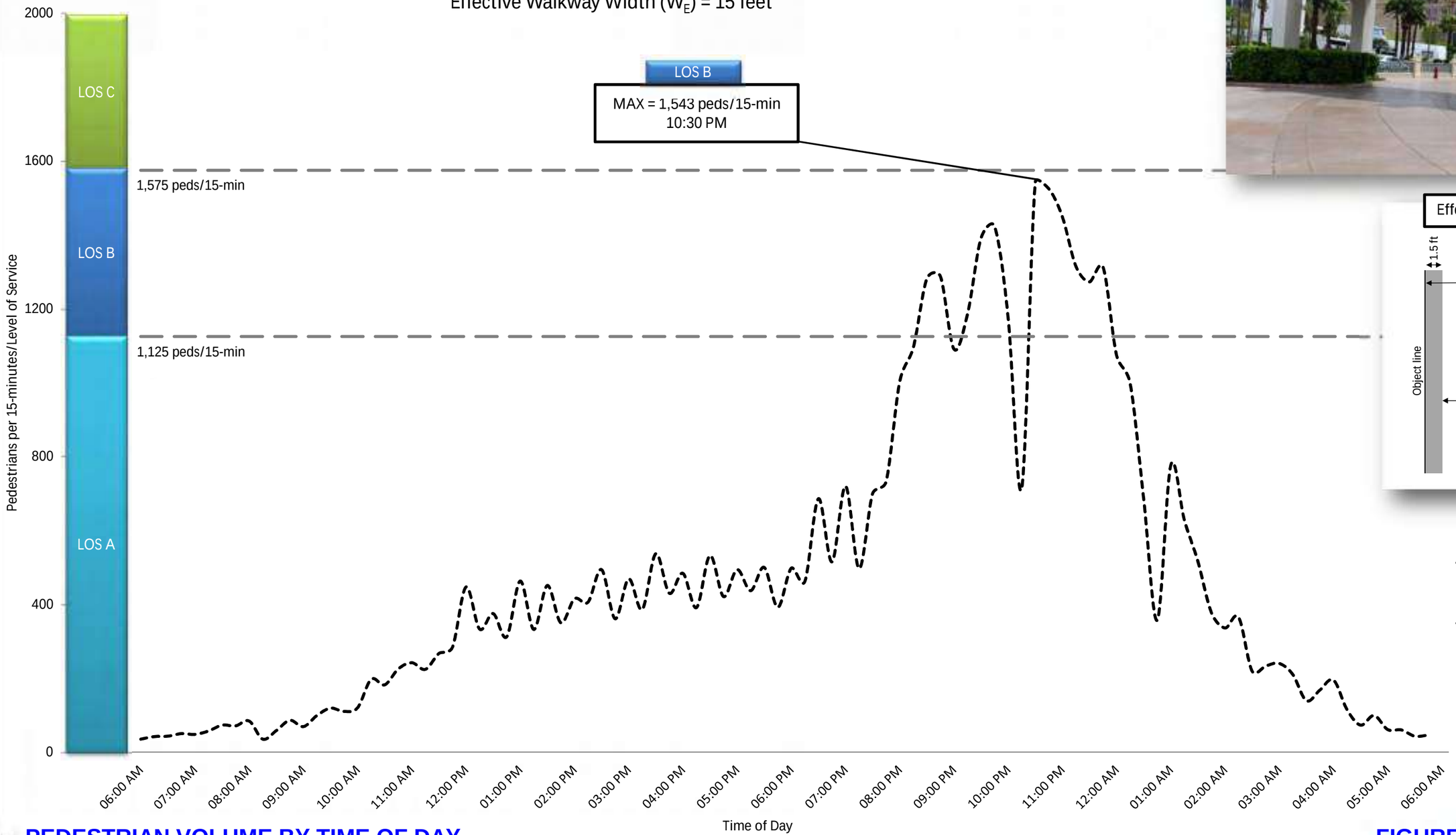
FIGURE 3.19

Kimley-Horn and Associates, Inc.

Bellagio Hotel/Casino (Location ID: 11A)
Video Count Location: 190 ft. South of Flamingo Road
Walkway Width (W) = 18 feet
Effective Walkway Width (W_E) = 15 feet







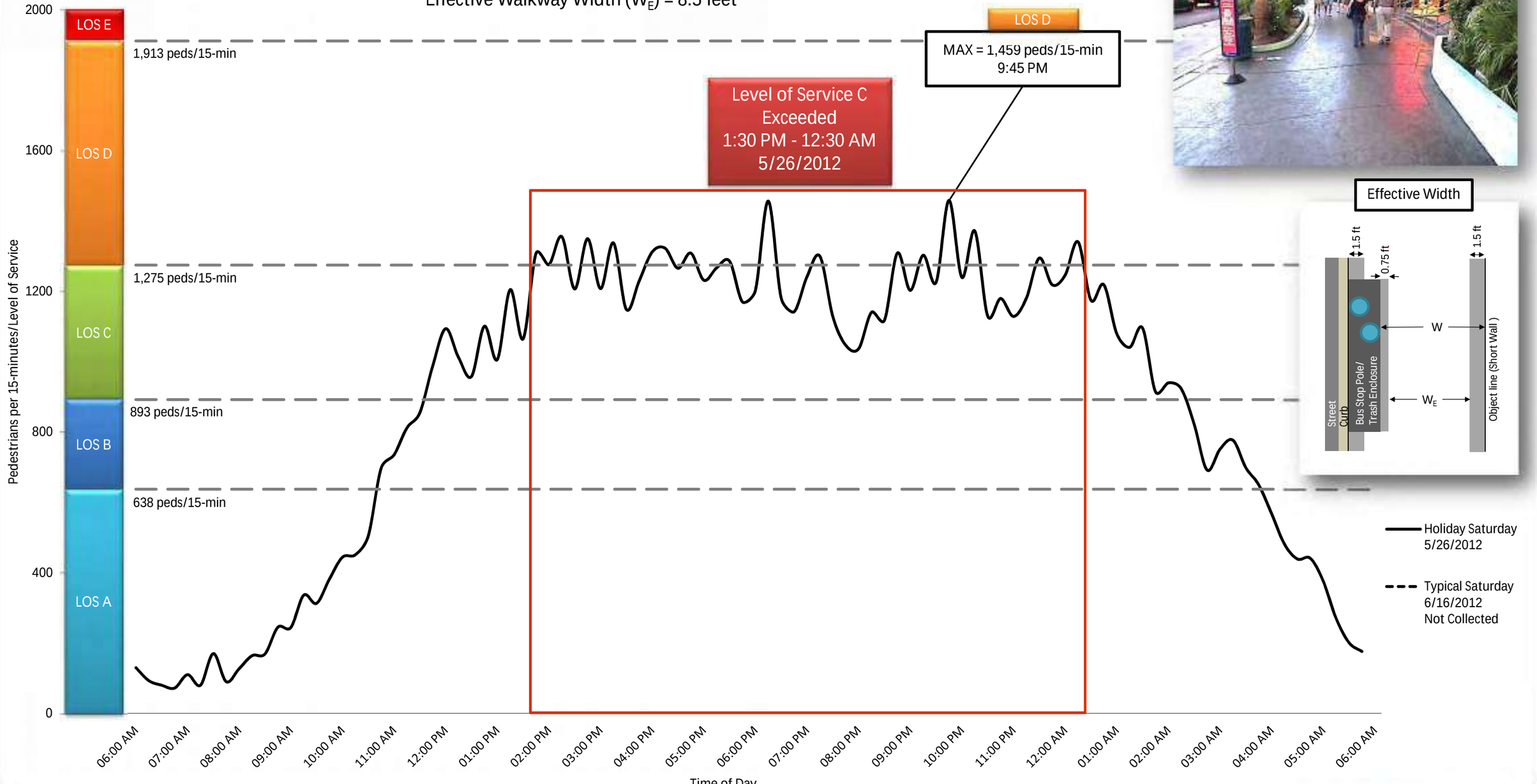
PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.20

Kimley-Horn and Associates, Inc.

Flamingo Hotel/Casino (Location ID: 12)
Video Count Location: 750 ft. North of Flamingo Road
Walkway Width (W) = 10.8 feet
Effective Walkway Width (W_E) = 8.5 feet





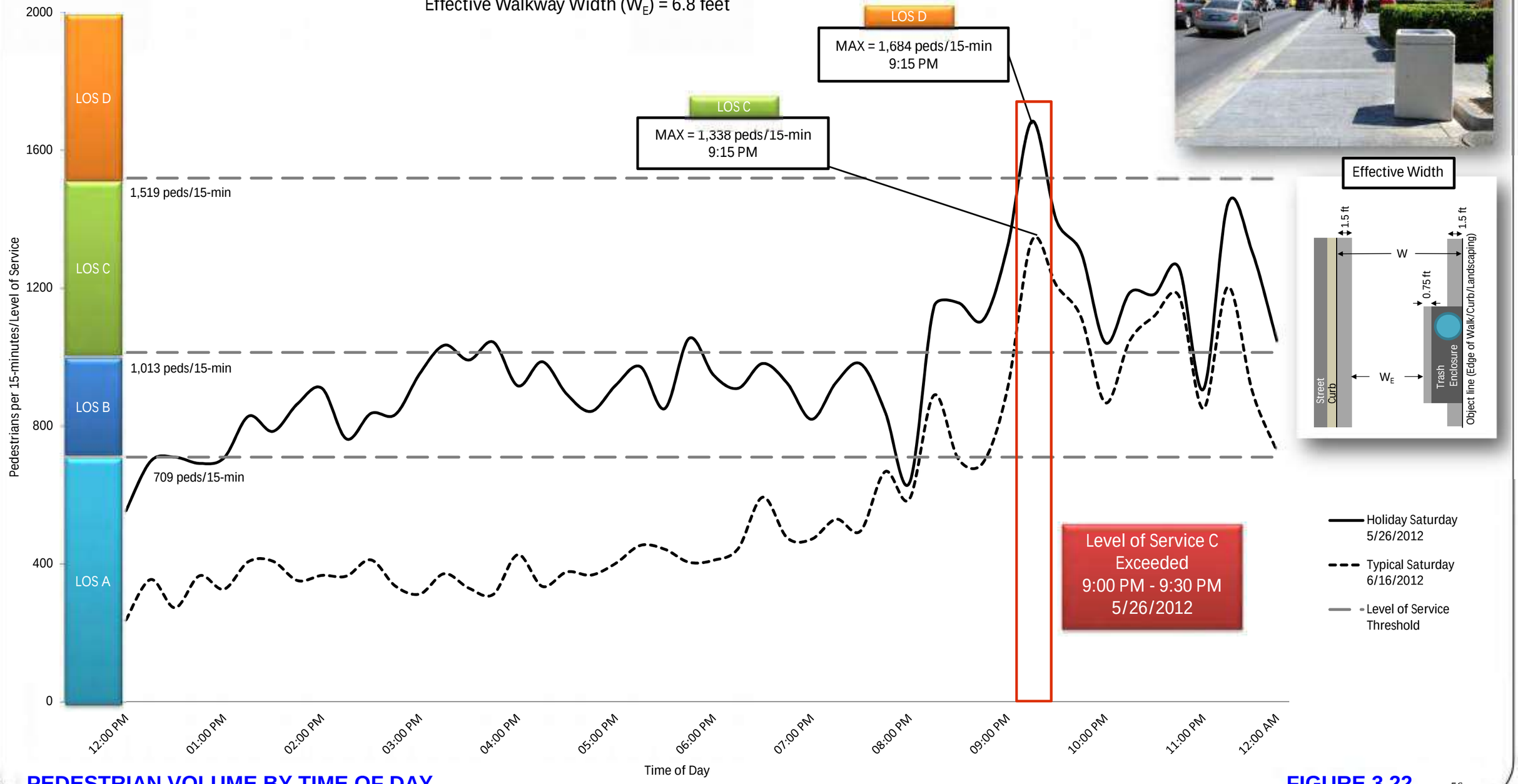
PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.21

Kimley-Horn and Associates, Inc.

Caesar's Palace Hotel/Casino (Location ID: M6)
Manual Count Location: 630 ft. North of Flamingo Road
Walkway Width (W) = 9 feet
Effective Walkway Width (W_E) = 6.8 feet





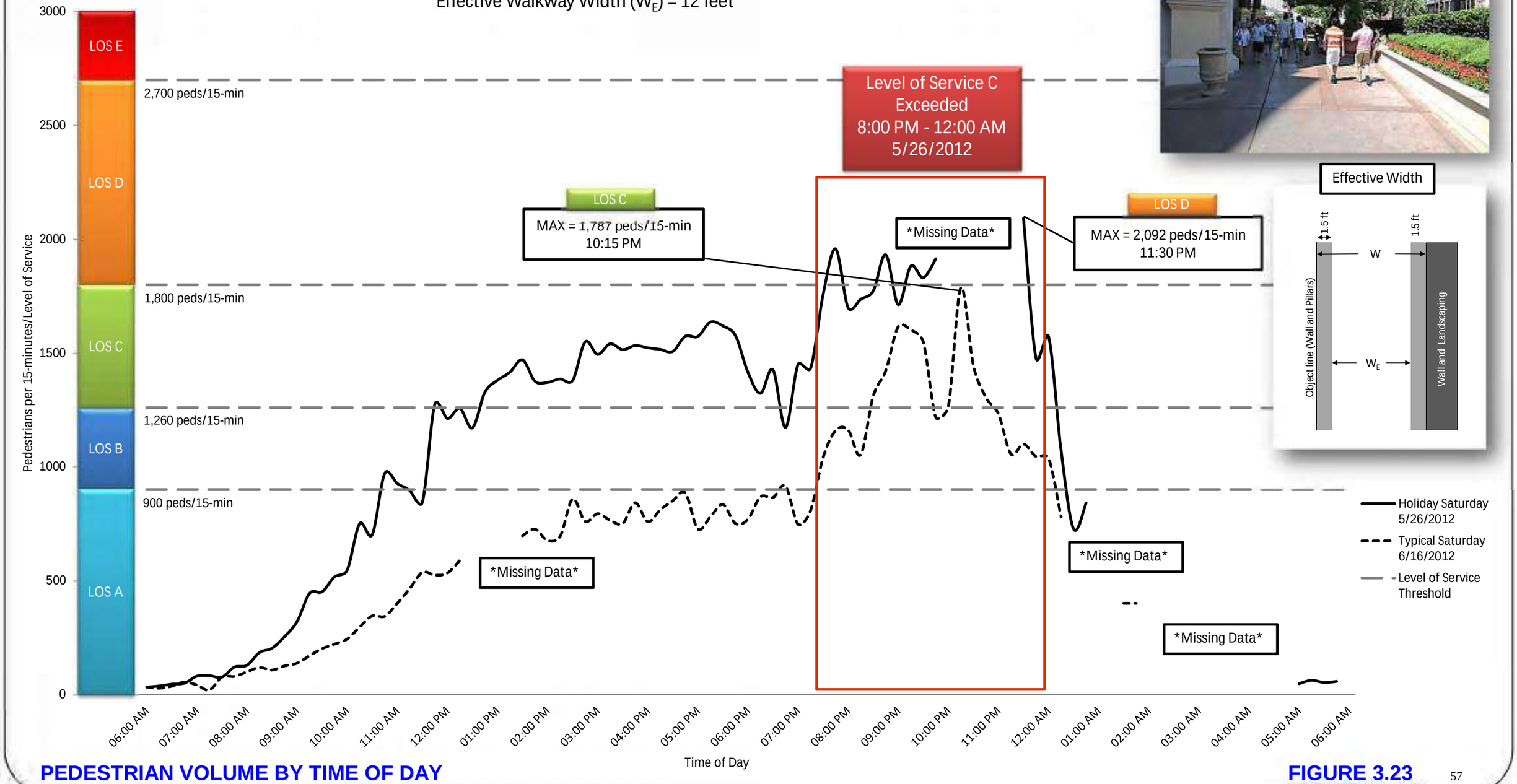
PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.22

Kimley-Horn and Associates, Inc.

Forum Shops (Location ID: 13)
Video Count Location: 1,610 ft. North of Flamingo Road
Walkway Width (W) = 15 feet
Effective Walkway Width (W_E) = 12 feet





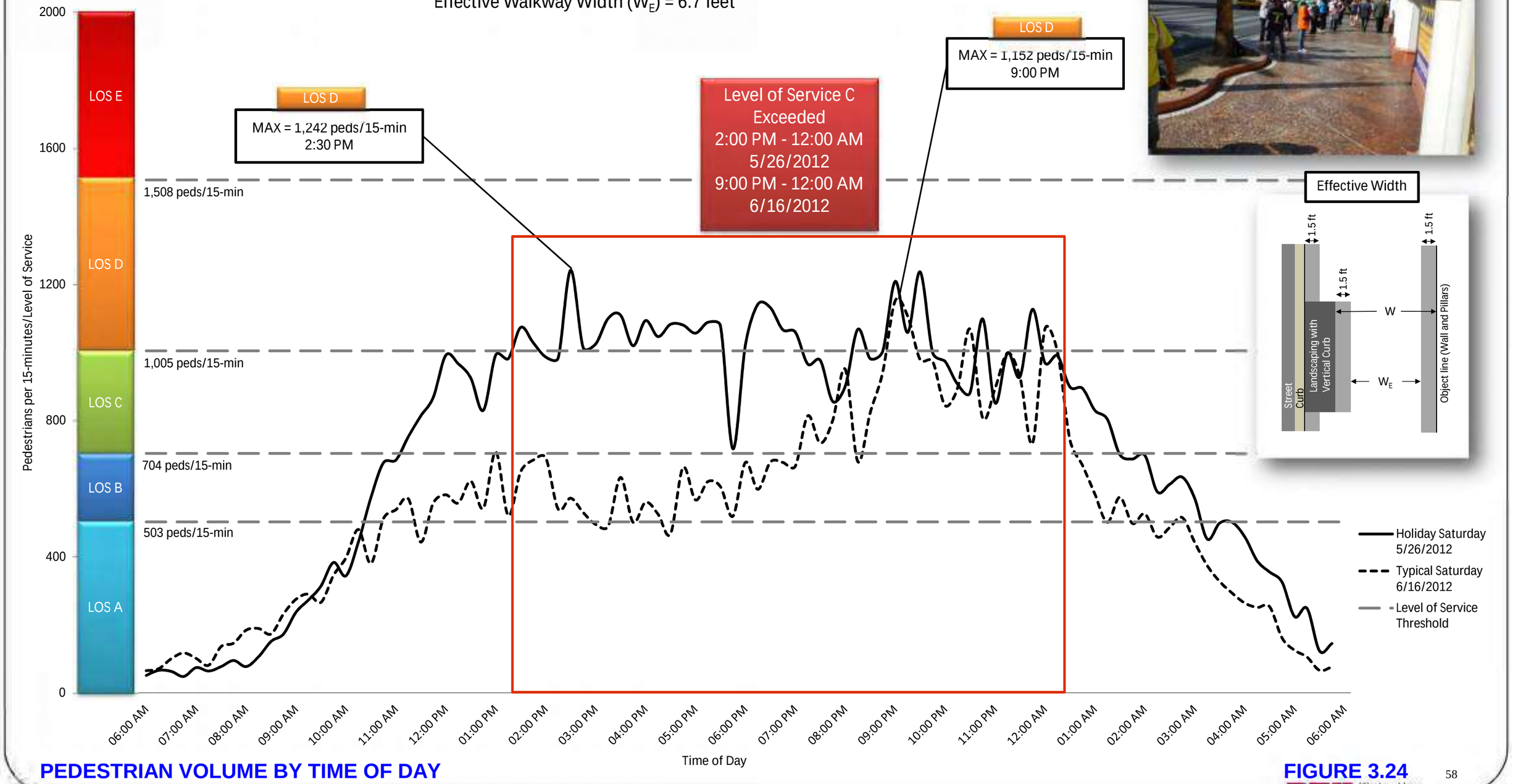
PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.23

Kimley-Horn and Associates, Inc.

Harrah's Hotel/Casino (Location ID: 14)
Video Count Location: 1,870 ft. North of Flamingo Road
Walkway Width (W) = 9.7 feet
Effective Walkway Width (W_E) = 6.7 feet





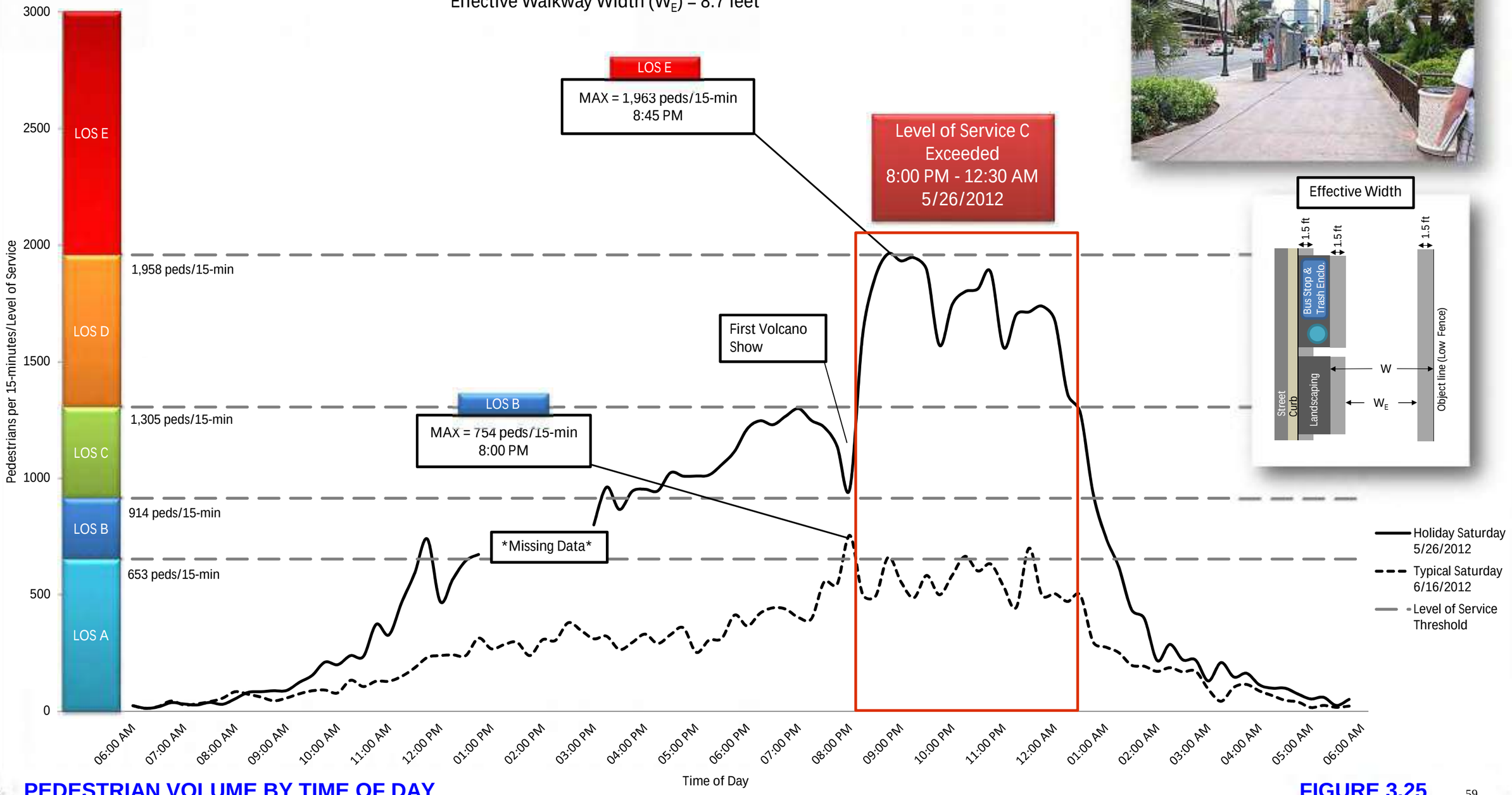
PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.24

Kimley-Horn and Associates, Inc.

Mirage Hotel/Casino (Location ID: 15)
Video Count Location: 1,980 ft. South of Spring Mountian Road
Walkway Width (W) = 11.7 feet
Effective Walkway Width (W_E) = 8.7 feet





PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.25

Kimley-Horn and Associates, Inc.

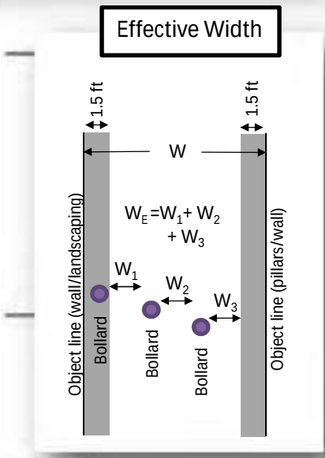
Venetian Hotel/Casino (Location ID: CC3)

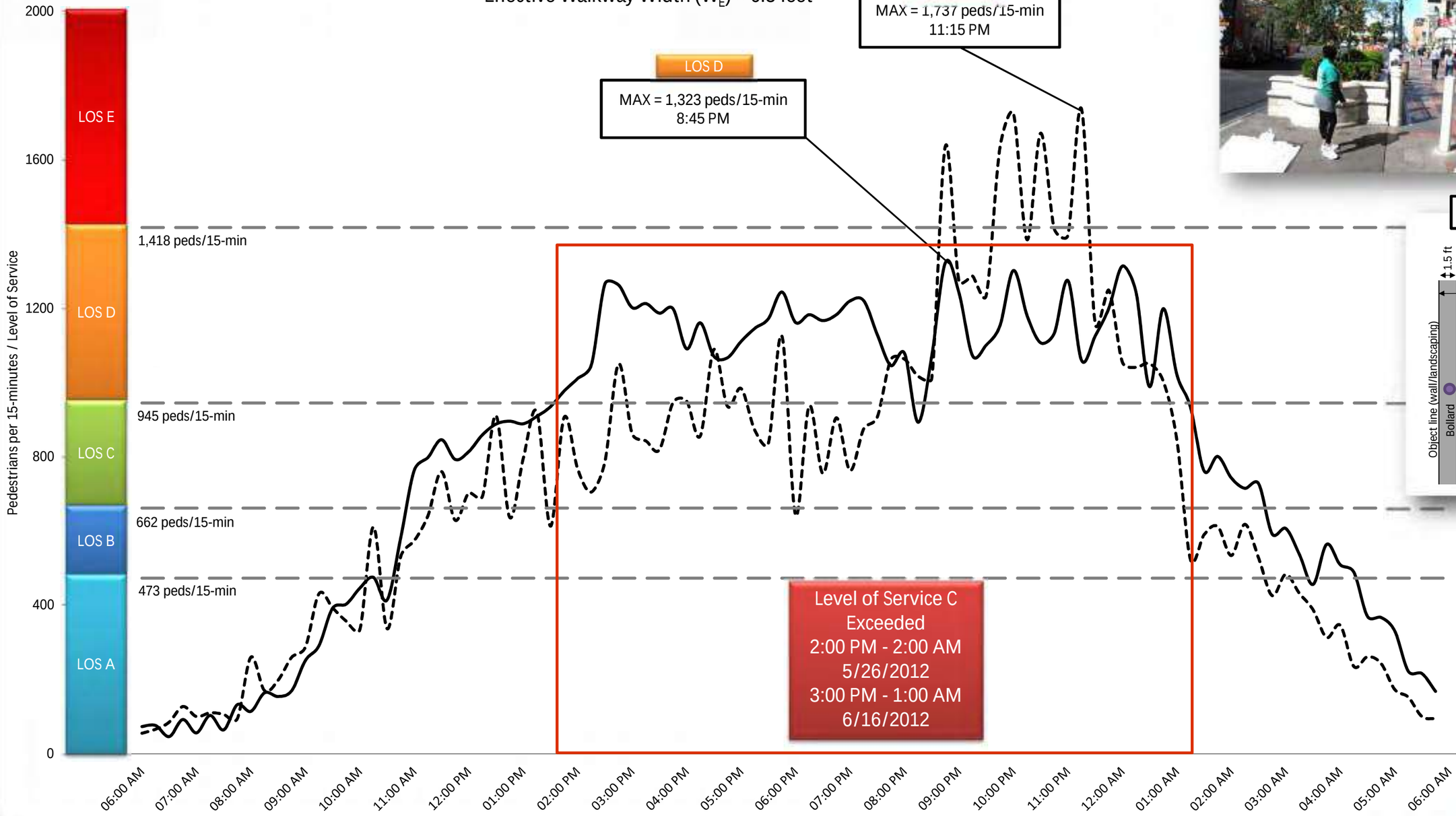
Video Count Location: 1,750 ft. South of Spring Mountian Road

Walkway Width (W) = 11.3 feet

Effective Walkway Width (W_E) = 6.3 feet







PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.26

Kimley-Horn and Associates, Inc.

CC 1041

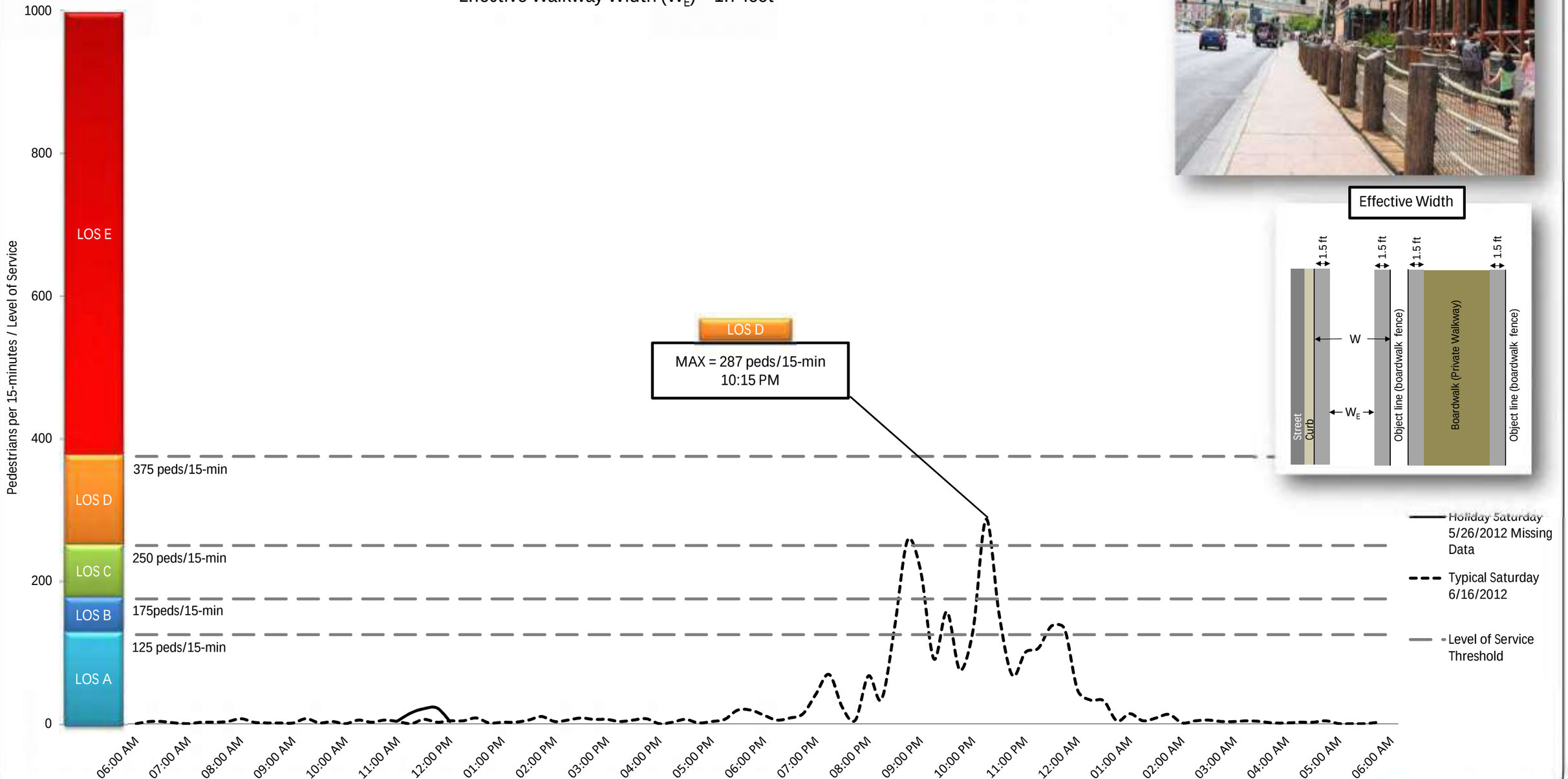
Treasure Island Hotel/Casino (Location ID: CC4)

Video Count Location: 730 ft. South of Spring Mountian Road

Walkway Width (W) = 4.7 feet

Effective Walkway Width (W_E) = 1.7 feet





PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.27

Kimley-Horn and Associates, Inc.

3.1.4 Pedestrian Bridges

In general, the observed pedestrian bridges provided a LOS C or better on the holiday Saturday of May 26, 2012. The only exception was the Flamingo Road west pedestrian bridge (see Figure 3.36) where the maximum peak 15-minute pedestrian volume was observed with 2,172 pedestrians per 15-minutes between 9:15 PM and 9:30 PM. A daily total volume of 99,892 pedestrians for the holiday Saturday were observed using this bridge. The bridge provided a LOS D between the hours of 3:00 PM and about 11:30 PM, all other times a LOS C or better was observed. It should be noted that the LOS calculations were made assuming no non-permanent obstructions were on the bridge and that the entire walkway was available for pedestrian movement. Also, the Flamingo Road west pedestrian bridge was observed to have an average of three non-permanent obstructions on the bridge between 9:00 PM and 12:00 AM (see Figure 3.57). In should also be noted that in Section 3.6, when pedestrian volumes were estimated for the holiday Saturday, the Harmon Avenue West pedestrian bridge resulted in a calculated LOS which was also found to exceed LOS C (based on adjacent count volumes). Picture 3.10 and Picture 3.11 show the activity on pedestrian bridges in the study corridor.

Table 3.3 summarizes the data collected at each of the pedestrian bridges for both the holiday and typical Saturdays (May 26 and June 16, 2012).

Pedestrian volume data was collected on 14 pedestrian bridges within the study corridor, which were:

- M3 – Tropicana Avenue South Pedestrian Bridge – Figure 3.28
- 2 – Tropicana Avenue West Pedestrian Bridge – Figure 3.29
- 3 – Tropicana Avenue East Pedestrian Bridge – Figure 3.30
- 4 – Tropicana Avenue North Pedestrian Bridge – Figure 3.31
- 7 – Harmon Avenue West Pedestrian Bridge – Figure 3.32
- M4 – Harmon Avenue North Pedestrian Bridge – Figure 3.33
- 8 - Flamingo Road South Pedestrian Bridge – Figure 3.34
- 10 - Flamingo Road East Pedestrian Bridge – Figure 3.35
- 11 - Flamingo Road West Pedestrian Bridge – Figure 3.36
- Metro2 - Flamingo Road North Pedestrian Bridge – Figure 3.37
- 16 – Venetian Pedestrian Bridge – Figure 3.38
- M7 - Spring Mountain West Pedestrian Bridge – Figure 3.39
- 17 - Spring Mountain East Pedestrian Bridge – Figure 3.40
- 19 – Wynn Pedestrian Bridge – Figure 3.41



Picture 3.10 – Flamingo Road West Pedestrian Bridge on Holiday Saturday.



Picture 3.11 – Flamingo Road East Pedestrian Bridge Escalators.

Table 3.3 – Data Summary for Pedestrian Bridges.

Holiday Saturday - May 26, 2012

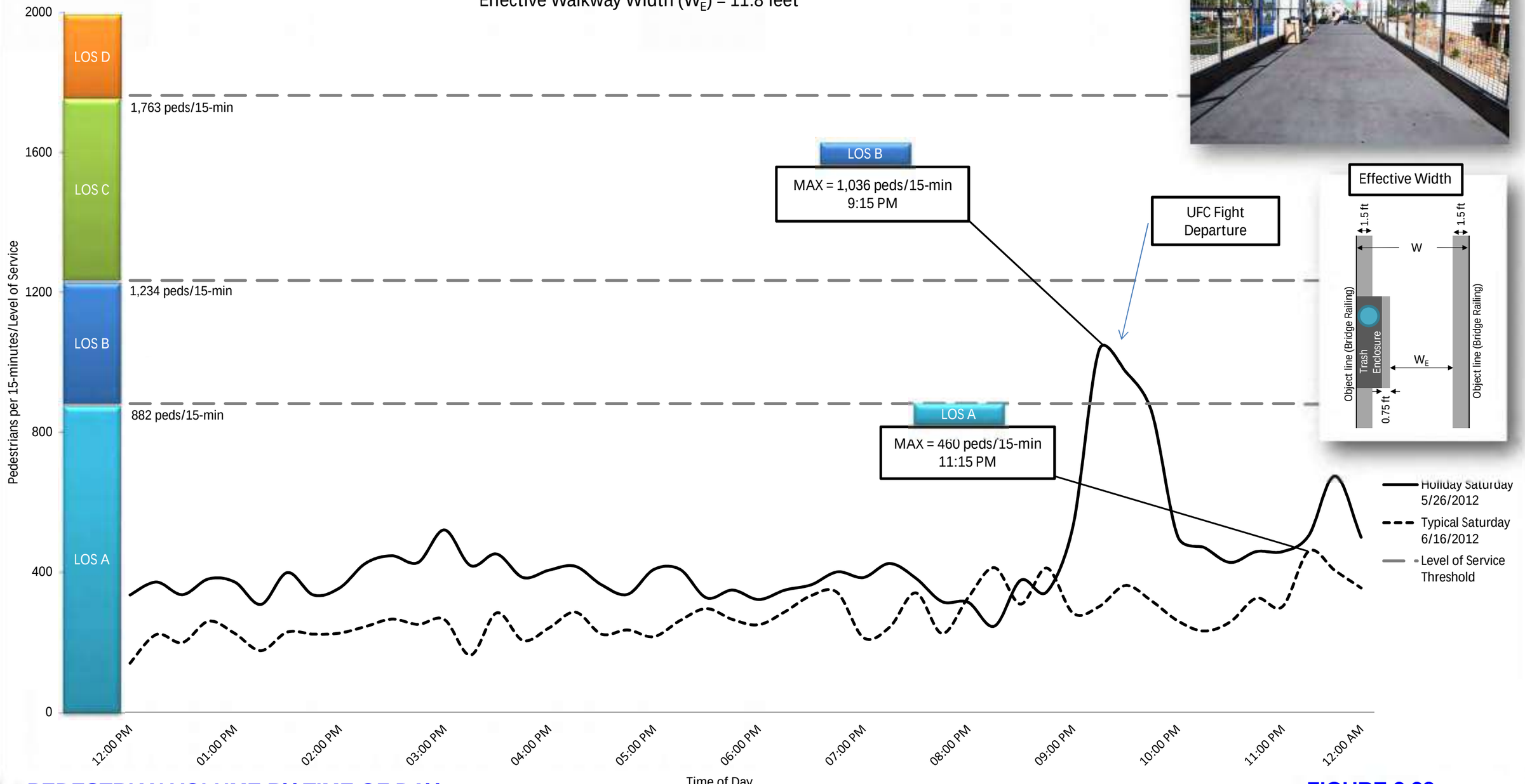
West Side (and South Bridges)						East Side (and North Bridges)					
ID	Name	W_E	Max 15-min Volume	Time of Max Volume	LOS	ID	Name	W_E	Max 15-min Volume	Time of Max Volume	LOS
M3	Tropicana South	11.8	1036	9:15PM - 9:30PM	B	3	Tropicana East	11.8	1626	9:15PM - 9:30PM	C
8	Flamingo South	11.8	938	4:15PM - 4:30PM	A	4	Tropicana North	11.8	1205	5:15PM - 5:30PM	B
11	Flamingo West	12.0	2172	9:30PM - 9:45PM	D	M4	Harmon North	12.3	1549	5:30PM - 5:45PM	B
16	Venetian South	13.5	915	8:45PM - 9:00PM	A	10	Flamingo East	11.0	1549	12:15AM - 12:30AM	C
M7	Spring Mtn West	13.8	1038	8:45PM - 9:00PM	A	Metro2	Flamingo North	11.0	696	2:00PM - 2:15PM	A
						17	Spring Mtn East	17.0	916	4:00PM - 4:15PM	A
						19	Wynn North	11.8	1190	2:15PM - 2:30PM	B

Typical Saturday - June 16, 2012

West Side (and South Bridges)						East Side (and North Bridges)					
ID	Name	W_E	Max 15-min Volume	Time of Max Volume	LOS	ID	Name	W_E	Max 15-min Volume	Time of Max Volume	LOS
M3	Tropicana South	11.8	460	11:15PM - 11:30PM	A	3	Tropicana East	11.8	518	12:00AM - 12:15AM	A
2	Tropicana West	11.8	1242	10:30PM - 10:45PM	C	4	Tropicana North	11.8	1220	12:00AM - 12:15AM	B
7	Harmon West	12.5	1599	9:30PM - 9:45PM	C	M4	Harmon North	12.3	1115	10:15PM - 10:30PM	A
8	Flamingo South	11.8	696	9:30PM - 9:45PM	B	10	Flamingo East	11.0	694	2:15PM - 2:30PM	A
11	Flamingo West	12.0	1570	9:15PM - 9:30PM	C	Metro2	Flamingo North	11.0	971	10:00PM - 10:15PM	B
16	Venetian South	13.5	720	9:00PM - 9:15PM	A	17	Spring Mtn East	17.0	673	2:00PM - 2:15PM	A
M7	Spring Mtn West	13.8	802	8:45PM - 9:00PM	A	19	Wynn North	11.8	514	2:30PM - 2:45PM	A

Tropicana Avenue South Pedestrian Bridge (Location ID: M3)
Manual Count Location: On Bridge
Walkway Width (W) = 14 feet
Effective Walkway Width (W_E) = 11.8 feet





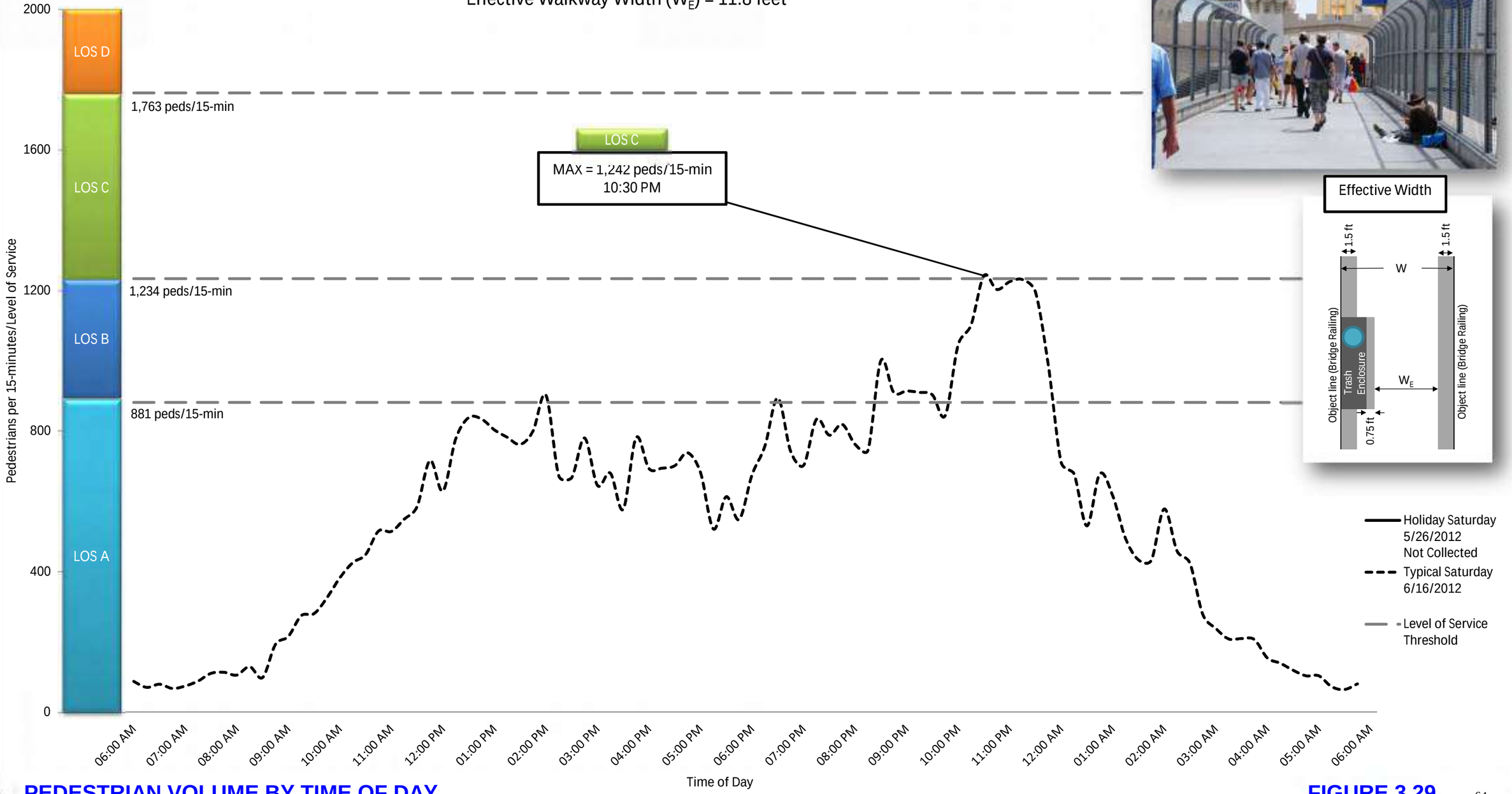
PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.28

Kimley-Horn and Associates, Inc.

Tropicana Avenue West Pedestrian Bridge (Location ID: 2)
Video Count Location: On Bridge
Walkway Width (W) = 14 feet
Effective Walkway Width (W_E) = 11.8 feet





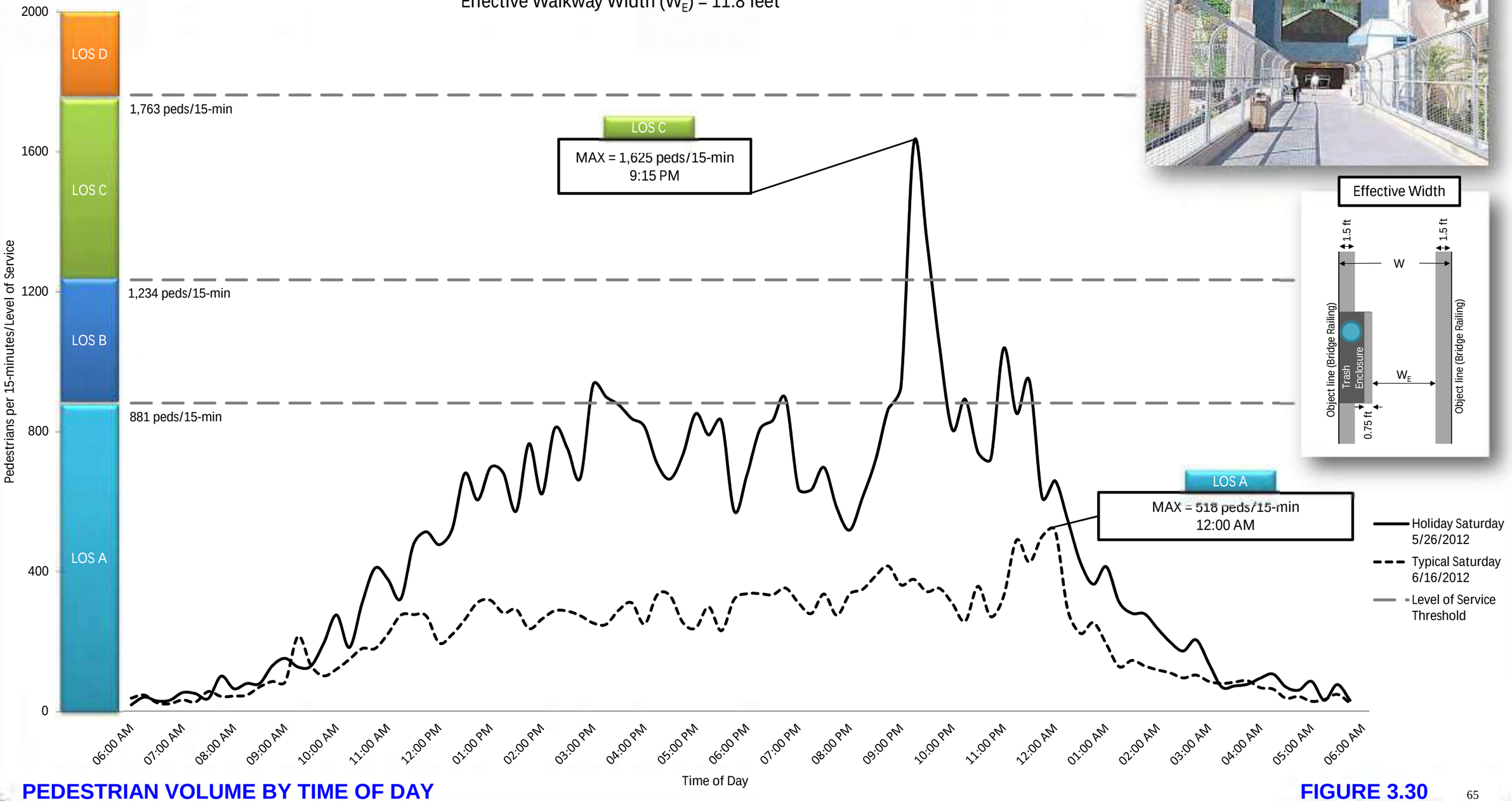
PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.29

Kimley-Horn and Associates, Inc.

Tropicana Avenue East Pedestrian Bridge (Location ID: 3)
Video Count Location: On Bridge
Walkway Width (W) = 14 feet
Effective Walkway Width (W_E) = 11.8 feet





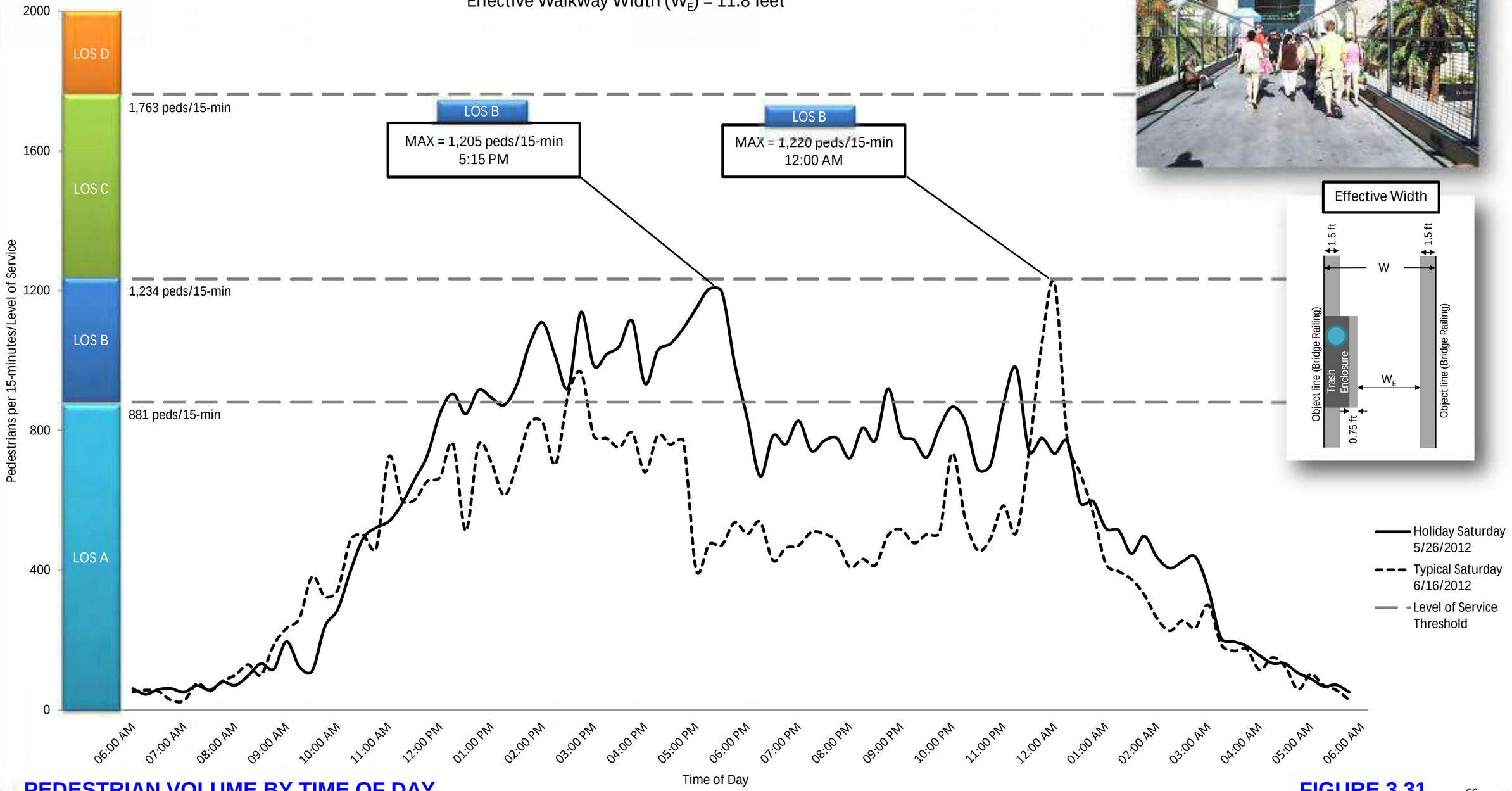
PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.30

Kimley-Horn and Associates, Inc.

Tropicana Avenue North Pedestrian Bridge (Location ID: 4)
Video Count Location: On Bridge
Walkway Width (W) = 14 feet
Effective Walkway Width (W_E) = 11.8 feet





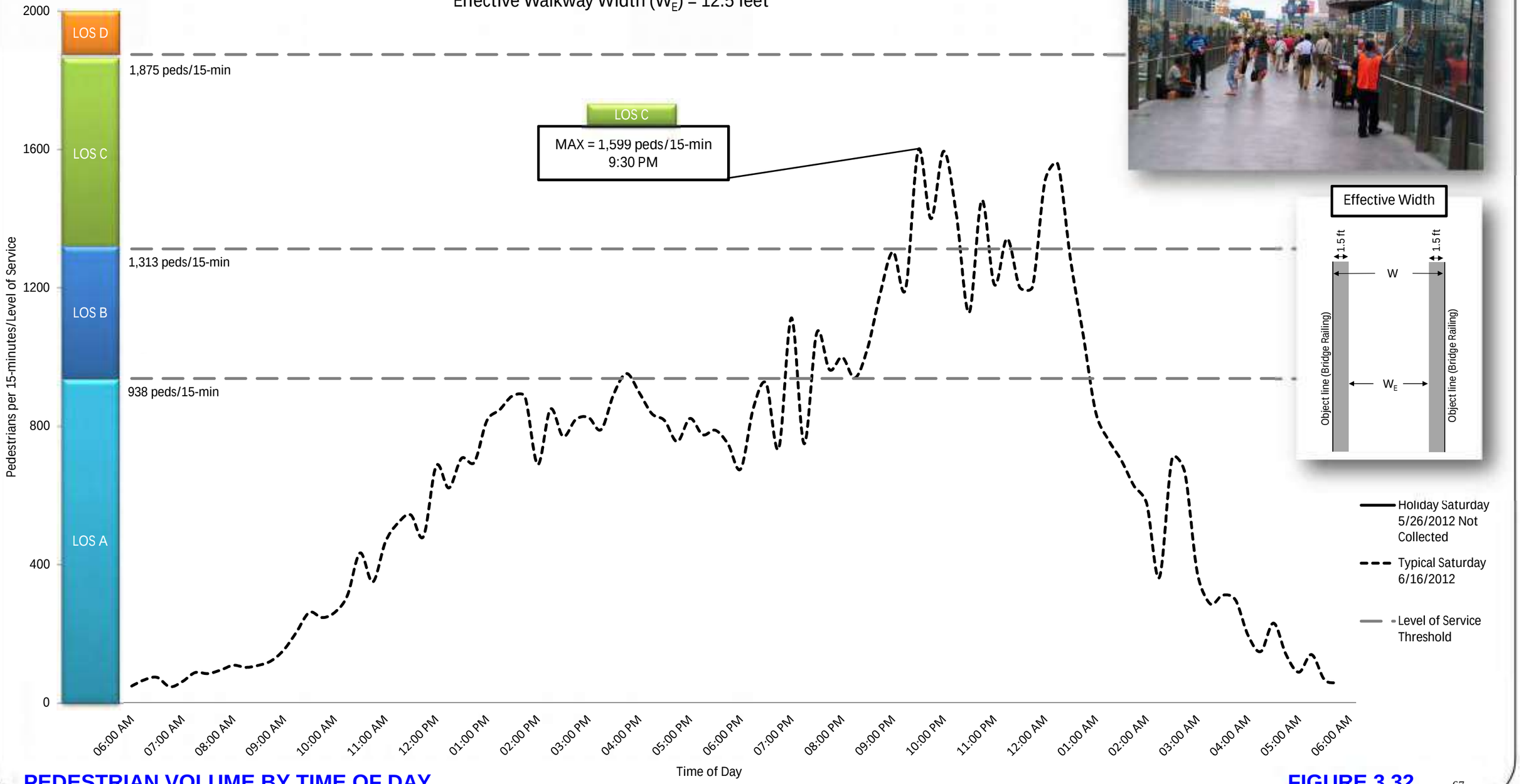
PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.31

Kimley-Horn and Associates, Inc.

Harmon Avenue West Pedestrian Bridge (Location ID: 7)
Video Count Location: On Bridge
Walkway Width (W) = 15.5 feet
Effective Walkway Width (W_E) = 12.5 feet





PEDESTRIAN VOLUME BY TIME OF DAY

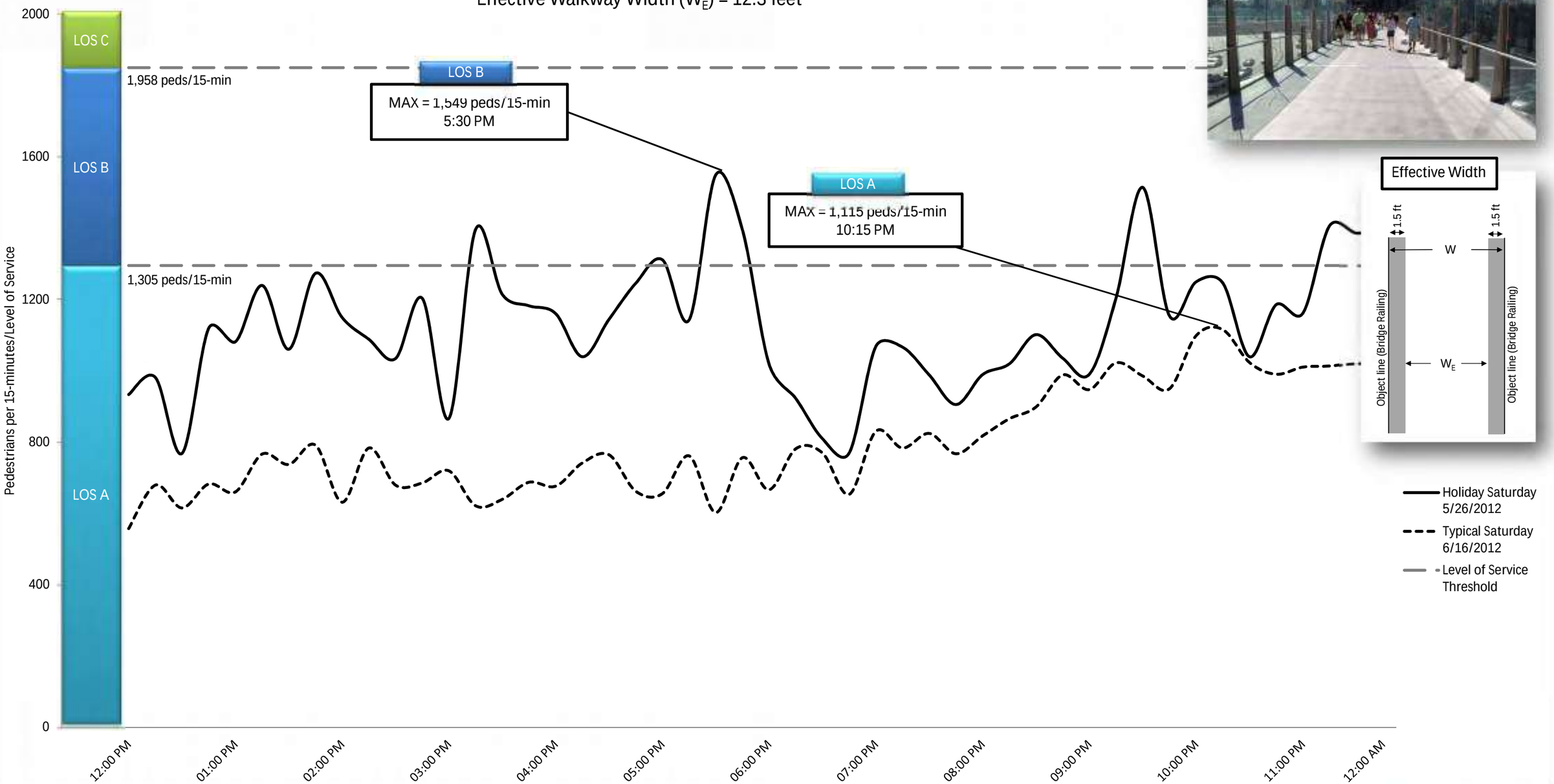
FIGURE 3.32

Kimley-Horn and Associates, Inc.

CC 1048

Harmon Avenue North Pedestrian Bridge (Location ID: M4)
Manual Count Location: On Bridge
Walkway Width (W) = 15.3 feet
Effective Walkway Width (W_E) = 12.3 feet





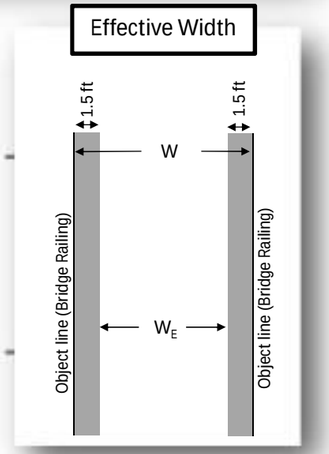
PEDESTRIAN VOLUME BY TIME OF DAY

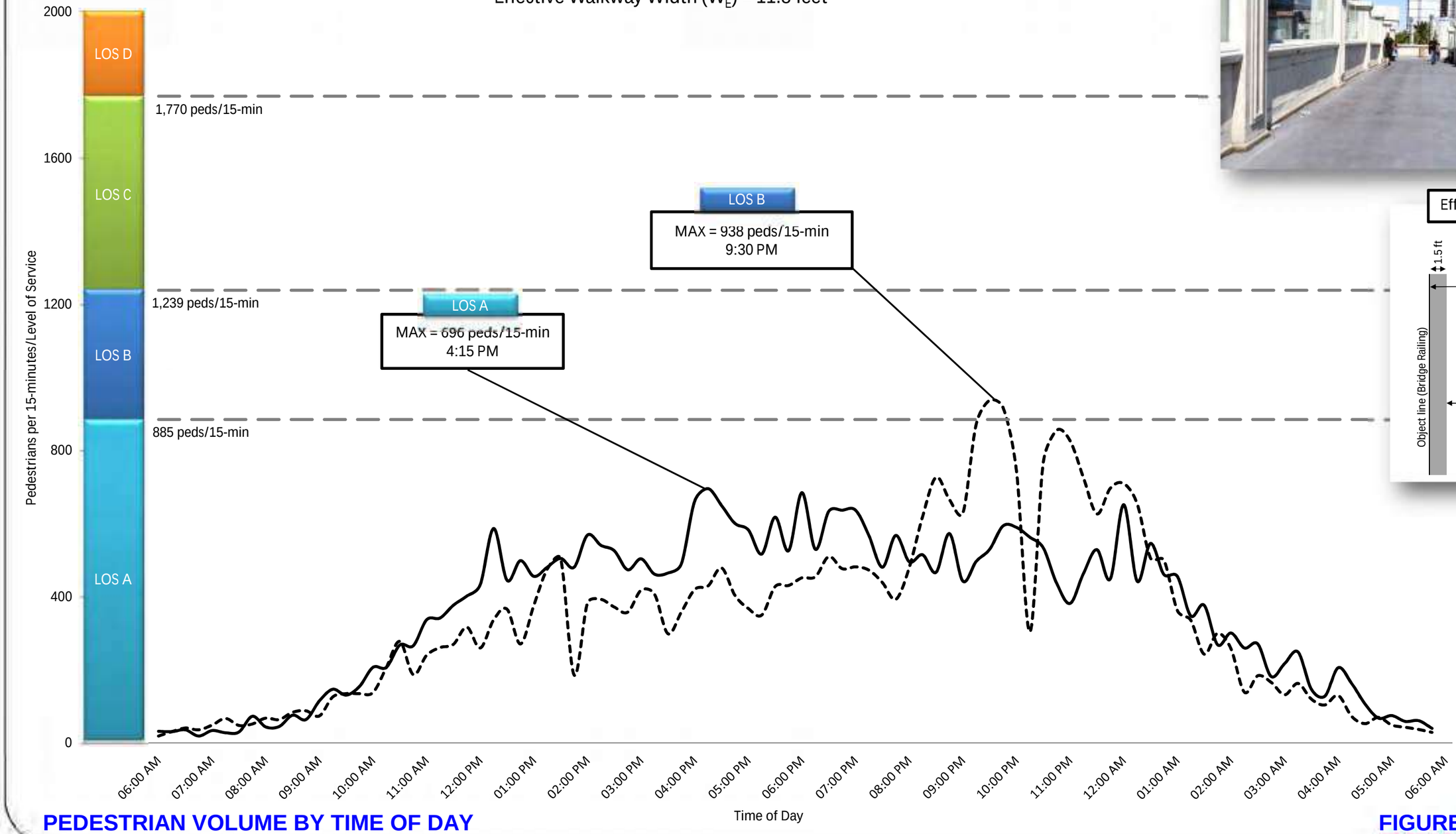
FIGURE 3.33

Kimley-Horn and Associates, Inc.

Flamingo Road South Pedestrian Bridge (Location ID: 8)
Video Count Location: On Bridge
Walkway Width (W) = 14.8 feet
Effective Walkway Width (W_E) = 11.8 feet







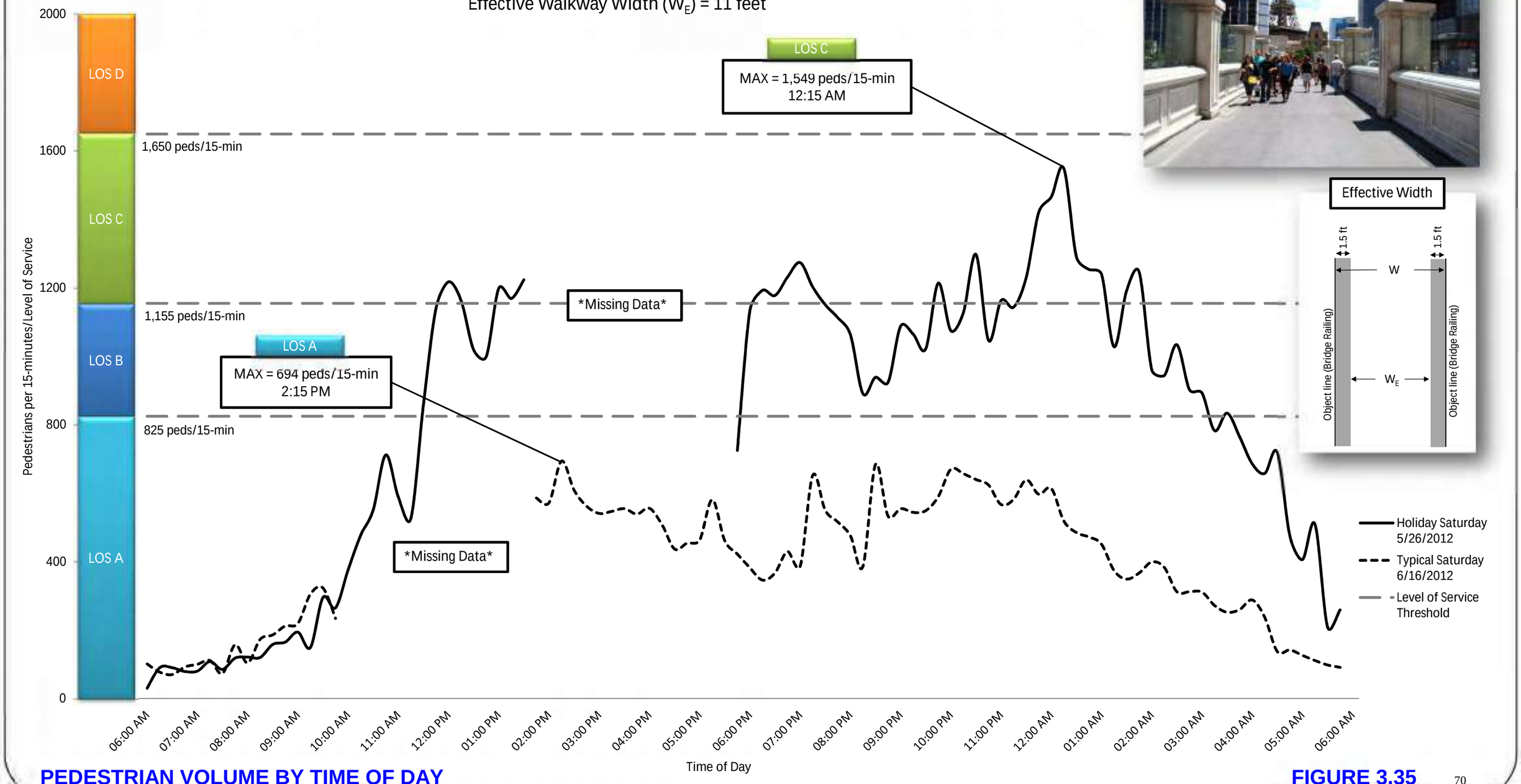
PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.34

Kimley-Horn and Associates, Inc.

Flamingo Road East Pedestrian Bridge (Location ID: 10)
Video Count Location: On Bridge
Walkway Width (W) = 14 feet
Effective Walkway Width (W_E) = 11 feet





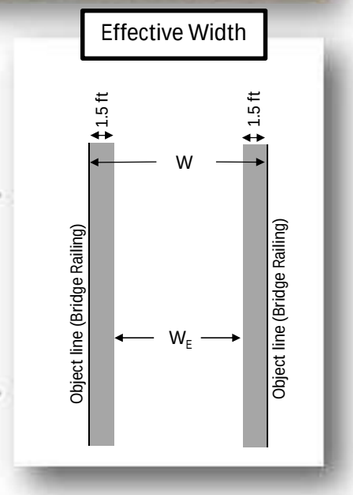
PEDESTRIAN VOLUME BY TIME OF DAY

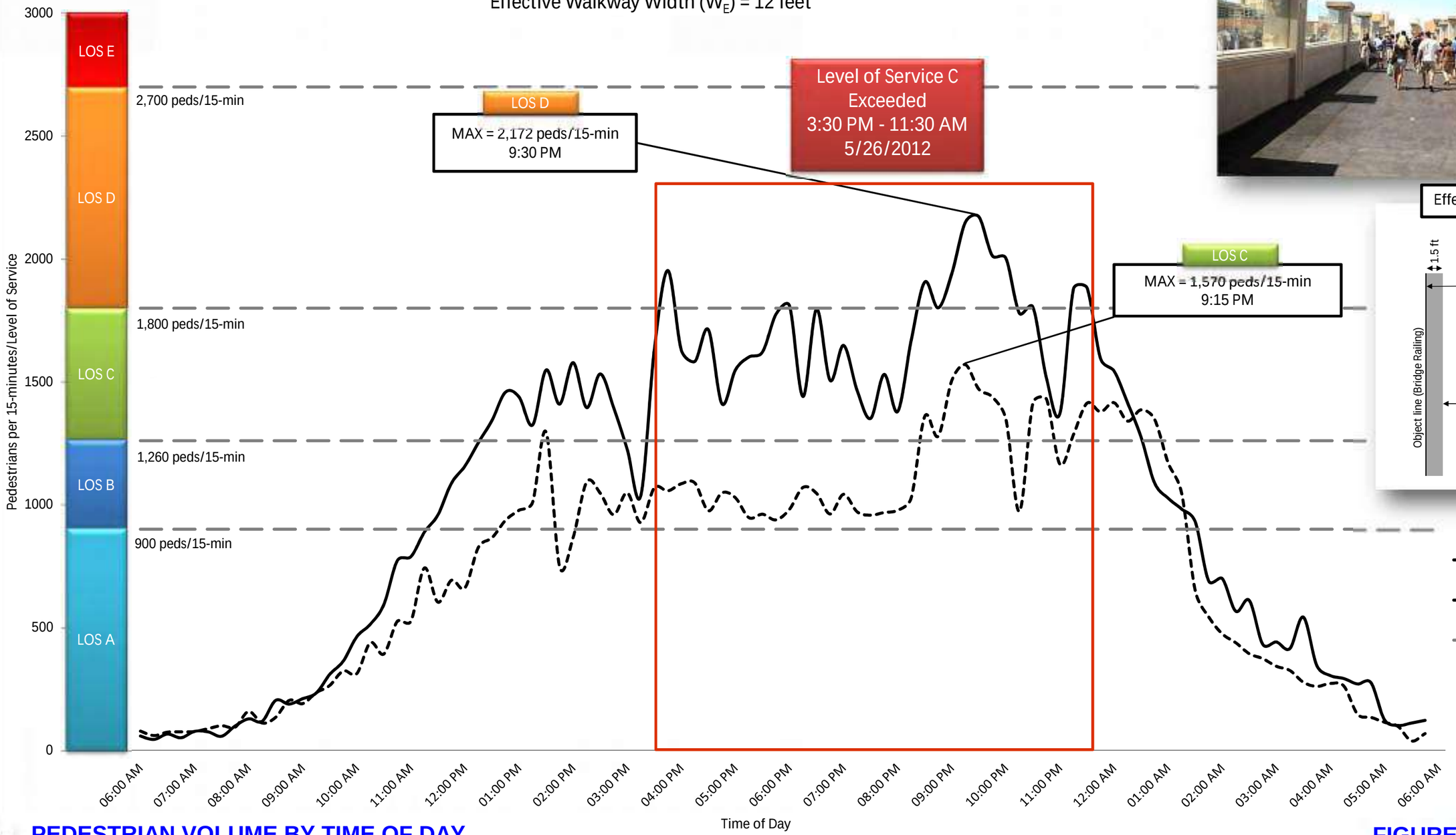
FIGURE 3.35

Kimley-Horn and Associates, Inc.

Flamingo Road West Pedestrian Bridge (Location ID: 11)
Video Count Location: On Bridge
Walkway Width (W) = 15 feet
Effective Walkway Width (W_E) = 12 feet







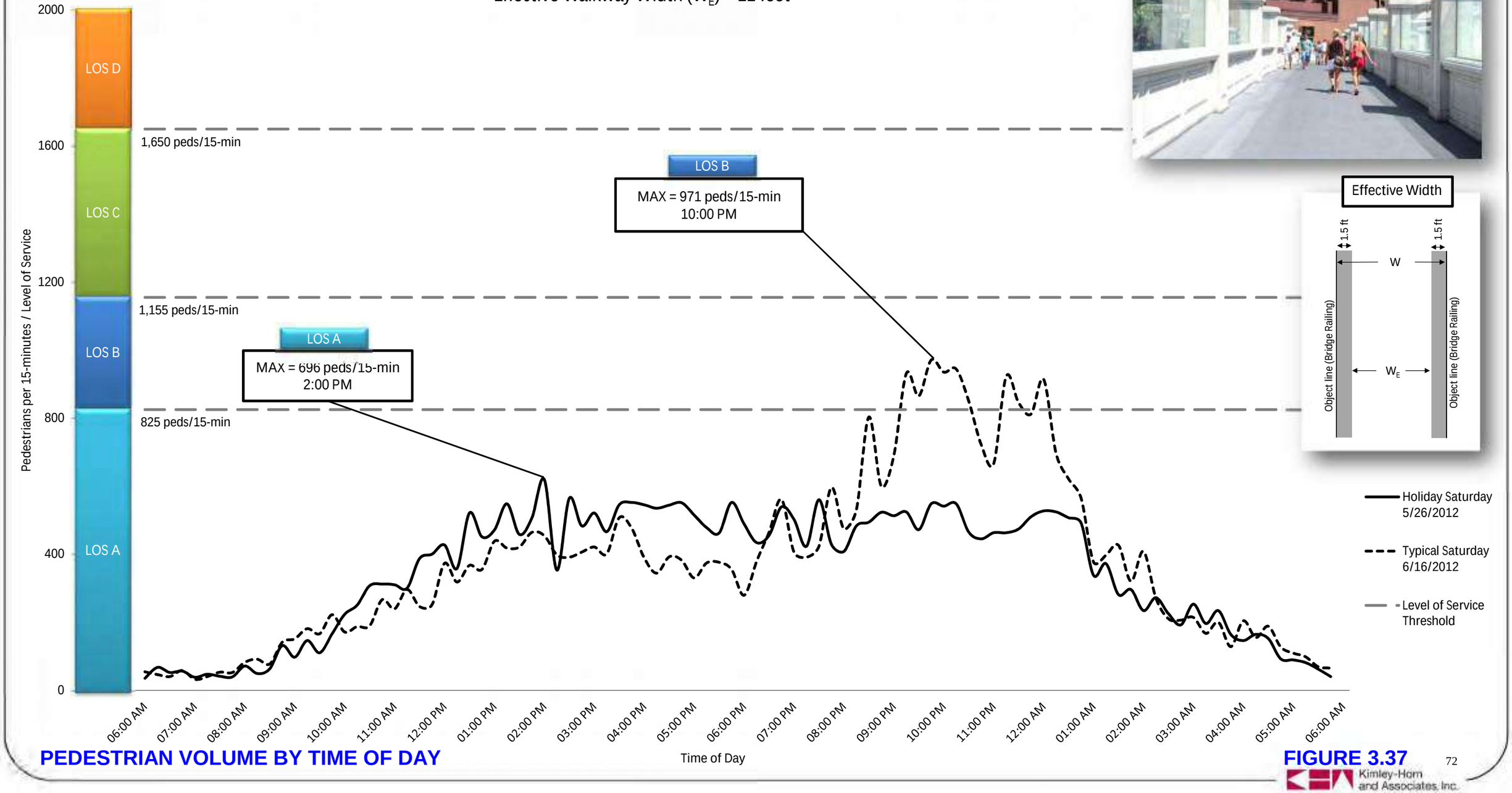
PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.36

Kimley-Horn and Associates, Inc.

Flamingo Road North Pedestrian Bridge (Location ID: Metro2)
Video Count Location: On Bridge
Walkway Width (W) = 14 feet
Effective Walkway Width (W_E) = 11 feet





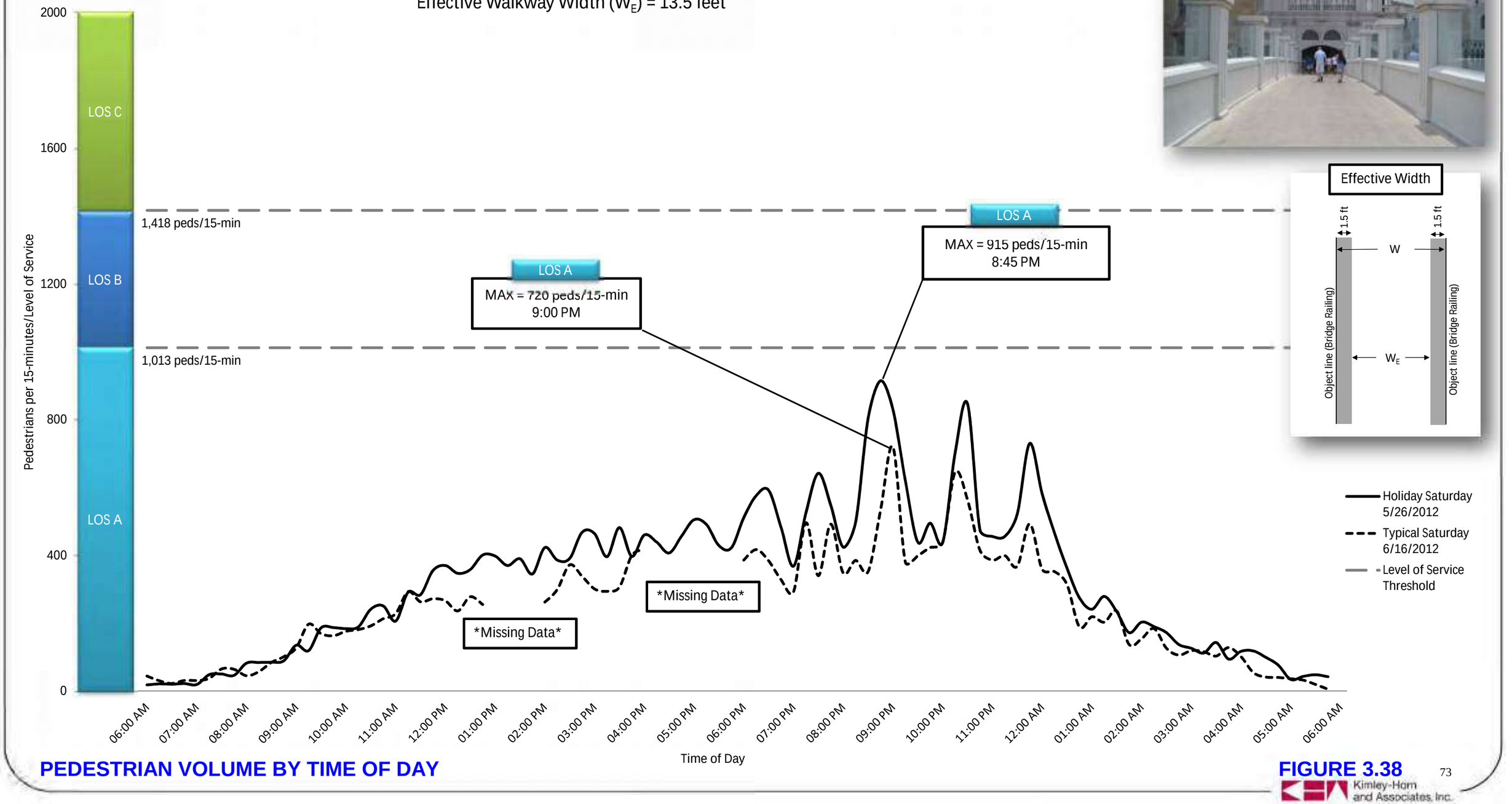
PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.37

Kimley-Horn and Associates, Inc.

Venetian Pedestrian Bridge (Location ID: 16)
Video Count Location: On Bridge
Walkway Width (W) = 16.5 feet
Effective Walkway Width (W_E) = 13.5 feet





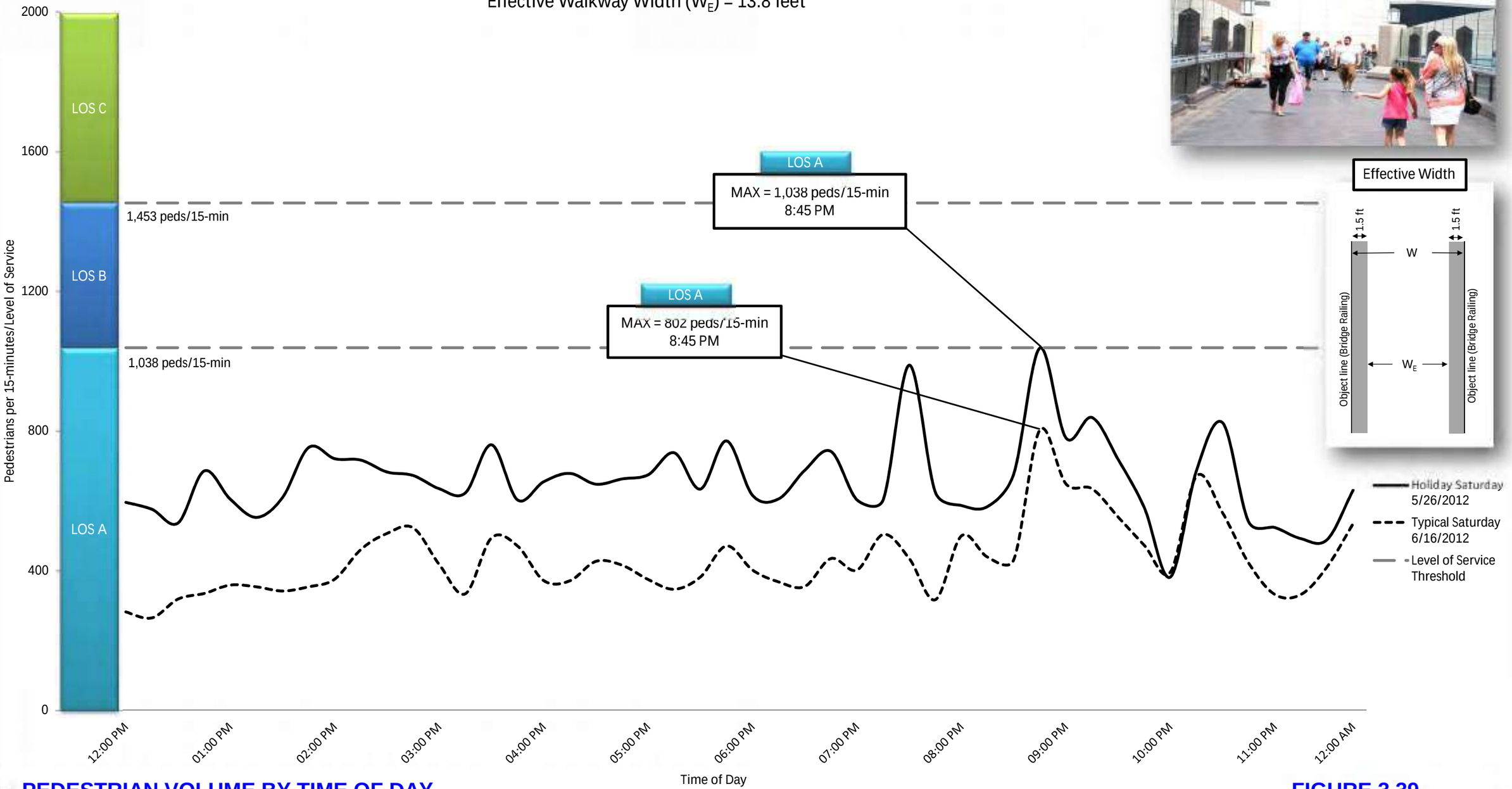
PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.38

Kimley-Horn and Associates, Inc.

Spring Mountain Road West Pedestrian Bridge (Location ID: M7)
Manual Count Location: On Bridge
Walkway Width (W) = 16.8 feet
Effective Walkway Width (W_E) = 13.8 feet





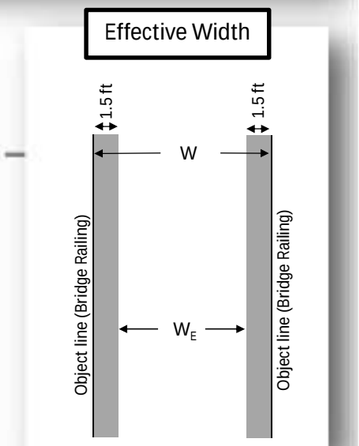
PEDESTRIAN VOLUME BY TIME OF DAY

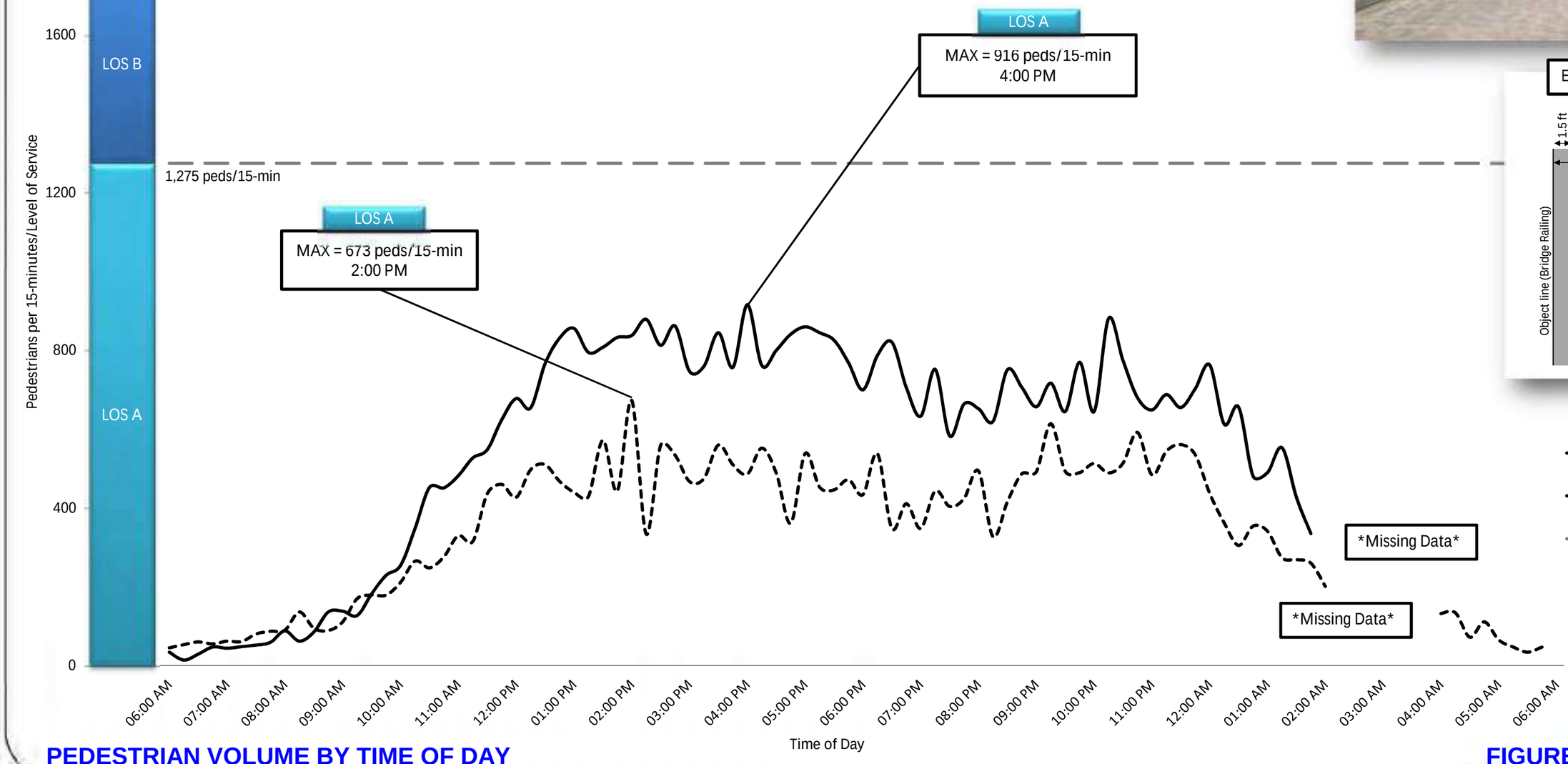
FIGURE 3.39

Kimley-Horn and Associates, Inc.

Spring Mountain Road East Pedestrian Bridge (Location ID: 17)
Video Count Location: On Bridge
Walkway Width (W) = 20 feet
Effective Walkway Width (W_E) = 17 feet







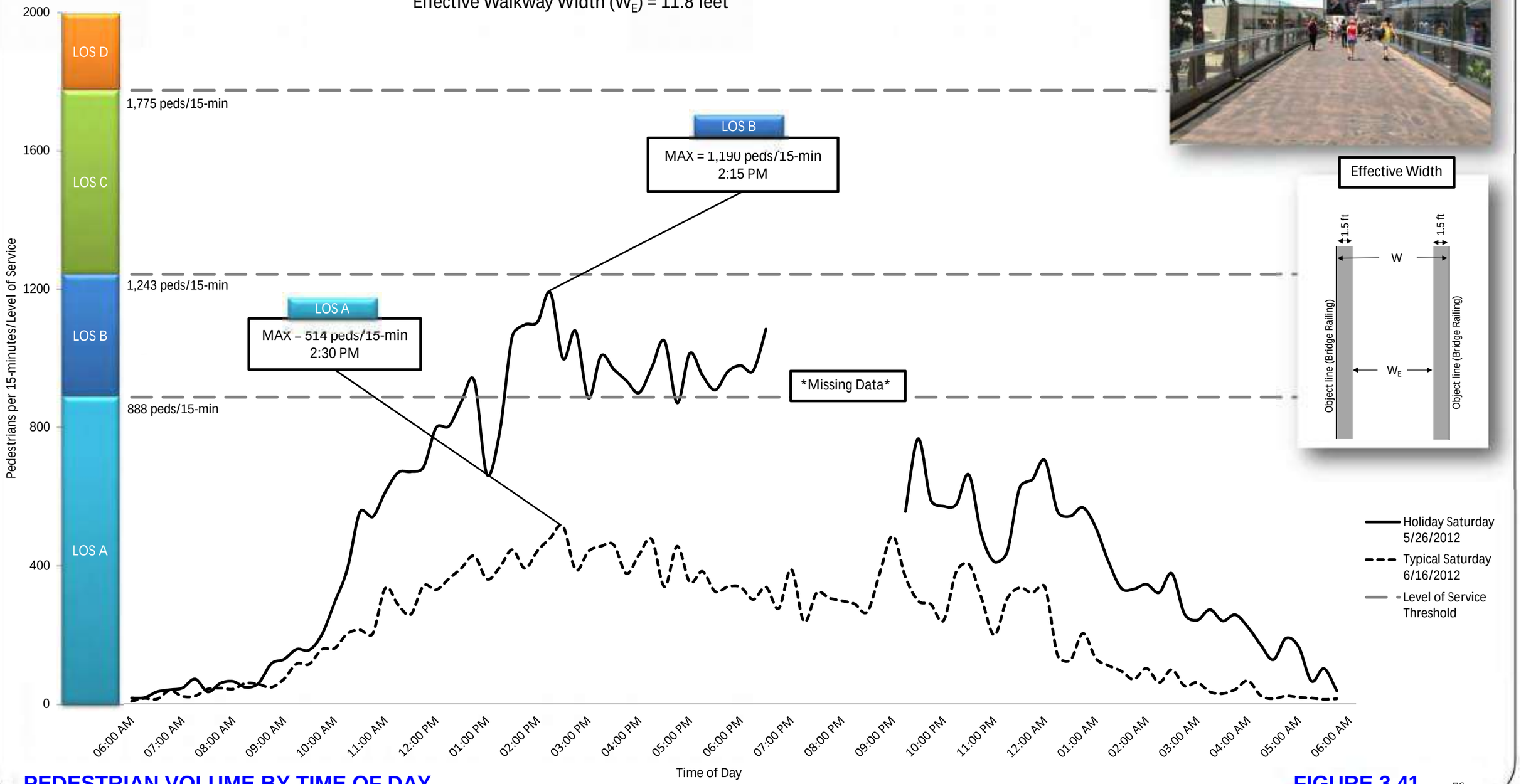
PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.40

Kimley-Horn and Associates, Inc.

Wynn Pedestrian Bridge (Location ID: 19)
Video Count Location: Stair/Escalator at Bridge Access
Walkway Width (W) = 14.8 feet
Effective Walkway Width (W_E) = 11.8 feet





PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.41

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3.1.5 Pedestrian Volume Level of Service

The 15-minute pedestrian volume data was paired with the field verified effective walkway widths and a LOS value calculated and assigned for every 15-minute data collection increment. The 2010 HCM LOS values are calculated as a numerical threshold based on effective walkway width (W_E); for example, a ten-foot effective walkway width (W_E=10') operating at LOS A can accommodate up to 750 pedestrians in 15-minutes and the same walkway can accommodate up to 1,500 pedestrians with a LOS C. It is important to note that the LOS values change depending on the effective walkway width (W_E) provided.

Figure 3.4 through Figure 3.41 indicate the maximum 15-minute volume identified for both count dates (May 26, 2012 – Holiday Saturday and June 16, 2012 – Typical Saturday) at each count location. Also listed on each figure is the walkway width (W) and effective walkway width (W_E). The LOS threshold levels were calculated and are shown in the figures. A review of the summary figures shows that of the 38 count locations, eight count locations were found with pedestrian volumes on the Holiday Saturday that exceeded LOS C conditions with two of those locations providing LOS E. The locations shown in Table 3.4 experienced LOS D or worse during either the holiday Saturday or typical Saturday.

Table 3.4 – Pedestrian Volume Count Locations that Exceeded LOS C

Holiday Saturday - May 26, 2012			Typical Saturday - June 16, 2012		
Count Location	Figure	LOS	Count Location	Figure	LOS
Harley Dav.	Figure 3.16	E	Harley Dav.	Figure 3.16	E
Flam W Bridge	Figure 3.36	D	Harrah's	Figure 3.24	D
Flamingo	Figure 3.21	D	Venetian	Figure 3.26	E
Caesars Palace	Figure 3.22	D			
Forum Shops	Figure 3.23	D			
Harrah's	Figure 3.24	D			
Mirage	Figure 3.25	E			
Venetian	Figure 3.26	D			

It should be noted that the LOS calculations were prepared assuming the entire effective walkway width (W_E) was available for pedestrian traffic. In situations where a non-permanent obstruction could be in the walkway, the calculated effective walkway width (W_E) would be reduced and thus a potentially lower level of service would be provided.

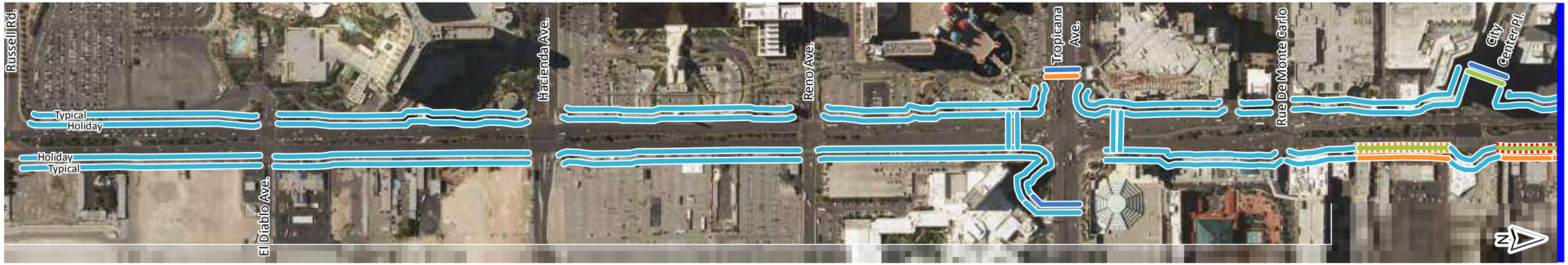
As mentioned in the previous section, the LOS within the outer portion of the study corridor was observed to be acceptable, LOS C or better, during the entire data collection process, both for the holiday and typical Saturday. Generally, the inner portion of the study corridor functions at LOS D or better throughout the day with the exception of several specific walkway restriction areas including the walkways in front of Harley Davidson Cafe and in front of the Mirage Hotel/Casino, which provided LOS E for short durations between 8:30 PM and 12:30 AM.

To provide an overall summary of the pedestrian volume LOS values for the Resort Corridor, Figure 3.42 was created.

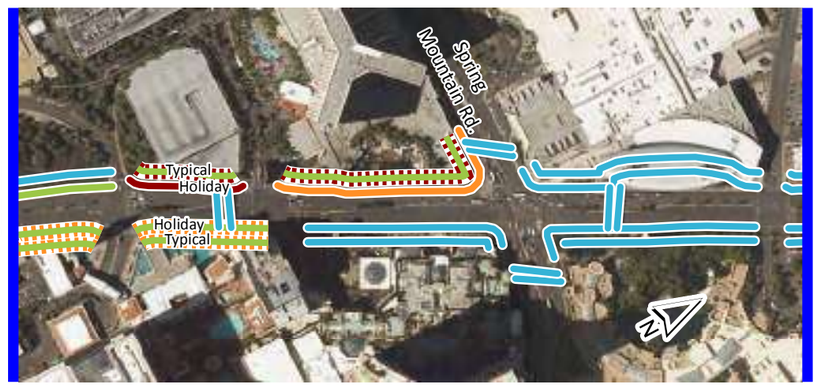
The following list of location was identified as constricted walkways or "pinch points" which could result in conditions of LOS less than C:

- East walkway across from Mandalay Bay Hotel/Casino
- Northeast quadrant of the intersection of Las Vegas Boulevard and Rue de Monte Carlo/MGM Drive
- East walkway directly south of Harmon Avenue, if front of the Harley Davidson Cafe
- West walkway south of the Bellagio Hotel/Casino
- East walkway at the north end of the Planet Hollywood Hotel/Casino (east-west crosswalk)
- East walkway in front of Margaritaville directly south of Caesars Palace Boulevard
- West walkway directly north of Caesars Palace Boulevard in front of the Coliseum
- East walkway in front of Harrah's Hotel/Casino at the east-west crosswalk
- West walkway north of the Mirage Hotel/Casino North driveway, south of Siren's Cove Boulevard

These locations are discussed and evaluated in Section 4.2.









Legend

Level of Service (LOS)

- A
- B
- C to D*
- C to E*
- C to F*
- C
- D
- E
- F
- Under Construction

* C to "X" with 2.25 ft W_E reduction for an obstruction

LEVEL OF SERVICE (LOS)
AVERAGE EFFECTIVE WALKWAY WIDTH (W_E) AND AVERAGE 15 MIN. VOLUME
9 P.M. - 11 P.M.

FIGURE 3.42 78

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3.2 Walking Speeds

Pedestrian walking speeds were recorded to provide an alternative level of service (LOS) assessment of the Las Vegas Boulevard pedestrian walkways within the Resort Corridor from Russell Road to Sahara Avenue. The study corridor was divided into walkway segments for evaluation. Twenty-five (25) individual segments were identified on the west side of Las Vegas Boulevard (labeled W1 – W25 from south to north) and twenty-eight (28) were established on the east side (labeled E1 – E28 from south to north). On Wednesday April, 25 2012, four individuals collected free-flow walking speeds within the study corridor from Russell Road to Sahara Avenue. The free-flow walking speed data was statistically evaluated using a t-test to determine the similarity in walking speeds for each segment and side of street. The evaluation determined a free-flow walking speed for the entire study corridor of 4.23 ft/sec with a 95% confidence level. Further analysis concluded that a statistical difference existed between certain segments of the study corridor. Strategic sectioning of Las Vegas Boulevard allowed for a more in depth walking speed analysis. Major cross streets were used to create four evaluation segments for the study corridor:

1. Russell Road to Tropicana Avenue
2. Tropicana Avenue to Flamingo Road
3. Flamingo Road to Spring Mountain Road
4. Spring Mountain Road to Sahara Avenue

The collected pedestrian volume data indicated that the outer two segments of the study corridor (1. Russell Road to Tropicana Avenue and 4. Spring Mountain Road to Sahara Avenue) have less pedestrian activity than the inner two segments. The outer two segments also have less existing development. The free-flow walking speed data was analyzed for the segment groupings of 1 and 4 as the outer portion of the study corridor and 2 and 3 as the inner portion. The walking speed data collected on April 25, 2012 identified a statistically different free-flow walking speed for the inner and outer study corridor segments at a 95% confidence level. Table 3.5 contains the free-flow walking speed summary.

Table 3.5 – Free-flow Walking Speeds

	Walking Speed (feet per second)	Level of Service (LOS)
Outer segments	4.40	A
Inner segments	3.87	D
All segments	4.23	B

There was no statistically significant difference at a 95% confidence level between the free-flow walking speeds for the west side and east sides of the outer or inner portions of the study corridor.

Walkway level of service (LOS) as described in Section 2.3.1 is based on pedestrian volumes and effective walkway widths (W_E) and is not related to the calculation of walkway LOS based upon walking speed. The 2010 HCM identifies walking speeds less than LOS C as undesirable. Table 3.6 summarizes the accepted walking speed values with their corresponding LOS thresholds from the HCM 2010. As discussed in Section 1.4.1, the 2010 HCM walking speed LOS thresholds are based on individuals walking to work, going to class or walking in an airport and do not represent leisure walking speeds.

Table 3.6 – LOS and Average Speed Values

LOS	Average Speed (ft/s)	Comments
A	>4.25	Ability to move in desired path, no need to alter movements
B	>4.17 - 4.25	Occasional need to adjust path to avoid conflicts
C	>4.00 - 4.17	Frequent need to adjust path to avoid conflicts
D	>3.75 - 4.00	Speed and ability to pass slower pedestrians restricted
E	>2.50 - 3.75	Speed restricted, very limited ability to pass slower pedestrians
F	≤2.50	Speeds severely restricted, frequent contact with other users

The average free-flow walking speed was determined to be 3.87 feet per second for the inner portion of the study corridor from Tropicana Avenue to Spring Mountain Road. This walking speed is within the 2010 HCM range for LOS D. Since the observed free-flow walking speed is categorized as LOS D, the study concluded that a walking speed categorized as LOS D is acceptable for the Las Vegas Boulevard tourist environment.

A possible explanation for the lower acceptable walking speed along the "Strip" is a tourist leisure mentality. A tourist is less rushed and is focused on enjoying the experience as opposed to someone in an airport walking to a terminal or on a city street walking to an appointment.

Also of interest is the variation in free-flow walking speeds and congested walking speeds. Some of the high pedestrian volume walking speed segments during the 9:00 PM – 12:00 AM study period experienced higher average walking speeds than the 1:00 PM – 4:00 PM and 5:00 PM – 8:00 PM periods on Saturday, May 26, 2012 of Memorial Day weekend. The walking speed data collection agents observed the pedestrian stream accelerate after they were slowed at a "bottleneck". Although more congestion was experienced in the 9:00 PM – 12:00 AM period, the total travel time did not significantly change due to this slow-down/speed-up effect. The average travel time for the length of the study corridor (from Russell Road to Sahara Avenue) was found to be one hour and 34 minutes.

The study corridor segment results from the free-flow walking speed study are included in Table 3.7 and Table 3.8 showing the average walking speed in each segment of the study corridor on the west and east side of Las Vegas Boulevard respectively. It is interesting to note that the overall average of the west side of the study corridor was found to be 4.25 ft/sec (LOS B) while the east side of the study corridor was found to be 4.00 ft/sec (LOS D). Upon reviewing the results, it is important to remember that the overall average walking speed took into account segment E15 on the east side which was under construction during data collection. The minimum walking speed observed on the west side was 3.53 ft/sec (LOS E) in front of the Monte Carlo Hotel/Casino where walkway widths average 25 feet, further demonstrating that the HCM 2010 walking speed LOS D and E may be considered acceptable as a Las Vegas tourist walking speed.

Table 3.7 – Free-flow Walking Speed – West Segments

Segment ID		Walking Speed (ft/sec)
Number	Name	9AM – 12PM
W1	Four Seasons	4.52
W2	Mandalay Bay	4.44
W3	Luxor	4.27
W4	Excalibur	4.38
W5	New York-New York	4.10
W6	Monte Carlo Parking	4.36
W7	Monte Carlo	3.53
W8	CityCenter	3.90
W9	Cosmopolitan	3.78
W10	Bellagio	3.85
W11	Caesars Palace	3.78
W12	Caesars Coliseum	3.74
W13	Forum Shops	4.35
W14	Mirage	4.21
W15	Mirage Parking	4.22
W16	Treasure Island	4.38
W17	Fashion Show Mall	4.25
W18	Plaza (Future)	4.74
W19	Echelon South	3.89
W20	Echelon North	4.48
W21	Slots A' Fun	4.43
W22	Circus Circus	4.87
W23	Sky Las Vegas	4.55
W24	Hilton Grand Vacations	4.63
W25	Sahara Corner (Vacant)	4.49
	Overall Average	4.25
	LOS	B

Table 3.8 – Free-flow Walking Speed – East Segments

Segment ID		Walking Speed (ft/sec)
Number	Name	9AM - 12PM
E1	Diamond Inn	4.59
E2	SkyVue (Future)	4.58
E3	Luxor Overflow Parking	4.45
E4	Tropicana	4.37
E5	MGM/Showcase	3.63
E6	Smith & Wollensky	4.22
E7	Polo Towers	3.79
E8	Travelodge	3.76
E9	Harley Davidson	3.12
E10	Planet Hollywood	4.00
E11	Paris South	2.92
E12	Paris North	3.77
E13	Bally's	3.94
E14	Flamingo	3.85
E15	Imperial Palace	3.49
E16	Harrah's	3.98
E17	Casino Royale	3.35
E18	Venetian South	4.08
E19	Venetian	3.55
E20	Palazzo	4.82
E21	Wynn	4.03
E22	Wynn Parking	4.02
E23	Encore	5.17
E24	Gold Key Shops	3.53
E25	Peppermill	4.23
E26	Riviera	4.31
E27	Fontainebleau	4.41
E28	SLS	4.12
	Overall Average	4.00
	Overall LOS	D

The minimum walking speed observed on the east side of the study corridor was 2.92 ft/sec (LOS E) in front of the Paris Hotel/Casino sign. The east side of the study corridor also showed that the free-flow walking speed in certain segments was observed to be LOS D and E, further supporting the acceptability of walking speed LOS lower than LOS C for the Las Vegas tourist.

Data included in Table 3.9 summarizes the holiday Saturday (May 26) average collected walking speeds for each walking segment on the west side of Las Vegas Boulevard between Russell Road and Sahara Avenue. It can be seen that while the 1:00 PM – 4:00 PM and 5:00 PM – 8:00 PM time periods maintained an average walking speed of 4.01 ft/sec (equivalent to a LOS C), the 9:00 PM – 12:00 AM time period average walking speed deteriorated to 3.79 ft/sec (LOS D). Review of the walking speeds on the individual segments show various segments that experience LOS D and LOS E throughout the day.

Table 3.9 – Average Walking Speed – West Segments – 5/26/2012 (Holiday Saturday)

Segment ID		Walking Speed (ft/sec)		
Number	Name	1PM – 4PM	5PM – 8PM	9PM – 12AM
W1	Four Seasons	4.56	4.49	4.52
W2	Mandalay Bay	4.41	4.40	3.94
W3	Luxor	4.22	4.32	4.17
W4	Excalibur	4.16	4.36	4.30
W5	New York-New York	4.13	3.78	3.65
W6	Monte Carlo Parking	3.85	3.73	3.00
W7	Monte Carlo	3.40	3.45	3.22
W8	CityCenter	3.89	3.94	3.61
W9	Cosmopolitan	3.46	3.66	3.26
W10	Bellagio	3.88	3.49	2.93
W11	Caesars Palace	3.65	3.57	3.16
W12	Caesars Coliseum	3.07	3.45	3.16
W13	Forum Shops	3.57	3.51	3.28
W14	Mirage	4.02	4.14	3.51
W15	Mirage Parking	3.64	3.78	2.84
W16	Treasure Island	4.32	4.15	3.72
W17	Fashion Show Mall	3.80	4.09	3.92
W18	Plaza (Future)	4.66	4.60	4.34
W19	Echelon South	3.90	3.93	3.80
W20	Echelon North	4.19	3.98	4.18
W21	Slots A' Fun	4.36	4.34	4.34
W22	Circus Circus	4.28	4.45	4.35
W23	Sky Las Vegas	4.35	4.42	4.50
W24	Hilton Grand Vacations	4.14	4.06	4.53
W25	Sahara Corner (Vacant)	4.37	4.24	4.53
	Overall Average	4.01	4.01	3.79
	Overall LOS	C	C	D

Table 3.10 shows the holiday Saturday (May 26) average walking speed for each walkway segment from Russell Road to Sahara Avenue on the east side of Las Vegas Boulevard. It is important to recognize that, like the west side, each value in this table is the average result of six individual walking speeds for each walking segment. Similar to the west side of the strip, the 9:00 PM – 12:00 AM time period, which time corresponds to the highest observed pedestrian volumes, was found to have a decrease in average walking speed for the study corridor including some segments that experienced LOS D, E and F. The evaluation also included segment E15 on the east side of the study corridor was under construction during data collection for the Caesars Linq project (significant decreases in walking speed were experienced in this area – see Picture 3.12).

Table 3.10 – Average Walking Speed – East Segments – 5/26/2012 (Holiday Saturday)

Segment ID		Walking Speed (ft/sec)		
Number	Name	1PM – 4PM	5PM – 8PM	9PM – 12AM
E1	Diamond Inn	4.71	4.89	4.51
E2	SkyVue (Future)	4.56	4.62	4.34
E3	Luxor Overflow Parking	4.46	4.57	4.24
E4	Tropicana	4.44	4.40	4.16
E5	MGM/Showcase	2.98	3.58	3.92
E6	Smith & Wollensky	3.31	3.72	3.04
E7	Polo Towers	3.36	3.24	3.19
E8	Travelodge	4.01	3.75	3.77
E9	Harley Davidson	2.30	2.76	2.49
E10	Planet Hollywood	3.41	3.37	3.43
E11	Paris South	2.45	2.37	2.54
E12	Paris North	3.17	3.13	3.34
E13	Bally's	3.30	3.25	2.78
E14	Flamingo	3.36	3.28	3.21
E15	Imperial Palace	2.52	2.95	1.56
E16	Harrah's	2.89	2.78	2.83
E17	Casino Royale	2.87	2.80	2.77
E18	Venetian South	3.00	3.45	3.55
E19	Venetian	3.25	3.53	3.25
E20	Palazzo	4.82	4.55	4.77
E21	Wynn	4.05	4.00	3.91
E22	Wynn Parking	4.05	3.91	4.02
E23	Encore	4.96	5.25	5.20
E24	Gold Key Shops	3.57	3.44	3.41
E25	Peppermill	3.92	4.05	4.14
E26	Riviera	4.54	4.07	4.10
E27	Fontainebleau	4.51	4.30	4.31
E28	SLS	4.21	4.30	4.10
	Overall Average	3.68	3.73	3.60
	Overall LOS	E	E	E

The results of the walking speed data from the June 16 data collection effort are summarized in Table 3.11 and Table 3.12 for the west and east sides of the study corridor respectively.

Table 3.11 – Average Walking Speed – West Segments – 6/16/2012 (Typical Saturday)

Segment ID		Walking Speed (ft/sec)		
Number	Name	1PM - 4PM	5PM - 8PM	9PM - 12AM
W1	Four Seasons	4.36	4.57	4.59
W2	Mandalay Bay	4.32	4.54	4.52
W3	Luxor	4.41	4.43	4.35
W4	Excalibur	4.23	4.38	4.22
W5	New York-New York	3.99	3.97	3.85
W6	Monte Carlo Parking	3.39	3.84	3.13
W7	Monte Carlo	3.55	3.55	3.37
W8	CityCenter	3.95	4.01	3.76
W9	Cosmopolitan	3.86	4.05	3.21
W10	Bellagio	3.90	4.02	2.95
W11	Caesars Palace	3.76	3.77	3.40
W12	Caesars Coliseum	3.59	3.94	3.27
W13	Forum Shops	3.74	3.89	3.45
W14	Mirage	4.01	4.26	3.54
W15	Mirage Parking	3.68	3.72	3.59
W16	Treasure Island	4.17	4.42	4.05
W17	Fashion Show Mall	4.08	4.25	4.21
W18	Plaza (Future)	4.58	4.73	4.48
W19	Echelon South	3.73	3.89	3.86
W20	Echelon North	3.96	4.13	3.80
W21	Slots A' Fun	4.12	4.53	4.21
W22	Circus Circus	4.17	4.06	4.13
W23	Sky Las Vegas	4.72	4.00	4.09
W24	Hilton Grand Vacations	4.20	4.88	4.60
W25	Sahara Corner (Vacant)	4.49	4.20	4.13
	Overall Average	4.04	4.16	3.87



Picture 3.12 – Caesars Linq Construction Zone which Experienced Walking Speed LOS F.

The overall average walking speeds of the study corridor were consistently higher for the typical Saturday than for the holiday Saturday. It is important to note that walking speeds of individual segments of LOS D and E were experienced on the typical Saturday and in one case a LOS F was observed (in front of the Paris Hotel/Casino sign during the 9:00 PM – 12:00 AM time period on the east side of Las Vegas Boulevard).

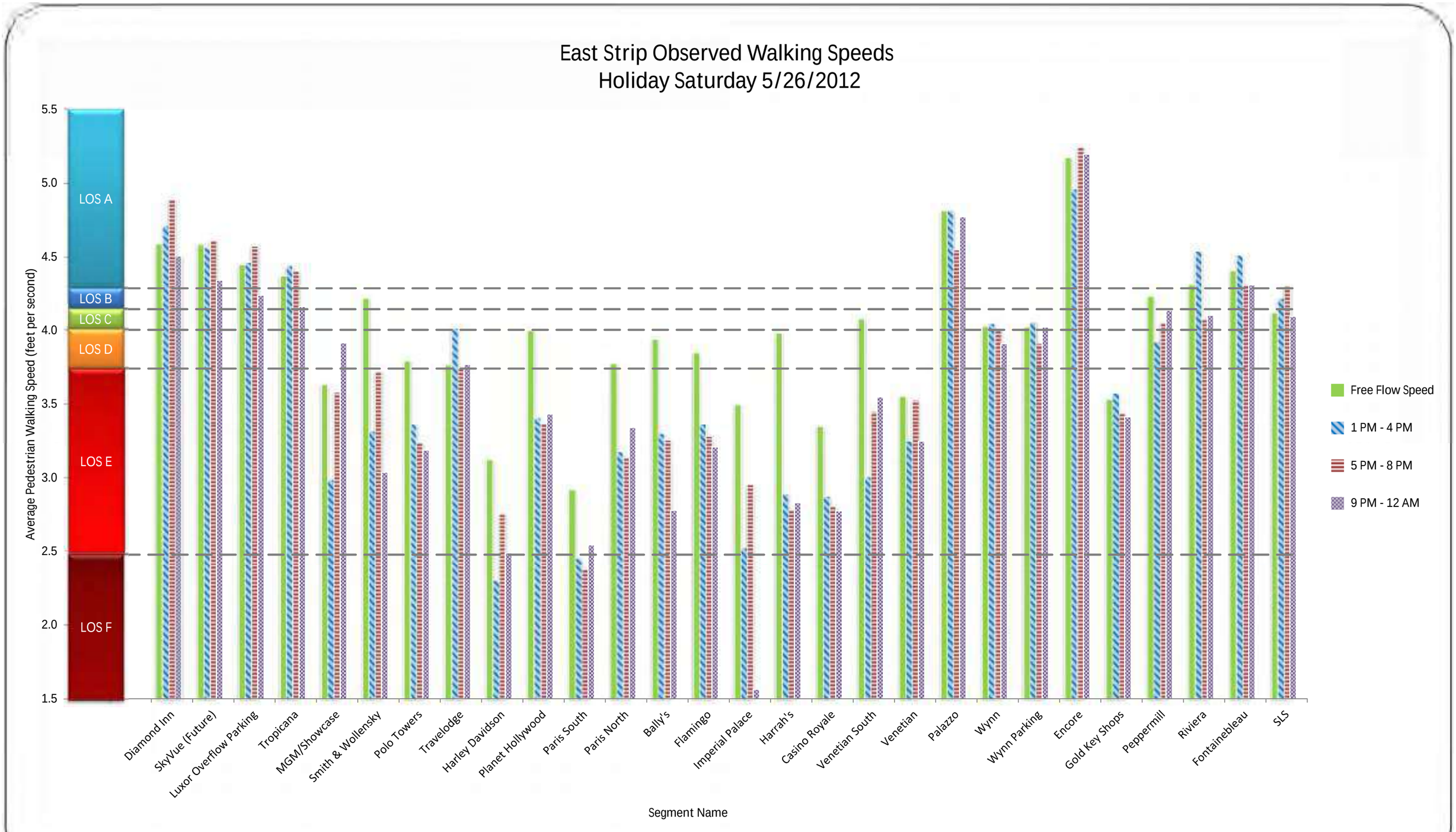
Table 3.12 – Average Walking Speed – East Segments – 6/16/2012 (Typical Saturday)

Segment ID		Walking Speed (ft/sec)		
Number	Name	1PM - 4PM	5PM - 8PM	9PM - 12AM
E1	Diamond Inn	4.66	4.61	4.55
E2	SkyVue (Future)	4.50	4.44	4.44
E3	Luxor Overflow Parking	4.38	4.44	4.23
E4	Tropicana	4.38	4.30	4.48
E5	MGM/Showcase	3.78	3.93	3.34
E6	Smith & Wollensky	3.77	3.77	3.24
E7	Polo Towers	3.91	3.72	3.56
E8	Travelodge	3.80	4.05	3.14
E9	Harley Davidson	2.92	3.20	2.60
E10	Planet Hollywood	3.80	3.73	3.30
E11	Paris South	3.24	3.14	2.16
E12	Paris North	3.73	3.79	3.14
E13	Bally's	3.80	3.75	3.03
E14	Flamingo	3.62	3.83	3.28
E15	Imperial Palace	3.50	3.31	2.99
E16	Harrah's	3.44	3.37	2.78
E17	Casino Royale	3.61	3.55	2.91
E18	Venetian South	3.94	3.76	3.40
E19	Venetian	3.68	3.59	3.30
E20	Palazzo	4.95	4.77	4.62
E21	Wynn	4.57	4.14	3.99
E22	Wynn Parking	4.45	4.20	4.00
E23	Encore	5.51	5.52	5.34
E24	Gold Key Shops	3.50	3.70	3.46
E25	Peppermill	4.23	4.30	4.36
E26	Riviera	4.35	4.39	4.20
E27	Fontainebleau	4.49	4.46	4.47
E28	SLS	4.29	4.40	4.51
	Overall Average	4.03	4.01	3.67

The walking speed data is summarized for comparison in Figure 3.43 through Figure 3.46 which display the average observed pedestrian walking speed per segment on each side of Las Vegas Boulevard for both the holiday Saturday and a typical Saturday. The 2010 HCM walking speed ranges have been included in the figures for reference (note that for many segments of the inner portion of the study corridor, the free-flow walking speed LOS is LOS D or E). Again, it should also be noted that segment E15, the walkway in front of the Imperial Palace Hotel/Casino, was under construction for the Caesars Linq project and was significantly congested during portions of the data collection period.

Figure 3.47 through Figure 3.48 visually illustrate the average observed walking speed per segment for each of the data collection time periods (1:00 PM – 4:00 PM, 5:00 PM – 8:00 PM and 9:00 PM - 12:00 AM) for both data collection dates.

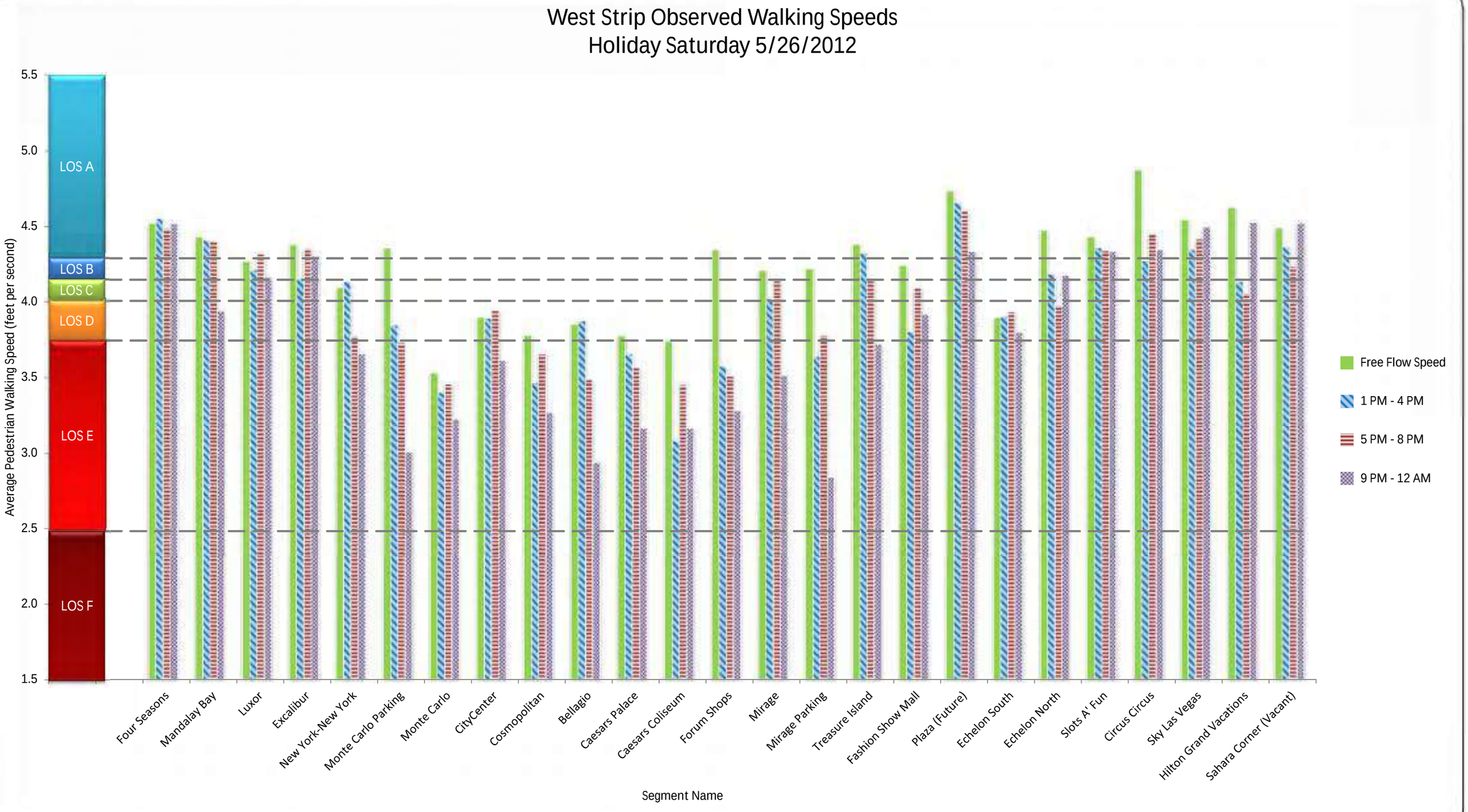
Upon commencement of the pedestrian study, it was hoped that conducting a free-flow and congested walking speed level of service (LOS) evaluation would aid in identifying possible congestion areas within the study corridor. The walking speed studies were useful in understanding tourist leisure walking speeds and the walking dynamics of Las Vegas Boulevard. However, the walking speed LOS, where LOS D and E may be considered unacceptable per the 2010 HCM procedures were typical free-flow walking speed on the "Strip" and were not found to be as effective in determining walkway congestion levels as the pedestrian volume LOS evaluation procedures of the 2010 HCM.



WALKING SPEED BY SEGMENT

FIGURE 3.43

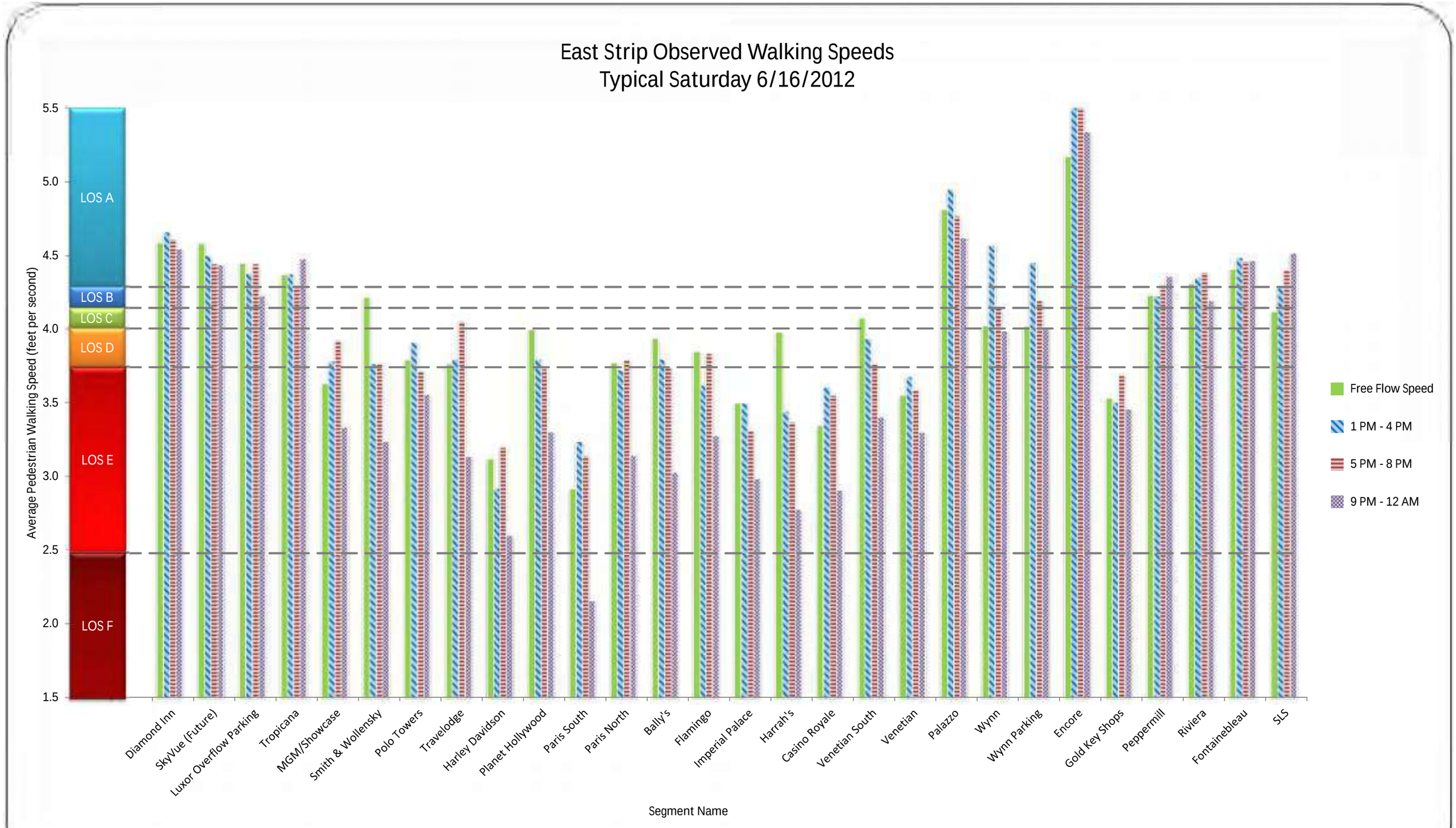
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WALKING SPEED BY SEGMENT

FIGURE 3.44

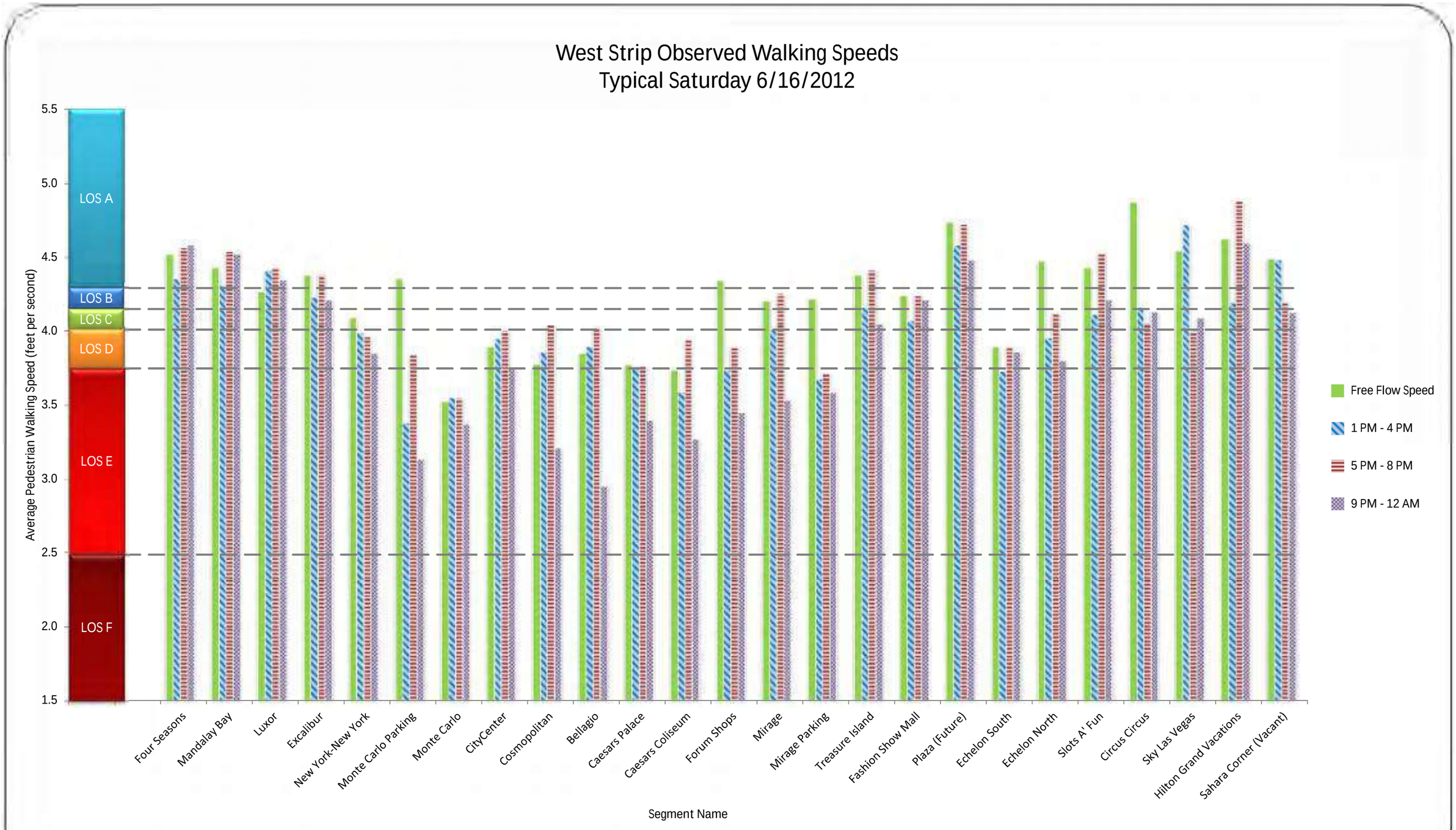
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WALKING SPEED BY SEGMENT

FIGURE 3.45

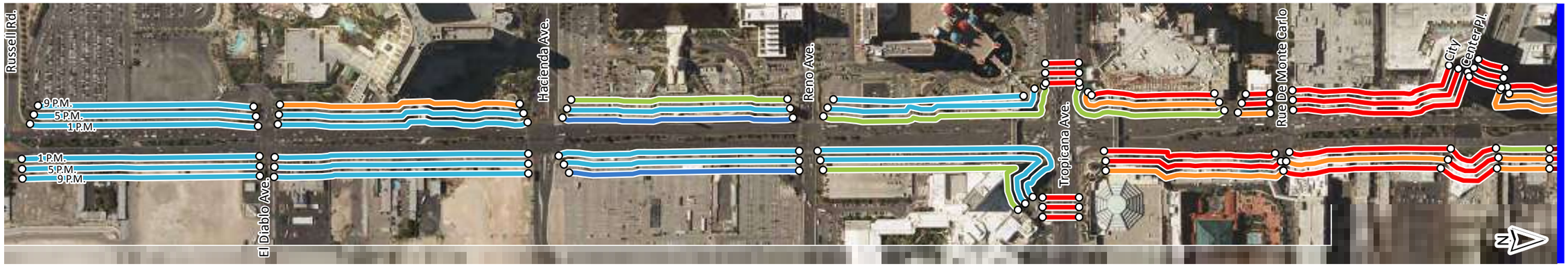
Kimley-Horn and Associates, Inc.

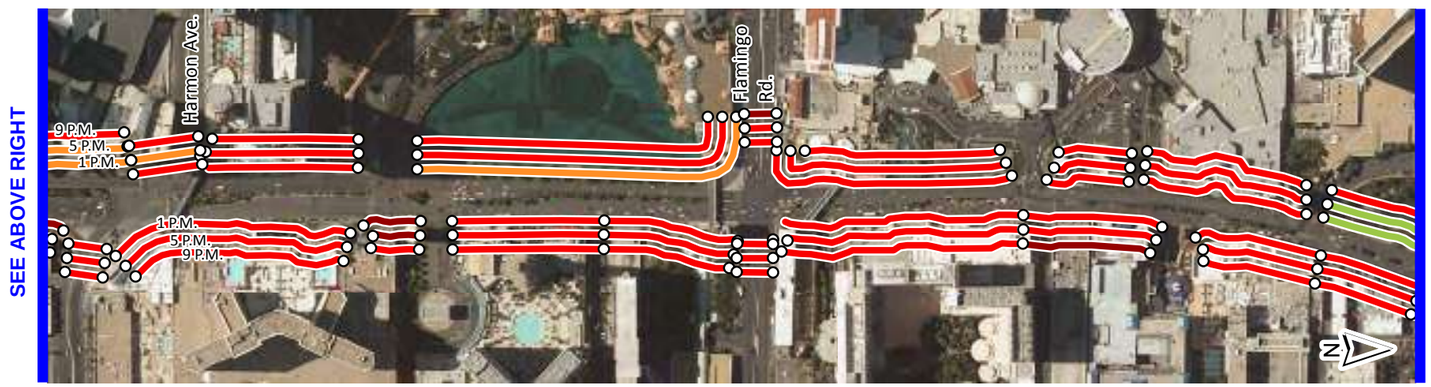


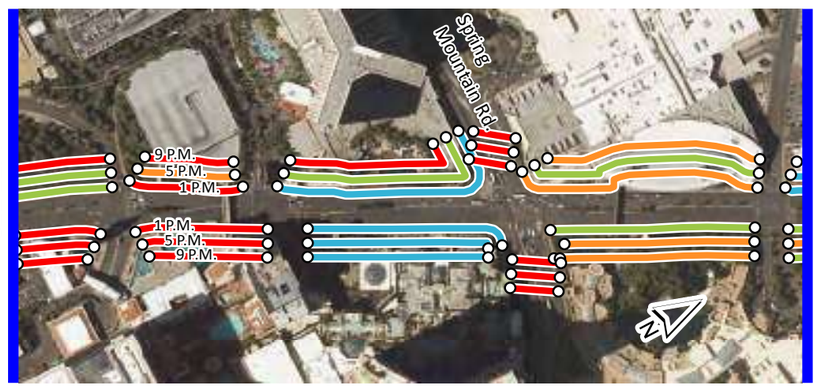
WALKING SPEED BY SEGMENT

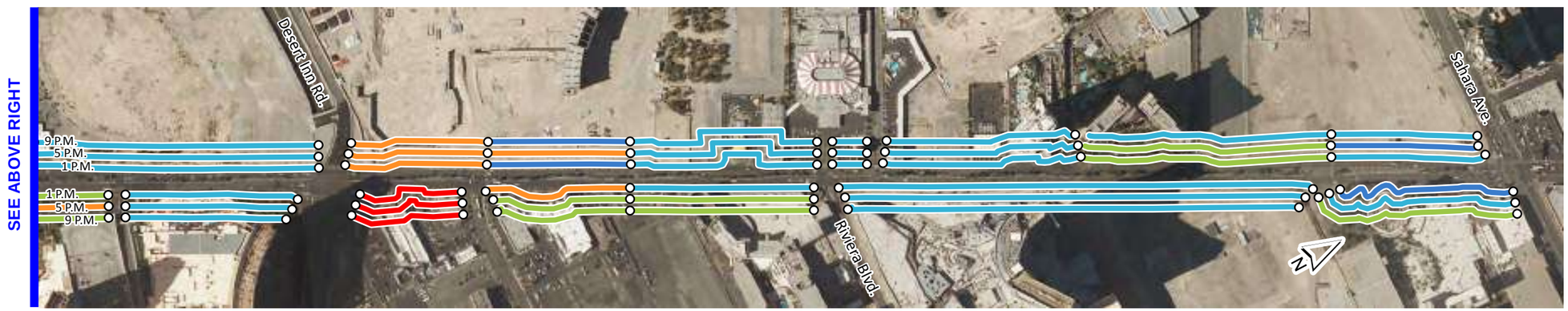
FIGURE 3.46

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Legend

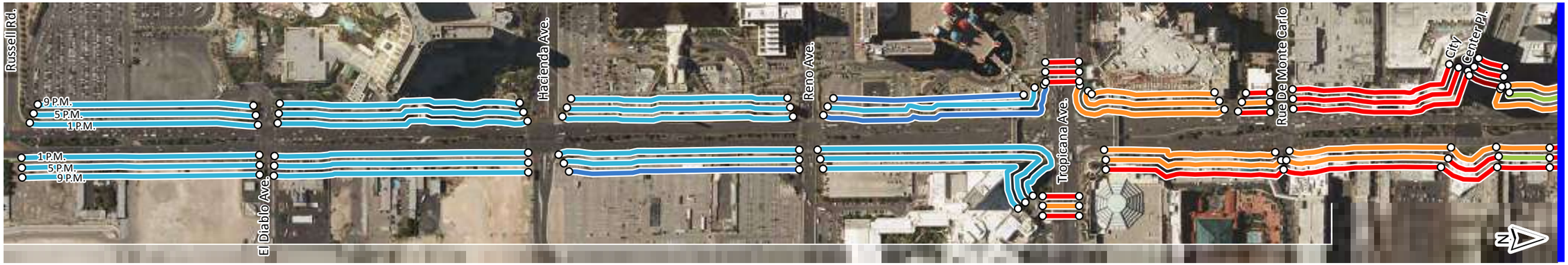
Average Walking Speed (Ft./Sec.)

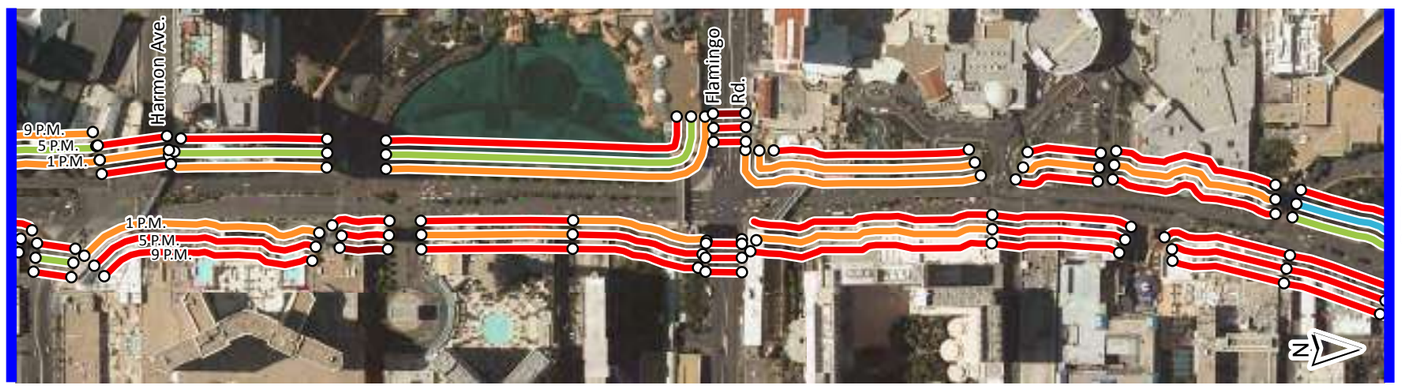
- Greater than 4.25: LOS A
- 4.18 - 4.25: LOS B
- 4.01 - 4.17: LOS C
- 3.76 - 4.00: LOS D
- 2.51 - 3.75: LOS E
- 2.50 or less: LOS F
- Segment Limits

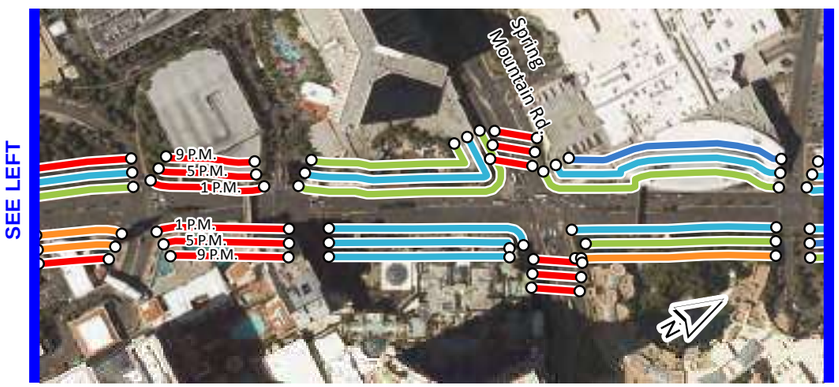
AVERAGE PEDESTRIAN WALKING SPEED PER SEGMENT
SATURDAY MAY 26, 2012

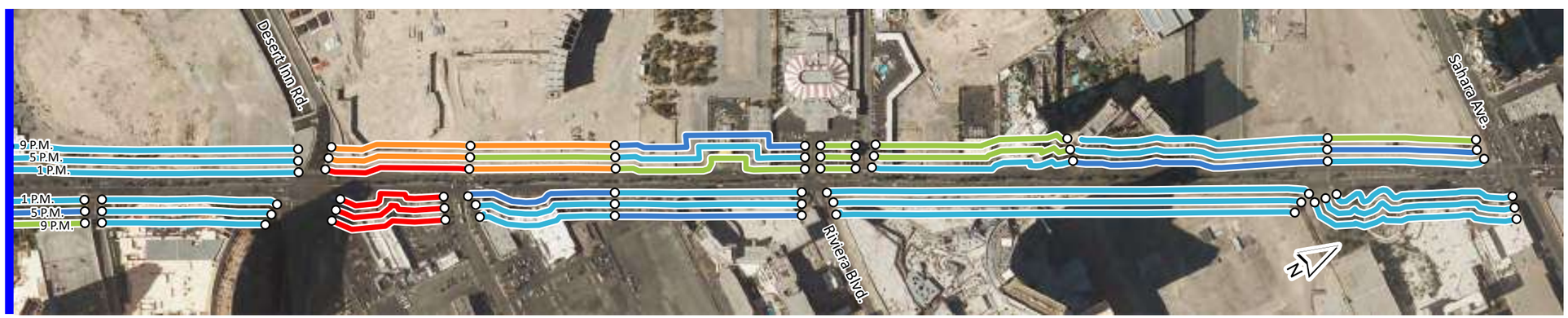
FIGURE 3.47 86

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Legend

Average Walking Speed (Ft./Sec.)

- Greater than 4.25: LOS A
- 4.18 - 4.25: LOS B
- 4.01 - 4.17: LOS C
- 3.76 - 4.00: LOS D
- 2.51 - 3.75: LOS E
- 2.50 or less: LOS F
- Segment Limits

AVERAGE PEDESTRIAN WALKING SPEED PER SEGMENT
SATURDAY JUNE 16, 2012

FIGURE 3.48 87

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3.2.1 Walking Speeds on Pedestrian Bridges

A separate data evaluation was conducted on the north/south Resort Corridor pedestrian bridges to determine walking speeds. The free-flow walking speeds of the bridges were observed to be lower than those of the Las Vegas Boulevard walkways, averaging 3.50 feet per second (2010 HCM walking speed LOS E) as compared to the inner "Strip" walkway speeds of 3.87 feet per second (LOS D). The observed pedestrian bridge average free-flow walk speed of 3.50 ft/sec is consistent with the 3.50 ft/sec the 2009 Manual on Uniform Traffic Control Devices (MUTCD) recommends for pedestrian walking speed to cross a street or highway. Figure 3.49 and Figure 3.50 compare the observed walking speeds for each of the two data collection dates.

These figures also show that the free-flow walking speed on eight of the nine north/south pedestrian bridges would be considered lower than LOS C per the 2010 HCM walking speed methodology. Even though the pedestrian volumes associated with some of the pedestrian bridges were significant, the walking speeds only slightly deteriorated. In some cases, average walking speeds increased from the free-flow walking speed; however, in the case of the Flamingo Road west pedestrian bridge, it was observed to have a walking speed with LOS F conditions during the 9:00 PM – 12:00 AM time period on both the holiday and typical Saturday.

Picture 3.13 and Picture 3.14 show pedestrian activity on various pedestrian bridges during the Memorial Day holiday Saturday (5/26/2012).



Picture 3.13 – Typical Pedestrian Bridge.

The walking speed data collection resulted in average walking speeds for each of the north/south pedestrian bridges in the study corridor, between Russell Road and Sahara Avenue. Table 3.13 and Table 3.14 show the free-flow walking speeds on the pedestrian bridges. It is interesting to note that the average LOS of the pedestrian bridges is within the LOS E range according to the 2010 HCM walking speed LOS procedures on both the east and west side of the study corridor.



Picture 3.14 – Flamingo Road West Pedestrian Bridge.

Table 3.13 – Free-flow Walking Speed – West Pedestrian Bridges

Segment ID		Walking Speed (ft/sec)
Number	Name	9AM - 12PM
W3	Tropicana West	4.14
W5	City Center	3.46
W7	Harmon West	3.99
W11	Flamingo West	3.17
W14	Spring Mtn West	3.65
	Overall Average	3.68
	Overall LOS	E

Table 3.14 – Free-flow Walking Speed – East Pedestrian Bridges

Segment ID		Walking Speed (ft/sec)
Number	Name	9AM - 12PM
E4	Tropicana East	3.10
E8	Harmon East	2.92
E12	Flamingo East	3.80
E15	Spring Mtn East	3.26
	Overall Average	3.27
	Overall LOS	E

The free-flow walking speeds of LOS E on the pedestrian bridges indicate that the 2010 HCM walking speed LOS categories may not be suited for leisure walking speeds, while suggesting that the observed LOS may be acceptable to the Las Vegas tourist. Table 3.15 through Table 3.18 show the data collected throughout the study corridor for the holiday and typical Saturday (May 26 and June 16, 2012 respectively).

Table 3.15 – Average Walking Speed – West Pedestrian Bridges – 5/26/2012 (Holiday Saturday)

Segment ID		Walking Speed (ft/sec)		
Number	Name	1PM – 4PM	5PM – 8PM	9PM – 12AM
W3	Tropicana West	3.15	3.69	2.98
W5	City Center	3.52	3.52	3.09
W7	Harmon West	3.44	3.78	3.31
W11	Flamingo West	2.67	2.82	2.34
W14	Spring Mtn West	3.44	3.64	3.10
	Overall Average	3.24	3.49	2.97
	Overall LOS	E	E	E

Table 3.16 – Average Walking Speed – East Pedestrian Bridges – 5/26/2012 (Holiday Saturday)

Segment ID		Walking Speed (ft/sec)		
Number	Name	1PM – 4PM	5PM – 8PM	9PM – 12AM
E4	Tropicana East	3.02	3.57	2.88
E8	Harmon East	3.39	3.42	3.58
E12	Flamingo East	3.26	3.42	3.19
E15	Spring Mtn East	3.24	3.17	3.20
	Overall Average	3.23	3.39	3.21
	Overall LOS	E	E	E

Table 3.17 – Average Walking Speed – West Pedestrian Bridges – 6/16/2012 (Typical Saturday)

Segment ID		Walking Speed (ft/sec)		
Number	Name	1PM - 4PM	5PM - 8PM	9PM - 12AM
W3	Tropicana West	3.59	3.72	3.23
W5	City Center	3.45	3.52	3.14
W7	Harmon West	3.66	3.90	3.17
W11	Flamingo West	2.55	2.82	2.21
W14	Spring Mtn West	3.50	3.39	3.37
	Overall Average	3.35	3.47	3.02
	Overall LOS	E	E	E

Table 3.18 – Average Walking Speed – East Pedestrian Bridges – 6/16/2012 (Typical Saturday)

Segment ID		Walking Speed (ft/sec)		
Number	Name	1PM – 4PM	5PM – 8PM	9PM – 12AM
E4	Tropicana East	3.61	3.87	3.51
E8	Harmon East	3.57	4.10	3.33
E12	Flamingo East	2.82	3.69	2.90
E15	Spring Mtn East	3.44	3.27	3.13
	Overall Average	3.36	3.73	3.22
	Overall LOS	E	E	E

Similar to the walking speed LOS results, the pedestrian bridge walking speed LOS is not considered to be as effective in determining walkway congestion levels as the pedestrian volume LOS evaluation procedures of the 2010 HCM.

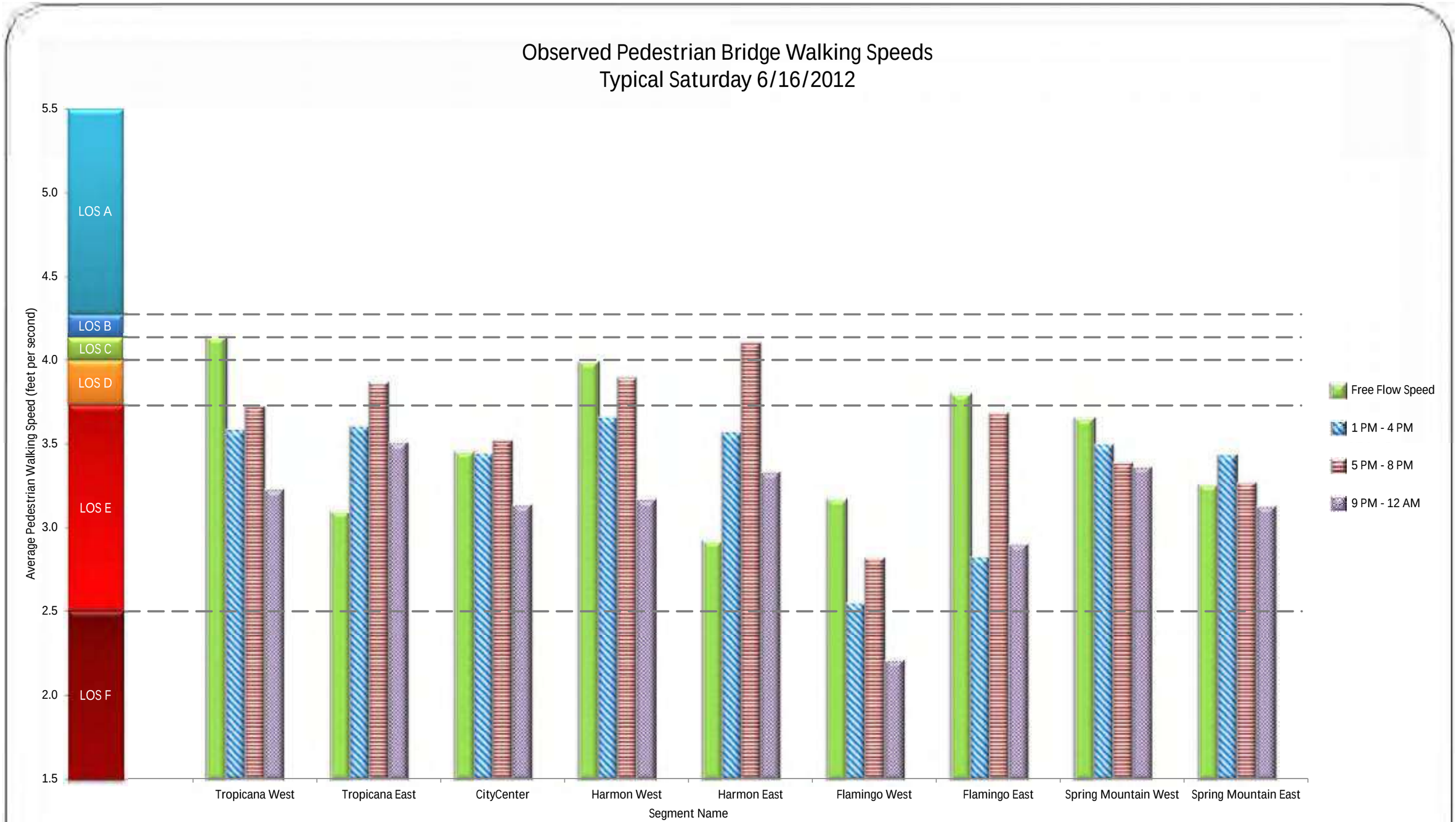


WALKING SPEED BY PEDESTRIAN BRIDGE

FIGURE 3.49

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WALKING SPEED BY PEDESTRIAN BRIDGE

FIGURE 3.50

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3.3 Non-Permanent Obstructions

The quantity, location and classification of non-permanent obstructions as gathered by field agents was compiled and analyzed to evaluate the effect of non-permanent obstructions on pedestrian LOS within the study corridor. The observations were conducted during the walking speed study. Individuals that were identified as non-permanent obstructions were recorded during three time period (1:00 PM – 4:00 PM, 5:00 PM – 8:00 PM and 9:00 PM – 12:00 AM) on May 26, 2012 and June 16, 2012.

Again, it is important to note that during the data collection process, the field agents were not instructed to determine if each "non-permanent obstruction" as counted was actually an obstruction to pedestrian flow. All non-permanent obstructions documented were considered as possible obstructions.

To provide an overall understanding of the dynamics of non-permanent obstructions within the Resort Corridor throughout the day, Figure 3.51 and Figure 3.52 were created with GIS representing the observed number of non-permanent obstructions per segment for each of the observation periods (1:00 PM – 4:00 PM, 5:00 PM – 8:00 PM and 9:00 PM – 12:00 AM) both for the holiday and typical Saturday. The following sections detail the data collected with regard to non-permanent obstructions both on walkways and on pedestrian bridges.

3.3.1 Non-Permanent Obstructions on Walkways

Table 3.19 provides a count summary for the average number of non-permanent obstructions observed for each side of Las Vegas Boulevard from Russell Road to Sahara Avenue during the holiday Saturday data collection effort.

Table 3.19 – Observed Non-Permanent Obstructions (May 26, 2012)

Time Period	West Side	East Side	TOTAL
1 PM - 4 PM	65	104	169
5 PM - 8 PM	103	156	259
9 PM - 12 PM	92	133	224

The highest number of non-permanent obstructions were observed on Saturday, May 26, 2012 between 5:00 PM and 8:00 PM, totaling 259 individuals either hand billing, performing, soliciting or vending. Table 3.20 summarizes the non-permanent obstructions observed on Saturday, June 16, 2012.

Table 3.20 – Observed Non-Permanent Obstructions (June 16, 2012)

Time Period	West Side	East Side	TOTAL
1 PM - 4 PM	51	88	139
5 PM - 8 PM	80	145	225
9 PM - 12 PM	103	149	252

The non-holiday Saturday (June 16, 2012) experienced a decrease in the total number of non-permanent obstructions in both the 1:00 PM – 4:00 PM and 5:00 PM – 8:00 PM time periods, but an increase in the 9:00 PM – 12:00 AM time period. The highest number of non-permanent obstructions observed on Saturday, June 16 was 252, only a slight decrease from the 259 observed on the holiday weekend Saturday of May 26.

The field notes taken by the walking agents for the highest observed time periods for each Saturday count were used to quantify the location of the observed non-permanent obstructions. The non-permanent obstructions were reviewed for walkway locations identified in Clark County Code Chapter 16.11. These locations are where non-permanent obstructions are not permitted to obstruct including: within 50 feet of a signalized intersection, access drive or mid-block cross walk. Categories were also created grouping non-permanent obstructions that were observed on pedestrian bridges, within 15 feet of pedestrian bridge landings and within 15 feet of a bus shelter. Table 3.21 and Table 3.22 summarize the distribution of the non-permanent obstructions within the study corridor on the holiday and typical Saturday (May 26 and June 16, 2012).

Table 3.21 – Distribution of Non-Permanent Obstructions 5PM – 8PM (May 26, 2012)

Non-Permanent Obstruction Category	Within 50' of an intersection, driveway or crosswalk	On pedestrian bridges	Within 15' of a pedestrian bridge landing	Within 15' of a bus stop	Other	TOTAL
Hand biller	110 (42%)	4 (2%)	3 (1%)	9 (3%)	27 (10%)	154 (59%)
Performer	21 (8%)	9 (3%)	1 (1%)	1 (1%)	43 (17%)	75 (29%)
Solicitor	4 (2%)	7 (3%)	1 (1%)	-	4 (2%)	16 (6%)
Vendor	5 (2%)	4 (2%)	-	-	6 (2%)	15 (6%)
Total	140 (54%)	24 (9%)	5 (2%)	10 (4%)	80 (31%)	259 (100%)

Table 3.22 – Distribution of Non-Permanent Obstructions 5PM – 8PM (June 16, 2012)

Non-Permanent Obstruction Category	Within 50' of an intersection, driveway or crosswalk	On pedestrian bridges	Within 15' of a pedestrian bridge landing	Within 15' of a bus stop	Other	TOTAL
Hand biller	113 (45%)	2 (1%)	4 (2%)	2 (1%)	24 (10%)	145 (58%)
Performer	22 (9%)	5 (2%)	3 (1%)	2 (1%)	38 (15%)	70 (28%)
Solicitor	6 (2%)	7 (3%)	-	-	4 (2%)	17 (7%)
Vendor	5 (2%)	6 (2%)	-	-	10 (4%)	21 (8%)
Total	146 (58%)	20 (8%)	7 (3%)	4 (2%)	76 (30%)	252 (100%)

It can be seen in Table 3.21 that 140 or 54% on Saturday, May 26 and 146 or 58% on Saturday, June 16 of the observed non-permanent obstructions were located within areas where non–permanent obstructions are not permitted to obstruct under County Code 16.11. The majority of these non-permanent obstructions were classified as hand billers.

Further analysis showed that the majority of the non-permanent obstructions were located within the inner portion of the study corridor. A total of 98.5% of the individuals hand billing, performing, soliciting or vending were observed between Tropicana Avenue and Spring Mountain Road. Table 3.23 shows the percent distribution in relation to the inner and outer portions of the study corridor and also the east and west sides of Las Vegas Boulevard.

Table 3.23 – Non-Permanent Obstructions by Percentage 5PM – 8PM (May 26, 2012)

	West	East	Total
Outer	1.2%	0.3%	1.5%
Inner	38.6%	59.9%	98.5%
Total	39.8%	60.2%	100.0%

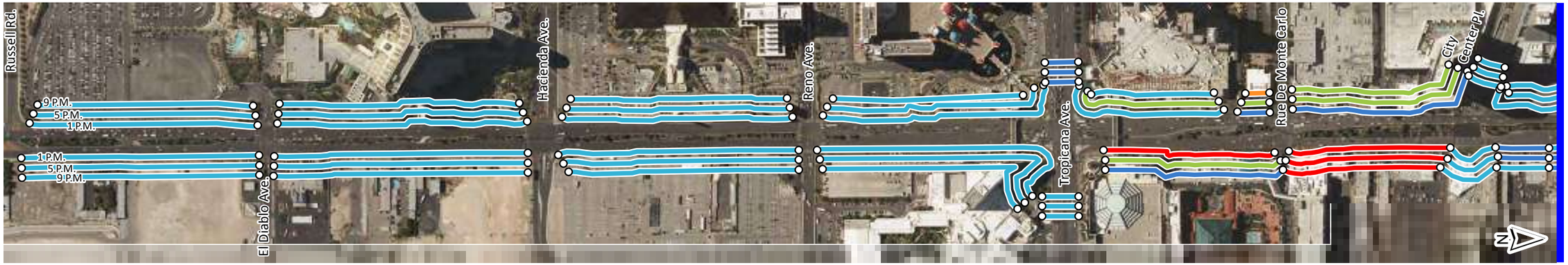
Similarly, Table 3.24 shows the percent distribution of non-permanent obstructions on the non-holiday Saturday.

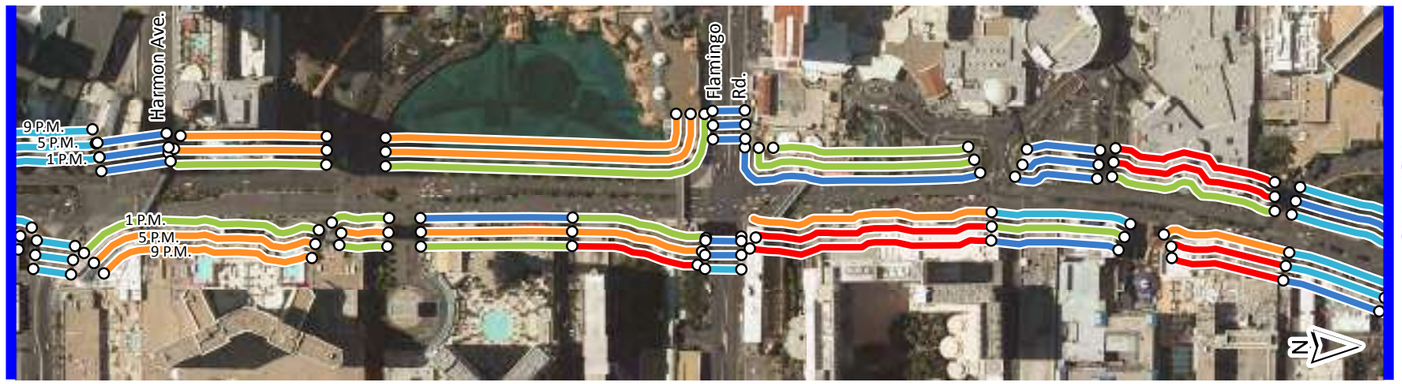
Table 3.24 – Non-Permanent Obstructions by Percentage 9PM – 12AM (June 16, 2012)

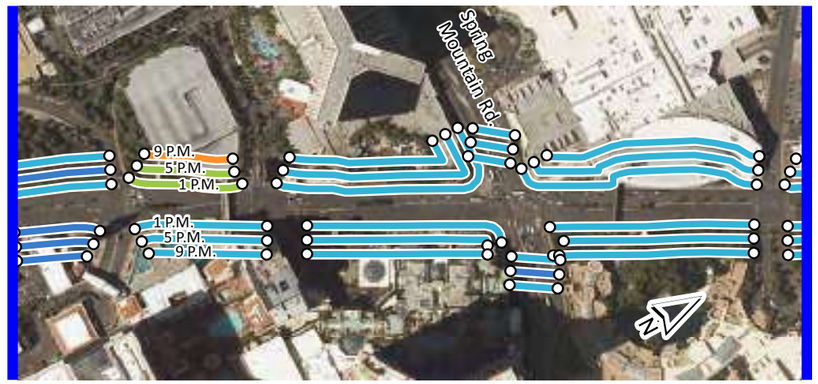
	West	East	Total
Outer	0.7%	0.5%	1.2%
Inner	40.2%	58.6%	98.8%
Total	40.9%	59.1%	100.0%

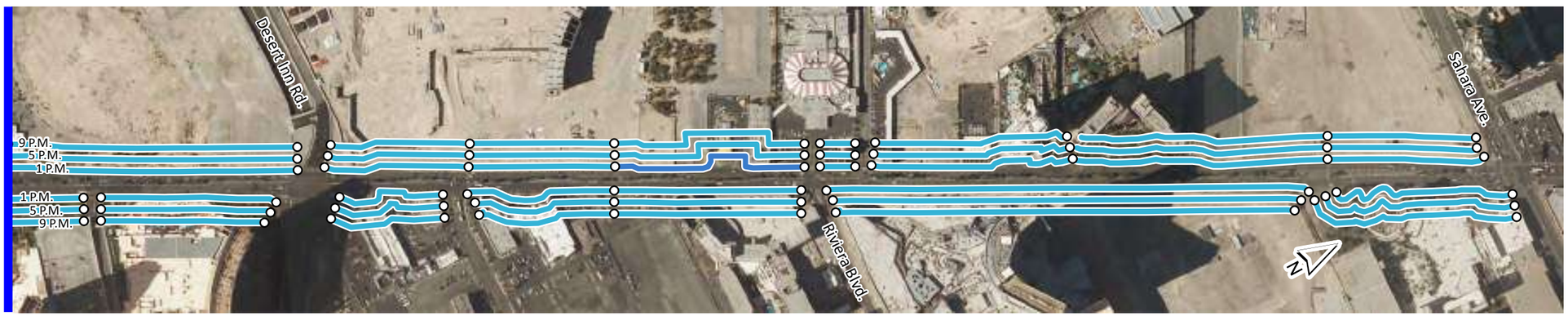
In comparing Table 3.23 and Table 3.24, it can be seen that the distribution of the non-permanent obstructions is similar on a holiday Saturday and a typical Saturday.

The non-permanent obstructions were quantified within each of the 53 study corridor segments (25 west segments and 28 east segments) and are graphically shown in Figure 3.53 and Figure 3.54 for the holiday Saturday on each side of Las Vegas Boulevard and Figure 3.55 and Figure 3.56 for the typical Saturday observations.









Legend

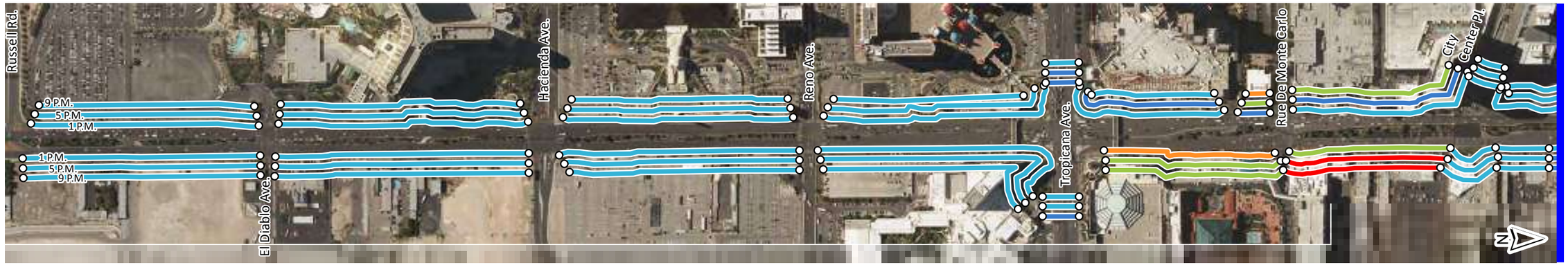
Avg. Non-Permanent Obstructions

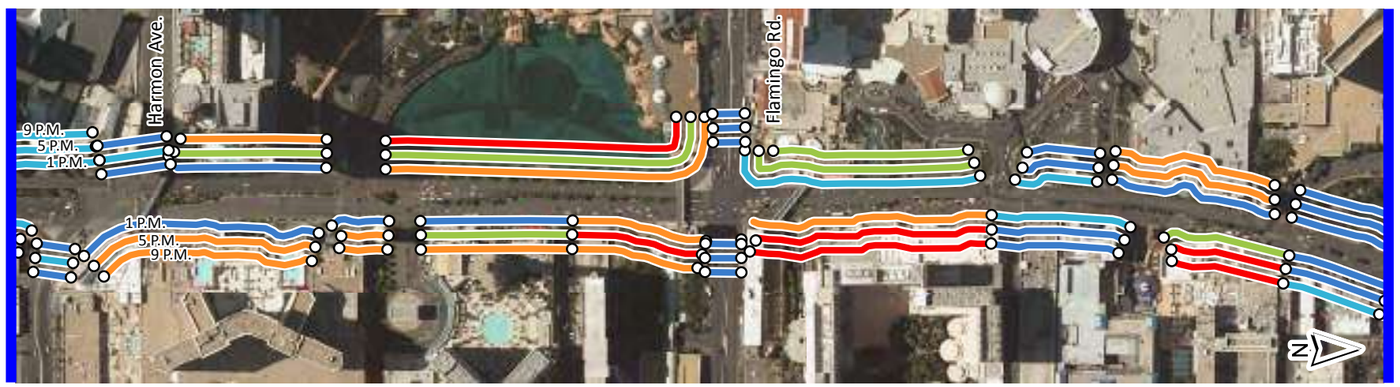
- 2 or less
- 3 - 6
- 7 - 10
- 11 - 14
- Greater than 14
- Segment Limits

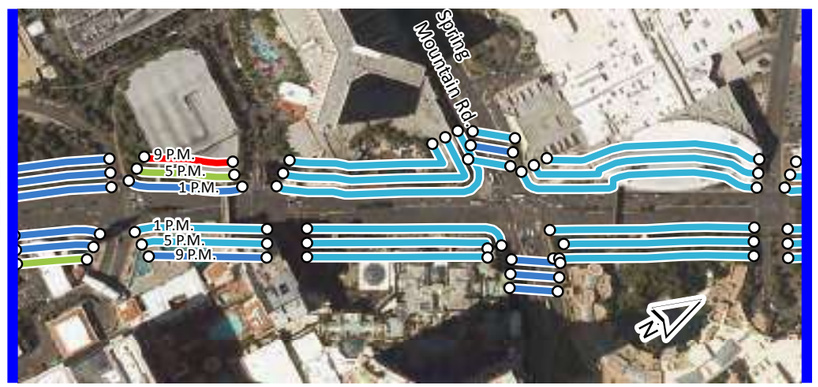
AVERAGE NON-PERMANENT OBSTRUCTIONS PER SEGMENT
SATURDAY MAY 26, 2012

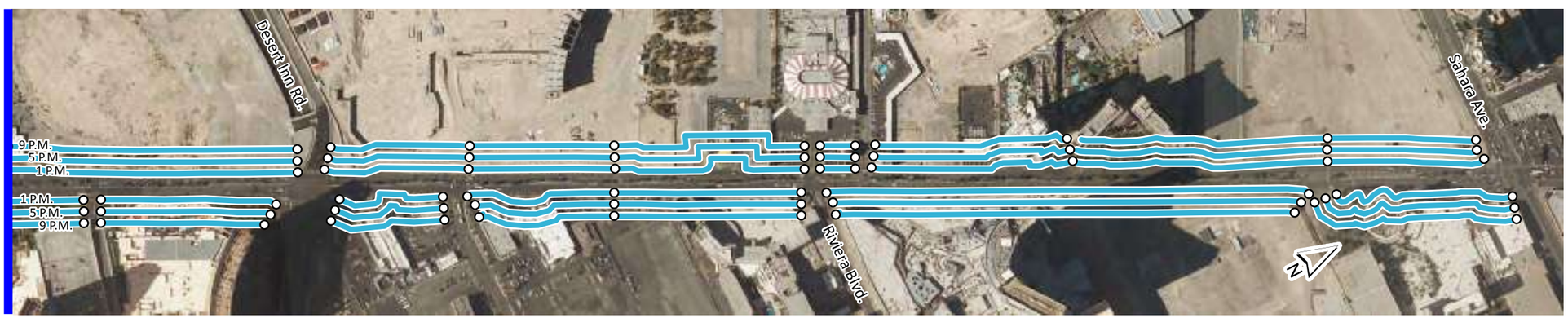
FIGURE 3.51 92

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Legend

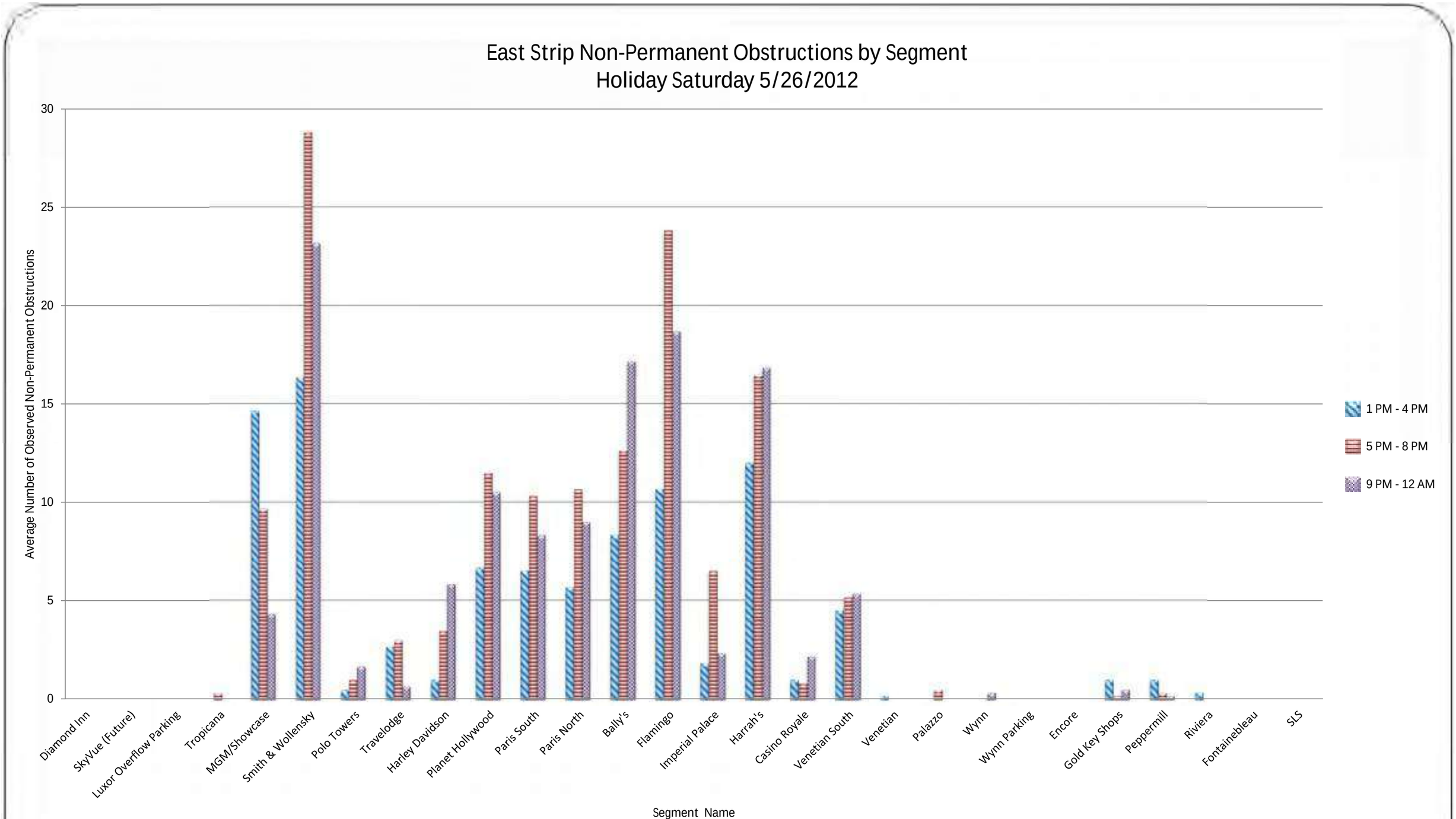
Avg. Non-Permanent Obstructions

- 2 or less
- 3 - 6
- 7 - 10
- 11 - 14
- Greater than 14
- Segment Limits

AVERAGE NON-PERMANENT OBSTRUCTIONS PER SEGMENT
SATURDAY JUNE 16, 2012

FIGURE 3.52 93

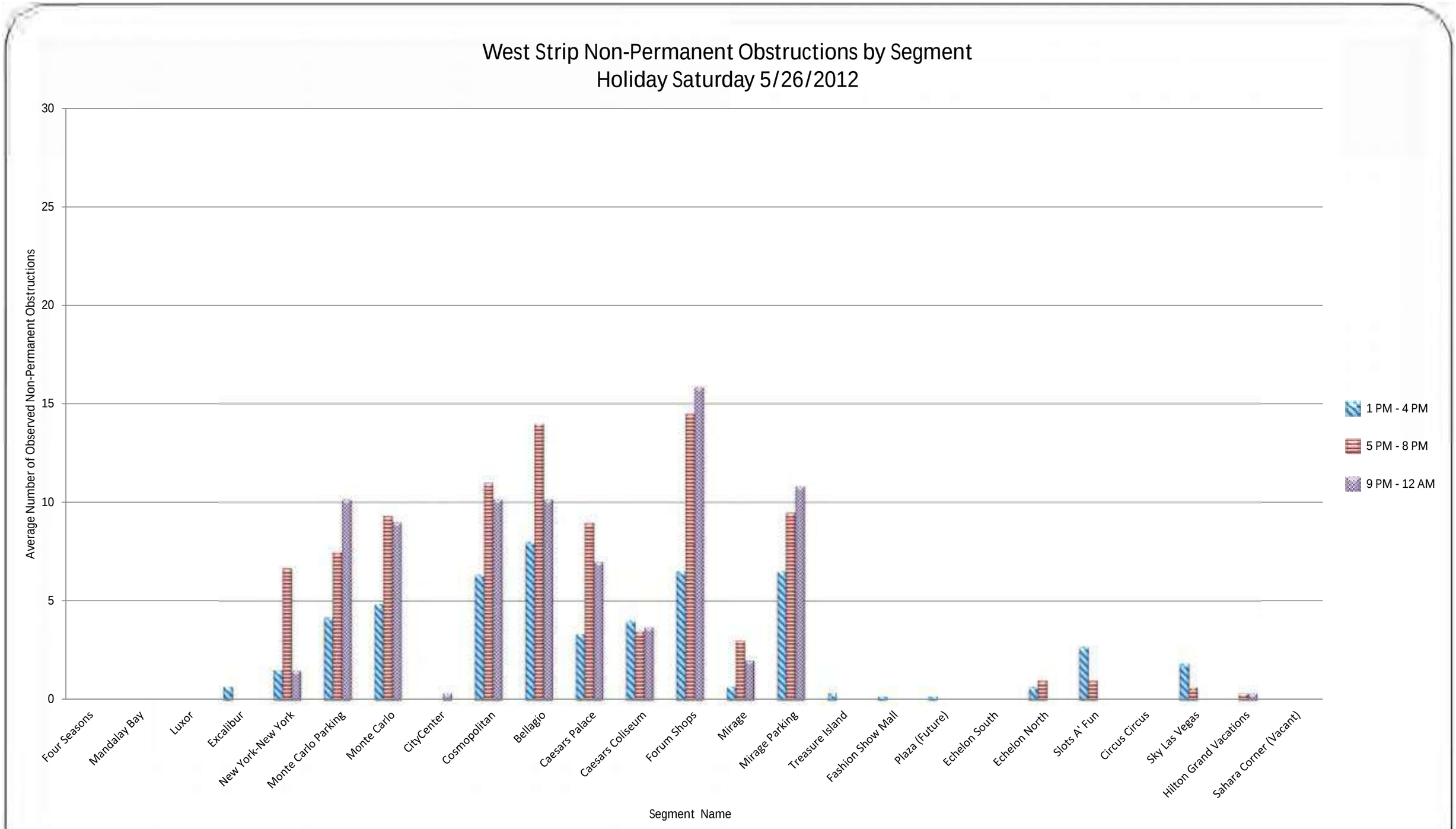
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NON-PERMANENT OBSTRUCTIONS

FIGURE 3.53

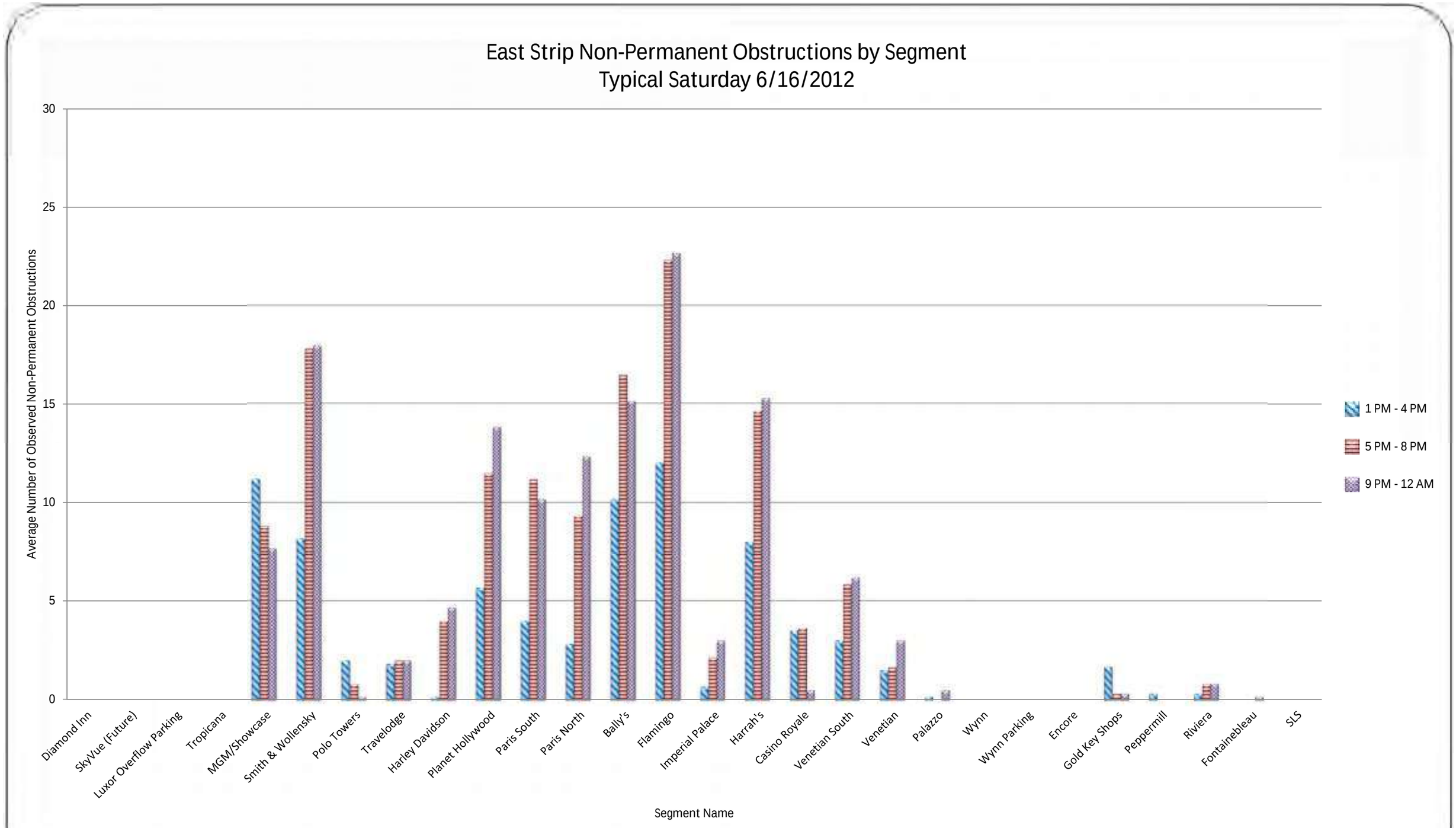
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NON-PERMANENT OBSTRUCTIONS

FIGURE 3.54

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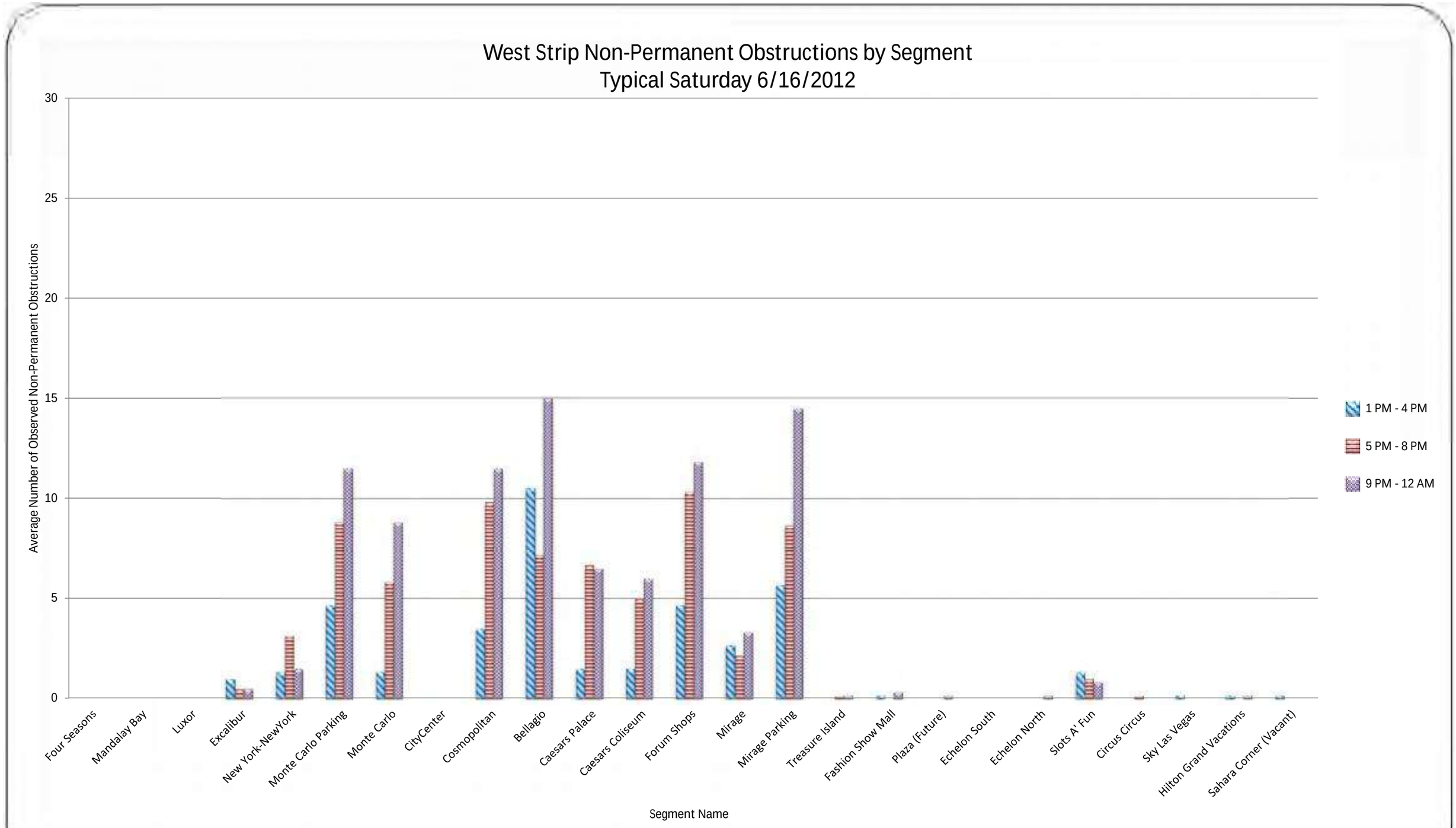


NON-PERMANENT OBSTRUCTIONS

FIGURE 3.55

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NON-PERMANENT OBSTRUCTIONS

FIGURE 3.56

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3.3.2 Non-Permanent Obstructions on Pedestrian Bridges

A separate evaluation was conducted for non-permanent obstructions observed on the 16 pedestrian bridges within the study area. The maximum number of individuals identified to be non-permanent obstructions on the pedestrian bridges was observed to be five on the Tropicana Road north pedestrian bridge between the New York-New York Hotel/Casino and the MGM Grand Hotel/Casino.

Table 3.25 through Table 3.28 summarize the average observed number of non-permanent obstructions on each pedestrian bridge from Russell Road to Sahara Avenue. It is important to note that the term "non-permanent obstruction", for the purposes of this report, is defined as an individual who could obstruct the pedestrian walkway while engaging in any of the following activities within the walkway: hand billing, performing, soliciting or selling.

Table 3.25 – Non-Permanent Obstructions on West Pedestrian Bridges – Holiday Saturday (5/26/2012)

	Avg. Number of Non-Permanent Obstructions		
Pedestrian Bridge	1PM - 4PM	5PM - 8PM	9PM - 12AM
Tropicana West	3	4	4
CityCenter	0	0	0
Harmon West	3	3	2
Flamingo West	4	4	3
Spring Mtn West	2	1	1

Table 3.26 – Non-Permanent Obstructions on East Pedestrian Bridges – Holiday Saturday (5/26/2012)

	Avg. Number of Non-Permanent Obstructions		
Pedestrian Bridge	1PM - 4PM	5PM - 8PM	9PM - 12AM
Tropicana East	2	1	1
Harmon East	2	1	1
Flamingo East	5	3	1
Spring Mtn East	1	3	2

The holiday Saturday, May 26, and the typical Saturday, June 16, saw a similar number of non-permanent obstructions on each bridge, with slight variability on each bridge. It is important to note that these tables are composed of the average of six distinct observations on each of the north/south pedestrian bridges.

Table 3.27 – Non-Permanent Obstructions on West Pedestrian Bridges – Typical Saturday (6/16/2012)

	Avg. Number of Non-Permanent Obstructions		
Pedestrian Bridge	1PM - 4PM	5PM - 8PM	9PM - 12AM
Tropicana West	3	2	2
CityCenter	0	0	0
Harmon West	2	2	3
Flamingo West	3	3	3
Spring Mtn West	2	3	2

Table 3.28 – Non-Permanent Obstructions on East Pedestrian Bridges – Typical Saturday (6/16/2012)

	Avg. Number of Non-Permanent Obstructions		
Pedestrian Bridge	1PM - 4PM	5PM - 8PM	9PM - 12AM
Tropicana East	1	1	3
Harmon East	3	2	3
Flamingo East	5	3	3
Spring Mtn East	2	4	5

Figure 3.57 and Figure 3.58 display the average total number of non-permanent obstructions observed on pedestrian bridges for a holiday Saturday and a typical Saturday respectively. In comparing the pedestrian volume LOS on the pedestrian bridges in Table 3.3 and the average number of non-permanent obstructions on pedestrian bridges in Figure 3.57 through Figure 3.58, it can be seen that as the average number of non-permanent obstructions increased, generally, the LOS decreased when pedestrian volumes were significant. The correlation is expected as with more non-permanent obstructions, the effective walkway width (W_E) decreases and the pedestrian traffic is not provided the complete walkway width (W) for movement. Only the Flamingo Road west pedestrian bridge, between the Bellagio Hotel/Casino and Caesars Palace Hotel/Casino, was calculated to have a LOS less than LOS C on the holiday Saturday. This bridge had an average of three non-permanent obstructions throughout the day.

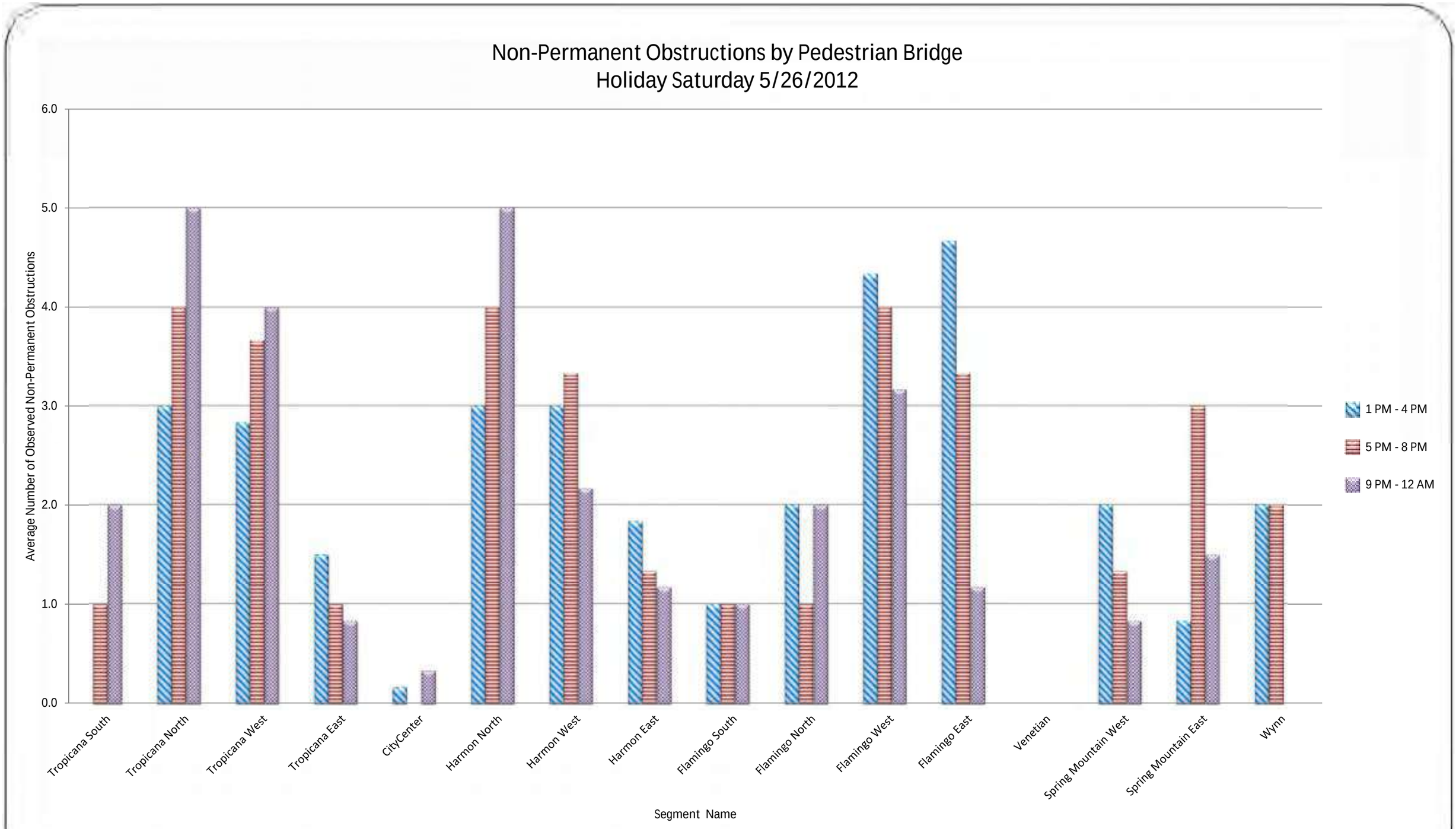
It is important to note that on average, the Flamingo Road west pedestrian bridge had three non-permanent obstructions on the bridge in each of the data collection periods while it experienced LOS D volume conditions and LOS F walking speed conditions. This suggests that at least where pedestrian volumes are large, non-permanent obstructions are contributing to deteriorated walking speeds and congestion. Picture 3.15 and Picture 3.16 show pedestrian bridges with non-permanent obstructions at Flamingo Road and Tropicana Avenue respectively.



Picture 3.15 – Non-Permanent Obstructions (vendors) on Pedestrian Bridge – Flamingo Road East.



Picture 3.16 – Non-Permanent Obstructions (solicitor/vendor) on Pedestrian Bridge – Tropicana Avenue West.

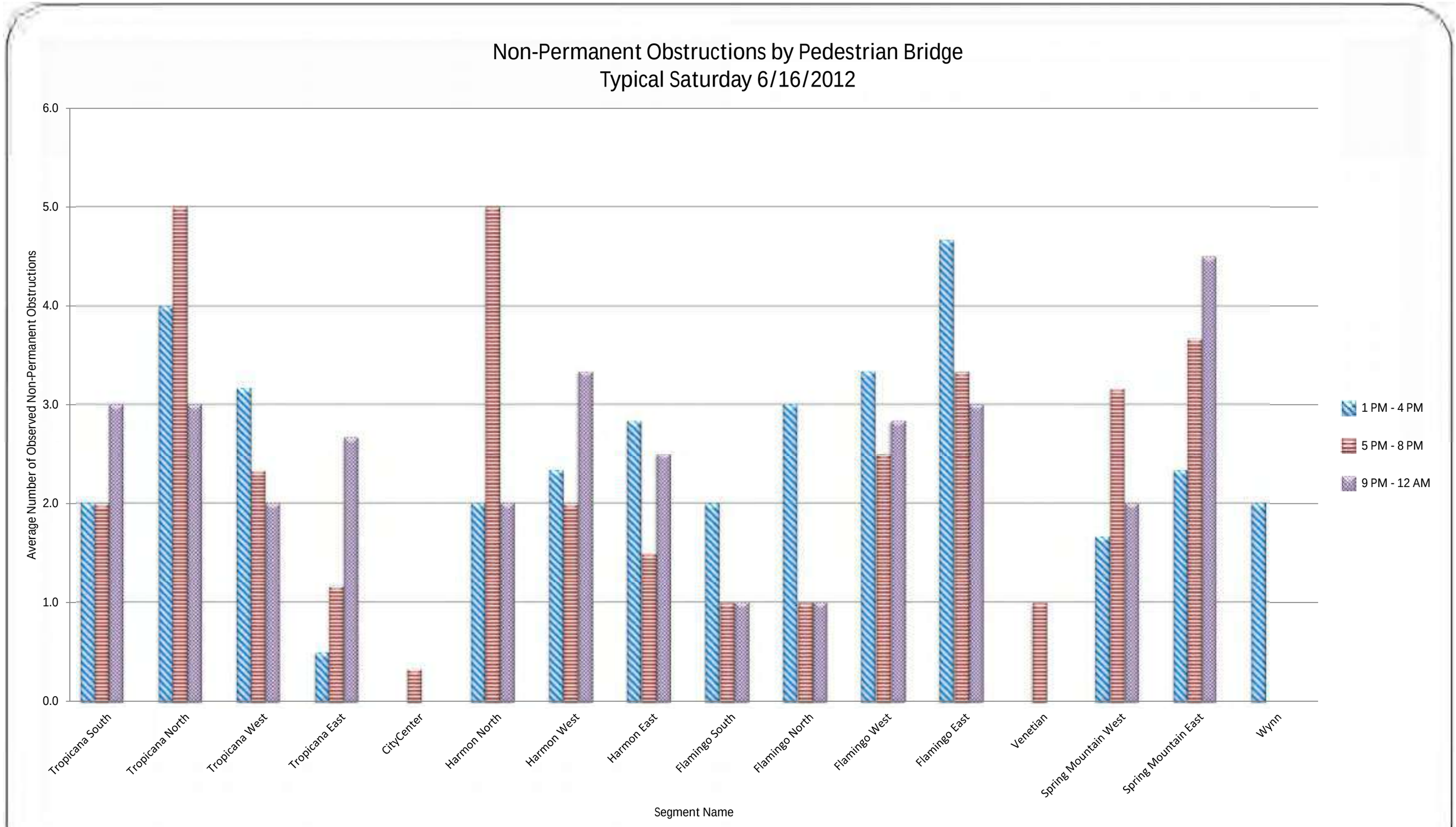


NON-PERMANENT OBSTRUCTIONS

FIGURE 3.57

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NON-PERMANENT OBSTRUCTIONS

FIGURE 3.58

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3.4 Bus Stop Queuing

Type 3 bus stops which have the bus shelter and queuing area behind the pedestrian walkway have the concern of congestion when transit passengers are boarding and alighting the bus and potentially while waiting for the bus to arrive (see Picture 3.17). Similarly, Type 2 bus stops have queue areas in front of the pedestrian walkway, affording queue space for transit riders outside the stream of pedestrian traffic (see Picture 3.18). Type 1 bus stops have separate queuing areas that are isolated from the pedestrian walkway and bus queuing does not affect the pedestrian flow in these locations. The maximum 15-minute boarding number was evaluated at each Type 3 bus stop and at Type 2 bus stops that were observed to potentially be of concern. In some cases, where bus queuing is intense, queues overcrowd the queuing area and spill into the pedestrian walkway. Bus stops were not further analyzed if 375 or less pedestrians per 15-minutes were observed during the Memorial Day holiday weekend (May 26, 2012) passing by the bus stop. A volume of 375 pedestrians in 15 minutes requires an effective walkway width of 2.5 feet to maintain a LOS C. The 375 pedestrian volume is based on the pedestrian volume capacity of a four-foot walkway with LOS C. Bus stops were also excluded from further evaluation if the maximum 15-minute boarding was less than 15 people. For 15 people, the queue space is calculated to be 105 square feet at 7.0 square feet per person for a Queuing LOS of C.

Analysis of the ridership data from both the holiday, May 26 and typical, June 16, Saturday indicated that the bus stops listed in Table 3.29 be further evaluated:

Table 3.29 – Bus Stops Included in Queuing Analysis

Bus Stop	Type
Polo Towers North	3
Bellagio South	3
Paris North	2
Flamingo North	2
Caesars Palace South	2
Mirage South	2
Treasure Island South	3
Venetian North	2

Of the eight stops identified for analysis, six had a maximum 15-minute boarding on the holiday Saturday (May 26, 2012) while the remaining two had maximum boardings on the typical Saturday (June 16, 2012). The maximum boarding volumes were used in the evaluation of the bus stop queuing areas. Figure 3.59 and Figure 3.60 show the bus stop locations, types, as well as the maximum 15-minute boarding for both data collection dates (see also Figure 2.6 for stop location and type). To maintain a queue space of LOS C or better, each person in a bus stop queue area requires a minimum of seven square feet. This distance allows for an 18-inch no-touch zone for each queued person. Table 3.30 shows the maximum queues at each of the identified bus stops and the queue area required for LOS C to serve that maximum queue.

Table 3.30 – Bus Stop Max Boardings and Queue Area

Bus Stop	Day	Maximum 15-minute volume	Maximum 15-minute boardings	Demand Queue Area (sq. ft.)	Existing Queue Area (sq. ft.)
Polo Towers N	6/16	1,290	33	231	265
Bellagio S	5/26	2,633	59	413	900
Paris N	5/26	2,124	82	574	260
Flamingo N	5/26	1,459	41	287	375
Caesars S	5/26	1,684	27	189	321
Mirage S	6/16	1,963	35	245	279
Treasure Island S	5/26	1,016	41	287	148
Venetian N	5/26	1,737	58	406	312

Bold Value – Demand Queue Exceeds Existing Area

Evaluation of the individual bus stops showed that the bus stops in Table 3.31 have adequate queue area within and in front of the shelter. For Type 3 bus stops (with bus shelter behind the pedestrian walkway), a minimum four-foot walk was calculated to be provided.

Table 3.31 – Analyzed Bus Stops with Adequate Queue Area

Bus Stop	Type
Polo Towers N	3
Bellagio S	2
Flamingo N	2
Caesars S	2
Mirage S	2

The remaining bus stops lack the amount of queue space that is desired for the maximum boardings while maintaining a LOS C queue area. These bus stops are included in Table 3.32.

Table 3.32 – Analyzed Bus Stops with Inadequate Queue Area

Bus Stop	Type
Paris N	2
Treasure Island S	3
Venetian N	2

The LOS evaluation suggests that where insufficient queue area is identified, 15 feet on either side and in front of the bus shelter should be reserved for bus patrons by restricting non-permanent obstructions. The LOS evaluation also concluded that all Type 2 and Type 3 bus stops should allow the area between the queue area and the curb to be available for only queued and walking pedestrians with a delineated no-obstructive use zone. In addition, from field observations, all Type 1 bus stops should also be considered for no-obstructive use zones to encourage transit use by maintaining queue areas of LOS C or better and aiding pedestrian flow in front of Type 1 bus stops.



Picture 3.17 – Type 2 Bus Stop – In Front of Walkway.

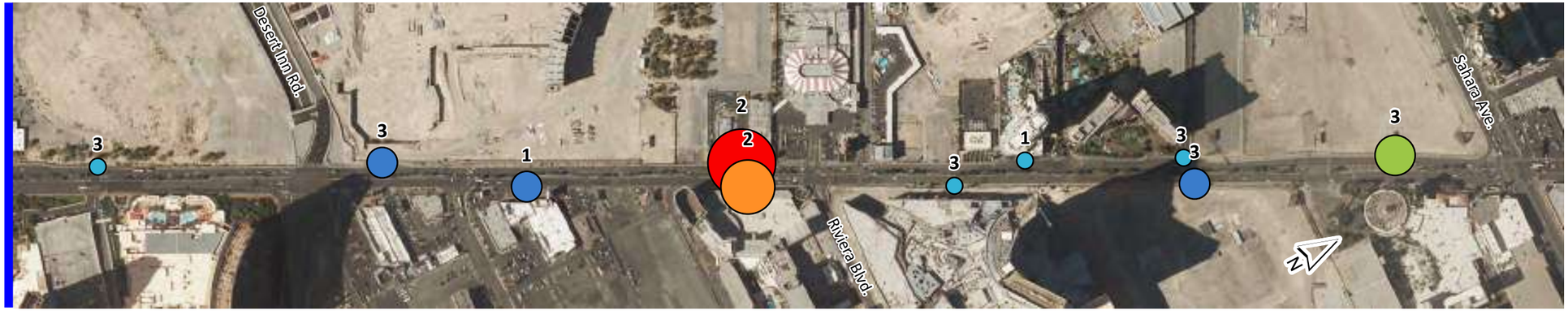


Picture 3.18 – Type 3 Bus Stop – Behind Walkway.









Legend

Bus Boardings

- 15 or Less
- 16 - 30
- 31 - 45
- 46 - 60
- Greater than 60

1: Isolated
2: In Front of Walk
3: Behind Walk

MAX PEAK 15-MINUTE BUS BOARDINGS - MAY 26, 2012

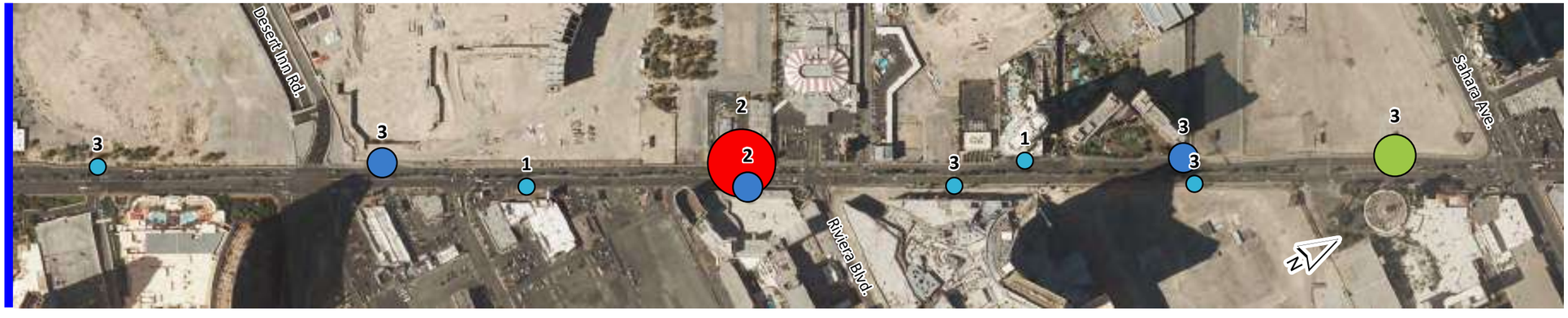
FIGURE 3.59

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Legend

Bus Boardings

- 15 or Less
- 16 - 30
- 31 - 45
- 46 - 60
- Greater than 60

1: Isolated
2: In Front of Walk
3: Behind Walk

MAX PEAK 15-MINUTE BUS BOARDINGS - JUNE 16, 2012

FIGURE 3.60

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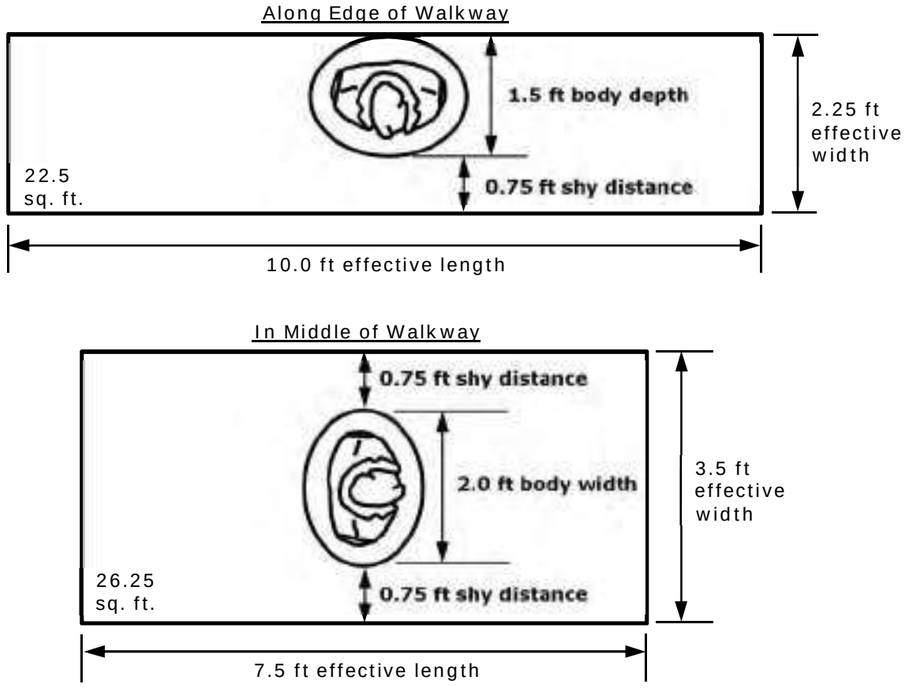
3.5 Pedestrian Simulation Modeling

The Advanced Land-Transportation Performance Simulation™ (ALPS™) software was used to simulate pedestrian activity based on pedestrian volumes, speeds, and group size, among other variables. After discussions with Clark County, the following locations were chosen for pedestrian simulation modeling with ALPS™:

- Model 1 – Pedestrian Bridge
- Model 2 – Sidewalk
- Model 3 –Sidewalk and Bus Stop
- Model 4 – Queuing at a signalized Crosswalk

The four models are anticipated to represent the general types of situations that are currently occurring along "typical" sections of Las Vegas Boulevard. The different model sections were analyzed with and without non-permanent obstructions. For modeling purposes, the actual activity of the non-permanent obstruction was not analyzed, only the space taken up by the obstruction and its impact on the adjacent walkway width was evaluated. In other words, the modeling does not represent any specific type of non-obstructive activity. Based on information contained in the HCM, obstructions along edges of the walkways were considered to take up 2.25 feet by 10 feet (22.5 square feet) and obstructions in the center of walkways were considered to take up 3.5 feet by 7.5 feet (26.25 square feet). Figure 3.61 illustrates the pedestrian obstruction sizes utilized in the analysis.

Figure 3.61 – Pedestrian Obstruction Sizes



The following sections outline the four modeling locations, scenarios, and model input data.

3.5.1 Model 1 – Pedestrian Bridge

Model 1 – Pedestrian Bridge represents a segment of the Flamingo Road west pedestrian bridge between the escalators south of Caesars Palace Hotel/Casino and north of the Bellagio Hotel/Casino. Figure 3.62 illustrates the area to be analyzed. Only the bridge walkway portion over Flamingo Road was included in the model (escalators, stairs, and elevators were not included in the model). The following scenarios were analyzed:

- Scenario A – No obstructions
- Scenario B – With obstructions along the walls (three obstructions total)
- Scenario C – With obstructions along the walls and in the center of the walkway (four obstructions total)

Scenarios B and C are consistent with the number of obstructions observed on this bridge section during the study. Table 3.33 summarizes the 15-minute pedestrian volume input data for Model 1 – Pedestrian Bridge.

Table 3.33 – Model 1 – Pedestrian Bridge Input Data -15-Minute Pedestrian Volume

Start Time	South bound	North bound	Start Time	South bound	North bound
3:00 PM	651	570	7:30 PM	707	642
3:15 PM	595	441	7:45 PM	861	666
3:30 PM	935	694	8:00 PM	793	581
3:45 PM	1,083	867	8:15 PM	707	958
4:00 PM	881	745	8:30 PM	953	950
4:15 PM	852	729	8:45 PM	886	908
4:30 PM	873	838	9:00 PM	1128	810
4:45 PM	739	671	9:15 PM	1,002	1143
5:00 PM	770	777	9:30 PM	1155	1015
5:15 PM	817	783	9:45 PM	980	1029
5:30 PM	772	848	10:00 PM	999	1002
5:45 PM	1,010	765	10:15 PM	772	1004
6:00 PM	810	996	10:30 PM	927	873
6:15 PM	797	641	10:45 PM	898	617
6:30 PM	949	846	11:00 PM	893	479
6:45 PM	746	755	11:15 PM	973	904
7:00 PM	907	735	11:30 PM	1101	781
7:15 PM	781	683	11:45 PM	831	761

Average walking speed: 2.61 feet per second (see Section 3.2.1)
Pedestrian speed and volume data from Saturday, May 26, 2012 (Memorial Day weekend) Count Location ID: 11
Location: the Flamingo Road west pedestrian bridge between the escalators south of Caesars Palace Hotel/Casino and north of the Bellagio Hotel/Casino

Figure 3.62 – Model 1 – Pedestrian Bridge



3.5.2 Model 2 – Sidewalk

Model 2 – Sidewalk is a segment of a sidewalk in front of Caesars Palace Hotel/Casino, north of Caesars Palace Boulevard and south of the Forum Shops. This section of sidewalk was identified to have pedestrian volumes exceeding a LOS C during the study. AS such, it was identified as a representative sidewalk section for further modeling. Like many segments of sidewalk along Las Vegas Boulevard, this segment of sidewalk is constrained on both sides of the pedestrian walkway. Figure 3.63 illustrates the area to be analyzed by ALPS modeling. The following scenarios were analyzed:

- Scenario A – No obstructions
- Scenario B – With obstructions along the outside of the sidewalk (three obstructions total)

Table 3.34 summarizes the 15-minute pedestrian volume input data for Model 2 – Sidewalk.

Table 3.34 – Model 2 – Sidewalk Input Data -15-Minute Pedestrian Volume

Start Time	South bound	North bound	Start Time	South bound	North bound
3:00 PM	731	763	7:30 PM	776	980
3:15 PM	752	788	7:45 PM	808	1150
3:30 PM	692	823	8:00 PM	709	990
3:45 PM	756	776	8:15 PM	752	984
4:00 PM	730	793	8:30 PM	755	1017
4:15 PM	714	802	8:45 PM	811	1121
4:30 PM	733	774	9:00 PM	733	980
4:45 PM	758	816	9:15 PM	915	967
5:00 PM	777	796	9:30 PM	855	976
5:15 PM	794	842	9:45 PM	984	960
5:30 PM	789	830	10:00 PM	643 *	563 *
5:45 PM	810	767	10:15 PM	808 *	562 *
6:00 PM	781	634	10:30 PM	872 *	494 *
6:15 PM	804	519	10:45 PM	997 *	460 *
6:30 PM	800	626	11:00 PM	755 *	293 *
6:45 PM	705	468	11:15 PM	1,101 *	570 *
7:00 PM	731	719	11:30 PM	907	1184
7:15 PM	809	623	11:45 PM	726	750

Average walking speed: 3.23 feet per second (see **Section 3.2**)

Pedestrian speed and volume data from Saturday, May 26, 2012 (Memorial Day weekend)

Location: Sidewalk in front of Caesars Palace Hotel/Casino, north of Caesars Palace Boulevard and south of the Forum Shops

*Pedestrian volumes estimated from Caesars Palace manual count location: M6.

Figure 3.63 – Model 2 – Sidewalk



3.5.3 Model 3 – Sidewalk and Bus Stop

Model 3 – Sidewalk and Bus Stop is located at the Treasure Island bus stop south of Siren's Cove Boulevard and north of The Mirage Hotel/Casino north entrance. As identified in Section 2.1.4, this bus stop is a Type 3 configuration with the bus shelter at the back of the walkway. For the model, the pedestrians are constrained to the walkway. It is important to note that during the observations, it was documented that pedestrians spill out onto Las Vegas Boulevard during peak congestion time periods (see Picture 3.19). Figure 3.64 illustrates the area to be analyzed. The following scenarios were analyzed:

- Scenario A – No obstructions
- Scenario B – With obstructions along the outside of the sidewalk (three obstructions total)

Table 3.35 summarizes the sidewalk 15-minute pedestrian volume input data for Model 3 – Sidewalk and Bus Stop, and Table 3.36 summarizes the boarding and alighting data received from the RTC for the TI bus stop.

Table 3.35 – Model 3 – Sidewalk Input Data -15-Minute Pedestrian Volume

Start Time	South bound	North bound	Start Time	South bound	North bound
3:00 PM	448	351	7:30 PM	615	603
3:15 PM	558	403	7:45 PM	503	634
3:30 PM	430	435	8:00 PM	294	661
3:45 PM	503	440	8:15 PM	1,016	598
4:00 PM	519	433	8:30 PM	952	913
4:15 PM	488	457	8:45 PM	1008	955
4:30 PM	556	467	9:00 PM	949	983
4:45 PM	519	489	9:15 PM	953	993
5:00 PM	506	503	9:30 PM	918	975
5:15 PM	487	526	9:45 PM	603	967
5:30 PM	518	540	10:00 PM	841	904
5:45 PM	563	552	10:15 PM	901	899
6:00 PM	622	590	10:30 PM	893	919
6:15 PM	637	609	10:45 PM	939	945
6:30 PM	603	626	11:00 PM	601	960
6:45 PM	611	655	11:15 PM	849	852
7:00 PM	619	679	11:30 PM	1011	702
7:15 PM	607	640	11:45 PM	885	853

Average walking speed: 3.42 feet per second (see **Section 3.2**)
Pedestrian speed and volume data from Saturday, May 26, 2012 (Memorial Day weekend) Count Location: 15
Location: TI bus stop south of Siren's Cove Boulevard and north of The Mirage's north entrance

Table 3.36 – Model 3 – Bus Stop Boarding and Alighting Data – 15-Minute Boarding/Alighting

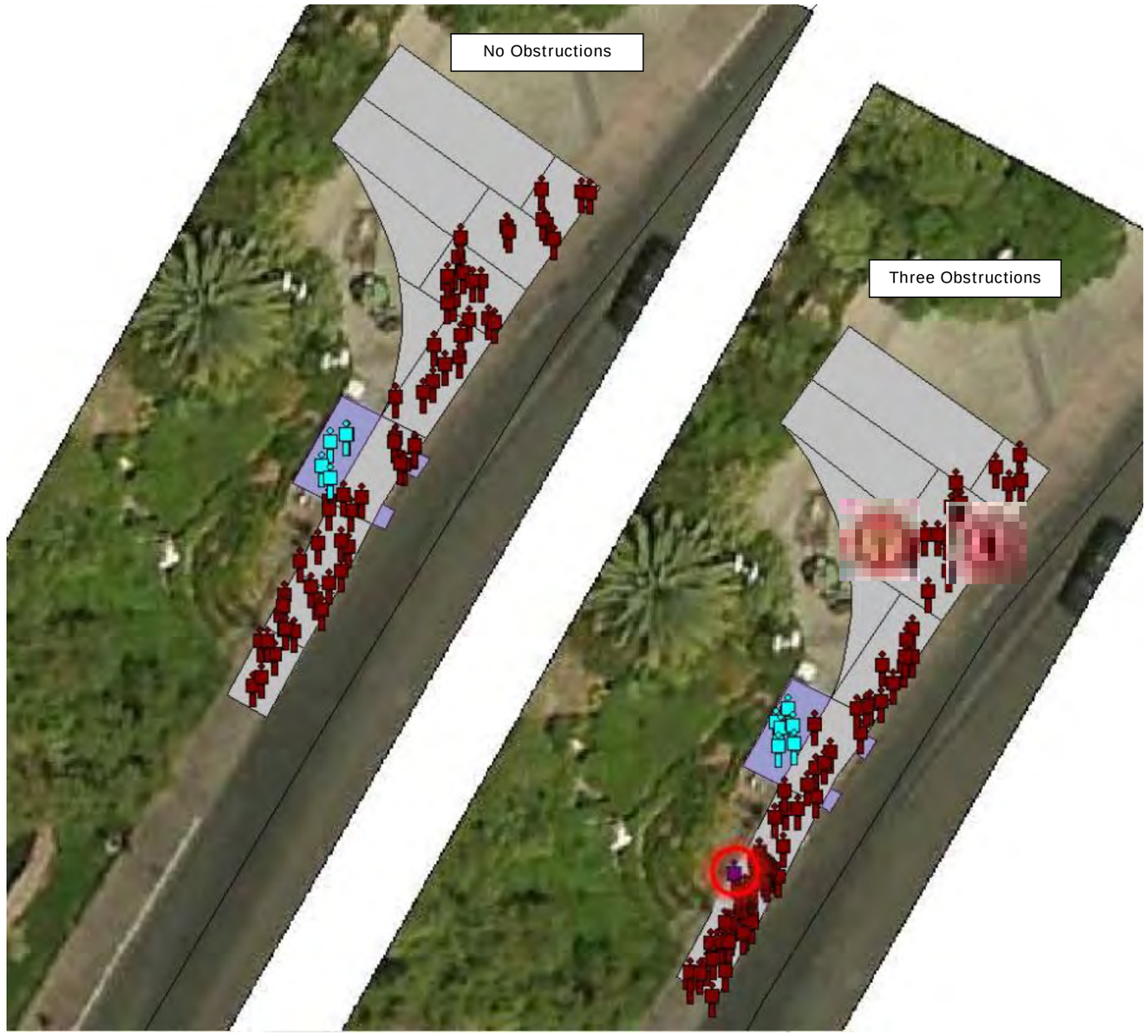
Start Time	Boarding	Alighting	Start Time	Boarding	Alighting
3:00 PM	26	15	7:30 PM	14	6
3:15 PM	14	20	7:45 PM	17	19
3:30 PM	26	25	8:00 PM	8	7
3:45 PM	28	27	8:15 PM	4	2
4:00 PM	15	7	8:30 PM	0	4
4:15 PM	11	26	8:45 PM	21	9
4:30 PM	5	20	9:00 PM	13	41
4:45 PM	9	19	9:15 PM	14	24
5:00 PM	15	15	9:30 PM	0	5
5:15 PM	11	5	9:45 PM	6	2
5:30 PM	4	0	10:00 PM	14	60
5:45 PM	33	13	10:15 PM	15	31
6:00 PM	8	20	10:30 PM	28	7
6:15 PM	15	13	10:45 PM	2	30
6:30 PM	28	12	11:00 PM	15	28
6:45 PM	24	35	11:15 PM	6	26
7:00 PM	12	5	11:30 PM	10	30
7:15 PM	6	13	11:45 PM	14	18

Source: Regional Transportation Commission of Southern Nevada bus stop data from Saturday, May 26, 2012
(Bus schedule is currently providing 12-15 minute headway service)



Picture 3.19 – Pedestrian Activity between Mirage and TI after Volcano Show and before Siren Show.

Figure 3.64 – Model 3 – Sidewalk and Bus Stop



3.5.4 Model 4 – Queuing at a Signalized Crosswalk

Model 4 – Queuing at a Signalized Crosswalk is located in the northeast quadrant of the intersection of Las Vegas Boulevard and Rue de Monte Carlo, near the Showcase Mall. Only pedestrian activity is simulated along with their interaction with crosswalk signal timing. Vehicles are not simulated or included in the model. Figure 3.65 illustrates the area to be analyzed. The following scenarios were analyzed:

- Scenario A – Permanent obstructions
- Scenario B – With obstructions along the outside of the sidewalk and permanent obstructions (three obstructions total)
- Scenario C – No obstructions (permanent obstructions removed)

Table 3.37 summarizes the sidewalk 15-minute pedestrian volume input data for Model 4 – Queuing at a Signalized Crosswalk (where SB, EB and NB signify south, east and northbound and T, R and L are thru, right and left).

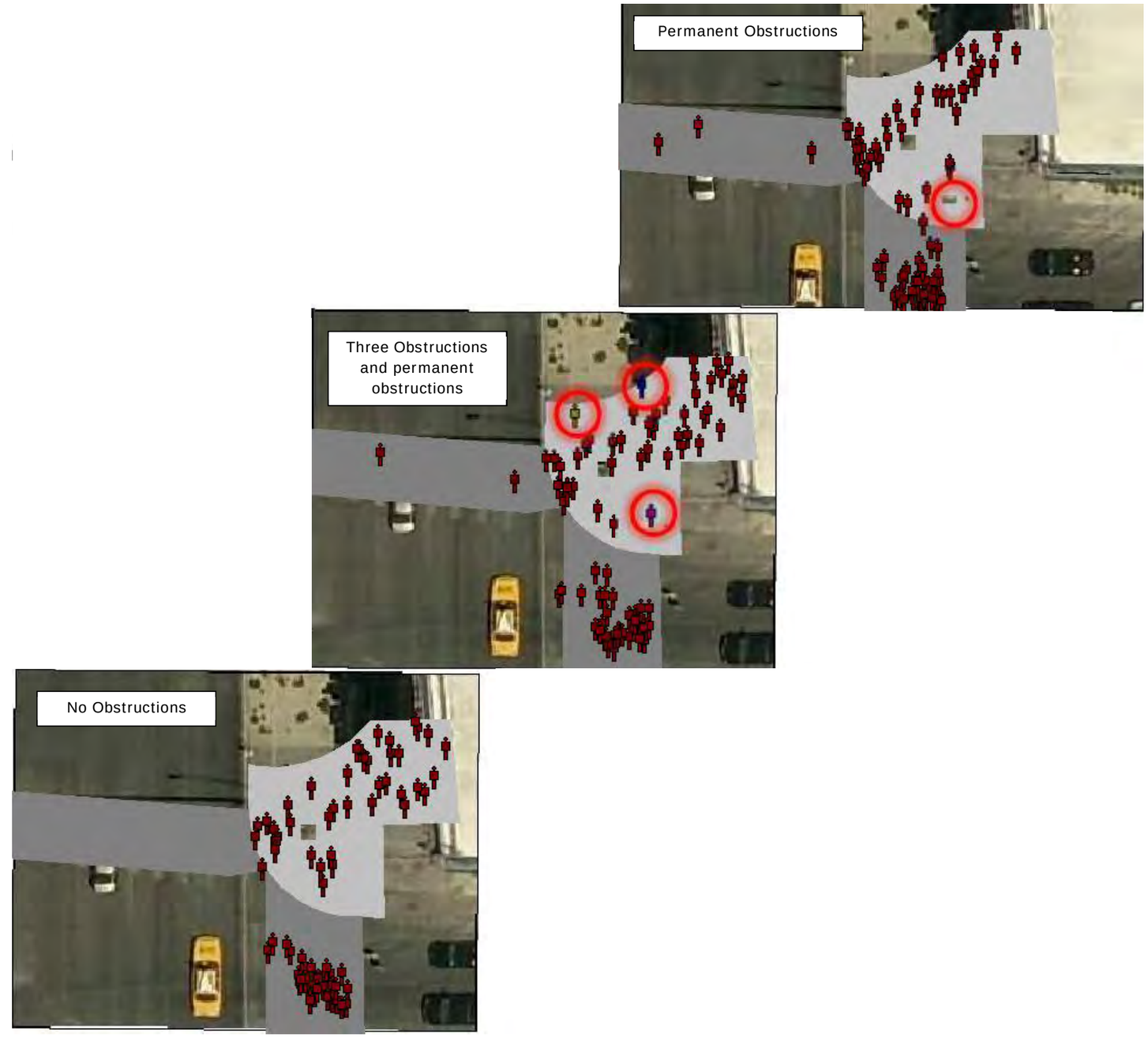
Table 3.37 – Model 4 – Queuing at a Signalized Intersection Input Data -15-Minute Pedestrian Volume

Start Time	SB		NB		EB		Start Time	SB		NB		EB	
	T	R	L	T	L	R		T	R	L	T	L	R
3:00 PM	87	299	81	591	236	92	7:30 PM	48	165	44	325	130	50
3:15 PM	85	289	72	532	212	89	7:45 PM	71	243	52	384	153	75
3:30 PM	65	224	76	559	223	69	8:00 PM	58	199	52	381	152	61
3:45 PM	64	220	63	464	185	68	8:15 PM	64	218	56	409	163	67
4:00 PM	61	207	67	492	196	64	8:30 PM	57	195	50	365	145	60
4:15 PM	96	329	75	549	219	101	8:45 PM	72	247	41	304	121	76
4:30 PM	65	221	73	535	213	68	9:00 PM	75	256	46	336	134	78
4:45 PM	61	209	60	439	175	64	9:15 PM	109	373	56	409	163	114
5:00 PM	70	239	62	457	182	73	9:30 PM	122	417	59	435	173	128
5:15 PM	78	265	66	484	193	81	9:45 PM	87	296	50	370	147	91
5:30 PM	62	212	52	384	153	65	10:00 PM	67	230	45	334	133	70
5:45 PM	78	266	59	434	173	81	10:15 PM	60	205	41	304	121	63
6:00 PM	68	232	70	515	205	71	10:30 PM	59	202	46	339	135	62
6:15 PM	72	245	63	464	185	75	10:45 PM	50	170	45	328	131	52
6:30 PM	54	184	73	534	213	56	11:00 PM	70	239	52	383	153	73
6:45 PM	59	201	68	502	200	61	11:15 PM	68	233	41	301	120	71
7:00 PM	74	254	60	437	174	78	11:30 PM	62	213	36	264	105	65
7:15 PM	57	195	52	385	153	60	11:45 PM	60	206	44	321	128	63

Average walking speed: 3.36 feet per second

Location: northeast quadrant of the intersection of Las Vegas Boulevard and Rue de Monte Carlo/MGM Drive. Count Location: 5

Figure 3.65 – Model 4 – Queuing at Signalized Intersection



3.5.5 Results of Pedestrian Simulation Modeling

A CD at the back of the report contains the output movies of the pedestrian simulation models and scenarios. In the various models, the pedestrian segments are color coded based on the LOS analysis for walkway segments. Table 3.38 describes the color coding by LOS for the different walkway segments. Figure 3.66 through Figure 3.69 contain screenshots of the models.

Table 3.38 – Pedestrian Simulation Modeling Color Codes

LOS	Color	Color
A	Gray	
B	Gray	
C	Gray	
D	Orange	
E	Red	
F	Red	

As shown in the pedestrian simulation model figures and attached movies, the LOS of the walkway segments is impacted by the presence of obstructions within the walkway. Table 3.39 provides data on the number of 15-minute periods where LOS C is exceeded during the model timeframe.

Table 3.39 – Model 1 Results Summary – 3:00 PM to 12:00 AM

Model	Scenario	Amount of Time LOS C is exceeded	Percent of Time LOS C is Exceeded
Model 1 – Pedestrian Bridge	No Obstructions	3.25 out of 9 hours	36%
	Side Obstructions	7 out of 9 hours	78%
	Side and Middle Obstructions	8.75 out of 9 hours	97%

Table 3.40 – Model 2 and 3 Results Summary – 3:00 PM to 12:00 AM

Model	Scenario	Percent of Time LOS C is Exceeded	Percent of Time LOS D is Exceeded	Percent of Time LOS E is Exceeded
Model 2 - Sidewalk	No Obstructions	100%	100%	44%
	Side Obstructions	100%	100%	100%
Model 3 – Sidewalk and Bus Stop	No Obstructions	100%	100%	56%
	Three Obstructions	100%	100%	100%

Figure 3.70 through Figure 3.72 illustrate the LOS results of the pedestrian simulation models.

3.5.6 Findings

The model simulations illustrate that significant sidewalk congestion occurs when the volume density LOS of C is exceeded. The locations modeled were walkway areas that were observed on May 26, 2012, to have significant pedestrian volumes. In these locations, the addition of non-permanent obstructions was clearly identified with decreases in LOS and increases in duration of walkway LOS impacts. The model results support the need to reduce the presence of non-permanent obstructions for the areas evaluated by the models, for sidewalks and street crossings, as well as on pedestrian bridges and at bus stops.

Model 1 – Pedestrian Bridge

According to the modeling analysis of the pedestrian bridge, the full width of the bridge is required to provide the best LOS for the observed pedestrian volumes. Based on the randomness of pedestrian flows and densities, LOS C was exceeded for 36% of the modeled time period from 3:00 PM to 12:00 AM. With the introduction of non-permanent obstructions on the sides of the pedestrian bridge, the effective walkway width (W_E) was reduced and LOS deteriorated. The final scenario including a non-permanent obstruction in the middle of the pedestrian bridge had the greatest impact due to the effective walkway width (W_E) being further reduced. It is evident from the pedestrian bridge model that the introduction of obstructions to the walkway cause a decrease in LOS as less walkway width (W) is available for pedestrian travel.

Model 2 – Sidewalk

The pedestrian simulation model of the constrained sidewalk area included alcoves with non-permanent obstructions. The model demonstrates that the presence of non-permanent obstructions in the alcove areas along the walkway do not impact the pedestrian flow or cause a deterioration of LOS. However, an obstruction along the side of the walkway did significantly affect the LOS of the walkway for the observed pedestrian volumes.

Model 3 – Sidewalk and Bus Stop

Due to the activities of bus stops with their associated queuing areas, walking congestion can occur around bus boarding and alighting. The introduction of non-permanent obstructions in proximity to the bus loading area within the model showed increases in congestion and a deterioration of LOS to LOS E for 56% of the model time (3:00 PM – 12:00 AM) to exceeding LOS E for 100% of the model time.

Model 4 – Signalized Intersection

For the observed pedestrian volumes, with or without non-permanent obstructions, the pedestrian corner queuing areas at the modeled signalized intersection experience high pedestrian densities and resulting LOS of E and F. Based upon these findings, these areas should be kept clear of unnecessary obstructions, to provide the maximum queuing space for pedestrians.

Figure 3.66 – Model 1 – Pedestrian Bridge Model Screenshot

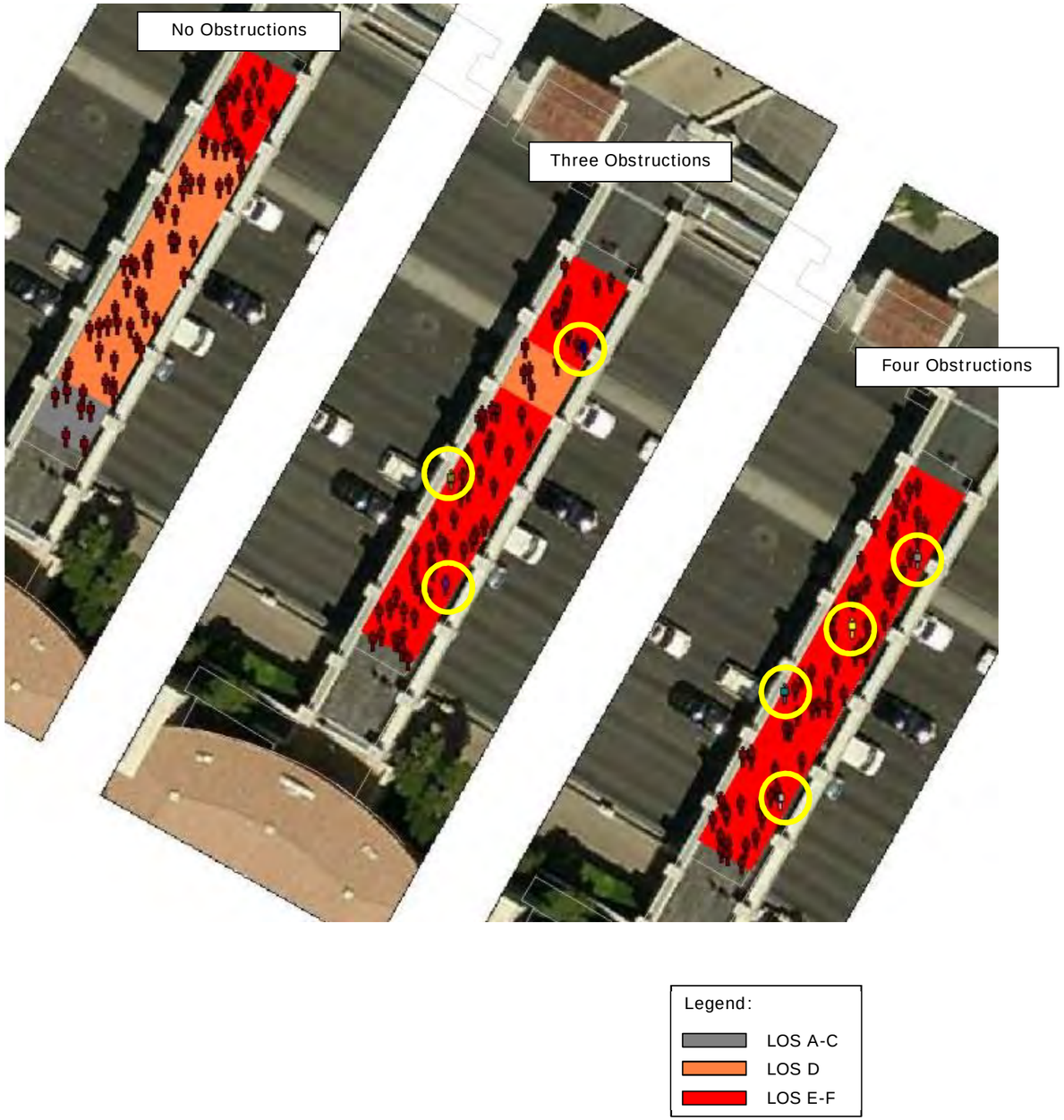


Figure 3.67 – Model 2 – Sidewalk Model Screenshot



Figure 3.68 – Model 3 – Sidewalk and Bus Stop Model Screenshot



Figure 3.69 – Model 4 – Queuing at Signalized Intersection Model Screenshot



Figure 3.70 – Model 1 – Pedestrian Bridge Model Output

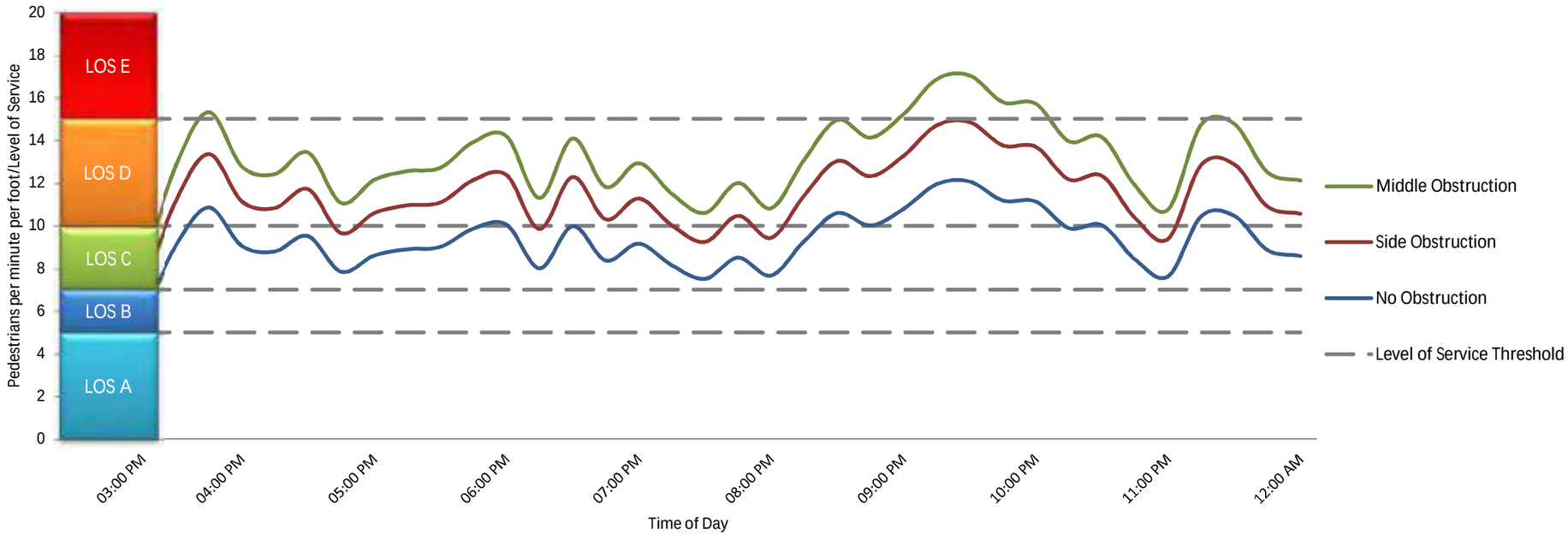


Figure 3.71 – Model 2 – Sidewalk Model Output

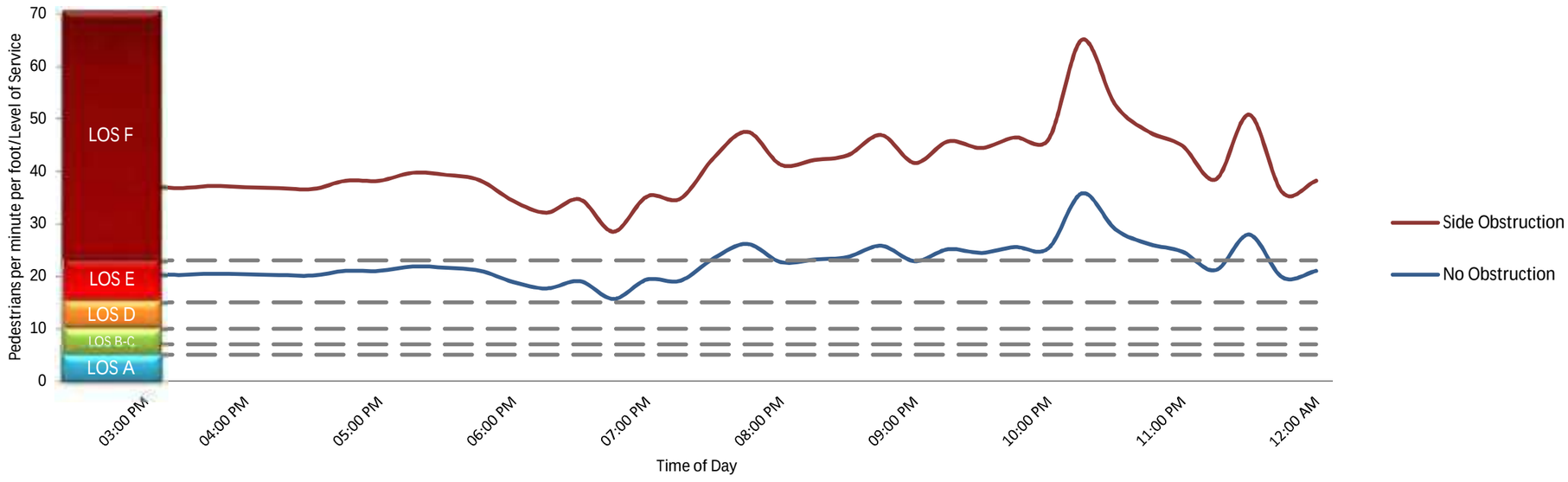
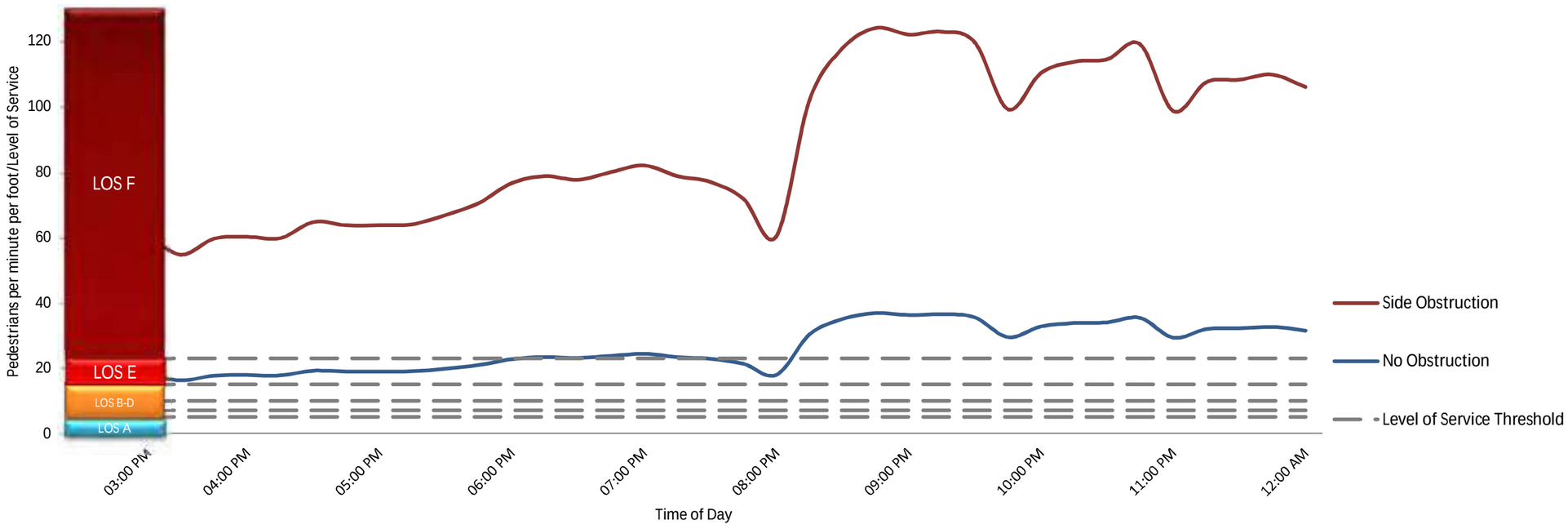


Figure 3.72 – Model 3 – Sidewalk and Bus Stop Model Output



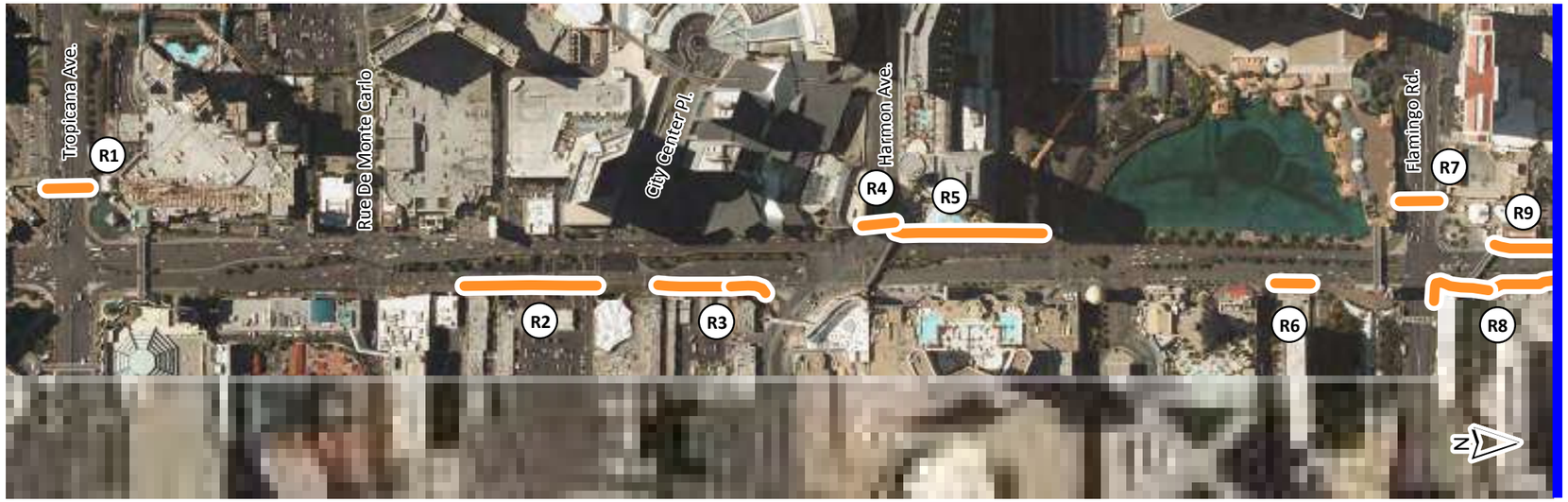
3.6 Walkway Segment Time of Day Restriction Analysis

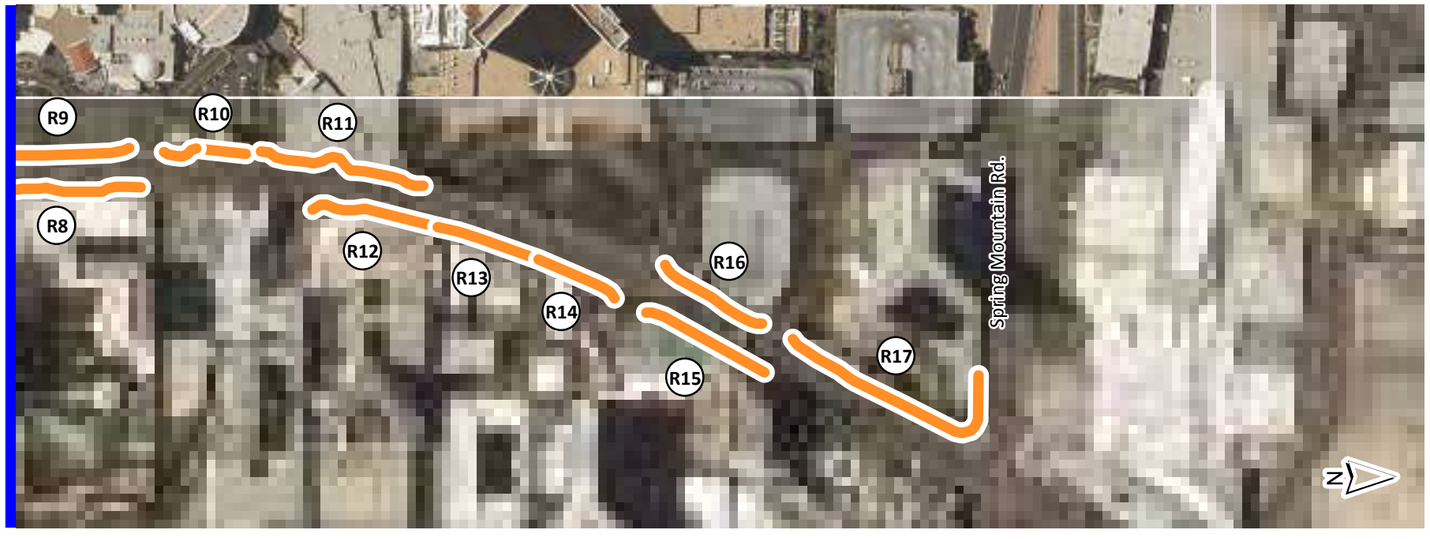
Based on observed pedestrian volumes, level of service, walkway conditions and pedestrian safety concerns, the locations shown in Figure 3.73 within the study corridor, have been identified as walkway segments in which non-permanent obstruction restrictions should be considered during specific days of the week and times of the day.

To identify the time of day, day of week, and month of year that certain walkway segments within the study corridor should be considered for restriction of non-permanent obstructions, the following steps were taken:

- Effective walkway widths along the entire length of the study corridor were grouped into segments with similar effective walkway widths (see Figure 2.1).
- Pedestrian volumes from all of the count locations were evaluated to identify a common daily peak pedestrian volume time period. This daily time period was found to occur between 9:00 PM and 11:00 PM.
- Pedestrian volumes for the common peak period were assigned to each segment of the study corridor to calculate a peak period LOS using 2010 HCM procedures (see Figure 3.74).
- The LOS analysis resulted in 17 walkway segments that were found to exceed LOS C on the Holiday and/or Typical Saturday (May 26 and/or June 16, 2012) labeled R1 to R17 from south to north (see Figure 3.73 for segment location) (see Figure 3.75 through Figure 3.91 for volume data at each location that exceeded LOS C for more than four hours).
- Figure 3.75 through Figure 3.87 show the volume distribution data at each location for the lowest pedestrian volume day of week where LOS C was exceeded for four hours on the holiday weekend. Similarly, Figure 3.88 through Figure 3.91 display volume distribution data for walkway segments during the typical weekend that exceeded LOS C for more than four hours.
- Walkway segments that resulted in a LOS C were considered further and analyzed to determine if the addition of an obstruction would result in the LOS deteriorating to D or greater. A reduction of the effective walkway width (W_E) of 2.25 feet associated with the obstruction of one person standing on the side of the walkway was applied for the analysis.
- The walkway segments were separated into three categories:
  - Walkways with no pedestrian containment
  - Walkways with pedestrian containment
  - Pedestrian bridges
- The Saturday count data was adjusted using the week-long data and the year-long data, provided by Caesars International, to determine day of week and month of year adjustment factors. The adjustment factors were used to determine time periods when walkway segments were estimated to exceed LOS C for days other than those counted on Saturday May 26 and June 16, 2012.

Table 3.41 summarizes the results of the analysis for possible time of day, day of week and month of year restrictions based solely on pedestrian volumes and walkway widths. Table 3.42 provides a summary of the analysis for possible non-permanent obstruction restrictions including an effective walkway width (W_E) reduction of 2.25 feet for an obstruction (note that the length of time for many areas increase and additional days of week are included).





Legend

LOS > C

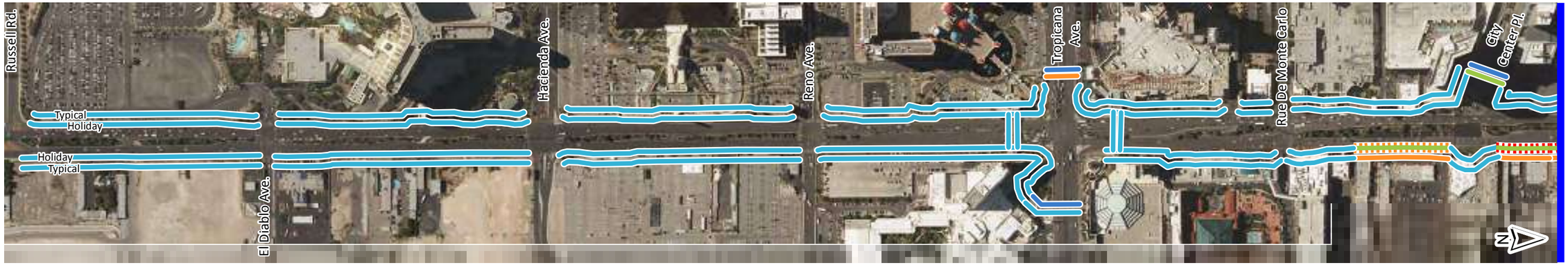
R# Segment Reference Number

WALKWAY SEGMENTS THAT EXCEED LEVEL OF SERVICE (LOS) C
AVERAGE EFFECTIVE WALKWAY WIDTH AND AVERAGE 15 MIN. VOLUME
9 P.M. - 11 P.M.

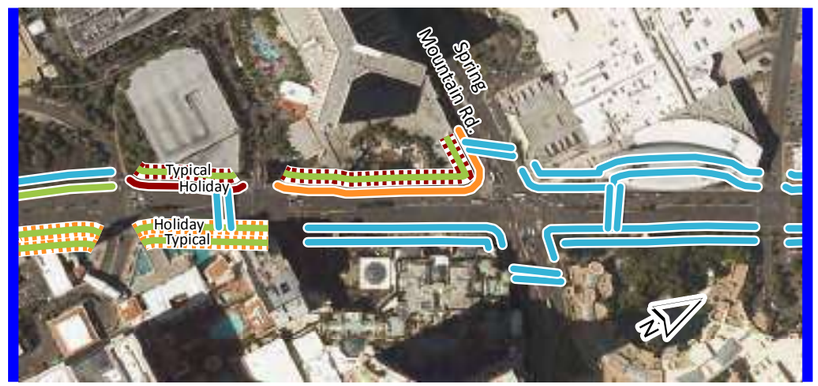
FIGURE 3.73 116

Kimley-Horn and Associates, Inc.

CC 1097









Legend

Level of Service (LOS)

- A
- B
- C to D*
- C to E*
- C to F*
- C
- D
- E
- F
- Under Construction

* C to "X" with 2.25 ft W_E reduction for an obstruction

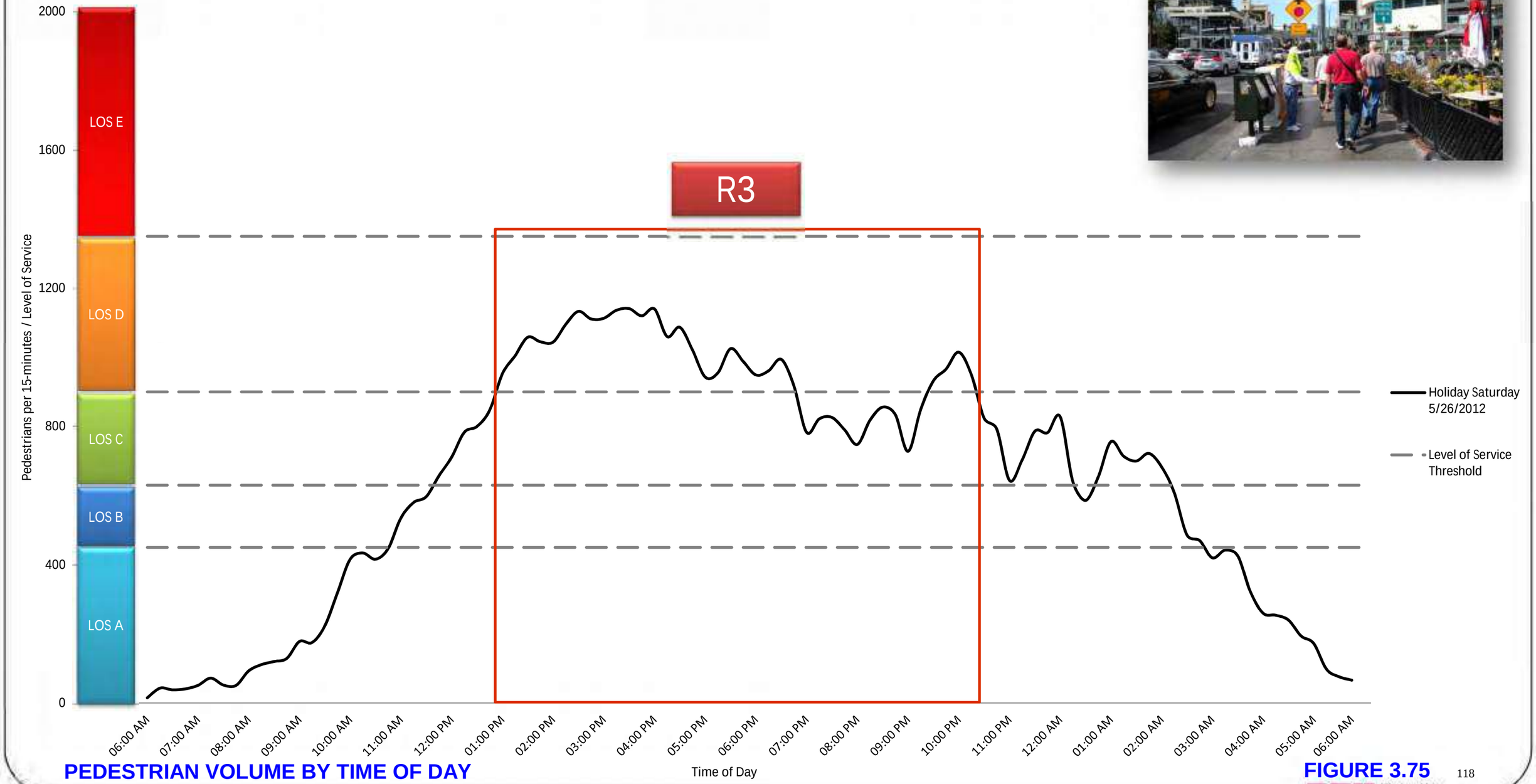
LEVEL OF SERVICE (LOS)
AVERAGE EFFECTIVE WALKWAY WIDTH (W_E) AND AVERAGE 15 MIN. VOLUME
9 P.M. - 11 P.M.

FIGURE 3.74 117

Kimley-Horn and Associates, Inc.

Harley Davidson Cafe (R3)
Holiday Saturday
Effective Walkway Width (W_E) = 6 feet





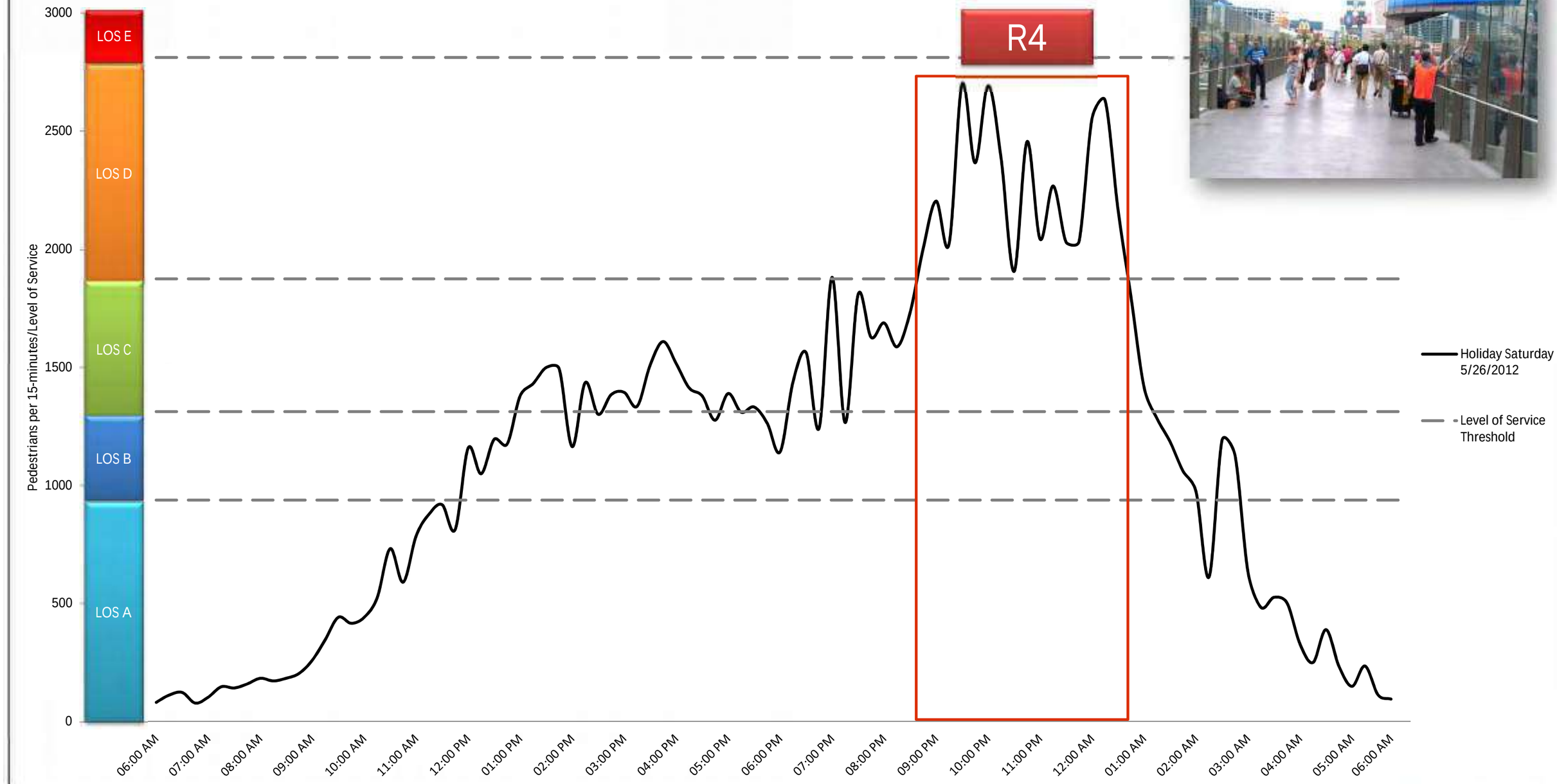
PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.75

Kimley-Horn and Associates, Inc.

CC 1099

Harmon Avenue West Pedestrian Bridge (R4)
Holiday Saturday
Effective Walkway Width (W_E) = 12.5 feet



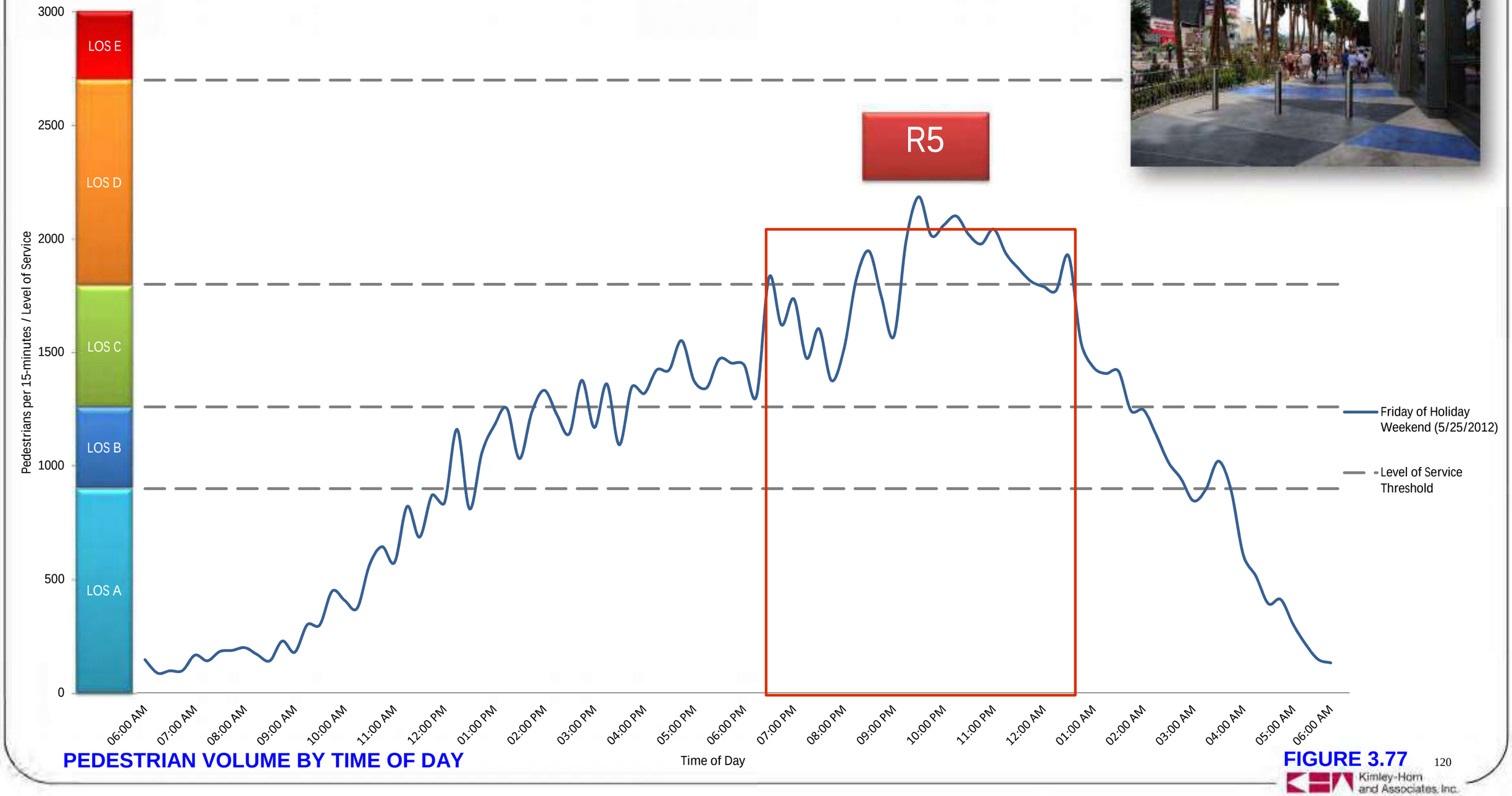
PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.76

Kimley-Horn and Associates, Inc.

Cosmopolitan Hotel/Casino (R5)
Holiday Friday
Effective Walkway Width (W_E) = 12 feet





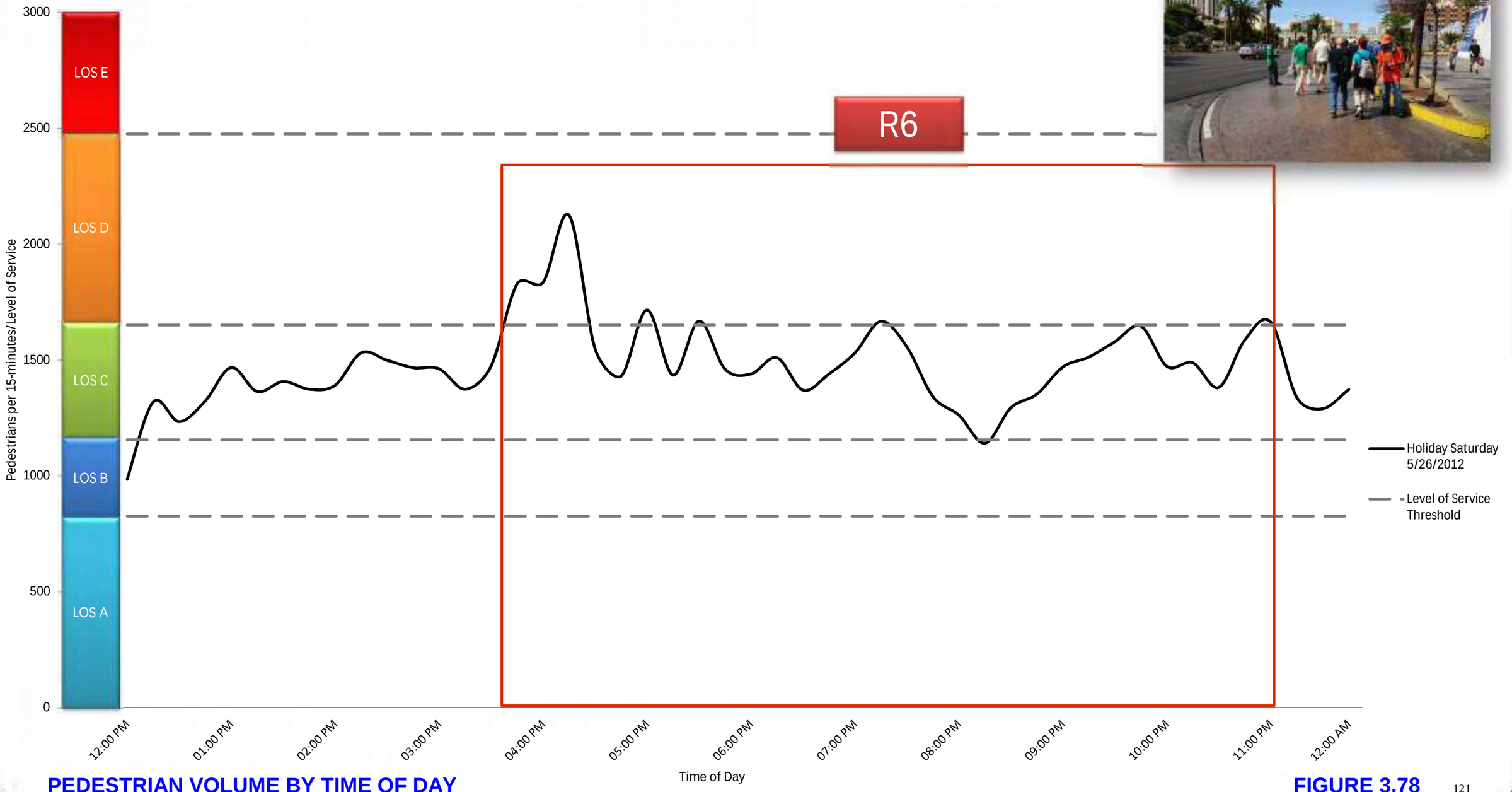
PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.77

Kimley-Horn and Associates, Inc.

Bally's Hotel/Casino South (R6)
Holiday Saturday
Effective Walkway Width (W_E) = 11 feet





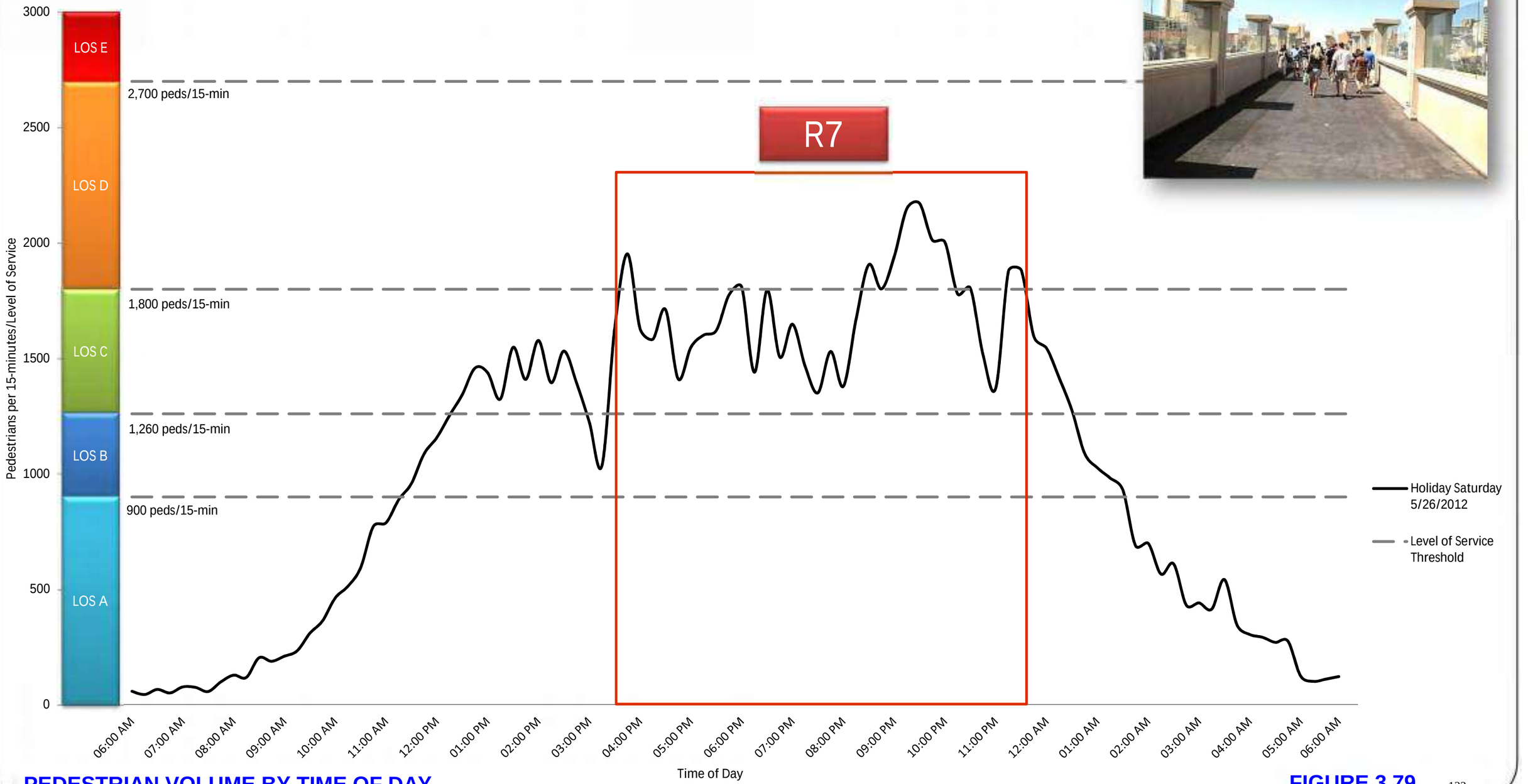
PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.78

Kimley-Horn and Associates, Inc.

Flamingo Road West Pedestrian Bridge (R7)
Holiday Saturday
Effective Walkway Width (W_E) = 12 feet





PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.79

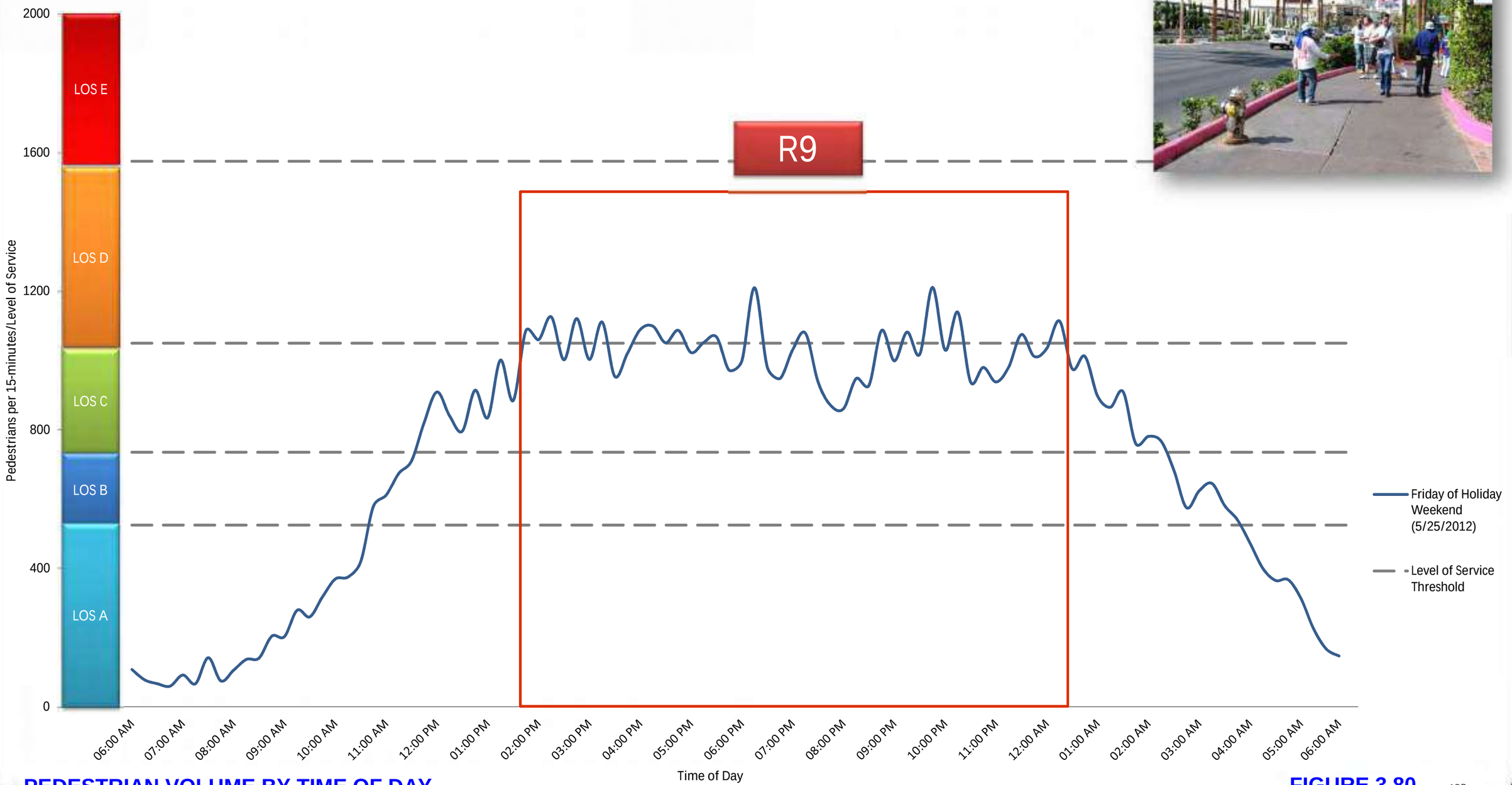
Kimley-Horn and Associates, Inc.

CC 1103

Flamingo Hotel/Casino (R9)
Holiday Friday
Effective Walkway Width (W_E) = 7 feet

Walkway Picture





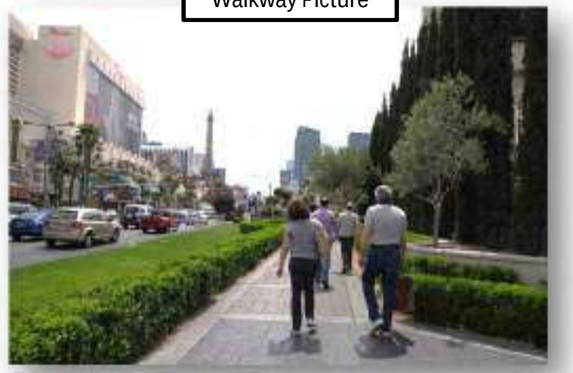
PEDESTRIAN VOLUME BY TIME OF DAY

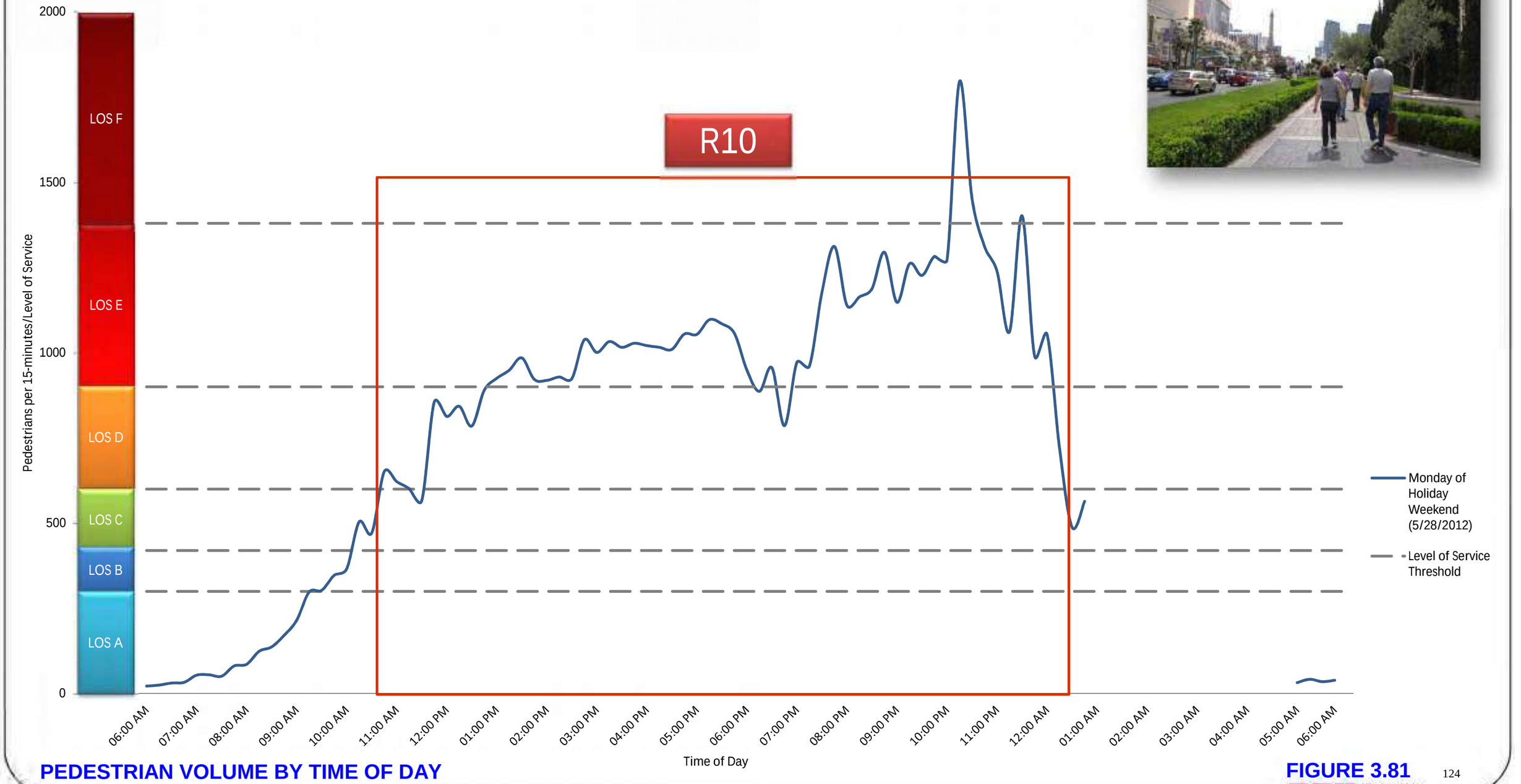
FIGURE 3.80

Kimley-Horn and Associates, Inc.

Caesars Palace Coliseum (R10)
Holiday Monday
Effective Walkway Width (W_E) = 4 feet

Walkway Picture





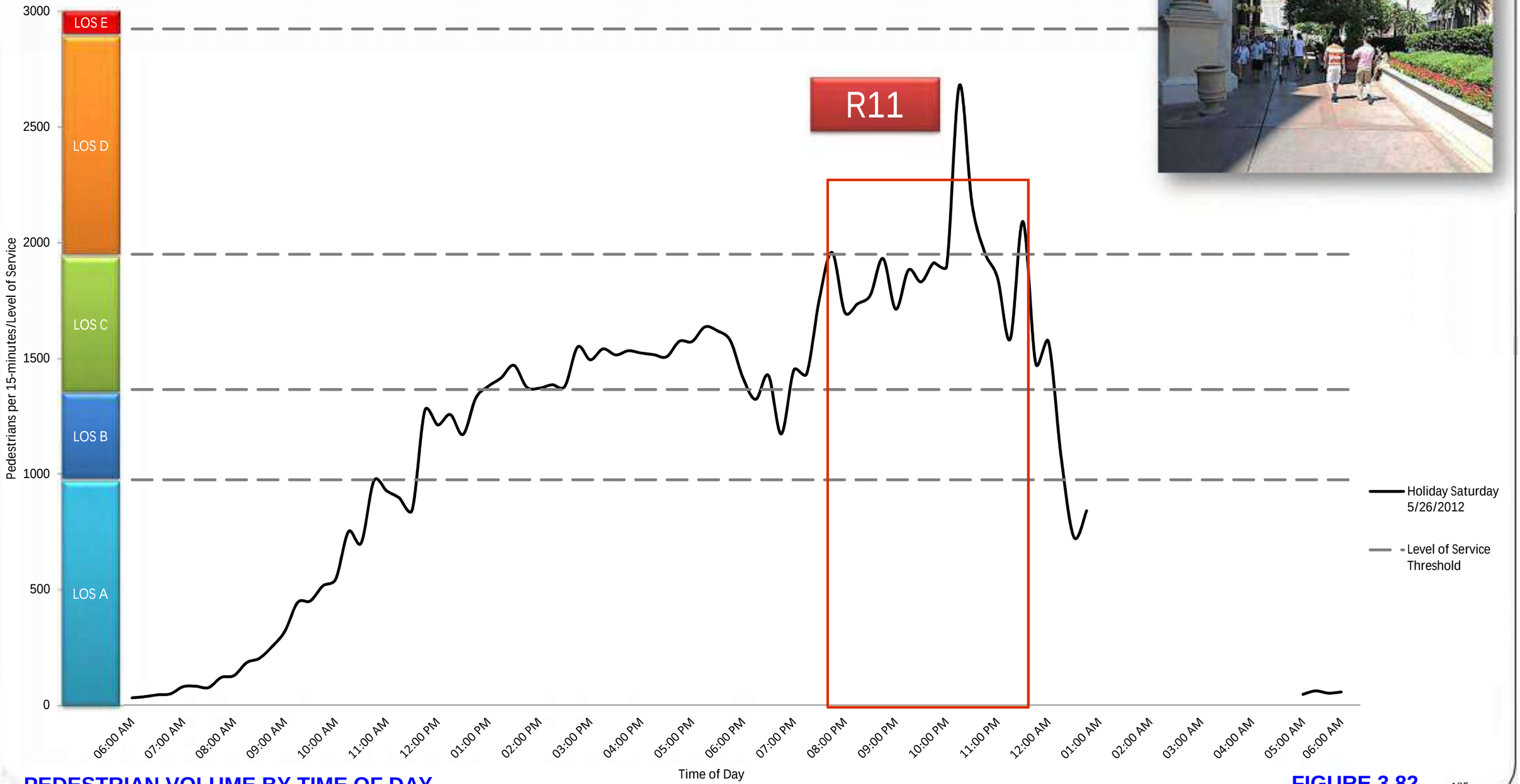
PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.81

Kimley-Horn and Associates, Inc.

Forum Shops (R11)
Holiday Saturday
Effective Walkway Width (W_E) = 13 feet





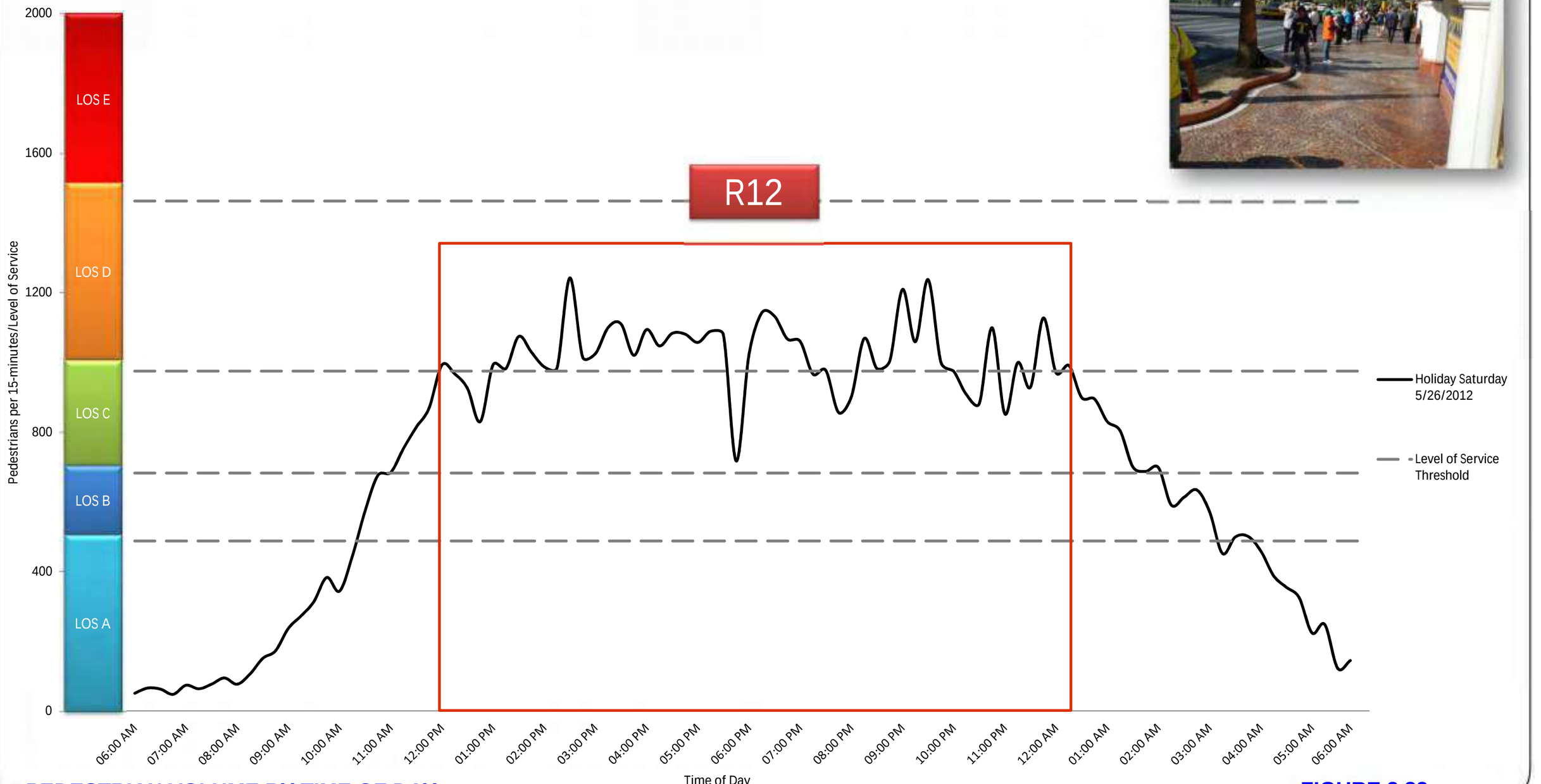
PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.82

Kimley-Horn and Associates, Inc.

Harrah's Hotel/Casino (R12)
Holiday Saturday
Effective Walkway Width (W_E) = 6.5 feet





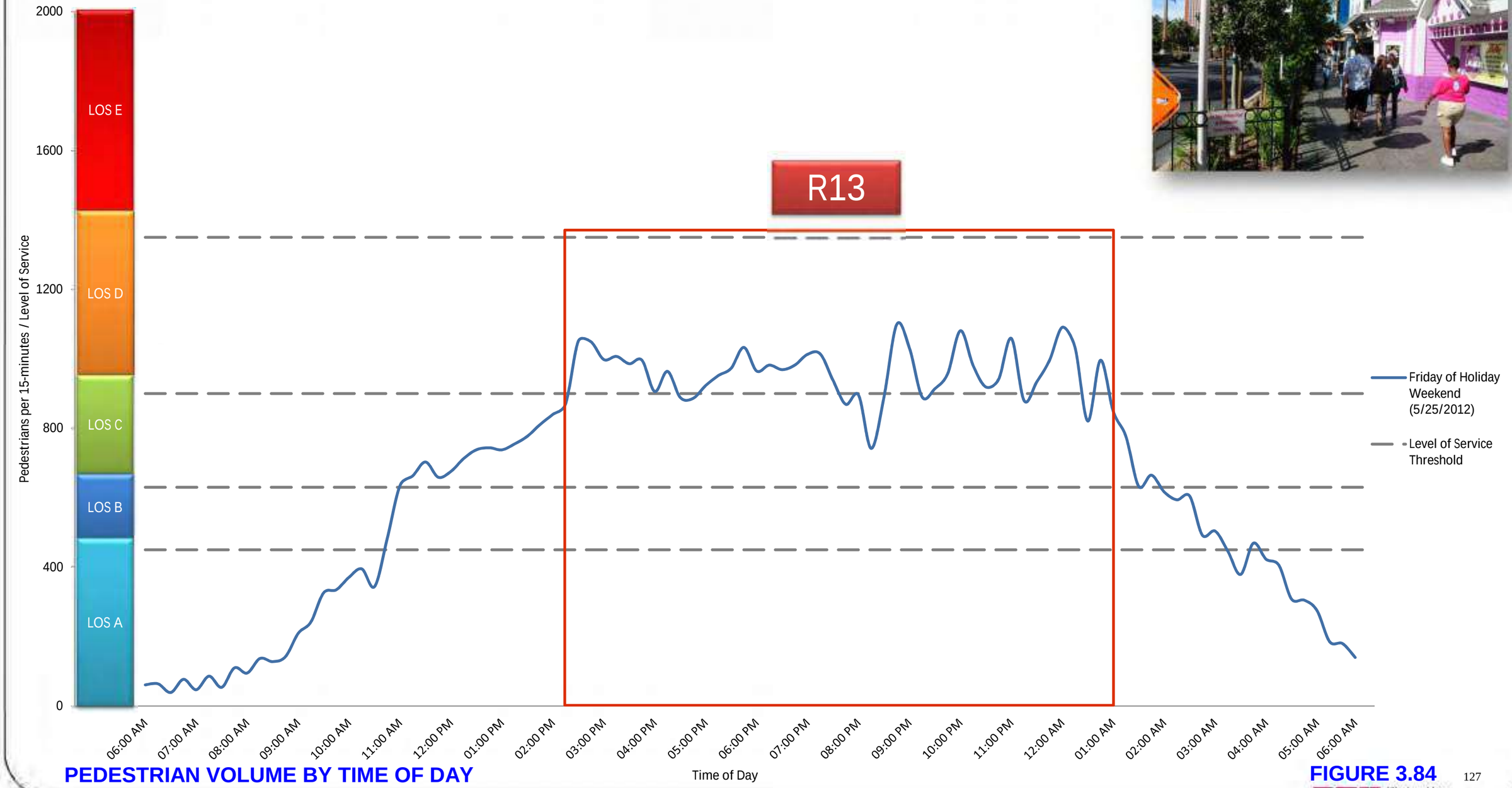
PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.83

Kimley-Horn and Associates, Inc.

Casino Royale Hotel/Casino (R13)
Holiday Friday
Effective Walkway Width (W_E) = 6 feet





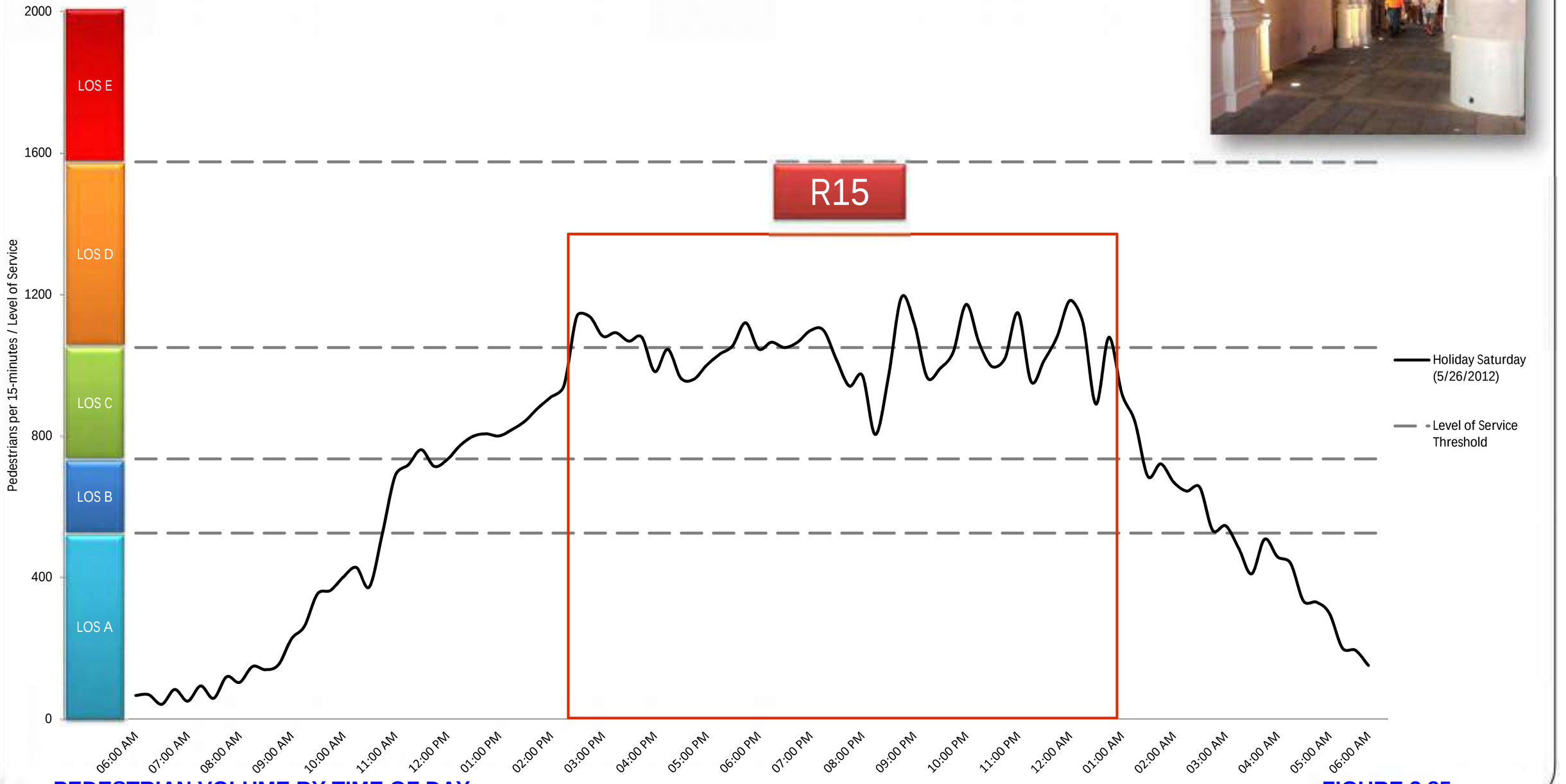
PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.84

Kimley-Horn and Associates, Inc.

Venetian Hotel/Casino North (R15)
Holiday Saturday
Effective Walkway Width (W_E) = 7 feet





PEDESTRIAN VOLUME BY TIME OF DAY

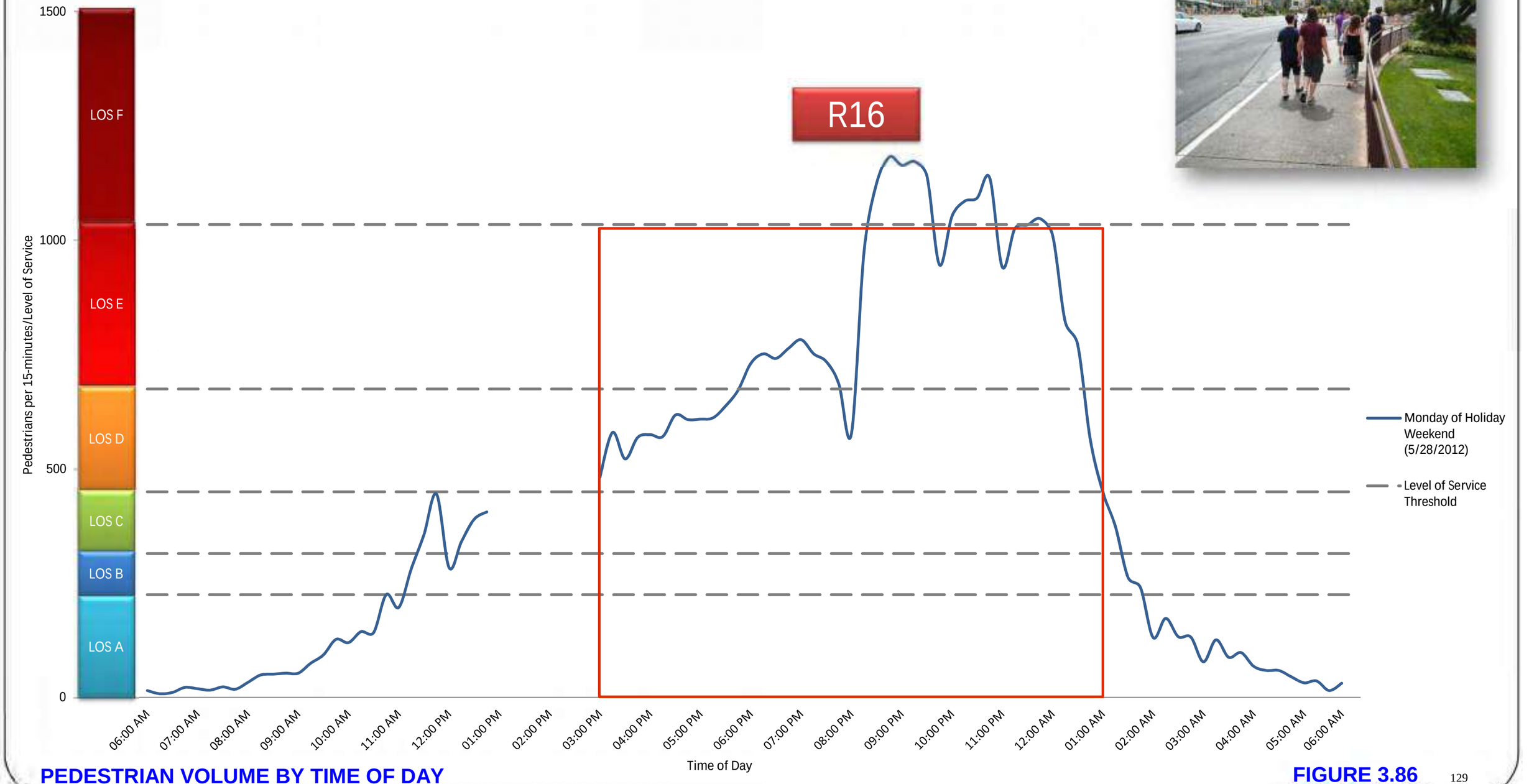
FIGURE 3.85

Kimley-Horn and Associates, Inc.

Treasure Island Bus Stop (R16)
Holiday Monday
Effective Walkway Width (W_E) = 3 feet

Walkway Picture





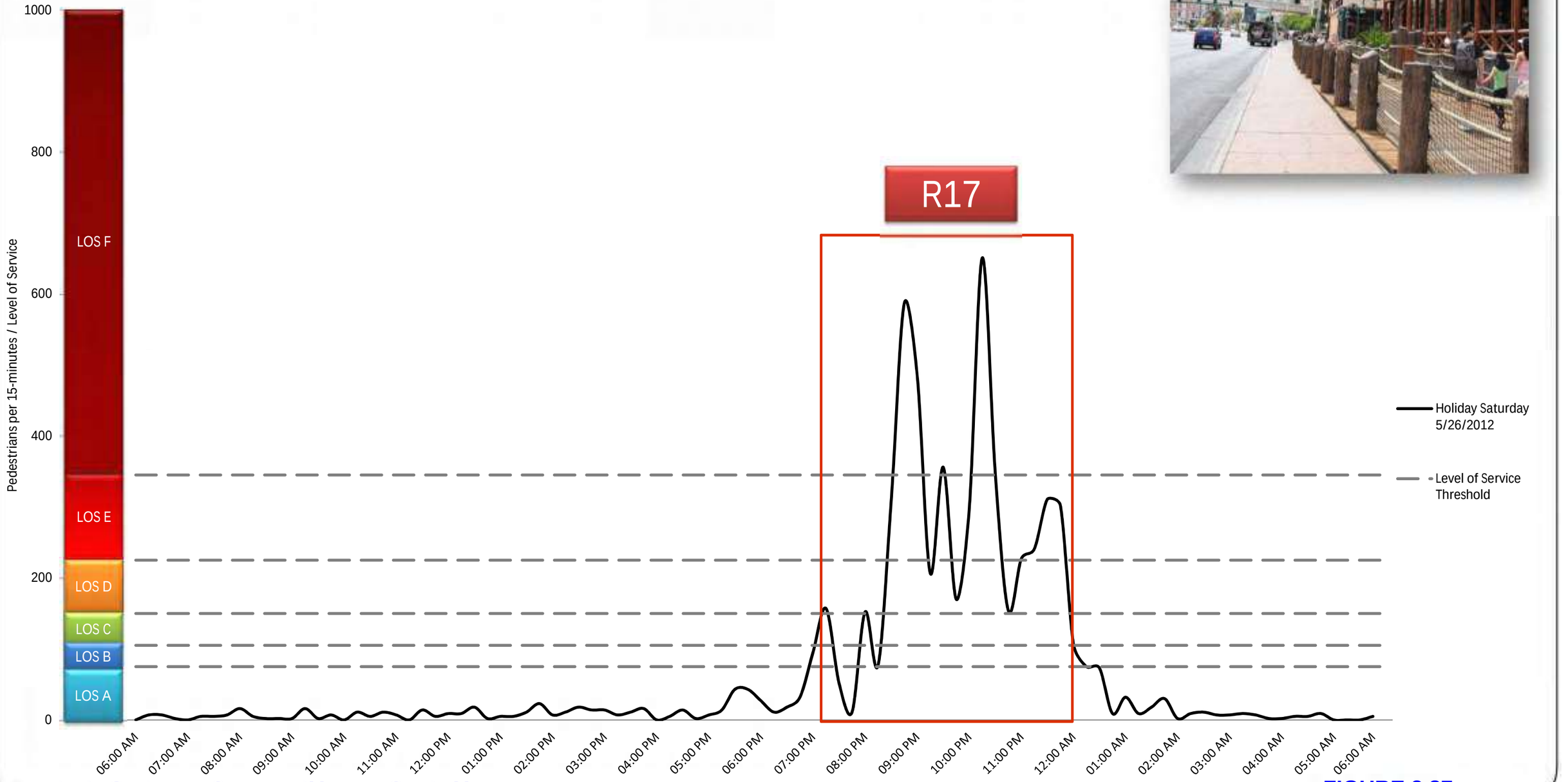
PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.86

Kimley-Horn and Associates, Inc.

Treasure Island Hotel/Casino (R17)
Holiday Saturday
Effective Walkway Width (W_E) = 1.7 feet





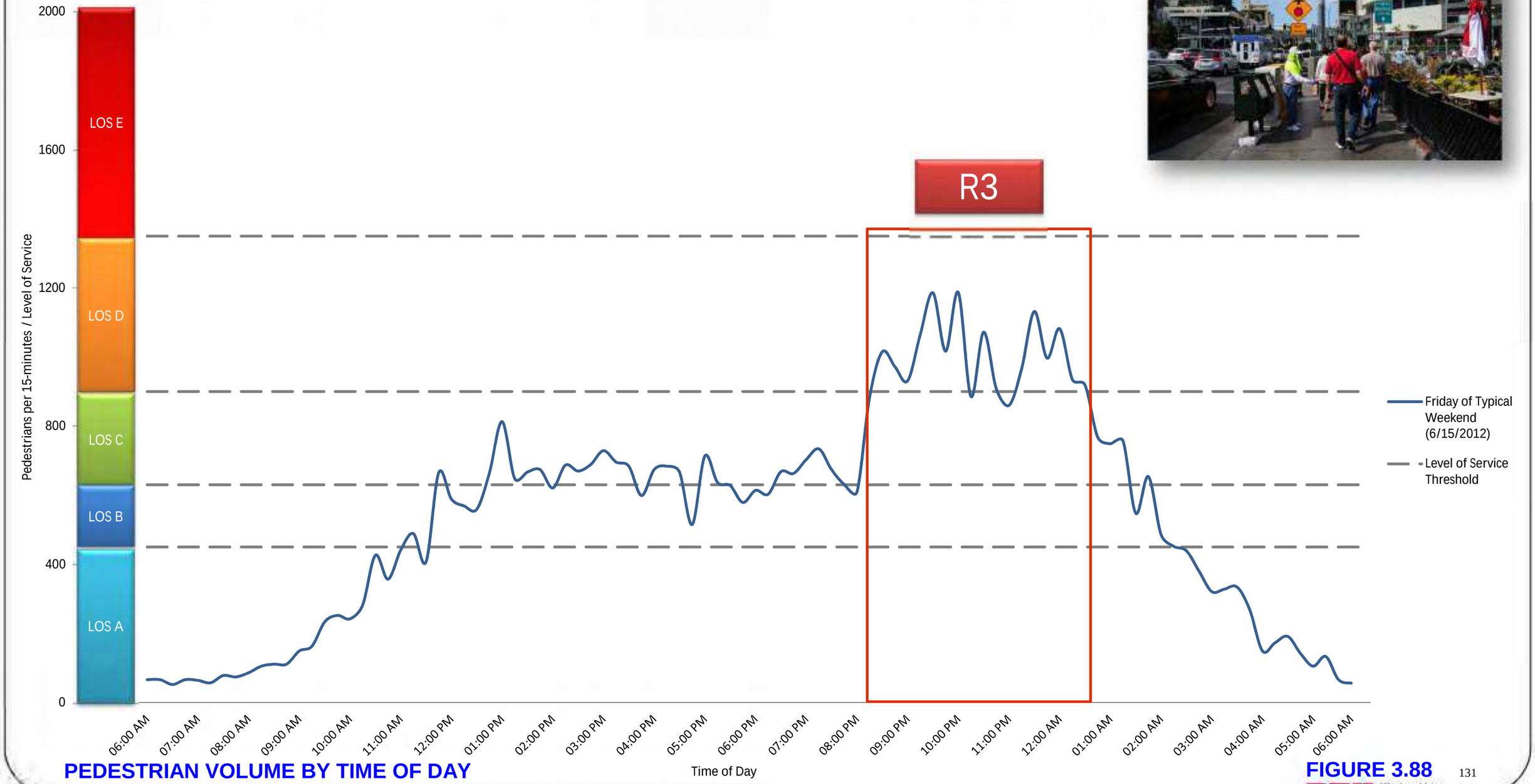
PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.87

Kimley-Horn and Associates, Inc.

Harley Davidson Cafe (R3)
Typical Friday
Effective Walkway Width (W_E) = 6 feet





PEDESTRIAN VOLUME BY TIME OF DAY

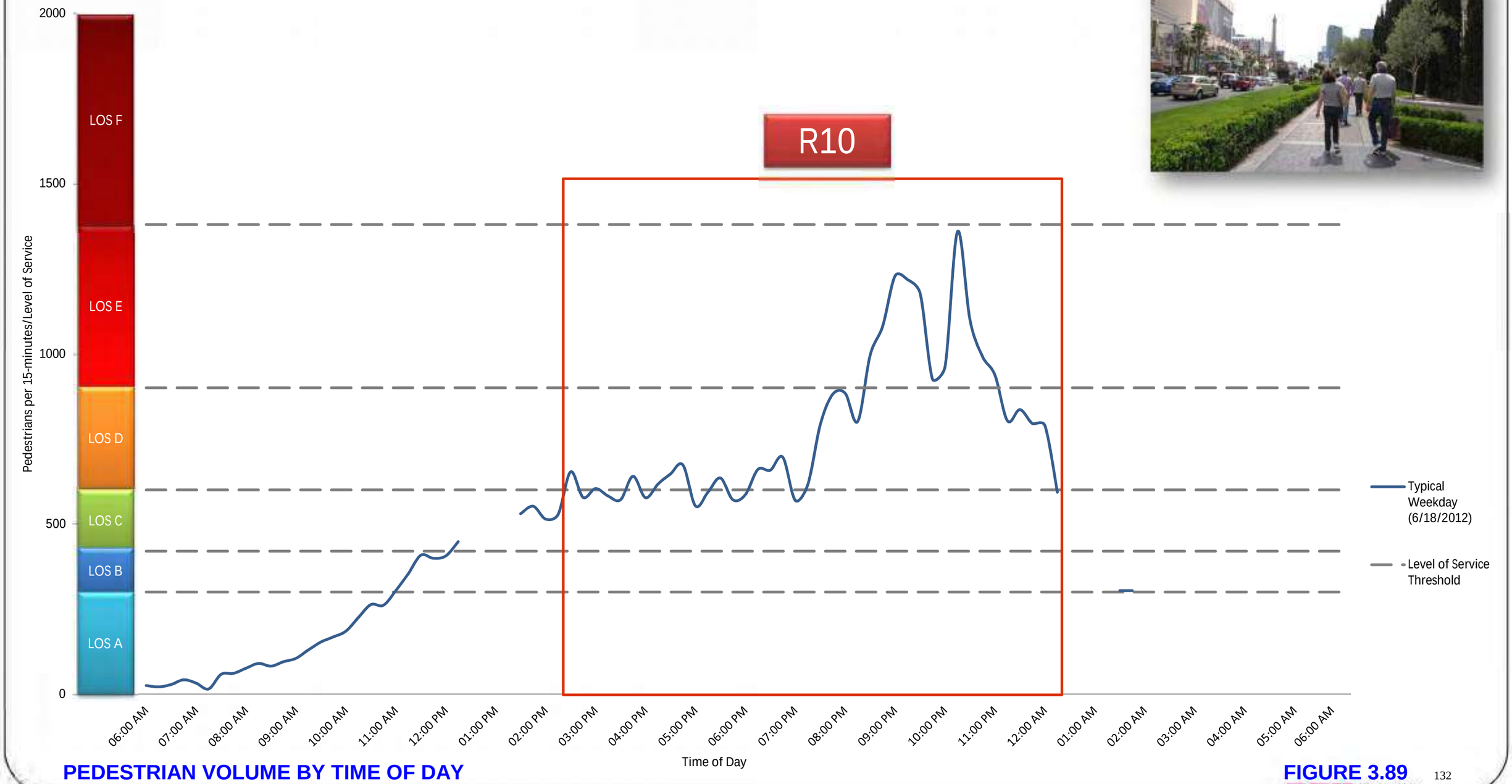
FIGURE 3.88 131

Kimley-Horn and Associates, Inc.

Caesar's Palace Coliseum (R10)
Typical Weekday
Effective Walkway Width (W_E) = 4 feet

Walkway Picture





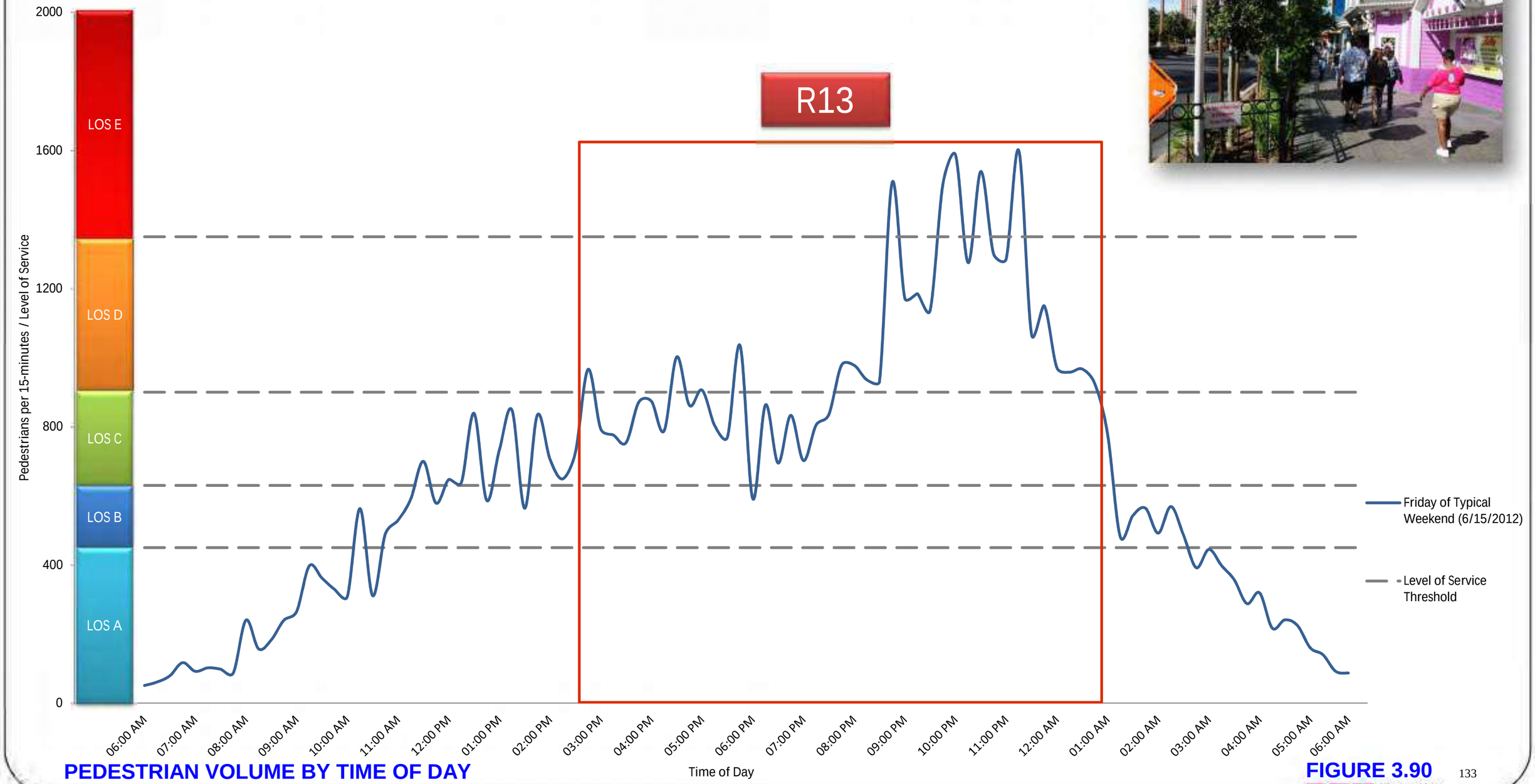
PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.89

Kimley-Horn and Associates, Inc.

Casino Royale Hotel/Casino (R13)
Typical Friday
Effective Walkway Width (W_E) = 6 feet





PEDESTRIAN VOLUME BY TIME OF DAY

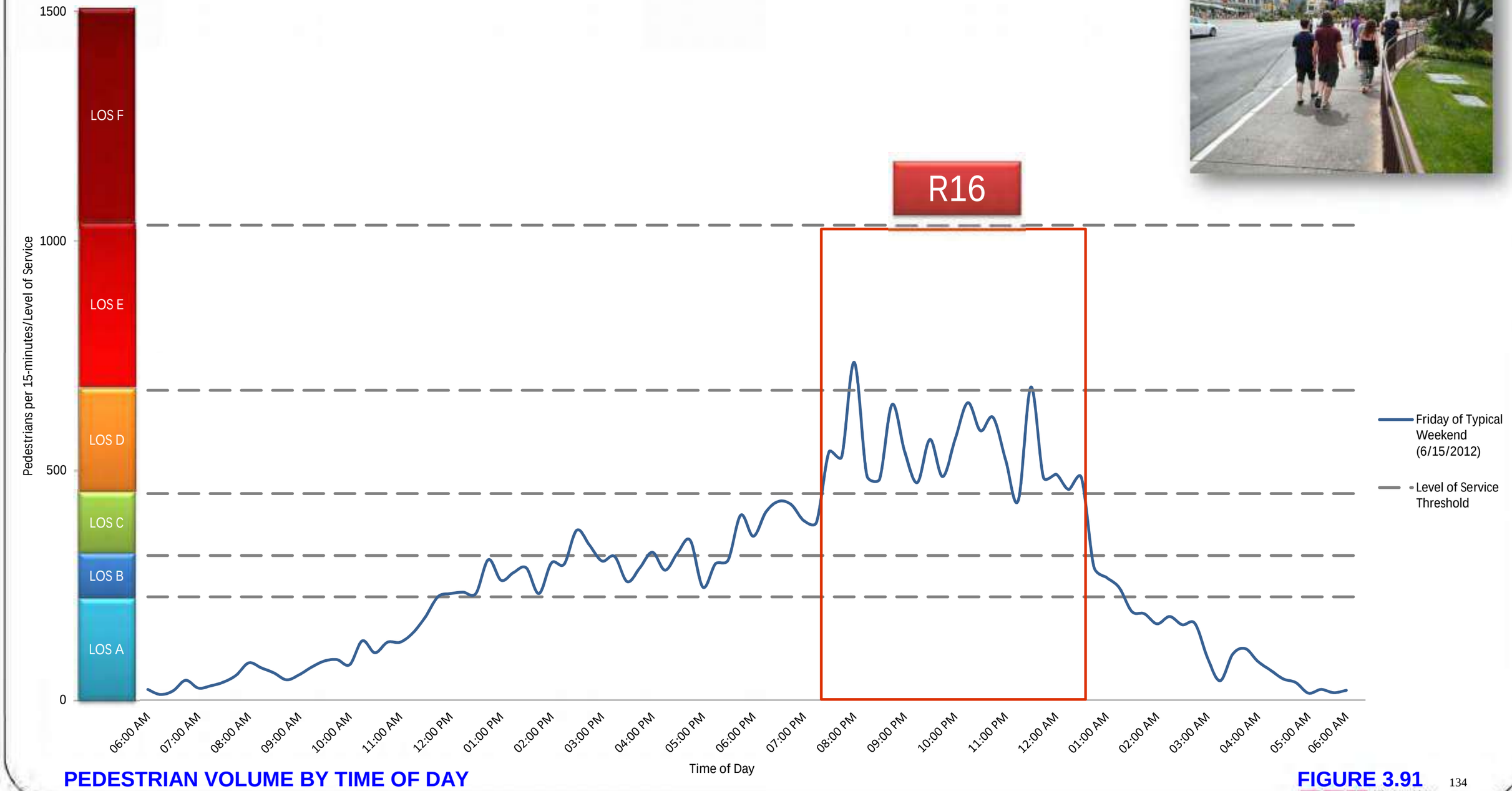
FIGURE 3.90

Kimley-Horn and Associates, Inc.

Treasure Island Bus Stop (R16)
Typical Friday
Effective Walkway Width (W_E) = 3 feet

Walkway Picture





PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 3.91

Kimley-Horn and Associates, Inc.

Table 3.41 – Walkways which Exceed LOS C - Time of Day, Day of Week, and Month of Year

Holiday Weekend - Existing Walkway

	Location ID	Segment Name	Friday LOS	Hours of Friday LOS	Saturday LOS	Hours of Sat LOS	Sunday LOS	Hours of Sunday LOS	Monday LOS	Hours of Monday LOS	Feb-Jan	Feb-Nov	Feb-Dec	Shortest Period of Time Common to All Days (Minimum of 4 hours)
Walkways with No Pedestrian Containment	R2	The Plaza	-	-	D	1:30PM - 5:00PM	D	1:30PM - 5:00PM	-	-	-	X	-	
	R3	Harley D	D	2:00PM - 4:30PM	D	1:00PM - 10:30PM	D	1:00PM - 10:30PM	-	-	-	X	-	1:00PM - 10:30PM Sat & Sun
	R6	Bally's S	D	4:00PM - 4:30PM	D	3:30PM - 11:00PM	D	3:30PM - 11:00PM	-	-	-	X	-	3:30PM - 11:00PM Sat & Sun
	R8	Caesars	-	-	D	9:00PM - 11:30PM	D	9:00PM - 11:30PM	-	-	-	X	-	
	R12	Harrah's	-	-	D	12:00PM - 12:30AM	D	12:00PM - 12:30AM	-	-	-	X	-	12:00PM - 12:30PM Sat & Sun
	R16	TI Bus Stop	D/E/F	11:30AM - 1:30AM	D/E/F	11:30AM - 1:30AM	D/E/F	11:30AM - 1:30AM	D/E/F	3:00PM - 1:00AM	X	X	X	3:00AM - 1:00AM Fri, Sat, Sun & Mon
	R17	Treasure Island	D/E/F	8:30PM - 12:00AM	D/E/F	7:30PM - 12:00AM	D/E/F	7:30PM - 12:00AM	D/E/F	8:30PM - 12:00AM	X	X	X	7:30PM - 12:00AM Sat & Sun
Walkways with Containment	R5	Cosmo	D	6:30PM - 12:30AM	D	4:30PM - 1:30AM	D	4:30PM - 1:30AM	-	-	X	X	-	6:30PM - 12:30AM Fri, Sat & Sun
	R9	Flamingo	D	1:30PM - 12:30AM	D	12:00PM - 1:30AM	D	12:00PM - 1:30AM	-	-	-	X	-	1:30PM - 12:30AM Fri, Sat & Sun
	R10	Coliseum	D/E/F	10:00AM - 1:30AM	D/E/F	10:00AM - 1:30AM	D/E/F	10:00AM - 1:30AM	D/E/F	10:30AM - 12:30AM	X	X	X	10:30AM - 12:30AM Fri, Sat, Sun & Mon
	R11	Forum Shops	D	10:00PM - 10:30PM	D	7:30PM - 11:30PM	D	7:30PM - 11:30PM	-	-	-	X	-	7:30PM - 11:30PM Sat & Sun
	R13	Casino Royale	D	2:00PM - 1:00AM	D	1:00PM - 1:30AM	D	12:00PM - 1:30AM	-	-	-	X	-	2:00PM - 1:00AM Fri, Sat & Sun
	R14	Venetian S	-	-	-	-	-	-	-	-	-	-	-	
	R15	Venetian N	-	-	D	2:30PM - 1:00AM	D	2:30PM - 1:00AM	-	-	-	X	-	2:30PM - 1:00AM Sat & Sun
Pedestrian Bridges	R1	Trop W Bridge*	D	10:00PM - 11:30AM	D	8:30PM - 12:00AM	D	8:30PM - 12:00AM	-	-	-	X	-	
	R4	Harm W Bridge	D	9:30PM - 12:30AM	D	8:30PM - 12:30AM	D	7:00PM - 12:30AM	-	-	X	X		8:30PM - 12:30AM Sat & Sun
	R7	Flam W Bridge	D	9:00PM - 9:30PM	D	3:30PM - 11:30PM	D	3:30PM - 12:00AM	-		-	X	-	3:30PM - 11:30PM Sat & Sun

*Calculated assuming removal of existing trash enclosure.

Typical Weekend - Existing Walkway

	Location ID	Segment Name	Friday LOS	Hours of Friday LOS	Saturday LOS	Hours of Sat LOS	Sunday LOS	Hours of Sunday LOS	Weekday LOS	Hours of Weekday LOS	Feb-Jan	Feb-Nov	Feb-Dec	Shortest Period of Time Common to All Days (Greater than 4 hours)
Walkways with No Pedestrian Containment	R2	The Plaza	D	9:00PM - 12:00AM	D	8:30PM - 12:30AM	-	-	-	-	-	X	-	
	R3	Harley D	D	8:00PM - 12:30AM	D	8:00PM - 12:30AM	D	9:00PM - 12:00AM	-	-	-	X	-	8:00PM - 12:30AM Fri & Sat
	R6	Bally's S	-	-	-	-	-	-	-	-	-	-	-	
	R8	Caesars	-	-	-	-	-	-	-	-	-	-	-	
	R12	Harrah's	D	9:00PM - 12:00AM	D	9:00PM - 12:30AM	-	-	-	-	-	X	-	
	R16	TI Bus Stop	D/E	7:30PM - 12:30AM	D/E	6:30PM - 12:30AM	D	7:30PM - 11:30PM	D/E/F	7:30PM - 11:30PM	X	X	-	7:30PM - 12:30AM Fri & Sat
	R17	Treasure Island	D/E	8:30PM - 10:30PM	D/E/F	8:30PM - 10:30PM	D/E	8:30PM - 10:30PM	D/E	8:30PM - 10:30PM	X	X	-	
Walkways with Containment	R5	Cosmo	-	-	-	-	-	-	-	-	-	-	-	
	R9	Flamingo	-	-	-	-	-	-	-	-	-	-	-	
	R10	Coliseum	D/E/F	1:30PM - 12:30AM	D/E/F	1:00PM - 12:30AM	D/E/F	2:30PM - 12:30AM	D/E/F	2:30PM - 12:30AM	X	X	X	2:30PM - 12:30AM Everyday
	R11	Forum Shops	-	-	-	-	-	-	-	-	-	-	-	
	R13	Casino Royale	D/E	2:30PM - 1:00AM	D/E	12:30PM - 1:00AM		8:30PM - 12:00AM		8:30PM - 12:00AM	X	X	-	2:30PM - 1:00AM Fri & Sat
	R14	Venetian S	D	9:00PM - 11:30PM	D	8:30PM - 11:30PM	-	-	-	-	-	X	-	
	R15	Venetian N	D	8:30PM - 11:30PM	D	8:30PM - 11:30PM	D	8:30PM - 11:30PM	-	-	-	X	-	
Pedestrian Bridges	R1	Trop W Bridge	-	-	-	-	-	-	-	-	-	-	-	
	R4	Harm W Bridge	-	-	-	-	-	-	-	-	-	-	-	
	R7	Flam W Bridge	-	-	-	-	-	-	-	-	-	-	-	

Table 3.42 – Walkways which Exceed LOS C - Time of Day, Day of Week, and Month of Year (with an obstruction)

Holiday Weekend - with a Non-Permanent Obstruction Effective Walk Width Reduction

	Location ID	Segment Name	Friday LOS	Hours of Friday LOS	Saturday LOS	Hours of Sat LOS	Sunday LOS	Hours of Sunday LOS	Monday LOS	Hours of Monday LOS	Feb-Jan	Feb-Nov	Feb-Dec	Shortest Period of Time Common to All Days (Greater than 4 hours)
Walkways with No Pedestrian Containment	R2	The Plaza	D	1:00PM - 10:30PM	D/E	12:00PM - 2:00AM	D/E	12:00PM - 2:00AM	D	2:00PM - 4:30PM	X	X	-	1:00PM - 10:30PM Fri, Sat & Sun
	R3	Harley D	D/E	12:00PM - 2:00AM	D/E	11:00PM - 2:30AM	D/E	11:00PM - 2:30AM	D	1:00PM - 10:30PM	X	X	X	1:00PM - 10:30PM Fri, Sat, Sun & Mon
	R6	Bally's S	D	3:30PM - 11:00PM	D/E	12:00PM - 1:30AM	D/E	12:00PM - 1:30AM	D	4:00PM - 4:30PM	X	X	-	3:30PM - 11:00PM Fri, Sat & Sun
	R8	Caesars	D	9:00PM - 12:00PM	D	3:00PM - 12:00PM	D	3:00PM - 12:30PM	D	9:00PM - 9:30PM	X	X	-	3:00PM - 12:00PM Fri, Sat & Sun
	R12	Harrah's	D/E	11:00AM - 1:30AM	D/E	10:30AM - 2:00AM	D/E	10:30AM - 3:00AM	D	12:00PM - 12:30AM	X	X	X	12:00AM - 12:30AM Fri, Sat, Sun & Mon
	R16	TI Bus Stop	D/E/F	9:30AM - 3:30AM	D/E/F	9:30AM - 3:30AM	D/E/F	9:30AM - 3:30AM	D/E/F	9:30AM - 3:30AM	X	X	X	9:30AM - 3:30AM Fri, Sat, Sun & Mon
	R17	Treasure Island	D/E/F	5:30PM - 2:00AM	D/E/F	5:30PM - 2:00AM	D/E/F	5:30PM - 2:00AM	D/E/F	5:30PM - 2:00AM	X	X	X	5:30PM - 2:00AM Fri, Sat, Sun & Mon
Walkways with Containment	R5	Cosmo	D	6:30PM - 1:00AM	D/E	1:00PM - 2:00AM	D/E	1:00PM - 2:00AM	D	6:30PM - 12:30AM	X	X	-	6:30PM - 12:30AM Fri, Sat, Sun & Mon
	R9	Flamingo	D/E	11:30AM - 2:30AM	D/E	11:30AM - 3:30AM	D/E	11:30AM - 3:30AM	D	12:00PM - 1:30AM	X	X	X	12:00PM - 1:30AM Fri, Sat, Sun & Mon
	R10	Coliseum	D/E/F	8:30AM - 2:30AM	D/E/F	8:30AM - 2:30AM	D/E/F	8:30AM - 2:30AM	D/E/F	8:30AM - 2:30AM	X	X	X	8:30AM - 2:30AM Fri, Sat, Sun & Mon
	R11	Forum Shops	D	10:00PM - 11:30PM	D/E	5:00PM - 12:00AM	D/E	4:30PM - 12:00AM	D	10:00PM - 10:30PM	X	X	-	5:00PM - 12:00AM Fri, Sat & Sun
	R13	Casino Royale	D/E/F	11:00AM - 2:30AM	D/E/F	11:00AM - 3:30AM	D/E/F	11:00AM - 3:30AM	D/E/F	11:30AM - 1:30AM	X	X	X	11:30AM - 1:30AM Fri, Sat, Sun & Mon
	R14	Venetian S	-	-	D	2:30PM - 1:00AM	D	2:30PM - 1:00AM	-	-	-	X	-	2:30PM - 1:00AM Sat & Sun
	R15	Venetian N	D	1:30PM - 1:30AM	D/E	11:00AM - 2:00AM	D/E	11:00AM - 2:00AM	D	2:30PM - 1:00AM	X	X	-	2:30PM - 1:00AM Fri, Sat, Sun & Mon
Pedestrian Bridges	R1	Trop W Bridge*	D	8:30PM - 12:00AM	D/E	12:30PM - 12:00AM	D/E	12:30PM - 12:00AM	D	10:00PM - 11:30PM	X	X	-	12:30PM - 12:00AM Sat & Sun
	R4	Harm W Bridge	D	7:00PM - 1:00AM	D/E	3:30PM - 1:00AM	D/E	1:30PM - 1:00AM	D	9:00PM - 12:30AM	X	X	-	7:00PM - 1:00AM Fri, Sat & Sun
	R7	Flam W Bridge	D	3:30PM - 11:30PM	D/E	1:00PM - 12:30AM	D/E	12:30PM - 12:30AM	-	-	-	X	-	3:30PM - 11:30PM Fri, Sat & Sun

*Calculated assuming removal of existing trash enclosure.

Typical Weekend - with a Non-Permanent Obstruction Effective Walk Width Reduction

	Location ID	Segment Name	Friday LOS	Hours of Friday LOS	Saturday LOS	Hours of Sat LOS	Sunday LOS	Hours of Sunday LOS	Weekday LOS	Hours of Weekday LOS	Feb-Jan	Feb-Nov	Feb-Dec	Shortest Period of Time Common to All Days (Greater than 4 hours)
Walkways with No Pedestrian Containment	R2	The Plaza	D/E	1:00PM - 1:30AM	D/E	12:00PM - 1:30AM	D	8:00PM - 1:00AM	D	8:00PM - 1:00AM	X	X	-	8:00PM - 1:00AM Everyday
	R3	Harley D	D/E	11:30AM - 2:00AM	D/E	11:30AM - 2:00AM	D/E	11:30AM - 1:00AM	D/E	1:00PM - 1:30AM	X	X	X	1:00PM - 1:30AM Everyday
	R6	Bally's S	-	-	D	10:00PM - 10:30PM	-	-	-	-	-	X	-	
	R8	Caesars	D	9:00PM - 11:30PM	D	9:00PM - 11:30PM	D	9:00PM - 9:30PM	-	-	-	X	-	
	R12	Harrah's	D/E	1:00PM - 12:30AM	D/E	1:00PM - 1:00AM	D	7:00PM - 12:30AM	D	8:00PM - 12:30AM	X	X	-	8:00PM - 12:30AM Everyday
	R16	TI Bus Stop	D/E/F	10:30AM - 3:00AM	D/E/F	10:30AM - 3:00AM	D/E/F	10:30AM - 3:00AM	D/E/F	10:30AM - 3:00AM	X	X	X	10:30AM - 3:00AM Everyday
	R17	Treasure Island	D/E/F	5:30PM - 2:00AM	D/E/F	5:30PM - 2:00AM	D/E/F	5:30PM - 2:00AM	D/E/F	5:30PM - 2:00AM	X	X	X	5:30PM - 2:00AM Everyday
Walkways with Containment	R5	Cosmo	-	-	D	10:00PM - 11:00PM	-	-	-	-	-	X	-	
	R9	Flamingo	D	1:30PM - 1:00AM	D	12:00PM - 1:30AM	D	2:00PM - 12:30AM	D	6:00PM - 10:30PM	-	X	-	2:00PM - 12:30AM Fri, Sat & Sun
	R10	Coliseum	D/E/F	10:00AM - 2:30AM	D/E/F	10:00AM - 2:30AM	D/E/F	10:30AM - 2:30AM	D/E/F	10:30AM - 2:30AM	X	X	X	10:30AM - 2:30AM Everyday
	R11	Forum Shops	-	-	D	9:00PM - 10:30PM	-	-	-	-	-	X	-	
	R13	Casino Royale	D/E/F	11:00AM - 2:30AM	D/E/F	10:00AM - 2:30AM	D/E/F	11:30AM - 1:00AM	D/E/F	11:30AM - 1:00AM	X	X	X	11:30AM - 1:00AM Everyday
	R14	Venetian S	D	8:30PM - 11:30PM	D	8:30PM - 12:00AM		8:30PM - 11:30PM		8:30PM - 11:30PM	X	X	X	
	R15	Venetian N	D/E	2:30PM - 1:00AM	D/E	2:30PM - 1:00AM	D/E	4:30PM - 12:30AM	D/E	8:30PM - 12:00AM	X	X	X	4:30PM - 12:30AM Fri, Sat & Sun
Pedestrian Bridges	R1	Trop W Bridge	-	-	-	-	-	-	-	-	-	-	-	
	R4	Harm W Bridge	-	-	D	9:30PM - 12:30AM	-	-	-	-	-	X	-	
	R7	Flam W Bridge	-	-	D	9:00PM - 9:30PM	-	-	-	-	-	X	-	

4 Conclusions and Recommendations

The conclusions and recommendations discussed in this section are based on the observation of 4,835,000 pedestrians, 160 hours of in–field agent observation and data collection, and the detailed data analysis and evaluation. General conclusions and recommendations are provided in relation to pedestrian safety and infrastructure improvement throughout the study corridor of Las Vegas Boulevard. Specific mitigation for constrained walkways are detailed on Figure 4.2 and described in detail below. Recommendations are also provided for consideration in updating the current no-obstructive use ordinance (see Section 4.3).

4.1 General Conclusions and Recommendations

The following general conclusions are provided recognizing the importance of maintaining the economic vitality of Las Vegas Boulevard (the "Strip") through the improvement and maintenance of a safe pedestrian walkway system.

- The results of this study continue to support the no-obstruction zone recommendations of the 1994 Lee Engineering Pedestrian Study as incorporated into Clark County Code Chapter 16.11 where obstructive uses are not permitted near a signalized intersection, access drive or mid-block cross walk.

- Clark County entitlement requirements on new construction within the Resort Corridor should continue to require pedestrian walks to be designed for a minimum effective walkway width (W_E) of ten feet (10') or a pedestrian walkway Level of Service (LOS) of C or better. Based on the pedestrian volumes observed in this study, some future sidewalks within the central or inner portions of the study corridor will require walkway widths of over 15 feet (W). A walkway with 15 feet of effective width (W_E) can serve up to 2,250 pedestrians in 15 minutes while maintaining a LOS of C.

- The study observed a significant number of individuals creating undue obstruction in the current no-obstructive use zones at intersections and driveways. This study provides additional support and justification to maintain these areas free from obstructions during peak walkway usage. Maintaining no-obstructive use zones at intersections, midblock crosswalks and access drive entrances reduces congestion which allows for increased visibility and enhanced walkway safety.

- The pedestrian bridges have constrained widths and are an integral part of the pedestrian walkway system. Based upon the observed pedestrian volumes, and walkway LOS, it is appropriate to designate the pedestrian bridges as no-obstruction zones. Pedestrian bridges should be maintained free of any obstructions, including obstructions like trash enclosures. In addition the areas on and around stair landings, elevator waiting areas, along with escalator approach and departure landing zones should also be maintained free of any obstructions.

- New development and reconstruction projects should incorporate the removal, replacement and/or installation of no-obstructive use zone signs and white painted sidewalk markings as appropriate, into the projects' civil improvement drawings.

- When a driveway has been abandoned or is no longer in active use, the designation of no-obstructive use zone should be removed from that area.

- The conducted walking speed studies were useful in understanding tourist leisure walking speeds and the walking dynamics of Las Vegas Boulevard (the "Strip"). However, the walking speed level of service (LOS) procedures of the 2010 Highway Capacity Manual (HCM) were not found to be as effective in determining walkway congestion levels as the pedestrian volume LOS evaluation procedures. It is recommended that future studies of the pedestrian LOS along Las Vegas Boulevard continue to use only the pedestrian volume LOS evaluation procedures of the HCM.

- LOS evaluations at bus stops suggest that where insufficient queue area is identified, bus stops should be reserved for bus patrons by restricting non-permanent obstructions. The LOS evaluations concluded that all Type 2 and Type 3 bus stops should allow the area between the queue area and the curb to be available for only queued and walking pedestrians with a delineated no-obstructive use zone. In addition, from field observations, all Type 1 bus stops should also be considered for no-obstructive use zones to encourage transit use by maintaining queue areas of LOS C or better and aiding pedestrian flow in front of Type 1 bus stops.

4.1.1 Safety Enhancements

During the study collection periods, general observations of the pedestrian activities and walkway conditions within the study corridor were conducted. The following recommendations are given as general safety enhancements based on observations made during data collection and study evaluations:

- It is recommended that pedestrian containment be considered in the median of Las Vegas Boulevard throughout the study corridor where no adjacent sidewalk containment exists to encourage the use of pedestrian bridges and signalized crosswalks.

- Pedestrian crosswalks along Las Vegas Boulevard should be a minimum of 25-feet in width to accommodate the observed pedestrian volumes at signalized crossings and improve visibility of the crossing.
- To improve pedestrian safety, a feasibility study should be conducted to evaluate the possible benefits of the installation of median refuge islands for at-grade crosswalks along Las Vegas Boulevard within the study area.

- Pedestrian bridge escalators and elevators should be maintained with a schedule that provides a high reliability of service. It is important to have these facilities be fully operational during holiday weekends. The capacity of the pedestrian bridges is severely impacted when the escalators are not functioning. Picture 4.1 shows two escalators not functioning and a queue forming to use the stairs on the holiday Saturday of May 26, 2012.



Picture 4.1 – Stairway Queue due to Non-Functional Escalators.

- At the present time, the RTC maintains a text service providing information on bus stop arrival times. For the "Strip", it is recommended that the RTC consider implementing an additional system to display real-time arrival time for transit vehicles at each of the bus stops within the study corridor. Not only will this enhance the transit system, but it will help mitigate the need to step out into the street to see if the bus is coming (see Picture 4.2). This is especially useful in the study corridor due to the number of visitors and tourists who are unfamiliar with the local transit system and texting service. A tourist being aware of the bus arrival time may elect to not wait for the next bus and continue to walk.

- Pedestrian bridge lighting should be studied, reviewed, and lighting levels adjusted as appropriate to provide improved night time security and safety.

- Daytime lighting levels of the pedestrian bridge stairwell at the north end of the Harmon Avenue east pedestrian bridge should be reviewed and increased as appropriate for various times of day, especially during twilight hours (see Picture 4.3).



Picture 4.2 – Bus Patron in Street Looking for Arriving Bus.



Picture 4.3 – Stairwell at Harmon East Pedestrian Bridge.

- At the McDonald's south of Circus Circus Drive, a study should be conducted to recommend either temporary sidewalk improvements directly along Las Vegas Boulevard, pedestrian containment and/or additional way finding signs to encourage pedestrians to use the existing walkway as constructed (see Figure 4.1 and Picture 4.4).



Figure 4.1 – Saw-tooth Walkway that Encourages Walking in Street



Picture 4.4 – Pedestrians in Street at McDonalds.

- A study of pedestrian containment in front of the Fashion Show Mall should be conducted. The open walkway for emergency mall evacuation provides direct pedestrian access to Las Vegas Boulevard. This allows pedestrians to enter the vehicle travel lanes and walk in the street between the pedestrian containment measures of the Spring Mountain Road pedestrian bridges (see Picture 4.5 and Picture 4.6).



Picture 4.5 – Fashion Show Mall Boulevard Access – No Pedestrian Containment.



Picture 4.6 – Pedestrians in Street in front of Fashion Show Mall.

4.2 Infrastructure Improvement Recommendations

Specific areas of concern identified by field observations and data evaluation are presented along with recommended mitigation strategies. The mitigation measures are classified as short, intermediate and long term. Short term measures are relatively low cost measures with estimated implementation times of less than one year. Intermediate measures may be more costly and require multi-agency and property coordination to implement. Intermediate measures can require 1 to 3 years to implement. Long term measures require additional study and significant planning and design for implementation which would require more than 3 years to implement. The locations of the following areas of concern are shown in Figure 4.2 in relationship to the study corridor.

Location A

This location is on the east side of Las Vegas Boulevard generally across from Mandalay Bay Hotel/Casino. Although pedestrian volumes in this area are minimal and no non-permanent obstructions were observed in this area, the sidewalk width is reduced due to a series of fire hydrants and associated bollards as illustrated in Picture 4.7. At this particular location there is only 32 inches of width between the hydrant and the curb.



Picture 4.7 – Location A at 8 Motel Mart.

Recommendation (Short Term):

- Remove bollards, as appropriate, and relocate fire hydrants within this area of Las Vegas Boulevard out of the sidewalk to provide a minimum of 5 feet of clear walkway.

Location B

On the northeast corner of the intersection of MGM Drive/Rue de Monte Carlo is an area of restricted sidewalk width. The large pedestrian volumes which travel both north/south and east/west at this signalized intersection queue at this constrained flow location. The sidewalk is restricted due to a signal controller cabinet and service pedestal. Due to elevation differences, there is also a railing in front of the Hard Rock Cafe (on the north corner) which further channelizes pedestrians into a narrower walkway area (see Picture 4.8).



Picture 4.8 – Location B near Hard Rock Cafe at MGM Drive.

Recommendation (Short Term):

- Crosswalk delineation should be restriped to provide a 25 feet wide crosswalk to match the approaching walkways on the north and south of MGM Drive.

Recommendation (Intermediate Term):

- The County should work with the property owner and Nevada Power Company to relocate the traffic controller and power service out of the walkway.
- Railing in front of Hard Rock Café and walkway grades should be studies and modified, as appropriate, to provide a wider pedestrian walkway.

Recommendation (Long Term):

- Study the feasibility of a pedestrian bridge at this location to address at-grade crossings of Las Vegas Boulevard.

Location C

At the Harley Davidson Cafe on the southeast corner of Las Vegas Boulevard and Harmon Avenue, an existing concrete wall serves as pedestrian containment and fenced landscaping create a restricted walkway width of eight feet (see Picture 4.9).



Picture 4.9 – Location C at Harley Davidson Cafe near Harmon Avenue.

Recommendations (Short Term):

- Enforce no-obstructive use ordinance.
- Per current code, delineate a no-obstructive use zone from the intersection 50 feet south from point of curvature of the curb.
- News racks immediately south of this walkway restriction should be relocated to increase existing pedestrian walkway width (W).

Recommendation (Intermediate Term):

- A pedestrian easement should be obtained from the Harley Davidson property to widen the pedestrian walkway to a minimum effective walk width (W_E) of 10 feet minimum.









Legend

✱ Location

LOCATIONS OF PEDESTRIAN INFRASTRUCTURE IMPROVEMENTS

FIGURE 4.2

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Location D

On the west side of Las Vegas Boulevard and south of the Bellagio fountain is a pedestrian refuge island (see Picture 4.10). This island harbors pedestrians between “WALK” indications when crossing Bellagio Drive and Las Vegas Boulevard. The queue area on the pedestrian island was observed to be at capacity multiple times during the data collection efforts.



Picture 4.10 – Location D – “Pork chop” Refuge Island near Bellagio Hotel/Casino.

Recommendation (Short Term):

- Enforce the no-obstructive use ordinance in this area

Recommendations (Long Term):

- Study the safety and feasibility of providing a Las Vegas Boulevard median refuge for pedestrians crossing Las Vegas Boulevard in coordination with Location E.
- Study the feasibility of a pedestrian bridge at this location to eliminate the at-grade pedestrian crossing (in coordination with Location E).

Location E

Picture 4.11 is at the north end of the Planet Hollywood property. This location experiences congestion and slow walking speeds due to pedestrians queuing to cross Las Vegas Boulevard to the Bellagio Hotel/Casino and those descending the Planet Hollywood Hotel/Casino walkway stairs and escalators. During the study, some of the highest pedestrian volumes were observed near this location.



Picture 4.11 – Location E at North end of Planet Hollywood Hotel/Casino.

Recommendations (Short Term):

- Enforce the no-obstructive use ordinance in this street crossing area. Non-permanent obstructions were prevalent in this area averaging as many as 10.
- Crosswalk widths both northbound and westbound should be widened to 25 feet to meet the pedestrian volume demands.

Recommendations (Long Term):

- Study the safety and feasibility of providing a Las Vegas Boulevard median refuge for pedestrians crossing Las Vegas Boulevard in coordination with Location D.
- Study the feasibility of a pedestrian bridge at this location to eliminate the at-grade pedestrian crossing (in coordination with Location D).

Location F

Location F is constrained by a pedestrian containment fence along Las Vegas Boulevard and the building face of Margaritaville. A fire hydrant also reduces the amount of effective walkway width and was observed to be a tripping hazard when the area is congested due to its lack of height as shown in Picture 4.12. The adjacent Las Vegas Boulevard crosswalk to Caesars Palace Hotel/Casino and the crossing of Caesars Palace Boulevard require pedestrian queuing which result in pedestrian congestion.



Picture 4.12 – Location F in front of Margaritaville.

Recommendation (Short Term):

- Enforce the no-obstructive use ordinance in this area. Non-permanent obstructions were prevalent in this area averaging as many as 10.

Recommendation (Intermediate Term):

- Relocate fire hydrant out of pedestrian walkway to maximum walkway width.

Note – although this concern was present at the time of this study, the construction of the Caesars Linq project may rectify the queuing issue.

Location G

As pedestrian volumes increase, older walkways are requiring additional width. Some of the largest pedestrian volumes were observed near this area of Caesars Palace Hotel/Casino. Location G is physically constrained by landscaping on both sides of the walk (see Picture 4.13). The walkway provides an effective walkway width of five feet.



Picture 4.13 – Location G near Caesars Palace Hotel/Casino.

Recommendation (Short Term):

- Apply the no-obstructive use ordinance to this area to restrict non-permanent obstructions.

Recommendation (Intermediate Term):

- County should coordinate with Caesars Palace Hotel/Casino to widen the existing walkway to provide a minimum effective walkway width of 15 feet.

Location H

Location H is in front of Harrah's Hotel/Casino and serves an east/west crossing of Las Vegas Boulevard for pedestrians crossing to the Mirage Hotel/Casino. The area is constrained by the Harrah's Hotel/Casino building face, signal poles, the street, and landscaping as shown in Picture 4.14.



Picture 4.14 – Location H in front of Harrah's Hotel/Casino.

Recommendation (Short Term):

- Enforce the no-obstructive use ordinance in this area. Non-permanent obstructions were prevalent in this area averaging as many as 15.

Recommendations (Intermediate Term):

- Coordinate with Harrah's to adjust or remove existing landscaping and other obstructions to maximize effective walkway width.
- Install pedestrian containment to encourage use of the existing crosswalk and enhance safety.

Location I

At the south end of the Venetian Hotel/Casino, permanent obstructions cause the effective walkway width (W_E) to be reduced to 6.3 feet. Significant pedestrian volumes were observed in this location. Also, immediately south of this location is the driveway into the Casino Royale Hotel/Casino property which causes queuing of pedestrians when vehicles enter or exit the driveway (see Picture 4.15).



Picture 4.15 – Location I at Casino Royale Driveway.

Recommendation (Short Term):

- Enforce the no-obstructive use ordinance in this area. Non-permanent obstructions were prevalent in this area averaging as many as 8.

Recommendations (Intermediate Term):

- Coordinate with the Venetian Hotel/Casino and the Casino Royale Hotel/Casino on the feasibility to adjust, relocate, or remove existing fencing and bollards to maximize pedestrian walkway width recognizing the adjacent access driveway.
- Extension of pedestrian containment south along the curb to the driveway could further enhance safety for pedestrians.
- Study area for options to maximize sidewalk width which may include adjusting existing landscaping.

Location J

Field observations found the highest number of pedestrians in the street at Location J (see Picture 4.16). The walkway north from the Mirage Hotel/Casino to the Treasure Island bus stop serves a large pedestrian volume especially before and after the Mirage Volcano show and the Sirens at Treasure Island show. The walkway has a width of six feet, which equates to a three foot effective walkway width (W_E).



Picture 4.16 – Location J at Treasure Island Bus Stop

Recommendations (Short Term):

- Enforce the no-obstructive use ordinance in this area. Non-permanent obstructions were prevalent in this area averaging as many as 8.
- Include bus stop area as a no-obstructive use zone

Recommendations (Long Term):

- Widen walkway to provide a minimum effective walkway width (W_E) of 15 feet.
- Consider constructing a bypass walkway behind the existing bus shelter to allow for increased queue area for bus patrons.

4.3 Recommended Updates to No-Obstructive Use Zones

The following recommendations are provided based on the findings of this study and are presented for consideration by the Clark County Board of Commissioners for amendments to the existing no-obstructive use ordinance (Clark County Code of Ordinances Title 16 – Roads and Highways Chapter 16.11 – Obstructive Uses of Public Sidewalks):

- Update ordinance to reflect the current 2010 HCM. The pedestrian methodology in Chapter 13 of the 1985 Highway Capacity Manual is now located in Chapter 23 of the 2010 Highway Capacity Manual.

- No-obstruction zones should be applied to all construction zones affecting pedestrian walkways.

- The no-obstruction zones should be clarified so that dimensions for midblock crosswalks, intersections and driveways are to be measured from and follow the adjacent pedestrian walkway and not the curb. The following exceptions should be addressed:
  - When the measured prohibition distance is greater than the distance to a nearby pedestrian containment fence, wall, or raised landscaping preventing a pedestrian from entering the street;
  - The designation area should follow the front of sidewalk if it veers away from or is separated by landscaping from the curb line;
  - Allow for engineering judgment to be used for unique and unusual walkway conditions.

- No-obstruction zones are recommended at bus stops:
  - For a bus turnout, the no-obstructive use zone should be for the entire bus turnout from the beginning to the end of the curb line deflections for the bus turnout.
  - For curb side bus stops with bus shelters, the no-obstructive use zone should begin and end a minimum of 15 feet from each side of the shelter as installed.
  - At curbside bus stops without a shelter, the no-obstructive use zone should begin 35 feet in the approaching direction and end 15 feet past the bus stop sign post.

- No-obstruction zones are recommended in front of elevators and at the landing areas of escalators and stairs. A study should be conducted to determine the appropriate clear areas that should be provided.

4.3.1 Recommended Time, Place, and Manner No – Obstructive Use Zones

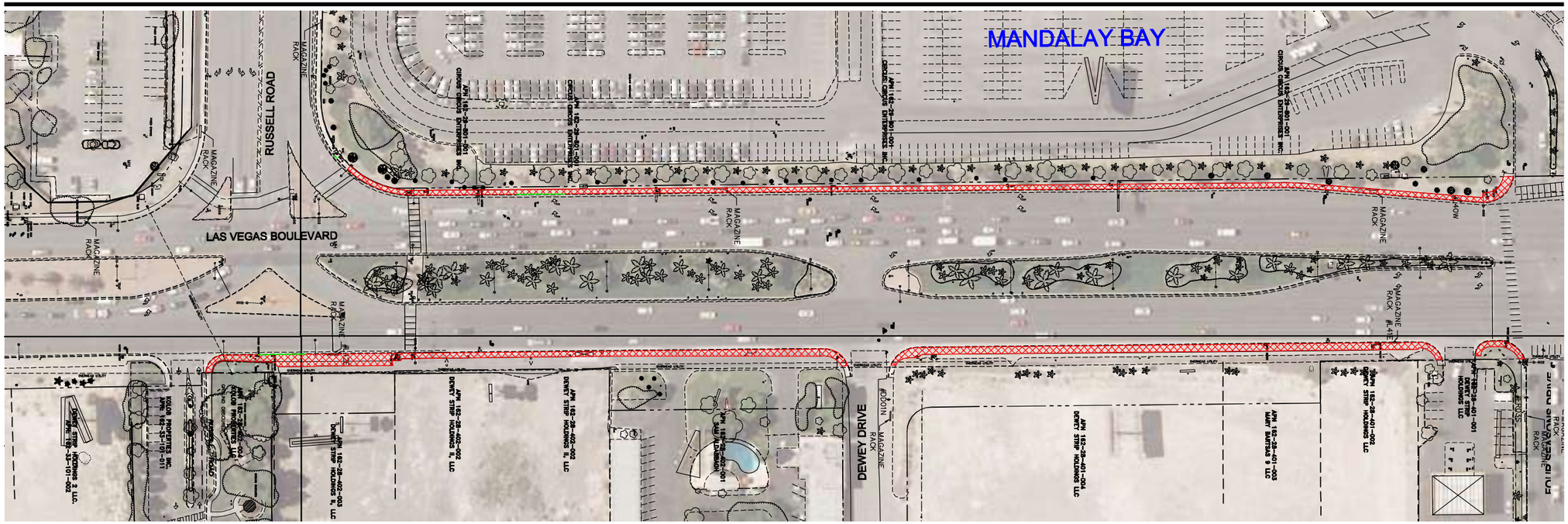
Based on observed pedestrian volumes, level of service, walkway conditions and pedestrian safety concerns, the locations shown in Figure 3.73 within the study corridor, have been identified as walkway segments in which non-permanent obstruction restrictions should be considered during specific days of the week and times of the day.

To identify the time of day, day of week, and month of year that certain walkway segments within the study corridor should be considered for restriction of non-permanent obstructions, the following steps were taken:

- Effective walkway widths along the entire length of the study corridor were grouped into segments with similar effective walkway widths (see Figure 2.1).
- Pedestrian volumes from all of the count locations were evaluated to identify a common daily peak pedestrian volume time period. This daily time period was found to occur between 9:00 PM and 11:00 PM.
- Pedestrian volumes for the common peak period were assigned to each segment of the study corridor to calculate a peak period LOS using 2010 HCM procedures (see Figure 3.74).
- The LOS analysis resulted in 17 walkway segments that were found to exceed LOS C on the Holiday and/or Typical Saturday (May 26 and/or June 16, 2012) labeled R1 to R17 from south to north (see Figure 3.73 for segment location) (see Figure 3.75 through Figure 3.91 for volume data at each location that exceeded LOS C for more than four hours).
- Figure 3.75 through Figure 3.87 show the volume distribution data at each location for the lowest pedestrian volume day of week where LOS C was exceeded for four hours on the holiday weekend. Similarly, Figure 3.88 through Figure 3.91 display volume distribution data for walkway segments during the typical weekend that exceeded LOS C for more than four hours.
- Walkway segments that resulted in a LOS C were considered further and analyzed to determine if the addition of an obstruction would result in the LOS deteriorating to D or greater. A reduction of the effective walkway width (W_E) of 2.25 feet associated with the obstruction of one person standing on the side of the walkway was applied for the analysis.
- The walkway segments were separated into three categories:
  - Walkways with no pedestrian containment
  - Walkways with pedestrian containment
  - Pedestrian bridges
- The Saturday count data was adjusted using the week-long data and the year-long data, provided by Caesars International, to determine day of week and month of year adjustment factors. The adjustment factors were used to determine time periods when walkway segments were estimated to exceed LOS C for days other than those counted on Saturday May 26 and June 16, 2012.

Table 3.41 summarizes the results of the analysis for possible time of day, day of week and month of year restrictions based solely on pedestrian volumes and walkway widths. Table 3.42 provides a summary of the analysis for possible non-permanent obstruction restrictions including an effective walkway width (W_E) reduction of 2.25 feet for an obstruction (note that the length of time for many areas increase and additional days of week are included).

EXHIBIT A



JOB No. 092061019

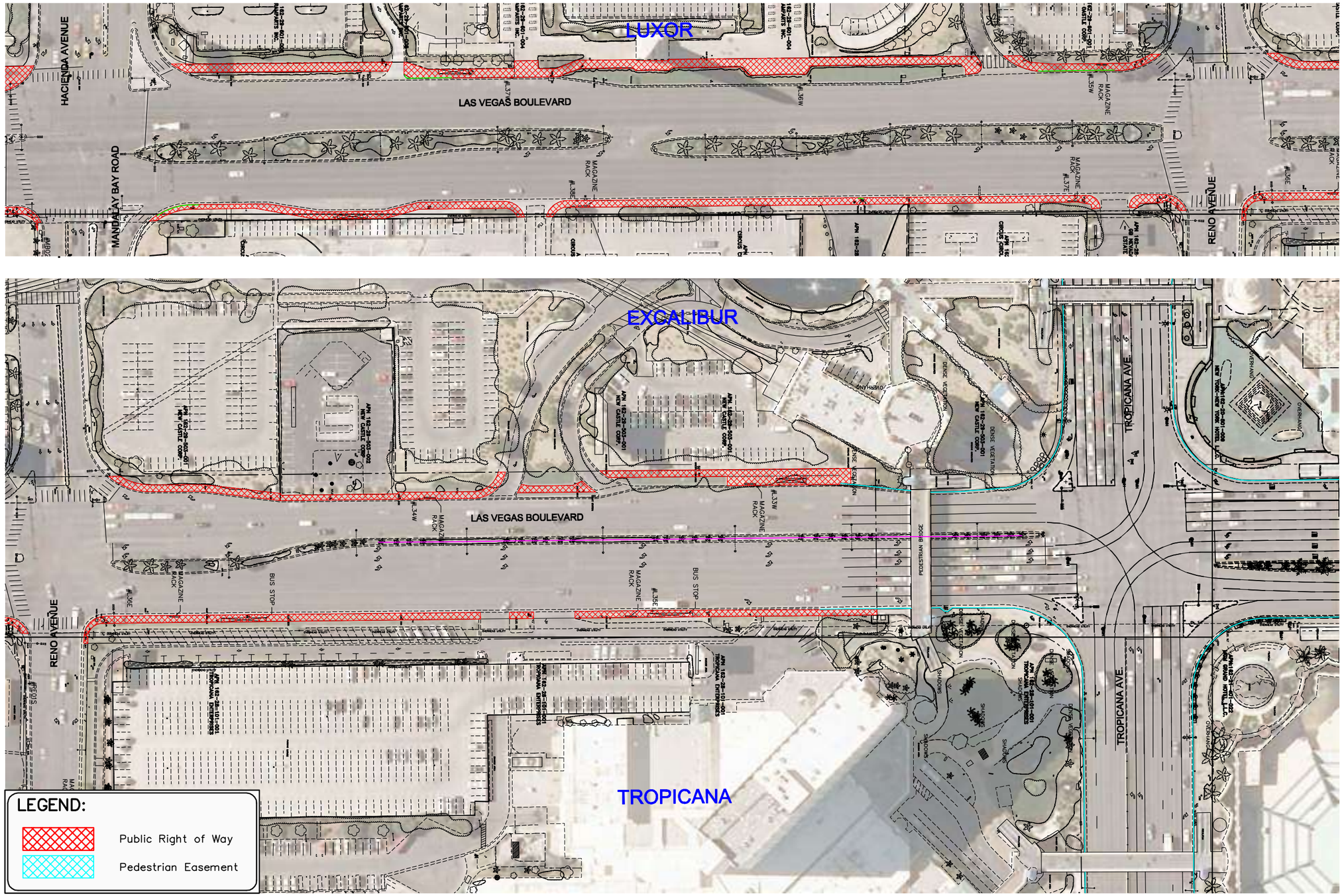
Kimley-Horn and Associates, Inc.

NOTE: SURVEY PER ACE REGIONAL RAPID TRANSIT SYSTEM, RESORT CORRIDOR, PRELIMINARY ALTERNATIVE ANALYSIS REPORT DATED JULY 2008. AERIAL IMAGE PER CLARK COUNTY DATED 2011.

PEDESTRIAN STUDY - LAS VEGAS BOULEVARD
RUSSELL ROAD TO MANDALAY BAY ROAD
May 9, 2012

FIGURE 1
SHEET 1 OF 9

GRAPHIC SCALE
40 0 20 40 80
1 inch = 40 feet



JOB No. 092061019

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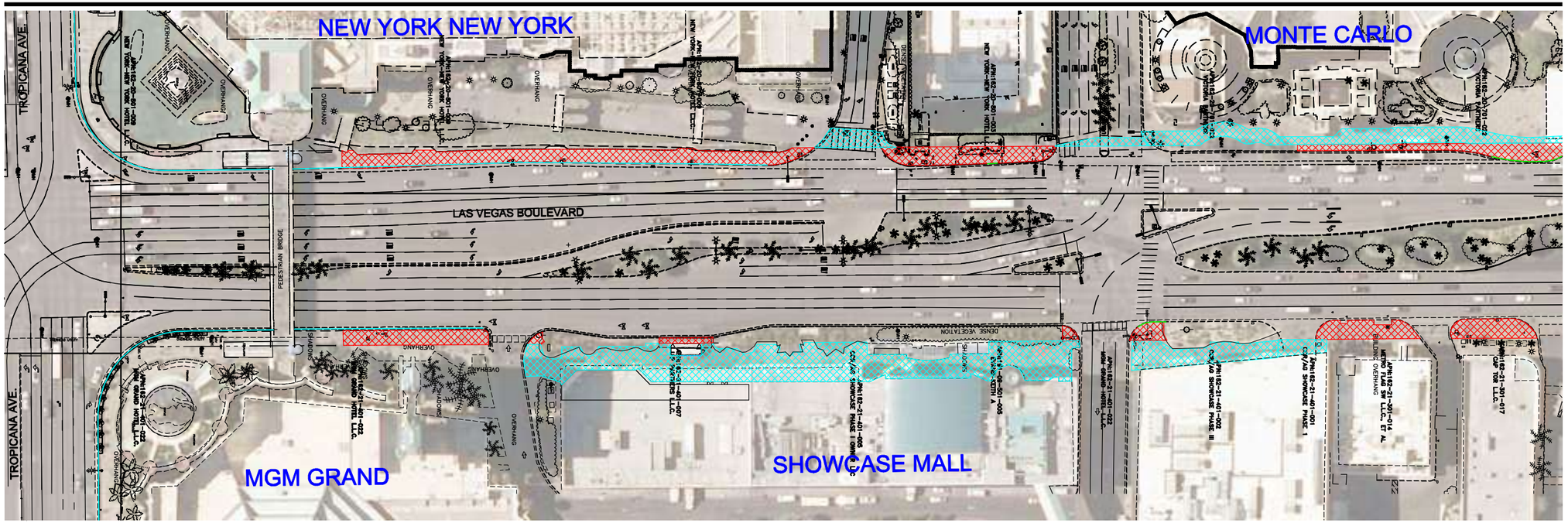
NOTE: SURVEY PER ACE REGIONAL RAPID TRANSIT SYSTEM, RESORT CORRIDOR, PRELIMINARY ALTERNATIVE ANALYSIS REPORT DATED JULY 2008. AERIAL IMAGE PER CLARK COUNTY DATED 2011.

PEDESTRIAN STUDY - LAS VEGAS BOULEVARD
MANDALAY BAY ROAD TO TROPICANA AVENUE
May 9, 2012

FIGURE 2

SHEET 2 OF 9

GRAPHIC SCALE
40 0 20 40 80
1 inch = 40 feet



LEGEND:

- Public Right of Way
- Pedestrian Easement

JOB No. 092061019

Kimley-Horn and Associates, Inc.

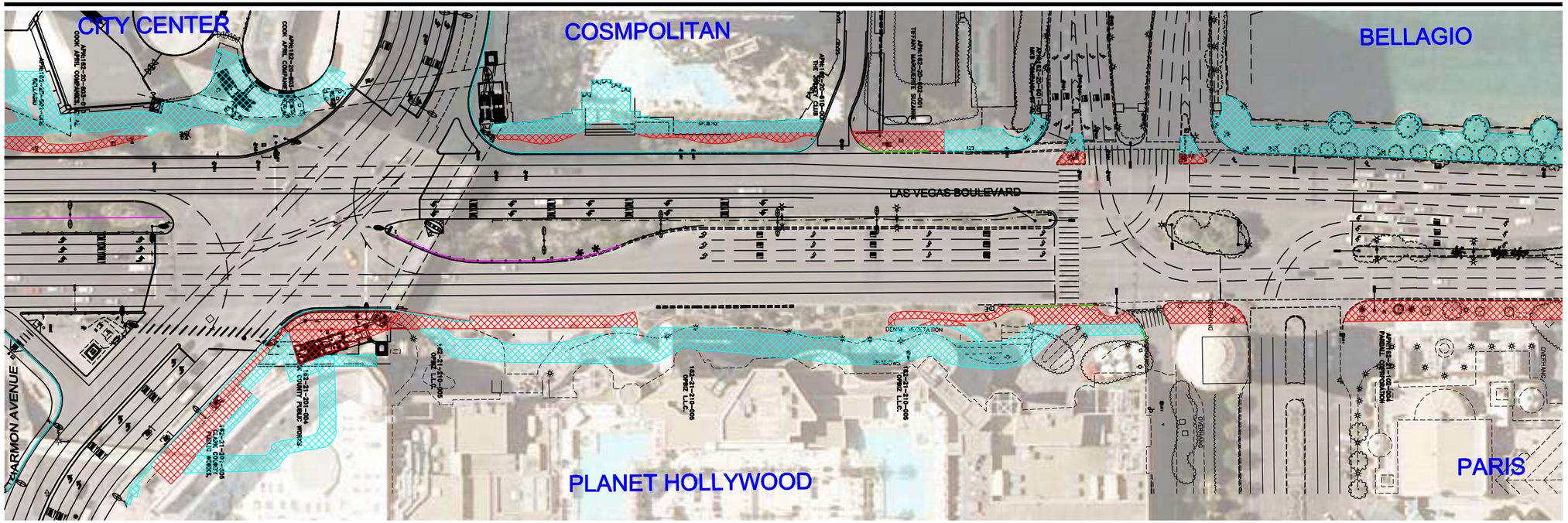
NOTE: SURVEY PER ACE REGIONAL RAPID TRANSIT SYSTEM, RESORT CORRIDOR, PRELIMINARY ALTERNATIVE ANALYSIS REPORT DATED JULY 2008. AERIAL IMAGE PER CLARK COUNTY DATED 2011.

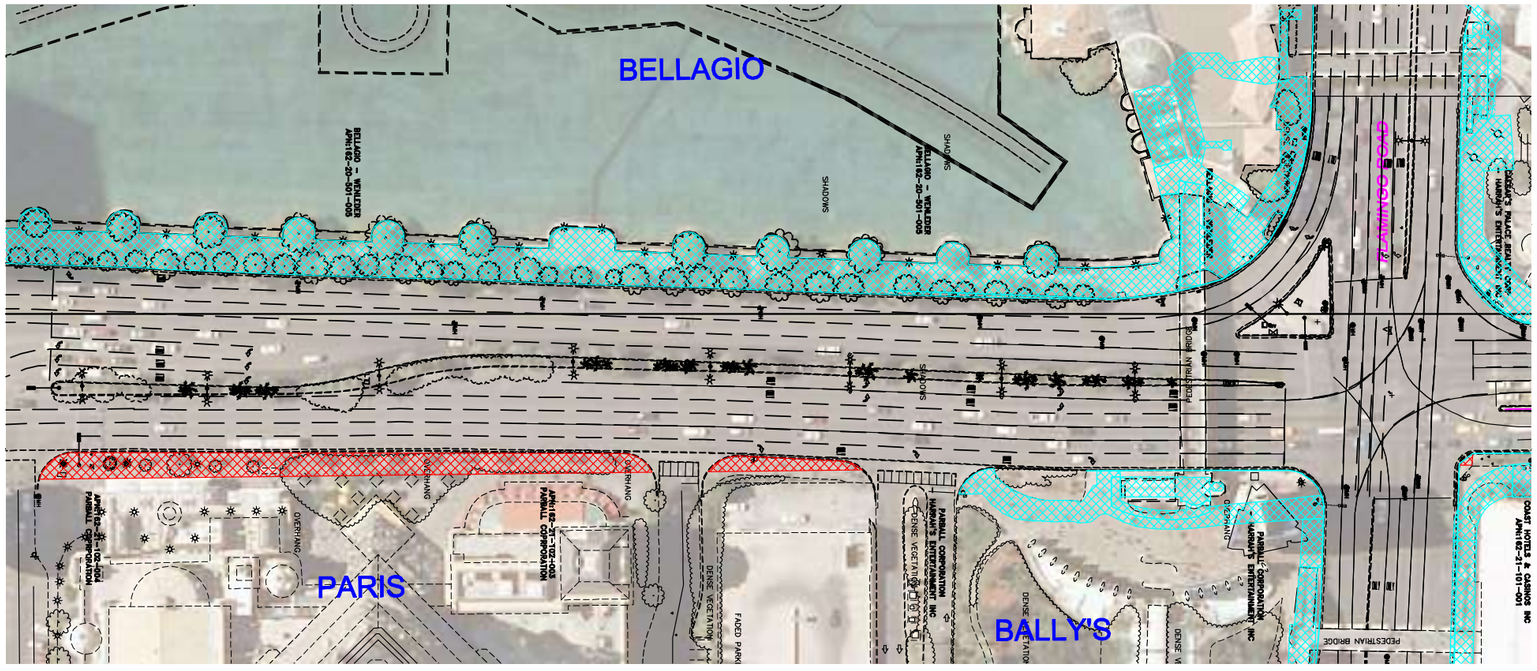
PEDESTRIAN STUDY - LAS VEGAS BOULEVARD
TROPICANA AVENUE TO HARMON AVENUE
MAY 9, 2012

FIGURE 3

SHEET 3 OF 9

GRAPHIC SCALE
40 0 20 40 80
1 inch = 40 feet





LEGEND:

Public Right of Way

Pedestrian Easement

JOB No. 092061019

Kimley-Horn and Associates, Inc.

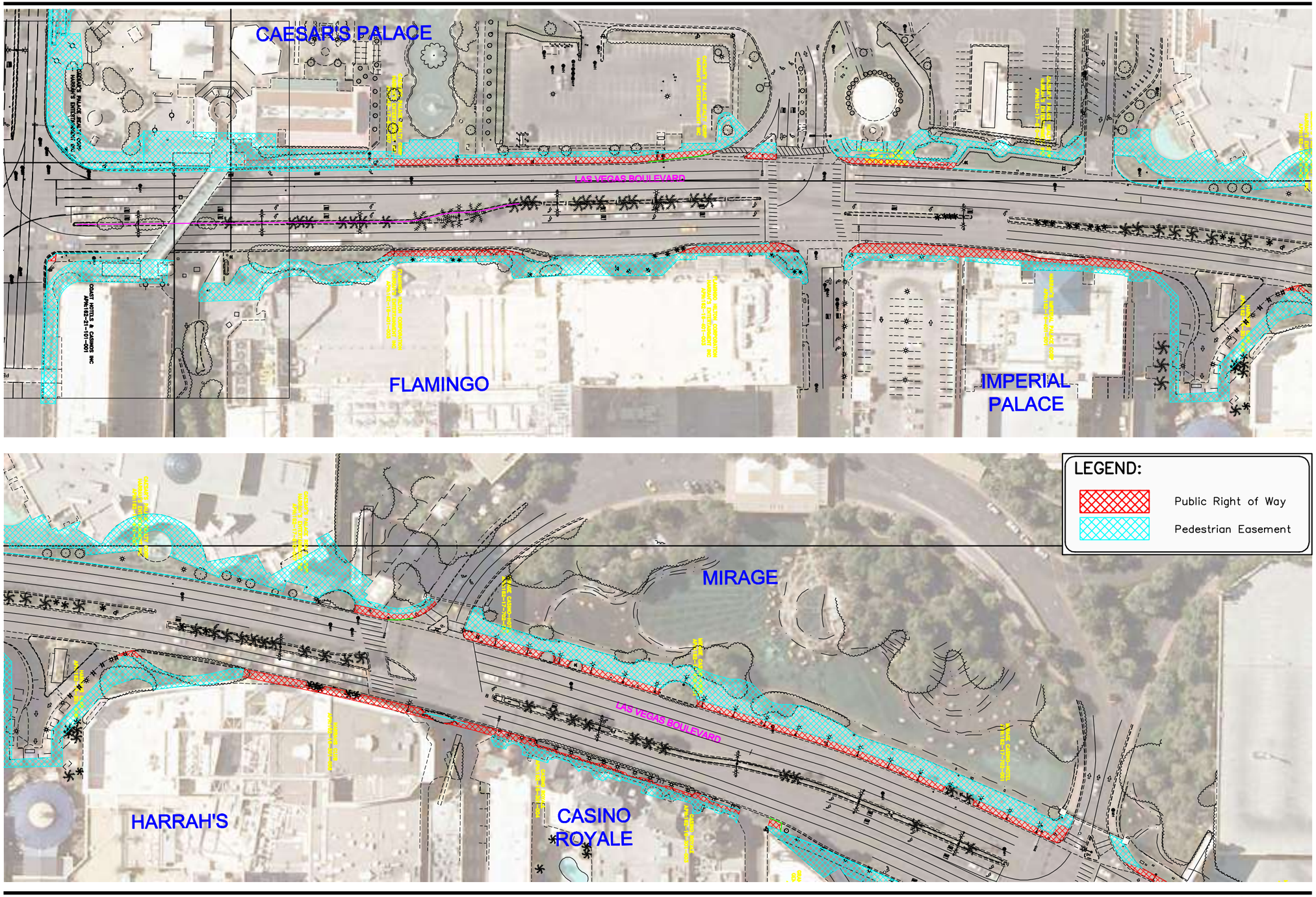
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PEDESTRIAN STUDY - LAS VEGAS BOULEVARD
HARMON AVENUE TO FLAMINGO ROAD
May 9, 2012

FIGURE 4

SHEET 4 OF 9

GRAPHIC SCALE
40 0 20 40 80
1 inch = 40 feet



JOB No. 092061019

Kimley-Horn and Associates, Inc.

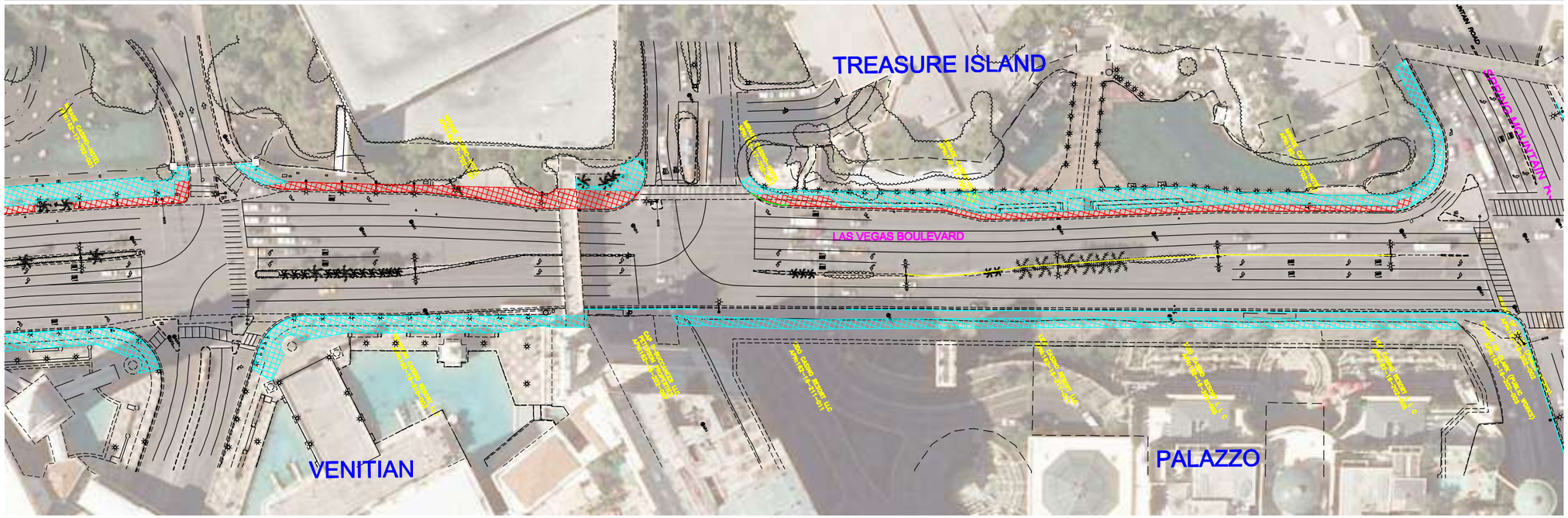
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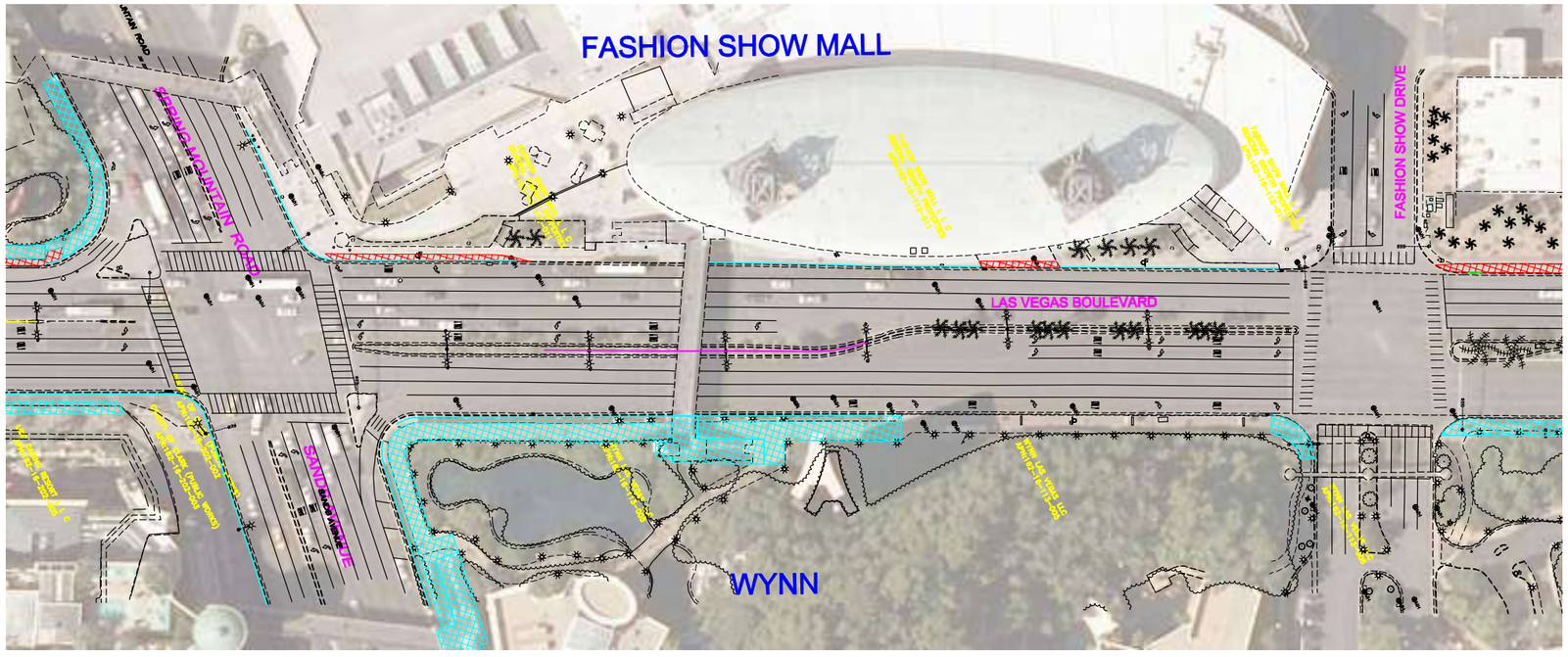
PEDESTRIAN STUDY - LAS VEGAS BOULEVARD
FLAMINGO ROAD TO MIRAGE HOTEL & CASINO
May 9, 2012

FIGURE 5

SHEET 5 OF 9

GRAPHIC SCALE
40 0 20 40 80
1 inch = 40 feet





LEGEND:

Public Right of Way

Pedestrian Easement

JOB No. 092061019

Kimley-Horn © 2013 and Associates, Inc.

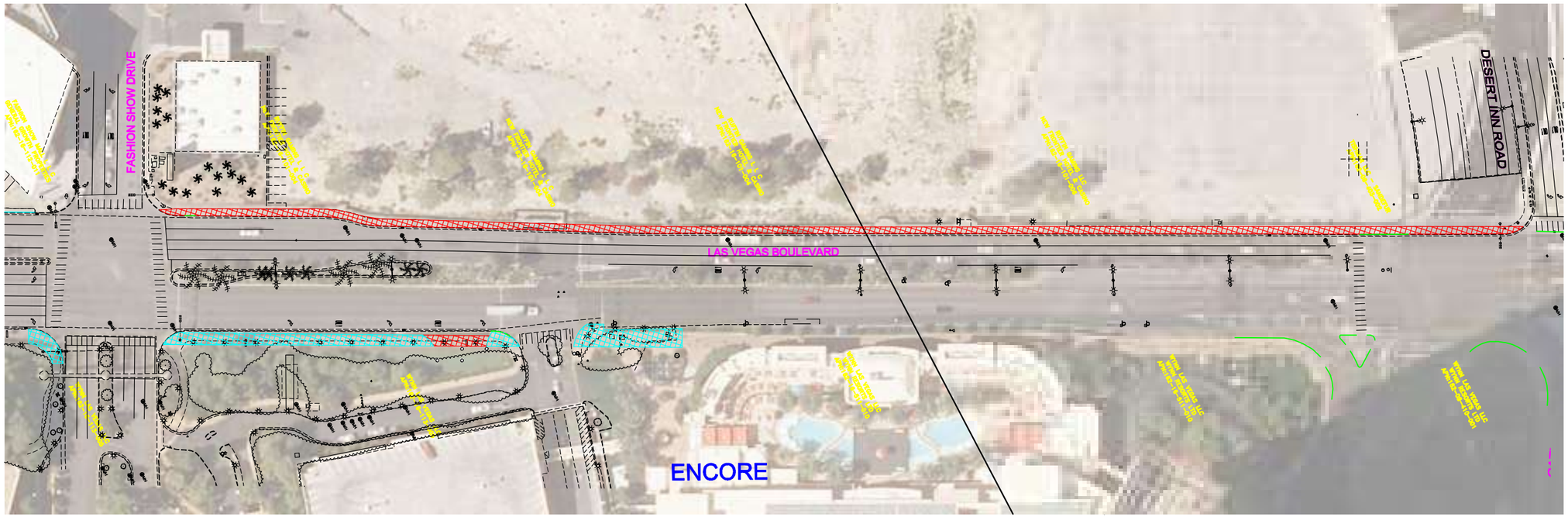
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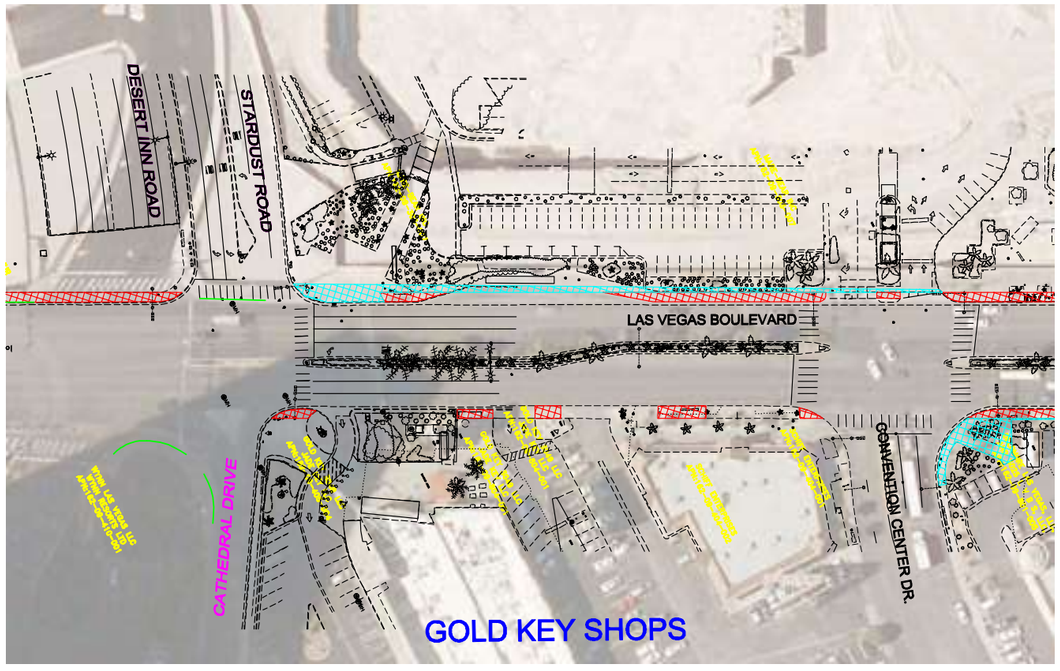
PEDESTRIAN STUDY - LAS VEGAS BOULEVARD
MIRAGE HOTEL & CASINO TO FASHION SHOW DRIVE
May 9, 2012

FIGURE 6

SHEET 6 OF 9

GRAPHIC SCALE
40 0 20 40 80
1 inch = 40 feet





LEGEND:

Public Right of Way

Pedestrian Easement

JOB No. 092061019

Kimley-Horn © 2013 and Associates, Inc.

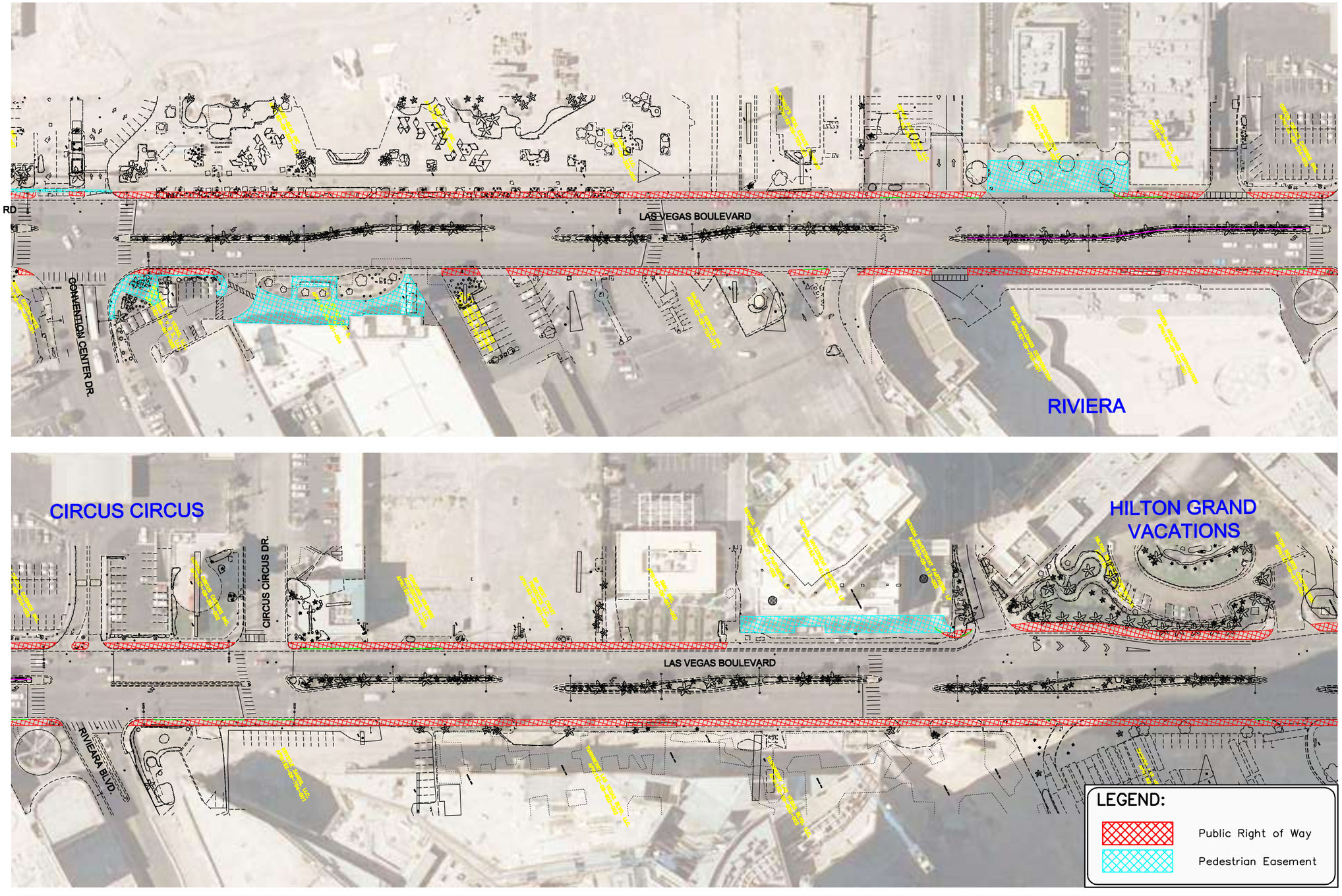
NOTE: SURVEY PER ACE REGIONAL RAPID TRANSIT SYSTEM, RESORT CORRIDOR, PRELIMINARY ALTERNATIVE ANALYSIS REPORT DATED JULY 2008. AERIAL IMAGE PER CLARK COUNTY DATED 2011.

PEDESTRIAN STUDY - LAS VEGAS BOULEVARD
FASHION SHOW DRIVE TO CONVENTION CENTER DRIVE
May 9, 2012

FIGURE 7

SHEET 7 OF 9

GRAPHIC SCALE
40 0 20 40 80
1 inch = 40 feet



JOB No. 092061019

Kimley-Horn and Associates, Inc.

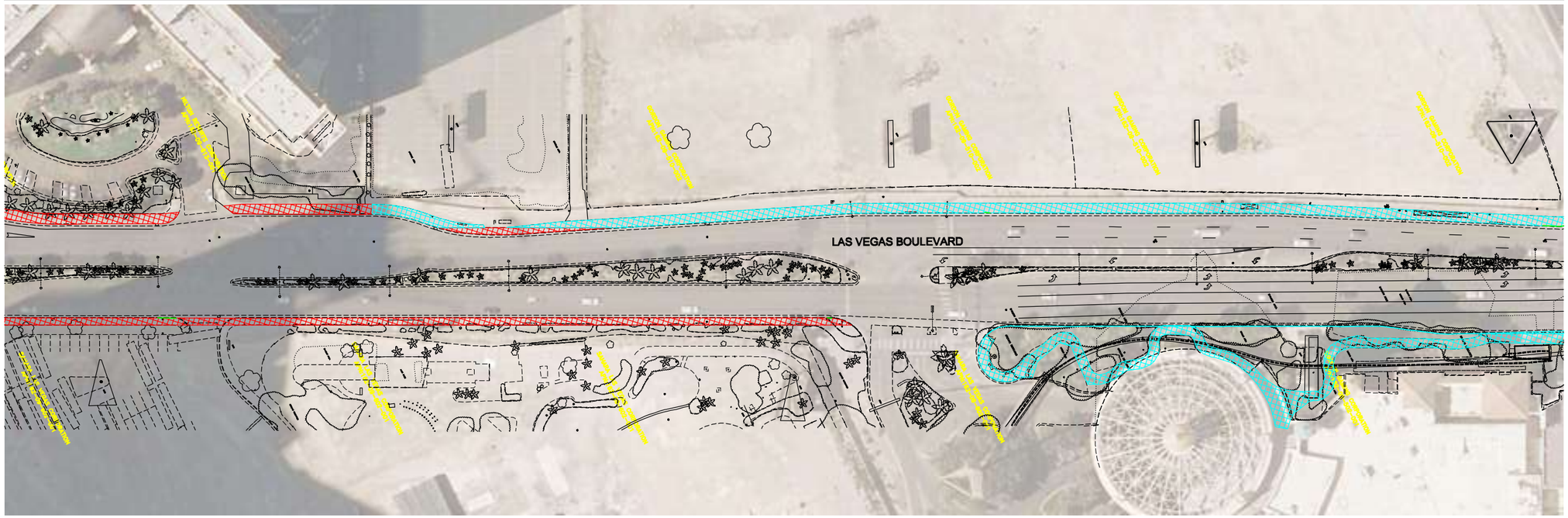
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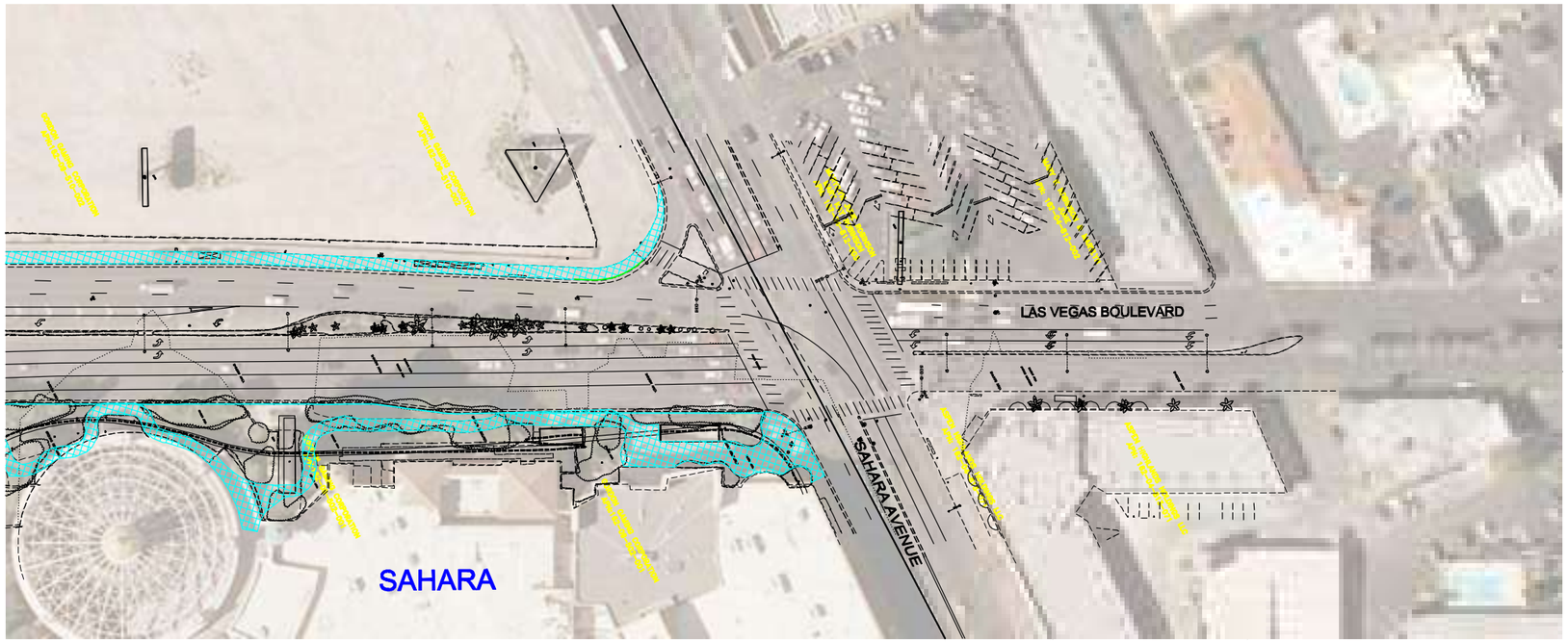
PEDESTRIAN STUDY - LAS VEGAS BOULEVARD
CONVENTION CENTER DRIVE TO HILTON GRAND VACATION
May 9, 2012

FIGURE 8

SHEET 8 OF 9

GRAPHIC SCALE
40 0 20 40 80
1 inch = 40 feet





LEGEND:

Public Right of Way

Pedestrian Easement

JOB No. 092061019

Kimley-Horn and Associates, Inc.

NOTE: SURVEY PER ACE REGIONAL RAPID TRANSIT SYSTEM, RESORT CORRIDOR, PRELIMINARY ALTERNATIVE ANALYSIS REPORT DATED JULY 2008. AERIAL IMAGE PER CLARK COUNTY DATED 2011.

PEDESTRIAN STUDY - LAS VEGAS BOULEVARD
HILTON GRAND VACATION TO SAHARA AVENUE
May 9, 2012

FIGURE 9

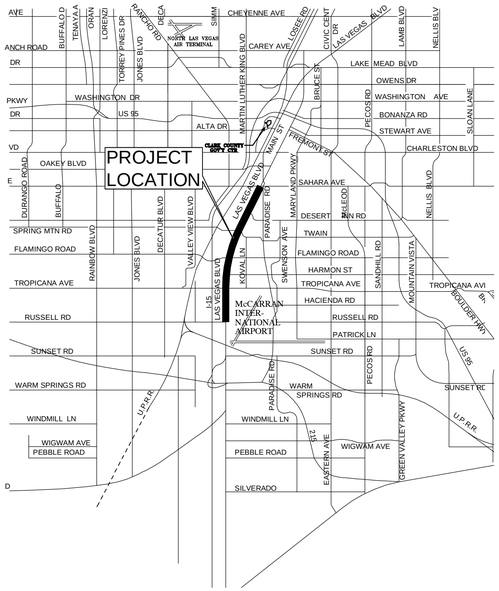
SHEET 9 OF 9

GRAPHIC SCALE
40 0 20 40 80
1 inch = 40 feet

EXHIBIT B

Kimley-Horn
and Associates, Inc.

DEPARTMENT OF PUBLIC WORKS



Vicinity Map

NOT TO SCALE

CLARK COUNTY NEVADA

2012

PEDESTRIAN STUDY LAS VEGAS BOULEVARD
RUSSELL ROAD TO SAHARA AVENUE

Index of Sheets

SHEET No.	DWG No.	SHEET NAME
1	GN-1	COVER SHEET
2	GN-2	SHEET INDEX
3 - 4	D-1 - D-2	DETAILS
5 - 24	C-1 - C-20	UPDATED NO OBSTRUCTIVE USE DRAWINGS

County Commissioners

Susan Brager, Chair
Steve Sisolak, Vice Chair
Larry Brown
Tom Collins
Chris Giunchigliani
Mary Beth Scow
Lawrence Weekly

FUNDED BY
CLARK COUNTY PUBLIC WORKS

County Manager

Donald G. Burnette

Director of Public Works

Approved:

Denis Cederburg

AGENCY	PLANS REVIEWED BY	DATE

DEPARTMENT OF PUBLIC WORKS	BY	DATE

REVISIONS NUMBER	DESCRIPTION	DATE

PRELIMINARY DRAWINGS

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FOR REVIEW

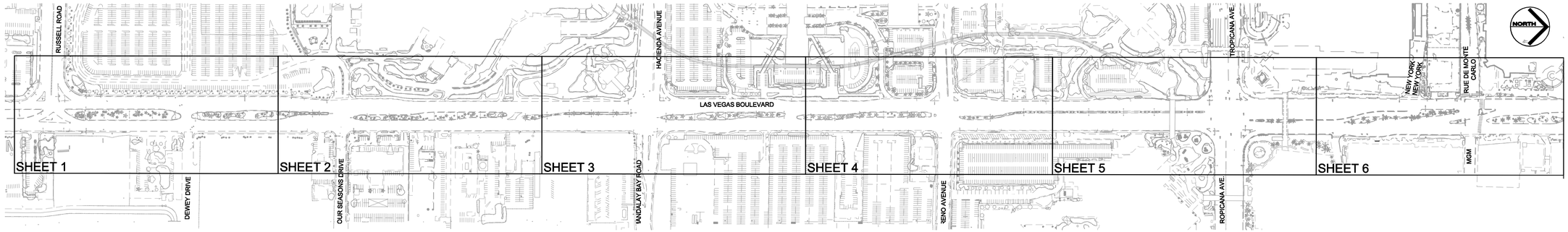
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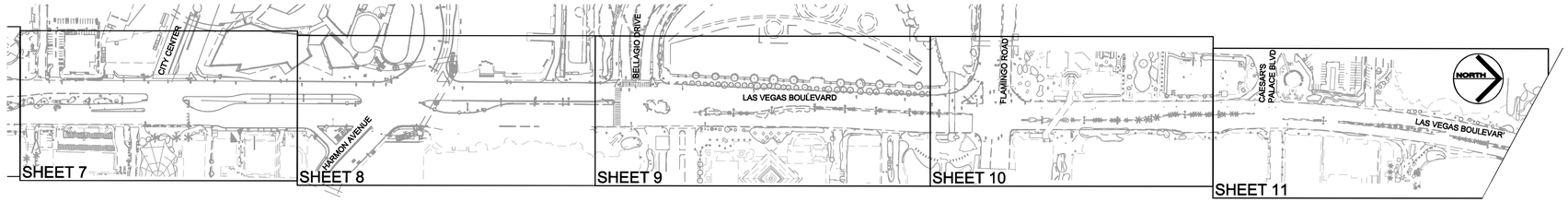
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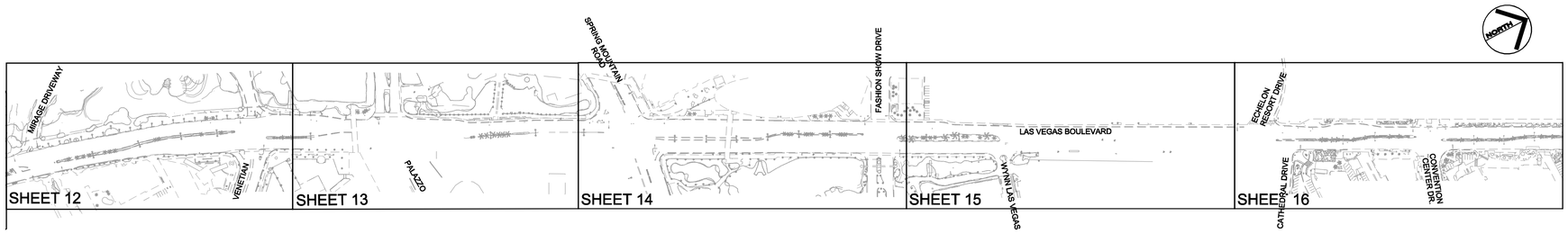
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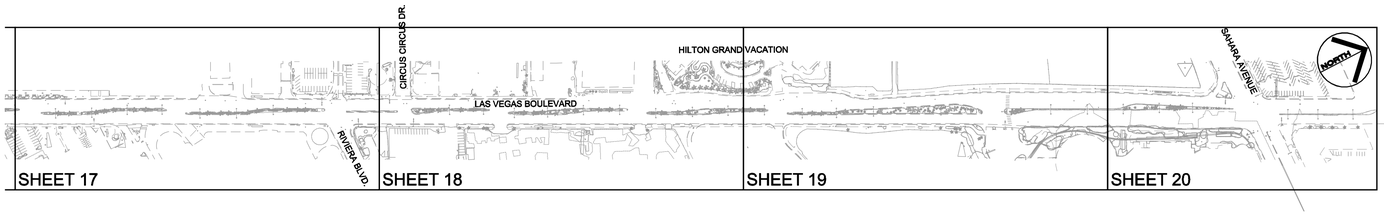
BID No.:

CC 1136









APPROVED

CLARK COUNTY NEVADA

PEDESTRIAN STUDY - LAS VEGAS BLVD

UPDATED NO OBSTRUCTIVE USE DRAWINGS

RUSSELL ROAD TO SAHARA AVENUE

CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

PRELIMINARY DRAWINGS

90%

FOR REVIEW

DESIGNED BY:	SRA
DRAWN BY:	SAS
CHECKED BY:	KWA
DATE:	Nov 17, 2012 – 2:32pm

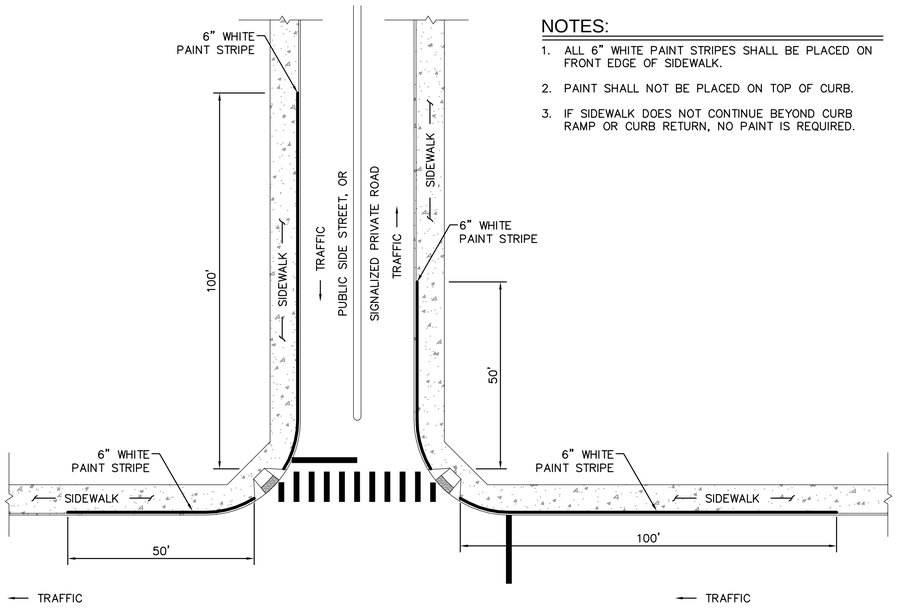
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FIELD BOOK	NONE

SHEET No

GN-2

SHEET 2 OF 24

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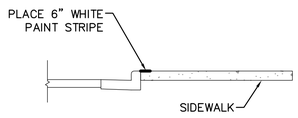


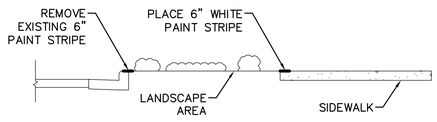
LAS VEGAS BOULEVARD

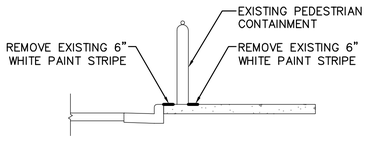
NOTES:

1. ALL 6" WHITE PAINT STRIPES SHALL BE PLACED ON FRONT EDGE OF SIDEWALK.
2. PAINT SHALL NOT BE PLACED ON TOP OF CURB.
3. IF SIDEWALK DOES NOT CONTINUE BEYOND CURB RAMP OR CURB RETURN, NO PAINT IS REQUIRED.

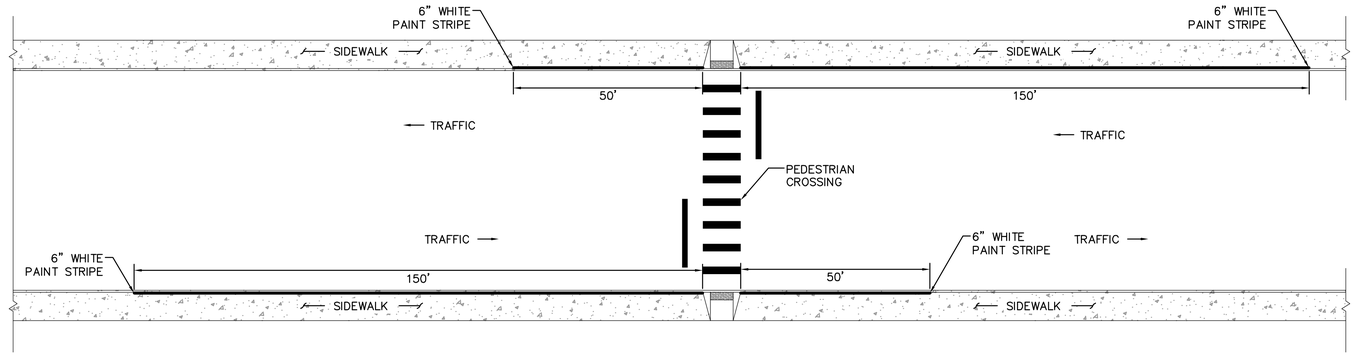
PUBLIC STREETS AND SIGNALIZED PRIVATE ROADS



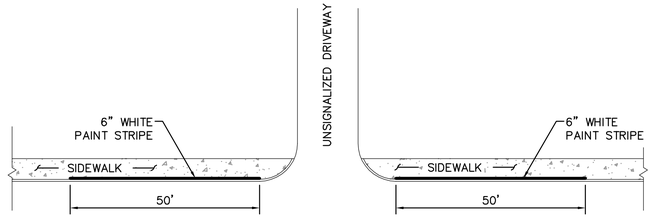




TYPICAL PAINT STRIPE LOCATIONS



MID-BLOCK CROSSING



UNSIGNALIZED DRIVEWAY

APPROVED	

PEDESTRIAN STUDY - LAS VEGAS BLVD

UPDATED NO OBSTRUCTIVE USE DRAWINGS
RUSSELL ROAD TO SAHARA AVENUE
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

PRELIMINARY DRAWINGS

90%
FOR REVIEW

DESIGNED BY:	SRA
DRAWN BY:	SAS
CHECKED BY:	KWA
DATE:	Nov 17, 2012 – 2:32pm

SCALE	
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VERT:	N/A
FIELD BOOK	NONE

SHEET No
D-1
SHEET 3 OF 24

Date: November 17, 2012 – 2:32pm / User: devin.moore
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2.0" Radius, 0.3" Border, 0.5" Indent, Red on White;
[RESORT DISTRICT:] B specified length; [NO OBSTRUCTIVE USES] B specified length;
[PERMITTED ON PUBLIC] B specified length; [SIDEWALKS AT LOCATIONS] B specified length;
[DESIGNATED BY A] B specified length; [WHITE STRIPE] B specified length;
[PURSUANT TO CLARK COUNTY CODE CHAPTER 16.11] B specified length;

ORDINANCE SIGN DETAIL

Date: November 17, 2012 - 2:32pm / User: devin.moore
Path: K:\LAV_Public Trans\092061019 - Clark County Strip Ped Study\CADD\Plan Sheets\092061019_DT.dwg / Xref: X092061019_TB
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PEDESTRIAN STUDY - LAS VEGAS BLVD

UPDATED NO OBSTRUCTIVE USE DRAWINGS
RUSSELL ROAD TO SAHARA AVENUE
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

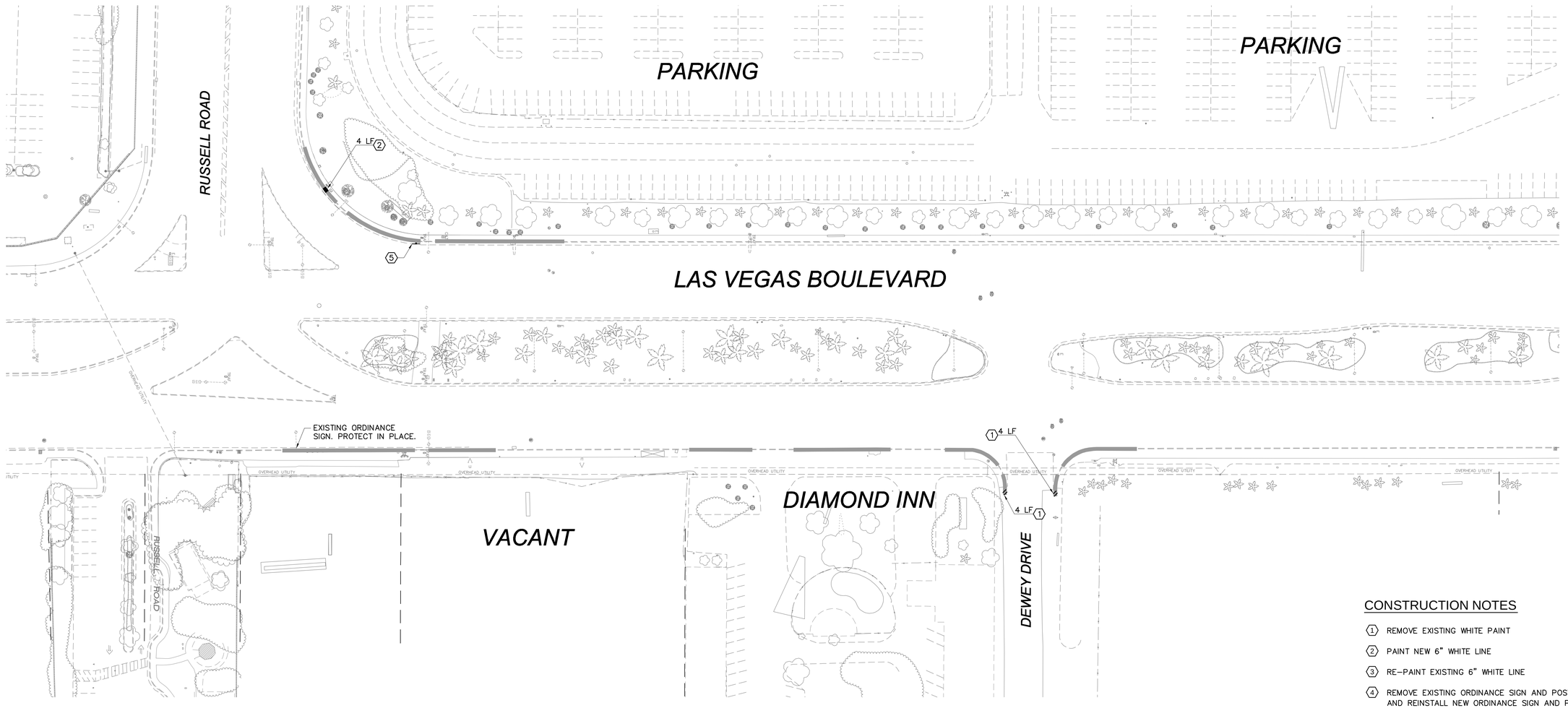
PRELIMINARY DRAWINGS

90%
FOR REVIEW

DESIGNED BY: SRA
DRAWN BY: SAS
CHECKED BY: KWA
DATE: Nov 17, 2012 - 2:32pm

SCALE
HORIZ: AS SHOWN
VERT: N/A
FIELD BOOK NONE

SHEET No
D-2
SHEET 4 OF 24



CONSTRUCTION NOTES

1. REMOVE EXISTING WHITE PAINT
2. PAINT NEW 6" WHITE LINE
3. RE–PAINT EXISTING 6" WHITE LINE
4. REMOVE EXISTING ORDINANCE SIGN AND POST AND REINSTALL NEW ORDINANCE SIGN AND POST PER CCAUSD No. 249.1
5. INSTALL NEW ORDINANCE POST AND SIGN PER DETAIL ON SHEET D–2 AND CCAUSD No. 249.1
6. REMOVE EXISTING ORDINANCE SIGN PANEL AND INSTALL NEW ORDINANCE SIGN PANEL

LEGEND

- EXISTING TOP OF CURB WHITE LINE
- INSTALL 6" TOP OF CURB WHITE LINE
- REMOVE EXISTING TOP OF CURB WHITE LINE
- [1] INACTIVE DRIVEWAY

NOTE:
PROTECT EXISTING 6" WHITE LINE UNLESS NOTED OTHERWISE

NOTE:
TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS WAS DEVELOPED BASED ON A SEARCH OF BEST AVAILABLE RECORDS AND INFORMATION. LOCATIONS AND CONDITION OF IMPROVEMENTS SHOWN ARE SUBJECT TO CHANGE AND SHALL BE VERIFIED IN THE FIELD.

BENCHMARK
NO SURVEY

BASIS OF BEARING
NO SURVEY

NORTH

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 ft.

APPROVED

PEDESTRIAN STUDY - LAS VEGAS BLVD

UPDATED NO OBSTRUCTIVE USE DRAWINGS
RUSSELL ROAD TO SAHARA AVENUE
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

PRELIMINARY DRAWINGS
90%
FOR REVIEW

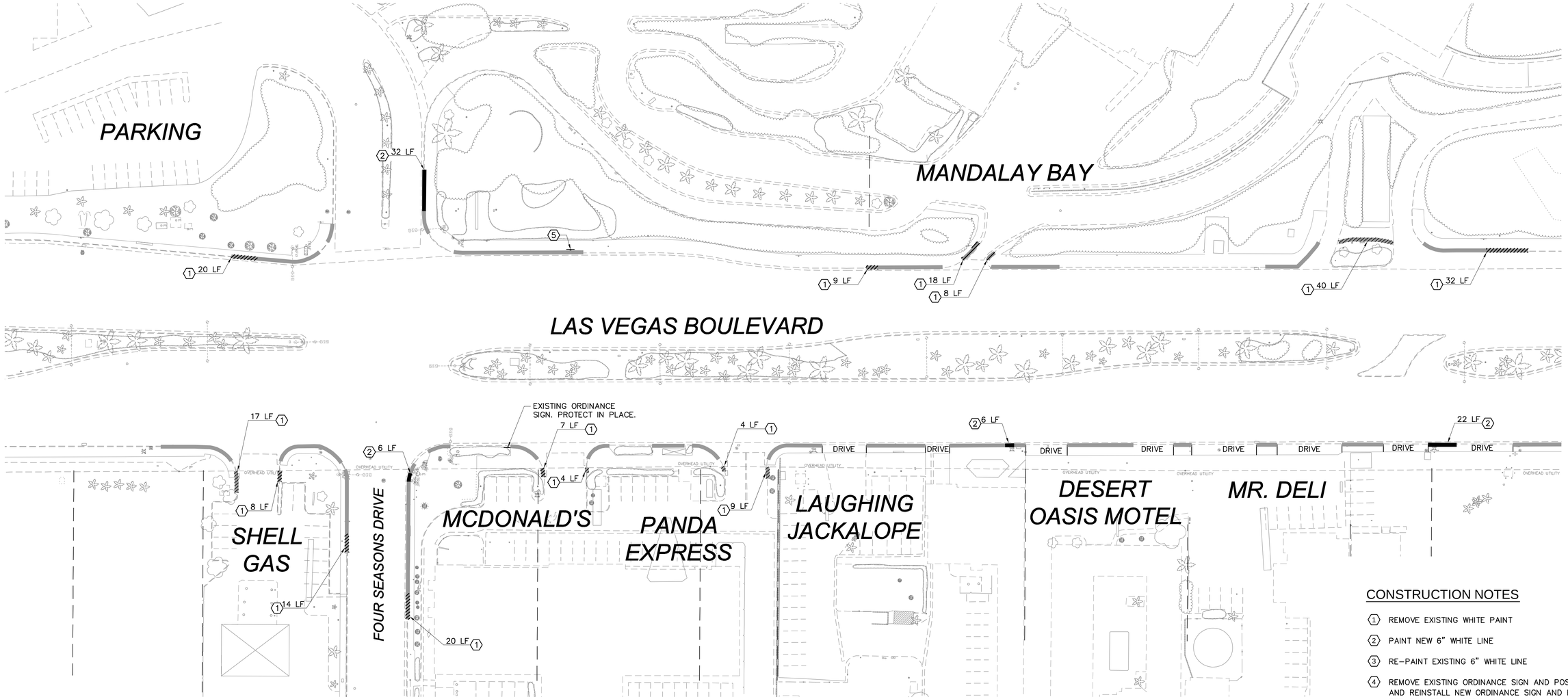
DESIGNED BY: SRA
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CHECKED BY: KWA
DATE: Nov 17, 2012 – 3:45pm

SCALE
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VERT: N/A
FIELD BOOK NONE

SHEET No
C-1
SHEET 5 OF 24

Date: November 17, 2012 – 3:45pm / User: devin.moore
Path: K:\LAV_PublicTrans\X092061019 – Clark County Strip Ped Study\CADD\Plan Sheets\X092061019_Russell to Trop Jan 09.dwg / Xref: X092061019_TB;X092061019_AE_2011_RussellToTropicana;x092061019_topoupdated;DI drawing;Encore Offsites;Palazzo entrance;X092061019_xCityCenter_MP–010;x092061019_whitelinesnew
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CONSTRUCTION NOTES

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2. PAINT NEW 6" WHITE LINE
3. RE-PAINT EXISTING 6" WHITE LINE
4. REMOVE EXISTING ORDINANCE SIGN AND POST AND REINSTALL NEW ORDINANCE SIGN AND POST PER CCAUSD No. 249.1
5. INSTALL NEW ORDINANCE POST AND SIGN PER DETAIL ON SHEET D-2 AND CCAUSD No. 249.1
6. REMOVE EXISTING ORDINANCE SIGN PANEL AND INSTALL NEW ORDINANCE SIGN PANEL

LEGEND

- EXISTING TOP OF CURB WHITE LINE
- INSTALL 6" TOP OF CURB WHITE LINE
- REMOVE EXISTING TOP OF CURB WHITE LINE
- [I] INACTIVE DRIVEWAY

NOTE:
PROTECT EXISTING 6" WHITE LINE UNLESS NOTED OTHERWISE

NOTE:
TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS WAS DEVELOPED BASED ON A SEARCH OF BEST AVAILABLE RECORDS AND INFORMATION. LOCATIONS AND CONDITION OF IMPROVEMENTS SHOWN ARE SUBJECT TO CHANGE AND SHALL BE VERIFIED IN THE FIELD.

NORTH

BENCHMARK
NO SURVEY

BASIS OF BEARING
NO SURVEY

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 ft.

APPROVED

PEDESTRIAN STUDY - LAS VEGAS BLVD

UPDATED NO OBSTRUCTIVE USE DRAWINGS
RUSSELL ROAD TO SAHARA AVENUE
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

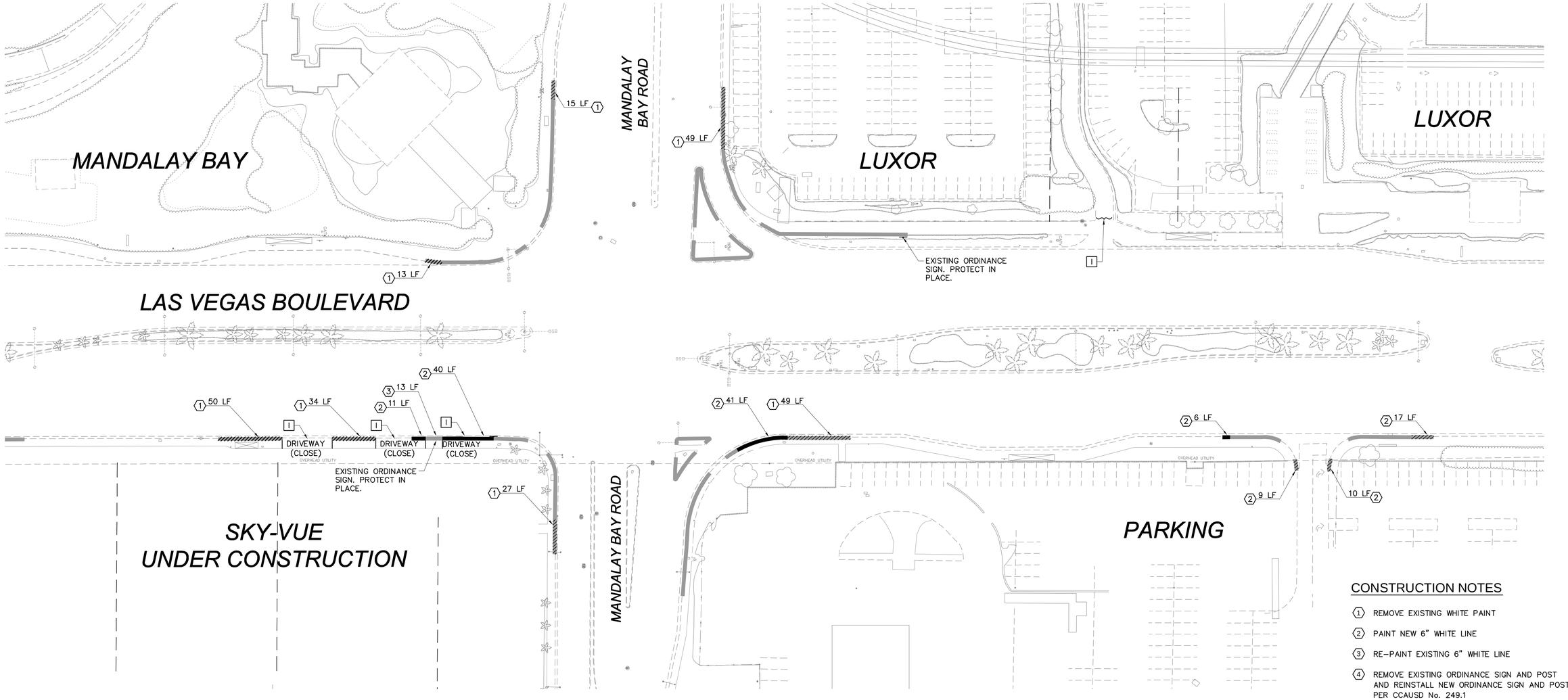
PRELIMINARY DRAWINGS
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FOR REVIEW

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DRAWN BY: SAS
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DATE: Nov 17, 2012 - 2:32pm

SCALE
HORIZ: AS SHOWN
VERT: N/A
FIELD BOOK NONE

SHEET No
C-2
SHEET 6 OF 24

CC 1141



CONSTRUCTION NOTES

1. REMOVE EXISTING WHITE PAINT
2. PAINT NEW 6" WHITE LINE
3. RE-PAINT EXISTING 6" WHITE LINE
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LEGEND

- EXISTING TOP OF CURB WHITE LINE
- INSTALL 6" TOP OF CURB WHITE LINE
- REMOVE EXISTING TOP OF CURB WHITE LINE
- I — INACTIVE DRIVEWAY

NOTE:
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NORTH

BENCHMARK
NO SURVEY

BASIS OF BEARING
NO SURVEY

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 ft.

APPROVED

CLARK COUNTY NEVADA

PEDESTRIAN STUDY - LAS VEGAS BLVD

UPDATED NO OBSTRUCTIVE USE DRAWINGS
RUSSELL ROAD TO SAHARA AVENUE
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

PRELIMINARY DRAWINGS
90%
FOR REVIEW

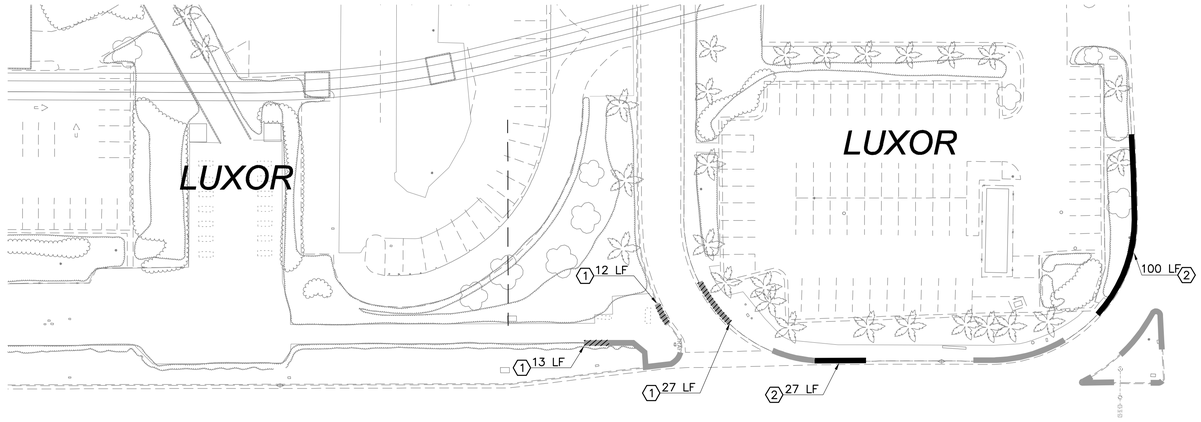
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DRAWN BY:	SAS
CHECKED BY:	KWA
DATE:	Nov 17, 2012 - 2:32pm

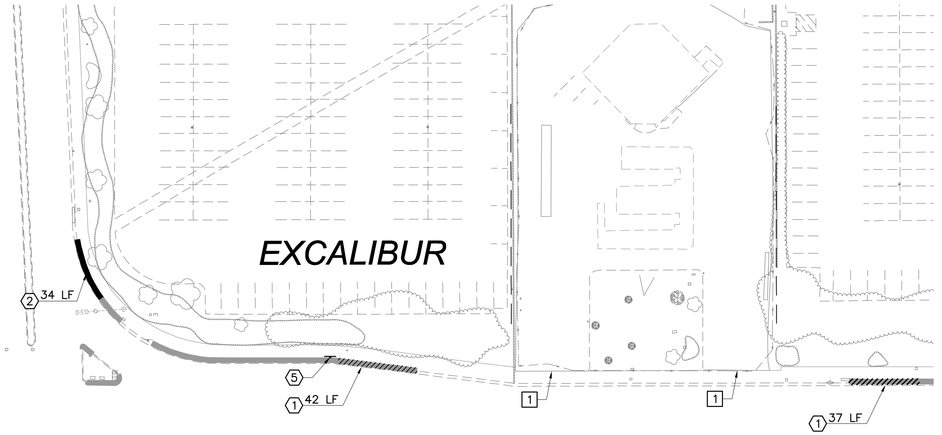
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HORIZ:	AS SHOWN
VERT:	N/A
FIELD BOOK	NONE

SHEET No
C-3
SHEET 7 OF 24

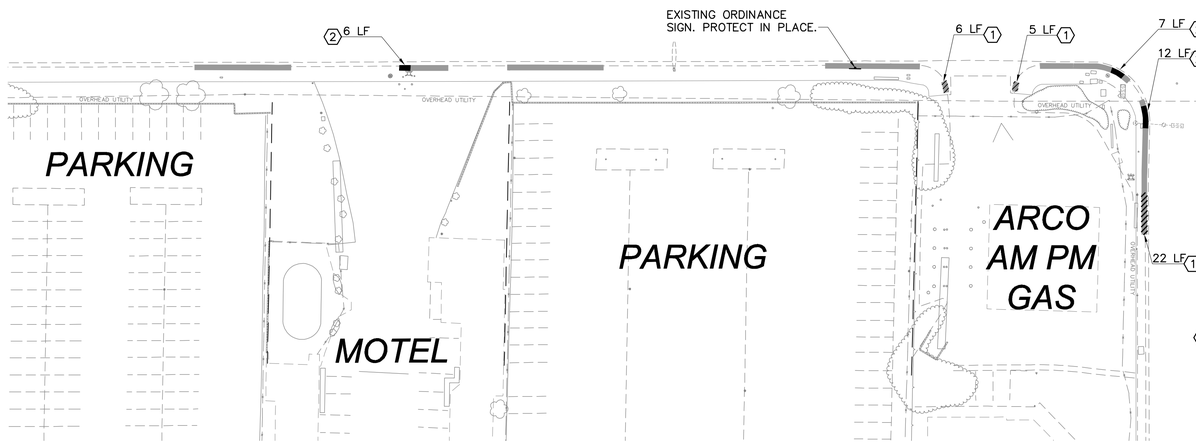
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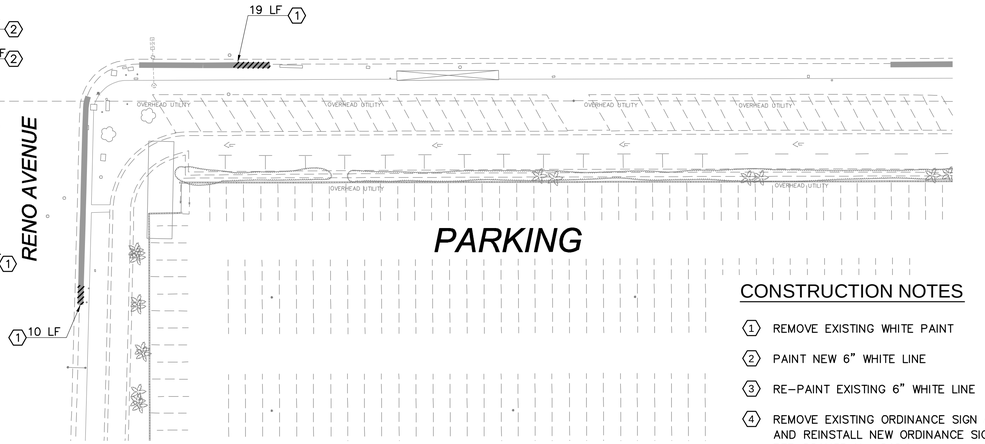
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CONSTRUCTION NOTES

1. REMOVE EXISTING WHITE PAINT
2. PAINT NEW 6" WHITE LINE
3. RE-PAINT EXISTING 6" WHITE LINE
4. REMOVE EXISTING ORDINANCE SIGN AND POST AND REINSTALL NEW ORDINANCE SIGN AND POST PER CCAUSD No. 249.1
5. INSTALL NEW ORDINANCE POST AND SIGN PER DETAIL ON SHEET D-2 AND CCAUSD No. 249.1
6. REMOVE EXISTING ORDINANCE SIGN PANEL AND INSTALL NEW ORDINANCE SIGN PANEL

LEGEND

- EXISTING TOP OF CURB WHITE LINE
- INSTALL 6" TOP OF CURB WHITE LINE
- REMOVE EXISTING TOP OF CURB WHITE LINE
- [I] INACTIVE DRIVEWAY

NOTE:
PROTECT EXISTING 6" WHITE LINE UNLESS NOTED OTHERWISE

NOTE:
TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS WAS DEVELOPED BASED ON A SEARCH OF BEST AVAILABLE RECORDS AND INFORMATION. LOCATIONS AND CONDITION OF IMPROVEMENTS SHOWN ARE SUBJECT TO CHANGE AND SHALL BE VERIFIED IN THE FIELD.

BENCHMARK
NO SURVEY

BASIS OF BEARING
NO SURVEY

NORTH

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 ft.

APPROVED

PEDESTRIAN STUDY - LAS VEGAS BLVD

UPDATED NO OBSTRUCTIVE USE DRAWINGS
RUSSELL ROAD TO SAHARA AVENUE
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

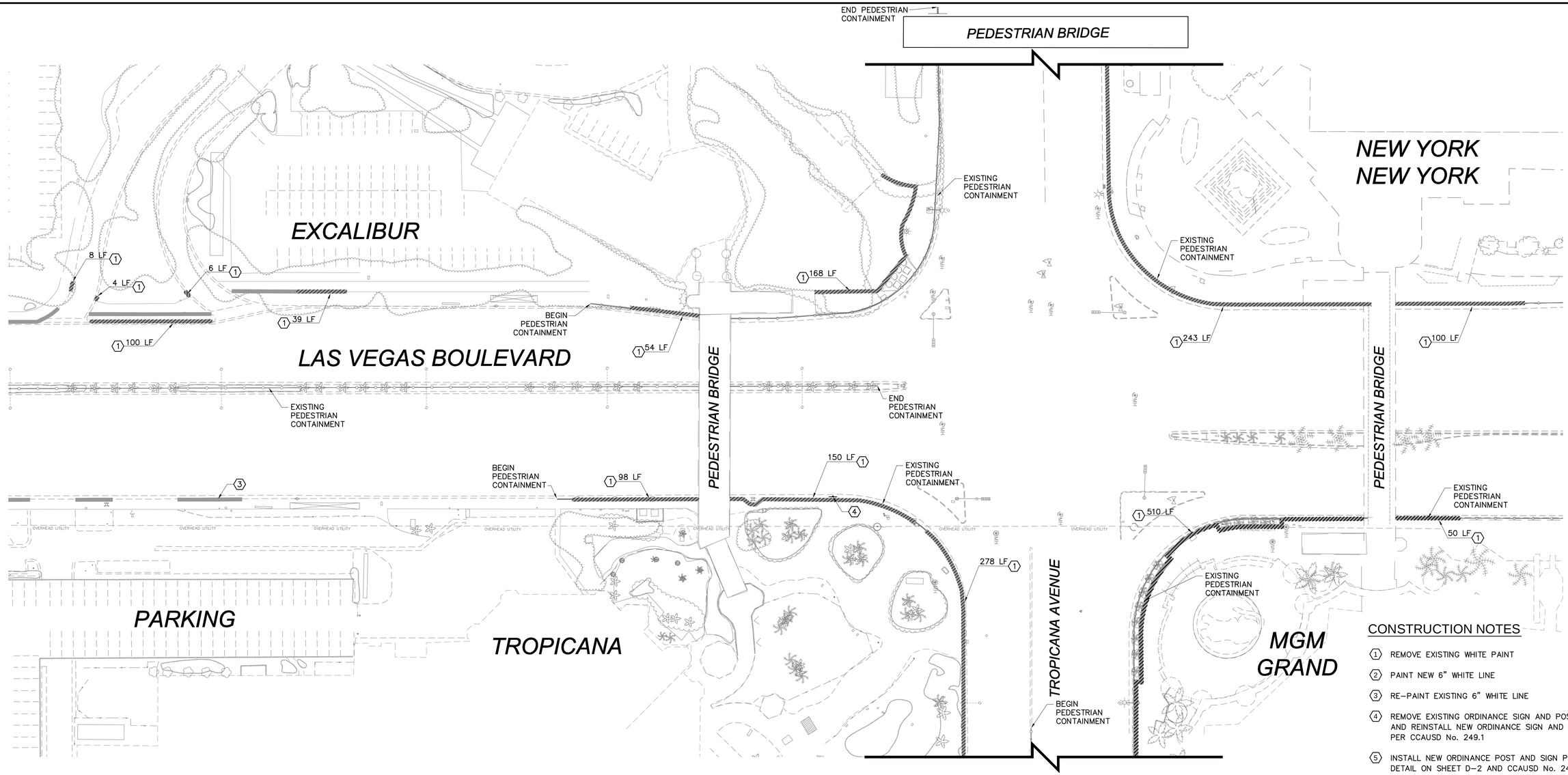
PRELIMINARY DRAWINGS
90%
FOR REVIEW

DESIGNED BY: SRA
DRAWN BY: SAS
CHECKED BY: KWA
DATE: Nov 17, 2012 - 2:33pm

SCALE
HORIZ: AS SHOWN
VERT: N/A
FIELD BOOK NONE

SHEET No
C-4
SHEET 8 OF 24

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LEGEND

- EXISTING TOP OF CURB WHITE LINE
- INSTALL 6" TOP OF CURB WHITE LINE
- REMOVE EXISTING TOP OF CURB WHITE LINE
- [1] INACTIVE DRIVEWAY

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BENCHMARK
NO SURVEY

BASIS OF BEARING
NO SURVEY

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 ft.

APPROVED

PEDESTRIAN STUDY - LAS VEGAS BLVD

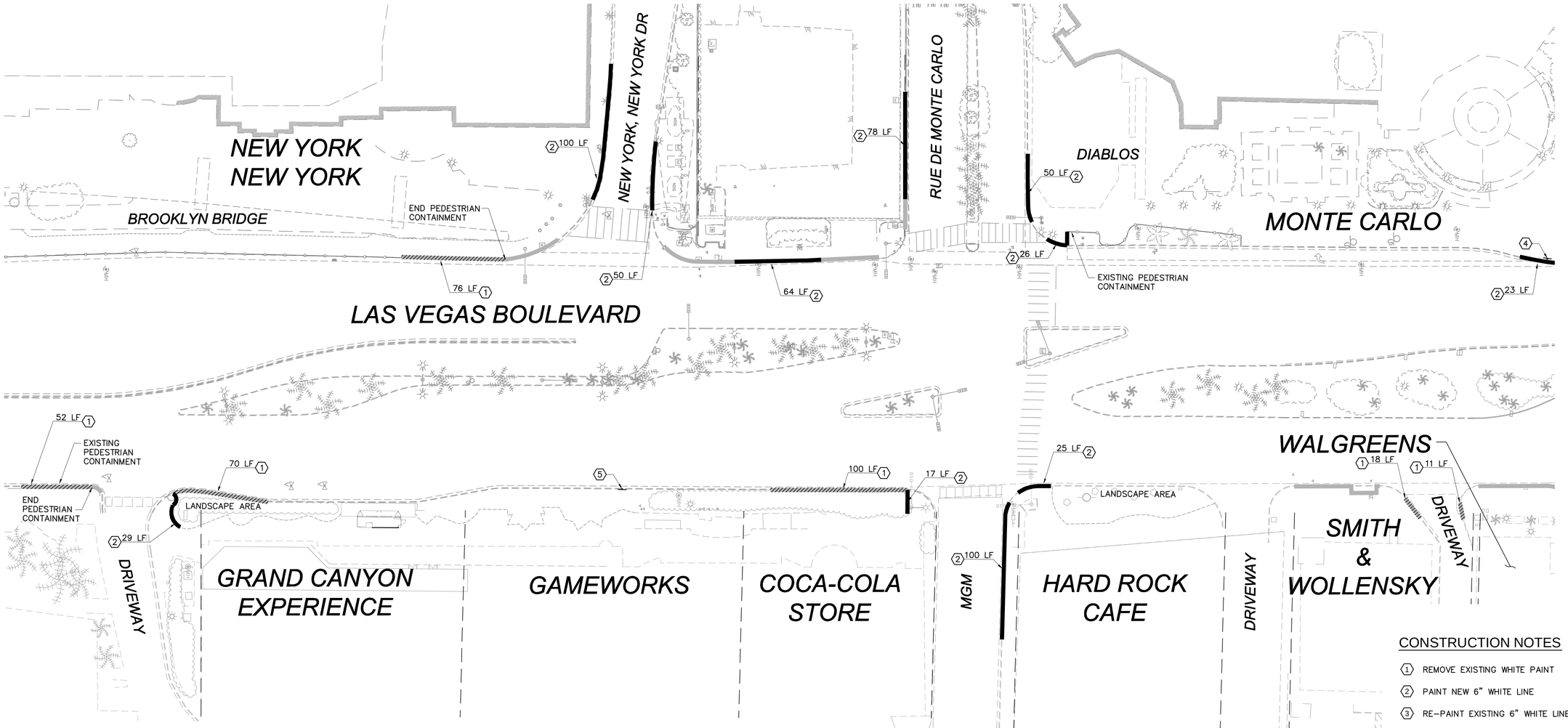
UPDATED NO OBSTRUCTIVE USE DRAWINGS
RUSSELL ROAD TO SAHARA AVENUE
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

PRELIMINARY DRAWINGS
90%
FOR REVIEW

DESIGNED BY:	SRA
DRAWN BY:	SAS
CHECKED BY:	KWA
DATE:	Nov 17, 2012 - 2:33pm

SCALE	
HORIZ:	AS SHOWN
VERT:	N/A
FIELD BOOK	NONE

SHEET No
C-5
SHEET 9 OF 24



CONSTRUCTION NOTES

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3. RE-PAINT EXISTING 6" WHITE LINE
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5. INSTALL NEW ORDINANCE POST AND SIGN PER DETAIL ON SHEET D-2 AND CCAUSD No. 249.1
6. REMOVE EXISTING ORDINANCE SIGN PANEL AND INSTALL NEW ORDINANCE SIGN PANEL

LEGEND

- EXISTING TOP OF CURB WHITE LINE
- INSTALL 6" TOP OF CURB WHITE LINE
- REMOVE EXISTING TOP OF CURB WHITE LINE
- [I] INACTIVE DRIVEWAY

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NORTH

BENCHMARK
NO SURVEY

BASIS OF BEARING
NO SURVEY

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 ft.

APPROVED

PEDESTRIAN STUDY - LAS VEGAS BLVD

UPDATED NO OBSTRUCTIVE USE DRAWINGS
RUSSELL ROAD TO SAHARA AVENUE
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

PRELIMINARY DRAWINGS
90%
FOR REVIEW

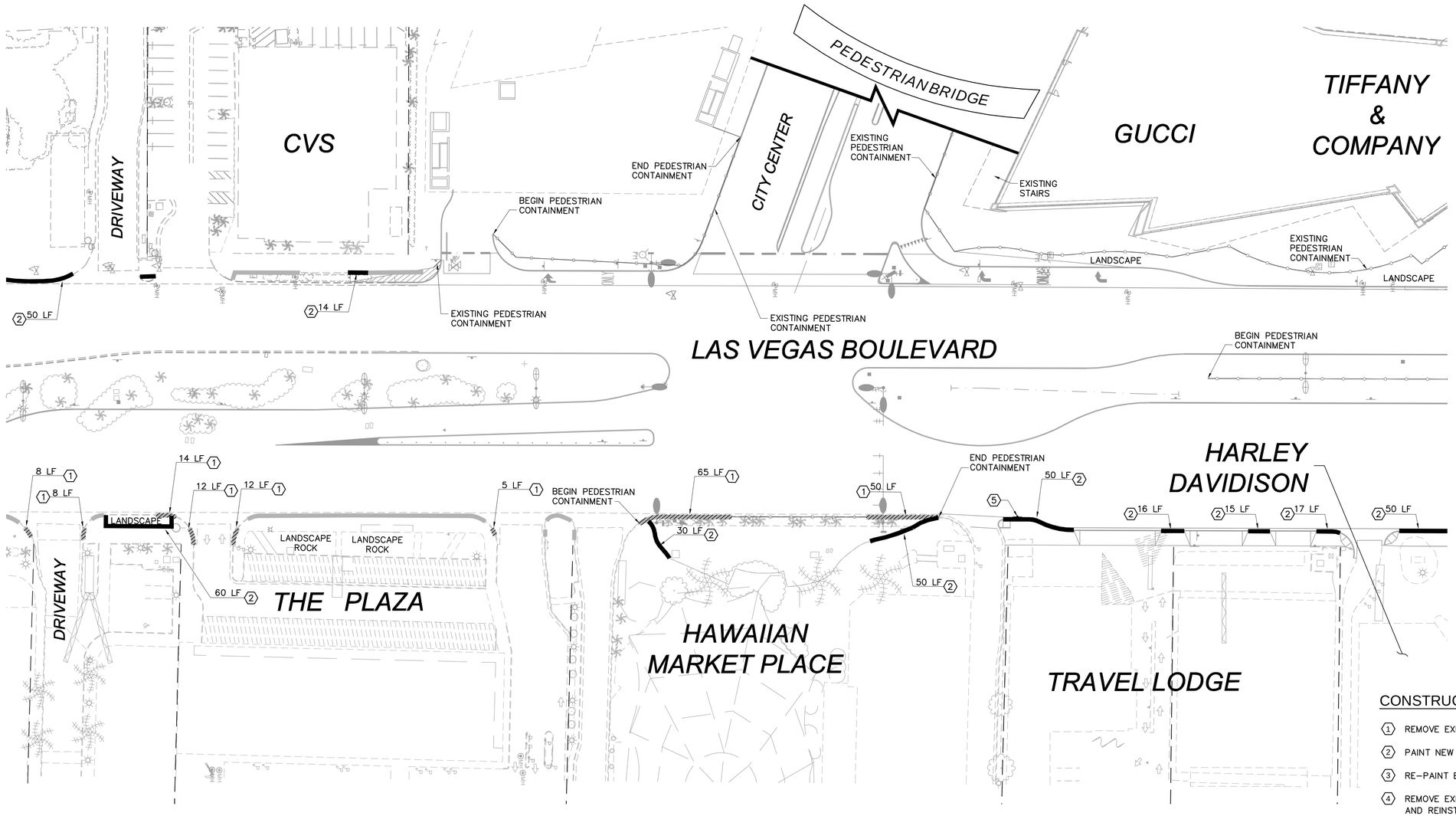
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CHECKED BY: KWA
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SCALE
HORIZ: AS SHOWN
VERT: N/A
FIELD BOOK NONE

SHEET No
C-6
SHEET 10OF 24

CC 1145

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LEGEND

- EXISTING TOP OF CURB WHITE LINE
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- I — INACTIVE DRIVEWAY

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BENCHMARK
NO SURVEY

BASIS OF BEARING
NO SURVEY

NORTH

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 ft.

APPROVED

PEDESTRIAN STUDY - LAS VEGAS BLVD

UPDATED NO OBSTRUCTIVE USE DRAWINGS
RUSSELL ROAD TO SAHARA AVENUE
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

PRELIMINARY DRAWINGS
90%
FOR REVIEW

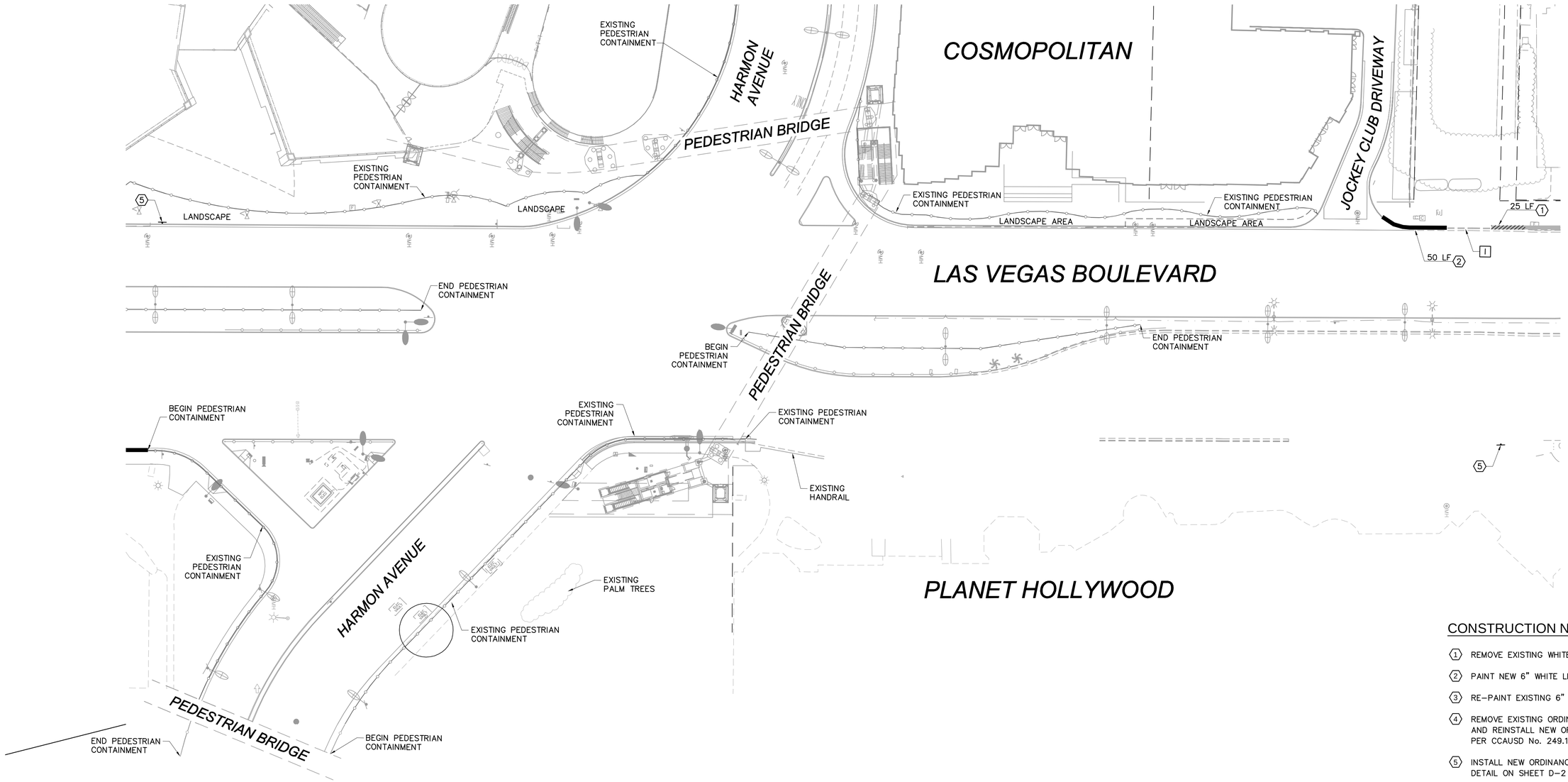
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VERT: N/A
FIELD BOOK NONE

SHEET No
C-7
SHEET 11OF 24

CC 1146

Date: November 17, 2012 - 2:34pm / User: devin.moore
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LEGEND

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- INSTALL 6" TOP OF CURB WHITE LINE
- REMOVE EXISTING TOP OF CURB WHITE LINE
- I — INACTIVE DRIVEWAY

CONSTRUCTION NOTES

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NOTE:
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BENCHMARK
NO SURVEY

BASIS OF BEARING
NO SURVEY

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 ft.

APPROVED

PEDESTRIAN STUDY - LAS VEGAS BLVD

UPDATED NO OBSTRUCTIVE USE DRAWINGS
RUSSELL ROAD TO SAHARA AVENUE
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

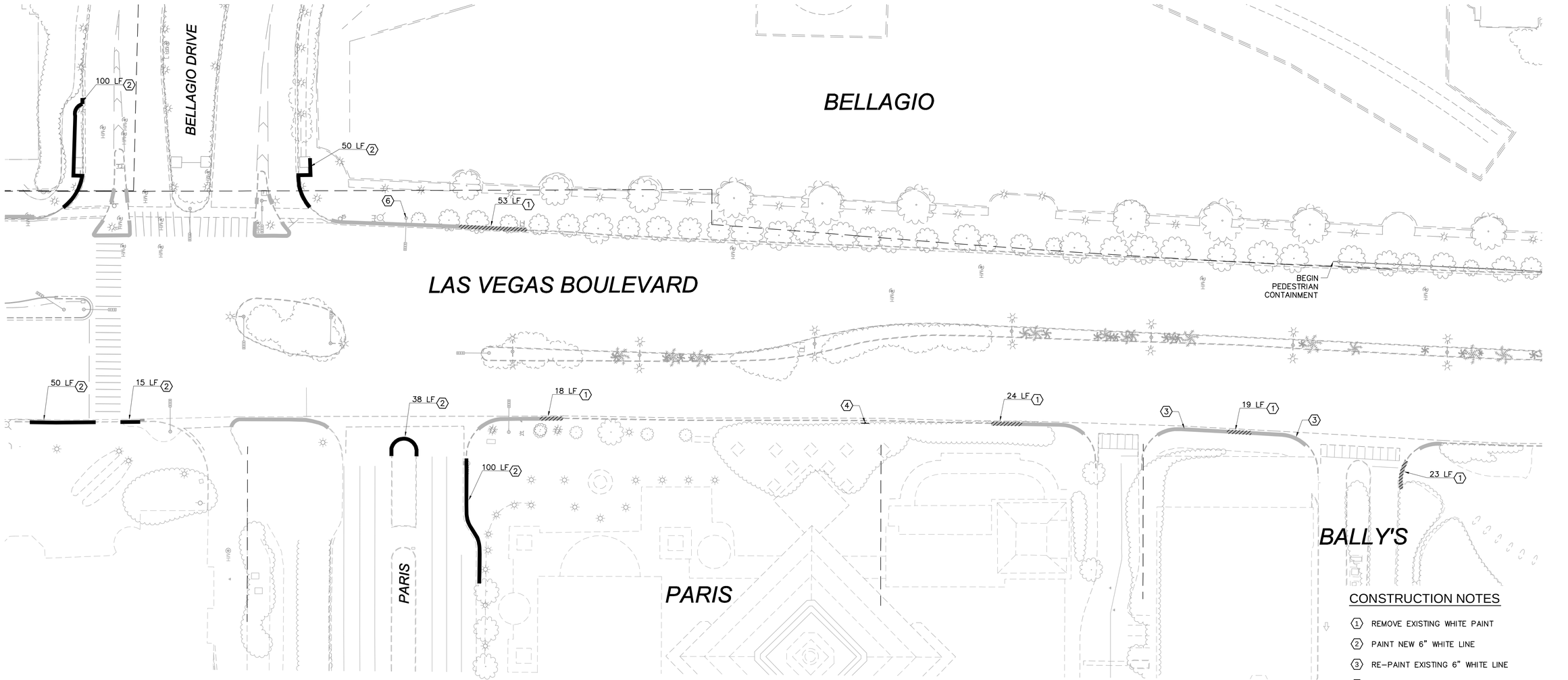
PRELIMINARY DRAWINGS
90%
FOR REVIEW

DESIGNED BY: SRA
DRAWN BY: SAS
CHECKED BY: KWA
DATE: Nov 17, 2012 - 2:34pm

SCALE
HORIZ: AS SHOWN
VERT: N/A
FIELD BOOK NONE

SHEET No
C-8
SHEET 12OF 24

Date: November 17, 2012 - 2:34pm / User: devin.monce
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NORTH

LEGEND

- EXISTING TOP OF CURB WHITE LINE
- INSTALL 6" TOP OF CURB WHITE LINE
- REMOVE EXISTING TOP OF CURB WHITE LINE
- [I] INACTIVE DRIVEWAY

NOTE:
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BENCHMARK
NO SURVEY

BASIS OF BEARING
NO SURVEY

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 ft.

APPROVED

PEDESTRIAN STUDY - LAS VEGAS BLVD

UPDATED NO OBSTRUCTIVE USE DRAWINGS
RUSSELL ROAD TO SAHARA AVENUE
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

PRELIMINARY DRAWINGS
90%
FOR REVIEW

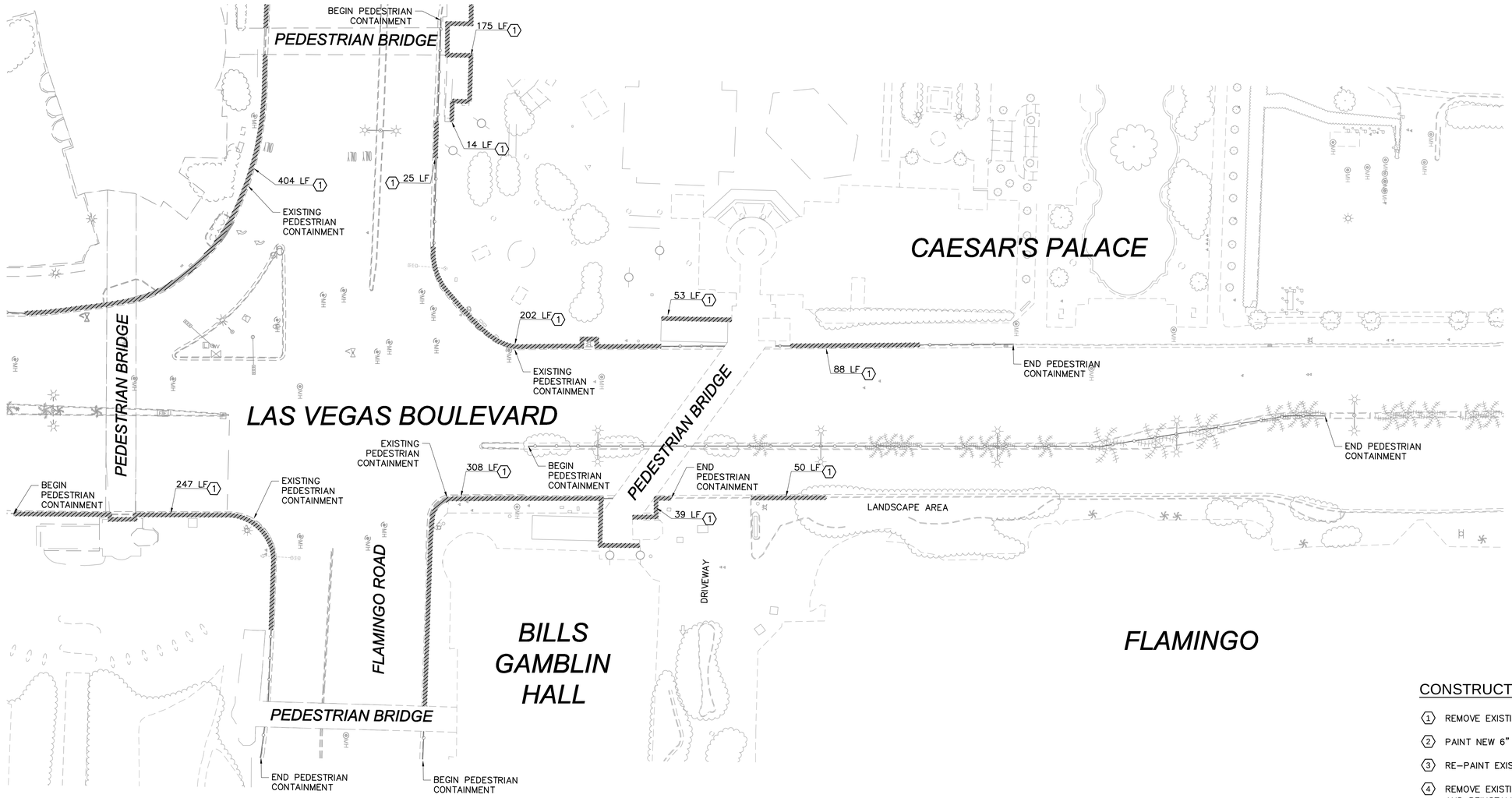
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SCALE
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VERT: N/A
FIELD BOOK NONE

SHEET No
C-9
SHEET 13OF 24

CC 1148

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LEGEND

- EXISTING TOP OF CURB WHITE LINE
- INSTALL 6" TOP OF CURB WHITE LINE
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- [I] INACTIVE DRIVEWAY

NOTE:
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BENCHMARK
NO SURVEY

BASIS OF BEARING
NO SURVEY

NORTH

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 ft.

APPROVED

PEDESTRIAN STUDY - LAS VEGAS BLVD

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RUSSELL ROAD TO SAHARA AVENUE
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

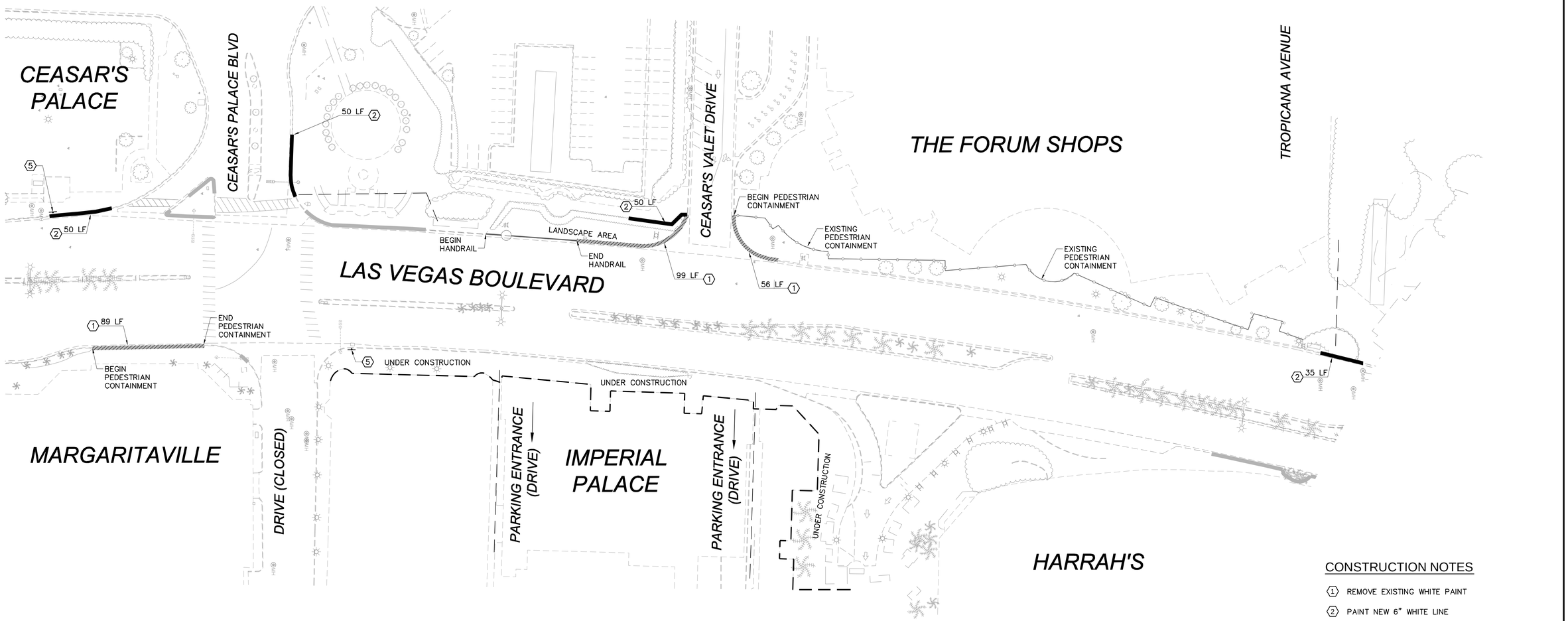
PRELIMINARY DRAWINGS
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DESIGNED BY: SRA
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CHECKED BY: KWA
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SCALE
HORIZ: AS SHOWN
VERT: N/A
FIELD BOOK NONE

SHEET No
C-10
SHEET 14OF 24

Date: November 17, 2012 - 2:35pm / User: devin.moore
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LEGEND

- EXISTING TOP OF CURB WHITE LINE
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BENCHMARK
NO SURVEY

BASIS OF BEARING
NO SURVEY

NORTH

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 ft.

APPROVED

CLARK COUNTY NEVADA

PEDESTRIAN STUDY - LAS VEGAS BLVD

UPDATED NO OBSTRUCTIVE USE DRAWINGS
RUSSELL ROAD TO SAHARA AVENUE
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

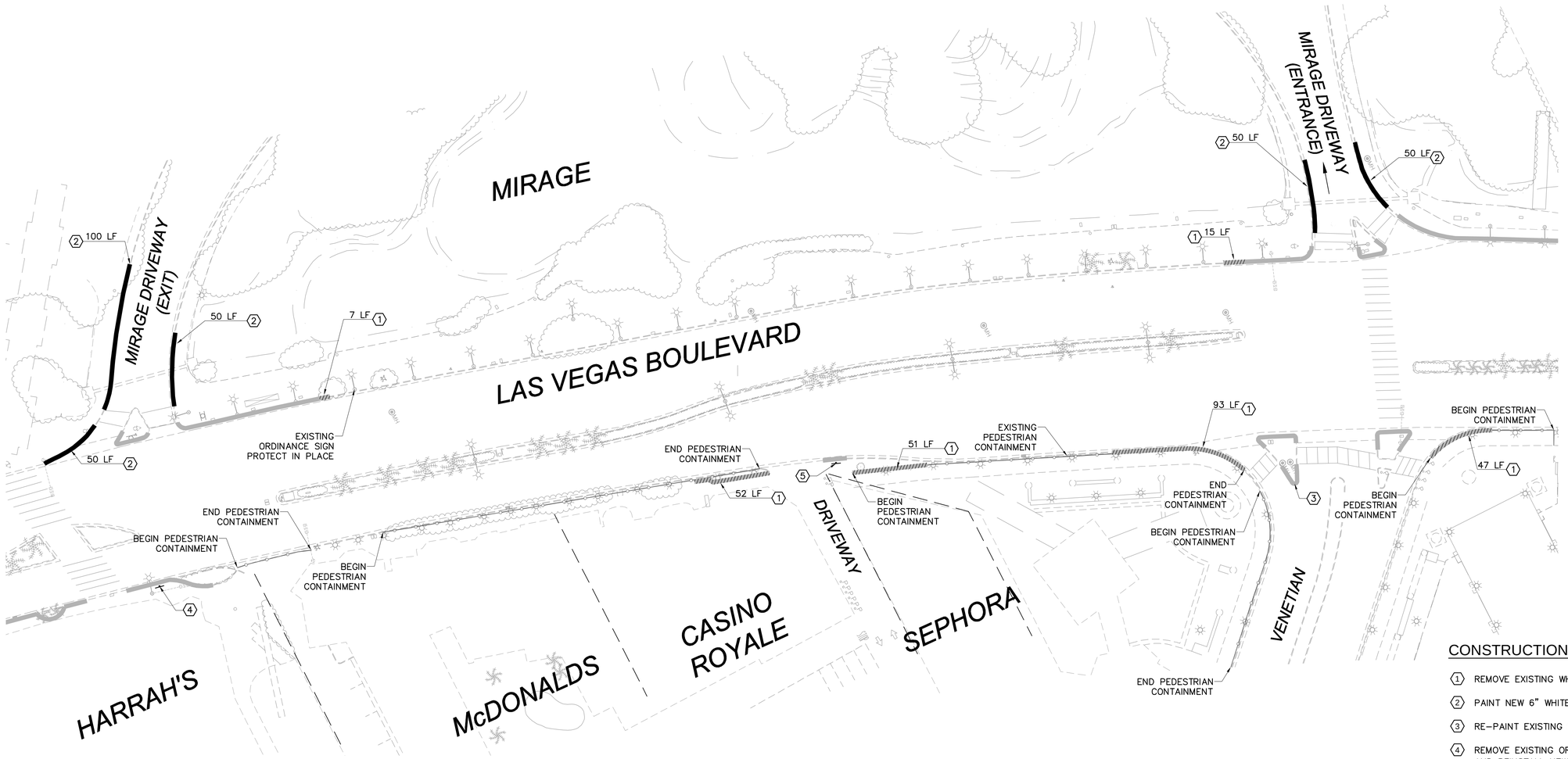
PRELIMINARY DRAWINGS
90%
FOR REVIEW

DESIGNED BY: SRA
DRAWN BY: SAS
CHECKED BY: KWA
DATE: Nov 17, 2012 - 2:36pm

SCALE
HORIZ: AS SHOWN
VERT: N/A
FIELD BOOK NONE

SHEET No
C-11
SHEET 15OF 24

Date: November 17, 2012 - 2:36pm / User: devin.moore
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6. REMOVE EXISTING ORDINANCE SIGN PANEL AND INSTALL NEW ORDINANCE SIGN PANEL

NORTH

LEGEND

- EXISTING TOP OF CURB WHITE LINE
- INSTALL 6" TOP OF CURB WHITE LINE
- REMOVE EXISTING TOP OF CURB WHITE LINE
- [I] INACTIVE DRIVEWAY

NOTE:
PROTECT EXISTING 6" WHITE LINE UNLESS NOTED OTHERWISE

NOTE:
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BENCHMARK
NO SURVEY

BASIS OF BEARING
NO SURVEY

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 ft.

APPROVED

PEDESTRIAN STUDY - LAS VEGAS BLVD

UPDATED NO OBSTRUCTIVE USE DRAWINGS
RUSSELL ROAD TO SAHARA AVENUE
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

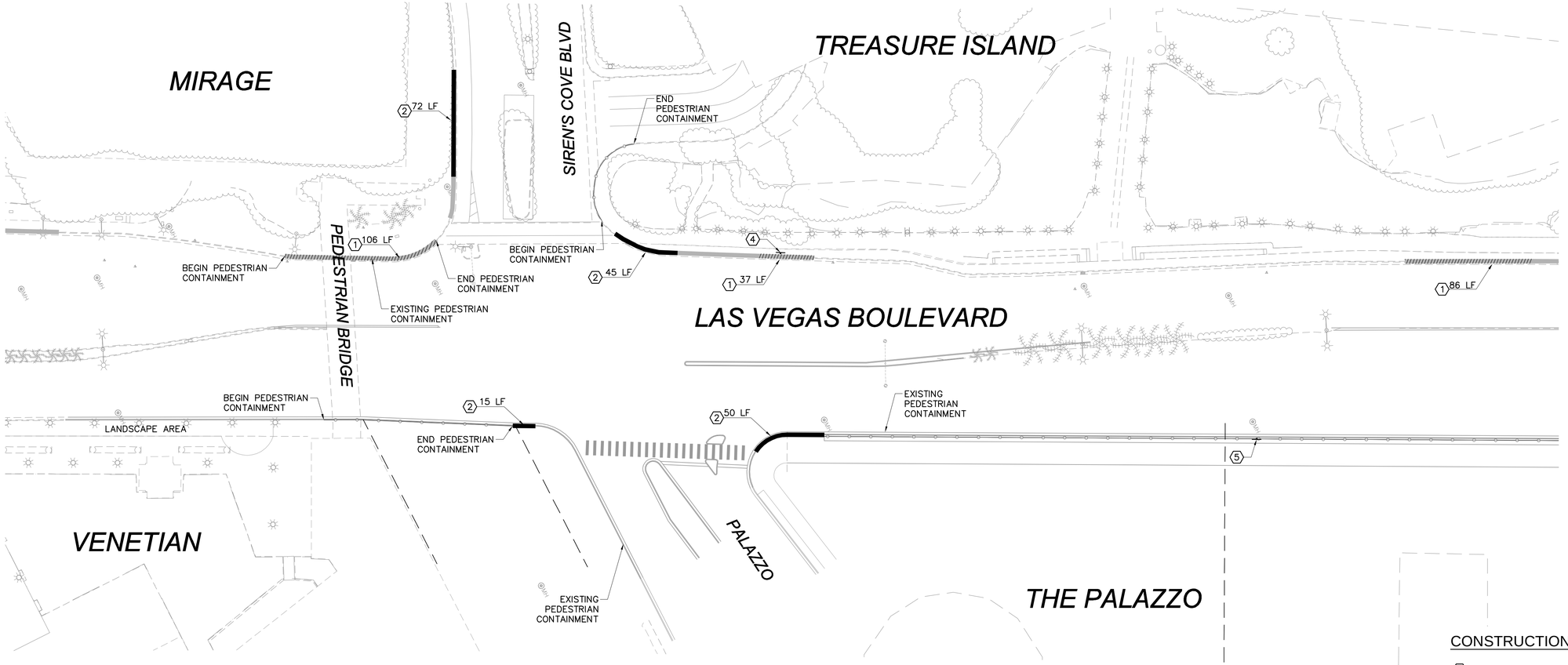
PRELIMINARY DRAWINGS
90%
FOR REVIEW

DESIGNED BY:	SRA
DRAWN BY:	SAS
CHECKED BY:	KWA
DATE:	Nov 17, 2012 - 2:36pm

SCALE	
HORIZ:	AS SHOWN
VERT:	N/A
FIELD BOOK	NONE

SHEET No
C-12
SHEET 16OF 24

Date: November 17, 2012 - 2:36pm / User: devin.moore
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CONSTRUCTION NOTES

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LEGEND

- EXISTING TOP OF CURB WHITE LINE
- INSTALL 6" TOP OF CURB WHITE LINE
- REMOVE EXISTING TOP OF CURB WHITE LINE
- [I] INACTIVE DRIVEWAY

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BENCHMARK
NO SURVEY

BASIS OF BEARING
NO SURVEY

NORTH

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 ft.

APPROVED

PEDESTRIAN STUDY - LAS VEGAS BLVD

UPDATED NO OBSTRUCTIVE USE DRAWINGS
RUSSELL ROAD TO SAHARA AVENUE
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

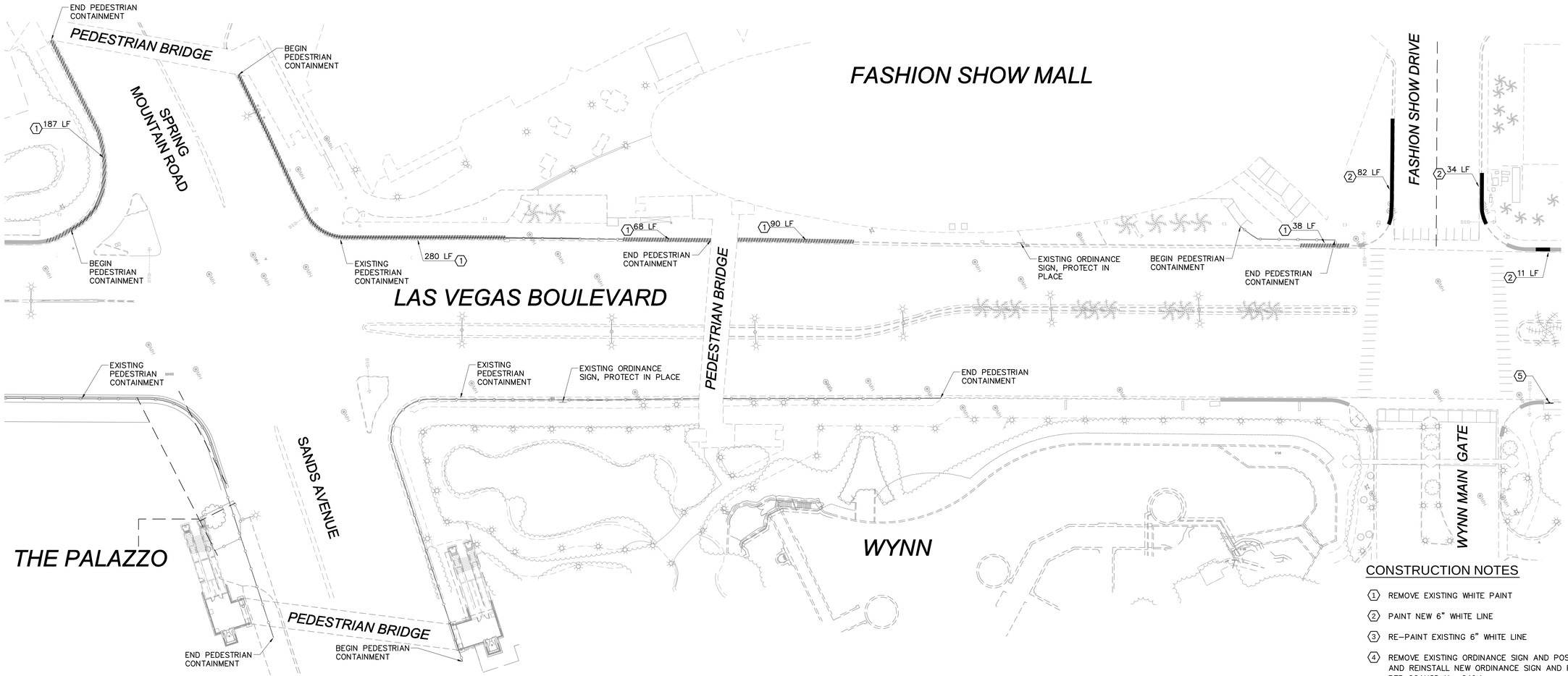
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FOR REVIEW

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DATE: Nov 17, 2012 - 2:36pm

SCALE
HORIZ: AS SHOWN
VERT: N/A
FIELD BOOK NONE

SHEET No
C-13
SHEET 17OF 24

Date: November 17, 2012 - 2:36pm / User: devin.moore
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BENCHMARK
NO SURVEY

BASIS OF BEARING
NO SURVEY

NORTH

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 ft.

APPROVED

PEDESTRIAN STUDY - LAS VEGAS BLVD

UPDATED NO OBSTRUCTIVE USE DRAWINGS
RUSSELL ROAD TO SAHARA AVENUE
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

PRELIMINARY DRAWINGS
90%
FOR REVIEW

DESIGNED BY: SRA
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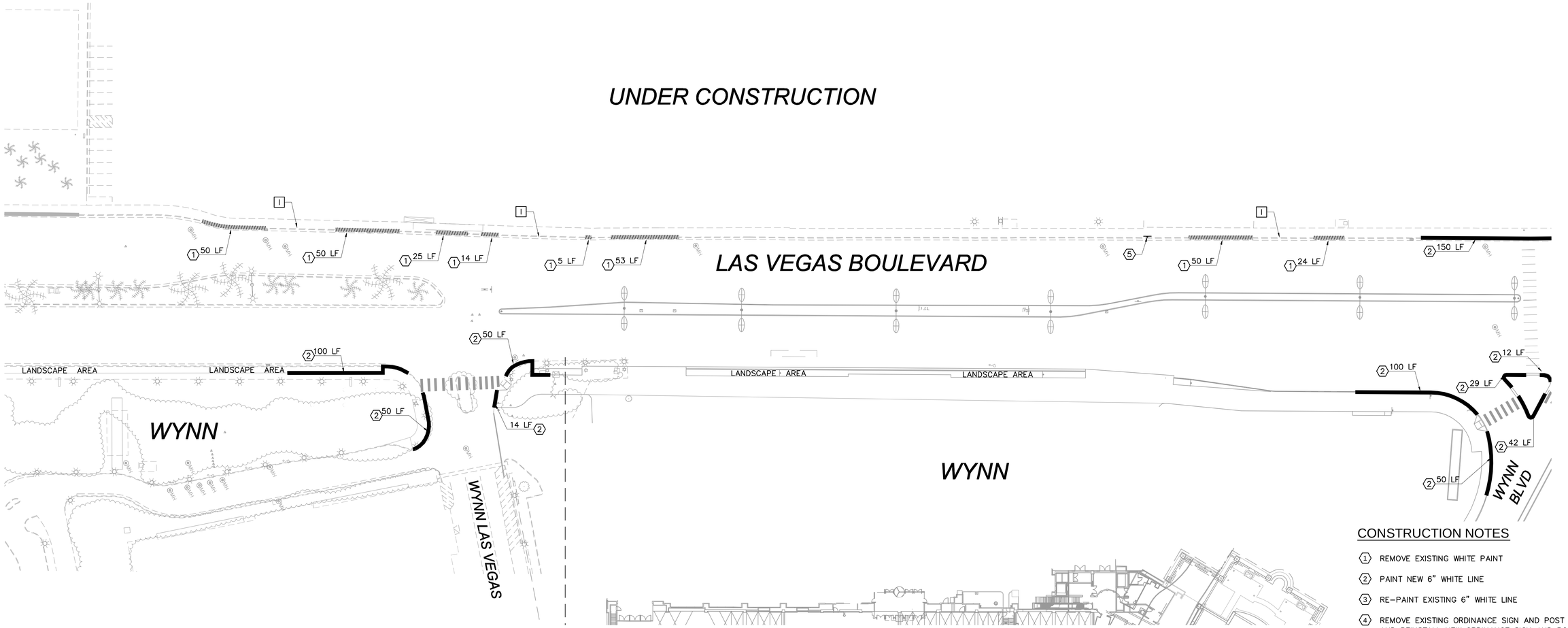
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FIELD BOOK NONE

SHEET No
C-14
SHEET 18OF 24

Date: November 17, 2012 - 2:36pm / User: devin.moore
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UNDER CONSTRUCTION



CONSTRUCTION NOTES

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3. RE-PAINT EXISTING 6" WHITE LINE
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6. REMOVE EXISTING ORDINANCE SIGN PANEL AND INSTALL NEW ORDINANCE SIGN PANEL

LEGEND

- EXISTING TOP OF CURB WHITE LINE
- INSTALL 6" TOP OF CURB WHITE LINE
- REMOVE EXISTING TOP OF CURB WHITE LINE
- [1] INACTIVE DRIVEWAY

NOTE:
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NOTE:
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BENCHMARK
NO SURVEY

BASIS OF BEARING
NO SURVEY

NORTH

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 ft.

APPROVED

PEDESTRIAN STUDY - LAS VEGAS BLVD

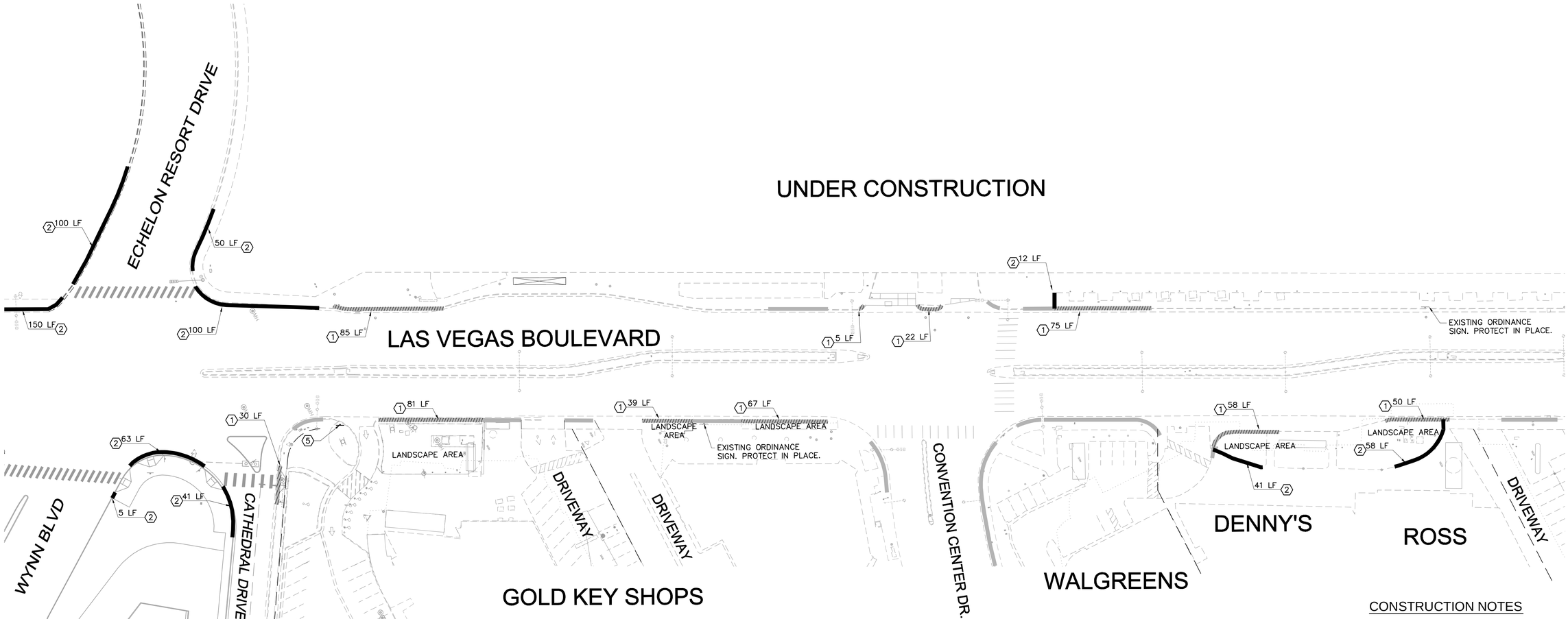
UPDATED NO OBSTRUCTIVE USE DRAWINGS
RUSSELL ROAD TO SAHARA AVENUE
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

PRELIMINARY DRAWINGS
90%
FOR REVIEW

DESIGNED BY:	SRA
DRAWN BY:	SAS
CHECKED BY:	KWA
DATE:	Nov 17, 2012 - 2:37pm

SCALE	
HORIZ:	AS SHOWN
VERT:	N/A
FIELD BOOK	NONE

SHEET No
C-15
SHEET 19OF 24



CONSTRUCTION NOTES

1. REMOVE EXISTING WHITE PAINT
2. PAINT NEW 6" WHITE LINE
3. RE-PAINT EXISTING 6" WHITE LINE
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LEGEND

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BENCHMARK
NO SURVEY

BASIS OF BEARING
NO SURVEY

NORTH

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 ft.

APPROVED

PEDESTRIAN STUDY - LAS VEGAS BLVD

UPDATED NO OBSTRUCTIVE USE DRAWINGS
RUSSELL ROAD TO SAHARA AVENUE
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

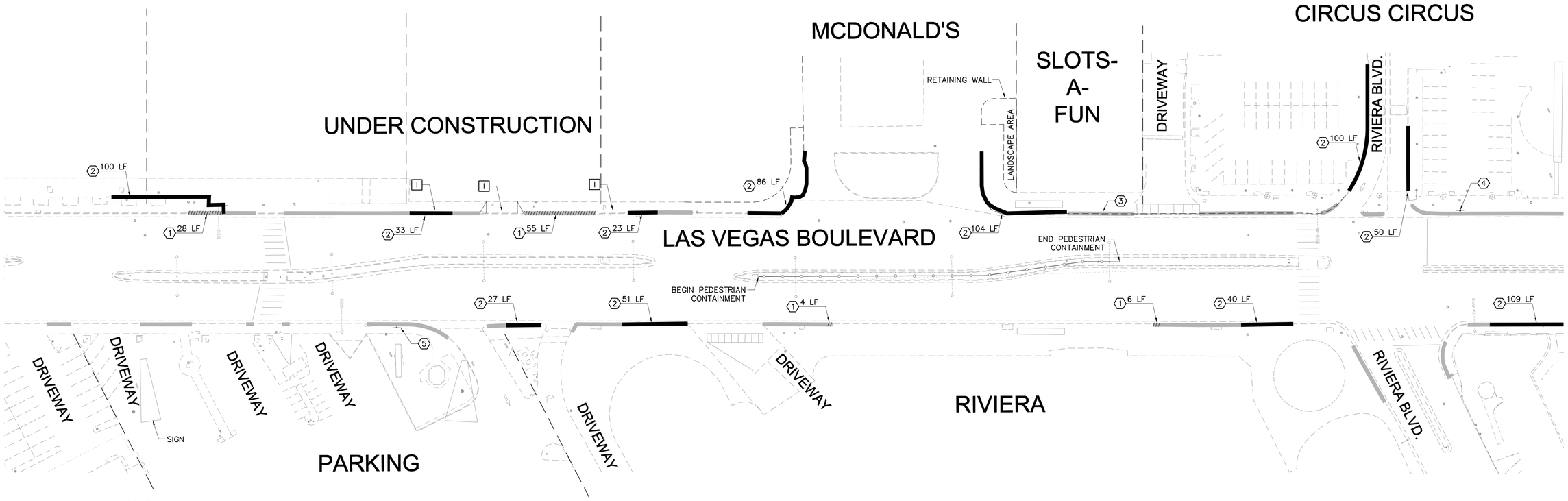
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FOR REVIEW

DESIGNED BY: SRA
DRAWN BY: SAS
CHECKED BY: KWA
DATE: Nov 17, 2012 - 2:37pm

SCALE
HORIZ: AS SHOWN
VERT: N/A
FIELD BOOK NONE

SHEET No
C-16
SHEET 20OF 24

Date: November 17, 2012 - 2:37pm / User: devin.moore
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LEGEND

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BENCHMARK
NO SURVEY

BASIS OF BEARING
NO SURVEY

NORTH

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 ft.

APPROVED

PEDESTRIAN STUDY - LAS VEGAS BLVD

UPDATED NO OBSTRUCTIVE USE DRAWINGS
RUSSELL ROAD TO SAHARA AVENUE
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

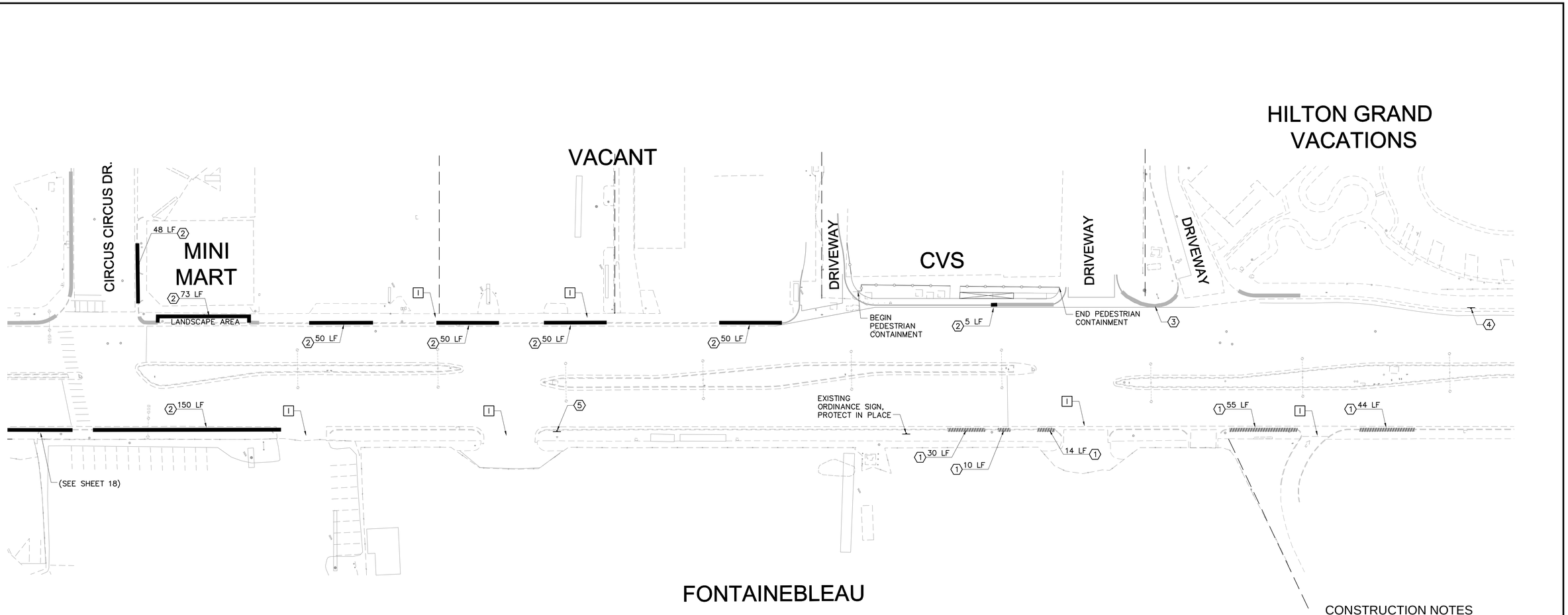
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FOR REVIEW

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VERT: N/A
FIELD BOOK NONE

SHEET No
C-17
SHEET 21OF 24

Date: November 17, 2012 - 2:38pm / User: devin.moore
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LEGEND

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BENCHMARK
NO SURVEY

BASIS OF BEARING
NO SURVEY

NORTH

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 ft.

APPROVED

PEDESTRIAN STUDY - LAS VEGAS BLVD

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RUSSELL ROAD TO SAHARA AVENUE
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

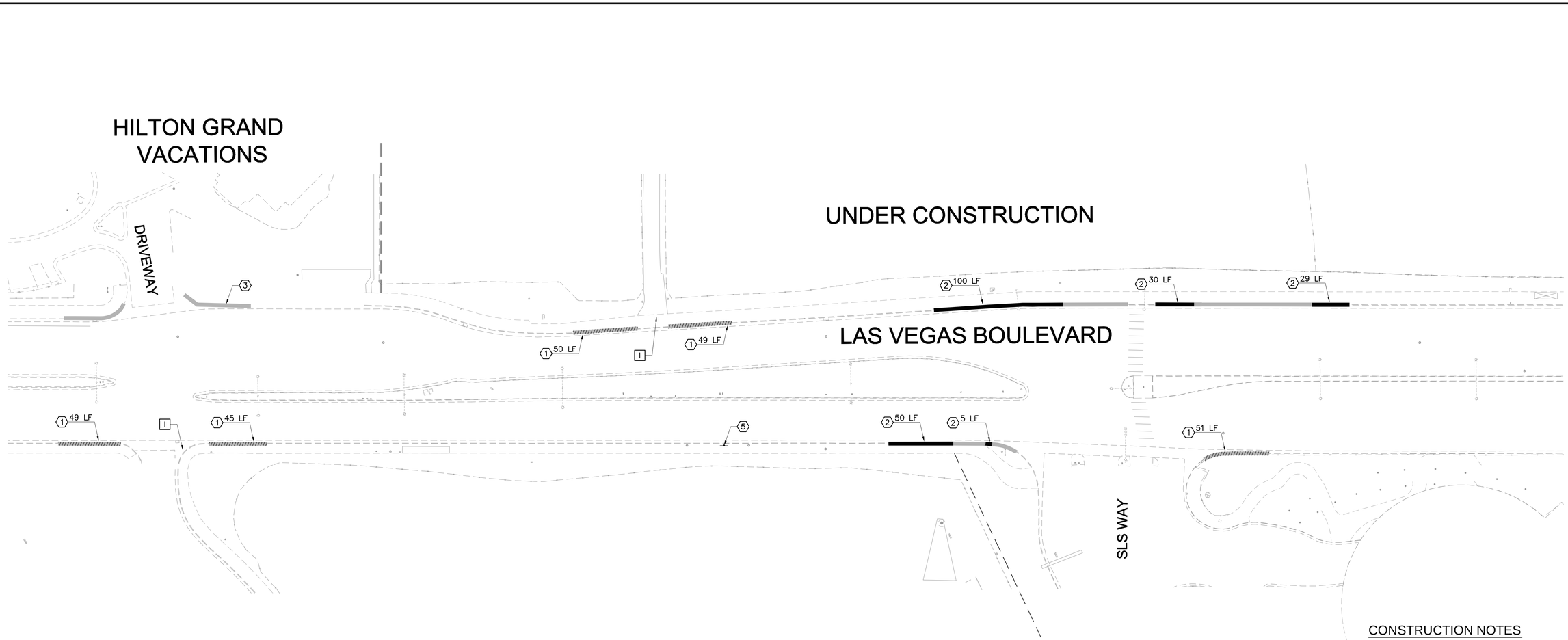
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SCALE
HORIZ: AS SHOWN
VERT: N/A
FIELD BOOK NONE

SHEET No
C-18
SHEET 22OF 24

Date: November 17, 2012 - 2:38pm / User: devin.moore
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BENCHMARK
NO SURVEY

BASIS OF BEARING
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APPROVED

PEDESTRIAN STUDY - LAS VEGAS BLVD

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RUSSELL ROAD TO SAHARA AVENUE
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

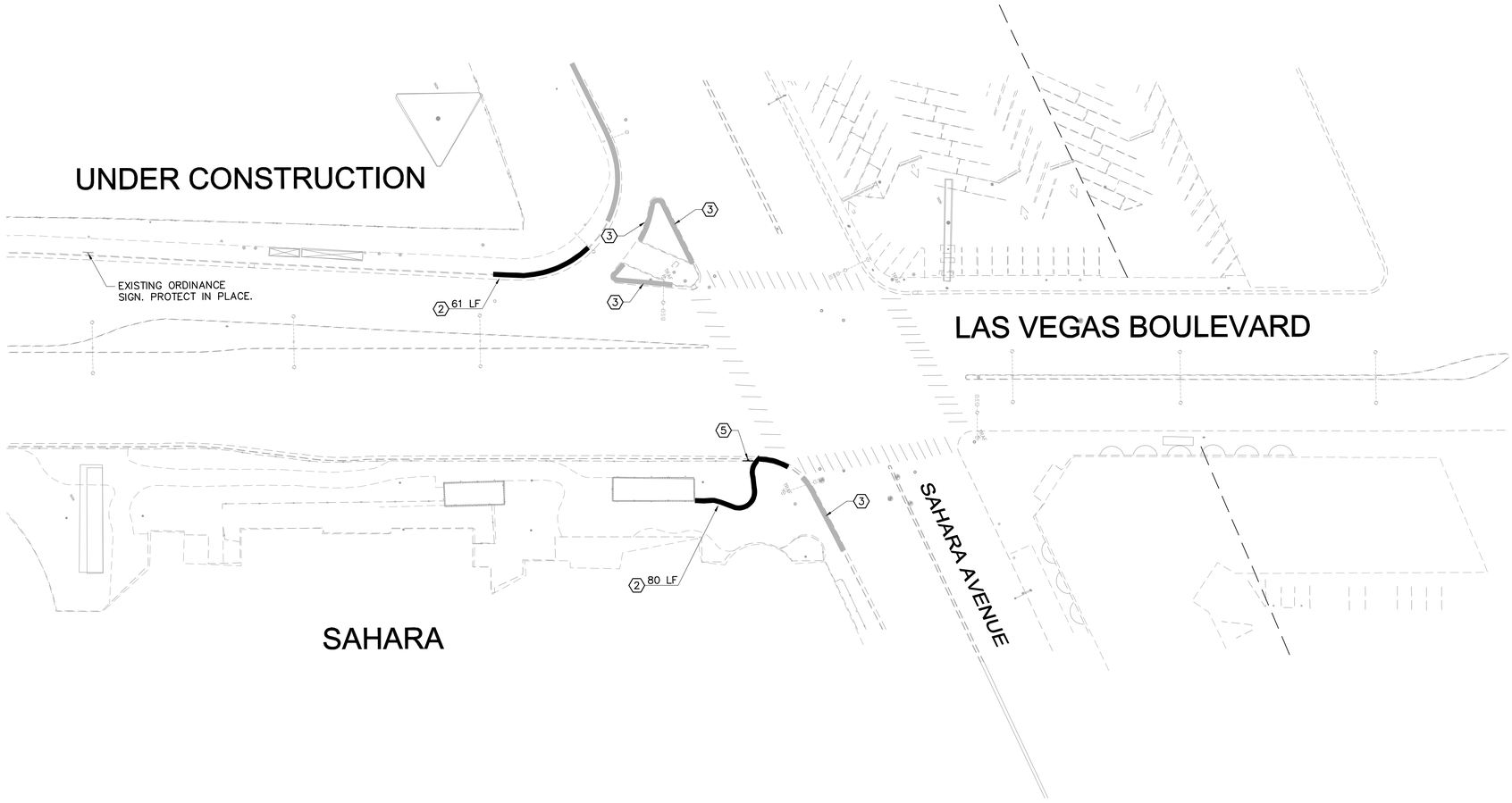
PRELIMINARY DRAWINGS
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FOR REVIEW

DESIGNED BY: SRA
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DATE: Nov 17, 2012 - 2:38pm

SCALE
HORIZ: AS SHOWN
VERT: N/A
FIELD BOOK NONE

SHEET No
C-19
SHEET 23OF 24

Date: November 17, 2012 - 2:38pm / User: devin.moore
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LEGEND

- EXISTING TOP OF CURB WHITE LINE
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NORTH

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 ft.

BENCHMARK
NO SURVEY

BASIS OF BEARING
NO SURVEY

APPROVED

PEDESTRIAN STUDY - LAS VEGAS BLVD

UPDATED NO OBSTRUCTIVE USE DRAWINGS
RUSSELL ROAD TO SAHARA AVENUE
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

PRELIMINARY DRAWINGS
90%
FOR REVIEW

DESIGNED BY: SRA
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DATE: Nov 17, 2012 – 2:38pm

SCALE
HORIZ: AS SHOWN
VERT: N/A
FIELD BOOK NONE

SHEET No
C-20
SHEET 24OF 24

Date: November 17, 2012 – 2:38pm / User: devin.moore
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EXHIBIT C

Chapter 16.11 - OBSTRUCTIVE USES OF PUBLIC SIDEWALKS

Sections:

16.11.010 - Purpose.
16.11.020 - General definitions.
16.11.030 - Establishment of the resort district.
16.11.035 - County policy against obstructive uses of public sidewalks.
16.11.038 - Notice in the resort district.
16.11.040 - Prohibition of obstructive uses.
16.11.050 - Designation of "No Obstruction Zones.
16.11.060 - Structures.
16.11.070 - Storing and unloading materials on public sidewalks.
16.11.080 - Removal of "No Obstruction Zone" designations.
16.11.090 - Penalty for violation.
16.11.100 - Private enforcement.
16.11.110 - Severability.

16.11.010 - Purpose.

The board finds that due to vehicle congestion, long delays and increasing costs, it has become increasingly more attractive for residents and visitors to use the public sidewalks on Las Vegas Boulevard South (the Strip) rather than to drive or to ride. Since, traditionally, the major emphasis along the Strip has been on automobile transportation and not on pedestrians, the existing pedestrian environment is inadequate as a transportation system and lacking in many safety features. Moreover, a great number of persons are engaged in uses of the public sidewalks which create undue obstruction, hindrance, blockage, hampering, and interference with pedestrian travel. Large numbers of pedestrians are walking in the streets when the public sidewalks become congested and many pedestrians are crossing against the traffic signal indications. In recognition of the need for improvement of the pedestrian environment and the need for accessible public sidewalks, it is necessary to enact the following regulations.

(Ord. 1617 § 1 (part), 1994)

16.11.020 - General definitions.

(a) "Pedestrian travel" includes nonvehicular travel by persons on foot, as well as vehicular travel by persons with disabilities in wheelchairs or similar devices.

(b) "Level of service" or "LOS" means a series of measures that define the relative degree of convenience for different pedestrian traffic volumes and densities, as determined by

(c) "Crosswalk" means any above or below grade structure or surface portion of a roadway at an intersection or elsewhere distinctly indicated for pedestrian crossing by signs, lines or other markings on the surface.

(d) "Public sidewalk" means that portion of a highway between the curb lines, or the lateral lines of a roadway, and the adjacent property lines, intended for use of pedestrians, and shall also include crosswalks, medians and traffic islands. For the purposes of this chapter, "public sidewalk" shall include private property upon which a limited easement of public access has been granted. However, no provision of this chapter shall be construed to limit any right of the private property owner to restrict or limit the use of that private property.

(e) "Obstructive use" means:
- (1) Placing, erecting or maintaining an unpermitted table, chair, booth or other structure upon the public sidewalk, if the placing, erecting, or maintaining of the table, chair, or booth is not protected by the First Amendment or if the placing, erecting, or maintaining of the table, chair, or booth is protected by the First Amendment but is actually obstructive;
- (2) Forming a cordon or line of persons across the public sidewalk;
- (3) Carrying banners or signs, upon the public sidewalk which actually causes an obstruction on the sidewalk;
- (4) Placing or storing equipment, materials, parcels, containers, packages, bundles or other property upon the public sidewalk which actually causes an obstruction on the sidewalk;
- (5) Placing, erecting or maintaining an unpermitted fixed sign upon the public sidewalk;
- (6) Sleeping upon the public sidewalk;
- (7) Obstructing, delaying, hindering, blocking, hampering or interfering with pedestrian passage, including passage to or from private property; or
- (8) Any use of the public sidewalk that causes the LOS for the public sidewalk to decline below LOS C, as determined by the methodology used in Chapter 13 of the Highway Capacity Manual and Las Vegas Boulevard South Pedestrian Walkway Study.

(f) "LOS C" means a pedestrian flow on a sidewalk of less than or equal to ten pedestrians per minute per foot as specified and defined in the Highway Capacity Manual, Special Report 209, a copy of which is filed with the office of the county clerk.

(g) "Permitted obstructive use" means:
- (1) Any obstructive use of the public sidewalk by public safety equipment, including but not limited to, street signs, traffic signals, fire hydrants, utility poles and street and sidewalk lighting; and
- (2) Any obstructive use of the public sidewalk for purposes of construction, maintenance or repair of the public safety equipment, right-of-way (or equipment therein) or adjoining private property, conducted by or pursuant to a valid construction permit issued by the Clark County department of public works, Clark County building department or Nevada Department of Transportation;
- (3) Any obstructive use of the public sidewalk resulting from:
  - (A) An encroachment or structure constructed pursuant to the ordinances, rules, regulations or laws of the United States, the state of Nevada or Clark County, or
  - (B) The construction, modification, addition or attraction upon abutting private property occurring or in place before May 1, 1994;
- (4) Any newsrack licensed pursuant to Clark County Code Chapter 16.08 unless such newsrack causes a degradation of the LOS to LOS C or less as provided in Section 16.11.040(e);
- (5) Any conduct "arguably protected" by the National Labor Relations Act until or unless such conduct is determined to be unprotected pursuant to a decision of the National Labor Relations Board;

(h) "Arguably protected" as used in subsection (g)(5) of this section has the same meaning as in San Diego Building Trades Council v. Garmon, 359 U.S. 236, 79 S. Ct. 773 (1959).

(i) "Street performer" is a member of the general public who engages in any performing act or the playing of any musical instrument, singing or vocalizing, with or without musical accompaniment, and whose performance is not an official part of a sponsored event.

(Ord. 3626 § 1, 2008: Ord. 1617 § 1 (part), 1994)
(Ord. No. 3916, § 1, 11-16-2010; Ord. No. 3986, § 9, 10-4-2011)

16.11.030 - Establishment of the resort district.

For purposes of this chapter a resort district is established as Sections 9, 10, 15, 16, 17, 18, 20, 21, 22, 27, 28, and 29 of Township 21 South, Range 61 East, Mount Diablo Meridian, Clark County, Nevada.

(Ord. 3626 § 1, 2008: Ord. 1617 § 1 (part), 1994)

16.11.035 - County policy against obstructive uses of public sidewalks.

It is the policy of Clark County that no obstructive use, other than a permitted obstructive use, shall be permitted upon any public sidewalk of the resort district of the Las Vegas Valley if the obstructive use, if allowed to occur, would:

(a) Cause the LOS for the sidewalk to decline below LOS C; or
(b) Result in a significant threat to or degradation of the safety of pedestrians.

(Ord. 1617 § 1 (part), 1994)

16.11.038 - Notice in the resort district.

Signs shall be posted at least every quarter of a mile in the resort district and the statement **"RESORT DISTRICT: NO OBSTRUCTIVE USES PERMITTED ON PUBLIC SIDEWALKS AT LOCATIONS DESIGNATED BY A WHITE STRIPE, PURSUANT TO CLARK COUNTY CODE CHAPTER 16.11."**

(Ord. 1617 § 1 (part), 1994)

16.11.040 - Prohibition of obstructive uses.

No obstructive use shall be permitted on public sidewalks in the following areas, which areas shall be designated by the placement of pavement markings on the public sidewalks or signs designating the limits of the no obstruction zones, or plaques, monuments or medallions placed in the public sidewalks:

(a) On or within any crosswalk, including but not limited to all portions of a public sidewalk located in or on a median, traffic island or other structure within, across or over or under a public street or roadway;

(b) (1) In or within one hundred fifty feet of any mid-block crosswalk, as measured from the crosswalk parallel to the sidewalk curb toward the direction of approaching vehicular traffic, and
(2) In or within fifty feet of any mid-block crosswalk as measured from the crosswalk parallel to the sidewalk curb away from the direction of approaching vehicular traffic;

(c) (1)In or within one hundred feet of any crosswalk located at an intersection of streets or highways, as measured parallel to the sidewalk curb in the direction of approaching vehicular traffic from the point of curvature of the curb or the marked edge of the crosswalk, whichever is less, and
(2) In or within fifty feet of a crosswalk located at an intersection of streets or highways, as measured parallel to the sidewalk curb away from the direction of approaching vehicular traffic from the point of curvature of the curb or the marked edge of the crosswalk, whichever is less;

(d) In or within fifty feet of any driveway providing ingress into or egress from any private or non-public property, as measured parallel to the sidewalk curb outward from the point of the curb cut;

(e) On or within any section of the public sidewalk which has been determined to have an average LOS of C or below, during the hours at which LOS declines below LOS C, as determined by a traffic study conducted by a registered professional engineer or the Clark County department of public works according to the methodology set forth in the Las Vegas Boulevard South Pedestrian Walkway Study.

(Ord. 1617 § 1 (part), 1994)

16.11.050 - Designation of "No Obstruction Zones.

" The board of county commissioners shall adopt a map, to be prepared by the Clark County department of public works, of the H-I zoning district which clearly sets forth those portions of the public sidewalks where obstructive uses, other than permitted obstructive uses, shall be prohibited based upon the factors set forth in Section 16.11.040, above.

(a) These areas shall be designated "NO OBSTRUCTION ZONES" and shall be clearly marked by the county by the placement of pavement markings on the public sidewalks or signs designating the limits of the no obstruction zones, or plaques, monuments or medallions placed in the public sidewalks, by declaring same.

(b) Pavement markings on the public sidewalk or signs designating the limits of the "No Obstruction" zone, or plaques, monuments or medallions placed in the public sidewalk marking areas deemed to be no obstruction zones on the basis of LOS, as set forth in Section 16.11.020, shall also specify the hours during which the area is a no obstruction zone.

(c) No person shall be in violation of this chapter for obstructive use of a no obstruction zone if the no obstruction zone is not designated.

(Ord. 1617 § 1 (part), 1994)

16.11.060 - Structures.

No person shall erect, place or maintain any building, booth, structure, table, chair or other object in whole or in part, upon any public sidewalk unless such use is a permitted obstructive use as set forth in this chapter.

(Ord. 1617 § 1 (part), 1994)

16.11.070 - Storing and unloading materials on public sidewalks.

(a) No equipment, materials, parcels, containers, packages, bundles or other property may be stored, placed or abandoned in or on the public sidewalk. This provision shall not apply to materials or property held or stored in a carry bag or pack which is actually carried by a pedestrian or items such as a musical instrument case or a backpack which is temporarily placed next to a street performer for that street performer's use unless said musical instrument case or backpack actually obstructs the sidewalk in violation of this chapter;

(b) Except in designated loading zones, vehicles may not stop in traffic lanes to load or unload equipment, materials, parcels, containers, packages, bundles or other property unto the public sidewalk.

(Ord. 1617 § 1 (part), 1994)
(Ord. No. 3916, § 1, 11-16-2010)

16.11.080 - Removal of "No Obstruction Zone" designations.

No unauthorized person shall willfully remove, alter, cover or otherwise harm a pavement marking, sign, plaque, monument or medallion marking a no obstruction zone.

(Ord. 1617 § 1 (part), 1994)

16.11.090 - Penalty for violation.

Any person who violates any of the provisions of this chapter is guilty of a misdemeanor and upon conviction shall be punished by imprisonment in the county jail for a term not to exceed six months or by a fine not to exceed one thousand dollars, or by both such fine and imprisonment.

(Ord. 1617 § 1 (part), 1994)

16.11.100 - Private enforcement.

The owner of private property abutting the public sidewalk may use any remedy available at law or equity to enforce the provisions of this chapter.

(Ord. 1617 § 1 (part), 1994)

16.11.110 - Severability.

If any section of this chapter or portion thereof is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such holding shall not invalidate the remaining parts of this chapter.

(Ord. 1617 § 1 (part), 1994)



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UNITED STATES DISTRICT COURT

DISTRICT COURT OF NEVADA

LISA MCALLISTER, an individual; BRANDON SUMMERS, an individual; and JORDAN POLOVINA, an individual,

Plaintiffs,

vs.

CLARK COUNTY, a political subdivision of the state of Nevada,

Defendant.

Case Number: 2:24-cv-00334

APPRENDIX OF EXHIBITS TO: PLAINTIFFS MOTION FOR SUMMARY JUDGMENT (ORAL ARGUMENT REQUESTED) VOLUME IV OF V

INDEX OF EXHIBITS

Exhibit No.	Description	Volume
1	Deposition of Kaizad Yazdani, 30(b)(6) Designee for Clark County	**I**
2	Statement on X posted by @ClarkCountyNV regarding CCC 16.13.030 on Jan. 2, 2024, 6:30 PM, M-S 00031	**I**
3	Deposition of Abigail Frierson, 30(b)(6) Designee for Clark County	**I**
4	Declaration of Brandon Summers	**I**
5	Declaration of Jordan Polovina	**I**
6	Polovina Citation	**I**
7	Clark County Pedestrian Study, December 2022	**II**
8	Clark County Pedestrian Study, November 2012	**III**
9	Clark County Pedestrian Study, 2015 Update	**IV**
10	Pedestrian Study, 2016 Update of Non-Permanent Obstructions	**IV**
11	Deposition of Devlin Val Moore, 30(b)(6) Designee for Non-Party Kimley-Horn	**V**
12	Pedestrian Bridge Arrests	**V**
13	*State v. Mirabelli*, 25-CR-071740, Criminal Complaint	**V**
14	Clark County Board of Commissioners Meeting Agenda from November 21, 2023	**V**
15	Clark County Board of Commissioners Meeting Agenda from December 5, 2023	**V**
16	Clark County Board of Commissioners Meeting Agenda from January 2, 2024	**V**

17	Questions Related to Public Safety on Pedestrian Bridges, William H. Sousa, Ph. D.	**V**
18	Deposition of William H. Sousa	**V**
19	Deposition of Andrew Walsh, 30(b)(6) Designee for Non-Party Las Vegas Metropolitan Police Department	**V**
20	Declaration of Christopher M. Peterson	**V**

DATED: December 18, 2025.

/s/ Christopher Peterson

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CERTIFICATE OF SERVICE

I hereby certify that I electronically filed the foregoing **Appendix of Exhibits** with the Clerk of the Court for the United States District Court of Nevada by using the court's CM/ECF system on December 18, 2025. I further certify that all participants in the case are registered CM/ECF users and that service will be accomplished on all participants by:

☒ CM/ECF

☐ Electronic mail; or

☐ US Mail or Carrier Service

/s/ Christopher Peterson
An employee of ACLU of Nevada

Exhibit 9

Clark County Pedestrian Study, 2015 Update

DECEMBER 2015

CLARK COUNTY
PEDESTRIAN STUDY

Las Vegas Boulevard
Russell Road to Sahara Avenue

2015 UPDATE







Kimley»Horn

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PEDESTRIAN STUDY

LAS VEGAS BOULEVARD

RUSSELL ROAD TO SAHARA AVENUE

2015 UPDATE

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December 2015

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List of Exhibits

Exhibit A – No Obstruction Zones (Adopted October 7, 2014)

Exhibit B – Right-of-Way/Pedestrian Easement Exhibits

Exhibit C – Newsrack Medallion Locations

Exhibit D – Clark County Municipal Code Chapter 16.11 – Obstructive Uses of Public Sidewalk

Exhibit E – Pedestrian Volume Raw Data (Provided on disk in the back of this report)

Exhibit F – Transportation Element of Clark County Master Plan – Pedestrian Crossing Map

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1 INTRODUCTION

In 2012, a comprehensive study of Las Vegas Boulevard was conducted by Kimley-Horn entitled "Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue" for the Clark County (County) Department of Public Works (**Picture 1.1**). In an effort to improve the pedestrian experience, the 2012 Pedestrian Study expanded upon the findings and recommendations of the 1994 Lee Engineering report *Las Vegas Boulevard South Pedestrian Walkway Study*. One of the key findings of the 2012 report was the identification of 17 segments of pedestrian walkway that were found to exceed level of service (LOS) "C" (segments with LOS D, E, or F). Since the completion of the 2012 study, the County has undertaken measures and completed important projects to improve and enhance the walkway conditions within the Resort Corridor and within the 17 identified walkway segments with poor LOS.

For this restudy, pedestrian volume data was collected on similar days to the 2012 study: over Memorial Day weekend (May 23, 2015), one of the busiest Saturdays on Las Vegas Boulevard, and on a typical summer Saturday (June 20, 2015) to capture and evaluate updated peak and typical pedestrian conditions. Current walkway widths and pedestrian volumes were documented for comparison calculations of walkway capacity. As with the 2012 study, non-permanent obstructions were located, quantified, and classified to identify possible impediments to pedestrian movement in comparison with previous observations.

1.1 Study Purpose

The unobstructed movement of pedestrians along Las Vegas Boulevard is important in maintaining the economic vitality and visitor experience of Las Vegas. The purpose of the restudy is to reevaluate walkway segments and time periods of pedestrian congestion along Las Vegas Boulevard (the "Strip"), particularly within 17 walkway segments previously identified in 2012 with a LOS of less than "C" (seen in **Figure 2.1**). The updated findings can be used to aid in the enforcement of the County's Obstructive Use Ordinance.

1.2 Study Goals

The goals of the update are to reevaluate locations of pedestrian walkway congestion by time of day and day of week (including holidays) for use in the enforcement of and/or revisions to County Code 16.11-Obstructive Uses of Public Sidewalks. The restudy is to also provide updated recommendations to further improve the pedestrian experience within the Resort Corridor.

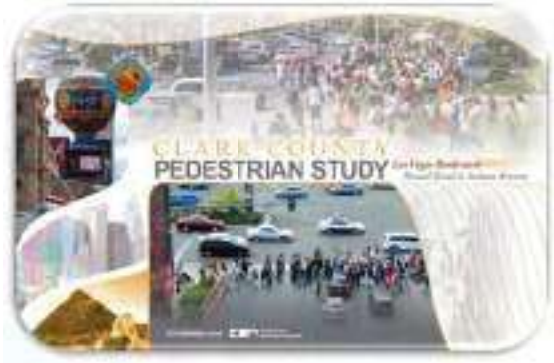
1.3 Study Corridor

The study corridor includes 4.2 miles of Las Vegas Boulevard from Russell Road to Sahara Avenue within the Las Vegas Valley. The corridor is located east of Interstate 15 (I-15), south of US Highway 95, and north of Interstate 215 (I-215) in Clark County, Nevada. Pedestrian volume data collection for this update was focused in the inner portion of the study corridor with emphasis on the 17 segments previously identified as having poor pedestrian LOS. **Figure 1.1** and **Figure 1.2** illustrate the study corridor and the observed walkway areas identified to experience conditions of less than LOS C in 2012 and 2015. Approximately 7,500 linear feet (LF) of the walkways within the Resort Corridor fell below LOS C in 2012 meaning that about 17% of the walkways within the corridor were below LOS C. With the implementation of the recommended improvements from the 2012 study, the LF of these walkways has been reduced to approximately 12.5% and 5,500 LF in 2015.

The pedestrian activity within the study corridor of Las Vegas Boulevard is primarily driven by the gaming and related tourist industry which is a major source of revenue for Clark County. Since the 2012 Pedestrian Study, the latest reported gaming revenue (2014) has increased by $270 million to total $6.37 billion, according to the Las Vegas Convention and Visitors Authority (LVCVA).

Increases in Las Vegas Boulevard pedestrian activity can also be associated with steady growth in the number of hotel rooms and the number of visitors to Las Vegas. In 2012, the number of hotel rooms in Clark County totaled 150,161 and the annual number of visitors was estimated at 38,928,708 (in 2011).

After three years, by 2015, the number of rooms in Clark County increased by 383 to total 150,544 (the highest inventory of hotel rooms of any city in the United States). The number of annual visitors (in 2014) also increased, by 2,197,804 to 41,126,512. The room inventory and number of visitors are expected to continue to increase with casino/resort expansions, new resort construction, and event center/arena construction.



Picture 1.1 – 2012 Pedestrian Study Cover.

Conventions, trade shows, and meetings are expected to continue to contribute to pedestrian activity along the Las Vegas Boulevard. These functions draw nearly five million attendees annually to Las Vegas, or about 12.6% of all visitors during 2014. They have contributed billions of dollars in non-gaming revenue to the economy. The LVCVA continues to move forward with the Las Vegas Global Business District and plans a new 1.8 million-square-foot conference facility along Las Vegas Boulevard in conjunction with the May 4, 2015 closure and razing of the Riviera Hotel and Casino shown in **Picture 1.2**.



Picture 1.2 – Riviera Hotel/Casino – April 2015.

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Figure 1.1 – 2012 Study Corridor



Figure 1.2 – 2015 Study Corridor

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2 EXISTING CONDITIONS (2015)

This section of the report describes in detail the 2015 existing conditions of the Las Vegas Resort Corridor from Russell Road to Sahara Avenue as compared to the original 2012 Clark County Pedestrian Study. Development throughout the Resort Corridor has taken place since the completion of the 2012 Pedestrian Study. These construction activities, as they relate to the pedestrian walkways, are documented in this report section. Existing construction zones within the Resort Corridor at the time of the restudy are also discussed.

2.1 Properties in Construction during the 2012 Pedestrian Study

With nearly 100 individual parcels with frontage along Las Vegas Boulevard within the study area, there is almost constant construction activity within the Resort Corridor. When the Pedestrian Study was conducted in 2012, the following properties were experiencing construction activity impacting their Las Vegas Boulevard frontage pedestrian walkways:

- MGM Grand
- Harmon Center
- Flamingo
- LINQ/Imperial Palace
- Harrah's
- Echelon/Resorts World
- Fontainebleau (inactive)
- SLS (former Sahara Hotel)

Each of the above listed properties have subsequently completed their construction activities except for the economically halted Echelon and Fontainebleau projects. The construction fencing surrounding the Fontainebleau project near Riviera Boulevard has recently been moved back from Las Vegas Boulevard. The Echelon Project from 2012 is now under construction as a newly redesigned resort development named Resorts World Las Vegas.

The Resorts World construction fencing has maintained a walkway width of 12 feet. This walkway width was found to be adequate for the existing walkway conditions of the 2012 study.

Picture 2.1 through **Picture 2.4** show examples of construction activity as observed during the 2012 study.



Picture 2.1 – MGM Grand Hotel/Casino Renovation Detour – 2012.



Picture 2.3 – Bus Turnout Construction at Harrah's - 2012.



Picture 2.2 – Caesars LINQ Construction – 2012.



Picture 2.4 – Signage Modifications at Harmon Center – 2012.

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2.2 Properties with Construction since 2012

In 2012, effective walkway widths along the entire length of the study corridor were grouped into segments with similar effective walkway widths. Analysis resulted in 17 walkway segments that were found to exceed LOS C on the holiday and/or typical Saturday (May 26 and/or June 16, 2012) labeled R1 to R17 from south to north (see **Figure 2.1** for segment location).

Since the completion of the 2012 Pedestrian Study, the following properties along Las Vegas Boulevard have had construction projects along Las Vegas Boulevard within the study area:

- New York-New York
- Monte Carlo
- Harley Davidson*
- Harmon Tower
- Paris
- Bally's Bazaar
- Flamingo
- Caesars Colosseum Frontage*
- Casino Royale*
- TI Bus Stop (at North Mirage)*
- Treasure Island*
- McDonald's
- North MGM Festival Grounds

**Construction location within walkway segment of LOS < C in 2012. At the time of the restudy, the construction activities at these properties have been completed.*

2.3 Completed Improvements from 2012 Pedestrian Study Recommendations

Various recommended improvements to remove permanent walkway obstructions, improve walkways widths, and pedestrian safety along Las Vegas Boulevard as identified with the 2012 Pedestrian Study have been implemented. Under the direction of Clark County Public Works $5 million has been spent for the design and construction of these recommended improvements:

- Walkways were widened at various locations for a total of approximately **1,700** additional linear footage.
- Approximately **14,000** linear feet of "white line" delineating the No Obstructive Use Zones was refreshed or added (see **Exhibit A**).
- **Twenty-four (24)** crosswalk ramps were reconstructed to improve walkway conditions to be Americans with Disabilities Act (ADA) compliant.
- **Six (6)** fire hydrants have been moved from the pedestrian walkway to the Las Vegas Boulevard median and **eleven (11)** fire hydrants have been removed from the walking path. A total of **seventeen (17)** hydrant obstructions have been removed or relocated out of the pedestrian walkway.
- Trash enclosures were removed from the pedestrian walkways.
- **Eighteen (18)** "NO PARKING" signs were removed from the curb lines along the pedestrian walkway.
- **One hundred and seven (107)** signs were relocated/replaced away from the pedestrian walkway.
- **Fifty-six (56)** time, place, and manner signs were installed along the pedestrian walkway.
- Areas of localized walkway width restrictions were addressed by removing obstructions and widening walkways.

Clark County, in cooperation with Resort Corridor property owners, developed public-private partnerships to address walkway concerns along Las Vegas Boulevard. Twenty-four (24) parcels took part in this property owner coordination leading to the following improvements:

- Harley Davidson Café (increasing walkway from 6 feet to 13 feet of effective walkway width)
- Metro Flag Food Court
- CVS at Bally's
- Caesars Palace Colosseum frontage (increasing walkway from 4 feet to 15 feet of effective walkway width)
- Mirage (increasing walkway at TI bus stop from 3 feet to 12.8 feet of effective walkway width)

With the acceptance of the 2012 Pedestrian Study, Clark County Planning began requesting new developments to provide a minimum of 15 feet of clear walkway width with appropriate shy distances along Las Vegas Boulevard walkways within the Resort Corridor. The typical shy distances are 1.5 feet on each side of the walkway (or 3 feet of shy distance) for a total clear width (W) of 18 feet. This development condition provides an effective walkway (W_E) width of 15 feet to accommodate existing and future pedestrian volumes. The Clark County development conditions require developers to maintain proposed and reconstructed walkways clear of obstructions such as existing fire hydrants and other utility obstructions, which are to be located outside of the pedestrian walkway.

Picture 2.7 through **Picture 2.18** show before-and-after views of examples of pedestrian walkway improvements that have been implemented along Las Vegas Boulevard since 2012.

Clark County has made additional improvements along the Resort Corridor aimed at improving the visitor experience. Lighting upgrades along the Strip installed light-emitting diode (LED) street lights from Russel Road to Sahara Avenue. The new lights are energy saving and produce a stronger light output. A photo of the replaced lighting is shown in **Picture 2.5** with the new LED lighting shown in **Picture 2.6**.



Picture 2.5 – Replaced Pedestrian Lighting - 2012.



Picture 2.6 – New LED Pedestrian Lighting - 2015.

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WALKWAY SEGMENTS THAT EXCEED LEVEL OF SERVICE (LOS) C IN 2012

*Reprint of Figure 3.73 from 2012 Study

FIGURE 2.1 *

Kimley»Horn

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Picture 2.7 – Typical Fire Hydrant at Margaritaville - 2012.



Picture 2.9 –Walkway at Harley Davidson Café - 2012.



Picture 2.11 – Walkway at Caesars Colosseum - 2012.



Picture 2.8 – Typical Fire Hydrant Relocation at Margaritaville - 2015.

Removal of fire hydrant obstructions, by relocating them to either the street median (if no other non-obstructive location was available) or to adjacent landscape areas, improved walkway capacity by eliminating the permanent obstruction. The relocations increased effective walkway width (W_E) by a minimum of three feet as well as eliminating a walkway hazard. An example of a removal is shown by comparing **Picture 2.7** and **Picture 2.8** above.



Picture 2.10 –Walkway at Harley Davidson Café - 2015.

Harley Davidson Café, in cooperation with Clark County, provided easements to widen the existing walkway by reducing landscaping. The sidewalk has increased in width through this area from 8 feet to 16 feet of total walkway. Newsracks were relocated to the north into a plaza area as shown. The Right Turn Only sign was relocated to the south, away from the constrained walkway area, the Stop Ahead Sign relocated to pedestrian barrier, and a Monorail directional sign was relocated adjacent to the Harley Davidson Café fencing.



Picture 2.12 – Walkway at Caesars Colosseum - 2015.

The pedestrian walkway was widened by Clark County, increasing width by 7 feet to a total of 18 feet (15 feet W_E). The widening improved the walkway pedestrian LOS to LOS C or above.

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Picture 2.13 – Walkway at Harrah's - 2012.



Picture 2.14 – Walkway at Harrah's - 2015.

Various obstructions were removed including a fire hydrant, trash containers, and landscaping to provide increased walkway capacity for north/south travel as well as improved queuing area to cross Las Vegas Boulevard at Harrah's/Mirage at-grade crosswalk.



Picture 2.15 – Walkway at Casino Royale/Venetian - 2012.



Picture 2.16 – Walkway at Casino Royale/Venetian - 2015.

The pedestrian directional fence and Casino Royale sign were redesigned and relocated to eliminate permanent obstructions within the pedestrian walkway.



Picture 2.17 – Walkway at Treasure Island Bus Stop - 2012.



Picture 2.18 – Walkway at Treasure Island Bus Stop - 2015.

A bypass walkway was constructed behind the existing bus shelter, improving both walkway capacity and queuing space for bus patrons to LOS C and better conditions.

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2.4 Properties/Areas Currently under Construction during the 2015 Update

At the time of this study there were various properties or areas that were undergoing construction within the Resort Corridor. The following properties had some level of construction:

- The Park and The Las Vegas Arena
- Resorts World Las Vegas (former Echelon Resort)
- Riviera (to be razed for new LVCVA Convention Center Expansion)
- Fontainebleau (inactive construction)
- All Net Arena (status unknown)
- Mandalay Bay Convention Center (opened 2015)
- Bally's CVS Store
- MGM Arena
- Metro Flag – Food Court (proposed construction)
- Harmon Tower at City Center (deconstruction)

Each of the above properties are currently under construction with differing completion dates. The Park and The Las Vegas Arena located south of Monte Carlo are anticipated to be completed Spring 2016. Completion dates for the other properties are unknown.

Picture 2.19 through **Picture 2.23** show examples of construction activity as observed during the 2015 study.



Picture 2.19 – Resorts World Construction (former Echelon Resort).



Picture 2.20 – Riviera Construction.



Picture 2.21 – Mandalay Bay Convention Center.



Picture 2.22 – Bally's CVS Store.



Picture 2.23 – Harmon Tower Deconstruction.

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2.5 Attractions

There are two recurring outdoor attractions within the study corridor on the "Strip". They are located on the west side of Las Vegas Boulevard and are free to the public. These attractions draw the attention of passers-by and are also destinations for pedestrians intending on watching the free shows. The attractions include the Bellagio Fountains and the Mirage Volcano. The Sirens of Treasure Island show previously discussed in the 2012 report has been closed and is no longer a recurring attraction. The removal of this attraction drastically reduced the pedestrian volumes around the attraction location.

The Bellagio Fountain shown in **Picture 2.24** has an approximate five-minute duration playing every 30 minutes from 12:00 PM to 7:00 PM and every 15 minutes from 7:00 PM to 12:00 AM. Due to the number of daily fountain shows and the sidewalk widths along the Bellagio frontage, the fountain show was not found to significantly impact the flow of pedestrians along Las Vegas Boulevard. The Mirage Volcano shown in **Picture 2.25** has an approximate five-minute duration and plays every half hour from 8:00 PM to 12:00 AM. The Mirage Volcano attraction was observed to impact pedestrian traffic. Pedestrians slow their walking speeds during the attractions to move through the crowds and to also catch a glimpse of the show. Walking speeds are also significantly slower immediately following the end of the show, as in many cases there is a significant crowd of pedestrians exiting the show area. **Figure 4.23** (Saturday May 23, 2015 - Memorial Day weekend) shows the impact to pedestrian volumes in front of the Mirage due to the volcano attraction. Pedestrian volume is significantly higher during the hours of the show as illustrated by the peaks in volume around show times.



Picture 2.24 – Bellagio Fountains – Daily Attraction.



Picture 2.25 – Mirage Volcano – Daily Attraction.

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2.6 Restudy Daily Conditions

2.6.1 Temperature

Kimley-Horn staff noted high temperatures in the field during the data collection time periods. Consequently, an analysis of temperature was done to determine if temperature potentially affected the number of people on the "Strip".

Temperature data for May 26th, 2012; June 16th, 2012; May 23rd, 2015; and June 20th, 2015 was collected from wunderground.com. The website records temperature readings from the closest airport to the location chosen. In this case, readings were taken at McCarran International Airport. The mean, maximum, and minimum temperature for each of the days as well as the historical average mean, maximum, and minimum temperatures for those days are summarized in degrees Fahrenheit in **Table 2.1**. Both the 2012 and 2015 study dates in May were cooler than the average temperatures. However, June 16, 2012 was marginally warmer than the historical temperatures for the day. Most importantly, June 20, 2015 was significantly warmer than the historical temperatures for the day. The maximum temperature on the day was the same as the record for the date at 113°F.

Table 2.1 – Temperature Data

	Date			
	Holiday Weekend Saturday		Typical Weekend Saturday	
	5/26/12	5/23/15	6/16/12	6/20/15
Mean Temp (Actual)	64	71	89	97
Max Temp (Actual)	75	82	103	113
Min Temp (Actual)	52	59	75	80
Avg. Mean Temp	80	80	87	88
Avg. Max Temp	92	91	99	100
Avg. Min Temp	69	68	75	76
Record Max	109	107	114	113
Record Min	50	48	53	53

2.6.2 Occupancy

Memorial Day weekend provided congested pedestrian conditions for Las Vegas Boulevard. Information compiled by the Las Vegas Convention and Visitors Authority (LVCVA) determined the citywide hotel occupancy for the 2015 Memorial Day weekend as 98.1% (96.0% in 2012). This total includes some hotels stretching from North Las Vegas to Primm and Boulder City. A number of large events were scheduled at numerous venues along the study corridor including concerts, comedians, and an Ultimate Fighting Championship (UFC) event. **Picture 2.26** illustrates the pedestrian activity level observed on Saturday, May 23, 2015.

The Electric Daisy Carnival (EDC) took place the weekend of the June 20, 2015 counts at the Las Vegas Motor Speedway. The event attracted more than 130,000 people each day, according to the event's website. The event opened at 5 PM and ended at 5:30 AM. The LVCVA reported the citywide hotel occupancy for the 2015 weekend of June 20 as 96.7% (94.7% in 2012).



Picture 2.26 – Activity Level on Memorial Day Weekend - 2015.

2.6.3 Escalators

During the restudy data collection periods, escalators within the study corridor were observed for their working conditions. Non-working escalators and elevators were recorded. The total number of instances that escalators were observed out of service can be seen in **Table 2.2** below. However, as Clark County is not responsible for the maintenance of all of these facilities, the latter part of **Table 2.2** provides the data for the number of non-working escalators that are the responsibility of the County. Only one elevator was noted not working throughout the study.

From observations and overheard visitor comments, it is important that escalators are operating whenever possible in the upwards direction when maintenance is being performed. As discussed in the original pedestrian study, the pedestrians on the Strip move at a leisurely pace. It is important therefore to maintain an atmosphere focused on the visitor experience. If one side of an escalator is not functional, it is desirable that the working side is set to move pedestrians upward. This further discourages pedestrians from illegally crossing the street to avoid climbing stairs as well as preventing a queue from forming at the bottom of the stairs. It is important to recognize that for the current escalator equipment, Clark County does not have the option to reverse travel directions without causing damage to the escalator equipment.

Table 2.2 – Out of Order Escalators

	Observed Out of Order (Up)		Observed Out of Order (Down)	
Time Period	5/23/15	6/20/15	5/23/15	6/20/15
1 PM – 4 PM	3	6	7	3
5 PM - 8 PM	3	3	4	5
9 PM - 12 AM	1	4	3	3
	County Out of Order (Up)		County Out of Order (Down)	
Time Period	5/23/15	6/20/15	5/23/15	6/20/15
1 PM – 4 PM	3	3	5	0
5 PM - 8 PM	2	1	1	3
9 PM - 12 AM	0	3	0	2

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The American Society of Mechanical Engineers Safety Code for Elevators and Escalators specifies a safety zone surrounding the entrances and exits of an escalator. The standard 6.1.3.6.4 reads:

> "The entry and exit zone shall be kept clear of all obstacles. The width of the zone shall be not less than the width between the centerlines of the handrails plus 200 mm (8in). The length of the zone, measured from the end of the newel, shall be not less than twice the distance between the centerlines of the handrails. Space shall be provided to accommodate all traffic in the safety zone." (pg. 180, 2004 ASME A17.1)."

These dimensions are considered absolute minimums. **Figure 2.2** provides a diagram of a safety zone and **Picture 2.27** gives an example. A typical escalator measures 4 feet wide on the "Strip". Therefore, a typical escalator clearance zone would measure 8 feet by 4 feet.



Figure 2.2 – Escalator Clear Zone Diagram.



Picture 2.27 – Non-Permanent Obstruction in Escalator Clearance Zone.

Similarly, the International Building Code states the following about a clear zone for stairs. The standard 1009.8 reads:

> "There shall be a floor or landing at the top and bottom of each stairway. The width of landings shall not be less than the width of stairways they serve. Every landing shall have minimum width measured perpendicular to the direction of travel equal to the width of the stairway. Where the stairway has a straight run the depth need not exceed 48 inches (1219 mm).
>
> The minimum size (width and depth) of all landings in a stairway is determined by the actual width of the stairway. If Section 1009.4 requires a stairway to have a width of at least 44 inches (1118 mm) and the stairway is constructed with that minimum width, then all landings serving that stairway must be at least 44 inches (1118 mm) wide and 44 inches (1118 mm) deep. If a stairway is constructed wider than required, landings must increase accordingly so as to not create a bottleneck situation in the egress travel."

Figure 2.3 illustrates an example of a safety zone. A typical stairway width on the "Strip" is 4 feet wide. Therefore, a typical stairway clear zone would measure 4 feet by 4 feet **Picture 2.28** shows a handbiller standing in a stairway clearance zone.

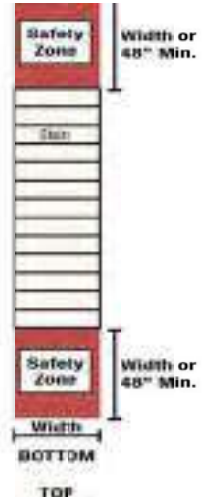


Figure 2.3 – Stair Clear Zone Diagram.



Picture 2.28 – Non-Permanent Obstruction in Stairway Clearance Zone.

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CC 1226

2.7 Public Right-of-Way and Pedestrian Easements

Research conducted in close coordination with Clark County Public Works staff yielded an updated comprehensive exhibit of the existing public walkways and the privately owned and maintained pedestrian walkways that are available to the public for pedestrian access. **Exhibit B** displays the existing public right-of-ways and pedestrian easements along Las Vegas Boulevard from Russell Road to Sahara Avenue. It should be noted that this exhibit is the summation of the best available information for this study. **Picture 2.29** illustrates a location with both public- and privately-maintained walkways with a public pedestrian easement that has been reconstructed since the 2012 Pedestrian Study. Additional locations of pedestrian easement modifications include:

- New York-New York
- Caesars Palace
- Harley Davidson
- Harrah's
- CVS at Bally's
- Bazaar at Bally's
- LINQ
- Miracle Mile Shops at Planet Hollywood
- Casino Royale
- Treasure Island Bus Stop
- CVS at Treasure Island
- Fashion Show Mall
- MGM North Festival Grounds
- SLS (Former Sahara Hotel/Casino)

Examples are shown in **Picture 2.29** through **Picture 2.31**.



Picture 2.29 – Treasure Island Walkway with Public Right-of-way, Pedestrian Easement, and Private Walkway.



Picture 2.31 – Casino Royale Walkway with Public Right-of-way and Pedestrian Easement.



Picture 2.30 – New York-New York Walkway with Public Right-of-way, Pedestrian Easement, and Private Walkway.

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CC 1227

2.8 Existing Walkway Widths (W)

To update the 2012 Pedestrian Study for current pedestrian LOS along Las Vegas Boulevard, the total walkway width (W) and effective walkway width (W_E) were verified and reestablished. Through field measurements and records research, walkway widths were documented within the previously identified 17 walkway segments of less than LOS C as well as where construction activity since 2012 has modified walkway widths. The walkway widths (W and W_E) were documented at each of the pedestrian volume data count locations within this restudy and at various locations throughout the study corridor that were representative of the defined walkway segments. At these locations, the effective walkway widths were calculated using the 2010 HCM methodology, the same methodology as used in the 2012 study. Shy distances were applied to permanent obstructions (i.e. fences, landscaping, trash enclosures, utility poles, bus shelters, fire hydrants, etc.) to determine the current effective walkway widths.

With the completion of the 2012 Pedestrian Study, the previous long-standing development requirement within the Resort Corridor of providing 10 feet of effective walkway width or a LOS C or better was revised. The 2012 Pedestrian Study recommended:

> "Based on the pedestrian volumes observed in this study, some future sidewalks within the central or inner portions of the study corridor will require walkway widths over 15 feet (W). A walkway with 15 feet of effective width (W_E) can serve up to 2,250 pedestrians in 15 minutes while maintaining a LOS of C."

The above recommendation has been applied for the entire Resort Corridor for pedestrian walkway planning to accommodate existing and future pedestrian volumes. Current project entitlements within the Resort Corridor now require developments to provide a minimum clear walkway of 15 feet with appropriate shy distances, or a clear sidewalk width of 18 feet considering a typical shy distance of 1.5 feet on each side of the walk (3 feet total). Sidewalk width exceptions are recognized to accommodate existing conditions with engineering judgement.

Picture 2.32 and **Picture 2.33** show examples of recently constructed 18 foot clear walkways providing 15 feet of effective walkway width. **Picture 2.34** and **Picture 2.35** show examples of recently constructed walkways with greater than 18 feet clear width.



Picture 2.32 – 18 foot Clear Walkway, Caesars Colosseum.



Picture 2.33 – 18 foot Clear Walkway, Treasure Island North.



Picture 2.34 – Greater than 18 foot Clear Walkway, North Festival Lot.



Picture 2.35 – Greater than 18 foot Clear Walkway, Bally's Bazaar.

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2.9 Newsracks

In the 2012 Pedestrian Study, newsracks were documented as permitted permanent obstructions within the Resort Corridor. Since that time, some newsracks have been removed or relocated so as not to obstruct the pedestrian walking path. The random-sized, multi-color, and various shaped newsracks seen in **Picture 2.36** have been replaced by the County. The replacement newsracks are owned and maintained by the County and provide a uniform color and appearance within the Resort Corridor. **Picture 2.37** shows the new uniform County newsracks. The peaked roof design discourages the use of the news racks as makeshift tables for trash collection, stacking of handbilling materials, or other activities.

Newsrack medallion locations are shown in **Exhibit C.**



Picture 2.36 – Mismatched Newsracks – 2015.



Picture 2.37 – Replacement Newsrack – 2015.

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2.10 Bus Stops

The 2012 Pedestrian Study identified twenty-nine (29) bus stops located along Las Vegas Boulevard between Russell Road and Sahara Avenue. For the existing 2015 conditions, twenty-eight (28) bus stops are provided within the Resort Corridor between Russell Road and Sahara Avenue. Some stops have been removed and/or relocated along the roadway since 2012. **Figure 2.4** displays the bus stops locations labeled by the type of bus stop installation per the 2012 study descriptions. Descriptions and examples of each type have been provided in **Figure 2.5** through **Figure 2.7.**

The following section details the modification and improvements to the Resort Corridor bus stops since 2012, recognizing the need for improved, unobstructed pedestrian walkways within the Resort Corridor. Bus stop identification signs were relocated in coordination with the Regional Transportation Commission (RTC) to better provide a clear pedestrian walkway as well. Changes are shown in **Picture 2.38** through **Picture 2.48**.



Picture 2.38 – Sky Condominium Bus Stop - 2012 - Removed.

The bus stop at the Sky Condominiums has been removed.



Picture 2.39 – Monte Carlo Bus Stop - 2012.



Picture 2.40 – Monte Carlo Bus Stop - 2015.

The Monte Carlo Hotel/Casino bus stop was reconstructed as an isolated bus stop (the bus stop type recommended within the Resort Corridor in the 2012 Pedestrian Study), with the pedestrian walking path behind the shelter.



Picture 2.41 – Paris Bus Stop - 2012.



Picture 2.42 – Paris Bus Stop - 2015.

The bus shelter and surrounding trees and planters at the Paris Hotel and Casino have been removed, increasing the clear walkway width. The bus stop and benches have been moved northward along the walkway since the 2012 Pedestrian Study. In addition, the bus ticket vending machines were relocated out of the pedestrian walkway adjacent to planters on Paris property and trash enclosures have been relocated in-between and in-line with the bus stop benches to further reduce obstructions to the pedestrian walkway.

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Picture 2.43 – Flamingo Bus Stop – 2012.



Picture 2.44 – Harrah's (Relocated Flamingo) Bus Stop – 2015.

During the 2012 Pedestrian Study, an isolated bus stop (the bus stop type recommended within the Resort Corridor in the 2012 Pedestrian Study), was being constructed at the Harrah's Hotel/Casino. Today the pedestrian walkway is located behind the bus stop, separated by landscaping. The current bus stop replaced the stop previously located at the front of the pedestrian walkway at the Flamingo Hotel/Casino.



Picture 2.45 – Hilton Grand Vacations South Bus Stop - 2012.



Picture 2.46 – Hilton Grand Vacations South Bus Stop - 2015.

The bus stop at Hilton Grand Vacations South was moved.



Picture 2.47 – Sahara South Bus Stop - 2012.



Picture 2.48 – Sahara South Bus Stop - 2015.

With the construction of the North Festival Lot (home to Rock-in-Rio), a new bus turnout was constructed south of the Sahara Avenue/Las Vegas Boulevard intersection. The bus stop is now located at the front of the walkway, providing 40 feet of walkway width behind the shelters.

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CC 1231

2015



Legend

Bus Stop

1. Isolated
2. In Front of Walk
3. Behind Walk

Notes:

1. Previously Type 2
2. Previous location at Flamingo
3. Previously Type 2
4. Sky Condominiums stop removed
5. Hilton Grand Vacations S. new location
6. Sahara S. new location

BUS STOP TYPE AND LOCATION IN 2015

FIGURE 2.4

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CC 1232

Type 1 – (Isolated) – These bus stops are separate from the main pedestrian walkway; typically, a separate walkway is provided from the main walkway to access the bus stop and shelter.

Figure 2.5 graphically illustrates a Type 1 bus stop. **Picture 2.49** gives an example of a Type 1 bus stop on the Resort Corridor. A total of five (5) Type 1 bus stops were found within the study corridor, with their locations shown on **Figure 2.4**. This type of bus stop minimized conflicts between bus patron queues and passing pedestrians.



Figure 2.5 – Type 1 (Isolated) Bus Stop Example



Picture 2.49 – Type 1 Bus Stop Example – Monte Carlo North.

Type 2 – (Front of Walk) – Bus stops were classified as Type 2 if the pedestrian walkway was located behind the bus shelter.

Figure 2.6 graphically illustrates a Type 2 bus stop. **Picture 2.50** gives an example of a Type 2 bus stop on the Resort Corridor. A total of ten (10) Type 2 bus stops were found within the study corridor, with their locations shown on **Figure 2.4**. The benefits of the Type 2 bus stop are similar to those of the isolated Type 1 except large pedestrian queues can spill back onto the adjacent through walkway.



Figure 2.6 – Type 2 (Front of Walk) Bus Stop Example



Picture 2.50 – Type 2 Bus Stop Example – Treasure Island South.

Type 3 – (Behind Walk) – This classification was applied to bus shelters and 2 bus benches that are located behind the pedestrian walkway. Type 3 bus stops route pedestrian traffic between the bus shelter or bus benches and the street.

Figure 2.7 graphically illustrates a Type 3 bus stop. **Picture 2.51** gives an example of a Type 3 bus stop on the Resort Corridor. A total of thirteen (13) Type 3 bus stops were found within the study corridor, with their locations shown on **Figure 2.4**. This is the least desirable type of bus stop for the Resort Corridor. As pedestrian volumes and bus patrons increase, conflicts occur on the walkway between the bus patrons and pedestrians walking by the stop.



Figure 2.7 – Type 3 (Behind Walk) Bus Stop Example



Picture 2.51 – Type 3 Bus Stop Example – Bellagio South.

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2.11 Pedestrian Containment

Pedestrian containment barriers have continued to be installed and improved from those reported in the 2012 Pedestrian Study along Las Vegas Boulevard. This section describes the modified and recently constructed pedestrian containment within the Resort Corridor. Public entities and private properties have installed containment within the Resort Corridor as well. Since 2012, Clark County has installed new fencing within the median of Las Vegas Boulevard to serve as a deterrent for pedestrians crossing Las Vegas Boulevard at unmarked locations and where containment is not provided along both sides of the roadway.

Approximately 4,840 LF of new pedestrian walkway containment has been added to Las Vegas Boulevard between Russell Road and Sahara Avenue (3,200 LF within the median and 1,640 LF along the curb). A total of 21,300 LF of containment fencing exists within the Resort Corridor at the time of this study.

New or replacement pedestrian containment fencing since 2012 has been installed at the following locations along Las Vegas Boulevard:

- New York–New York
- Monte Carlo
- LINQ
- Treasure Island
- MGM North Festival Grounds

Picture 2.52 through **Picture 2.55** examples of the new pedestrian containment since the 2012 Pedestrian Study. **Figure 2.8** through **Figure 2.10** compares a summary of pedestrian containment throughout the Resort Corridor in 2012 to the pedestrian containment that exists at the time this report was prepared in 2015.



Picture 2.52 – New Pedestrian Containment at Monte Carlo.



Picture 2.54 – New Pedestrian Containment at LINQ.



Picture 2.53 – Reconstructed Containment along New CVS Store at Treasure Island.



Picture 2.55 – New Pedestrian Containment at MGM North Festival Grounds.

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2012



SEE FIGURE 2.9

2015



SEE FIGURE 2.9

PEDESTRIAN CONTAINMENT - PUBLIC AND PRIVATE LOCATIONS
RUSSELL RD. TO CITY CENTER PL.

FIGURE 2.8

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2012



SEE FIGURE 2.8

SEE RIGHT



SEE FIGURE 2.10

2015



SEE FIGURE 2.8

SEE RIGHT



SEE FIGURE 2.10

PEDESTRIAN CONTAINMENT - PUBLIC AND PRIVATE LOCATIONS
HARMON AVE. TO FASHION SHOW DR.

FIGURE 2.9

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2012



SEE FIGURE 2.9

Legend

Total Resort Corridor Containment 2012

Curb - 13,360 LF

Median - 3,100 LF

2015



SEE FIGURE 2.9

Legend

Total Resort Corridor Containment 2015

Curb - 15,000 LF

Median - 6,300 LF

PEDESTRIAN CONTAINMENT - PUBLIC AND PRIVATE LOCATIONS
FASHION SHOW DR. TO SAHARA AVE.

FIGURE 2.10

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3 DATA COLLECTION

The data collection methodology established for the 2012 study was repeated with minor variations to capture the variations in pedestrian activity and the pedestrian environment along Las Vegas Boulevard from Russell Road to Sahara Avenue, and to compare and update the 2012 Pedestrian Study. During the data collection phase of the study, pedestrian volumes and non-permanent obstructions were observed. Similar to the 2012 study, the term "non-permanent obstruction," for the purposes of the data collection phase of the study and for this report, is defined as an individual who could obstruct the pedestrian walkway while engaging in any of the following activities within the walkway: handbilling, performing, soliciting, or selling.

With the study focus on the segments of the "Strip" with LOS lower than C, the count locations in the 2015 study were selected within the inner portion of the corridor (Tropicana Avenue to Spring Mountain Road). In order to obtain observations that could directly compare to the findings of the 2012 study, the previous data collection periods were maintained for this update. In consultation with the County and for consistency with the previous pedestrian study, the pedestrian volume data collection times for this restudy were identified to be the Saturday of the Memorial Day holiday weekend and on a typical summer Saturday. Based upon the study schedule, May 23, 2015, the Saturday of Memorial Day weekend, and June 20, 2015 were selected.

Memorial Day Weekend continues to be one of the most active periods within the Resort Corridor. **Picture 3.1** illustrates the activity level observed on Saturday, May 26, 2012 and for comparison, **Picture 3.2** shows the activity level on Saturday, May 23, 2015.



Picture 3.1 – Activity Level on Memorial Day Weekend - 2012.



Picture 3.2 – Activity Level on Memorial Day Weekend - 2015.

Two video cameras were used to observe pedestrian activities for seven consecutive days each with 24-hour recordings from Friday 6 AM to Friday 6 AM before and after the Saturday count days. The video cameras were installed by Clark County for the study and used for the data collection. The seven-day observations were programmed to occur between May 22 to May 29 and June 19 to June 26 (including the two primary study days). Due to technical issues, data from only one 24-hour video location was able to be reduced.

The pedestrian observation sites for the Saturday data collection program were selected based upon the identified 17 segments which experienced less than LOS C in the 2012 Pedestrian Study. Count locations were chosen to be within the identified 17 segments. In addition, seven (7) new count locations were added to the study in 2015 recognizing the changes in land use and shifts in construction areas. The twenty-one (21) count locations are listed in **Table 3.1**.

An effort was made to recount at the same locations as the 2012 study where possible for direct comparison. Eleven locations were identified on the west side of Las Vegas Boulevard, nine were identified on the east side, as well as one east/west pedestrian bridge. Twenty-one (21) locations were used for data collection in 2015. Where video observation coverage was not available for the restudy, manual counts were conducted. The pedestrian count locations identified for the update are summarized in **Figure 3.1**.

Figure 3.1 shows the location of each of the count locations numbered from south to north. For consistency, count locations that were manual counts in the 2012 study are labeled with "M," Clark County cameras are labeled with "CC," and video counts provided by cameras from the Metropolitan Police Department are labeled "Metro." New count locations are labeled with their respective count type descriptions and numbered starting from the last count location of that type in 2012.

Table 3.1 – Count Locations

Count Location ID	Location	Segment
2	Tropicana W. Bridge	R1
CC1	New York-New York	-
M11	Food Court*	R2
Metro1	Harley Davidson	R3
7	Harmon W. Bridge	R4
M4	Harmon N. Bridge	-
CC2	Bellagio South	R5
M12	Bally's South*	R6
9	Bally's Bazaar	-
11	Flamingo W. Bridge	R7
Metro3	Cromwell*	R8
12	Margaritaville	R8
M6	Caesars Palace S.	R9
M13	Colosseum*	R10
13	Forum Shops	R11
14	Harrah's	R12
CC3	Venetian South	R14
M14	Venetian North*	R15
Metro4	TI Bus Stop*	R16
CC4	TI South	R17
M15	TI North*	R17

**New count location in 2015.*

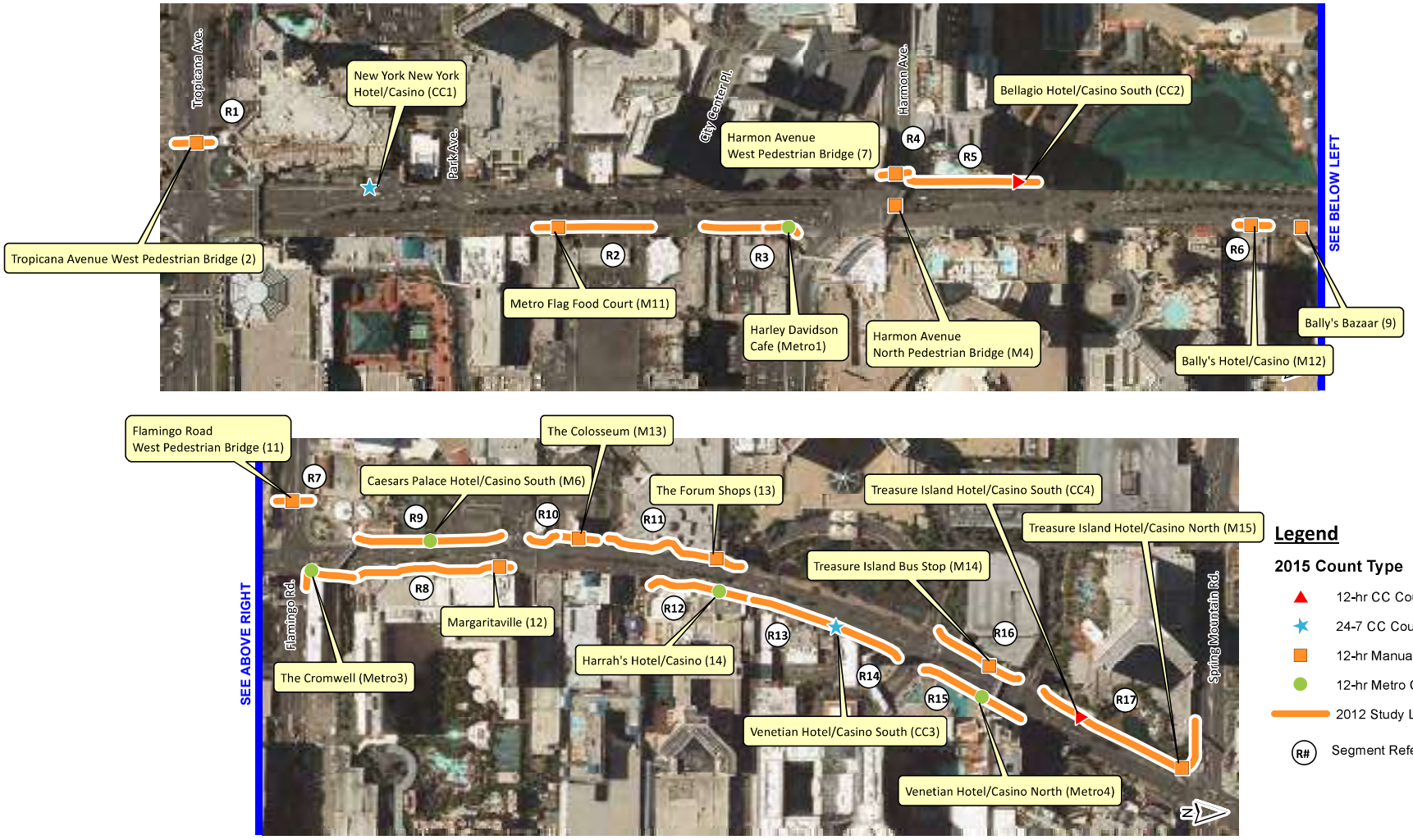
The pedestrian volume data used in this study is the result of a total of 288 hours of manual counts and 840 hours of recorded video at 21 unique locations within the study corridor. These 21 locations included four pedestrian bridges (manual) and 17 walkway locations (nine video and eight manual). This report and its conclusions are based upon approximately 2,650,000 observed pedestrians within the study corridor as counted between May 22 and June 26, 2015.

The following sections provide additional details on the data collection effort. The raw data from the data collection effort is provided on a disk located on the back cover of this study.

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CC 1238

2015



PEDESTRIAN VOLUME COUNT LOCATIONS IN 2015

FIGURE 3.1

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CC 1239

3.1.1 Pedestrian Counts - Video

Through close coordination with Metropolitan Police Department (Metro), and Clark County Public Works, seven (7) surveillance cameras were made available for the study.

Metro provided five (5) surveillance cameras for the study. The Metro cameras were used to observe 12 hours of sidewalk pedestrian activity throughout the study area for each Saturday count. A typical metro camera installation can be seen in **Picture 3.3** as installed along Las Vegas Boulevard. Camera observation views for each location were selected by Kimley-Horn staff to ensure that all video footage would provide suitable data for collecting pedestrian volume counts. It should be noted that as data was analyzed there were segments of time that were not available for pedestrian counting. Clark County deployed two (2) additional cameras for video data collection. Kimley-Horn coordinated with the County to install the cameras in similar locations for video coverage as in the 2012 Pedestrian Study (see **Picture 3.5**). Each camera was manually adjusted to the desired location before each week-long study period. The cameras were removed following each data collection session and the video data was subsequently downloaded from the cameras. A typical County camera installation is shown for the Treasure Island Hotel/Casino north of Siren's Cove Boulevard and south of Spring Mountain Road in **Picture 3.4.**

Once the video data was collected by Kimley-Horn in cooperation with Clark County and Metro, the videos were viewed and pedestrian volumes were documented in 15-minute increments by trained counting staff.

The video data collection effort for the study is summarized below by date and total hours observed for the study.

- **12-hr Camera Locations**

7 locations	5/23/2015	=	84 hours
7 locations	6/20/2015	=	84 hours

- **24-hr Camera Locations**

2 locations	5/22-5/29/2015	=	336 hours
2 locations	6/19-6/26/2015	=	336 hours
			840 hours*

**Due to technical difficulties, some video data was not recovered.*



Picture 3.3 – Typical Las Vegas Boulevard Metro Camera.



Picture 3.4 – Clark County Camera - Treasure Island Hotel/Casino.



Picture 3.5 – Camera Installation – Treasure Island.

3.1.2 Pedestrian Counts - Manual

Manual pedestrian counts were collected at various locations on Las Vegas Boulevard from Tropicana Avenue to Spring Mountain Road to supplement the video data. The manual counts were conducted from 12:00 PM to 12:00 AM (noon to midnight) on both Saturday, May 23 and Saturday, June 20, 2015.

The 12-hour count period allowed the capture of pedestrian volume peaks in both the early afternoon and evening when pedestrian volumes have historically been the highest. In addition, during the May 23 count period when a high pedestrian volume location was identified, the counting staff was increased to ensure an accurate count was obtained.

The manual data collection effort for the study is summarized below by date and total hours observed for the study.

- **12-hr Manual Pedestrian Volume Counts**

12 locations	5/23/2015	=	144 hours
12 locations	6/20/2015	=	144 hours
			288 hours

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CC 1240

3.1.3 Non-Permanent Obstructions

As collected in the 2012 Pedestrian Study, during the peak data collection periods, non-permanent obstructions were observed by three unique data collection agents. Non-permanent obstructions (obstructive uses) are defined as individuals who could obstruct the pedestrian walkway while handbilling, performing, soliciting, or selling. Under County Ordinance 16.11 (**Exhibit D**), an "obstructive use" means "obstructing, delaying, hindering, blocking, hampering or interfering with pedestrian passage, including passage to or from private property" (Obstructive Uses of Public Sidewalks - 16.11.020 – General Definitions, Clark County). On May 23 and June 20, the data collection agents were tasked with documenting the quantity, classification, and location of non-permanent obstructions in the pedestrian walkway during each of their three data collection walks. To maintain consistency with the previous 2012 study, non-permanent obstructions were classified into four categories with the following definitions for uniformity in data collection:

- Handbillers – any person within the pedestrian walkway attempting to give away literature of any kind. No financial transaction occurs and the handbiller does not expect anything in return for the literature that is given.
- Performers – any person within the pedestrian walkway attempting to entertain with the expectation of receiving a tip. Performers may include anyone dressed in a costume expecting tips for photographs, or any display of talent for a tip.
- Solicitors – any person within the pedestrian walkway soliciting donations. The solicitor provides nothing to those who donate.
- Vendors – any person within the pedestrian walkway with the intent of selling some item. There is a financial transaction that takes place and some item is exchanged for money.

The non-permanent obstruction field data, as observed by each agent for the study, were compiled in the office and summarized in a spreadsheet format. Non-permanent obstructions were summarized similar to the 2012 study by observation period, side of street, and by location within the corridor into the following categories:

- Within 50 feet of an intersection, driveway, or crosswalk
- On pedestrian bridges
- Within 15 feet of a pedestrian bridge landing
- Within 15 feet of a bus stop
- Other

A significant amount of the research portrayed in the 1985 Highway Capacity Manual (HCM) and its most recent 2010 edition in regards to pedestrians and walkway LOS originated in the work of Dr. Fruin. The concept of the body ellipse defines the average male human body as an 18" depth and a 24" shoulder breadth, necessitating 3.0 square feet when standing still (i.e., in a queue for a bus). The 2010 HCM also defined the pedestrian body ellipse which is shown in **Figure 3.2** as adapted from the 2010 HCM.

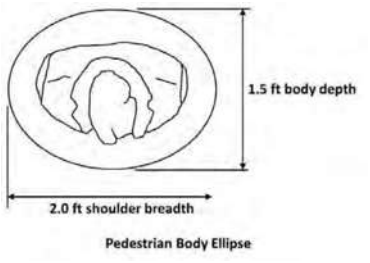


Figure 3.2 – 2010 Highway Capacity Manual Standards for Pedestrian Geometry

Based on information contained in the HCM, obstructions along edges of the walkways were considered to take up an area 2.25 feet by 10 feet (22.5 square feet) and obstructions in the center of walkways were considered to take up 3.5 feet by 7.5 feet (26.25 square feet). **Figure 3.3** illustrates the pedestrian obstruction sizes utilized in the analysis. See **Section 4.1** for methodology behind calculating effective length and width.

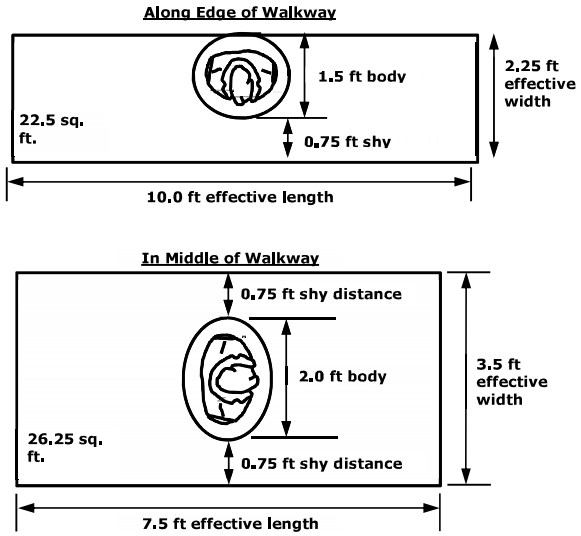


Figure 3.3 – Pedestrian Obstruction Sizes

3.2 RTC FAST Cam Stills

The Regional Transportation Commission (RTC) of Southern Nevada – Freeway and Arterial System of Transportation (FAST) provided additional snapshot views of the pedestrian activity from a FAST cam video camera. The following are the RTC FAST camera locations and views provided to visually capture the general pedestrian activity levels throughout the day:

- View 1:
  - Caesars
  - Fashion
  - Circus
  - Harrah's
  - Wynn
  - SLS
  - Venetian
  - Treasure Island
  - Welcome
- View 2:
  - MGM
  - Harmon
  - Planet Hollywood
  - Monte Carlo
  - Harmon West
  - Paris
  - City Center East
  - City Center West
  - Bellagio

The RTC provided photos for the Saturday of Memorial Day weekend, May 23, 2015. Snapshots were taken every four seconds from midnight to 2 AM and from noon to midnight. In total, over 23,000 photographs from the cameras with each photograph showing nine (9) locations were provided. See video snapshots in **Figure 3.4** through **Figure 3.11**. These figures illustrate typical conditions at 2 AM, 12 PM (Noon), 6 PM, and 12 AM (midnight). Full photo data is provided in **Exhibit E**.

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CC 1241



Figure 3.4 – RTC Photo Exhibit View 1 at 2 AM

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CC 1242



Figure 3.5 – RTC Photo Exhibit View 1 at 12 PM (noon)

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CC 1243



Figure 3.6 – RTC Photo Exhibit View 1 at 6 PM

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Figure 3.7 – RTC Photo Exhibit View 1 at 12 AM (midnight)

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Figure 3,8 – RTC Photo Exhibit View 2 at 2 AM

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Figure 3.9 – RTC Photo Exhibit View 2 at 12 PM (noon)

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Figure 3.10 – RTC Photo Exhibit View 2 at 6 PM

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Figure 3.11 – RTC Photo Exhibit View 2 at 12 AM (midnight)

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4 Data Evaluation

Quantitative and qualitative measures are important when addressing safety concerns and general experience enhancements. This section of the report presents both the numerical results from the data collection effort, as well as the qualitative assessments made by Kimley-Horn staff.

Numerical results are provided for the data collection and analysis with regard to pedestrian volumes from the video and manual counts and resulting LOS values along the inner study corridor from Tropicana Avenue to Spring Mountain Road. The results from the non-permanent obstructions data collection are also presented. In addition, bus stop queuing analysis results are summarized.

The 17 segments of LOS C from the 2012 study, as summarized in **Figure 2.1,** were analyzed based on the current 2015 conditions. Walkways segments that had improved to be at or above LOS C were removed from **Figure 2.1** and in many cases reduced in segment length. The remaining and new segments can be seen in **Figure 4.2** and **Figure 4.3.** The updated analysis found the East/West Harmon Avenue Bridge over Las Vegas Boulevard having short periods of time on Saturday of Memorial Day exceeding LOS C. The LOS less than C segments shown in **Figure 4.2** and **Figure 4.3** represent approximately 5,500 LF of walkway within the Resort Corridor.

4.1 Data Analysis Methodology

This section details the methodology used to analyze the collected pedestrian volume data to determine pedestrian LOS throughout the study corridor. Following the recommendations of the 2012 study, pedestrian LOS based upon walking speed was not used as a factor in the 2015 update.

4.1.1 Pedestrian Volume Analysis – Level of Service Calculations

The 2010 HCM methodology was used for calculating the pedestrian flowrate LOS as used to determine an overall pedestrian LOS along the "Strip", as well as LOS at specific locations of walkway width restrictions along the study corridor. The analysis requires calculation of the following:

1. Determine the effective walkway width (W_E)
2. Calculate the pedestrian flow rate
3. Determine LOS

Determining effective length and effective walkway width (W_E)

The following equation is for the calculation of effective walkway width:

Equation 4.1 – Effective Walkway Width (W_E)

$$W_E = W - W_O$$

where: W_E = effective walkway width (ft),

W *or* W_T = total walkway width at a given point along walkway (ft), and

W_O = sum of fixed-point object effective widths and linear-feature shy distances at a given point along walkway (ft).

The total walkway widths (W or W_T) for **Equation 4.1** and the factors that influence the determination of the effective walkway widths (W_E) in **Equation 4.1** were found using a combination of aerial imagery, available topographic surveys, and field measurements. The 2010 HCM defines effective walkway width (W_E) as:

> "the portion of a walkway that can be used effectively by pedestrians. Various types of obstructions and linear features… reduce the walkway area that can be effectively used by pedestrians… Linear features such as the street curb, [a] low wall, [or a] building face each have associated shy distances. The shy distance is the buffer that pedestrians give themselves to avoid accidentally stepping off the curb, brushing against a building face, or getting too close to other pedestrians standing under awnings or window shopping. Fixed objects, such as [a] tree, have effective widths associated with them. The fixed-object effective width includes the object's physical width, any functionally unusable space (e.g., the space between a parking meter and the curb of the space in front of a bench occupied by people's legs and belongings), and the buffer given the object by pedestrians" (pg. 23-9, 2010 HCM).

The 2010 HCM recommends that walkway operational analysis evaluate "the portion of the walkway with the narrowest effective width (W_E), since this section forms the constraint on pedestrian flow" (pg. 23-10, 2010 HCM). **Figure 4.1** shows graphically how effective walkway width (W_E) is calculated (adapted from the 2010 HCM). **Table 4.1** from the 2010 HCM shows the LOS threshold criteria for pedestrian flowrates per unit width (v_p).

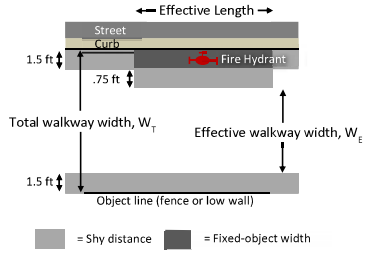


Figure 4.1 – Effective Walkway Width (W_E) Diagram

Figure 4.1 also illustrates the effective length of a fixed object. As described by the 2010 HCM:

> "the effective width of a fixed object extends over an effective length that is considerably longer than the object's physical length. The effective length represents the portion of the walkway that is functionally unusable because pedestrians need to move to one side ahead of time to get around a fixed object. The effective length of a fixed object is assumed to be five times the object's effective width.
>
> "Typically, a walkway operational analysis evaluates the portion of the walkway with the narrowest effective width, since this section forms the constraint on pedestrian flow. A design analysis identifies the minimum effective walkway width that must be maintained along the length of the walkway to avoid pedestrian queuing or spillover" (pg. 23-10, 2010 HCM).

The effective walkway widths (W_E) for the study corridor were calculated at each pedestrian volume count location and for restricted sidewalk locations as identified during the field inventory of the study corridor. Using **Equation 4.2** the walkway characteristics for the observed pedestrian volumes can be used to determine the walkway LOS.

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Equation 4.2 – Pedestrian Flow Rate per Unit Width of Walkway

$$v_p = \frac{v_{15}}{15 \times W_E}$$

where: v_p = pedestrian flow per unit width (p/ft/min),

v_{15} = pedestrian flow rate during peak 15 min (p/h), and

W_E = effective sidewalk width (ft).

Table 4.1 – Pedestrian LOS

LOS	Flow Rate (p/min/ft)	Comments
A	≤5	Ability to move in desired path, no need to alter movements
B	>5 - 7	Occasional need to adjust path to avoid conflicts
C	>7 - 10	Frequent need to adjust path to avoid conflicts
D	>10 - 15	Speed and ability to pass slower pedestrians restricted
E	>15 - 23	Speed restricted, very limited ability to pass slower pedestrians
F	Variable	Speeds severely restricted, frequent contact with other users

4.2 Pedestrian Volumes

The pedestrian volume data from each count location was evaluated and plotted graphically to show peak periods of pedestrian traffic and identify maximum volumes. (The pedestrian volume data in PDF and Excel formats as collected for this study is included as **Exhibit E** on a CD at the back of the report.)

In 2012, effective walkway widths along the entire length of the study corridor were grouped into segments with similar effective walkway widths. Analysis resulted in 17 walkway segments that were found to exceed LOS C on the holiday and/or typical Saturday (May 26 and/or June 16, 2012) labeled R1 to R17 from south to north (see **Figure 2.1** for segment location). For the update, count locations were chosen based off the 17 segments created in 2012 and locations observed to be problematic.

Count locations in the outer study area, (Russell Road to Flamingo Road and Spring Mountain Road to Sahara Avenue) were not considered in this portion of the restudy. **Figure 4.4** through **Figure 4.7** provide a visual summary of the maximum 15-minute pedestrian volume at each count for each count day in 2015 compared to the equivalent count location in 2012 for a holiday and typical Saturday.

The 15-minute pedestrian volume data was paired with the field verified effective walkway widths and a LOS value calculated and assigned for every 15-minute data collection increment. The 2010 HCM LOS values are calculated as a numerical threshold based on effective walkway width (W_E); for example, a 10-foot effective walkway width (W_E=10') operating at LOS A can accommodate up to 750 pedestrians in 15 minutes and the same walkway can accommodate up to 1,500 pedestrians with a LOS C. It is important to note that the LOS threshold values change depending on the effective walkway width (W_E) provided.

The maximum number of pedestrians observed in a 15-minute period was 2,472 on the northeast corner of Flamingo Road at the Cromwell Hotel/Casino during the time of 11:15 PM and 11:30 PM on Saturday, May 23, 2015 of Memorial Day weekend (**Picture 4.1**). A total of 15 of the 21 count locations were observed with more than 1,500 pedestrians in 15 minutes on May 23, 2015. This is compared to one (1) location observed with more than 1,500 pedestrians in 15 minutes during June 20, 2015. A maximum volume of 1,500 pedestrians in 15 minutes represents a pedestrian LOS C on an effective width walkway of 10 feet. In comparison, one (1) location was observed with more than 2,250 pedestrians in 15 minutes on May 23, 2015. No locations were observed with more than 2,250 pedestrians in 15 minutes during June 20, 2015. A maximum volume of 2,250 pedestrians in 15 minutes represents a pedestrian LOS C on an effective width walkway of 15 feet (the recommended width for new construction).



Picture 4.1 – Memorial Day Weekend Pedestrian Activity – Cromwell - 2015.

4.2.1 Evaluation Results Summary

The following results presented in **Table 4.2** are from an evaluation based solely on the pedestrian volume at each count location and the associated walkway widths at those locations.

Table 4.2 – LOS Summary

Count Location ID	Location	W_E 2012	W_E 2015	LOS Holiday 2012	LOS Holiday 2015	LOS Typical 2012	LOS Typical 2015
2	Tropicana West Bridge	11.8	11.8	D	D	C	B
CC1	NYNY	8.3	12.8	C	B	C	A
M11	Food Court	6.5	13	D	C	C	B
Metro1	Harley Davidson	5	13	E	C	E	A
7	Harmon West Bridge	12.5	12.5	D	D	C	C
M4	Harmon North Bridge	12.3	12.3	B	D	A	A
CC2	Bellagio South	21.5	21.5	C	B	A	A
M12	Bally's South	11	16	D	C	C	B
9	Bally's Bazaar	28	14.5	A	C	A	B
11	Flamingo West Bridge	12	12	D	D	C	D
Metro3	Cromwell	11.5	11.5	C	D	A	C
12	Margaritaville	8.5	8.5	D	E	C	D
M6	Caesars South	6.8	6.8	D	E	C	C
M13	Colosseum	4	15	F	C	F	A
13	Forum Shops	12	12	D	C	C	A
14	Harrah's	6.7	12.5	D	C	D	A
CC3	Venetian South	6.3	6.3	D	E	E	D
M14	TI Bus Stop	7	12.8	D	B	C	A
Metro4	Venetian North	3	7	F	D	F	C
CC4	TI South	1.7	1.7	F	A	D	A
M15	TI North	5.5	15	D	A	C	A

Count locations with LOS less than C are shown in red. Data collected on the typical Saturday (June 20, 2015) showed similar characteristics as the data collected on the holiday Saturday (May 23, 2015). The main distinction between the two days was that the total pedestrian volumes on the typical Saturday were generally lower than those of the holiday Saturday. The pedestrian volume peaking hourly trends were generally the same and in many cases the maximum peak 15-minute period at a count location was observed at the same time of day.

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2012



SEE FIGURE 4.3

Legend (2012)

- LOS < C
- R# Segment Reference Number

2015



SEE FIGURE 4.3

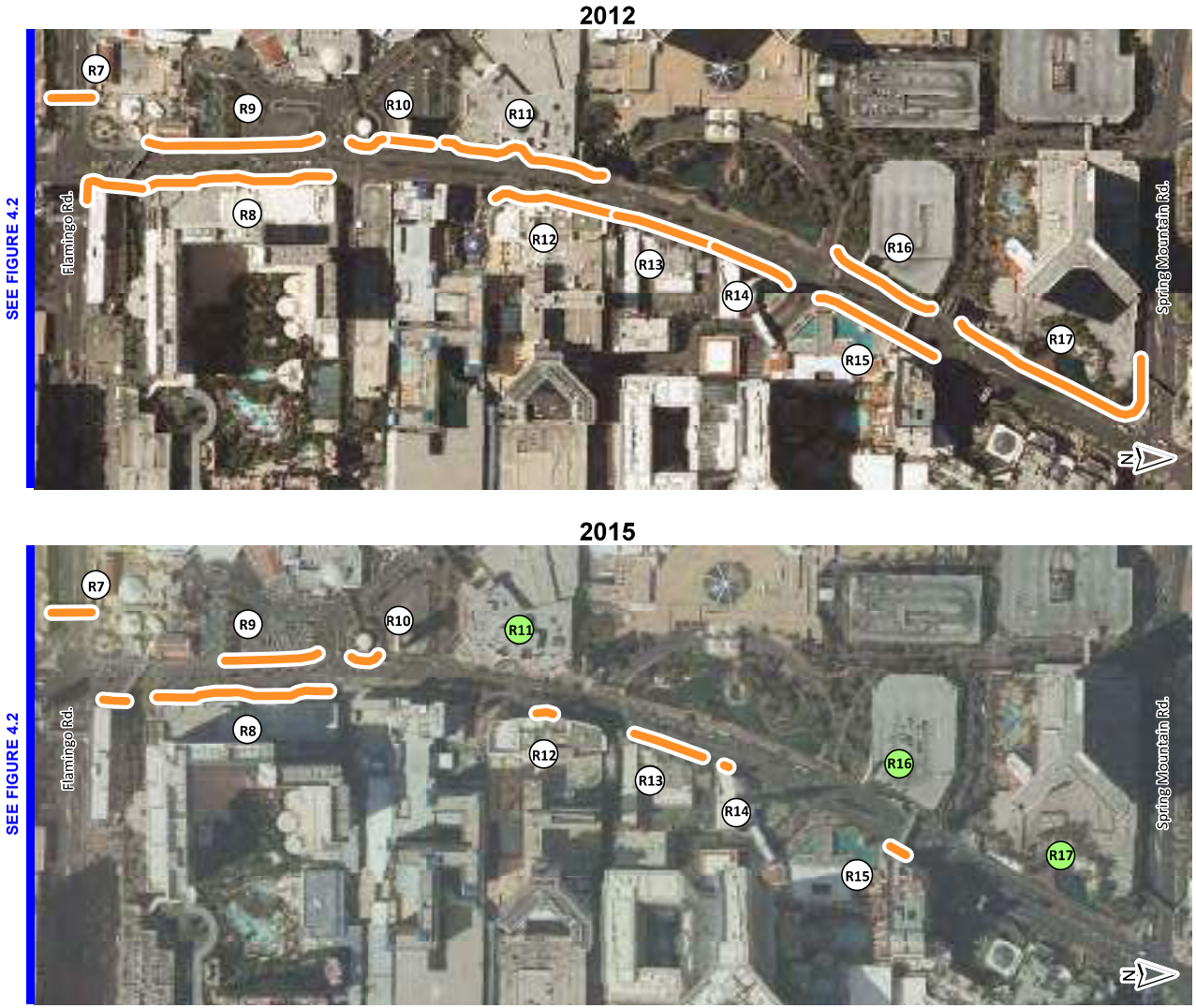
Legend (2015)

- New Segment, LOS<C in 2015
- LOS < C
- R# Segment Reference Number
- R# Segment No Longer Less than LOS C in 2015

WALKWAY SEGMENTS THAT EXCEED LEVEL OF SERVICE (LOS) C
TROPICANA AVE. TO FLAMINGO RD.

FIGURE 4.2

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Legend (2012)

- LOS < C
- R# Segment Reference Number

Legend (2015)

- LOS < C
- R# Segment Reference Number
- R# Segment No Longer Less than LOS C in 2015

WALKWAY SEGMENTS THAT EXCEED LEVEL OF SERVICE (LOS) C
FLAMINGO RD. TO SPRING MOUNTAIN RD.

FIGURE 4.3

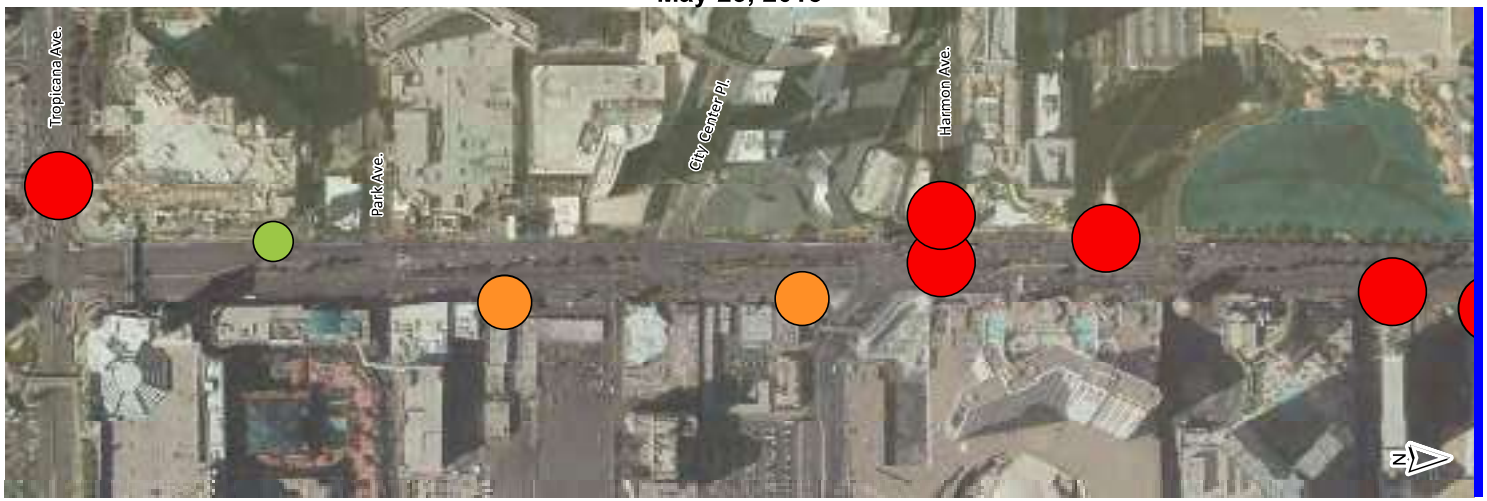
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May 26, 2012



May 23, 2015



Legend

Max. 15-Minute Pedestrian Volume

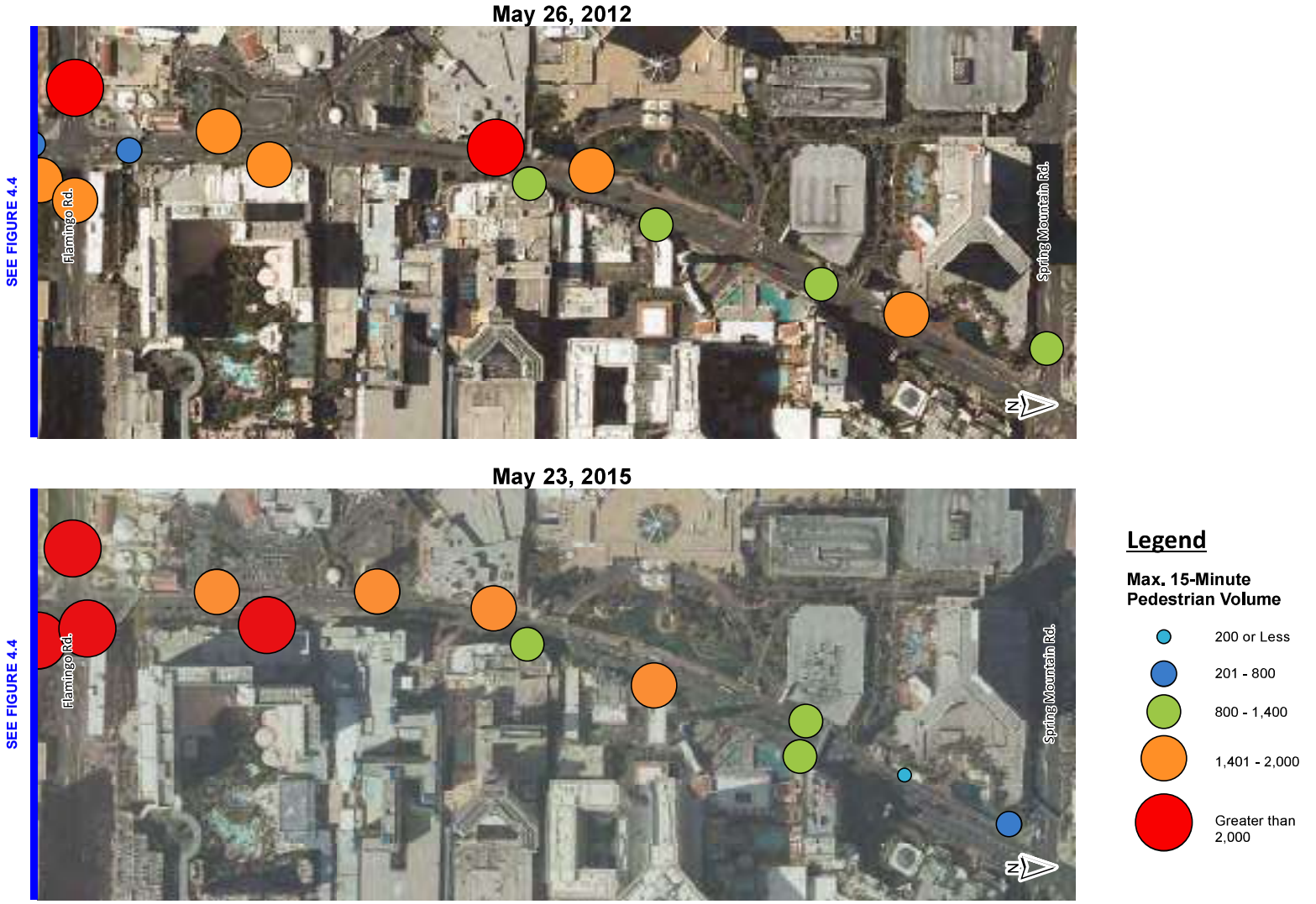
- 200 or Less
- 201 - 800
- 800 - 1,400
- 1,401 - 2,000
- Greater than 2,000

PEDESTRIAN VOLUME - MAX 15 MINUTES
TROPICANA AVE. TO FLAMINGO RD. (HOLIDAY SATURDAY)

FIGURE 4.4

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PEDESTRIAN VOLUME - MAX 15 MINUTES
FLAMINGO RD. TO SPRING MOUNTAIN RD. (HOLIDAY SATURDAY)

FIGURE 4.5

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June 16, 2012



June 20, 2015



Legend

Max. 15-Min Pedestrian Volume

- 200 or Less
- 201 - 800
- 800 - 1,400
- 1,401 - 2,000
- Greater than 2,000

PEDESTRIAN VOLUME - MAX 15 MINUTES
TROPICANA AVE. TO FLAMINGO RD. (TYPICAL SATURDAY)

FIGURE 4.6

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June 16, 2012



June 20, 2015



Legend

Max. 15-Minute Pedestrian Volume

- 200 or Less
- 201 - 800
- 800 - 1,400
- 1,401 - 2,000
- Greater than 2,000

PEDESTRIAN VOLUME - MAX 15 MINUTES
FLAMINGO RD. TO SPRING MOUNTAIN RD. (TYPICAL SATURDAY)

FIGURE 4.7

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4.2.2 LOS Analysis/Results

Count Data

Figure 4.9 through **Figure 4.29** indicate the maximum 15-minute volume identified for both count dates (May 23, 2015 – holiday Saturday and June 20, 2015 – typical Saturday) at each count location. Also listed on each figure is the walkway width (W) and effective walkway width (W_E). The LOS threshold levels were calculated at each location and are shown in the figures. The time periods when LOS C was found to be exceeded are identified by a red rectangle on the volume graph with the time periods identified. A review of the summary figures shows that of the twenty-one (21) count locations, eight (8) count locations were found with pedestrian volumes on the holiday Saturday that exceeded LOS C conditions during peak the peak period of 9 PM -11 PM with four (4) of those locations providing LOS E. The locations shown in **Table 4.3** exceeded LOS C during the holiday Saturday. Pedestrian volumes at three (3) locations were found to exceed LOS C on the typical Saturday.

Table 4.3 – Pedestrian Volume Count Locations that Exceeded LOS C

Holiday Saturday - May 23, 2015			Typical Saturday - June 20, 2015		
Count Location	**Figure**	**LOS**	**Count Location**	**Figure**	**LOS**
Tropicana West	Figure 4.9	D	Flamingo West	Figure 4.18	D
Harmon West	Figure 4.13	D	Caesars Palace South	Figure 4.20	D
Harmon North	Figure 4.14	D	Venetian South	Figure 4.25	D
Flamingo West	Figure 4.18	E			
Cromwell	Figure 4.19	D			
Margaritaville	Figure 4.21	E			
Caesars Palace South	Figure 4.20	E			
Venetian South	Figure 4.25	E			

It should be noted that the LOS calculations were prepared assuming the entire effective walkway width (W_E) was available for pedestrian traffic. In situations where a non-permanent obstruction could be in the walkway, the calculated effective walkway width (W_E) would be reduced and thus a potentially lower LOS would be provided.

To provide an overall summary of the average effective walkway width along the Resort Corridor, **Figure 4.8** was created as an update from the 2012 study. **Figure 4.8** displays the average effective sidewalk width along the Resort Corridor. This includes public access easements as well as public walkways.

The following list of locations were identified as locations of constricted walkways widths within the study corridor which could result in conditions of LOS less than C:

- East walkway directly north of Flamingo Road underneath east/west pedestrian bridge at Cromwell (Cromwell)
- East walkway in front of Margaritaville directly south of Caesars Palace Boulevard (Margaritaville)
- Staircase on west walkway directly north of Caesars Palace Boulevard at Caesars rotunda (Caesars Rotunda)
- West walkway directly south of Caesars Palace Boulevard in front of the Colosseum (Colosseum)
- East walkway south of Venetian Hotel/Casino and directly north of Casino Royale driveway at bollards (Casino Royale)
- East walkway beneath Siren's Cove South pedestrian bridge and North of Venetian Hotel/Casino(Siren's Cove)

These locations are discussed and evaluated in **Section 4.5.** Pedestrian volume data was collected at twenty-one (21) locations between Tropicana Avenue and Spring Mountain Road. The following thirteen (13) locations were found to have a LOS of C or better:

- CC1 – New York-New York Hotel/Casino -Figure 4.10
- M11 – Metro Flag Food Court -Figure 4.11
- Metro1 – Harley Davidson Café -Figure 4.12
- CC2 – Bellagio Hotel/Casino South -Figure 4.15
- M12 – Bally's Hotel/Casino South -Figure 4.16
- 9 – Bally's Bazaar -Figure 4.17
- M13 – The Colosseum -Figure 4.22
- 13 – Forum Shops -Figure 4.23
- 14 – Harrah's Hotel and Casino -Figure 4.24
- CC3 – Venetian Hotel/Casino South -Figure 4.25
- M14 – Treasure Island Bus Stop -Figure 4.26
- CC4 – Treasure Island Hotel/Casino South -Figure 4.28
- M15 – Treasure Island Hotel/Casino North -Figure 4.29

Pedestrian volumes were found to exceed LOS C at the following locations:

- 2 – Tropicana Avenue West Pedestrian Bridge –Figure 4.9
- 7 – Harmon Avenue West Pedestrian Bridge –Figure 4.13
- M4 – Harmon Avenue North Pedestrian Bridge –Figure 4.14
- 11 – Flamingo Road West Pedestrian Bridge –Figure 4.18
- Metro3 – Cromwell -Figure 4.19
- M6 – Caesars Palace South -Figure 4.20
- 12 – Margaritaville -Figure 4.21
- Metro4 – Venetian Hotel/Casino North -Figure 4.27

The time periods when LOS was found to exceed LOS C are identified by a red rectangle on the volume graph with the time periods identified.

Table 4.4 provides a comparison summary of maximum 15-minute volumes for each count location repeated from the 2012 study. The percentage difference was calculated between the maximum volumes in 2012 and 2015. As can be seen, the peak volumes have increased as well as decreased within the study corridor. Decreases are shown in red.

Table 4.5 and **Table 4.6** show the summary of data collected within the study corridor. Maximum 15-minute volumes are listed for each count locations along with the time this volume occurred and the resultant LOS at the location. The table lists data for count locations on both the west and east side of the "Strip" for the holiday Saturday and typical Saturday, respectively.

In general, as can be seen in **Table 4.4** the west side volumes have decreased from 2012 to those of 2015. This is most likely attributed to the redistribution of pedestrian flows to the east side of the "Strip" with the opening of new properties such as the LINQ, Cromwell Hotel/Casino, and the Bazaar at Bally's etc. and the construction near Tropicana Avenue of the MGM Arena. In addition, the peak volumes previously seen in 2012 along the frontage of the Treasure Island Hotel/Casino walkways are substantially less in 2015. This can be associated with the closure of the Siren Show at Treasure Island.

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Table 4.4 – Comparison of Max. 15-Min. Volumes

Comparison of Max 15-Min Volumes						
Count Location ID	Location	W_E (ft) (2012)	W_E (ft) (2015)	Max 15-Min Volume (2012)	Max 15-Min Volume (2015)	% Change in Vol
2	Tropicana W. Bridge	11.8	11.8	2634	1036	-22
CC1	New York-New York	8.3	12.8	1043	1025	-2
M11	Food Court	6.5	13	1343	1772	32
Metro1	Harley Davidson	5	13	1290	1938	50
7	Harmon W. Bridge	12.5	12.5	2702	2060	-24
M4	Harmon N. Bridge	12.3	12.3	1549	2028	31
CC2	Bellagio South	21.5	21.5	2633	2189	-17
M12	Bally's South	11	16	2124	2007	-6
9	Bally's Bazaar	28	14.5	1783	2137	20
11	Flamingo W. Bridge	12	12	2172	2238	3
Metro3	Cromwell	11.5	11.5	1549	2472	60
12	Margaritaville	8.5	8.5	1459	2044	40
M6	Caesars Palace S.	6.8	6.8	1684	1997	19
M13	Colosseum	4	15	2092	1953	-7
13	Forum Shops	12	12	2092	1749	-16
14	Harrah's	6.7	12.5	1242	1364	10
CC3	Venetian South	6.3	6.3	1737	1767	2
M14	Venetian North	7	7	1737	1385	-20
Metro4	TI Bus Stop	3	12.8	1963	1331	-32
CC4	TI South	1.7	1.7	524	24	-95
M15	TI North	5.5	15	1037	560	-46

Note: See **Figure 3.1** *for count locations.*

Table 4.5 - Data Summary– Holiday Saturday

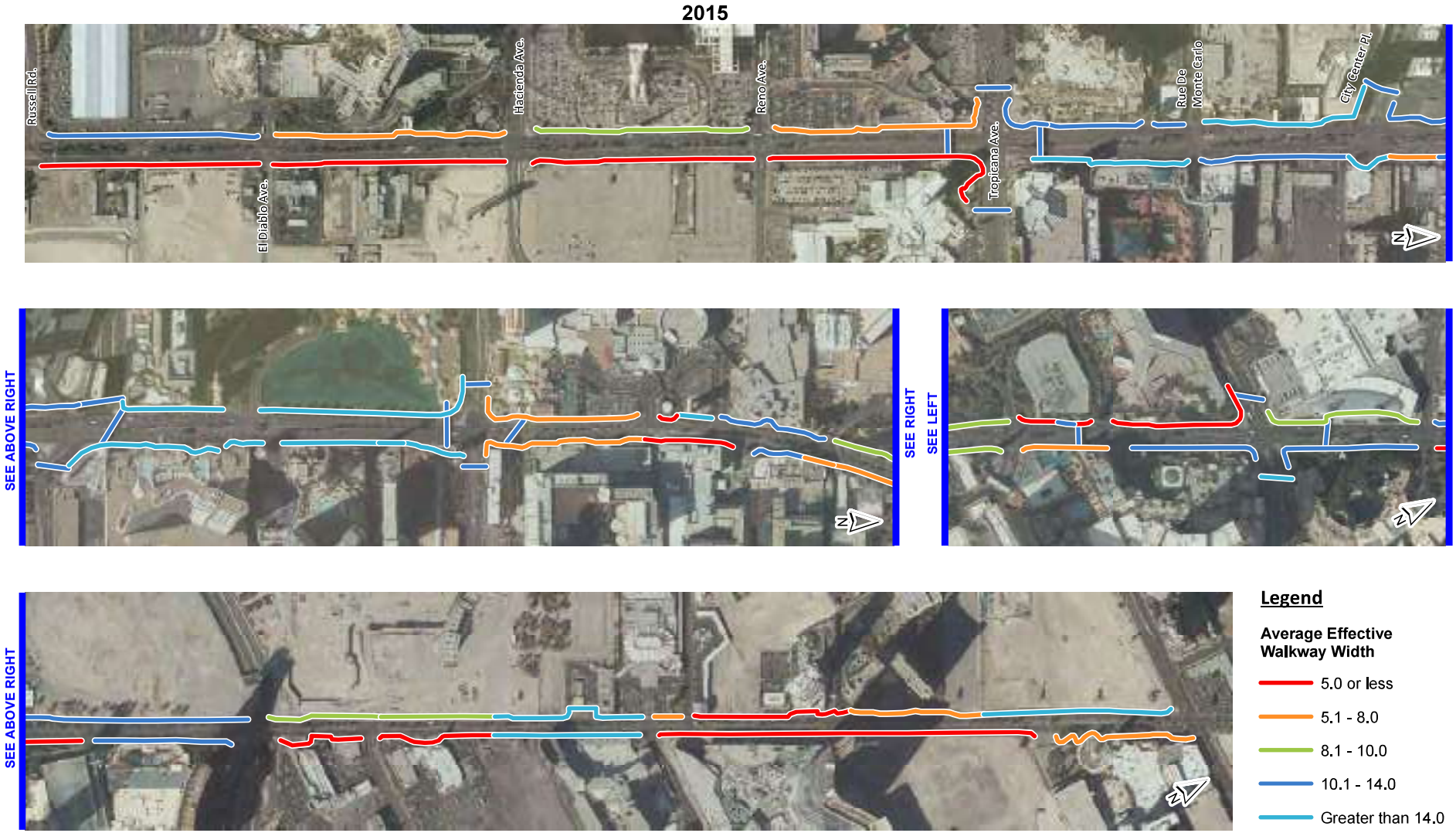
Holiday Saturday - May 23, 2015					
Count Location ID	Location	Max 15-min Vol	Time of Max Volume	W_E (ft)	LOS
2	Tropicana W. Bridge	1036	06:45PM - 07:00PM	11.8	D
CC1	New York-New York	1025	10:00PM - 10:15PM	12.8	B
M11	Food Court	1772	10:30PM - 10:45PM	13	C
Metro1	Harley Davidson	1938	08:00PM - 08:15PM	13	C
7	Harmon W. Bridge	2060	07:45PM - 08:00PM	12.5	D
M4	Harmon N. Bridge	2028	10:30PM – 10:45PM	12.3	D
CC2	Bellagio South	2189	11:45PM - 12:45PM	21.5	B
M12	Bally's South	2007	09:45PM - 10:00PM	16	C
9	Bally's Bazaar	2137	09:45PM - 10:00PM	14.5	C
11	Flamingo W. Bridge	2238	09:30PM - 09:45PM	12	E
Metro3	Cromwell	2472	11:15PM - 11:30PM	11.5	D
12	Margaritaville	2044	09:00PM - 09:15PM	8.5	E
M6	Caesars Palace S.	1977	10:00PM - 10:15PM	6.8	D
M13	Colosseum	1953	09:45PM - 10:00PM	15	C
13	Forum Shops	1749	08:45PM - 09:00PM	12	C
14	Harrah's	1364	05:45PM - 06:00PM	12.5	C
CC3	Venetian South	1767	11:30 PM – 11:45 PM	6.3	E
M14	Venetian North	1385	10:30PM - 10:45PM	7	D
Metro4	TI Bus Stop	1331	10:00PM - 10:15PM	12.8	B
CC4	TI South	21	09:00PM - 09:15PM	1.7	A
M15	TI North	560	09:15PM - 09:30PM	15	A

Table 4.6 - Data Summary– Typical Saturday

Typical Saturday - June 20, 2015					
Count Location ID	Location	Max 15-min Vol	Time of Max Volume	W_E (ft)	LOS
2	Tropicana W. Bridge	918	10:30PM - 10:45PM	11.8	B
CC1	New York-New York	421	10:45PM - 11:00PM	12.8	A
M11	Food Court	1059	11:00PM - 11:15PM	13	B
Metro1	Harley Davidson	859	11:00PM - 11:15PM	13	A
7	Harmon W. Bridge	1447	11:00PM - 11:15PM	12.5	C
M4	Harmon N. Bridge	893	9:45PM - 10:00PM	12.3	A
CC2	Bellagio South	1544	10:00PM - 10:15PM	21.5	A
M12	Bally's South	1350	11:15PM - 11:30PM	16	B
9	Bally's Bazaar	1414	11:15PM - 11:30PM	14.5	B
11	Flamingo W. Bridge	1841	10:15PM - 10:30PM	12	D
Metro3	Cromwell	1263	11:30PM - 11:45PM	11.5	C
12	Margaritaville	1176	11:00PM - 11:15PM	8.5	C
M6	Caesars Palace S.	1094	10:00PM - 10:15PM	6.8	C
M13	Colosseum	977	09:45PM - 10:00PM	15	A
13	Forum Shops	679	10:45PM - 11:00PM	12	C
14	Harrah's	843	10:00PM - 10:15PM	12.5	A
CC3	Venetian South	1065	11:00PM - 11:15PM	6.3	D
M14	Venetian North	1047	11:15PM - 11:30PM	7	C
Metro4	TI Bus Stop	802	10:00PM - 10:15PM	12.8	A
CC4	TI South	24	09:00PM - 09:15PM	1.7	A
M15	TI North	298	09:15PM - 09:30PM	15	A

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CC 1259

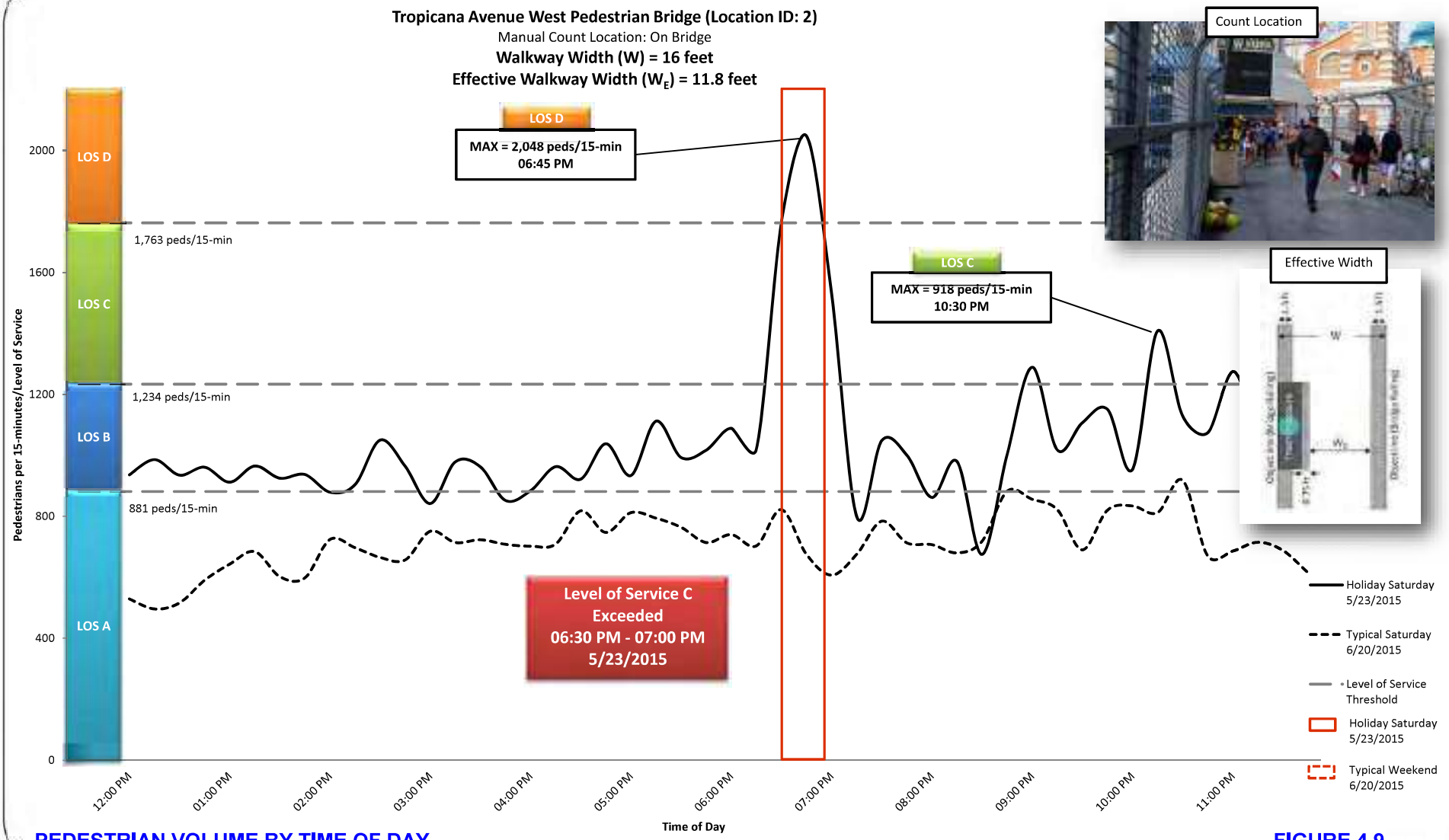


AVERAGE EFFECTIVE WALKWAY WIDTH (W_E) ALONG RESORT CORRIDOR

FIGURE 4.8

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PEDESTRIAN VOLUME BY TIME OF DAY

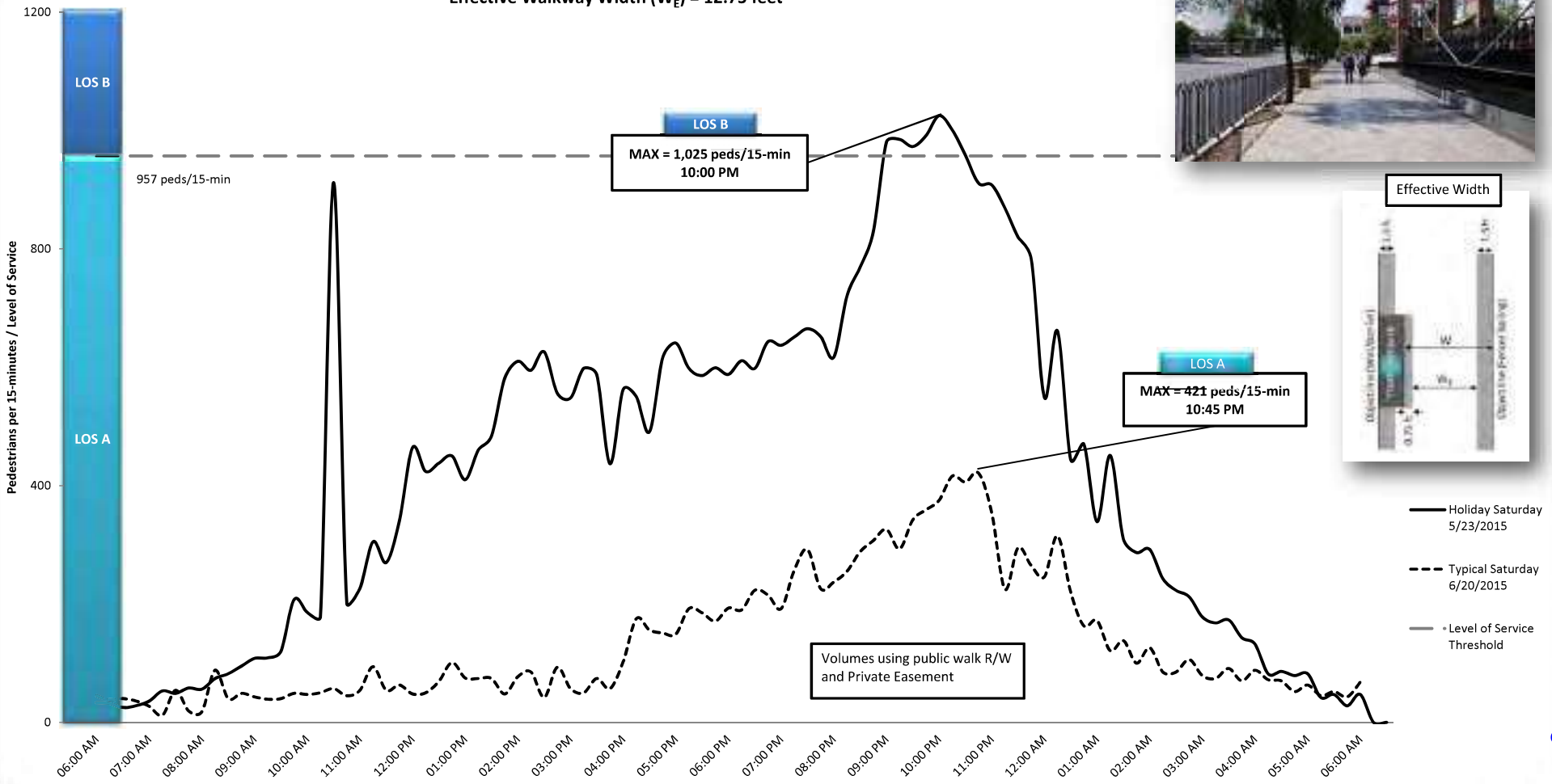
FIGURE 4.9

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New York New-York Hotel/Casino (Location ID: CC1)
Video Count Location: North of Tropicana Avenue
Walkway Width (W) = 15 feet
Effective Walkway Width (W_E) = 12.75 feet





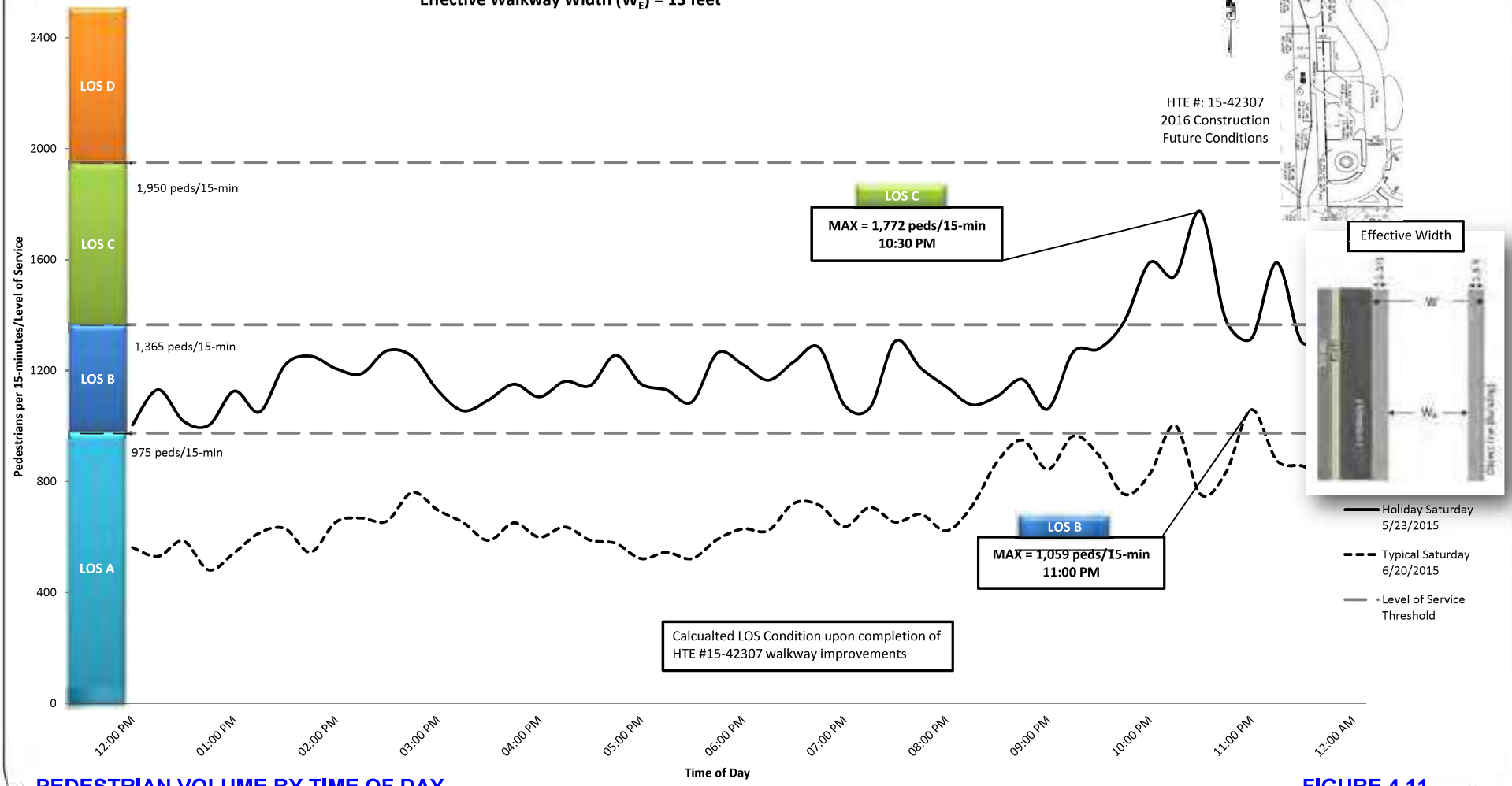
PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 4.10

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Metro Flag Food Court (Location ID: M11)
Manual Count Location: North of Tropicana Avenue
Walkway Width (W) = 16 feet
Effective Walkway Width (W_E) = 13 feet

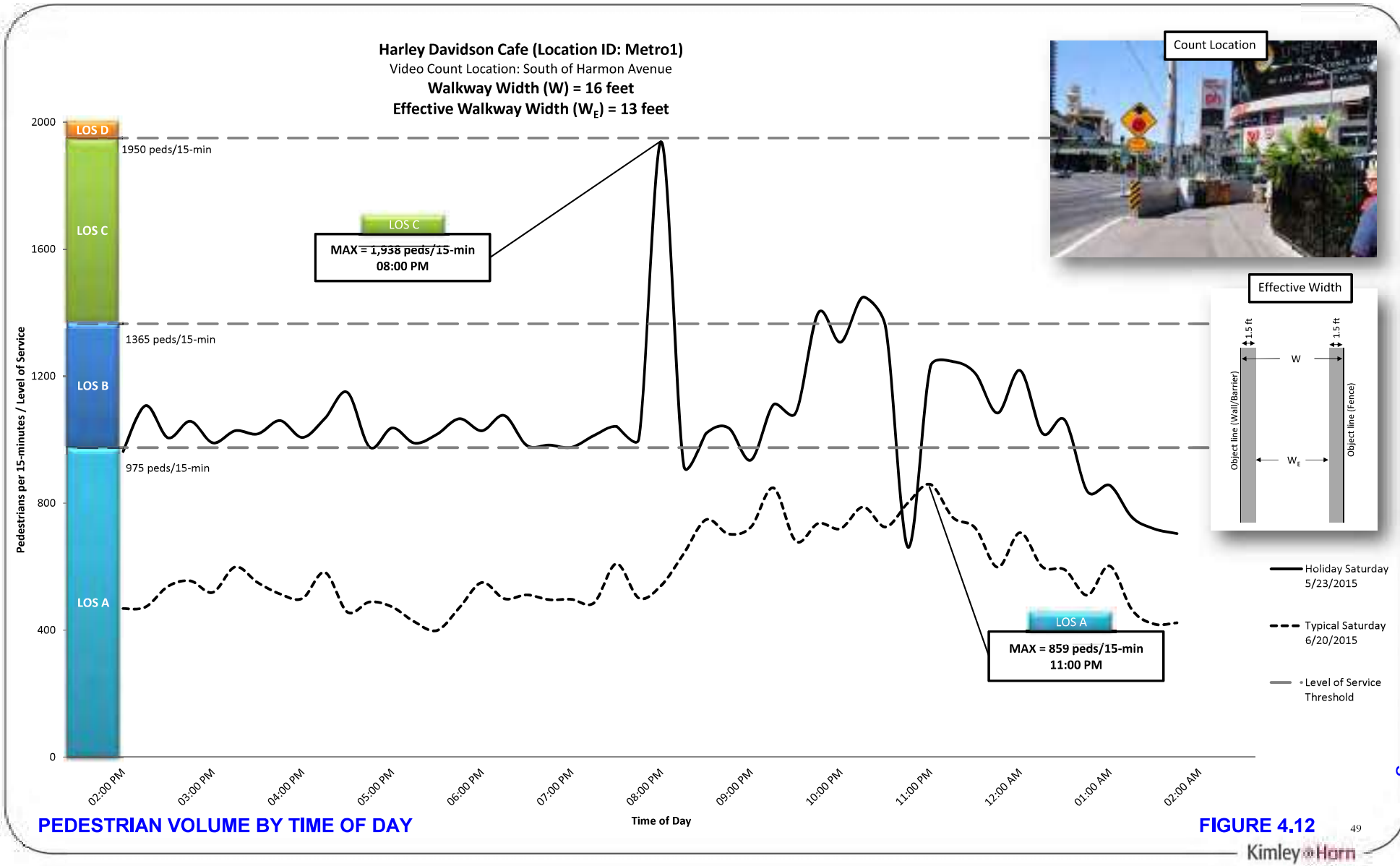


PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 4.11

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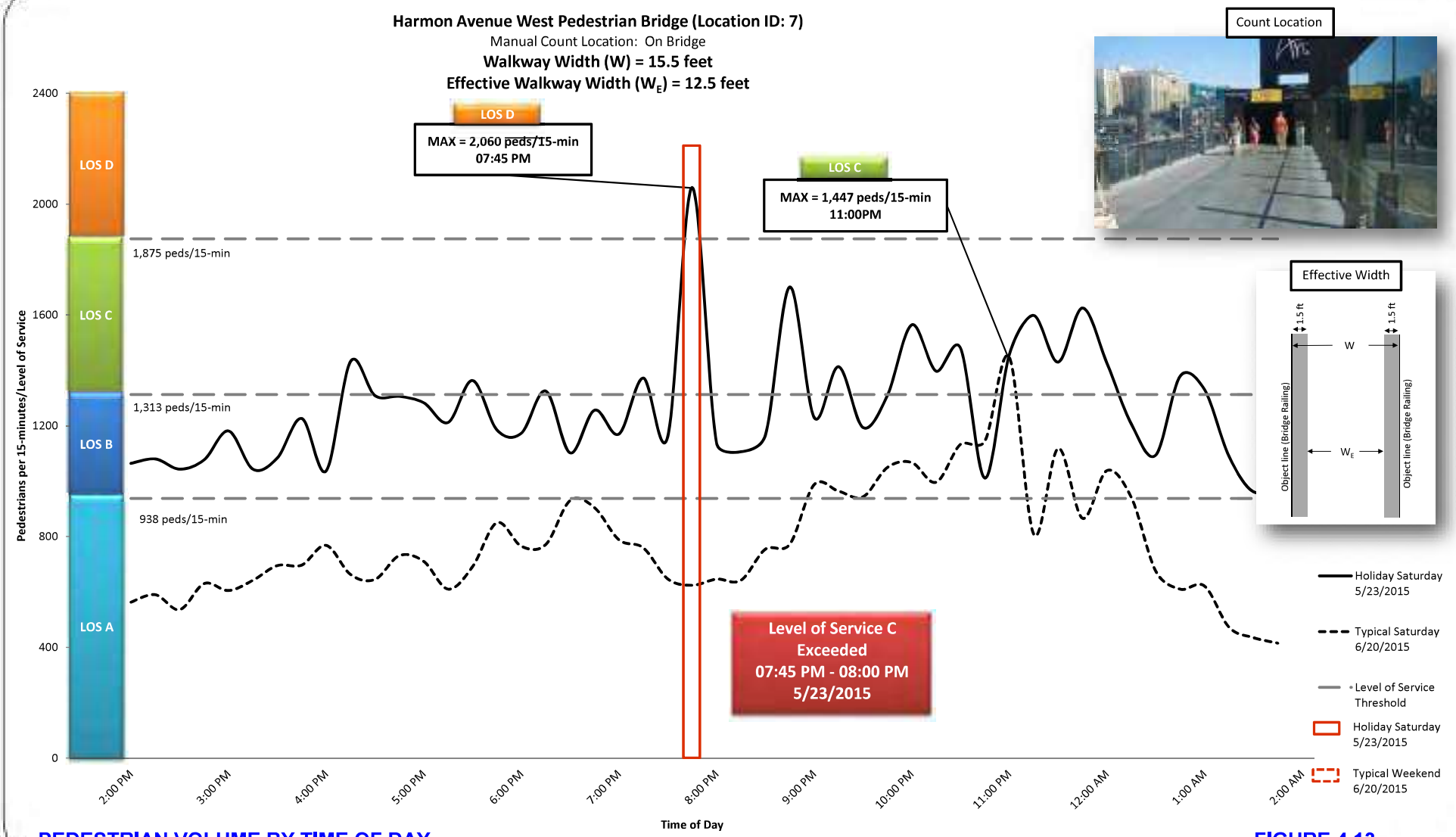


PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 4.12

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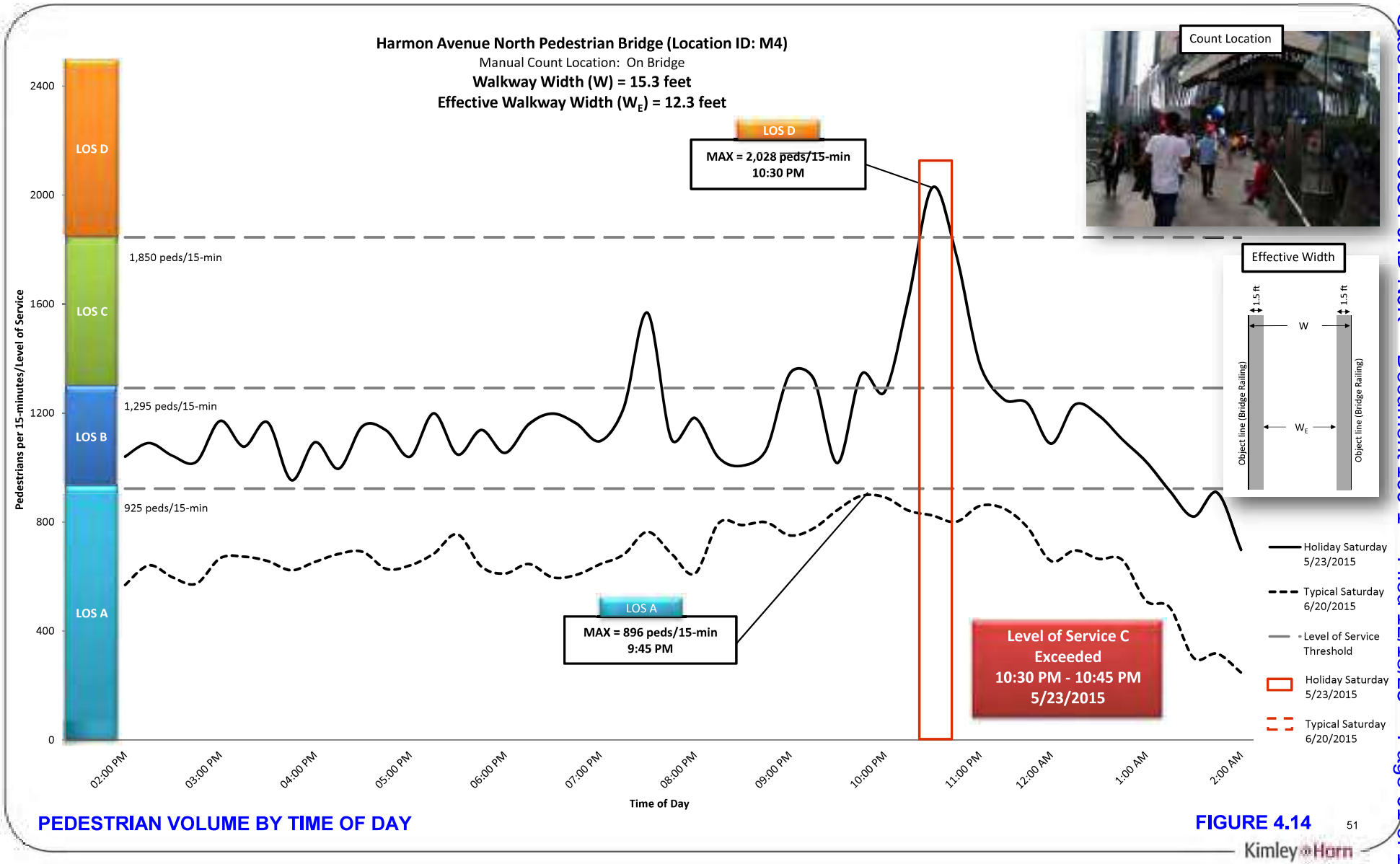


PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 4.13

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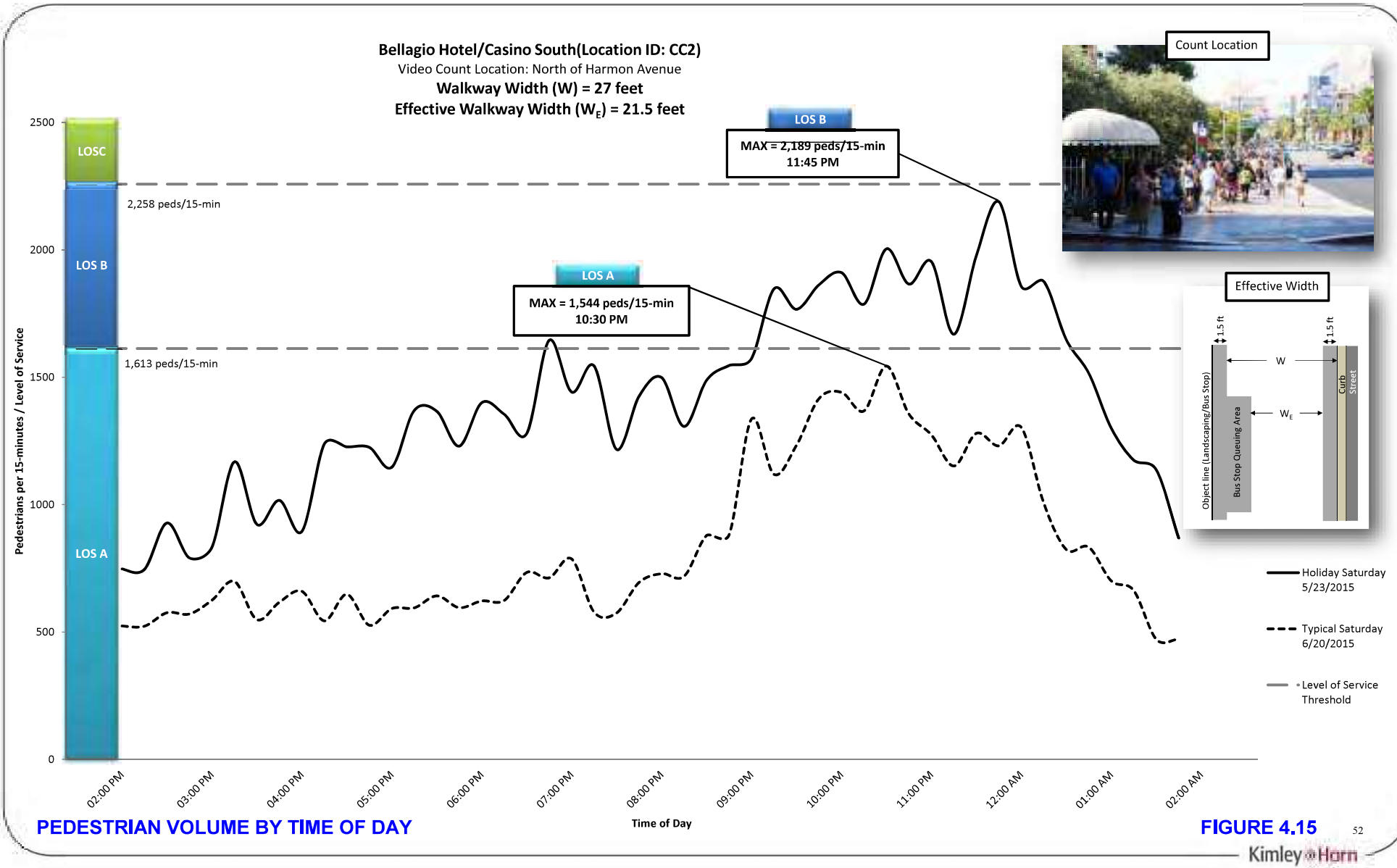


PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 4.14

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PEDESTRIAN VOLUME BY TIME OF DAY

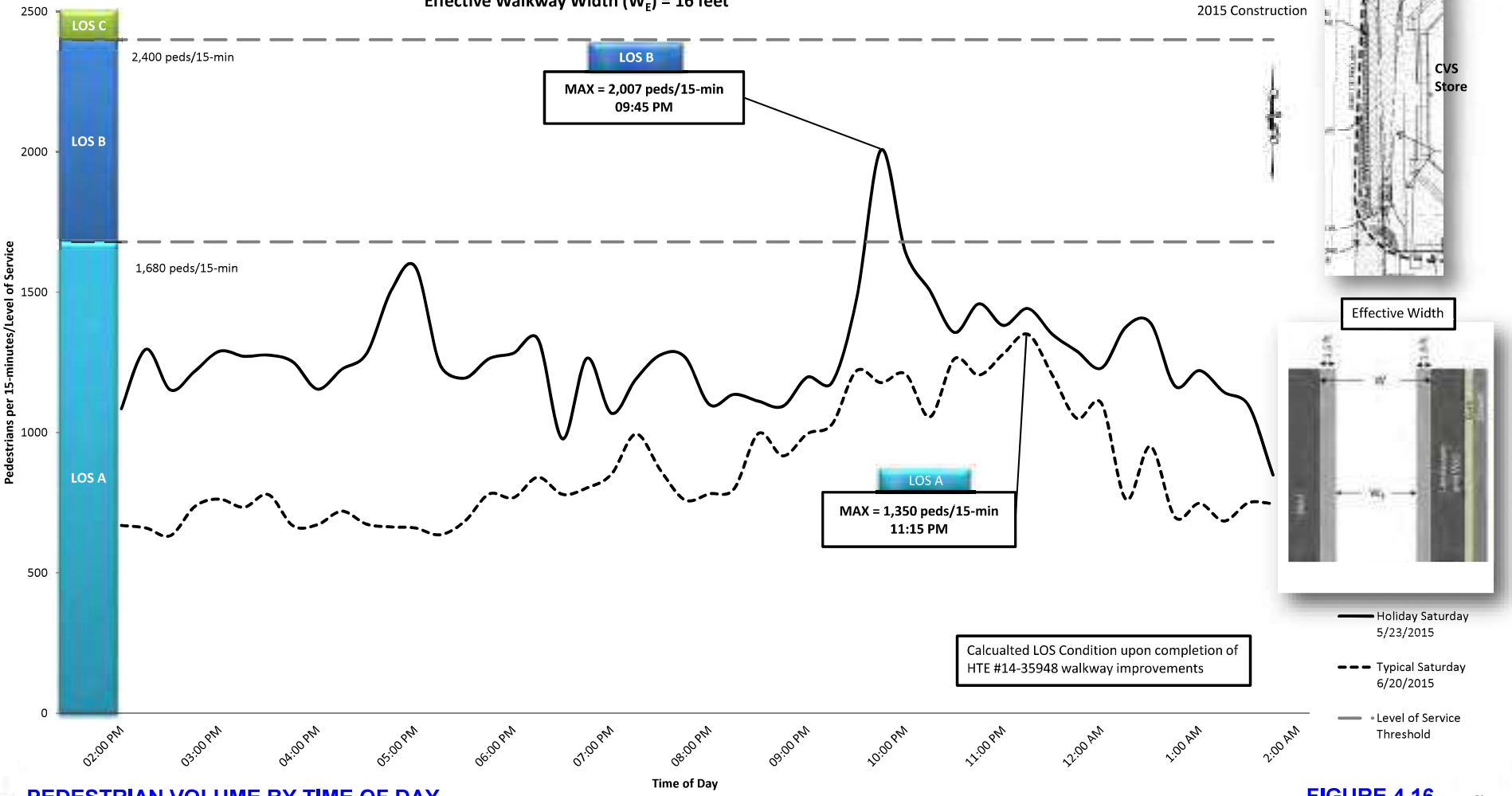
FIGURE 4.15

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Bally's Hotel/Casino South (Location ID: M12)
Manual Count Location: South of Flamingo Road
Walkway Width (W) = 19 feet
Effective Walkway Width (W_E) = 16 feet

HTE #: 14-35948
2015 Construction



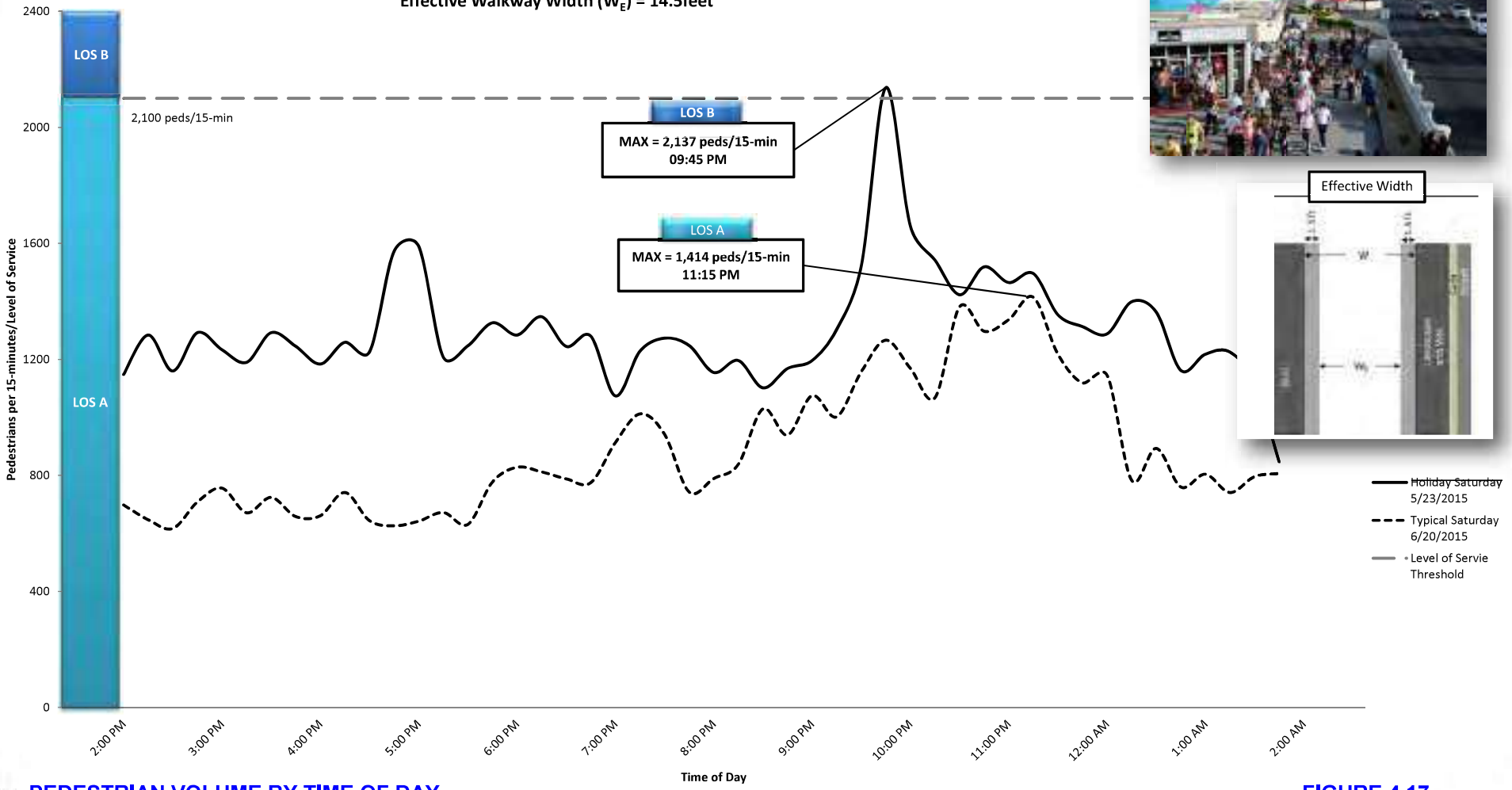
PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 4.16

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Bally's Bazaar (Location ID: 9)
Manual Count Location: South of Flamingo Road
Walkway Width (W) = 17.5 feet
Effective Walkway Width (W_E) = 14.5feet

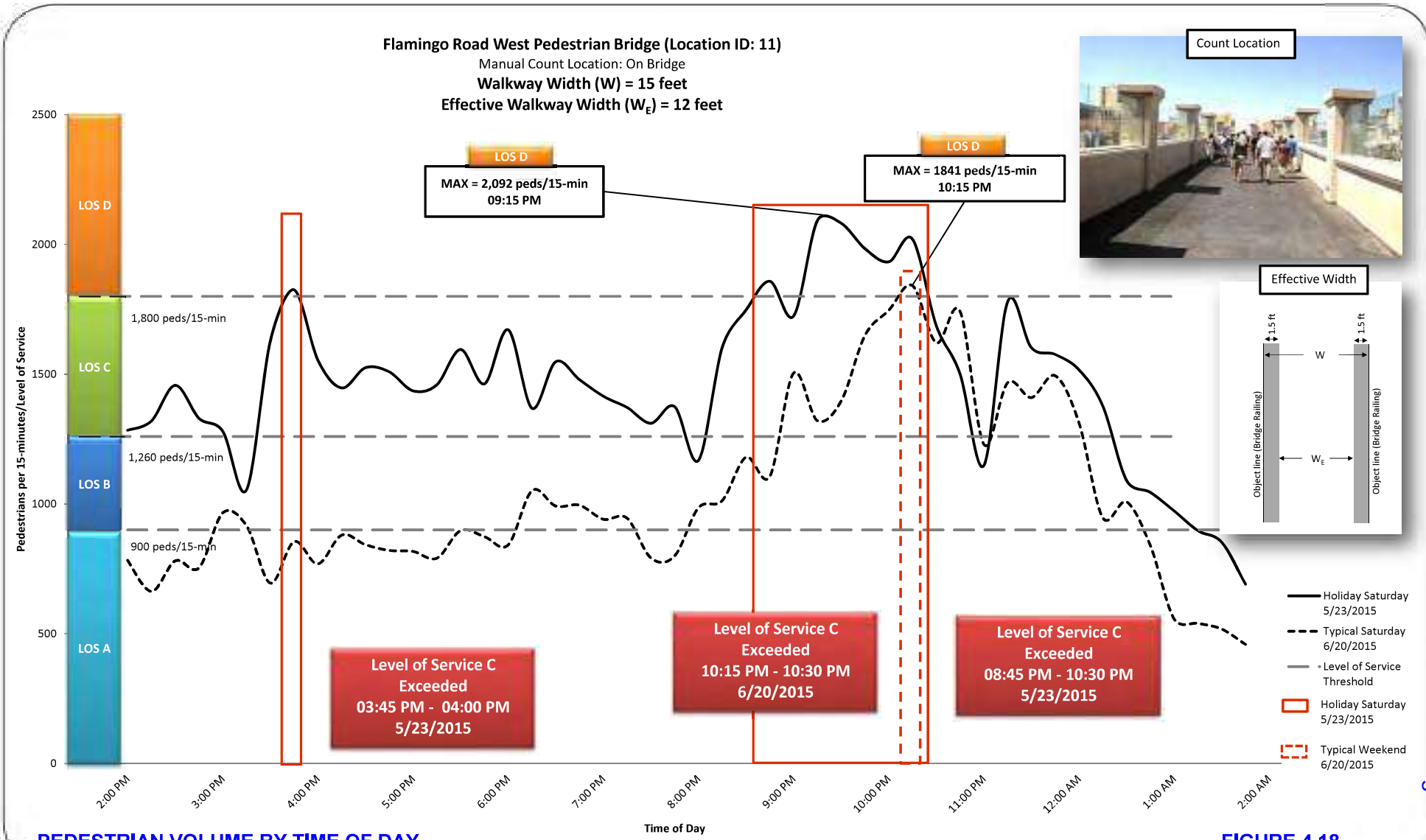


PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 4.17

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PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 4.18

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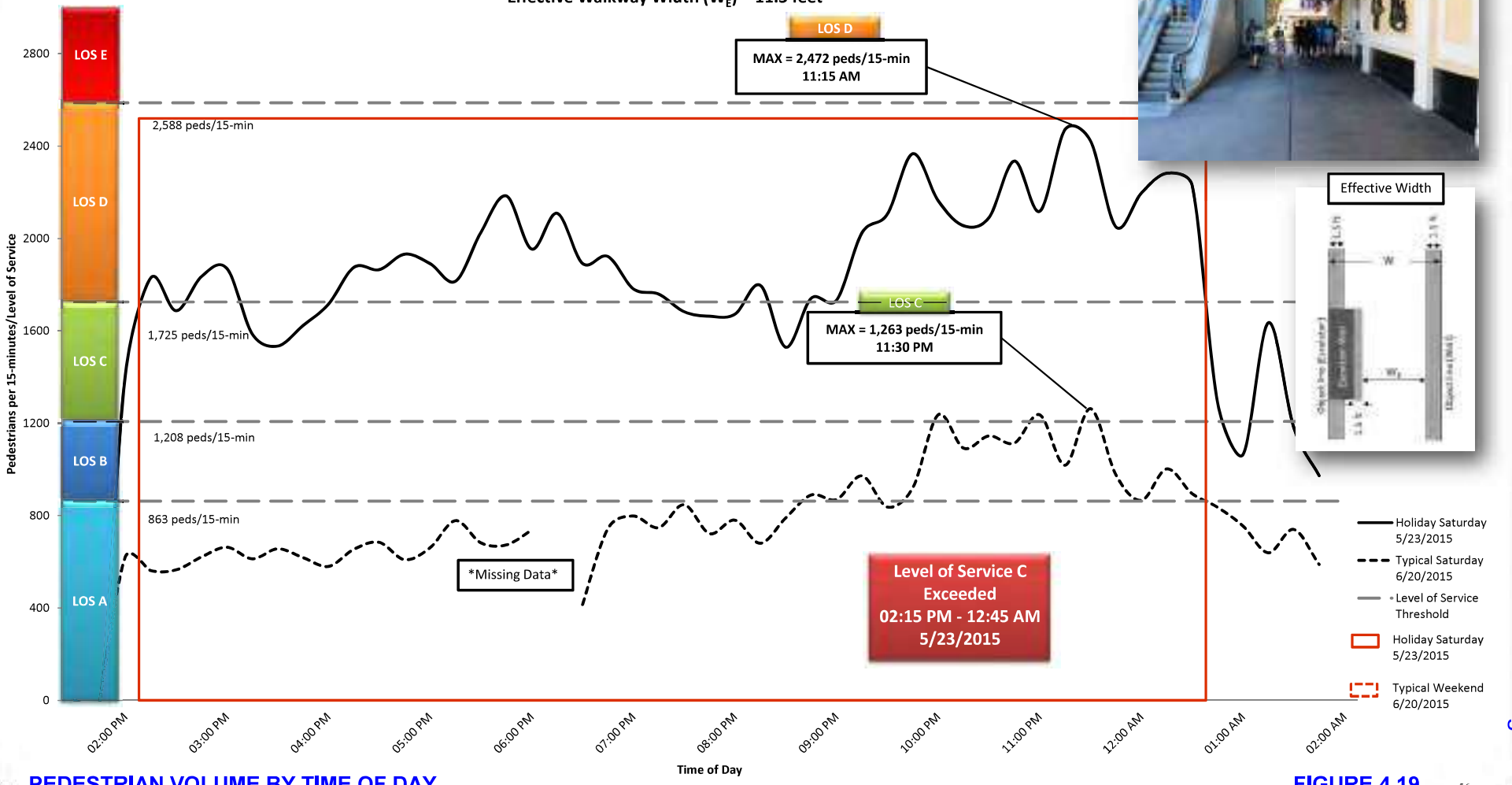
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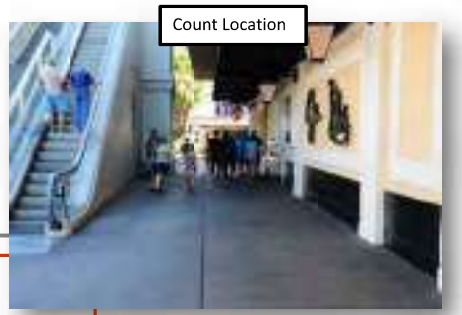
Cromwell (Location ID: Metro3)

Video Count Location: Northeast Corner of Flamingo Road and Las Vegas Boulevard

Walkway Width (W) = 14.5 feet

Effective Walkway Width (W_E) = 11.5 feet



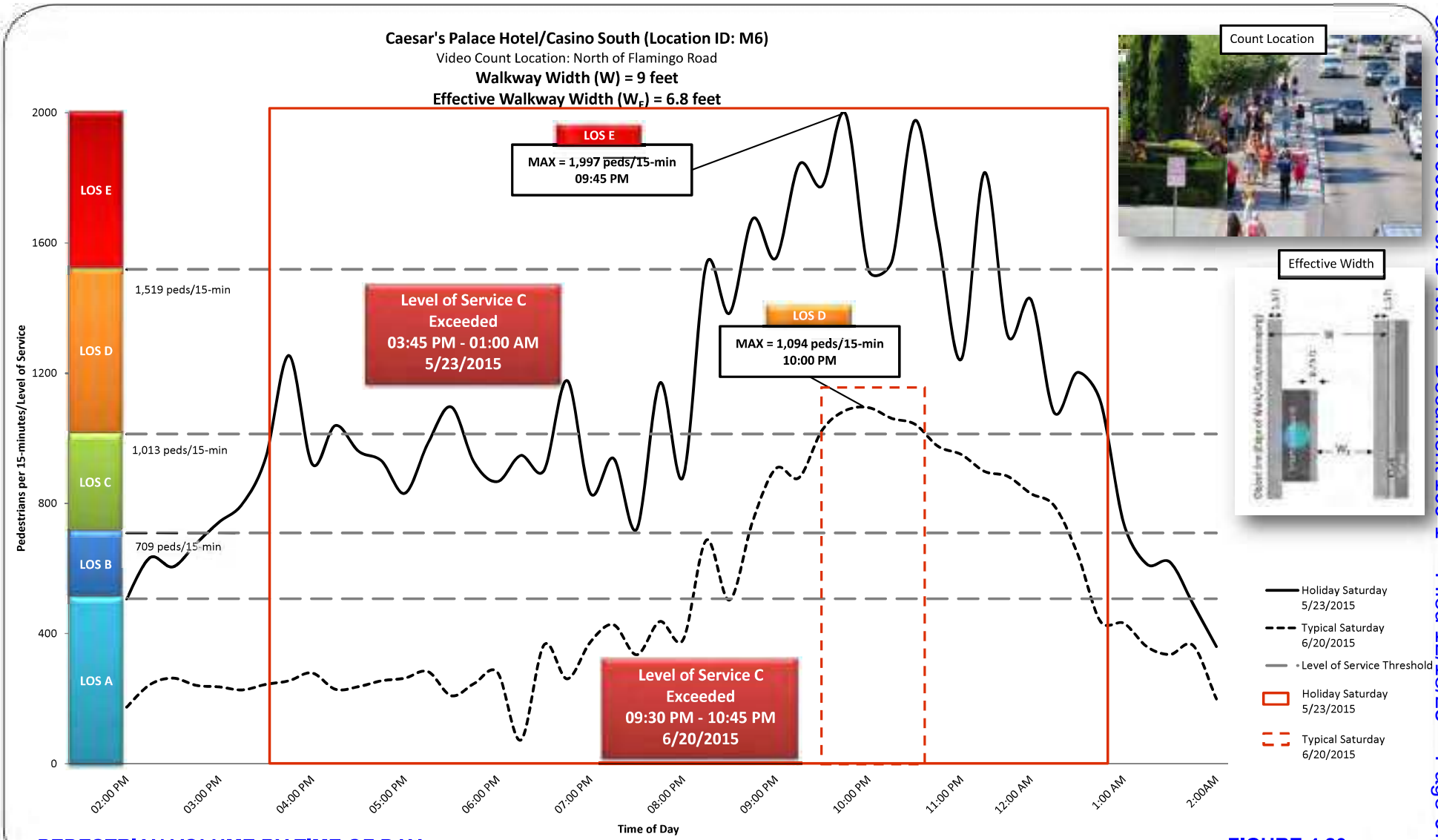


PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 4.19

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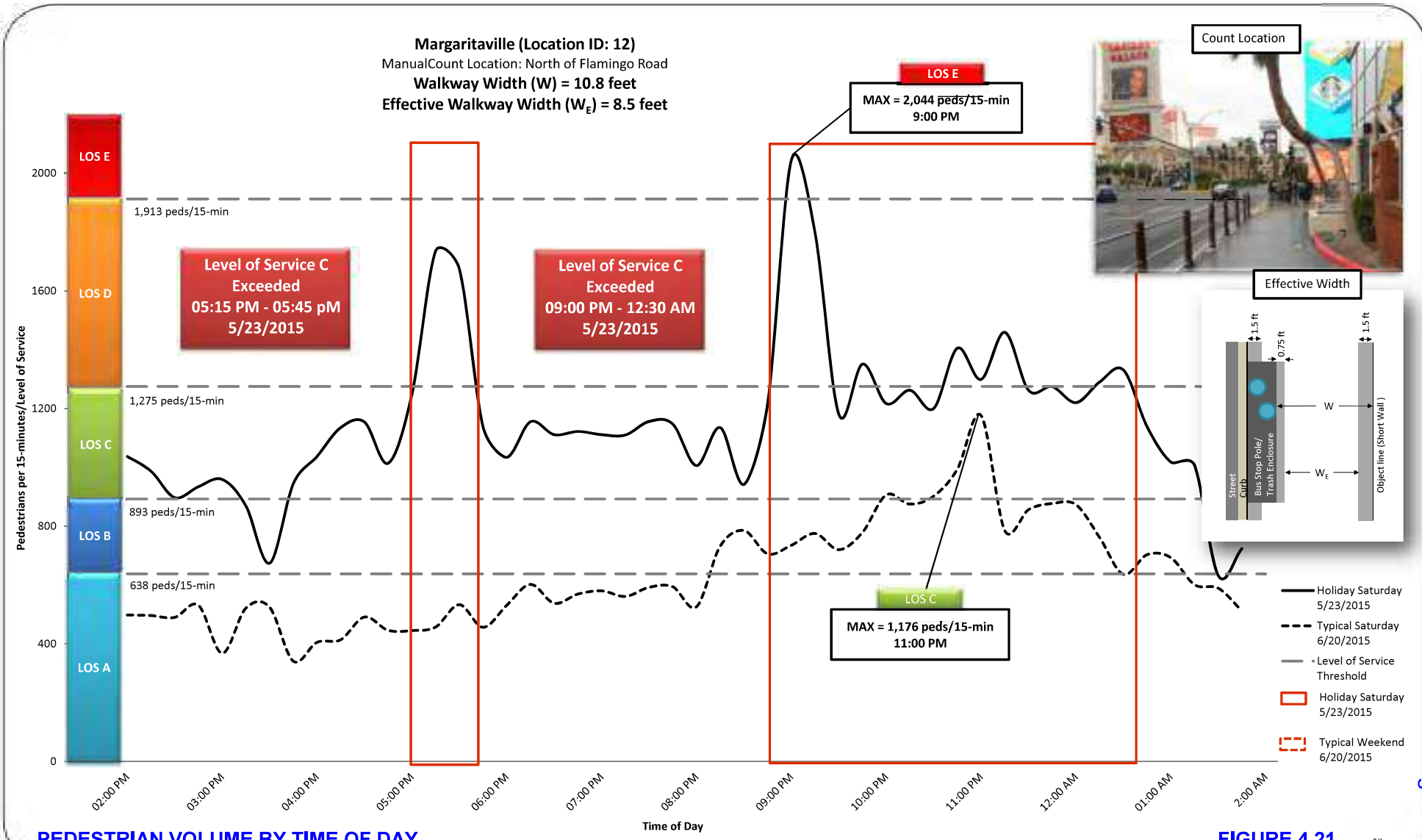


PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 4.20

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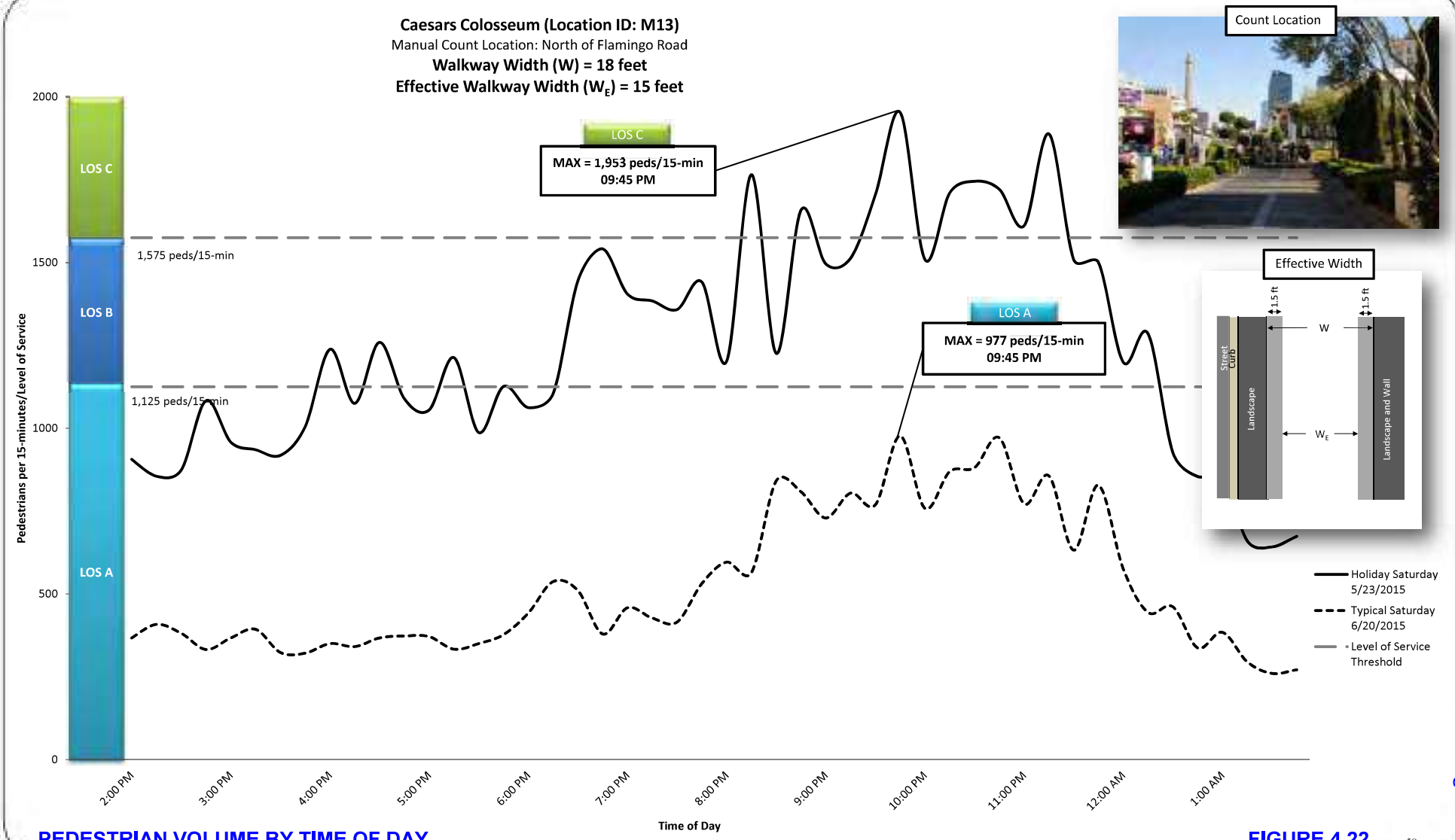


PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 4.21

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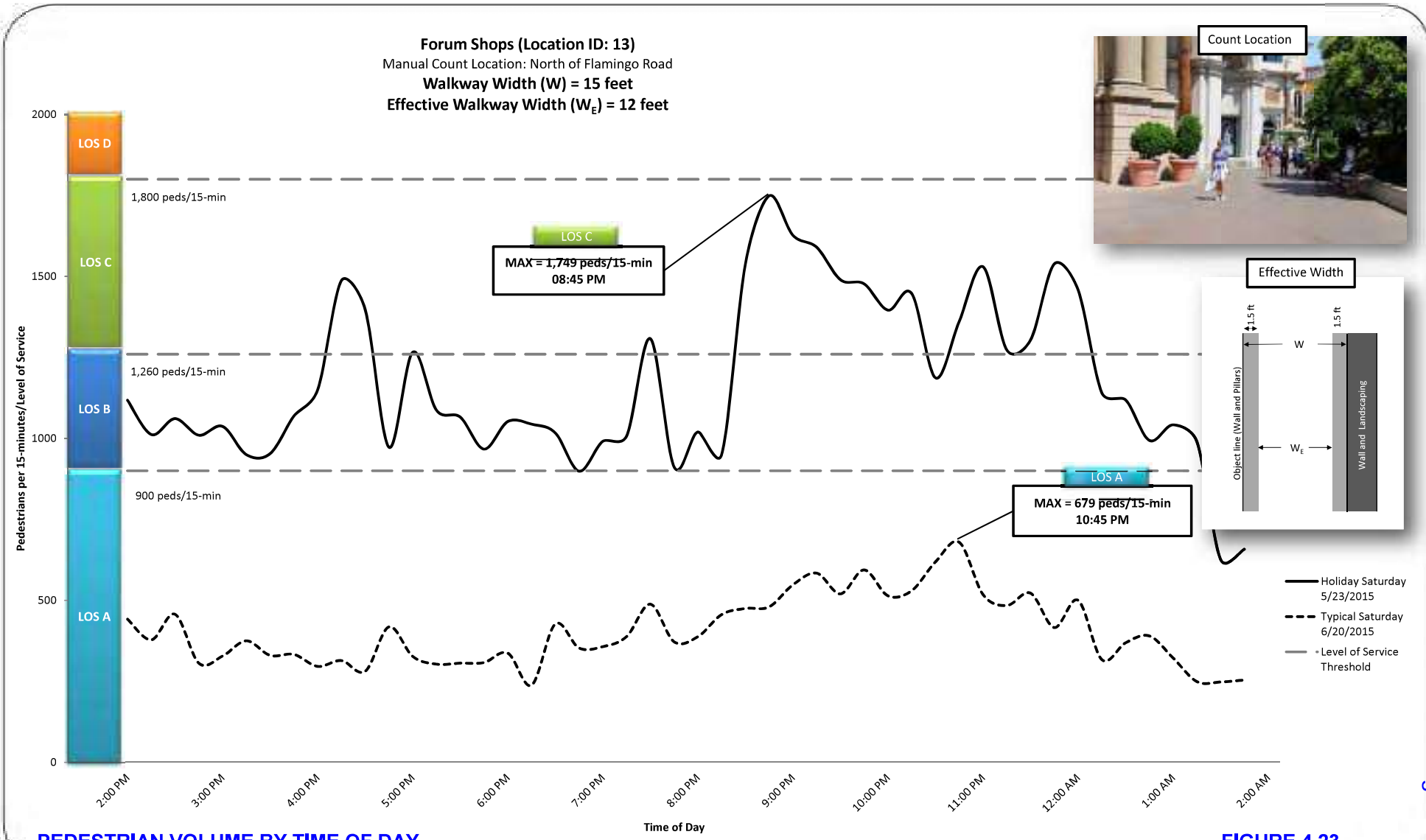


PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 4.22

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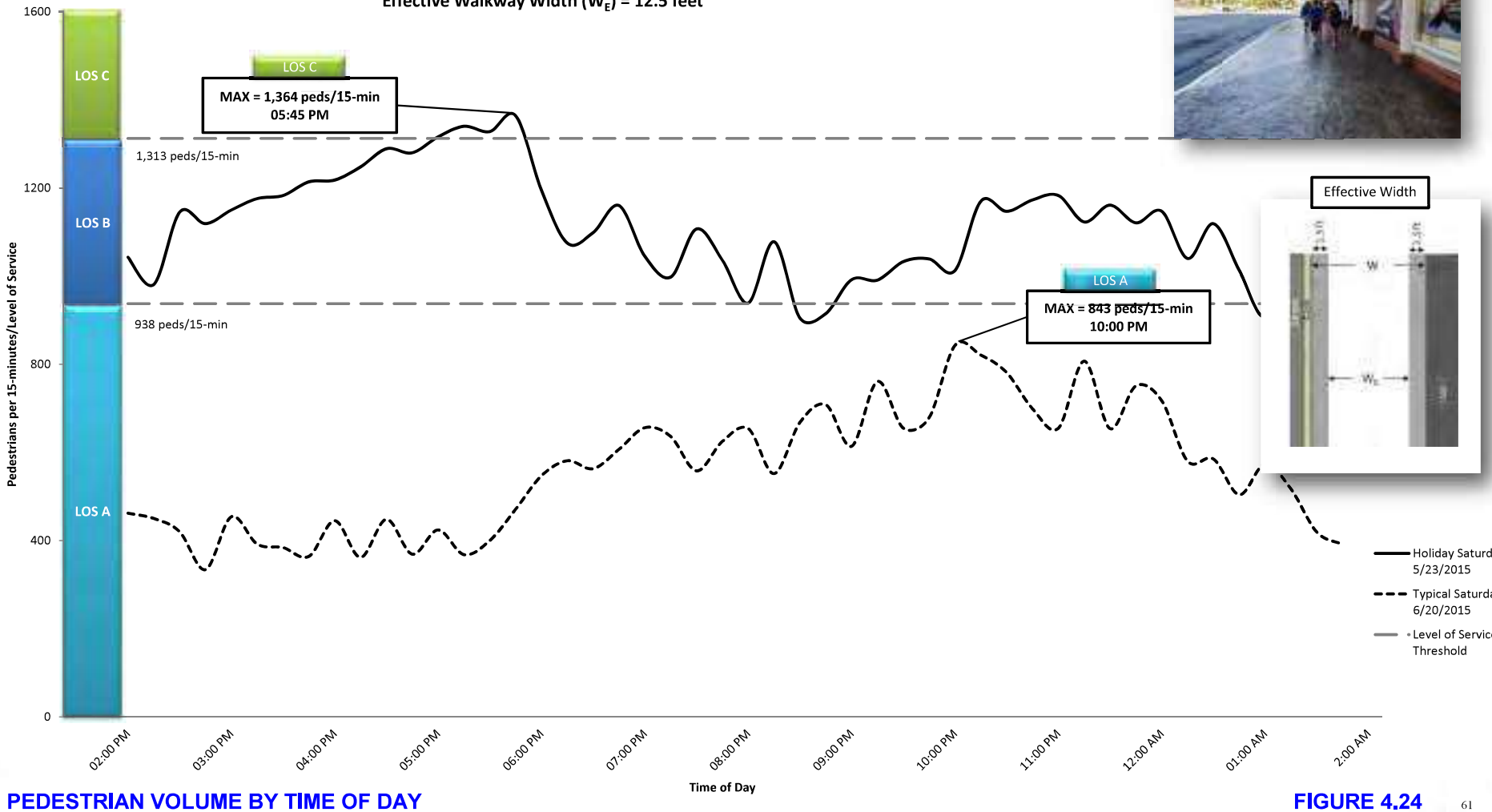
PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 4.23

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Harrah's Hotel/Casino (Location ID: 14)
Video Count Location: North of Flamingo Road
Walkway Width (W) = 15.5 feet
Effective Walkway Width (W_E) = 12.5 feet

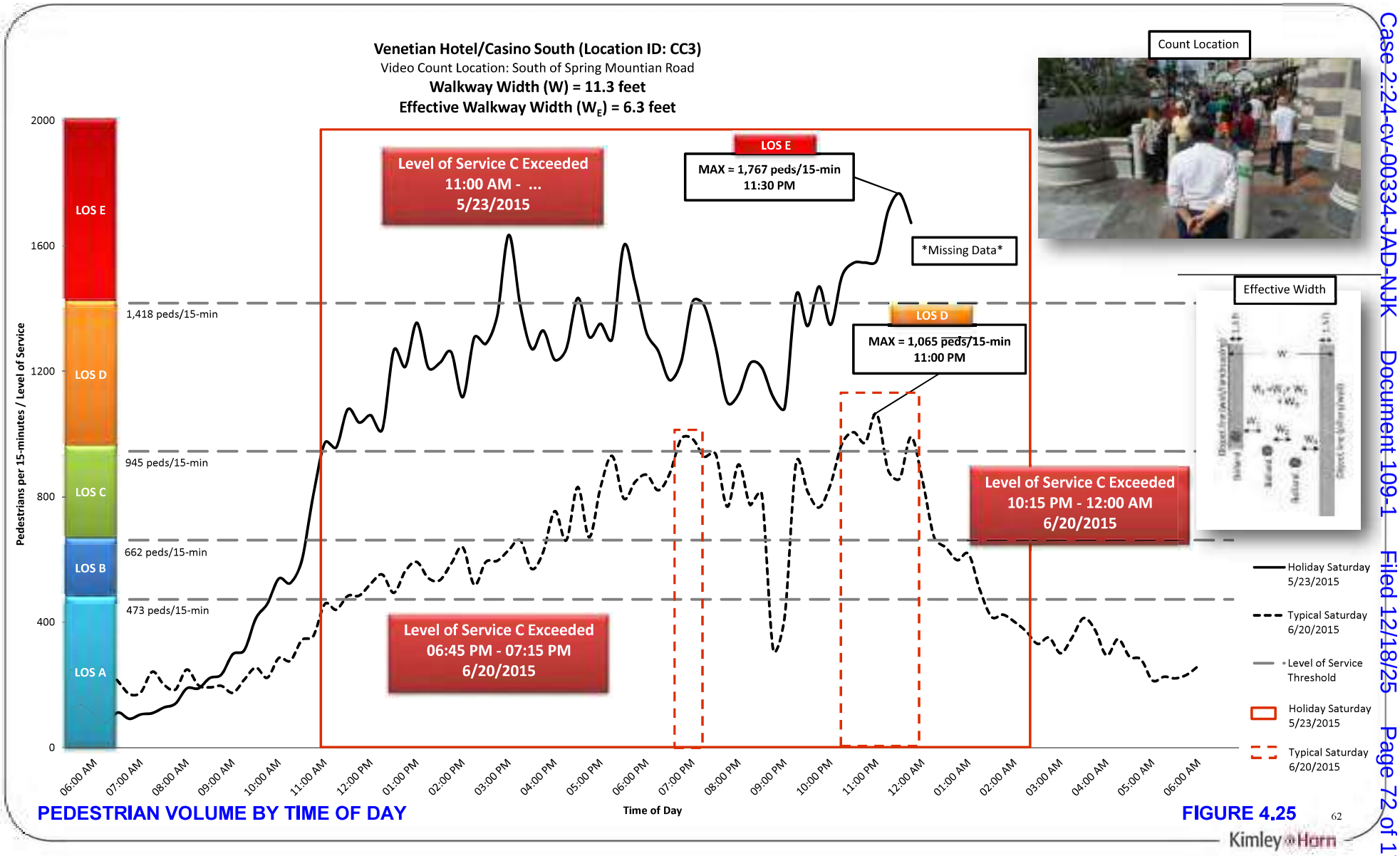


PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 4.24

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PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 4.25

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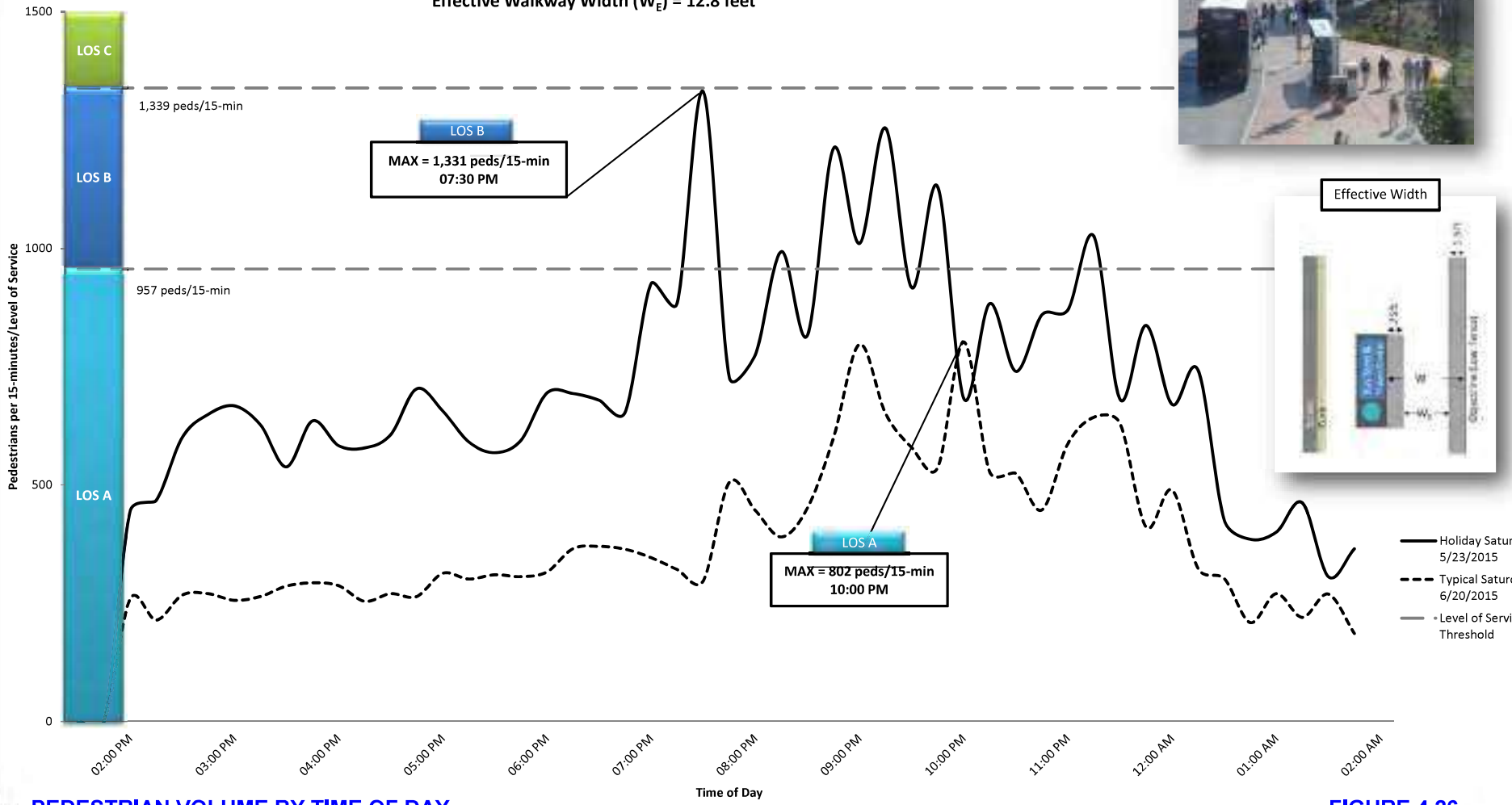
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Treasure Island Bus Stop (Location ID: M14)

Manual Count Location: South of Spring Mountian Road

Walkway Width (W) = 15 feet

Effective Walkway Width (W_E) = 12.8 feet



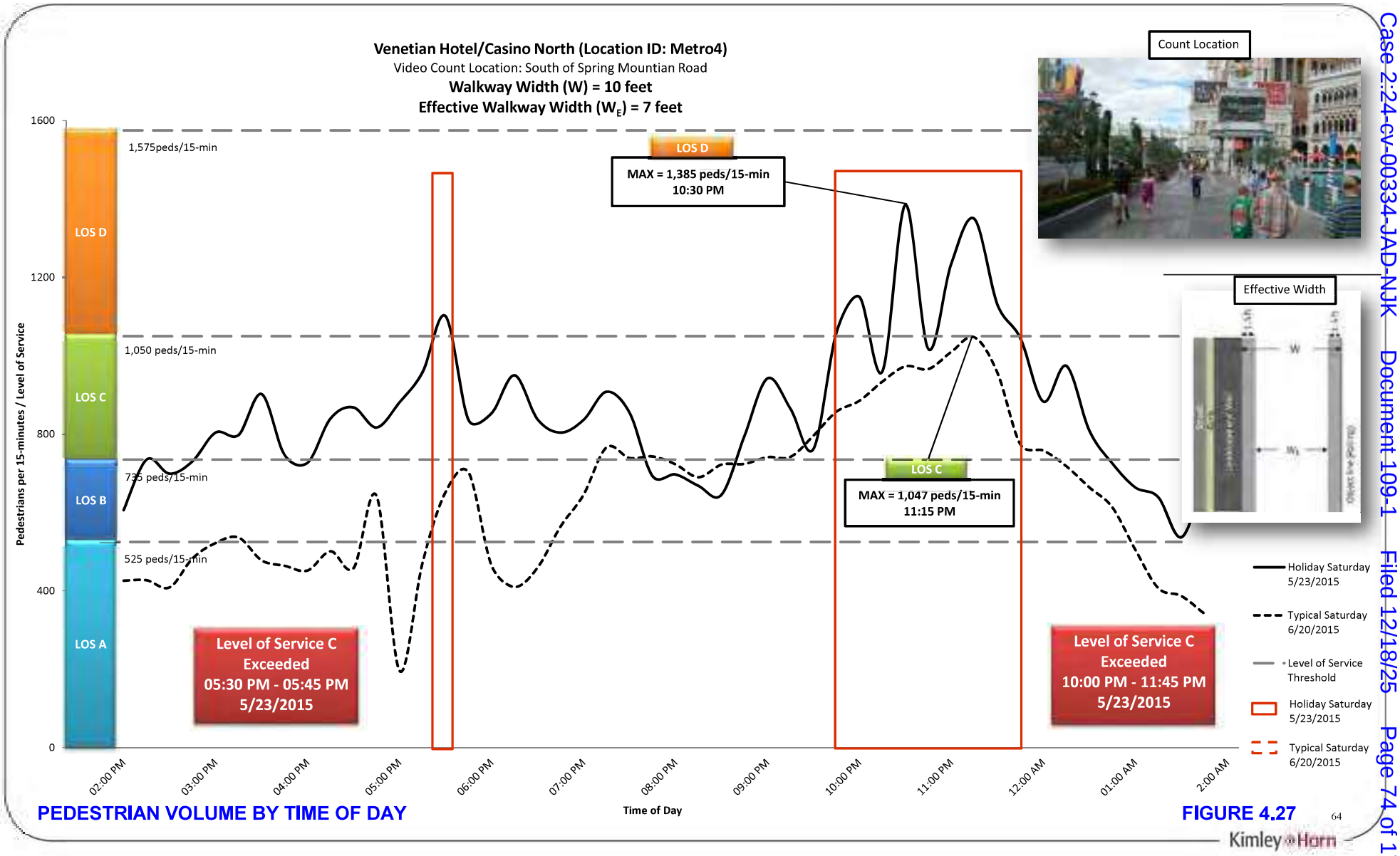
PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 4.26

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CC 1278



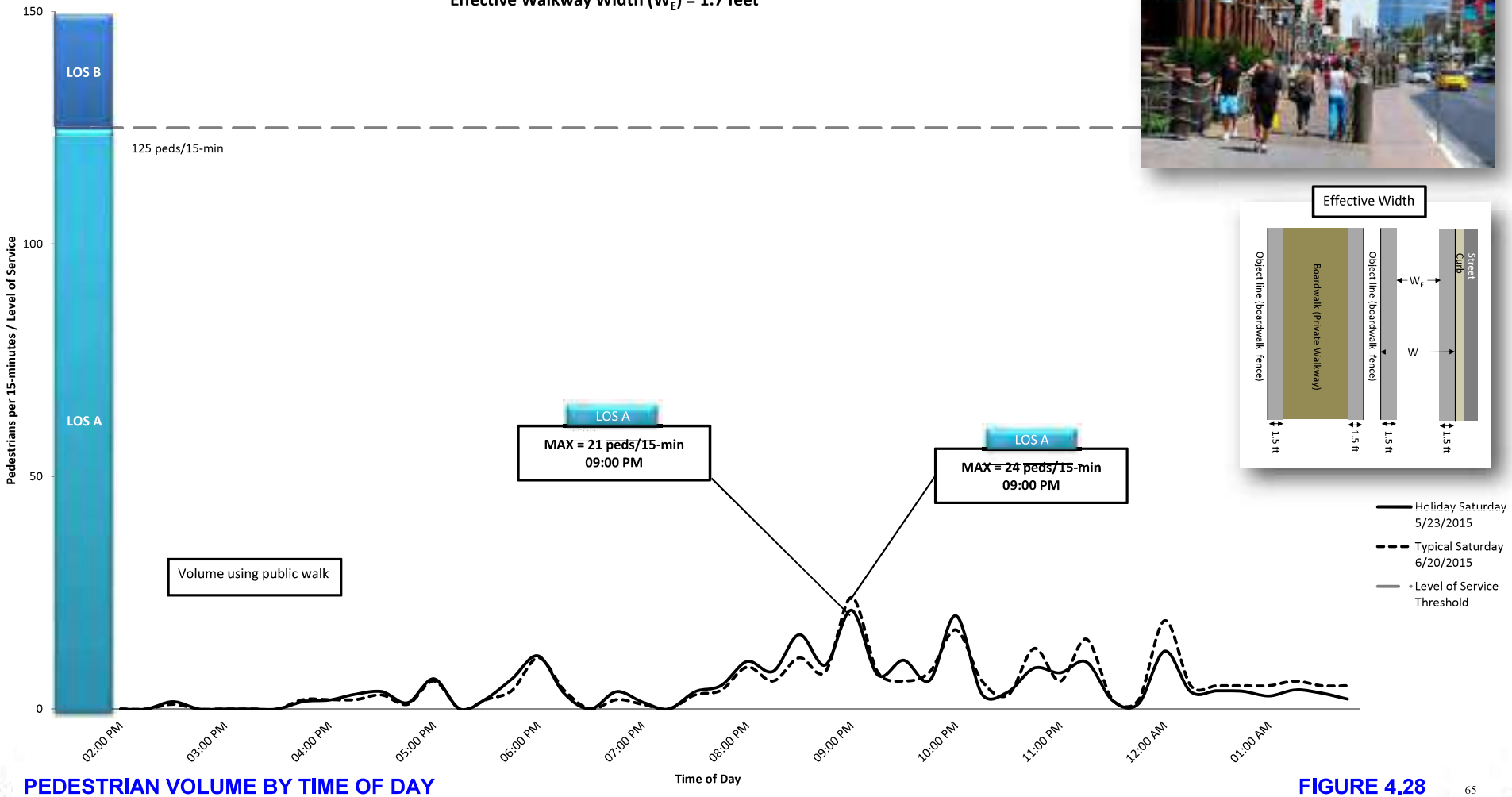
PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 4.27

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Treasure Island Hotel/Casino South (Location ID: CC4)
Video Count Location: South of Spring Mountian Road
Walkway Width (W) = 4.7 feet
Effective Walkway Width (W_E) = 1.7 feet



PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 4.28

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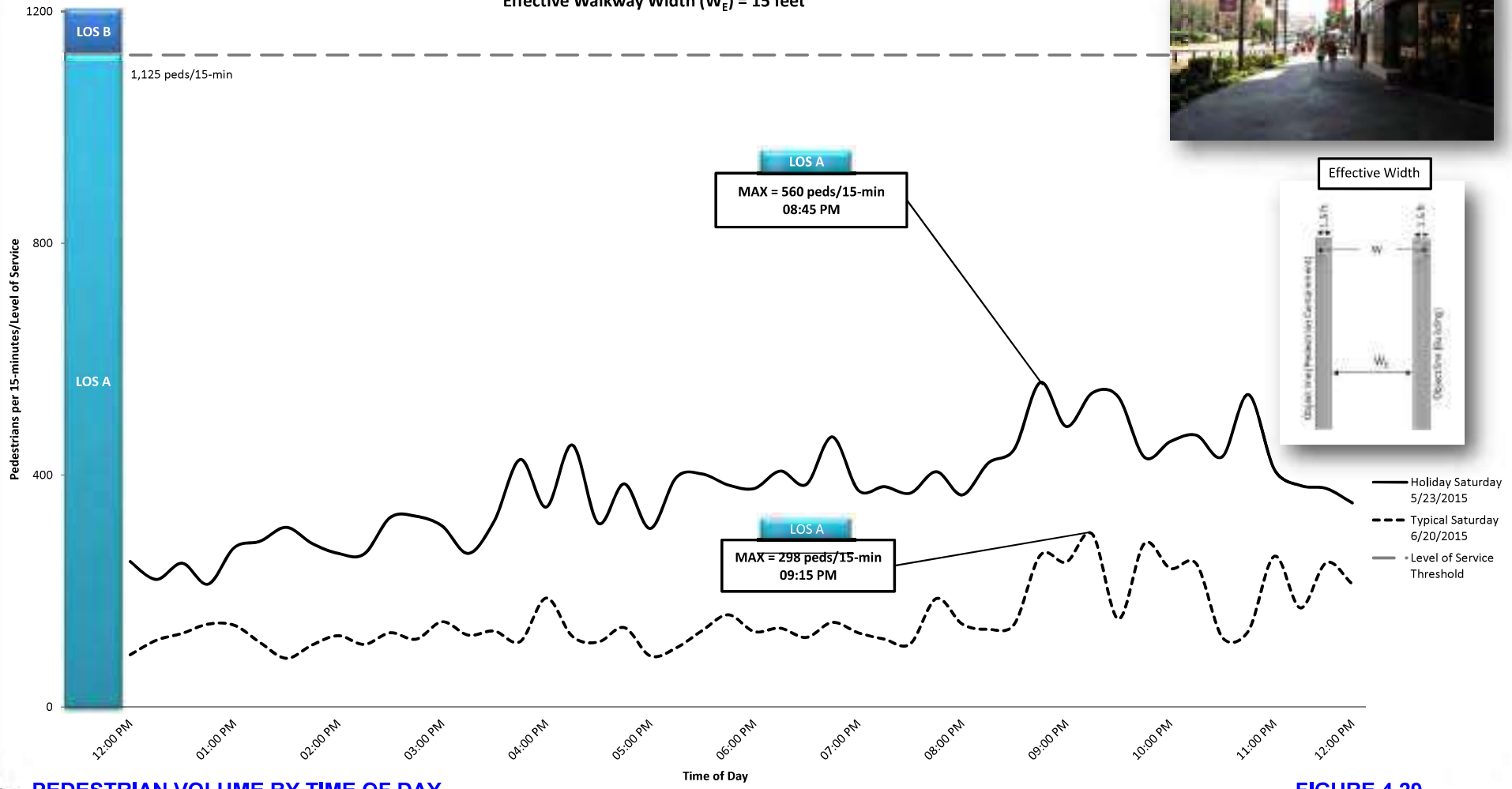
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Treasure Island Hotel/Casino North (Location ID: M15)

Manual Count Location: NW Corner of Spring Mountain Rd and Las Vegas Blvd

Walkway Width (W) = 18 feet

Effective Walkway Width (W_E) = 15 feet



PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 4.29

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4.2.3 Adjacent Public Right-of-Way/Pedestrian Easement Theoretical LOS Analysis

Research conducted in close coordination with Clark County Public Works staff yielded an updated comprehensive exhibit of the existing public walkways and the privately owned and maintained pedestrian walkway easements that are available to the public for pedestrian access. **Exhibit B** displays the existing public right-of-ways and pedestrian easements along Las Vegas Boulevard from Russell Road to Sahara Avenue. It should be noted that this exhibit is the summation of the best available information for this study.

Many locations along the Resort Corridor have public right-of-way and pedestrian walkway easements that are parallel to privately owned walkways. Although they both serve pedestrian needs along Las Vegas Boulevard, an analysis was conducted to determine the LOS of walkway segments if a property were to temporarily or permanently take their parallel private walkway out of service.

This analysis was conducted at the count locations below for the 2015 Pedestrian Study Update:

- New York-New York Hotel/Casino (**Picture 4.2** and **Picture 4.3**)
- Planet Hollywood Hotel/Casino (**Picture 4.4** and **Picture 4.5**)

Figure 4.10 displays the observed pedestrian volume present on the available walkway segments at New York-New York. Comparatively, **Figure 4.30** represents the LOS of the walkway segments at New York-New York and if all the observed pedestrian volume along Las Vegas Boulevard were to be directed to use only the public right-of-way and/or pedestrian easement walkway.

Although under existing conditions LOS C was observed at this location, if all pedestrians were placed on the public walk and/or private easement walkway, LOS E would result. Likewise, under similar conditions at Planet Hollywood, the pedestrian LOS reduces to below C if all pedestrians must use only the public right-of-way and/or private easement walkway.

Walkway segments that provide LOS less than C under these conditions are shown in **Figure 4.31** and **Figure 4.32**. Existing conditions from **Figure 2.1** are shown here for comparison.



Picture 4.2 – New York-New York Plaza.



Picture 4.4 – Performer Spans Easement Line – Planet Hollywood.



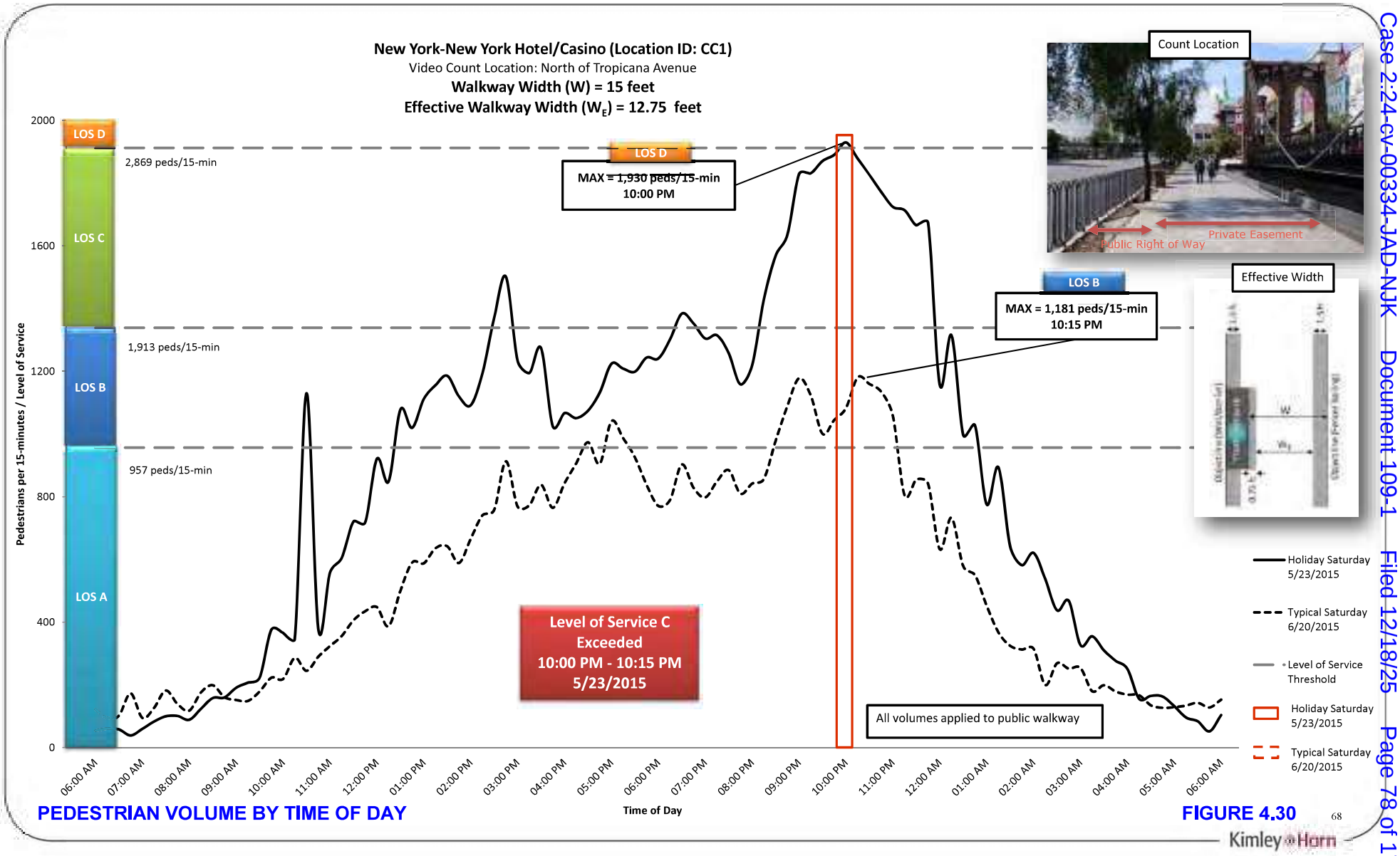
Picture 4.3 – New York-New York Bridge.



Picture 4.5 – Easement Line – Planet Hollywood.

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PEDESTRIAN VOLUME BY TIME OF DAY

FIGURE 4.30

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2015 Existing



SEE FIGURE 4.32

2015 Theoretical



SEE FIGURE 4.32

Legend

- LOS < C
- Calculated LOS < C for theoretical volumes on public right of way walkway width
- R# Segment Reference Number
- R# Segment No Longer Less than LOS C in 2015

PUBLIC RIGHT OF WAY WALKWAY SEGMENTS THAT THEORETICALLY EXCEED LEVEL OF SERVICE (LOS) C TROPICANA AVE. TO FLAMINGO RD.

FIGURE 4.31 69

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2015 Existing



2015 Theoretical



Legend

- LOS < C
- Calculated LOS < C for theoretical volumes on public right of way walkway width
- R# Segment Reference Number
- R# Segment No Longer Less than LOS C in 2015

PUBLIC RIGHT OF WAYWALKWAY SEGMENTS THAT THEORETICALLY EXCEED LEVEL OF SERVICE (LOS) C FLAMINGO RD. TO SPRING MOUNTAIN RD.

FIGURE 4.32

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4.3 Non-Permanent Obstructions

The quantity, location and classification of non-permanent obstructions as observed during the Saturday of Memorial Day weekend (May 23, 2015) and the typical summer Saturday (June 20, 2015) was summarized and analyzed to evaluate the effect of non-permanent obstructions on pedestrian LOS on walkway segments that were found in the 2012 Pedestrian Study to experience a pedestrian LOS of less than C. Individuals that were identified as non-permanent obstructions were summarized for three time periods (1 PM – 4 PM, 5 PM – 8 PM and 9 PM – 12 AM) to compare with the findings of the 2012 Pedestrian Study.

It is important to note that during the data collection process, the field agents were instructed to not make judgement if the "non-permanent obstruction" as counted was actually an obstruction to pedestrian flow. All non-permanent obstructions documented were considered as possible obstructions. **Picture 4.6** and **Picture 4.7** provide examples of typical activities witnessed during the data collection process. **Picture 4.6** through **Picture 4.12** provide pictorial examples of the classified non-permanent obstructions observed for this study.

In addition to the four types of non-permanent obstructions described previously, "short-term" non-permanent obstructions were also present within the Resort Corridor (see **Picture 4.13**). Short-term non-permanent obstructions can be classified as activities that take place within the public right-of-way and obstruct pedestrian traffic, but are quickly removed and/or relocated. Due to the random nature of these short-term activities, these non-permanent obstructions were not included in the analysis. It should be noted, however, that although the installations of Metro surveillance cameras has helped enforcement, these activities were observed within the corridor.

To provide an overall comparison to the 2012 Pedestrian Study, **Figure 4.33** through **Figure 4.38** were created to represent the observed number of non-permanent obstructions in 2012 and 2015 per walkway segment and pedestrian bridge for each of the observation periods (1 PM – 4 PM, 5 PM – 8 PM and 9 PM – 12 AM) both for the holiday and typical Saturday. The following sections detail the data collected with regard to non-permanent obstructions both on walkways and on the pedestrian bridges along Las Vegas Boulevard.

In addition to the pedestrian bridges along Las Vegas Boulevard, non-permanent obstructions were also quantified on pedestrian bridges crossing Las Vegas Boulevard for this 2015 Update. To provide a more direct comparison to the 2012 data, these pedestrian bridges are discussed separately in **Section 4.3.2.**

Table 4.7 provides a count summary for the average number of non-permanent obstructions observed for each side of Las Vegas Boulevard from Russell Road to Sahara Avenue during the holiday Saturday data collection effort in 2015 and 2012 for comparison. The highest number of non-permanent obstructions observed for a holiday Saturday was 278 individuals between 5PM and 8PM on Saturday, May 23, 2015.

The highest number of non-permanent obstructions were observed on Saturday, May 23, 2015 between 5:00 PM and 8:00 PM, totaling 278 individuals either handbilling, performing, soliciting or vending. Similarly, **Table 4.8** summarizes the non-permanent obstructions observed on Saturday, June 20, 2015 and the non-permanent obstructions observed on Saturday, June 16, 2012 for comparison. The highest number of non-permanent obstructions observed for a typical Saturday was 252 individuals between 9 PM and 12 AM on Saturday, June 16, 2012.

Table 4.7 – Observed Non-Permanent Obstructions Holiday Saturday

Time Period	West Side		East Side		Total	
	2012	2015	2012	2015	2012	2015
1 PM - 4 PM	65	104	104	164	169	268
5 PM - 8 PM	103	126	156	152	259	278
9 PM - 12 PM	92	117	133	141	224	258

Table 4.8 – Observed Non-Permanent Obstructions Typical Saturday

Time Period	West Side		East Side		Total	
	2012	2015	2012	2015	2012	2015
1 PM - 4 PM	51	61	88	62	139	123
5 PM - 8 PM	80	79	145	80	225	159
9 PM - 12 PM	103	131	149	95	252	226



Picture 4.6 – Non-Permanent Obstructions (Performers) Jump Over Tourists – MGM Grand.



Picture 4.7 – Non-Permanent Obstructions (Vendor and Solicitor) – Bellagio.

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Picture 4.8 – Non-Permanent Obstruction Example – Handbiller.



Picture 4.10 – Non-Permanent Obstruction Example – Performers.



Picture 4.12 – Non-Permanent Obstruction Example – Vendor.



Picture 4.9 – Non-Permanent Obstruction Example – Handbiller (Sign-holders).



Picture 4.11 – Non-Permanent Obstruction Example – Solicitor.



Picture 4.13 – Non-Permanent Obstruction Example – "Short-Term" – Illegal Street Gambling.

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The non-holiday Saturday (June 20, 2015) experienced a decrease in the total number of non-permanent obstructions in all time periods except for 9 PM to 12 AM on the west side where there was a slight increase. The highest number of non-permanent obstructions observed on Saturday, June 20 was 226, a decrease from the 278 observed on the holiday weekend, Saturday, May 23. The observed reduction could have been related to the high afternoon temperature of 113°F that day.

The field notes recorded by the data collection agents for the highest observed time periods for each Saturday count were used to quantify the location of the observed non-permanent obstructions. The non-permanent obstructions were reviewed for walkway locations identified in Clark County Code Chapter 16.11. These locations are where non-permanent obstructions are not permitted to obstruct including: within 50 feet of a signalized intersection, access drive or mid-block crosswalk. Categories were also created grouping non-permanent obstructions that were observed on pedestrian bridges, within 15 feet of pedestrian bridge landings and within 15 feet of a bus shelter.

Table 4.9 summarizes the distribution of the non-permanent obstruction types within the study corridor on the holiday and typical Saturdays for 2012 and 2015. It can be seen in **Table 4.9** that 98 or 35% on Saturday, May 23, 2015 and 94 or 42% on Saturday, June 20, 2015 of the observed non-permanent obstructions were located within areas where non-permanent obstructions are not permitted to obstruct under County Code 16.11. The majority of these non-permanent obstructions were classified as handbillers. The non-permanent obstructions were quantified within each of the 53 study corridor segments (25 west segments and 28 east segments) and are graphically shown in **Figure 4.39** through **Figure 4.46**.

Table 4.9 – Distribution of Non-Permanent Obstructions

Distribution of Non-Permanent Obstructions - Holiday Saturday												
Non-Permanent Obstruction Category	Within 50' of an intersection, driveway, or crosswalk		On pedestrian bridges parallel to LVB		Within 15' of a pedestrian bridge landing		Within 15' of a bus stop		Other		Total	
	2012	2015	2012	2015	2012	2015	2012	2015	2012	2015	2012	2015
Handbiller	110 (42%)	65 (23%)	4 (2%)	5 (2%)	3 (1%)	1 (0%)	9 (3%)	5 (2%)	27 (10%)	40 (14%)	154 (59%)	116 (42%)
Performer	21 (8%)	18 (6%)	9 (3%)	4 (1%)	1 (1%)	15 (5%)	1 (1%)	7 (3%)	43 (17%)	47 (17%)	75 (29%)	91 (33%)
Solicitor	4 (2%)	14 (5%)	7 (3%)	16 (6%)	1 (1%)	1 (0%)	0 (0%)	0 (0%)	4 (2%)	11 (4%)	16 (6%)	42 (15%)
Vendor	5 (2%)	1 (0%)	4 (2%)	4 (1%)	0 (0%)	1 (0%)	0 (0%)	1 (0%)	6 (2%)	22 (8%)	15 (6%)	29 (10%)
Total	140 (54%)	98 (35%)	24 (9%)	29 (10%)	5 (2%)	18 (6%)	10 (4%)	13 (5%)	80 (31%)	120 (43%)	259 (100%)	278 (100%)

Distribution of Non-Permanent Obstructions - Typical Saturday												
Non-Permanent Obstruction Category	Within 50' of an intersection, driveway, or crosswalk		On pedestrian bridges parallel to LVB		Within 15' of a pedestrian bridge landing		Within 15' of a bus stop		Other		Total	
	2012	2015	2012	2015	2012	2015	2012	2015	2012	2015	2012	2015
Handbiller	113 (45%)	45 (20%)	2 (1%)	45 (20%)	4 (2%)	5 (2%)	2 (2%)	4 (2%)	24 (10%)	19 (8%)	145 (58%)	76 (34%)
Performer	22 (9%)	32 (14%)	5 (2%)	32 (14%)	3 (1%)	1 (1%)	2 (1%)	6 (3%)	38 (15%)	42 (19%)	70 (28%)	81 (36%)
Solicitor	6 (2%)	8 (4%)	7 (3%)	8 (4%)	0 (0%)	1 (0%)	0 (0%)	0 (0%)	4 (2%)	10 (4%)	17 (7%)	30 (13%)
Vendor	5 (2%)	9 (4%)	6 (2%)	9 (4%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	10 (4%)	17 (8%)	21 (8%)	36 (16%)
Total	146 (58%)	94 (42%)	20 (8%)	94 (42%)	7 (3%)	7 (3%)	4 (2%)	10 (4%)	76 (30%)	88 (39%)	252 (100%)	226 (100%)

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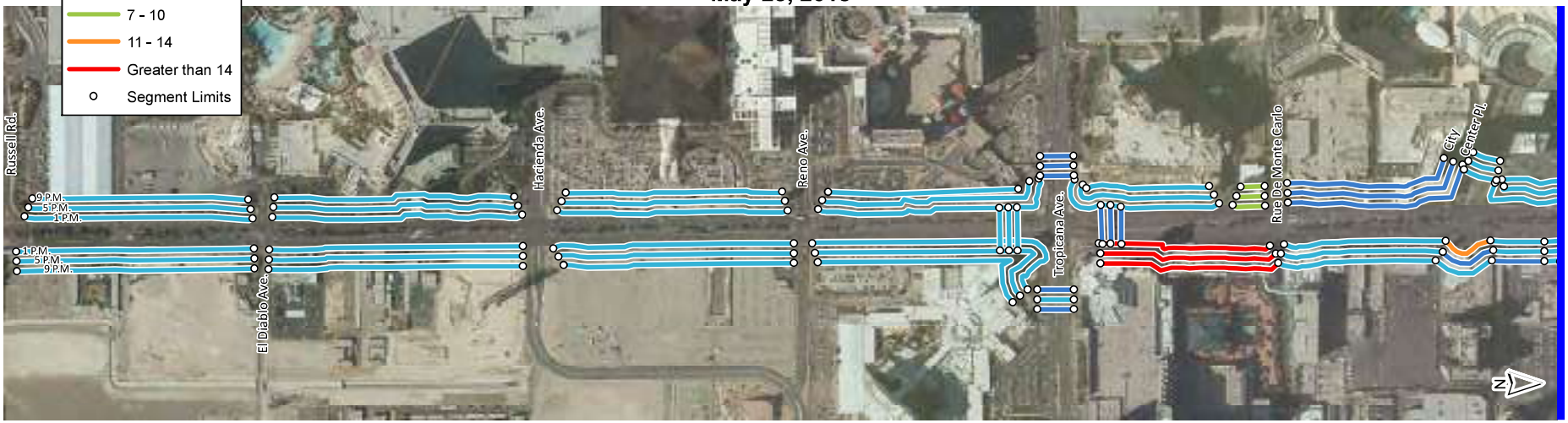
CC 1288

May 26, 2012



SEE FIGURE 4.34

May 23, 2015

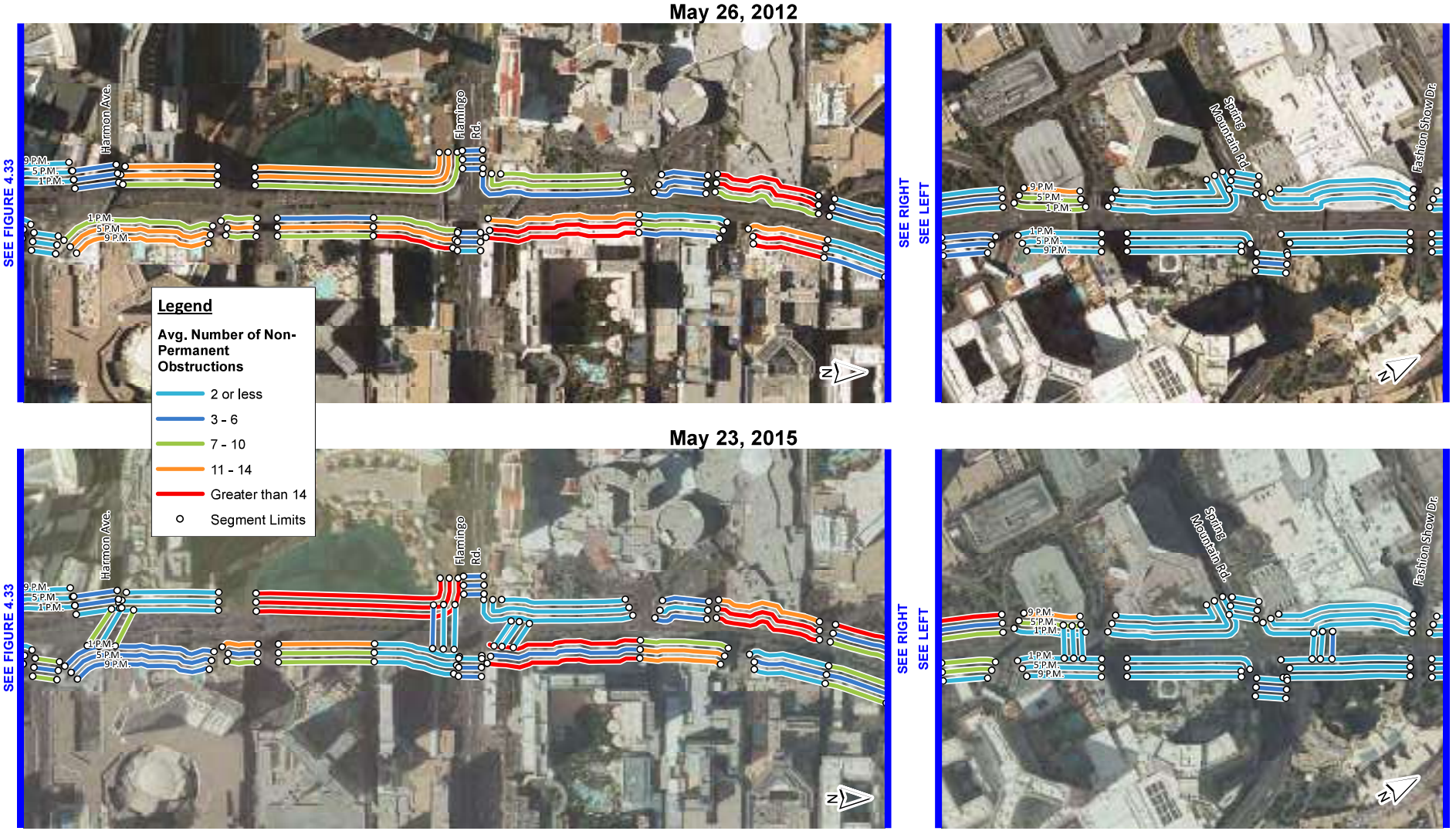


SEE FIGURE 4.34

AVERAGE NON-PERMANENT OBSTRUCTIONS PER SEGMENT
RUSSELL RD. TO CITY CENTER PL. (HOLIDAY SATURDAY)

FIGURE 4.33

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AVERAGE NON-PERMANENT OBSTRUCTIONS PER SEGMENT
HARMON AVE. TO FASHION SHOW DR. (HOLIDAY SATURDAY)

FIGURE 4.34

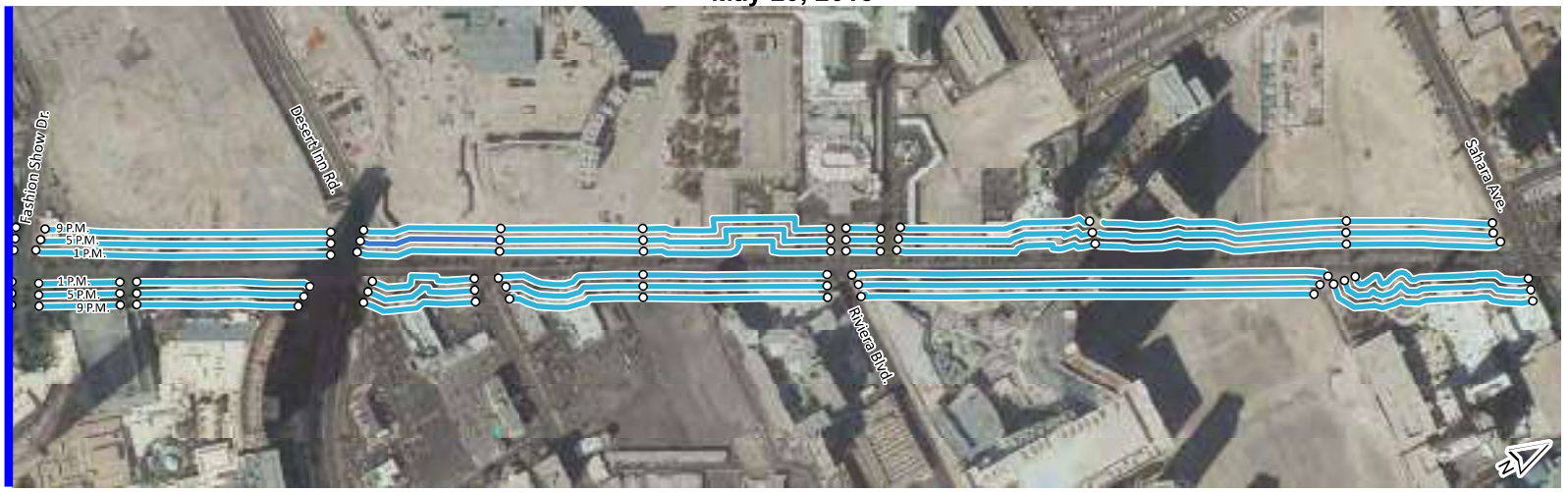
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May 26, 2012



May 23, 2015



Legend

Avg. Number of Non-Permanent Obstructions (NPO's)

- 2 or less
- 3 - 6
- 7 - 10
- 11 - 14
- Greater than 14
- Segment Limits

AVERAGE NON-PERMANENT OBSTRUCTIONS PER SEGMENT
FASHION SHOW DR. TO SAHARA AVE. (HOLIDAY SATURDAY)

FIGURE 4.35 76

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AVERAGE NON-PERMANENT OBSTRUCTIONS PER SEGMENT
RUSSELL RD. TO CITY CENTER PL. (TYPICAL SATURDAY)

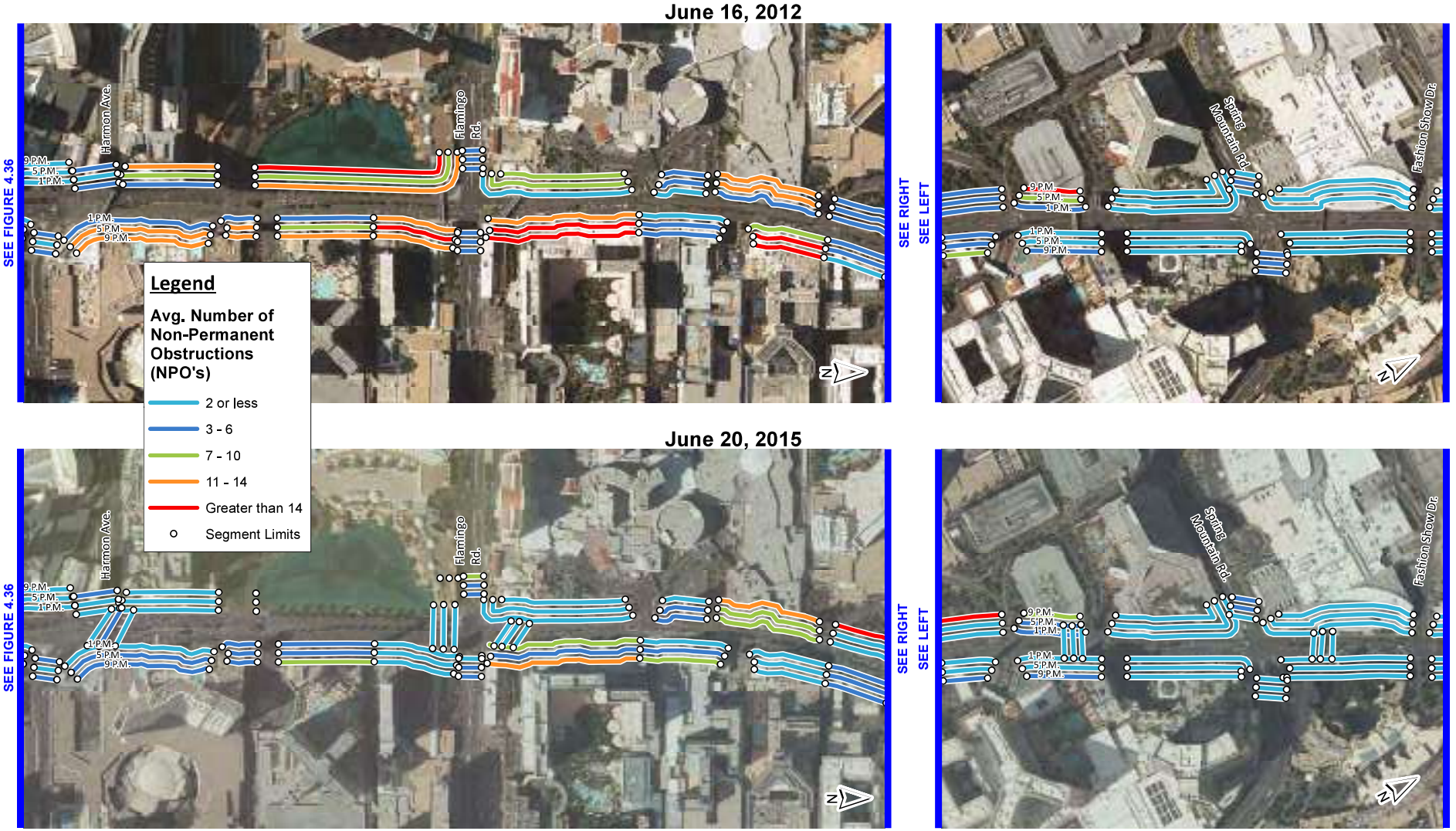
FIGURE 4.36

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SEE FIGURE 4.37

SEE FIGURE 4.37



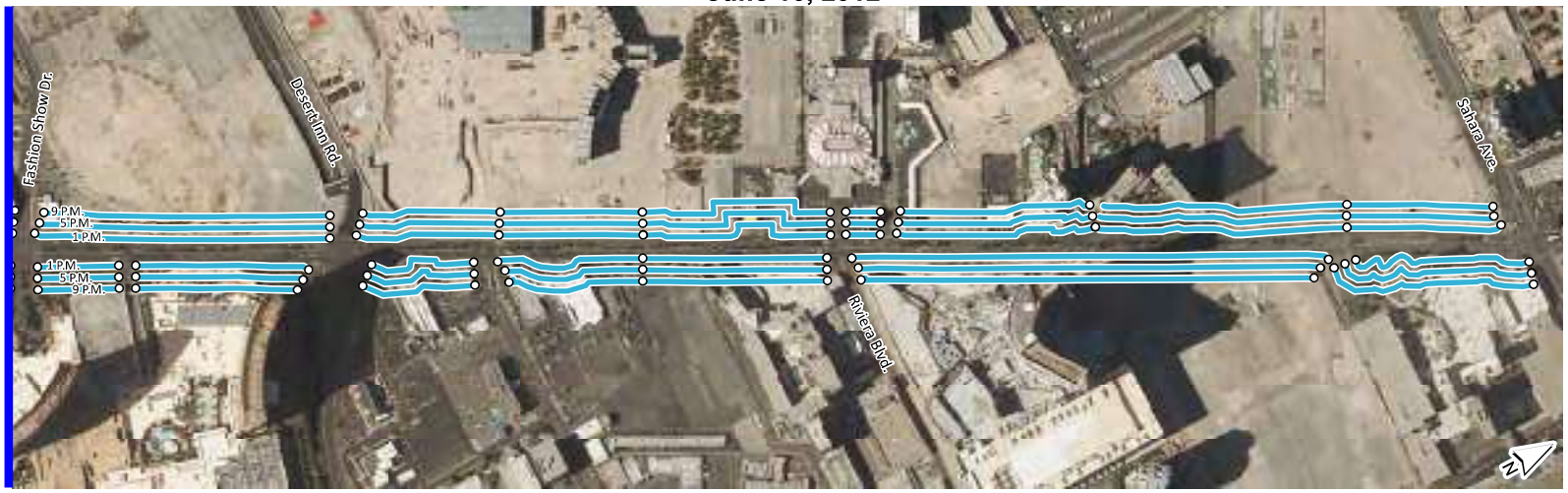
AVERAGE NON-PERMANENT OBSTRUCTIONS PER SEGMENT
HARMON AVE. TO FASHION SHOW DR. (TYPICAL SATURDAY)

FIGURE 4.37

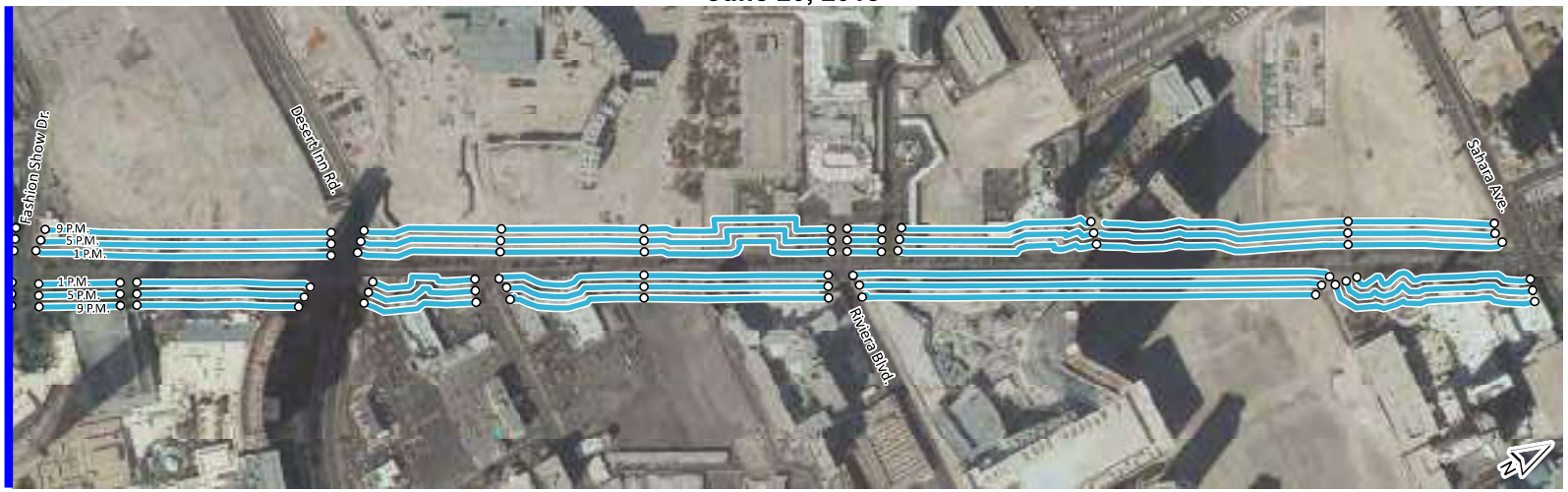
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June 16, 2012



June 20, 2015



Legend

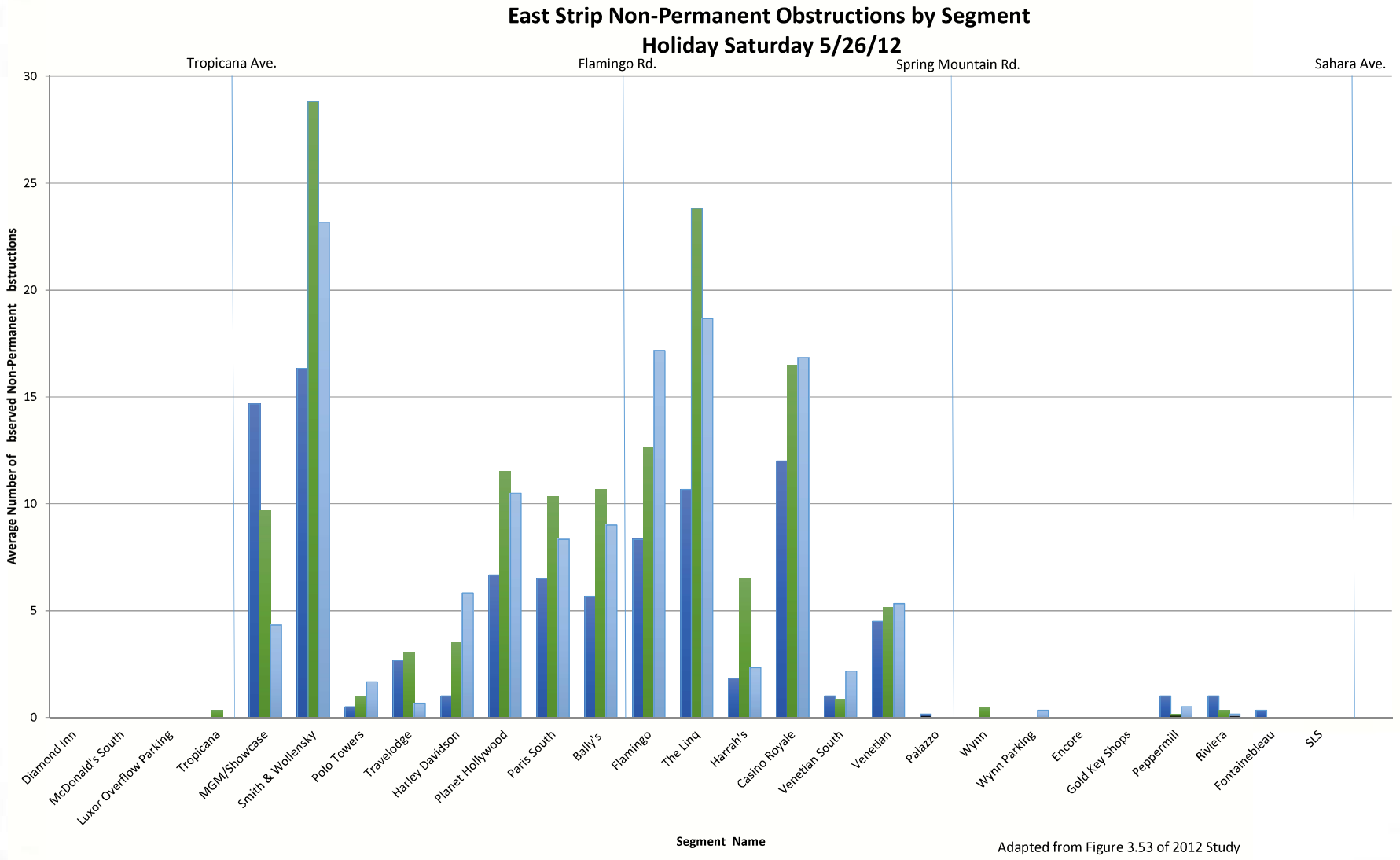
Avg. Number of Non-Permanent Obstructions (NPO's)

- 2 or less
- 3 - 6
- 7 - 10
- 11 - 14
- Greater than 14
- Segment Limits

AVERAGE NON-PERMANENT OBSTRUCTIONS PER SEGMENT
FASHION SHOW DR. TO SAHARA AVE. (TYPICAL SATURDAY)

FIGURE 4.38 79

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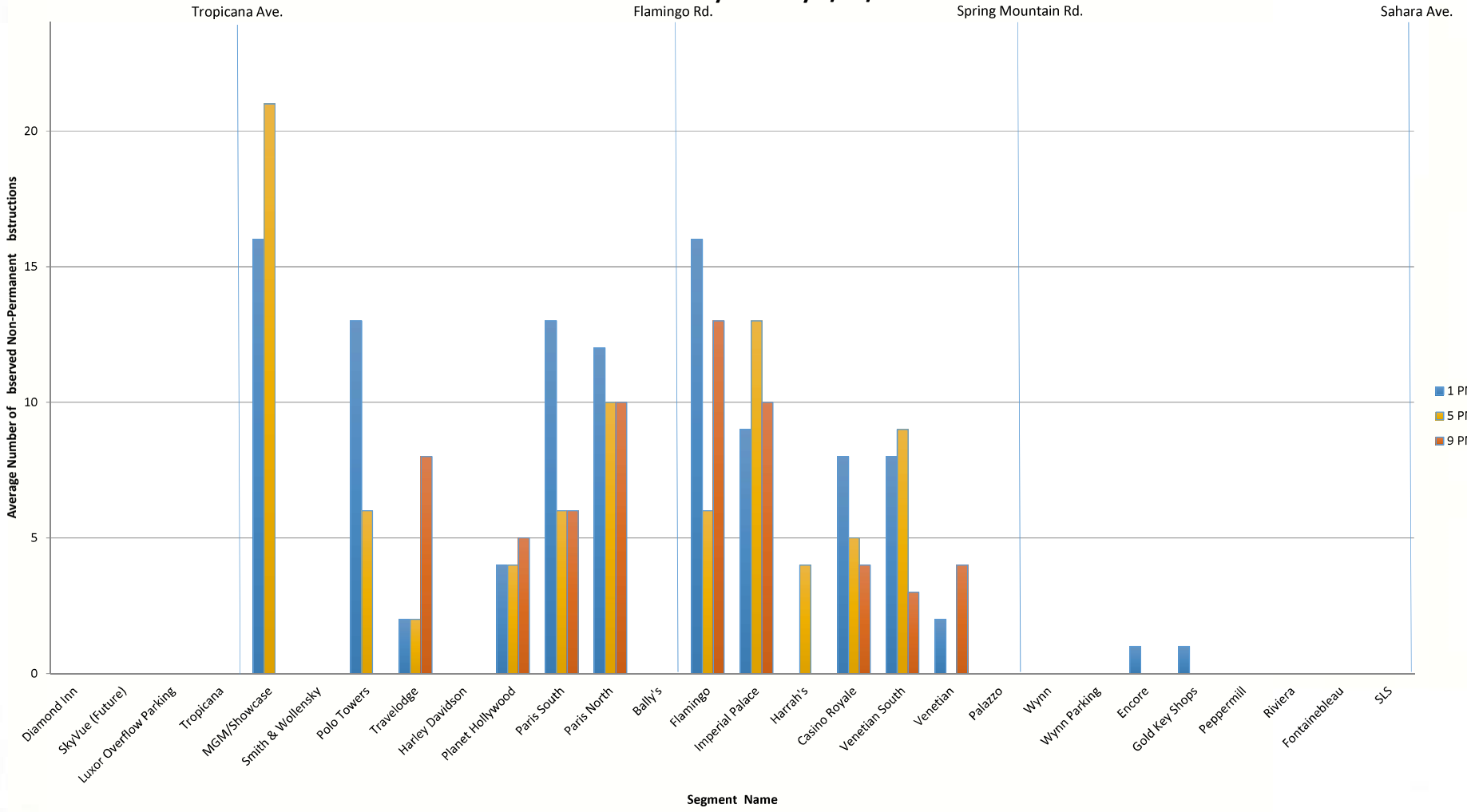
Adapted from Figure 3.53 of 2012 Study

NON-PERMANENT OBSTRUCTIONS

FIGURE 4.39

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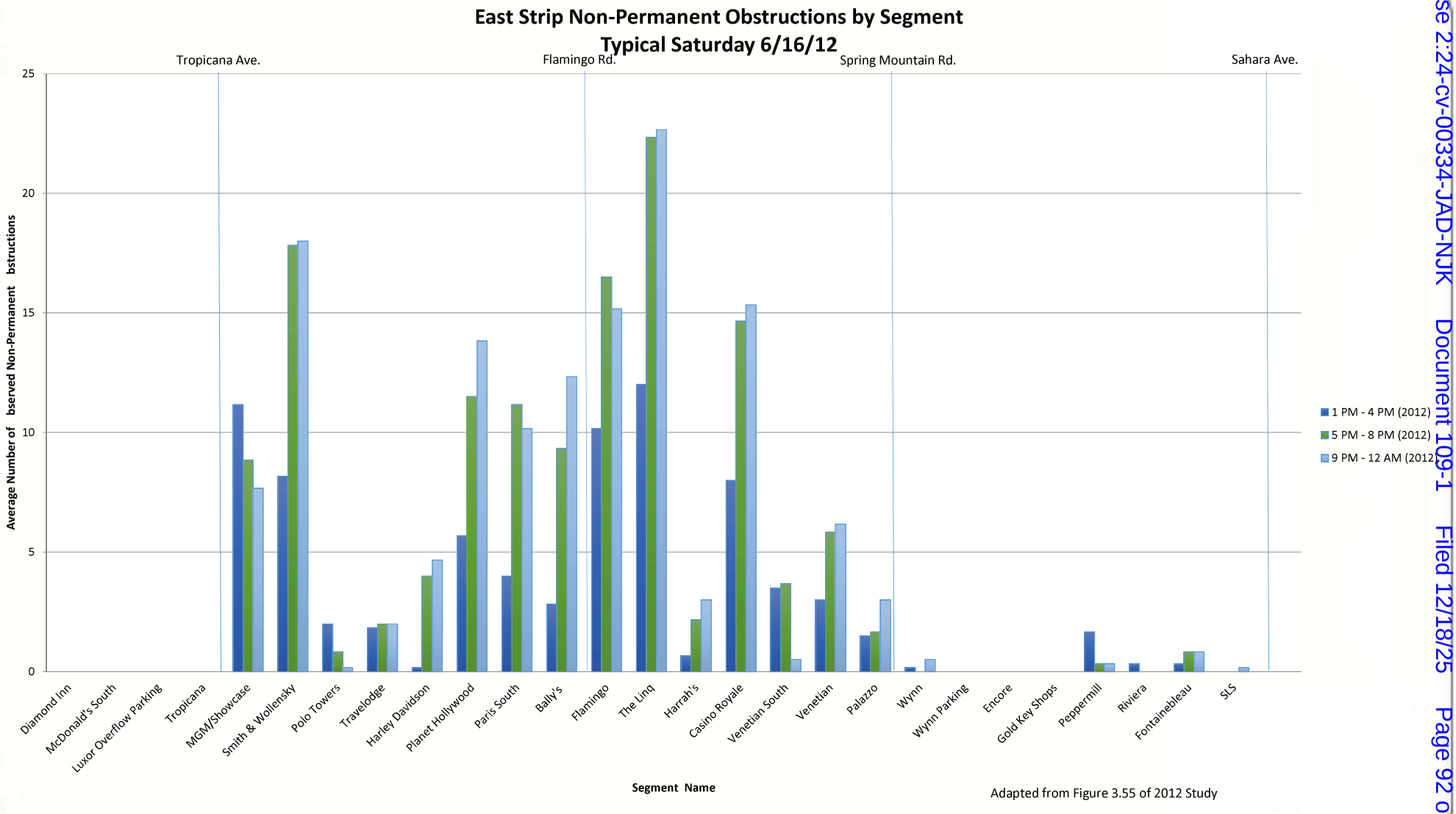


NON-PERMANENT OBSTRUCTIONS

FIGURE 4.40

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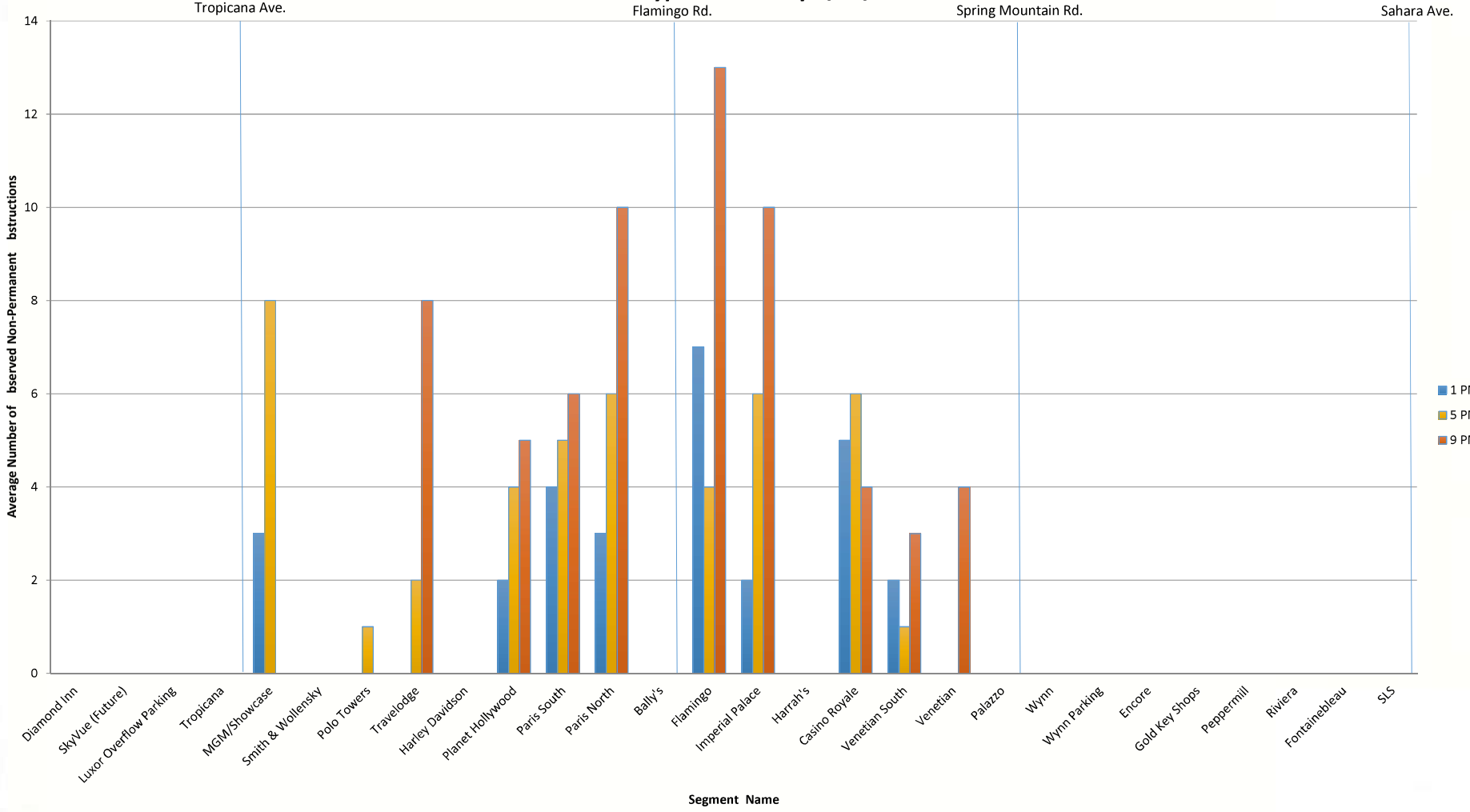
Adapted from Figure 3.55 of 2012 Study

NON-PERMANENT OBSTRUCTIONS

FIGURE 4.41

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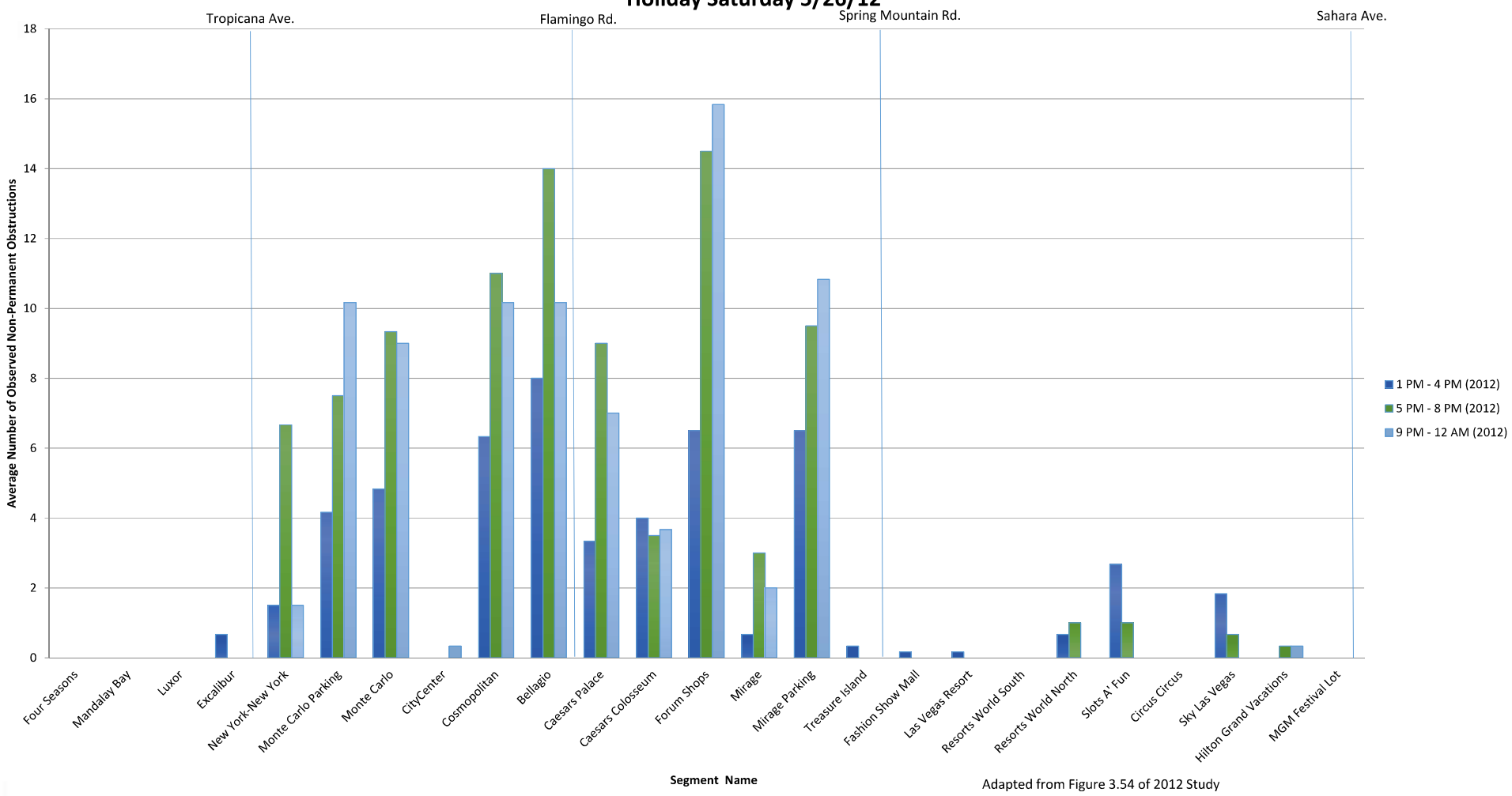


NON-PERMANENT OBSTRUCTIONS

FIGURE 4.42

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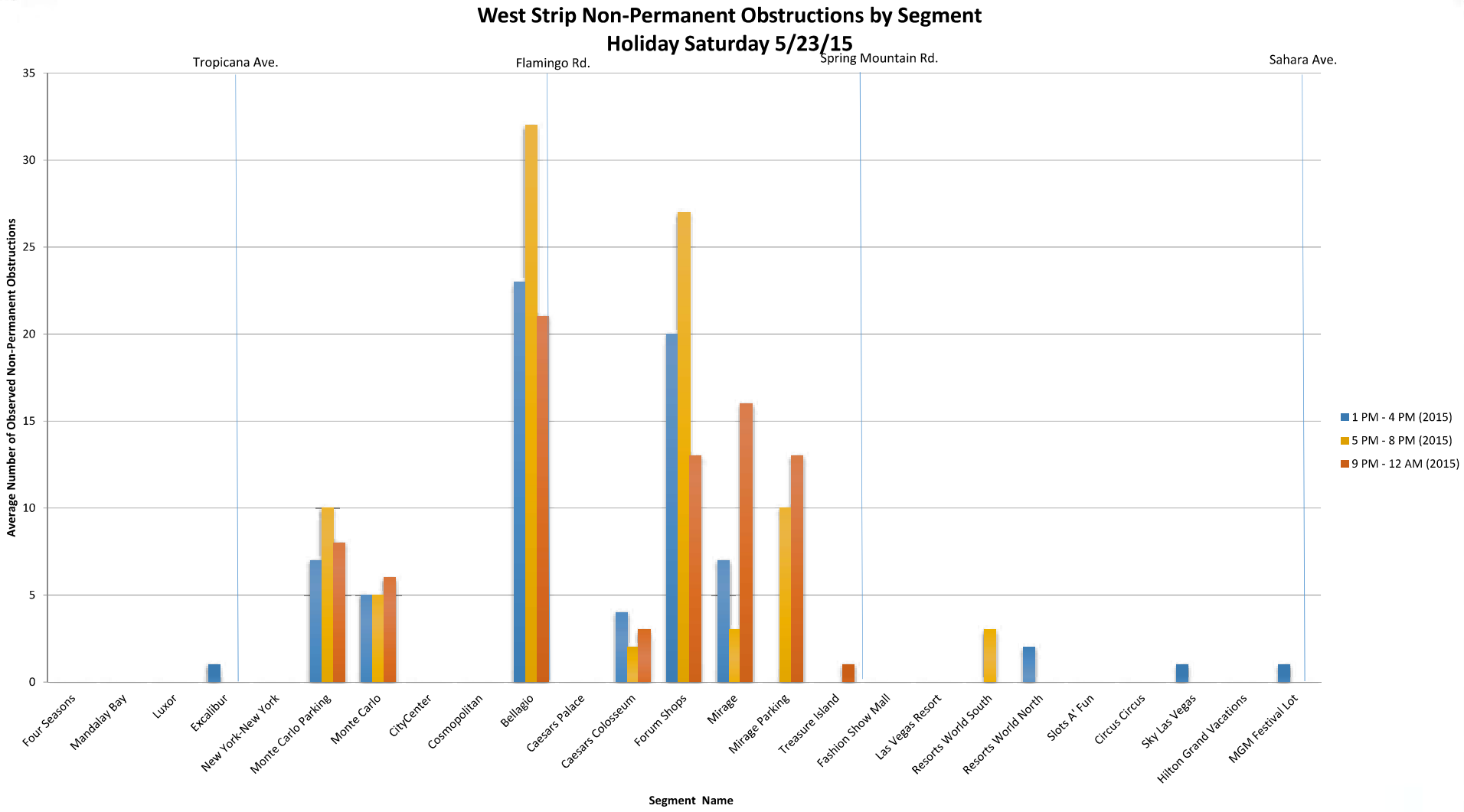
Adapted from Figure 3.54 of 2012 Study

NON-PERMANENT OBSTRUCTIONS

FIGURE 4.43

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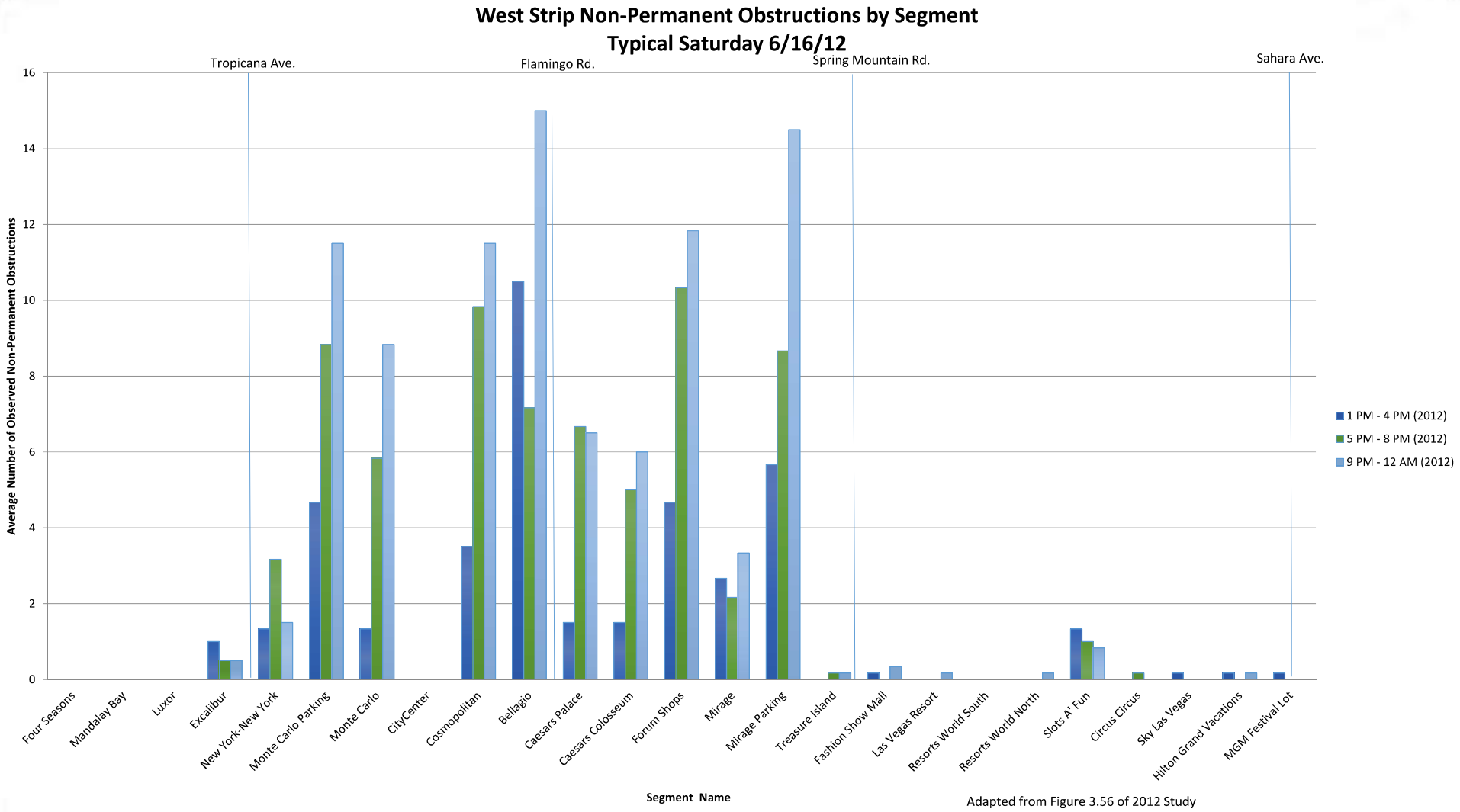


NON-PERMANENT OBSTRUCTIONS

FIGURE 4.44

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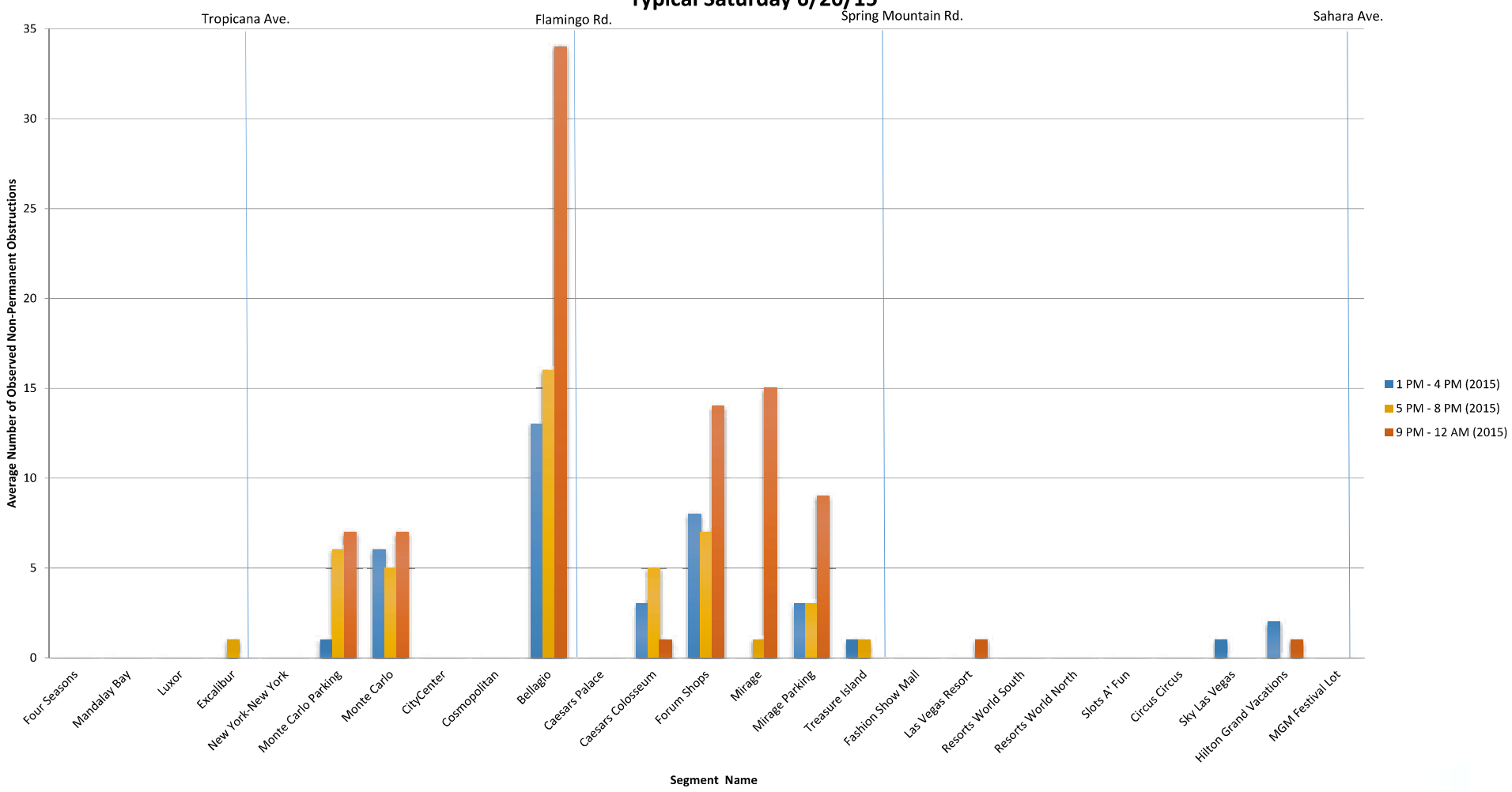


NON-PERMANENT OBSTRUCTIONS

FIGURE 4.45

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NON-PERMANENT OBSTRUCTIONS

FIGURE 4.46

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4.3.1 Non-Permanent Obstructions on Pedestrian Bridges along Las Vegas Boulevard

A separate evaluation was conducted for non-permanent obstructions observed on the fifteen (15) pedestrian bridges within the re-study area. The maximum number of individuals identified to be non-permanent obstructions on the pedestrian bridges was observed to be ten (10) on the Harmon Avenue east pedestrian bridge between the Harley Davidson Café and the Miracle Mile Shops at Planet Hollywood Hotel/Casino.

Table 4.10 and **Table 4.11** summarize the total observed number of non-permanent obstructions on each pedestrian bridge running parallel to (along) Las Vegas Boulevard within the Resort Corridor. Bridges "parallel to Las Vegas Boulevard" indicate bridges that carry pedestrians in the north/south direction parallel to Las Vegas Boulevard and are on the east and west side of intersections. **Table 4.12** and **Table 4.13** provide the distribution of the non-permanent obstruction types within the study corridor for 2012 and 2015 on the holiday and typical Saturdays respectively.

Table 4.10 – NPO's on Pedestrian Bridges Parallel to Las Vegas Boulevard – Holiday Saturday

Pedestrian Bridge	1 PM - 4 PM		5 PM - 8 PM		9 PM - 12 PM	
	2012	2015	2012	2015	2012	2015
Tropicana East	2	3	1	0	1	4
Tropicana West	3	6	4	5	4	4
Harmon East	2	7	1	5	1	10
Harmon West	3	0	3	5	2	5
Flamingo East	5	0	3	3	1	2
Flamingo West	4	3	4	4	3	4
Spring Mountain East	1	2	3	4	2	2
Spring Mountain West	2	2	1	2	1	1

Table 4.11 – NPO's on Pedestrian Bridges Parallel to Las Vegas Boulevard– Typical Saturday

Pedestrian Bridge	1 PM - 4 PM		5 PM - 8 PM		9 PM - 12 PM	
	2012	2015	2012	2015	2012	2015
Tropicana East	1	1	1	2	3	0
Tropicana West	3	8	2	2	2	5
Harmon East	3	4	2	0	3	3
Harmon West	2	0	2	2	3	4
Flamingo East	5	2	3	3	3	3
Flamingo West	3	3	3	4	3	7
Spring Mountain East	5	2	4	1	5	2
Spring Mountain West	2	2	3	5	2	3

Figure 4.47 through **Figure 4.50** display the total number of non-permanent obstructions observed on pedestrian bridges for a holiday Saturday and a typical Saturday respectively for both 2012 and 2015. In comparing the pedestrian volume LOS on the pedestrian bridges in **Table 4.5** and **Table 4.6** and the average number of non-permanent obstructions on pedestrian bridges in **Figure 4.47** through **Figure 4.50**, it can be seen that the average number of non-permanent obstructions increased from 2012 to 2015, generally. Additionally, the LOS decreased when pedestrian volumes were significant. The decrease in LOS is expected with the increase in non-permanent obstruction as the effective walkway width (W_E) decreases and pedestrians are not provided the total walkway width (W) for walking. The Flamingo Road West and Harmon North pedestrian bridges were calculated to experience a LOS less than LOS C on the typical Saturday.

It is important to note that during 9 PM to 12 AM, the Flamingo Road west pedestrian bridge had four non-permanent obstructions on the bridge while it experienced a calculated LOS D volume conditions (calculated without any reduction of width due to non-permanent obstructions). This suggests that at least where pedestrian volumes are large, non-permanent obstructions are contributing to walkway congestion. **Picture 4.14** and **Picture 4.15** show pedestrian bridges with non-permanent obstructions in 2015 at Flamingo Road and Tropicana Avenue, respectively.



Picture 4.14 – Non-Permanent Obstructions (vendor) on Pedestrian Bridge – Flamingo Road West.



Picture 4.15 – Non-Permanent Obstructions on Pedestrian Bridge (handbillers) – Tropicana Avenue West.

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CC 1303

Table 4.12 – NPO's on Pedestrian Bridges Parallel to Las Vegas Boulevard – Holiday Saturday

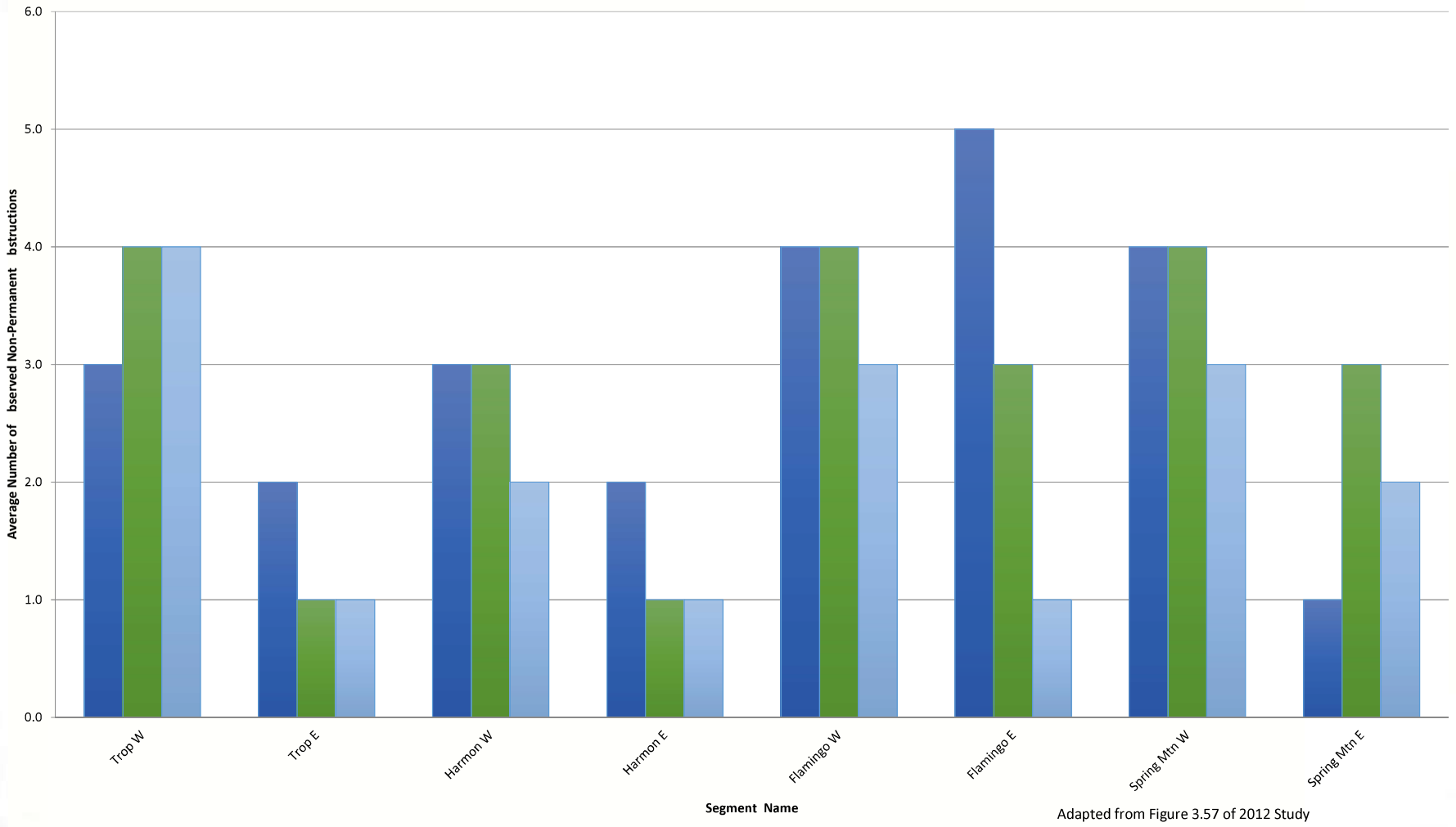
Non-Permanent Obstruction Category	On Pedestrian Bridges		Within 15' of a pedestrian bridge landing	
	2012	2015	2012	2015
Handbiller	4	5	3	1
Performer	9	4	1	15
Solicitor	7	16	1	1
Vendor	4	4	0	1
Total	24	29	5	18

Table 4.13 –NPO's on Pedestrian Bridges Parallel to Las Vegas Boulevard – Typical Saturday

Non-Permanent Obstruction Category	On Pedestrian Bridges		Within 15' of a pedestrian bridge landing	
	2012	2015	2012	2015
Handbiller	2	3	4	5
Performer	5	3	3	1
Solicitor	7	11	0	1
Vendor	6	10	0	0
Total	20	27	7	7

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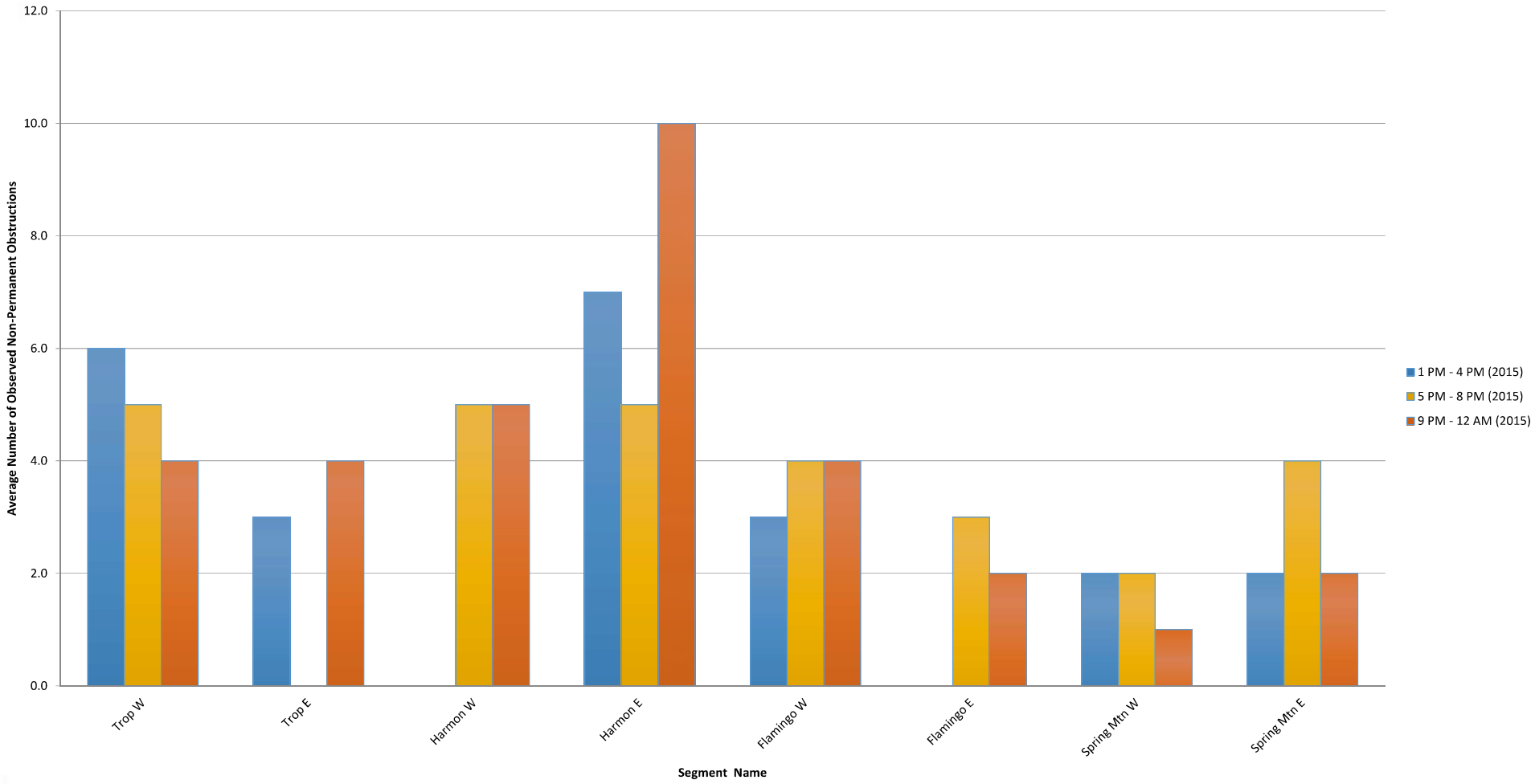


Adapted from Figure 3.57 of 2012 Study

NON-PERMANENT OBSTRUCTIONS

FIGURE 4.47

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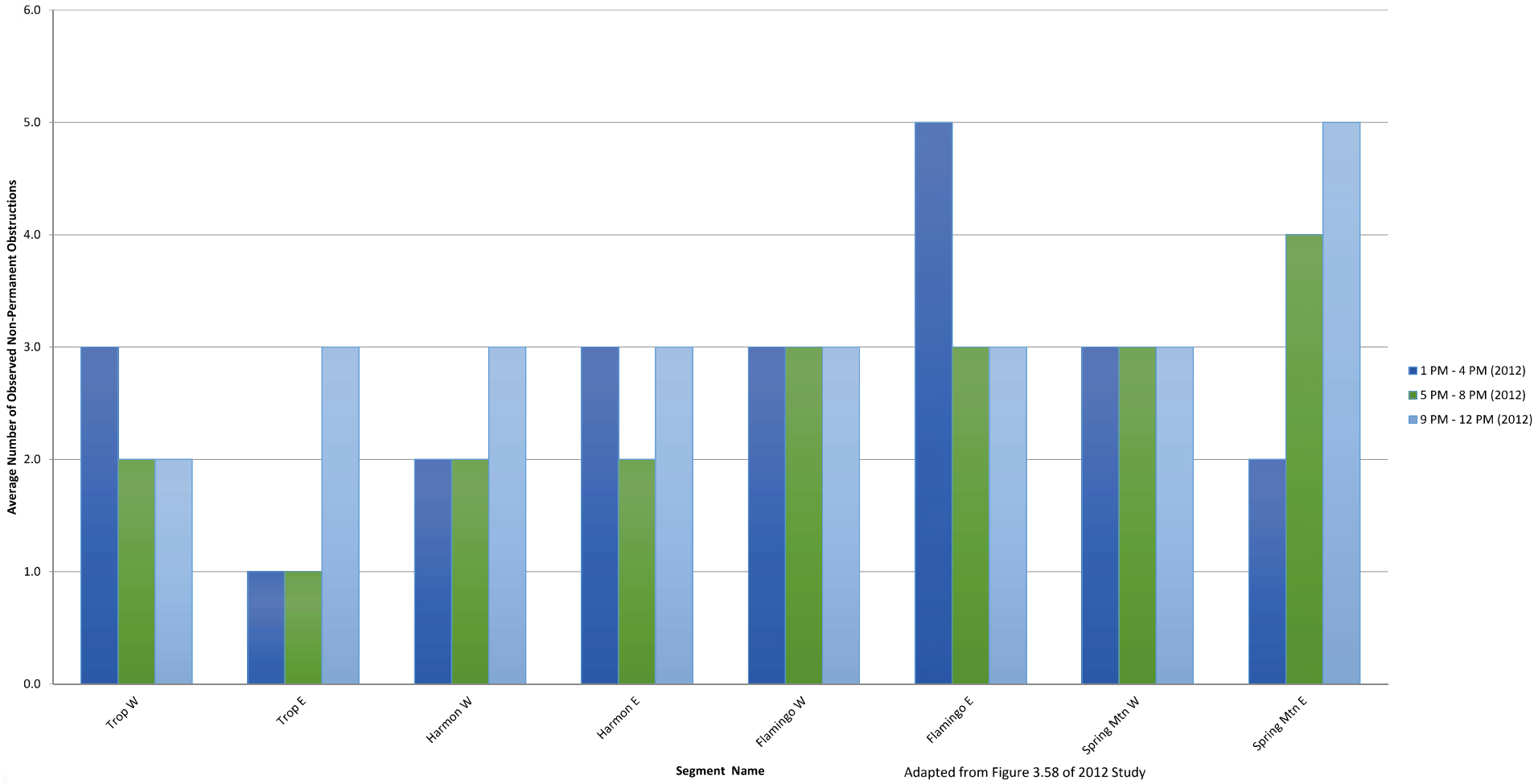


NON-PERMANENT OBSTRUCTIONS

FIGURE 4.48

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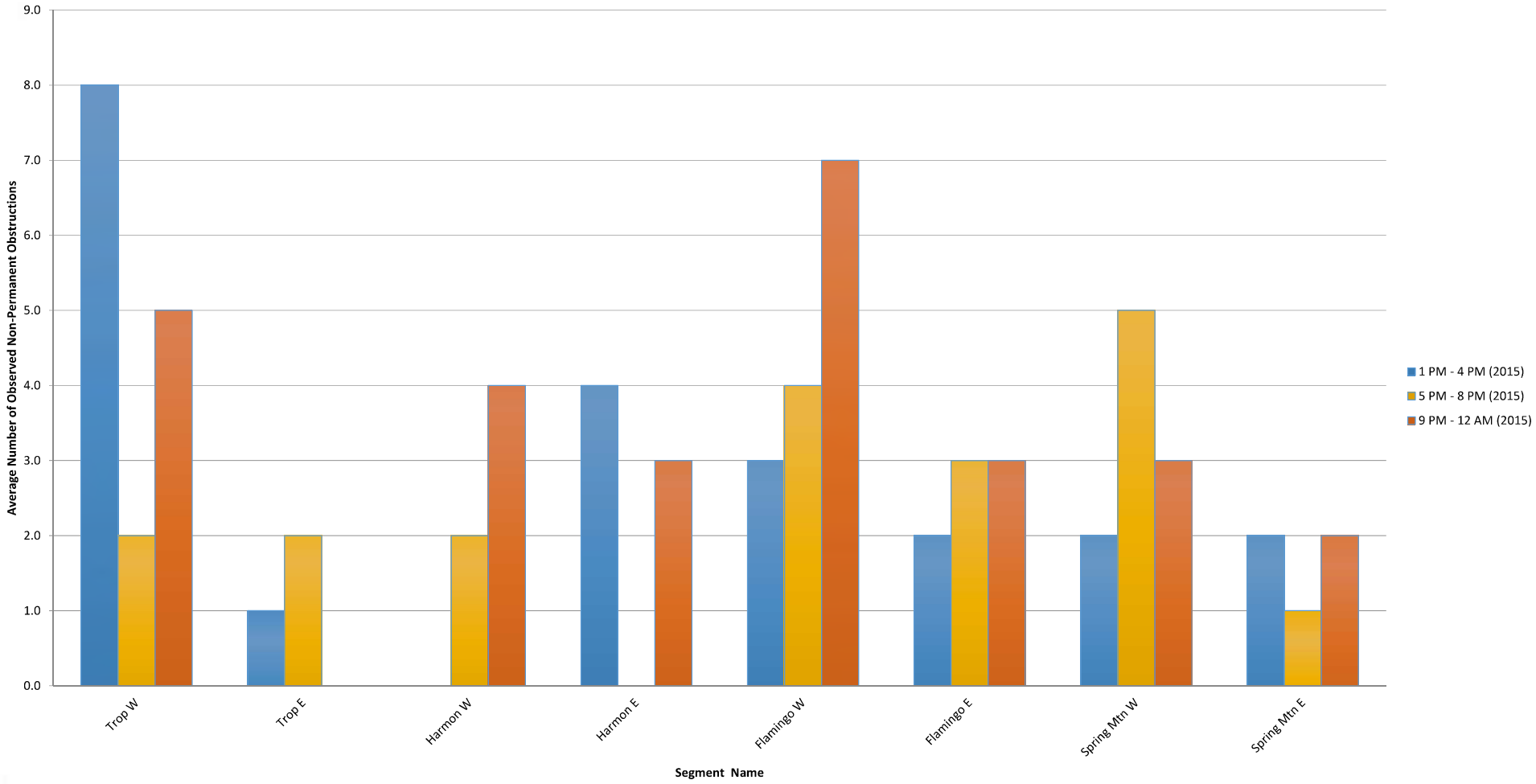


NON-PERMANENT OBSTRUCTIONS

FIGURE 4.49

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NON-PERMANENT OBSTRUCTIONS

FIGURE 4.50

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4.3.2 Non-Permanent Obstructions on Pedestrian Bridges Crossing Las Vegas Boulevard

In addition to the north/south pedestrian bridges, non-permanent obstructions were also quantified on east/west pedestrian bridges for this 2015 update. In order to provide a more direct comparison to the bridges that were represented in the 2012 data, the pedestrian bridges crossing Las Vegas Boulevard are discussed separately here. Bridges "crossing Las Vegas Boulevard" represent bridges that carry pedestrians in the east/west direction over Las Vegas Boulevard and are on the north and south side of intersections.

Table 4.14 provides a count summary for the average number of non-permanent obstructions observed for pedestrian bridges crossing Las Vegas Boulevard between Russell Road and Sahara Avenue during the holiday Saturday data collection effort in 2015. **Table 4.15** provides a count summary for the average number of non-permanent obstructions observed for pedestrian bridges during the typical Saturday in 2015.

Table 4.14 – NPO's on Pedestrian Bridges Crossing Las Vegas Boulevard – 5/23/2015

Number of Non-Permanent Obstructions – Holiday Saturday			
Pedestrian Bridge	1 PM – 4 PM	5 PM – 8 PM	9 PM – 12 AM
Tropicana South	1	0	2
Tropicana North	3	4	3
Harmon North	7	2	9
Flamingo South	3	1	1
Flamingo North	4	0	0
Sirens Cove South	1	1	1
Spring Mountain North	0	1	3

Table 4.15 –NPO's on Pedestrian Bridges Crossing Las Vegas Boulevard –6/20/2015

Number of Non-Permanent Obstructions – Typical Saturday			
Pedestrian Bridge	1 PM – 4 PM	5 PM – 8 PM	9 PM – 12 AM
Tropicana South	1	2	1
Tropicana North	4	7	4
Harmon North	2	3	7
Flamingo South	1	0	2
Flamingo North	0	0	0
Sirens Cove South	0	0	1
Spring Mountain North	0	0	3

The distribution of the non-permanent obstruction types on these bridges for 2015 is given in **Table 4.16** for both the holiday and typical Saturdays.

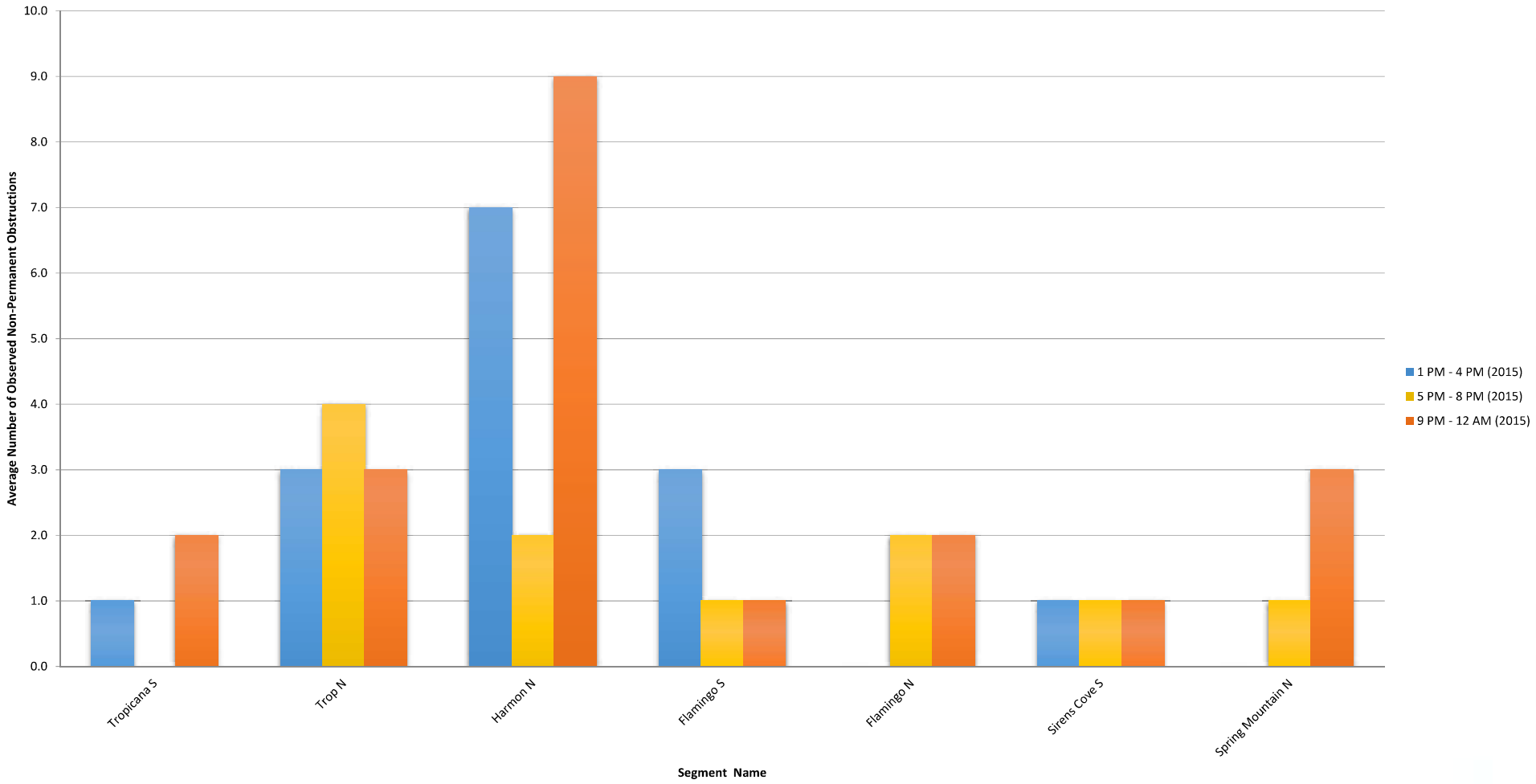
Table 4.16 – Distribution of NPO's on Pedestrian Bridges Crossing Las Vegas Boulevard

Non-Permanent Obstruction Category	On Pedestrian Bridges (Holiday Sat.)	On Pedestrian Bridges (Typ. Sat.)
Handbiller	12(26%)	10(26%)
Performer	16(34%)	10(26%)
Solicitor	16(34%)	13(35%)
Vendor	3(6%)	5(13%)
Total	47	38

Figure 4.51 and **Figure 4.52** display the total number of non-permanent obstructions observed on east/west pedestrian bridges for a holiday Saturday and a typical Saturday respectively.

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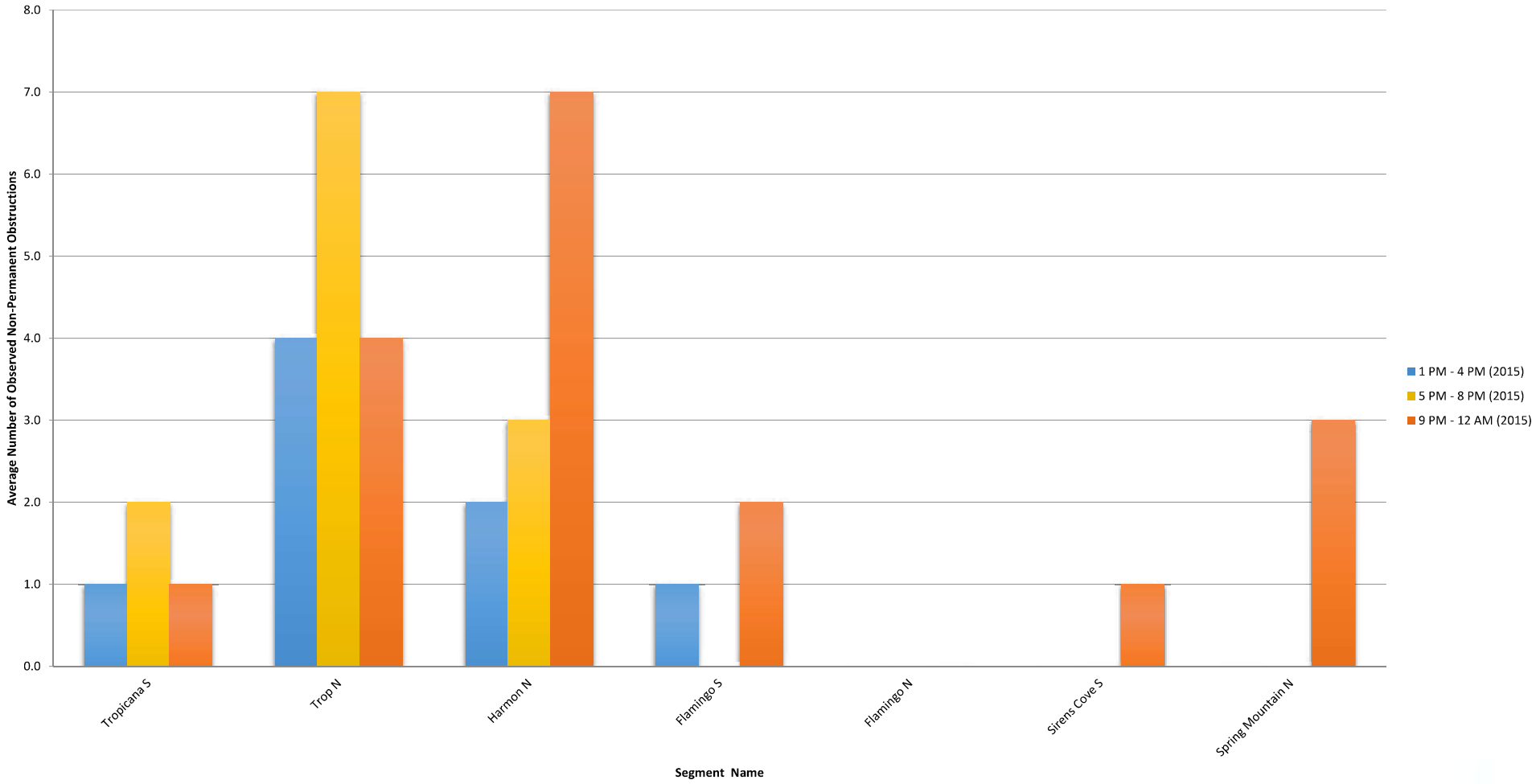


NON-PERMANENT OBSTRUCTIONS

FIGURE 4.51

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NON-PERMANENT OBSTRUCTIONS

FIGURE 4.52

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4.3.3 Theoretical Analysis of Non-Permanent Obstructions' Effect on LOS

The LOS evaluation and the associated **FiguresFigure** 4.9 through **Figure 4.29** were completed assuming the full effective walkway width (W_E) was available for pedestrian traffic. If a non-permanent obstruction is theoretically present along the side of the walkway, the effective walkway width (W_E) is reduced and the LOS of the walkway could also be reduced. An additional theoretical analysis was conducted to determine the LOS impact of one (1) non-permanent obstruction (NPO) standing on the side of the walkway which results in a reduction of 2.25 feet from the effective walkway width (W_E). The same analysis was then conducted assuming two (2) non-permanent obstructions were standing on opposite sides of the walkway directly across from each other. See **Section 3.1.3** for background information on the effects of a person standing within a walkway. **Figure 4.53** displays graphically the reduction in effective walkway width when zero, one, and two non-permanent obstructions are present while **Figure 4.54** through **Figure 4.57** compare the segments that exceed level of service C with zero, one, and two non-permanent obstructions.

Under these conditions the count locations presented in **Table 4.17** were calculated to degrade to below LOS C. Level of Service conditions presented in **Table 4.17** below are based on maximum 15-minute volumes for the count location.

It is important to note that the benefits of improvements and capital expended by the County to improve the "Strip" walkways can be rapidly reduced when non-permanent obstructions are present.

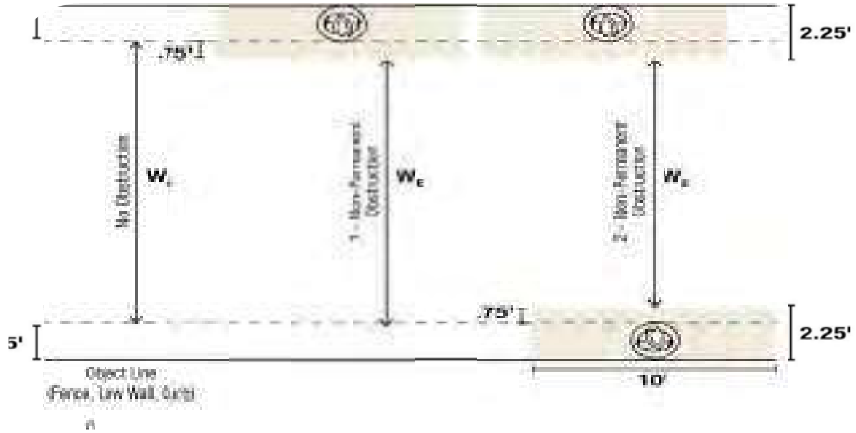


Figure 4.53 – Effective Walkway Width (W_E) Diagram with Zero, One, and Two Obstructions

Table 4.17 – NPO's Effect on LOS with Maximum Observed Volumes (Holiday or Typical Saturday)

Count Location		WE Existing	LOS Existing	Time of Day Exceed LOS C	WE w/ 1 NPO	LOS w/ 1 NPO	Time of Day Exceed LOS C	WE w/ 2 NPOs	LOS w/ 2 NPOs	Time of Day Exceed LOS C
2	Tropicana West Bridge	11.8	D	6:30PM-7:00PM	11	D	6:30PM-7:00PM	10.3	D	6:30PM-7:00PM
M11	Food Court	13	C	-	12.3	C	-	11.5	D	10:30PM-10:45PM
Metro1	Harley Davidson	13	C	-	12.3	D	8:00PM-8:15PM	11.5	D	8:00PM-8:15PM
7	Harmon West Bridge	12.5	D	7:45PM-8:00PM	11.8	D	7:45PM-8:00PM	11	E	7:45PM-9:00PM
M4	Harmon North Bridge	12.3	D	10:30PM-10:45PM	11.6	D	10:30PM-11:00PM	10.8	D	10:30PM-11:00PM
9	Bally's Bazaar	14.5	C	-	13.8	D	9:45PM-10:00PM	13	D	9:45PM-10:00PM
11	Flamingo West Bridge	12	D	8:45PM-12:15AM	11.3	D	8:45PM-12:15AM	10.5	D	3:30PM-12:15AM
Metro3	Cromwell	11.5	D	2:15PM-12:45AM	10.8	E	2:15PM-1:30AM	10	D	2:15PM-1:30AM
12	Margaritaville	8.5	E	5:15PM-12:45AM	7	E	4:15PM-1:00AM	6.3	E	2:00PM-1:30AM
M6	Caesars South	6.8	E	3:45PM-12:45AM	6.1	E	3:30PM-12:45AM	5.3	F	3:15PM-12:45AM
13	Forum Shops	12	C	-	11.3	D	8:45PM-9:00PM	10.5	D	8:45PM-9:00PM
CC3	Venetian South	6.3	E	12:00PM-12:00AM	5.6	E	12:00PM-12:00AM	4.8	F	12:00PM-12:00AM
Metro4	Venetian North	7	D	9:45PM-11:45PM	6.3	D	5:15PM-12:30AM	5.5	D	3:30PM-12:30AM

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CC 1312

2015
Non-Permanent Obstruction Absent



2015
One Non-Permanent Obstruction



Legend (2015)

- LOS < C when NPO Absent
- LOS < C when 1 NPO is present
- R# — Segment Reference Number
- R# — Segment No Longer Less than LOS C in 2015 with No Non-Permanent Obstructions

COMPARISON OF SEGMENTS THAT EXCEED LEVEL OF SERVICE (LOS) C WITH ONE NON-PERMANENT OBSTRUCTION TROPICANA AVE. TO FLAMINGO RD.

FIGURE 4.54

Kimley»Horn

2015
Non-Permanent Obstruction Absent



2015
One Non-Permanent Obstruction



Legend (2015)

- Segment where LOS < C when 1 NPO is present
- LOS < C when no NPO is present
- R# Segment Reference Number
- R# Segment No Longer Less than LOS C in 2015 with No Non-Permanent Obstructions

COMPARISION OF SEGMENTS THAT EXCEED LEVEL OF SERVICE (LOS) C WITH ONE NON-PERMANENT OBSTRUCTION FLAMINGO RD. TO SPRING MOUNTAIN RD.

FIGURE 4.55

Kimley»Horn

2015
Non-Permanent Obstruction Absent



SEE FIGURE 4.57

2015
Two Non-Permanent Obstructions



SEE FIGURE 4.57

Legend (2015)

- LOS < C when 2 NPOs are present
- LOS < C when NPO is Absent
- Segment Reference Number
- R# — Segment No Longer Less than LOS C in 2015 with No Non-Permanent Obstructions

COMPARISON OF SEGMENTS THAT EXCEED LEVEL OF SERVICE (LOS) C WITH TWO NON-PERMANENT OBSTRUCTIONS TROPICANA AVE. TO FLAMINGO RD.

FIGURE 4.56 100

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2015
Non-Permanent Obstruction Absent



2015
Two Non-Permanent Obstructions



Legend (2015)

- LOS < C when 2 NPOs are present
- LOS < C when NPO is Absent
- R# Segment Reference Number
- R# Segment No Longer Less than LOS C in 2015 with No Non-Permanent Obstructions

COMPARISION OF SEGMENTS THAT EXCEED LEVEL OF SERVICE (LOS) C WITH TWO NON-PERMANENT OBSTRUCTIONS FLAMINGO RD. TO SPRING MOUNTAIN RD.

FIGURE 4.57

4.4 Bus Stop Queuing

The twenty-eight (28) bus stops within the corridor are classified into three types as defined in the 2012 Pedestrian Study:

- Type 1 bus stops have separate queuing areas that are isolated from the pedestrian walkway and bus queuing does not affect the pedestrian flow in these locations (see **Figure 2.5**).
- Type 2 bus stops have queue areas in front of the pedestrian walkway, affording queue space for transit riders outside the stream of pedestrian traffic (see **Figure 2.6)**.
- Type 3 bus stops have queue areas behind the pedestrian walkway and can experience congestion when transit passengers are boarding, alighting the bus, and potentially while waiting for the bus to arrive (see **Figure 2.7**).

Only Type 2 and Type 3 bus stops were analyzed in the 2015 study of the "Strip". As noted in **Section 2.10**, the bus stops at Harrah's and Monte Carlo were converted to Type 1 bus stops since the 2012 Pedestrian Study. For comparison, these two Type 1 bus stops were analyzed as well as the Type 2 and Type 3 bus stops within the study area.

Following the methodology used in the 2012 Pedestrian Study, the maximum 15-minute boarding number was evaluated at each Type 2 and Type 3 bus stop. In some cases, where bus queuing is significant, queues overcrowd the queuing area and spill into the adjacent pedestrian walkway. Bus stops were not further analyzed if 375 or less pedestrians per 15 minutes were observed passing by the bus stop during the Memorial Day holiday weekend (May 23, 2015). A volume of 375 pedestrians in 15 minutes requires an effective walkway width of 2.5 feet to maintain a LOS C. The 375 pedestrian volume is based on the pedestrian volume capacity of a four-foot walkway with LOS C. Bus stops were also excluded from further evaluation if the maximum 15-minute boarding was less than 15 people. For 15 people, the queue space is calculated to be 105 square feet at 7.0 square feet per person for a queuing LOS of C.

Of the nine (9) stops identified for analysis, five (5) were documented to have a maximum 15-minute boarding during the holiday Saturday of May 23, 2015, while the remaining four (4) were found to have maximum boardings on the typical Saturday, June 20, 2015. The maximum boarding volumes as provided by the RTC of Southern Nevada were used in the evaluation of the bus stop queuing areas. **Figure 4.58** through **Figure 4.63** show bus stop locations, types, as well as the maximum 15-minute boarding for both data collection dates in 2012 and 2015 (see also **Figure 2.4** for stop location and type). To maintain a queue space of LOS C or better, each person in a bus stop queue area requires a minimum of seven square feet. This area allows for an 18-inch no-touch zone for each queued person. **Table 4.19** shows the maximum queues at each of the identified bus stops and the queue area required for LOS C to serve that maximum queue.



Type 1 (Isolated) Bus Stop Example (Figure 2.5)



Type 2 (Front of Walk) Bus Stop Example (Figure 2.6)



Type 3 (Behind Walk) Bus Stop Example (Figure 2.7)

To provide a comparison to the bus stop analysis conducted in the 2012 Pedestrian Study, the bus stops listed below in **Table 4.18** were further evaluated in the 2015 update:

Table 4.18 – Bus Stops Included in Queuing Analysis

Bus Stop	Type
Monte Carlo South	1
Polo Towers North	3
Bellagio South	3
Paris North	2
Harrah's North	1
Caesars Palace South	2
Mirage South	2
Treasure Island South	3
Venetian North	2

Table 4.19 – Bus Stop Max Boardings and Queue Area

Bus Stop	Day	Maximum 15-minute volume	Maximum 15-minute boardings	Demand Queue Area (sq. ft.)	Existing Queue Area (sq. ft.)	Existing Queue Area (2012) (sq. ft.)
Monte Carlo S	5/23	1025	22	154	440	400
Polo Towers N	5/23	1,772	47	329**	265	265
Bellagio S	6/20	2,189	64	448	900	900
Paris N	5/23	2,007	74	518	520	260
Harrah's N*	5/22	1,364	78	546**	440	375
Caesars S	5/22	1,997	39	273	321	321
Mirage S	6/20	1,749	37	245	279	279
Treasure Island S	6/20	1,331	35	245	360	148
Venetian N	6/20	1,385	47	329**	312	312

**Previously named/located Flamingo N*
***Demand Queue Exceeds Existing Area*

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Further evaluation of the individual bus stops showed that the bus stops in **Table 4.20** have adequate queue area within and in front of the shelter. For Type 3 bus stops (with bus shelter behind the pedestrian walkway), a minimum four-foot walk was calculated to be provided.

Table 4.20 – Analyzed Bus Stops with Adequate Queue Area

Bus Stop	Type
Monte Carlo S	1
Bellagio S	2
Paris N	2
Caesars S	2
Mirage S	2
Treasure Island S	3

The remaining bus stops were determined to lack the amount of queue space that is desired for the maximum boardings while maintaining a LOS C queue area. These bus stops are included in **Table 4.21**.

Table 4.21 – Analyzed Bus Stops with Inadequate Queue Area

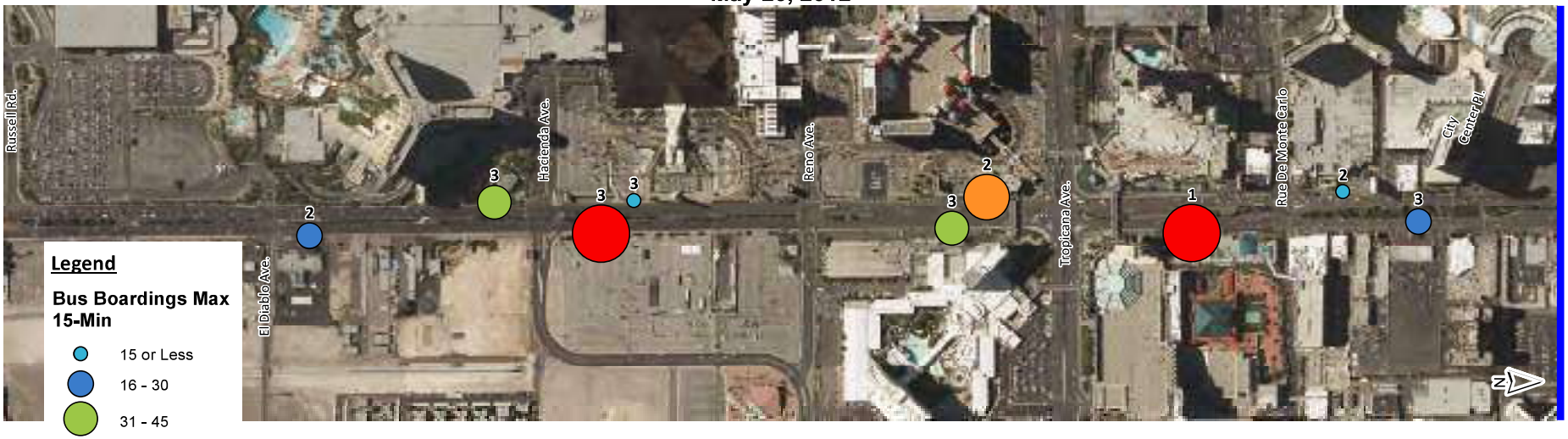
Bus Stop	Type
Polo Towers N	3
Harrah's N	1
Venetian N	2

The bus stop evaluation of LOS for passenger queuing suggests that where insufficient queue area is identified, 15 feet on either side and in front of the bus shelter should be reserved for bus patrons by restricting non-permanent obstructions. The LOS evaluation also concluded that all Type 2 and Type 3 bus stops should allow the area between the queue area and the curb to be available for only queued and walking pedestrians with a recommended delineated no-obstructive use zone. In addition, from field observations, all Type 1 bus stops should also be considered for no-obstructive use zones to encourage transit use by maintaining queue areas of LOS C or better and aiding transit rider flow in front of Type 1 bus stops.

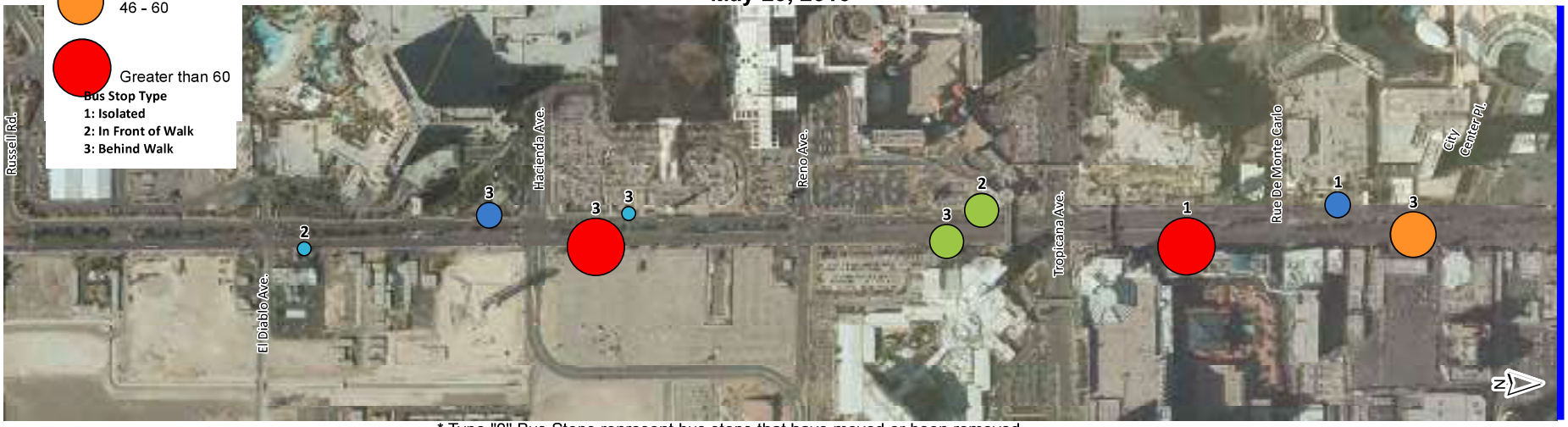
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May 26, 2012



May 23, 2015



Legend

Bus Boardings Max 15-Min

- 15 or Less
- 16 - 30
- 31 - 45
- 46 - 60
- Greater than 60

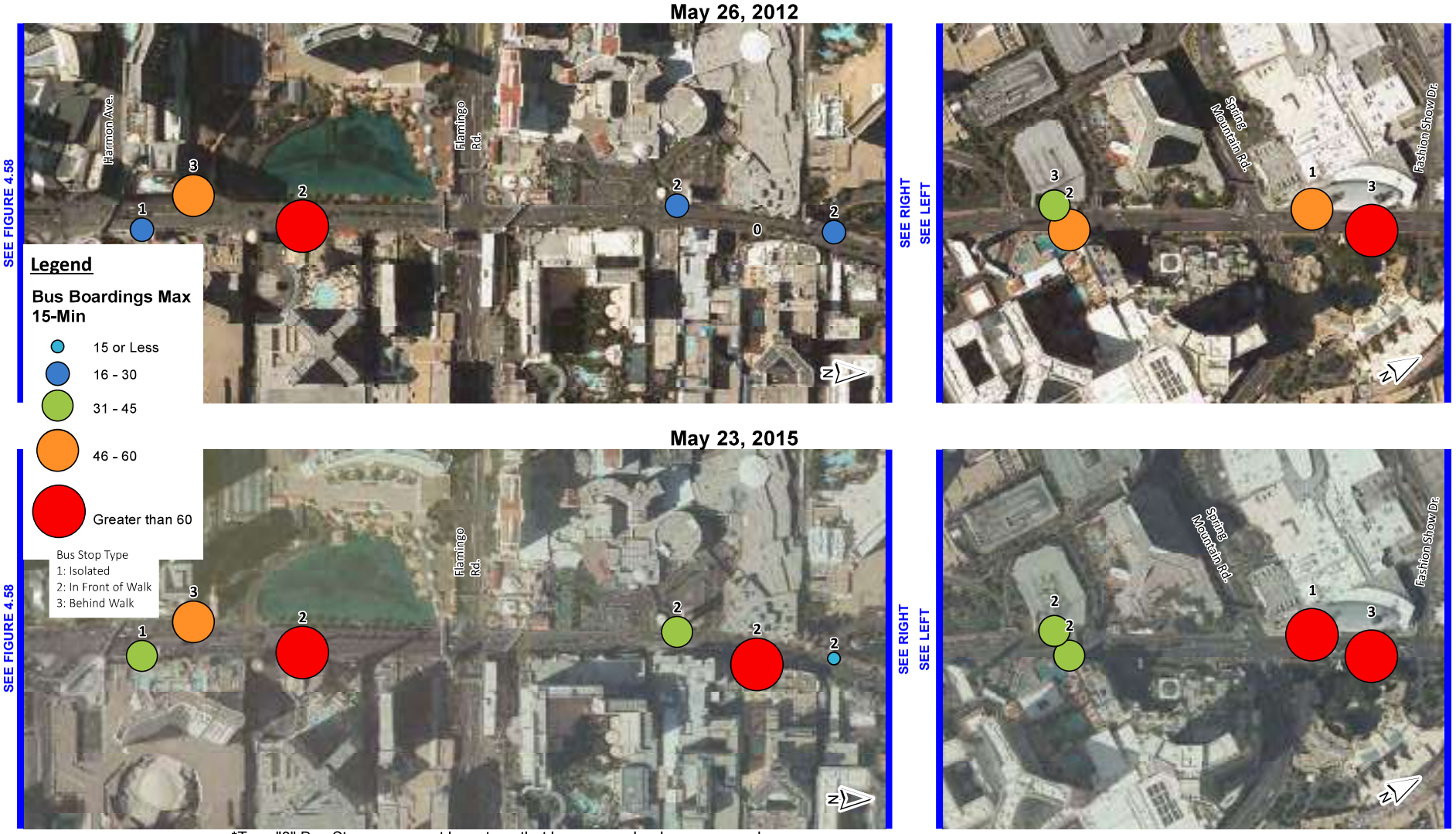
Bus Stop Type
1: Isolated
2: In Front of Walk
3: Behind Walk

* Type "0" Bus Stops represent bus stops that have moved or been removed.

MAX PEAK 15-MINUTE BUS BOARDING
RUSSELL RD. TO CITY CENTER PL. (HOLIDAY SATURDAY)

FIGURE 4.58

Kimley»Horn



*Type "0" Bus Stops represent bus stops that have moved or been removed.

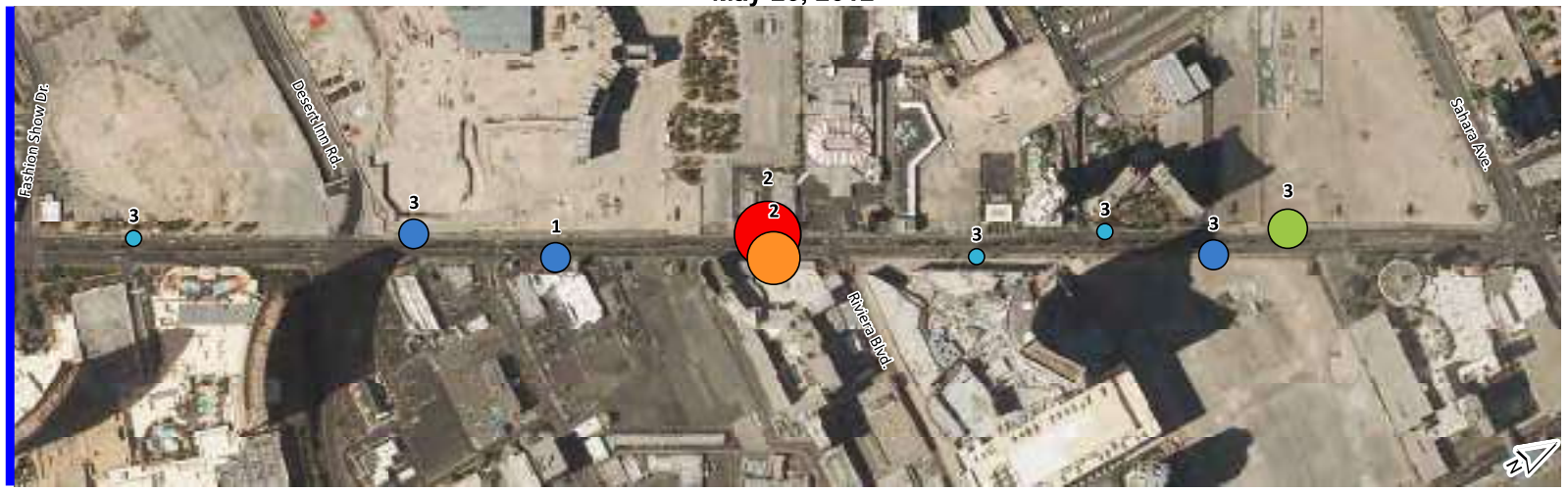
MAX PEAK 15-MINUTE BUS BOARDING
HARMON AVE. TO FASHION SHOW DR. (HOLIDAY SATURDAY)

FIGURE 4.59

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May 26, 2012



May 23, 2015



Legend

Bus Boardings Max 15-Min

- 15 or Less
- 16 - 30
- 31 - 45
- 46 - 60
- Greater than 60

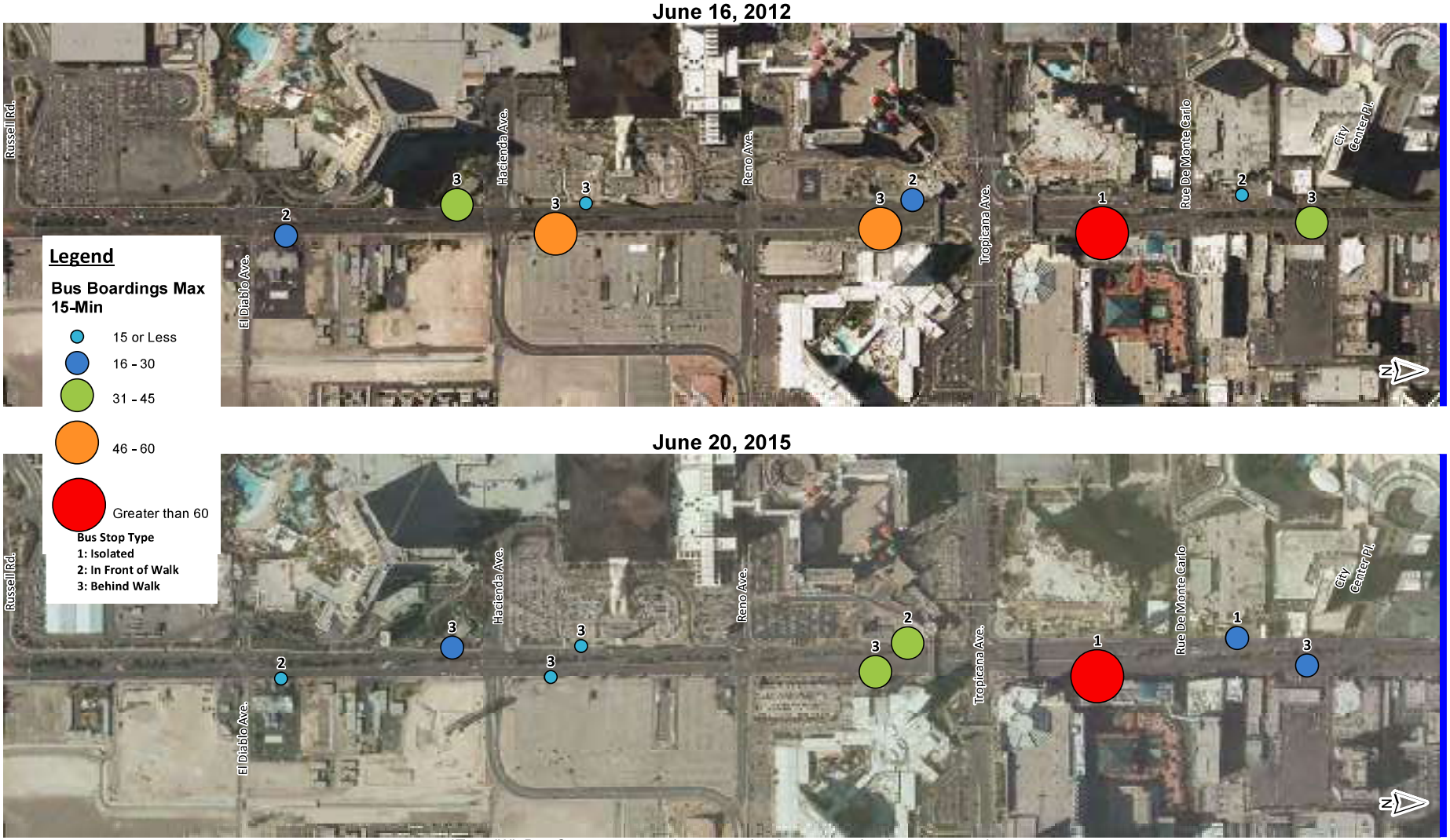
Bus Stop Type
1: Isolated
2: In Front of Walk
3: Behind Walk

*Type "0" Bus Stops represent bus stops that have moved or been removed.

MAX PEAK 15-MINUTE BUS BOARDINGS
FASHION SHOW DR. TO SAHARA AVE. (HOLIDAY SATURDAY)

FIGURE 4.60

Kimley»Horn



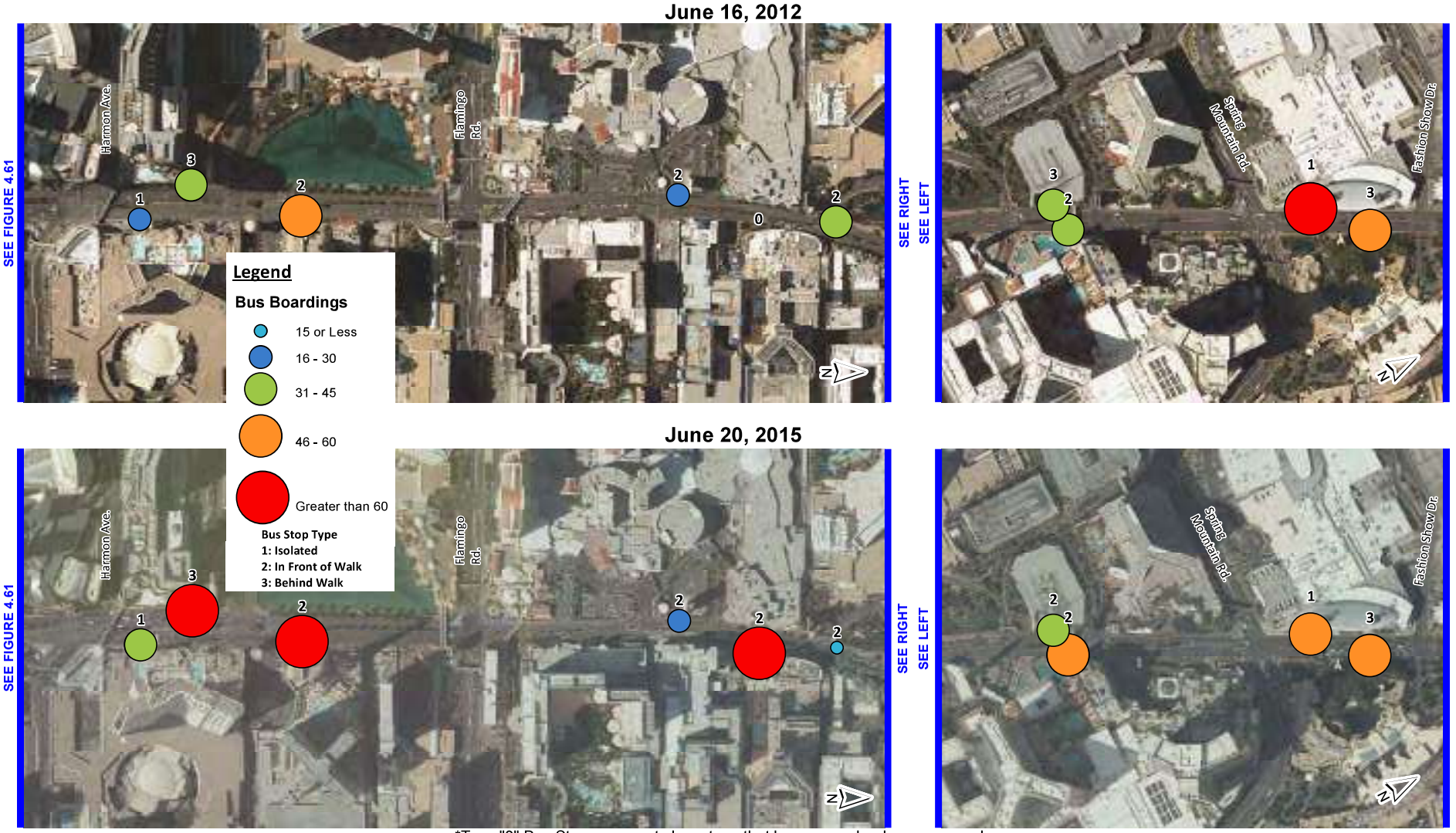
*Type "0" Bus Stop represents bus stops that have moved or been removed.

MAX PEAK 15-MINUTE BUS BOARDING
RUSSELL RD. TO CITY CENTER PL. (TYPICAL SATURDAY)

FIGURE 4.61 107

Kimley»Horn

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*Type "0" Bus Stop represents bus stops that have moved or been removed.

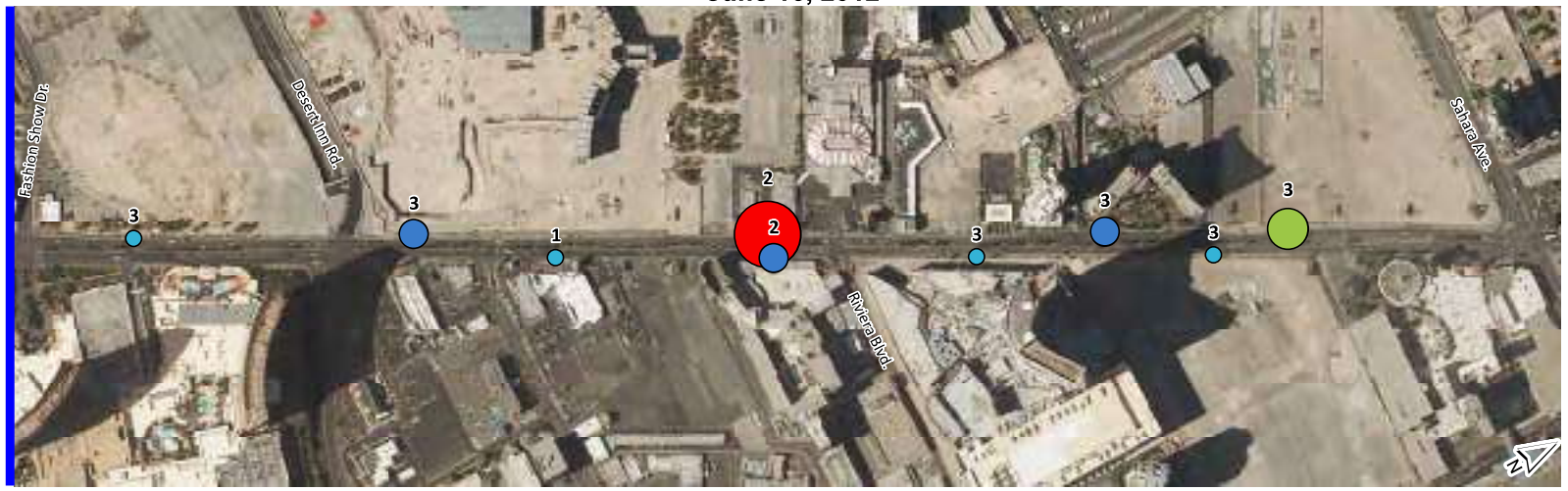
MAX PEAK 15-MINUTE BUS BOARDING
HARMON AVE. TO FASHION SHOW DR. (TYPICAL SATURDAY)

FIGURE 4.62

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June 16, 2012



June 20, 2015



Legend

Bus Boardings Max 15-Min

- 15 or Less
- 16 - 30
- 31 - 45
- 46 - 60
- Greater than 60

Bus Stop Type
1: Isolated
2: In Front of Walk
3: Behind Walk

*Type "0" Bus Stop represents bus stops that have moved or been removed.

MAX PEAK 15-MINUTE BUS BOARDINGS
FASHION SHOW DR. TO SAHARA AVE. (TYPICAL SATURDAY)

FIGURE 4.63

Kimley»Horn

4.5 Walkway Segment Time of Day Restriction Analysis

Based on observed pedestrian volumes, LOS, walkway conditions and pedestrian safety concerns, the locations shown in **Figure 4.64** through **Figure 4.68** within the study corridor, have been identified as walkway segments in which non-permanent obstruction restrictions should be considered during specific days of the week and times of the day. Example of existing signage is shown in **Picture 4.16** and **Picture 4.17**.

To identify the time of day, day of week, and month of year that certain walkway segments within the study corridor should be considered for restriction of non-permanent obstructions, the following steps were taken:

- Segments created in 2012 were re-evaluated to determine which segments were still found to exceed LOS C.
- Pedestrian volumes from all count locations were evaluated on a common daily peak pedestrian time found to occur between 9:00 PM and 11:00 PM.
- Walkway segments that were found to continue to exceed LOS C on the holiday and/or typical Saturday (May 23 and/or June 20, 2015) are labeled R1 to R19 (see **Figure 4.2** and **Figure 4.3**).
- Walkway segments that resulted in a LOS C were considered further and analyzed to determine if the addition of one (1) non-permanent obstruction would result in the LOS deteriorating to D or less. A reduction of the effective walkway width (W_E) of 2.25 feet associated with the obstruction of one person standing on the side of the walkway was applied for the analysis.
- The walkway segments were separated into three categories including: walkways with no pedestrian containment, walkways with pedestrian containment, and pedestrian bridges.
- The Saturday count data was adjusted using the week-long data and the year-long data, provided by Caesars International and used in the 2012 Pedestrian Study, to determine day of week and month of year adjustment factors. The adjustment factors were used to determine time periods when walkway segments were estimated to exceed LOS C for days other than those counted on Saturday May 23 and June 20, 2015.

Table 4.23 summarizes the results of the analysis for possible time of day, day of week, and month of year no obstructive use restrictions based solely on pedestrian volumes and walkway widths.

Table 4.24 provides a summary of the analysis for possible no obstructive use restrictions including an effective walkway width (W_E) reduction of 2.25 feet for non-permanent obstructions (note that the length of time for many areas increase and additional days of week are included).

Table 4.25 provides a summary of the analysis for possible no obstructive use restrictions including an effective walkway width (W_E) reduction of 4.5 feet for two non-permanent obstructions.



Picture 4.16 – No Obstructive Use Signs



Picture 4.17 – Time of Day Restriction Sign

4.5.1 Localized Walkway Width Restrictions

The following list of locations were identified as constricted walkways within the study corridor which could result in localized conditions of LOS less than C:

- East walkway directly north of Flamingo Road underneath east/west pedestrian bridge at Cromwell (Cromwell)
- East walkway in front of Margaritaville directly south of Caesars Palace Boulevard (Margaritaville)
- Staircase on west walkway directly north of Caesars Palace Boulevard at Caesars rotunda (Caesars Rotunda)
- West walkway directly north of Caesars Palace Boulevard in front of the Colosseum (Colosseum)
- East walkway south of Venetian Hotel/Casino and directly north of Casino Royale driveway at bollards (Casino Royale)
- East walkway beneath Siren's Cove South pedestrian bridge and North of Venetian Hotel/Casino(Siren's Cove)

The effective walkway width, pedestrian volumes, and projected LOS at each localized width restriction location is shown in **Table 4.22** below.

Table 4.22 – Localized Walkway Width Restriction Summary

Width Restriction Summary			
Location	**W_E (ft)**	**Max 15-min Volume**	**LOS**
Cromwell	10	2472	E
Margaritaville	8.5	2044	E
Caesars Rotunda	5.5	1953	F
Colosseum	6.8	1953	E
Casino Royale	6.3	1767	E
Siren's Cove	6	1331	D

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Table 4.23 – Count Locations Exceeding LOS C - Time of Day, Day of Week, and Month of Year

Holiday Weekend – Existing Walkway

Segment #	Count Location	Friday LOS	Hours of Friday LOS	Saturday LOS	Hours of Saturday LOS	Sunday LOS	Hours of Sunday LOS	Monday LOS	Hours of Monday LOS	Jan	Feb - Nov	Dec	Shortest Period of Time Common to All Days (Minimum of 4 hours)
R1	Trop West Bridge	-	-	D	6:30PM-7:00PM	D	6:30PM-7:00PM	-	-	-	X	-	-
R3	Harley Davidson	-	-	-	-	D	8:00PM-8:15PM	-	-	-	X	-	-
R4	Harmon West Bridge	-	-	D	7:45PM-8:00PM	D	7:45PM-8:00PM	-	-	-	X	-	-
R18*	Harmon North Bridge	-	-	D	10:30PM-10:45PM	D	10:30PM-11:00PM	-	-	-	X	-	-
-	Bally's Bazaar**	-	-	-	-	D	9:45PM-10:00PM	-	-	-	X	-	-
R7	Flamingo West Bridge	-	-	D	8:45PM-12:15AM	D	8:45PM-12:15AM	-	-	-	X	-	-
R8	Cromwell	D	9:30PM-12:45AM	D	2:15PM-12:45AM	D	2:15PM-12:45AM	-	-	X	X	-	2:15PM-12:45AM (Saturday and Sunday)
R9	Caesars South	D/E	8:15PM-12:00AM	D/E	3:45PM-12:45AM	D/E	3:45PM-12:45AM	D	9:45PM-11:30PM	X	X	X	3:45PM-12:45AM (Saturday and Sunday)
R8	Margaritaville	D	9:00PM-9:30PM	D/E	5:15PM-12:45AM	D/E	5:15PM-12:45AM	-	-	X	X	-	5:15PM-12:45AM (Saturday and Sunday)
R10	Colosseum	D/E	6:30PM-12:30AM	D/E	2:45PM-12:30AM	D/E	2:45PM-12:30AM	D	9:45PM-11:30PM	X	X	X	6:30PM-12:30AM (Friday, Saturday and Sunday)
R11	Forum Shops	-	-	-	-	D	8:45PM-9:00PM	-	-	-	X	-	-
R12	Harrah's	-	-	D	3:45PM-6:00PM	D	3:15PM-11:45PM	-	-	-	X	-	3:15PM-11:45PM (Sunday)
R13***	-	D/E	12:30PM-12:00AM	D/E	12:00PM-12:00AM	D/E	12:00PM-12:00AM	-	-	X	X	-	12:30PM-12:00AM (Friday, Saturday, and Sunday)
R14	Venetian South	D/E	12:00PM-12:00AM	D/E	12:00PM-12:00AM	D/E	12:00PM-12:00AM	D	11:15PM-12:00AM	X	X	X	12:00PM-12:00AM (Friday, Saturday and Sunday)
R15	Venetian North	D	10:30PM-11:30PM	D	9:45PM-11:45PM	D	9:45PM-11:45PM	-	-	-	X	-	-

Typical Weekend – Existing Walkway

Segment #	Count Location	Friday LOS	Hours of Friday LOS	Saturday LOS	Hours of Saturday LOS	Sunday LOS	Hours of Sunday LOS	Monday LOS	Hours of Monday LOS	Jan	Feb - Nov	Dec	Shortest Period of Time Common to All Days (Minimum of 4 hours)
R7	Flamingo West Bridge	-	-	D	10:15PM-10:30PM	-	-	-	-	-	X	-	-
R9	Caesars South	-	-	D	9:30PM-10:45PM	-	-	-	-	-	X	-	-
R13***	-	-	-	D	10:00PM-11:15PM	-	-	-	-	-	X	-	-
R14	Venetian South	-	-	D	10:15PM-12:00AM	-	-	-	-	-	X	-	-

**New segment created in 2015*
***Count location not located within one of original 17 segments of 2012 study*
****No count location located within segment.*

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Table 4.24 – Count Locations Exceeding LOS C - Time of Day, Day of Week, and Month of Year (with 1 NPO)

Holiday Weekend – with a Non-Permanent Obstruction Effective Walk Width Reduction

Segment #	Count Location	Friday LOS	Hours of Friday LOS	Saturday LOS	Hours of Saturday LOS	Sunday LOS	Hours of Sunday LOS	Monday LOS	Hours of Monday LOS	Jan	Feb - Nov	Dec	Shortest Period of Time Common to All Days (Minimum of 4 hours)
R1	Trop West Bridge	D	6:45PM-7:00PM	D	6:30PM-7:00PM	D	6:30PM-7:00PM	-	-	-	X	-	-
R3	Harley Davidson	-	-	D	8:00PM-8:15PM	D	8:00PM-8:15PM	-	-	-	X	-	-
R4	Harmon West Bridge	-	-	D	7:45PM-8:00PM	D	7:45PM-9:00PM	-	-	-	X	-	-
R18*	Harmon North Bridge	-	-	D	10:30PM-11:00PM	D	10:30PM-11:00PM	-	-	-	X	-	-
-	Bally's Bazaar**	-	-	D	9:45PM-10:00PM	D	2:15PM-12:30AM	-	-	-	X	-	-
R7	Flamingo West Bridge	D	9:30PM-10:30PM	D	8:45PM-12:15AM	D	8:45PM-12:15AM	-	-	-	X	-	
R8	Cromwell	D	5:30PM-12:45AM	D/E	2:15PM-1:30AM	D/E	2:15PM-1:30AM	-	-	X	X	-	2:15PM-1:30AM (Saturday and Sunday)
R9	Caesars South	D/E	3:45PM-12:45AM	D/E	3:30PM-12:45AM	D/E/F	3:30PM-12:45AM	D	8:45PM-11:30PM	X	X	X	3:45PM-12:45AM (Friday, Saturday, and Sunday)
R8	Margaritaville	D	5:15PM-12:45AM	D/E	4:15PM-1:00AM	D/E	2:00PM-1:15AM	D	9:00PM-9:15PM	X	X	X	5:15PM-12:45AM (Friday, Saturday, and Sunday)
R10	Colosseum	D/E	4:00PM-12:30AM	D/E	2:45PM-12:30AM	D/E	2:00PM-12:45AM	D	8:15PM-11:30PM	X	X	X	6:30PM-12:30AM (Friday, Saturday and Sunday)
R11	Forum Shops	-	-	D	8:45PM-9:00PM	D	8:45PM-9:00PM	-	-	-	X	-	-
R12	Harrah's	D	5:00PM-6:00PM	D	2:30PM-12:45AM	D	2:30PM-1:30AM	-	-	-	X	-	2:30PM-12:45AM (Saturday and Sunday)
R13***	-	D/E	12:30PM-12:00AM	D/E	12:00PM-12:00AM	D/E	12:00PM-12:00AM	-	-	X	X	X	12:30PM-12:00AM (Friday, Saturday, and Sunday)
R14	Venetian South	D/E	12:00PM-12:00AM	D/E	12:00PM-12:00AM	D/E	12:00PM-12:00AM	D	9:45PM-12:00AM	X	X	X	12:00PM-12:00AM (Friday, Saturday, and Sunday)
R15	Venetian North	D	10:00PM-11:45PM	D	5:15PM-12:30AM	D/E	3:30PM-12:30AM	-	-	X	X	-	3:30PM-12:30AM (Friday, Saturday, and Sunday)

Typical Weekend – with a Non-Permanent Obstruction Effective Walk Width Reduction

Segment #	Count Location	Friday LOS	Hours of Friday LOS	Saturday LOS	Hours of Saturday LOS	Sunday LOS	Hours of Sunday LOS	Monday LOS	Hours of Monday LOS	Jan	Feb-Nov	Dec	Shortest Period of Time Common to All Days (Minimum of 4 hours)
R7	Flamingo West Bridge	D	10:15PM-10:30PM	D	10:00PM-11:00PM	-	-	-	-	-	X	-	-
R9	Caesars South	D	9:30PM-10:45PM	D/E	9:00PM-11:15PM	-	-	-	-	-	X	-	-
R8	Margaritaville	D	11:00PM-11:15PM	D	11:00PM-11:15PM	-	-	-	-	-	X	-	-
R10	Colosseum	-	-	D	9:45PM-11:00PM	-	-	-	-	-	X	-	-
R11	Forum Shops	-	-	-	-	-	-	-	-	-	-	-	-
R12	Harrah's	-	-	-	-	-	-	-	-	-	-	-	-
R13***	-	D	11:00PM-11:15PM	D	6:45PM-12:00AM	-	-	-	-	-	X	-	6:45PM-12:00AM (Saturday)
R14	Venetian South	D	5:15PM-12:00AM	D	5:15PM-12:15AM	D	11:00PM-11:15PM	-	-	-	X	-	5:15PM-12:00AM (Friday and Saturday)
R16	TI Bus Stop	-	-	-	-	-	-	-	-	-	-	-	-
R15	Venetian North	D	11:15PM-11:30PM	D	10:30PM-11:45PM	-	-	-	-	-	X	-	-

**New segment created in 2015*
***Count location not located within one of original 17 segments of 2012 study*
****No count location located within segment.*

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Table 4.25 – Count Locations Exceeding LOS C - Time of Day, Day of Week, and Month of Year (with 2 NPO's)

Holiday Weekend – with Two Non-Permanent Obstruction Effective Walk Width Reductions

Segment #	Count Location	Friday LOS	Hours of Friday LOS	Saturday LOS	Hours of Saturday LOS	Sunday LOS	Hours of Sunday LOS	Monday LOS	Hours of Monday LOS	Jan	Feb-Nov	Dec	Shortest Period of Time Common to All Days (Minimum of 4 hours)
R1	Trop West Bridge	D	6:45PM-7:00PM	D	6:30PM-7:00PM	D	6:30PM-7:15PM	-	-	-	X	-	-
R2	Food Court	-	-	D	10:30PM-10:45PM	D	10:30PM-10:45PM	-	-	-	X	-	-
R3	Harley Davidson	-	-	D	8:00PM-8:15PM	D	8:00PM-8:15PM	-	-	-	X	-	-
R4	Harmon West Bridge	D	7:45PM-8:00PM	D	7:45PM-9:00PM	D	7:45PM-9:00PM	-	-	-	X	-	-
R18*	Harmon North Bridge	D	10:30PM-10:45PM	D	10:15PM-11:00PM	D	7:30PM-11:00PM	-	-	-	X	-	-
-	Bally's Bazaar**	-	-	D	9:45PM-10:00PM	D	9:45PM-10:00PM	-	-	-	X	-	-
R7	Flamingo West Bridge	D	8:45PM-11:00PM	D	3:30PM-12:15AM	D	3:30PM-12:30AM	-	-	X	X	-	3:30PM-12:15AM (Saturday and Sunday)
R8	Cromwell	D	2:15PM-12:45AM	D/E	2:15PM-1:30AM	D/E	2:15PM-1:30AM	-	-	X	X	-	2:15PM-1:30AM (Friday, Saturday and Sunday)
R9	Caesars South	D/E	3:45PM-12:45AM	D/E/F	3:15PM-12:45AM	D/E/F	3:15PM-12:45AM	D	8:15PM-12:00AM	X	X	X	3:45PM-12:45AM (Friday, Saturday, and Sunday)
R8	Margaritaville	D	4:15PM-1:00AM	D/E	4:15PM-1:00AM	D/E	2:00PM-1:30AM	D	5:15PM-9:30PM	X	X	X	4:15PM-1:00AM (Friday, Saturday, and Sunday)
R10	Colosseum	D/E	2:45PM-12:30AM	D/E/F	2:00PM-1:15AM	D/E/F	2:00PM-1:15AM	D	6:45PM-12:00AM	X	X	X	6:45PM-12:30AM (Friday, Saturday, Sunday, and Monday)
R11	Forum Shops	-	-	D	8:45PM-9:00PM	D	8:30PM-12:00AM	-	-	-	X	-	-
R12	Harrah's	D	3:15PM-6:15PM	D	2:00PM-1:30AM	D	2:00PM-1:30AM	-	-	X	X	-	2:00PM-1:30AM (Saturday and Sunday)
R13***	-	D/E	12:00PM-12:00AM	D/E	12:00PM-12:00AM	D/E	12:00PM-12:00AM	D	3:00PM-12:00AM	X	X	-	3:00PM-12:00AM (Friday, Saturday, Sunday and Monday)
R14	Venetian South	D/E	12:00PM-12:00AM	D/E	12:00PM-12:00AM	D/E	12:00PM-12:00AM	D	12:30PM-12:00AM	X	X	X	12:30PM-12:00AM (Friday, Saturday, Sunday, and Monday)
R15	Venetian North	D	5:30PM-12:00AM	D	3:30PM-12:30AM	D/E	3:00PM-12:45AM	-	-	X	X	-	5:30PM-12:00AM (Friday, Saturday, and Sunday)

Typical Weekend – with Two Non-Permanent Obstruction Effective Walk Width Reductions

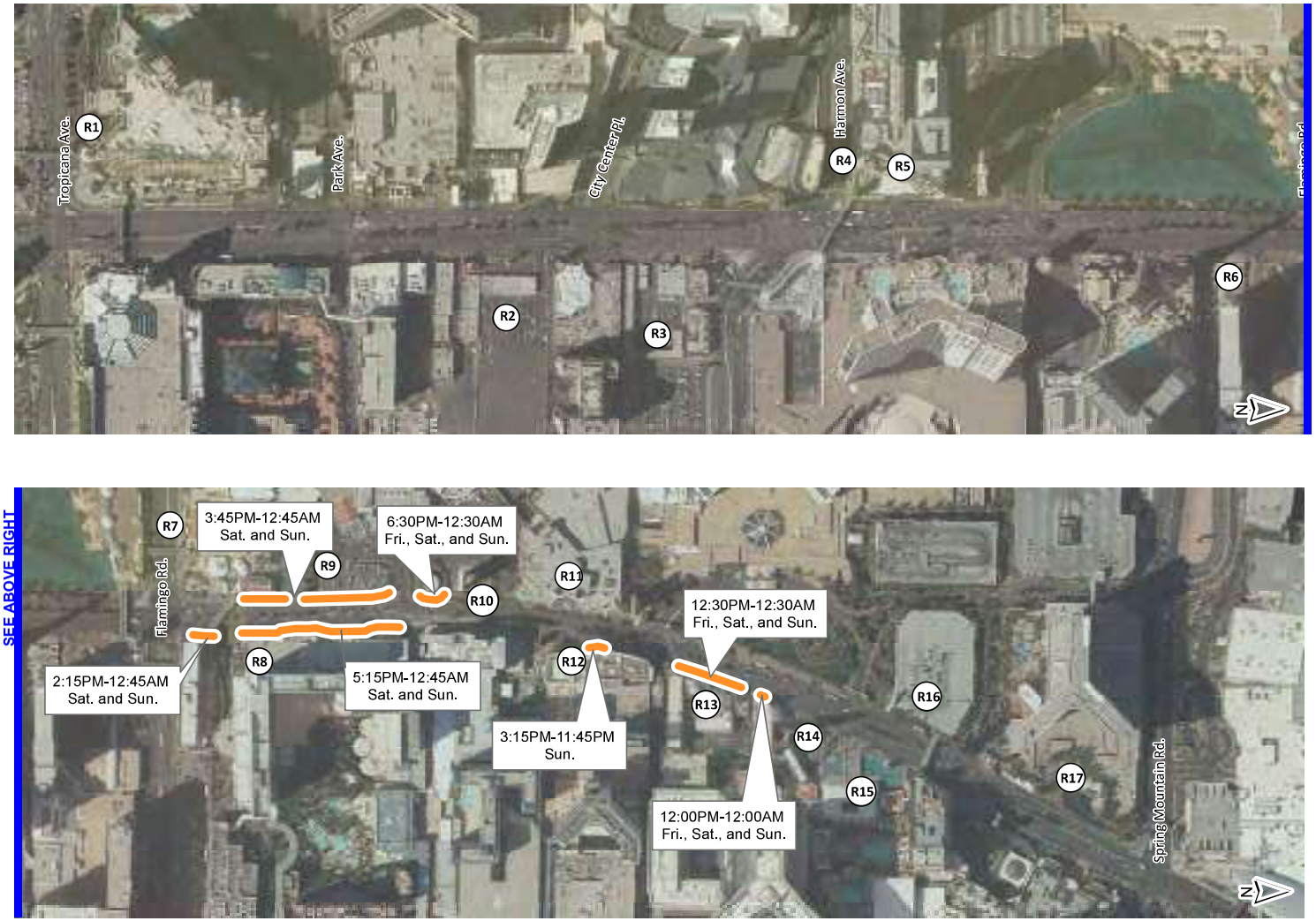
Segment #	Count Location	Friday LOS	Hours of Friday LOS	Saturday LOS	Hours of Saturday LOS	Sunday LOS	Hours of Sunday LOS	Monday LOS	Hours of Monday LOS	Jan	Feb-Nov	Dec	Shortest Period of Time Common to All Days (Minimum of 4 hours)
R7	Flamingo West Bridge	D	10:00PM-11:00PM	D	9:45PM-11:00PM	-	-	-	-	-	X	-	-
R9	Caesars South	D	9:00PM-11:45PM	D	9:00PM-12:15AM	D	9:30PM-11:00PM	D	9:30PM-10:45PM	-	X	-	-
R8	Margaritaville	D	11:00PM-11:15PM	D	11:00PM-11:15PM	D	11:00PM-11:15PM	-	-	-	X	-	-
R10	Colosseum	D	9:45PM-11:00PM	D	8:30PM-12:00AM	-	-	-	-	-	X	-	-
R13***	-	D	5:15PM-12:00AM	D	4:30PM-12:15AM	D	11:00PM-11:15PM	-	-	-	X	-	5:15PM-12:00AM (Friday and Saturday)
R14	Venetian South	D	4:30PM-12:00AM	D	4:00PM-12:15AM	D	5:15PM-12:00AM	D	6:45PM-12:00AM	X	X	-	6:45PM-12:00AM (Friday, Saturday, Sunday and Monday)
R15	Venetian North	D	10:15PM-11:45PM	D	9:45PM-11:45PM	D	11:15PM-11:30PM	-	-	-	X	-	-

**New segment created in 2015*
***Count location not located within one of original 17 segments of 2012 study*
****No count location located within segment.*

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2015



Legend (2015)

- Segment where LOS < C for more than four hours
- R# Segment Reference Number

WALKWAY SEGMENTS THAT EXCEED LEVEL OF SERVICE (LOS) C FOR MORE THAN FOUR HOURS WITH NON-PERMANENT OBSTRUCTION ABSENT

FIGURE 4.64

2015

NON-PERMANENT OBSTRUCTION ABSENT



Legend (2015)

Segment where LOS < C for more than four hours

R# Segment Reference Number

ONE NON-PERMANENT OBSTRUCTION PRESENT



Legend (2015)

Segment where LOS < C for more than four hours when 1 NPO is present

R# Segment Reference Number

WALKWAY SEGMENTS THAT EXCEED LEVEL OF SERVICE (LOS) C FOR MORE THAN FOUR HOURS WITH ONE NON-PERMANENT OBSTRUCTION PRESENT
TROPICANA AVE. TO FLAMINGO RD.

FIGURE 4.65

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NON-PERMANENT OBSTRUCTION ABSENT

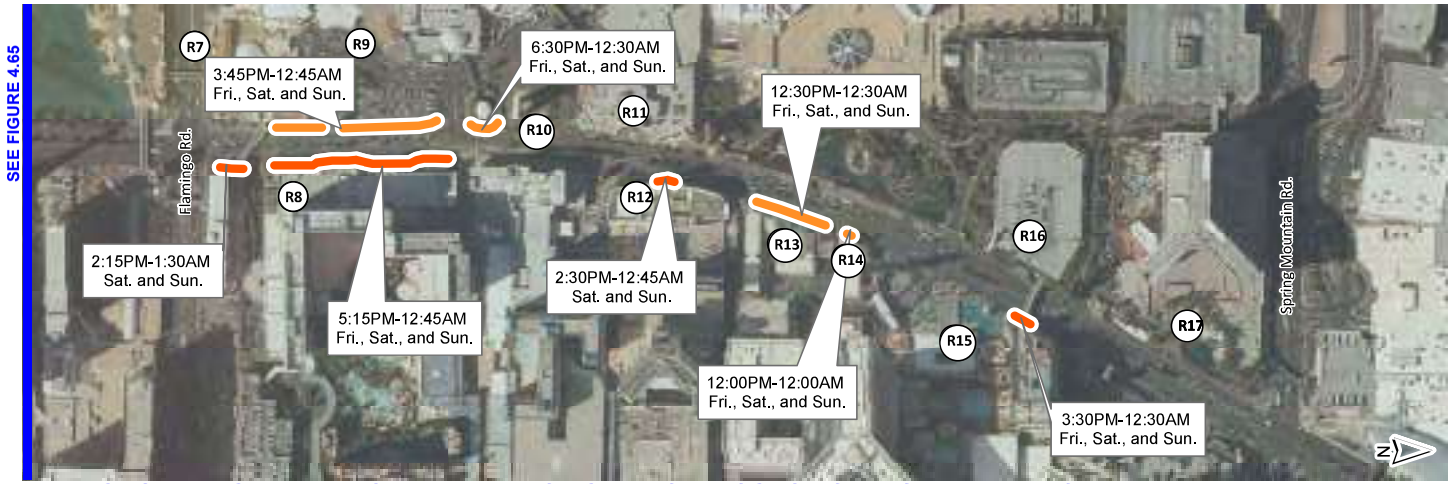


Legend

Segment where LOS < C for more than four hours

R# Segment Reference Number

ONE NON-PERMANENT OBSTRUCTION PRESENT



Legend

Segment where LOS < C for more than four hours with 1 NPO present

Segment where LOS < C for more than four hours

R# Segment Reference Number

WALKWAY SEGMENTS THAT EXCEED LEVEL OF SERVICE (LOS) C FOR MORE THAN FOUR HOURS WITH ONE NON-PERMANENT OBSTRUCTIONS PRESENT
FLAMINGO RD. TO SPRING MOUNTAIN RD.

FIGURE 4.66 116

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NON-PERMANENT OBSTRUCTIONS ABSENT



SEE FIGURE 4.68

Legend (2015)

Segment where LOS < C for more than four hours

R# Segment Reference Number

TWO NON-PERMANENT OBSTRUCTIONS PRESENT



SEE FIGURE 4.68

Legend (2015)

Segment where LOS < C for more than four hours when 2 NPO's are present

R# Segment Reference Number

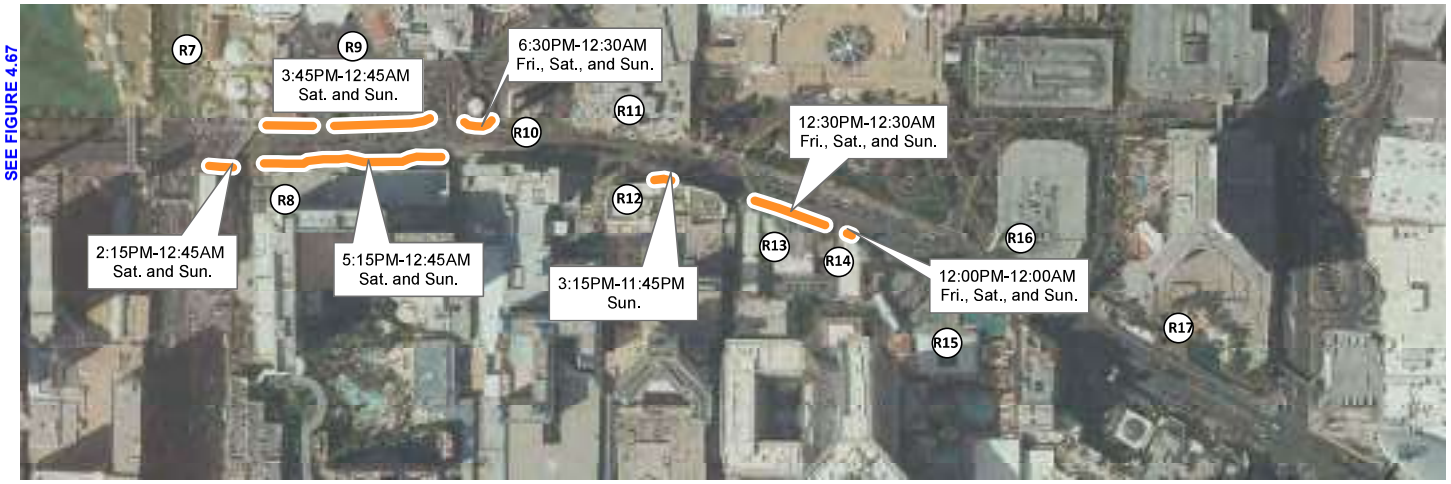
WALKWAY SEGMENTS THAT EXCEED LEVEL OF SERVICE (LOS) C FOR MORE THAN FOUR HOURS WITH TWO NON-PERMANENT OBSTRUCTIONS PRESENT
TROPICANA AVE. TO FLAMINGO RD.

FIGURE 4.67 117

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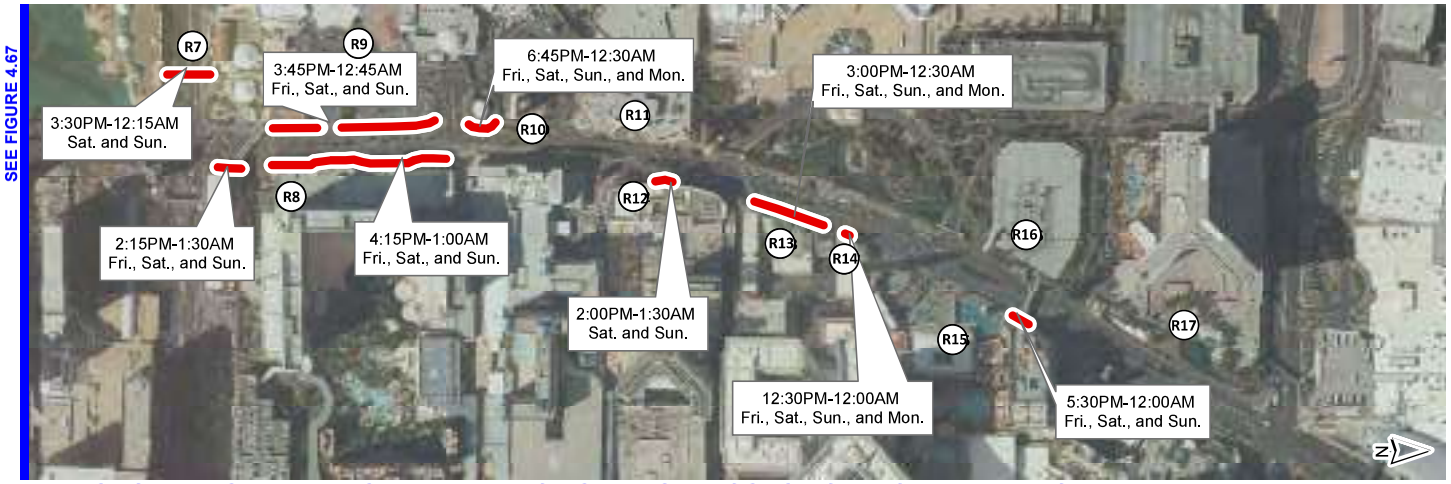
NON-PERMANENT OBSTRUCTIONS ABSENT



Legend

- Segment where LOS < C for more than four hours
- R# Segment Reference Number

TWO NON-PERMANENT OBSTRUCTIONS PRESENT



Legend

- Segment where LOS < C for more than four hours
- Segment where LOS < C for more than four hours when 2 NPO's are present
- R# Segment Reference Number

WALKWAY SEGMENTS THAT EXCEED LEVEL OF SERVICE (LOS) C FOR MORE THAN FOUR HOURS WITH TWO NON-PERMANENT OBSTRUCTIONS PRESENT
FLAMINGO RD. TO SPRING MOUNTAIN RD.

FIGURE 4.68

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5 Conclusions and Recommendations

General conclusions, specific recommendations, and best practices are discussed in this section based on the observation of 2,650,000 pedestrians, 288 hours of in-field observations and the detailed data analysis and evaluation conducted during this update. General conclusions and specific recommendations are provided in relation to pedestrian safety and infrastructure improvement throughout the study corridor of Las Vegas Boulevard. Specific mitigation recommendations for constrained walkways are detailed on **Figure 5.1** and in **Section 5.2**. Recommendations are also provided for consideration in updating the current no-obstructive use ordinance (see **Section 3.3**). **Section 5.4** provides measures of Best Practices for the continued improvement to the pedestrian experience along Las Vegas Boulevard.

5.1 General Conclusions

The following general conclusions are provided recognizing the importance of maintaining the economic vitality of Las Vegas Boulevard (the Strip) through the improvement and maintenance of a safe pedestrian walkway system.

- The results of this restudy continue to support the no-obstruction zone recommendations of the 1994 Lee Engineering Pedestrian Study as incorporated into Clark County Code Chapter 16.11 where obstructive uses are not permitted near a signalized intersection, access drive, or mid-block cross walk.
- Clark County entitlement requirements on new construction within the Resort Corridor should continue to require pedestrian walks to be designed for a minimum effective walkway width (W_E) of fifteen feet (15') or a pedestrian walkway LOS of C or better. Considering a typical 1.5-foot shy distance on each side of the walk (3 feet of shy distance), a total of 18 feet of walkway width should be provided. A walkway with 15 feet of effective width (W_E) can serve up to 2,250 pedestrians in 15 minutes while maintaining a LOS of C.
- Clark County entitlement requirements on new construction projects within the Resort Corridor should incorporate the removal, replacement, and/or installation of no-obstructive use zone signs and white painted sidewalk markings as appropriate, into the projects' civil improvement drawings. Depending on the scope of these improvements, the development should work with the Department of Public Works to update the "No Obstruction Zones" map for adoption by the Board of County Commissions.
- The study observed a significant number of individuals creating undue obstruction in the current no-obstructive use zones at intersections and driveways. This study provides additional support and justification to maintain these areas free from obstructions during peak walkway usage. Maintaining no-obstructive use zones at intersections, midblock crosswalks and access drive entrances reduces congestion which allows for increased visibility and enhanced walkway safety.
- The pedestrian bridges are an integral part of the pedestrian walkway system, but have constrained widths. Based upon the observed pedestrian volumes and walkway LOS, it is appropriate at times to designate pedestrian bridges as no-obstruction zones. Pedestrian bridges should be maintained free of any obstructions, whether permanent or non-permanent in nature. In addition, the areas on and around stair landings, elevator waiting areas, as well as escalator approach, and departure landing zones should also be maintained free of any obstructions (permanent or non-permanent).
- LOS evaluations at bus stops suggest that where insufficient bus patron queue area is identified, bus stops should be reserved for bus patrons by restricting non-permanent obstructions. The LOS evaluations concluded that all Type 2 (In Front of Walk) and Type 3 (Behind Walk) bus stops should allow the area between the bus patron queue area and the curb to be available for only queued bus patrons and walking pedestrians with a delineated no-obstructive use zone. In addition, from field observations, all Type 1 (Isolated) bus stops should also be considered for no-obstructive use zones to encourage transit use by maintaining queue areas of LOS C or better and aiding transit rider flow in front of Type 1 bus stops.
- With development or redevelopment within the Resort Corridor, the developer should work with the Las Vegas Valley Water District to relocate any water district facilities out of the pedestrian walkway by providing appropriate utility easements.
- Pedestrian containment measures should be standardized along the Resort Corridor including placement and design. Containment encourages the use of pedestrian bridges and signalized crosswalks. Containment installations should be installed recognizing the need to maintain intersection site visibility zones, especially at driveway crossings.
- Pedestrian crosswalks within the resort corridor along Las Vegas Boulevard should be constructed to:
  - Accommodate the observed pedestrian volumes at the desired crossing location. This is especially important at signalized crossings in order to improve visibility of the crossing.
  - Be perpendicular to the sidewalk when possible in order to provide pedestrians the shortest path in crossing the street.
  - Consider median refuge islands for marked at-grade crosswalks with approved markings.
  - Discourage the use of "porkchop" right-turn islands for exclusive right-turn lanes to shorten pedestrian street crossing widths whenever applicable.

5.1.1 Safety Enhancements

During the study collection periods, general observations of the pedestrian activities and walkway conditions within the study corridor were conducted. The following measures are given as general safety enhancements based on study observation evaluations:

- Pedestrian containment should continue to be deployed in the median of Las Vegas Boulevard throughout the study corridor where no adjacent sidewalk containment exists to encourage the use of pedestrian bridges and signalized crosswalks.
- At the present time, the RTC maintains a text and email update service providing information on bus stop arrival times. For the Strip, the RTC should consider implementing an additional system to display real-time arrival time for transit vehicles at each of the bus stops within the study corridor. Not only will this continue to enhance the transit system and the visitor experience, it will also help mitigate the motivation to step out into the street to see if the bus is coming. This is especially useful in the Resort Corridor due to the number of visitors and tourists who are unfamiliar with the local transit system and texting service. A tourist being aware of the bus arrival time may elect to not wait for the next bus and continue to walk.
- Supplemental pedestrian walkway lighting should be installed to eliminate dark alcoves and other dark areas within the Resort Corridor. Pedestrian bridge lighting should continue to be installed and lighting levels adjusted as appropriate to provide nighttime security and safety for the Las Vegas visitor experience.
- Pedestrian bridge stairwells should be designed and constructed to allow the users to be visible to surrounding public areas and walkways.

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5.2 Infrastructure Improvement Recommendations

Following the acceptance of the 2012 Pedestrian Study, many of the previously identified short-term infrastructure areas of concern have been addressed or are in the process of being acted upon as detailed in **Section 2.3**. With the 2015 Update, the following specific areas of concern have been identified by field observations and updated data evaluations.

Each measure is classified as short, intermediate, or long-term. Short-term measures are relatively low construction cost measures with estimated implementation times of less than one year. Intermediate measures may be more costly and require multi-agency and property coordination to implement. Intermediate measures can require one to three years to implement. Long-term measures require additional study and significant planning and design for implementation which would require more than three years to implement. Specific location improvements may not result in improving LOS to C or better. The following areas of concern for specific mitigation measures are shown in **Figure 5.1** in relationship to the Resort Corridor.

General

Recommendation (Short-Term):

- Enforce the no-obstructive use ordinance within the Resort Corridor.
- Review and update the Transportation Element of the Clark County Master Plan (see Appendix F) to reflect the recommendations of this report section to provide additional pedestrian bridge systems within the Resort Corridor.

Recommendations (Intermediate/Long-Term):

- With development fire hydrants and other utility infrastructure facilities are to be relocated and/or constructed outside of adjacent pedestrian walkways.
- Construct pedestrian bridge systems to eliminate at-grade pedestrian crossings in compliance with the adopted Transportation Element of the Clark County Master Plan.

5.2.1 Areas with LOS Less than C

Location A: Tropicana Avenue Pedestrian Bridges



Picture 5.1 – Location A: Tropicana Avenue Pedestrian Bridges.

Recommendations (Short-Term):

- Coordinate with the Nevada Department of Transportation (NDOT) to remove trash enclosures located on existing pedestrian bridges.

Location B: Sidewalk adjacent to Caesars Palace Hotel/Casino



Picture 5.2 – Location B: Caesars Palace Sidewalk.

Recommendations (Intermediate-Term):

- In coordination with Caesars Palace, landscaping should be modified to allow for sidewalk widening to obtain a minimum effective walkway width of 15 feet. During this update, peak 15-minute pedestrian demands of 1,997 pedestrians were observed along this walkway segment.

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Location C: Sidewalk Adjacent to Caesars Palace Rotunda



Picture 5.3 – Location C: Caesars Palace Rotunda.

Recommendations (Short-Term):

- Study, in coordination with Caesars Palace, the feasibility to modify existing rotunda structure to widen adjacent sidewalk widths.

Recommendations (Intermediate-Term):

- Implement study recommendations to widen walkway on the northwest corner of the Caesars Palace Drive/Las Vegas Boulevard intersection.

Location D: Venetian North Bus Stop at Las Vegas Boulevard Pedestrian Bridge



Picture 5.4 – Location D: Venetian N. Bus Stop.

Recommendations (Intermediate-Term):

- In coordination with the Venetian Hotel/Casino, widen the existing (W_E = 6 feet) walkway width beneath the Las Vegas Boulevard pedestrian bridge. This may require bus stop relocation, traffic signal cabinet relocation, and/or landscape modifications.

Location E: Sidewalk north of Circus Circus Drive



Picture 5.5 – Location E: Sidewalk at Mini Mart.

Recommendations (Short-Term):

- Coordinate with NV Energy to relocate utility pole outside of existing sidewalk on the west side of Las Vegas Boulevard north of Circus Circus Drive.
- Evaluate and implement options to widen existing walkway.

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5.2.2 Street Crossings

Location F: Las Vegas Boulevard and Park Avenue intersection



Picture 5.6 – Location F: MGM - Park Avenue/Las Vegas Boulevard Intersection.



Picture 5.7 – Location F: MGM - Park Avenue/Las Vegas Boulevard Intersection.

Recommendations (Short-Term):

- Study the feasibility of advancing the time schedule for the construction of a pedestrian bridge system at this intersection.

Location G: Las Vegas Boulevard and Bellagio/Paris intersection



Picture 5.8 – Location G: Pedestrian Volumes at Bellagio-Paris Intersection.

Recommendation (Intermediate-Term):

- Study the safety and feasibility in coordination with Bellagio Hotel/Casino to remove the right-turn "porkchop" island on the south west corner of the Bellagio/Paris - Las Vegas Boulevard intersection.
- Widen existing crosswalk widths both north/south and east/west for identified pedestrian volume demands.
- Study the safety and feasibility of providing a Las Vegas Boulevard median refuge for pedestrians crossing Las Vegas Boulevard.

Recommendations (Long-Term):

- Study the feasibility of a pedestrian bridge system at this major intersection to eliminate the at-grade pedestrian crossing of Las Vegas Boulevard.

Location H: Caesars Palace Drive and Las Vegas Boulevard intersection pedestrian crossings



Picture 5.9 – Location H: LINQ - Caesars Palace Drive/Las Vegas Boulevard Intersection.

Recommendations (Intermediate-Term):

- Study the safety and feasibility in coordination with Caesars Palace to remove the right-turn "porkchop" island on the southwest corner of the intersection.

Recommendations (Long-Term):

- Study the feasibility of a pedestrian bridge system at this intersection location to eliminate the at grade pedestrian crossings between Caesars Palace and the LINQ.

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Location I Las Vegas Boulevard and Mirage South Entrance



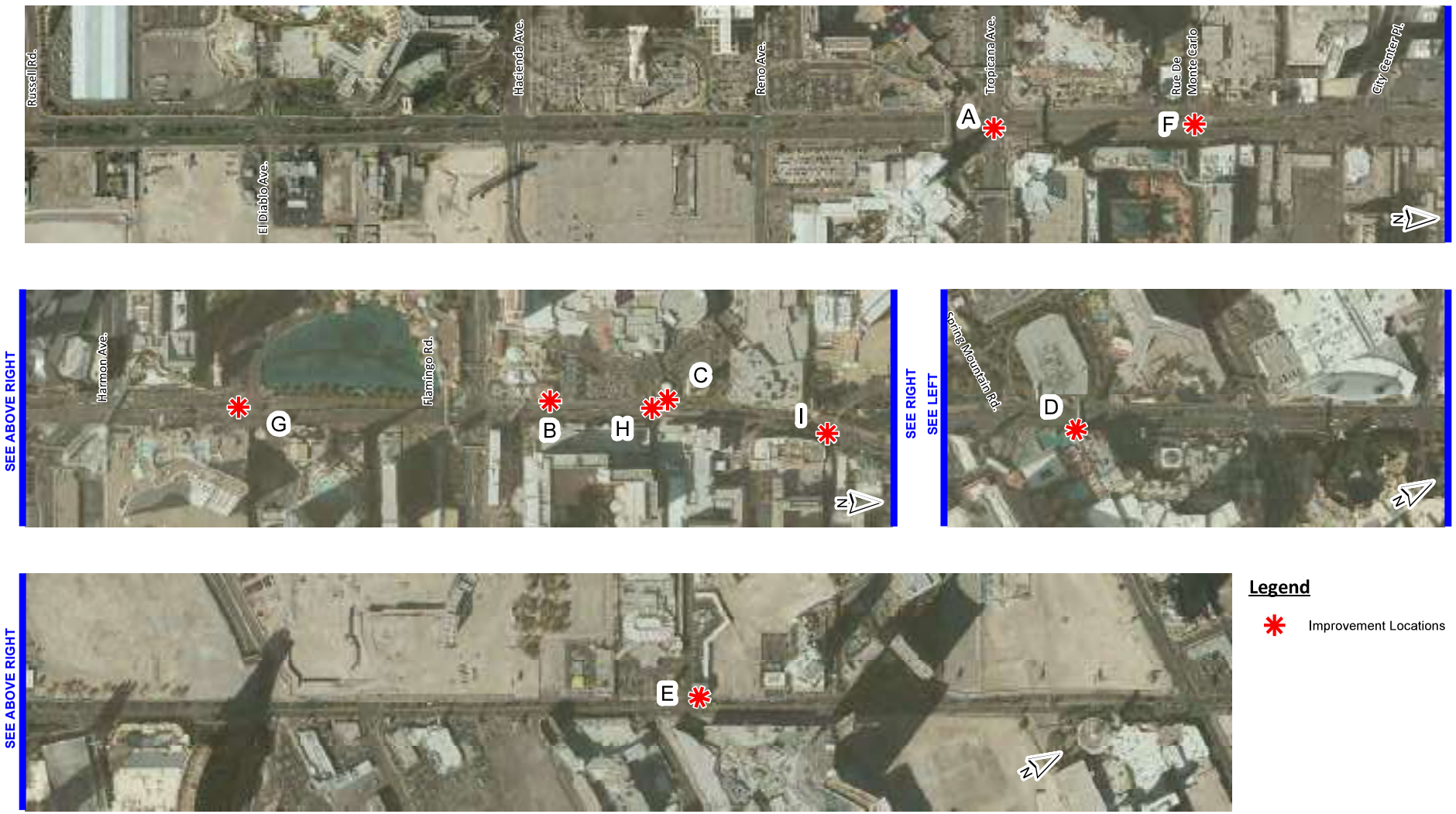
Picture 5.10 – Location I: Mirage/Harrah's – Intersection of Las Vegas Boulevard and Mirage South Entrance.

Recommendations (Short-Term):

- Study the feasibility of a pedestrian bridge system at this location to eliminate the at-grade pedestrian crossings of Las Vegas Boulevard.

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LOCATIONS OF PEDESTRIAN MOVEMENT CONCERN IN 2015

FIGURE 5.1

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5.3 Recommended Updates to No-Obstructive Use Zones

The following recommendations are provided based on the technical findings of this study update and are presented for legal review and consideration by the Clark County Board of Commissioners for amendments to the existing no-obstructive use ordinance (Clark County Code of Ordinances Title 16 – Roads and Highways Chapter 16.11 – Obstructive Uses of Public Sidewalks) shown in **Exhibit D**:

- No-obstruction zones should be applied to all construction zones affecting pedestrian walkways.
- To date, engineering judgement has been used to implement the no-obstruction zone to the unique sidewalk conditions along the Resort Corridor. The no-obstruction zones should be clarified so that dimensions for midblock crosswalks, intersections, and driveways are measured following the adjacent pedestrian walkway that does not always follow the back of curb. Exceptions to back of curb measurements should be addressed:
  - When the defined prohibition distance is greater than the distance to a nearby pedestrian containment object, the prohibition marking should end at these physical containment measures.
  - The no-obstructive zone delineation should follow the front of sidewalk if it veers away from or is separated by landscaping from the curb line.
  - Allow for engineering judgment to be used for unique and unusual walkway conditions.
- No-obstruction zones (shown in yellow in **Figure 5.2** through **Figure 5.4**) are recommended at bus stops:
  - For a bus turnout, the no-obstructive use zone should be for the entire bus turnout from the beginning to the end of the curb line deflections for the bus turnout (see **Figure 5.2**).
  - For curbside bus stops with bus shelters, the no-obstructive use zone should begin and end a minimum of 15 feet from each side of the shelter as installed (see **Figure 5.3**).
  - At curbside bus stops without a shelter, the no-obstructive use zone should begin 35 feet in the approaching direction and end 15 feet past the bus stop sign post (see **Figure 5.4**).
  - Ticket vending machines, bus stop signs and trash cans are allowable obstructions as long as placed within shelter influence zone.
- No-obstruction zones are recommended in front of elevators and at the landing area safety zones of escalators and stairs. Based upon research conducted during this restudy, the safety zone as shown in red in **Figure 5.5** through **Figure 5.6** is recommended to be defined within the ordinance including the identified shy distances.
- Pedestrian Bridge Systems and their associated walkways should be clarified as non-obstructive use zones as they are an integral part of the public street crossings replacing at-grade crosswalks. Pedestrian bridges should be maintained free of any obstructions including permanent and non-permanent obstructions.



Figure 5.2 – Bus Turnout No-obstruction Zone

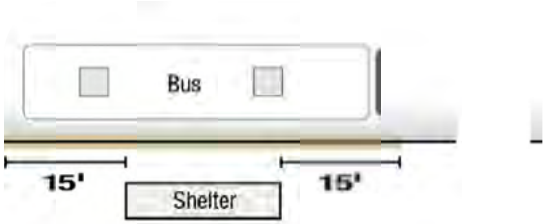


Figure 5.3 – Bus Shelter No-obstruction Zone

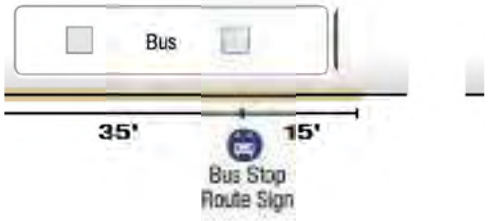


Figure 5.4 – Bus Stop Sign Without Shelter, No-obstruction Zone



Figure 5.5 – Elevator Safety Zone

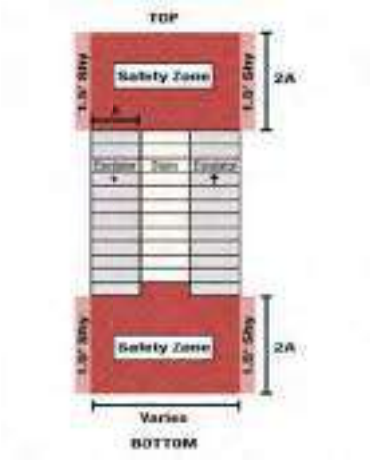


Figure 5.6 – Escalator and Stair Safety Zone

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5.3.1 *Identified Time, Place, and Manner Restrictions for No-Obstructive Use Zones*

Based on the updated pedestrian volume observations, LOS, walkway conditions, and pedestrian safety concerns, the locations shown in **Figure 4.64** through **Figure 4.68** within the study corridor, have been identified as walkway segments in which non-permanent obstruction restrictions should be considered during specific days of the week and times of the day.

To identify the time of day, day of week, and month of year that certain walkway segments within the study corridor should be considered for restriction of non-permanent obstructions, the following steps were taken:

- The previously identified 17 segments that exceeded a LOS C from the 2012 Pedestrian Study were reevaluated for LOS.
- The common daily peak pedestrian volume time period (between 9 PM and 11 PM) identified in 2012 was used in this 2015 Pedestrian Study.
- The LOS analysis of the previous 17 walkway segments that exceeded LOS C in 2012 on the holiday and/or typical Saturday were re-evaluated for 2015 pedestrian volume data to determine locations that exceeded LOS C.
- Similar to the 2012 evaluation, walkway segments that resulted in a LOS C were considered further and analyzed to determine if the addition of an obstruction would result in the LOS deteriorating to D or greater. A reduction of the effective walkway width (W_E) of 2.25 feet associated with the obstruction of one person standing on the side of the walkway and 4.5 feet associated with the obstruction of two individuals standing on each side of the walkway was applied for the analysis.
- The Saturday count data was adjusted using week-long data from 2012 and year-long data, provided by Caesars International, to determine day of week and month of year adjustment factors. The 2012 adjustment factors were determined to be appropriate for use in this study and were used to determine time periods when walkway segments were estimated to exceed LOS C for days other than those counted on Saturday May 23 and June 20, 2015.

Table 4.23 summarizes the results of the analysis for possible time of day, day of week, and month of year restrictions based solely on current 2015 pedestrian volumes and walkway widths (without non-permanent obstructions). **Table 4.24** provides a summary of the analysis for the conditions of one non-permanent obstruction and **Table 4.25** for two non-permanent obstructions (one on each side of the walkway) reducing the effective walk way width (W_E). It is important to recognize that the time duration of impact in many areas increased as well as additional days of the week.

5.4 Resort Corridor Best Practices

The following best practices are provided recognizing the positive measures taken by the County and Strip property owners recognizing the importance of maintaining the economic vitality of the Resort Corridor and a positive visitor experience.

- With development and/or redevelopment within the Resort Corridor, sidewalks should be kept clear of permanent obstructions. This includes tripping hazards within the pedestrian walkway, fire hydrants, traffic signal and other equipment, and any other permanent obstructions that could impede pedestrian flow. In addition service counters near the sidewalk should form their customer queue to the side away from the pedestrian walkway (see **Picture 5.11**).



Picture 5.11 – Pedestrian Queue Away from Street Walkway.

- Whenever possible designs should avoid the need for installation of bollards within the walkway area. If the placement of bollards is deemed necessary, additional walkway width should be provided to recognize the loss of effective walkway (W_E) width due to the placement of bollards within the walkway.
- Signs should be placed 18" from the back of curb in landscaping areas where possible in accordance with Manual on Uniform Traffic Control Devices (MUTCD) standards.
- Pedestrian crosswalks along Las Vegas Boulevard should have ramps facing toward the direction of travel. The finish curb should be provided with tactile domes. An example of a preferred directional ramp is shown below in **Picture 5.12**. Curb ramps should be individually custom designed to accommodate the desire to have perpendicular crosswalks to minimize street crossing widths.



Picture 5.12 – Directional Ramps.

- When a driveway has been abandoned or is no longer in active use, the driveway should be replaced with curb, gutter, and sidewalk along with the removal of the associated driveway from the no-obstructive use zone.
- With new escalator installations, escalators should be routinely reversed to ensure even equipment wear. With even wear, if an escalator is down for repair, the adjacent escalator can be switched to a preferred upward direction. The desire is to have escalators always working in the upward direction even if the adjacent escalator is closed for maintenance (see **Picture 5.13**). Pedestrian bridge escalators and elevators should continue to be maintained on a regular schedule that ensures a high reliability of service. It is important to have these facilities fully operational during holiday weekends. The capacity of the accompanying pedestrian bridges are severely impacted when the escalators are not functioning.

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CC 1341



Picture 5.13 – Downward Escalator under Repair.

- As development occurs within the Resort Corridor, bus stops should be modified to a Type 2 (see **Figure 5.7**) design placing the shelter and queueing area in front of the through pedestrian walkway. Ticket vending machines and signs should also be placed adjacent to the stop to reduce losses in effective walkway widths.



Figure 5.7 – Type 2 Bus Stop

- Installation of pavement marking should follow the below criteria:
  - Markings within valley gutters should be avoided.
  - Medians should be painted and maintained according to MUTCD standards (see **Picture 5.14**).



Picture 5.14 – Paint Colors Not in Compliance with MUTCD.

- Mature tree canopies for walkway shading should be encouraged while maintaining a minimum clearance height of 14 feet (see **Picture 5.15**).



Picture 5.15 – Desirable Tree Canopy.

- Low landscaping heights should be used within site visibility zones at intersection corners, especially at access drives.
- With new development, walkways should have paving distinctions between private property and the public walkway (such as different textures and/or colors, see **Picture 5.16**).



Picture 5.16 – Public Walkway/Private Property Distinction by Pavement Textures.

- Landscaping and pedestrian walkway planning and design should recognize adjacent properties and walkway transition areas should be provided between properties so as not to negatively impact walkway widths. Alcoves should be avoided to reduce hidden areas and landscaping corners of 90 degrees at property boundaries should be avoided.
- Construction work zones should be planned so as to not negatively impact pedestrian flow on adjacent sidewalks (see **Picture 5.17**).



Picture 5.17 – Work Zone Walkway on Memorial Day Weekend 2015.

CC 1342

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EXHIBIT A
NO OBSTRUCTION ZONES (ADOPTED OCTOBER 7, 2014)

Kimley»Horn

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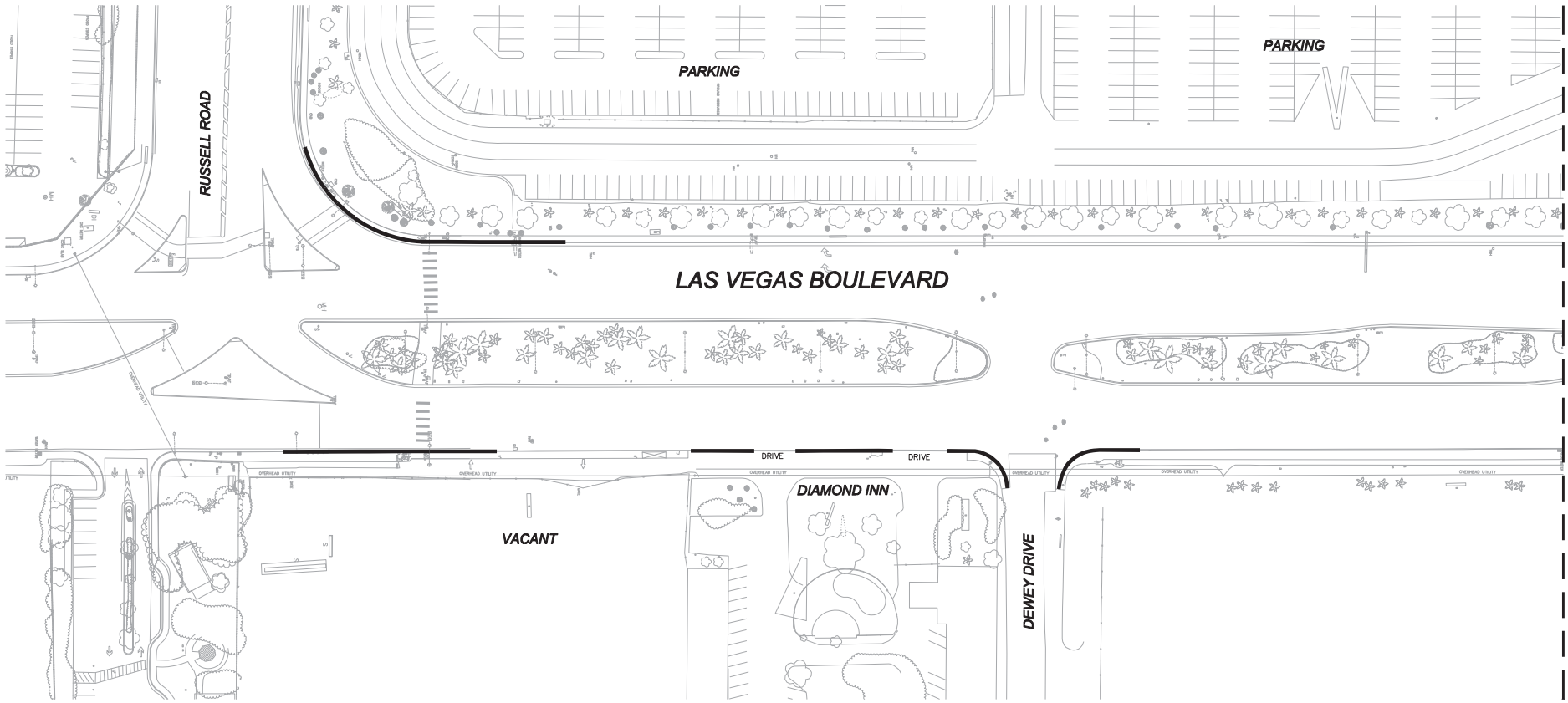
CLARK COUNTY

NO OBSTRUCTION ZONES

CC CODE 16.11

LAS VEGAS BOULEVARD

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LEGEND

PAINTED WHITE LINE

TIME PERIODS LESS THAN LEVEL OF SERVICE C

NOTE:
TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS WAS DEVELOPED BASED ON A SEARCH OF BEST AVAILABLE RECORDS AND INFORMATION. LOCATIONS AND CONDITION OF IMPROVEMENTS SHOWN ARE SUBJECT TO CHANGE AND SHALL BE VERIFIED IN THE FIELD.

NO OBSTRUCTION ZONES - LAS VEGAS BLVD RUSSELL ROAD TO SAHARA AVENUE

CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 1

SCALE: AS SHOWN

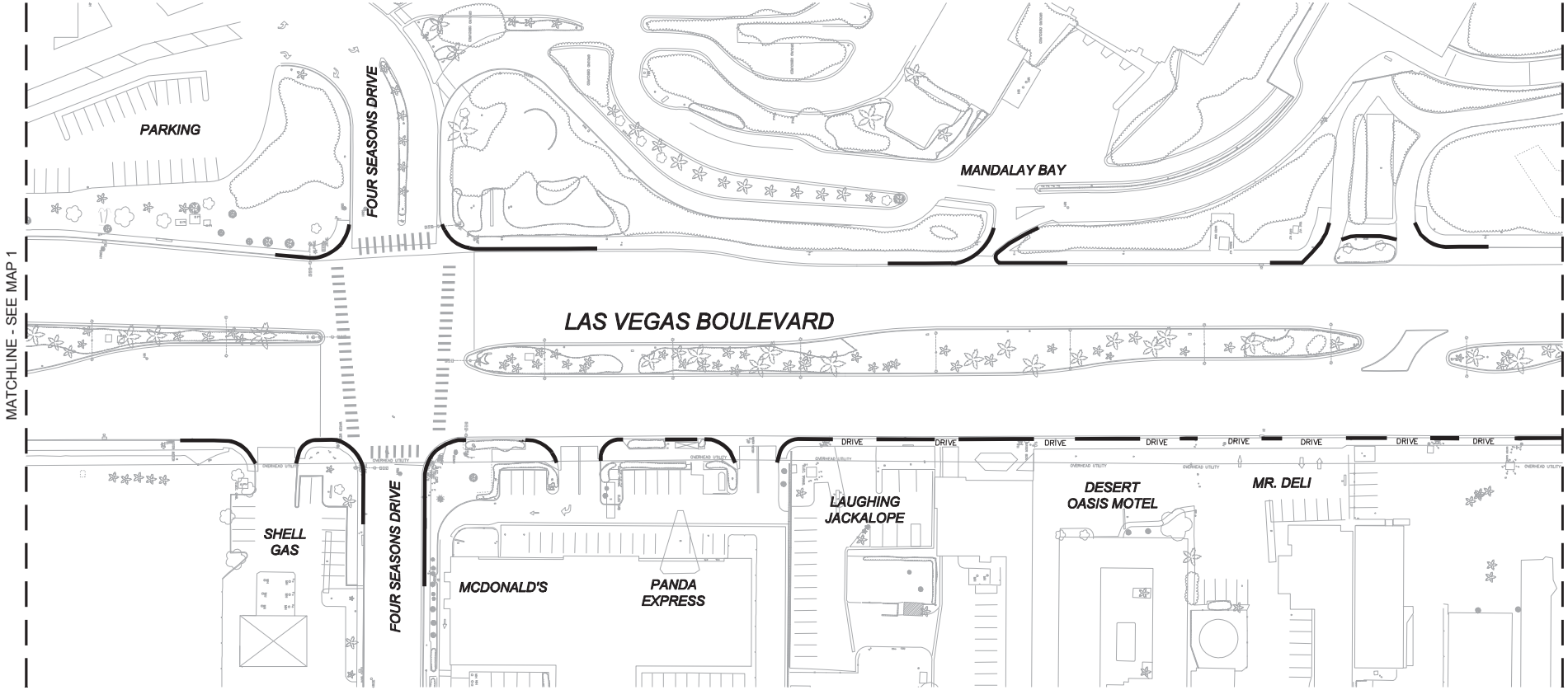
DATE: SEPTEMBER 26, 2014

GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.

CC 1345

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LEGEND

PAINTED WHITE LINE

TIME PERIODS LESS THAN LEVEL OF SERVICE C

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NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 2

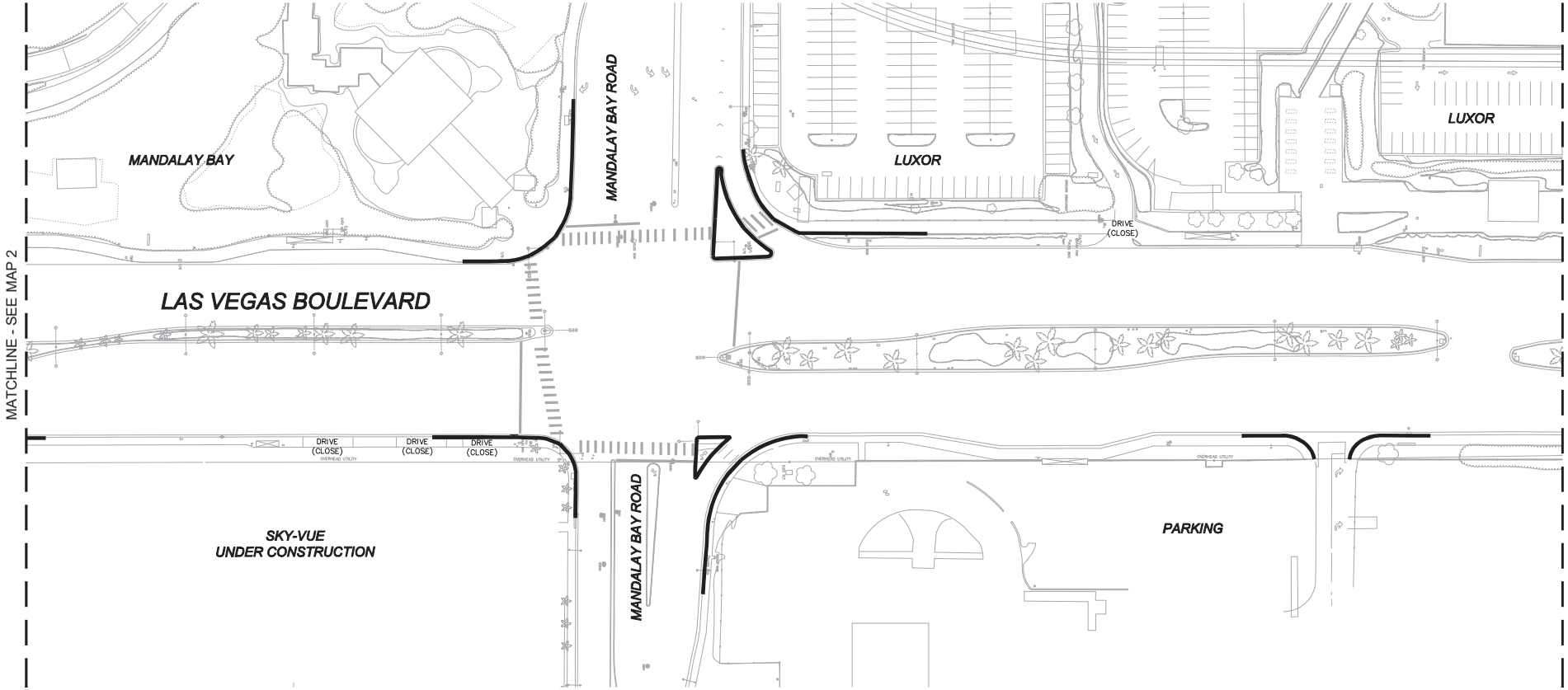
SCALE: AS SHOWN

DATE: SEPTEMBER 26, 2014

GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

CC 1346

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LEGEND

PAINTED WHITE LINE

TIME PERIODS LESS THAN LEVEL OF SERVICE C

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NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 3

SCALE: AS SHOWN

DATE: SEPTEMBER 26, 2014

NORTH

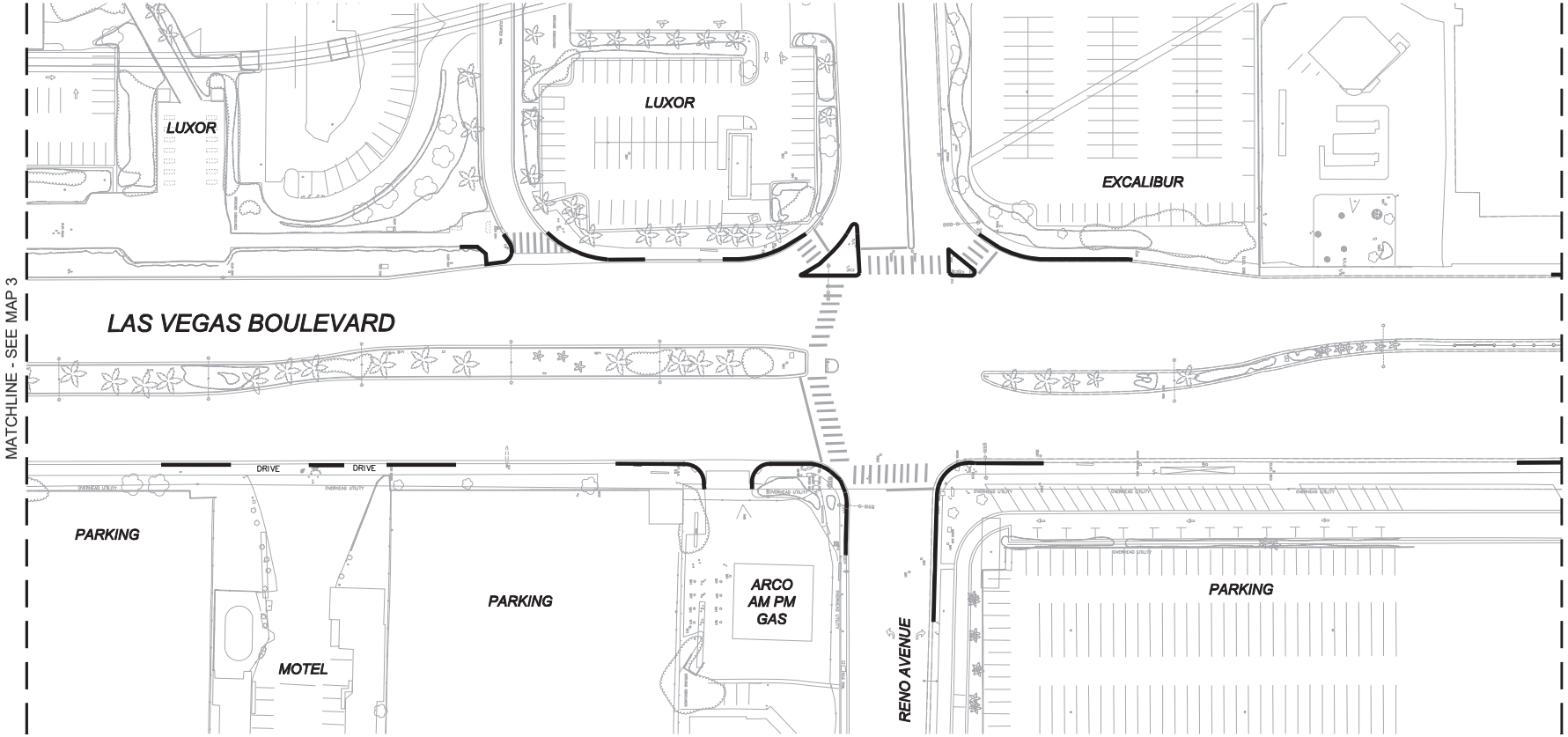
GRAPHIC SCALE

40 0 20 40 80

(IN FEET)
1 inch = 40 ft.

CC 1347

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LEGEND

PAINTED WHITE LINE

TIME PERIODS LESS THAN LEVEL OF SERVICE C

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NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 4

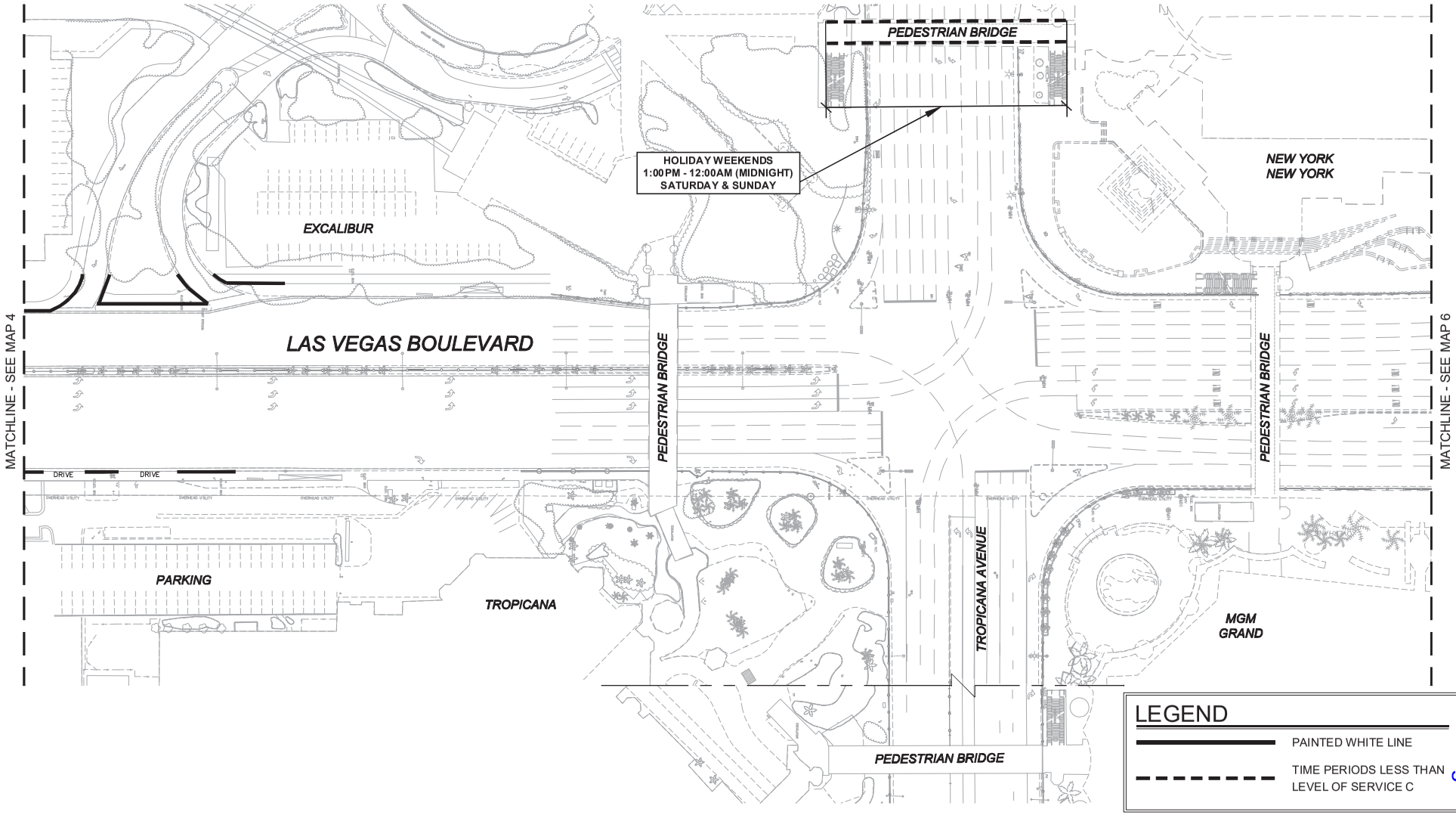
SCALE: AS SHOWN

DATE: SEPTEMBER 26, 2014

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 ft.

CC 1348

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NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

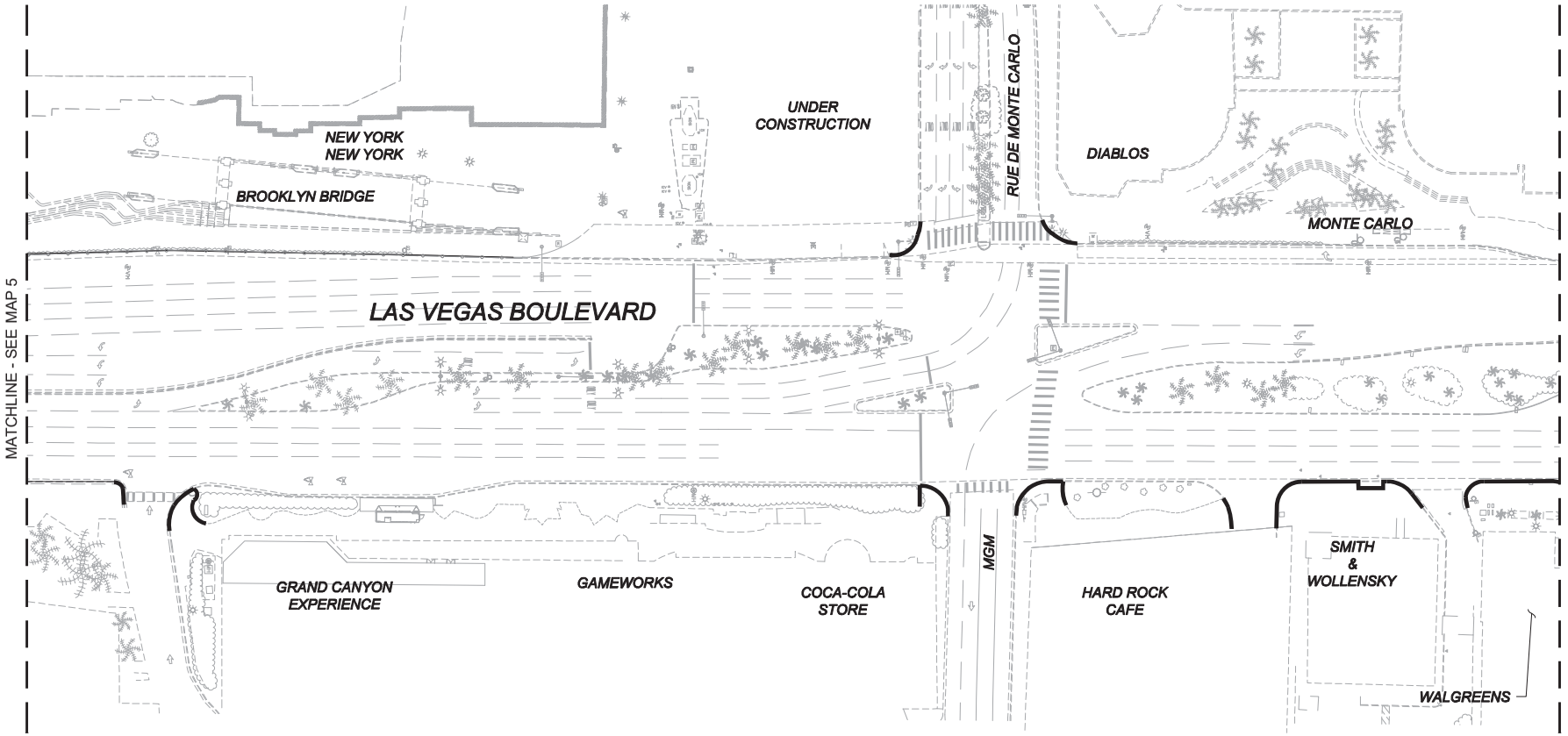
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 5
SCALE: AS SHOWN
DATE: SEPTEMBER 26, 2014

GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

CC 1349

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LEGEND

PAINTED WHITE LINE

TIME PERIODS LESS THAN LEVEL OF SERVICE C

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NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 6

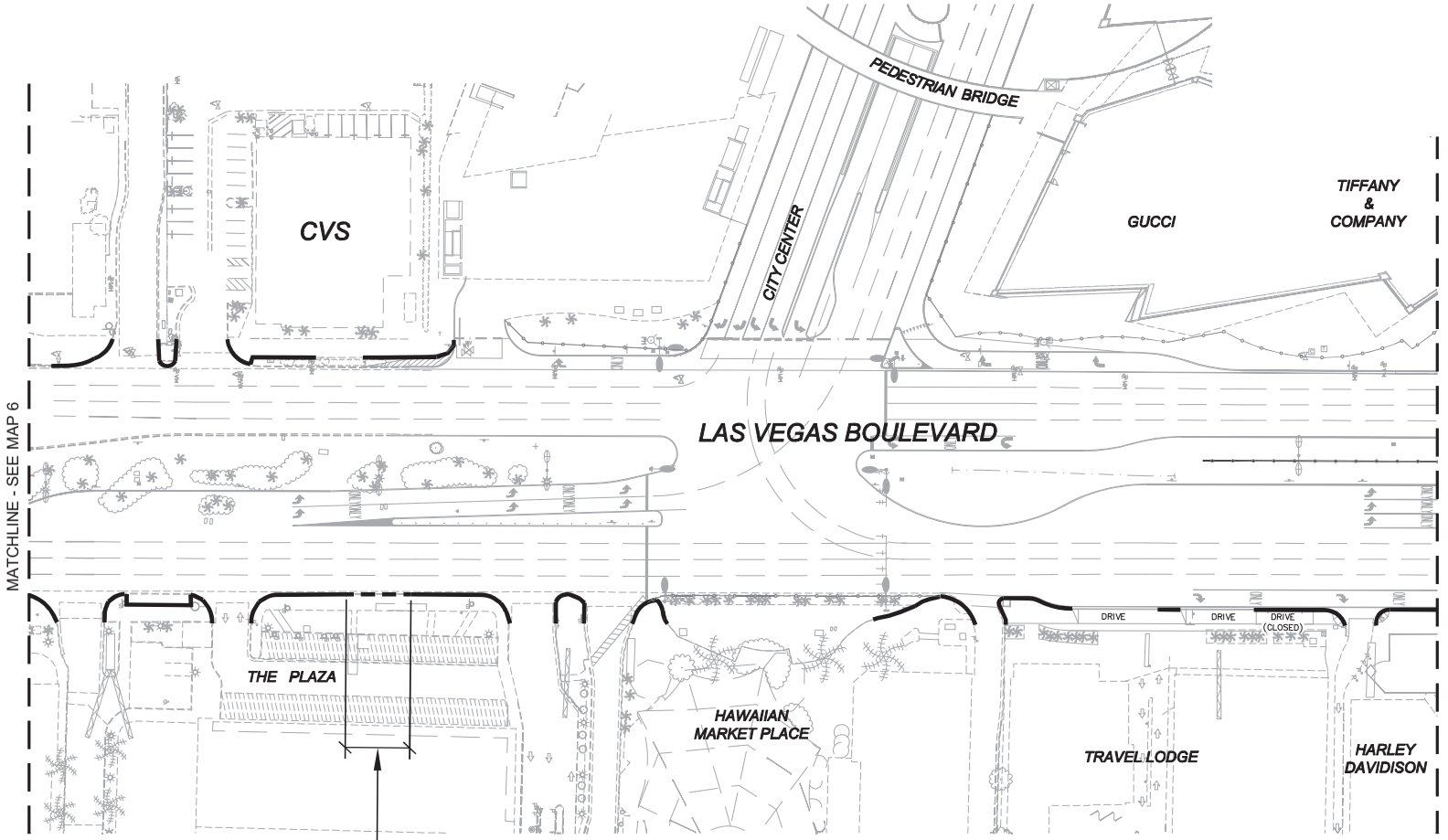
SCALE: AS SHOWN

DATE: SEPTEMBER 26, 2014

GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

CC 1350

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NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

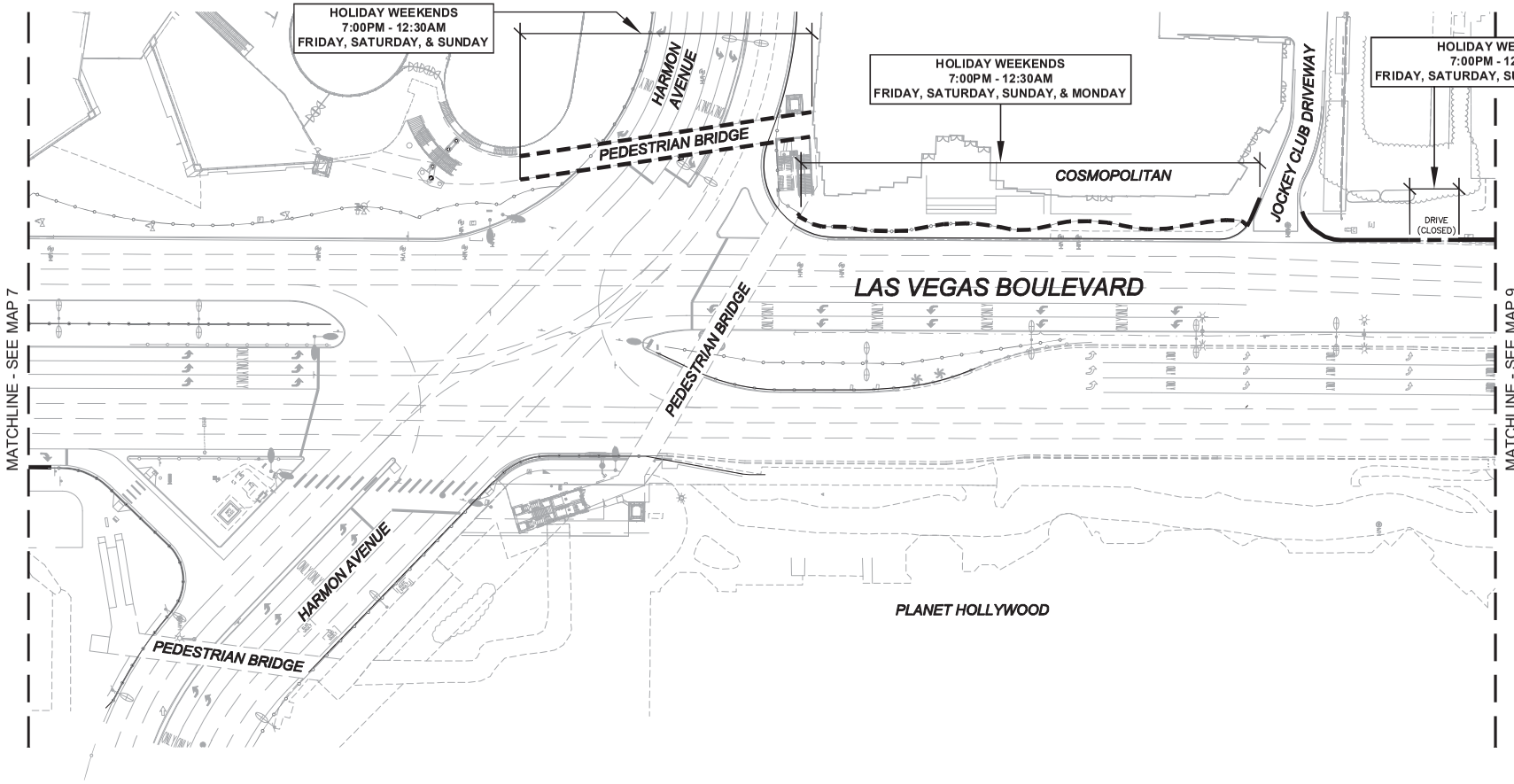
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 7
SCALE: AS SHOWN
DATE: SEPTEMBER 26, 2014

GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

CC 1351

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LEGEND

PAINTED WHITE LINE

TIME PERIODS LESS THAN LEVEL OF SERVICE C

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NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 8

SCALE: AS SHOWN

DATE: SEPTEMBER 26, 2014

NORTH

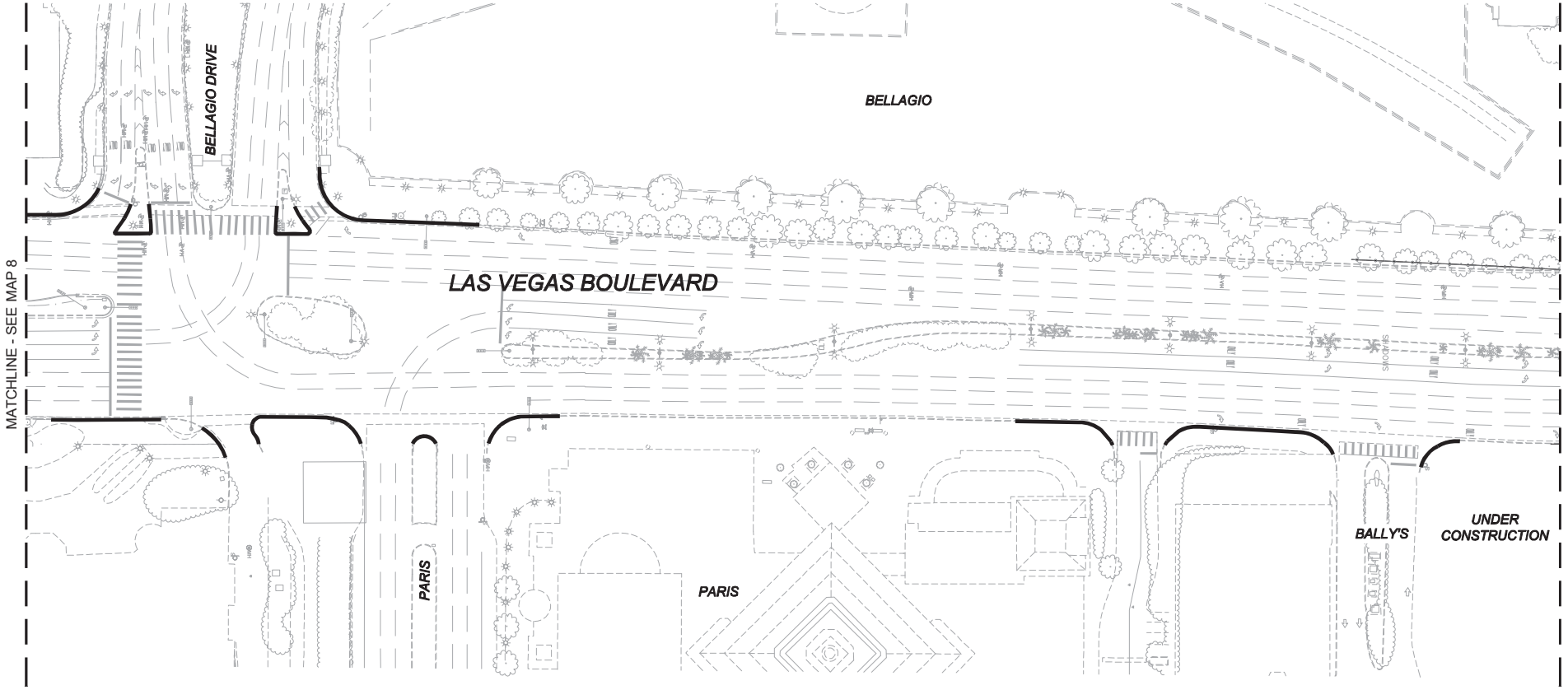
GRAPHIC SCALE

40 0 20 40 80

(IN FEET)
1 inch = 40 ft.

CC 1352

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LEGEND

PAINTED WHITE LINE

TIME PERIODS LESS THAN LEVEL OF SERVICE C

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NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 9

SCALE: AS SHOWN

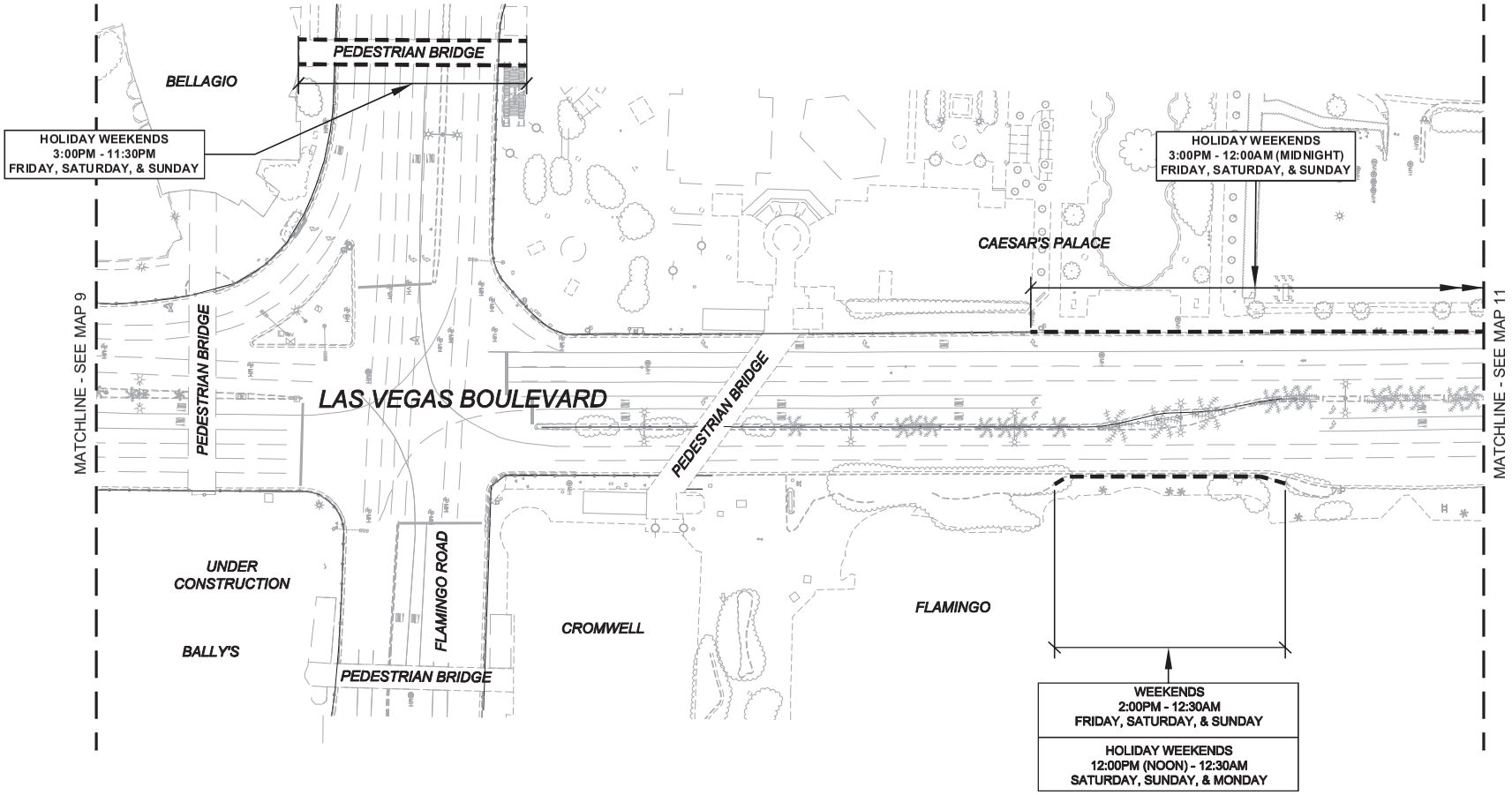
DATE: SEPTEMBER 26, 2014

GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.

CC 1353

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LEGEND

PAINTED WHITE LINE

TIME PERIODS LESS THAN LEVEL OF SERVICE C

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NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 10

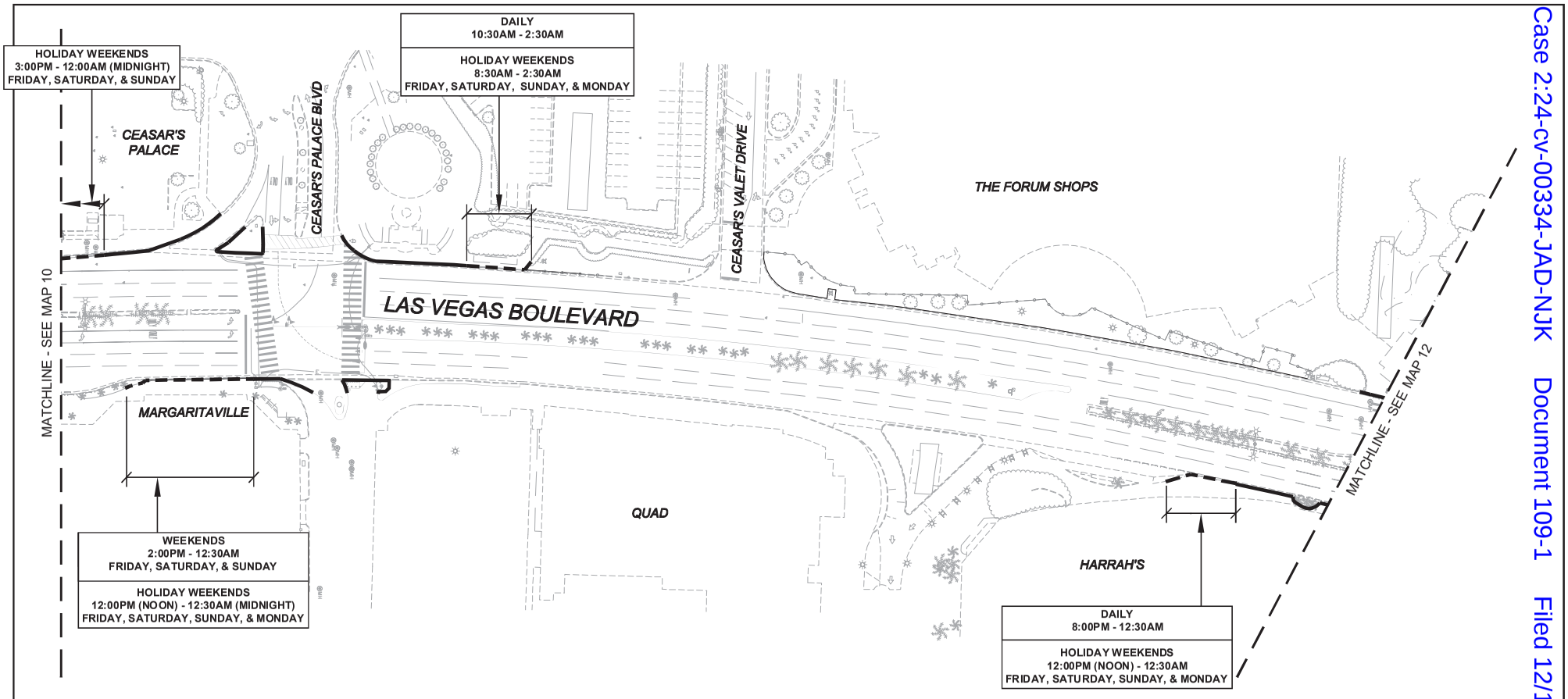
SCALE: AS SHOWN

DATE: SEPTEMBER 26, 2014

GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

CC 1354

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NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

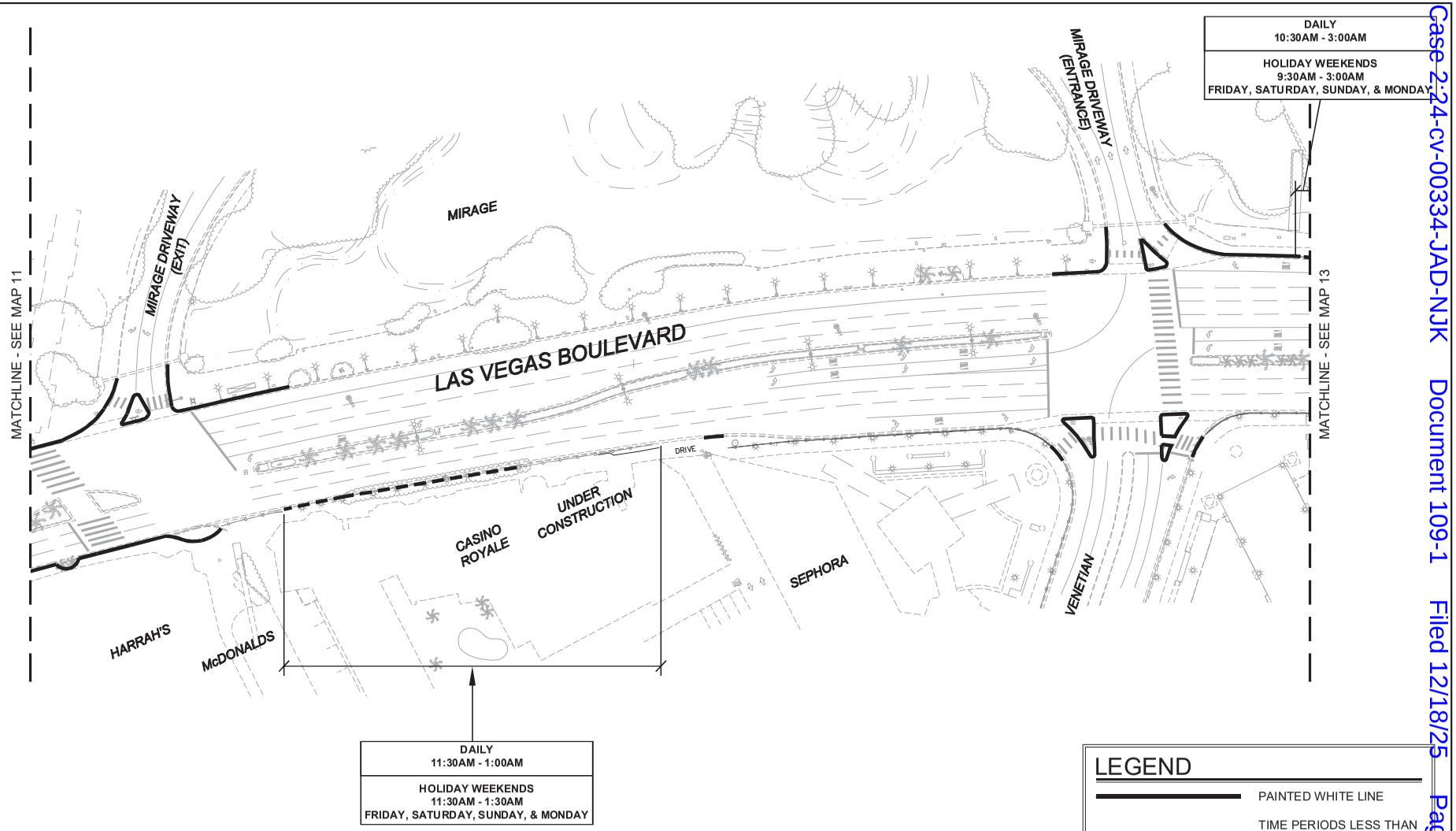
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 11
SCALE: AS SHOWN
DATE: SEPTEMBER 26, 2014

GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

CC 1355

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NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

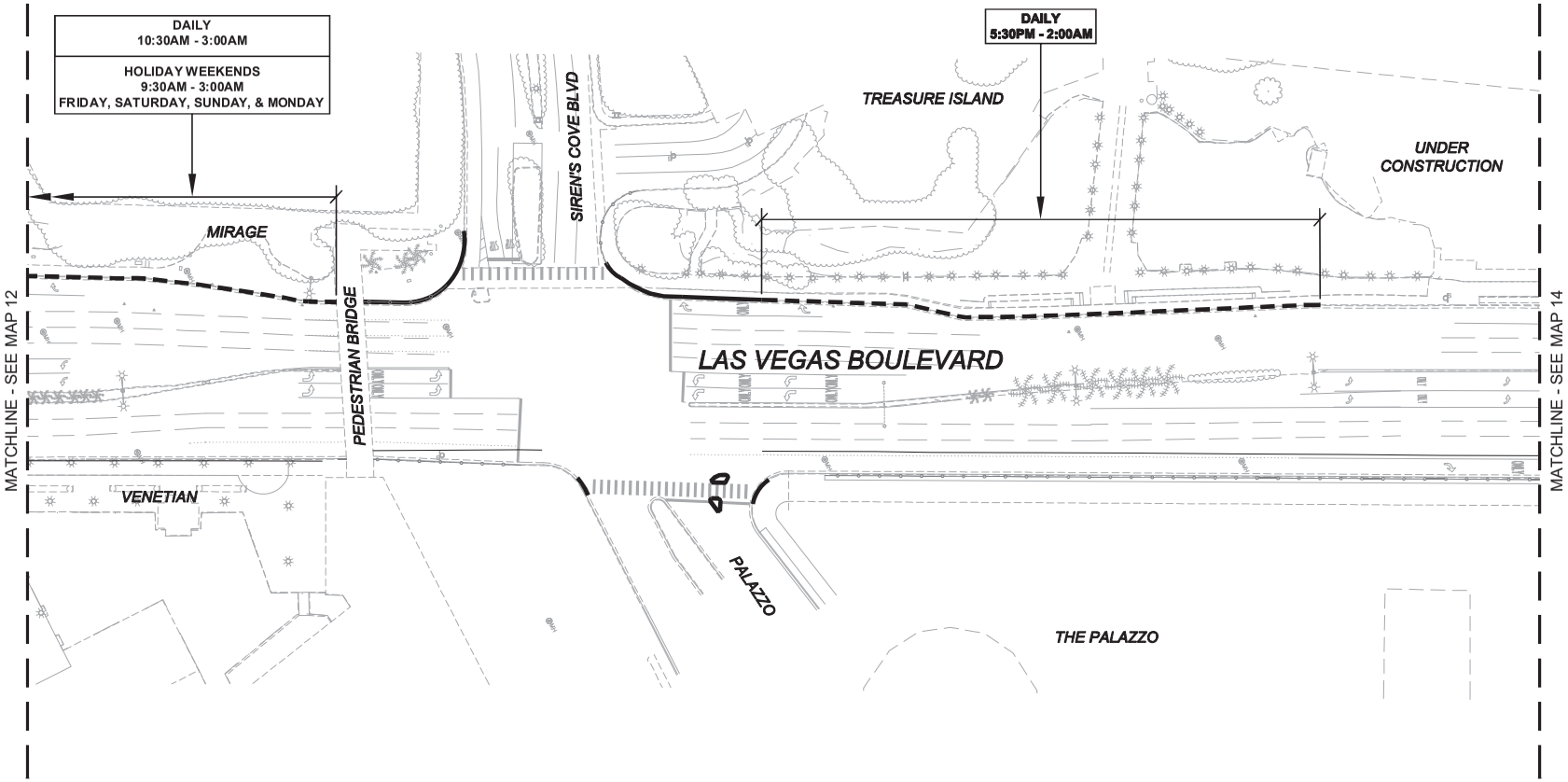
CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 12
SCALE: AS SHOWN
DATE: SEPTEMBER 26, 2014

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 ft.

CC 1356

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LEGEND

PAINTED WHITE LINE

TIME PERIODS LESS THAN LEVEL OF SERVICE C

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NO OBSTRUCTION ZONES - LAS VEGAS BLVD RUSSELL ROAD TO SAHARA AVENUE

CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 13

SCALE: AS SHOWN

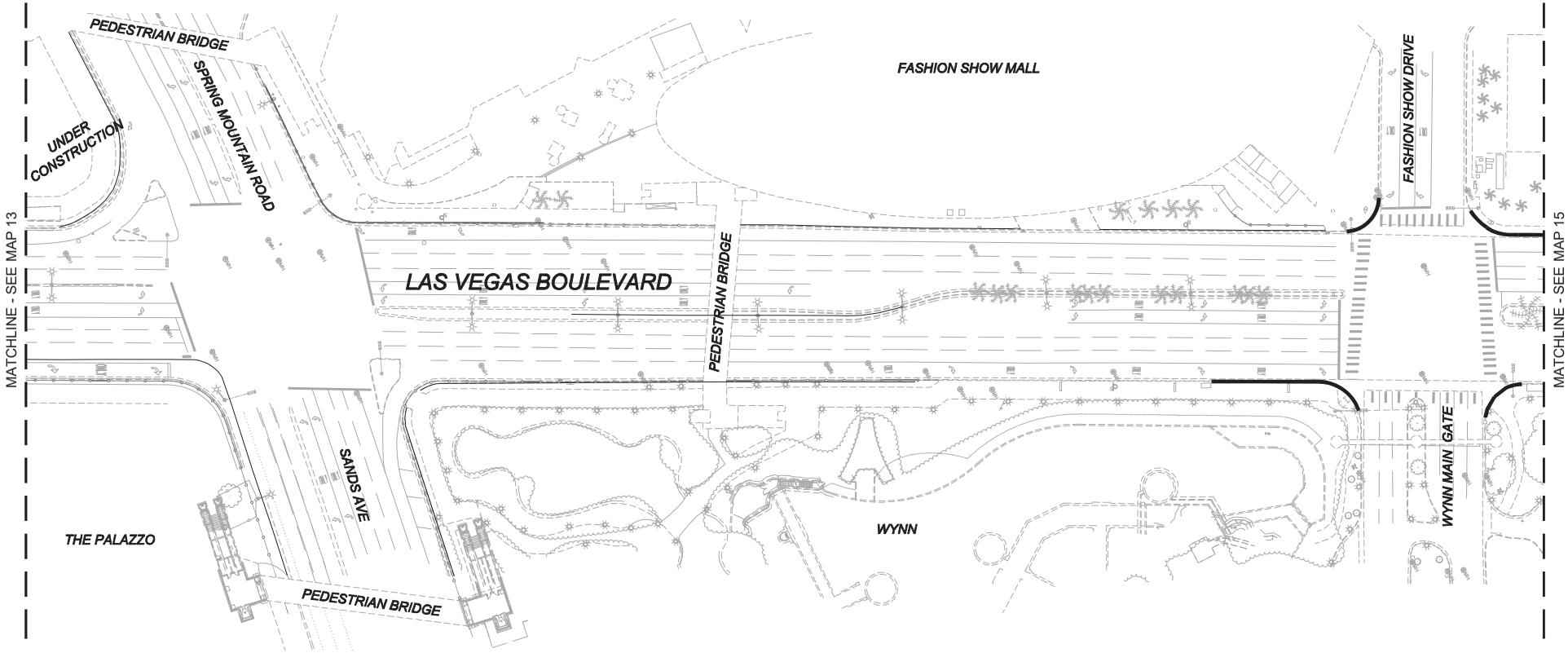
DATE: SEPTEMBER 26, 2014

GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.

CC 1357

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LEGEND

PAINTED WHITE LINE

TIME PERIODS LESS THAN LEVEL OF SERVICE C

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NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 14

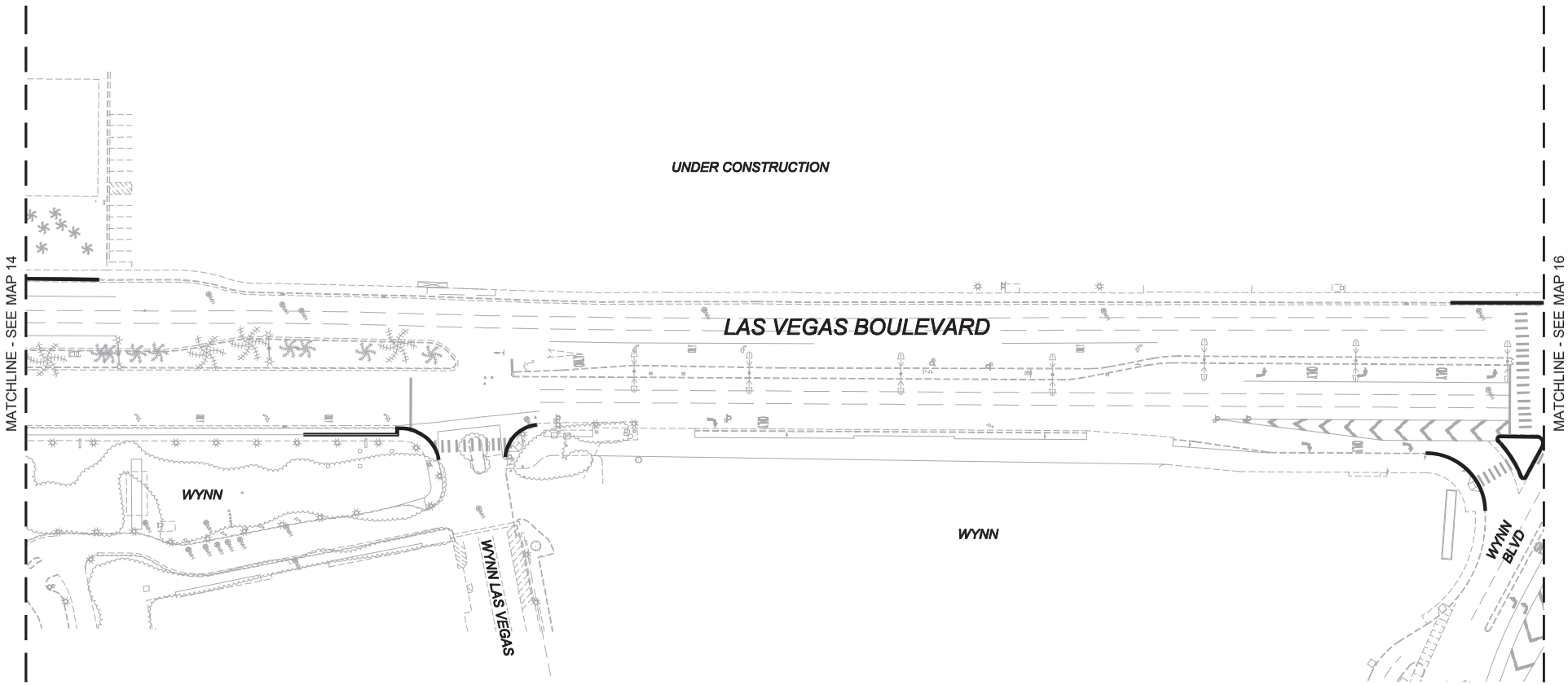
SCALE: AS SHOWN

DATE: SEPTEMBER 26, 2014

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 ft.

CC 1358

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LEGEND

PAINTED WHITE LINE

TIME PERIODS LESS THAN LEVEL OF SERVICE C

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NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 15

SCALE: AS SHOWN

DATE: SEPTEMBER 26, 2014

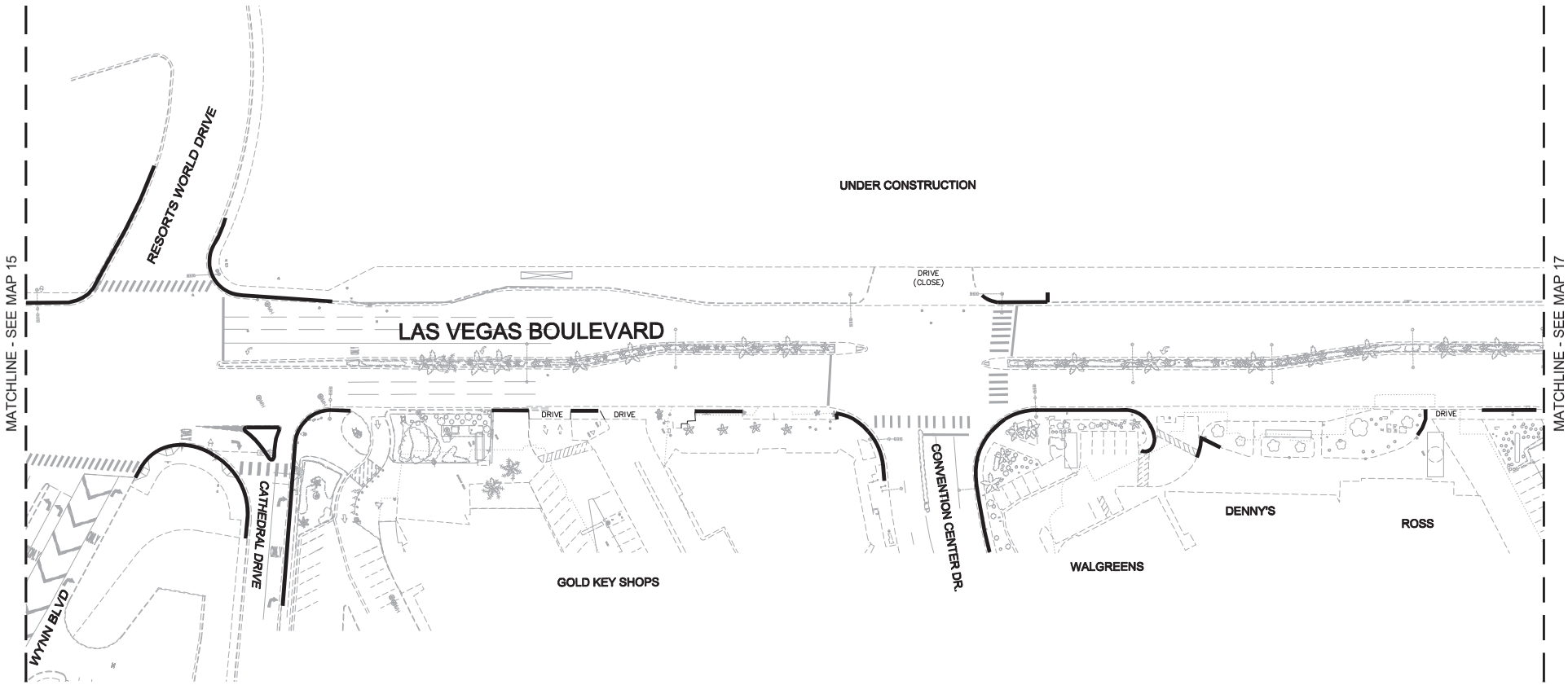
GRAPHIC SCALE

40 0 20 40 80

(IN FEET)
1 inch = 40 ft.

CC 1359

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LEGEND

PAINTED WHITE LINE

TIME PERIODS LESS THAN LEVEL OF SERVICE C

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NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 16

SCALE: AS SHOWN

DATE: SEPTEMBER 26, 2014

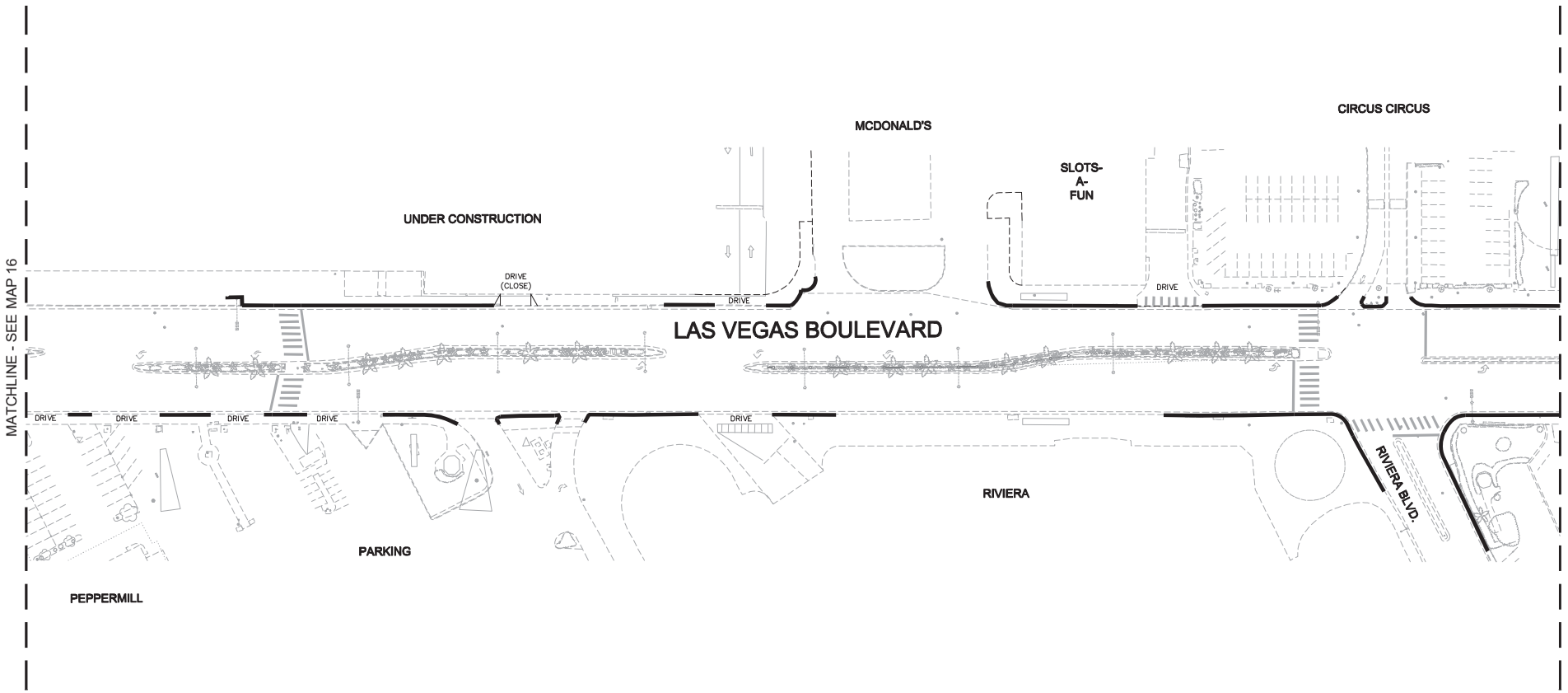
GRAPHIC SCALE

40 0 20 40 80

(IN FEET)
1 inch = 40 ft.

CC 1360

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LEGEND

PAINTED WHITE LINE

TIME PERIODS LESS THAN LEVEL OF SERVICE C

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NO OBSTRUCTION ZONES - LAS VEGAS BLVD
RUSSELL ROAD TO SAHARA AVENUE

CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 17

SCALE: AS SHOWN

DATE: SEPTEMBER 26, 2014

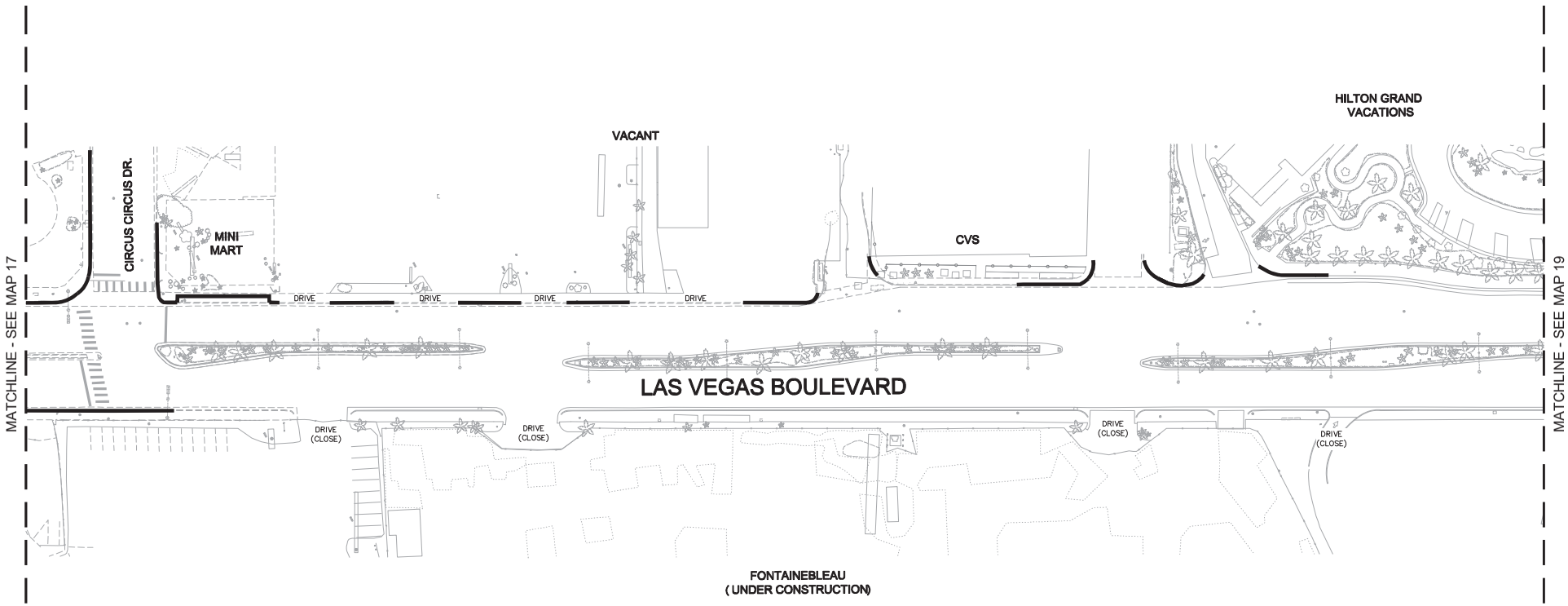
GRAPHIC SCALE

40 0 20 40 80

(IN FEET)
1 inch = 40 ft.

CC 1361

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LEGEND

PAINTED WHITE LINE

TIME PERIODS LESS THAN LEVEL OF SERVICE C

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NO OBSTRUCTION ZONES - LAS VEGAS BLVD RUSSELL ROAD TO SAHARA AVENUE

CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 18

SCALE: AS SHOWN

DATE: SEPTEMBER 26, 2014

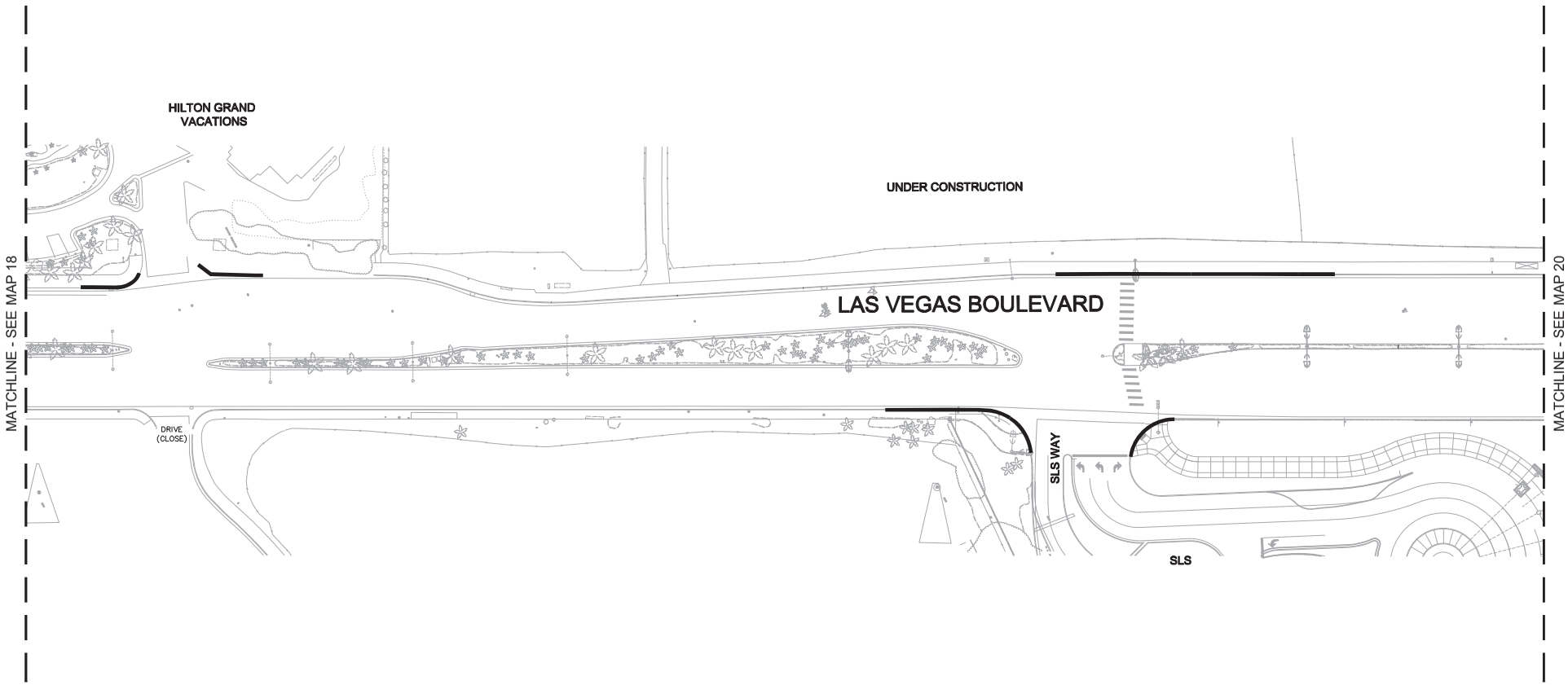
GRAPHIC SCALE

40 0 20 40 80

(IN FEET)
1 inch = 40 ft.

CC 1362

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LEGEND

PAINTED WHITE LINE

TIME PERIODS LESS THAN LEVEL OF SERVICE C

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NO OBSTRUCTION ZONES - LAS VEGAS BLVD RUSSELL ROAD TO SAHARA AVENUE

CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 19

SCALE: AS SHOWN

DATE: SEPTEMBER 26, 2014

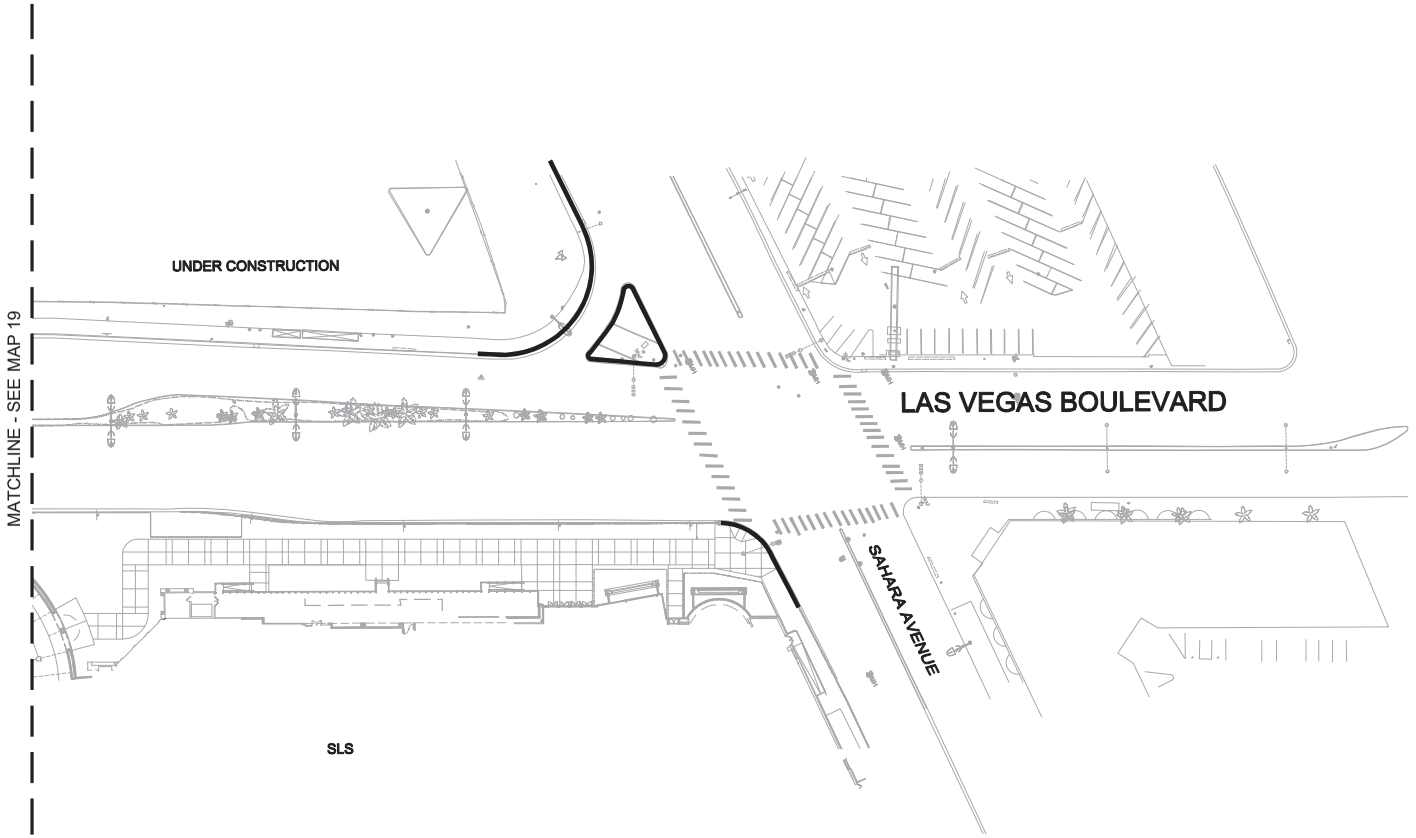
GRAPHIC SCALE

40 0 20 40 80

(IN FEET)
1 inch = 40 ft.

CC 1363

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LEGEND

PAINTED WHITE LINE

TIME PERIODS LESS THAN LEVEL OF SERVICE C

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TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS WAS DEVELOPED BASED ON A SEARCH OF BEST AVAILABLE RECORDS AND INFORMATION. LOCATIONS AND CONDITION OF IMPROVEMENTS SHOWN ARE SUBJECT TO CHANGE AND SHALL BE VERIFIED IN THE FIELD.

NO OBSTRUCTION ZONES - LAS VEGAS BLVD RUSSELL ROAD TO SAHARA AVENUE

CLARK COUNTY, NEVADA, DEPARTMENT OF PUBLIC WORKS

SHEET: MAP 20

SCALE: AS SHOWN

DATE: SEPTEMBER 26, 2014

GRAPHIC SCALE

40 0 20 40 80

(IN FEET)
1 inch = 40 ft.

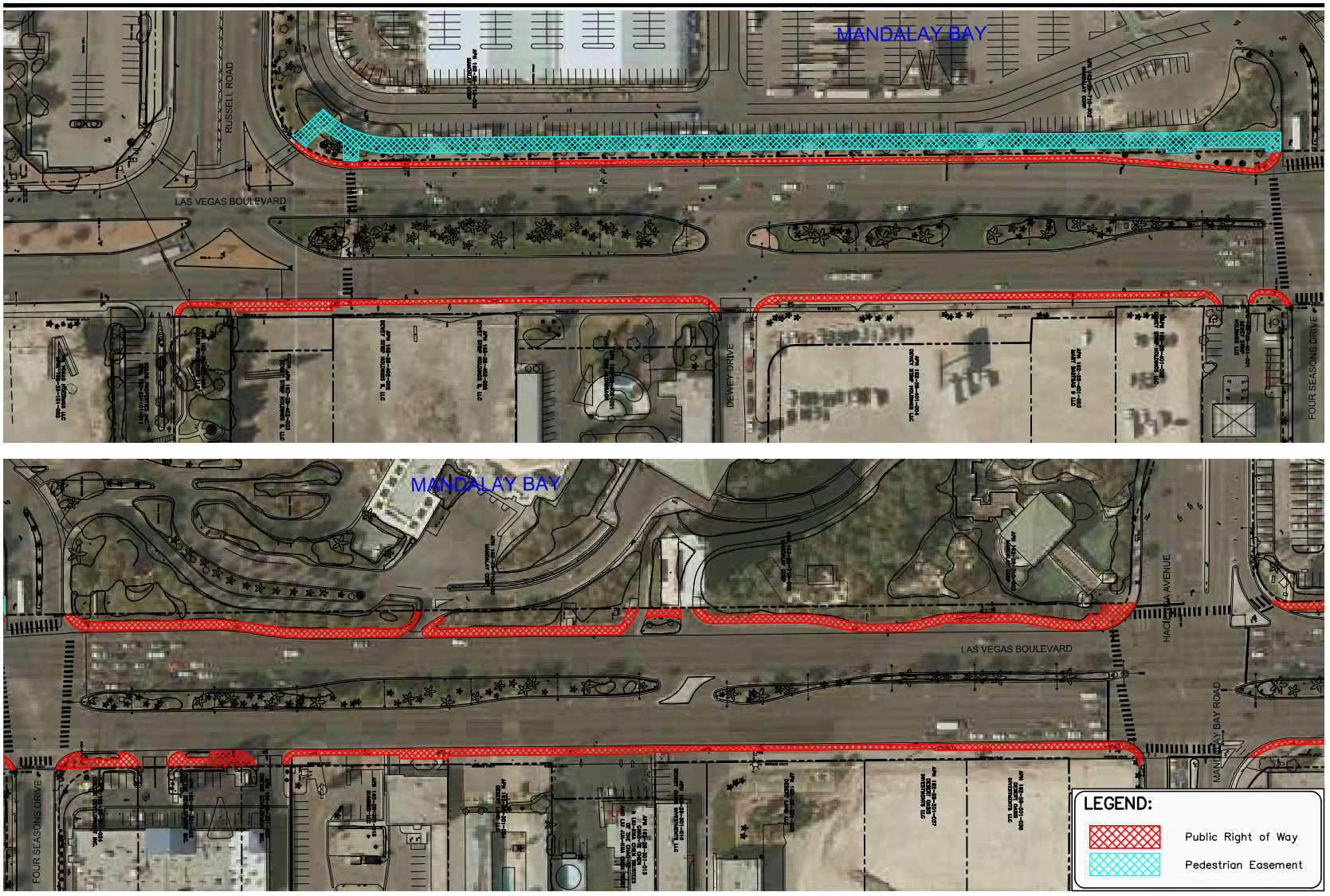
CC 1364

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EXHIBIT B
RIGHT-OF-WAY/PEDESTRIAN EASEMENT EXHIBITS

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JOB No. 092061019

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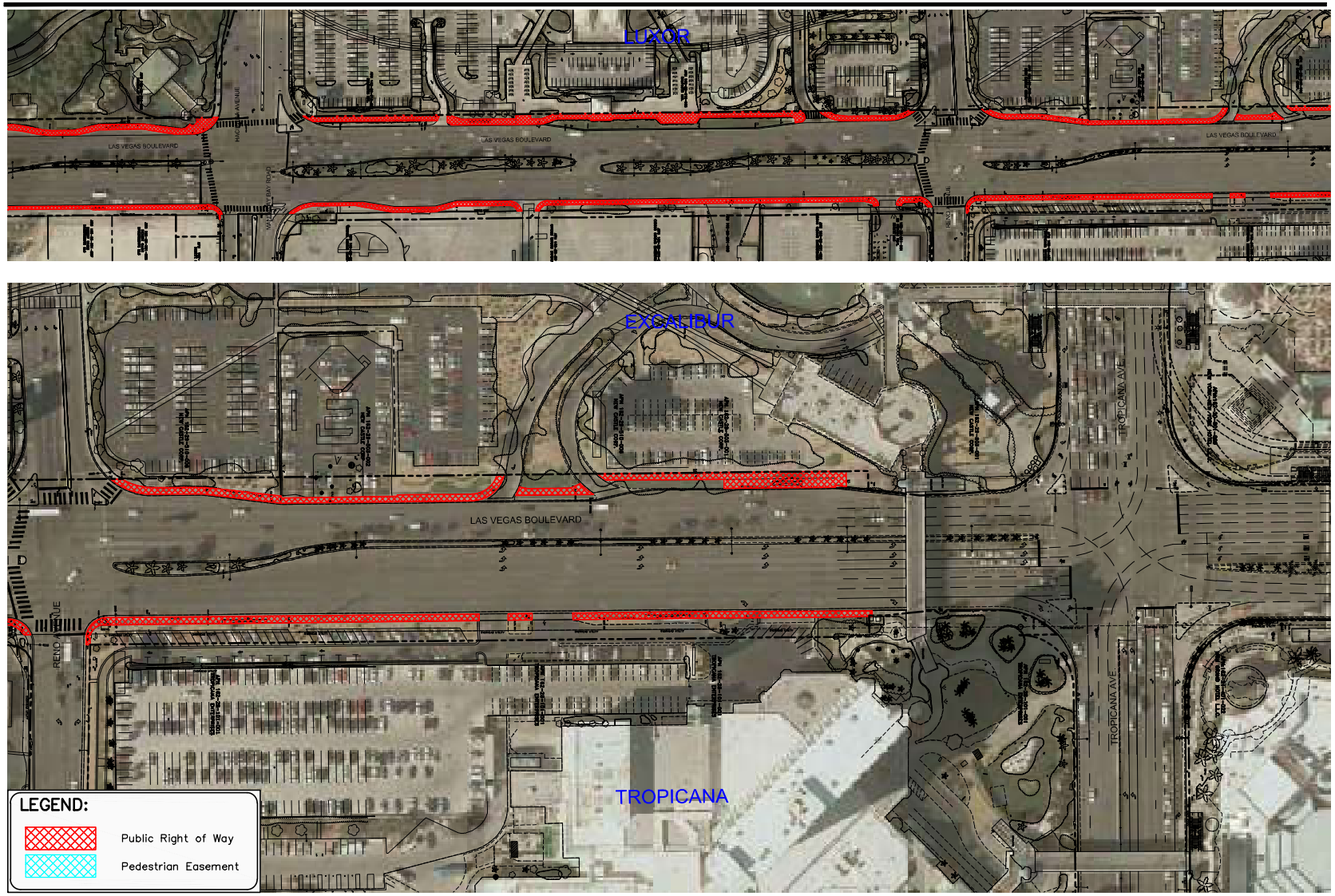
NOTE: SURVEY PER ACE REGIONAL RAPID TRANSIT SYSTEM, RESORT CORRIDOR, PRELIMINARY ALTERNATIVE ANALYSIS REPORT DATED JULY 2008. AND UPDATES WERE INCLUDED AS PROVIDED ALONG THE RESORT CORRIDOR. AERIAL IMAGE PER CLARK COUNTY DATED 2013.

PEDESTRIAN STUDY - LAS VEGAS BOULEVARD
RUSSELL ROAD TO MANDALAY BAY ROAD
October 29, 2015

FIGURE 1
SHEET 1 OF 9

GRAPHIC SCALE
40 0 20 40 80
1 inch = 40 feet

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JOB No. 092061019

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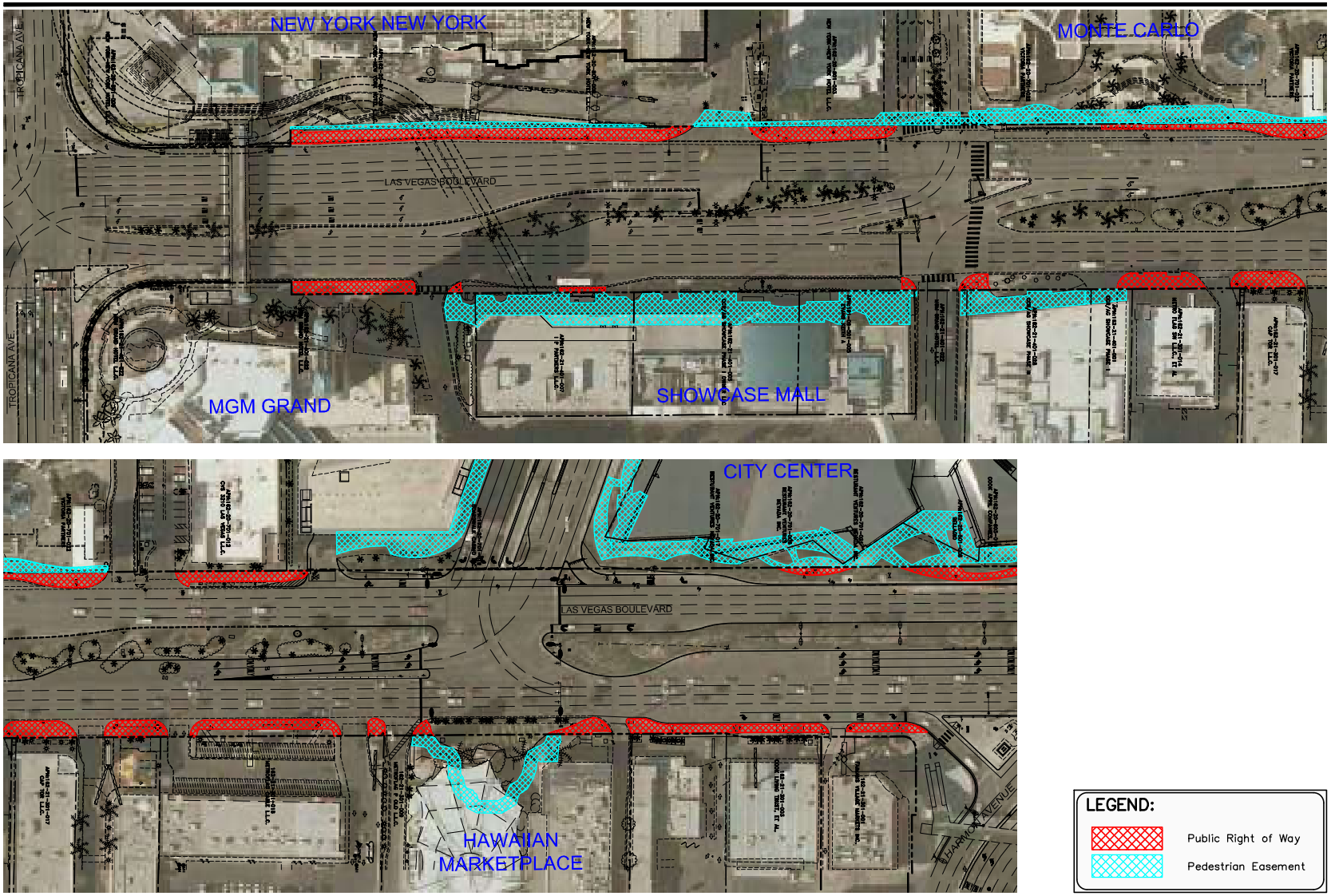
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PEDESTRIAN STUDY - LAS VEGAS BOULEVARD
MANDALAY BAY ROAD TO TROPICANA AVENUE
October 29, 2015

FIGURE 2
SHEET 2 OF 9

GRAPHIC SCALE
40 0 20 40 80
1 inch = 40 feet

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JOB No. 092061019

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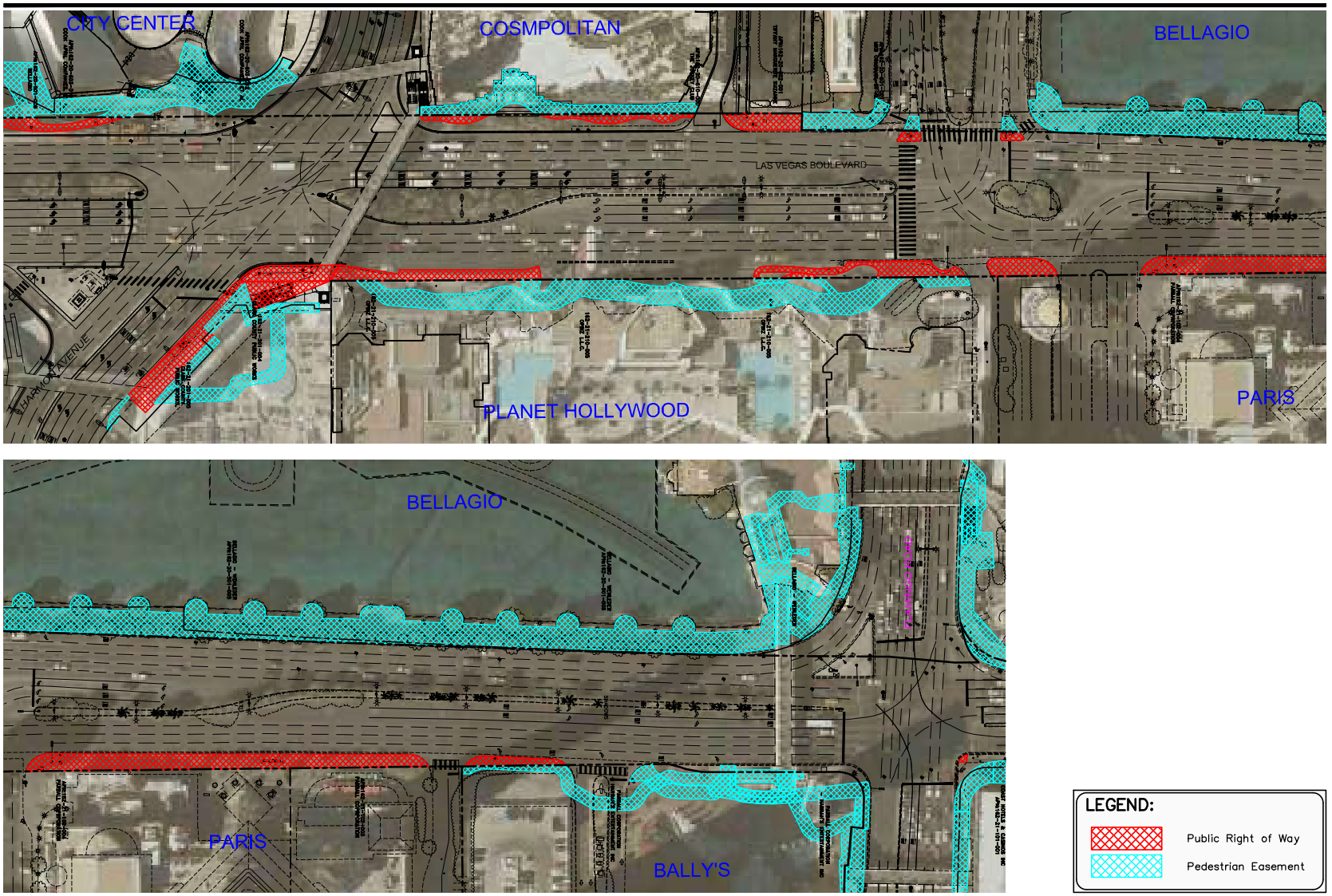
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PEDESTRIAN STUDY - LAS VEGAS BOULEVARD
TROPICANA AVENUE TO HARMON AVENUE
October 29, 2015

FIGURE 3
SHEET 3 OF 9

GRAPHIC SCALE
40 0 20 40 80
1 inch = 40 feet

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JOB No. 092061019

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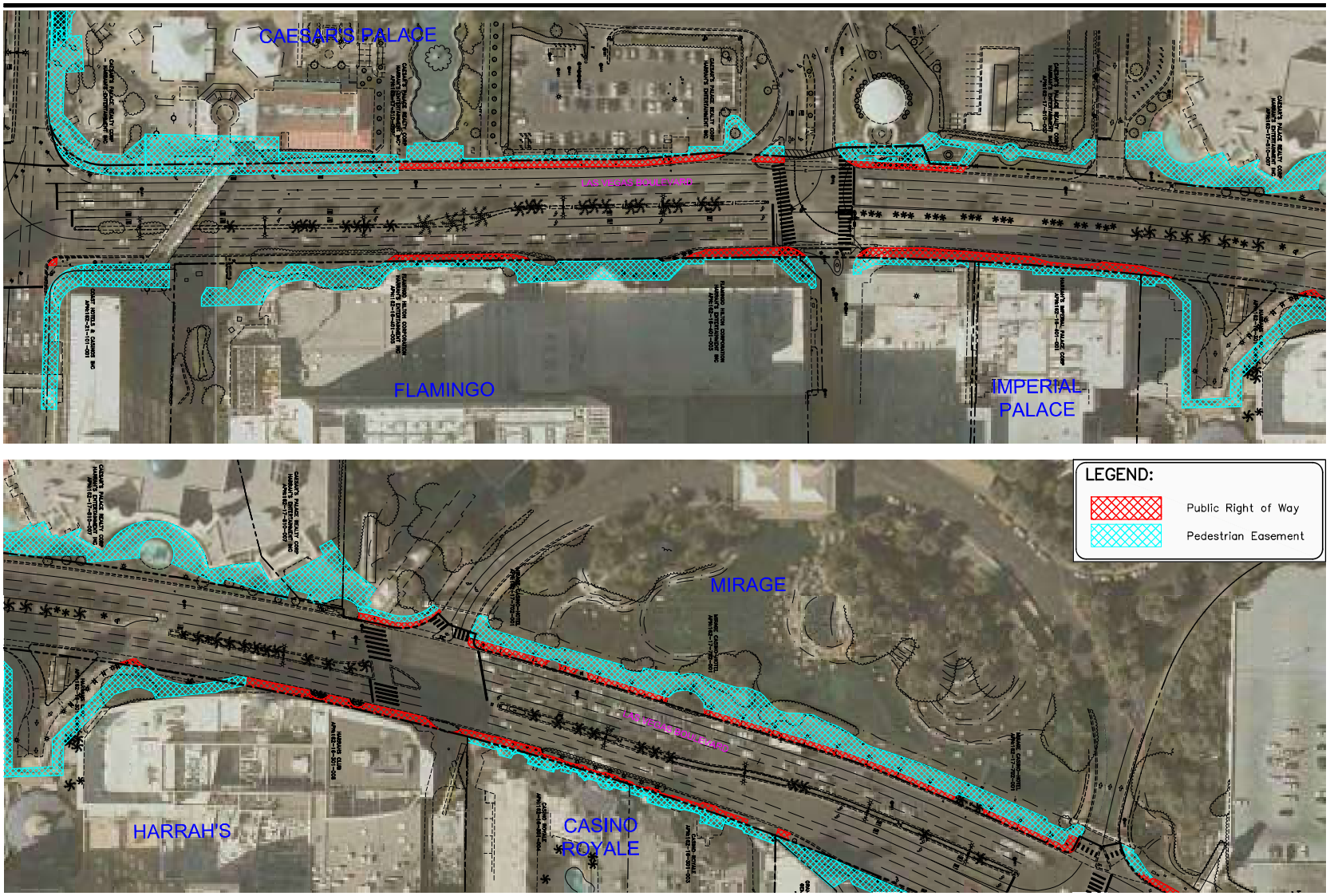
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PEDESTRIAN STUDY - LAS VEGAS BOULEVARD
HARMON AVENUE TO FLAMINGO ROAD
October 29, 2015

FIGURE 4
SHEET 4 OF 9

GRAPHIC SCALE
40 0 20 40 80
1 inch = 40 feet

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JOB No. 092061019

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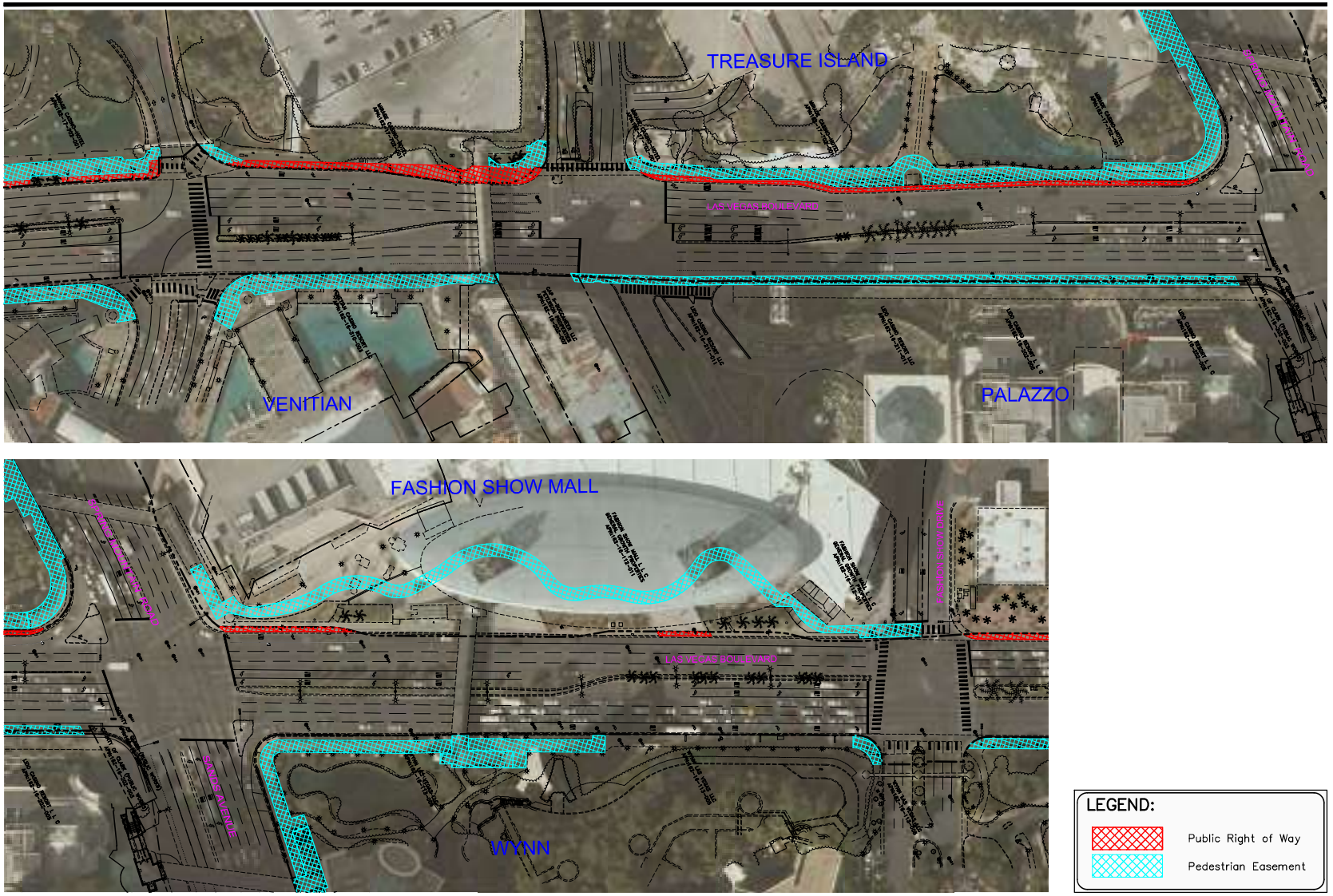
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PEDESTRIAN STUDY - LAS VEGAS BOULEVARD
FLAMINGO ROAD TO MIRAGE HOTEL & CASINO
October 29, 2015

FIGURE 5
SHEET 5 OF 9

GRAPHIC SCALE
40 0 20 40 80
1 inch = 40 feet

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JOB No. 092061019

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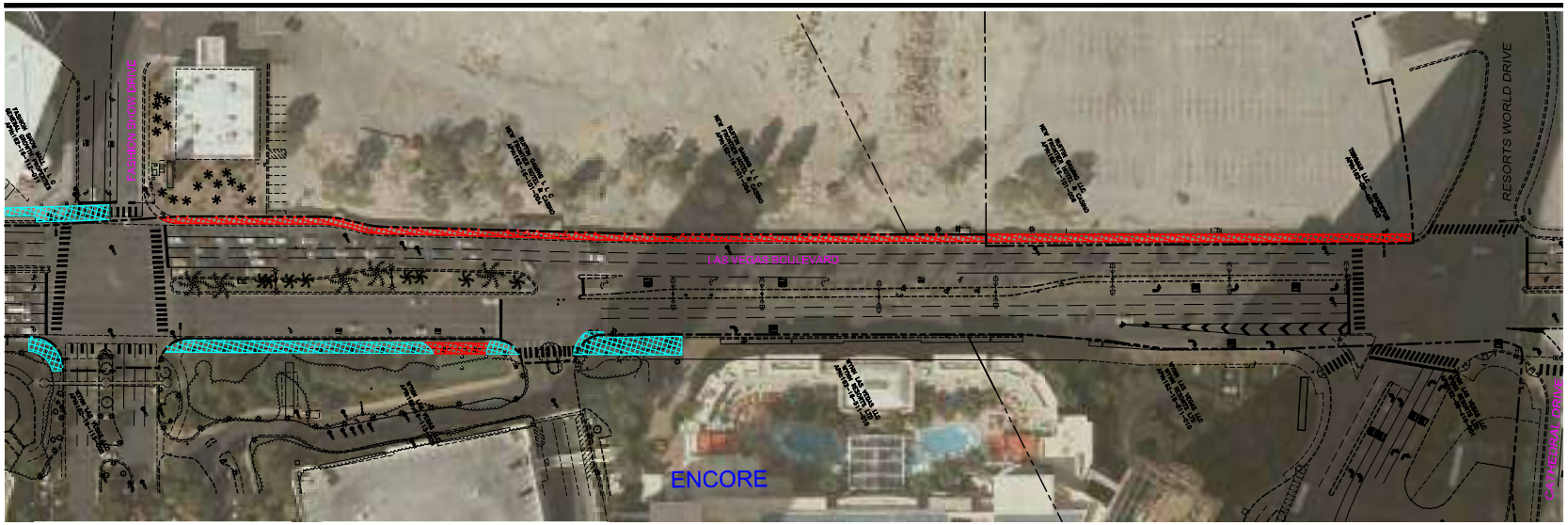
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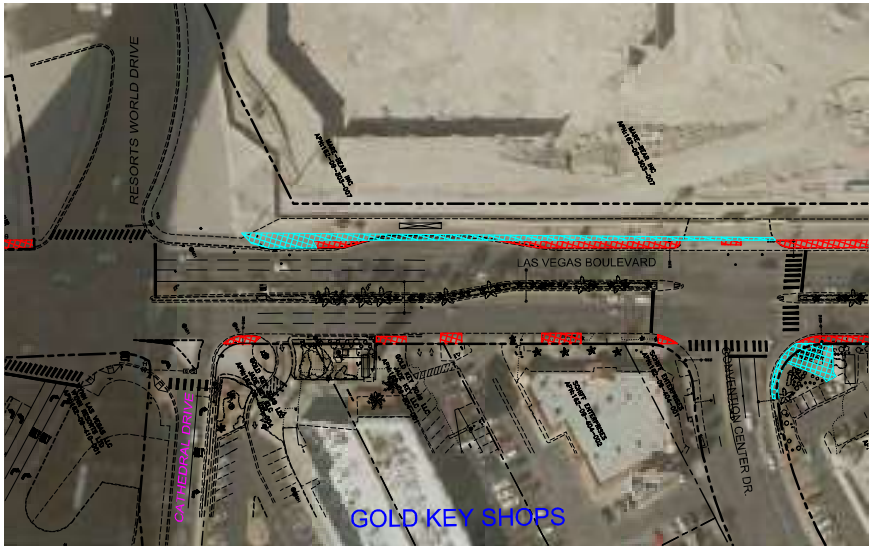
PEDESTRIAN STUDY - LAS VEGAS BOULEVARD
MIRAGE HOTEL & CASINO TO FASHION SHOW DRIVE
October 29, 2015

FIGURE 6
SHEET 6 OF 9

GRAPHIC SCALE
40 0 20 40 80
1 inch = 40 feet

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LEGEND:

Public Right of Way

Pedestrian Easement

JOB No. 092061019

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NOTE: SURVEY PER ACE REGIONAL RAPID TRANSIT SYSTEM, RESORT CORRIDOR, PRELIMINARY ALTERNATIVE ANALYSIS REPORT DATED JULY 2008. AND UPDATES WERE INCLUDED AS PROVIDED ALONG THE RESORT CORRIDOR. AERIAL IMAGE PER CLARK COUNTY DATED 2013.

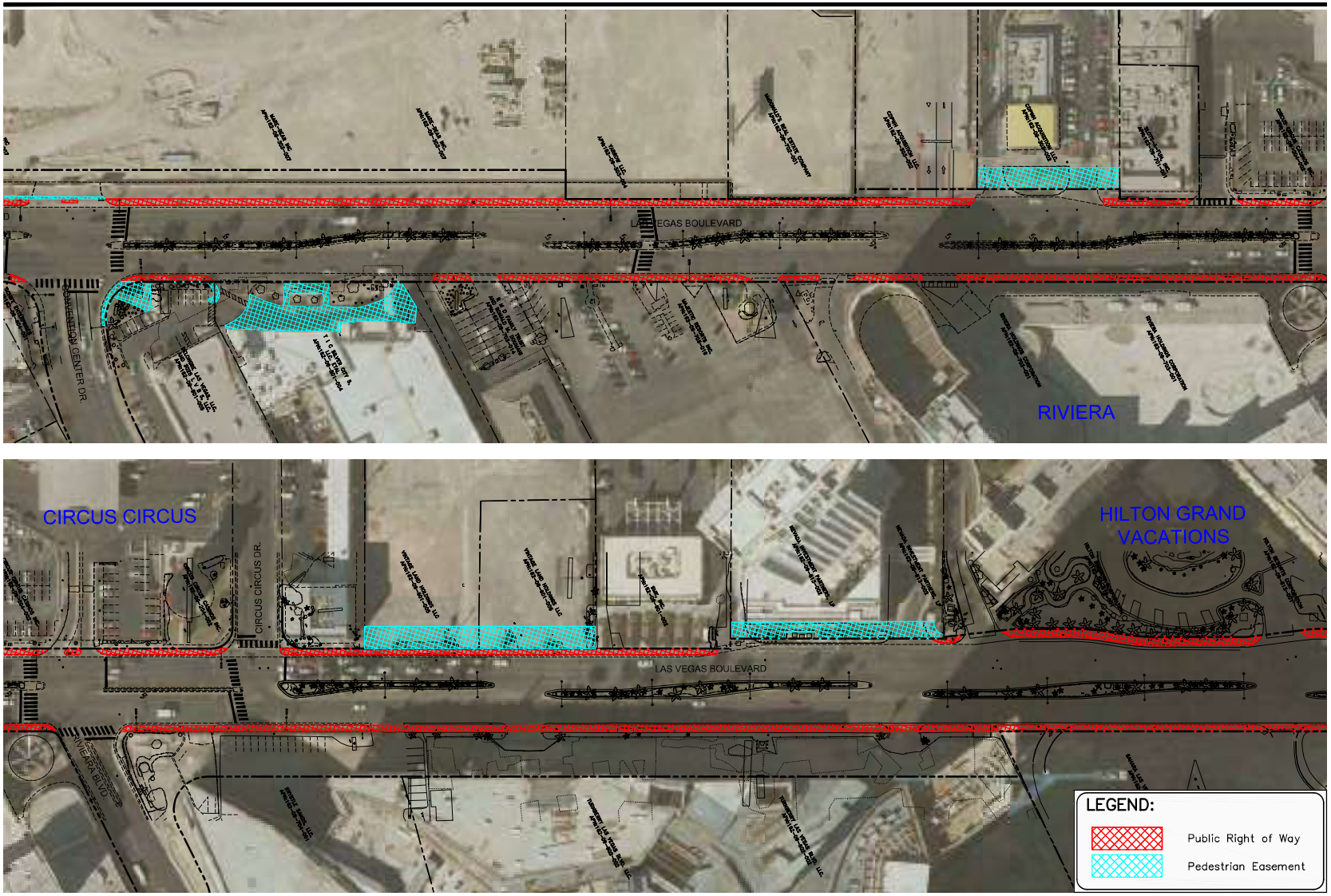
PEDESTRIAN STUDY - LAS VEGAS BOULEVARD
FASHION SHOW DRIVE TO CONVENTION CENTER DRIVE
October 29, 2015

FIGURE 7

SHEET 7 OF 9

GRAPHIC SCALE
40 0 20 40 80
1 inch = 40 feet

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JOB No. 092061019

Kimley»Horn

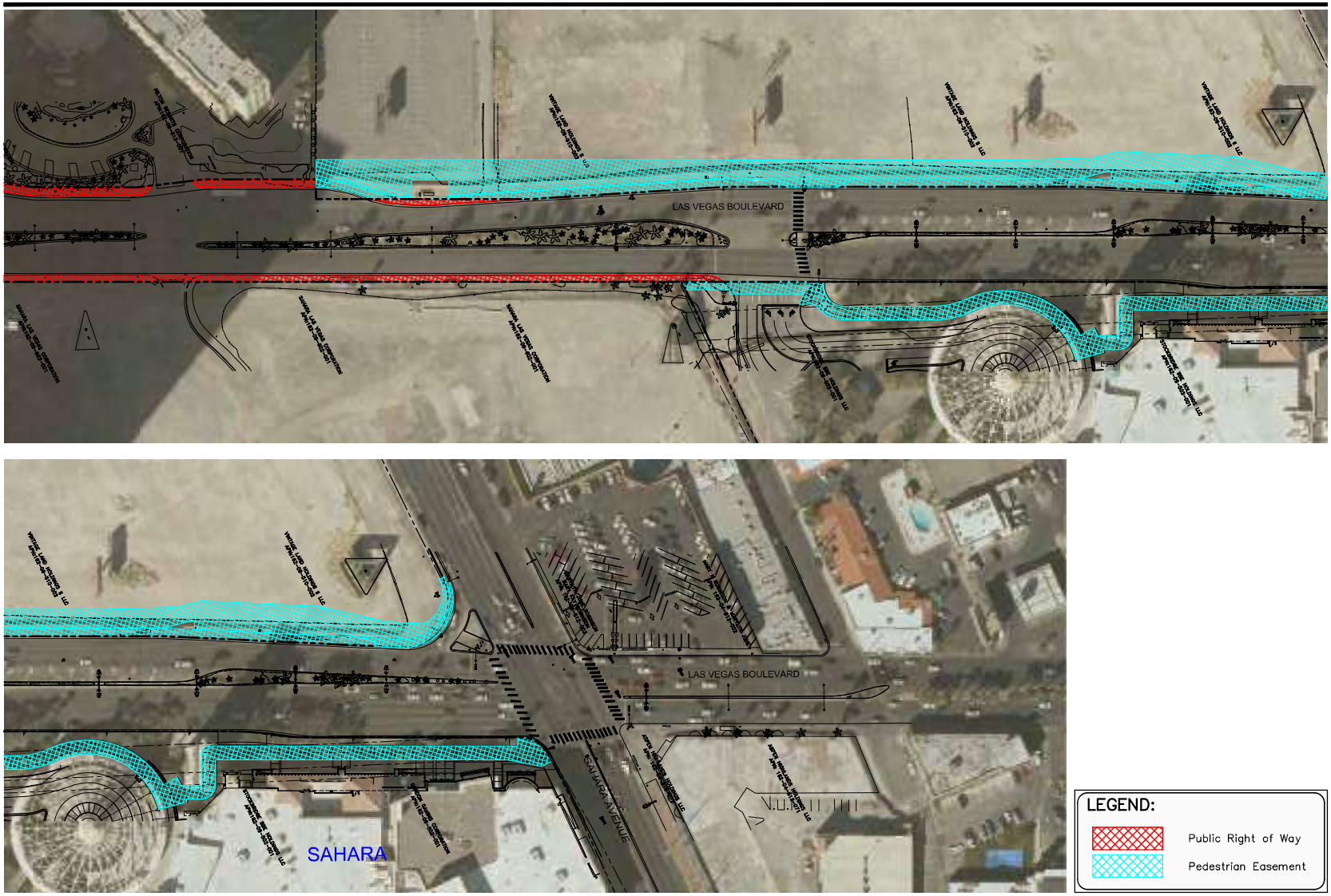
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PEDESTRIAN STUDY - LAS VEGAS BOULEVARD
CONVENTION CENTER DRIVE TO HILTON GRAND VACATION
October 29, 2015

FIGURE 8
SHEET 8 OF 9

GRAPHIC SCALE
40 0 20 40 80
1 inch = 40 feet

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JOB No. 092061019

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NOTE: SURVEY PER ACE REGIONAL RAPID TRANSIT SYSTEM, RESORT CORRIDOR, PRELIMINARY ALTERNATIVE ANALYSIS REPORT DATED JULY 2008. AND UPDATES WERE INCLUDED AS PROVIDED ALONG THE RESORT CORRIDOR. AERIAL IMAGE PER CLARK COUNTY DATED 2013.

PEDESTRIAN STUDY - LAS VEGAS BOULEVARD
HILTON GRAND VACATION TO SAHARA AVENUE
October 29, 2015

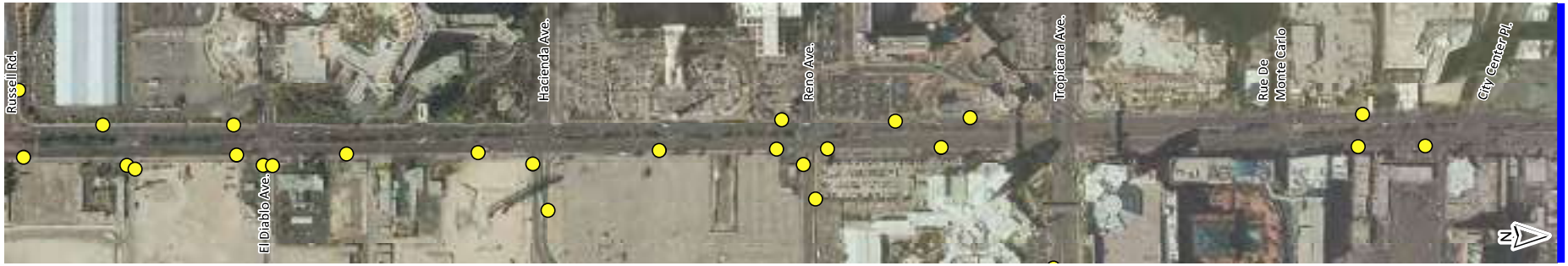
FIGURE 9
SHEET 9 OF 9

GRAPHIC SCALE
40 0 20 40 80
1 inch = 40 feet

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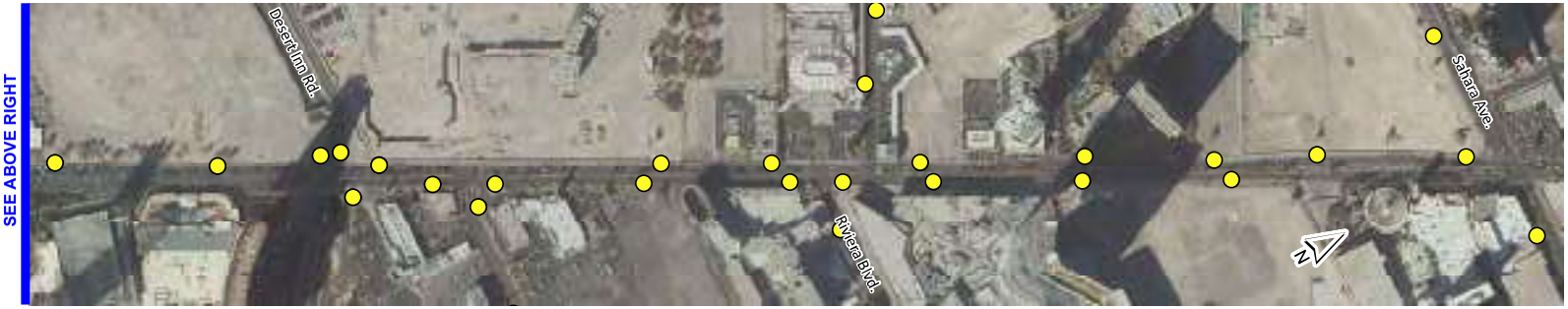
EXHIBIT C
NEWSRACK MEDALLION LOCATIONS

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Legend

Medallion Locations

2015 NEWSRACK MEDALLION LOCATIONS

Exhibit C

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CC 1376

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EXHIBIT D
CLARK COUNTY MUNICIPAL CODE CHAPTER 16.11 – OBSTRUCTIVE USES OF PUBLIC SIDEWALK

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Chapter 16.11 - OBSTRUCTIVE USES OF PUBLIC SIDEWALKS

Sections:

16.11.010 - Purpose.
16.11.020 - General definitions.
16.11.030 - Establishment of the resort district.
16.11.035 - County policy against obstructive uses of public sidewalks.
16.11.038 - Notice in the resort district.
16.11.040 - Prohibition of obstructive uses.
16.11.050 - Designation of "No Obstruction Zones.
16.11.060 - Structures.
16.11.070 - Storing and unloading materials on public sidewalks.
16.11.080 - Removal of "No Obstruction Zone" designations.
16.11.090 - Penalty for violation.
16.11.100 - Private enforcement.
16.11.110 - Severability.

16.11.010 - Purpose.

The board finds that due to vehicle congestion, long delays and increasing costs, it has become increasingly more attractive for residents and visitors to use the public sidewalks on Las Vegas Boulevard South (the Strip) rather than to drive or to ride. Since, traditionally, the major emphasis along the Strip has been on automobile transportation and not on pedestrians, the existing pedestrian environment is inadequate as a transportation system and lacking in many safety features. Moreover, a great number of persons are engaged in uses of the public sidewalks which create undue obstruction, hindrance, blockage, hampering, and interference with pedestrian travel. Large numbers of pedestrians are walking in the streets when the public sidewalks become congested and many pedestrians are crossing against the traffic signal indications. In recognition of the need for improvement of the pedestrian environment and the need for accessible public sidewalks, it is necessary to enact the following regulations.

(Ord. 1617 § 1 (part), 1994)

16.11.020 - General definitions.

(a) "Pedestrian travel" includes nonvehicular travel by persons on foot, as well as vehicular travel by persons with disabilities in wheelchairs or similar devices.

(b) "Level of service" or "LOS" means a series of measures that define the relative degree of convenience for different pedestrian traffic volumes and densities, as determined by

(c) "Crosswalk" means any above or below grade structure or surface portion of a roadway at an intersection or elsewhere distinctly indicated for pedestrian crossing by signs, lines or other markings on the surface.

(d) "Public sidewalk" means that portion of a highway between the curb lines, or the lateral lines of a roadway, and the adjacent property lines, intended for use of pedestrians, and shall also include crosswalks, medians and traffic islands. For the purposes of this chapter, "public sidewalk" shall include private property upon which a limited easement of public access has been granted. However, no provision of this chapter shall be construed to limit any right of the private property owner to restrict or limit the use of that private property.

(e) "Obstructive use" means:

(1) Placing, erecting or maintaining an unpermitted table, chair, booth or other structure upon the public sidewalk, if the placing, erecting, or maintaining of the table, chair, or booth is not protected by the First Amendment or if the placing, erecting, or maintaining of the table, chair, or booth is protected by the First Amendment but is actually obstructive;

(2) Forming a cordon or line of persons across the public sidewalk;

(3) Carrying banners or signs, upon the public sidewalk which actually causes an obstruction on the sidewalk;

(4) Placing or storing equipment, materials, parcels, containers, packages, bundles or other property upon the public sidewalk which actually causes an obstruction on the sidewalk;

(5) Placing, erecting or maintaining an unpermitted fixed sign upon the public sidewalk;

(6) Sleeping upon the public sidewalk;

(7) Obstructing, delaying, hindering, blocking, hampering or interfering with pedestrian passage, including passage to or from private property; or

(8) Any use of the public sidewalk that causes the LOS for the public sidewalk to decline below LOS C, as determined by the methodology used in Chapter 13 of the Highway Capacity Manual and Las Vegas Boulevard South Pedestrian Walkway Study.

(f) "LOS C" means a pedestrian flow on a sidewalk of less than or equal to ten pedestrians per minute per foot as specified and defined in the Highway Capacity Manual, Special Report 209, a copy of which is filed with the office of the county clerk.

(g) "Permitted obstructive use" means:

(1) Any obstructive use of the public sidewalk by public safety equipment, including but not limited to, street signs, traffic signals, fire hydrants, utility poles and street and sidewalk lighting; and

(2) Any obstructive use of the public sidewalk for purposes of construction, maintenance or repair of the public safety equipment, right-of-way (or equipment therein) or adjoining private property, conducted by or pursuant to a valid construction permit issued by the Clark County department of public works, Clark County building department or Nevada Department of Transportation;

(3) Any obstructive use of the public sidewalk resulting from:

(A) An encroachment or structure constructed pursuant to the ordinances, rules, regulations or laws of the United States, the state of Nevada or Clark County, or

(B) The construction, modification, addition or attraction upon abutting private property occurring or in place before May 1, 1994;

(4) Any newsrack licensed pursuant to Clark County Code Chapter 16.08 unless such newsrack causes a degradation of the LOS to LOS C or less as provided in Section 16.11.040(e);

(5) Any conduct "arguably protected" by the National Labor Relations Act until or unless such conduct is determined to be unprotected pursuant to a decision of the National Labor Relations Board;

(h) "Arguably protected" as used in subsection (g)(5) of this section has the same meaning as in San Diego Building Trades Council v. Garmon, 359 U.S. 236, 79 S. Ct. 773 (1959).

(i) "Street performer" is a member of the general public who engages in any performing act or the playing of any musical instrument, singing or vocalizing, with or without musical accompaniment, and whose performance is not an official part of a sponsored event.

(Ord. 3626 § 1, 2008: Ord. 1617 § 1 (part), 1994)
(Ord. No. 3916, § 1, 11-16-2010; Ord. No. 3986, § 9, 10-4-2011)

16.11.030 - Establishment of the resort district.

For purposes of this chapter a resort district is established as Sections 9, 10, 15, 16, 17, 18, 20, 21, 22, 27, 28, and 29 of Township 21 South, Range 61 East, Mount Diablo Meridian, Clark County, Nevada.

(Ord. 3626 § 1, 2008: Ord. 1617 § 1 (part), 1994)

16.11.035 - County policy against obstructive uses of public sidewalks.

It is the policy of Clark County that no obstructive use, other than a permitted obstructive use, shall be permitted upon any public sidewalk of the resort district of the Las Vegas Valley if the obstructive use, if allowed to occur, would:

(a) Cause the LOS for the sidewalk to decline below LOS C; or

(b) Result in a significant threat to or degradation of the safety of pedestrians.

(Ord. 1617 § 1 (part), 1994)

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16.11.038 - Notice in the resort district.

Signs shall be posted at least every quarter of a mile in the resort district and the statement **"RESORT DISTRICT: NO OBSTRUCTIVE USES PERMITTED ON PUBLIC SIDEWALKS AT LOCATIONS DESIGNATED BY A WHITE STRIPE, PURSUANT TO CLARK COUNTY CODE CHAPTER 16.11."**

(Ord. 1617 § 1 (part), 1994)

16.11.040 - Prohibition of obstructive uses.

No obstructive use shall be permitted on public sidewalks in the following areas, which areas shall be designated by the placement of pavement markings on the public sidewalks or signs designating the limits of the no obstruction zones, or plaques, monuments or medallions placed in the public sidewalks:

(a) On or within any crosswalk, including but not limited to all portions of a public sidewalk located in or on a median, traffic island or other structure within, across or over or under a public street or roadway;

(b) (1) In or within one hundred fifty feet of any mid-block crosswalk, as measured from the crosswalk parallel to the sidewalk curb toward the direction of approaching vehicular traffic, and
(2) In or within fifty feet of any mid-block crosswalk as measured from the crosswalk parallel to the sidewalk curb away from the direction of approaching vehicular traffic;

(c) (1)In or within one hundred feet of any crosswalk located at an intersection of streets or highways, as measured parallel to the sidewalk curb in the direction of approaching vehicular traffic from the point of curvature of the curb or the marked edge of the crosswalk, whichever is less, and
(2) In or within fifty feet of a crosswalk located at an intersection of streets or highways, as measured parallel to the sidewalk curb away from the direction of approaching vehicular traffic from the point of curvature of the curb or the marked edge of the crosswalk, whichever is less;

(d) In or within fifty feet of any driveway providing ingress into or egress from any private or non-public property, as measured parallel to the sidewalk curb outward from the point of the curb cut;

(e) On or within any section of the public sidewalk which has been determined to have an average LOS of C or below, during the hours at which LOS declines below LOS C, as determined by a traffic study conducted by a registered professional engineer or the Clark County department of public works according to the methodology set forth in the Las Vegas Boulevard South Pedestrian Walkway Study.

(Ord. 1617 § 1 (part), 1994)

16.11.050 - Designation of "No Obstruction Zones.

" The board of county commissioners shall adopt a map, to be prepared by the Clark County department of public works, of the H-I zoning district which clearly sets forth those portions of the public sidewalks where obstructive uses, other than permitted obstructive uses, shall be prohibited based upon the factors set forth in Section 16.11.040, above.

(a) These areas shall be designated "NO OBSTRUCTION ZONES" and shall be clearly marked by the county by the placement of pavement markings on the public sidewalks or signs designating the limits of the no obstruction zones, or plaques, monuments or medallions placed in the public sidewalks, by declaring same.

(b) Pavement markings on the public sidewalk or signs designating the limits of the "No Obstruction" zone, or plaques, monuments or medallions placed in the public sidewalk marking areas deemed to be no obstruction zones on the basis of LOS, as set forth in Section 16.11.020, shall also specify the hours during which the area is a no obstruction zone.

(c) No person shall be in violation of this chapter for obstructive use of a no obstruction zone if the no obstruction zone is not designated.

(Ord. 1617 § 1 (part), 1994)

16.11.060 - Structures.

No person shall erect, place or maintain any building, booth, structure, table, chair or other object in whole or in part, upon any public sidewalk unless such use is a permitted obstructive use as set forth in this chapter.

(Ord. 1617 § 1 (part), 1994)

16.11.070 - Storing and unloading materials on public sidewalks.

(a) No equipment, materials, parcels, containers, packages, bundles or other property may be stored, placed or abandoned in or on the public sidewalk. This provision shall not apply to materials or property held or stored in a carry bag or pack which is actually carried by a pedestrian or items such as a musical instrument case or a backpack which is temporarily placed next to a street performer for that street performer's use unless said musical instrument case or backpack actually obstructs the sidewalk in violation of this chapter;

(b) Except in designated loading zones, vehicles may not stop in traffic lanes to load or unload equipment, materials, parcels, containers, packages, bundles or other property unto the public sidewalk.

(Ord. 1617 § 1 (part), 1994)
(Ord. No. 3916, § 1, 11-16-2010)

16.11.080 - Removal of "No Obstruction Zone" designations.

No unauthorized person shall willfully remove, alter, cover or otherwise harm a pavement marking, sign, plaque, monument or medallion marking a no obstruction zone.

(Ord. 1617 § 1 (part), 1994)

16.11.090 - Penalty for violation.

Any person who violates any of the provisions of this chapter is guilty of a misdemeanor and upon conviction shall be punished by imprisonment in the county jail for a term not to exceed six months or by a fine not to exceed one thousand dollars, or by both such fine and imprisonment.

(Ord. 1617 § 1 (part), 1994)

16.11.100 - Private enforcement.

The owner of private property abutting the public sidewalk may use any remedy available at law or equity to enforce the provisions of this chapter.

(Ord. 1617 § 1 (part), 1994)

16.11.110 - Severability.

If any section of this chapter or portion thereof is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such holding shall not invalidate the remaining parts of this chapter.

(Ord. 1617 § 1 (part), 1994)

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EXHIBIT E
PEDESTRIAN VOLUME RAW DATA
SEE CD AT BACK OF REPORT

Case 2:24-cv-00334-JAD-NJK Document 109-1 Filed 12/18/25 Page 175 of 178

EXHIBIT F
TRANSPORTATION ELEMENT OF CLARK COUNTY MASTER PLAN – PEDESTRIAN CROSSING MAP

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Transportation Element

Map 13
Public Pedestrian
Grade Separations
and Transit Stations

0 750 1,500 3,000 4,500 6,000
SCALE IN FEET

Map Created On: February 23, 2009

This information is for display purposes only. No liability is assumed as to the accuracy of the data delineated hereon.

Existing Public Pedestrian Grade Separations

Planned Public Pedestrian Grade Separations

Future Transit Stations - General Locations

Comprehensive Planning

Case 2:24-cv-00334-JAD-NJK Document 109-1 Filed 12/18/25 Page 177 of 178



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Las Vegas, Nevada 89119

702-862-3600

Exhibit 10

Pedestrian Study, 2016 Update of Non-Permanent Obstructions

PEDESTRIAN STUDY

LAS VEGAS BOULEVARD

TROPICANA AVENUE TO SPRING MOUNTAIN ROAD

2016 UPDATE OF

NON-PERMANENT OBSTRUCTIONS

Prepared for:

CLARK COUNTY NEVADA

500 S. Grand Central Parkway
Las Vegas, NV 89115-4000



Prepared by:

Kimley»Horn

6671 Las Vegas Boulevard South, Suite 320, Las Vegas, NV 89119
Tel 702-862-3600 www.kimley-horn.com

November 2016

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1. INTRODUCTION

In 2012, a comprehensive study of Las Vegas Boulevard was conducted by Kimley-Horn entitled "Clark County Pedestrian Study, Las Vegas Boulevard: Russell Road to Sahara Avenue" for the Clark County (County) Department of Public Works. Since the completion of the 2012 study, the County has undertaken measures and completed important projects to improve and enhance the walkway conditions within the Resort Corridor and 17 identified walkway segments with poor Level of Service (LOS).

A study update was conducted in 2015 to compare 2012 walkway LOS with the improved walkways in 2015. For the 2015 Update, pedestrian volume data was collected on similar days to the 2012 study: over Memorial Day weekend (May 23, 2015), one of the busiest Saturdays on Las Vegas Boulevard, and on a typical Summer Saturday (June 20, 2015) to capture and evaluate updated peak and typical pedestrian conditions. As with the 2012 study, non-permanent obstructions (NPO's) were located, quantified, and classified to identify possible impediments to pedestrian movements along Las Vegas Boulevard in comparison with previous observations.

1.1. Study Purpose

In 2016, additional funding was provided to increase the presence of the Las Vegas Metropolitan Police Department along Las Vegas Boulevard. In order to observe the effectiveness of the increased enforcement that began on May 28, 2016, the number of NPO's was documented to prepare an update to the NPO Analysis portion of the Las Vegas Boulevard Pedestrian Study. The following sections provide a summary of the 2016 data and the subsequent analysis. An example of Metro presence observed can be seen in **Picture 1** through **Picture 3**.



Picture 1 – Metro Presence on Strip – July 2, 2016.



Picture 2 – Metro Presence on Strip – July 16, 2016.



Picture 3 – Metro Presence on Strip – October 15, 2016.

2. DATA COLLECTION

The Las Vegas Boulevard study corridor is generally located east of Interstate 15 (I-15), south of Sahara Avenue, and north of Russell Road in Clark County, Nevada. Data collection was focused on the previously identified "inner corridor" of the "Strip" from Tropicana Avenue to Spring Mountain Road. The quantity, location, and classification of non-permanent obstructions (NPO's) as observed during the 2016 data collection periods was summarized and analyzed for comparison with previous years.

As collected in the 2012 Pedestrian Study and 2015 Pedestrian Study update, NPO's were observed by field data collection agents during three (3) peak data collection periods (1 PM – 4 PM, 5 PM – 8 PM and 9 PM – 12 AM).

NPO's are defined in the 2012 Study and 2015 Update as individuals who could obstruct the pedestrian walkway while handbilling, performing, soliciting, or selling. Under County Ordinance 16.11, an "obstructive use" means "obstructing, delaying, hindering, blocking, hampering or interfering with pedestrian passage, including passage to or from private property" (Obstructive Uses of Public Sidewalks - 16.11.020 – General Definitions, Clark County). It is important to recognize that under the ordinance "street performing" is a "permitted obstructive use". For reference, the complete ordinance as recently updated and approved by the Clark County Commission November 1, 2016, is provided in **Appendix A**. On the Saturdays of July 2nd, July 16th, and October 15th, data collection agents documented the quantity, classification, and location of NPO's in the pedestrian walkway during each of three (3) data collection periods. To maintain consistency with the 2012 and 2015 data collection procedures and analyses, NPO's continued to be classified into four categories with the following definitions:

- Handbillers – any person within the pedestrian walkway attempting to give away literature of any kind. No financial transaction occurs and the handbiller does not expect anything in return for the literature that is given (see **Picture 4**).
- Performers – any person within the pedestrian walkway attempting to entertain with the expectation of receiving a tip. Performers may include anyone dressed in a costume expecting tips for photographs, or any display of talent for a tip (see **Picture 5**).
- Solicitors – any person within the pedestrian walkway soliciting donations. The solicitor provides nothing to those who donate (see **Picture 6**).
- Vendors – any person within the pedestrian walkway with the intent of selling some item. There is a financial transaction that takes place and some item is exchanged for money (see **Picture 7**).

The NPO field data, as observed by each agent for the study, was compiled in a spreadsheet format. NPO's were summarized similar to the previous studies by observation period, side of street, and by location within the corridor for the following categories:

- Within 50 feet of an intersection, driveway, or crosswalk
- On pedestrian bridges
- Within 15 feet of a pedestrian bridge landing
- Other



Picture 4 – Non-Permanent Obstruction (Handbiller) – Paris.



Picture 5 – Non-Permanent Obstructions (Performers) with crowd – Mirage.



Picture 6 – Non-Permanent Obstruction (Solicitor).



Picture 7 – Non-Permanent Obstruction (Vendor) – Bellagio.

3. DATA EVALUATION

The quantity, location, and classification of NPO's as observed during the Saturday of Fourth of July weekend (July 2, 2016), typical Summer Saturday (July 16, 2016), and typical Fall Saturday (October 15, 2016) was summarized and analyzed to compare with the findings of the 2012 Pedestrian Study and 2015 Pedestrian Update.

It is important to note that during the data collection process the field agents were instructed to not make judgement if the observed NPO was an obstruction to pedestrian flow. All documented NPO's were considered as possible obstructions. The following pictures (**Picture 8** through **Picture 11**) provide examples of the NPO's observed for this study.



Picture 8 – Non-Permanent Obstructions (Performer and Handbiller) – July 2, 2016.



Picture 9 – Non-Permanent Obstructions (Performers with crowd) – July 16, 2016.



Picture 10 – Non-Permanent Obstructions (Solicitor with pet) – October 15, 2016.



Picture 11 – Non-Permanent Obstructions (Illegal Gambling) – July 2, 2016.

Although pedestrian volume data was not collected in 2016, data collection agents generally observed comparable volumes on the holiday weekend Saturday to that of previous years (see **Picture 12** through **Picture 14**).



Picture 12 – Pedestrian Volumes – May 26, 2012.



Picture 13 – Pedestrian Volumes – May 23, 2015.



Picture 14 – Pedestrian Volumes – July 2, 2016.

Appendix B displays graphs that provide detailed comparisons among the observed number of NPO's per walkway segment and pedestrian bridge. The yearly comparisons include each observation period (1 PM – 4 PM, 5 PM – 8 PM, and 9 PM – 12 AM) for the holiday and typical Saturday in 2012 and 2015 as well as the three (3) days observed in 2016. A summary of the peak period volumes can be seen in **Figure 1** and **Figure 2**.

In addition to the pedestrian bridges along (parallel to) Las Vegas Boulevard, NPO's were also quantified on pedestrian bridges crossing (perpendicular to) Las Vegas Boulevard. It should be noted that the perpendicular bridges were not analyzed in the original 2012 study and therefore were not included in the values in the summary tables (**Table 1** and **Table 2**) to provide a direct data comparison.

Table 1 provides a comparison count summary for the average number of NPO's observed along Las Vegas Boulevard from Tropicana Avenue to Spring Mountain Road during the holiday Saturday data collection effort in 2016 versus 2012 and 2015. The highest number of NPO's observed for a holiday Saturday was 248 between 9PM and 12AM on Saturday, July 2, 2016. This is approximately 10.8% less than the maximum number of 278 NPO's observed on the holiday weekend in 2015. **Table 2** provides a similar summary for the data collected on non-holiday Saturdays. The highest number of NPO's observed was 264 (for a Summer Saturday, July 16, 2016). This is 4.8% more than the maximum of 252 previously observed for the typical Saturday in 2012. The peak time period for each year is displayed in bold.

Table 1 – Count Summary Comparison – Holiday Weekend.

Count Summary*			
Time Period	**2012**	**2015**	**2016**
1PM-4PM	169	268	143
5PM-8PM	**259**	**278**	168
9PM-12AM	225	258	**248**

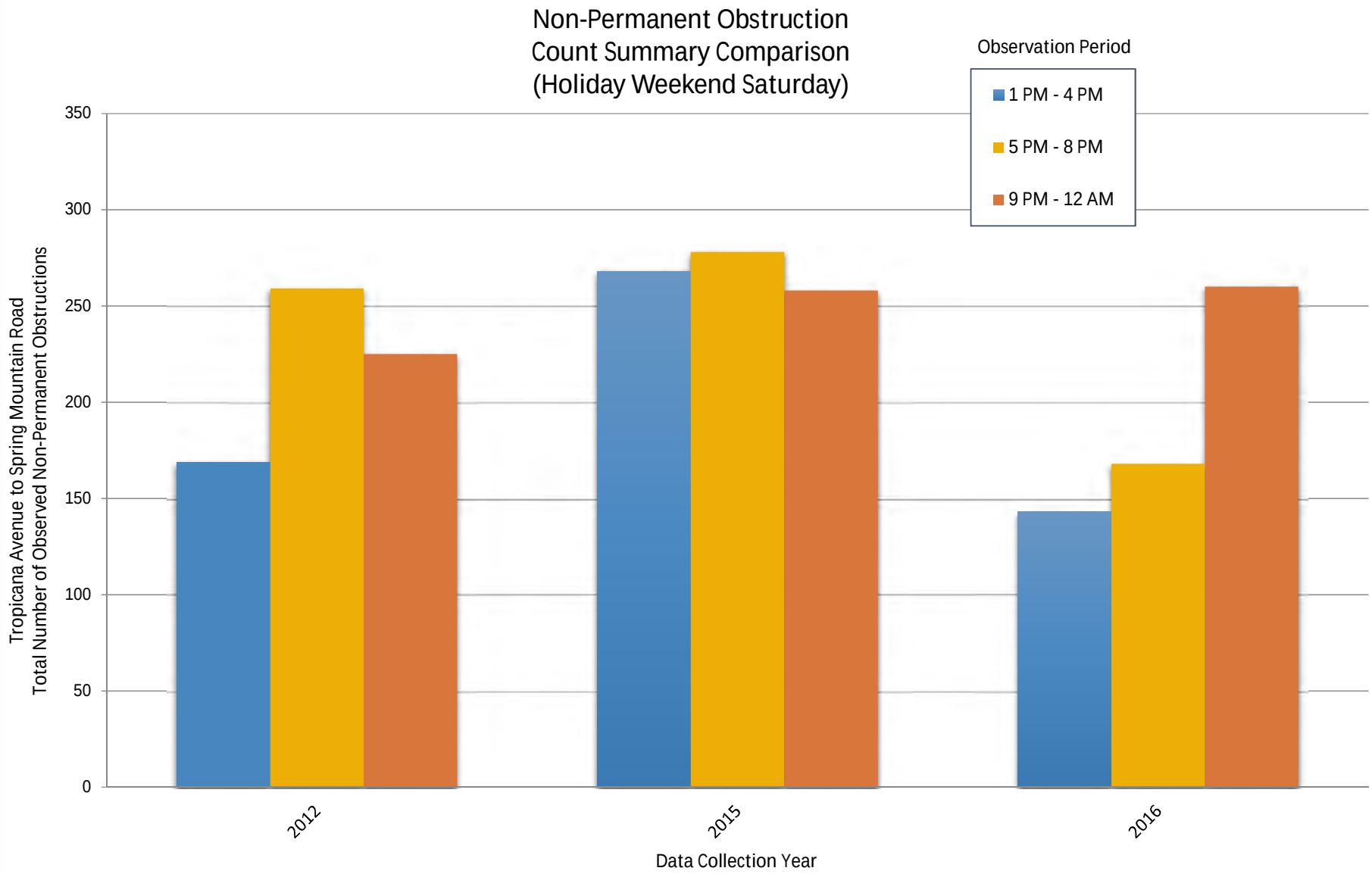
**Perpendicular bridges were not analyzed in the original 2012 study and therefore were not included in the values above to provide a direct comparison.*

Table 2 – Count Summary Comparison – Typical Weekend.

Count Summary*				
Time Period	**2012**	**2015**	**2016**	
			Summer	**Fall**
1PM-4PM	139	123	145	173
5PM-8PM	225	159	196	182
9PM-12AM	**252**	**226**	**264**	**201**

**Perpendicular bridges were not analyzed in the original 2012 study and therefore were not included in the values above to provide a direct comparison.*

Although bridges perpendicular to Las Vegas Boulevard are not analyzed in this section, more information about the NPO's on these bridges as well as bridges parallel to the "Strip" can be found in **Section 3.2**.



Note: For comparison purposes, NPOs on the crossing or perpendicular bridges to Las Vegas Blvd. are not included in the table totals as this data was not collected in 2012.

Figure 1

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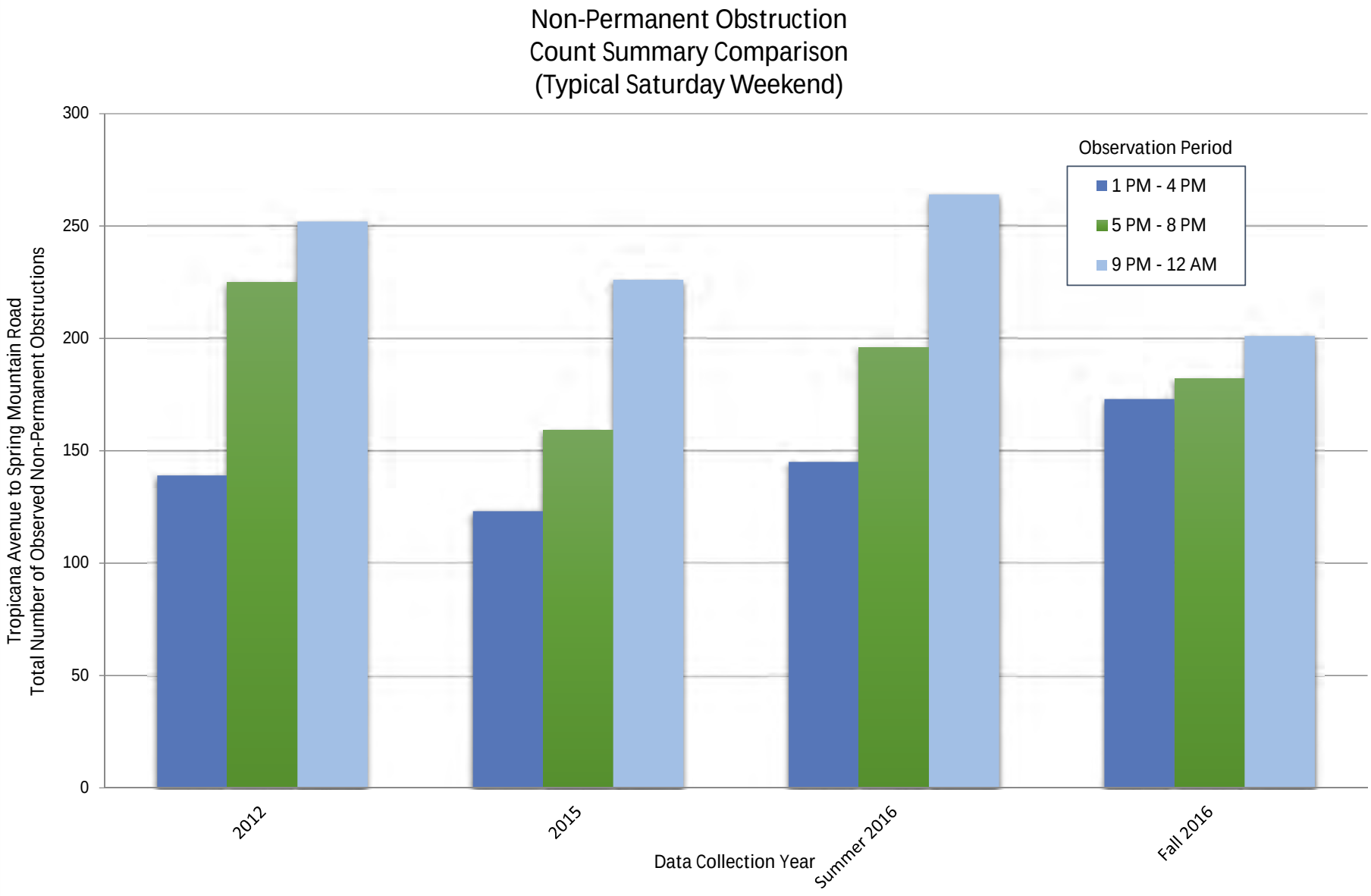


Figure 2

Note: For comparison purposes, NPOs on the bridges crossing (perpendicular to) Las Vegas Blvd. are not included in the table totals as this data was not collected in 2012.

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3.1. Location of Observed Non-Permanent Obstructions

The field notes recorded by the data collection agents for the highest observed time periods for each Saturday count were used to determine the location of the observed NPO's. **Table 3** through **Table 5** summarize the distribution of the NPO types within the study corridor on the holiday and typical Saturdays for 2016. It can be seen in the following tables that 75 (29%) of the observed NPO's on July 2, 2016, 46 (16%) of the NPO's on July 16, 2016, and 65 (30%) of the NPO's on October 15, 2016 were located within 50 feet of a signalized intersection, access drive or mid-block crosswalk where obstructive uses are not permitted. A comparison between the distributions for the different years is shown in **Table 6** and **Figure 3**. **Table 6** compares the summarized peak daily period for each count day by each NPO category.

Table 3 – Distribution of Non-Permanent Obstructions – July 2, 2016 (9PM – 12 AM).

Non-Permanent Obstruction Category	Within 50' of an intersection, driveway, or crosswalk	On pedestrian bridges*	Within 15' of a pedestrian bridge landing	Other	Total
Handbiller	36 (14%)	0 (0%)	4 (2%)	28 (11%)	68 (26%)
Performer	34 (13%)	10 (4%)	3 (1%)	58 (22%)	105 (40%)
Solicitor	4 (2%)	29 (11%)	6 (2%)	22 (8%)	61 (23%)
Vendor	1 (0%)	5 (2%)	0 (0%)	20 (8%)	26 (10%)
Total	**75 (29%)**	**44 (17%)**	**13 (5%)**	**128 (49%)**	**260 (100%)**

.

Table 4 – Distribution of Non-Permanent Obstructions – July 16, 2016 (9PM – 12 AM).

Non-Permanent Obstruction Category	Within 50' of an intersection, driveway, or crosswalk	On pedestrian bridges*	Within 15' of a pedestrian bridge landing	Other	Total
Handbiller	29 (10%)	7 (2%)	2 (1%)	44 (15%)	82 (28%)
Performer	15 (5%)	20 (7%)	6 (2%)	90 (31%)	131 (45%)
Solicitor	2 (1%)	29 (10%)	2 (1%)	21 (7%)	54 (18%)
Vendor	0 (0%)	2 (1%)	0 (0%)	24 (8%)	26 (9%)
Total	**46 (16%)**	**58 (20%)**	**10 (3%)**	**179 (61%)**	**293 (100%)**

Table 5 – Distribution of Non-Permanent Obstructions – October 15, 2016 (9PM – 12 AM).

Non-Permanent Obstruction Category	Within 50' of an intersection, driveway, or crosswalk	On pedestrian bridges	Within 15' of a pedestrian bridge landing	Other	Total
Handbiller	43 (20%)	6 (3%)	1 (0%)	33 (15%)	83 (38%)
Performer	21 (10%)	14 (6%)	4 (2%)	41 (19%)	80 (37%)
Solicitor	0 (0%)	21 (10%)	3 (1%)	6 (3%)	30 (14%)
Vendor	0 (0%)	3 (1%)	2 (1%)	19 (9%)	25 (11%)
Total	**65 (30%)**	**44 (20%)**	**10 (5%)**	**99 (45%)**	**218 (100%)**

Table 6 – Distribution Comparison – Peak Data Collection Period

Non-Permanent Obstruction Category	2012*		2015		2016		
	Holiday 5 PM – 8 PM	Typical 9 PM – 12 AM	Holiday 5 PM – 8 PM	Typical 9 PM – 12 AM	Holiday 9 PM – 12 AM	Summer 9 PM – 12 AM	Fall 9 PM – 12 AM
Handbiller	153 (59%)	145 (58%)	118 (41%)	80 (33%)	68 (26%)	82 (28%)	83 (38%)
Performer	75 (29%)	70 (28%)	93 (32%)	90 (37%)	105 (40%)	131 (45%)	80 (37%)
Solicitor	16 (6%)	17 (7%)	47 (16%)	34 (14%)	61 (23%)	54 (18%)	30 (14%)
Vendor	15 (6%)	21 (8%)	31 (11%)	40 (16%)	26 (10%)	26 (9%)	11 (25%)
Total	**259 (100%)**	**252 (100%)**	**289 (100%)**	**244 (100%)**	**260 (100%)**	**293 (100%)**	**218 (100%)**

**Perpendicular bridges were not analyzed in the original 2012 study and therefore are not included in the 2012 totals.*



Picture 15 – Non-Permanent Obstructions – Bellagio.

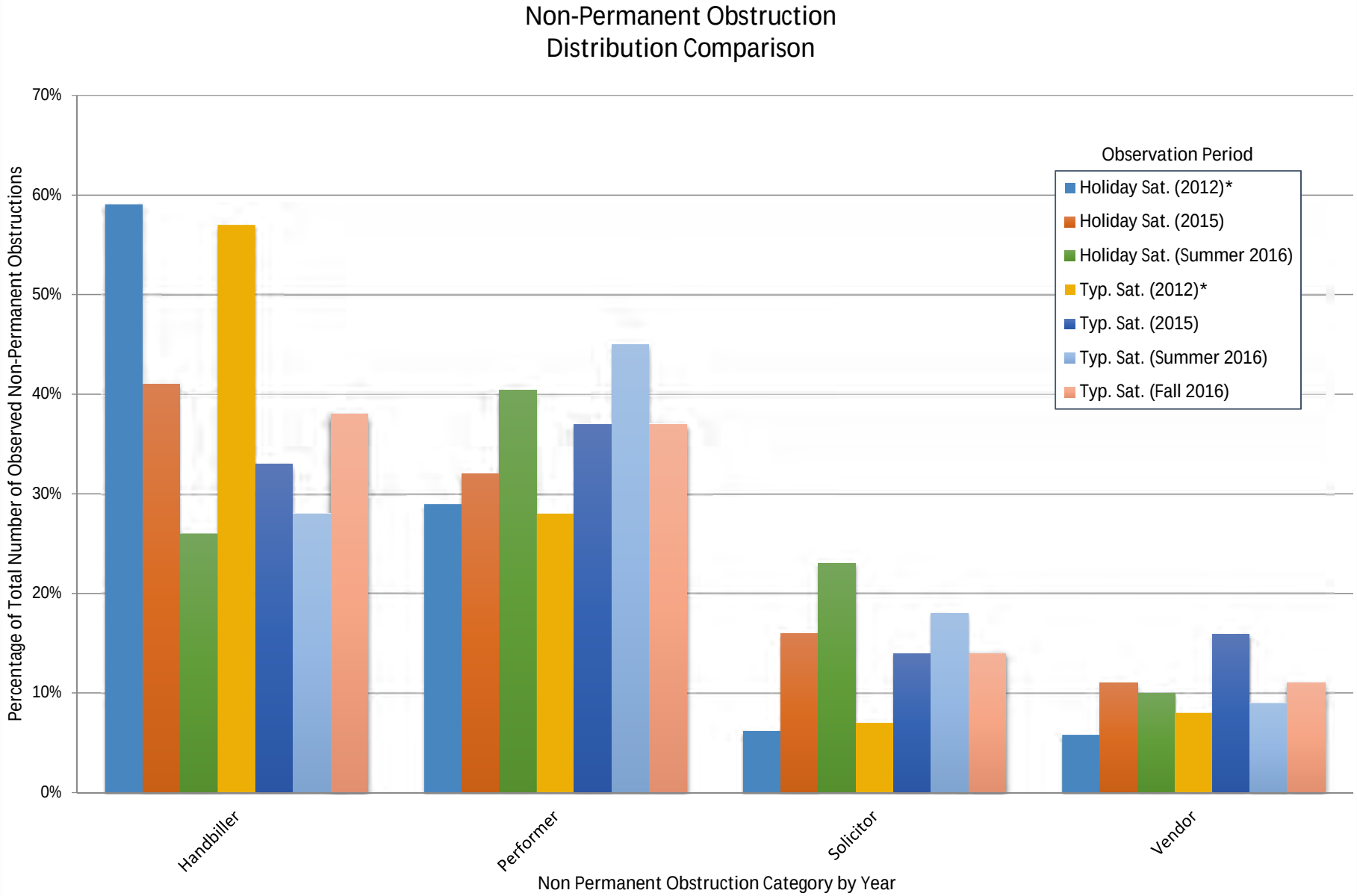


Figure 3

*Note: NPOs on the crossing (perpendicular bridges to Las Vegas Blvd.) are not included in the 2012 distributions as this data was not collected in 2012.

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3.2. Non-Permanent Obstructions on Pedestrian Bridges

Beginning with the 2015 Update, NPO's were quantified on pedestrian bridges crossing Las Vegas Boulevard as well as those parallel to the "Strip". **Table 7** through **Table 10** below display the location of NPO's on pedestrian bridges parallel and perpendicular to (or crossing) Las Vegas Boulevard for both the holiday and typical Saturdays in 2015 and 2016. **Table 11** compares the summarized distribution for pedestrian bridges for each peak daily collection period.

Table 7 – NPO's on Parallel Pedestrian Bridges to LV Blvd. – Holiday Saturday.

Pedestrian Bridge	1 PM - 4 PM			5 PM - 8 PM			9 PM - 12 PM		
	'12	'15	'16	'12	'15	'16	'12	'15	'16
Tropicana West	3	6	7	4	5	2	4	4	2
Tropicana East	2	3	0	1	0	1	1	4	9
City Center	0	0	1	0	0	0	0	0	0
Harmon West	3	0	5	3	5	5	2	5	4
Harmon East	2	7	2	1	5	0	1	10	4
Flamingo West	4	3	0	4	4	0	3	4	1
Flamingo East	5	0	0	3	3	2	1	2	1
Spring Mountain West	2	2	4	1	2	4	1	1	7
Spring Mountain East	1	2	1	3	4	1	2	2	4

Table 8 – NPO's on Parallel Pedestrian Bridges to LV Blvd. – Typical Saturday.

Pedestrian Bridge	1 PM - 4 PM				5 PM - 8 PM				9 PM - 12 PM			
	'12	'15	16	Fall '16	'12	'15	'16	Fall '16	'12	'15	'16	Fall '16
Tropicana West	3	8	4	4	2	2	4	0	2	5	5	4
Tropicana East	1	1	2	2	1	2	5	1	3	0	5	3
City Center	0	0	0	0	0	0	0	0	0	0	0	0
Harmon West	2	0	2	7	2	2	7	5	3	4	7	4
Harmon East	3	4	2	3	2	0	2	3	3	3	2	3
Flamingo West	3	3	2	3	3	4	2	4	3	7	2	5
Flamingo East	5	2	1	1	3	3	4	3	3	3	4	3
Spring Mountain West	3	2	1	2	3	5	2	2	3	3	2	1
Spring Mountain East	2	2	5	4	4	1	2	3	5	2	2	4

Table 9 – NPO's on Perpendicular Pedestrian Bridges to LV Blvd – Holiday Saturday.

Pedestrian Bridge	1 PM – 4 PM		5 PM – 8 PM		9 PM – 12 AM	
	'15	'16	'15	'16	'15	'16
Tropicana South*	1	0	0	0	2	0
Tropicana North	3	8	4	9	3	3
Harmon North	7	4	2	4	9	3
Flamingo South	3	1	1	1	1	0
Flamingo North	4	0	0	1	0	4
Sirens Cove South	1	2	1	2	1	1
Spring Mountain North	0	1	1	1	3	1

**Under construction in 2016*

Table 10 – NPO's on Perpendicular Pedestrian Bridges to LV Blvd – Typical Saturday.

Pedestrian Bridge	1 PM – 4 PM			5 PM – 8 PM			9 PM – 12 AM		
	'15	'16	Fall '16	'15	'16	Fall '16	'15	'16	Fall '16
Tropicana South*	1	0	0	2	0	0	1	0	0
Tropicana North	4	9	2	7	6	2	4	11	4
Harmon North	2	9	5	3	5	1	7	8	4
Flamingo South	1	1	4	0	1	2	2	2	2
Flamingo North	0	1	4	0	1	3	0	3	4
Sirens Cove South	0	1	0	0	1	4	1	2	1
Spring Mountain North	0	2	2	0	1	3	3	3	2

**Under construction in 2016*

Table 11 – Pedestrian Bridge Distribution Comparison – Peak Data Collection Period

Non-Permanent Obstruction Category	2012*		2015		2016		Fall 2016
	Holiday 5 PM – 8 PM	Typical 9 PM – 12 AM	Holiday 5 PM – 8 PM	Typical 9 PM – 12 AM	Holiday 9 PM – 12 AM	Typical 9 PM – 12 AM	Typical 9 PM – 12 AM
Handbiller	4 (17%)	2 (10%)	5 (17%)	3 (11%)	0 (0%)	7 (12%)	6 (14%)
Performer	9 (38%)	5 (25%)	4 (14%)	3 (11%)	10 (23%)	20 (34%)	14 (32%)
Solicitor	7 (29%)	7 (35%)	16 (55%)	11 (41%)	29 (66%)	29 (50%)	21 (48%)
Vendor	4 (17%)	6 (30%)	4 (14%)	10 (37%)	5 (11%)	2 (3%)	3 (7%)
Total	**24 (100%)**	**20 (100%)**	**29 (100%)**	**27 (100%)**	**44 (100%)**	**58 (100%)**	**44 (100%)**

**2012 values do not include non-permanent obstruction numbers present on bridges perpendicular to Las Vegas Boulevard.*

4. METRO VIDEO DATA

Through close coordination with the Las Vegas Metropolitan Police Department (Metro), the Real Time Crime Center (RTCC), and Clark County Public Works, data from three surveillance cameras along Las Vegas Boulevard was provided for use in this update.

Metro camera data from three (3) locations as recorded on July 2, 2016 was determined to be suitable for this study. The RTCC provided comparable video footage for July 16, 2016. An example of the provided video data can be seen below in **Picture 16.**



Picture 16 – Metro Video View – Tropicana North Pedestrian Bridge – July 2, 2016.

Observations made from viewing the Metro-provided videos are summarized in the following section. The video data was used in this study to obtain volumes of non-permanent obstructions at each of the three sites and the duration of their stay in one location. Although the video data was used as a verification of the field counts conducted on July 2, 2016 and July 16, 2016, it is not all-encompassing as there are areas in which the camera view does not capture. NPO's also move frequently in out and of camera view. Therefore, field counts showed variations from observations made from the video data.

The number of non-permanent obstructions observed in total during the duration of each data collection period is documented in the following section for each of the three (3) locations and compared to field-observed values for Locations 1 and 3. Location 2 is not included in this breakdown as it was analyzed as part of a larger segment during the field data collection.

Please note the totals in the following tables do not represent the sum of individual NPO's seen throughout the review of the surveillance video. However, they do represent the total number of individual NPO's observed in each separate data collection period. Therefore, NPO's observed across more than one data collection period are counted in the totals more than once.

4.1. Location 1 – Spring Mountain West Pedestrian Bridge

The Spring Mountain West Pedestrian Bridge was found to have a total of seventeen (17) individuals (see view area, **Picture 17**) during the holiday weekend Saturday. The NPO's spend an average of 130 minutes at this location. Three (3) individual solicitors were seen across all three data collection periods on July 2nd. Additionally, a cleaning crew was seen on the bridge for approximately 15 minutes during the 5:00 PM – 8:00 PM data collection period. During the typical weekend Saturday, eight (8) individuals were observed averaging 118 minutes on the bridge. A summary of the data can be seen below in **Table 12**.

Table 12 – Metro Video Observations – Location 1 – Spring Mtn. W. Pedestrian Bridge

Non-Permanent Obstruction Category	Holiday Weekend Saturday (July 2, 2016)			Typical Weekend Saturday (July 16, 2016)		
	1 PM – 4 PM	5 PM – 8 PM	9 PM – 12 AM	1 PM – 4 PM	5 PM – 8 PM	9 PM – 12 AM
Handbiller	0	0	1	0	0	1
Performer	0	0	1	0	0	0
Solicitor	6	4	9	1	3	6
Vendor	0	2	1	0	0	0
Total	**6**	**6**	**11**	**1**	**3**	**7**



Picture 17 – Location 1 – Spring Mountain West Pedestrian Bridge.

Table 13 provides a summary of the NPO's observed by field data collection agents on July 2 and July 16, 2016. When comparing the number of NPO's observed on the Metro surveillance cameras to the numbers observed in the field, it can be seen that they differ. For instance, although six (6) solicitors were seen in total from 1 PM – 4 PM on the video footage, only an average of three (3) were seen during field data collection. However, the values are generally comparable. Solicitors were the overwhelming majority of the NPO presence on this bridge throughout the time periods.

Table 13 – Field Walk Observations – Location 1 – Spring Mtn. W. Pedestrian Bridge

Non-Permanent Obstruction Category	Holiday Weekend Saturday (July 2, 2016)			Typical Weekend Saturday (July 16, 2016)		
	1 PM – 4 PM	5 PM – 8 PM	9 PM – 12 AM	1 PM – 4 PM	5 PM – 8 PM	9 PM – 12 AM
Handbiller	0	0	0	0	0	0
Performer	0	0	0	1	1	1
Solicitor	3	3	6	4	1	1
Vendor	1	1	1	0	1	0
Total	**6**	**6**	**11**	**5**	**3**	**2**



Picture 18 – Spring Mountain West Pedestrian Bridge – Field Observation.

4.2. Location 2 – SW Corner of Flamingo Road and Las Vegas Boulevard Intersection

As shown in **Picture 19** (Location 2 on the Southwest corner of Flamingo Road and Las Vegas Boulevard at Bellagio) a total of fourteen (14) individual NPO's were observed on the Metro video during the data collection periods for the holiday weekend Saturday. These NPO's average a duration of 98 minutes at this location. Five (5) individual NPO's were seen across multiple data collection periods. During the typical weekend Saturday, 20 individuals were observed averaging 141 minutes at the location. A summary of the video data can be seen below in **Table 14**. A comparison of video observations to the field walk through data collection was not practical at this location due to the data collection methods. It was analyzed as part of a larger segment during the field data collection.

Table 14 – Metro Video Observations – Location 2 – Flamingo Rd. & LV Blvd. SW Corner

Non-Permanent Obstruction Category	Holiday Weekend Saturday (July 2, 2016)			Typical Weekend Saturday (July 16, 2016)		
	1 PM – 4 PM	5 PM – 8 PM	9 PM – 12 AM	1 PM – 4 PM	5 PM – 8 PM	9 PM – 12 AM
Handbiller	0	0	0	0	0	2
Performer	0	2	5	2	13	13
Solicitor	3	2	0	1	0	0
Vendor	0	0	5	0	0	2
Total	**3**	**4**	**10**	**3**	**13**	**17**



Picture 19 – Location 2 – Southwest Corner of Flamingo Rd. and LV Blvd.

4.3. Location 3 – Tropicana Avenue North Pedestrian Bridge

The Tropicana North Pedestrian Bridge (Location 3, **Picture 20)** documented a total of thirty-three (33) individual NPO's from the recorded Metro video during the data collection periods on the holiday weekend Saturday. These NPO's average a duration of 82 minutes at this location. Six (6) individual NPO's were seen across multiple data collection periods. Three (3) solicitors were observed with pets and two (2) solicitors were observed being removed by Metro during the data collection periods. During the typical weekend Saturday, 21 individuals were observed averaging 141 minutes on the bridge. It should be noted that during the 5 PM – 8 PM time period, the Metro camera view changed and five (5) solicitors became visible. Due to the unknown length of their stay, they were not included in the duration calculations. A summary of the video data can be seen below in **Table 15.** An arrest made on this bridge on July 2, 2016 can be seen in **Picture 21.**

Table 15 – Metro Video Observations – Location 3 – Tropicana N. Pedestrian Bridge

Non-Permanent Obstruction Category	Holiday Weekend Saturday (July 2, 2016)			Typical Weekend Saturday (July 16, 2016)		
	1 PM – 4 PM	5 PM – 8 PM	9 PM – 12 AM	1 PM – 4 PM	5 PM – 8 PM	9 PM – 12 AM
Handbiller	6	1	0	4	0	0
Performer	0	2	0	0	0	0
Solicitor	8	16	4	7	13	3
Vendor	1	1	0	0	0	0
Total	**15**	**20**	**4**	**11**	**13**	**3**



Picture 20 – Location 3 – Tropicana North Pedestrian Bridge.

Summarized in **Table 16** are the number of NPO's observed during the field counting observations. When comparing the number of NPO's observed on the Metro surveillance cameras to the numbers observed in the field, it can be seen that they differ due to the fluctuation and movement of NPO's within the Resort Corridor. Although the number of NPO's differ slightly, they are considered comparable.

Table 16 – Field Walk Observations – Location 3 – Tropicana N. Pedestrian Bridge

Non-Permanent Obstruction Category	Holiday Weekend Saturday (July 2, 2016)			Typical Weekend Saturday (July 16, 2016)		
	1 PM – 4 PM	5 PM – 8 PM	9 PM – 12 AM	1 PM – 4 PM	5 PM – 8 PM	9 PM – 12 AM
Handbiller	3	0	0	3	0	1
Performer	0	3	1	0	0	0
Solicitor	4	6	2	6	6	10
Vendor	1	0	0	0	0	0
Total	**8**	**9**	**3**	**9**	**6**	**11**



Picture 21 – Metro officers arrest illegal vendors – July 2, 2016.



Picture 22 – Activity on Tropicana North Pedestrian Bridge – July 2, 2016.

5. FINDINGS

The following section describes relevant observations and findings from the field data collection efforts as well as the Metro video for the 2016 update of non-permanent obstructions.

- Kimley-Horn and Associates staff noted a Metro presence throughout all observation days (see **Picture 23**).



Picture 23 – Citation of Lyft Handbillers – October 15, 2016.

- The number of handbillers have shown a trend of significant reduction in numbers from 2012 to those observed in 2016.
- Many handbillers were observed to be handing out literature for nightclubs, ride-sharing companies (such as Lyft, etc.) rather than the gentleman club cards traditionally seen in the past. This observation was more prevalent in the 1 PM – 4 PM and 5 PM – 8 PM data collection periods (see **Picture 24** through **Picture 26**).



Picture 24 – Lyft Handbillers.



Picture 25 – Non-Traditional Handbiller on intersection island.



Picture 26 – Handbilling Material left on ground.

- The number of individual vendors have remained general consistent in number; however, the types of vendors have changed. There was an observed reduction in ice chest water sales during the Summer 2016 counts compared to previous years. However, the number of vendors with ice chests appears to have increased during the Fall 2016 counts from those of Summer 2016 counts. Most of these vendors are now offering both beer and water sales (see **Picture 27**).



Picture 27 – Vendor with ice chest.

- Solicitors showed increasing numbers from 2012 to the observations in Summer of 2016. However, solicitors have shown a decrease in numbers since the Summer 2016 counts for the Fall 2016 observations. Since 2012, there has been a significant upward trend in the number of street performers of various types of activities. The number of performers observed during the Fall 2016 data collection was found to be less than those from the Summer 2016 counts and consistent with the volumes observed in 2015. A variety of performers are shown in **Picture 28** through **Picture 31**.



Picture 28 – Street Performer Example.



Picture 29 – Street Performer Example.



Picture 30 – Street Performer Example.



Picture 31 – Street Performer Example.

- The total number of non-permanent obstructions has experienced a general increase in overall number since 2012 partially due to the increase in street performers overshadowing the observed decrease in handbillers.
- The highest number of non-permanent obstructions observed for a holiday Saturday was 248 between 9PM and 12AM on Saturday, July 2, 2016. This is approximately 10.8% less than the 278 observed on the holiday weekend in 2015. The highest number of non-permanent obstruction observed on the typical weekend Saturday was 264 in 2016. This is a 4.8% increase from the maximum of 252 observed on the typical Saturday in 2012.
- The pedestrian bridges appeared to be generally clear of non-permanent obstructions during the data collection on July 2, 2016 (**Picture 32**). This observation was more prevalent in the 1 PM – 4 PM and 5 PM – 8 PM data collection periods. The general exception to this observation is that several pedestrian bridges were observed with large numbers of solicitors and/or performers grouped together during certain observation times.



Picture 32 – NPO Clear Pedestrian Bridge – July 2, 2016.

- From the review of the Metro video data for the three (3) selected sites, the average stay of a non-permanent obstruction was found to be 118 minutes (nearly 2 hours).
- The following walkway segments were found to have the maximum number of observed NPO's in any one data collection period for the holiday weekend Saturday:
    - Tropicana N. Bridge – 9 NPO's
    - Bellagio – 30 NPO's

APPENDIX A

CLARK COUNTY ORDINANCE 16.11 – OBSTRUCTIVE USES OF PUBLIC SIDEWALKS

[~~Bracketed and stricken~~] material is that portion being deleted
Underlined material is that portion being added

BILL NO. 10-18-16-1

SUMMARY – An Ordinance amending sections 16.11.038, 16.11.050, and 16.11.080 of the Clark County Code for the purpose of modifying the notice requirements relating to no obstruction zones in the resort district; and providing for other matters properly relating thereto.

ORDINANCE NO _____
(of Clark County, Nevada)

AN ORDINANCE AMENDING SECTIONS 16.11.038, 16.11.050, AND 16.11.080 OF THE CLARK COUNTY CODE FOR THE PURPOSE OF MODIFYING THE NOTICE REQUIREMENTS RELATING TO NO OBSTRUCTION ZONES IN THE RESORT CORRIDOR; AND PROVIDING FOR OTHER MATTERS PROPERLY RELATING THERETO.

THE BOARD OF COUNTY COMMISSIONERS OF THE COUNTY OF CLARK, STATE OF NEVADA, DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. Section 16.11.038 of title 16 of the Clark County Code is hereby amended to read as follows:

16.11.038 - Notice relating to no obstruction zones in the resort district.

Signs shall be posted at least every quarter of a mile in the resort district. [~~and the statement "RESORT DISTRICT: NO OBSTRUCTIVE USES PERMITTED ON PUBLIC SIDEWALKS AT LOCATIONS DESIGNATED BY A WHITE STRIPE, PURSUANT TO CLARK COUNTY CODE CHAPTER 16.11."~~]

SECTION 2. Section 16.11.050 of title 16 of the Clark County Code is hereby amended to read as follows:

16.11.050 - Designation of [~~"No Obstruction Zones"~~] no obstruction zones.

The board of county commissioners shall adopt a map, to be prepared by the Clark County department of public works, of the H-1 zoning district which clearly sets forth those portions of the public sidewalks where obstructive uses, other than permitted obstructive uses, shall be prohibited based upon the factors set forth in Section 16.11.040, above.

(a) These areas shall be designated [~~"NO OBSTRUCTION ZONES"~~] as no obstruction zones and shall be clearly marked by the county by the placement of pavement markings on the public sidewalks or signs designating the limits of the no obstruction zones, or plaques, monuments or medallions placed in the public sidewalks, by declaring same.

(b) Pavement markings on the public sidewalk or signs designating the limits of the [~~"No Obstruction" zone,~~] no obstruction zones, or plaques, monuments or medallions placed in the public sidewalk marking areas deemed to be no obstruction zones on the basis of LOS, as set forth in Section 16.11.020, shall also specify the hours during which the area is a no obstruction zone.

(c) No person shall be in violation of this chapter for obstructive use of a no obstruction zone if the no obstruction zone is not designated.

SECTION 3. Section 16.11.080 of title 16 of the Clark County Code is hereby amended to read as follows:

16.11.080 - Removal of [~~"No Obstruction Zone"~~] no obstruction zone designations.

No unauthorized person shall wilfully remove, alter, cover or otherwise harm a pavement marking, sign, plaque, monument or medallion marking a no obstruction zone.

SECTION 4. If any section of this ordinance or portion thereof is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such holding shall not invalidate the remaining parts of this ordinance.

SECTION 5. All ordinances, parts of ordinances, chapters, sections, subsections, clauses, phrases or sentences contained in the Clark County Code in conflict herewith are hereby repealed.

SECTION 6. This ordinance shall take effect and be in force from and after its passage and the publication thereof by title only, together with the names of the County Commissioners voting for or against its passage, in a newspaper published in and having a general circulation in Clark County, Nevada, at least once a week for a period of two (2) weeks.

PROPOSED on the 18th day of October, 2016.

PROPOSED BY: Commissioner Steve Sisolak

PASSED on the _____ day of _____, 2016.

AYES: _____

_____

NAYS:

ABSTAINING:

ABSENT:

BOARD OF COUNTY COMMISSIONERS
CLARK COUNTY, NEVADA

BY:
Steve Sisolak, Chairman

ATTEST:

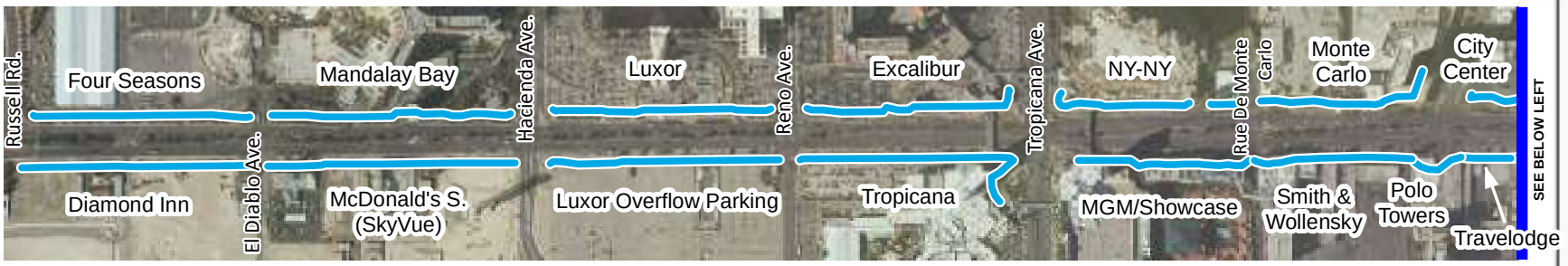
LYNN MARIE GOYA, County Clerk

This ordinance shall be in force and effect from and after the ____ day of _____, 2016.

APPENDIX B

DATA SUMMARY GRAPHS

Index of Count Segment Location and Reference Name









Field Data Collection Segment

*Segment name per 2015 Las Vegas Blvd. Pedestrian Study Update

0 0.125 0.25 0.5 Miles

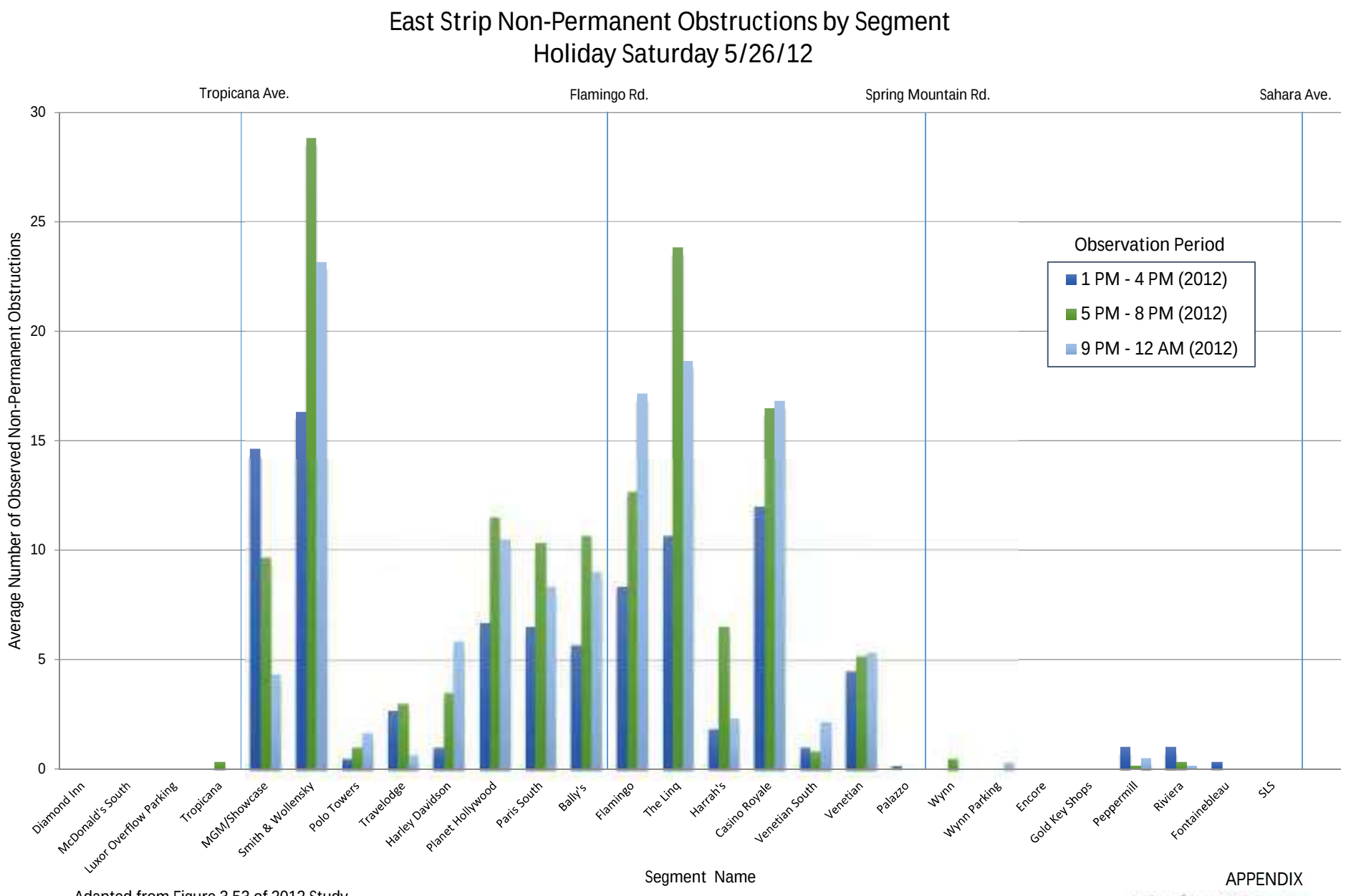
APPENDIX

Kimley»Horn

EAST STRIP NPO'S BY SEGMENT

Kimley»Horn

APPENDIX

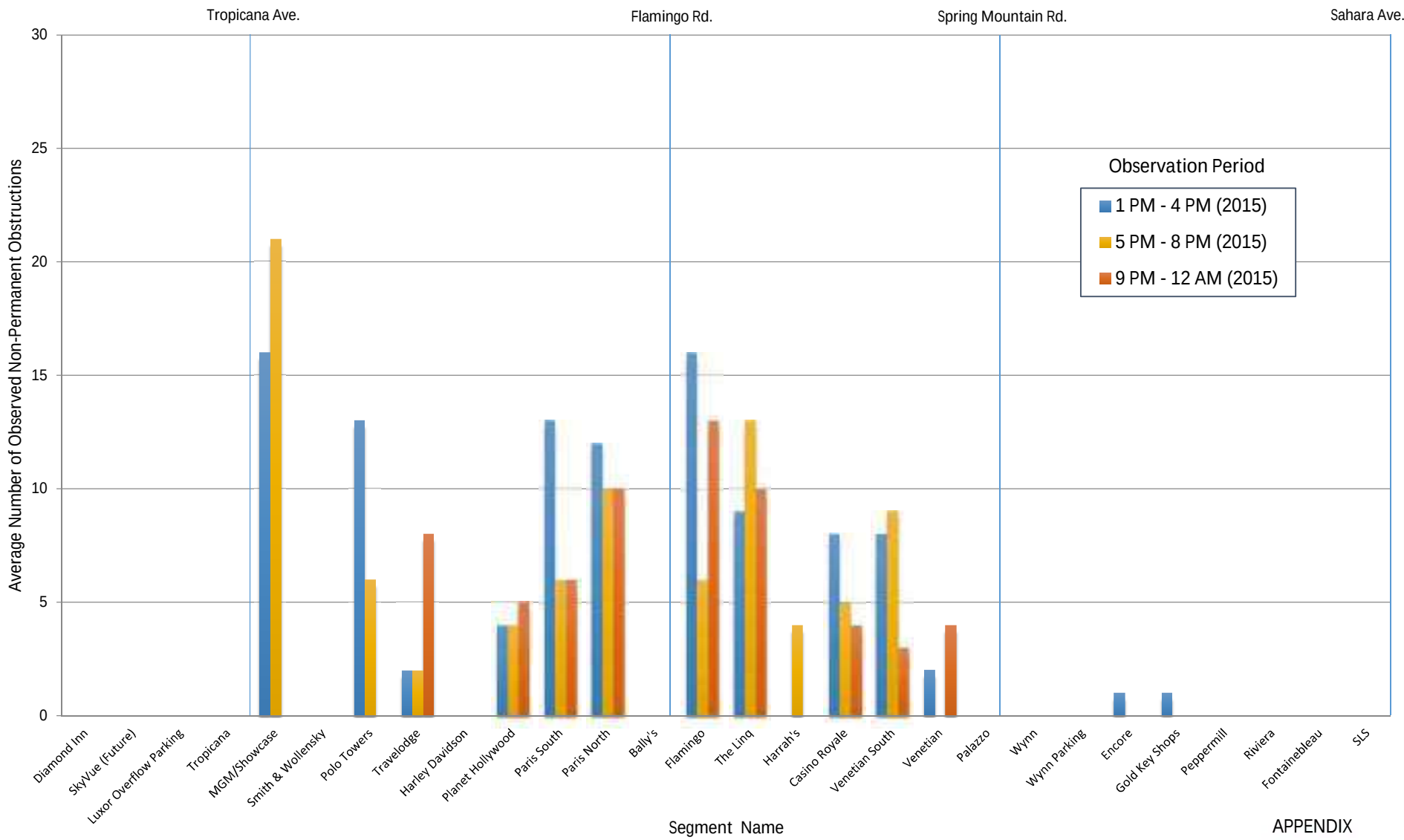


Adapted from Figure 3.53 of 2012 Study

APPENDIX

Kimley»Horn

CC 4301

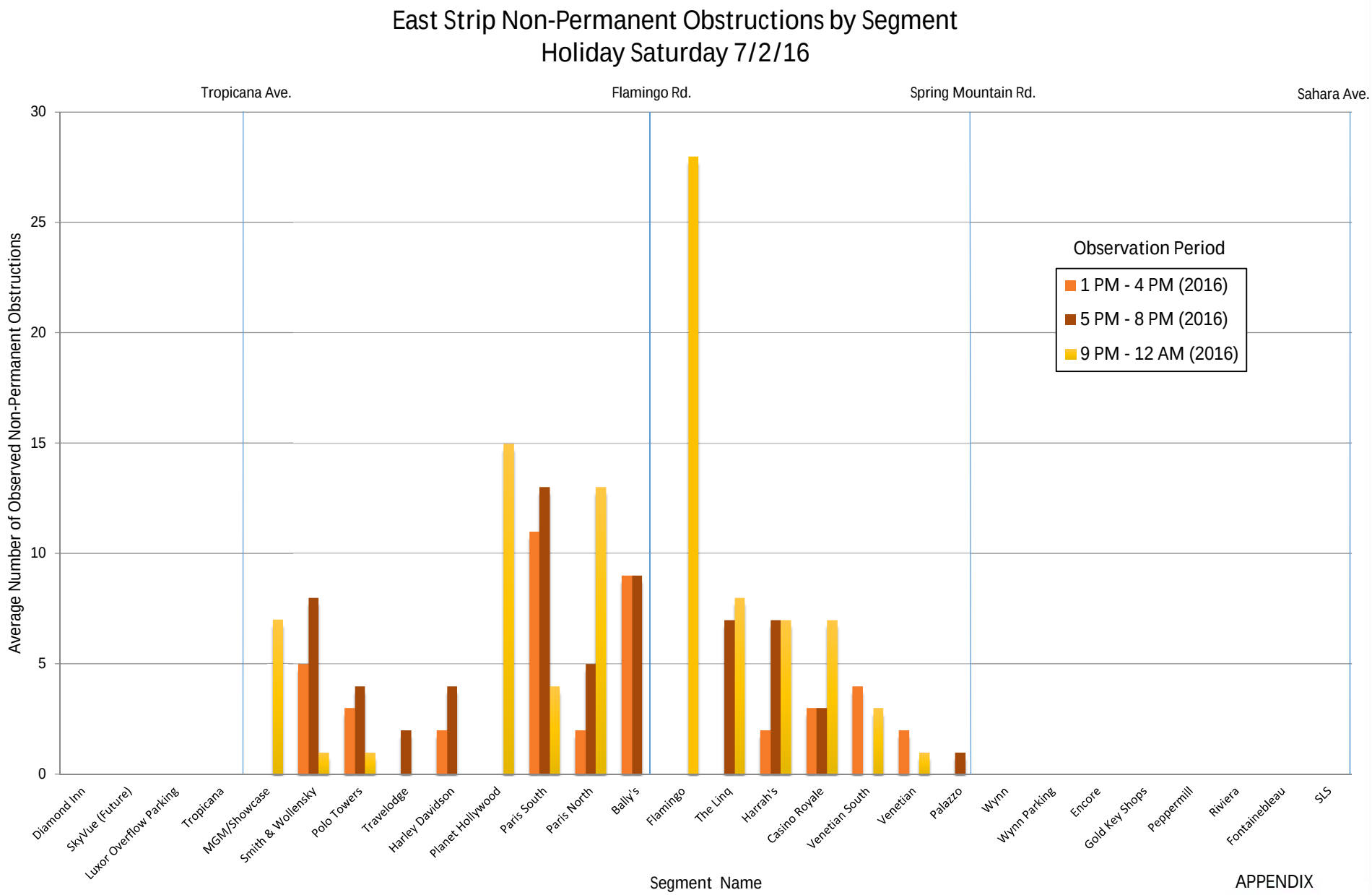


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APPENDIX

Kimley»Horn

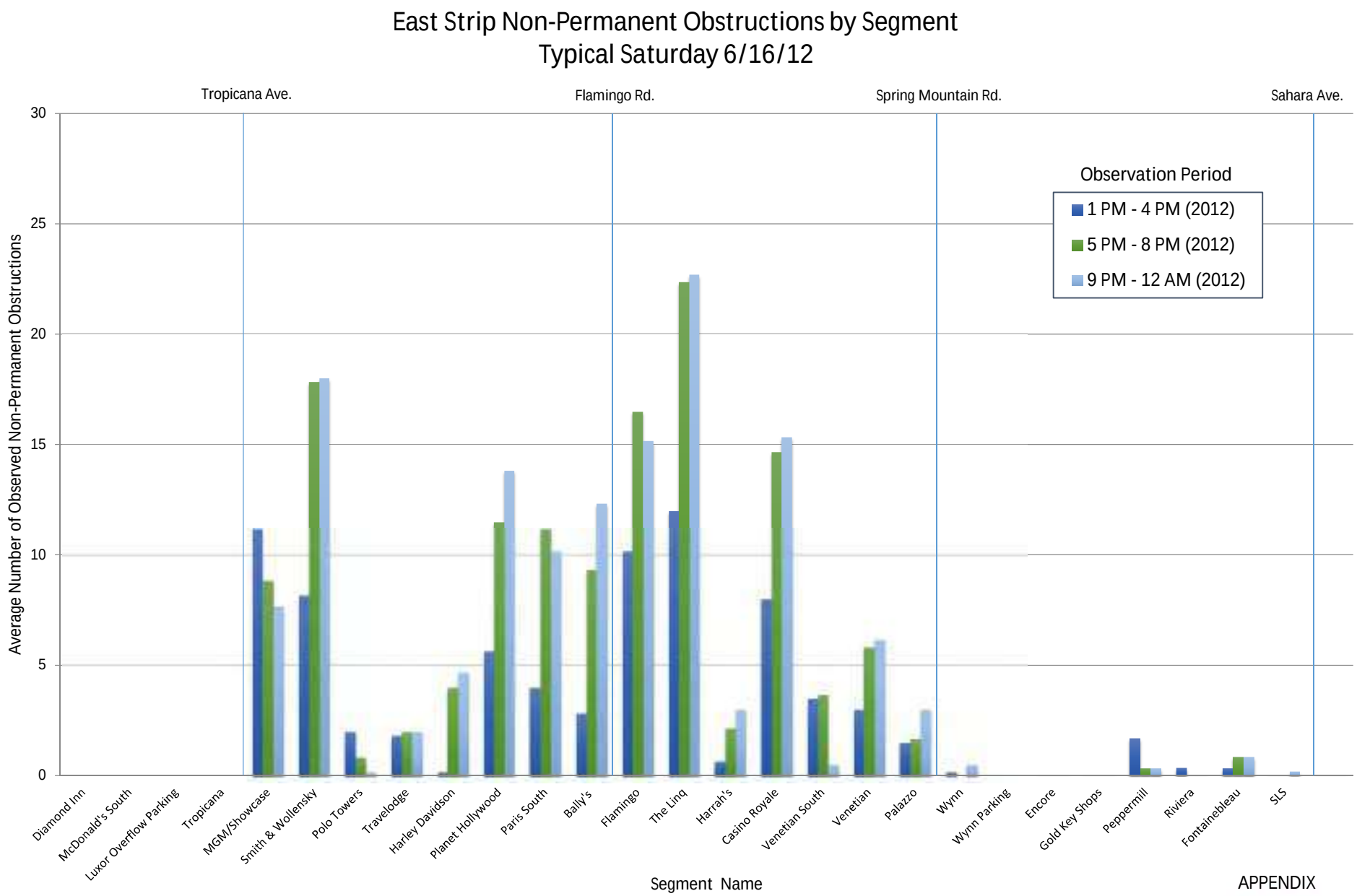
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APPENDIX

Kimley»Horn

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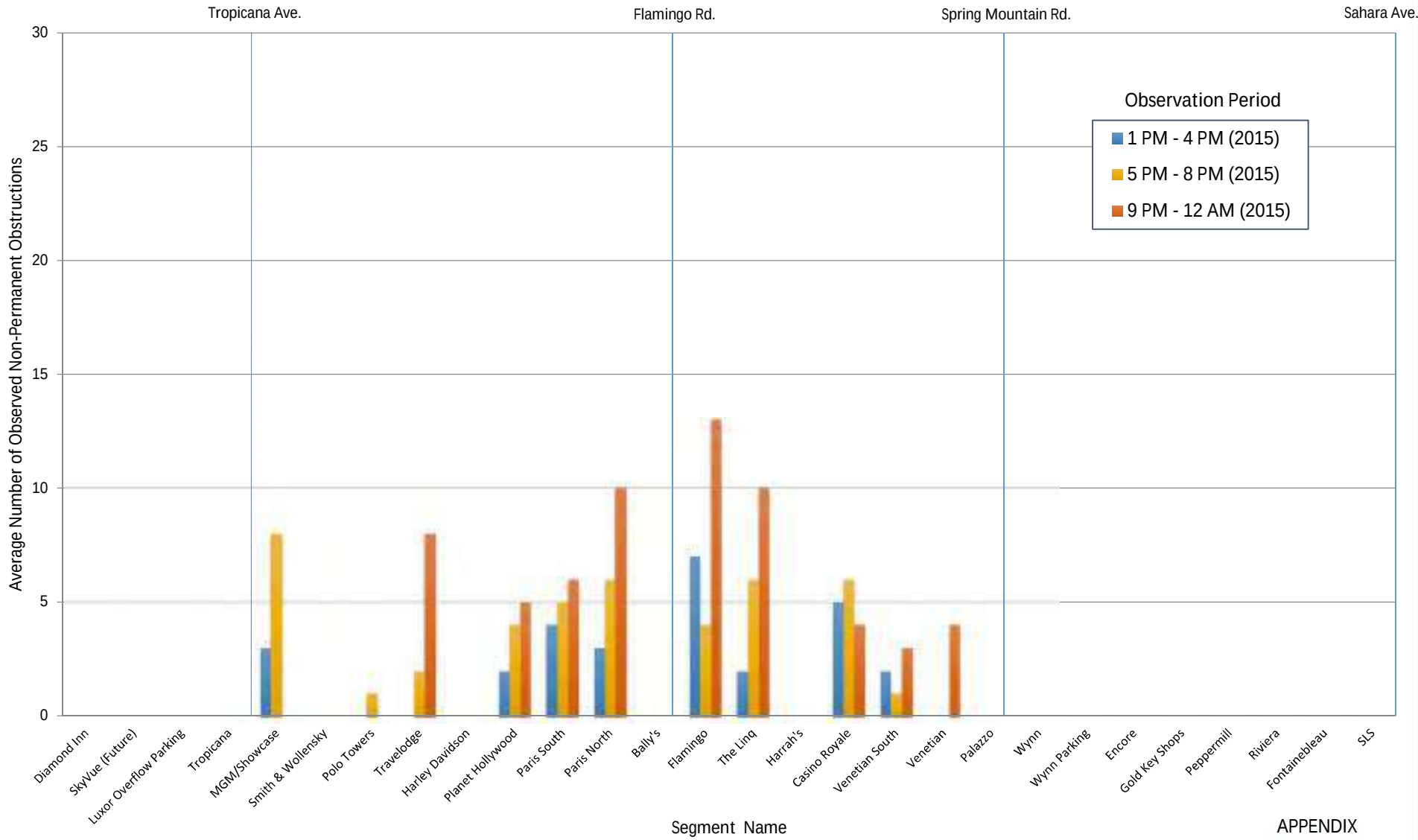


Adapted from Figure 3.55 of 2012 Study

APPENDIX

Kimley»Horn

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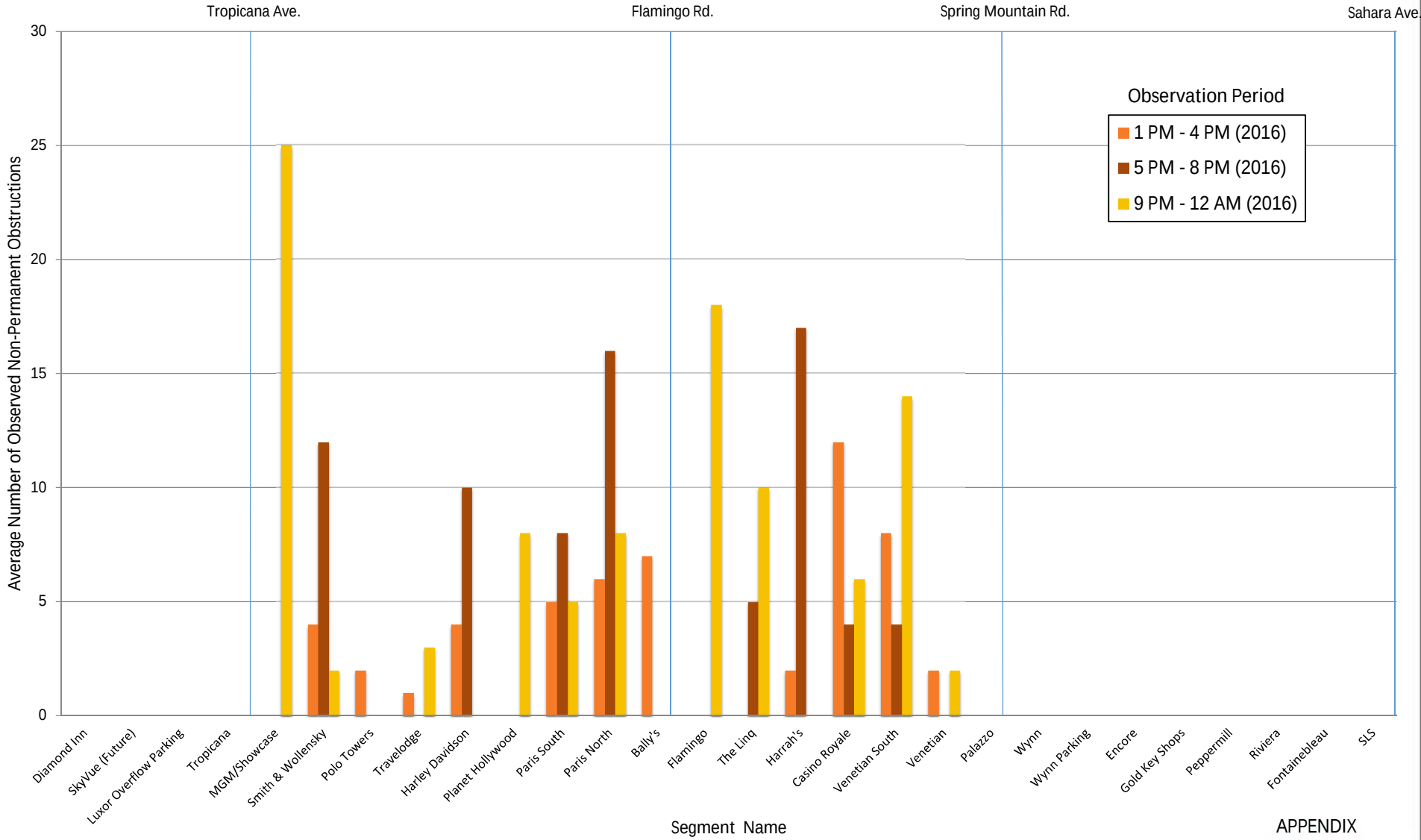


Adapted from Figure 4.42 of 2015 Study Update

APPENDIX

Kimley»Horn

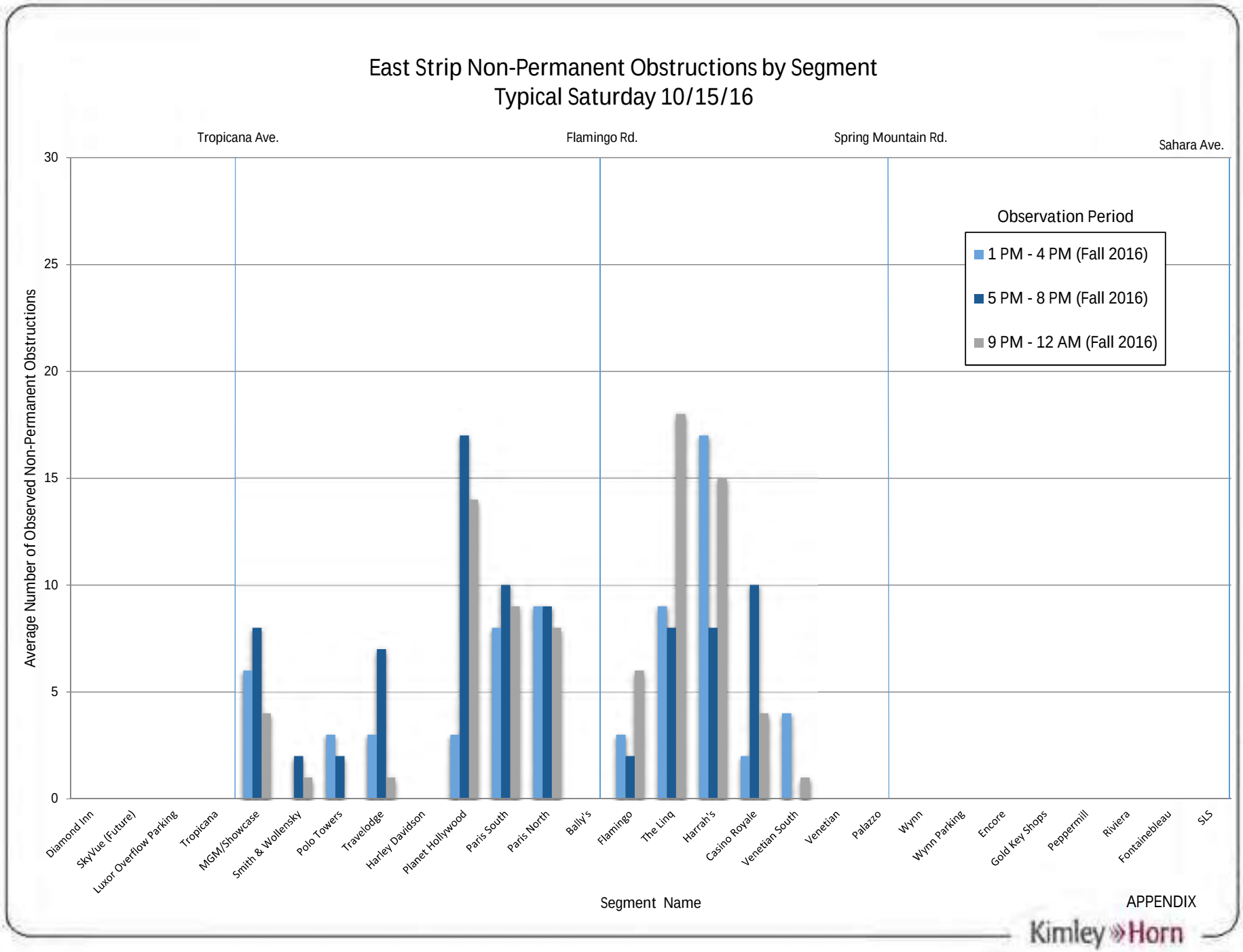
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APPENDIX

Kimley»Horn

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APPENDIX

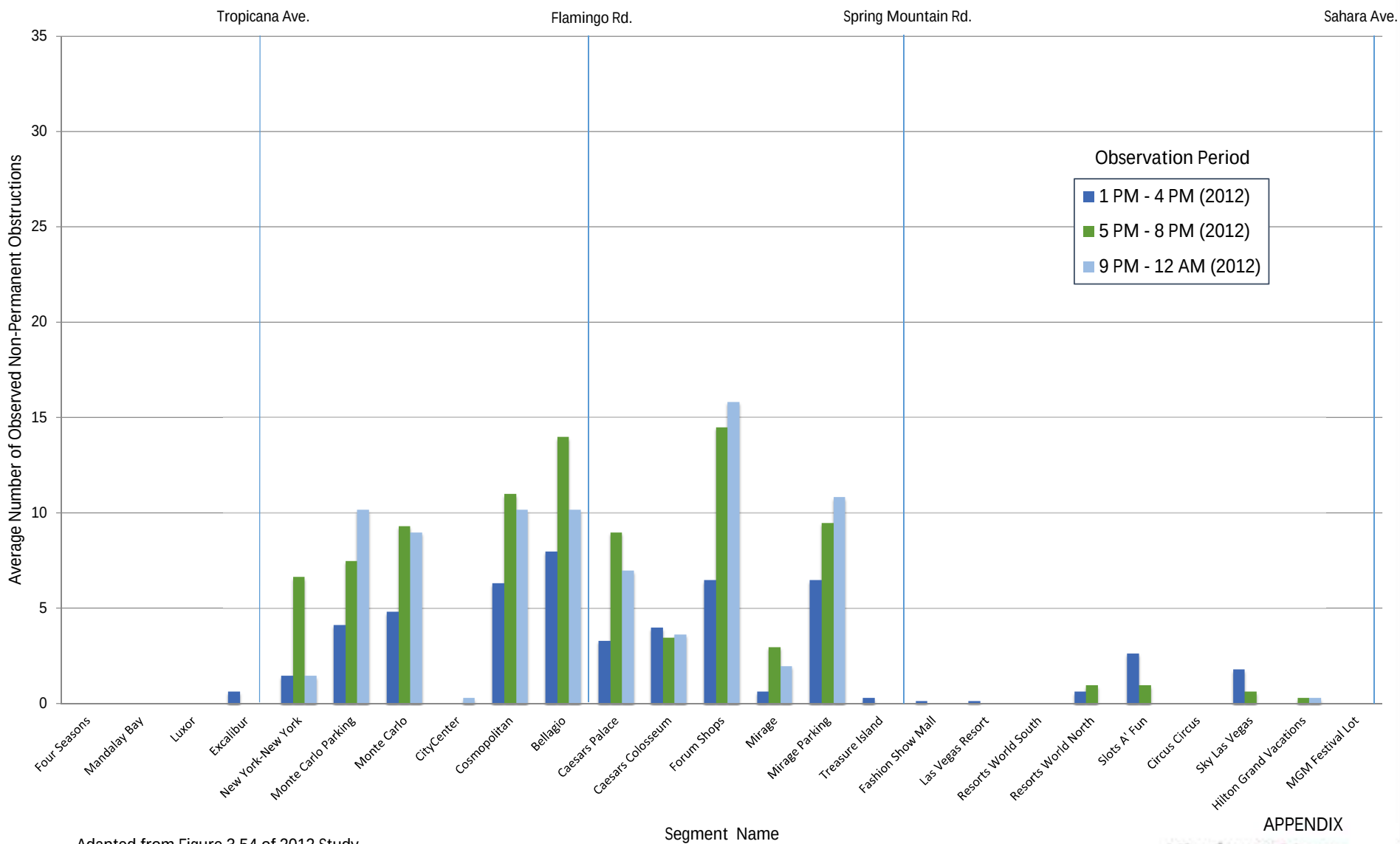
Kimley»Horn

CC 4307

WEST STRIP NPO'S BY SEGMENT

Kimley»Horn

APPENDIX

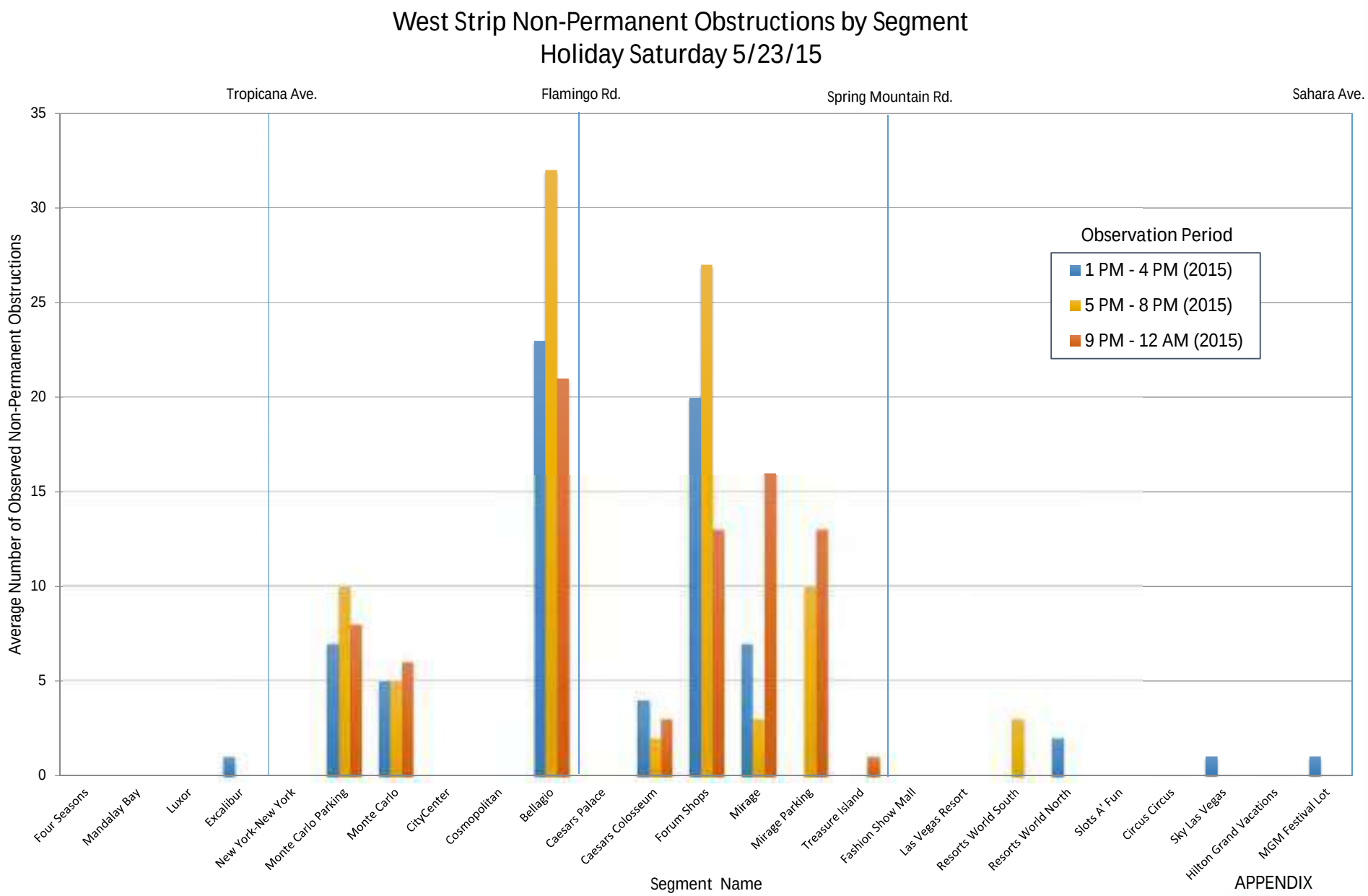


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APPENDIX

Kimley»Horn

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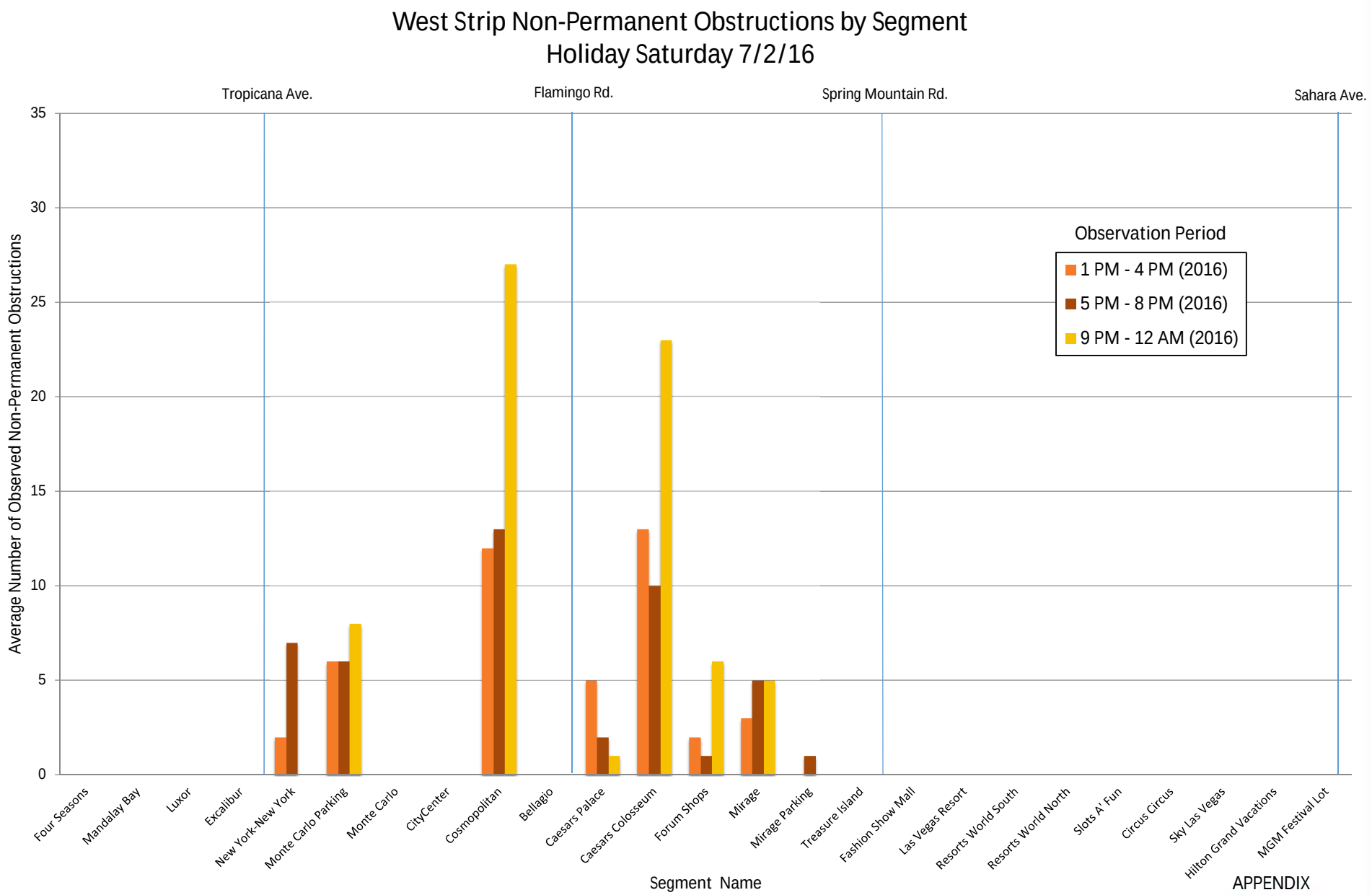


Adapted from Figure 4.44 of 2015 Study Update

APPENDIX

Kimley»Horn

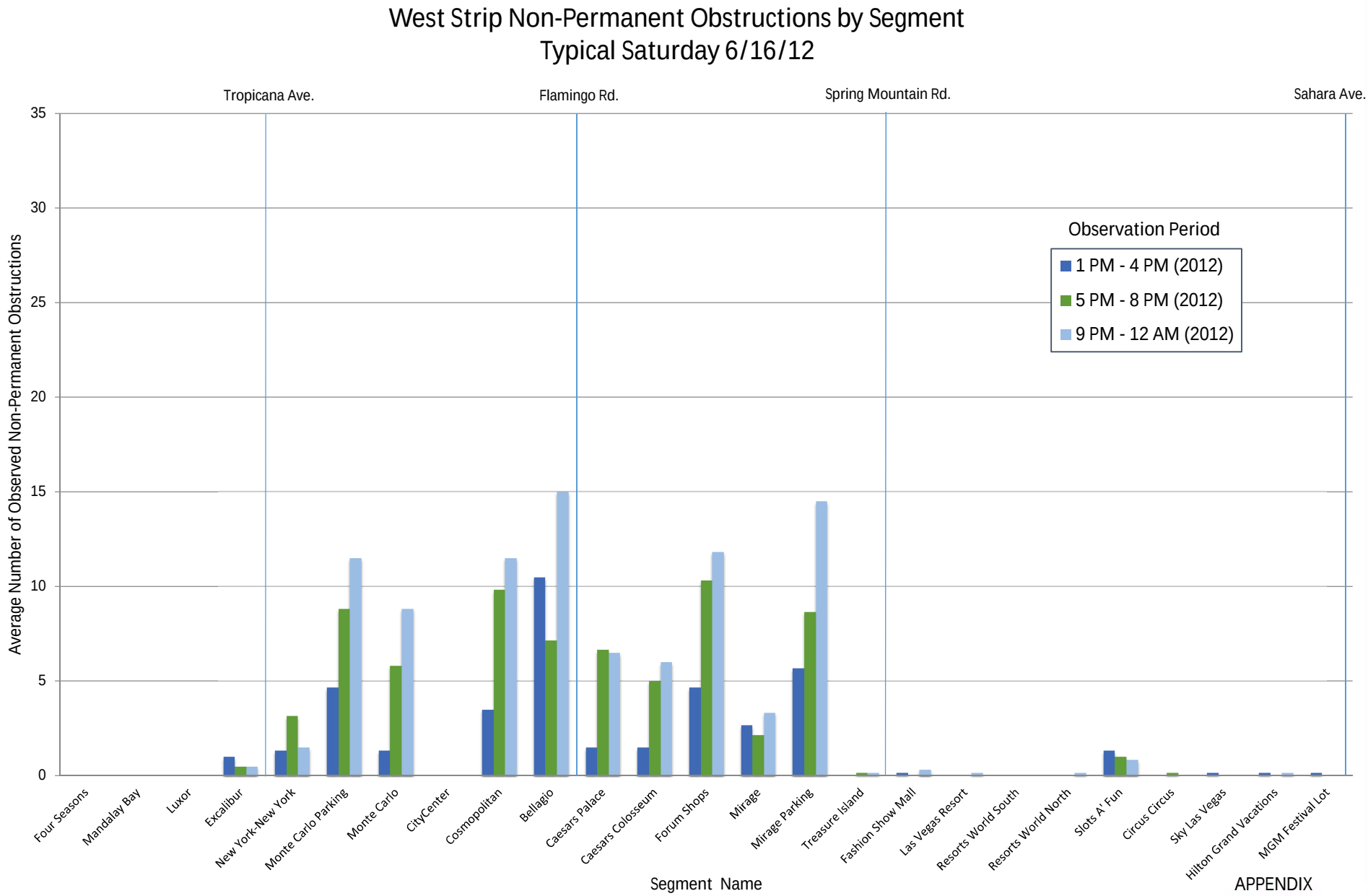
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APPENDIX

Kimley»Horn

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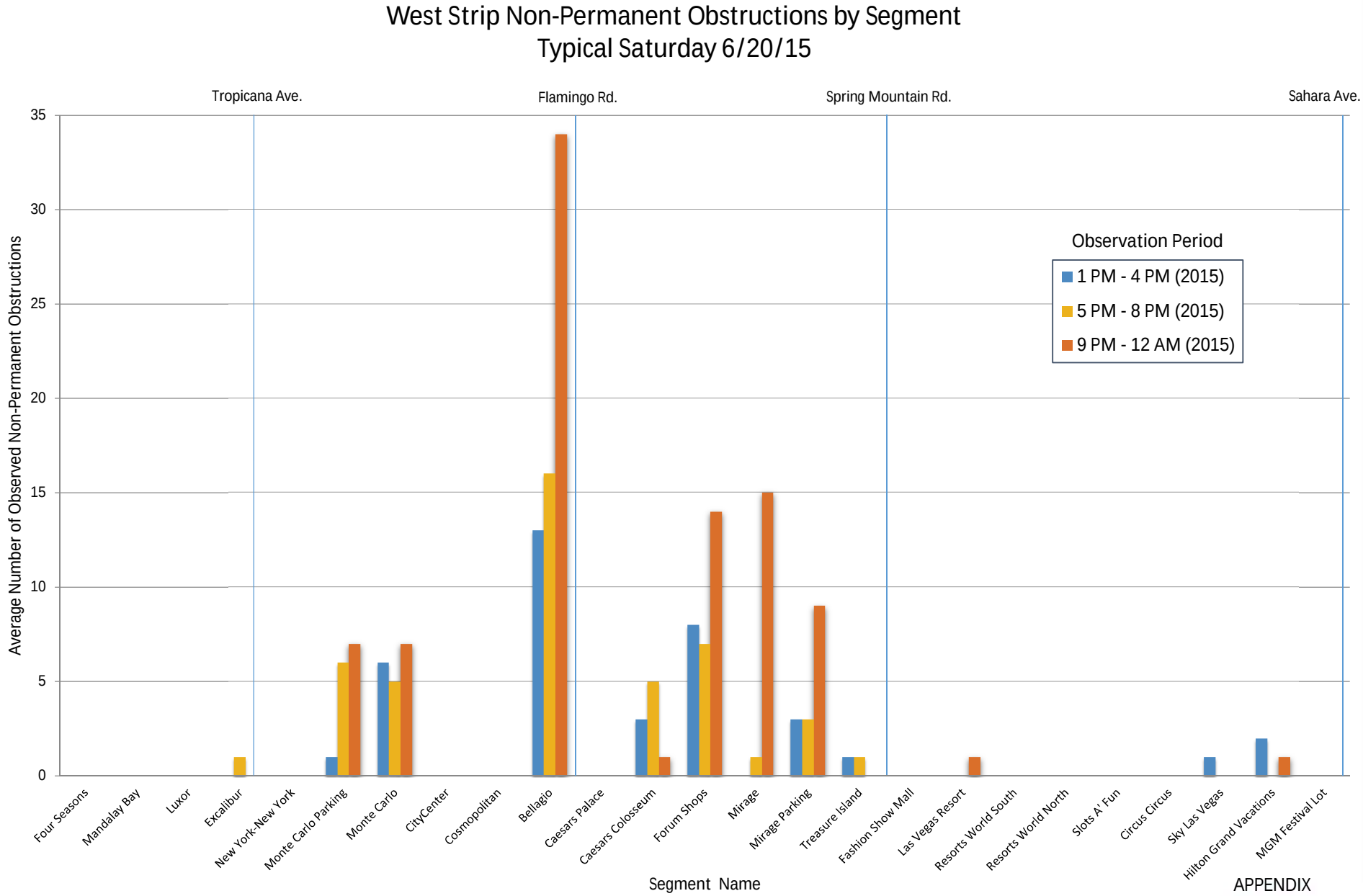


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APPENDIX

Kimley»Horn

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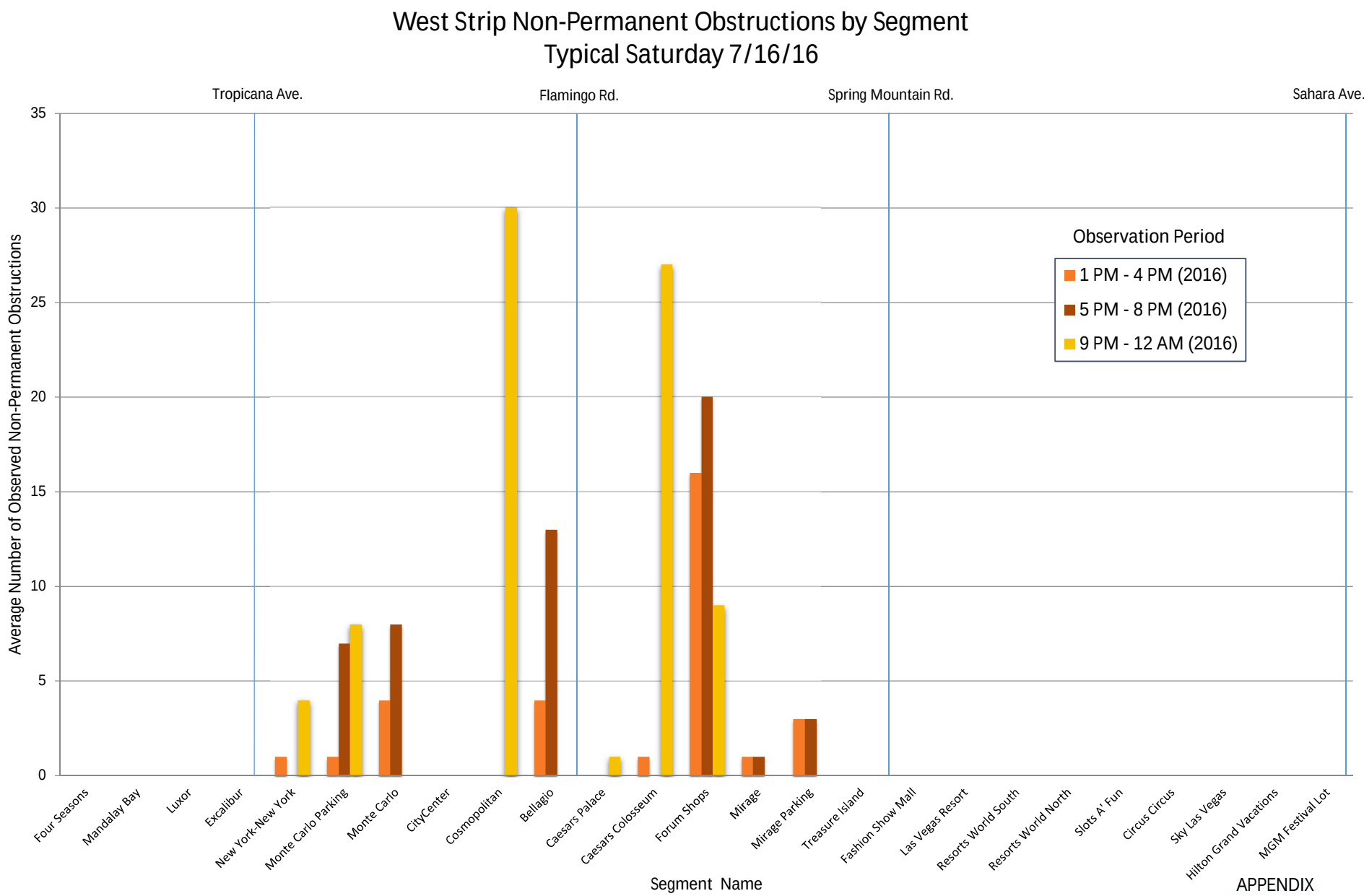


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Kimley»Horn

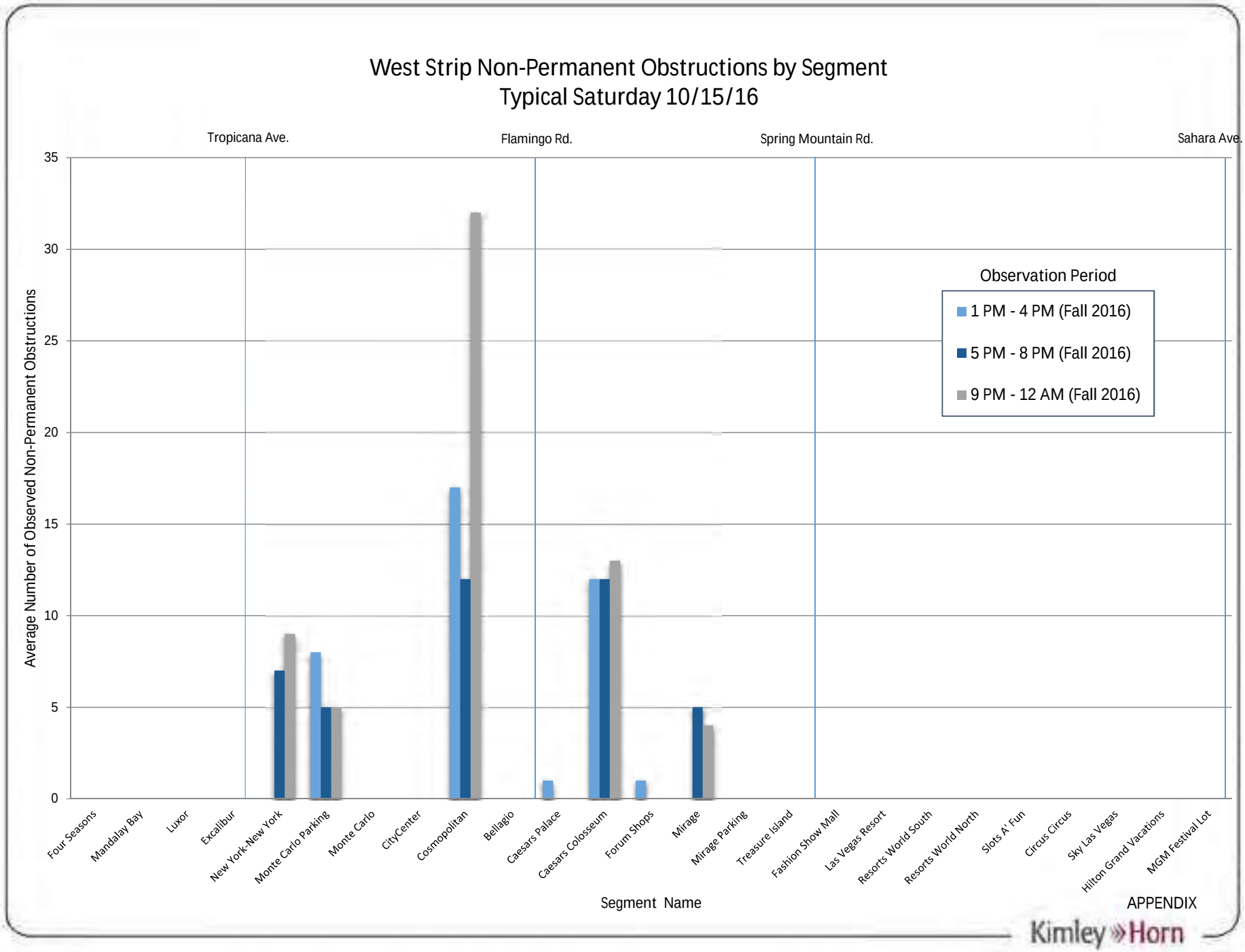
CC 4313



APPENDIX

Kimley»Horn

CC 4314



APPENDIX

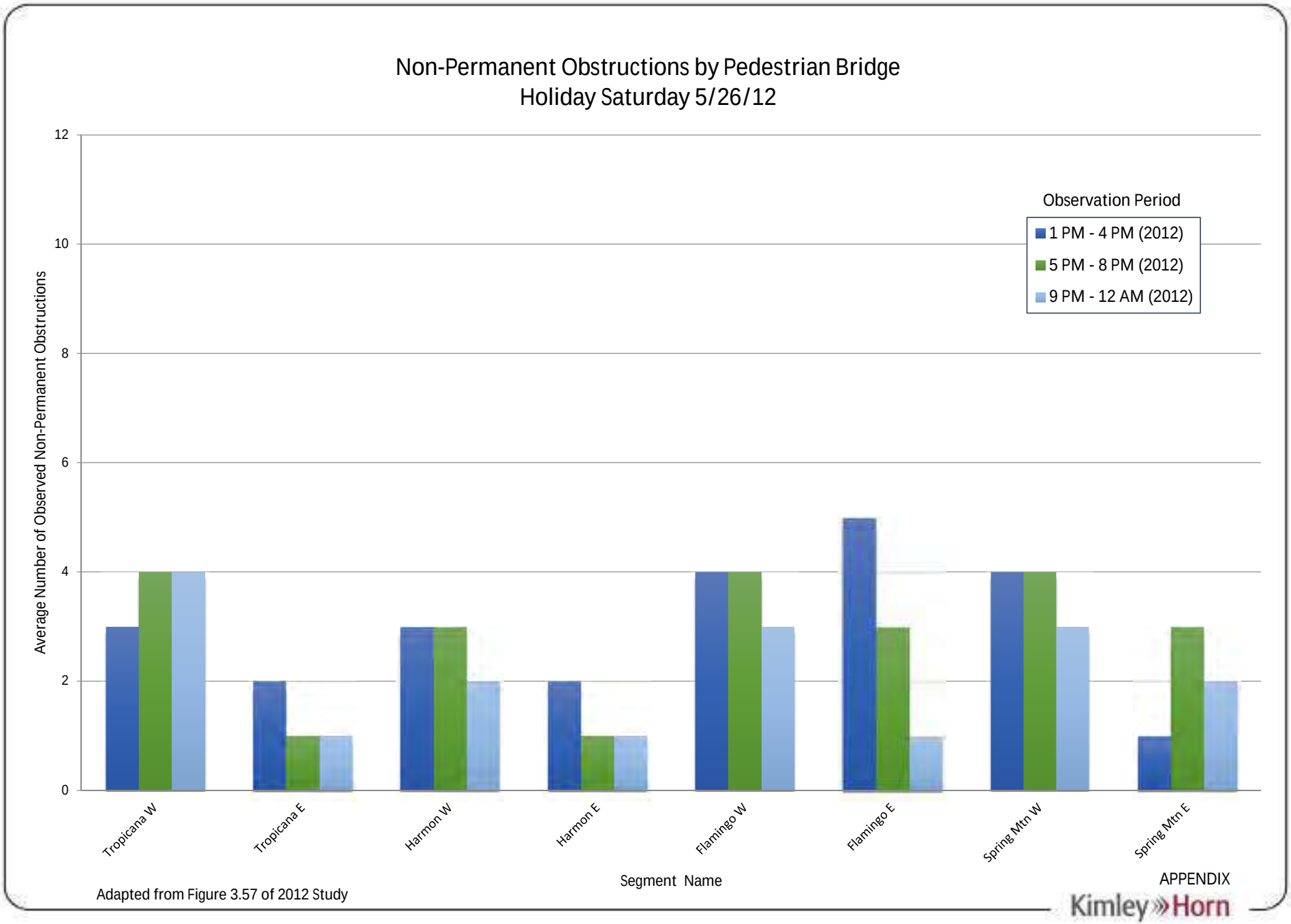
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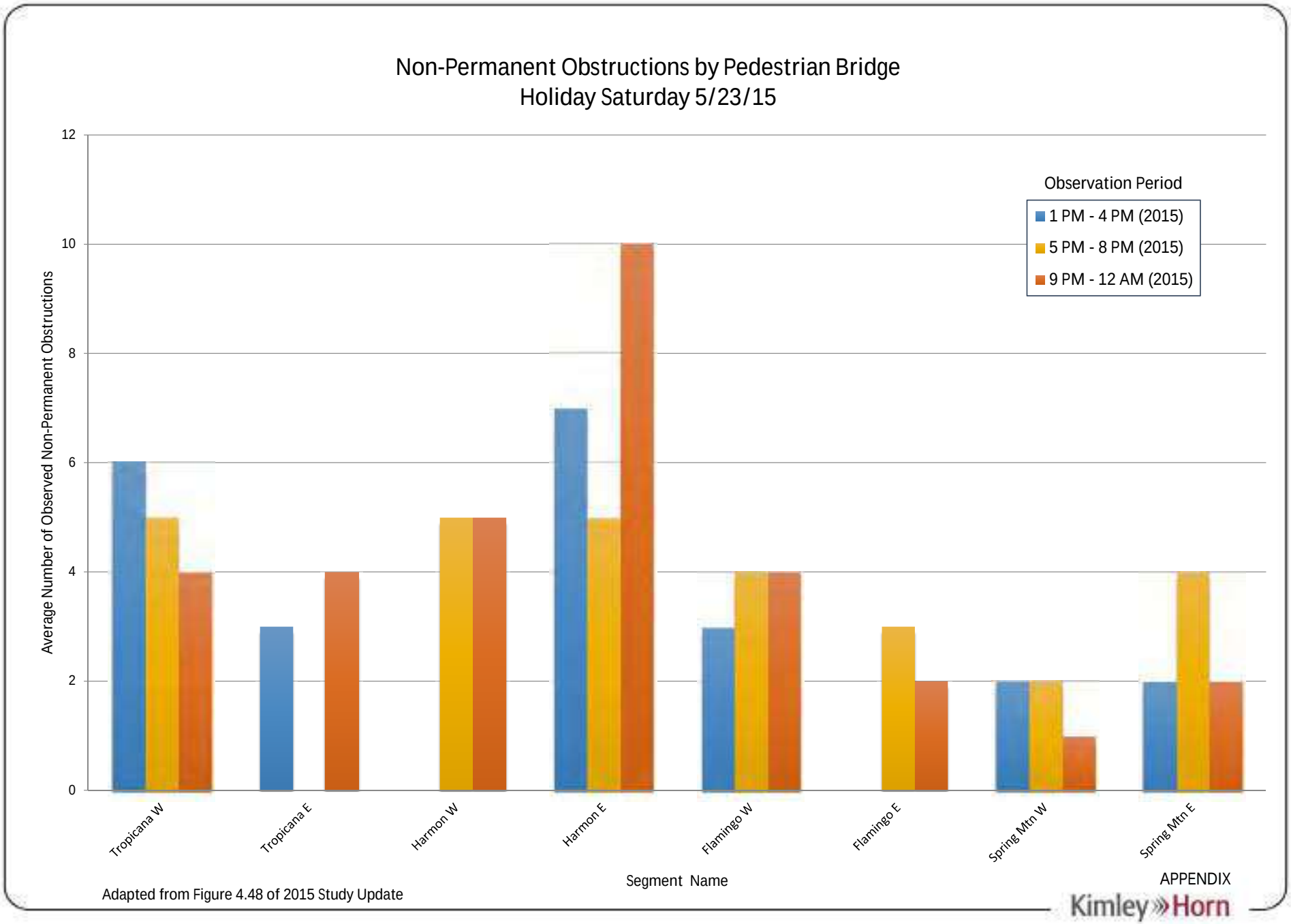
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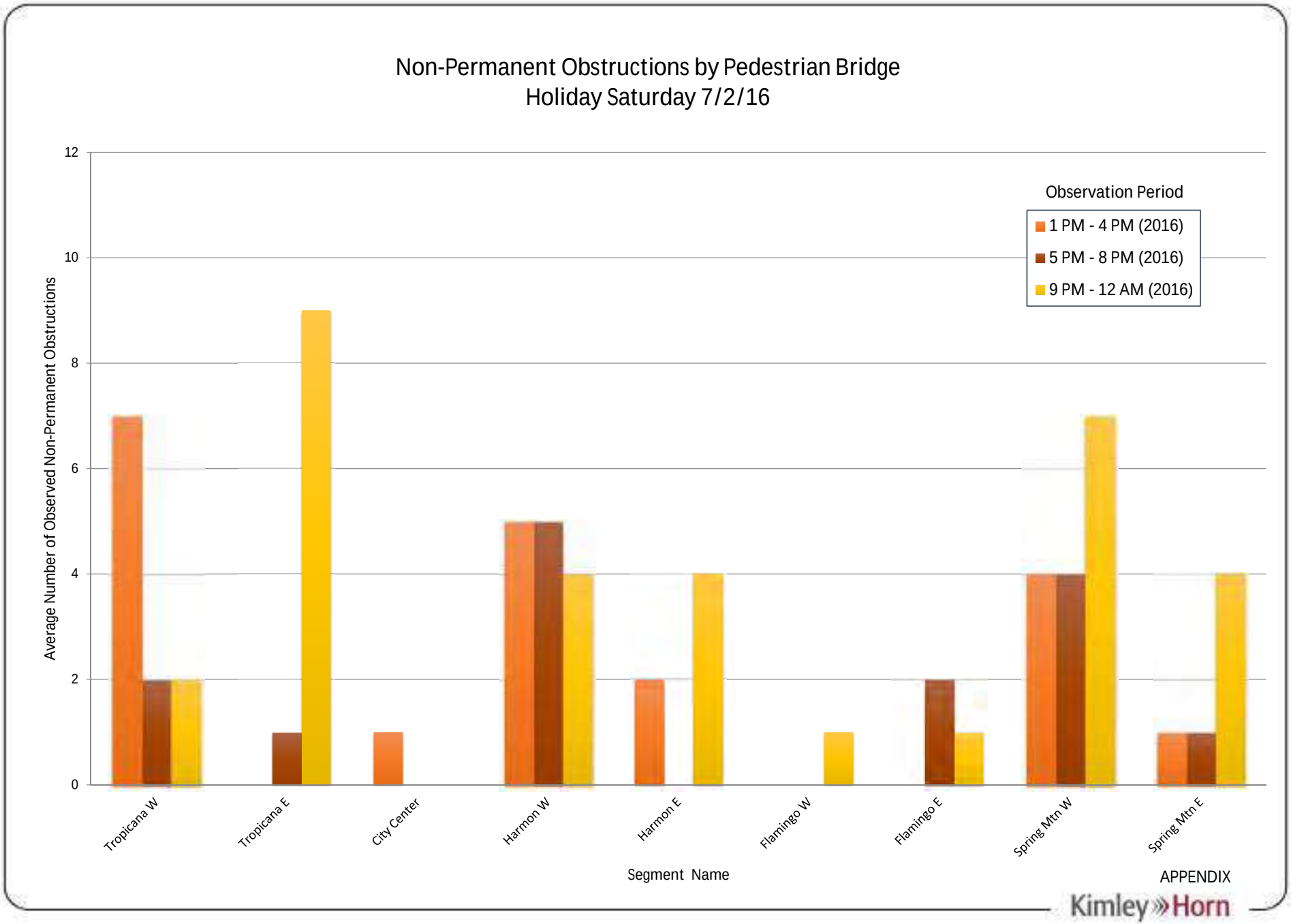
NPO'S BY PARALLEL PEDESTRIAN BRIDGES

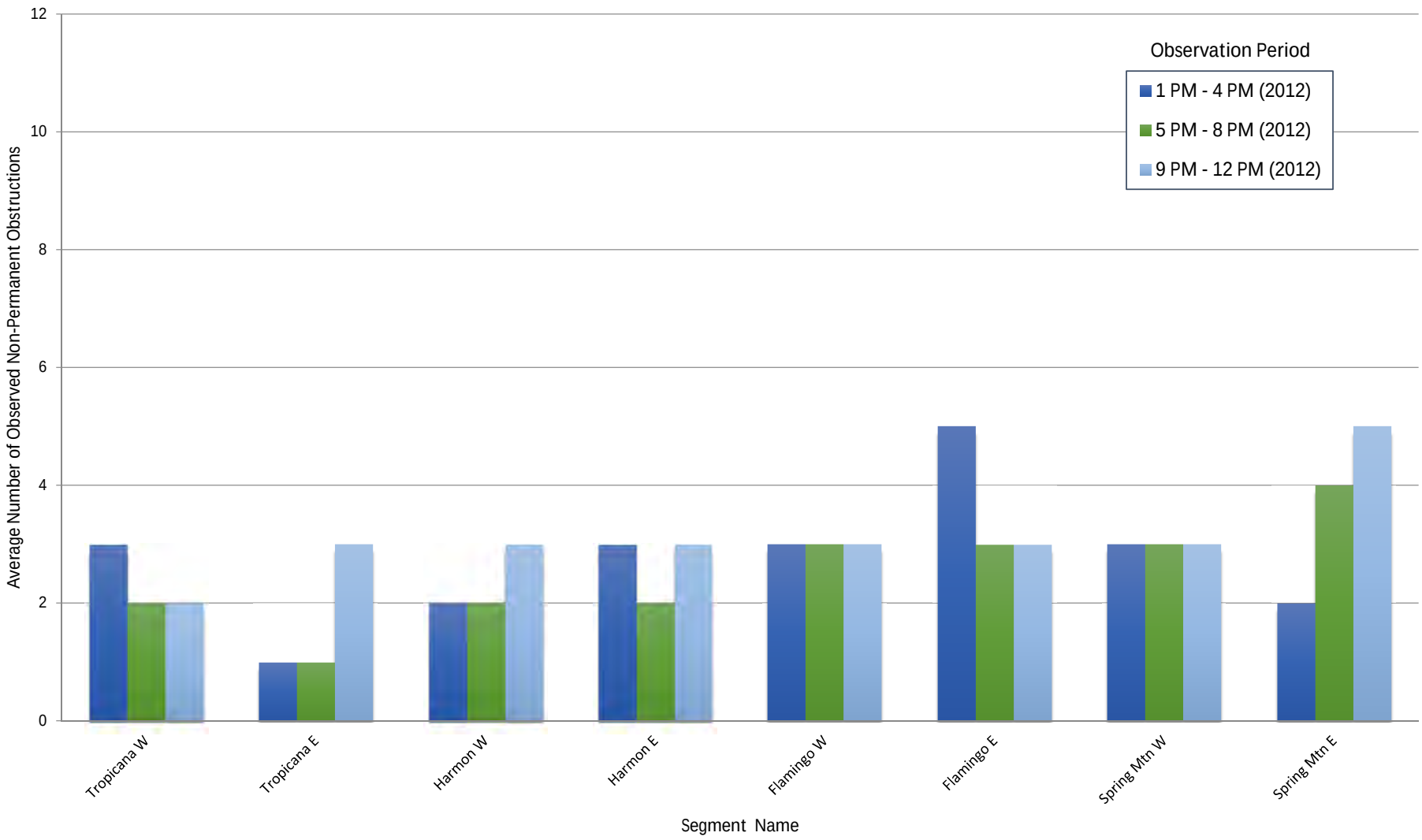
Kimley»Horn

APPENDIX


Non-Permanent Obstructions by Pedestrian Bridge
Holiday Saturday 5/26/12
Average Number of Observed Non-Permanent Obstructions
12
10
8
6
4
2
0
Observation Period
1 PM - 4 PM (2012)
5 PM - 8 PM (2012)
9 PM - 12 AM (2012)
Tropicana W
Tropicana E
Harmon W
Harmon E
Flamingo W
Flamingo E
Spring Mtn W
Spring Mtn E
Segment Name
Adapted from Figure 3.57 of 2012 Study
APPENDIX
Kimley»Horn


Non-Permanent Obstructions by Pedestrian Bridge
Holiday Saturday 5/23/15
Average Number of Observed Non-Permanent Obstructions
0
2
4
6
8
10
12
Observation Period
1 PM - 4 PM (2015)
5 PM - 8 PM (2015)
9 PM - 12 AM (2015)
Tropicana W
Tropicana E
Harmon W
Harmon E
Flamingo W
Flamingo E
Spring Mtn W
Spring Mtn E
Segment Name
Adapted from Figure 4.48 of 2015 Study Update
APPENDIX
Kimley»Horn

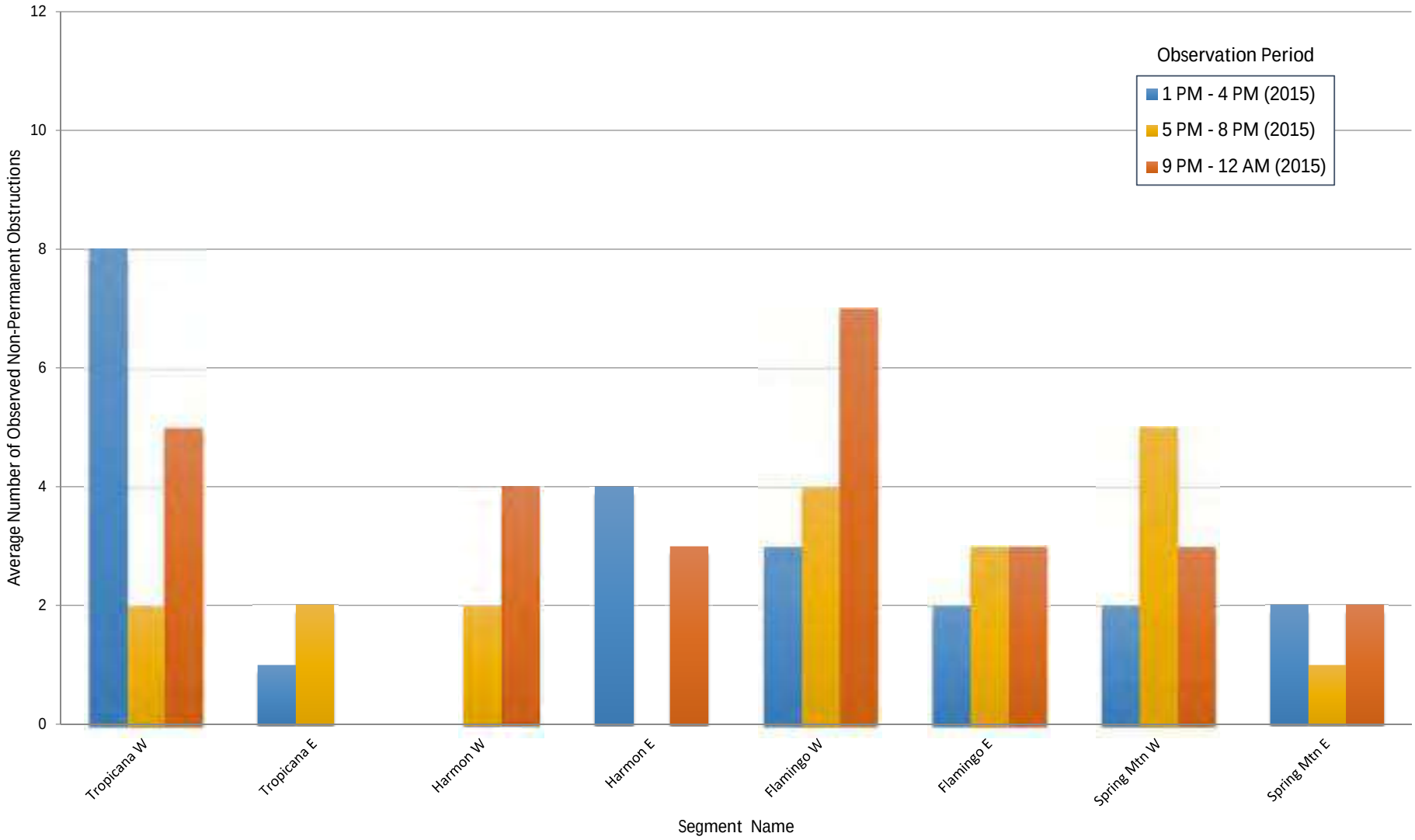

Non-Permanent Obstructions by Pedestrian Bridge
Holiday Saturday 7/2/16
Average Number of Observed Non-Permanent Obstructions
12
10
8
6
4
2
0
Observation Period
1 PM - 4 PM (2016)
5 PM - 8 PM (2016)
9 PM - 12 AM (2016)
Tropicana W
Tropicana E
City Center
Harmon W
Harmon E
Flamingo W
Flamingo E
Spring Mtn W
Spring Mtn E
Segment Name
APPENDIX
Kimley»Horn



APPENDIX

Adapted from Figure 3.58 of 2012 Study

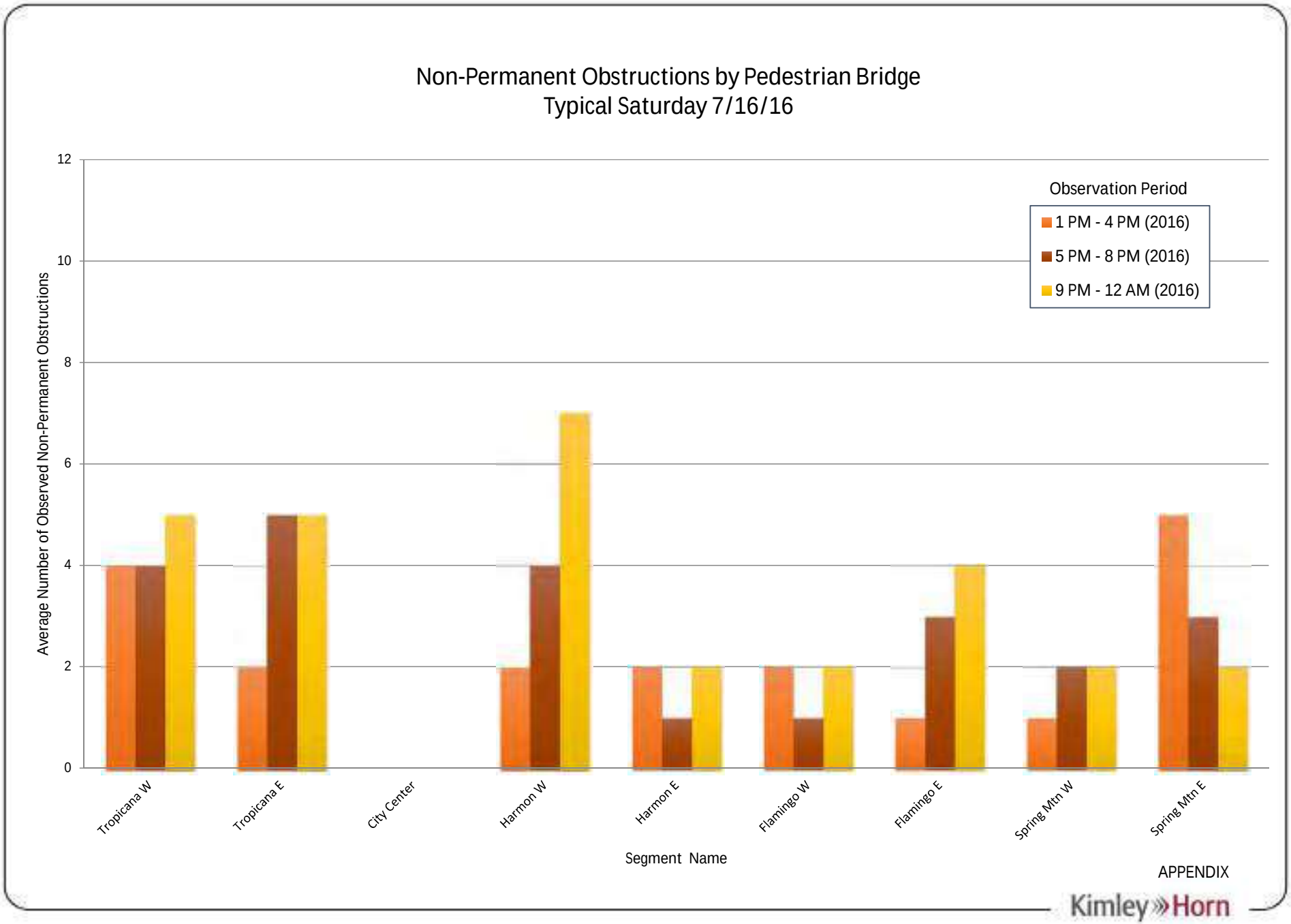
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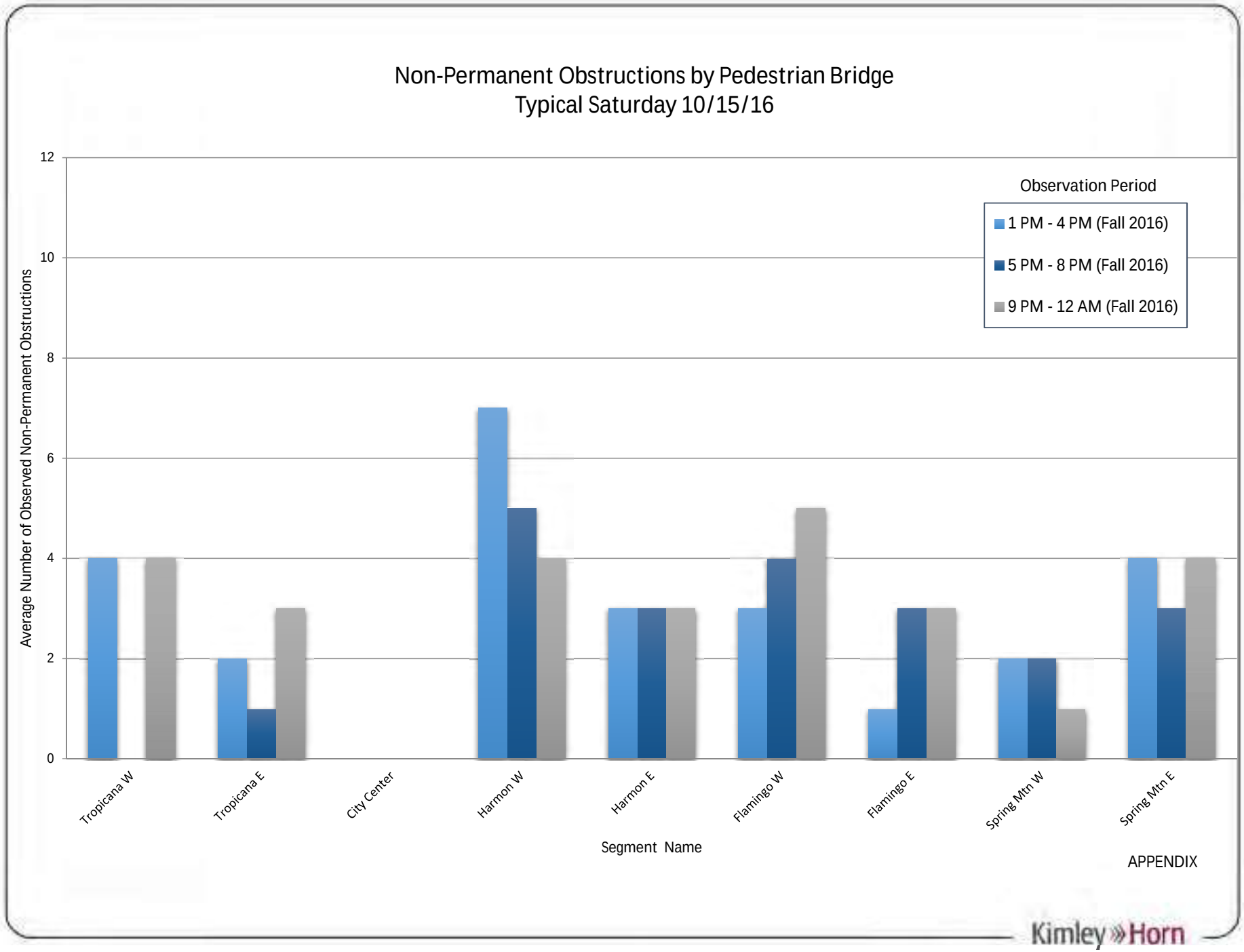


Adapted from Figure 4.50 of 2015 Study Update

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Kimley»Horn

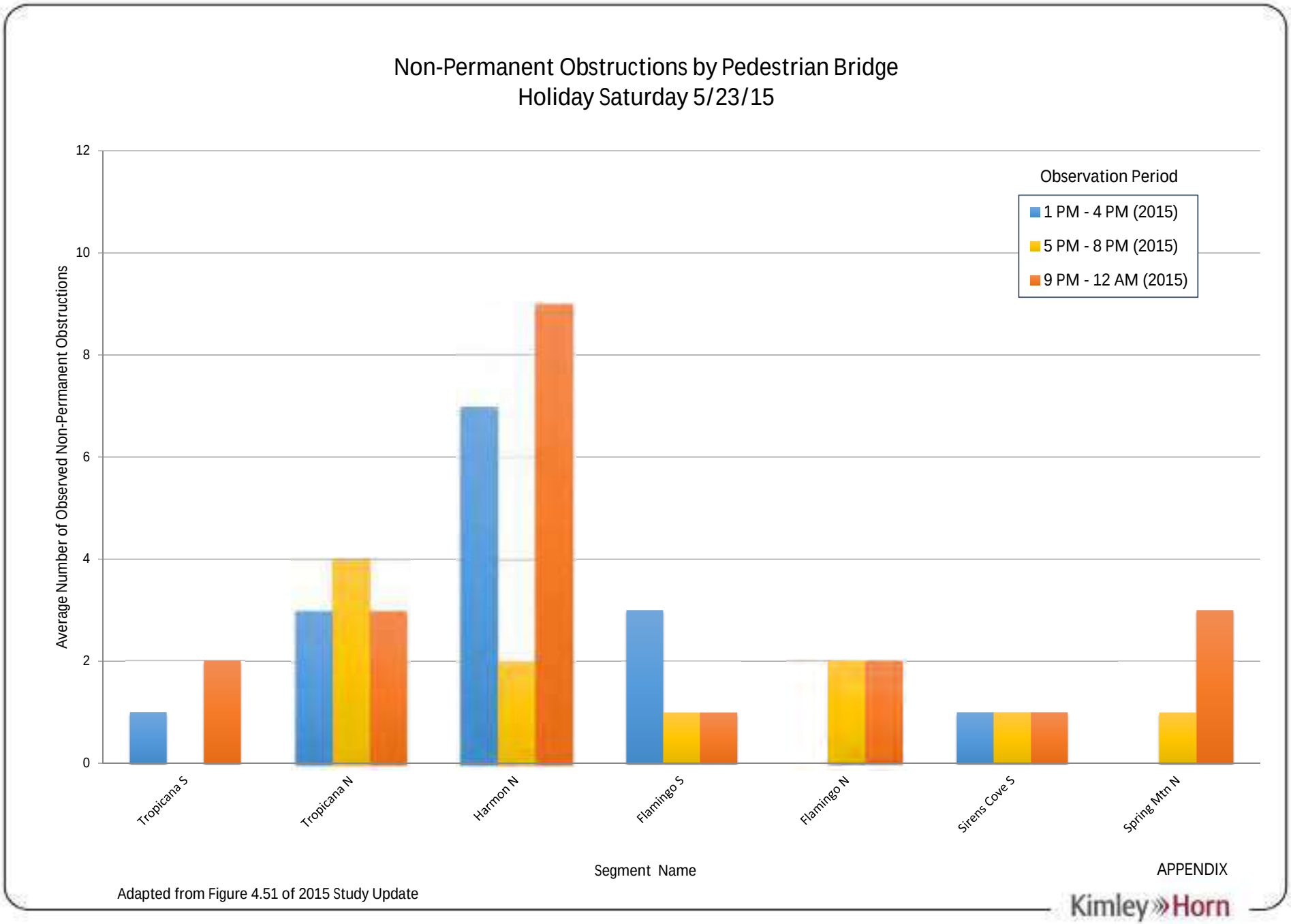

Non-Permanent Obstructions by Pedestrian Bridge
Typical Saturday 7/16/16
Average Number of Observed Non-Permanent Obstructions
0
2
4
6
8
10
12
Observation Period
1 PM - 4 PM (2016)
5 PM - 8 PM (2016)
9 PM - 12 AM (2016)
Tropicana W
Tropicana E
City Center
Harmon W
Harmon E
Flamingo W
Flamingo E
Spring Mtn W
Spring Mtn E
Segment Name
APPENDIX
Kimley»Horn

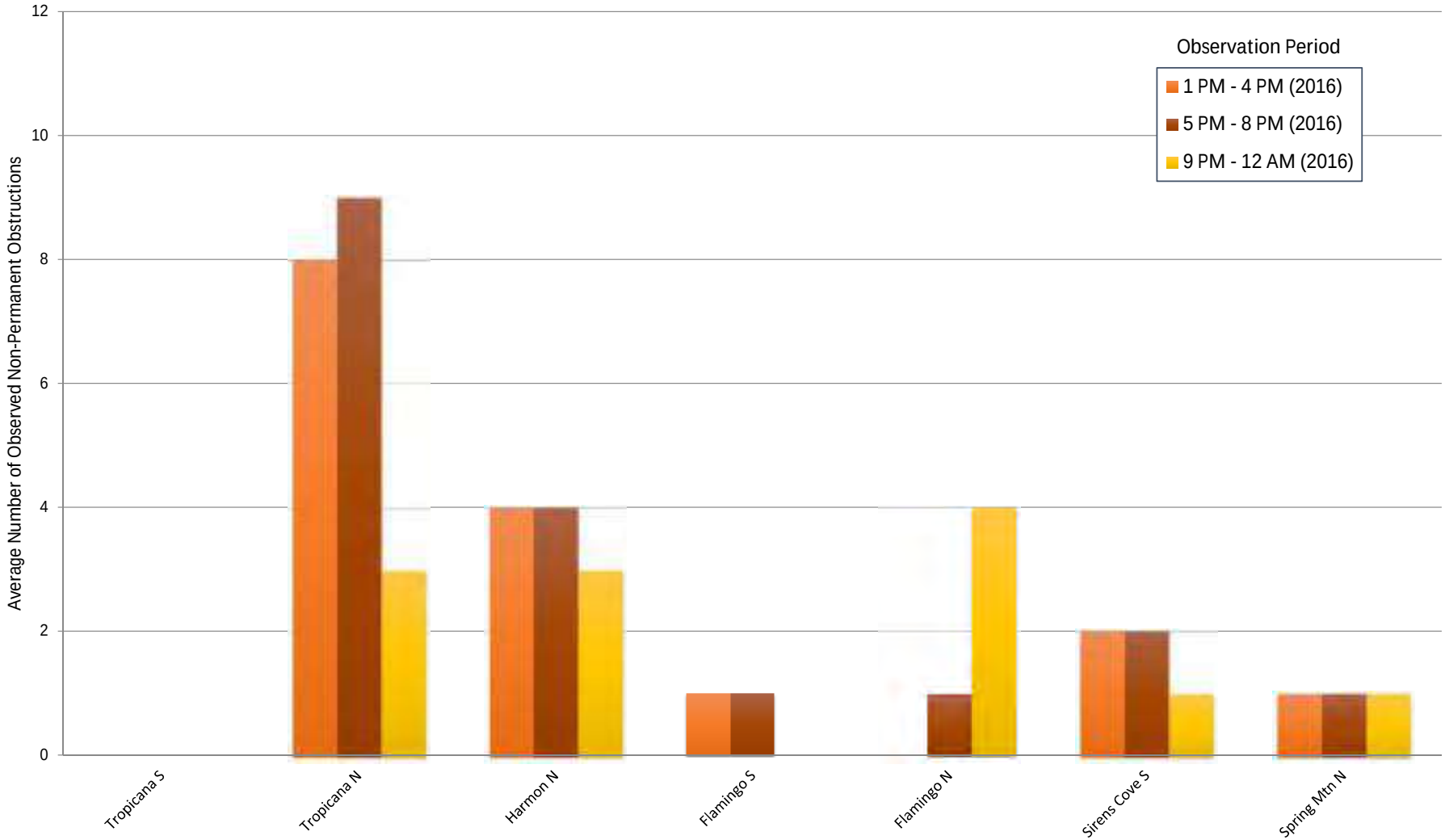

Non-Permanent Obstructions by Pedestrian Bridge
Typical Saturday 10/15/16
Average Number of Observed Non-Permanent Obstructions
12
10
8
6
4
2
0
Observation Period
1 PM - 4 PM (Fall 2016)
5 PM - 8 PM (Fall 2016)
9 PM - 12 AM (Fall 2016)
Tropicana W
Tropicana E
City Center
Harmon W
Harmon E
Flamingo W
Flamingo E
Spring Mtn W
Spring Mtn E
Segment Name
APPENDIX
Kimley»Horn

NPO'S BY PERPENDICULAR PEDESTRIAN BRIDGES

Kimley»Horn

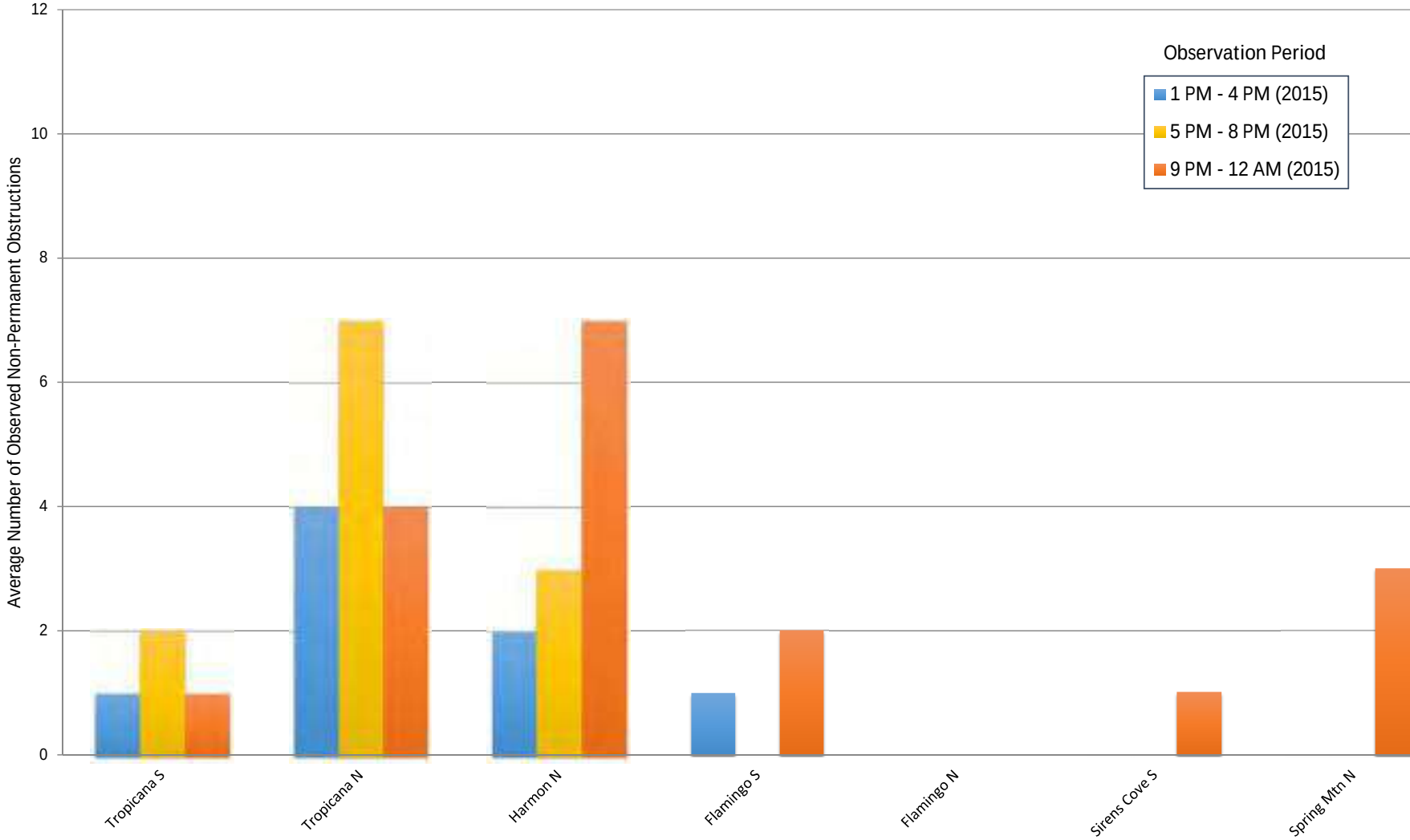
APPENDIX


Non-Permanent Obstructions by Pedestrian Bridge
Holiday Saturday 5/23/15
Average Number of Observed Non-Permanent Obstructions
12
10
8
6
4
2
0
Observation Period
1 PM - 4 PM (2015)
5 PM - 8 PM (2015)
9 PM - 12 AM (2015)
Tropicana S
Tropicana N
Harmon N
Flamingo S
Flamingo N
Sirens Cove S
Spring Mtn N
Segment Name
APPENDIX
Adapted from Figure 4.51 of 2015 Study Update
Kimley»Horn



APPENDIX

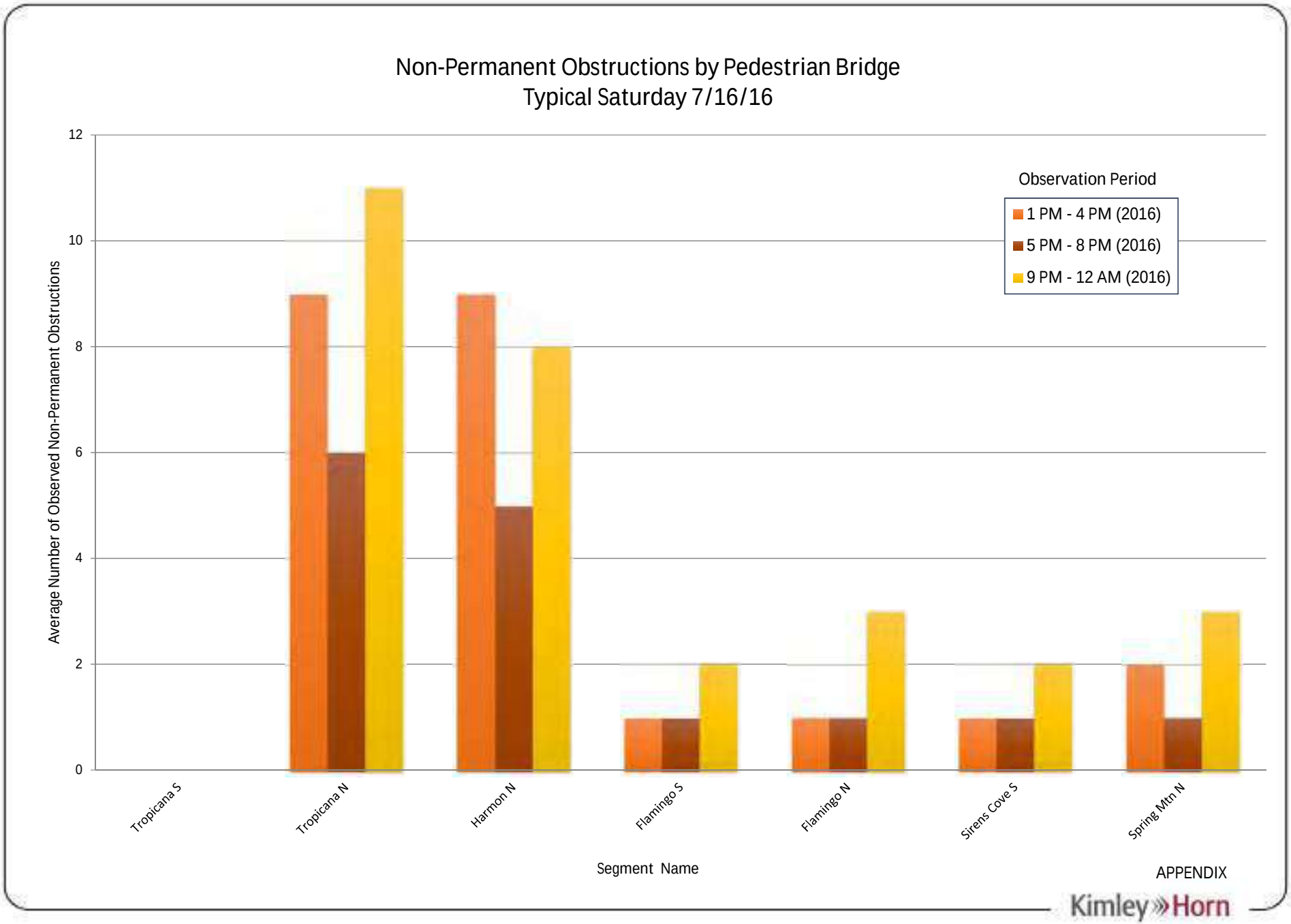
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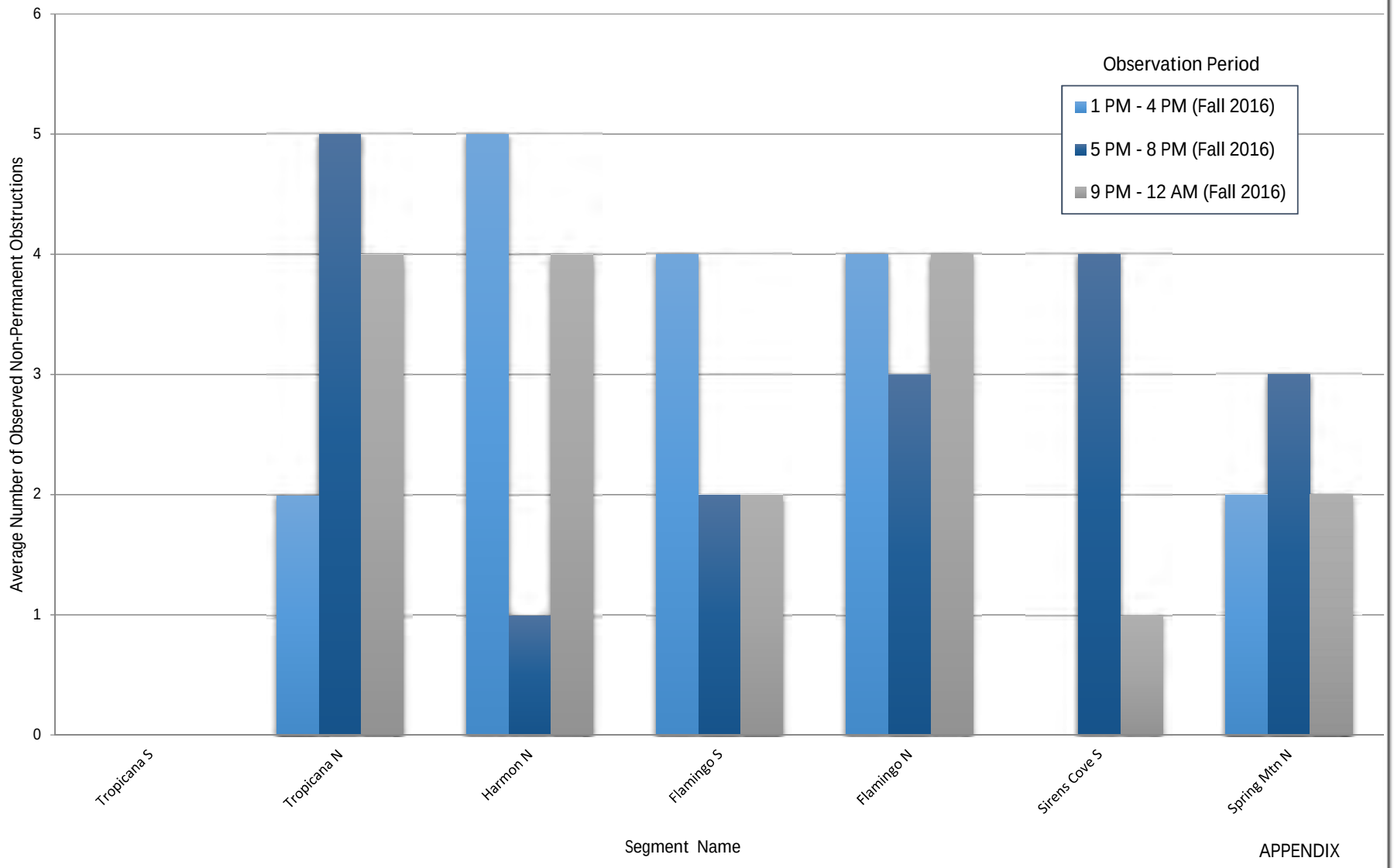


Adapted from Figure 4.52 of 2015 Study Update

APPENDIX

Kimley»Horn


Non-Permanent Obstructions by Pedestrian Bridge
Typical Saturday 7/16/16
Average Number of Observed Non-Permanent Obstructions
12
10
8
6
4
2
0
Observation Period
1 PM - 4 PM (2016)
5 PM - 8 PM (2016)
9 PM - 12 AM (2016)
Tropicana S
Tropicana N
Harmon N
Flamingo S
Flamingo N
Sirens Cove S
Spring Mtn N
Segment Name
APPENDIX
Kimley»Horn



APPENDIX

Kimley»Horn

CC 4329

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efile@nvlitigation.com

Attorneys for Plaintiffs

UNITED STATES DISTRICT COURT

DISTRICT COURT OF NEVADA

LISA MCALLISTER, an individual; BRANDON SUMMERS, an individual; and JORDAN POLOVINA, an individual,

Plaintiffs,

vs.

CLARK COUNTY, a political subdivision of the state of Nevada,

Defendant.

Case Number: 2:24-cv-00334

APPRENDIX OF EXHIBITS TO: PLAINTIFFS MOTION FOR SUMMARY JUDGMENT (ORAL ARGUMENT REQUESTED) VOLUME V OF V

INDEX OF EXHIBITS

Exhibit No.	Description	Volume
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DATED: December 18, 2025.

/s/ Christopher Peterson

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CERTIFICATE OF SERVICE

I hereby certify that I electronically filed the foregoing **Appendix of Exhibits** with the Clerk of the Court for the United States District Court of Nevada by using the court's CM/ECF system on December 18, 2025. I further certify that all participants in the case are registered CM/ECF users and that service will be accomplished on all participants by:

☒ CM/ECF

☐ Electronic mail; or

☐ US Mail or Carrier Service

/s/ Christopher Peterson
An employee of ACLU of Nevada

Exhibit 11

Deposition of Devin Val Moore, 30(b)(6) Designee for Non-Party Kimley-Horn

McAllister et al., vs Clark County, et al.

Deposition of

DEVIN VAL MOORE, 30(B)(6) FOR NON-PARTY KIMLEY-HORN

August 18, 2025



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UNITED STATES DISTRICT COURT

DISTRICT COURT OF NEVADA

LISA McALLISTER, an individual; BRANDON SUMMERS, in individual; and JORDAN POLOVINA, an individual,

Plaintiffs,

vs.

Case No. 2:24-CV-00334

CLARK COUNTY, a political subdivision of the state of Nevada,

Defendant.
_____/

DEPOSITION OF THE 30(b)(6) NON-PARTY KIMLEY-HORN

WITNESS: DEVIN VAL MOORE

Taken on Monday, August 18, 2025

At 1:00 p.m.

4362 W. Cheyenne Avenue

North las Vegas, Nevada

Reported By: Rhonda Aquilina, Nevada #979, RMR, CRR

Q. And are performers considered NPOs?
A. Yes.
Q. Why?
A. And I guess when I say yes, I mean per the studies, yes.
Q. Why?
A. For the same reasons performers individually can reduce the capacity of the walkway, performers also -- and all of the NPOs do at certain periods, but the performers specifically can attract larger crowds, and so there are individuals who are not categorized as NPOs in the study, for example, who are pedestrians who do stop as well and they get attracted to that performance, so it could cause additional capacity constraints.
MR. PETERSON: Sorry. I just want to briefly go back to hand billers just to clarify something.
THE WITNESS: Sure.
BY MR. PETERSON:
Q. So are you saying that you categorize hand billers as NPOs because they would be stopped in the pedestrian flow?
A. Correct.
Q. Are you categorizing them as NPOs because they were also trying to have other people stop to

engage with them?

A. No.

Q. Okay.

A. Yeah, that's a good clarifying question, because there are some hand billers that we observed on Las Vegas Boulevard who would walk and hand bill at the same time, and those we did not classify.

Q. Okay. So just to clarify, you only classified people who had stopped while engaging in this activity?

A. Correct. Yes, that's correct.

Q. Okay.

BY MR. VALENTINE:

Q. Solicitors. Are solicitors considered NPOs?

A. In the studies, yes.

Q. And why?

A. For the same reason if they're in the, I guess per the definition, any person within the pedestrian walkway soliciting donations could be obstructing the free-flow movement of pedestrians within the right-of-way.

MR. PETERSON: I would like to go back, actually, to performers to what you said there.

THE WITNESS: Sure, yeah.

///

half of the NPOs on pedestrian bridges were performers, based on the 2022 study?

A. On the pedestrian bridges, that's correct, yes. Oh, that's a great point. Sorry. That table is only on pedestrian bridges.

So to make that clear, table 5.21 is the distribution of NPOs on pedestrian bridges, so that would include all pedestrians within that 8-mile study corridor.

Q. Do you have any data on NPOs or people who were stopped for any other reason other than those four reasons: The hand billers, performers, solicitors, and vendors?

A. We do not.

Q. And --

A. Well, that's not true. We have data on them as pedestrians, because we would have counted them as pedestrians, but not as NPOs.

Q. And was there a reason that the other types of activities were excluded from the data collection?

A. Excluded?

Q. Mm-hmm.

A. They were just counted as pedestrians as they're moving along the walkway or the bridges.

Q. And does that include people that were either

C E R T I F I C A T E O F R E P O R T E R

STATE OF NEVADA)
SS:
COUNTY OF CLARK)

I, Rhonda Aquilina, a Certified Court Reporter, duly licensed by the State of Nevada, do hereby certify:

That I reported the deposition of DEVIN VAL MOORE, commencing on Monday, August 18, 2025.

That prior to being deposed, the deponent was duly sworn by me to testify to the truth;

That I thereafter transcribed my said stenographic notes into written form;

That the typewritten transcript is a complete, true, and accurate transcript of my said stenographic notes;

I further certify that pursuant to ^FRCP ^NRCP Rule 30(e)(1) that the signature of the deponent:

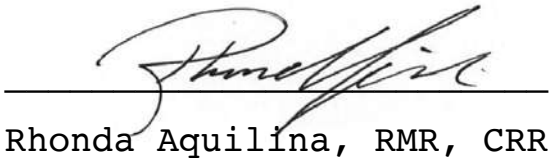
_____ was requested by the deponent or a party before the completion of the deposition;

____x__ was waived by the deponent or a party before the completion of the deposition;

The original transcript and exhibits will be forwarded to JACOB T.S. VALENTINE, ESQ..

I further certify that I am not a relative or employee of counsel or of any of the parties involved in the proceeding, nor a person financially interested in the proceeding.

IN WITNESS WHEREOF, I have set my hand in my office in the County of Clark, State of Nevada, this 25th day of August, 2025.



Rhonda Aquilina, RMR, CRR, Cert. #979

Exhibit 12

Pedestrian Bridge Arrests

TABLE 2-4. REPORTED MAXIMUM ONE-WAY VOLUMES FOR SELECTED MULTILANE HIGHWAYS

LOCATION	TOTAL VOLUME (VPH)	AVG. VOL. PER LANE (VPHPL)
4-LANE HIGHWAYS		
U.S. 101, Sonoma County, California	4120	2062
Utah 201, Salt Lake City, Utah	3989	1995
SR 17, Bergen County, New Jersey	3776	1888
U.S. 301, Prince Georges County, Maryland	3304	1652
6-LANE HIGHWAYS		
U.S. 46, Passaic County, New Jersey	5596	1865
SR 3, Passaic County, New Jersey	5348	1783
U.S. 1, Essex County, Massachusetts	4776	1592
8-LANE HIGHWAYS		
Almaden Expressway, San Jose, California	5428	1357

Source: HCQS Survey, Federal Highway Administration and Ref. 24.

TABLE 2-5. REPORTED MAXIMUM VOLUMES ON SELECTED TWO-LANE RURAL HIGHWAYS

LOCATION	TOTAL VOLUME (VPH)	PEAK DIR. VOLUME (VPH)	OFF-PEAK DIR. VOLUME (VPH)
HIGHWAYS			
Madera-Olsen Rd., Simi Valley, California	3107	1651	1456
Madera-Olsen Rd., Simi Valley, California	3027	1839	1188
Hwy. 1, Banff, Alberta, Canada	2450		
Hwy. 35/115, Kirby, Ontario, Canada	2250	—	—
Wasatch Blvd., Salt Lake City, Utah	2198	1504	694
Hwy. 35, Kirby, Ontario, Canada	2050	—	—
U.S. 50, Lake Tahoe, California	1796	1386	410
NJ 50, Cape May Co., New Jersey	1714	1445	269
Hwy. 1, Banff-Yoho, Alberta–British Columbia, Canada	1517		
BRIDGES/TUNNELS			
U.S. 158, Nags Head, North Carolina	3195	—	—
Midtown Tunnel, Norfolk/Portsmouth, Virginia	2920	1827	1093
Sagamore Bridge, Hudson, New Hampshire	2701	—	—
TH 15, St. Cloud, Minnesota	2242	1146	1096
Underwood Bridge, Hampton, New Hampshire	1960	1047	913
Staley Viaduct, Decatur, Illinois	1919	971	948

Source: HCQS Survey and Federal Highway Administration.

Seasonal peaks in traffic demand are also of great importance, particularly for primarily recreational facilities. Highways serving beach resort areas may be virtually unused during much of the year, only to be subject to regular congestion during peak summer periods.

The sections that follow present observed patterns of time variation in traffic demand for various types of facilities in North America.

Seasonal and Monthly Variations

Seasonal fluctuations in traffic demand reflect the social and economic activity of the area being served by the highway. Figure 2-8 shows monthly variation patterns observed in Illinois and Minnesota. Several significant characteristics are apparent:

1. Monthly variations are more severe on rural routes than on urban routes.
2. Monthly variations are more severe on rural routes serving primarily recreational traffic than on rural routes serving primarily business routes.
3. Daily traffic patterns vary by month of year most severely for recreational routes.

These observations lead to the conclusion that commuter and business-oriented travel occurs in more uniform patterns and that recreational traffic is subject to the greatest variation among trip-purpose components of the traffic stream.

The data for Figure 2-8b were collected on the same Interstate route. One segment is within 8 mi of the central business district of a large metropolitan area. The other segment is within 50 mi of the first but serves a combination of recreational and intercity business travel. The wide difference in seasonal variation patterns for the two segments underscores the effect of trip purpose and may also reflect capacity restrictions on the urban section.

Daily Variations

Volume variations by day of the week are also related to the type of highway on which observations are made. Figure 2-9 shows that weekend volumes are lower than weekday volumes for highways serving predominantly business travel, such as urban free-

TABLE 2-6. REPORTED MAXIMUM ONE-WAY VOLUMES ON SELECTED URBAN ARTERIALS

LOCATION	TOTAL VOLUME (VPH)	AVG. VOLUME PER LANE (VPHPL)	V/C RATIO	TOTAL FLOW RATE (VPHG)	AVG. FLOW RATE PER LANE (VPHGPL)
4-LANE ARTERIALS					
Ill. 83, DuPage Co., Illinois	3839	1910	0.81	4724	2387
So. Virginia St. (US 395), Reno, Nevada	2821	1415	0.62	4566	2282
Tara Blvd., Clayton, Georgia	2137	1068	0.47	4547	2272
Dougall Ave. SB, Windsor, Ontario, Canada	2240	1120	0.60	3733	1867
Antoine, Houston Texas	2310	1155	0.65	3553	1777
Woodway WB, Houston Texas	2156	1078	0.76	2836	1418
5-LANE ARTERIALS					
North Shepard NB, PM, Houston, Texas	2100	1050	0.60	3500	1750
6-LANE ARTERIALS					
CO 2, Denver, Colorado	3435	1145	0.50	6870	2290
US 74/NC 27, Charlotte, North Carolina	4862	1621	0.80	6102	2034
Almaden Expressway, San Jose, California	3960	1320	0.66	6000	2000
Ygnacio Valley Road, Walnut Creek, California	3790	1263	0.65	5831	1943
Southwest Trafficway, Kansas City, Missouri	3491	1164	0.60	5820	1940
U.S. 19, Clearwater, Florida	4305	1435	0.75	5740	1913
Ward Parkway, Kansas City, Missouri	3477	1159	0.61	5700	1900
Seward Highway, Anchorage, Alaska	3177	1059	0.70	4538	1513
8 LANE ARTERIALS					
Telegraph Rd., Detroit, Michigan	4400	1100	0.60	7333	1833
FM 1093, Houston, Texas	4580*	1175	0.70	6429	1607
FM 1091, Houston, Texas	4268*	1067	0.70	6097	1524

*4-7 lanes

Source: HCQS Survey, Federal Highway Administration, Case Studies in Access Management, Draft Final Report, J. J. Koepke, Jr., and Herbert Levinson, 1992

ways. In comparison, peak traffic occurs on weekends on main rural and recreational access facilities. Furthermore, the magnitude of daily variation is highest for recreational access routes and least for urban commuter routes.

Figure 2-10 shows the variation in traffic by vehicle type for the shoulder lane of an urban freeway. Truck traffic is the most severely reduced on weekends.

The extent of daily volume variation decreases as volume increases, often reflecting the effect of capacity restrictions on demand.

Although the values shown in Figures 2-9 and 2-10 are illustrative of typical patterns that may be observed, they are not meant to substitute for local studies and analyses. The average daily traffic averaged over a full year is referred to as the annual average daily traffic, or AADT, and is often used in forecasting and planning.

Hourly Variations

Typical hourly variation patterns are shown in Figure 2-11, where the patterns are related to highway type and day of the week. The typical morning and evening peak hours are evident for urban commuter routes on weekdays. The evening peak is generally somewhat more intense than the morning peak, as shown in Figure 2-11. On weekends, urban routes show a peak that is less intense and more "spread out," occurring early to midafternoon.

Recreational routes also have single daily peaks. Saturday peaks on such routes tend to occur in the late morning to early afternoon (as travelers go to their recreational destination) and in late afternoon or early evening on Sundays (as they *return* home).

The repeatability of hourly variations is of great importance. The stability of peak-hour demands affects the feasibility of using such values in design and operational analysis of highways and other transportation facilities. Figure 2-12 shows data obtained over a 77-day period in metropolitan Toronto. The shaded area indicates the range within which one can expect 95 percent of the observations to fall. Whereas the variations by hour of the day are typical for urban areas, the relatively narrow and parallel fluctuations among the 77 days indicate the repeatability of the basic pattern. The observations shown were obtained from detectors measuring one-way traffic only, as evidenced by the single peak hour shown for either morning or afternoon.

It is again noted that the data of Figures 2-11 and 2-12 are typical of observations that can be made. The patterns illustrated, however, vary in response to local travel habits and environments, and these examples should not be used as a substitute for locally obtained data.

Peak Hour and Design Hour

Capacity and other traffic analyses focus on the peak hour of traffic volume, because it represents the most critical period for operations and has the highest capacity requirements. The peak-hour volume, however, is not a constant value from day to day or from season to season.

If the highest hourly volumes for a given location were listed in descending order, a large variation in the data would be observed, depending on the type of route and facility under study.

Rural and recreational routes often show a wide variation in peak-hour volumes. Several extremely high volumes occur on a

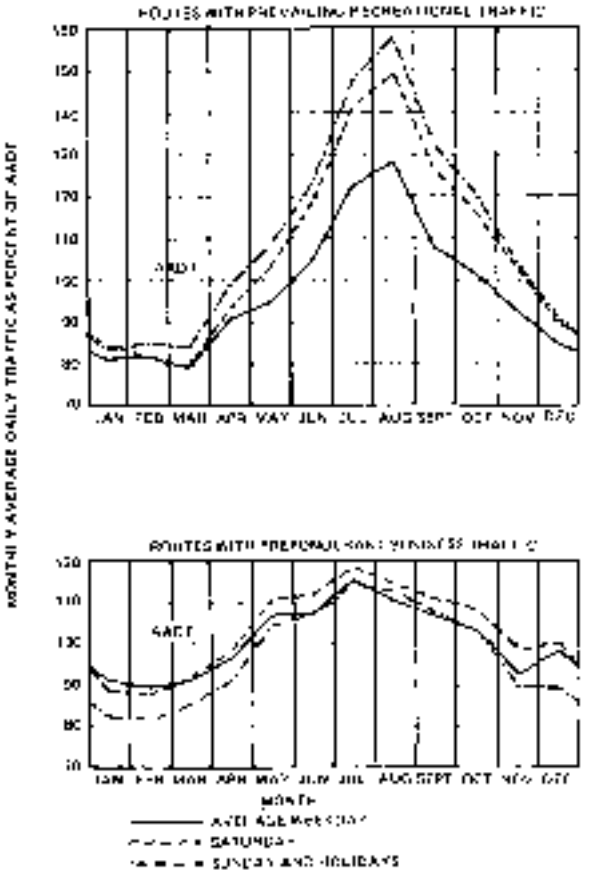


Figure 2-8(a). Examples of seasonal traffic volume variations showing monthly variations in traffic for a freeway in Minnesota

few selected weekends or other peak periods, and traffic during the rest of year is at much lower volumes, even during the peak hour. This occurs because the traffic stream consists of few daily or frequent users, the major component of traffic is generated by seasonal recreational activities and special events.

Urban routes, on the other hand, show very little variation in peak-hour traffic. Most users are daily commuters or frequent users, and occasional and special event traffic are at a minimum. Furthermore, many urban routes are filled to capacity during each peak hour, and variation is therefore severely constrained. In many urban areas, both the a.m. and p.m. peak periods extend for more than 1 hr.

Figure 2-13 shows hourly volume relationships measured on a variety of highway types in Minnesota. Recreational facilities show the widest variation in peak-hour traffic, with values ranging from 10 percent of the AADT occurring in the highest hour of the year to about 15.3 percent of AADT occurring in the 200th-highest hour of the year and 8.3 percent in the 1,000th-highest hour of the year. Main rural facilities also display a wide variation. The highest hour is subjected to 17.9 percent of the AADT, decreasing to 10 percent in the 100th hour and 6.9 percent in the 1,000th hour. Urban radial and circumferential facilities show far less variation. The range in percent of AADT covers a narrow band, from approximately 11.5 percent for the highest hour to 7 to 8 percent for the 1,000th-highest hour. Figure 2-13 includes all hours, not just peak hours of each day.

It is apparent from these characteristics that traffic engineers are faced with the need for substantial judgments. Provision of a recreational facility adequate to handle the highest peak-hour volume of the year for a given level of service results in gross underutilization of capacity during all but a few hours of the year. On the other hand, providing sufficient capacity for the 30th, 100th, 500th, or other hour would guarantee the occurrence of substantial congestion and delay during those special event or recreational peak hours occurring less frequently.

The selection of an appropriate hour for planning, design, and operational purposes is a compromise between providing an adequate level of service for every (or almost every) hour of the year and economic efficiency. Customary practice in the United States is to base rural highway design on an hour between the 30th- and 200th-highest hour of the year. This range generally encompasses the "knee" of the curve—the area in which the slope of the curve changes from sharp to flat. For rural highways, the knee has often been assumed to occur at the 30th-highest hour, which is often used as the basis for estimates of design hour volume. For urban roadways, a design hour for the repetitive weekday peak periods is common. Signal timing analyses frequently use traffic conditions typical of certain periods of the day or week.

Past studies [7,8] have emphasized the difficulty in locating a distinct knee on hourly volume curves. Figure 2-14 shows hourly volumes for all hours of the year at a Kentucky counting station. The first and third curves illustrate the continuous nature of the relationship, with no distinct breaks or knee in the decreasing hourly volume pattern. The second curve shows a rather spread-out knee, which could easily be located anywhere within the first 100 hr. These curves illustrate the point that arbitrary selection of a design hour between the 30th- and 100th-highest hour is not a rigid criterion and indicate the need for local data on which to make informed judgments.

Since the first knee may be followed by another occurring on different days of the week or month or with different prevailing trip purposes, it is advisable to identify the nature of traffic in the highest hours.

The selection of a design hour must consider the impact of the selection on the higher-volume hours that are not accommodated. The recreational access route curve of Figure 2-14 shows that the highest hours of the year have more than twice the volume of the 100th hour, whereas the highest hours of an urban radial route are only about 15 percent higher than the volume in the 100th hour. Use of a design criterion set at the 100th hour would create substantial congestion on a recreational access route during the highest-volume hours but would have less effect on an urban facility, where the variation in peak-hour volumes is less. Another consideration is the level of service objective. A route designed to operate at LOS B can absorb larger amounts of additional traffic than a route designed to operate at LOS D during those extreme hours of the year with higher volumes than the design hour. As a general guide, the most repetitive peak volumes may be used for the design, and the level of service during higher-volume periods should be tested as to the acceptability of the resulting traffic conditions.

The proportion of AADT occurring in the design hour is often referred to as the *K*-factor. It is expressed as a decimal and varies on the basis of the hour selected for design or planning application and the characteristics of the subject route and its development.

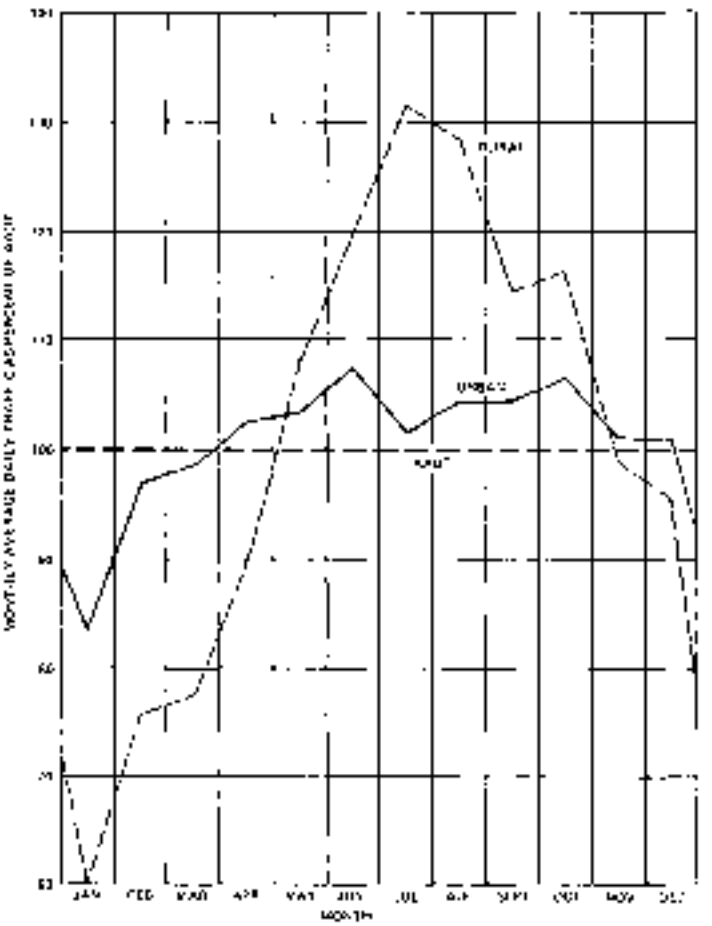


Figure 2-8(b) Examples of monthly traffic volume variations showing relative traffic volume trends by route type on rural roads in Lake County, Illinois. (Source: Ref. 5*1*)

environment. Where the *K*-factor is based on the 30th-highest hour of the year, several general characteristics can be noted:

1 The *K*-factor generally decreases as the AADT on a highway increases.

2 The reduction rate for high *K*-factors is faster than that for lower values.

3 The *K*-factor decreases as development density increases.

4 The highest *K*-factors generally occur on recreational facilities, followed by rural, suburban, and urban facilities, in descending order.

Subhourly Variations in Flow

Whereas volume forecasts for long-range planning studies are frequently expressed in units of AADT (vehicles per day), subsequently reduced to hourly volumes, the analysis of level of service is based on peak rates of flow occurring within the peak hour. Most of the procedures in this manual are based on peak 15-min rates of flow. Figure 2-15 shows the substantial short-term fluctuation in flow rate that can occur during an hour. The data shown are for I-35W in Minneapolis, Minnesota, in 1983.

In Figure 2-15 the maximum 5-min rate of flow is 2,232 vph, whereas the maximum rate of flow for a 15-min period is 1,980 vph. The full hour volume is only 1,622 vph. A design for a peak 5-min flow rate would result in substantial excess capacity during the rest of the peak hour, whereas a design for the peak-hour volume would result in congestion for a substantial portion of the hour. Note that Figure 2-15 treats discrete 15 min periods for clarity. In practice, the peak 15 min may occur during any 15-min interval within the hour.

Consideration of these peaks is important. Congestion due to inadequate capacity occurring for only a few minutes could take substantial time to dissipate because of the dynamics of breakdown flow, which are explained in greater detail in Chapter 6. Fifteen-min flow rates have been selected as the basis for most procedures of this manual to incorporate these peak flows.

Five-min flow rates have been avoided, since research has shown them to be statistically unstable. The operational effects of a 5-min flow surge are virtually impossible to predict with any certainty.

The relationship between the peak 15-min flow rate and the full hourly volume is given by the peak-hour factor, defined in Part A of this chapter.

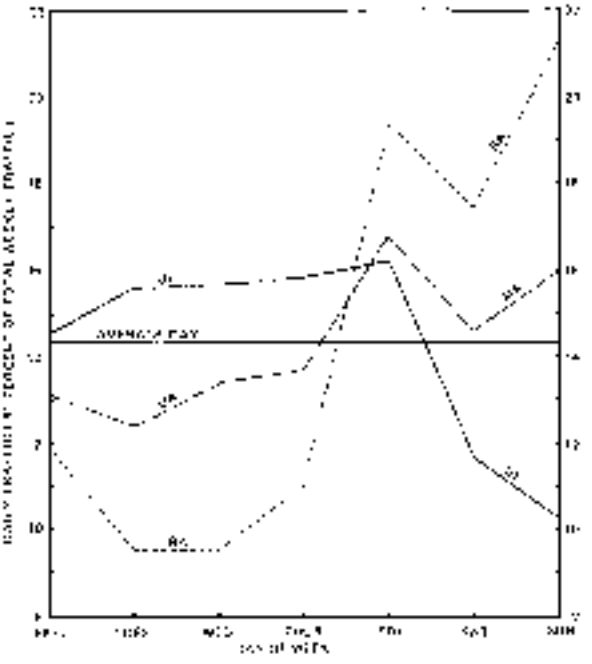


Figure 2-9. Examples of daily traffic variation by type of road. Legend: MR curve represents main rural route I-35, Southern Minnesota, AADT 10,823 4-lanes; IMR RA curve represents recreational access route MN 169, North-Central Lake Region, AADT 3,863, 2-lanes, 1981; UF curve represents urban freeway, four freeways in Minneapolis–St. Paul, AADTs 75,000–130,000, 6–8 lanes, 1982. (Source: Minnesota Department of Transportation)

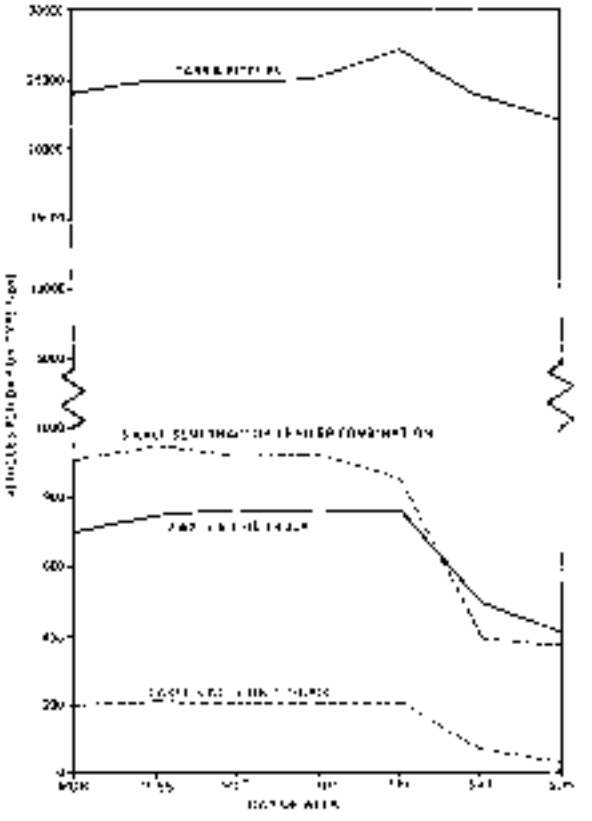


Figure 2-10. Daily variation in traffic by vehicle type. Data for this figure were collected on I-494, 4-lanes, in Minneapolis–St Paul. (Source: Minnesota Department of Transportation)

Whether the design hour was measured, established from the analysis of peaking patterns, or based on modeled demand, the peak-hour factor (PHF) is applied to determine design hour flow rates.

Peak hour factors in urban areas generally range between 0.80 and 0.98. Lower values signify greater variability of flow within the subject hour, and higher values signify little flow variation. Peak-hour factors over 0.95 are often indicative of high traffic volumes, sometimes with capacity constraints on flow during the peak hour.

SPATIAL DISTRIBUTIONS

Whereas traffic volume varies in time, it also varies in space. The two critical spatial characteristics of interest in capacity analysis are directional distribution and lane distribution. Volume may also vary longitudinally along various segments of a facility, but this does not explicitly affect capacity analysis computations. Each facility segment serving different traffic demands must be analyzed separately.

Directional Distribution

During any particular hour, traffic volume may be greater in one direction than in the other. An urban radial route, serving strong directional demands into the city in the morning and out of it at night, may display as much as a 2:1 imbalance in directional flows. Recreational and rural routes may also be subject to significant directional imbalances, which must be considered in the design process. Table 2-7 gives the directional distribution on various highway types in Minnesota between 1980 and 1982.

Directional distribution is an important factor in highway capacity analysis. This is particularly true for two-lane rural highways. Capacity and level of service vary substantially on the basis of directional distribution because of the interactive nature of directional flows on such facilities. Procedures for two-lane highways include explicit consideration of directional distribution.

Whereas there is no explicit consideration of directional distribution in the analysis of multilane facilities, the distribution has a dramatic impact on both design and level of service. As indicated in Table 2-7, urban radial routes have been observed to have up to two-thirds of their peak-hour traffic in a single direction. Unfortunately, this peak occurs in one direction during the morning and in the other in the evening. Thus, both directions of the facility must be adequate for the peak directional flow. This characteristic has led to the use of reversible lanes on some urban freeways and arterials.

Directional distribution is not a static characteristic. It changes by hours of the day, day of the week, season, and from year to year. Development in the vicinity of highway facilities often in-

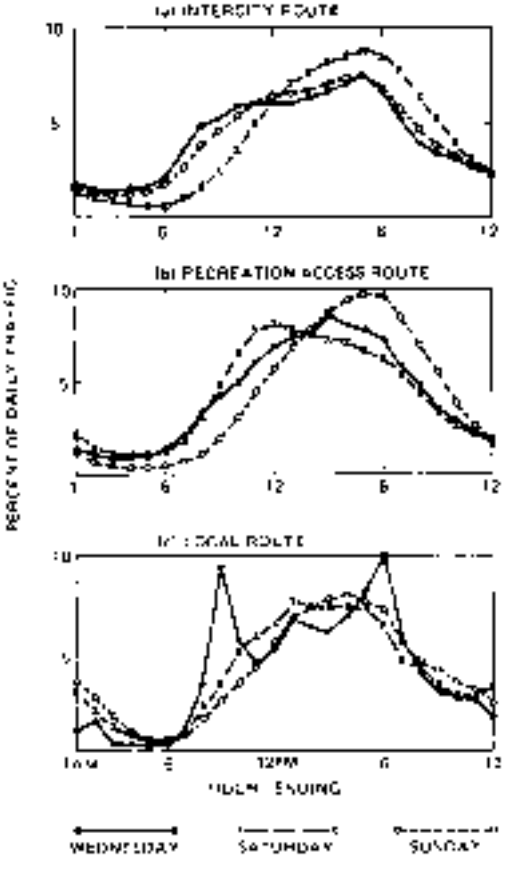


Figure 2-11 Examples of hourly traffic variations for rural routes in New York State. (Source: Ref. 5)

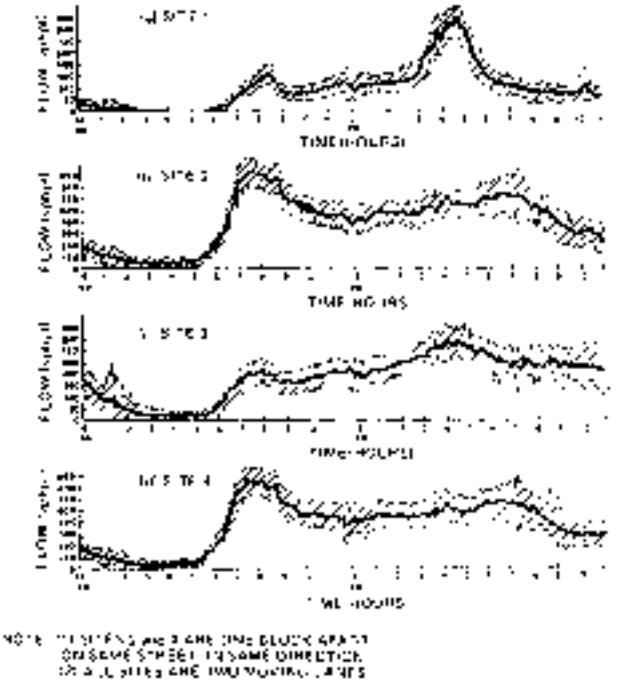


Figure 2-12 Repeatability of hourly traffic variations for four 2-lane arterials in Toronto, Ontario, Canada. (Source: Ref. 5)

ducts traffic growth that changes the existing directional distribution.

The proportion of traffic occurring in the peak direction of travel during peak hours is often denoted as *D*. The *K*-factor, the proportion of AADT occurring in the design hour, was discussed previously. These factors are used to estimate the peak-hour traffic volume in the peak direction using the following equation:

$$DDHV = AADT \times K \times D \qquad (2\text{-}11)$$

where

DDHV = directional design hour volume (vph),
AADT = average annual daily traffic (vpd),
K = proportion of AADT occurring in the peak direction, and
D = proportion of peak hour traffic in peak direction.

The product of the factors *K* and *D* is given for a number of facilities in Table 2-8. The product gives the proportion of AADT occurring in the maximum direction of the peak hour.

Lane Distribution

When two or more lanes are available for traffic in a single direction, the distribution in lane use varies widely. The lane distribution depends on traffic regulations, traffic composition, speed and volume, the number of and location of access points, the origin-destination patterns of drivers, development environment, and local driver habits.

Because of these factors, there are no "typical" lane distributions. The procedures of this manual assume an average capacity of multilane uninterrupted flow facilities of 2,200 pcphpl. It is recognized that flow in some lanes will be higher and in others lower. Recent data collected as part of the Highway Capacity and Quality of Service Committee survey of high-volume facilities indicate no consistency in lane distribution. Data indicate that the peak lane on a six-lane freeway, for example, may be the shoulder, middle, or median lane, depending on local conditions.

Table 2-9 gives lane distribution data for various vehicle types on selected freeways. These are illustrative and are not intended to represent "typical" values.

The trend indicated in Table 2-9 is reasonably consistent throughout North America. Heavier vehicles tend toward the right-hand lanes, partially because they may operate at lower speeds than other vehicles and partially because of regulations prohibiting them from using left-most lanes.

Lane distribution is a critical factor in the analysis of freeway ramp junctions, because the traffic in the shoulder lane forms the merge or diverge volume in conjunction with ramp vehicles.

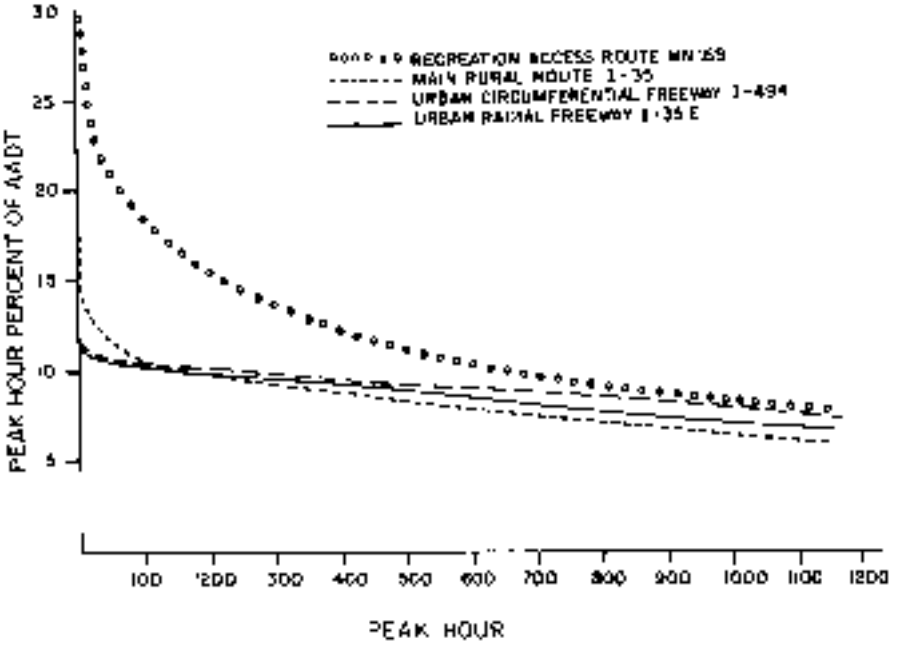


Figure 2-13. Ranked hourly volumes on Minnesota highways. (Source: Minnesota Department of Transportation)

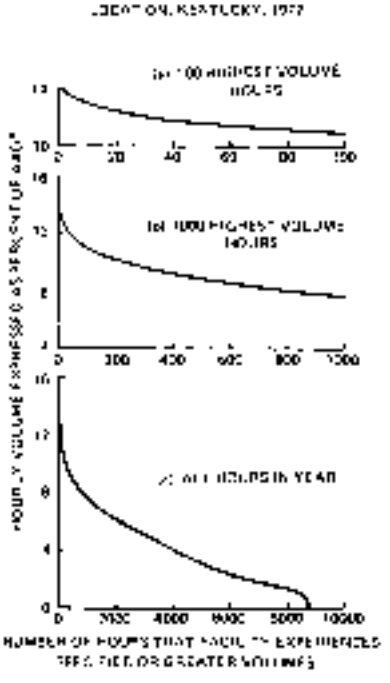


Figure 2-14. Ranked hourly volume distribution showing inadequacy of data for Kentucky location in 1977. (Source: Ref. 7)

Procedures for their analysis in Chapter 5 focus on estimating traffic in the shoulder lane as well as such presence in the lane.

TRAFFIC COMPOSITION

The fraction of trucks, recreational vehicles, and buses in the traffic stream is also required to apply the procedures of this manual. Adjustments for these three categories of vehicles, especially as they relate to grade-climbing capabilities, are given for each of the procedures in following chapters.

Lighter-weight vehicles dominate the new-car market. Figures 2-16 and 2-17 show trends in passenger car power characteristics since 1967, with projections to 1995. Whereas the trend is clearly toward less powerful vehicles (as indicated by the ratio of horsepower to weight in Figure 2-16), the average 1995 vehicle will have about 85 percent of the lb/hp of an average 1978 vehicle. The impact of these changes on capacity and operations is expected to be minimal.

IMPACT OF WEATHER ON MAXIMUM VOLUMES

There have been relatively few efforts to quantify the effects of adverse weather on capacity. Some measure of the impact can be gained from studies conducted on two freeways with automated data collection systems—the Gulf Freeway (I-45) in Houston (11) and I-35W in Minneapolis (12). For both freeways, observations were made on three-lane segments influenced by bottlenecks such that a history of "capacity volumes" was available. For the Gulf Freeway, it was reported that rain significantly reduces capacity by from 14 to 19 percent compared with clear-weather values.

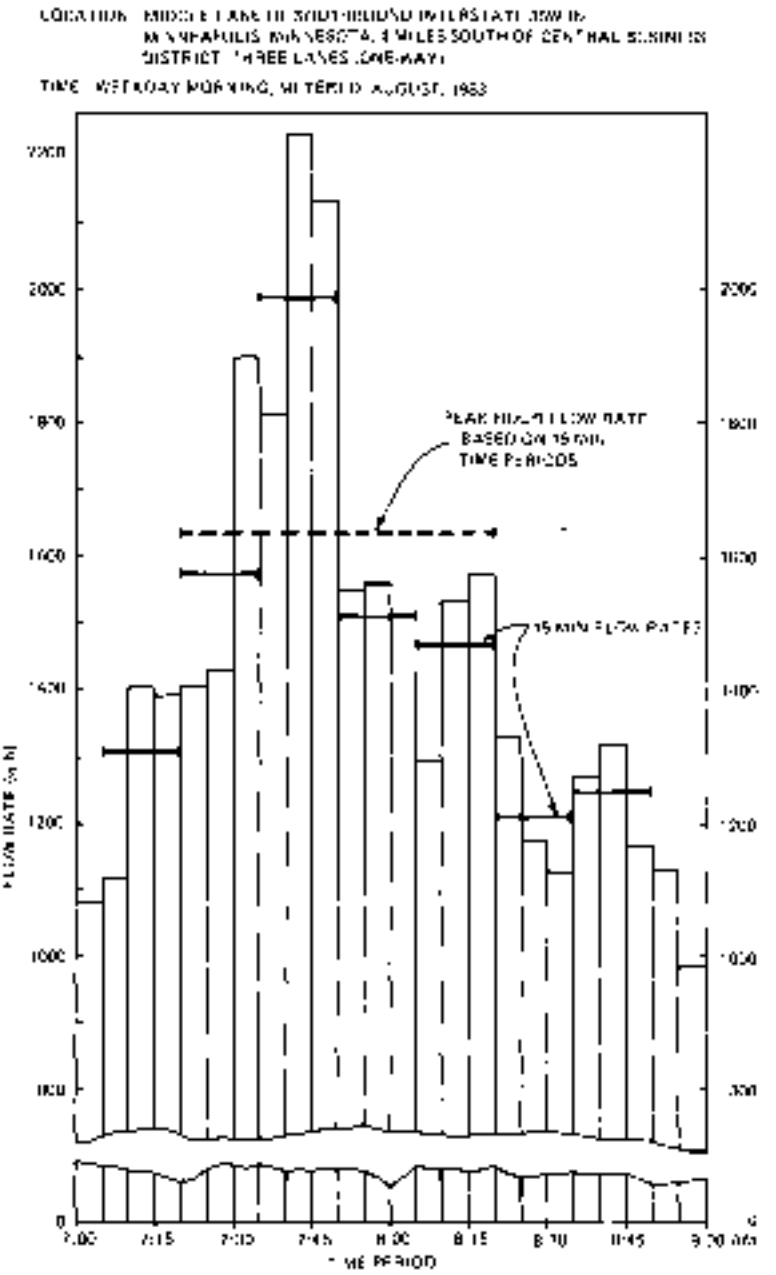


Figure 2-15. Relationship between short term and hourly flows. (Source: Minnesota Department of Transportation)

TABLE 2-7. DIRECTIONAL DISTRIBUTION CHARACTERISTICS

HIGHEST HOUR OF THE YEAR	PERCENT TRAFFIC IN PEAK DIRECTION — TYPE OF FACILITY		
	URBAN CBD	URBAN RADIAL	RURAL
1st	53	66	57
10th	55	66	59
50th	53	66	55
100th	50	65	52

Source: Minnesota Department of Transportation, 1980–1982

Updated October 1984

Results from the I-35W study suggested that even a trace of precipitation reduced capacity by 8 percent. Each 0.01 in/hr increase in rainfall resulted in a further decrease of 0.6 percent in capacity. When precipitation falls as snow, the impact is even greater: an additional 2.4 percent decrease in capacity for each 0.01 in/hr of snow (water equivalent) beyond the initial trace decrease of 8 percent.

The procedures of this manual do not specifically account for inclement weather conditions. However, in areas where such conditions are prevalent, analysts may wish to modify results to account for these impacts.

TABLE 2-8. OBSERVED VALUES OF *K* AND *D* ON SELECTED FREEWAYS AND EXPRESSWAYS

CITY AND 1990 URBANIZED AREA POPULATION	FACILITY	YEAR COUNT TAKEN	NUMBER OF LANES	ANNUAL AVERAGE DAILY TRAFFIC (2-WAY)	VOLUMES IN PEAK DIRECTION		AVERAGE VOLUME PER LANE (DHPV)
					VEHICLES (1-WAY)	% 2-WAY ADT (*K* in %)	
Atlanta, Ga. 2,157,806	I-20 E. of CBD at Moreland Ave.	1984	8	99,900	7,794	7.8	1,948
	I-20 at Martin Luther King Jr. Drive	1984	8	91,200	(5,198)	5.7 (1975)	(1,299)
	I-75 S. of CBD at University Ave.	1984	8	146,000	(8,179)	5.6 (1975)	(2,045)
	I-75 N. of CBD (N. of I-85)	1984	8	82,830	(5,135)	6.2 (1975)	(1,284)
	I-85 N. of I-75 at Monroe Dr.	1984	8	95,300	6,765	7.1	1,641
Boston, Mass. 2,775,370	I-93 N. of I-495	1984	6	76,500	5,200	6.8	1,733
	S.E. Expressway at Southampton St.	1982	6	143,300	6,860	4.8	2,286
	I-95 E. of Rt. 128 N. of Middlesex	1984	8	125,050	7,282	5.8	1,823
Denver, Colo. 1,517,977	I-25 S. of I-70	1984	8	175,000	7,500	4.3	1,875
	I-70, Colorado Blvd. to Dahlia	1984	6	114,000	4,650	4.1	1,550
	C-S 6 W. of Federal Blvd.	1985	6	112,000	5,835	5.2	1,945
Detroit, Mich. 3,697,529	I-96 Jeffers Freeway at Warren	1980	8	60,600	6,270	9.3	1,568
	Lodge at E. Grand Blvd.	1983	6	111,450	4,660	4.2	1,553
Houston, Tex. 2,901,853	I-10 E. of Taylor St.	1985	10	156,000	7,800	5.0	1,560
	I-10 E. of McCarty	1985	8	110,200	7,520	6.8	1,882
	I-610 at Ship Channel	1985	10	103,200	5,540	5.4	1,108
Milwaukee, Wis. 1,226,293	N.-S. Freeway at Wisconsin	1984	8	118,080	5,130	4.5	1,342
	N.-S. Freeway at Greenfield	1984	8	110,060	6,380	5.8	1,595
	E.-W. Freeway at 26th St.	1984	6	128,150	5,700	4.7	1,900
	Zoo Freeway at Wisconsin	1984	6	110,730	6,760	6.3	1,581
	Airport Freeway at 68th	1984	6	88,020	3,940	4.9	1,313
New York, N.Y. 16,044,012	Holland Tunnel	1982	4	73,200	2,700	3.7	1,350
San Francisco, Calif. 3,629,516	I-80 Oakland Bay Bridge	1984	10	223,000	8,898	4.0	1,780
Washington, D.C. 3,369,061	I-66 Theodore Roosevelt Bridge	1984	6	86,200	(7,413)	8.6 (1975)	(2,471)
	Anacostia Freeway at Howard Road	1984	6	121,200	(6,061)	5.0 (1975)	(2,020)

Note: Values in parentheses based on *K* × *D* value for the year indicated if different from the year the count was taken.
Source: Characteristics of Urban Transportation Demand—An Update, July 1986, Charles River Associates in association with H. S. Levinson, and Ref. 52.

TABLE 2-9 LANE DISTRIBUTION BY VEHICLE TYPE

HIGHWAY	VEHICLE TYPE	PERCENT DISTRIBUTION BY LANE		
		LANE 1[b]	LANE 2	LANE 3
Lodge Freeway, Detroit	Light[a]	29.2	38.4	32.4
	SU Trucks	30.5	61.5	7.7
	Combinations	88.5	2.9	8.6
	All Vehicles	30.9	37.8	31.3
I-95, Connecticut Turnpike	Light[a]	34.6	40.9	24.5
	All Vehicles	37.1	40.4	22.5
I-4, Orlando, Florida	All Vehicles	29.9	31.7	38.4

[a] Passenger cars, panel trucks, and pickup trucks.
[b] Lane 1 = shoulder lane; lanes numbered from shoulder to median.
Source: Ref. 74 and Florida Department of Transportation, 1985.

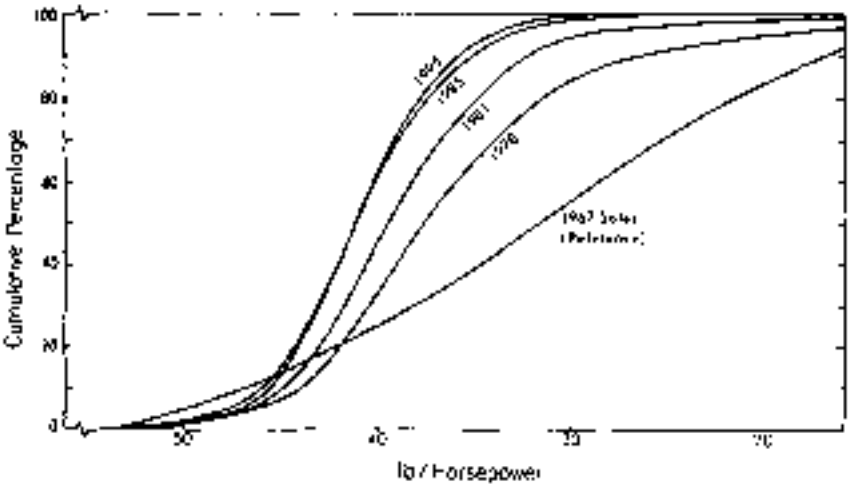


Figure 2-16. Distribution of power-to-mass ratios of passenger cars (Source: Ref. 9).

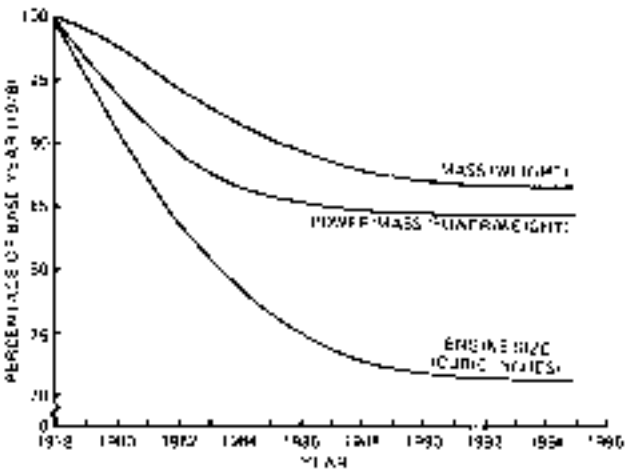


Figure 2-17. On-highway passenger car characteristics (Source: Ref. 10, Figure 2-14).

IV. SPEED CHARACTERISTICS

NATIONAL SPEED TRENDS

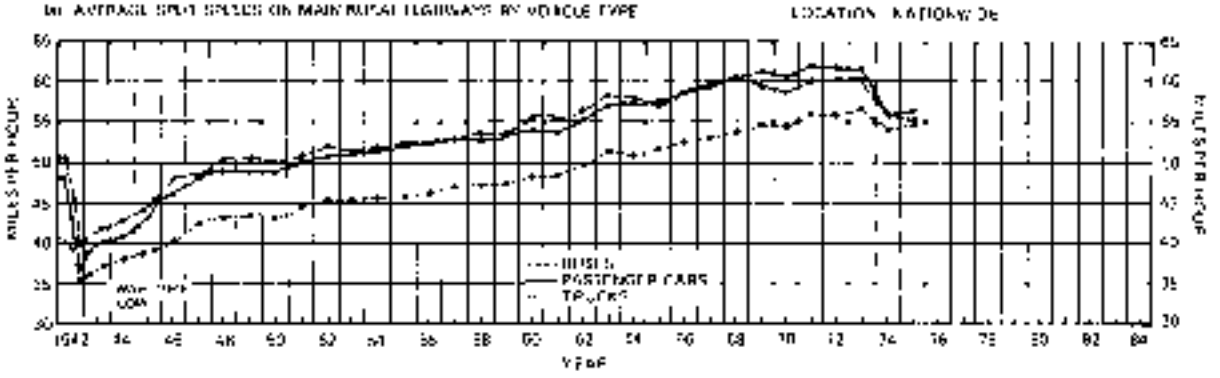
Nationwide speed trends through 1995 are shown in Figure 2-18a for various vehicle types and in Figure 2-18b for all vehicles on Interstate rural highways through 1993.

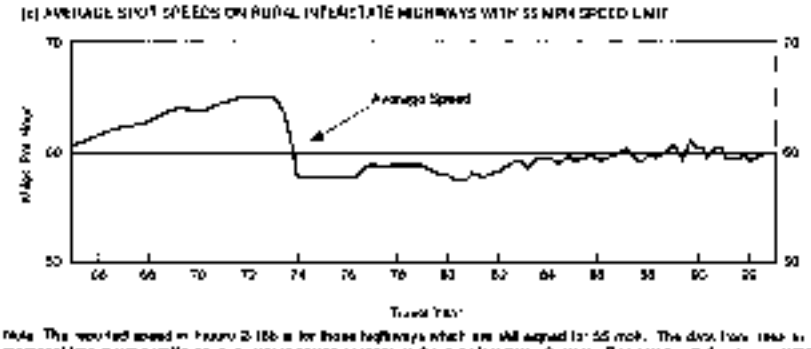
Figure 2-18a, for main rural highways, shows a clear increasing speed trend from 1942 through the middle of 1972. This reflects the better design of both highways and vehicles occurring throughout this period. In 1973, in response to a severe fuel shortage, the 55-mph national speed limit was reinstituted, and a sharp decline in speeds was observed. The figure also shows that buses and passenger cars travel at similar speeds on rural highways, whereas trucks travel at somewhat lower speeds. To 1973, the difference between average truck and passenger car speed was about 7 to 8 mph. After 1973, this difference was reduced considerably, to about 2 mph, because of the lower overall speeds being observed.

Figure 2-18b indicates that speeds have been gradually increasing despite the 55-mph speed limit. With the restoration of the 65-mph speed limit on some of the major roadways, further increases in average speeds can be expected.

Table 2-10 confirms the increasing speed trends on U.S. highways. All of the highways referenced in Table 2-10 had a 55-mph speed limit in effect.

Aside from the general interest in the speed limit issue, these speed trends have an impact on the procedures presented in this manual. Uninterrupted flow procedures incorporate national aver-





Note: The posted speed in Figure 2-18c is for those highways which are still signed for 55 mph. The data from 1987 to 1991 represent free moving traffic on rural, uncongested sections of the new Interstate System. Beginning with fiscal year 1990, the data of overall vehicle travel on the rural Interstate System

Figure 2-18. Nationwide speed trends through 1975 and 1993 (Source: Ref. 1 and Highway Statistics)

TABLE 2-10. NATIONAL SPOT SPEED TRENDS FOR 55-MPH FACILITIES

FISCAL YEAR	AVERAGE SPEED (MPH)	MEDIAN SPEED (MPH)	85TH PERCENTILE SPEED (MPH)	PERCENT > 55 MPH
URBAN INTERSTATE HIGHWAYS				
1985	57.2	57.4	64.0	64.1
1987	58.0	58.0	64.8	67.4
1989	58.9	59.0	66.1	71.3
1991	58.6	58.8	66.1	69.8
RURAL INTERSTATE HIGHWAYS				
1985	59.5	59.4	66.1	75.4
1987	59.7	59.3	66.5	77.7
1989	60.1	60.3	67.2	76.8
1991	59.4	59.4	67.2	75.5
RURAL ARTERIALS				
1985	54.9	55.2	61.7	50.5
1987	55.9	56.1	62.8	54.0
1989	56.2	56.4	63.4	56.0
1991	56.4	56.3	63.8	56.5
URBAN PRINCIPAL ARTERIALS				
1985	53.5	53.6	60.1	41.1
1987	54.0	54.1	60.7	44.1
1989	54.6	55.1	61.3	47.3
1991	54.0	53.9	60.6	42.2

Note: All highways have 55-mph speed limit
Source: Highway Statistics, Federal Highway Administration, 1991

Updated October 1994

Exhibit 13

M r , 25-CR-071740, Criminal Complaint

FILED
Aug 28 2025 8:44AM
Justice Court
Las Vegas, Nevada

STEVEN B. WOLFSON
Clark County District Attorney
Nevada Bar #1565
200 Lewis Avenue
Las Vegas, NV 89155
PH: (702) 671-2500
FAX: (702) 868-2412
DAInfo@clarkcountydanv.gov
Attorney for the Plaintiff

JUSTICE COURT, LAS VEGAS TOWNSHIP

CLARK COUNTY, NEVADA

THE STATE OF NEVADA,

Plaintiff,

-vs-

ALLECIANA MICHELE MIABELLI
#7162602

Defendant.

JC CASE NO: 25-CR-071740

JC DEPT NO: 10

CRIMINAL COMPLAINT

That the Defendant(s) above named, within the County of Clark, State of Nevada, on or about August 23, 2025, committed the crime of STOP/STAND/CAUSE OTHERS TO STOP W/I PED BRIDGE, (Misdemeanor - NRS 16.11.030 - NOC 66203), in the manner following, to wit:

ALLECIANA MICHELE MIABELLI did on or about August 23, 2025, did willfully and unlawfully stop or stand within any pedestrian flow zone, Las Vegas Boulevard and Tropicana Avenue, Las Vegas, Clark County, Nevada, by stopping on a pedestrian bridge to engage in a protest after having been warned not to stop.

All of which is contrary to the form, force and effect of Statutes in such cases made and provided and against the peace and dignity of the State of Nevada. Said Complainant makes this declaration subject to the penalty of perjury.



08/28/2025

MPD EV# LLV250800092360

Exhibit 14

Clark County Board of Commissioners Meeting Agenda from November 21, 2023

AGENDA

JOINT MEETING OF THE
CLARK COUNTY BOARD OF COMMISSIONERS
CLARK COUNTY REDEVELOPMENT AGENCY
CLARK COUNTY WATER RECLAMATION DISTRICT BOARD OF TRUSTEES
AND CLARK COUNTY LIQUOR AND GAMING LICENSING BOARD

9:00 AM TUESDAY, NOVEMBER 21, 2023

COMMISSION CHAMBERS, GOVERNMENT CENTER

500 SOUTH GRAND CENTRAL PARKWAY

LAS VEGAS, NEVADA 89106

This meeting has been properly noticed and posted online at https://clarkcountynv.gov/agendas and Nevada Public Notice at https://notice.nv.gov/ and in the following location:

CC Government Center 500 S. Grand Central Pkwy. Las Vegas, NV (Principal Office)

If you wish to speak on an item marked "For Possible Action" appearing on this agenda, please fill out a Public Comment Interest Card which is located in front of the Commission Chambers and submit the comment card to staff sitting in the Commission Chambers. If you wish to speak to the Board about items within its jurisdiction but not appearing as an "Action" item on this agenda, you must wait until the "Comments by the General Public" period listed at the end of this agenda. Comments will be limited to up to three minutes. Please step up to the speaker's podium, clearly state your name and address and please spell your last name for the record. If any member of the Board wishes to extend the length of a presentation, this will be done by the Chair, or the Board by majority vote.

- Items on the agenda may be taken out of order.
- The Board of County Commissioners, Board of Trustees, and Licensing Board may combine two or more agenda items for consideration.
- The Board of County Commissioners, Board of Trustees, and Licensing Board may remove an item from the agenda or delay discussion relating to an item at any time.

Contracts, zoning matters, or ordinances that do not comply with the County's disclosure requirement as outlined in Section 10(2) of the County Ethics Policy are subject to being voided.

The main agenda is available on Clark County's website, ClarkCountyNV.gov. For copies of agenda items and supporting backup materials, please contact Agenda Coordinator, at (702) 455-3530, Clark County Manager's Office, 500 S. Grand Central Parkway, 6th Floor, Las Vegas, Nevada 89106. This meeting will be broadcast live in the Las Vegas area. Clark County Television is available in the Las Vegas area on Channel 4/1004 on Cox cable and on CenturyLink on Channels 4 and 1004 as well as in Laughlin on Channel 14 via Suddenlink. Live streaming of CCTV programming is available at www.ClarkCountyNV.gov and https://www.youtube.com/ClarkCountyNV. CCTV is also available in Boulder City on Channel 4 and in Moapa Valley on Digital Channel 5.3. For more information about the program schedule, please refer to https://clarkcountynv.gov/CCTV4/ or contact CCTV Channel 4 at (702) 455-6890.

SEC. 1. OPENING CEREMONIES

CALL TO ORDER

INVOCATION

PLEDGE OF ALLEGIANCE

SEC. 2. COMMISSIONERS' / COUNTY MANAGER'S RECOGNITION

1. County Manager recognition of newly hired Clark County employees.

SEC. 3. PUBLIC FORUM

This is the first of two portions of the meeting devoted to the Public. Public comment during this portion of the agenda must be limited to matters on the agenda for action. If you wish to speak during this portion of the meeting, please fill out a Public Comment Interest Card located in front of the Commission Chambers and submit it to staff sitting in the Commission Chambers. After completing and submitting a Public Comment Interest Card, proceed up to the speaker's podium, clearly state your name and address, and spell your last name for the record.

2. Public Comment.

SEC. 4. AGENDA

3. Approval of Minutes of the Regular Meeting on October 18, 2023 and the Clark County Redevelopment Agency Meeting on October 18, 2023. (For possible action) (Available in the County Clerk's Office, Commission Division)

4. Approval of Agenda with the Inclusion of Any Emergency Items and Deletion of Any Items (For possible action)

SEC. 5. CONSENT AGENDA: Items No. 5 through No. 64

NOTE:
- The Board of County Commissioners, Board of Trustees, and Licensing Boards may remove an item from the agenda or take discussion relating to an item at any time.
- Consent Agenda - All matters in this sub-section are considered by the Board of County Commissioners, Board of Trustees, and Licensing Board to be routine and may be acted upon in one motion. Most agenda items are placed on the agenda for discussion and action. However, the Board of Trustees may take other actions such as hold, table, continue, etc.
- Consent Agenda items are routine and can be taken in one motion, unless a Commissioner/Trustee/Licensing Board member requests that an item be heard separately. The Chair will allow public comment on these items before a vote on all items is called on the Consent Agenda; the action taken will be staff's recommendation as indicated on the item.
- Items heard separately from the Consent Agenda by Commissioner/Trustee/Licensing Board Member at the meeting will be heard following the Commissioners'/County Manager's recognition section.

Purchasing & Contracts

5. Ratify and authorize the Chair to sign Interlocal Agreement with Regional Transportation Commission of Southern Nevada, for CBE No. 606684-23, for Interlocal Freeway and Arterial System of Transportation; or take other action as appropriate. (For possible action)

6. Approve the Contract with Sletten Construction of Nevada, Inc., for RFP No. 606098-22, for Construction Services for Clark County Detention Center: South Tower Facility Renovation, contingent upon submission of the required bonds and insurance; and authorize the Chief Financial Officer or her designee to sign the Contract; or take other action as appropriate. (For possible action)

7. Ratify and approve an Amendment to the Contract with Sletten Construction of Nevada, Inc., for RFP No. 606098-22, for Pre-Construction Services for Clark County Detention Center: South Tower Facility Renovation; and authorize the Chief Financial Officer or her designee to sign the Amendment; or take other action as appropriate. (For possible action)

8. Authorize the Chair to sign the Interlocal Agreement with Southern Utah University, for CBE No. 606788-23, for Edaphic Components of LV Bearpoppy Habitat; or take other action as appropriate. (For possible action)

9. Approve the annual renewal of CBE No. 604996-18, for E-Payment Services Agreement, with Point & Pay, LLC; and authorize the Chief Financial Officer or her designee to issue renewal notices on an annual basis; or take other action as appropriate. (For possible action)

10. Approve the award of Bid No. 606361-22, for Annual Requirements Contract for Inmate Clothing and Accessories, to the low responsive and responsible bidders. Staff recommends award to Victory Supply LLC for Packages 1, 2, 3 and 7, Bob Barker Company, Inc for Packages 4 and 8, and Tabb Textiles Co., Inc. for Packages 5 and 6; or take other action as appropriate. (For possible action)

11. Approve an Amendment to the Contract with Brightview Landscape Services, Inc., for Bid No. 606696-23, for Annual Requirements Contract for Landscape and Grounds Maintenance Services at Wetlands Park; and authorize the Chief Financial Officer or her designee to sign the Amendment; or take other action as appropriate.
(For possible action)

12. Approve an Amendment to the Contract with Tyler Technologies, Inc., for CBE No. 605011-18, for Software, Licenses and Professional Services for Las Vegas Justice Court Case Management System; and authorize the Chief Financial Officer or her designee to sign the Amendment; or take other action as appropriate. (For possible action)

13. Approve an Amendment to the Contract with Digitech Computer LLC, for CBE No. 606308-22, for EMS Billing Services; and authorize the Chief Financial Officer or her designee to sign the Amendment; or take other action as appropriate. (For possible action)

14. Approve the selection of and the Contract with Trinity Services Group, Inc. for RFP No. 606613-23, for Food Services for Clark County Detention Center (CCDC), contingent upon submission of the required insurance; and authorize the Chief Financial Officer or her designee to sign the Contract; or take other action as appropriate. (For possible action)

15. Approve the Contracts with AppleOne, Inc. and My Next Career Path Staffing, LLC dba MNCP Staffing, for CBE No. 606719-23, for Temporary Employment Services for 2024 Elections, contingent upon submission of the required insurance; and authorize the Chief Financial Officer or her designee to sign the Contracts; or take other action as appropriate. (For possible action)

16. Approve the award of Bid No. 606638-23, for Fort Apache Road, Blue Diamond Road to Huntington Cove to the low responsive and responsible bidder, contingent upon submission of the required bonds and insurance. Staff recommends award to Tand, Inc.; or take other action as appropriate. (For possible action)

17. Approve an Amendment to the Interlocal Agreement with United States Geological Survey, for CBE No. 605596-20, for Rare Plant Propagation Research; and authorize the Chair to sign the Amendment; or take other action as appropriate. (For possible action)

18. Ratify and approve an Amendment to the Contracts with Apple Grove Treatment, LLC dba Apple Grove Foster Care Agency, Bamboo Sunrise, LLC, Eagle Quest, Specialized Alternative for Families and Youth of Nevada, Inc., St. Jude's for Children - Nevada Region, Inc., dba St. Jude's Ranch for Children and HELP of Southern Nevada, for RFQ No. 604376-17 for Alternative Living Services; and authorize the Chief Financial Officer or her designee to sign the Amendment; or take other action as appropriate. (For possible action)

19. Approve the selection of, and the Contract with CORE West, Inc. dba CORE Construction, for RFP No. 606643-23, for Pre-Construction Services for Downtown Judicial Campus Phased Tenant Improvements, contingent upon submission of the required insurance; and authorize the Chief Financial Officer or her designee to sign a Contract; or take other action as appropriate. (For possible action)

20. Approve an Amendment to the Contract with Sober Testing Services LLC, for CBE No. 606243-22, for Forensic Drug Testing; and authorize the Chief Financial Officer or her designee to sign the Amendment; or take other action as appropriate. (For possible action)

21. Approve the selection of and the Contract with Aramark Correctional Services, LLC, for RFP No. 606564-23, for Commissary Services for CCDC, contingent upon submission of the required insurance; and authorize the Chief Financial Officer or her designee to sign the Contract; or take other action as appropriate. (For possible action)

22. Approve the award of Bid No. 606572-23 for Annual Requirements Contract for Hygiene Supplies, to the low responsive and responsible bidders. Staff recommends award to Phoenix Trading, Inc. dba Amercare Products, Inc. for Packages 1 and 5, Brady Industries of Nevada, LLC dba Brady IFS for Packages 2-3, and Charm-Tex, Inc. for Package 4; or take other action as appropriate. (For possible action)

23. Approve an Amendment to the Contract with All Clean Inc., for CBE No. 606417-22, for Annual Requirements Contract for Janitorial Services at Clark County Detention Center and North Valley Correctional Complex; and authorize the Chief Financial Officer or her designee to sign the Amendment; or take other action as appropriate. (For possible action)

Town Services

24. Note for the record the following Town Advisory Board (TAB) and/or Citizens Advisory Council (CAC) Minutes: Moapa Valley TAB - October 11, 2023; Paradise TAB - September 26, 2023; Sunrise Manor TAB - September 14, 2023; and Winchester TAB - October 10, 2023.

Business License

25. Approve the application for an Importer/Wholesaler Liquor License for Shand Import LLC, located at 4005 W Reno Ave, Suite A, Las Vegas, NV 89118, in accordance with Nevada Revised Statute 369. Commission District: A (For possible action)

26. Accept the application of Gigapower, LLC for a Franchise to provide telecommunication services in unincorporated Clark County; cause public notice of the application pursuant to NRS 709.070; and set a public hearing to consider awarding a franchise for January 2, 2024, at 10 a.m. following the public notice period; and providing for other matters properly related thereto. Commission Districts: All (For possible action)

Social Service

27. Ratify submission of the grant application to the Substance Abuse and Mental Health Services Administration (SAMHSA) under the Consolidated Appropriation Act, 2023 [P.L. 117-328] in the amount of $1,709,594 to provide a continuum of care for frequent users of the criminal justice system who suffer from severe mental illness, and/or have substance use disorders; accept awarded SAMHSA funding; and authorize the Deputy County Manager, or her designee, to sign any additional grant documents related thereto. (For possible action)

Environment and Sustainability

28. Ratify and approve the appointment of Rebecca Choi as the County's representative and Jodi Bechtel as the County's alternate representative to the Conservation District of Southern Nevada Board of Supervisors for a two-year term from December 1, 2022 through November 30, 2024. (For possible action)

Aviation

29. Approve and authorize the Director of Aviation to sign the First Amendment to the Lease Agreement between Clark County and MCM Development I, LLC (James Howard, Authorized Signatory); or take other action as appropriate. (For possible action)

30. Approve and authorize the Director of Aviation to sign the First Amendment to the Lease Agreement between Clark County and MCM Development II, LLC (James Howard, Authorized Signatory); or take other action as appropriate. (For possible action)

31. Approve and authorize the Director of Aviation or her designee to sign the purchase and sale agreement, escrow instructions and related ministerial documents required to complete the acquisition process for Assessor's parcel number 177-04-201-006 located on the northeast corner of Las Vegas Boulevard and Hidden Well Road; or take other action as appropriate. (For possible action)

32. Authorize the Director of Aviation to sign a Professional Services Contract between Clark County and HDR Engineering, Inc. (Craig Smart, Managing Principal) for design services associated with Project 3100 LAS Drainage Improvements at Taxiway D at Harry Reid International Airport; or take other action as appropriate. (For possible action)

Public Works

33. Approve and authorize Lubawy & Associates, Inc. dba Valbridge Property Advisors to perform appraisal services for Assessor's Parcel Numbers 176-22-301-004 and 176-22-801-003, being considered for rights-of-way for construction of the Blue Diamond Railroad Channel between Blue Diamond Road and Rainbow Boulevard project; and Assessor's Parcel Numbers 243-34-301-009, 243-34-701-028 and 243-34-601-010 being considered for rights-of-way for construction of the Searchlight West Channel Improvements project; and appoint Matthew Lubawy, MAI, to appraise the parcels. (For possible action)

34. Approve and authorize the exchange of County-owned properties identified as Assessor's Parcel Numbers 125-20-803-014 and 125-20-803-016 for Assessor's Parcel Number 176-20-201-001 needed for the widening and realignment of the Fort Apache Road between Blue Diamond Road and Warm Springs Road project; approve the appraisals by Matthew J. Lubawy, MAI; approve, adopt, and authorize the Chair to sign a resolution to exchange County properties and an exchange agreement between Clark County and Hamid Moradi, Trustee of the Moradi Hakimian Revocable Living Trust dated June 14, 2013; and authorize the County Manager or his designee to sign escrow documents to complete the transaction. (For possible action)

35. Approve and authorize the acquisition by negotiation of portions of Assessor's Parcel Numbers 177-28-301-001 (Soo & Bok I LLC) and 177-28-701-003 (Khachik Arakelyan) needed for construction of the Pyle Avenue between Las Vegas Boulevard and Bermuda Road project; and authorize the County Manager or his designee to sign future escrow instructions and any pertinent documents necessary to complete the acquisition process. (For possible action)

36. Designate portions of Clark County-owned (Aviation) property as right-of-way pertaining to Assessor's Parcel Numbers 177-02-501-025 and 177-02-501-027 located on Helm Drive and Bruce Street; and authorize the Director of Real Property Management to sign the dedication in fee documents. (For possible action)

37. Accept the donation, on loan, of 24 flatbed trailers from Global Experience Specialists, Inc. (GES) to the Clark County Department of Public Works with an estimated value of $6,930; and authorize the Director of Clark County Public Works to sign an in-kind donation agreement with GES acknowledging the donation and its purpose. (For possible action)

38. Approve and authorize the Chair to sign a Revocable License and Maintenance Agreement among Clark County, Clark County Stadium Authority and LV Stadium Events Company, LLC allowing a connection to the County's storm drain and flood control system for the purpose of discharging ground water from its site located at 3333 Al Davis Way (Assessor's Parcel Number 162-29-310-001). (For possible action)

39. Approve and authorize the Chair to sign a Revocable License and Maintenance Agreement among Clark County, Clark County Stadium Authority and LV Stadium Events Company, LLC for non-standard improvements within the County's public right-of-way. (For possible action)

40. Approve and authorize the County Manager or his designee to sign Supplemental No. 3 to the professional surveying services contract between Clark County and J. S. & S., Inc., dba Jemison Surveying & Services (Raymond Jemison, Owner/President) for additional construction land surveying services for the Las Vegas Boulevard Roadway Improvements between Interstate 215 South and Russell Road (Phase B) project. (For possible action)

41. Approve and authorize the Chair to sign Amendment No. 1 to Interlocal Agreement No. 20-031IL-CC between Clark County and Regional Transportation Commission of Southern Nevada for the Maryland Parkway Bus Rapid Transit project. (For possible action)

Real Property Management

42. Approve and authorize the Acting Director of Real Property Management or her designee to sign Property Marketing Agreements with Commercial Real Estate Exchange, Inc. for marketing and online auction services of twenty (20) Department of Aviation individual sale units comprised of single or multiple parcels, to be sold at public auction; or take other action as appropriate. (For possible action)

43. Approve and authorize the Chairman to sign the Resolutions of Intent to Sell Real Property at Public Auction providing for the sale of ±129.91 acres of vacant Clark County owned real property in twenty (20) individual sale units comprised of single or multiple parcels, specifying the minimum prices and terms of the sales, and setting a public 48-hour online auction for January 29, 2024 through January 31, 2024, with the final acceptance or rejection of any bids to take place at a following meeting of the Board of County Commissioners. (For possible action)

Budget & Finance

44. In accordance with NRS 244.210 and 354.220 through 354.250, approve, adopt, and authorize the Chair to sign a resolution to authorize refunds as shown on Exhibit "A. " (For possible action)

45. Allocate Residential Construction Tax Funds from Mountain's Edge Fund (2110.018) in the amount of $130,000 for the construction of the Mountain's Edge Neighborhood Park Design (RP.F0424081) and authorize a transfer from Fund (2110.018) to the Recreation Capital Improvement Fund (4110.000). (For possible action)

46. Approve the definition of "Rural Program of Resident Officers" as adopted by the Las Vegas Metropolitan Police Department Fiscal Affairs Committee (For possible action)

47. Pursuant to Nevada Revised Statutes, note for the record that NRS 354.290 financial reports are on file in the County Clerk's Office, Commission Division.

48. Approve and authorize the reallocation of $2,000,000 in Clark County Recovery Funds (County Recovery Funds) to Legal Aid Center of Southern Nevada from the Children's Attorneys Project Stability project to the Vegas Resiliency Center capital project; and authorize the County Manager or his designee to execute the required grant resolutions per NRS 244.1505; or take other action deemed appropriate. (For possible action)

Clark County Redevelopment Agency (Board of County Commissioners sitting as the Redevelopment Agency)

49. Approve the purchase of 900 Liberace Ave located on APN#162-10-510-029 which consists of a +/- 1.14 acre developed parcel with four two-story retail/office buildings containing a gross building square footage of 72,500; fund the purchase price of $6,500,000, and $10,000 for closing costs; ratify the appraisal dated October 29, 2023 by Britton-Adamo Group/ROI Appraisal; and Authorize the Director of Operations to sign escrow documents and any other related documents to complete the transaction and management of the leases. (For possible action)

50. Approve and authorize the Chair to sign an Interlocal Agreement between Clark County Redevelopment Agency and UNLV College of Fine Arts for the sponsorship of five pilot projects to assist in the revitalization of areas located within the current redevelopment area. (For possible action)

51. Approve and authorize the Clark County Redevelopment Agency Director of Operations and/or her designee to sign a contract with Gatski Commercial Real Estate Services for property management services with an annual operating budget of $251,000 annually for 900 Liberace Ave Las Vegas, NV 89109 located on APN#162-10-510-029 which consists of a +/- 1.14 acre developed parcel with four two-story retail/office buildings containing a gross building square footage of 72,500. (For possible action)

Clark County Water Reclamation District (Board of County Commissioners sitting as the CCWRD Board of Trustees)

52. Approve and authorize the General Manager to sign a Right of Entry and Temporary Construction Easement and Non-Exclusive Grant of Easement with Clark County Real Property Management for the Whitney Lift Station Project 19100, located on Assessor's Parcel Numbers 161-23-301-002, 161-23-301-003, 161-26-101-008, 161-26-302-002 and 161-26-701-001 and sign any other related documents as necessary to complete the transaction. (For possible action)

General Administration

53. Approve and authorize the Chair to sign the correction of the 2021-2022 thru 2023-2024 Secured and the 2019-2020 thru 2023-2024 Unsecured Assessment Roll AR-1121-23-21 and order the corrections to be made. (For possible action)

54. Pursuant to the Nevada Revised Statutes, note for the record that the Official Reports and Documents received from various County offices are on file in the County Clerk's Office, Commission Division.

55. Ratify the submission of a grant application to the Department of Housing and Urban Development (HUD) under the Consolidated Appropriation Act, 2023 [P.L. 117-328] in the amount of $2,555,000 to fund the rehabilitation of building for Jewish Family Services (JFSA); accept any awarded HUD EDI funding; and authorize the Director, or his designee, to sign any additional grant documents related thereto. (For possible action)

56. Ratify the grant application submitted to the Health Resources and Services Administration (HRSA) under the Consolidated Appropriation Act, 2022 [P.L. 117-103] in the amount of $1,600,000 to fund the design and engineering costs associated with the expansion of the Southern Nevada Children's Advocacy Center (SNCAC); accept funding and authorize the Director to sign any additional grant documents related thereto. (For possible action)

57. Approve the acceptance of the modified grant award from the Department of Health and Human Services - Substance Abuse and Mental Health Services Administration, to fund Children's Mental Health Initiative program in the amount of $2,634,952.00 effective September 30, 2023 through September 29, 2027; approve and authorize the continuation of one (1) grant funded limited permanent full time position: one (1) Family Services Specialist II (C28); and approve and authorize the creation of one (1) grant funded limited permanent full time position Youth & Adult Intervention Specialist II (C29) for the period during which the grant funds are available; authorize the Director to sign any additional grant documents and accept any funds awarded. (For possible action)

58. Receive the report of donations accepted by the Clark County Department of Family Services (DFS), including the Southern Nevada Children's Assessment Center, from July 1, 2023 through September 30, 2023 for the use and benefit of DFS and the children and families it serves. (For possible action)

59. Approve and authorize the Chair to sign the First Amendment to the agreement with The Boring Company to provide Clark County Fire Department with equipment and staffing in support of the Vegas Loop Project; or take other action as appropriate. (For possible action.)

60. Ratify the U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration no-cost grant extension submission in the awarded amount not to exceed $400,000 for retention of one Specialty Court Coordinator; authorize the Court Administrator or designee to sign any additional grant documents, sign the award documents related thereto; and accept any funds awarded. (For possible action)

61. Ratify Las Vegas Justice Court's submission of the grant application to the State of Nevada Office of Criminal Justice Assistance; ratify the acceptance of the grant award of $86,415 to fund professional services and $64,950 for the retention of one Specialty Court Coordinator for the DUI Treatment Court from October 1, 2023, through September 30, 2024; authorize the Court Administrator or designee to sign any additional grant documents, as necessary. (For possible action)

62. Accept the donation of trees and plants from the Electronic Daisy Carnival with an estimated total value of $250,000. (For Possible Action)

63. Ratify the Letter of Agreement with International Association of Fire Firefighters (IAFF) Local 1908 regarding fire and emergency services for the Las Vegas Grand Prix. (For Possible Action)

64. Ratify the County Manager's execution of the Letter of Agreement with Las Vegas Grand Prix regarding reimbursement for fire and emergency services to be provided on the circuit for the Las Vegas Grand Prix. (For Possible Action)

END CONSENT AGENDA

SEC. 6. ITEMS TAKEN SEPARATELY FROM CONSENT AGENDA

SEC. 7. PUBLIC HEARINGS - 10 AM

65. Conduct a public hearing and approve, adopt, and authorize the Chair to sign an ordinance to amend Clark County Code Title 8, Chapter 8.20, Subsection 8.20.020.106 to revise the definition of "full service liquor bar"; and providing for other matters properly related thereto. Commission District: All (For possible action) (Sitting as the Liquor & Gaming Licensing Board)

66. Conduct a public hearing to receive comments or objections from the public concerning the granting of a telecommunication system franchise to Vero Fiber Networks, LLC to provide telecommunication services in certain unincorporated areas of Clark County; and to approve and authorize the Chair to sign a Telecommunications System Franchise Agreement between Clark County and Vero Fiber Networks, LLC to construct, operate and maintain a telecommunication system to provide subscription service to certain unincorporated areas of Clark County, Nevada for a term of ten years, with one five-year renewal option; and providing for other matters properly related thereto. (For Possible Action)

END PUBLIC HEARINGS

SEC. 8. INTRODUCTION OF ORDINANCES

This item is for introduction only. A date and time will be set for a public hearing. No public comments will be heard at this time.

67. Introduce an ordinance to amend sections of Chapter 2.42 of the Clark County Code relating to ethical standards; providing for other matters properly relating thereto; and set a public hearing. (For possible action)

68. Introduce an Ordinance to amend Title 16 of the Clark County Code to add a new Chapter 16.13 to establish pedestrian flow zones on pedestrian bridges and up to 20 feet surrounding a touchdown structure; and providing for other matters properly relating thereto; and set a public hearing. (For possible action)

SEC. 9. BUSINESS ITEMS

69. Identify emerging issues to be addressed by staff or by the Board at future meetings; receive updates on the activities of the various regional boards and commissions; and direct staff accordingly.

70. Approve and Authorize the Chair to appoint 32 members (including 13 At-Large members, 11 Representatives and 7 Alternates, and 1 appointee from a participating city) to the Community Development Advisory Committee (CDAC) from the list of the following nominees: (Representing 11 Town Advisory Boards/Citizens Advisory Councils) Representatives Laren Abott, Peter Sarles, Kathy Ochs, Allison Bonanno, Michael Abbott, Janice Ridondo, Steffanie Gray, Michele Brown, Randal Okamura, Karen Miller, and April Mench and Alternates Justin Maffett, Pamela Walker, Lori Houston, Carmen Allfrey, James Allen, Geraldine Ramirez and Cristhian Barneond; (Representing 13 At-Large) Christopher Lee, Eric Hilbrecht, Irene Boylan, Monica Gresser, Eric Jeng, Paul Nimsuwan, Donna Darden, Dontae Scott, Jacqueline Ingram, Faridun Zaid, Adan Gentile, Miguel Davila Uzcategui, and Cindi Rivera; Recognize the appointment of 1 member to CDAC made by a participating city, Jeff Alpert (North Las Vegas); and Appoint a Chairperson for the committee. (For possible action)

71. Discuss an update to the Clark County Board of Commissioners Rules of Procedure Handbook to include a code of conduct and a censure procedure; and direct staff accordingly. (For possible action)

72. Consider and approve an adjustment to the Public Facilities Needs Assessment (PFNA) fees, and direct staff accordingly. (For possible action)

73. Receive a report on Clark County's Redevelopment Agency Blight Study and review maps for proposed new redevelopment areas; accept and authorize the executive director and/or his designee to develop the legal descriptions for the recommended new redevelopment areas and take actions in accordance with NRS279.608 to amend Clark County's current redevelopment plan to add the proposed new redevelopment areas; or take other action as deemed appropriate. (Also sitting as Clark County Redevelopment Agency) (For possible action)

74. Go into closed session, pursuant to NRS 241.015(3)(b)(2), to receive information from the District Attorney regarding potential or existing litigation involving a matter over which the Board has supervision, control, jurisdiction or advisory power, and to deliberate toward a decision on the matter, and pursuant to NRS Chapter 288.220, to receive a report on the status of ongoing labor negotiations; and direct staff accordingly. (For possible action)

PUBLIC COMMENTS

Comments by the General Public

A period devoted to comments by the general public about matters relevant to the Board/Trustees' jurisdiction will be held. No vote may be taken on a matter not listed on the posted agenda. Comments will be limited to up to three minutes. Please step up to the speaker's podium, clearly state your name and address, and please SPELL your last name for the record. If more individuals wish to speak than time allows, the length of presentation may be limited by the Chair of the Board/Trustees by majority vote.

All comments by speakers should be relevant to Board/Trustees action and jurisdiction.

ZONING AND SUBDIVISIONS Tuesday, November 21, 2023, 1:00 p.m. Separate Agenda

THE REGULAR JOINT MEETINGS OF THE CLARK COUNTY BOARD OF COMMISSIONERS, THE CLARK COUNTY WATER RECLAMATION BOARD OF TRUSTEES, THE UNIVERSITY MEDICAL CENTER OF SOUTHERN NEVADA BOARD OF TRUSTEES, THE CLARK COUNTY LIQUOR AND GAMING LICENSING BOARD, AND THE CLARK COUNTY REDEVELOPMENT AGENCY HELD ON THE FIRST AND THIRD TUESDAYS OF EACH MONTH ARE VIDEO-TAPED BY CLARK COUNTY TELEVISION (CCTV). THIS MEETING WILL BE BROADCAST LIVE IN THE LAS VEGAS AREA. CLARK COUNTY TELEVISION IS AVAILABLE IN THE LAS VEGAS AREA ON CHANNEL 4 (HD) ON COX CABLE AND ON CENTURYLINK ON CHANNELS 4 AND 1004 AS WELL AS IN LAUGHLIN ON CHANNEL 14 VIA SUDDENLINK. LIVE STREAMING OF CCTV PROGRAMMING IS AVAILABLE AT WWW.CLARKCOUNTYNV.GOV AND WWW.YOUTUBE.COM/CLARKCOUNTYNV. CCTV IS ALSO AVAILABLE IN BOULDER CITY ON CHANNEL 3 AND IN MOAPA VALLEY ON DIGITAL CHANNEL 503. FOR MORE INFORMATION ABOUT THE PROGRAM SCHEDULE, PLEASE REFER TO HTTPS://CLARKCOUNTYNV.GOV/CCTV/ OR CONTACT CCTV CHANNEL 4 AT (702) 455-4800.

THE COUNTY CLERK KEEPS THE OFFICIAL RECORD OF ALL PROCEEDINGS OF THE COUNTY COMMISSION, THE COWRD BOARD OF TRUSTEES, THE UMC HOSPITAL BOARD OF TRUSTEES, THE CLARK COUNTY LIQUOR AND GAMING LICENSING BOARD, AND THE CLARK COUNTY REDEVELOPMENT AGENCY. IN ORDER TO MAINTAIN A COMPLETE AND ACCURATE RECORD OF ALL PROCEEDINGS, ANY PHOTOGRAPH, MAP, CHART, OR ANY OTHER DOCUMENT USED IN ANY PRESENTATION TO THE BOARD/TRUSTEES SHOULD BE SUBMITTED TO THE COUNTY CLERK. IF MATERIALS ARE TO BE DISTRIBUTED TO COMMISSIONERS/TRUSTEES, PLEASE PROVIDE SUFFICIENT COPIES FOR DISTRIBUTION TO THE COUNTY MANAGER, COUNTY COUNSEL, AND COUNTY CLERK.

WHEN OPEN TO THE PUBLIC, THE CLARK COUNTY COMMISSION CHAMBERS ARE ACCESSIBLE TO INDIVIDUALS WITH DISABILITIES. WITH TWENTY-FOUR (24) HOUR ADVANCE REQUEST, A SIGN LANGUAGE INTERPRETER MAY BE MADE AVAILABLE (PHONE: (702) 455-3530 OR TDD (702) 385-7486) OR RELAY NEVADA TOLL FREE (800) 326-6868, TTY/TDD. ASSISTIVE LISTENING DEVICES ARE AVAILABLE UPON REQUEST AT THE STAFF TABLE.

CLARK COUNTY BOARD OF COMMISSIONERS
AGENDA ITEM

Petitioner: Kevin Schiller, County Manager
Abigial Frierson, Deputy County Manager

Recommendation:

Introduce an Ordinance to amend Title 16 of the Clark County Code to add a new Chapter 16.13 to establish pedestrian flow zones on pedestrian bridges and up to 20 feet surrounding a touchdown structure; and providing for other matters properly relating thereto; and set a public hearing. (For possible action)

FISCAL IMPACT:

Fund #:	N/A	Fund Name:	N/A
Fund Center:	N/A	Funded PGM/Grant:	N/A
Amount:	N/A		
Description:	N/A		
Additional Comments:	N/A		

BACKGROUND:

The proposed ordinance would create Pedestrian Flow Zones within the resort corridor on pedestrian bridges and up to 20 feet surrounding a touchdown structure, which includes elevators, escalators and stairways located on public right of way associated with a pedestrian bridge. The ordinance would prohibit any person from stopping, standing, or engaging in activity that causes another person to stop or stand within a Pedestrian Flow Zone to ensure the continuous movement of pedestrian traffic on pedestrian bridges and surrounding touchdown structures. The public safety concerns regarding pedestrian bridges on the Las Vegas Strip are discussed in a report prepared by William Sousa, Ph.D. The ordinance addresses public safety on the pedestrian bridges on the Las Vegas Strip and is narrowly tailored to accomplish this goal by requiring every person utilizing the pedestrian bridge to keep moving across the bridge to ensure pedestrians gets to their desired location in the safest matter possible.

Staff recommends a public hearing be set for December 5, 2023, at 10:00 a.m.

ACTION: BILL NO. 11-21-23-1 INTRODUCED BY COMMISSIONER GIBSON; PUBLIC HEARING SET FOR TUESDAY, DECEMBER 5, 2023 AT 10:00 A.M.

Cleared for Agenda
11/21/2023
File ID#
23-1617

68.1

[Bracketed] material is that portion being deleted
Underlined material is that portion being added

BILL NO. 11-21-23-1

SUMMARY – Establishes Pedestrian Flow Zones on Pedestrian Bridges and up to 20 feet surrounding a touchdown structure.

ORDINANCE NO. _____
(of Clark County, Nevada)

AN ORDINANCE TO AMEND TITLE 16 OF THE CLARK COUNTY CODE TO ADD A NEW CHAPTER 16.13 TO ESTABLISH PEDESTRIAN FLOW ZONES ON PEDESTRIAN BRIDGES AND UP TO 20 FEET SURROUNDING A TOUCHDOWN STRUCTURE; AND PROVIDING FOR OTHER MATTERS PROPERLY RELATING THERETO.

THE BOARD OF COUNTY COMMISSIONERS OF THE COUNTY OF CLARK, STATE OF NEVADA, DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. Title 16 of the Clark County Code is amended as follows:

CHAPTER 16.13 – PEDESTRIAN FLOW ZONES

16.13.010 – Purpose.

The pedestrian bridges located within the world-famous Las Vegas Strip provide above grade access for the visitors, employees, and residents of Clark County to safely cross the roadways located within the Las Vegas Strip. The pedestrian bridges are part of the sidewalk system of the Las Vegas Strip and were created for the purpose of separating pedestrian traffic from vehicular traffic to facilitate pedestrians crossing in those locations. Pedestrians are prohibited from crossing at grade level where pedestrian bridges are located. The pedestrian bridges were designed for the specific purpose of

facilitating such crossings at all foreseeable levels of demand which can vary significantly and unpredictably regardless of day or time of day. The parameters for the pedestrian bridge design did not include uses beyond pedestrian traffic crossing from one side to the other side. The parameters included that pedestrians would not stop, stand or congregate other than for incidental and fleeting viewing of the Las Vegas Strip from the pedestrian bridge. For pedestrians to be able to stop, stand or congregate for any other reason, the pedestrian bridges would have been designed differently to account for such uses.

Stopping on the pedestrian bridges creates conditions that can foment disorder which, in turn, can lead to crime and serious safety issues. Because pedestrian traffic demand on the bridges varies significantly and unpredictably regardless of day or time of day, it is impossible to know in advance when stopping will result in criminal or otherwise dangerous conditions (whether involving the particular pedestrian who has stopped or others) and because of the physical nature of the pedestrian bridges, by the time such conditions exist, it would often be too late for law enforcement or other first responders to intervene, mitigate, render aid, rescue, or take other actions necessary as a result of crime and other serious safety issues. In recent years, numerous incidents have occurred that underscore these concerns. There is an ever-increasing demand as visitation numbers have reached near historical levels. Clark County continues to attract major sporting events and has become the home to major sports teams. Clark County has a substantial government interest in providing safe pedestrian access on the Las Vegas Strip. The increased number and frequency of high-profile attacks in places of public gatherings throughout the country have contributed to the occurrence of threats and

perceived threats that result in public panic and immediate and unexpected demand on pedestrian bridges as in an event of flight by large groups of people.

From 2018 to 2022, calls for law enforcement services on the Las Vegas Strip have increased twenty-nine percent (29%) from 37,598 in 2018 to 48,358 in 2022. The service calls for disorderly offenses increased twenty-three percent (23%) from 6,981 in 2018 to 8,750 in 2022. While the pedestrian bridges constitute only approximately six percent (6%) of the total linear feet of public sidewalks available to pedestrians, the service calls for disorderly conduct on the pedestrian bridge are almost twice as high. In addition to the disproportionate call volume on pedestrian bridges, the pedestrian bridges create a unique opportunity for criminal disorder as the bridges create a captive audience. Generally, in order for a pedestrian to cross Las Vegas Boulevard the pedestrian must use the bridge, therefore, unlike on a sidewalk where a pedestrian has a greater ability to avoid disorder, on the pedestrian bridge, the pedestrian is confined to the restricted space of the pedestrian bridge.

The Board has a substantial government interest in ensuring public safety on the pedestrian bridges. The Board finds that adoption of Pedestrian Flow Zones is a narrowly tailored means to accomplish the County's important objective of reducing the incidence and risk of crime and serious safety issues on pedestrian bridges and allows pedestrians to freely and safely get to their desired location. The pedestrian bridges represent only six percent (6%) of the total linear feet of the public sidewalk available to pedestrians within the Las Vegas Strip, to the extent the Pedestrian Flow Zones have some incidental impact on the manner of First Amendment activity, (people must continue to move, whether engaged in First Amendment activity or not), there is ample alternative means of

communication on the other approximately ninety-four percent (94%) of the sidewalks located within the Las Vegas Strip. Therefore, for the reasons described herein, the Board hereby adopts the following ordinance.

16.13.020 - General definitions.

"Pedestrian Bridges" are bridges located in the Resort Corridor that allow pedestrians to cross streets in the Resort Corridor above grade level. For the purposes of this chapter, "pedestrian bridges" shall include bridges for pedestrians in the Resort Corridor that are private property upon which a limited easement of public access has been granted. However, no provision of this chapter shall be construed to limit any right of the private property owner to restrict or limit the use of that private property.

"Pedestrian Flow Zones" include the Pedestrian Bridges and up to 20 feet surrounding a Touchdown Structure located within the Resort Corridor.

"Resort Corridor" includes the boundaries established by Sections 9, 10, 15, 16, 17, 18, 20, 21, 22, 27, 28 and 29 of Township 21 South Range 61 East, Mount Diablo Meridian, Clark County, Nevada.

"Touchdown Structure" means the elevators, escalators and stairways located on the public right of way associated with Pedestrian Bridges.

16.11.030 – Pedestrian Flow Zones. To maintain the safe and continuous movement of pedestrian traffic, it is unlawful for any person to stop, stand, or engage in an activity that causes another person to stop or stand within any Pedestrian Flow Zone.

16.11.040 – Designation of Pedestrian Flow Zones. The County shall place signs in Pedestrian Flow Zones providing notice to the public they are in a Pedestrian Flow

Zone and that stopping, standing, or engaging in an activity that causes another person to stop within the Pedestrian Flow Zone is not permitted.

16.11.050 – Penalty for Violation. Any person who violates any of the provisions of this chapter is guilty of a misdemeanor and upon conviction shall be punished by imprisonment in the county jail for a term not to exceed six months or by a fine not to exceed one thousand dollars, or by both such fine and imprisonment.

SECTION 2. If any section of this ordinance or portion thereof is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such holding shall not invalidate the remaining parts of this ordinance.

SECTION 3. All ordinances, parts of ordinances, chapters, sections, subsections, clauses, phrases or sentences contained in the Clark County Code in conflict herewith are hereby repealed.

SECTION 4. This ordinance shall take effect and be in force from and after its passage and the publication thereof by title only, together with the names of the County Commissioners voting for or against its passage, in a newspaper published in and having a general circulation in Clark County, Nevada, at least once a week for a period of two (2) weeks.

PROPOSED on the _____ day of _____, 2023.

PROPOSED BY: _____

PASSED on the _____ day of _____ 2023.

AYES: _____

_____

_____

_____

_____

_____

_____

NAYS _____

_____

ABSTAINING _____

ABSENT _____

BOARD OF COUNTY COMMISSIONERS
CLARK COUNTY, NEVADA

By _____
JAMES B. GIBSON, Chair

ATTEST

LYNN GOYA, County Clerk

This ordinance shall be in force and effect from and after the day of 2023.

Rule from Dr. Zaiz's Ordinance -6-

QUESTIONS RELATED TO PUBLIC SAFETY ON PEDESTRIAN BRIDGES
William H. Sousa, Ph.D.

1. **What is the focus of Dr. Sousa's research projects and how do they relate to the pedestrian overpasses?**

The focus of my research is on crime, disorder, and public safety, particularly in urban settings. I am an author of a textbook on policing and numerous articles, monographs, and book chapters on the nature of disorder, its impact on community life, and the role of police and citizens in terms of dealing with disorder. The nature of the research often involves conducting observations of police as they manage complex problems in public places. Over my nearly 20-year career, I have conducted approximately 150 ride-along / walk-along observations with police, totaling well over 1,000 hours.

While I have explored issues related to public safety in numerous cities around the country, much of my research is focused in Clark County. As just a few examples, I have studied citizen perceptions of disorder along Las Vegas Boulevard and Fremont Street,[1] issues related to pedestrian safety on Las Vegas Boulevard,[2] efforts to manage major crowd events along Las Vegas Boulevard,[3] concerns related to unhoused youth in Southern Nevada,[4] and violence prevention efforts in Las Vegas neighborhoods.[5]

Whereas much of this work examines connections between disorder and public safety, the research relates directly to concerns that have developed along the pedestrian bridges over Las Vegas Boulevard.[6] Analyses indicate that calls for service for disorder-related events on Las Vegas Boulevard increased 23% between 2018 and 2022. Moreover, while problems related to disorder have increased on the Strip in general, further analyses reveal that disorder tends to concentrate on the pedestrian overpasses. While the bridges comprise less than 6% of the sidewalk system along Las Vegas Boulevard, 11% of disorder-related calls occurred on the overpasses.

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[1] Jonathan Birds and William Sousa (2015). *Perceptions of Disorder: Results from Two Las Vegas Tourist Locations*. Research in Brief Series, 2015-01. Las Vegas, NV: UNLV Center for Crime and Justice Policy.
[2] William Sousa (2023). *Safety on Las Vegas Boulevard, 2018-2022*. Stat Sheet Series, 2023-01. Las Vegas, NV: UNLV Center for Crime and Justice Policy.
[3] William H. Sousa and Tamara D. Madensen (2011). "The police and major event planning: A case study in Las Vegas, Nevada." *Preventing Crowd Violence.* Crime Prevention Studies Series, *26*, 139-158.
[4] Patricia Cook-Craig, Jennifer Guthrie, William Sousa, Carlton Craig, Michael Bruner, Judy Tudor, Jessica Word, and Melissa Jacobowitz (2017). *The State of Youth Homelessness in Southern Nevada.* Research in Brief. Las Vegas, NV: Greenspun College of Urban Affairs.
[5] Timothy Radtke, William Sousa, and Timothy Hart (2008). "Operation Ceasefire in Clark County, Nevada: Evaluating a Cross-Jurisdictional Approach to Reducing Gun Violence." Washington, DC: Bureau of Justice Statistics.
[6] See, generally, Sousa (2023).

2. What does disorder mean with respect to Dr. Sousa's expertise and areas of research and study? What is the relationship between disorder and crime and other safety issues? Explain disorder and how it creates conditions of public safety and/or crime.

Within the criminological literature, "disorder" refers to a broad range conditions and behaviors that are not necessarily illegal (although they often are), but are nevertheless considered to be problematic in public places.[7] The term "disorder" is sometimes used interchangeably with terms such as "incivilities" or "quality-of-life concerns." Research often distinguishes between two types of disorders: social and physical. Social disorders involve active behaviors, such as aggressive panhandlers who intimidate passersby, individuals engaging in street prostitution, people using drugs and alcohol in public, or unruly teenagers who harass pedestrians. Physical disorders involve persistent conditions, such as litter along sidewalks, locations with evidence of public urination and defecation, or graffiti on walls of public buildings.[8]

Disorder is a concern because of the potential harmful effect it can have on public life. Research indicates that disorder can lead to citizen fear, to more disorder, and to serious crime. Researchers have argued, for example, that citizens' perceptions of disorder are significantly related to fear of victimization,[9] and that people will often alter their behavior to avoid confrontations with disorderly actors or conditions.[10] Other studies demonstrate that relatively little disorder, if left unchecked, can generate more disorder.[11] Furthermore, although it is not inevitable, locations with permissive atmospheres toward disorder are more susceptible to serious criminal activity.[12] This is because serious offenders are generally more comfortable in places where acts of disorder are common and appear to be acceptable.

Several factors escalate problems related to disorder, including the amount of visible disorder at any given time, the level of aggressiveness of the disorderly actor(s), and the type of location where the disorder is occurring. Location is particularly important because disorderly behaviors are often most problematic when they are performed in specific locations where people are especially vulnerable to intimidation (i.e., in areas where the observer of the behavior is a "captive audience"). Examples of such locations are bus stops, train platforms, and subway cars.

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[7] Wes G. Skogan (1990). *Disorder and Decline: Crime and the Spiral of Decay in American Neighborhoods*. New York: The Free Press.
[8] William H. Sousa (2010). "Wesley Skogan's 'Disorder and Decline'" in *The Encyclopedia of Criminological Theory*, Frank Cullen & Pam Wilcox (eds.), SAGE publications.
[9] Catherine E. Ross and Sung Joon Jang (2000). "Neighborhood disorder, fear, and mistrust: the buffering role of social ties with neighbors." *American Journal of Community Psychology, 28*(4), 401-420.
[10] William H. Sousa and George L. Kelling (2014). "Order Maintenance Policing" in *Encyclopedia of Criminology and Criminal Justice*, G. Bruinsma & D. Weisburd (eds.), Springer.
[11] Kees Keizer, Siegwart Lindenberg, and Lionda Steg (2008). "The spreading of disorder." *Science, 322*, 1681-1685.
[12] Skogan (1990).

Those who are a captive audience often fear that they could be an easy victim of serious crime if they refuse the disorderly actor, or they fear harassment because it is physically difficult for them to "get away."[13] Even if people are physically able to avoid or remove themselves from a particular location where the disorder is occurring, doing so may prevent them from the legitimate use of that location. Notably, it is often the most vulnerable members of society – such as the elderly, children, and the disabled – who are the most susceptible to this type of intimidation.

3. **When considering the pedestrian overpasses as part of Las Vegas Boulevard South / Resort District sidewalk system, are there disorder or safety issues that are unique or more significant to the bridges separate from the at-grade sidewalks? If so, what are the issues unique to the bridges that are not issues on the at-grade sidewalks?**

A number of disorders are common on the Las Vegas Boulevard South / Resort District sidewalk system, including aggressive panhandlers, solicitation while intoxicated, aggressive street performers, illegal vendors, confidence games (i.e., three-card monte), and drug related activity. These are all disorders that, as discussed above, can potentially lead to more significant problems if they are not managed.

While many of these behaviors are not unique to the pedestrian bridges (they occur on the at-grade sidewalks as well), the nature of the bridges makes these disorders especially problematic for at least two reasons. First, disorderly acts and conditions contribute to obstructions and crowding on the overpasses as people stop to react to the disorder. While not all acts of disorder are necessarily intended to make people stop, many of the behaviors described above (three-card monte, for example) are done by individuals who are stopped on a bridge and who deliberately cause other pedestrians to stop and congregate.

Second, people trying to cross a pedestrian bridge are a "captive audience" similar to those described above in Question #2. If pedestrians want to safely cross Las Vegas Boulevard, they have little choice but to use the overpasses. Once they are on a bridge, they are essentially confined to a restricted space with no way to leave other than the point that they entered and the exit point on the opposite side. Such conditions make pedestrians on overpasses particularly vulnerable to intimidation from disorderly behaviors or conditions. Pedestrians on at-grade sidewalks have more flexibility in terms of avoiding disorder if they feel threatened by it – since they are not restricted by the walls of a pedestrian bridge, they can retreat, enter a property, or otherwise maneuver around the disorder. Given the relatively limited width of the bridges, however, pedestrians are often unable to negotiate around the disorders they encounter. Their only choice may be to return to the point where they entered, but doing so would deny them from the legitimate purpose of using the bridge in the first place, which is to safely cross Las Vegas Boulevard.

[13] George L. Kelling and Catherine M. Coles (1996). *Fixing Broken Windows: Restoring Order and Reducing Crime in Our Communities*. New York, NY: The Free Press, p.34.

4. With respect to the pedestrian overpasses, are there issues of egress in times of panic and increased risk of injury?

Pedestrians on an overpass are in a rigidly confined space with traffic flow in only two directions. This creates a heightened risk of injury should an incident occur that triggers rapid group movement in one direction (i.e., panicked pedestrians rushing toward one side of the bridge).[14] A bottleneck can occur as a quickly moving crowd on an overpass is funneled to a narrower exit point (i.e., a doorway or an escalator on the overpass). As crowd density increases at the concentrated exit point, people can become so packed together that injuries result – a phenomenon known as "crowd crush."

An escalator further complicates matters in the event of an emergency on a pedestrian overpass. While the down-escalator is a potential source of bottlenecking as people rush off the bridge, the up-escalator will continue delivering people to the same location as the bottleneck. This can result in a pileup at the outlet of the up-escalator, which further contributes to crowd density and increases the likelihood of injury.[15]

Additionally, crowd density caused by pedestrians who are rapidly exiting an overpass can impede the efforts of first responders who are trying to enter the bridge. This can prevent authorities from reaching the initial source of the panic, and it can delay emergency medical treatment to those injured on the overpass.

5. Are these issues that are unique or more significant to bridges exasperated by those who congregate or stop on bridges, regardless of whether the people who stop or congregate are engaging in wrongful conduct themselves?

As discussed above, the rigid boundaries of pedestrian bridges reduce the ability of people to distance themselves from each other, particularly if there are large numbers of people on a bridge at a given time. Individuals who are standing, sitting, laying, or otherwise stopped on an overpass may obstruct pedestrians and therefore present a physical risk both to themselves and to others, especially in an emergency.

Those who are stopped may also encourage others to stop or congregate (either intentionally or unintentionally). Regardless of whether people who stop or congregate are engaged in wrongful conduct, the relatively confined space along a pedestrian overpass generates a higher propensity for increased crowd density when people are stopped. Pedestrians may be forced to negotiate through the crowd since going around it may not be an option.

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[14] See, generally, John J. Fruin (1984). "Crowd dynamics and auditorium management." *Auditorium News*, May ed.
[15] John J. Fruin (1993). "The causes and prevention of crowd disasters." Paper presented at the First International Conference on Engineering for Crowd Safety, London, England, March 1993.

In addition to the heightened risk of injury as crowd density increases (as discussed in Question #4), research on crowd dynamics suggests a number of other problems that can result as crowds gather, especially if the density of the crowd is such that people are close enough to physically touch.[16] For example, pickpocketing, groping, and other forms of theft, assault, and violence are more common in crowded conditions, particularly if alcohol or drugs are involved.

6. **What actions can be taken to reduce disorder and improve public safety on the pedestrian bridges and how and why would they do so?**

When the nature of an environment is such that there are limited points of ingress and egress, efforts should be made to facilitate the orderly movement of people and make the flow of pedestrian traffic as efficient as possible.[17] In practical terms, this means encouraging people to keep moving on the overpasses, discouraging people from stopping or congregating on the bridges, and managing any disorderly conditions that may cause people to stop.

In some environments, technological, architectural, or engineering modifications could be implemented that might reduce disorder or otherwise encourage pedestrians to keep moving / prevent pedestrians from stopping or congregating. Given the architectural design of the pedestrian overpasses, however, options for altering the physical environment are limited.

Enforcement efforts would be another method to reduce disorder and facilitate the flow of pedestrian traffic along the overpasses. Official ordinances give police the legal authority to issue warnings for non-compliance or, as a last resort, take formal action (i.e., citations). A local ordinance that prohibits stopping, for example, would provide a legal mechanism for police who seek to manage the orderly movement of people along the overpasses.

7. **Assuming one such action is to prevent the stoppage or congregating of all persons, how does that action decrease risk to the public? To be effective does it need to include everyone, including those who stop or congregates and are not engaging in bad behavior?**

Efforts designed to prevent stopping or congregating on pedestrian bridges would improve public safety in several ways. First, as discussed in Question #5, regardless of whether people who stop or congregate are engaged in wrongful behavior, they may contribute to crowd density that can increase risk of injury (i.e., "crowd crush") or other problems that arise when people are close enough to physically touch (i.e., pickpocketing, theft, groping, fights). By keeping all pedestrians moving on the overpasses, risks associated with crowd density are minimized.

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[16] Miliaikeala SJ. Heen and Joel D. Lieberman (2018). "Sexual harassment and violence at music concerts and festivals." Stat Sheet Series, 2018-03. Las Vegas, NV: UNLV Center for Crime and Justice Policy.
[17] Fruin (1993).

Additionally, as discussed in Question #3, much of the disorder that occurs along the pedestrian bridges is the result of people who are stopped or who encourage others to stop (either intentionally or unintentionally). Research demonstrates that efforts to manage disorderly behaviors directly reduce those behaviors and can also prevent more serious problems from forming.[18] Preventing stopping or congregating on bridges – regardless of the actor's motivation for stopping – is likely to reduce disorder and therefore improve public safety.

8. Why is a prohibition on obstruction insufficient to resolve the issues on the bridges?

As discussed above, obstructions can occur as the result of unsafe and disorderly conditions along the walkways. Once obstructions have occurred, however, it may be too late to prevent their more serious consequences, including the elevated risk of injury to pedestrians and the increased difficulty for first responders to quickly manage emergencies. A prohibition on obstruction is therefore insufficient because such a prohibition will not address the problematic conditions that create obstructions in the first place.

The main safety concern on the bridges stems from people who stop or congregate. Those who are stopped, even if they are not intentionally obstructing others, may encourage other pedestrians to stop. This can contribute to increased crowd density and its potential results, including risk of physical injury and criminal activity that can occur when people are in close proximity to each other. Relatedly, those who are stopped may add to the amount of disorder on the bridges even if their actions are not unlawful.

Whereas the purpose of the overpasses is to safely deliver people from one side of Las Vegas Boulevard to the other, the most reasonable solution to minimize problems related to crowd density, disorder, and criminal activity is to keep pedestrians moving along the bridges. A prohibition on obstruction alone will not resolve these concerns.

[18] See George L. Kelling and William H. Sousa (2001). *Do Police Matter? An Analysis of the Impact of New York City's Police Reforms*. Civic Report No. 22. New York, NY: The Manhattan Institute for Policy Research; see also Anthony A. Braga, Brandon C. Welsh, and Cory Schnell (2015). "Can policing disorder reduce crime? A systematic review and meta-analysis." *Journal of Research in Crime and Delinquency*, *52*(4), 567–588.

UNLV CENTER FOR CRIME AND JUSTICE POLICY

Stat Sheet

April 2023

CCJP-SS 2023-1

Safety on Las Vegas Boulevard, 2018-2022

By: William Sousa

Safety concerns related to police calls for service, disorderly conditions, and unhoused individuals present numerous challenges for public officials. This Stat Sheet provides an overview of safety conditions on Las Vegas Boulevard from 2018-2022.

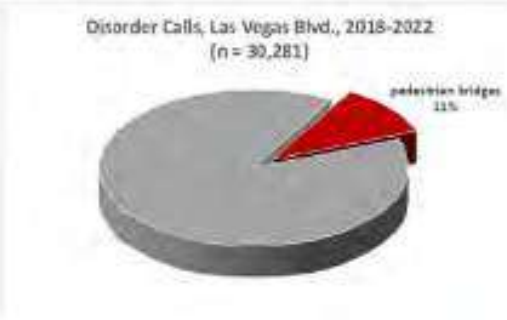
Key Stats



1. Calls for Service – Disorder

Overall calls for service on Las Vegas Boulevard increased 29% from 37,589 in 2018 to 48,358 in 2022.

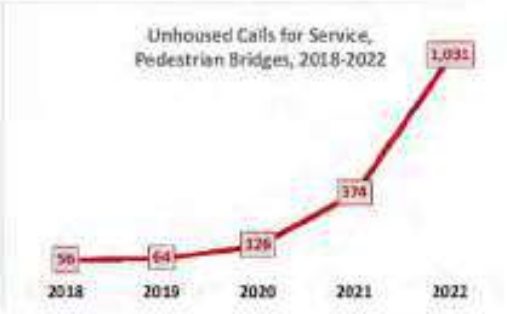
Calls specifically for disorderly offenses jumped from 6,981 in 2018 to 8,570 in 2022 – an increase of 23%.



2. Disorder on Pedestrian Bridges

Calls for disorderly offenses on Las Vegas Boulevard are disproportionately concentrated on pedestrian bridges.

Although the pedestrian bridges account for less than 6% of the total length of the sidewalk system along Las Vegas Boulevard, 11% of disorder calls occurred on the walkways.



3. Calls Related to Unhoused Individuals

Calls for service related to unhoused individuals increased dramatically on Las Vegas Boulevard from 2018-2022.

For example, calls related to the unhoused increased on the pedestrian bridges from 56 in 2018 to 1,031 in 2022 – an increase of over 1,700%.

Center for Crime and Justice Policy

Introduction

Public safety along Las Vegas Boulevard – the heart of the entertainment industry in Clark County – is an important consideration for public officials. As a major tourist destination, issues related to police calls for service, disorderly conditions, and unhoused individuals present a number of challenges. An analysis of data from 2018-2023 provides information on measures of public safety along Las Vegas Boulevard.[1]

Calls for Service

Calls for service are a gauge for the amount of police resources required to manage problems at locations. While many calls are not necessarily crime-related, they often reflect citizen concerns about problematic conditions related to personal health and safety. Analyses reveal that calls for service along the stretch of Las Vegas Boulevard between Russell Road and Sahara Avenue increased substantially, from 37,589 in 2018 to 48,358 in 2022 – an increase of 29%.

Disorder

Research demonstrates that problematic quality-of-life conditions (aggressive panhandling, public drug and alcohol use, excessive trash and litter, etc.) can lead to more quality-of-life issues in public spaces, increased sanitation problems, heightened fear among citizens, and serious criminal activity. Calls for service specifically for disorder increased from 6,981 in 2018 to 8,570 in 2022 – an increase of 23%. Disorder also appears to concentrate at specific locations along Las Vegas Boulevard. For example, although pedestrian bridges make up less than 6% of the total length of the sidewalk system, 11% of disorder calls on Las Vegas Boulevard occurred on the walkways.[2]

Unhoused Individuals

Safety concerns related to unhoused individuals present a number of challenges. The unhoused are disproportionately impacted by struggles with physical health, mental health, and substance abuse problems – and they are at heightened risk of victimization by serious crime. Many calls for service to police concern unhoused individuals. Calls related to the unhoused increased at an alarming rate along Las Vegas Boulevard, from 346 in 2018 to 7,066 in 2022 – an increase of over 1,900%. On the pedestrian bridges alone, calls increased from just 56 in 2018 to 1,031 in 2022 – an increase of over 1,700%.

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[1] Data were provided by the LVMPD Research & Analysis Unit and the Clark County Public Works Department.
[2] The total length of the sidewalks between Russell Road and Sahara Avenue (east and west sides), including the pedestrian bridges, is 39,600 linear feet. The length of the bridges alone is 2,300 linear feet. These measures do not include the privately owned pedestrian bridges in front of Treasure Island, the Venetian, and the Wynn.

HARWELL — actual people here to object to it or comment on it, that's what the public hearing's for. And then there's also a recommendation to approve the agreement.

GIBSON — Thank you. This is a public hearing. Anyone who wishes to speak on Item 66 is invited to come forward. State your name, please spell your last name for our clerk, and keep your comments to three minutes. Is there anyone who wishes to comment? Being no one, the public hearing is closed. Alright.

JONES — Move approval.

GIBSON — Sir, there's a motion for approval by Commissioner Jones. Any discussion on the motion? Please cast your votes. The motion carries

HARWELL — Thank you

GIBSON — Thank you very much, Mike

ACTION: — It was moved by Commissioner Justin Jones, and carried by unanimous vote, that the recommendation be approved.

The Board returned to Item No. 33 following Item No. 66

ITEM NO. 67 Introduce an ordinance to amend sections of Chapter 2.42 of the Clark County Code relating to ethical standards; providing for other matters properly relating thereto; and set a public hearing. (For possible action)

ACTION: — Deleted from the agenda.

ITEM NO. 68 Introduce an Ordinance to amend Title 16 of the Clark County Code to add a new Chapter 16.13 to establish pedestrian flow zones on pedestrian bridges and up to 20 feet surrounding a touchdown structure; and providing for other matters properly relating thereto; and set a public hearing. (For possible action)

SCHILLER — Commissioner, it's not 10:00 a.m. yet, so we'll now move to Introduction of Ordinances. Item 68 is an ordinance to amend Title 16 of the Clark County Code, to add a new Chapter, 16.13, to establish pedestrian flow zones on pedestrian bridges and up to 20 feet surrounding a touchdown structure, and providing for other matters properly related thereto, and set a public hearing

GIBSON — I'll introduce the ordinance and set the public hearing for Tuesday, December 5, 2023, at 10:00 a.m.

ACTION: — There being no objections, Chair Gibson set the public hearing for December 5, 2023, at 10:00 a.m.

ITEM NO. 69 Identify emerging issues to be addressed by staff or by the Board at future meetings; receive updates on the activities of the various regional boards and commissions; and direct staff accordingly

SCHILLER — Commissioners, we can now move to your Business Section. Item 69 is to identify emerging issues to be addressed by staff or by the Board at future meetings, receive updates on the activities of various regional boards and commissions, and direct staff accordingly

VOTE: 7

Voting Aye:	Jim Gibson
	Tick Segerblom
	Marilyn Kirkpatrick
	William McCurdy II
	Ross Miller
	Michael Naft
	Justin Jones
Voting Nay:	None
Absent:	None
Abstain:	None

END PUBLIC HEARINGS

SEC. 8. INTRODUCTION OF ORDINANCES

This item is for introduction only. A date and time will be set for a public hearing. No public comments will be heard at this time.

67. Introduce an ordinance to amend sections of Chapter 2.42 of the Clark County Code relating to ethical standards; providing for other matters properly relating thereto, and set a public hearing. (For possible action)

ACTION: DELETED FROM AGENDA.

ATTACHMENT: Staff Report

ATTACHMENT: Ethics Ordinance for Introduction

68. Introduce an Ordinance to amend Title 16 of the Clark County Code to add a new Chapter 16.13 to establish pedestrian flow zones on pedestrian bridges and up to 20 feet surrounding a touchdown structure; and providing for other matters properly relating thereto; and set a public hearing. (For possible action)

ACTION: BILL NO. 11-21-23-1 INTRODUCED BY COMMISSIONER GIBSON; PUBLIC HEARING SET FOR TUESDAY, DECEMBER 5, 2023 AT 10:00 A.M.

ATTACHMENT: Staff Report

ATTACHMENT: Ordinance New Chapter 16.13 Pedestrian Flow Zones

ATTACHMENT: Final Sousa Report

SEC. 9. BUSINESS ITEMS


CERTIFIED COPY
DOCUMENT ATTACHED IS A
TRUE AND CORRECT COPY OF
THE DOCUMENT OR DATA ON FILE
MINUS ANY REDACTED PORTIONS
SEP 05 2024
CLERK

Exhibit 15

Clark County Board of Commissioners Meeting Agenda from December 5, 2023

AGENDA

JOINT MEETING OF THE

CLARK COUNTY BOARD OF COMMISSIONERS

MOUNT CHARLESTON FIRE PROTECTION DISTRICT BOARD OF FIRE COMMISSIONERS

CLARK COUNTY WATER RECLAMATION DISTRICT BOARD OF TRUSTEES

UNIVERSITY MEDICAL CENTER OF SOUTHERN NEVADA BOARD OF TRUSTEES

9:05 AM TUESDAY, DECEMBER 5, 2023

COMMISSION CHAMBERS, GOVERNMENT CENTER

500 SOUTH GRAND CENTRAL PARKWAY

LAS VEGAS, NEVADA 89106

This meeting has been properly noticed and posted online at https://clarkcountynv.gov/agendas and Nevada Public Notice at https://notice.nv.gov/ and in the following location:

CC Government Center 500 S. Grand Central Pkwy. Las Vegas, NV (Principal Office)

If you wish to speak on an item marked "For Possible Action" appearing on this agenda, please fill out a Public Comment Interest Card which is located in front of the Commission Chambers and submit the comment card to staff sitting in the Commission Chambers. If you wish to speak to the Board about items within its jurisdiction but not appearing as an "Action" item on this agenda, you must wait until the "Comments by the General Public" period listed at the end of this agenda. Comments will be limited to up to three minutes. Please step up to the speaker's podium, clearly state your name and address and please spell your last name for the record. If any member of the Board wishes to extend the length of a presentation, this will be done by the Chair, or the Board by majority vote.

- Items on the agenda may be taken out of order.
- The Board of County Commissioners, Board of Trustees, and Licensing Board may combine two or more agenda items for consideration.
- The Board of County Commissioners, Board of Trustees, and Licensing Board may remove an item from the agenda or delay discussion relating to an item at any time.

Contracts, zoning matters, or ordinances that do not comply with the County's disclosure requirement as outlined in Section 10(2) of the County Ethics Policy are subject to being voided.

The main agenda is available on Clark County's website, ClarkCountyNV.gov. For copies of agenda items and supporting backup materials, please contact Agenda Coordinator, at (702) 455-3530, Clark County Manager's Office, 500 S. Grand Central Parkway, 6th Floor, Las Vegas, Nevada 89106. This meeting will be broadcast live in the Las Vegas area. Clark County Television is available in the Las Vegas area on Channel 4/1004 on Cox cable and on CenturyLink on Channels 4 and 1004 as well as in Laughlin on Channel 14 via Suddenlink. Live streaming of CCTV programming is available at www.ClarkCountyNV.gov and https://www.youtube.com/ClarkCountyNV. CCTV is also available in Boulder City on Channel 4 and in Moapa Valley on Digital Channel 50.3. For more information about the program schedule, please refer to https://clarkcountynv.gov/CCTV4/ or contact CCTV Channel 4 at (702) 455-6890.

SEC. 1. OPENING CEREMONIES

CALL TO ORDER

INVOCATION

PLEDGE OF ALLEGIANCE

SEC. 2. COMMISSIONERS' / COUNTY MANAGER'S RECOGNITION

1. Present a proclamation to Float Like a Duck and Paragon Pools in recognition of their 20th anniversary campaign that focuses on the importance of water safety and drowning prevention by providing information, tips, and videos for consumers, non-profits, and fellow water safety advocates

2. Present a proclamation to STOP DUI to recognize 3D Month and STOP DUI's 3 decades of work providing victim assistance and DUI education and awareness.

3. County Manager recognition of newly hired Clark County employees.

SEC. 3. PUBLIC FORUM

This is the first of two portions of the meeting devoted to the Public. Public comment during this portion of the agenda must be limited to matters on the agenda for action. If you wish to speak during this portion of the agenda, please fill out a Public Comment Request card located in front of the Commission Chambers and submit a completed card to staff sitting in the Commission Chambers. After completing and submitting a Public Comment Request Card, please step up to the speaker's podium when called, state your name and address and speak into the microphone.

4. Public Comment

SEC. 4. AGENDA

5. Approval of Minutes of the Regular Meeting on November 7, 2023. (For possible action) (Available in the County Clerk's Office, Commission Division)

6. Approval of Agenda with the Inclusion of Any Emergency Items and Deletion of Any Items (For possible action)

SEC. 5. CONSENT AGENDA: Items No. 7 through No. 34

NOTE:
- The Board of County Commissioners / Board of Trustees and Licensing Board may remove an item from the agenda or delay discussion relative to an agenda item at any time.
- Consent Agenda - All matters in this sub-category are considered by the Board of County Commissioners / Board of Trustees and Licensing Board to be routine and may be acted upon in one motion. Most agenda items are placed on for positive action. However, the Board / Trustees may take other action as they deem appropriate.
- Consent Agenda items are presented and can be taken in one motion unless a Commissioner/Trustee/Licensing member requests that an item be taken separately. The Chair will allow public comment on these items before the vote. For all items left on the Consent Agenda, the action taken will be staff's recommendation as indicated on the item.
- Items taken separately from the Consent Agenda by Commissioners/Trustees/Licensing members at the meeting will be heard following the Commissioners' Private Meeting Lunch Session.

Purchasing & Contracts

7. Authorize the Chair to sign the Interlocal Agreement with Nevada Department of Corrections, for CBE No. 606242-22, for Coroner/Medical Examiner Related Services; or take other action as appropriate. (For possible action)

8. Approve the award of Bid No. 606778-23, for Annual Requirements Contract for Street Lighting and Traffic Signal Poles, to the low responsive and responsible bidder, contingent upon submission of the required insurance. Staff recommends award to Ferguson Enterprises, Inc. dba Ferguson Waterworks for Packages 1, 2, 3, and 4; or take other action as appropriate. (For possible action)

9. Approve an Amendments to the Contracts with Dixie Leavitt Agency, Inc dba Leavitt Insurance Agency and Willis Towers Watson Insurance Services West, Inc., for RFP No. 604982-18, for Insurance Brokerage Services for Cyber Liability, Property, Crime, Boiler and Machinery Insurance and Miscellaneous Bonds as Required and Insurance Brokerage Services for Excess General Liability and Excess Workers' Compensation Insurance; and authorize the Chief Financial Officer or her designee to sign the Amendments; or take other action as appropriate. (For possible action)

10. Ratify and authorize the Chair to sign the Interlocal Agreement with State of Nevada, Department of Business and Industry, Nevada Housing Division, for CBE No. 606838-23, for 2024 Agreement to Use Account for Affordable Housing Trust Funds by Clark County; or take other action as appropriate. (For possible action)

11. Approve an Amendment to the Contract with Homes and Building Cleaning Services, for Bid No. 606596-23, for Annual Requirements Contract for Janitorial Services at 309 S. Third St. Building; and authorize the Chief Financial Officer or her designee to sign the Amendment; or take other action as appropriate. (For possible action)

12. Approve an Amendment to the Contract with High Quality Concepts, Inc. dba Best Janitorial Services of Nevada, for Bid No. 605612-20, for Annual Requirements Contract for Janitorial Services at Clark County Family Courts; and authorize the Chief Financial Officer or her designee to sign the Amendment; or take other action as appropriate. (For possible action)

13. Approve an Amendment to the Contract with Curbelo, Inc. dba Nevada Cleaning Systems, for Bid No. 606537-23, for Annual Requirements Contract for Janitorial Services at Child Haven Campus and DFS Center K-1 K-2; and authorize the Chief Financial Officer or her designee to sign the Amendment; or take other action as appropriate. (For possible action)

14. Approve an Amendment to the Contract with Opportunity Village, ARC, for CBE No. 605890-21, for Annual Requirements Contract for Janitorial Services at Government Center; and authorize the Chief Financial Officer or her designee to sign the Amendment; or take other action as appropriate. (For possible action)

15. Ratify and approve an Amendment to the Contract with Wells Fargo Merchant Services L.L.C. and Wells Fargo Bank, N.A., for CBE No. 603612-15, for Merchant Bankcard Services; and authorize the Chief Financial Officer or her designee to sign the Amendment; or take other action as appropriate. (For possible action)

16. Approve the award of Bid No. 606690-23, for Roadway Improvements on Various Streets to the low responsive and responsible bidder, contingent upon submission of the required bonds and insurance. Staff recommends award to Unicon, LLC; or take other action as appropriate. (For possible action)

17. Approve an Amendment to the Contract with Charleston Residential Services LLC dba Crossroads of Southern Nevada, for RFQ No. 605240-19, for Crisis Stabilization and Supportive Housing Continuity of Care Program; and authorize the Chief Financial Officer or her designee to sign the Amendment; or take other action as appropriate. (For possible action)

18. Approve an Amendment to the Contract with UMR, Inc, for RFP No. 604028-16, for Medical and Dental Third-Party Administration (TPA) Services; and authorize the Chief Financial Officer or her designee to sign the Amendment; or take other action as appropriate. (Previous Amendments and original Contract are available for public viewing at the County Clerk's Office, Commission Division) (Also sitting as Clark County Water Reclamation District Board of Trustees, University Medical Center of Southern Nevada Board of Trustees and Mount Charleston Fire Protection District Board of Fire Commissioners) (For possible action)

Town Services

19. Note for the record the following Town Advisory Board (TAB) and/or Citizens Advisory Council (CAC) Minutes: Enterprise TAB - November 1, 2023; Laughlin TAB - October 10, 2023; Paradise TAB - October 31, 2023; Sandy Valley CAC - October 10, 2023; Seachlight TAB - October 11, 2023; Spring Valley TAB - October 10, 2023 and October 31, 2023; Sunrise Manor TAB - November 2, 2023; Whitney TAB - October 12, 2023; and Winchester TAB - October 31, 2023.

Public Works

20. Receive notice regarding Change Order No. 1 to the contract with Las Vegas Paving Corporation for construction of the Residential Streets Pavement Reconstruction #104 - Lot 1 & 2 project (Bid No. 606515-23). (For possible action)

21. Approve and authorize the County Manager or his designee to sign Supplemental No. 1 to the professional engineering services contract between Clark County and Horrocks Engineers, Inc. (Wayne Horlacher, Senior Vice President) to increase total funds for design services for the Rainbow Boulevard between Blue Diamond Road and Clark County 215 Beltway project. (For possible action)

22. Approve and authorize the Chair to sign an interlocal contract between Clark County and Regional Flood Control District for design of the Thomas Edison Detention Basin, Collection and Outfall project. (For possible action)

23. Approve and authorize the Chair to sign Supplemental No. 4 to Interlocal Contract No. 3009 among Clark County, Regional Transportation Commission of Southern Nevada, City of Las Vegas, and City of Henderson to add City of Las Vegas and City of Henderson as participants in the Arterial Reconstruction: Gomer Road, Gowan Road, Durango Drive, Eastern Avenue and Various Roadways project. (For possible action)

24. Approve and authorize the Chair to sign Supplemental No. 2 to Interlocal Contract No. 3035 among Clark County, Regional Transportation Commission of Southern Nevada, and City of Las Vegas to add City of Las Vegas as a participant in the Decatur Boulevard between Tropicana Avenue and Sahara Avenue project. (For possible action)

25. Approve and authorize the Chair to sign Supplemental No. 1 to Interlocal Contract No. 1219 between Clark County and Regional Transportation Commission of Southern Nevada to increase total funds for design of the Pyle Avenue between Las Vegas Boulevard and Bermuda Road project. (For possible action)

26. Approve and authorize the Chair to sign Interlocal Contract No. 3122 between Clark County and Regional Transportation Commission of Southern Nevada for construction of the Maryland Parkway Underground Utilities between Tropicana Avenue and Flamingo Road project. (For possible action)

27. Approve and authorize the Chair to sign the First Amendment to the Interlocal Agreement for Maintenance of Infrastructure Improvements along the Clark County 215 Bruce Woodbury Beltway between Clark County and City of Las Vegas addressing the maintenance and operation responsibilities for regional flood control facilities, trails and streets crossing the Beltway within the jurisdictions of the City of Las Vegas and Clark County. (For possible action)

28. Approve and authorize the Director of Public Works to sign a Revocable License Agreement between Clark County and Las Vegas Super Bowl Host Committee, Inc., a Nevada nonprofit corporation, to use a portion of the Tropicana Detention Basin for off-site operational compounds and for vehicle and cargo inspection screening in support of Super Bowl LVIII being held at Allegiant Stadium; and take any action deemed appropriate. (For possible action)

Budget & Finance

29. In accordance with NRS 244.210 and 354.220 through 354.250, approve, adopt, and authorize the Chair to sign a resolution to authorize refunds as shown on Exhibit "A. " (For possible action)

Mount Charleston Fire Protection District (Board of County Commissioners sitting as the Mount Charleston Fire Protection District Board of Fire Commissioners)

30. Ratify and authorize the Chair to sign Interlocal Agreement No. 606815-23 with Nevada Division of Forestry, for CBE No. 606815-23, for Interlocal Contract Between Public Agencies; or take other action as appropriate. (For possible action)

General Administration

31. Approve and authorize the Chair to sign the correction of the 2021-2022 thru 2023-2024 Secured Assessment Roll AR-1205-23-22 and order the corrections to be made. (For possible action)

32. Per NRS 253.040, approve a bond for the Public Administrator to administer estates from January 3, 2023 through January 3, 2027. (For possible action)

33. Approve Offers of Judgement served in Antonio Gonzalez-Rodriguez; Consuelo Gonzales Posada v. Clark County et al., Case No. A-19-78752-C (For possible action)

34. Ratify the Chief Financial Officer's execution of the Settlement Agreement and Mutual Release between Clark County, Las Vegas Justice Court and Matterhorn. (For possible action)

END CONSENT AGENDA

SEC. 6. ITEMS TAKEN SEPARATELY FROM CONSENT AGENDA

SEC. 7. PUBLIC HEARINGS - 10 AM

35. Pursuant to NRS 288.153, conduct a public hearing; and approve and authorize the Chair to sign the Collective Bargaining Agreement between Clark County and the Clark County Juvenile Probation Officers Association (JJPOA), effective July 1, 2023 through June 30, 2026; and extend the same salary and benefit changes to non-union employees not covered by the JJPOA Collective Bargaining Agreement. (For possible action)

36. Conduct a public hearing and approve, adopt and authorize the Chair to sign an ordinance to amend Title 16 of the Clark County Code to add a new Chapter 16.13 to establish pedestrian flow zones on pedestrian bridges and up to 20 feet surrounding a touchdown structure; and providing for other matters properly relating thereto; or take other actions as appropriate. (For possible action)

END PUBLIC HEARINGS

SEC. 8. BUSINESS ITEMS

37. Identify emerging issues to be addressed by staff or by the Board at future meetings; receive updates on the activities of the various regional boards and commissions; and direct staff accordingly.

38. Appoint a qualified individual to serve on the Las Vegas Stadium Authority Board of Directors for a four-year term commencing January 1, 2024, from the list of the following individuals: Incumbent: Thomas White; New Applicants: Diane Bartholomew, Shelli Hayes, Bobby House, Thomas Keefe, Dennis Montalvo, Andrew Ramirez, Brian Scroggins, Diana Valles, and Kelvin Watson; and Reappoint Jan Jones Blackhurst for a four-year term commencing January 1, 2024. (For possible action)

39. Approve and authorize the Chair to appoint 5 additional members (inclusive of 1 At-Large member, 2 Representatives, and 2 Alternates) to the Community Development Advisory Committee (CDAC) from the list of the following nominees: Kimberly Schwartzlander and Sondra Cosgrove (Each Representing 1 Town Advisory Board/Citizens Advisory Council); Kimberly Schwartzlander, Sondra Cosgrove and their respective Alternates Angelo Carvalho, and Stephanie Jordan;, and Laura Martin (Representing 1 At-Large) Laura Martin. (For possible action)

40. Ratify the appointment of Jason Douglas as Fire Chief of the Mount Charleston Fire Protection District effective January 5, 2024. (Sitting as the Mount Charleston Fire Protection District Board of Fire Commissioners) (For possible action)

41. Approve, adopt, and authorize the Chair to sign a resolution creating the Clark County Regional Opioid Task Force. (For possible action)

42. Appoint fifteen (15) qualified individuals to serve on the Clark County Regional Opioid Task Force for a term ending December 31, 2024, from the list of following applicants: Stephanie A. Abeyta, Leila E.S.H. Garcia, Kyle Kuwahara, Rosa B. O'Bannon, Melanie R. Rouse, Meambi T. Newbern-Johnson, Melissa A. Perez, Eboni J. Washington, Greg S. Theobald, Brandon P. Delise, Ronald L. Ware Jr., Andrew J. Bischel, Albert D. Chavez, Jamie P. Sorenson, Jessica A. Johnson, Thomas A. Alfreda, Jr., Jose Maria Partida Corona, Farzad Kamyar, Charlene A. Letchford, Stephanie L. Mapula Magdaleno, Ashley M. Reich, Timothy C. Smith, Maureen P. Strohm, Ariann Chelli, Erin C. Donohue, Joseph William Engle, Timothy J. Grigsby, Lisa P. Kelso, Rickey R. Reich, Araine M. Scorsone, Emily M. Thomas, Aaron M. Allred, Geoconda Hughes, Kelly B. Morgan, Brian M. O'Neal, Damon R. Schilling, Ryan B. Tyler, BacTrinh N. Dang, Dr. Juana Leia Jordan, Thomas J. Stewart, Jerry L. Cade, Jose Maria Partida Corona, Frederick John Lippmann, Ertha Allyson Nanton, Mayra A. Gonzalez, Dolletta M. Mitchell, Jennifer M. Paulson, Chelsi Nydia Cheaton, Sandra L. Estrada, Kyle D. Heckard, Magdalena Palma, Dianna M. Sbabo, and Barbara J. Tanner. (For possible action)

43. Designate the Chairperson and Vice-Chairperson of the Clark County Regional Opioid Task Force for a term ending December 31, 2024. (For possible action)

44. Discuss a potential resolution establishing a Colorado River Heritage Greenway Park Trail Advisory Council to assist in community service and outreach events in Laughlin. (For possible action)

45. Go into closed session, pursuant to NRS 241.015(3)(b)(2), to receive information from the District Attorney regarding potential or existing litigation involving a matter over which the Board has supervision, control, jurisdiction or advisory power, and to deliberate toward a decision on the matter, and pursuant to NRS Chapter 288.220, to receive a report on the status of ongoing labor negotiations; and direct staff accordingly. (For possible action)

PUBLIC COMMENTS

Comments by the General Public

A period devoted to comments by the general public about matters relevant to the Board/Trustees' jurisdiction will be held. No vote may be taken on a matter not listed on the posted agenda. Comments will be limited to up to three minutes. Please step up to the speaker's podium, clearly state your name and address and please SPELL your last name for the record. If any member of the Board/Trustees wishes to extend the length of a presentation, this will be done by the Chair, or the Board/Trustees by majority vote.

All comments by speakers should be relevant to Board/Trustees action and jurisdiction.

ZONING AND SUBDIVISIONS **Wednesday, December 6, 2023, 9:00 a.m.** **Separate Agenda**

THE REGULAR JOINT MEETINGS OF THE CLARK COUNTY BOARD OF COMMISSIONERS, THE CLARK COUNTY WATER RECLAMATION BOARD OF TRUSTEES, THE UNIVERSITY MEDICAL CENTER OF SOUTHERN NEVADA BOARD OF TRUSTEES, THE CLARK COUNTY LIQUOR AND GAMING LICENSING BOARD, AND THE CLARK COUNTY REDEVELOPMENT AGENCY HELD ON THE FIRST AND THIRD TUESDAYS OF EACH MONTH, ARE VIDEO-TAPED BY CLARK COUNTY TELEVISION (CCTV). THIS MEETING WILL BE BROADCAST LIVE IN THE LAS VEGAS AREA. CLARK COUNTY TELEVISION IS AVAILABLE IN THE LAS VEGAS AREA ON CHANNEL 4/1004 ON COX CABLE AND ON CENTURYLINK ON CHANNELS 4 AND 1004 AS WELL AS IN LAUGHLIN ON CHANNEL 14 VIA SUDDENLINK. LIVE STREAMING OF CCTV PROGRAMMING IS AVAILABLE AT WWW.CLARKCOUNTYNV.GOV AND WWW.YOUTUBE.COM/CLARKCOUNTYNV. CCTV IS ALSO AVAILABLE IN BOULDER CITY ON CHANNEL 4 AND IN MOAPA VALLEY ON DIGITAL CHANNEL 503. FOR MORE INFORMATION ABOUT THE PROGRAM SCHEDULE, PLEASE REFER TO HTTPS://CLARKCOUNTYNV.GOV/CCTV/, OR CONTACT CCTV CHANNEL 4 AT (702) 455-6898.

THE COUNTY CLERK KEEPS THE OFFICIAL RECORD OF ALL PROCEEDINGS OF THE COUNTY COMMISSION, THE CCWRD BOARD OF TRUSTEES, THE UMC HOSPITAL BOARD OF TRUSTEES, THE CLARK COUNTY LIQUOR AND GAMING LICENSING BOARD, AND THE CLARK COUNTY REDEVELOPMENT AGENCY. IN ORDER TO MAINTAIN A COMPLETE AND ACCURATE RECORD OF ALL PROCEEDINGS, ANY PHOTOGRAPH, MAP, CHART, OR ANY OTHER DOCUMENT USED IN ANY PRESENTATION TO THE BOARD/TRUSTEES SHOULD BE SUBMITTED TO THE COUNTY CLERK. IF MATERIALS ARE TO BE DISTRIBUTED TO COMMISSIONERS/TRUSTEES, PLEASE PROVIDE SUFFICIENT COPIES FOR DISTRIBUTION TO THE COUNTY MANAGER, COUNTY COUNSEL, AND COUNTY CLERK.

WHEN OPEN TO THE PUBLIC, THE CLARK COUNTY COMMISSION CHAMBERS ARE ACCESSIBLE TO INDIVIDUALS WITH DISABILITIES. WITH TWENTY-FOUR (24) HOUR ADVANCE REQUEST, A SIGN LANGUAGE INTERPRETER MAY BE MADE AVAILABLE (PHONE: (702) 455-3530 OR TDD (702) 385-7486) OR RELAY NEVADA TOLL FREE (800) 326-6868 TT/TDD. ASSISTIVE LISTENING DEVICES ARE AVAILABLE UPON REQUEST AT THE STAFF TABLE.

CLARK COUNTY BOARD OF COMMISSIONERS
AGENDA ITEM

Petitioner: Kevin Schiller, County Manager
Abigail Frierson, Deputy County Manager

Recommendation:

Conduct a public hearing and approve, adopt and authorize the Chair to sign an ordinance to amend Title 16 of the Clark County Code to add a new Chapter 16.13 to establish pedestrian flow zones on pedestrian bridges and up to 20 feet surrounding a touchdown structure; and providing for other matters properly relating thereto; or take other actions as appropriate. (For possible action)

FISCAL IMPACT:

Fund #:	N/A	Fund Name:	N/A
Fund Center:	N/A	Funded PGM/Grant:	N/A
Amount:	N/A		
Description:	N/A		
Additional Comments:	N/A		

BACKGROUND:

The proposed ordinance would create Pedestrian Flow Zones within the resort corridor on pedestrian bridges and up to 20 feet surrounding a touchdown structure, which includes elevators, escalators and stairways located on public right of way associated with a pedestrian bridge. The ordinance would prohibit any person from stopping, standing, or engaging in activity that causes another person to stop or stand within a Pedestrian Flow Zone to ensure the continuous movement of pedestrian traffic on pedestrian bridges and surrounding touchdown structures. The public safety concerns regarding pedestrian bridges on the Las Vegas Strip are discussed in a report prepared by William Sousa, Ph.D. The ordinance addresses public safety on the pedestrian bridges on the Las Vegas Strip and is narrowly tailored to accomplish this goal by requiring every person utilizing the pedestrian bridge to keep moving across the bridge to ensure pedestrians get to their desired location in the safest matter possible.

The ordinance was introduced at the Board of County Commissioners' meeting on November 21, 2023, and a public hearing was set for December 5, 2023, at 10:00 a.m. Staff recommends approval of this ordinance.

ACTION: HELD UNTIL THE JANUARY 2, 2024 BOARD MEETING.

Date Of Agenda
12/05/2023
Item No.
23-1655

36.1

[Bracketed] material is that portion being deleted
Underlined material is that portion being added

BILL NO. 11-21-23-1

SUMMARY – Establishes Pedestrian Flow Zones on Pedestrian Bridges and up to 20 feet surrounding a touchdown structure.

ORDINANCE NO. _____
(of Clark County, Nevada)

AN ORDINANCE TO AMEND TITLE 16 OF THE CLARK COUNTY CODE TO ADD A NEW CHAPTER 16.13 TO ESTABLISH PEDESTRIAN FLOW ZONES ON PEDESTRIAN BRIDGES AND UP TO 20 FEET SURROUNDING A TOUCHDOWN STRUCTURE; AND PROVIDING FOR OTHER MATTERS PROPERLY RELATING THERETO.

THE BOARD OF COUNTY COMMISSIONERS OF THE COUNTY OF CLARK, STATE OF NEVADA, DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. Title 16 of the Clark County Code is amended as follows:

CHAPTER 16.13 – PEDESTRIAN FLOW ZONES

16.13.010 – Purpose.

The pedestrian bridges located within the world-famous Las Vegas Strip provide above grade access for the visitors, employees, and residents of Clark County to safely cross the roadways located within the Las Vegas Strip. The pedestrian bridges are part of the sidewalk system of the Las Vegas Strip and were created for the purpose of separating pedestrian traffic from vehicular traffic to facilitate pedestrians crossing in those locations. Pedestrians are prohibited from crossing at grade level where pedestrian bridges are located. The pedestrian bridges were designed for the specific purpose of

facilitating such crossings at all foreseeable levels of demand which can vary significantly and unpredictably regardless of day or time of day. The parameters for the pedestrian bridge design did not include uses beyond pedestrian traffic crossing from one side to the other side. The parameters included that pedestrians would not stop, stand or congregate other than for incidental and fleeting viewing of the Las Vegas Strip from the pedestrian bridge. For pedestrians to be able to stop, stand or congregate for any other reason, the pedestrian bridges would have been designed differently to account for such uses.

Stopping on the pedestrian bridges creates conditions that can foment disorder which, in turn, can lead to crime and serious safety issues. Because pedestrian traffic demand on the bridges varies significantly and unpredictably regardless of day or time of day, it is impossible to know in advance when stopping will result in criminal or otherwise dangerous conditions (whether involving the particular pedestrian who has stopped or others) and because of the physical nature of the pedestrian bridges, by the time such conditions exist, it would often be too late for law enforcement or other first responders to intervene, mitigate, render aid, rescue, or take other actions necessary as a result of crime and other serious safety issues. In recent years, numerous incidents have occurred that underscore these concerns. There is an ever-increasing demand as visitation numbers have reached near historical levels. Clark County continues to attract major sporting events and has become the home to major sports teams. Clark County has a substantial government interest in providing safe pedestrian access on the Las Vegas Strip. The increased number and frequency of high-profile attacks in places of public gatherings throughout the country have contributed to the occurrence of threats and

perceived threats that result in public panic and immediate and unexpected demand on pedestrian bridges as in an event of flight by large groups of people.

From 2018 to 2022, calls for law enforcement services on the Las Vegas Strip have increased twenty-nine percent (29%) from 37,598 in 2018 to 48,358 in 2022. The service calls for disorderly offenses increased twenty-three percent (23%) from 6,981 in 2018 to 8,750 in 2022. While the pedestrian bridges constitute only approximately six percent (6%) of the total linear feet of public sidewalks available to pedestrians, the service calls for disorderly conduct on the pedestrian bridge are almost twice as high. In addition to the disproportionate call volume on pedestrian bridges, the pedestrian bridges create a unique opportunity for criminal disorder as the bridges create a captive audience. Generally, in order for a pedestrian to cross Las Vegas Boulevard the pedestrian must use the bridge, therefore, unlike on a sidewalk where a pedestrian has a greater ability to avoid disorder, on the pedestrian bridge, the pedestrian is confined to the restricted space of the pedestrian bridge.

The Board has a substantial government interest in ensuring public safety on the pedestrian bridges. The Board finds that adoption of Pedestrian Flow Zones is a narrowly tailored means to accomplish the County's important objective of reducing the incidence and risk of crime and serious safety issues on pedestrian bridges and allows pedestrians to freely and safely get to their desired location. The pedestrian bridges represent only six percent (6%) of the total linear feet of the public sidewalk available to pedestrians within the Las Vegas Strip, to the extent the Pedestrian Flow Zones have some incidental impact on the manner of First Amendment activity, (people must continue to move, whether engaged in First Amendment activity or not), there is ample alternative means of

communication on the other approximately ninety-four percent (94%) of the sidewalks located within the Las Vegas Strip. Therefore, for the reasons described herein, the Board hereby adopts the following ordinance.

16.13.020 - General definitions.

"Pedestrian Bridges" are bridges located in the Resort Corridor that allow pedestrians to cross streets in the Resort Corridor above grade level. For the purposes of this chapter, "pedestrian bridges" shall include bridges for pedestrians in the Resort Corridor that are private property upon which a limited easement of public access has been granted. However, no provision of this chapter shall be construed to limit any right of the private property owner to restrict or limit the use of that private property.

"Pedestrian Flow Zones" include the Pedestrian Bridges and up to 20 feet surrounding a Touchdown Structure located within the Resort Corridor.

"Resort Corridor" includes the boundaries established by Sections 9, 10, 15, 16, 17, 18, 20, 21, 22, 27, 28 and 29 of Township 21 South Range 61 East, Mount Diablo Meridian, Clark County, Nevada.

"Touchdown Structure" means the elevators, escalators and stairways located on the public right of way associated with Pedestrian Bridges.

16.11.030 – Pedestrian Flow Zones. To maintain the safe and continuous movement of pedestrian traffic, it is unlawful for any person to stop, stand, or engage in an activity that causes another person to stop or stand within any Pedestrian Flow Zone.

16.11.040 – Designation of Pedestrian Flow Zones. The County shall place signs in Pedestrian Flow Zones providing notice to the public they are in a Pedestrian Flow

Zone and that stopping, standing, or engaging in an activity that causes another person to stop within the Pedestrian Flow Zone is not permitted.

16.11.050 – Penalty for Violation. Any person who violates any of the provisions of this chapter is guilty of a misdemeanor and upon conviction shall be punished by imprisonment in the county jail for a term not to exceed six months or by a fine not to exceed one thousand dollars, or by both such fine and imprisonment.

SECTION 2. If any section of this ordinance or portion thereof is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such holding shall not invalidate the remaining parts of this ordinance.

SECTION 3. All ordinances, parts of ordinances, chapters, sections, subsections, clauses, phrases or sentences contained in the Clark County Code in conflict herewith are hereby repealed.

SECTION 4. This ordinance shall take effect and be in force from and after its passage and the publication thereof by title only, together with the names of the County Commissioners voting for or against its passage, in a newspaper published in and having a general circulation in Clark County, Nevada, at least once a week for a period of two (2) weeks.

PROPOSED on the _____ day of _____, 2023.

PROPOSED BY: _____

PASSED on the _____ day of _____ 2023.

AYES: _____

_____

_____

_____

_____

_____

_____

NAYS _____

_____

ABSTAINING _____

ABSENT _____

BOARD OF COUNTY COMMISSIONERS
CLARK COUNTY, NEVADA

By _____
JAMES B. GIBSON, Chair

ATTEST

LYNN GOYA, County Clerk

This ordinance shall be in force and effect from and after the day of 2023.

Rule from Dec 7 2023 Ordinance -6-

QUESTIONS RELATED TO PUBLIC SAFETY ON PEDESTRIAN BRIDGES
William H. Sousa, Ph.D.

1. **What is the focus of Dr. Sousa's research projects and how do they relate to the pedestrian overpasses?**

The focus of my research is on crime, disorder, and public safety, particularly in urban settings. I am an author of a textbook on policing and numerous articles, monographs, and book chapters on the nature of disorder, its impact on community life, and the role of police and citizens in terms of dealing with disorder. The nature of the research often involves conducting observations of police as they manage complex problems in public places. Over my nearly 20-year career, I have conducted approximately 150 ride-along / walk-along observations with police, totaling well over 1,000 hours.

While I have explored issues related to public safety in numerous cities around the country, much of my research is focused in Clark County. As just a few examples, I have studied citizen perceptions of disorder along Las Vegas Boulevard and Fremont Street,[1] issues related to pedestrian safety on Las Vegas Boulevard,[2] efforts to manage major crowd events along Las Vegas Boulevard,[3] concerns related to unhoused youth in Southern Nevada,[4] and violence prevention efforts in Las Vegas neighborhoods.[5]

Whereas much of this work examines connections between disorder and public safety, the research relates directly to concerns that have developed along the pedestrian bridges over Las Vegas Boulevard.[6] Analyses indicate that calls for service for disorder-related events on Las Vegas Boulevard increased 23% between 2018 and 2022. Moreover, while problems related to disorder have increased on the Strip in general, further analyses reveal that disorder tends to concentrate on the pedestrian overpasses. While the bridges comprise less than 6% of the sidewalk system along Las Vegas Boulevard, 11% of disorder-related calls occurred on the overpasses.

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[1] Jonathan Birds and William Sousa (2015). *Perceptions of Disorder: Results from Two Las Vegas Tourist Locations*. Research in Brief Series, 2015-01. Las Vegas, NV: UNLV Center for Crime and Justice Policy.
[2] William Sousa (2023). *Safety on Las Vegas Boulevard, 2018-2022*. Stat Sheet Series, 2023-01. Las Vegas, NV: UNLV Center for Crime and Justice Policy.
[3] William H. Sousa and Tamara D. Madensen (2011). "The police and major event planning: A case study in Las Vegas, Nevada." *Preventing Crowd Violence.* Crime Prevention Studies Series, *26*, 139-158.
[4] Patricia Cook-Craig, Jennifer Guthrie, William Sousa, Carlton Craig, Michael Bruner, Judy Tudor, Jessica Word, and Melissa Jacobowitz (2017). *The State of Youth Homelessness in Southern Nevada.* Research in Brief. Las Vegas, NV: Greenspun College of Urban Affairs.
[5] Timothy Radtke, William Sousa, and Timothy Hart (2008). "Operation Ceasefire in Clark County, Nevada: Evaluating a Cross-Jurisdictional Approach to Reducing Gun Violence." Washington, DC: Bureau of Justice Statistics.
[6] See, generally, Sousa (2023).

2. What does disorder mean with respect to Dr. Sousa's expertise and areas of research and study? What is the relationship between disorder and crime and other safety issues? Explain disorder and how it creates conditions of public safety and/or crime.

Within the criminological literature, "disorder" refers to a broad range conditions and behaviors that are not necessarily illegal (although they often are), but are nevertheless considered to be problematic in public places.[7] The term "disorder" is sometimes used interchangeably with terms such as "incivilities" or "quality-of-life concerns." Research often distinguishes between two types of disorders: social and physical. Social disorders involve active behaviors, such as aggressive panhandlers who intimidate passersby, individuals engaging in street prostitution, people using drugs and alcohol in public, or unruly teenagers who harass pedestrians. Physical disorders involve persistent conditions, such as litter along sidewalks, locations with evidence of public urination and defecation, or graffiti on walls of public buildings.[8]

Disorder is a concern because of the potential harmful effect it can have on public life. Research indicates that disorder can lead to citizen fear, to more disorder, and to serious crime. Researchers have argued, for example, that citizens' perceptions of disorder are significantly related to fear of victimization,[9] and that people will often alter their behavior to avoid confrontations with disorderly actors or conditions.[10] Other studies demonstrate that relatively little disorder, if left unchecked, can generate more disorder.[11] Furthermore, although it is not inevitable, locations with permissive atmospheres toward disorder are more susceptible to serious criminal activity.[12] This is because serious offenders are generally more comfortable in places where acts of disorder are common and appear to be acceptable.

Several factors escalate problems related to disorder, including the amount of visible disorder at any given time, the level of aggressiveness of the disorderly actor(s), and the type of location where the disorder is occurring. Location is particularly important because disorderly behaviors are often most problematic when they are performed in specific locations where people are especially vulnerable to intimidation (i.e., in areas where the observer of the behavior is a "captive audience"). Examples of such locations are bus stops, train platforms, and subway cars.

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[7] Wes G. Skogan (1990). *Disorder and Decline: Crime and the Spiral of Decay in American Neighborhoods*. New York: The Free Press.
[8] William H. Sousa (2010). "Wesley Skogan's 'Disorder and Decline'" in *The Encyclopedia of Criminological Theory*, Frank Cullen & Pam Wilcox (eds.), SAGE publications.
[9] Catherine E. Ross and Sung Joon Jang (2000). "Neighborhood disorder, fear, and mistrust: the buffering role of social ties with neighbors." *American Journal of Community Psychology, 28*(4), 401-420.
[10] William H. Sousa and George L. Kelling (2014). "Order Maintenance Policing" in *Encyclopedia of Criminology and Criminal Justice*, G. Bruinsma & D. Weisburd (eds.), Springer.
[11] Kees Keizer, Siegwart Lindenberg, and Lionda Steg (2008). "The spreading of disorder." *Science, 322*, 1681-1685.
[12] Skogan (1990).

Those who are a captive audience often fear that they could be an easy victim of serious crime if they refuse the disorderly actor, or they fear harassment because it is physically difficult for them to "get away."[13] Even if people are physically able to avoid or remove themselves from a particular location where the disorder is occurring, doing so may prevent them from the legitimate use of that location. Notably, it is often the most vulnerable members of society – such as the elderly, children, and the disabled – who are the most susceptible to this type of intimidation.

3. **When considering the pedestrian overpasses as part of Las Vegas Boulevard South / Resort District sidewalk system, are there disorder or safety issues that are unique or more significant to the bridges separate from the at-grade sidewalks? If so, what are the issues unique to the bridges that are not issues on the at-grade sidewalks?**

A number of disorders are common on the Las Vegas Boulevard South / Resort District sidewalk system, including aggressive panhandlers, solicitation while intoxicated, aggressive street performers, illegal vendors, confidence games (i.e., three-card monte), and drug related activity. These are all disorders that, as discussed above, can potentially lead to more significant problems if they are not managed.

While many of these behaviors are not unique to the pedestrian bridges (they occur on the at-grade sidewalks as well), the nature of the bridges makes these disorders especially problematic for at least two reasons. First, disorderly acts and conditions contribute to obstructions and crowding on the overpasses as people stop to react to the disorder. While not all acts of disorder are necessarily intended to make people stop, many of the behaviors described above (three-card monte, for example) are done by individuals who are stopped on a bridge and who deliberately cause other pedestrians to stop and congregate.

Second, people trying to cross a pedestrian bridge are a "captive audience" similar to those described above in Question #2. If pedestrians want to safely cross Las Vegas Boulevard, they have little choice but to use the overpasses. Once they are on a bridge, they are essentially confined to a restricted space with no way to leave other than the point that they entered and the exit point on the opposite side. Such conditions make pedestrians on overpasses particularly vulnerable to intimidation from disorderly behaviors or conditions. Pedestrians on at-grade sidewalks have more flexibility in terms of avoiding disorder if they feel threatened by it – since they are not restricted by the walls of a pedestrian bridge, they can retreat, enter a property, or otherwise maneuver around the disorder. Given the relatively limited width of the bridges, however, pedestrians are often unable to negotiate around the disorders they encounter. Their only choice may be to return to the point where they entered, but doing so would deny them from the legitimate purpose of using the bridge in the first place, which is to safely cross Las Vegas Boulevard.

[13] George L. Kelling and Catherine M. Coles (1996). *Fixing Broken Windows: Restoring Order and Reducing Crime in Our Communities*. New York, NY: The Free Press, p.34.

4. With respect to the pedestrian overpasses, are there issues of egress in times of panic and increased risk of injury?

Pedestrians on an overpass are in a rigidly confined space with traffic flow in only two directions. This creates a heightened risk of injury should an incident occur that triggers rapid group movement in one direction (i.e., panicked pedestrians rushing toward one side of the bridge).[14] A bottleneck can occur as a quickly moving crowd on an overpass is funneled to a narrower exit point (i.e., a doorway or an escalator on the overpass). As crowd density increases at the concentrated exit point, people can become so packed together that injuries result – a phenomenon known as "crowd crush."

An escalator further complicates matters in the event of an emergency on a pedestrian overpass. While the down-escalator is a potential source of bottlenecking as people rush off the bridge, the up-escalator will continue delivering people to the same location as the bottleneck. This can result in a pileup at the outlet of the up-escalator, which further contributes to crowd density and increases the likelihood of injury.[15]

Additionally, crowd density caused by pedestrians who are rapidly exiting an overpass can impede the efforts of first responders who are trying to enter the bridge. This can prevent authorities from reaching the initial source of the panic, and it can delay emergency medical treatment to those injured on the overpass.

5. Are these issues that are unique or more significant to bridges exasperated by those who congregate or stop on bridges, regardless of whether the people who stop or congregate are engaging in wrongful conduct themselves?

As discussed above, the rigid boundaries of pedestrian bridges reduce the ability of people to distance themselves from each other, particularly if there are large numbers of people on a bridge at a given time. Individuals who are standing, sitting, laying, or otherwise stopped on an overpass may obstruct pedestrians and therefore present a physical risk both to themselves and to others, especially in an emergency.

Those who are stopped may also encourage others to stop or congregate (either intentionally or unintentionally). Regardless of whether people who stop or congregate are engaged in wrongful conduct, the relatively confined space along a pedestrian overpass generates a higher propensity for increased crowd density when people are stopped. Pedestrians may be forced to negotiate through the crowd since going around it may not be an option.

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[14] See, generally, John J. Fruin (1984). "Crowd dynamics and auditorium management." *Auditorium News*, May ed.
[15] John J. Fruin (1993). "The causes and prevention of crowd disasters." Paper presented at the First International Conference on Engineering for Crowd Safety, London, England, March 1993.

In addition to the heightened risk of injury as crowd density increases (as discussed in Question #4), research on crowd dynamics suggests a number of other problems that can result as crowds gather, especially if the density of the crowd is such that people are close enough to physically touch.[16] For example, pickpocketing, groping, and other forms of theft, assault, and violence are more common in crowded conditions, particularly if alcohol or drugs are involved.

6. **What actions can be taken to reduce disorder and improve public safety on the pedestrian bridges and how and why would they do so?**

When the nature of an environment is such that there are limited points of ingress and egress, efforts should be made to facilitate the orderly movement of people and make the flow of pedestrian traffic as efficient as possible.[17] In practical terms, this means encouraging people to keep moving on the overpasses, discouraging people from stopping or congregating on the bridges, and managing any disorderly conditions that may cause people to stop.

In some environments, technological, architectural, or engineering modifications could be implemented that might reduce disorder or otherwise encourage pedestrians to keep moving / prevent pedestrians from stopping or congregating. Given the architectural design of the pedestrian overpasses, however, options for altering the physical environment are limited.

Enforcement efforts would be another method to reduce disorder and facilitate the flow of pedestrian traffic along the overpasses. Official ordinances give police the legal authority to issue warnings for non-compliance or, as a last resort, take formal action (i.e., citations). A local ordinance that prohibits stopping, for example, would provide a legal mechanism for police who seek to manage the orderly movement of people along the overpasses.

7. **Assuming one such action is to prevent the stoppage or congregating of all persons, how does that action decrease risk to the public? To be effective does it need to include everyone, including those who stop or congregates and are not engaging in bad behavior?**

Efforts designed to prevent stopping or congregating on pedestrian bridges would improve public safety in several ways. First, as discussed in Question #5, regardless of whether people who stop or congregate are engaged in wrongful behavior, they may contribute to crowd density that can increase risk of injury (i.e., "crowd crush") or other problems that arise when people are close enough to physically touch (i.e., pickpocketing, theft, groping, fights). By keeping all pedestrians moving on the overpasses, risks associated with crowd density are minimized.

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[16] Miliaikeala SJ. Heen and Joel D. Lieberman (2018). "Sexual harassment and violence at music concerts and festivals." Stat Sheet Series, 2018-03. Las Vegas, NV: UNLV Center for Crime and Justice Policy.
[17] Fruin (1993).

Additionally, as discussed in Question #3, much of the disorder that occurs along the pedestrian bridges is the result of people who are stopped or who encourage others to stop (either intentionally or unintentionally). Research demonstrates that efforts to manage disorderly behaviors directly reduce those behaviors and can also prevent more serious problems from forming.[18] Preventing stopping or congregating on bridges – regardless of the actor's motivation for stopping – is likely to reduce disorder and therefore improve public safety.

8. Why is a prohibition on obstruction insufficient to resolve the issues on the bridges?

As discussed above, obstructions can occur as the result of unsafe and disorderly conditions along the walkways. Once obstructions have occurred, however, it may be too late to prevent their more serious consequences, including the elevated risk of injury to pedestrians and the increased difficulty for first responders to quickly manage emergencies. A prohibition on obstruction is therefore insufficient because such a prohibition will not address the problematic conditions that create obstructions in the first place.

The main safety concern on the bridges stems from people who stop or congregate. Those who are stopped, even if they are not intentionally obstructing others, may encourage other pedestrians to stop. This can contribute to increased crowd density and its potential results, including risk of physical injury and criminal activity that can occur when people are in close proximity to each other. Relatedly, those who are stopped may add to the amount of disorder on the bridges even if their actions are not unlawful.

Whereas the purpose of the overpasses is to safely deliver people from one side of Las Vegas Boulevard to the other, the most reasonable solution to minimize problems related to crowd density, disorder, and criminal activity is to keep pedestrians moving along the bridges. A prohibition on obstruction alone will not resolve these concerns.

[18] See George L. Kelling and William H. Sousa (2001). *Do Police Matter? An Analysis of the Impact of New York City's Police Reforms*. Civic Report No. 22. New York, NY: The Manhattan Institute for Policy Research; see also Anthony A. Braga, Brandon C. Welsh, and Cory Schnell (2015). "Can policing disorder reduce crime? A systematic review and meta-analysis." *Journal of Research in Crime and Delinquency*, *52*(4), 567–588.

UNLV CENTER FOR CRIME AND JUSTICE POLICY

Stat Sheet

April 2023

CCJP-SS 2023-1

Safety on Las Vegas Boulevard, 2018-2022

By: William Sousa

Safety concerns related to police calls for service, disorderly conditions, and unhoused individuals present numerous challenges for public officials. This Stat Sheet provides an overview of safety conditions on Las Vegas Boulevard from 2018-2022.

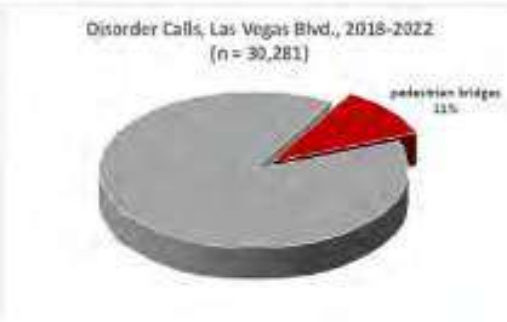
Key Stats



1. Calls for Service – Disorder

Overall calls for service on Las Vegas Boulevard increased 29% from 37,589 in 2018 to 48,358 in 2022.

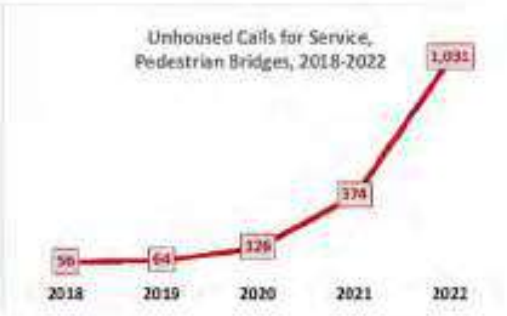
Calls specifically for disorderly offenses jumped from 6,981 in 2018 to 8,570 in 2022 – an increase of 23%.



2. Disorder on Pedestrian Bridges

Calls for disorderly offenses on Las Vegas Boulevard are disproportionately concentrated on pedestrian bridges.

Although the pedestrian bridges account for less than 6% of the total length of the sidewalk system along Las Vegas Boulevard, 11% of disorder calls occurred on the walkways.



3. Calls Related to Unhoused Individuals

Calls for service related to unhoused individuals increased dramatically on Las Vegas Boulevard from 2018-2022.

For example, calls related to the unhoused increased on the pedestrian bridges from 56 in 2018 to 1,031 in 2022 – an increase of over 1,700%.

Center for Crime and Justice Policy

Introduction

Public safety along Las Vegas Boulevard – the heart of the entertainment industry in Clark County – is an important consideration for public officials. As a major tourist destination, issues related to police calls for service, disorderly conditions, and unhoused individuals present a number of challenges. An analysis of data from 2018-2023 provides information on measures of public safety along Las Vegas Boulevard.[1]

Calls for Service

Calls for service are a gauge for the amount of police resources required to manage problems at locations. While many calls are not necessarily crime-related, they often reflect citizen concerns about problematic conditions related to personal health and safety. Analyses reveal that calls for service along the stretch of Las Vegas Boulevard between Russell Road and Sahara Avenue increased substantially, from 37,589 in 2018 to 48,358 in 2022 – an increase of 29%.

Disorder

Research demonstrates that problematic quality-of-life conditions (aggressive panhandling, public drug and alcohol use, excessive trash and litter, etc.) can lead to more quality-of-life issues in public spaces, increased sanitation problems, heightened fear among citizens, and serious criminal activity. Calls for service specifically for disorder increased from 6,981 in 2018 to 8,570 in 2022 – an increase of 23%. Disorder also appears to concentrate at specific locations along Las Vegas Boulevard. For example, although pedestrian bridges make up less than 6% of the total length of the sidewalk system, 11% of disorder calls on Las Vegas Boulevard occurred on the walkways.[2]

Unhoused Individuals

Safety concerns related to unhoused individuals present a number of challenges. The unhoused are disproportionately impacted by struggles with physical health, mental health, and substance abuse problems – and they are at heightened risk of victimization by serious crime. Many calls for service to police concern unhoused individuals. Calls related to the unhoused increased at an alarming rate along Las Vegas Boulevard, from 346 in 2018 to 7,066 in 2022 – an increase of over 1,900%. On the pedestrian bridges alone, calls increased from just 56 in 2018 to 1,031 in 2022 – an increase of over 1,700%.

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[1] Data were provided by the LVMPD Research & Analysis Unit and the Clark County Public Works Department.
[2] The total length of the sidewalks between Russell Road and Sahara Avenue (east and west sides), including the pedestrian bridges, is 39,600 linear feet. The length of the bridges alone is 2,300 linear feet. These measures do not include the privately owned pedestrian bridges in front of Treasure Island, the Venetian, and the Wynn.

QUESTIONS RELATED TO PUBLIC SAFETY ON PEDESTRIAN BRIDGES
William H. Sousa, Ph.D.

1. **What is the focus of Dr. Sousa's research projects and how do they relate to the pedestrian overpasses?**

The focus of my research is on crime, disorder, and public safety, particularly in urban settings. I am an author of a textbook on policing and numerous articles, monographs, and book chapters on the nature of disorder, its impact on community life, and the role of police and citizens in terms of dealing with disorder. The nature of the research often involves conducting observations of police as they manage complex problems in public places. Over my nearly 20-year career, I have conducted approximately 150 ride-along / walk-along observations with police, totaling well over 1,000 hours.

While I have explored issues related to public safety in numerous cities around the country, much of my research is focused in Clark County. As just a few examples, I have studied citizen perceptions of disorder along Las Vegas Boulevard and Fremont Street,[1] issues related to pedestrian safety on Las Vegas Boulevard,[2] efforts to manage major crowd events along Las Vegas Boulevard,[3] concerns related to unhoused youth in Southern Nevada,[4] and violence prevention efforts in Las Vegas neighborhoods.[5]

Whereas much of this work examines connections between disorder and public safety, the research relates directly to concerns that have developed along the pedestrian bridges over Las Vegas Boulevard.[6] Analyses indicate that calls for service for disorder-related events on Las Vegas Boulevard increased 23% between 2018 and 2022. Moreover, while problems related to disorder have increased on the Strip in general, further analyses reveal that disorder tends to concentrate on the pedestrian overpasses. While the bridges comprise less than 6% of the sidewalk system along Las Vegas Boulevard, 11% of disorder-related calls occurred on the overpasses.

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[1] Jonathan Birds and William Sousa (2015). *Perceptions of Disorder: Results from Two Las Vegas Tourist Locations*. Research in Brief Series, 2015-01. Las Vegas, NV: UNLV Center for Crime and Justice Policy.
[2] William Sousa (2023). *Safety on Las Vegas Boulevard, 2018-2022*. Stat Sheet Series, 2023-01. Las Vegas, NV: UNLV Center for Crime and Justice Policy.
[3] William H. Sousa and Tamara D. Madensen (2011). "The police and major event planning: A case study in Las Vegas, Nevada." *Preventing Crowd Violence.* Crime Prevention Studies Series, *26*, 139-158.
[4] Patricia Cook-Craig, Jennifer Guthrie, William Sousa, Carlton Craig, Michael Bruner, Judy Tudor, Jessica Word, and Melissa Jacobowitz (2017). *The State of Youth Homelessness in Southern Nevada.* Research in Brief. Las Vegas, NV: Greenspun College of Urban Affairs.
[5] Timothy Radtke, William Sousa, and Timothy Hart (2008). "Operation Ceasefire in Clark County, Nevada: Evaluating a Cross-Jurisdictional Approach to Reducing Gun Violence." Washington, DC: Bureau of Justice Statistics.
[6] See, generally, Sousa (2023).

2. What does disorder mean with respect to Dr. Sousa's expertise and areas of research and study? What is the relationship between disorder and crime and other safety issues? Explain disorder and how it creates conditions of public safety and/or crime.

Within the criminological literature, "disorder" refers to a broad range conditions and behaviors that are not necessarily illegal (although they often are), but are nevertheless considered to be problematic in public places.[7] The term "disorder" is sometimes used interchangeably with terms such as "incivilities" or "quality-of-life concerns." Research often distinguishes between two types of disorders: social and physical. Social disorders involve active behaviors, such as aggressive panhandlers who intimidate passersby, individuals engaging in street prostitution, people using drugs and alcohol in public, or unruly teenagers who harass pedestrians. Physical disorders involve persistent conditions, such as litter along sidewalks, locations with evidence of public urination and defecation, or graffiti on walls of public buildings.[8]

Disorder is a concern because of the potential harmful effect it can have on public life. Research indicates that disorder can lead to citizen fear, to more disorder, and to serious crime. Researchers have argued, for example, that citizens' perceptions of disorder are significantly related to fear of victimization,[9] and that people will often alter their behavior to avoid confrontations with disorderly actors or conditions.[10] Other studies demonstrate that relatively little disorder, if left unchecked, can generate more disorder.[11] Furthermore, although it is not inevitable, locations with permissive atmospheres toward disorder are more susceptible to serious criminal activity.[12] This is because serious offenders are generally more comfortable in places where acts of disorder are common and appear to be acceptable.

Several factors escalate problems related to disorder, including the amount of visible disorder at any given time, the level of aggressiveness of the disorderly actor(s), and the type of location where the disorder is occurring. Location is particularly important because disorderly behaviors are often most problematic when they are performed in specific locations where people are especially vulnerable to intimidation (i.e., in areas where the observer of the behavior is a "captive audience"). Examples of such locations are bus stops, train platforms, and subway cars.

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[7] Wes G. Skogan (1990). *Disorder and Decline: Crime and the Spiral of Decay in American Neighborhoods*. New York: The Free Press.
[8] William H. Sousa (2010). "Wesley Skogan's 'Disorder and Decline'" in *The Encyclopedia of Criminological Theory*, Frank Cullen & Pam Wilcox (eds.), SAGE publications.
[9] Catherine E. Ross and Sung Joon Jang (2000). "Neighborhood disorder, fear, and mistrust: the buffering role of social ties with neighbors." *American Journal of Community Psychology, 28*(4), 401-420.
[10] William H. Sousa and George L. Kelling (2014). "Order Maintenance Policing" in *Encyclopedia of Criminology and Criminal Justice*, G. Bruinsma & D. Weisburd (eds.), Springer.
[11] Kees Keizer, Siegwart Lindenberg, and Lionda Steg (2008). "The spreading of disorder." *Science, 322*, 1681-1685.
[12] Skogan (1990).

Those who are a captive audience often fear that they could be an easy victim of serious crime if they refuse the disorderly actor, or they fear harassment because it is physically difficult for them to "get away."[13] Even if people are physically able to avoid or remove themselves from a particular location where the disorder is occurring, doing so may prevent them from the legitimate use of that location. Notably, it is often the most vulnerable members of society – such as the elderly, children, and the disabled – who are the most susceptible to this type of intimidation.

3. **When considering the pedestrian overpasses as part of Las Vegas Boulevard South / Resort District sidewalk system, are there disorder or safety issues that are unique or more significant to the bridges separate from the at-grade sidewalks? If so, what are the issues unique to the bridges that are not issues on the at-grade sidewalks?**

A number of disorders are common on the Las Vegas Boulevard South / Resort District sidewalk system, including aggressive panhandlers, solicitation while intoxicated, aggressive street performers, illegal vendors, confidence games (i.e., three-card monte), and drug related activity. These are all disorders that, as discussed above, can potentially lead to more significant problems if they are not managed.

While many of these behaviors are not unique to the pedestrian bridges (they occur on the at-grade sidewalks as well), the nature of the bridges makes these disorders especially problematic for at least two reasons. First, disorderly acts and conditions contribute to obstructions and crowding on the overpasses as people stop to react to the disorder. While not all acts of disorder are necessarily intended to make people stop, many of the behaviors described above (three-card monte, for example) are done by individuals who are stopped on a bridge and who deliberately cause other pedestrians to stop and congregate.

Second, people trying to cross a pedestrian bridge are a "captive audience" similar to those described above in Question #2. If pedestrians want to safely cross Las Vegas Boulevard, they have little choice but to use the overpasses. Once they are on a bridge, they are essentially confined to a restricted space with no way to leave other than the point that they entered and the exit point on the opposite side. Such conditions make pedestrians on overpasses particularly vulnerable to intimidation from disorderly behaviors or conditions. Pedestrians on at-grade sidewalks have more flexibility in terms of avoiding disorder if they feel threatened by it – since they are not restricted by the walls of a pedestrian bridge, they can retreat, enter a property, or otherwise maneuver around the disorder. Given the relatively limited width of the bridges, however, pedestrians are often unable to negotiate around the disorders they encounter. Their only choice may be to return to the point where they entered, but doing so would deny them from the legitimate purpose of using the bridge in the first place, which is to safely cross Las Vegas Boulevard.

[13] George L. Kelling and Catherine M. Coles (1996). *Fixing Broken Windows: Restoring Order and Reducing Crime in Our Communities*. New York, NY: The Free Press, p.34.

4. With respect to the pedestrian overpasses, are there issues of egress in times of panic and increased risk of injury?

Pedestrians on an overpass are in a rigidly confined space with traffic flow in only two directions. This creates a heightened risk of injury should an incident occur that triggers rapid group movement in one direction (i.e., panicked pedestrians rushing toward one side of the bridge).[14] A bottleneck can occur as a quickly moving crowd on an overpass is funneled to a narrower exit point (i.e., a doorway or an escalator on the overpass). As crowd density increases at the concentrated exit point, people can become so packed together that injuries result – a phenomenon known as "crowd crush."

An escalator further complicates matters in the event of an emergency on a pedestrian overpass. While the down-escalator is a potential source of bottlenecking as people rush off the bridge, the up-escalator will continue delivering people to the same location as the bottleneck. This can result in a pileup at the outlet of the up-escalator, which further contributes to crowd density and increases the likelihood of injury.[15]

Additionally, crowd density caused by pedestrians who are rapidly exiting an overpass can impede the efforts of first responders who are trying to enter the bridge. This can prevent authorities from reaching the initial source of the panic, and it can delay emergency medical treatment to those injured on the overpass.

5. Are these issues that are unique or more significant to bridges exasperated by those who congregate or stop on bridges, regardless of whether the people who stop or congregate are engaging in wrongful conduct themselves?

As discussed above, the rigid boundaries of pedestrian bridges reduce the ability of people to distance themselves from each other, particularly if there are large numbers of people on a bridge at a given time. Individuals who are standing, sitting, laying, or otherwise stopped on an overpass may obstruct pedestrians and therefore present a physical risk both to themselves and to others, especially in an emergency.

Those who are stopped may also encourage others to stop or congregate (either intentionally or unintentionally). Regardless of whether people who stop or congregate are engaged in wrongful conduct, the relatively confined space along a pedestrian overpass generates a higher propensity for increased crowd density when people are stopped. Pedestrians may be forced to negotiate through the crowd since going around it may not be an option.

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[14] See, generally, John J. Fruin (1984). "Crowd dynamics and auditorium management." *Auditorium News*, May ed.
[15] John J. Fruin (1993). "The causes and prevention of crowd disasters." Paper presented at the First International Conference on Engineering for Crowd Safety, London, England, March 1993.

In addition to the heightened risk of injury as crowd density increases (as discussed in Question #4), research on crowd dynamics suggests a number of other problems that can result as crowds gather, especially if the density of the crowd is such that people are close enough to physically touch.[16] For example, pickpocketing, groping, and other forms of theft, assault, and violence are more common in crowded conditions, particularly if alcohol or drugs are involved.

6. **What actions can be taken to reduce disorder and improve public safety on the pedestrian bridges and how and why would they do so?**

When the nature of an environment is such that there are limited points of ingress and egress, efforts should be made to facilitate the orderly movement of people and make the flow of pedestrian traffic as efficient as possible.[17] In practical terms, this means encouraging people to keep moving on the overpasses, discouraging people from stopping or congregating on the bridges, and managing any disorderly conditions that may cause people to stop.

In some environments, technological, architectural, or engineering modifications could be implemented that might reduce disorder or otherwise encourage pedestrians to keep moving / prevent pedestrians from stopping or congregating. Given the architectural design of the pedestrian overpasses, however, options for altering the physical environment are limited.

Enforcement efforts would be another method to reduce disorder and facilitate the flow of pedestrian traffic along the overpasses. Official ordinances give police the legal authority to issue warnings for non-compliance or, as a last resort, take formal action (i.e., citations). A local ordinance that prohibits stopping, for example, would provide a legal mechanism for police who seek to manage the orderly movement of people along the overpasses.

7. **Assuming one such action is to prevent the stoppage or congregating of all persons, how does that action decrease risk to the public? To be effective does it need to include everyone, including those who stop or congregates and are not engaging in bad behavior?**

Efforts designed to prevent stopping or congregating on pedestrian bridges would improve public safety in several ways. First, as discussed in Question #5, regardless of whether people who stop or congregate are engaged in wrongful behavior, they may contribute to crowd density that can increase risk of injury (i.e., "crowd crush") or other problems that arise when people are close enough to physically touch (i.e., pickpocketing, theft, groping, fights). By keeping all pedestrians moving on the overpasses, risks associated with crowd density are minimized.

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8. Why is a prohibition on obstruction insufficient to resolve the issues on the bridges?

As discussed above, obstructions can occur as the result of unsafe and disorderly conditions along the walkways. Once obstructions have occurred, however, it may be too late to prevent their more serious consequences, including the elevated risk of injury to pedestrians and the increased difficulty for first responders to quickly manage emergencies. A prohibition on obstruction is therefore insufficient because such a prohibition will not address the problematic conditions that create obstructions in the first place.

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UNLV CENTER FOR CRIME AND JUSTICE POLICY

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April 2023

CCJP-SS 2023-1

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By: William Sousa

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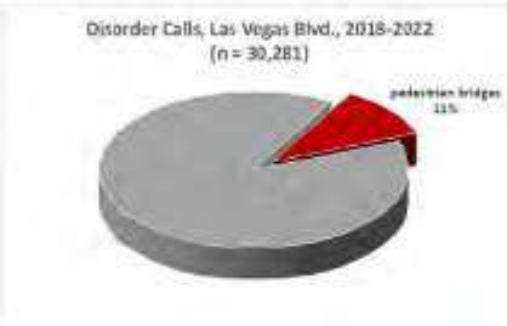
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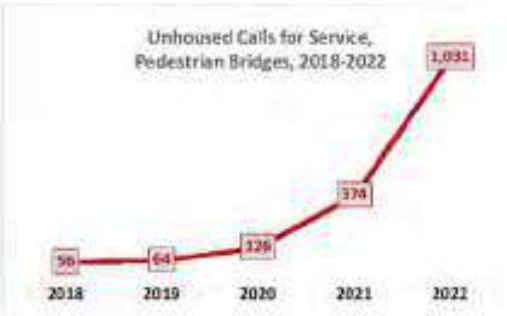
Calls specifically for disorderly offenses jumped from 6,981 in 2018 to 8,570 in 2022 – an increase of 23%.



2. Disorder on Pedestrian Bridges

Calls for disorderly offenses on Las Vegas Boulevard are disproportionately concentrated on pedestrian bridges.

Although the pedestrian bridges account for less than 6% of the total length of the sidewalk system along Las Vegas Boulevard, 11% of disorder calls occurred on the walkways.



3. Calls Related to Unhoused Individuals

Calls for service related to unhoused individuals increased dramatically on Las Vegas Boulevard from 2018-2022.

For example, calls related to the unhoused increased on the pedestrian bridges from 56 in 2018 to 1,031 in 2022 – an increase of over 1,700%.

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RESORT CORRIDOR



GIBSON	Thank you.
EPPENGER	Sorry.
GIBSON	Thank you. That completes your presentation on the County contract?
RAMOS	Yes. I would like to thank Kevin though and his team who's always in the back. We spent a really long day, but we finally got a three-year, fair agreement that we've got put in place.
GIBSON	Thank you very much. This is a public hearing. Is there anyone here who wishes to speak on this item? That's Item 35 that relates to this contract with the Clark County Juvenile Probation Officers Association. There being no one, the public hearing is closed.
SEGERBLOM	Move to approve and congratulate everyone. Thank you.
EPPENGER	Thank you.
RAMOS	Thank you.
GIBSON	Yes, thank you very much for your work. There's a motion for approval of Item 35, which is the new contract with the Probation Officers Association. Please cast your votes. And the motion carries.
EPPENGER	Thank you.
RAMOS	Thank you.
ACTION:	It was moved by Commissioner Tick Segerblom, and carried by unanimous vote, that the recommendation be approved.

ITEM NO. 36 Conduct a public hearing and approve, adopt and authorize the Chair to sign an ordinance to amend Title 16 of the Clark County Code to add a new Chapter 16.13 to establish pedestrian flow zones on pedestrian bridges and up to 20 feet surrounding a touchdown structure; and providing for other matters properly relating thereto; or take other actions as appropriate. (For possible action)

ACTION:	Held to the January 2, 2024 Board meeting.

ITEM NO. 37 Identify emerging issues to be addressed by staff or by the Board at future meetings; receive updates on the activities of the various regional boards and commissions; and direct staff accordingly.

SCHILLER	Commissioners, we can now move to the business section of your agenda. Item 37 is to identify emerging issues to be addressed by staff or by the Board at future meetings, receive updates on the activities of the various regional boards and commissions, and direct staff accordingly.
GIBSON	Are there any emerging issues? Commissioner Segerblom, did you have one?

33. Approve Offers of Judgement served in Antonio Gonzalez-Rodriguez; Consuelo Gonzales Posada v. Clark County et al., Case No. A-19-78752-C (For possible action)

ACTION: APPROVED AS RECOMMENDED.

ATTACHMENT: Staff Report

34. Ratify the Chief Financial Officer's execution of the Settlement Agreement and Mutual Release between Clark County, Las Vegas Justice Court and Matterhorn. (For possible action)

ACTION: APPROVED AS RECOMMENDED.

ATTACHMENT: Staff Report

END CONSENT AGENDA

SEC. 6. ITEMS TAKEN SEPARATELY FROM CONSENT AGENDA

SEC. 7. PUBLIC HEARINGS - 10 AM

35. Pursuant to NRS 288.153, conduct a public hearing; and approve and authorize the Chair to sign the Collective Bargaining Agreement between Clark County and the Clark County Juvenile Probation Officers Association (JJPOA), effective July 1, 2023 through June 30, 2026; and extend the same salary and benefit changes to non-union employees not covered by the JJPOA Collective Bargaining Agreement. (For possible action)

MOVED BY: Tick Segerblom
ACTION: CONDUCTED, APPROVED AND AUTHORIZED AS RECOMMENDED.
VOTE: 7

Voting Aye:	Jim Gibson
	Tick Segerblom
	Marilyn Kirkpatrick
	William McCurdy II
	Ross Miller
	Michael Naft
	Justin Jones
Voting Nay:	None
Absent:	None
Abstain:	None

36. Conduct a public hearing and approve, adopt and authorize the Chair to sign an ordinance to amend Title 16 of the Clark County Code to add a new Chapter 16.13 to establish pedestrian flow zones on pedestrian bridges and up to 20 feet surrounding a touchdown structure; and providing for other matters properly relating thereto; or take other actions as appropriate. (For possible action)

ACTION: HELD UNTIL THE JANUARY 2, 2024 BOARD MEETING.

ATTACHMENT: Staff Report

ATTACHMENT: Bill 11-21-23-1 Pedestrian Flow Zones

ATTACHMENT: Final Sousa Report

ATTACHMENT: Resort_Corridor_Map

END PUBLIC HEARINGS

SEC. 8. BUSINESS ITEMS

37. Identify emerging issues to be addressed by staff or by the Board at future meetings; receive updates on the activities of the various regional boards and commissions; and direct staff accordingly.

ACTION: IDENTIFIED/RECEIVED AS RECOMMENDED.

ATTACHMENT: Staff Report

38. Appoint a qualified individual to serve on the Las Vegas Stadium Authority Board of Directors for a four-year term commencing January 1, 2024, from the list of the following individuals: Incumbent: Thomas White; New Applicants: Diane Bartholomew, Shelli Hayes, Bobby House, Thomas Keefe, Dennis Montalvo, Andrew Ramirez, Brian Scroggins, Diana Valles, and Kelvin Watson; and Reappoint Jan Jones Blackhurst for a four-year term commencing January 1, 2024. (For possible action)

MOVED BY: Tick Segerblom

ACTION: APPROVED (INCLUDING APPOINTMENT OF DIANA VALLES AND THE REAPPOINTMENT OF JAN JONES BLACKHURST TO SERVE ON THE LAS VEGAS STADIUM BOARD OF DIRECTORS FOR A FOUR-YEAR TERM COMMENCING JANUARY 1, 2024) AS RECOMMENDED.

VOTE: 7

Voting Aye:	Jim Gibson
	Tick Segerblom
	Marilyn Kirkpatrick
	William McCurdy II
	Ross Miller
	Michael Naft
	Justin Jones
Voting Nay:	None
Absent:	None
Abstain:	None


CERTIFIED COPY
DOCUMENT ATTACHED IS A
TRUE AND CORRECT COPY OF
THE DOCUMENT OR DATA ON FILE
MINUS ANY REDACTED PORTIONS
SEP 05 2024
CLERK

Exhibit 16

Clark County Board of Commissioners Meeting Agenda from January 2, 2024

AGENDA

JOINT MEETING OF THE

CLARK COUNTY BOARD OF COMMISSIONERS

CLARK COUNTY REDEVELOPMENT AGENCY

CLARK COUNTY WATER RECLAMATION DISTRICT BOARD OF TRUSTEES

9:00 AM TUESDAY, JANUARY 2, 2024

COMMISSION CHAMBERS, GOVERNMENT CENTER

500 SOUTH GRAND CENTRAL PARKWAY

LAS VEGAS, NEVADA 89106

This meeting has been properly noticed and posted online at https://clarkcountynv.gov/agendas and Nevada Public Notice at https://notice.nv.gov/ and in the following location:

CC Government Center 500 S. Grand Central Pkwy., Las Vegas, NV (Principal Office)

If you wish to speak on an item marked "For Possible Action" appearing on this agenda, please fill out a Public Comment Interest Card which is located in front of the Commission Chambers and submit the comment card to staff sitting in the Commission Chambers. If you wish to speak to the Board about items within its jurisdiction but not appearing as an "Action" item on this agenda, you must wait until the "Comments by the General Public" period listed at the end of this agenda. Comments will be limited to up to three minutes. Please step up to the speaker's podium, clearly state your name and address and please spell your last name for the record. If any member of the Board wishes to extend the length of a presentation, this will be done by the Chair, or the Board by majority vote.

- Items on the agenda may be taken out of order.
- The Board of County Commissioners, Board of Trustees, and Licensing Board may combine two or more agenda items for consideration.
- The Board of County Commissioners, Board of Trustees, and Licensing Board may remove an item from the agenda or delay discussion relating to an item at any time.

Contracts, zoning matters, or ordinances that do not comply with the County's disclosure requirement as outlined in Section 10(2) of the County Ethics Policy are subject to being voided.

The main agenda is available on Clark County's website, ClarkCountyNV.gov. For copies of agenda items and supporting backup materials, please contact Agenda Coordinator, at (702) 455-3530, Clark County Manager's Office, 500 S. Grand Central Parkway, 6th Floor, Las Vegas, Nevada 89106. This meeting will be broadcast live in the Las Vegas area. Clark County Television is available in the Las Vegas area on Channel 4/1004 on Cox cable and on CenturyLink on Channels 4 and 1004 as well as in Laughlin on Channel 14 via Suddenlink. Live streaming of CCTV programming is available at www.ClarkCountyNV.gov and https://www.youtube.com/ClarkCountyNV. CCTV is also available in Boulder City on Channel 4 and in Moapa Valley on Digital Channel 50.3. For more information about the program schedule, please refer to https://clarkcountynv.gov/CCTV4/ or contact CCTV Channel 4 at (702) 455-6890.

SEC. 1. OPENING CEREMONIES

CALL TO ORDER

INVOCATION

PLEDGE OF ALLEGIANCE

SEC. 2. COMMISSIONERS' / COUNTY MANAGER'S RECOGNITION

1. Present a proclamation to Fire Chief, Jorge Gonzalez in recognition of his retirement and years of service to the Mt. Charleston Fire District and Clark County.

2. Recognize all sponsors from the 2023 Annual District D Toy Giveaway.

SEC. 3. PUBLIC FORUM

This is the first of two portions of the meeting devoted to the Public. Public comment during this portion of the agenda must be limited to matters on the agenda for action. If you wish to speak during this portion of the agenda, please fill out a Public Comment Interest Card located in front of the Commission Chambers and submit a comment card to staff sitting in the Commission Chambers. After completing and submitting a Public Comment Interest Card, please step up to the speaker's podium, clearly state your name and address, and spell your last name for the record.

3. Public Comment

SEC. 4. AGENDA

4. Approval of Minutes of the Regular Meeting on December 5,2023. (For possible action) (Available in the County Clerk's Office, Commission Division)

5. Approval of Agenda with the Inclusion of Any Emergency Items and Deletion of Any Items. (For possible action)

6. Designate a Chair and Vice Chair of the Clark County Board of County Commissioners; and

Designate a Chair and Vice Chair of the Liquor & Gaming License Board; and

Designate a President and a Vice President to the Board of Directors, Las Vegas Valley Water District; and

Designate a Chair and a Vice Chair to the following Boards of Trustees: Big Bend Water District, Clark County Water Reclamation District, Kyle Canyon Water District, University Medical Center of Southern Nevada, and Coyote Springs Water Resources General Improvement District; and

Designate a Chair for the following fire protection districts: Moapa Valley Fire Protection District and Mount Charleston Fire Protection District; and

Appoint Commissioners to the following boards and councils: Family & Juvenile Justice Services Policy and Fiscal Affairs Board, Las Vegas Global Economic Alliance Board of Directors, the Nevada Association of Counties Board of Directors, and the Southern Nevada Civilian Military Council; and

Pursuant to NRS 459.0091 (2) (c), select a Commissioner to be presented to the NACO Board of Directors to be placed on a nominee list to be appointed to the Nevada Commission on Nuclear Projects by the Governor of Nevada. (For possible action)

SEC. 5. CONSENT AGENDA: Items No. 7 through No. 37

NOTE:
- The Board of County Commissioners, Board of Trustees, and Licensing Board may remove an item from the agenda or delay discussion relating to an item at any time.
- Consent Agenda - All matters in this sub-category are considered by the Board of County Commissioners, Board of Trustees, and Licensing Board to be routine and may be acted upon in one motion. Most agenda items are phrased for a positive action. However, the Board/Trustees may take other actions such as hold, table, amend, etc.
- Consent Agenda items are routine and can be taken in one motion unless a Commissioner/Trustee/Licensing member requests that an item be taken separately. The Chair will call for public comment on these items before a vote. For all items left on the Consent Agenda, the action taken will be staff's recommendation as indicated on the item.
- Items taken separately from the Consent Agenda by Commission/Trustees/Licensing members at the meeting will be heard following the Commissioners'/County Manager's Recognition Section.

Purchasing & Contracts

7. Approve an Amendment to the Contract with Aspire Mental Health, LLC, for CBE No. 606108-22, for Mental Health Services for Juveniles; and authorize the Chief Financial Officer or her designee to sign the Amendment; or take other action as appropriate. (For possible action)

8. Approve an Amendment to the Contract with Unifirst Corporation, for Bid No. 604900-18, for Annual Requirements Contract for Uniform Rental; and authorize the Chief Financial Officer or her designee to sign the Amendment; or take other action as appropriate. (For possible action)

9. Ratify and approve an Amendment to the Master Contract for RFQ No. 604131-16, for Foster Care Services; and authorize the Chief Financial Officer or her designee to sign the Amendments; or take other action as appropriate. (Previous Amendments and original Contract are available for public viewing at the County Clerk's Office, Commission Division) (For possible action)

10. Approve an Amendment to the Contract with MasterCorp Commercial Services, for Bid No. 606517-23, for Annual Requirements Contract for Power Washing; and authorize the Chief Financial Officer or her designee to sign the Amendment; or take other action as appropriate. (For possible action)

11. Approve the award of Bid No. 606697-23, for Peace Way Bridge at Clark County 215 Beltway to the low responsive and responsible bidder, contingent upon submission of the required bonds and insurance. Staff recommends award to Las Vegas Paving Corporation; or take other action as appropriate. (For possible action)

12. Approve the award of Bid No. 606780-23, for Annual Requirements Contract for Street Name Sign Materials and Panels, to the sole bidder. Staff recommends award to Southwest Traffic Systems for Package 1 and cancel Package 2; or take other action as appropriate. (For possible action)

13. Approve the Competitive Bidding Exception with Stryker Sales, LLC, for CBE No. 606908-23, for Stryker Power Gurneys and Auto-Load Systems; and authorize the Chief Financial Officer or her designee to issue purchase orders, subject to approved budget appropriations; or take other action as appropriate. (For possible action)

14. Approve an Amendment to the Contract with SAP Public Services, Inc, for RFP No. 5459-03, for Enterprise Resource Planning System; and authorize the Chief Financial Officer or her designee to sign the Amendment; or take other action as appropriate. (Previous Amendments and original Contract are available for public viewing at the County Clerk's Office, Commission Division) (For possible action)

15. Authorize the Chair to sign Interlocal Agreement CFDA #14.239 with State of Nevada, Department of Business and Industry, Nevada Housing Division, for CBE No. 606896-23, for 2023 Agreement to Use Home Investment Partnerships Program (HOME) Funds by Clark County; or take other action as appropriate. (For possible action)

16. Ratify and approve the Contract with Legal Aid Center of Southern Nevada, Inc., for CBE No. 606905-23, for Operation and Management of the Vegas Strong Resiliency Center, contingent upon submission of the required insurance; and authorize the Chief Financial Officer or her designee to sign the Contract; or take other action as appropriate. (For possible action)

17. Approve the Contract with Binti, Inc, for CBE No. 606901-23, for Licensing and Placement Master Subscription and Services Agreement, contingent upon submission of insurance; and authorize the Chief Financial Officer or her designee to sign the Contract; or take other action as appropriate. (For possible action)

Town Services

18. Note for the record the following Town Advisory Board (TAB) and/or Citizens Advisory Council (CAC) Minutes: Indian Springs TAB - November 16, 2023; Moapa Valley TAB - November 29, 2023; Paradise TAB - November 28, 2023; Spring Valley TAB - November 14, 2023 and November 28,2023 and Sunrise Manor TAB - November, 30, 2023.

Business License

19. Accept the application of Google Fiber Nevada, LLC for a Franchise to provide telecommunication services in unincorporated Clark County; cause public notice of the application pursuant to NRS 709.070; and set a public hearing to consider awarding a franchise for February 6, 2024, at 10 a.m. following the public notice period; and providing for other matters properly related thereto. Commission Districts: All (For possible action)

Environment and Sustainability

20. Approve and authorize the Department of Environment and Sustainability (DES) to submit applications to the U.S. Environmental Protection Agency (EPA) for Clean Air Act Sections 103, 103 Inflation Reduction Act (IRA), and 105 grants not to exceed $2.2 million to fund air quality projects and programs through January 31, 2025; authorize acceptance of grant funds awarded; and authorize the Director to execute any necessary documents relating to the application or award, including an EPA Assistance Amendment to extend the budget/project period. (For possible action)

Parks & Recreation

21. Ratify the submission of grant application by the Clark County Parks and Recreation in the amount of up to $85,410 from the Nevada Department of Wildlife; authorize the Director of Parks and Recreation or his designee to sign grant documents as necessary; and accept any funds awarded. (For possible action)

22. Ratify the Clark County Parks & Recreation Director's recommendation for reappointment of Alfredo Fernandez-Gonzalez, as the Professional Architect/Landscape Architect Representative to the Art Committee for a three-year term ending October 2026. This is his second term. (For possible action)

23. Ratify the Clark County Parks & Recreation Director's recommendation for appointment of Heather Harmon, At Large Professional Artist Representative to the Art Committee for a three-year term ending January 2027, with the option of reapplying for an additional three-year term. (For possible action)

Public Works

24. Approve and authorize the County Manager or his designee to sign Supplemental No. 1 to the professional project administration and construction management services contract between Clark County and WSP USA, Inc. (Derich Sukow, P.E., Vice President) to extend the contract term for construction management services for the project for Laughlin - Bullhead City Bridge between Needles Highway in Laughlin, Nevada to State Route 95 in Bullhead City, Arizona. (For possible action)

25. Ratify the approval of a professional services contract between Clark County and ELM Utility Services for locating and marking Public Works' subsurface facilities. (For possible action)

Real Property Management

26. Approve and authorize the Director of Real Property Management or designee to sign Amendment No. 6 to Contract for Consulting Services for Ground Lease Portfolio Phase II with JABarrett Company, LLC (James A. Barrett, President) for the financial report reviews of Clark County's portfolio of ground leases on Department of Aviation lands. (For possible action)

27. Approve and authorize the Acting Director of Real Property Management (Director) or her designee to sign Amendment III to Sublease agreement (Amendment III) between Clark County and Changing Smiles Pediatric Dentistry for ±3,971 square feet of dental office space located at 1750 Wheeler Peak Drive, Las Vegas, NV 89106 (APN 139-21-416-011) known as the Enterprise Dental Clinic; and sign any other related documents to complete the transaction and manage the Sublease. (For possible action)

Budget & Finance

28. In accordance with NRS 244.210 and 354.220 through 354.250, approve, adopt, and authorize the Chair to sign a resolution to authorize refunds as shown on Exhibit "A." (For possible action)

29. Approve the revised Fiscal Year 2023 Transfer Reconciliation Schedule and authorize the listed transfer amounts for various County funds. (For possible action)

30. Approve a resolution to amend the purpose of the Redevelopment Agency Special Revenue Fund (2350). (Also sitting as Clark County Redevelopment Agency) (For possible action)

31. Approve and authorize the reallocation of $2,000,000 in Clark County Recovery Funds (County Recovery Funds) to Legal Aid Center of Southern Nevada from the Children's Attorneys Project Stability project to the Vegas Resiliency Center capital project; and authorize the County Manager or his designee to execute the required grant resolutions per NRS 244.1505; or take other action deemed appropriate. (For possible action)

Clark County Water Reclamation District (Board of County Commissioners sitting as the CCWRD Board of Trustees)

32. Approve and authorize the award of Project No. 23502, "Rapid Response Construction Services 2025", to the lowest responsive and responsible bidder and authorize the General Manager to sign a contract contingent upon the submission of the required bonds and insurance. Staff recommends award to Las Vegas Paving Corp. (Jay N. Smith, President); or take other action as appropriate. (For possible action).

General Administration

33. Approve and authorize the Chair to sign the correction of the 2021-2022 thru 2023-2024 Secured and the 2023-2024 Unsecured Assessment Roll AR-0102-24-1 and order the corrections to be made. (For possible action)

34. Approve and authorize the Chair to reallocate a total of $19,906 in FY 2021-2022 Edward Byrne Justice Assistance Grant (JAG) funds, originally awarded to Clark County District Attorney Office (CCDA): $16,406 to the following eight (8) programs in the amount of $2,050.75 each - Refuge for Women LV-Trafficking Prevention, Real Talk Youth Impact Program, Clark County Law Foundation, The Police Athletic League, Family and Child Treatment, Rite of Passage, Community Counseling Center, and Refuge for Women LV-Transitional Living; and $3,500 for Clark County Social Service administrative costs; and authorize the County Manager, or his designee, to execute any necessary agreements related thereto. (For possible action)

35. Approve and authorize the adoption of a Critical Home Repair Program; authorize the annual allocation of funds in the amount of $1,000,000 for the operation of the Program, pursuant to Assembly Bill 309 of the 2019 Nevada Legislature; and authorize the County Manager, or his designee, to sign any additional Program documents related thereto; or take other action as deemed appropriate. (For possible action)

36. Receive and accept the Annual Report for Fiscal Year 2023 from the Clark County Law Library. (For possible action)

37. Award a salary increase of nine percent and a five percent bonus to County Manager Kevin Schiller based on the performance evaluation, and take any action as deemed appropriate. (For possible action)

END CONSENT AGENDA

SEC. 6. ITEMS TAKEN SEPARATELY FROM CONSENT AGENDA

SEC. 7. PUBLIC HEARINGS - 10 AM

38. Conduct a public hearing and approve, adopt and authorize the Chair to sign an ordinance to amend Title 16 of the Clark County Code to add a new Chapter 16.13 to establish pedestrian flow zones on pedestrian bridges and up to 20 feet surrounding a touchdown structure; and providing for other matters properly relating thereto; or take other actions as appropriate. (For possible action)

39. Conduct a public hearing to receive comments or objections from the public concerning the granting of a telecommunications franchise to Gigapower, LLC to provide telecommunication services in certain unincorporated areas of Clark County; and to approve and authorize the Chair to sign a Telecommunications Utility System Franchise Agreement between Clark County and Gigapower, LLC to construct, operate and maintain a telecommunications utility system to provide subscription service in certain unincorporated areas of Clark County, Nevada for a term of ten years, with one five-year renewal option; and providing for other matters properly related thereto. Commission District: All (For possible action)

END PUBLIC HEARINGS

SEC. 8. BUSINESS ITEMS

40. Identify emerging issues to be addressed by staff or by the Board at future meetings; receive updates on the activities of the various regional boards and commissions; and direct staff accordingly.

41. Receive an update on Community Engagement and Communications Strategy for Clark County. (For possible action)

42. Appoint two qualified members to serve on the Clark County Law Library Board of Trustees for a two-year term ending December 31, 2025; from the list of following applicants: Karen Byrd and Jennifer Green; or take other action as appropriate. (For possible action)

43. Approve the appointment of Susan Bush and Sam Bateman as Clark County hearing officers for a term ending January 2, 2028; Continue the appointment of Lucinda Coumou, Adam Edwards, Robert Gower, Brian Rutledge and Holly Stoberski as Clark County hearing officers for a term ending January 2, 2028; or take other action as appropriate. (For possible action)

44. Go into closed session, pursuant to NRS 241.015(3)(b)(2), to receive information from the District Attorney regarding potential or existing litigation involving a matter over which the Board has supervision, control, jurisdiction or advisory power, and to deliberate toward a decision on the matter, and pursuant to NRS Chapter 288.220, to receive a report on the status of ongoing labor negotiations; and direct staff accordingly. (For possible action)

PUBLIC COMMENTS

Comments by the General Public

A period devoted to comments by the general public about matters relevant to the Board's/Trustees' jurisdiction will be held. No vote may be taken on a matter not listed on the posted agenda. Comments will be limited to up to three minutes. Please step up to the speaker's podium, clearly state your name and address and please SPELL your last name for the record. If any member of the Board/Trustees wishes to extend the length of a presentation, this will be done by the Chair, or the Board/Trustees by majority vote.

All comments by speakers should be relevant to Board/Trustees action and jurisdiction.

ZONING AND SUBDIVISIONS **Wednesday, January 3, 2024, 9:00 a.m.** **Separate Agenda**

THE REGULAR JOINT MEETINGS OF THE CLARK COUNTY BOARD OF COMMISSIONERS, THE CLARK COUNTY WATER RECLAMATION BOARD OF TRUSTEES, THE UNIVERSITY MEDICAL CENTER OF SOUTHERN NEVADA BOARD OF TRUSTEES, THE CLARK COUNTY LIQUOR AND GAMING LICENSING BOARD, AND THE CLARK COUNTY REDEVELOPMENT AGENCY HELD ON THE FIRST AND THIRD TUESDAYS OF EACH MONTH, ARE VIDEO-TAPED BY CLARK COUNTY TELEVISION (CCTV). THIS MEETING WILL BE BROADCAST LIVE IN THE LAS VEGAS AREA. CLARK COUNTY TELEVISION IS AVAILABLE IN THE LAS VEGAS AREA ON CHANNEL 4/1004 ON COX CABLE AND ON CENTURYLINK ON CHANNELS 4 AND 1004 AS WELL AS IN LAUGHLIN ON CHANNEL 14 VIA SUDDENLINK. LIVE STREAMING OF CCTV PROGRAMMING IS AVAILABLE AT WWW.CLARKCOUNTYNV.GOV AND WWW.YOUTUBE.COM/CLARKCOUNTYNV. CCTV IS ALSO AVAILABLE IN BOULDER CITY ON CHANNEL 4 AND IN MOAPA VALLEY ON DIGITAL CHANNEL 50.3. FOR MORE INFORMATION ABOUT THE PROGRAM SCHEDULE, PLEASE REFER TO HTTPS://CLARKCOUNTYNV.GOV/CCTV4/ OR CONTACT CCTV CHANNEL 4 AT (702) 455-6890.

THE COUNTY CLERK KEEPS THE OFFICIAL RECORD OF ALL PROCEEDINGS OF THE COUNTY COMMISSION, THE CCWRD BOARD OF TRUSTEES, THE UMC HOSPITAL BOARD OF TRUSTEES, THE CLARK COUNTY LIQUOR AND GAMING LICENSING BOARD, AND THE CLARK COUNTY REDEVELOPMENT AGENCY. IN ORDER TO MAINTAIN A COMPLETE AND ACCURATE RECORD OF ALL PROCEEDINGS, ANY PHOTOGRAPH, MAP, CHART, OR ANY OTHER DOCUMENT USED IN ANY PRESENTATION TO THE BOARD/TRUSTEES SHOULD BE SUBMITTED TO THE COUNTY CLERK. IF MATERIALS ARE TO BE DISTRIBUTED TO COMMISSIONERS/TRUSTEES, PLEASE PROVIDE SUFFICIENT COPIES FOR DISTRIBUTION TO THE COUNTY MANAGER, COUNTY COUNSEL, AND COUNTY CLERK.

WHEN OPEN TO THE PUBLIC, THE CLARK COUNTY COMMISSION CHAMBERS ARE ACCESSIBLE TO INDIVIDUALS WITH DISABILITIES. WITH TWENTY-FOUR (24) HOUR ADVANCE REQUEST, A SIGN LANGUAGE INTERPRETER MAY BE MADE AVAILABLE (PHONE: (702) 455-3530 OR TDD (702) 385-7486) OR RELAY NEVADA TOLL FREE (800) 326-6868, TT/TDD. ASSISTIVE LISTENING DEVICES ARE AVAILABLE UPON REQUEST AT THE STAFF TABLE.

CLARK COUNTY BOARD OF COMMISSIONERS
AGENDA ITEM

Petitioner: Kevin Schiller, County Manager
Abigail Emerson, Deputy County Manager

Recommendation:

Conduct a public hearing and approve, adopt and authorize the Chair to sign an ordinance to amend Title 16 of the Clark County Code to add a new Chapter 16.13 to establish pedestrian flow zones on pedestrian bridges and up to 20 feet surrounding a touchdown structure; and providing for other matters properly relating thereto; or take other actions as appropriate. (For possible action)

FISCAL IMPACT:

Fund #:	N/A	Fund Name:	N/A
Fund Center:	N/A	Funded PGM/Grant:	N/A
Amount:	N/A		
Description	N/A		
Additional Comments:	N/A		

BACKGROUND:

The proposed ordinance would create Pedestrian Flow Zones within the resort corridor on pedestrian bridges and up to 20 feet surrounding a touchdown structure, which includes elevators, escalators and stairways located on public right of way associated with a pedestrian bridge. The ordinance would prohibit any person from stopping, standing, or engaging in activity that causes another person to stop or stand within a Pedestrian Flow Zone to ensure the continuous movement of pedestrian traffic on pedestrian bridges and surrounding touchdown structures. The public safety concerns regarding pedestrian bridges on the Las Vegas Strip are discussed in a report prepared by William Sousa, Ph.D. The ordinance addresses public safety on the pedestrian bridges on the Las Vegas Strip and is narrowly tailored to accomplish this goal by requiring every person utilizing the pedestrian bridge to keep moving across the bridge to ensure pedestrians gets to their desired location in the safest matter possible.

The ordinance was introduced at the Board of County Commissioners' meeting on November 21, 2023, and a public hearing was set for December 5, 2023, at 10:00 a.m. On December 5, 2023, this item was continued until January 2, 2024. Staff recommends approval of this ordinance.

**ACTION: CONDUCTED, APPROVED AND AUTHORIZED (WITH CORRECTION READ INTO THE RECORD AS FOLLOWS: UNDER SECTION 1 OF THE PROPOSED PEDESTRIAN FLOW ZONE ORDINANCE, SECTION 16.13.030 SHALL BE AMENDED TO READ: "TO MAINTAIN THE SAFE AND CONTINUOUS MOVEMENT OF PEDESTRIAN TRAFFIC, IT IS UNLAWFUL FOR ANY PERSON TO (1) STOP OR STAND WITHIN ANY PEDESTRIAN FLOW ZONE, OR (2) ENGAGE IN ANY ACTIVITY WHILE WITHIN A PEDESTRIAN FLOW ZONE WITH THE INTENT OF CAUSING ANOTHER PERSON WHO IS WITHIN A PEDESTRIAN FLOW ZONE TO STOP OR STAND. A PERSON IS NOT IN VIOLATION OF THIS SECTION IF THEY STOP OR STAND WHILE WAITING FOR ACCESS TO AN ELEVATOR OR ESCALATOR FOR PURPOSES OF ENTERING OR EXITING A PEDESTRIAN FLOW ZONE;
AND ADOPTION OF ORDINANCE NO. 5090) AS RECOMMENDED.**

Cleared for Agenda
01/02/2024
Item No.
23-1715

[Bracketed] material is that portion being deleted
Underlined material is that portion being added

BILL NO. 11-21-23-1

SUMMARY – Establishes Pedestrian Flow Zones on Pedestrian Bridges and up to 20 feet surrounding a touchdown structure.

ORDINANCE NO. 5090
(of Clark County, Nevada)

AN ORDINANCE TO AMEND TITLE 16 OF THE CLARK COUNTY CODE TO ADD A NEW CHAPTER 16.13 TO ESTABLISH PEDESTRIAN FLOW ZONES ON PEDESTRIAN BRIDGES AND UP TO 20 FEET SURROUNDING A TOUCHDOWN STRUCTURE; AND PROVIDING FOR OTHER MATTERS PROPERLY RELATING THERETO.

THE BOARD OF COUNTY COMMISSIONERS OF THE COUNTY OF CLARK, STATE OF NEVADA, DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. Title 16 of the Clark County Code is amended as follows:

CHAPTER 16.13 – PEDESTRIAN FLOW ZONES

16.13.010 – Purpose.

The pedestrian bridges located within the world-famous Las Vegas Strip provide above grade access for the visitors, employees, and residents of Clark County to safely cross the roadways located within the Las Vegas Strip. The pedestrian bridges are part of the sidewalk system of the Las Vegas Strip and were created for the purpose of separating pedestrian traffic from vehicular traffic to facilitate pedestrians crossing in those locations. Pedestrians are prohibited from crossing at grade level where pedestrian bridges are located. The pedestrian bridges were designed for the specific purpose of

facilitating such crossings at all foreseeable levels of demand which can vary significantly and unpredictably regardless of day or time of day. The parameters for the pedestrian bridge design did not include uses beyond pedestrian traffic crossing from one side to the other side. The parameters included that pedestrians would not stop, stand or congregate other than for incidental and fleeting viewing of the Las Vegas Strip from the pedestrian bridge. For pedestrians to be able to stop, stand or congregate for any other reason, the pedestrian bridges would have been designed differently to account for such uses.

Stopping on the pedestrian bridges creates conditions that can foment disorder which, in turn, can lead to crime and serious safety issues. Because pedestrian traffic demand on the bridges varies significantly and unpredictably regardless of day or time of day, it is impossible to know in advance when stopping will result in criminal or otherwise dangerous conditions (whether involving the particular pedestrian who has stopped or others) and because of the physical nature of the pedestrian bridges, by the time such conditions exist, it would often be too late for law enforcement or other first responders to intervene, mitigate, render aid, rescue, or take other actions necessary as a result of crime and other serious safety issues. In recent years, numerous incidents have occurred that underscore these concerns. There is an ever-increasing demand as visitation numbers have reached near historical levels. Clark County continues to attract major sporting events and has become the home to major sports teams. Clark County has a substantial government interest in providing safe pedestrian access on the Las Vegas Strip. The increased number and frequency of high-profile attacks in places of public gatherings throughout the country have contributed to the occurrence of threats and

perceived threats that result in public panic and immediate and unexpected demand on pedestrian bridges as in an event of flight by large groups of people.

From 2018 to 2022, calls for law enforcement services on the Las Vegas Strip have increased twenty-nine percent (29%) from 37,598 in 2018 to 48,358 in 2022. The service calls for disorderly offenses increased twenty-three percent (23%) from 6,981 in 2018 to 8,750 in 2022. While the pedestrian bridges constitute only approximately six percent (6%) of the total linear feet of public sidewalks available to pedestrians, the service calls for disorderly conduct on the pedestrian bridge are almost twice as high. In addition to the disproportionate call volume on pedestrian bridges, the pedestrian bridges create a unique opportunity for criminal disorder as the bridges create a captive audience. Generally, in order for a pedestrian to cross Las Vegas Boulevard the pedestrian must use the bridge, therefore, unlike on a sidewalk where a pedestrian has a greater ability to avoid disorder, on the pedestrian bridge, the pedestrian is confined to the restricted space of the pedestrian bridge.

The Board has a substantial government interest in ensuring public safety on the pedestrian bridges. The Board finds that adoption of Pedestrian Flow Zones is a narrowly tailored means to accomplish the County's important objective of reducing the incidence and risk of crime and serious safety issues on pedestrian bridges and allows pedestrians to freely and safely get to their desired location. The pedestrian bridges represent only six percent (6%) of the total linear feet of the public sidewalk available to pedestrians within the Las Vegas Strip, to the extent the Pedestrian Flow Zones have some incidental impact on the manner of First Amendment activity, (people must continue to move, whether engaged in First Amendment activity or not), there is ample alternative means of

communication on the other approximately ninety-four percent (94%) of the sidewalks located within the Las Vegas Strip. Therefore, for the reasons described herein, the Board hereby adopts the following ordinance

16.13.020 - General definitions.

"Pedestrian Bridges" are bridges located in the Resort Corridor that allow pedestrians to cross streets in the Resort Corridor above grade level. For the purposes of this chapter, "pedestrian bridges" shall include bridges for pedestrians in the Resort Corridor that are private property upon which a limited easement of public access has been granted. However, no provision of this chapter shall be construed to limit any right of the private property owner to restrict or limit the use of that private property.

"Pedestrian Flow Zones" include the Pedestrian Bridges and up to 20 feet surrounding a Touchdown Structure located within the Resort Corridor.

"Resort Corridor" includes the boundaries established by Sections 9, 10, 15, 16, 17, 18, 20, 21, 22, 27, 28 and 29 of Township 21 South Range 61 East, Mount Diablo Meridian, Clark County, Nevada.

"Touchdown Structure" means the elevators, escalators and stairways located on the public right of way associated with Pedestrian Bridges.

16.13.030 – Pedestrian Flow Zones. To maintain the safe and continuous movement of pedestrian traffic, it is unlawful for any person to (1) stop or stand within any Pedestrian Flow Zone, or (2) engage in any activity while within a Pedestrian Flow Zone with the intent of causing another person who is within a Pedestrian Flow Zone to stop or stand. A person is not in violation of this Section if they stop or stand while

waiting for access to an elevator or escalator for purposes of entering or exiting a Pedestrian Flow Zone.

16.13.040 – Designation of Pedestrian Flow Zones. The County shall place signs in Pedestrian Flow Zones providing notice to the public they are in a Pedestrian Flow Zone and that stopping, standing, or engaging in an activity that causes another person to stop within the Pedestrian Flow Zone is not permitted.

16.13.050 – Penalty for Violation. Any person who violates any of the provisions of this chapter is guilty of a misdemeanor and upon conviction shall be punished by imprisonment in the county jail for a term not to exceed six months or by a fine not to exceed one thousand dollars, or by both such fine and imprisonment.

SECTION 2. If any section of this ordinance or portion thereof is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such holding shall not invalidate the remaining parts of this ordinance.

SECTION 3. All ordinances, parts of ordinances, chapters, sections, subsections, clauses, phrases or sentences contained in the Clark County Code in conflict herewith are hereby repealed.

SECTION 4. This ordinance shall take effect and be in force from and after its passage and the publication thereof by title only, together with the names of the County Commissioners voting for or against its passage, in a newspaper published in and having a general circulation in Clark County, Nevada, at least once a week for a period of two (2) weeks.

PROPOSED on the 21st day of November, 2023.

PROPOSED BY: Commissioner James B. Gibson

PASSED on the 2nd day of January 2024.

AYES: Tick Segerblom
James B. Gibson
Justin Jones
Marilyn K. Kirkpatrick
William McCurdy II
Michael Naft
Tick Segerblom

NAYS: None

ABSTAINING: None

ABSENT: None

BOARD OF COUNTY COMMISSIONERS
CLARK COUNTY, NEVADA

By: _____
TICK SEGERBLOM, Chair

ATTEST:

_____
LYNN GOYA, County Clerk

This ordinance shall be in force and effect from and after the 16th day of January 2024.

QUESTIONS RELATED TO PUBLIC SAFETY ON PEDESTRIAN BRIDGES
William H. Sousa, Ph.D.

1. **What is the focus of Dr. Sousa's research projects and how do they relate to the pedestrian overpasses?**

The focus of my research is on crime, disorder, and public safety, particularly in urban settings. I am an author of a textbook on policing and numerous articles, monographs, and book chapters on the nature of disorder, its impact on community life, and the role of police and citizens in terms of dealing with disorder. The nature of the research often involves conducting observations of police as they manage complex problems in public places. Over my nearly 20-year career, I have conducted approximately 150 ride-along / walk-along observations with police, totaling well over 1,000 hours.

While I have explored issues related to public safety in numerous cities around the country, much of my research is focused in Clark County. As just a few examples, I have studied citizen perceptions of disorder along Las Vegas Boulevard and Fremont Street,[1] issues related to pedestrian safety on Las Vegas Boulevard,[2] efforts to manage major crowd events along Las Vegas Boulevard,[3] concerns related to unhoused youth in Southern Nevada,[4] and violence prevention efforts in Las Vegas neighborhoods.[5]

Whereas much of this work examines connections between disorder and public safety, the research relates directly to concerns that have developed along the pedestrian bridges over Las Vegas Boulevard.[6] Analyses indicate that calls for service for disorder-related events on Las Vegas Boulevard increased 23% between 2018 and 2022. Moreover, while problems related to disorder have increased on the Strip in general, further analyses reveal that disorder tends to concentrate on the pedestrian overpasses. While the bridges comprise less than 6% of the sidewalk system along Las Vegas Boulevard, 11% of disorder-related calls occurred on the overpasses.

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[1] Jonathan Birds and William Sousa (2015). *Perceptions of Disorder: Results from Two Las Vegas Tourist Locations*. Research in Brief Series, 2015-01. Las Vegas, NV: UNLV Center for Crime and Justice Policy.
[2] William Sousa (2023). *Safety on Las Vegas Boulevard, 2018-2022*. Stat Sheet Series, 2023-01. Las Vegas, NV: UNLV Center for Crime and Justice Policy.
[3] William H. Sousa and Tamara D. Madensen (2011). "The police and major event planning: A case study in Las Vegas, Nevada." *Preventing Crowd Violence.* Crime Prevention Studies Series, *26*, 139-158.
[4] Patricia Cook-Craig, Jennifer Guthrie, William Sousa, Carlton Craig, Michael Bruner, Judy Tudor, Jessica Word, and Melissa Jacobowitz (2017). *The State of Youth Homelessness in Southern Nevada.* Research in Brief. Las Vegas, NV: Greenspun College of Urban Affairs.
[5] Timothy Radtke, William Sousa, and Timothy Hart (2008). "Operation Ceasefire in Clark County, Nevada: Evaluating a Cross-Jurisdictional Approach to Reducing Gun Violence." Washington, DC: Bureau of Justice Statistics.
[6] See, generally, Sousa (2023).

2. What does disorder mean with respect to Dr. Sousa's expertise and areas of research and study? What is the relationship between disorder and crime and other safety issues? Explain disorder and how it creates conditions of public safety and/or crime.

Within the criminological literature, "disorder" refers to a broad range conditions and behaviors that are not necessarily illegal (although they often are), but are nevertheless considered to be problematic in public places.[7] The term "disorder" is sometimes used interchangeably with terms such as "incivilities" or "quality-of-life concerns." Research often distinguishes between two types of disorders: social and physical. Social disorders involve active behaviors, such as aggressive panhandlers who intimidate passersby, individuals engaging in street prostitution, people using drugs and alcohol in public, or unruly teenagers who harass pedestrians. Physical disorders involve persistent conditions, such as litter along sidewalks, locations with evidence of public urination and defecation, or graffiti on walls of public buildings.[8]

Disorder is a concern because of the potential harmful effect it can have on public life. Research indicates that disorder can lead to citizen fear, to more disorder, and to serious crime. Researchers have argued, for example, that citizens' perceptions of disorder are significantly related to fear of victimization,[9] and that people will often alter their behavior to avoid confrontations with disorderly actors or conditions.[10] Other studies demonstrate that relatively little disorder, if left unchecked, can generate more disorder.[11] Furthermore, although it is not inevitable, locations with permissive atmospheres toward disorder are more susceptible to serious criminal activity.[12] This is because serious offenders are generally more comfortable in places where acts of disorder are common and appear to be acceptable.

Several factors escalate problems related to disorder, including the amount of visible disorder at any given time, the level of aggressiveness of the disorderly actor(s), and the type of location where the disorder is occurring. Location is particularly important because disorderly behaviors are often most problematic when they are performed in specific locations where people are especially vulnerable to intimidation (i.e., in areas where the observer of the behavior is a "captive audience"). Examples of such locations are bus stops, train platforms, and subway cars.

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[7] Wes G. Skogan (1990). *Disorder and Decline: Crime and the Spiral of Decay in American Neighborhoods*. New York: The Free Press.
[8] William H. Sousa (2010). "Wesley Skogan's 'Disorder and Decline'" in *The Encyclopedia of Criminological Theory*, Frank Cullen & Pam Wilcox (eds.), SAGE publications.
[9] Catherine E. Ross and Sung Joon Jang (2000). "Neighborhood disorder, fear, and mistrust: the buffering role of social ties with neighbors." *American Journal of Community Psychology, 28*(4), 401-420.
[10] William H. Sousa and George L. Kelling (2014). "Order Maintenance Policing" in *Encyclopedia of Criminology and Criminal Justice*, G. Bruinsma & D. Weisburd (eds.), Springer.
[11] Kees Keizer, Siegwart Lindenberg, and Lionda Steg (2008). "The spreading of disorder." *Science, 322*, 1681-1685.
[12] Skogan (1990).

Those who are a captive audience often fear that they could be an easy victim of serious crime if they refuse the disorderly actor, or they fear harassment because it is physically difficult for them to "get away."[13] Even if people are physically able to avoid or remove themselves from a particular location where the disorder is occurring, doing so may prevent them from the legitimate use of that location. Notably, it is often the most vulnerable members of society – such as the elderly, children, and the disabled – who are the most susceptible to this type of intimidation.

3. **When considering the pedestrian overpasses as part of Las Vegas Boulevard South / Resort District sidewalk system, are there disorder or safety issues that are unique or more significant to the bridges separate from the at-grade sidewalks? If so, what are the issues unique to the bridges that are not issues on the at-grade sidewalks?**

A number of disorders are common on the Las Vegas Boulevard South / Resort District sidewalk system, including aggressive panhandlers, solicitation while intoxicated, aggressive street performers, illegal vendors, confidence games (i.e., three-card monte), and drug related activity. These are all disorders that, as discussed above, can potentially lead to more significant problems if they are not managed.

While many of these behaviors are not unique to the pedestrian bridges (they occur on the at-grade sidewalks as well), the nature of the bridges makes these disorders especially problematic for at least two reasons. First, disorderly acts and conditions contribute to obstructions and crowding on the overpasses as people stop to react to the disorder. While not all acts of disorder are necessarily intended to make people stop, many of the behaviors described above (three-card monte, for example) are done by individuals who are stopped on a bridge and who deliberately cause other pedestrians to stop and congregate.

Second, people trying to cross a pedestrian bridge are a "captive audience" similar to those described above in Question #2. If pedestrians want to safely cross Las Vegas Boulevard, they have little choice but to use the overpasses. Once they are on a bridge, they are essentially confined to a restricted space with no way to leave other than the point that they entered and the exit point on the opposite side. Such conditions make pedestrians on overpasses particularly vulnerable to intimidation from disorderly behaviors or conditions. Pedestrians on at-grade sidewalks have more flexibility in terms of avoiding disorder if they feel threatened by it – since they are not restricted by the walls of a pedestrian bridge, they can retreat, enter a property, or otherwise maneuver around the disorder. Given the relatively limited width of the bridges, however, pedestrians are often unable to negotiate around the disorders they encounter. Their only choice may be to return to the point where they entered, but doing so would deny them from the legitimate purpose of using the bridge in the first place, which is to safely cross Las Vegas Boulevard.

[13] George L. Kelling and Catherine M. Coles (1996). *Fixing Broken Windows: Restoring Order and Reducing Crime in Our Communities*. New York, NY: The Free Press, p.34.

4. With respect to the pedestrian overpasses, are there issues of egress in times of panic and increased risk of injury?

Pedestrians on an overpass are in a rigidly confined space with traffic flow in only two directions. This creates a heightened risk of injury should an incident occur that triggers rapid group movement in one direction (i.e., panicked pedestrians rushing toward one side of the bridge).[14] A bottleneck can occur as a quickly moving crowd on an overpass is funneled to a narrower exit point (i.e., a doorway or an escalator on the overpass). As crowd density increases at the concentrated exit point, people can become so packed together that injuries result – a phenomenon known as "crowd crush."

An escalator further complicates matters in the event of an emergency on a pedestrian overpass. While the down-escalator is a potential source of bottlenecking as people rush off the bridge, the up-escalator will continue delivering people to the same location as the bottleneck. This can result in a pileup at the outlet of the up-escalator, which further contributes to crowd density and increases the likelihood of injury.[15]

Additionally, crowd density caused by pedestrians who are rapidly exiting an overpass can impede the efforts of first responders who are trying to enter the bridge. This can prevent authorities from reaching the initial source of the panic, and it can delay emergency medical treatment to those injured on the overpass.

5. Are these issues that are unique or more significant to bridges exasperated by those who congregate or stop on bridges, regardless of whether the people who stop or congregate are engaging in wrongful conduct themselves?

As discussed above, the rigid boundaries of pedestrian bridges reduce the ability of people to distance themselves from each other, particularly if there are large numbers of people on a bridge at a given time. Individuals who are standing, sitting, laying, or otherwise stopped on an overpass may obstruct pedestrians and therefore present a physical risk both to themselves and to others, especially in an emergency.

Those who are stopped may also encourage others to stop or congregate (either intentionally or unintentionally). Regardless of whether people who stop or congregate are engaged in wrongful conduct, the relatively confined space along a pedestrian overpass generates a higher propensity for increased crowd density when people are stopped. Pedestrians may be forced to negotiate through the crowd since going around it may not be an option.

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[14] See, generally, John J. Fruin (1984). "Crowd dynamics and auditorium management." *Auditorium News*, May ed.
[15] John J. Fruin (1993). "The causes and prevention of crowd disasters." Paper presented at the First International Conference on Engineering for Crowd Safety, London, England, March 1993.

In addition to the heightened risk of injury as crowd density increases (as discussed in Question #4), research on crowd dynamics suggests a number of other problems that can result as crowds gather, especially if the density of the crowd is such that people are close enough to physically touch.[16] For example, pickpocketing, groping, and other forms of theft, assault, and violence are more common in crowded conditions, particularly if alcohol or drugs are involved.

6. What actions can be taken to reduce disorder and improve public safety on the pedestrian bridges and how and why would they do so?

When the nature of an environment is such that there are limited points of ingress and egress, efforts should be made to facilitate the orderly movement of people and make the flow of pedestrian traffic as efficient as possible.[17] In practical terms, this means encouraging people to keep moving on the overpasses, discouraging people from stopping or congregating on the bridges, and managing any disorderly conditions that may cause people to stop.

In some environments, technological, architectural, or engineering modifications could be implemented that might reduce disorder or otherwise encourage pedestrians to keep moving / prevent pedestrians from stopping or congregating. Given the architectural design of the pedestrian overpasses, however, options for altering the physical environment are limited.

Enforcement efforts would be another method to reduce disorder and facilitate the flow of pedestrian traffic along the overpasses. Official ordinances give police the legal authority to issue warnings for non-compliance or, as a last resort, take formal action (i.e., citations). A local ordinance that prohibits stopping, for example, would provide a legal mechanism for police who seek to manage the orderly movement of people along the overpasses.

7. Assuming one such action is to prevent the stoppage or congregating of all persons, how does that action decrease risk to the public? To be effective does it need to include everyone, including those who stop or congregates and are not engaging in bad behavior?

Efforts designed to prevent stopping or congregating on pedestrian bridges would improve public safety in several ways. First, as discussed in Question #5, regardless of whether people who stop or congregate are engaged in wrongful behavior, they may contribute to crowd density that can increase risk of injury (i.e., "crowd crush") or other problems that arise when people are close enough to physically touch (i.e., pickpocketing, theft, groping, fights). By keeping all pedestrians moving on the overpasses, risks associated with crowd density are minimized.

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[16] Miliaikeala SJ. Heen and Joel D. Lieberman (2018). "Sexual harassment and violence at music concerts and festivals." Stat Sheet Series, 2018-03. Las Vegas, NV: UNLV Center for Crime and Justice Policy.
[17] Fruin (1993).

Additionally, as discussed in Question #3, much of the disorder that occurs along the pedestrian bridges is the result of people who are stopped or who encourage others to stop (either intentionally or unintentionally). Research demonstrates that efforts to manage disorderly behaviors directly reduce those behaviors and can also prevent more serious problems from forming.[18] Preventing stopping or congregating on bridges – regardless of the actor's motivation for stopping – is likely to reduce disorder and therefore improve public safety.

8. Why is a prohibition on obstruction insufficient to resolve the issues on the bridges?

As discussed above, obstructions can occur as the result of unsafe and disorderly conditions along the walkways. Once obstructions have occurred, however, it may be too late to prevent their more serious consequences, including the elevated risk of injury to pedestrians and the increased difficulty for first responders to quickly manage emergencies. A prohibition on obstruction is therefore insufficient because such a prohibition will not address the problematic conditions that create obstructions in the first place.

The main safety concern on the bridges stems from people who stop or congregate. Those who are stopped, even if they are not intentionally obstructing others, may encourage other pedestrians to stop. This can contribute to increased crowd density and its potential results, including risk of physical injury and criminal activity that can occur when people are in close proximity to each other. Relatedly, those who are stopped may add to the amount of disorder on the bridges even if their actions are not unlawful.

Whereas the purpose of the overpasses is to safely deliver people from one side of Las Vegas Boulevard to the other, the most reasonable solution to minimize problems related to crowd density, disorder, and criminal activity is to keep pedestrians moving along the bridges. A prohibition on obstruction alone will not resolve these concerns.

[18] See George L. Kelling and William H. Sousa (2001). *Do Police Matter? An Analysis of the Impact of New York City's Police Reforms*. Civic Report No. 22. New York, NY: The Manhattan Institute for Policy Research; see also Anthony A. Braga, Brandon C. Welsh, and Cory Schnell (2015). "Can policing disorder reduce crime? A systematic review and meta-analysis." *Journal of Research in Crime and Delinquency*, *52*(4), 567–588.

UNLV CENTER FOR CRIME AND JUSTICE POLICY

Stat Sheet

April 2023

CCJP-SS 2023-1

Safety on Las Vegas Boulevard, 2018-2022

By: William Sousa

Safety concerns related to police calls for service, disorderly conditions, and unhoused individuals present numerous challenges for public officials. This Stat Sheet provides an overview of safety conditions on Las Vegas Boulevard from 2018-2022.

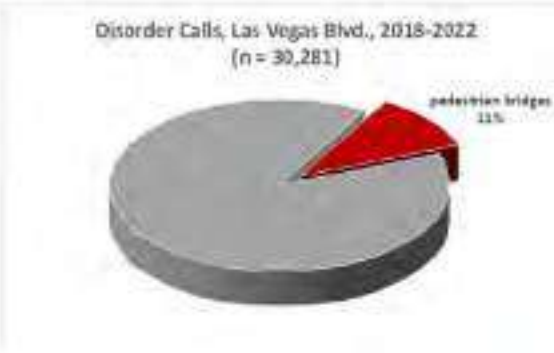
Key Stats



1. Calls for Service – Disorder

Overall calls for service on Las Vegas Boulevard increased 29% from 37,589 in 2018 to 48,358 in 2022.

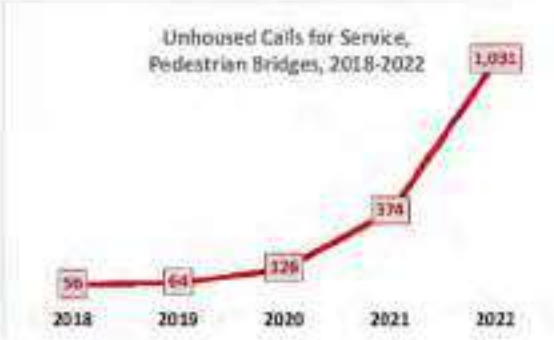
Calls specifically for disorderly offenses jumped from 6,981 in 2018 to 8,570 in 2022 – an increase of 23%.



2. Disorder on Pedestrian Bridges

Calls for disorderly offenses on Las Vegas Boulevard are disproportionately concentrated on pedestrian bridges.

Although the pedestrian bridges account for less than 6% of the total length of the sidewalk system along Las Vegas Boulevard, 11% of disorder calls occurred on the walkways.



3. Calls Related to Unhoused Individuals

Calls for service related to unhoused individuals increased dramatically on Las Vegas Boulevard from 2018-2022.

For example, calls related to the unhoused increased on the pedestrian bridges from 56 in 2018 to 1,031 in 2022 – an increase of over 1,700%.

Center for Crime and Justice Policy

Introduction

Public safety along Las Vegas Boulevard – the heart of the entertainment industry in Clark County – is an important consideration for public officials. As a major tourist destination, issues related to police calls for service, disorderly conditions, and unhoused individuals present a number of challenges. An analysis of data from 2018-2023 provides information on measures of public safety along Las Vegas Boulevard.[1]

Calls for Service

Calls for service are a gauge for the amount of police resources required to manage problems at locations. While many calls are not necessarily crime-related, they often reflect citizen concerns about problematic conditions related to personal health and safety. Analyses reveal that calls for service along the stretch of Las Vegas Boulevard between Russell Road and Sahara Avenue increased substantially, from 37,589 in 2018 to 48,358 in 2022 – an increase of 29%.

Disorder

Research demonstrates that problematic quality-of-life conditions (aggressive panhandling, public drug and alcohol use, excessive trash and litter, etc.) can lead to more quality-of-life issues in public spaces, increased sanitation problems, heightened fear among citizens, and serious criminal activity. Calls for service specifically for disorder increased from 6,981 in 2018 to 8,570 in 2022 – an increase of 23%. Disorder also appears to concentrate at specific locations along Las Vegas Boulevard. For example, although pedestrian bridges make up less than 6% of the total length of the sidewalk system, 11% of disorder calls on Las Vegas Boulevard occurred on the walkways.[2]

Unhoused Individuals

Safety concerns related to unhoused individuals present a number of challenges. The unhoused are disproportionately impacted by struggles with physical health, mental health, and substance abuse problems – and they are at heightened risk of victimization by serious crime. Many calls for service to police concern unhoused individuals. Calls related to the unhoused increased at an alarming rate along Las Vegas Boulevard, from 346 in 2018 to 7,066 in 2022 – an increase of over 1,900%. On the pedestrian bridges alone, calls increased from just 56 in 2018 to 1,031 in 2022 – an increase of over 1,700%.

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[1] Data were provided by the LVMPD Research & Analysis Unit and the Clark County Public Works Department.
[2] The total length of the sidewalks between Russell Road and Sahara Avenue (east and west sides), including the pedestrian bridges, is 39,600 linear feet. The length of the bridges alone is 2,300 linear feet. These measures do not include the privately owned pedestrian bridges in front of Treasure Island, the Venetian, and the Wynn.

RESORT CORRIDOR



[Bracketed] material is that portion being deleted
Underlined material is that portion being added

BILL NO. _____

SUMMARY – Establishes Pedestrian Flow Zones on Pedestrian Bridges and up to 20 feet surrounding a touchdown structure.

ORDINANCE NO. _____
(of Clark County, Nevada)

AN ORDINANCE TO AMEND TITLE 16 OF THE CLARK COUNTY CODE TO ADD A NEW CHAPTER 16.13 TO ESTABLISH PEDESTRIAN FLOW ZONES ON PEDESTRIAN BRIDGES AND UP TO 20 FEET SURROUNDING A TOUCHDOWN STRUCTURE; AND PROVIDING FOR OTHER MATTERS PROPERLY RELATING THERETO.

THE BOARD OF COUNTY COMMISSIONERS OF THE COUNTY OF CLARK, STATE OF NEVADA, DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. Title 16 of the Clark County Code is amended as follows:

CHAPTER 16.13 – PEDESTRIAN FLOW ZONES

16.13.010 – Purpose.

The pedestrian bridges located within the world-famous Las Vegas Strip provide above grade access for the visitors, employees, and residents of Clark County to safely cross the roadways located within the Las Vegas Strip. The pedestrian bridges are part of the sidewalk system of the Las Vegas Strip and were created for the purpose of separating pedestrian traffic from vehicular traffic to facilitate pedestrians crossing in those locations. Pedestrians are prohibited from crossing at grade level where pedestrian bridges are located. The pedestrian bridges were designed for the specific purpose of

facilitating such crossings at all foreseeable levels of demand which can vary significantly and unpredictably regardless of day or time of day. The parameters for the pedestrian bridge design did not include uses beyond pedestrian traffic crossing from one side to the other side. The parameters included that pedestrians would not stop, stand or congregate other than for incidental and fleeting viewing of the Las Vegas Strip from the pedestrian bridge. For pedestrians to be able to stop, stand or congregate for any other reason, the pedestrian bridges would have been designed differently to account for such uses.

Stopping on the pedestrian bridges creates conditions that can foment disorder which, in turn, can lead to crime and serious safety issues. Because pedestrian traffic demand on the bridges varies significantly and unpredictably regardless of day or time of day, it is impossible to know in advance when stopping will result in criminal or otherwise dangerous conditions (whether involving the particular pedestrian who has stopped or others) and because of the physical nature of the pedestrian bridges, by the time such conditions exist, it would often be too late for law enforcement or other first responders to intervene, mitigate, render aid, rescue, or take other actions necessary as a result of crime and other serious safety issues. In recent years, numerous incidents have occurred that underscore these concerns. There is an ever-increasing demand as visitation numbers have reached near historical levels. Clark County continues to attract major sporting events and has become the home to major sports teams. Clark County has a substantial government interest in providing safe pedestrian access on the Las Vegas Strip. The increased number and frequency of high-profile attacks in places of public gatherings throughout the country have contributed to the occurrence of threats and

perceived threats that result in public panic and immediate and unexpected demand on pedestrian bridges as in an event of flight by large groups of people.

From 2018 to 2022, calls for law enforcement services on the Las Vegas Strip have increased twenty-nine percent (29%) from 37,598 in 2018 to 48,358 in 2022. The service calls for disorderly offenses increased twenty-three percent (23%) from 6,981 in 2018 to 8,750 in 2022. While the pedestrian bridges constitute only approximately six percent (6%) of the total linear feet of public sidewalks available to pedestrians, the service calls for disorderly conduct on the pedestrian bridge are almost twice as high. In addition to the disproportionate call volume on pedestrian bridges, the pedestrian bridges create a unique opportunity for criminal disorder as the bridges create a captive audience. Generally, in order for a pedestrian to cross Las Vegas Boulevard the pedestrian must use the bridge, therefore, unlike on a sidewalk where a pedestrian has a greater ability to avoid disorder, on the pedestrian bridge, the pedestrian is confined to the restricted space of the pedestrian bridge.

The Board has a substantial government interest in ensuring public safety on the pedestrian bridges. The Board finds that adoption of Pedestrian Flow Zones is a narrowly tailored means to accomplish the County's important objective of reducing the incidence and risk of crime and serious safety issues on pedestrian bridges and allows pedestrians to freely and safely get to their desired location. The pedestrian bridges represent only six percent (6%) of the total linear feet of the public sidewalk available to pedestrians within the Las Vegas Strip, to the extent the Pedestrian Flow Zones have some incidental impact on the manner of First Amendment activity, (people must continue to move, whether engaged in First Amendment activity or not), there is ample alternative means of

communication on the other approximately ninety-four percent (94%) of the sidewalks located within the Las Vegas Strip. Therefore, for the reasons described herein, the Board hereby adopts the following ordinance.

16.13.020 - General definitions.

"Pedestrian Bridges" are bridges located in the Resort Corridor that allow pedestrians to cross streets in the Resort Corridor above grade level. For the purposes of this chapter, "pedestrian bridges" shall include bridges for pedestrians in the Resort Corridor that are private property upon which a limited easement of public access has been granted. However, no provision of this chapter shall be construed to limit any right of the private property owner to restrict or limit the use of that private property.

"Pedestrian Flow Zones" include the Pedestrian Bridges and up to 20 feet surrounding a Touchdown Structure located within the Resort Corridor.

"Resort Corridor" includes the boundaries established by Sections 9, 10, 15, 16, 17, 18, 20, 21, 22, 27, 28 and 29 of Township 21 South Range 61 East, Mount Diablo Meridian, Clark County, Nevada.

"Touchdown Structure" means the elevators, escalators and stairways located on the public right of way associated with Pedestrian Bridges.

16.13.030 – Pedestrian Flow Zones. To maintain the safe and continuous movement of pedestrian traffic, it is unlawful for any person to (1) stop or stand within any Pedestrian Flow Zone, or (2) engage in any activity while within a Pedestrian Flow Zone with the intent of causing another person who is within a Pedestrian Flow Zone to stop or stand. A person is not in violation of this Section if they stop or stand while

waiting for access to an elevator or escalator for purposes of entering or exiting a Pedestrian Flow Zone.

16.13.040 – Designation of Pedestrian Flow Zones. The County shall place signs in Pedestrian Flow Zones providing notice to the public they are in a Pedestrian Flow Zone and that stopping, standing, or engaging in an activity that causes another person to stop within the Pedestrian Flow Zone is not permitted.

16.13.050 – Penalty for Violation. Any person who violates any of the provisions of this chapter is guilty of a misdemeanor and upon conviction shall be punished by imprisonment in the county jail for a term not to exceed six months or by a fine not to exceed one thousand dollars, or by both such fine and imprisonment.

SECTION 2. If any section of this ordinance or portion thereof is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such holding shall not invalidate the remaining parts of this ordinance.

SECTION 3. All ordinances, parts of ordinances, chapters, sections, subsections, clauses, phrases or sentences contained in the Clark County Code in conflict herewith are hereby repealed.

SECTION 4. This ordinance shall take effect and be in force from and after its passage and the publication thereof by title only, together with the names of the County Commissioners voting for or against its passage, in a newspaper published in and having a general circulation in Clark County, Nevada, at least once a week for a period of two (2) weeks.

PROPOSED on the _____ day of _____, 2023.

PROPOSED BY: _____

PASSED on the _____ day of _____ 2024.

AYES: _____

_____

_____

_____

_____

_____

_____

NAYS: _____

_____

ABSTAINING: _____

ABSENT: _____

_____

BOARD OF COUNTY COMMISSIONERS
CLARK COUNTY, NEVADA

By: _____

ATTEST:

_____
LYNN GOYA, County Clerk

This ordinance shall be in force and effect from and after the _____ day of _____ 2024.

ITEM NO. 36 Receive and accept the Annual Report for Fiscal Year 2023 from the Clark County Law Library. (For possible action)

ACTION: It was moved by Commissioner Tick Segerblom, and carried by unanimous vote, that the recommendation be approved.

ITEM NO. 37 Award a salary increase of nine percent and a five percent bonus to County Manager Kevin Schiller based on the performance evaluation, and take any action as deemed appropriate. (For possible action)

ACTION: It was moved by Commissioner Tick Segerblom, and carried by unanimous vote, that the recommendation be approved.

ITEM NO. 38 Conduct a public hearing and approve, adopt and authorize the Chair to sign an ordinance to amend Title 16 of the Clark County Code to add a new Chapter 16.13 to establish pedestrian flow zones on pedestrian bridges and up to 20 feet surrounding a touchdown structure; and providing for other matters properly relating thereto; or take other actions as appropriate. (For possible action)

SCHILLER: Commissioners, it's now 10:00 a.m. so we can move to the public hearing section of the agenda. Item 38 is to conduct a public hearing and approve, adopt, and authorize the chair to sign an ordinance to amend Title 16 of the Clark County Code to add a new chapter 16.13 to establish pedestrian flow zones and pedestrian bridges and up to 20 feet surrounding a touchdown structure and providing for other matters properly related thereto or take other action as appropriate.

LOGSDON: Good morning, Commissioners.

SCHILLER: I can reread it.

LOGSDON: I have a brief presentation for you. So, the proposed ordinance will create pedestrian flow zones on the pedestrian bridge up to 20 feet surrounding the touchdown structures to maintain safe and continuance movement of pedestrian traffic. The ordinance will apply to pedestrian bridges in the area surrounding them such as the elevators and escalators, which are located in the Resort Corridor. The Resort Corridor is defined from Russell Road to the south and Sahara Avenue to the north and Valley View to the west and Maryland Parkway to the east.

The pedestrian bridges are part of the overall sidewalk system of the Resort Corridor and were created for the purposes of separating pedestrian traffic from vehicular traffic to facilitate pedestrians safely crossing in the Resort Corridor. The pedestrian bridges were designed in a manner to facilitate the flow of pedestrian traffic in the most efficient manner possible. The bridges were not designed for pedestrians to stop, stand, or congregate other than for incidental and brief views of the Las Vegas Strip.

The pedestrian flow zone is similar to pedestrian zones located in other large cities such as New York City, which ensure the safe and continuance movement of pedestrian traffic. The proposed ordinance prohibits stopping, standing, or engaging in activity while in the pedestrian flow zone with the intent of causing another person who was within the pedestrian flow zone to stop or stand. The ordinance is necessary as the pedestrian bridges create a unique public safety issue. In reviewing and preparing the ordinance to address the significant public safety issue, the County has

LOGSDON relied on a report prepared by Dr. William Sousa. Dr. Sousa is here to provide you with a brief summary of the report regarding the public safety concerns on the pedestrian bridges. After Dr. Sousa's presentation, Metro will have a few additional comments.

SEGERBLOM Thank you, Dr. Sousa.

BILL SOUSA Good morning. As Miss Logsdon mentioned, my name is Bill Sousa. I'm a professor in the Department of Criminal Justice at UNLV and I'm also the Director of UNLV's Center for Crime and Justice Policy. My primary area of research is crime and public safety in public spaces. I was asked to repair the report on the state of disorder on the Strip, specifically as it relates to the pedestrian bridges. I will summarize that report in the following points. First, disorder has been increasing on the Strip. From 2018 through 2022, calls for disorderly offenses such as fights, suspicious persons, public intoxication, and public drug activity. Calls for these types of offenses were up by nearly 25% during that time. It's significant to note however, that disorder on the Strip concentrates disproportionately on the pedestrian bridges. Although the bridges make up less than 6% of the total sidewalk system, they accounted for 11% of calls for disorderly offenses.

Disorder on the bridges is a concern for several reasons that I outlined in the report. Research indicates that increased levels of disorder can impact people's perceptions of personal safety and fear of victimization. Disorder can also generate conditions that are favorable for more disorder and potentially for more serious crime and violence. But disorder is especially problematic within the context of a pedestrian bridge because it often encourages people to stop walking. Regardless of whether people who are stopped or engaged in inappropriate conduct, the relatively limited space along a bridge generates a higher chance for obstructions and increased crowd density.

Obstructions and crowd density are significant public safety concerns on the bridges. The bridges are a confined environment with traffic flow in only two directions. Should an incident occur that triggers rapid group movement in one of those directions, a bottleneck could quickly develop that could lead to serious injuries as the result of crowd crush. Importantly, crowd density caused by people who are trying to rapidly exit a bridge can block the efforts of first responders who are then trying to enter the bridge, making their jobs more difficult, indeed, more dangerous.

Research demonstrates that when the nature of an environment is such that there are limited points of entry and exit. Efforts should be made to facilitate the orderly movement of people and make the flow of traffic as efficient as possible. In practical terms, this means that we should encourage people to keep moving on the bridges. We should discourage people from stopping or congregating and we should manage disorderly conditions that may cause people to stop walking. An ordinance that prohibit stopping would provide a mechanism to manage the orderly movement of people along the bridges. This will make the bridges safer for everyone to use. That is what I have to discuss. If there are any questions.

SEGERBLOM I don't hear any questions. Thank you so much.

SOUSA Thank you.

LOGSDON

And now I believe we have a representative from Metro here.

UNDERSHERIFF ANDY WALSH

Good morning, Commissioners. I'm Andy Walsh. I'm the Undersheriff with Metro. And we're here today to discuss why Metro supports the ordinance that establishes the free flow zones on the pedestrian bridges in the tourist corridor. For us, the pedestrian bridges present the public safety challenge and essentially there are two major problems for the police when it comes to policing and keeping those bridges safe. First, it's the crime and disorder as Dr. Sousa just mentioned, that could occurs due to the bridges that are congested and the concealed nature of the bridges. And for officers, there's a challenge of not being able to see what is happening on the bridges when they're on foot patrol and when they're on the street below. And even when they are present on the bridges, officers have the challenge to keep the bridges safe. And without this ordinance, they do not have the tools that they need to help stop the atmosphere of disorder that's created when people congregate on the bridges.

And it is our belief that this ordinance where pedestrians are mandated to keep moving will greatly diminish the crime and disorder that occurs on the bridges and will improve public safety. For some time, we have been concerned about crowd crush with the ever-growing number of tourists and large events that occur on Las Vegas Boulevard. We've seen large crowds on bridges during major events, and what we see is when the pedestrian bridges get packed, it's very difficult for officers to get onto those bridges and to maintain order. It is our concern about these times where there's heavy traffic and heavy use of the bridges.

And we can think of several times where the bridges were not crowded with pedestrians, but when incidents have happened in the Resort Corridor calls of active shooter type events where crowds come rushing at a casino properties. If there were folks that were congregating on those bridges, standing on those bridges, standing there with property on those bridges, it would be very difficult for people to use those bridges as an exit from what their perceptions are of the danger and also be very difficult for officers to address the threat if that were existing.

If the bridges are crowded and people are not moving and their property is still there, it creates an exceptional public safety event for us. We've been very lucky so far that we have not had a crowd crush type incident on those bridges where people were injured, but the old saying where it's predictable, it's preventable, is staring us right in the face. I know that there's going to be questions and there should be questions and concerns about how we're going to enforce this. My understanding is that there'll be the creation of the signage that says free flow zones similar to what Dr. Sousa mentioned exists in New York City and that Public Works will be posting those signs along the bridges on Las Vegas Boulevard.

For those that disobey the signage, officers will first be instructed to inform them, educate them on the law in an attempt to generate voluntary compliance with the law and keep the pedestrians moving. Officers will issue a warning and ask folks to move along. If they refuse, officers will have the ability based on this law to issue a citation or make an arrest, but our goal obviously is to generate voluntary compliance from members of the community and tourists alike who've used the bridges. And we believe this ordinance will help us reduce crime and disorder on the pedestrian bridges and help keep our tourist and local communities safe. That's all I have. If you have any questions.

SEGERBLOM — I had a question. So right now, or in the future, will we have good cameras on both sides of the bridges so we'll be able to see what's happening and then also what happened retroactively?

WALSH — Yes. We have a very robust camera system for Las Vegas Boulevard, obviously to protect our tourist corridor, but the cameras, even when we see something on cameras, getting an officer up onto the bridge and responding also takes time. So, the cameras are useful, the cameras definitely generate our ability to respond.

SEGERBLOM — But the flip side is if anyone's complaining that we'll be able to see what happened and we make sure that the enforcement is being done evenly and no one's being picked out.

WALSH — Yeah, I think one of the great things about doing this in this forum is that the goal is to generate voluntary compliance. So, it's not just the role of the police department to educate the folks in our community and tourists alike on what the law is. It's something that if we can all work together and educate and generate voluntary compliance with the law, then the question of enforcement obviously will... People will, if they obey the signage, there'll be very little questions about how it's being enforced.

SEGERBLOM — Thank you.

LOGSDON — Thank you, Commissioners. So, this ordinance addresses a significant government interest in public safety. The ordinance is content neutral as it applies equally to everyone and is narrowly tailored to address the public safety issues of pedestrians in the Resort Corridor and leaves ample alternative channels of communication as the pedestrian bridges are a small part of the entire sidewalk system in the Resort Corridor. This ordinance will provide our public safety officers and first responders with the tools necessary to address public safety issues and quickly manage emergency situations. I'm happy to answer any questions.

SEGERBLOM — Commissioner Miller? I'm sorry, Commissioner Gibson

GIBSON — Thank you, Mister Chair. So, Lisa, when it comes to the, there are a number of interests here, have we had discussion with any of the union leadership and if so, to what extent has anything that they've been concerned about in terms of their need to assemble and the things that become important during contract time or at other times have been incorporated into this ordinance?

LOGSDON — Yes, Commissioner, I did work with Culinary's counsel out of San Francisco. They did have some concerns with the little bit of the language, which was what was read into the record today. And so that is clarification on that when they're engaging in activity within the pedestrian flow zone and they have to be intending to cause another person to stop in the pedestrian flow zone. So, if there is picketing or different activity going down on the street level and somebody stops up at the bridge, that is not covered under this ordinance. And then we also added language that is not a violation of this section if a person stops or waits for access to an elevator for the purposes of using the facilities.

GIBSON — So, in the case of Culinary, we've heard from them and this addresses the concerns

GIBSON — that they raised?

LOGSDON — That is correct.

GIBSON — Okay. And we've heard from, and in the past, we've heard from street performers. What effect does this have on street performers?

LOGSDON — So again, as the ordinance is content neutral, it doesn't have any impact. So, they can still do all of their street performing things down on the street level where they're continuing to walk while they do any First Amendment activity, but there's also, as I think in the report, the bridges are 6% of the entire overall sidewalk system. So, this is a time, place and manner restriction that is narrowly tailored because there's other avenues in which to provide the First Amendment activity.

GIBSON — So, we're not saying they can't be on sidewalks? Stopping on a sidewalk is not a problem. It is when you get onto the pedestrian bridges and the area that has been designated in the ordinance, that's when we have an issue.

LOGSDON — Correct. Due to the unique public safety issues that are created on the bridges that this ordinance is necessary and the least restrictive means to address that significant public safety issue and government interest.

GIBSON — I don't have any other questions right this minute.

SEGERBLOM — Any other questions?

LOGSDON — I think you can go ahead and open the public hearing.

SEGERBLOM — Please. Alright. This is a public hearing. Anyone who wish to speak on this proposed ordinance, please come forward.

VIRGINIA VALENTINE — Good morning, Commissioners. My name is Virginia Valentine, 10000 West Charleston Boulevard, and I'm here today on behalf of the Nevada Resort Association and I would like to note that there are many of my colleagues in the room represented from the resort. You may not hear from them today, but I do want to point out that they are here to point out and underscore what important issue safety on the pedestrian bridges is for all of us.

We appreciate the time, effort, and science that went into the thoughtful crafting of the ordinance. The work of Dr. Sousa clearly demonstrates the challenges of maintaining a safe environment on the bridge for guests, for resort employees, and for first responders on the bridges. It's important to note that unlike at grade sidewalks, those wishing to cross Las Vegas Boulevard South or the intersecting arterials have no choice but to cross on the bridges. The bridges were designed to convey pedestrians from one side to the other and for no other purpose.

The Las Vegas Visitors and Convention Authority estimated that nearly 400,000 people were expected for New Year's Eve. Most of those will have visited the Strip. Visitation to the Strip has increased and large events have grown in size and number. Please consider this ordinance an ounce of prevention, one that may prevent significant injury should there be a need for rapid evacuation across the bridge or

VALENTINE

access by first responders. The ordinance will reduce the potential for chaos. It may also reduce tripping hazards and will increase the effective capacities of the bridges by reducing obstructions. Today you have an opportunity to proactively improve the safety of the pedestrian bridges for guests and employees. We urge your support. Thank you on behalf of all the resorts on Las Vegas Boulevard.

ATHAR HASEEBULLAH

Good afternoon. Oh, sorry. Good morning, Commissioners. I'm still in foreign time. I had a nice vacation for the holidays, but my name is Athar Haseebullah. First name spelled A-T-H-A-R, last name H-A-S-E-E-B-U-L-L-A-H. I'm the Executive Director for the ACLU of Nevada. I'm also a civil rights attorney. I don't think it comes as a surprise to this Commission, since we've been here, we've shared with all of you that we're vehemently opposed to this proposal. We do thank Deputy County Manager Frierson as well as District Attorney Logsdon for bringing us into the conversation early and sharing that there was an intent to do this, but we're still opposed. We're opposed for a number of reasons. We're not alone in our opposition. In fact, we submitted a letter on behalf of a few different groups. ACLU of Nevada, Progressive Leadership Alliance of Nevada, NAACP Las Vegas, the Nevada Partnership for Homeless Youth, Nevada NOW, Nevada Homeless Alliance, Make the Road Nevada, the Clark County Black Caucus and SEIU Local 1107 who are all opposed to this proposal and still opposed to this proposal regardless of the minor change that was put into place today.

See, what you heard was a presentation that suggested that there's data surrounding dangerous conduct, negative behavior and increased elements surrounding crime stats being up on these bridges. You haven't heard any specificity with respect to what that crime looks like. These are general anecdotes, right? If we say that crime is up and then we decide to criminalize the mere act of stopping, your crime rate naturally will increase if that is put into place. Much the same way if you criminalized breathing, your crime rate would be 100%. So, this notion that crime rates are up are not actually telling. I can assure you that if this passes, this will result in litigation because despite buzzwords being used about this being narrowly tailored and the least restrictive alternative, it's not.

You in fact have all the power right now to work with Metro to have officers placed on these bridges permanently, if crime is so bad on the bridges. That's not been done, not a single time. These bridges are being surveilled. That's also not been done. There's not been any sort of additional elements. You're asking for or Metro is asking for another tool in the toolbox and we keep hearing this phrase. This is the same tool that's been used. It's another carceral policy that's put in place.

I encourage you if you're in support of the First Amendment, to not move forward with this proposal. There's a multitude of things that can be done, but why aren't you asking the questions today about why Metro's not assigned to be on the bridges? They certainly can be if it's so dangerous up there. That hasn't happened. Again, regardless if you sign off on this today or not, I can assure you that there's going to be further questions surrounding this.

We're going to end up having to litigate this. We don't want to be in that posture. And again, if I'm the Resorts Association, I understand it from their perspective, I would want to have the ability to remove whoever I wanted as well. That goes without saying. They're business enterprises, but you have a responsibility as

HASEEBULLAH

commissioners to ensure there's a check and a balance. And simply asking for data on the backend of what's going to end up being disproportionate enforcement is insufficient. We need this to be stopped now. If it's not stopped now, again, this is going to end up resulting in litigation. I know that many of you are strong advocates for the First Amendment, so I'd encourage you to vote no today and not move this forward. Thank you.

SEGERBLOM

Thank you.

EVE HANAN

Good morning, Chair, Commissioners. My name is Eve, E-V-E Hanan, H-A-N-A-N. I am a professor at the Boyd School of Law at UNLV and I'm the director of the Misdemeanor Clinic in the Thomas and Mack Legal Clinic there. I'm speaking to you today not representing the views of UNLV, but representing the interests of our clients in the misdemeanor clinics where our students, our law students, particularly third year law students have the opportunity to represent clients charged with misdemeanors in the justice courts. Many of the cases do arise out of incidents and arrests and citations that occur in the Strip Corridor as well.

I speak today opposed to this for constitutional and policy reasons. I think it's bad policy for at least two reasons. One is that it takes an issue, which is essentially an urban planning and a crowd control issue, which is pedestrian flow and makes it into a criminal matter, carrying up to six months in jail. Pedestrian flow is a matter for urban planners and it is to a certain extent a matter for police insofar as they enforce the existing laws, but it is not traditionally seen as a crime. So, this is an overcriminalization problem which has downstream consequences. Our clients are working class people. They're sometimes working class people who have fallen through the cracks. They're people who may be trying to make money doing something without the proper license, perhaps vending or something like that. Those are existing crimes. To add more crimes, to put more fines on them, to put them in positions where they have open cases for months and years, which inhibits them from getting jobs, it's simply not good policy for this Commission.

The law is simple. Even with the changes that are proposed today, this law is void for vagueness. This is not a First Amendment argument, it's a due process argument with clear Supreme Court case law in Desertrain and Morales being the two foundational cases. Stopping, standing, the intent to cause someone else to stop or stand, this is simply too vague and the elevator exception doesn't cure it.

If someone says, "Excuse me, could you please stop and give me directions? Excuse me, could you please take our picture as we stand here with the view in the background?" These actions would be criminalized under this law. That makes it void for vagueness. It's impossible for an ordinary person to know when they're in compliance with the law.

Now, Metro has told us that they will use their discretion to not arrest those folks, but to let those folks know what the law is and to only arrest others. But that, Commissioners is exactly what Desertrain and Morales and the Supreme Court case law teaches us is where the problem lies. It's selective prosecution. They have in mind and this Commission may have in mind who ought to be prosecuted under this. So, it's a law not meant for equal enforcement. So, with that, I'll conclude my time and I'd be happy at a later date to provide more information on those constitutional

HANAN — issues.

SEGERBLOM — Thank you.

HANAN — Thank you.

SEGERBLOM — This is a public hearing. Anyone else here wishing to speak on ordinance? He already spoke once. I'm sorry you already spoke on this ordinance.

MITCHEL LANGBERG — Good morning, Commissioners. Mitchell Langberg from Brownstein Hyatt. One thing that you have not heard except from Dr. Sousa and from Metro is about the unique nature of these bridges. This issue about the bridges being just 6% of the overall sidewalk system is very important because all of the speech-related issues that you've heard about can occur if not otherwise prevented in the other 94% of the sidewalk system. And this is a critical aspect of this time, place, or manner restriction as County Counsel has told you. The Supreme Court recognizes that there are times where a legislative body needs to make a law that might have an incidental effect on speech. That is speech isn't the target, as it is not the target here. And when an ordinance such as this, has an incidental effect on First Amendment activity and is merely a restriction on either the time, the place or the manner of speech, and this is a restriction that could impact the place or manner of speech, the Supreme Court instructs that it needs to be content neutral, which this is. That is, there's no specific content. It's not even speech that's being directly targeted, that it needs to be narrowly tailored to a significant government interest.

You've heard from Metro, Dr. Sousa and County Counsel what this significant interest is. It's the unique nature of these bridges. It is the fact that by the time something happens that creates urgency in a crowd flow, it is too late to take action to clear the bridges and make them unobstructed. It's because it is a funnel on both ends that people going down the escalators are going to prevent first responders from going up. And anything that creates additional blockage is going to make things more dangerous. So, that significant government interest is targeted by preventing people from stopping or standing on that 6% of the sidewalk system. And the last thing the Supreme Court cares about it, thinks as important, says is important, is that there'd be alternate alternative, sorry, ample alternative channels for the speech that might be impacted.

And the truth is is that people who are engaged in First Amendment activity that are earning their livings from tips, presumably from entertainment activities, all they need to do is go down to the surface level. And for the most part, they will be speaking to the exact same audience that they would speak to if they were on the bridges themselves. Because almost everybody is either going to come up or down those escalators except for the few that come out on the second level. And based on that, based on this government interest, based on the fact that this is nearly tailored for that and based on those ample alternative channels, this passes constitutional muster. There is no question to any reasonable person about what's allowed and what's not allowed. It's not vague. There is no stopping, there is no standing. Thank you.

SEGERBLOM — Thank you. Anyone else here wishing to speak? If not, I'll go ahead and close the public hearing and ask for comments by the Commissioners.

JUSTIN JONES — I had a question.

SEGERBLOM — Commissioner Jones.

JONES — Yeah. I know there's going to be some signage that's going to be put up. With regards to the 20 feet from touchdown structures, will there be markings for the 20 feet so that those who want to still do whatever they want to do will will know where the 20 feet is?

LOGSDON — That is correct and that's why it says up to, because in some areas, there's not even up to 20 feet around there. So, it would be no more than the 20 but in some areas it will be smaller than that, around those areas.

SEGERBLOM — Commissioner McCurdy, and also if the IT person could come up. I need my password again.

MCCURDY — Thank you, Mister Chairman. I think that it's important just to get a few things on the record. Thank you to all of our presenters and also those who've spoke in public comment during this period. I think that we should get clearly on the record that the application of the law will be done equally. We need to make sure that there is data that's kept by our law enforcement officers to ensure that is not being applied in an unequitable manner. So if there is, for example, a street performer performing and there's a showgirl, I expect for both to have the same type of interaction with law enforcement and as it relates to law enforcement, I think that we need to have some assurances that as we seek to enforce this law, we need to be made aware of how we are going to position our law enforcement officers in and around the flow zone to ensure that we're not deploying resources where they're not needed.

I know that we do have surveillance in the area, and we have a high level of surveillance in the corridor, but we do certainly need to make sure that the education that's done around the law that is to be passed today, that the officers know that we can't disproportionately target one group or another. I think that that's where a large majority of the concern is coming from and I think that that's also valid because at the end of the day, it's our responsibility to ensure that we are creating policy that is going to be equitably applied to all of our residents and also tourists alike. And also to this notion of the discretion, how are we going to make sure that one person that's worn first time, second time comes before a body after receiving a misdemeanor, how are we going to make sure that that person's not getting a slap on the wrist and another person who may have done the exact same thing is not getting up to six months in jail.

I think that that's a very, very important question that we have to answer, and I know that we don't have any jurisdiction over what our judges do, but I think that's a great consideration that we need to have as we move forward this policy. And lastly, I certainly understand that it is incredibly important that we maintain the health and safety of our residents and tourists alike and also protect our remaining lifeblood of our economy which is a resort corridor that we just make sure that we're doing it in a manner that's consistent with our Board's vision. Which we know we just had a historic month, not only through the Airport, but also through the heads that's been going in our beds. But we just need to make sure that if this is to be passed and it is litigated that we are sure that we have firm footing to stand on it. It sounds like there

MCCURDY — is footing but I guess that's yet to be determined.

SEGERBLOM — Anything further? Commissioner Gibson?

GIBSON — Very often our focus in our discussion has been about tourists. What do they think? What do they experience? Are they afraid for themselves? Is it a safe environment as we move to continue to move this destination forward and grow it and grow its appeal. One of the things that has motivated me very heavily is the fact that we have over a hundred thousand of our residents who work in this area and utilize those bridges themselves. And I've been very concerned for their safety as well.

Notionally... Well, before I do that, I'm aware because the Convention Center Area Command covers half of the Strip that I have, most of the Strip, I guess all of the Strip and all that I have and I have a lot. I've spent a lot of time with Captain Cornell to get a sense of what the stresses are in terms of managing what's happening on the Strip. And it's really clear to me that there is already an awful lot of police presence out there. The police are on the bridges, they are surged to areas when they need to be, but they need additional support, additional help as we've heard today from the Undersheriff. And I think that the reality is we have provided for a fair and I think adequate, more than adequate notice to the public. I think that there is ample opportunity for speech, ample alternatives I think is the term that Counsel used. When you get right down to it, the unique nature of these bridges and the unique nature of this city and the unique nature of Las Vegas Boulevard when there can be a hundred thousand people moving up and down the street at the same time and accessing the bridges and moving along as they do, that becomes really important.

It's essential to us that we provide the tools to the Police Department to be able to do what needs to be done in the rare occasion that someone is going to object, where someone is going to refuse to abide by an ordinance that is a lawful ordinance, that makes all the sense in the world and has its objective to keep every pedestrian that would move along around those bridges up and down the elevator safe. It is for those reasons that... And those reasons were important a year ago or more when we started thinking about and before we had thought it through fully came with an ordinance that was not this ordinance, that was a different approach. And after the hearing, it was apparent that some of the things that have been discussed today were not a part of that ordinance. This ordinance, I think is really clean.

I think it's clear, it's direct, it's short, not a lot to know. And I think that we obviously must trust that our police department will be fair and equitable in the way they exercise their discretion. I have every confidence that they will be. To the extent that they're not, then there will be a price to be paid. But it is my view that with the education that will occur there, that we won't have issues. And so, unless there's something more that would compel us to do otherwise, I would move the adoption of this ordinance.

SEGERBLOM — Just taking a point of personal privilege, I did have a comment I wanted to make in conjunction with what you said and that is, this is a work in progress, so we need to really monitor this. So, I would urge everyone to really make sure that this is enforced correctly because the lifeblood of the Strip is these walkways. We wouldn't be here unless there was a need for it but we also need to make sure that we don't over correct something. So anyway, move for, or cast your votes. And that passes.

ACTION: It was moved by Commissioner Jim Gibson, and carried by unanimous vote, that the recommendation (including the adoption of Ordinance No. 5090) be approved.

ITEM NO. 39 Conduct a public hearing to receive comments or objections from the public concerning the granting of a telecommunications franchise to Gigapower, LLC to provide telecommunication services in certain unincorporated areas of Clark County; and to approve and authorize the Chair to sign a Telecommunications Utility System Franchise Agreement between Clark County and Gigapower, LLC to construct, operate and maintain a telecommunications utility system to provide subscription service in certain unincorporated areas of Clark County, Nevada for a term of ten years, with one five-year renewal option; and providing for other matters properly related thereto. Commission District: All (For possible action)

SCHILLER — Okay. Commissioners, we can now move to Item 39, which is to conduct a public hearing to receive comments or objections from the public concerning the granting of a telecommunications franchise to Gigapower LLC, to provide telecommunication services in certain unincorporated areas of Clark County and to approve and authorize the chair to sign a telecommunications utility system franchise agreement between Clark County and Gigapower LLC to construct, operate, and maintain a telecommunications utility system to provide subscription service in certain unincorporated areas of Clark County, Nevada for a term of 10 years with one five-year renewal option and providing for other matters properly related thereto.

MIKE HARWELL — Good morning, Chair, Commissioners. Mike Harwell for Business License. Gigapower applied for telecommunication franchise agreement a few months ago. And according to state law, the Board accepted the application on November 21 and according to NRS 709, we published the public notice of this meeting in the Review Journal once a week for four weeks and also three locations in each of the towns that is in their service area. The notice was to notify the public of the public hearing and to request that if they have any comments or concerns, to address those to the Clerk's office. As of this date, we've not received any comments or the Clerk's office has not received any comments either. And this following the public hearing, the franchise agreement that's attached to this item, the staff is recommending approval of that and I'm here for any questions.

SEGERBLOM — This is a public hearing. Is anyone here wishes to speak? I'll close the public hearing. I had a couple of questions. So, it indicates it's a franchise, but I know I'm talking to staff before today. There is no franchise fee or there's no payment to the County on this?

HARWELL — It depends. The franchise fee, the franchise would allow Gigapower to put infrastructure in the public rights of ways to provide telecommunication services or broadband services and depending on what services they provide. For example, if their customers or other telecommunication companies like AT&T or T-Mobile or I mean other telecom companies, they could be paying us fees but state law limits local government's telecommunication fees to be no more than 5% of retail intrastate revenue. If they provide broadband service, broadband is considered by the Federal Communication Commission as an intrastate information service. So, it's possible if they provide only broadband, that we would not receive any revenue unless obviously, if state law changes to allow us to do that. But right now, the way that state laws were written, we're limited to intrastate retail telecommunication services.

SEGERBLOM — And do they pay any kind of a fee they use to cut open our streets or?

SEC. 7. PUBLIC HEARINGS - 10 AM

38. Conduct a public hearing and approve, adopt and authorize the Chair to sign an ordinance to amend Title 16 of the Clark County Code to add a new Chapter 16.13 to establish pedestrian flow zones on pedestrian bridges and up to 20 feet surrounding a touchdown structure; and providing for other matters properly relating thereto; or take other actions as appropriate. (For possible action)

MOVED BY: Jim Gibson

ACTION: CONDUCTED, APPROVED AND AUTHORIZED (WITH CORRECTION READ INTO THE RECORD AS FOLLOWS: UNDER SECTION 1 OF THE PROPOSED PEDESTRIAN FLOW ZONE ORDINANCE, SECTION 16.13.030 SHALL BE AMENDED TO READ: "TO MAINTAIN THE SAFE AND CONTINUOUS MOVEMENT OF PEDESTRIAN TRAFFIC, IT IS UNLAWFUL FOR ANY PERSON TO (1) STOP OR STAND WITHIN ANY PEDESTRIAN FLOW ZONE, OR (2) ENGAGE IN ANY ACTIVITY WHILE WITHIN A PEDESTRIAN FLOW ZONE WITH THE INTENT OF CAUSING ANOTHER PERSON WHO IS WITHIN A PEDESTRIAN FLOW ZONE TO STOP OR STAND. A PERSON IS NOT IN VIOLATION OF THIS SECTION IF THEY STOP OR STAND WHILE WAITING FOR ACCESS TO AN ELEVATOR OR ESCALATOR FOR PURPOSES OF ENTERING OR EXITING A PEDESTRIAN FLOW ZONE; AND ADOPTION OF ORDINANCE NO. 5090) AS RECOMMENDED.

VOTE: 7

Voting Aye:	Jim Gibson Tick Segerblom Marilyn Kirkpatrick William McCurdy II Ross Miller Michael Naft Justin Jones
Voting Nay:	None
Absent:	None
Abstain:	None

39. Conduct a public hearing to receive comments or objections from the public concerning the granting of a telecommunications franchise to Gigapower, LLC to provide telecommunication services in certain unincorporated areas of Clark County; and to approve and authorize the Chair to sign a Telecommunications Utility System Franchise Agreement between Clark County and Gigapower, LLC to construct, operate and maintain a telecommunications utility system to provide subscription service in certain unincorporated areas of Clark County, Nevada for a term of ten years, with one five-year renewal option; and providing for other matters properly related thereto. Commission District: All (For possible action)

MOVED BY: William McCurdy II

ACTION: CONDUCTED, APPROVED AND AUTHORIZED AS RECOMMENDED.

BOARD OF COUNTY COMMISSIONERS
PUBLIC COMMENT – INTEREST CARD
Please Print

DATE: 1-2-2024
NAME: Shawn Sorrentino
ADDRESS: Las Vegas NV

✓ I WISH TO SPEAK ON ITEM # 38

✓ I WISH TO SPEAK ON A MATTER NOT CURRENTLY ON THE AGENDA

AT THE CALL OF THE CHAIRMAN, ANYONE WISHING TO SPEAK ON AN ITEM ON THE AGENDA WILL BE GIVEN AN OPPORTUNITY TO SPEAK EITHER AT THE BEGINNING OF THE MEETING OR WHEN EACH ITEM IS CALLED. ANYONE WISHING TO SPEAK ON AN ITEM ON THE CONSENT AGENDA SHOULD SPEAK AT THE FIRST PUBLIC COMMENT PERIOD AT THE BEGINNING OF THE AGENDA. IF YOU WISH TO SPEAK ON A MATTER NOT ON THE AGENDA, YOU WILL BE CALLED AT THE PUBLIC COMMENT PERIOD HELD AT THE CLOSE OF EACH MEETING.

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I have read and understand, and agree to abide by the Code of Conduct.

Signed by: _____

CC 115

BOARD OF COUNTY COMMISSIONERS
PUBLIC COMMENT – INTEREST CARD
Please Print

DATE: 1-2-2023
NAME: MICHAEL ESQUIVEL
ADDRESS: 3683 E BONANZA RD

✓ I WISH TO SPEAK ON ITEM # 37

_____ I WISH TO SPEAK ON A MATTER NOT CURRENTLY ON THE AGENDA

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CC 117

BOARD OF COUNTY COMMISSIONERS
PUBLIC COMMENT – INTEREST CARD
Please Print

DATE: 1/2/23
NAME: Eve Hanan, Director of Misdemeanor Clinic, UNLV
ADDRESS: [illegible]

✓ I WISH TO SPEAK ON ITEM # 38 Proposed Chapter No 13 (pedestrian bridges)

___ I WISH TO SPEAK ON A MATTER NOT CURRENTLY ON THE AGENDA

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Signed by:



CC 119

BOARD OF COUNTY COMMISSIONERS
PUBLIC COMMENT – INTEREST CARD
Please Print

DATE: 1/2/2024
NAME: David Johnson
ADDRESS: 220 Whitney Breeze Ave N Las Vegas, NV, 89031

X I WISH TO SPEAK ON ITEM # 6

X I WISH TO SPEAK ON A MATTER NOT CURRENTLY ON THE AGENDA

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Citizens Code of Conduct

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Signed by: _____

CC 121

BOARD OF COUNTY COMMISSIONERS
PUBLIC COMMENT – INTEREST CARD
Please Print

DATE:
NAME: Marcus Hanson
ADDRESS: 517 N. 14th Street #3 Las Vegas NV, 89101

✓ I WISH TO SPEAK ON ITEM # 38

_____ I WISH TO SPEAK ON A MATTER NOT CURRENTLY ON THE AGENDA

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Signed by: _____

CC 123

CERTIFIED COPY
DOCUMENT ATTACHED IS A
TRUE AND CORRECT COPY OF
THE DOCUMENT OR DATA ON FILE
MINUS ANY REDACTED PORTIONS

SEP 05 2024

Lynn Marie Goya
CLERK

Exhibit 17

Questions Related to Public Safety on Pedestrian Bridges, William H. Sousa, Ph. D.

QUESTIONS RELATED TO PUBLIC SAFETY ON PEDESTRIAN BRIDGES
William H. Sousa, Ph.D.

1. **What is the focus of Dr. Sousa's research projects and how do they relate to the pedestrian overpasses?**

The focus of my research is on crime, disorder, and public safety, particularly in urban settings. I am an author of a textbook on policing and numerous articles, monographs, and book chapters on the nature of disorder, its impact on community life, and the role of police and citizens in terms of dealing with disorder. The nature of the research often involves conducting observations of police as they manage complex problems in public places. Over my nearly 20-year career, I have conducted approximately 150 ride-along / walk-along observations with police, totaling well over 1,000 hours.

While I have explored issues related to public safety in numerous cities around the country, much of my research is focused in Clark County. As just a few examples, I have studied citizen perceptions of disorder along Las Vegas Boulevard and Fremont Street,[1] issues related to pedestrian safety on Las Vegas Boulevard,[2] efforts to manage major crowd events along Las Vegas Boulevard,[3] concerns related to unhoused youth in Southern Nevada,[4] and violence prevention efforts in Las Vegas neighborhoods.[5]

Whereas much of this work examines connections between disorder and public safety, the research relates directly to concerns that have developed along the pedestrian bridges over Las Vegas Boulevard.[6] Analyses indicate that calls for service for disorder-related events on Las Vegas Boulevard increased 23% between 2018 and 2022. Moreover, while problems related to disorder have increased on the Strip in general, further analyses reveal that disorder tends to concentrate on the pedestrian overpasses. While the bridges comprise less than 6% of the sidewalk system along Las Vegas Boulevard, 11% of disorder-related calls occurred on the overpasses.

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[1] Jonathan Birds and William Sousa (2015). *Perceptions of Disorder: Results from Two Las Vegas Tourist Locations*. Research in Brief Series, 2015-01. Las Vegas, NV: UNLV Center for Crime and Justice Policy.
[2] William Sousa (2023). *Safety on Las Vegas Boulevard, 2018-2022*. Stat Sheet Series, 2023-01. Las Vegas, NV: UNLV Center for Crime and Justice Policy.
[3] William H. Sousa and Tamara D. Madensen (2011). "The police and major event planning: A case study in Las Vegas, Nevada." *Preventing Crowd Violence.* Crime Prevention Studies Series, *26*, 139-158.
[4] Patricia Cook-Craig, Jennifer Guthrie, William Sousa, Carlton Craig, Michael Bruner, Judy Tudor, Jessica Word, and Melissa Jacobowitz (2017). *The State of Youth Homelessness in Southern Nevada.* Research in Brief. Las Vegas, NV: Greenspun College of Urban Affairs.
[5] Timothy Radtke, William Sousa, and Timothy Hart (2008). "Operation Ceasefire in Clark County, Nevada: Evaluating a Cross-Jurisdictional Approach to Reducing Gun Violence." Washington, DC: Bureau of Justice Statistics.
[6] See, generally, Sousa (2023).

2. What does disorder mean with respect to Dr. Sousa's expertise and areas of research and study? What is the relationship between disorder and crime and other safety issues? Explain disorder and how it creates conditions of public safety and/or crime.

Within the criminological literature, "disorder" refers to a broad range conditions and behaviors that are not necessarily illegal (although they often are), but are nevertheless considered to be problematic in public places.[7] The term "disorder" is sometimes used interchangeably with terms such as "incivilities" or "quality-of-life concerns." Research often distinguishes between two types of disorders: social and physical. Social disorders involve active behaviors, such as aggressive panhandlers who intimidate passersby, individuals engaging in street prostitution, people using drugs and alcohol in public, or unruly teenagers who harass pedestrians. Physical disorders involve persistent conditions, such as litter along sidewalks, locations with evidence of public urination and defecation, or graffiti on walls of public buildings.[8]

Disorder is a concern because of the potential harmful effect it can have on public life. Research indicates that disorder can lead to citizen fear, to more disorder, and to serious crime. Researchers have argued, for example, that citizens' perceptions of disorder are significantly related to fear of victimization,[9] and that people will often alter their behavior to avoid confrontations with disorderly actors or conditions.[10] Other studies demonstrate that relatively little disorder, if left unchecked, can generate more disorder.[11] Furthermore, although it is not inevitable, locations with permissive atmospheres toward disorder are more susceptible to serious criminal activity.[12] This is because serious offenders are generally more comfortable in places where acts of disorder are common and appear to be acceptable.

Several factors escalate problems related to disorder, including the amount of visible disorder at any given time, the level of aggressiveness of the disorderly actor(s), and the type of location where the disorder is occurring. Location is particularly important because disorderly behaviors are often most problematic when they are performed in specific locations where people are especially vulnerable to intimidation (i.e., in areas where the observer of the behavior is a "captive audience"). Examples of such locations are bus stops, train platforms, and subway cars.

---

[7] Wes G. Skogan (1990). *Disorder and Decline: Crime and the Spiral of Decay in American Neighborhoods*. New York: The Free Press.

[8] William H. Sousa (2010). "Wesley Skogan's 'Disorder and Decline'" in *The Encyclopedia of Criminological Theory*, Frank Cullen & Pam Wilcox (eds.), SAGE publications.

[9] Catherine E. Ross and Sung Joon Jang (2000). "Neighborhood disorder, fear, and mistrust: the buffering role of social ties with neighbors." *American Journal of Community Psychology, 28*(4), 401-420.

[10] William H. Sousa and George L. Kelling (2014). "Order Maintenance Policing" in *Encyclopedia of Criminology and Criminal Justice*, G. Bruinsma & D. Weisburd (eds.), Springer.

[11] Kees Keizer, Siegwart Lindenberg, and Lionda Steg (2008). "The spreading of disorder." *Science, 322*, 1681-1685.

[12] Skogan (1990).

Those who are a captive audience often fear that they could be an easy victim of serious crime if they refuse the disorderly actor, or they fear harassment because it is physically difficult for them to "get away."[13] Even if people are physically able to avoid or remove themselves from a particular location where the disorder is occurring, doing so may prevent them from the legitimate use of that location. Notably, it is often the most vulnerable members of society – such as the elderly, children, and the disabled – who are the most susceptible to this type of intimidation.

3. **When considering the pedestrian overpasses as part of Las Vegas Boulevard South / Resort District sidewalk system, are there disorder or safety issues that are unique or more significant to the bridges separate from the at-grade sidewalks? If so, what are the issues unique to the bridges that are not issues on the at-grade sidewalks?**

A number of disorders are common on the Las Vegas Boulevard South / Resort District sidewalk system, including aggressive panhandlers, solicitation while intoxicated, aggressive street performers, illegal vendors, confidence games (i.e., three-card monte), and drug related activity. These are all disorders that, as discussed above, can potentially lead to more significant problems if they are not managed.

While many of these behaviors are not unique to the pedestrian bridges (they occur on the at-grade sidewalks as well), the nature of the bridges makes these disorders especially problematic for at least two reasons. First, disorderly acts and conditions contribute to obstructions and crowding on the overpasses as people stop to react to the disorder. While not all acts of disorder are necessarily intended to make people stop, many of the behaviors described above (three-card monte, for example) are done by individuals who are stopped on a bridge and who deliberately cause other pedestrians to stop and congregate.

Second, people trying to cross a pedestrian bridge are a "captive audience" similar to those described above in Question #2. If pedestrians want to safely cross Las Vegas Boulevard, they have little choice but to use the overpasses. Once they are on a bridge, they are essentially confined to a restricted space with no way to leave other than the point that they entered and the exit point on the opposite side. Such conditions make pedestrians on overpasses particularly vulnerable to intimidation from disorderly behaviors or conditions. Pedestrians on at-grade sidewalks have more flexibility in terms of avoiding disorder if they feel threatened by it – since they are not restricted by the walls of a pedestrian bridge, they can retreat, enter a property, or otherwise maneuver around the disorder. Given the relatively limited width of the bridges, however, pedestrians are often unable to negotiate around the disorders they encounter. Their only choice may be to return to the point where they entered, but doing so would deny them from the legitimate purpose of using the bridge in the first place, which is to safely cross Las Vegas Boulevard.

[13] George L. Kelling and Catherine M. Coles (1996). *Fixing Broken Windows: Restoring Order and Reducing Crime in Our Communities*. New York, NY: The Free Press, p.34.

4. With respect to the pedestrian overpasses, are there issues of egress in times of panic and increased risk of injury?

Pedestrians on an overpass are in a rigidly confined space with traffic flow in only two directions. This creates a heightened risk of injury should an incident occur that triggers rapid group movement in one direction (i.e., panicked pedestrians rushing toward one side of the bridge).[14] A bottleneck can occur as a quickly moving crowd on an overpass is funneled to a narrower exit point (i.e., a doorway or an escalator on the overpass). As crowd density increases at the concentrated exit point, people can become so packed together that injuries result – a phenomenon known as "crowd crush."

An escalator further complicates matters in the event of an emergency on a pedestrian overpass. While the down-escalator is a potential source of bottlenecking as people rush off the bridge, the up-escalator will continue delivering people to the same location as the bottleneck. This can result in a pileup at the outlet of the up-escalator, which further contributes to crowd density and increases the likelihood of injury.[15]

Additionally, crowd density caused by pedestrians who are rapidly exiting an overpass can impede the efforts of first responders who are trying to enter the bridge. This can prevent authorities from reaching the initial source of the panic, and it can delay emergency medical treatment to those injured on the overpass.

5. Are these issues that are unique or more significant to bridges exasperated by those who congregate or stop on bridges, regardless of whether the people who stop or congregate are engaging in wrongful conduct themselves?

As discussed above, the rigid boundaries of pedestrian bridges reduce the ability of people to distance themselves from each other, particularly if there are large numbers of people on a bridge at a given time. Individuals who are standing, sitting, laying, or otherwise stopped on an overpass may obstruct pedestrians and therefore present a physical risk both to themselves and to others, especially in an emergency.

Those who are stopped may also encourage others to stop or congregate (either intentionally or unintentionally). Regardless of whether people who stop or congregate are engaged in wrongful conduct, the relatively confined space along a pedestrian overpass generates a higher propensity for increased crowd density when people are stopped. Pedestrians may be forced to negotiate through the crowd since going around it may not be an option.

[14] See, generally, John J. Fruin (1984). "Crowd dynamics and auditorium management." *Auditorium News*, May ed.
[15] John J. Fruin (1993). "The causes and prevention of crowd disasters." Paper presented at the First International Conference on Engineering for Crowd Safety, London, England, March 1993.

In addition to the heightened risk of injury as crowd density increases (as discussed in Question #4), research on crowd dynamics suggests a number of other problems that can result as crowds gather, especially if the density of the crowd is such that people are close enough to physically touch.[16] For example, pickpocketing, groping, and other forms of theft, assault, and violence are more common in crowded conditions, particularly if alcohol or drugs are involved.

6. What actions can be taken to reduce disorder and improve public safety on the pedestrian bridges and how and why would they do so?

When the nature of an environment is such that there are limited points of ingress and egress, efforts should be made to facilitate the orderly movement of people and make the flow of pedestrian traffic as efficient as possible.[17] In practical terms, this means encouraging people to keep moving on the overpasses, discouraging people from stopping or congregating on the bridges, and managing any disorderly conditions that may cause people to stop.

In some environments, technological, architectural, or engineering modifications could be implemented that might reduce disorder or otherwise encourage pedestrians to keep moving / prevent pedestrians from stopping or congregating. Given the architectural design of the pedestrian overpasses, however, options for altering the physical environment are limited.

Enforcement efforts would be another method to reduce disorder and facilitate the flow of pedestrian traffic along the overpasses. Official ordinances give police the legal authority to issue warnings for non-compliance or, as a last resort, take formal action (i.e., citations). A local ordinance that prohibits stopping, for example, would provide a legal mechanism for police who seek to manage the orderly movement of people along the overpasses.

7. Assuming one such action is to prevent the stoppage or congregating of all persons, how does that action decrease risk to the public? To be effective does it need to include everyone, including those who stop or congregates and are not engaging in bad behavior?

Efforts designed to prevent stopping or congregating on pedestrian bridges would improve public safety in several ways. First, as discussed in Question #5, regardless of whether people who stop or congregate are engaged in wrongful behavior, they may contribute to crowd density that can increase risk of injury (i.e., "crowd crush") or other problems that arise when people are close enough to physically touch (i.e., pickpocketing, theft, groping, fights). By keeping all pedestrians moving on the overpasses, risks associated with crowd density are minimized.

[16] Miliaikeala SJ. Heen and Joel D. Lieberman (2018). "Sexual harassment and violence at music concerts and festivals." Stat Sheet Series, 2018-03. Las Vegas, NV: UNLV Center for Crime and Justice Policy.
[17] Fruin (1993).

Additionally, as discussed in Question #3, much of the disorder that occurs along the pedestrian bridges is the result of people who are stopped or who encourage others to stop (either intentionally or unintentionally). Research demonstrates that efforts to manage disorderly behaviors directly reduce those behaviors and can also prevent more serious problems from forming.[18] Preventing stopping or congregating on bridges – regardless of the actor's motivation for stopping – is likely to reduce disorder and therefore improve public safety.

8. Why is a prohibition on obstruction insufficient to resolve the issues on the bridges?

As discussed above, obstructions can occur as the result of unsafe and disorderly conditions along the walkways. Once obstructions have occurred, however, it may be too late to prevent their more serious consequences, including the elevated risk of injury to pedestrians and the increased difficulty for first responders to quickly manage emergencies. A prohibition on obstruction is therefore insufficient because such a prohibition will not address the problematic conditions that create obstructions in the first place.

The main safety concern on the bridges stems from people who stop or congregate. Those who are stopped, even if they are not intentionally obstructing others, may encourage other pedestrians to stop. This can contribute to increased crowd density and its potential results, including risk of physical injury and criminal activity that can occur when people are in close proximity to each other. Relatedly, those who are stopped may add to the amount of disorder on the bridges even if their actions are not unlawful.

Whereas the purpose of the overpasses is to safely deliver people from one side of Las Vegas Boulevard to the other, the most reasonable solution to minimize problems related to crowd density, disorder, and criminal activity is to keep pedestrians moving along the bridges. A prohibition on obstruction alone will not resolve these concerns.

[18] See George L. Kelling and William H. Sousa (2001). *Do Police Matter? An Analysis of the Impact of New York City's Police Reforms*. Civic Report No. 22. New York, NY: The Manhattan Institute for Policy Research; see also Anthony A. Braga, Brandon C. Welsh, and Cory Schnell (2015). "Can policing disorder reduce crime? A systematic review and meta-analysis." *Journal of Research in Crime and Delinquency*, *52*(4), 567–588.

UNLV CENTER FOR CRIME AND JUSTICE POLICY

Stat Sheet

April 2023

CCJP-SS 2023-1

Safety on Las Vegas Boulevard, 2018-2022

By: William Sousa

Safety concerns related to police calls for service, disorderly conditions, and unhoused individuals present numerous challenges for public officials. This Stat Sheet provides an overview of safety conditions on Las Vegas Boulevard from 2018-2022.

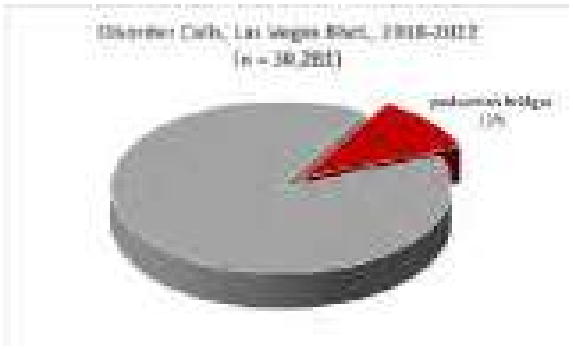
Key Stats



1. Calls for Service – Disorder

Overall calls for service on Las Vegas Boulevard increased 29% from 37,589 in 2018 to 48,358 in 2022.

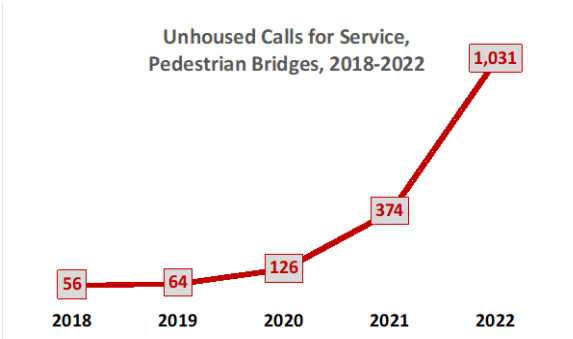
Calls specifically for disorderly offenses jumped from 6,981 in 2018 to 8,570 in 2022 – an increase of 23%.



2. Disorder on Pedestrian Bridges

Calls for disorderly offenses on Las Vegas Boulevard are disproportionately concentrated on pedestrian bridges.

Although the pedestrian bridges account for less than 6% of the total length of the sidewalk system along Las Vegas Boulevard, 11% of disorder calls occurred on the walkways.



3. Calls Related to Unhoused Individuals

Calls for service related to unhoused individuals increased dramatically on Las Vegas Boulevard from 2018-2022.

For example, calls related to the unhoused increased on the pedestrian bridges from 56 in 2018 to 1,031 in 2022 – an increase of over 1,700%.

Center for Crime and Justice Policy

Introduction

Public safety along Las Vegas Boulevard – the heart of the entertainment industry in Clark County – is an important consideration for public officials. As a major tourist destination, issues related to police calls for service, disorderly conditions, and unhoused individuals present a number of challenges. An analysis of data from 2018-2023 provides information on measures of public safety along Las Vegas Boulevard.[1]

Calls for Service

Calls for service are a gauge for the amount of police resources required to manage problems at locations. While many calls are not necessarily crime-related, they often reflect citizen concerns about problematic conditions related to personal health and safety. Analyses reveal that calls for service along the stretch of Las Vegas Boulevard between Russell Road and Sahara Avenue increased substantially, from 37,589 in 2018 to 48,358 in 2022 – an increase of 29%.

Disorder

Research demonstrates that problematic quality-of-life conditions (aggressive panhandling, public drug and alcohol use, excessive trash and litter, etc.) can lead to more quality-of-life issues in public spaces, increased sanitation problems, heightened fear among citizens, and serious criminal activity. Calls for service specifically for disorder increased from 6,981 in 2018 to 8,570 in 2022 – an increase of 23%. Disorder also appears to concentrate at specific locations along Las Vegas Boulevard. For example, although pedestrian bridges make up less than 6% of the total length of the sidewalk system, 11% of disorder calls on Las Vegas Boulevard occurred on the walkways.[2]

Unhoused Individuals

Safety concerns related to unhoused individuals present a number of challenges. The unhoused are disproportionately impacted by struggles with physical health, mental health, and substance abuse problems – and they are at heightened risk of victimization by serious crime. Many calls for service to police concern unhoused individuals. Calls related to the unhoused increased at an alarming rate along Las Vegas Boulevard, from 346 in 2018 to 7,066 in 2022 – an increase of over 1,900%. On the pedestrian bridges alone, calls increased from just 56 in 2018 to 1,031 in 2022 – an increase of over 1,700%.

[1] Data were provided by the LVMPD Research & Analysis Unit and the Clark County Public Works Department.
[2] The total length of the sidewalks between Russell Road and Sahara Avenue (east and west sides), including the pedestrian bridges, is 39,600 linear feet. The length of the bridges alone is 2,300 linear feet. These measures do not include the privately owned pedestrian bridges in front of Treasure Island, the Venetian, and the Wynn.

Exhibit 18

Deposition of William H. Sousa

McAllister et al., vs Clark County, et al.

Deposition of

WILLIAM H. SOUSA

April 29, 2025



CCR Firm 064F

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UNITED STATES DISTRICT COURT

DISTRICT COURT OF NEVADA

LISA MCALLISTER, an individual; BRANDON SUMMERS, an individual; and JORDAN POLOVINA, an individual, Plaintiffs, vs. CLARK COUNTY, political subdivision of the state of Nevada, Defendant.	CASE NO. 2:24-cv-00334

DEPOSITION OF WILLIAM H. SOUSA

Taken on Tuesday, April 29, 2025

At 8:51 a.m.

At 4362 W. Cheyenne Avenue

North Las Vegas, Nevada 89032

Reported by: JoAnn Melendez, CCR 370

A. That is my opinion I suppose. Yes, that's true.

Q. And just to clarify, when did you write the report?

A. The report would have been written over the course of 2023. It would have been mostly in the spring of '23 and summer of '23.

Q. So when would your opinion have been finalized in the report?

A. I believe it was finalized in the summer of '23, yes.

Q. Okay. So as of summer of '23, it was your opinion that the pedestrian bridges had higher levels of disorder than the grade level sidewalk in the strip corridor?

A. Correct. But that's based on data from -- that's based on a timeframe until 2022. So the timeframe is 2018 to 2022. So during that time is what I'm basing this opinion on.

Q. Okay. And I'm gonna get to the data analysis a little bit later, but I wanted to maybe clarify a few things inside of the subpoena.

Can you define disorder for me?

A. So disorder is synonymous with -- disorder refers to minor offenses, sometimes

synonymous with incivilities or quality of life issues. It relates to problems that are -- don't necessarily rise to the level of serious crime, but they're nonetheless concerns for citizens. Well, concerns for everyone in public life.

Q. Can you tell me what activities are included in the concept of disorder?

A. So disorder is often dis -- it is -- the academic literature will distinguish between two types of disorder. There's social disorder and then there's physical disorder.

Social disorder is associated with specific behaviors. So drug use in public, alcohol use in public, prostitution, aggressive panhandling. These types of active behaviors.

Physical disorder are more or less existing conditions. So the examples of that would be things like graffiti, trash and litter, broken windows, broken glass, locations where there's evidence of public urination or public defecation. Places like that.

Q. When you refer to social disorder, does that only refer to criminal activity?

A. Not necessarily in the academic sense, no. It doesn't necessarily -- it often is criminal

activity, but it's not necessarily criminal activity. Yes.

Q. Are all forms of criminal activity considered a form of disorder?

A. In the academic sense, no. Not in the way that -- that disorder is being defined in the academic sense, no.

Q. So what sorts of criminal activities would constitute disorder?

A. What sorts of criminal activities --

Q. Yeah.

A. -- would constitute disorder?

Q. Yeah.

A. Street level prostitution, the street level drug dealing, street level drug use would be considered to be.

Q. And what noncriminal activities would be considered a form of disorder?

A. Well, this is where things get contextual in terms of the academic definition of disorder.

So for example, in some places begging in front of an ATM machine is not illegal, but in -- but one could build the argument in the academic sense that that is still a form of disorder because it generates -- even though in that location or in

that municipality or in that jurisdiction it's not an illegal act, it generates fear and intimidation on the part of the person observing it.

Q. In the context of the pedestrian bridges in the strip corridor, what noncriminal activities would be considered disorder?

A. Within the strip corridor, everything is contextual. So what I would say is that one of -- the accumulation of disorder, for example, can create disorder.

So for example, a group of youth is not illegal nor is it typically a problem, but if you have a group of youth who's blocking an entire sidewalk and not allowing people through, then that would become disorder.

Q. Are there any specific acts that would be considered disorder in and of themselves that are noncriminal?

A. No. It would be mostly contextual.

Q. So would solicitation on the pedestrian bridges in the strip corridor, would that be a form of disorder?

A. It is contextual. So what I would argue is that many people soliciting in a relative or confined area to the point that people are unable to

move or if the activity's designed in particular on the bridges, if the activity's designed to get people to stop, then that would be generating a crowd and could be potentially disorder related.

Q. I know you've mentioned stopping a few times. Is there any -- I guess going back to solicitation, is there any time where solicitation is not meant to have someone stop?

A. Is there any time that solicitation is not meant to have someone stop.

MR. BROWNING: Form, speculation.

BY MR. PETERSON:

Q. You've mentioned that it can be a form ever disorder if it's intended to make people stop and engage with the person, correct?

A. Right. I mean, typically that's what's done in term of solicitation in terms of what I've seen. I suppose someone could be soliciting from -- well, I don't -- I don't envision, I can't recall any time someone has not asked -- done solicitation without asking people to stop, so.

Q. Is that true also for panhandling?

A. Yes, generally.

Q. What about street performing?

A. That would the same to -- that it's just

designed essentially to have people stop to watch or at least stop to give a handout.

Q. Now, I'm gonna just jump ahead to something. We're gonna talk a little bit more about your other work related to the strip further along in the deposition, but I think it might be worth just briefly jumping in here.

You've previously studied disorder on -- in the Las Vegas strip corridor; is that correct?

A. Correct.

Q. Okay. And you did that by conducting surveys with people who were passing through the strip corridor; is that right?

A. Correct.

Q. And those surveys were asking about specific types of social disorder; is that correct?

A. Yes. There may have been some questions related to physical disorder as well but certainly social disorder.

Q. Now -- I'm sorry. Let me just pull that up. All right. And just to be clear, that resulted in a paper titled 'Perception to Disorder Results from Two Las Vegas Tourist Locations'; is that right?

A. That's correct.

on the sidewalks or bridges, yes.

Q. Would that be a form of social disorder?

A. So yes, I could build the argument. Again, it's contextual.

Q. Can you -- can you maybe explain that to me?

A. Someone who is quote selling CDs who jams a CD in someone's hand and then backs up and says, you took that CD, now give me money for that CD.

Q. So more broadly, is that a form like aggressive sales tactics, is that a form of disorder?

A. Right.

Q. Now, going back through this, you know, you talked about solicitation, panhandling, street performing, street peddlers.

If the person interacting with these people found that they're going to be irritating, not necessarily intimidating but irritating, would that be a form of social disorder?

A. In the academic sense, yes.

Q. Okay.

A. You can see something is irritating and recognize it as disorder without necessarily being intimidated by it if that's what your question was.

pedestrian flow and restrictions based upon those established patterns, would those address your concerns?

MR. BROWNING: Same objections.

THE WITNESS: And it's very difficult to answer the question. If you were to show me data that on every single pedestrian bridge at any given time there's only one person on it ever, then I'd answer that question a certain way, but I suspect that data does not exist.

BY MR. PETERSON:

Q. Are you aware -- actually, I think maybe that might be a good time to move on to the data that you relied upon in reaching your opinion.

A. Uh-huh.

Q. But before that I do that, are you familiar with the term pedestrian level of service?

A. Pedestrian level of surface.

MR. BROWNING: Objection; scope, calls for expert testimony outside this expert's field.

THE WITNESS: I -- I mean, I can -- no, I don't, I don't, no. I can -- I mean, I know what those words mean, but I don't know if it's in this specific context.

BY MR. PETERSON:

Q. Any studies specifically in the context of bridges?

A. No. Well, not that I'm aware of.

Q. Any -- let's see. Any studies -- sorry. You've also argued that stopping and standing contributes to disorder.

Do you have any evidence to support that happening specifically on the pedestrian bridges?

A. Specifically on the pedestrian bridges, no.

Q. What about more generally?

A. Some disorder is specifically designed to get people to stop. And so I would build that argument that if you're intentionally getting people to stop, then that is creating scenarios that are potentially concerning for purposes of crowds and then what could happen on the bridge.

Q. So maybe let me break this out. First stopping and standing and then talking about having -- convincing someone else to stop and stand.

Do you have any studies indicating that stopping and standing in of itself contributes to disorder?

A. Any studies saying that standing in and of itself contributes to disorder. I don't have any

specific studies stating that, no.

Q. Do you have any evidence that supports your contention that stopping and standing on the pedestrian bridges contributes to disorder?

A. When you're saying evidence, do you mean I have anecdotal evidence. If you're talking about systematic evidence, then no.

Q. That you relied upon for your opinion in this matter.

A. No.

Q. Now, talking about trying to convince someone else to stop or stand, maybe I'll just say convincing someone else to stop might be a better way of phrasing it.

Do you have any evidence that people trying to convince other people to stop contributed to disorder on the pedestrian bridges?

A. Again, if you're asking for anecdotal, then I have. If you're asking for systematic, then no.

Q. I'm just asking for evidence that you relied upon in establishing your opinions in this matter?

A. Well, experiential knowledge is part of knowledge. And so when developing a more

theoretical argument for something, then it is entirely allowable to do that, but I'm not basing any statistical conclusion on anything.

Q. So I guess my question, you know, what you're saying there is that you're talking about sort of the scientific methods you have a hypothesis and your hypothesis is based on your experience?

A. You can develop hypothesis based on experiences, yes.

Q. Have you done anything to prove your hypothesis in this matter?

A. On the bridges?

Q. Uh-huh.

A. No.

Q. Okay. Have you -- do you have any studies establishing that trying to convince someone to stop contributes to disorder?

A. That is a difficult question to answer because there are studies that demonstrate that disorder can lead to more disorder and some of that disorder will involve getting people to stop, but the precision of that connection that you're asking about, I don't have any evidence nor do I know of any studies that establish the precision of that causal linkage.

the bridges would result in actually increased criminal activity?

A. The potential was there. Again, when people are close enough to physically touch, then there's the propensity for that. It's not necessarily an inevitability. Again, we're dealing more with probability than with certainty, so there's the possibility of that. So yes.

Q. Do you have any evidence proving that hypothesis?

A. No. I don't have any specific link between an act of disorder on the bridge and a criminal act.

Q. And in making that statement in your report, you're relying upon -- let me just pull it out -- 'Sexual Harassment and Violence at Music Concerts and Festivals' by Miliaikeala Heen and Joel Lieberman?

A. Yes.

Q. Okay. Did I pronounce her first name correctly?

A. Milia -- Miliaikeala.

Q. Is that -- is she a professor at UNLV?

A. She is now. I don't believe she was when that document was produced.

people close enough to physically touch is the language that's typically used.

Q. Does Fruin give the metric of seven people per square meter?

A. I don't remember that, but that might be in there.

Q. Are you aware of anytime where there's been a crowd density of seven people per square meter on the pedestrian bridges?

A. I don't have that information. Again, I can't say.

Q. Do you know what the maximum recorded crowd density on a --

(Court reporter clarification.)

BY MR. PETERSON:

Q. Do you know what the maximum crowd density reported on the bridges has been?

A. I do not.

Q. Are you aware of any studies defining that rigid boundaries in and of themselves on -- sorry.

Are you aware of any studies that find that rigid boundaries in themselves surrounding an area contribute to crowd density?

A. Am I aware of studies saying that rigid

there was a crowd crush is less likely. But if you're asking if there's a specific study that demonstrates that, then I'm not aware of it, no.

Q. We touched upon this earlier, but I do have one additional question I don't think I've asked. I want to go to -- let me see. The last page, page six.

You say, Once obstructions have occurred, however, it may be too late to prevent their more serious consequences, including the elevated risk of injury to pedestrians and the increased difficulty for first responders to quickly manage emergencies. A prohibition on obstruction is therefore insufficient because such a prohibition will not address the problematic conditions that create obstructions in the first place.

Do you have any evidence that there were any unremedied obstructions on the pedestrian bridges before the stopping and standing ban went into effect?

A. No.

Q. Do you have any evidence that indicated that the preexisting laws were insufficient to address the concerns that you're raising here today?

A. They are certainly sufficient for

purposes of first responders and their opinion. If you're asking for concrete data, then the answer is no. If you're asking for my opinion on it, then I would say that obstruction is not -- that the problem is already there, so.

Q. And yeah, I'm asking do you have any concrete evidence supporting that hypothesis?

A. No.

Q. And then finally you say, The main safety concern on the bridges stems from people who stop or congregate.

What evidence do you have to support that contention?

A. I'm -- this is based on my opinion. In my opinion, the main safety concern of bridges stems from people who stop and congregate. So if you're asking for concrete evidence like data, then I'm -- there's -- there's no data on people stopping and congregating. All of this is based on theoretical connections to what disorder does, what stopping does and what potential consequences are.

Q. And just to be clear, was it a more serious safety concern -- sorry.

Were people stopping and standing and congregating on the pedestrian bridges the more

serious safety concern than actual criminal activity on the bridges?

A. Was that a concern that actual criminal activity. They are very different concerns. So I don't know that there -- it would be more of a concern. Define criminal activity, serious criminal activity.

Q. Well, I think you have used that term in other places in other studies.

So I guess the question is putting aside serious criminal aside, what about just simply criminal activity?

A. If there's a lot of criminal activity going on, then I think that would be a problem. And if this is related to people stopping, would be a problem as well. One leads to crowded conditions and one theoretically could take place in crowded conditions or not crowded conditions, but is also problematic. I think we would try to prevent both if you're asking me.

Q. And just to clarify, you had no data on how many people were actually stopping and standing on these bridges; is that correct?

A. No. It would be no.

Q. And you had no data establishing what the

actual cause and effect of people stopping and standing on these bridges was; is that fair to say?

A. It's fair to say that I don't have a connection, that's right.

Q. All right. I'm just gonna talk -- I think we'll be able to move through this relatively quickly. We're kind of nearing the last stretch.

A. Do you want this back?

Q. Let's just keep it flat here so we -- I don't -- actually, I want to ask you just a question about your statute real quick.

A. Okay.

Q. You used the term statistically significant earlier when we kind of going through the data.

A. Right.

Q. Can you explain generally what it means for statistically significant?

A. So statistically significance is related to when you, for example, when you're comparing a change from one time to another or comparing one group to another.

Statistically significance is whether the difference in that group or that time is sufficient that we would say that it's not the result of chance

CERTIFICATE OF WITNESS

PAGE	LINE	CHANGE	REASON

* * * * *

I, William H. Sousa, Jr., witness herein, do hereby certify and declare under penalty of perjury that the within and foregoing transcript, including any corrections stated above, is a true and correct transcription of my testimony contained therein; that I have read, corrected and do hereby affix my signature to said deposition taken on Tuesday, April 29, 2025.

Executed this day of 2025, at .
(City/State)

William H. Sousa, Jr., Witness

CERTIFICATE OF REPORTER

STATE OF NEVADA)
SS:
COUNTY OF CLARK)

I, JoAnn Melendez, Certified Court Reporter in the State of Nevada, do hereby certify:

That I reported the taking of the deposition of the witness, William H. Sousa, Jr., commencing on Tuesday, April 29, 2025, at 8:51 a.m.

That prior to being examined, the witness was by me duly sworn to testify to the truth.

That the foregoing transcript is a true, complete, and accurate transcription of the stenographic notes of the testimony taken by me in the matter entitled herein to the best of my knowledge, skill, and ability.

That prior to the completion of the proceedings, the reading and signing of the transcript was requested by the witness or a party.

I further certify that I am not a relative or employee of an attorney or counsel of any of the parties, nor a relative or employee of an attorney or counsel involved in said action, nor a person financially interested in the action.

IN WITNESS WHEREOF, I have hereunto set my hand in my office in the County of Clark, State of Nevada, this 22nd day of May 2025.

JoAnn Melendez

JoAnn Melendez, CCR 370

Exhibit 19

Deposition of Andrew Walsh, 30(b)(6) Designee for Non-Party Las Vegas Metropolitan Police Department

McAllister, et al. v. Clark County

Deposition of:
Andrew Walsh

September 23, 2025

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UNITED STATES DISTRICT COURT

DISTRICT COURT OF NEVADA

LISA MCALLISTER, an individual; BRANDON SUMMERS, an individual; and JORDAN POLOVINA, an individual,	)	
Plaintiffs,	)	CASE NO.
vs.	)	2:24-cv-00334
CLARK COUNTY, a political subdivision of the state of Nevada,	)	
Defendant.	)	

DEPOSITION OF ANDREW WALSH

30(B)(6) Las Vegas Metropolitan Police Department

Taken on Tuesday, September 23, 2025

At 9:01 a.m.

At the Law Offices of McLetchie Law

602 South Tenth Street

Las Vegas, Nevada

FIRM NO. 021F JOB NO. 29175

REPORTED BY: DANA TAVAGLIONE, RPR, CCR 841

of -- I could see her husband, but I can't think of his last name.

BY MR. PETERSON:

Q. And just to clarify, this Administrative Notice was intended to give guidance to your employees on how to enforce Clark County Code 16.13.030?

A. Yes.

Q. Now, it is also based upon LVMPD's understanding of the law?

MR. WHITMIRE: Object. Scope.

THE WITNESS: Yes.

BY MR. PETERSON:

Q. Okay. Now, on this Administrative Notice, there's a date of February 7th, 2024; is that correct?

A. Yes.

Q. All right. Is that the date that the Administrative Notice would have been promulgated to the employees?

A. Yes.

Q. Okay. Do you know when this Administrative Notice was first -- I'm sorry. I'm going to take this back. Let me say this more clearly.

Do you know when LVMPD first began drafting

enforcement or warning or education.
BY MR. PETERSON:
Q. Is this Administrative Notice still active today?
A. Yes.
Q. Did LVMPD consult with Clark County in creating this Administrative Notice?
A. I don't know.
Q. Is this something that -- and just to clarify, when you say you don't know, are you saying that you, Undersheriff Walsh, don't know or LVMPD does not know?
MR. WHITMIRE: Object. Scope. Well, go ahead.
THE WITNESS: I don't know if anybody at the Las Vegas Metropolitan Police Department consulted with anybody within Clark County.
BY MR. PETERSON:
Q. Is there anyone at LVMPD that would know that information?
MR. WHITMIRE: Object. Scope.
THE WITNESS: I would guess perhaps Liesl Freedman, who was our general counsel at the time.
BY MR. PETERSON:
Q. Okay. So looking at this Administrative

congregating or causing others to stop, except for incidental viewing purposes?

MR. WHITMIRE: Object to scope.

THE WITNESS: Yes.

BY MR. PETERSON:

Q. Okay. So, to clarify, it is LVMPD's position that the ordinance does not prohibit people from stopping, standing, or congregating if they do so for incidental viewing purposes?

MR. WHITMIRE: Object to form. Scope.

THE WITNESS: Yes.

BY MR. PETERSON:

Q. Do you know why LVMPD has exempted incidental viewing purposes from other forms of stopping, standing, or congregating that would be prohibited by Clark County Code 16.13.030?

MR. WHITMIRE: Object. Scope.

THE WITNESS: Yes.

BY MR. PETERSON:

Q. Why?

A. Well, there's a couple of things to consider. One is people will stop and -- on the bridge and look north, south, east, west, take a picture of a casino, take a picture of something exciting on the strip, take a selfie. People will,

also incidental in nature.

Q. And we'll come back to that.

I actually want to ask a few more questions about the term "incidental viewing purposes." In determining whether or not someone has stopped for incidental viewing purposes, does LVMPD consider whether or not the stop was intentional?

MR. WHITMIRE: Object to -- object. Scope.

MR. BROWNING: Legal conclusion. Join.

THE WITNESS: Yes.

BY MR. PETERSON:

Q. All right. If someone stops intentionally for incidental viewing purposes, does LVMPD consider that a violation the of Clark County Code 16.13.030?

A. No.

Q. Okay. Does LVMPD have a set length of time that's allowed if someone stops for incidental viewing purposes?

A. No.

Q. What is LVMPD's basis to believe that incidental viewing purposes are permitted under Clark County Code 16.13.030?

MR. WHITMIRE: Objection on that one, scope.

MR. BROWNING: Speculation. Join.

THE WITNESS: I believe it's from the intent of the laws to not -- it's my interpretation of the intention of the law is to not take any type of education, enforcement, or warning action against people that stop to take a photograph.

BY MR. PETERSON:

Q. And when you say "it's my," are you referring to LVMPD's interpretation of the law?

MR. WHITMIRE: Objection. Scope.

THE WITNESS: It's my interpretation of the law. So I guess I speak on behalf of Metro, like you said earlier. So, yes, that's our interpretation of the law.

BY MR. PETERSON:

Q. You referred to the intent of the law. How did you determine that the intent of the law did not include incidental viewing purposes?

A. I believe at the Clark County Commission hearing where this was passed, there was testimony from a county attorney that stated that.

Q. Was that attorney Lisa Logsdon?

A. Yes.

Q. Okay. Anything else?

A. No.

Q. Okay. Is it LVMPD's understanding that they

determined -- sorry. Sorry. Let me think about this for a minute. Now I want to ask you, you mentioned when describing the activities that be exempted from the ordinance, I believe you said something about taking a picture; is that correct?

A. Yes.

Q. Okay. So is it LVMPD's understanding that taking a picture would be exempted from 16.13.030?

A. Yes.

Q. All right. What is the basis to believe that taking a picture, stopping -- sorry. Let me rephrase that. What is the basis to believe that stopping to take a picture is allowed under Clark County Ordinance 16.13.030?

A. Our, Metro's interpretation of the law is, my interpretation as well, is that this is for flow, the flow of pedestrian traffic. Somebody stopping to take a photograph is not directly related to what was causing the disorder issues on the bridges. So the intent of the law was to reduce the disorder. If someone is stopping to take a photograph and promote that type of -- to promote that type of behavior is not harmful to us in any way.

Q. So -- I'm sorry. Could you say that just one more time, please.

A. Yeah, I don't think that the intent of the law is to stop people from stopping to take a photograph of the many iconic things that you can see from the bridges on Las Vegas Boulevard and the resort corridor.

Q. I think you said something about taking a photograph does not contribute to the disorder on the pedestrian bridge; is that correct?

A. Yes.

Q. So just to clarify, is it LVMPD's position that stopping or standing that does not contribute to the disorder on the pedestrian bridges is exempted from Clark County Ordinance 16.13.030?

A. Yes.

Q. Okay. Is that reflected in the language of Clark County Ordinance 16.13.030?

A. I haven't read the ordinance in awhile. I'd have to see it again.

MR. PETERSON: Okay. I will come back to that. Okay. Now, going back specifically to the photograph --

Can I mark this. I believe we're at Exhibit 3; is that right?

THE REPORTER: Yes.

/ / /

others have interpreted it that way.

Q. And when you say you have your own interpretation, you're referring to Undersheriff Walsh?

A. Yes.

Q. Your own interpretation?

A. And as a representative of Metro, that is how we interpret this ordinance and what the intentions are.

Q. Okay. Have you communicated your understanding of the ordinance to defendant, Clark County?

A. No. I personally? No.

Q. Has LVMPD?

MR. WHITMIRE: Object. Scope.

THE WITNESS: The Administrative Notice is a public record. I believe from the county commission meeting, that was what everybody understood was the intent of the ordinance, so.

BY MR. PETERSON:

Q. Okay.

A. I may have testified to that at the county commission meeting as well.

Q. Is it correct to say that LVMPD has directed its officers to, quote, "not enforce incidental

stopping," end quote?

A. Yes.

Q. Okay. Can you explain what "incidental stopping" means.

A. Tying your shoe, stopping to pick something up if you dropped it, stopping to take a photograph.

Q. How long is an incidental stop?

A. Couple seconds. Couple -- long enough to take a photograph and keep moving, however long that would take.

Q. Has LVMPD provided guidance to its officers as to what the length of an incidental stop would be?

A. No.

Q. Have they provided any guidance on where an incidental stop -- an acceptable incidental stop may occur on the pedestrian bridges?

A. It could occur anywhere on the pedestrian bridge.

Q. Okay. Now, LVMPD has provided guidance to its officers that an incidental stop would include tying your shoe; is that correct?

A. Yes.

Q. LVMPD has provided guidance to its officers that an incidental stop would include taking photographs?

A. Yes.

Q. LVMPD has provided guidance to its officers that incidental stop would include stopping to view the strip?

A. Yes.

Q. Is there any other conduct that LVMPD has described to its officers as being only an incidental stop that they should not enforce?

A. It's kind of a -- no. I don't know of any other in addition to the ones you mentioned, but it's -- all the examples are provided to the work force so that if there are other examples, the officers have discretion to understand that something that is incidental -- I could think of a variety of things that would be incidental, that officers could consider incidental.

Q. Did LVMPD make the decision -- oh, sorry. Let me think. Did LVMPD determine that incidental stopping is exempted from Clark County Ordinance 16.13.030 based upon its own internal enforcement authority?

MR. WHITMIRE: Objection. Scope.

THE WITNESS: Yes.

BY MR. PETERSON:

Q. Okay. So even if this -- even if incidental

A. Possible. I mean, she's -- I probably have calls with her. But if it was specific to this, I don't recall. This was around the same time that F1 was going on for the first time, I believe, and so it wouldn't have been out of the realm of possibility that I had phone conversations with her.

Q. Now, I want to talk a bit about your communications with the county. Now, prior to the passage of Clark County Ordinance 16.13.030, did LVMPD discuss with you, the county ordinance agents, whether or not time-based restrictions on the pedestrian bridges would have addressed the concerns that Clark County Ordinance 16.13.030 were meant to address?

A. Time-place restrictions doesn't sound familiar.

Q. So to your knowledge, there was no discussion about that?

A. To my knowledge, I don't recall that.

Q. Okay. Prior to the passage of Clark County Ordinance 16.13.030, did LVMPD discuss with the county the possibility of restrictions on specific bridges in alternative to passing Clark County Ordinance 16.13.030?

A. Not that I'm aware of.

MR. PETERSON: No. I had a bunch of ordinances drafted up in a document.

MR. WHITMIRE: What page?

MR. BROWNING: See, that's the thing. I don't know what page it is.

EXAMINATION

BY MR. BROWNING:

Q. Could you turn with me to 16.13.010, if you can find it, please. Is 16.13.010 in there, or --

A. Yes.

Q. It should be. All right. And would you mind reading that first paragraph to yourself.

A. The purpose?

Q. Correct. Just so you're familiar with it. Let me know when you're finished.

A. (Witness complies.) I'm finished.

Q. Okay. Do you see anything in that paragraph that supports LVMPD's position that incidental stopping is not intended to be covered by the subject ordinance?

A. Yes.

Q. And what portion is that?

A. The sentence starts with: "The parameters include that pedestrians would not stop, stand, or

congregate, other than for incidental and fleeting viewing of the Las Vegas strip from the pedestrian bridge."

Q. So then would you say that Metro's enforcement policy of the subject ordinance is consistent with the purpose as defined in section 16.13.010?

A. Yes.

MR. BROWNING: That's it. I have no further questions.

THE WITNESS: I messed up my pile.

MR. BROWNING: I'm not going to ask any more questions.

MR. WHITMIRE: I always love it when I see another lawyer have that quizzical look of what the hell does that post-it note mean and making the strategic call.

MS. McLETCHIE: It also helps that my handwriting is the worst in the world.

MR. PETERSON: Yeah, it's --

MR. WHITMIRE: I'm not sure if I'd agree with that.

MS. McLETCHIE: But I think we're done.

MR. PETERSON: Yeah, I think I have no further questions.

CERTIFICATE OF DEPONENT

PAGE	LINE	CHANGE	REASON

* * * * *

I, ANDREW WALSH, deponent herein, do hereby certify and declare the within and foregoing transcription to be my deposition in said action; under penalty of perjury; that I have read, corrected and do hereby affix my signature to said deposition.

_____

ANDREW WALSH Deponent Date

CERTIFICATE OF REPORTER

I, Dana J. Tavaglione, a Certified Court Reporter, licensed by the State of Nevada, do hereby certify:

That I reported the deposition of the witness, ANDREW WALSH, commencing on September 23, 2025, at 9:01 a.m.;

That prior to being examined, the witness was by me first duly sworn to testify to the truth, the whole truth, and nothing but the truth; that I thereafter transcribed my related shorthand notes into typewriting and that the typewritten transcript of said deposition is a complete, true and accurate record of testimony provided by the witness at said time.

I further certify (1) that I am not a relative or employee of an attorney or counsel of any of the parties, nor a relative or employee of any attorney or counsel involved in said action, nor a person financially interested in the action; and (2) that pursuant to Rule 30(e), transcript review by the witness was not requested.

IN WITNESS HEREOF, I have hereunto set my hand, in my office in the County of Clark, State of Nevada, this 7th day of October 2025.

Dana J. Tavaglione

DANA J. TAVAGLIONE, RPR, CCR NO. 841