

**Location:**



**REGIONAL TRANSPORTATION COMMISSION**  
**1105 Terminal Way, 1<sup>st</sup> Floor Great Room, Reno, NV**  
**Date/Time: 8:00 A.M., Friday, June 21, 2024**

**REGIONAL TRANSPORTATION COMMISSION**  
**OF WASHOE COUNTY**  
**BOARD MEETING AGENDA**

- I. The Regional Transportation Commission Great Room is accessible to individuals with disabilities. Requests for auxiliary aids to assist individuals with disabilities should be made with as much advance notice as possible. For those requiring hearing or speech assistance, contact Relay Nevada at 1-800-326-6868 (TTY, VCO or HCO). Requests for supporting documents and all other requests should be directed to Michelle Kraus at 775-348-0400 and you will receive a response within five business days. Supporting documents may also be found on the RTC website: [www.rtcwashoe.com](http://www.rtcwashoe.com).
- II. This meeting will be televised live and replayed on RTC's YouTube channel at: [bit.ly/RTCWashoeYouTube](https://bit.ly/RTCWashoeYouTube)
- III. Members of the public in attendance at the meeting may provide public comment (limited to three minutes) after filling out a request to speak form at the meeting. Members of the public that would like to provide presentation aids must bring eight (8) hard copies to be distributed to the Board members at the meeting. Alternatively, presentation aids may be emailed, in PDF format only, to [mkraus@rtcwashoe.com](mailto:mkraus@rtcwashoe.com) prior to 4:00 p.m. on the day preceding the meeting to be distributed to the Board members in advance of the meeting. Members of the public may also provide public comment by one of the following methods: (1) emailing comments to: [rtcpubliccomments@rtcwashoe.com](mailto:rtcpubliccomments@rtcwashoe.com); or (2) leaving a voicemail (limited to three minutes) at (775) 335-0018. Comments received prior to 4:00 p.m. on the day preceding the meeting will be entered into the record.
- IV. The Commission may combine two or more agenda items for consideration and/or may remove an item from the agenda or delay discussion relating to an item on the agenda at any time.
- V. The supporting materials for the meeting will be available at <https://rtcwashoe.com/news/board-meeting-notes/>. In addition, a member of the public may request supporting materials electronically from Michelle Kraus at the following email address: [mkraus@rtcwashoe.com](mailto:mkraus@rtcwashoe.com).

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**1. Call to Order:**

- 1.1. Roll Call
- 1.2. Pledge of Allegiance
- 1.3. Special Recognitions
  - 1.3.1 Keolis Utility Worker Scott West

**2. Public Comment:** *Public comment taken under this item may pertain to matters both on and off the agenda. The Chair may take public comment on a particular item on the agenda at the time it is discussed. Comments are to be made to the Board as a whole and not to individual commissioners.*

**3. Approval of Agenda (For Possible Action)**

**4. Consent Items (For Possible Action):**

- 4.1. Minutes
  - 4.1.1 Approve the meeting minutes for the 05/17/2024 RTC Board meeting. (For Possible Action)
  - 4.1.2 Approve the meeting minutes for the 05/23/2024 RTC Special Board meeting. (For Possible Action)

## 4.2. Reports

- 4.2.1 Acknowledge receipt of the monthly Procurement Activity Report. (For Possible Action)
- 4.2.2 Acknowledge receipt of the monthly Planning Activity Report. (For Possible Action)
- 4.2.3 Acknowledge receipt of the Summary Report for the Technical, Citizens Multimodal, and Regional Road Impact Fee Advisory Committees. (For Possible Action)
- 4.2.4 Acknowledge receipt of the monthly Engineering Activity Report. (For Possible Action)
- 4.2.5 Acknowledge receipt of the monthly Public Transportation and Operations report. (For Possible Action)
- 4.2.6 Acknowledge receipt of monthly Community and Media Outreach Activities Report. (For Possible Action)

## 4.3. Planning Department

- 4.3.1 Approve Cooperative Agreement No. PR284-24-802 between the Nevada Department of Transportation (NDOT) and the Regional Transportation Commission (RTC) for fiscal year (FY) 2025 federal planning funds. (For Possible Action)

## 4.4. Engineering Department

- 4.4.1 Approve an administrative settlement in the amount of \$109,336 authorizing RTC to acquire certain property interests related to APN 013-084-02 from Galantuomini Family Holdings, LLC, for the Mill Street Capacity and Safety Project. (For Possible Action)
- 4.4.2 Approve an administrative settlement in the amount of \$123,631 authorizing RTC to acquire certain property interests related to APN 012-201-21 and APN 012-201-22 from Vaughn, Rory R., for the Mill Street Capacity and Safety Project. (For Possible Action)
- 4.4.3 Approve a contract with J-U-B Engineers, Inc., to perform a feasibility study, conceptual alternatives analysis, and environmental studies for the Geiger Grade Realignment Project, in an amount not-to-exceed \$1,373,975. (For Possible Action)
- 4.4.4 Approve a Regional Road Impact Fee (RRIF) Offset Agreement between RTC, Lemmon Drive Villas Property LLC, and the City of Reno for offset-eligible improvements to be made to the intersection of Lemmon Drive, Vista Knolls Parkway, and Sunset View Drive. (For Possible Action)
- 4.4.5 Approve a Regional Road Impact Fee (RRIF) Offset Agreement between RTC, Lemmon Drive Villas Property LLC, and Washoe County for offset-eligible improvements to be made to the intersection of Lemmon Drive, Vista Knolls Parkway, and Sunset View Drive. (For Possible Action)

## 4.5. Public transportation/Operations Department

- 4.5.1 Approve a contract with Qual-Econ U.S.A. LLC., for janitorial and porter services for the RTC facilities, for a total not-to-exceed amount of \$3,162,190.12 beginning FY25 for four years. (For Possible Action)

## 4.6. Executive, Administrative and Finance Department

- 4.6.1 Authorize the Executive Director to bind annual insurance coverage effective July 1, 2024, for automobile liability, general liability, public officials' errors and omissions (E&O), property, earthquake/flood, crime, cyber, pollution liability, social engineering, fiduciary liability, employment practices liability, and workers'

compensation; and approve the RTC's continued membership in in the Nevada Public Agency Insurance Pool (POOL) and Public Agency Compensation Trust (PACT). (For Possible Action)

**5. Public Hearing:**

- 5.1. Conduct a public hearing regarding approval of Amendment No. 3 to the FFY 2023-2027 Regional Transportation Improvement Program (RTIP); adopt a resolution approving Amendment No. 3 to the FFY 2023-2027 Regional Transportation Improvement Program (RTIP). (For Possible Action)
  - a. Staff Presentation
  - b. Public Hearing
  - c. Action

**6. Discussion Items and Presentations:**

- 6.1. Discuss transportation issues and needs in relation to the Tahoe-Reno Industrial Center as requested by Chair Lawson and provide input and direction to the Executive Director. (For Possible Action)

**7. Reports (Information Only):**

- 7.1. Monthly verbal update/messages from RTC Executive Director Bill Thomas - no action taken.
- 7.2. Monthly verbal update/messages from Paul Nelson, RTC Government Affairs Officer on federal matters related to the RTC - no action will be taken.
- 7.3. Monthly verbal update/messages from NDOT Director Tracy Larkin Thomason or designated NDOT Deputy Director - no action will be taken.

**8. Commissioner Announcements and Updates:** *Announcements and updates to include requests for information or topics for future agendas. No deliberation or action will take place on this item.*

**9. Public Comment:** *Public comment taken under this item may pertain to matters both on and off the agenda. The Chair may take public comment on a particular item on the agenda at the time it is discussed. Comments are to be made to the Board as a whole and not to individual commissioners.*

**10. Adjournment (For Possible Action)**

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Posting locations: RTC, 1105 Terminal Way, Reno, NV, RTC website: [www.rtcwashoe.com](http://www.rtcwashoe.com), State website: <https://notice.nv.gov/>



**REGIONAL TRANSPORTATION COMMISSION**

*Metropolitan Planning • Public Transportation & Operations • Engineering & Construction*

Metropolitan Planning Organization of Washoe County, Nevada

**Meeting Date:** 6/21/2024

**Agenda Item:** 4.1.1

To: Regional Transportation Commission

From: Michelle Kraus, Clerk of the Board

**SUBJECT: Draft Meeting Minutes for 05/17/2024**

**RECOMMENDED ACTION**

Approve the meeting minutes for the 05/17/2024 RTC Board meeting.

**BACKGROUND AND DISCUSSION**

See attached for Background and Discussion.

**FISCAL IMPACT**

There is no fiscal impact related to this item.

**PREVIOUS BOARD ACTION**

There has been no previous Board action taken.

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**REGIONAL TRANSPORTATION COMMISSION  
WASHOE COUNTY, NEVADA**

**FRIDAY**

**10:01 A.M.**

**May 17, 2024**

**PRESENT:**

**Ed Lawson, Mayor of Sparks  
Alexis Hill, Vice Chair, Washoe County Commissioner  
Devon Reese, Reno City Council  
Mariluz Garcia, Washoe County Commissioner**

**Bill Thomas, RTC Executive Director  
Adam Spear, Legal Counsel  
Tracy Larkin Thomason, Director of NDOT**

**ABSENT:**

**Hillary Schieve, Mayor of Reno**

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The regular monthly meeting, held in the 1<sup>st</sup> Floor Great Room at Regional Transportation Commission of Washoe County, Reno, Nevada, was called to order by Chair Lawson. The Board conducted the following business:

***Item 1           CALL TO ORDER***

- 1.1 Roll Call
- 1.2 Pledge of Allegiance
- 1.3 Special Recognition
  - 1.3.1 National Public Works Week Proclamation read by Bill Thomas, Executive Director.

***Item 2           PUBLIC INPUT***

Chair Lawson opened the meeting to public input and called on anyone wishing to speak on topics relevant to the Regional Transportation Commission (RTC) that are not included in the current agenda.

Zachary Allen, Director Thomas, board members. My name is Zachary Allen. I own Robert Allen Pools and spawns. I'm on your topic on the agenda today for ZR Enterprises. My dad started it close to 30 years ago. We've been in the same location the whole time. It is my understanding, and I'm not an attorney, but in review reading the Nevada law as of 2007 that an individual such as myself who is going through an eminent domain process here shall be placed in the same monetarily position as if this eminent domain had never happened. I've been very fortunate to find ourselves a new location pretty close by. This new location comes with a nice bank loan and the banks loving me right now to where I'm really hoping that we can see a resolution here sooner than later for all project and how it pertains to us and the individuals who work for me, the 20 plus employees and your, you know, we're a staple member of this community. I hope to continue to provide our services to the Community and through Northern Nevada as we have for many years. I hope that we can come to this resolution in a timely fashion, as it is costing us, you know, tremendous amounts of money. I really just appreciate your guys' time and consideration and hearing me here today that I hope to come to a resolution here sooner than later. I'd really like to have seen maybe a meeting with you guys by now. I know that hasn't happened quite yet, but you know, I like to think I'm a pretty fair and reasonable person.

Theo Nicholas, I'm a Reno resident. I'm here today on behalf of the Washoe County Household Travel Survey that I took back in March of this year. Upon completion of the survey, I was promised a travel card by the surveyor. To this day, I've never received anything, and I don't know if it's just miscommunication, but that is my issue today. Thank you.

Michael Gawthrop-Hutchins emailed a public comment on May 14, 2024 @ 2:18 p.m. as follows: This seems to be outside the purview of the proposed amendment to the Regional Transportation Improvement Plan as agendized, so I understand that it is not something that could be fully addressed during this meeting, but I would appreciate if the RTC were willing to contemplate implementing a policy to include multimodal improvements to every project going forward, regardless of whether or not such improvements had originally been included in that project. With a typical street going decades between major rehabilitation projects, and Reno/Sparks already being one of the most dangerous regions for pedestrians and cyclists in the country, we simply cannot afford to have any project that will lock in an unsafe design for potentially an entire generation. We can't go back in time and undo the mistakes of the past, but it isn't too late to commit to not making the same mistakes again, and it isn't too late to start fixing the mistakes of the past.

On that topic, RTC should also embrace rapid deployment solutions that have proven successful in other cities. There is very little that prevents RTC from very rapidly converting any street with both parking and bike lanes into a street with parking protected bike lanes (it could literally be done with paint for a bare minimum job, and options for flexi poles and/or parking space stops for more mid grade, but still very cheap upgrades, even high end options like adding a curb ought not be overly expensive). There is little to prevent the RTC from converting almost every "buffered" bike lane into a protected bike lane via the use of parking space stops. There is little to prevent RTC from creating ad hoc neckdowns and/or pedestrian bulb out simulacrum using low concrete planters. Not only would these rapid deployment strategies make for the quickest means of improving pedestrian and cyclist safety, but they would allow for (lack of better terms) beta testing of designs in the real world as they would also be very quick to modify.

There being no one else wishing to speak, Chair Lawson moved to Approval of the Agenda.

***Item 3            APPROVAL OF AGENDA***

Vice Chair Hill suggested two changes to the Agenda. First, I would like to ask that 5.1 be removed. This item will be brought back to the board in June after it is brought to the CMAC committee, and that procedural step will be taken by our team.

Second, I would ask that 4.41 be removed from the consent agenda to be considered by the board after 6.3 for the board to receive a report on the Mill Street project before the board is asked to consider 4.41. Thank you, Mr. Chairman, and that's in the form of a motion.

On motion of Vice Chair Hill to approve agenda with the two changes being made, seconded by Commissioner Reese, which motion unanimously carried, Chair Lawson ordered that the agenda for this meeting be approved.

**Items 4      CONSENT ITEMS**

**4.1      Minutes**

- 4.1.1 Approve the meeting minutes for the 04/19/2024 RTC Board meeting. (For Possible Action)

**4.2.      Reports**

- 4.2.1 Acknowledge receipt of the monthly Procurement Activity Report. (For Possible Action)
- 4.2.2 Acknowledge receipt of the monthly Planning Activity Report. (For Possible Action)
- 4.2.3 Acknowledge receipt of the monthly summary report for the Technical, Citizens Multimodal, and Regional Road Impact Fee Advisory Committees. (For Possible Action)
- 4.2.4 Acknowledge receipt of the monthly Engineering Activity Report. (For Possible Action)
- 4.2.5 Acknowledge receipt of the monthly Public Transportation and Operations Activity Report. (For Possible Action)
- 4.2.6 Acknowledge receipt of the monthly Outreach Report from the Communications staff. (For Possible Action)

**4.3      Planning Department**

- 4.3.1 Acknowledge receipt of a report regarding the status of the 2050 Regional Transportation Plan (RTP) Update. (For Possible Action)
- 4.3.2 Approve the FY 2025 Shared Work Program with the Truckee Meadows Regional Planning Agency (TMRPA). (For Possible Action)
- 4.3.3 Receive the 2024 Final Report from the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) regarding the federally required Transportation Management Area Planning Certification Review. (For Possible Action)

**4.4      Engineering Department**

- 4.4.1 Approve a Resolution of Condemnation authorizing RTC’s legal counsel to commence condemnation proceedings to acquire a fee simple interest in the entirety of APN 013-082-10, a fee simple interest in a portion of APN 013-082-14, and a temporary construction easement on a portion of APN 013-082-14 from ZRA Enterprises LTD, which are needed to construct the Mill Street Capacity and Safety project. (For Possible Action) *This item will be discussed at the end of Item 6, discussion items and presentations.*

**4.5      Public Transportation/Operations Department**

- 4.5.1 Approve the purchase of fifteen (15) Allstar – FORD E450 CNG Cutaway vehicles from Model 1 Commercial Vehicles (formerly Creative Bus Sales) utilizing the State of Nevada Fleet Vehicles Procurement Contract No. 99SWC-S1495, for an amount not-to-exceed \$3,270,060. (For Possible Action)
- 4.5.2 Approve a contract with RFI Enterprises, Inc., for the Security Cameras and Access Controls Maintenance Agreement for RTC facilities, for a total not-to-exceed amount of \$586,673. (For Possible Action)

On motion of Commissioner Reese to approve agenda, seconded by Vice Chair Hill, which motion unanimously carried, Chair Lawson ordered that the consent items for this meeting be approved.

**Item 5 PUBLIC HEARING**

- 5.1 Conduct a public hearing regarding approval of Amendment No. 3 to the FFY 2023-2027 Regional Transportation Improvement Program (RTIP); adopt a resolution approving Amendment No. 3 to the FFY 2023-2027 Regional Transportation Improvement Program (RTIP). (For Possible Action)
- a. Staff Presentation
  - b. Public Hearing
  - c. Action

*This item was pulled by Commissioner Hill to come back at June 21, 2024 Board meeting.*

**Item 6 DISCUSSION ITEMS AND PRESENTATIONS**

- 6.1 Acknowledge receipt of the 2023 Annual Report. (For Possible Action)

Bill Thomas, Executive Director showed a video on what the RTC has accomplished in the past year. This video is available on our website. I'm very proud of our team and very thankful for the leadership and the support of the board.

A motion to approve was recommended by Adam Spear, RTC Legal Counsel. On motion of Vice Chair Hill to accept the report, seconded by Commissioner Reese, which motion unanimously carried, Chair Lawson ordered the item be approved.

- 6.2 Evaluate the Executive Director's annual performance as it pertains to the duties and obligations of the position and accomplishments for Fiscal Year 2024, and consider approval of a compensation adjustment if the Executive Director's performance has been satisfactory or better. (For Possible Action)

Laura Freed, Director of Administrative Services detailed the process of the evaluation and the results. The Board shall review and rated the executive director's performance at least once annually at, or near the end of the fiscal year. Performance rating is evaluated against the duties and obligations of the position to include evaluation of the performance of mutually agreed upon goals and objectives. Your better performance makes the executive director eligible for an annual salary increase. Additionally, the Board May award a performance bonus between 0 and 5% of the executive director's current base salary that is not in addition to base pay. Any salary increase and any bonus would be effective on July 1st of 2024.

Prior to today's board meeting pursuant to management policy, P01, the board chair met with the executive director to discuss his performance. The evaluation form contained 7 categories for board members to score, the executive director. These categories are management of the organization's execution of policy, financial management, board relations, community relations, leadership and professionalism. Each category could be scored from zero, which fails to meet all expectations to six, which far exceeds all expectations. The scores received from three of the five board members are as follows. 5.0, 5.0 and 5.71, which averages out to 5.24. For a score of five, it means exceeds all expectations.

On motion of Vice Chair Hill for the Board to approve an 8% salary increase, which was seconded by the report, seconded by Commissioner Reese, which motion unanimously carried, Chair Lawson ordered the salary increase be approved.



6.3 Acknowledge receipt of the Mill Street Capacity and Safety Project update. (For Possible Action)

Kim Diegle, RTC Project Manager, I'm here to present a project update for the Mill Street Capacity and Safety project. The limits of this project are from just West of Kietzke Lane to Terminal Way along Mill Street. The need for the project was identified in the 2013 Mill Corridor Mill Terminal Corridor study and the 2050 Regional Transportation Plan.

The main goals of this project are to enhance safety and improve traffic operations. The team will also modernize the access control and provide safe routes for pedestrians and cyclists.

There have been multiple crashes, including fatalities, along this stretch of Mill Street and we identified 8 areas for improvements. We are proposing to add a third eastbound lane from West of Kietzke Lane to I-580, which will provide a dedicated lane to the I-580 southbound onramp, improving traffic operations. We are modernizing the access management by consolidating side street access from Louise Street and Redwood Place and improving safety and traffic operations by installing a new signalized intersection at Golden Lane. We're also focusing on safety by Matley Lane to a right in right out intersection, relocating overhead utilities, constructing new sidewalks and making the ADA accessible improvements and providing continuous bike lanes through the corridor.

Once we are closer to construction, RTC will hold a public meeting to discuss the final design and construction schedule. We anticipate construction to begin in early 2025. The current project cost is approximately \$32 million, which includes engineering and right of way services, acquisition and relocation costs and construction.

On motion of Commissioner Reese to accept the report, seconded by Vice Chair Hill, which motion unanimously carried, Chair Lawson ordered the item be approved.

Chair Lawson, now going back to Item 4.4.1 Approve a Resolution of Condemnation authorizing RTC's legal counsel to commence condemnation proceedings to acquire a fee simple interest in the entirety of APN 013-082-10, a fee simple interest in a portion of APN 013-082-14, and a temporary construction easement on a portion of APN 013-082-14 from ZRA Enterprises LTD, which are needed to construct the Mill Street Capacity and Safety project. (For Possible Action)

Adam Spear, RTC Legal Counsel spoke on this item. We follow the process that's mandated by state law to make every effort to reach agreement with property owners, but when that's not possible, this is a step in the process, as with other matters, where the recommendation from legal counsels, that litigation matters be discussed publicly by Commissioners. There have been attorney-client briefings on this matter. The staff report describes the action that the staff is recommending. We certainly can take a recess for any additional attorney-client communication, if necessary, but otherwise my recommendation would be that the board approve a motion to approve the item is.

On motion of Vice Chair Hill to accept the report, seconded by Commissioner Reese, which motion unanimously carried, Chair Lawson ordered the item be approved.

**Item 7            *REPORTS (Informational Only)***

**7.1     *RTC Executive Director Report***

1. We implemented our most recent transit service improvements, May 4<sup>th</sup>. One of them is our fourth FlexRIDE zone in select areas of the South Meadows. Route 56 is our only fixed route in this area, so FlexRIDE will provide an additional transportation option for people in south Reno. The change

also includes more bus bays at Meadowood Mall and an increase in frequency on Route 21 and the Virginia Line.

2. The U.S. Department of Transportation recently completed its certification review of RTC's planning process. It determined that our process meets Federal planning requirements. It does have a handful of recommendations but pointed out some things that we are doing very well. It concluded that we are doing a good job demonstrating consistency of projects in the program to federal goals and meeting the MPO's long-range priorities and performance targets. It also pointed out that our support of public transit to improve rapid bus service and streetscape improvements along critical ridership corridors is noteworthy.
3. We are getting very close to launching our Spanish outreach campaigns for transit, with the help of our consultants at Celtis Ventures. They tested multiple messages and identified the ones that had the highest performance. We will implement those into the full campaign. Celtis is also helping us with our ED-Pass campaign, which we will launch very soon. ED-Pass is a valuable resource for our college students, faculty, and staff to ride public transit for free.
4. We held our first Military Road Public Meeting last month at the North Valleys Community Center. We had a good turnout of residents in the Stead and Lemmon Valley areas to give input on the project. Thank you to Austin McCoy and Kimberly Diegle for giving a presentation on the Military Road Capacity and Safety Project. This improved roadway will be a huge benefit to the people who live and work in that area.
5. We are proud to participate in Work Zone Safety Week. The slogan for the campaign is "Respect the Cone: My Family Needs Me Home". The Associated General Contractors of Nevada will host a press conference Tuesday, May 28 at 10 a.m. on the northbound US 395 on-ramp near NDOT's widening project. Governor Joe Lombardo will speak at the event. Thank you to Chair Lawson and Director Larkin Thomason for speaking at the event, as well. Safety is always our top priority and it's every driver's duty to make sure the workers make it home from work, safely.
6. I would also like to thank Chair Lawson for joining us at our Spring Fling event, last month. Our directors grilled some burgers and hot dogs for our staff. We also designated part of the day for our employees to clean their offices and common areas, and clear out some of their old computer files. Thank you to everyone who participated, and I hope you enjoyed the event.
7. The RTC is partnering with the Truckee Meadows Bicycle Alliance and several other agencies to support the Ride Reno, Spin Sparks event tomorrow. It's happening from 10 a.m. to noon at Teglia's Paradise Park. The bike ride will showcase the new bicycle and pedestrian facilities on a portion of the Oddie Wells Project. Thank you, Commissioner Garcia, for using some of your discretionary funding for this event. On that note, today is National Bike to Work Day. We are providing free transit for anyone who rides their bike to the bus stations today through Sunday.
8. We're also holding a community event to celebrate the completion of Phase 3 of the Oddie Wells Project Saturday, June 1<sup>st</sup>. It will take place at Carniceria ([Carnee-seh-REE-AH](#)) Tres Amigos on Sutro Street from 11 a.m. to 1 p.m. The event will include live music, raffle prizes, face painting, and discounts at local businesses. We expect to complete the entire Oddie Wells Project by this fall.
9. Please join me in congratulating Omar Casildo on his promotion to a full-time position. Omar started as an Accounting Specialist in the Finance Department on April 22<sup>nd</sup>. Many of you already know him because he did such a great job as our Finance Intern. Omar received his Bachelor's Degree in Business Administration with a Major in Finance from UNR last Fall. Thank you for your work, Omar. We look forward to your success at RTC.
10. We also have a couple of anniversaries to mention. Congratulations to Hannah Yue for reaching her 5th anniversary on May 6<sup>th</sup>. Jessica Dover will reach the one-year mark on May 22<sup>nd</sup>. Thank you both for your hard work.
11. Please join us in congratulating Patty McCauley for MTM employee of the month for April 2024. Patty has been driving for Access for 11-and-a-half years. As a BTW trainer, she has put many new drivers on the road with confidence and a safety mindset. Her clients and coworkers appreciate her

service, and they send in many compliments about her great work. Patty likes to go camping as often as she can – and she also enjoys fishing and riding her motorbike. We appreciate Patty’s customer service skills and safety record. She is an integral part of what makes MTM great as a team.

12. Lionel Lopez is the Keolis driver of the month. Lionel is originally from Truckee, and he has worked as a bus operator for Ride since August of 2017. He enjoys working as a team and interacting with his coworkers. Lionel had a 99 percent on-time performance, zero preventable accidents, and no customer complaints in April. He enjoys spending quality time with his family.

## **6.2 RTC Federal Report**

Paul Nelson, RTC Government Affairs Officer. We submitted an application for the Safe Streets and Roads For All Planning Grant this week. We're asking for \$1.6 million, and this is really to go for our planning efforts in terms of making our road network safer for all users. We should find out if we were successful in August.

The Senate and House Appropriations subcommittees both held hearings on DOT's proposed budget for FY25. Senate topics included ensuring financial stability for public transit agencies and for passenger rail expansions in the House. The FTA's proposal is \$20 billion for projects, but only \$3.4 billion is appropriated, so as projects are getting more expensive, the idea is that appropriations are going to have to increase in order to keep pace.

Secretary Buttigieg talked about the importance of public transit in terms of regional economies. One of the things that he pointed out in the language of the proposed budget is that there would be some flexibility in formula and flex funds that would allow Federal Highway funds to transfer over to operating expenses.

The Justice Department issued a final ruling on ADA rules for transit apps and websites. Transit agencies are required to make online information accessible within three years to be in compliance. The RTC is in compliance and our staff is continually doing things like webinars to improve even more.

## **6.3 NDOT Director Report**

NDOT Director Tracy Larkin Thomason gave a presentation and spoke on the following:

Nevada State Employee Appreciation Week, May 6<sup>th</sup> – May 10<sup>th</sup>. I want to thank all employees for their hard work and continued dedication.

Environmental Excellence Award. The road ecologists and engineers from across North America evaluate research and data to determine the most effective practices to reduce animal vehicle collisions and increase connectivity for Nevada wildlife. The goals of the study are to look at the best practices and share them, and we have several across the state and we work very closely watching where the migration patterns are, and we have some very close along different areas right here in the state. I am very proud of the department for that award.

Theft Reduction Pilot Program. in the Reno area, we've already experienced over half \$1,000,000 and rising of wire theft in Southern Nevada. I know Clark County has over 2.5 million thus far and it was rising there, so I thought we would look at a pilot program. It is in Southern Nevada right now where the heaviest has been going on where we are actually putting traffic cameras in the areas at 66 local stations along I-15.

I want to acknowledge the issue that we've had on Pyramid Way with the pyramid sound walls. First of all, I want to say that the walls themselves are structurally sound. The molding for the visual items on the outside do not line up, so what we were looking at is going back with some internal things to look at, but also we are looking at adding some metal inserts if you're familiar. If you go along I-80, you'll see things like trout, birds and fish. So, we're looking at adding some metal inserts that should also minimize the visual impact and actually may enhance the overall wall together. So, as we move further down, I just want you to know that we have looked at it. We've acknowledged that there was an error and that we are moving forward on how we can best mitigate it.

***Item 7            COMMISSIONER ANNOUNCEMENTS AND UPDATES***

Commissioner Garcia spoke about Ride Paradise Park Reno taking place May 18<sup>th</sup> at Paradise Park. I wanted to give a special shout out to Paul Nelson, Josh MacEachern and Maria Paz Ferandez from the RTC for all of your work over the past few months and the coordination. I really appreciate it. It turns out planning a multi-jurisdictional event is kind of challenging and it's a lot of money too. So, I wanted to give a special shout out to our chair here, Mayor Lawson, for helping us find a solution to work together on the law enforcement piece and for Mayor Schieve for also agreeing to do that.

Chair Lawson, I just have one thing I want to bring up is the right of way for the connector between La Posada and USA Parkway. We have a possibility of an Angel donor that wants to pay for the engineering of this right away. I'd like to bring that back for the entire Commission to hear.

***Item 8            PUBLIC INPUT***

Chair Lawson opened the meeting to public input and called on anyone wishing to speak on topics relevant to the Regional Transportation Commission (RTC) that are not included in the current agenda. There being no one wishing to speak, Chair Lawson moved to Adjournment.

***Item 9            ADJOURNMENT***

There being no further business to come before the Board, the meeting adjourned at 10:58 a.m.

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ED LAWSON, Chair  
Regional Transportation Commission

**\*\*Copies of all presentations are available by contacting Michelle Kraus at [mkraus@rtcwashoe.com](mailto:mkraus@rtcwashoe.com).**



**REGIONAL TRANSPORTATION COMMISSION**

*Metropolitan Planning • Public Transportation & Operations • Engineering & Construction*

Metropolitan Planning Organization of Washoe County, Nevada

**Meeting Date:** 6/21/2024

**Agenda Item:** 4.1.2

To: Regional Transportation Commission

From: Michelle Kraus, Clerk of the Board

**SUBJECT: Draft Meeting Minutes for 05/23/2024**

**RECOMMENDED ACTION**

Approve the meeting minutes for the 05/23/2024 RTC Special Board meeting.

**BACKGROUND AND DISCUSSION**

See attached for Background and Discussion.

**FISCAL IMPACT**

There is no fiscal impact related to this item.

**PREVIOUS BOARD ACTION**

There has been no previous Board action taken.

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**REGIONAL TRANSPORTATION COMMISSION  
WASHOE COUNTY, NEVADA**

**FRIDAY**

**8:10 A.M.**

**May 23, 2024**

**PRESENT:**

**Ed Lawson, Mayor of Sparks (Via Zoom)  
Alexis Hill, Vice Chair, Washoe County Commissioner (Via Zoom)  
Mariluz Garcia, Washoe County Commissioner (Via Zoom)**

**Bill Thomas, RTC Executive Director (Via Zoom)  
Adam Spear, Legal Counsel (Via Zoom)**

**ABSENT:**

**Devon Reese, Reno City Council  
Hillary Schieve, Mayor of Reno  
Tracy Larkin Thomason, Director of NDOT**

A special meeting for the FY2025 Final Budget was held in the 1<sup>st</sup> Floor Great Room at Regional Transportation Commission of Washoe County, Reno, Nevada, was called to order by Chair Lawson. The Board conducted the following business:

***Item 1            CALL TO ORDER***

1.1    Roll Call

***Item 2            PUBLIC INPUT***

Chair Lawson opened the meeting to public input and called on anyone wishing to speak on topics relevant to the Regional Transportation Commission (RTC) that are not included in the current agenda. There being no one wishing to speak, Chair Lawson closed public input.

***Item 3            PUBLIC HEARING***

- 3.1    Conduct a public hearing on the FY 2025 RTC Final Budget; approve a recommendation from the Executive Director regarding an employee cost-of-living adjustment and performance-based salary increases to be included in the budget; approve the FY 2025 RTC Final Budget. (For Possible Action)
- a.    Staff Presentation
  - b.    Public Hearing
  - c.    Action

Christian Schonlau, Director of Finance/CFO, presented a PowerPoint presentation and discussed the FY25 Budget. The process started back in February with our Directors Retreat and we followed that up with the Commissioners strategic initiatives and what direction they'd like to see us go. We took those recommendations from both sessions and compiled our tentative budget, which was provided to you last month, and was also submitted to the Department of Taxation. Today we have our public hearing and hopefully approval of our final budget, which we will submit to the Department of Taxation by May 31<sup>st</sup> and begin operations on July 1<sup>st</sup>.

Just a reminder that the majority of our budget comes from our local fuel tax and sales tax. A large portion of federal funding supports those projects, some small transfers from NDOT for MPO, passenger fare revenues to operate our transit system or portion thereof.

The majority of those revenues gets spent on capital expenditures, which this year we're totaling almost 160 million in the Street and Highway projects, about a third of those are preservation and multimodal projects. Another third of those capacity as a reminder, we have about \$23 million a year. Debt service that we have to continually pay until 2043 and then the other small amounts of our budgets related to transit operations and then RTC operations.

Some of the things we've incorporated since the last meeting from the discussions is we were able to add funding for the Tart Micro Transit services for the upcoming year as requested by the Commission. I'm also looking into the long-term transit possibilities up at Lake Tahoe through the Lake Tahoe Transit study, and then we've gone ahead and added an evaluator for agencies enterprise resource program evaluation where we look to modernize and transition to a new accounting and HR system.

This year employees are able to get anywhere from zero to 5% merit increase on top of a cost-of-living increase.

We have about \$160 million in capital expenditures in the Street and Highway program this year. Some of the larger projects we're starting on are the Arlington Avenue bridges construction, West 4th Street Safety Construction and design and construction on Sparks Boulevard.

In public transportation, we have some hydrogen fueling station construction starting. We're working on the design of our Meadowood Mall transfer station and we're looking into the design and relocation potentials of our maintenance facility.

I want to conclude by saying we have a balanced budget as always with healthy reserves going into the next year for future CIP.

Chair Lawson opened the meeting to public input on Item 3.1 being a Public Hearing, there being no one wishing to speak, Chair Lawson moved to approval of Item 3.1.

Chair Lawson asked that those in favor signify by saying aye, which motion unanimously carried, Chair Lawson ordered that Item 3.1 be approved.

***Item 4            COMMISSIONER ANNOUNCEMENTS AND UPDATES***

Being none, Chair Lawson moved to Public Comment.

***Item 5            PUBLIC COMMENT***

Chair Lawson opened the meeting to public input and called on anyone wishing to speak on topics relevant to the Regional Transportation Commission (RTC) that are not included in the current agenda. There being no one wishing to speak, Chair Lawson moved to Adjournment.

*Item 6           ADJOURNMENT*

There being no further business to come before the Board, the meeting adjourned at 8:20 a.m.

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ED LAWSON, Chair  
Regional Transportation Commission

**\*\*Copies of all presentations are available by contacting Michelle Kraus at [mkraus@rtcwashoe.com](mailto:mkraus@rtcwashoe.com).**





**REGIONAL TRANSPORTATION COMMISSION**

*Metropolitan Planning • Public Transportation & Operations • Engineering & Construction*

Metropolitan Planning Organization of Washoe County, Nevada

**Meeting Date:** 6/21/2024

**Agenda Item:** 4.2.1

To: Regional Transportation Commission

From: Christian Schonlau, Director of Finance/CFO

**SUBJECT: Procurement Activity Report**

**RECOMMENDED ACTION**

Acknowledge receipt of the monthly Procurement Activity Report.

**BACKGROUND AND DISCUSSION**

See attached for Background and Discussion.

**FISCAL IMPACT**

There is no fiscal impact related to this action.

**PREVIOUS BOARD ACTION**

There has been no previous Board action taken.

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**ATTACHMENT A**

**PROJECTS CURRENTLY ADVERTISED**

<b><u>Invitations for Bids (IFB)</u></b>	
<b>Project</b>	<b>Due Date</b>
Somersett Parkway, Mae Anne Avenue to Del Webb Parkway	June 25, 2024
<b><u>Request for Proposals (RFP)</u></b>	
<b>Project</b>	<b>Due Date</b>
N/A	

**REPORT ON INVITATION FOR BID (IFB) AWARDS**

*Per NRS 332, NRS 338 and RTC’s Management Policy P-13 “Purchasing,” the Executive Director has authority to negotiate and execute a contract with the lowest responsive and responsible bidder on an Invitation for Bid (IFB) without Commission approval.*

<b>Project</b>	<b>Contractor</b>	<b>Award Date</b>	<b>Contract Amount</b>
Raleigh Heights Rehabilitation	Sierra Nevada Construction	05/17/2024	\$3,481,007

**PROFESSIONAL SERVICES/CONSULTING AGREEMENTS**

*Per RTC’s Management Policy P-13 Executive Director has authority to approve contracts greater than \$25,000 and less than (or equal to) \$100,000.*

<b>Project</b>	<b>Contractor</b>	<b>Contract Amount</b>
Director’s & Board Retreats 2025	OnStrategy	\$45,760
ATIIP NOFO Grant Supportive Services	Alta Planning + Design	\$25,000
Federal Lobbying Legal Services	Porter Group	\$83,000
Federal Lobbying Legal Services	Cardinal Infrastructure	\$84,000

**CHANGE ORDERS AND CONTRACT AMENDMENTS WITHIN EXECUTIVE DIRECTOR’S RTC’S P-13 PURCHASING POLICY AUTHORITY**

<b>Project</b>	<b>Contractor</b>	<b>Approval Date</b>	<b>CO / Amend. Number</b>	<b>CO / Amend. Amount</b>	<b>Revised Total Contract Amount</b>
38 Message Point Media Displays Contract 177623HQ	Vontas	5/11/2024	Amend. 1	\$25,715	\$594,275



**REGIONAL TRANSPORTATION COMMISSION**

*Metropolitan Planning • Public Transportation & Operations • Engineering & Construction*

Metropolitan Planning Organization of Washoe County, Nevada

**Meeting Date:** 6/21/2024

**Agenda Item:** 4.2.2

To: Regional Transportation Commission

From: Xuan Wang, PHD, PE, PTP, RSP2, Planning Manager

**SUBJECT: Planning Activity Report**

**RECOMMENDED ACTION**

Acknowledge receipt of the monthly Planning Activity Report.

**BACKGROUND AND DISCUSSION**

See Attachment A for Background and Discussion.

**FISCAL IMPACT**

There is no fiscal impact related to this action.

**PREVIOUS BOARD ACTION**

There has been no previous Board action taken.

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## PLANNING STUDIES

<b>Virginia Street Transit Oriented Development (TOD) Planning Study</b>	
Graham Dollarhide, Project Manager	<a href="https://www.rtcwashoe.com/mpo-corridor-plan/south-virginia-street-transit-oriented-development-tod-study/">https://www.rtcwashoe.com/mpo-corridor-plan/south-virginia-street-transit-oriented-development-tod-study/</a>
<i>Status: Final plan being drafted with presentation to project TAC anticipated the last week of June. Presentation to RTC TAC and CMAC, as well as to RTC Board anticipated in the month of July, with formal adoption in August.</i>	

<b>Active Transportation Plan</b>	
Marquis Williams, Project Manager	<a href="https://www.rtcwashoe.com/mpo-reports/active-transportation-plan/">https://www.rtcwashoe.com/mpo-reports/active-transportation-plan/</a>
<i>Status: Continued refinement of planning and implementation strategies based on public input, three Agency Working Group (AWG) meetings, and internal priorities. Comments on draft Plan are being reviewed by Consultant and RTC staff. Aligning final deliverables with approved establishment of formal Active Transportation Program.</i>	

<b>Regional Freight Study</b>	
Marquis Williams, Project Manager	<a href="https://rtcwashoe.com/planning/regional-planning/regional-freight-plan/">https://rtcwashoe.com/planning/regional-planning/regional-freight-plan/</a>
<i>Status: First round of comments on draft Report submitted for incorporation by Consultant. Public survey is now live for the remainder of June 2024.</i>	

<b>RTC REGIONAL TRAVEL CHARACTERISTICS STUDY</b>	
Xuan Wang, Project Manager	<a href="https://www.rtcwashoe.com/mpo-reports/survey2023/">https://www.rtcwashoe.com/mpo-reports/survey2023/</a>
<i>Status: Project team is working on data collection. Transit and visitor surveys completed. Household travel survey is ongoing.</i>	

<b>RTC REGIONAL TRAVEL DEMAND MODEL UPDATE</b>	
Xuan Wang, Project Manager	<a href="https://www.rtcwashoe.com/mpo-reports/model2023/">https://www.rtcwashoe.com/mpo-reports/model2023/</a>
<i>Status: A base year model has been built. Project team is working on developing calibration targets.</i>	

<b>RTC REGIONAL TRANSPORTATION PLAN UPDATE</b>	
Xuan Wang, Project Manager	TBA
<i>Status: Online public survey completed. The project team is summarizing the survey results.</i>	

## ONGOING PROGRAMS

<b>Data Collection Program</b>	
Xuan Wang, Project Manager	<a href="#">N/A</a>
<i>Status: Data collection started for scheduled sites. Continue to identify sites for data collection.</i>	

<b>Bicycle and Pedestrian Planning</b>	
RTC Planning and Engineering Staff	<a href="https://www.rtcwashoe.com/metropolitan-planning/">https://www.rtcwashoe.com/metropolitan-planning/</a>
<i>Status: Ongoing collaboration with partner agencies on several initiatives to improve bicycle and pedestrian safety &amp; facilities:</i>	
<ul style="list-style-type: none"> <li>• Coordinating with Engineering to develop design details on roadway network concepts and outreach activities.</li> </ul>	

<b>Vision Zero Truckee Meadows</b>	
RTC Planning Staff	<a href="https://visionzerotruckeemeadows.com/">https://visionzerotruckeemeadows.com/</a>
<i>Status: Task Force meeting held 5/13/24. Application for SS4A planning funds to update the Action Plan and High Injury Network submitted 5/16/24. Next Task Force meeting tentatively scheduled for 8/12/24. Results of SS4A awards anticipated mid-July.</i>	



**REGIONAL TRANSPORTATION COMMISSION**

*Metropolitan Planning • Public Transportation & Operations • Engineering & Construction*

Metropolitan Planning Organization of Washoe County, Nevada

**Meeting Date:** 6/21/2024

**Agenda Item:** 4.2.3

To: Regional Transportation Commission

From: Xuan Wang, PHD, PE, PTP, RSP2, Planning Manager

**SUBJECT: Advisory Committee Report**

**RECOMMENDED ACTION**

Acknowledge receipt of the Summary Report for the Technical, Citizens Multimodal, and Regional Road Impact Fee Advisory Committees.

**BACKGROUND AND DISCUSSION**

The Citizens Multimodal Advisory Committee (CMAC), which includes members from the community. The RTC Board approves appointments to this advisory committee.

The Technical Advisory Committee (TAC), which includes local public works directors, community development directors, and staff from other key agencies.

The Regional Road Impact Fee Technical Advisory Committee (RRIF TAC), which was created to oversee and advise the local governments regarding land use classification assumptions and the Capital Improvements Plan (CIP) used in the impact fee program. The RRIF TAC consists of three representatives from each local entity, two RTC representatives, and four private sector members who are appointed by the RTC Board.

The CMAC and the TAC met on June 5, 2024 and June 6, 2024, respectively. Each committee received a presentation from Graham Dollarhide, RTC Planning Manager, on the Proposed Amendment #3 to the FFY 2023-2027 Regional Transportation Improvement Program.

There has not been a RRIF TAC meeting since the Board previously met.

**FISCAL IMPACT**

There is no fiscal impact related to this action.

**PREVIOUS BOARD ACTION**

There has been no previous Board action taken.



**REGIONAL TRANSPORTATION COMMISSION**

*Metropolitan Planning • Public Transportation & Operations • Engineering & Construction*

Metropolitan Planning Organization of Washoe County, Nevada

**Meeting Date:** 6/21/2024

**Agenda Item:** 4.2.4

To: Regional Transportation Commission

From: Dale Keller, Deputy Executive Director

**SUBJECT: Engineering Activity Report**

**RECOMMENDED ACTION**

Acknowledge receipt of the monthly Engineering Activity Report.

**BACKGROUND AND DISCUSSION**

See Attachment A for Background and Discussion.

**FISCAL IMPACT**

There is no fiscal impact related to this action.

**PREVIOUS BOARD ACTION**

There has been no previous Board action taken.

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## ACTIVE TRANSPORTATION IMPROVEMENTS

<b>Downtown Reno Micromobility Project</b>	
Sara Going, Project Manager	<a href="http://www.downtownrenomicromobility.com">www.downtownrenomicromobility.com</a>
<i>Status: Preliminary design is underway.</i>	

<b>Truckee River Shared Use Path</b>	
Scott Gibson, Project Manager	<a href="https://www.rtcwashoe.com/engineering-project/truckee-river-shared-use-path-project/">https://www.rtcwashoe.com/engineering-project/truckee-river-shared-use-path-project/</a>
<i>Status: The RTC is continuing to coordinate with the Reno Sparks Indian Colony (RSIC) for the maintenance, security, and property rights necessary for the pathway. There is no update on this during last reporting period.</i>	

## CAPACITY/CONGESTION RELIEF PROJECTS

<b>Buck Drive Circulation</b>	
Maria Paz Fernandez, Project Manager	<a href="https://www.rtcwashoe.com/engineering-project/buck-drive-circulation/">https://www.rtcwashoe.com/engineering-project/buck-drive-circulation/</a>
<i>Status: Kimley Horn is the selected firm for the design and construction engineering services. Ongoing coordination with City of Reno staff. 50% Design Plans expected by the end of June. Construction is tentatively scheduled for spring 2025.</i>	

<b>Butch Cassidy Drive Extension</b>	
Kim Diegle, Project Manager	<a href="https://www.rtcwashoe.com/engineering-project/butch-cassidy-drive-extension/">https://www.rtcwashoe.com/engineering-project/butch-cassidy-drive-extension/</a>
<i>Status: Preliminary design is underway.</i>	

<b>Eagle Canyon Safety and Operations</b>	
Sara Going, Project Manager	<a href="https://rtcwashoe.com/projects/eagle-canyon-safety-and-operations/">https://rtcwashoe.com/projects/eagle-canyon-safety-and-operations/</a>
<i>Status: The project design is 30% complete.</i>	

<b>Geiger Grade Realignment</b>	
Kim Diegle, Project Manager	<a href="https://www.rtcwashoe.com/engineering-project/geiger-grade-road-realignment/">https://www.rtcwashoe.com/engineering-project/geiger-grade-road-realignment/</a>
<i>Status: RTC has selected J-U-B Engineers, Inc. to perform a feasibility study to further investigate preliminary design alternatives, traffic, and environmental impacts.</i>	



<b>Kietzke Lane ITS</b>	
Garrett Rodgers, Project Manager	<a href="https://www.rtcwashoe.com/engineering-project/kietzke-lane-its-project/">https://www.rtcwashoe.com/engineering-project/kietzke-lane-its-project/</a>
<i>Status: Bids were opened April 25th. Sierra Nevada Construction (SNC) was awarded the Contract. Pre-construction coordination is ongoing. Construction activities are anticipated to begin in early Summer 2024.</i>	

<b>Military Road Capacity &amp; Safety</b>	
Austin McCoy, Project Manager	<a href="https://www.rtcwashoe.com/engineering-project/military-road-capacity-and-safety/">https://www.rtcwashoe.com/engineering-project/military-road-capacity-and-safety/</a>
<i>Status: Alternative selection for roadway and intersection configurations is complete. Intermediate design is underway. A public meeting was held Thursday, April 25<sup>th</sup>.</i>	

<b>North McCarran Boulevard &amp; Pyramid Hwy Fiber</b>	
Alex Wolfson, Project Manager	<a href="https://www.rtcwashoe.com/engineering-project/mccarran-pyramid-fiber/">https://www.rtcwashoe.com/engineering-project/mccarran-pyramid-fiber/</a>
<i>Status: Construction is substantially complete; contractor is working on punch list items.</i>	

<b>North Valleys North Virginia Street Capacity</b>	
Garrett Rodgers, Project Manager	<a href="https://www.rtcwashoe.com/engineering-project/north-valleys-north-virginia-street-capacity/">https://www.rtcwashoe.com/engineering-project/north-valleys-north-virginia-street-capacity/</a>
<i>Status: The traffic analysis study and conceptual design is complete. Project team is advancing 30% Design Submittal.</i>	

<b>Pembroke Drive Capacity &amp; Safety</b>	
Maria Paz Fernandez, Project Manager	<a href="https://www.rtcwashoe.com/engineering-project/pembroke-drive-capacity-and-safety/">https://www.rtcwashoe.com/engineering-project/pembroke-drive-capacity-and-safety/</a>
<i>Status: Nichols Consulting Engineers (NCE) was the selected design consultant. Preliminary design alternatives were updated to include widening to two (2) lanes on each direction. 30% design plans expected by the end of June.</i>	

<b>Pyramid Highway Intelligent Corridor</b>	
Alex Wolfson, Project Manager	<a href="https://www.rtcwashoe.com/engineering-project/pyramid-highway-intelligent-corridor/">https://www.rtcwashoe.com/engineering-project/pyramid-highway-intelligent-corridor/</a>
<i>Status: Installation of the new fiber is in progress and will likely be completed by the end of June. Testing of software for the notification system and dynamic traffic signal control is in progress.</i>	

<b>Pyramid Highway Operations Improvements</b>	
Jessica Dover, Project Manager	<a href="https://www.rtcwashoe.com/engineering-project/pyramid-highway-operations-improvements/">https://www.rtcwashoe.com/engineering-project/pyramid-highway-operations-improvements/</a>
<i>Status: Preliminary Engineering ongoing; RTC is coordinating with NDOT to develop preferred preliminary alignment alternative.</i>	

<b>Pyramid Way, Sparks Boulevard, Highland Ranch Interchange</b>	
Austin McCoy, Project Manager	<a href="https://www.rtcwashoe.com/engineering-project/pyramid-highway-us-395-connection-project/">https://www.rtcwashoe.com/engineering-project/pyramid-highway-us-395-connection-project/</a>
<i>Status: NDOT LPA Agreement has been executed and a notice to proceed from NDOT has been received. Data collection, traffic analysis, and preliminary design is underway with Parametrix.</i>	

<b>South Meadows Traffic Enhancements</b>	
Austin McCoy, Project Manager	<a href="https://www.rtcwashoe.com/engineering-project/south-meadows-traffic-enhancements/">https://www.rtcwashoe.com/engineering-project/south-meadows-traffic-enhancements/</a>
<i>Status: Sierra Nevada Construction (SNC) has started construction of the improvements, completion is expected for around mid-summer.</i>	

<b>South Virginia Street &amp; I-580 Exit 29 Capacity &amp; Safety</b>	
Maria Paz Fernandez, Project Manager	<a href="https://www.rtcwashoe.com/engineering-project/south-virginia-street-nb-lane-widening/">https://www.rtcwashoe.com/engineering-project/south-virginia-street-nb-lane-widening/</a>
<i>Status: Q&amp;D Construction recently started construction, completion is expected by the end of the year.</i>	

<b>Sparks Boulevard – North Phase</b>	
Garrett Rodgers, Project Manager	<a href="https://www.rtcwashoe.com/engineering-project/sparks-blvd-project/">SparksBLVDproject.com.</a>
<i>Status: 100% Design Submittal received in May 2024. Final Design Submittal expected later this summer. Right-of-Way acquisition is under way.</i>	

<b>Steamboat Parkway Improvement</b>	
Garrett Rodgers, Project Manager	<a href="https://www.rtcwashoe.com/engineering-project/steamboat-pkwy-improvement/">https://www.rtcwashoe.com/engineering-project/steamboat-pkwy-improvement/</a>
<i>Status: Construction started April 2<sup>nd</sup>. Crews are performing utility relocations and preparing for roadway widening operations.</i>	

<b>Traffic Signal Fiber 25-01</b>	
Austin McCoy, Project Manager	<a href="https://rtcwashoe.com/projects/traffic-signal-fiber-25-01/">https://rtcwashoe.com/projects/traffic-signal-fiber-25-01/</a>
<i>Status: Preliminary design is underway.</i>	

<b>Traffic Signal Installations 23-01</b>	
Alex Wolfson, Project Manager	<a href="https://www.rtcwashoe.com/engineering-project/traffic-signal-installations-23-01/">https://www.rtcwashoe.com/engineering-project/traffic-signal-installations-23-01/</a>
<i>Status: Work on the new signal at Moana / Baker and signal replacement at Prater / 4<sup>th</sup> continues. Substantial completion is expected in July.</i>	

<b>Traffic Signal Modifications 23-01</b>	
Sara Going, Project Manager	<a href="https://www.rtcwashoe.com/engineering-project/traffic-signal-modifications-23-01/">https://www.rtcwashoe.com/engineering-project/traffic-signal-modifications-23-01/</a>
<i>Status: The construction contract for the project was awarded to Summit Line Construction, Inc. The contractor has been procuring materials necessary for the project (signal poles, traffic signal cabinets, etc.) Construction is expected to start in early June.</i>	

<b>Traffic Signal Modifications 24-01</b>	
Sara Going, Project Manager	<a href="https://www.rtcwashoe.com/engineering-project/traffic-signal-modifications-24-01/">https://www.rtcwashoe.com/engineering-project/traffic-signal-modifications-24-01/</a>
<i>Status: The project design is 60% complete.</i>	

<b>Traffic Signal Modifications 25-01</b>	
Alex Wolfson, Project Manager	<a href="https://rtcwashoe.com/projects/traffic-signal-modifications-25-01/">https://rtcwashoe.com/projects/traffic-signal-modifications-25-01/</a>
<i>Status: Preliminary design of the improvements is in progress. In addition, the consultant is working on intersection evaluations at several locations.</i>	

<b>Traffic Signal Timing 7</b>	
Alex Wolfson, Project Manager	<a href="https://www.rtcwashoe.com/engineering-project/traffic-signal-timing-7-project/">https://www.rtcwashoe.com/engineering-project/traffic-signal-timing-7-project/</a>
<i>Status: New signal timing plans have been implemented on the following corridors:</i>	
<ul style="list-style-type: none"> <li>- N Virginia St and Golden Valley Rd</li> <li>- Golden Valley Rd from North Hills to Beckwourth</li> </ul>	

<b>Veterans Parkway ITS</b>	
Austin McCoy, Project Manager	<a href="https://www.rtcwashoe.com/engineering-project/veterans-parkway-its/">https://www.rtcwashoe.com/engineering-project/veterans-parkway-its/</a>
<i>Status: Preliminary project design is underway.</i>	

<b>Veterans Roundabout Modifications</b>	
Jessica Dover, Project Manager	<a href="https://www.rtcwashoe.com/engineering-project/veterans-roundabout-modifications/">https://www.rtcwashoe.com/engineering-project/veterans-roundabout-modifications/</a>
<i>Status: Preliminary Design (30%) received May 2024. Currently in review with RTC, anticipate submittal to NDOT and local agencies for review June 2024.</i>	

<b>Vista Boulevard/Disc Drive Intersection Improvement</b>	
Alex Wolfson, Project Manager	<a href="https://rtcwashoe.com/projects/vista-boulevard-disc-drive-intersection-improvements/">https://rtcwashoe.com/projects/vista-boulevard-disc-drive-intersection-improvements/</a>
<i>Status: Final design is underway.</i>	

<b>Vista Boulevard/Prater Way ITS</b>	
Garrett Rodgers, Project Manager	<a href="https://www.rtcwashoe.com/engineering-project/vista-boulevard-prater-way-its/">https://www.rtcwashoe.com/engineering-project/vista-boulevard-prater-way-its/</a>
<i>Status: Final design is underway.</i>	

## CORRIDOR IMPROVEMENT PROJECTS

<b>Arlington Avenue Bridges</b>	
Bryan Byrne, Project Manager	<a href="https://www.rtcwashoe.com/engineering-project/arlington-avenue-bridges-project/">https://www.rtcwashoe.com/engineering-project/arlington-avenue-bridges-project/</a>
<i>Status: The Final PS&amp;E was received by RTC in May 2024. The project is looking to have the Guaranteed Maximum Price in June 2024. Construction is tentatively scheduled for 2025 and 2026.</i>	

<b>Keystone Bridge Replacement</b>	
Sara Going, Project Manager	<a href="https://www.rtcwashoe.com/engineering-project/keystone-avenue-bridge-replacement/">https://www.rtcwashoe.com/engineering-project/keystone-avenue-bridge-replacement/</a>
<i>Status: The project team is approaching completion of the Feasibility Study for the project. The details of the feasibility study and proposed improvements for the project will be presented to the public in July 2024. A public meeting will be held at McKinley Arts and Culture Center on the evening of July 11<sup>th</sup> where the public can learn more about the project.</i>	

<b>Lemmon Drive Traffic Improvements and Resiliency</b>	
Bryan Byrne, Project Manager	<a href="https://www.rtcwashoe.com/engineering-project/lemmon-drive-segment-2/">https://www.rtcwashoe.com/engineering-project/lemmon-drive-segment-2/</a>
<p><i>Status: The project is making significant progress in conducting the required NEPA studies. The project team is incorporating public feedback and working towards 60% design submission. Additionally, the project team is organizing public "pop-up" meetings to address questions and offer insight into the project's design and purpose. These meetings are scheduled for late May and early June.</i></p>	

<b>Mill Street Capacity &amp; Safety (Kietzke Lane to Terminal Way)</b>	
Kimberly Diegle, Project Manager	<a href="http://millstreetwidening.com">http://millstreetwidening.com</a>
<p><i>Status: Final design is underway. The right-of-way acquisition activities and utility coordination is ongoing. Outreach with adjacent business owners continues. Construction is anticipated to start early 2025.</i></p>	

<b>McCarran Boulevard Safety and Operational Improvements</b>	
Jessica Dover, Project Manager	<a href="https://rtcwashoe.com/projects/mccarran-boulevard-safety-and-operational-improvements/">https://rtcwashoe.com/projects/mccarran-boulevard-safety-and-operational-improvements/</a>
<p><i>Status: Project Kickoff held May 2024. Project Prioritization Phase underway, preliminary design Summer 2025.</i></p>	

<b>Oddie/Wells Multimodal Improvements</b>	
Maria Paz Fernandez, Project Manager	<a href="http://oddiewellsproject.com/">http://oddiewellsproject.com/</a>
<p><i>Status: Phase 1 (Pyramid Way to Sullivan Lane in Sparks) was completed at the end of August 2023. Phase 2 (Sullivan Ln in Sparks to Silverada Blvd in Reno) is expected to be completed by the end of May 2024. Phase 3 (Silverada Blvd to east of US 395 in Reno): NVE lights continue to be installed. Phase 4 (Sutro Street to I-80): Pavement was completed the first week of May. No work during Rodeo (June 2024).</i></p> <p><i>Overall construction, including the remaining phases, is anticipated to be completed by the third quarter of 2024.</i></p>	

<b>Sierra Street Bridge Replacement</b>	
Bryan Byrne, Project Manager	<a href="https://sierrastreetbridge.com/">https://sierrastreetbridge.com/</a>
<p><i>Status: RTC has received the 30% design submittal and is currently reviewing it. The project team has engaged our Aesthetic Stakeholders Working Group to outline aesthetic design features to take to the public for voting. This is expected to take place August 2024.</i></p>	

<b>Sun Valley Boulevard Corridor Improvements – Phase 2</b>	
Jessica Dover, Project Manager	<a href="https://www.rtcwashoe.com/engineering-project/sun-valley-boulevard-corridor-improvements-phase-2/">https://www.rtcwashoe.com/engineering-project/sun-valley-boulevard-corridor-improvements-phase-2/</a>
<i>Status: Preferred Alternatives resulting from the Draft Conceptual Drainage Design Report advancing to next level of analysis. Categorical Exclusion for Geotech ongoing.</i>	

<b>West Fourth Street Downtown</b>	
Scott Gibson, Project Manager	<a href="https://www.rtcwashoe.com/engineering-project/west-fourth-street-downtown/">https://www.rtcwashoe.com/engineering-project/west-fourth-street-downtown/</a>
<i>Status: 30% design Plans have been completed and Reno comments are being reviewed and addressed.</i>	

<b>West Fourth Street Safety</b>	
Scott Gibson, Project Manager	<a href="https://www.rtcwashoe.com/engineering-project/west-fourth-street-safety/">https://www.rtcwashoe.com/engineering-project/west-fourth-street-safety/</a>
<i>Status: Wood Rodgers has submitted 60% design plans for review. Work on NEPA and coordination with NDOT environmental division continues. Coordination with UPRR is ongoing.</i>	

## PAVEMENT PRESERVATION PROJECTS

<b>2024 Preventive Maintenance Program</b>	
Jessica Dover, Project Manager	<a href="https://rtcwashoe.com/projects/2024-preventive-maintenance-project/">https://rtcwashoe.com/projects/2024-preventive-maintenance-project/</a>
<i>Status: Construction ongoing; slurry started June 03, 2024. Substantial Completion anticipated Fall/Winter 2024.</i>	

<b>2025 Bridge Maintenance</b>	
Scott Gibson, Project Manager	<a href="https://rtcwashoe.com/projects/2025-bridge-maintenance/">https://rtcwashoe.com/projects/2025-bridge-maintenance/</a>
<i>Status: Preliminary design is underway.</i>	

<b>1<sup>st</sup> Street Rehabilitation and Signal Replacement</b>	
Scott Gibson, Project Manager	<a href="https://www.rtcwashoe.com/engineering-project/1st-street-rehabilitation-and-signal-replacement/">https://www.rtcwashoe.com/engineering-project/1st-street-rehabilitation-and-signal-replacement/</a>
<i>Status: This project is substantially complete.</i>	

<b>Arrowcreek/Wedge Rehabilitation</b>	
Jessica Dover, Project Manager	<a href="https://www.rtcwashoe.com/engineering-project/arrowcreek-parkway-wedge-rehabilitation/">https://www.rtcwashoe.com/engineering-project/arrowcreek-parkway-wedge-rehabilitation/</a>

*Status: Preliminary design (50%) anticipated Summer 2024.*

### **Las Brisas and Los Altos Resurfacing**

Jessica Dover, Project Manager

<https://www.rtcwashoe.com/engineering-project/las-brisas-and-los-altos-resurfacing/>

*Status: Las Brisas Boulevard mill and overlay (Robb Drive to Britannia Drive) and signage throughout the corridor has achieved Final Acceptance. Los Altos Parkway mill and overlay (S. Vista Boulevard to Goodwin Road) and utility adjustments throughout the corridor has achieved Final Acceptance. Slurry and associated remaining Contract Items at both locations to be completed Summer 2024.*

### **Meadowood Rehabilitation**

Garrett Rodgers, Project Manager

<https://rtcwashoe.com/projects/meadowood-rehab/>

*Status: Preliminary design is underway.*

### **N Virginia Street University Rehabilitation**

Bryan Byrne, Project Manager

<https://www.rtcwashoe.com/engineering-project/north-virginia-street-university-rehabilitation/>

*Status: The construction bid was awarded to Granite Construction. Construction is underway and is scheduled to be completed in mid-August 2024.*

### **Raleigh Heights Rehabilitation**

Austin McCoy, Project Manager

<https://www.rtcwashoe.com/engineering-project/raleigh-heights-rehabilitation/>

*Status: Construction is tentatively scheduled to start in June and go through October 2024.*

### **Selmi Drive Rehabilitation**

Maria Paz Fernandez, Project Manager

<https://www.rtcwashoe.com/engineering-project/selmi-drive-rehabilitation/>

*Status: Construction awarded to Q&D Construction, LLC., and it started on April 2<sup>nd</sup>. Substantial completion is expected by the end of June.*

### **Somerset Parkway Corrective Project**

Scott Gibson, Project Manager

<https://rtcwashoe.com/projects/2024-corrective-maintenance-somerset/>

*Status: Final design is complete and the construction contract is out to bid*

<b>Stanford Way Rehabilitation</b>	
Kimberly Diegle, Project Manager	<a href="https://www.rtcwashoe.com/engineering-project/stanford-way-rehabilitation/">https://www.rtcwashoe.com/engineering-project/stanford-way-rehabilitation/</a>
<i>Status: Construction is substantially complete for this project.</i>	

## OTHER PROJECTS

<b>4<sup>th</sup> Street Station Expansion</b>	
Ian Chamberlain, Project Manager	<a href="https://www.rtcwashoe.com/engineering-project/4th-street-station-expansion/">https://www.rtcwashoe.com/engineering-project/4th-street-station-expansion/</a>
<i>Status: This project is on hold due to issues with property acquisition for proposed improvements.</i>	

<b>Virginia Line BRT Improvements</b>	
Kimberly Diegle, Project Manager	<a href="https://www.rtcwashoe.com/engineering-project/virginia-line-brt-improvements/">https://www.rtcwashoe.com/engineering-project/virginia-line-brt-improvements/</a>
<i>Status: 60% Design is complete. Coordination with the City of Reno, FTA, and affected utility companies continues. NEPA re-evaluation of the original Virginia Street Bus RAPID Transit Extension project is anticipated to be completed in early summer.</i>	

## REPORT ON NEGOTIATED SETTLEMENT AGREEMENTS FOR THE ACQUISITION OF PROPERTY

Project	Property Owner	Purchase Amount	Amount Over Appraisal
S. Virginia Street & I580 Exit 29 Capacity & Safety	SDH LLC	\$1,500.00	\$1,734.00

## CONTRACTS UP TO \$100,000

Project	Vendor	Scope	Amount
Pavement Evaluation: Prater Way and S. Virginia Street	Lumos & Associates	pavement investigation, visual assessment, and alternatives analysis	\$64,800





**REGIONAL TRANSPORTATION COMMISSION**

*Metropolitan Planning • Public Transportation & Operations • Engineering & Construction*

Metropolitan Planning Organization of Washoe County, Nevada

**Meeting Date:** 6/21/2024

**Agenda Item:** 4.2.5

To: Regional Transportation Commission

From: James Gee, Director of Public Transportation and Operations

**SUBJECT: Monthly Public Transportation and Operations Report**

**RECOMMENDED ACTION**

Acknowledge receipt of the monthly Public Transportation and Operations report.

**BACKGROUND AND DISCUSSION**

See Attachment A for Background and Discussion.

**FISCAL IMPACT**

There is no fiscal impact related to this action.

**PREVIOUS BOARD ACTION**

There has been no previous Board action taken.

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## BACKGROUND AND DISCUSSION

## ATTACHMENT A

### Highlights

#### RTC Announces Free RTC RIDE Trips for Students

– On June 5, RTC announced that it will be providing free transportation to youth 17 and under during summer break beginning Saturday, June 8 until school returns to session in August. This service applies to RTC RIDE fixed routes, and will run seven days a week during all normal RTC hours. Children under



the age of six will require a parent or guardian. This service allows students to ride transit to gain access to essential meals for high school students to get to work, and all students to visit family.



POWERED BY CONNECTION: MAY 2024

adults with information and resources to access transportation options available in Washoe County. Attendees learned about various transportation technologies and how those technologies can help plan trips more efficiently throughout the Reno-Sparks area.

Older Americans Month - In celebration of Older Americans Month in May, RTC and Neighbor Network of Northern Nevada (N4), along with other organizations hosted several events to provide older



RTC and Partners Stuff a Bus for Seniors - On Friday, May 24 Washoe County, The Human Services Agency (HSA), RTC, KOLO and the Reno Aces partnered to stuff a bus with donations for seniors in the community.

#### RTC RIDE Key Highlights – May

- 8 trainees released to Operations for revenue service
- Driver of the Month: Lionel Lopez (April accomplishments)
- 99% for completed hours and trips
- 5/22/24 OAM Event: Transportation for older adults, Senior Center

- 5/24/24 Stuff a Bus Donation for Seniors
- Employee Engagement:
  - Events continued through 5/3 for Keolis surveys
- CUTA Training Continues:
  - 16 employees completed Modules 1 – 4 in May,
  - May’s update makes 114 drivers who have completed all 4 modules of the CUTA training.
  - 45 employees have taken at minimum, 2 modules.
- 1 new grievance filed, and 2 grievances withdrawn in May
- 0 new ULP filed in May

**Keolis represented staffing headcount as of May 31, 2024:**

<b>Position</b>	<b>Total Employed</b>	<b>#Needed</b>
Coach Operator Trainees	10	6+
Coach Operators	159	6
Dispatchers	7	0
Road Supervisors	4	0
Mechanic A	6	0
Mechanic B	4	1
Mechanic C	4	1
Facilities Technician	2	0
EV Technician	1	0
Utility Worker	13	0
Electronics Tech	2	0
Body Technician	1	0

**RTC ACCESS Key Highlights – May**

**Classes: No classes held in May**

**Safety:**

- **Accidents:**
  - 0 Preventable
  - 2 Non-Preventable
- **Incidents**
  - 1
- **Injuries:**
  - 0
- **YTD Preventable Accident Count: 5**
- **YTD Injury Count: 0**
- **May Blitz**
  - School’s Out
- **May Safety Meeting**
  - Peds, Bikes, and Motorbikes + Visually Impaired Assistance

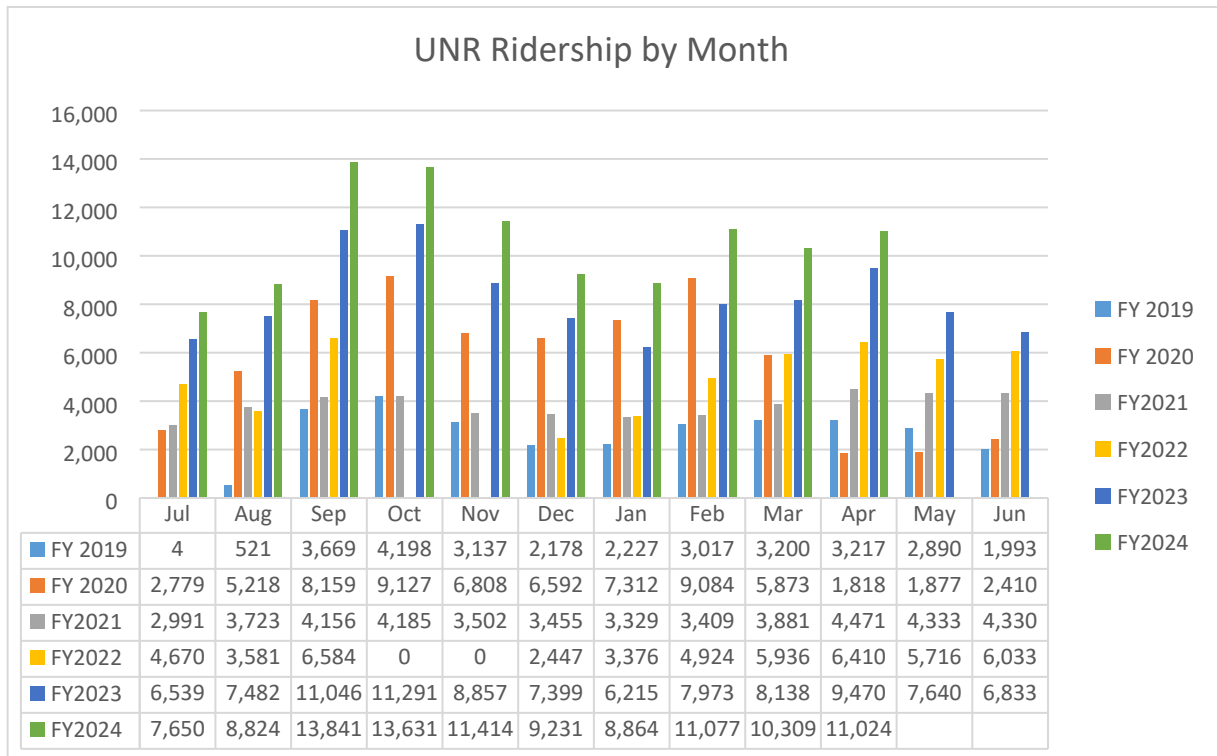
**MTM represented staffing headcount as of May 31, 2024:**

Position	Total Employed	#Needed
Drivers	55FT – 4PT	7-10 FT – 0 PT
Dispatchers	4.5 FT	0
Reservationists	5.0 FTE's	0
Mechanic A	3 FT	0
Maintenance Technician	1	0
Utility Worker	1	0

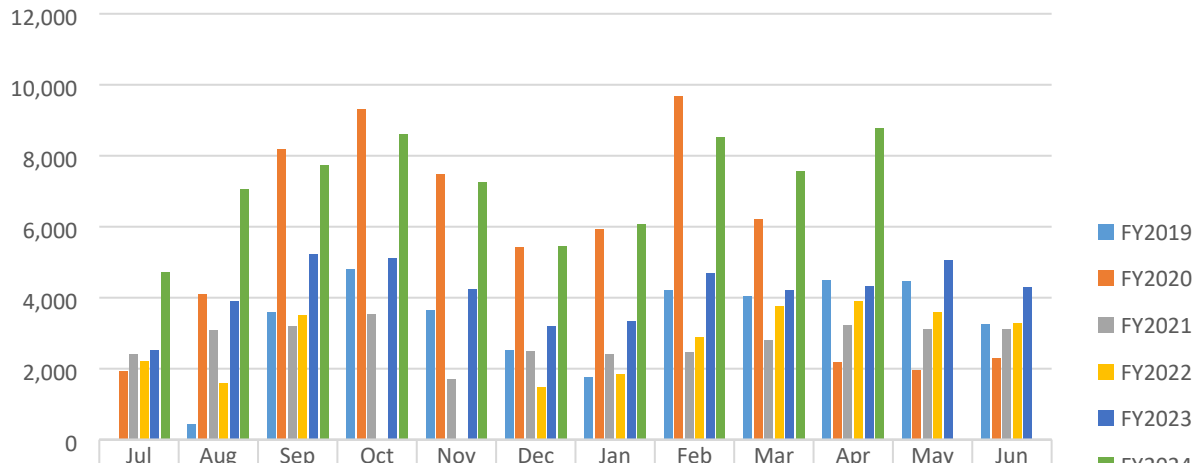
**TRANSIT DEMAND MANAGEMENT (TDM) Update**

- Vanpools added 1 vanpool to rise to 335. Staff continues to work with the Lake Tahoe region to start more vanpools. Both the Truckee North Tahoe TMA (Transportation Management Association) and South Shore TMA have received grants to give further subsidies to help support the vanpools. Staff is working with a group in Tahoe to increase the number of vans going to the Lake. Currently 19 vans service the Lake Tahoe area.
- Staff had several meetings with different groups at UNR (their marketing folks, student senate, and sustainability director) during the month to talk about and get buy in for the new ED Pass marketing campaign. All the meetings went well.

**Ridership numbers from the ED Pass Program through the month of April 2024:**



## TMCC Ridership by Month

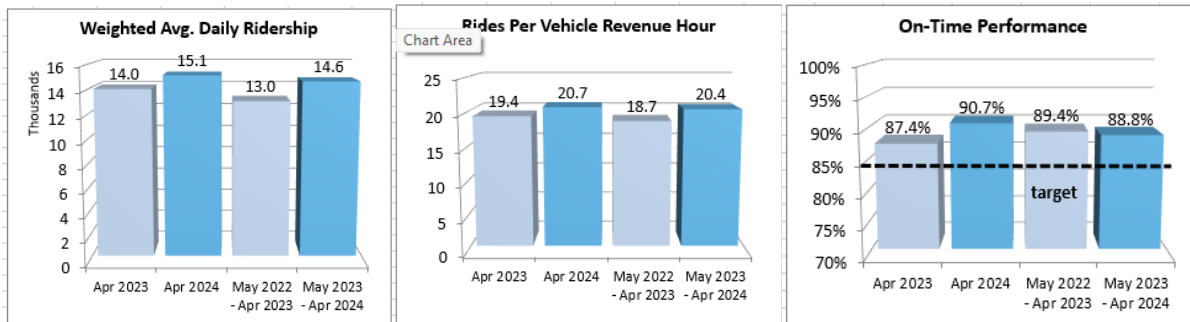


	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY2019	6	431	3,582	4,798	3,648	2,516	1,767	4,206	4,049	4,491	4,456	3,241
FY2020	1,933	4,086	8,193	9,311	7,479	5,413	5,945	9,668	6,227	2,193	1,968	2,310
FY2021	2,414	3,090	3,187	3,535	1,712	2,493	2,402	2,459	2,800	3,225	3,126	3,124
FY2022	2,208	1,584	3,516	0	0	1,480	1,858	2,875	3,773	3,889	3,585	3,287
FY2023	2,533	3,913	5,233	5,103	4,231	3,195	3,335	4,690	4,213	4,314	5,051	4,292
FY2024	4,725	7,045	7,727	8,596	7,244	5,440	6,081	8,520	7,569	8,768		

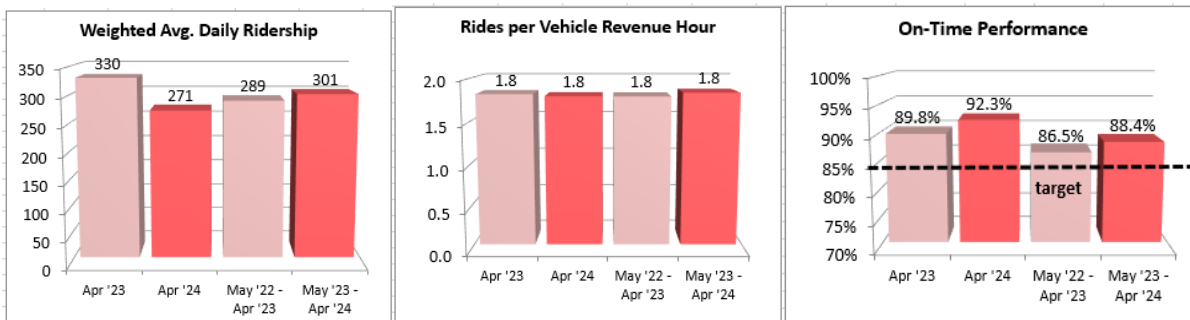
***Both UNR and TMCC had their highest ridership for April to date and UNR has had the highest ridership for each month in FY24.***

### **APRIL 2024 TRANSIT PERFORMANCE**

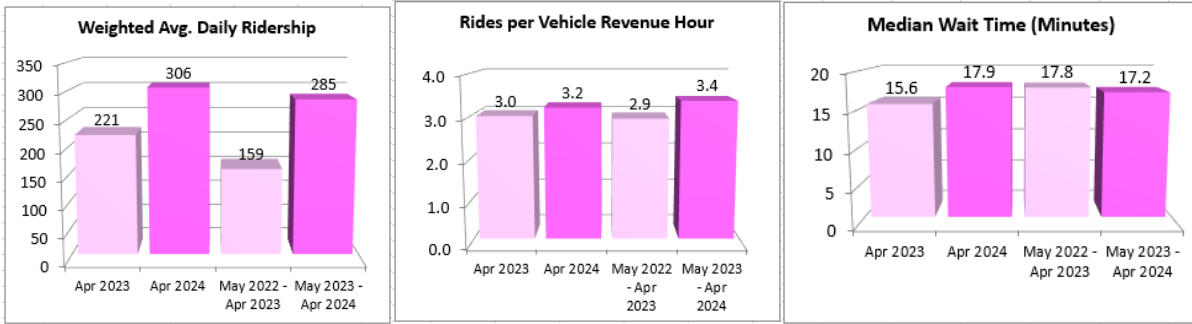
#### **RTC RIDE**



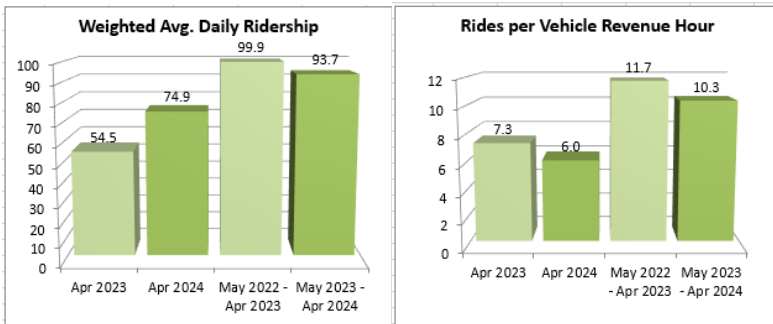
#### **RTC ACCESS**



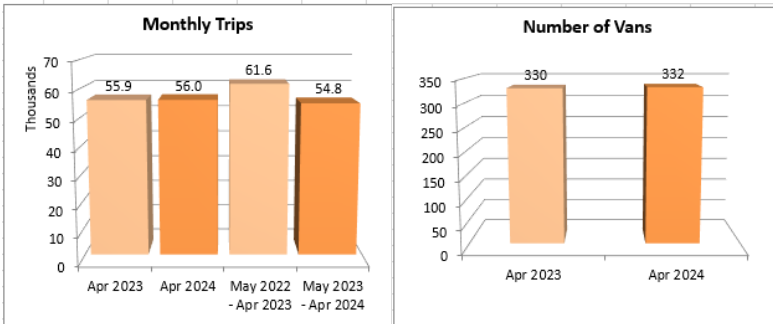
## RTC FlexRIDE



## TART



## RTC VANPOOL





**REGIONAL TRANSPORTATION COMMISSION**

*Metropolitan Planning • Public Transportation & Operations • Engineering & Construction*

Metropolitan Planning Organization of Washoe County, Nevada

**Meeting Date:** 6/21/2024

**Agenda Item:** 4.2.6

To: Regional Transportation Commission

From: Josh MacEachern, Public Information Officer

**SUBJECT: Community and Media Outreach Activities for May**

**RECOMMENDED ACTION**

Acknowledge receipt of monthly Community and Media Outreach Activities Report.

**BACKGROUND AND DISCUSSION**

See Attached for Background and Discussion.

**FISCAL IMPACT**

There is no fiscal impact related to this action.

**PREVIOUS BOARD ACTION**

There has been no previous Board action taken.

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**COMMUNITY AND MEDIA OUTREACH ACTIVITIES**  
**May 2024**

<b>Outreach Activities</b>
Josh MacEachern, Project Manager
<b>Status: RTC staff conducted the following outreach activities from May 1 through May 30</b>
<i>Press Releases</i>
<i>5.3.24 – RTC Transit Service Improvements Release</i>
<i>5.16.24 – Bike to Work Free Rides Release</i>
<i>5.16.24 – Ride Reno Spin Sparks Community Event Release</i>
<i>5.29.24 – Lemmon Drive Resiliency Pop-Up Events Release</i>
<i>Public Outreach</i>
<i>5.4.24 – Sun Valley CAB Meeting (Paul/Amanda)</i>
<i>5.7.24 – Ward 3 NAB Meeting (Paul/Jeff)</i>
<i>5.8.24 – Reno &amp; Sparks Leadership Class (Paul/Bill/Jeff)</i>
<i>5.9.24 – Reno Biggest Business Expo (Josh/Paul)</i>
<i>5.13.24 – Ward 1 NAB Meeting (Paul/Amanda)</i>
<i>5.14.24 – Ward 5 NAB Meeting (Paul/Jeff)</i>
<i>5.16.24 – Ward 4 NAB Meeting (Paul/Dale)</i>
<i>5.20.24 – RTC/University of Nevada Meeting (Josh/Paul/Scott)</i>
<i>5.20.24 – West Truckee Meadows/Verdi Township CAB Meeting (Paul/Jeff)</i>
<i>5.21.24 – Ward 2 NAB Meeting (Paul/Jeff)</i>
<i>5.22.24 – Sparks Senior Citizens Advisory Committee (Paul/Amanda)</i>
<i>5.24.24 – Stuff-a-Bus for Seniors Event (Paul)</i>
<i>5.28.24 – AGC Work Zone Safety Event (Josh/Paul/Bill/Dale)</i>
<i>5.28.24 – Reno Access Advisory Committee (Paul/Dale)</i>
<i>5.29.24 – Joint Interim Standing Committee on Growth &amp; Infrastructure, Hydrogen (Paul/Jim)</i>
<i>5.29.24 – ASUN / RTC Ed-Pass (Josh/Paul/Scott/Jim)</i>

<b>Media Mentions</b>
Josh MacEachern, Project Manager
<i>5.1.24 – (KOLO 8) – The Road Ahead: South Meadows FlexRIDE</i>
<i>5.3.24 – (KOLO 8) – RTC bus route improvements launch this Saturday</i>
<i>5.8.24 – (Business Wire) – Innovative Household Travel Survey Initiative in Reno to Enhance Local Transportation Planning</i>
<i>5.15.24 – (Nevada Sports Net) From construction zones to end zones, Reno’s Dale Keller balances life as an NFL referee</i>
<i>5.17.24 – (KOLO 8) Studio Interview about Ride Reno Spin Sparks (Commissioner Garcia)</i>
<i>5/17/24 – (KOLO 8) RTC offering free rides this weekend to riders who bring a bike</i>
<i>5/18/24 – (KTVN 2) RTC Offering Free Bus Rides to Bikers</i>



5.23.24 – (KOLO 8) Studio Interview about RTP & Stuff-a-Bus (Paul/Josh)  
5.23.24 – (KTVN 2) Video; Construction Near UNR Starting Tuesday (Bryan)  
5.24.24 – (KOLO 8) Studio Interview about Stuff-a-Bus (Paul)  
5.24.24 – (KOLO 8) Interview for Stuff-a-Bus (Paul)  
5.29.24 – (KOLO 8) Studio Interview about RTP Survey (Josh/Dale)  
5.30.24 – (KOLO 8, KTVN 2, KRNV) Lemmon Pop-Up Meeting (Paul)

***Social Media engagement and reach has increased across all platforms.***

### **Informational Materials and Video Production**

Paul Nelson, Project Manager

*Status: Five (5) topics were broadcast on KOLO-TV for The Road Ahead with RTC.*

- Sparks Intelligent Corridor (Dale)
- Ride Reno, Spin Sparks (Commissioner Garcia)
- Stuff-a-Bus for Seniors (Abbie Badolato)
- South Virginia TOD Study (Graham)
- South Virginia & I580 Project (Jeff)



**REGIONAL TRANSPORTATION COMMISSION**

*Metropolitan Planning • Public Transportation & Operations • Engineering & Construction*

Metropolitan Planning Organization of Washoe County, Nevada

**Meeting Date:** 6/21/2024

**Agenda Item:** 4.3.1

To: Regional Transportation Commission

From: Graham Dollarhide, Planning Manager

**SUBJECT: FY2025 UPWP Agreement for Metropolitan Planning Funds**

**RECOMMENDED ACTION**

Approve Cooperative Agreement No. PR284-24-802 between the Nevada Department of Transportation (NDOT) and the Regional Transportation Commission (RTC) for fiscal year (FY) 2025 federal planning funds.

**BACKGROUND AND DISCUSSION**

Federal Planning (PL) funds are the funding source for the majority of activities in the Unified Planning Work Program (UPWP), which RTC adopts biennially. The UPWP identifies the planning studies, such as the Regional Transportation Plan, corridor studies, and other planning activities which the agency undertakes to support the metropolitan transportation planning process. In order to receive funding for the UPWP, the RTC must annually enter into a cooperative agreement with NDOT. Both the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) provide PL funds for transportation planning in metropolitan areas.

The UPWP documents the major transportation planning activities to be undertaken each fiscal year and the funding sources necessary to support these activities. Federal regulations require the RTC develop and approve the UPWP as the Metropolitan Planning Organization (MPO) for the region. The UPWP is developed in coordination with the RTC Annual Budget, incorporating the major objectives, revenues and expenses identified in the budget.

Cooperative Agreement No. PR284-24-802 is the agreement that allows the RTC to utilize federal PL funds available for the fiscal year. The amount of federal funding estimated to be available for FY 2025 is \$3,366,475.72. When approved, this agreement will become effective July 1, 2024.

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**FISCAL IMPACT**

The \$3,366,475.72 in federal PL funds requires a local match of \$158,081.25 (generally a 95/5 ratio, with Complete Streets activities funded at 100% federal).

**PREVIOUS BOARD ACTION**

4/21/2023      Approved the FY 2024-2025 UPWP.

COOPERATIVE AGREEMENT

This Agreement is made and entered into on \_\_\_\_\_, by and between the State of Nevada, acting by and through its Department of Transportation, hereinafter called the "DEPARTMENT", and Regional Transportation Commission of Washoe County, 1105 Terminal Way, Suite 300, Reno, NV 89502, hereinafter called "RTCWA".

WITNESSETH:

WHEREAS, a Cooperative Agreement is defined pursuant to Nevada Revised Statutes (NRS) 277.110 as an agreement between two or more public agencies for the joint exercise of powers, privileges, and authority; and

WHEREAS, pursuant to the provisions contained in Chapter 408 of the Nevada Revised Statutes, the Director of the DEPARTMENT may enter into those agreements necessary to carry out the provisions of the Chapter; and

WHEREAS, NRS 277.110 authorizes any two or more public agencies to enter into agreements for joint or cooperative action; and

WHEREAS, the parties to this Agreement are public agencies and authorized to enter into agreements in accordance with NRS 277.080 to 277.110, inclusive; and

WHEREAS, the purpose of this Agreement is to set forth general provisions for the duties of the parties for the expenditure of the Federal Metropolitan Planning (PL) funds set forth hereinafter called the "PROJECT;" and

WHEREAS, the current Transportation Act provides funding for all modes of transportation under which this PROJECT is eligible for ninety-five percent (95%) federal funds and five percent (5%) matching funds; and

WHEREAS, BIL § 11206(b) requires States and Metropolitan Planning Organizations (MPOs) to use not less than two and 5/10 percent (2.5%) of PL funds on Complete Streets planning activities to waive the non-federal match requirement for PL funds in support of Section 11206, increasing safe and accessible transportation options of the Infrastructure Investment and Jobs Act (IIJA)

WHEREAS, the PROJECT has been approved for Federal Planning funds, Catalog of Federal Domestic Assistance (CFDA) Number CFDA 20.205; and

WHEREAS, the Transportation Planning Services to be provided by RTCWA shall be of benefit to the DEPARTMENT, RTCWA, and to the people of the State of Nevada; and

WHEREAS, the parties hereto are willing and able to perform the services described herein.

NOW, THEREFORE, in consideration of the premises and of the mutual covenants herein contained, it is agreed as follows:

ARTICLE I - RTCWA AGREES

- 1. The undersigned signatory MPO hereby commits to complete, during State Fiscal

Year (FY) 2025, starting July 1, 2024, and ending June 30, 2025, the Unified Planning Work Program (UPWP) as approved and is incorporated herein by this reference and made an express part of this Agreement.

2. To be responsible for the maintenance of a comprehensive, continuing, and cooperative transportation planning process, and as such, shall be responsible for all Transportation Planning funds for the study area whose boundaries shall include the limits of the RTCWA Planning Area Boundary.

3. To be responsible, in cooperation with the DEPARTMENT, for designating the PROJECT priorities on the System of Streets and Highways within the RTCWA boundaries, consistent with the guidelines governing the Regional Transportation Improvement Program.

4. To be responsible, in cooperation with the DEPARTMENT, for compiling, and reviewing the planning consistency of, and adopting a fiscally constrained Transportation Plan and Transportation Improvement Program for the Metropolitan Planning Area.

5. To develop and implement a public participation program to assist RTCWA in identifying community transportation needs and desires. Various methods of providing for public involvement and input may be used as deemed necessary or appropriate. These methods may include but are not limited to meetings, hearings, workshops, citizen committees, and newsletters.

6. To be responsible, in cooperation with the DEPARTMENT, for the annual development, maintenance, adoption, and administration of the RTCWA Unified Planning Work Program as required by Title 23 Code of Federal Regulations 450.314 and Title 23 Part 420, herein incorporated by reference. The Unified Planning Work Program is a program budget document within which the comprehensive metropolitan planning process is defined so that federal and DEPARTMENT planning requirements can be met.

7. To provide funds, from sources other than the DEPARTMENT or federal funds, to cover the balance of the work defined in the Unified Planning Work Program. Any funding provided by the DEPARTMENT as indicated in the Unified Planning Work Program must be expended in the Program year indicated. The DEPARTMENT's obligation to provide DEPARTMENT funds lapses at the end of each Program year as indicated in the approved Unified Planning Work Program. Eligible costs as well as methods for documenting those costs attributable to the PROJECT contracting requirements shall be governed by the current provision of:

a. Office of Management and Budget (OMB) Title 2 Subtitle A Chapter II Part 200.

8. To invoice the DEPARTMENT quarterly for actual eligible costs (with supporting auditable documentation) of completing planning activities as contained in the approved Unified Planning Work Program. Monthly billings will be allowed, at the DEPARTMENT's discretion, on a case-by-case basis. Reimbursement shall not exceed the approved federal funds for the fiscal year that is programmed. This Agreement does not cover fund sources other than the PL funds and the 5303 Federal Transit Administration (FTA) funds transferred to Federal Highway Administration (FHWA) to become PL funds. RTCWA shall be responsible for the non-federal match as required.

9. To invoice the DEPARTMENT for final quarter eligible costs within forty-five (45) calendar days of the program completion.

10. To submit for review a year-end report accounting for the expenditure of all funds and services included as part of the Transportation Section of the Unified Planning Work

Program, with optional quarterly accounting reports on expenditures and services.

11. To permit the DEPARTMENT and the FHWA to audit the books, records, and accounts of RTCWA pertaining to RTCWA's Unified Planning Work Program. In addition, RTCWA shall present to the DEPARTMENT the results of any independent audit, review, and/or inspection of the Unified Planning Work Program prepared by or for RTCWA.

12. To provide and maintain all books, documents, papers, accounting records, and other evidence pertaining to costs incurred and to make such materials available at the administrative offices of RTCWA at all reasonable times during the tenure of this Agreement and for three (3) years from federal acceptance of the PROJECT for work accomplished by RTCWA under the UPWP. Such materials shall be made available for inspection by authorized representatives of the DEPARTMENT or the FHWA, and copies thereof shall be furnished upon request.

13. To establish a separate fund to provide funding for the Transportation Planning Process and to match Federal Transportation Planning Funds. The estimated amount of local match to be paid by RTCWA is One Hundred Fifty-Eight Thousand Eighty-One and 25/100 Dollars (\$158,081.25).

14. Should RTCWA expend funds in excess of those federal funds actually encumbered for FY 2025 against this UPWP, those costs shall be borne solely by RTCWA.

15. The Director of the DEPARTMENT shall be an ex-officio member for participation in matters pertaining to planning. The Nevada Division Administrator of the FHWA shall act in an advisory capacity.

16. During the performance of this Agreement, RTCWA, for itself, its assignees, and successors in interest agrees as follows:

a. Compliance with Regulations: RTCWA shall comply with all of the regulations relative to nondiscrimination in federally-assisted programs of 49 CFR Part 21 as they may be amended from time to time (hereinafter "Regulations"), which are herein incorporated by reference and made a part of this Agreement.

b. Nondiscrimination: RTCWA, with regard to the professional services performed by it during the Agreement, shall not discriminate on the grounds of race, color, age, religion, sex, creed, disability/handicap, national origin in the selection and retention of subcontractors, including procurement of materials and leases of equipment. RTCWA shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices, when this Agreement covers a program set forth in Appendix B of the Regulations.

c. Solicitations for Subcontracts, Including Procurement of Materials, and Equipment: In all solicitations either by competitive bidding or negotiation made by RTCWA for professional services to be performed under a subcontract, including procurement of materials or leases of equipment, each potential subcontractor or supplier shall be notified by RTCWA of the subcontractor's obligations under this Agreement and the Regulations relative to nondiscrimination on the grounds of race, color, age, religion, sex, creed, disability/handicap, national origin.

d. Information and Reports: RTCWA shall provide all information and reports required by the Regulations, or directives issued pursuant thereto, and shall permit access to its

facilities as may be determined by the DEPARTMENT or the FHWA to be pertinent to ascertain compliance with such Regulations or directives. Where any information required of RTCWA is in the exclusive possession of another who fails or refuses to furnish this information, RTCWA shall so certify to the DEPARTMENT, or the FHWA as appropriate, and shall set forth what efforts it has made to obtain the information.

e. Sanctions for Noncompliance: In the event of RTCWA's noncompliance with the nondiscrimination provisions of this Agreement, the DEPARTMENT shall impose such Agreement sanctions as it or the FHWA may determine to be appropriate, including, but not limited to:

1. Withholding of payments to RTCWA under this Agreement until RTCWA complies, and/or

2. Cancellation, termination or suspension of this Agreement, in whole or in part.

f. Agreements with subcontractors shall include provisions making all subcontractor records available for audit by the DEPARTMENT and/or the FHWA.

g. Incorporation of Provisions: RTCWA shall include the provisions of Paragraphs (a) through (f) above in every subcontract, including procurement of materials and leases of equipment, unless exempt by Regulations, order, or instructions issued pursuant thereto. RTCWA shall take such action with respect to any subcontract or procurement as the DEPARTMENT or the FHWA may direct as a means of enforcing such provisions, including sanctions for non-compliance. In the event RTCWA becomes involved in, or is threatened with, litigation by a subcontractor or supplier as a result of such direction, RTCWA may request the DEPARTMENT to enter into such litigation to protect the interest of the DEPARTMENT, and RTCWA may request the United States to enter into such litigation to protect the interests of the United States.

ARTICLE II - DEPARTMENT AGREES

1. Subject to availability of funds this FY, UPWP funds encumbered by the DEPARTMENT include, but may not exceed, the estimated amount of federal funds for FY 2025 is:

Federal Funds at 95%	\$3,003,543.72
Federal Funds at 100% for Complete Street Activities (BIL § 11206)	\$362,932.00
Total Federal Estimated PROJECT Costs:	\$3,366,475.72

2. Reimbursement of these funds shall begin when the funds are made available to the DEPARTMENT.

3. To participate in the ongoing Transportation Planning Program and to provide funds for eligible activities in the federally approved UPWP. Any state funds used shall come from monies authorized by NRS Chapter 408 and shall be utilized for funding only by agreement in writing approved by the DEPARTMENT.

4. To program the approved federal funds each year allocable to RTCWA. The DEPARTMENT agrees to reimburse RTCWA ninety-five percent (95%) or one hundred percent (100%), depending on whether non-federal match is required, of the amount approved by FHWA of the Program costs upon receipt of quarterly billings with supporting documentation. Total

reimbursement shall not exceed the total amount appropriated for each Federal Fiscal Year (FFY). Reimbursement shall not exceed the amount shown for each of the tasks in the approved RTCWA UPWP.

5. To reimburse RTCWA PL funds no later than fifteen (15) calendar days (FAST Act) after the date of receipt as authorized in Title 23 United States Code (USC). The invoice must contain all appropriate documentation and backup material. If the required documentation contains errors or is not included with the invoice as required, the invoice shall be returned to the respective MPO for corrections. After corrections are made, the invoice shall be returned to the DEPARTMENT and the 15-calendar day period will begin affective upon stamped receipt of the corrected invoice.

6. To notify RTCWA within thirty (30) calendar days of the publication of a FHWA Notice as authorized by Congress of the rescission of Federal Metropolitan Planning funds of the amounts to be rescinded from each of the various Metropolitan Planning areas of the State of Nevada under said Notice together with any amounts withheld by the DEPARTMENT and the basis for this allocation.

7. The DEPARTMENT shall inform RTCWA and the FHWA Division Office of the amounts allocated (per the mutually agreed upon allocation formula) to RTCWA as soon as possible, but no later than thirty (30) calendar days, after PL and 5303 FTA funds have been apportioned by the United States Department of Transportation (USDOT) to the DEPARTMENT.

### ARTICLE III - IT IS MUTUALLY AGREED

1. The term of this Agreement shall be from the date first written above through and including June 30, 2025.

2. This Agreement shall not become effective until and unless approved by appropriate official action of the governing body of each party.

3. In the event that RTCWA performs or causes to be performed any work after: (a) the Agreement's expiration date as set forth within this Agreement, as it may be amended from time to time through written amendment signed by the parties hereto and approved by appropriate official action of the DEPARTMENT's governing body, prior to such expiration date; or (b) termination of this Agreement prior to the expiration date set forth within this Agreement; then the DEPARTMENT shall make no payment for work performed following the expiration or termination dates, and RTCWA shall forfeit any and all right to payment for such work.

4. RTCWA, on behalf of itself, its spouses, heirs, executors, administrators, successors, subrogees, servants, insurers, attorneys, independent representatives, personal representatives, agents, and assigns, does hereby waive, release, and forever discharge the State of Nevada, the DEPARTMENT, and each and every of their departments, divisions, agencies, officers, directors, agents, contractors, and employees, from any and all claims, demands, liens, liability, actions, causes of action, and suits for damages, at law and in equity, in any way connected with or arising from RTCWA's provision of services and work performed following termination of this Agreement and/or following the expiration date of this Agreement, as it may be amended from time to time through written amendment signed by the parties hereto and approved by appropriate official action of the DEPARTMENT's governing body, prior to such expiration date.

5. Neither the State of Nevada, the DEPARTMENT, nor any of their departments, divisions, agencies, officers, directors, agents, contractors, and employees, shall have authority to extend this Agreement beyond the expiration date set forth within this Agreement, unless such



extension is set forth within a written amendment signed by the parties hereto and approved by appropriate official action of the DEPARTMENT's governing body prior to such expiration date. RTCWA shall not rely upon any oral or written representations expressed extrinsic to a written amendment signed by the parties hereto and approved by appropriate official action of the DEPARTMENT's governing body prior to such expiration date, purporting to alter or amend this Agreement, including, but not limited to, representations relating to the extension of the Agreement's expiration date.

6. Paragraphs 1 through 6 of this Article III - It is Mutually Agreed, shall survive the termination and expiration of this Agreement.

7. RTCWA shall not proceed with said work until a copy of this fully executed Agreement is received. If RTCWA does commence said work prior to receiving a copy of this fully executed Agreement, RTCWA shall forfeit any and all right to reimbursement for that portion of the work performed prior to said dates. Furthermore, RTCWA shall not rely on the terms of this Agreement in any way, including, but not limited to, any written or oral representations and warranties made by the DEPARTMENT or any of its agents, employees, or affiliates, or on any dates of performance, deadlines, indemnities, or any other term contained in this Agreement or otherwise prior to the receipt of the fully executed Agreement. In the event RTCWA violates the provisions of this Section, it waives any and all claims and damages against the DEPARTMENT, its employees, agents and/or affiliates, including, but not limited to, monetary damages and/or any other available remedy at law or in equity.

8. This Agreement may be terminated by either party prior to the date set forth above, provided that a termination shall not be effective until thirty (30) calendar days after a party has served written notice upon the other party. This Agreement may be terminated by mutual consent of both parties, or unilaterally by either party without cause. The parties expressly agree that this Agreement shall be terminated immediately if for any reason Federal and/or State Legislature funding ability to satisfy this Agreement is withdrawn, limited, or impaired.

9. All notices or other communications required or permitted to be given under this Agreement shall be in writing and shall be deemed to have been duly given if delivered personally in hand, by telephonic facsimile or electronic mail with simultaneous regular mail, or mailed certified mail, return receipt requested, postage prepaid on the date posted, and addressed to the other party at the address set forth below:

FOR DEPARTMENT:

Tracy Larkin Thomason, Director  
Attn: Kevin Verre, Chief, Multimodal Program  
Development  
Nevada Department of Transportation  
Division: Planning  
1263 South Stewart Street  
Carson City, NV 89712  
Phone: (775) 888-7712  
Fax: (775) 888-7207  
Email: [kverre@dot.nv.gov](mailto:kverre@dot.nv.gov)

FOR MPO:

William A. Thomas  
CC: Graham Dollarhide, Planning Manager  
Regional Transportation Commission  
Washoe County (RTCWA)  
1105 Terminal Way, Suite 217  
Reno, NV 89502  
Phone: (775) 335-1826  
Email: [bthomas@rtcwashoe.com](mailto:bthomas@rtcwashoe.com)

Email:

[gdollarhide@rtcwashoe.com](mailto:gdollarhide@rtcwashoe.com)

10. Should this Agreement be terminated by RTCWA prior to completion of the PROJECT, RTCWA shall reimburse the DEPARTMENT for all improvement costs incurred up to the point of Agreement termination and all costs incurred by the DEPARTMENT because of this Agreement's termination.

11. RTCWA agrees to pay actual PROJECT costs whether they be greater than or less than the estimates shown herein.

12. RTCWA shall ensure that any reports, materials, studies, photographs, negatives, drawings or other documents prepared in the performance obligations under this Agreement shall be the exclusive, joint property of RTCWA and the DEPARTMENT. RTCWA shall ensure any subconsultant(s) shall not use, willingly allow, or cause to have such documents used for any purpose other than performance of obligations under this Agreement without the written consent of both RTCWA and the DEPARTMENT. RTCWA shall not utilize (and shall ensure any subconsultant(s) shall not utilize) any materials, information, or data obtained as a result of performance of this Agreement in any commercial or academic publication or presentation without the express written permission of the DEPARTMENT. RTCWA (and any subconsultant(s)) shall not reference an opinion of an employee or agent of the DEPARTMENT obtained as a result of performance of this Agreement in any publication or presentation without the written permission of the employee or agent to whom the opinion is attributed, in addition to the written permission of the DEPARTMENT.

13. Neither party shall be deemed to be in violation of this Agreement if it is prevented from performing any of its obligations hereunder due to strikes, failure of public transportation, civil or military authority, act of public enemy, accidents, fires, explosions, or acts of God, including, without limitations, earthquakes, floods, winds or storms. In such an event, the intervening cause must not be through the fault of the party asserting such an excuse, and the excused party is obligated to promptly perform in accordance with the terms of the Agreement after the intervening cause ceases.

14. To the fullest extent of NRS Chapter 41 liability limitations, each party shall indemnify, hold harmless, and defend, not excluding the other's right to participate, the other from and against all liability, claims, actions, damages, losses, and expenses, including, but not limited to, reasonable attorneys' fees and costs, caused by the negligence, errors, omissions, recklessness, or intentional misconduct of its own officers, employees, and agents. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described herein. This indemnification obligation is conditioned upon the performance of the duty of the party seeking indemnification (indemnified party) to serve the other party (indemnifying party) with written notice of an actual or pending claim, within thirty (30) calendar days of the indemnified party's notice of such actual or pending claim or cause of action. The indemnifying party shall not be liable for reimbursement of any attorney's fees and costs incurred by the indemnified party due to said party exercising its right to participate with legal counsel.

15. The parties do not waive and intend to assert available NRS Chapter 41 liability limitations in all cases. Agreement liability of both parties shall not be subject to punitive damages. Actual damages for any DEPARTMENT breach shall never exceed the amount of funds which have been appropriated for payment under this Agreement, but not yet paid, for the fiscal year budget in existence at the time of the breach.

16. Failure to declare a breach or the actual waiver of any particular breach of this

Agreement or any of its material or nonmaterial terms by either party shall not operate as a waiver by such party of any of its rights or remedies as to any other breach, including a breach of the same term.

17. An alteration ordered by the DEPARTMENT, which substantially changes the services provided for by the expressed intent of this Agreement shall be considered extra work and shall be specified in a written amendment which shall set forth the nature and scope thereof. The method of payment for extra work shall be specified at the time the amendment is written.

18. This Agreement and the rights and obligations of the parties hereto shall be governed by, and construed according to, the laws of the State of Nevada. The parties consent to the exclusive jurisdiction of the Nevada state district courts for enforcement of this Agreement.

19. The illegality or invalidity of any provision or portion of this Agreement shall not affect the validity of the remainder of the Agreement, and this Agreement shall be construed as if such provision did not exist. The unenforceability of such provision shall not be held to render any other provision or provisions of this Agreement unenforceable.

20. Except as otherwise expressly provided within this Agreement, all or any property presently owned by either party shall remain in such ownership upon termination of this Agreement, and there shall be no transfer of property between the parties during the course of this Agreement.

21. In the event the Nevada Legislature does not appropriate sufficient or any funds for a DEPARTMENT biennium during the term of this Agreement, this Agreement shall terminate.

22. It is specifically agreed between the parties executing this Agreement that it is not intended by any of the provisions of any part of this Agreement to create in the public or any member thereof a third-party beneficiary status hereunder or to authorize anyone not a party to this Agreement to maintain a suit for personal injuries or property damage pursuant to the terms or provisions of this Agreement.

23. Each party agrees to keep and maintain under generally accepted accounting principles full, true, and complete records and documents pertaining to this Agreement and present, at any reasonable time, such information for inspection, examination, review, audit, and copying at any office where such records and documentation are maintained. Such records and documentation shall be maintained for three (3) years after final payment is made.

24. The parties are associated with each other only for the purposes and to the extent set forth in this Agreement. Each party is, and shall be, a public agency separate and distinct from the other party and shall have the right to supervise, manage, operate, control, and direct performance of the details incident to its duties under this Agreement. Nothing contained in this Agreement shall be deemed or construed to create a partnership or joint venture, to create relationships of an employer-employee or principal-agent, or to otherwise create any liability for one agency whatsoever with respect to the indebtedness, liabilities, and obligations of the other agency or any other party.

25. Neither party shall assign, transfer or delegate any rights, obligations, or duties under this Agreement without the prior written consent of the other party.

26. The parties hereto represent and warrant that the person executing this Agreement on behalf of each party has full power and authority to enter into this Agreement and that the parties are authorized by law to engage in the cooperative action set forth herein.

27. Pursuant to NRS 239.010 information or documents may be open to public

inspection and copying. The parties shall have the duty to disclose unless a particular record is confidential by law or a common law balancing of interests.

28. Each party shall keep confidential all information, in whatever form, produced, prepared, observed, or received by that party to the extent that such information is confidential by law or otherwise required to be kept confidential by this Agreement.

29. This Agreement constitutes the entire agreement of the parties and such is intended as a complete and exclusive statement of the promises, representations, negotiations, discussions, and other agreements that may have been made in connection with the subject matter hereof. Unless an integrated attachment to this Agreement specifically displays a mutual intent to amend a particular part of this Agreement, general conflicts in language between any such attachment and this Agreement shall be construed consistent with the terms of this Agreement. Unless otherwise expressly authorized by the terms of this Agreement, no modification or amendment to this Agreement shall be binding upon the parties unless the same is in writing and signed by the respective parties hereto and approved by the Attorney General.

IN WITNESS WHEREOF, the parties have executed this Agreement on the day and year first above written.

Regional Transportation Commission of  
Washoe County

State of Nevada, acting by and through its  
DEPARTMENT OF TRANSPORTATION

In Process

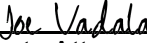
\_\_\_\_\_

\_\_\_\_\_

Director

\_\_\_\_\_  
Name and Title (Print)

Approved as to Legality and Form:

DocuSigned by:  
  
\_\_\_\_\_  
Deputy Attorney General



**REGIONAL TRANSPORTATION COMMISSION**

*Metropolitan Planning • Public Transportation & Operations • Engineering & Construction*

Metropolitan Planning Organization of Washoe County, Nevada

**Meeting Date:** 6/21/2024

**Agenda Item:** 4.4.1

To: Regional Transportation Commission

From: Michele Payne, Property Agent

**SUBJECT: Administrative Settlement - Galantuomini Family Holdings, LLC**

**RECOMMENDED ACTION**

Approve an administrative settlement in the amount of \$109,336 authorizing RTC to acquire certain property interests related to APN 013-084-02 from Galantuomini Family Holdings, LLC, for the Mill Street Capacity and Safety Project.

**BACKGROUND AND DISCUSSION**

RTC is in the process of acquiring property needed for the Mill Street Capacity and Safety Project. RTC and Galantuomini Family Holdings, LLC have negotiated an agreement to purchase certain property interests related to APN 013-084-02, contingent upon Board approval. The proposed purchase price is \$436,035, which represents a proposed administrative settlement of \$109,336 above RTC's original appraised value and offer of \$326,699. RTC Management Policy P-55 requires Board approval of administrative settlements in excess of \$50,000.

Staff recommends approval of the settlement. If the Board approves the settlement, the Executive Director will execute the attached agreement and RTC will acquire the property interests. If the Board does not approve the settlement, staff will continue to attempt to negotiate for the purchase of the property interests until it becomes necessary to file a complaint in eminent domain.

**FISCAL IMPACT**

The costs to acquire the subject property interests are included in the FY 2025 budget.

**PREVIOUS BOARD ACTION**

There has been no previous Board action taken.

Project: Mill Street Capacity & Safety Project  
Project #: 0211007  
Parcel: 013-084-02  
Situs': 2150 & 2190 Mill Street

## PUBLIC HIGHWAY AGREEMENT

THIS PUBLIC HIGHWAY AGREEMENT ("AGREEMENT"), made this \_\_\_\_\_ day of \_\_\_\_\_, 2024 (the "EFFECTIVE DATE"), by and between, Galantuomini Family Holdings LLC, a Nevada Limited Liability Company, hereinafter called the ("OWNER"), and the REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY, hereinafter called the ("RTC").

### WITNESSETH:

1. That the OWNER, for and in consideration of the covenants to be performed and payments to be paid as herein provided, represents the following:

(a) OWNER is the owner of that certain real property located in Washoe County, Nevada, described as Assessor's Parcel Number 013-084-02 (the "OWNER PROPERTY").

(b) OWNER owns fee title to OWNER PROPERTY and there are no prior encumbrances, liens, restrictions, covenants or conditions applicable to the OWNER PROPERTY which will frustrate or interfere with the purposes of this AGREEMENT.

(c) That there are no leases, licenses, conditions, actions or threatened or pending litigation related to the OWNER PROPERTY which will frustrate or interfere with the purposes of this AGREEMENT.

2. That the OWNER, for and in consideration of the covenants to be performed and payments to be paid as herein provided, agrees as follows:

(a) To sell and convey a portion of the OWNER PROPERTY to the RTC, free and clear of any liens or encumbrances created by OWNER, by way of a grant, bargain and sale deed in substantially the form attached hereto as Schedule 1; this real property is described on Exhibit "A" to Schedule 1 and depicted on Exhibit "B" to Schedule 1, attached hereto and made a part hereof (the "LAND").

(b) To grant a temporary construction easement to the RTC upon, over and across a portion of the OWNER PROPERTY by way of a temporary construction easement document in substantially the form attached hereto as Schedule 2; this temporary construction easement is described on Exhibit "A" to Schedule 2 and depicted on Exhibit "B" to Schedule 2, attached hereto and made a part hereof (the "TCE EASEMENT AREA").

(c) To deposit into escrow with Stewart Title, 5390 Kietzke Lane, Suite 101, Reno, Nevada 89511 (Attn: Roberta Crown Rogers), hereinafter called (the "ESCROW AGENT"), all the aforementioned documents, fully executed and notarized where required, on or prior to \_\_\_\_\_ (the "ESCROW CLOSING DATE").

(d) To deliver to ESCROW AGENT such other documentation as ESCROW AGENT may reasonably require to close the escrow and consummate the real property transfers in accordance with the terms of this AGREEMENT.

(e) To be responsible for the LAND and TCE EASEMENT AREA, including risk and liability for loss and damage, including all repairs to the premises prior to the ESCROW CLOSING DATE.

(f) To acknowledge and hereby does acknowledge, that a public highway and the necessary incidents thereto (the "PROJECT"), are to be located upon, over, and across the LAND.

(g) To waive, and hereby does waive, all claims and rights that OWNER may have to seek consequential, special and/or punitive damages in relation to any breach of the obligations contemplated in this AGREEMENT, and acknowledges that nothing in this AGREEMENT is intended to or shall it be construed to waive the rights, limitations and immunities of the RTC under Nevada Revised Statutes Chapter 41.

3. The RTC, in consideration of the promises and covenants of the OWNER herein set forth, agrees as follows:

(a) To pay to the OWNER through the deposit into escrow the sum of FOUR HUNDRED THIRTY-SIX THOUSAND THIRTY-FIVE DOLLARS (\$436,035), which shall be the total purchase price for the LAND AND TCE EASEMENT AREA, as follows: The partial fee simple acquisition area constituting the LAND totaling 2,792 square feet, the TCE EASEMENT of 2,686 square feet for a three-year term.

(b) To deliver to ESCROW AGENT such other documentation as ESCROW AGENT may reasonably require to close the escrow and consummate the real property transfers in accordance with the terms of this AGREEMENT.

(c) To acknowledge, and hereby does acknowledge, that the real property conveyed hereby is transferred and sold "AS IS", "WHERE IS", WITH ALL FAULTS AND CONDITIONS THEREON, and that OWNER has not made and specifically disclaims any representations, warranties, promises, covenants or guaranties of any kind or character whatsoever, whether express or implied, oral or written, past, present or future with respect to the LAND and TCE EASEMENT AREA, and hereby waives any right to make any claim against OWNER based on any of the foregoing.

(d) To leave the TCE EASEMENT AREA in as neat and presentable condition as existed prior to RTC's entry.

4. In the event of any default by OWNER under this AGREEMENT, the RTC may, as its sole and exclusive remedy for such default, either: (1) terminate this AGREEMENT in its entirety by delivery of notice of termination to OWNER and receive a refund of all amounts paid by RTC to the OWNER, or (2) continue this AGREEMENT pending the RTC's action for injunctive relief and/or specific performance hereunder provided appropriate proceedings are commenced by the RTC within ninety (90) days following RTC's written notice to OWNER of OWNER's default. Nothing in this Section shall limit or impair the rights of the RTC to condemn or exercise its power of condemnation and eminent domain with respect to real property interests needed for the PROJECT including, but not limited to, the LAND and TCE EASEMENT AREA.

5. With respect to the PROJECT, it is mutually agreed and understood by the RTC and by the OWNER as follows:

(a) Based upon the best information available to RTC for the time frame of the PROJECT, the term of the TCE EASEMENT shall commence on July 1, 2024 and shall continue through and including June 30, 2027. The RTC shall have the option, at its sole discretion, to extend the term of the TCE EASEMENT under the same terms and conditions of this AGREEMENT, for One (1) additional successive term of Twelve (12) months, for a total TCE EASEMENT term not to exceed four (4) years, by delivering written notice to OWNER not later than May 31, 2027. The RTC's exercise of the term extension option shall not be effective or binding upon the RTC unless and until the same has been approved by the appropriate official action of the RTC and communicated in writing to the OWNER.

(b) In the event the RTC exercises its option to extend the term of the TCE EASEMENT, the rental rate price to be paid by the RTC to the OWNER shall be that same rental rate as established in this AGREEMENT of: (FIFTY) (\$50.00) per square foot for Assessor Parcel No. 013-084-02, multiplied by a rental rate of NINE percent (9%) multiplied by ONE (1) year, for a total amount of TWELVE THOUSAND EIGHT-SEVEN DOLLARS (\$12,087). Payment of the foregoing sum to OWNER by the RTC shall be a condition to the effectiveness of the option to extend the term of the TCE EASEMENT. Upon completion of the Project, the RTC will execute any documentation as may be reasonably necessary to cause the TCE EASEMENT to be released of record.

(c) That as soon as reasonably practicable following the EFFECTIVE DATE hereof, the RTC shall commence and thereafter shall use its commercially reasonable best efforts to complete the PROJECT within the timeline (as may be extended) previously provided to OWNER and as provided for by all applicable laws and standards.

6. It is further mutually agreed and understood by the RTC and by the OWNER as follows:

(a) The laws of the State of Nevada shall be applied in interpreting and construing this AGREEMENT. The party's consent to the exclusive jurisdiction and venue of the Second Judicial District Court in and for the State of Nevada, located in Washoe County, Nevada, for the enforcement of this AGREEMENT.

(b) This AGREEMENT shall constitute the entire contract between the parties hereto, and no modification hereof shall be binding upon the parties unless the same is in writing and signed by the respective parties hereto.

(c) All covenants and agreements herein contained shall extend to and be obligatory upon the heirs, executors, administrators, successors, and assigns, as the case may be, of the respective parties.

(d) As used herein the term OWNER shall include the plural as well as the singular, and the feminine as well as the masculine and the neuter.

(e) The covenants and agreements expressed in the AGREEMENT shall survive the Close of Escrow.

(f) The regulations pertaining to nondiscrimination and Title VI of the Civil Rights Act of 1964, as contained in Title 23, Code of Federal Regulations Part 200, and Title 49, Code of Federal Regulations Part 21, are hereby incorporated by reference and made a part of this AGREEMENT.

(g) Except as otherwise provided for by law or this AGREEMENT, the rights and remedies of the parties hereto shall not be exclusive and are in addition to any other rights and remedies provided by law or equity.

(h) That the persons signing this AGREEMENT and all related documents on behalf of the RTC and OWNER are duly authorized to so sign and have the full power and authority to bind them, and to enter into and perform the obligations hereunder.

(i) That this AGREEMENT may be executed in counterpart.

(j) Notices. Except as otherwise expressly specified in this AGREEMENT, all notices, requests, consents, approvals, agreements, authorizations, acknowledgments, waivers and other communications required or permitted hereunder shall be in writing to the addresses set forth below and shall be deemed given: (i) immediately when delivered by hand; (ii) the next business day when sent by overnight delivery by internationally recognized express courier such as Federal Express or UPS; or (iii) three (3) days after deposit in the United States mail postage prepaid, registered or certified mail, return receipt requested:



**To RTC:**

Regional Transportation Commission of Washoe County  
Attn: Michele Payne  
1105 Terminal Way, Suite 108  
Reno, NV 89502

**To OWNER:**

Galantuomini Family Holdings LLC  
2105 Humboldt Street  
Attn: Carol Galantuomini  
Reno, NV 89509

*Signature Pages Follow*

IN WITNESS WHEREOF the parties hereto have executed this AGREEMENT the day and year first above written.

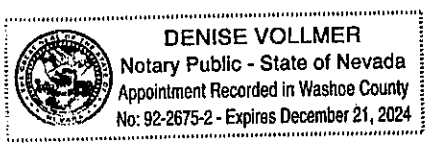
OWNER: Galantuomini Family Holdings LLC, a Nevada Limited Liability Company

By: Carol Galantuomini  
Carol Galantuomini, Manager

STATE OF NEVADA                    )  
  ) ss.  
COUNTY OF WASHOE                )

This instrument was acknowledged before me on May 29, 2024 by Carol Galantuomini, as Manager of Galantuomini Family Holdings LLC, a Nevada Limited Liability Company.

S  
E  
A  
L



Denise Vollmer  
Notary Public

My commission expires:  
December 21, 2024

*RTC Signature Page Follows*

RTC:

REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY

\_\_\_\_\_  
William Thomas, Executive Director

STATE OF NEVADA                    )  
  ) ss.  
COUNTY OF WASHOE                )

This instrument was acknowledged before me on \_\_\_\_\_  
by William Thomas as Executive Director of the Regional Transportation Commission of Washoe County.

S  
E  
A  
L

\_\_\_\_\_  
Notary Public

My commission expires:  
\_\_\_\_\_

SCHEDULE 1

FORM OF GRANT, BARGAIN AND SALE DEED

LEGAL DESCRIPTION PREPARED BY:  
HALANA D. SALAZAR, PLS  
JACOBS ENGINEERING  
50 W. LIBERTY ST., SUITE 205  
RENO, NV 89501

**EXHIBIT "A"**  
**LEGAL DESCRIPTION**

Ptn. of APN 013-084-02  
Fee Parcel

Situate, lying and being in the City of Reno, County of Washoe, State of Nevada, and more particularly described as being a portion of the SW 1/4 of Section 7 and the NW 1/4 of Section 18, T. 19 N., R. 20 E., M.D.M.; and more fully described by metes and bounds as follows:

BEGINNING at the intersection of the right or southerly right-of-way line of Mill Street with Grantor's westerly boundary line, 52.00 feet right of and at right angles to Highway Engineer's Station "M" 105+04.60 P.O.T.; said point of beginning further described as bearing S. 26°49'32" W. a distance of 2,934.29 feet from the center quarter corner of said Section 7; said corner further described as being a 3 inch brass cap in a survey well stamped "Center Sec 7/C ENGR" in Glendale Avenue; thence N. 25°47'53" E., along said westerly boundary line, a distance of 13.12 feet to the former right or southerly right-of-way line of said Mill Street; thence S. 62°55'32" E., along said former southerly right-of-way line, a distance of 185.81 feet; thence S. 53°34'58" E., continuing along said former southerly right-of-way line, a distance of 49.32 feet to Grantor's easterly boundary line; thence S. 00°34'48" W., along said easterly boundary line, a distance of 13.94 feet to said right or southerly right-of-way line of Mill Street; thence N. 53°54'19" W., along said southerly right-of-way line, a distance of 63.40 feet; thence N. 63°45'10" W., continuing along said southerly right-of-way line, a distance of 177.81 feet to the point of beginning; said parcel contains an area of 2,792 square feet (0.06 of an acre).

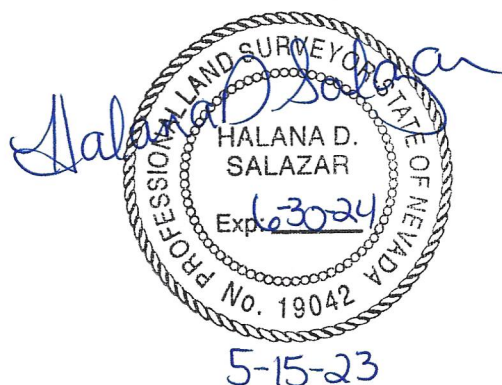
TOGETHER WITH the access rights, including the abutter's rights in and to I-580 Freeway along the following described line:

BEGINNING at a point on the left or westerly right-of-way line of I-580 Freeway and the left or southerly right-of-way line of Mill Street, 343.87 feet left of and measured radially from the centerline of said I-580 Freeway at Highway Engineer's Station "PH1 P1" 470+66.27 P.O.C.; said point of beginning further described as bearing S. 23°12'27" W. from the center quarter corner of said Section 7, said corner further described as being a 3 inch brass cap in a survey well stamped "Center Sec 7/C ENGR" in Glendale Avenue; thence S. 53°54'19" E. a distance of 55.59 feet to the point of ending; said point of

ending being 303.31 feet left of and measured radially from the centerline of said I-580 Freeway at Highway Engineer's Station "PH1 P1" 470+30.19 P.O.C.; said point of ending further described as bearing S. 22°09'21" W. from said center quarter corner of Section 7.

Said rights were previously acquired by that certain DEED dated August 20, 1971, filed for record on September 8, 1971 in Book 573, Page 261, Document No. 218019, in Official Records, Washoe County, Nevada;

The Basis of Bearing for this description is the NEVADA STATE PLANE COORDINATE SYSTEM, NAD 83/94 DATUM, West Zone as determined by the State of Nevada, Department of Transportation.



# EXHIBIT "B"

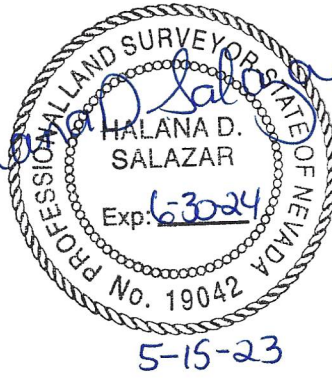


SCALE: 1"=50'



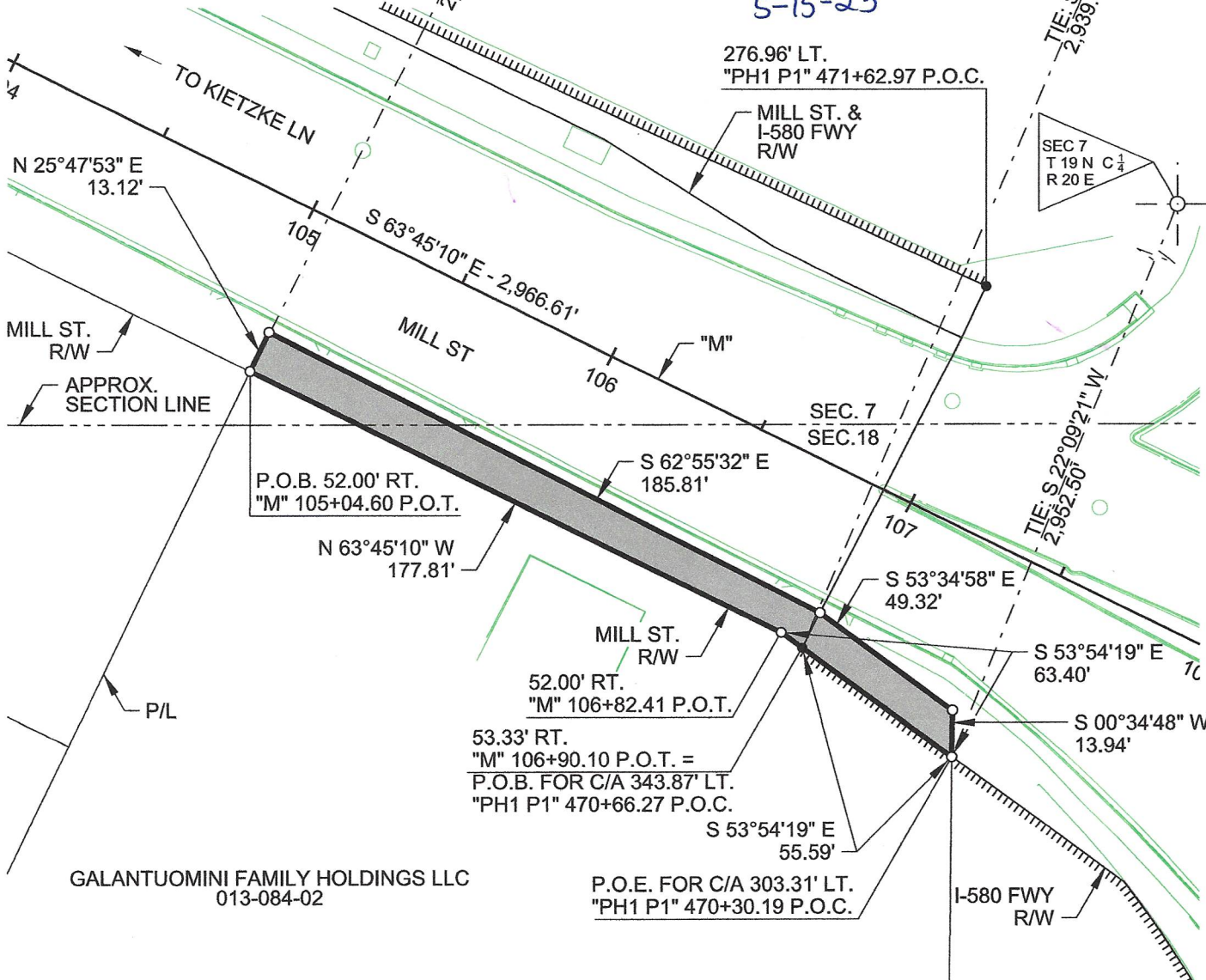
FEE ACQUISITION

SEC 7  
T 19 N C 1/4  
R 20 E



SEC 7  
T 19 N C 1/4  
R 20 E

SEC 7  
T 19 N C 1/4  
R 20 E



**LEGEND**

CONTROL OF ACCESS WITH FENCE OR BARRIER

OWNER: GALANTUOMINI FAMILY HOLDINGS LLC, A NEVADA LIMITED LIABILITY COMPANY  
 ASSESSOR PARCEL NO's: APN 013-084-02  
 SECTION, TOWNSHIP, RANGE: SW 1/4 SECTION 7 & NW 1/4 SECTION 18, T. 19 N., R. 20 E.  
 AREA: 2,792 SQUARE FEET  
 LOCATION: CITY OF RENO, COUNTY OF WASHOE

<p>PROPERTY LOCATION MAP</p>	<p>JOB NO: W7Y47500</p>	<p><b>JACOBS</b> 50 W. LIBERTY ST. STE #205 RENO, NV 89501 (775) 329-7300</p>
	<p>DATE: 05/15/2023</p>	
	<p>DRAWN BY: SB</p>	
	<p>CHECKED BY: HS</p>	

SCHEDULE 2

FORM OF TEMPORARY CONSTRUCTION EASEMENT DEED



LEGAL DESCRIPTION PREPARED BY:  
HALANA D. SALAZAR, PLS  
JACOBS ENGINEERING  
50 W. LIBERTY ST., SUITE 205  
RENO, NV 89501

**EXHIBIT "A"**  
**TEMPORARY CONSTRUCTION EASEMENT**  
**LEGAL DESCRIPTION**

Ptn. of APN 013-084-02

Situate, lying and being in the City of Reno, County of Washoe, State of Nevada, and more particularly described as being a portion of the SW 1/4 of Section 7 and the NW 1/4 of Section 18, T. 19 N., R. 20 E., M.D.M.; and more fully described by metes and bounds as follows:

BEGINNING at the intersection of the right or southerly right-of-way line of Mill Street with Grantor's westerly boundary line, 52.00 feet right of and at right angles to Highway Engineer's Station "M" 105+04.60 P.O.T.; said point of beginning further described as bearing S. 26°49'32" W. a distance of 2,934.29 feet from the center quarter corner of said Section 7; said corner further described as being a 3 inch brass cap in a survey well stamped "Center Sec 7/C ENGR" in Glendale Avenue; thence S. 63°45'10" E., along said southerly right-of-way line, a distance of 177.81 feet; thence S. 53°54'19" E., continuing along said southerly right-of-way line, a distance of 63.40 feet to Grantor's easterly boundary line; thence S. 00°34'48" W., along said easterly boundary line, a distance of 18.43 feet; thence along the following four (4) courses and distances:

- 1) N. 53°54'19" W. – 122.51 feet;
- 2) N. 63°45'10" W. – 27.81 feet;
- 3) S. 26°14'50" W. – 3.00 feet;
- 4) N. 63°45'10" W. – 99.67 feet to said Grantor's westerly boundary line;

thence N. 25°47'53" E., along said westerly boundary line, a distance of 9.50 feet to the point of beginning; said parcel contains an area of 2,686 square feet (0.06 of an acre).

The Basis of Bearing for this description is the NEVADA STATE PLANE COORDINATE SYSTEM, NAD 83/94 DATUM, West Zone as determined by the State of Nevada, Department of Transportation.



5-15-23

# EXHIBIT "B"



SCALE: 1"=50'

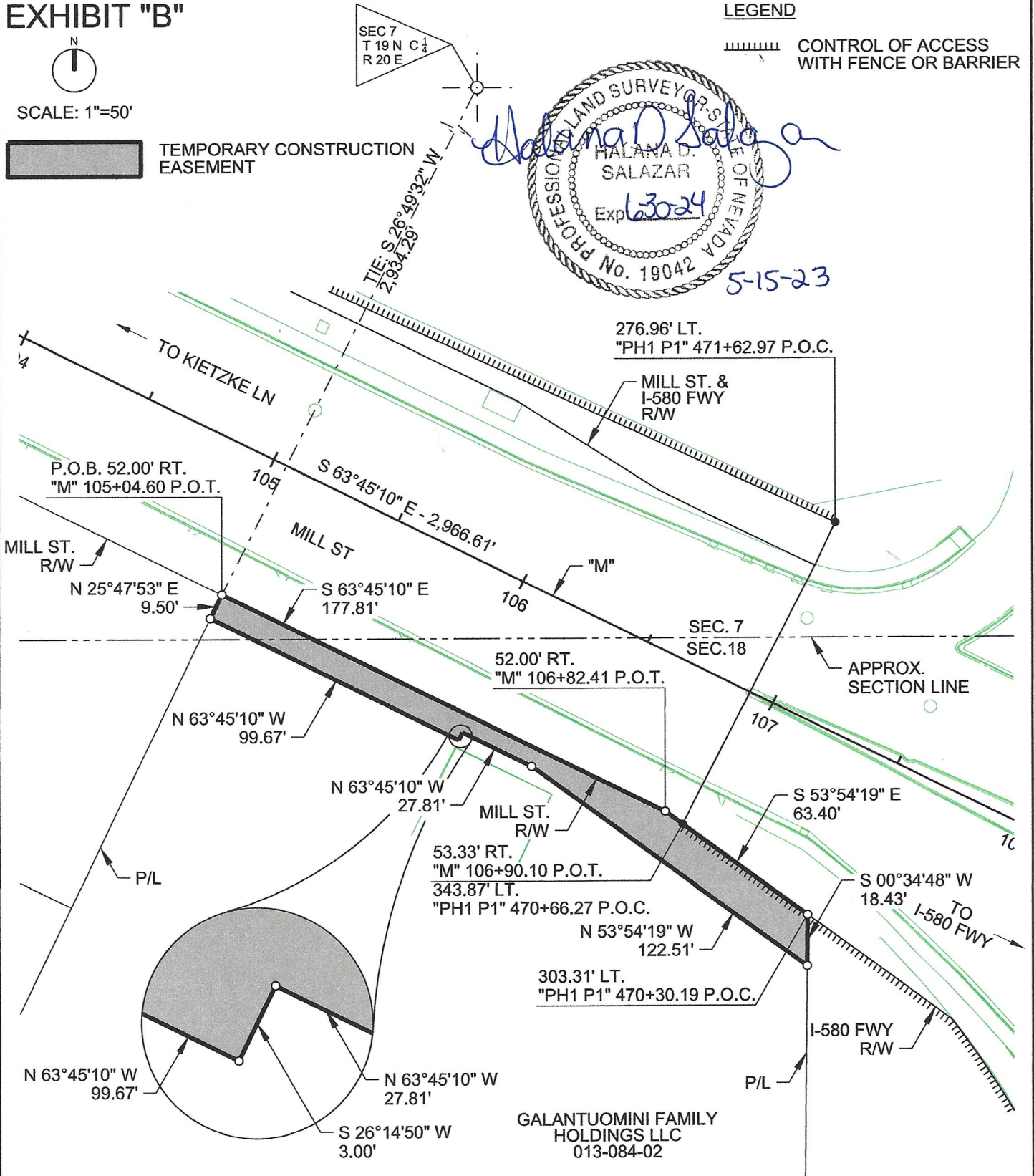


TEMPORARY CONSTRUCTION EASEMENT

## LEGEND

CONTROL OF ACCESS WITH FENCE OR BARRIER

SEC 7  
T 19 N C 1  
R 20 E



GALANTUOMINI FAMILY HOLDINGS LLC  
013-084-02

OWNER: GALANTUOMINI FAMILY HOLDINGS LLC, A NEVADA LIMITED LIABILITY COMPANY  
 ASSESSOR PARCEL NO's: APN 013-084-02  
 SECTION, TOWNSHIP, RANGE: SW 1/4 SECTION 7 & NW 1/4 SECTION 18, T. 19 N., R. 20 E.  
 AREA: 2,686 SQUARE FEET  
 LOCATION: CITY OF RENO, COUNTY OF WASHOE

<p>PROPERTY LOCATION MAP</p>	<p>JOB NO: W7Y47500</p>	<p><b>JACOBS</b> 50 W. LIBERTY ST. STE #205 RENO, NV 89501 (775) 329-7300</p>
	<p>DATE: 05/15/2023</p>	
	<p>DRAWN BY: SB</p>	
	<p>CHECKED BY: HS</p>	



**REGIONAL TRANSPORTATION COMMISSION**

*Metropolitan Planning • Public Transportation & Operations • Engineering & Construction*

Metropolitan Planning Organization of Washoe County, Nevada

**Meeting Date:** 6/21/2024

**Agenda Item:** 4.4.2

To: Regional Transportation Commission

From: Michele Payne, Property Agent

**SUBJECT: Administrative Settlement - Vaughn, Rory R.**

**RECOMMENDED ACTION**

Approve an administrative settlement in the amount of \$123,631 authorizing RTC to acquire certain property interests related to APN 012-201-21 and APN 012-201-22 from Vaughn, Rory R., for the Mill Street Capacity and Safety Project.

**BACKGROUND AND DISCUSSION**

RTC is in the process of acquiring property needed for the Mill Street Capacity and Safety Project. RTC and Vaughn, Rory R. have negotiated an agreement to purchase certain property interests related to APN 012-201-21 and APN 012-201-22, contingent upon Board approval. The proposed purchase price is \$335,831, which represents a proposed administrative settlement of \$123,631 above RTC's original appraised value and offer of \$212,200. RTC Management Policy P-55 requires Board approval of administrative settlements in excess of \$50,000.

Staff recommends approval of the settlement. If the Board approves the settlement, the Executive Director will execute the attached agreement and RTC will acquire the property interests. If the Board does not approve the settlement, staff will continue to attempt to negotiate for the purchase of the property interests until it becomes necessary to file a complaint in eminent domain.

**FISCAL IMPACT**

The costs to acquire the subject property interests are included in the FY 2025 budget.

**PREVIOUS BOARD ACTION**

There has been no previous Board action taken.

Project: Mill Street Capacity & Safety Project  
Project #: 0211007  
Parcels: 012-201-21 & 012-201-22  
Situs': 1893 Mill Street & 1855 Mill Street

## PUBLIC HIGHWAY AGREEMENT

THIS PUBLIC HIGHWAY AGREEMENT ("AGREEMENT"), made this 29 day of May, 2024 (the "EFFECTIVE DATE"), by and between Rory R. Vaughn, an unmarried man, hereinafter called the ("OWNER"), and the REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY, hereinafter called the ("RTC").

### WITNESSETH:

1. That the OWNER, for and in consideration of the covenants to be performed and payments to be paid as herein provided, represents the following:

(a) OWNER is the owner of that certain real property located in Washoe County, Nevada, described as Assessor's Parcel Numbers 012-201-21 & 012-201-22 (the "OWNER PROPERTY").

(b) OWNER owns fee title to OWNER PROPERTY and there are no prior encumbrances, liens, restrictions, covenants or conditions applicable to the OWNER PROPERTY which will frustrate or interfere with the purposes of this AGREEMENT.

(c) That there are no leases, licenses, conditions, actions or threatened or pending litigation related to the OWNER PROPERTY which will frustrate or interfere with the purposes of this AGREEMENT.

2. That the OWNER, for and in consideration of the covenants to be performed and payments to be paid as herein provided, agrees as follows:

(a) To sell and convey a portion of the OWNER PROPERTY to the RTC, free and clear of any liens or encumbrances created by OWNER, by way of a grant, bargain and sale deed in substantially the form attached hereto as Schedule 1; this real property is described on Exhibits "A-1" and "A-2" to Schedule 1 and depicted on Exhibits "B-1" and "B-2" to Schedule 1, attached hereto and made a part hereof (the "LAND").

(b) To grant a temporary construction easement to the RTC upon, over and across a portion of the OWNER PROPERTY by way of a temporary construction easement document in substantially the form attached hereto as Schedule 2; this temporary construction easement is described on Exhibits "A-1" and "A-2" to Schedule 2 and depicted on Exhibits "B-1" and "B-2" to Schedule 2, attached hereto and made a part hereof (the "TCE EASEMENT AREA").

(c) To deposit into escrow with Stewart Title, 5390 Kietzke Lane, Suite 101, Reno, Nevada 89511 (Attn: Roberta Crown Rogers), hereinafter called (the "ESCROW AGENT"), all the aforementioned documents, fully executed and notarized where required, on or prior to \_\_\_\_\_ (the "ESCROW CLOSING DATE").

(d) To deliver to ESCROW AGENT such other documentation as ESCROW AGENT may reasonably require to close the escrow and consummate the real property transfers in accordance with the terms of this AGREEMENT.

(e) To be responsible for the LAND and TCE EASEMENT AREA, including risk and liability for loss and damage, including all repairs to the premises prior to the ESCROW CLOSING DATE.

(f) To acknowledge and hereby does acknowledge, that a public highway and the necessary incidents thereto (the "PROJECT"), are to be located upon, over, and across the LAND.

(g) To waive, and hereby does waive, all claims and rights that OWNER may have to seek consequential, special and/or punitive damages in relation to any breach of the obligations contemplated in this AGREEMENT, and acknowledges that nothing in this AGREEMENT is intended to or shall it be construed to waive the rights, limitations and immunities of the RTC under Nevada Revised Statutes Chapter 41.

3. The RTC, in consideration of the promises and covenants of the OWNER herein set forth, agrees as follows:

(a) To pay to the OWNER through the deposit into escrow the sum of THREE HUNDRED THIRTY-FIVE THOUSAND EIGHT HUNDRED THIRTY-ONE DOLLARS (\$335,831), which shall be the total purchase price for the LAND AND TCE EASEMENT AREA. The partial fee simple acquisition areas constituting the LAND totaling 3,960 square feet and, the TCE EASEMENT of 2,657 square feet for a three year term.

(b) To deliver to ESCROW AGENT such other documentation as ESCROW AGENT may reasonably require to close the escrow and consummate the real property transfers in accordance with the terms of this AGREEMENT.

(c) To acknowledge, and hereby does acknowledge, that the real property conveyed hereby is transferred and sold "AS IS", "WHERE IS", WITH ALL FAULTS AND CONDITIONS THEREON, and that OWNER has not made and specifically disclaims any representations, warranties, promises, covenants or guaranties of any kind or character whatsoever, whether express or implied, oral or written, past, present or future with respect to the LAND and TCE EASEMENT AREA, and hereby waives any right to make any claim against OWNER based on any of the foregoing.

4. In the event of any default by OWNER under this AGREEMENT, the RTC may, as its sole and exclusive remedy for such default, either: (1) terminate this AGREEMENT in its entirety by delivery of notice of termination to OWNER and receive a refund of all amounts paid by RTC to the OWNER, or (2) continue this AGREEMENT pending the RTC's action for injunctive relief and/or specific performance hereunder provided appropriate proceedings are commenced by the RTC within ninety (90) days following RTC's written notice to OWNER of OWNER's default. Nothing in this Section shall limit or impair the rights of the RTC to condemn or exercise its power of condemnation and eminent domain with respect to real property interests needed for the PROJECT including, but not limited to, the LAND and TCE EASEMENT AREA.

5. With respect to the PROJECT, it is mutually agreed and understood by the RTC and by the OWNER as follows:

(a) Based upon the best information available to RTC for the time frame of the PROJECT, the term of the TCE EASEMENT shall commence on July 1, 2024 and shall continue through and including June 30, 2027. The RTC shall have the option, at its sole discretion, to extend the term of the TCE EASEMENT under the same terms and conditions of this AGREEMENT, for One (1) additional successive term of Twelve (12) months, for a total TCE EASEMENT term not to exceed four (4) years, by delivering written notice to OWNER not later than May 31, 2027. The RTC's exercise of the term extension option shall not be effective or binding upon the RTC unless and until the same has been approved by the appropriate official action of the RTC and communicated in writing to the OWNER.

(b) In the event the RTC exercises its option to extend the term of the TCE EASEMENT, the rental rate price to be paid by the RTC to the OWNER shall be that same rental rate as established in this AGREEMENT of: FIFTY-FOUR DOLLARS AND FORTY-SIX CENTS (\$54.46) per square foot for Assessor Parcel Nos. 012-201-21 & 012-201-22 multiplied by a rental rate of NINE percent (9%) multiplied by ONE (1) year, for a total amount of THIRTEEN THOUSAND TWENTY-THREE (\$13,023). Payment of the foregoing sum to OWNER by the RTC shall be a condition to the effectiveness of the option to extend the term of the TCE EASEMENT. Upon completion of the Project, the RTC will execute any documentation as may be reasonably necessary to cause the TCE EASEMENT to be released of record.

(c) That as soon as reasonably practicable following the EFFECTIVE DATE hereof, the RTC shall commence and thereafter shall use its commercially reasonable best efforts to complete the PROJECT within the timeline (as may be extended) previously provided to OWNER and as provided for by all applicable laws and standards.

6. It is further mutually agreed and understood by the RTC and by the OWNER as follows:

(a) The laws of the State of Nevada shall be applied in interpreting and construing this AGREEMENT. The party's consent to the exclusive jurisdiction and venue of the Second Judicial District Court in and for the State of Nevada, located in Washoe County, Nevada, for the enforcement of this AGREEMENT.

(b) This AGREEMENT shall constitute the entire contract between the parties hereto, and no modification hereof shall be binding upon the parties unless the same is in writing and signed by the respective parties hereto.

(c) All covenants and agreements herein contained shall extend to and be obligatory upon the heirs, executors, administrators, successors, and assigns, as the case may be, of the respective parties.

(d) As used herein the term OWNER shall include the plural as well as the singular, and the feminine as well as the masculine and the neuter.

(e) The covenants and agreements expressed in the AGREEMENT shall survive the Close of Escrow.

(f) The regulations pertaining to nondiscrimination and Title VI of the Civil Rights Act of 1964, as contained in Title 23, Code of Federal Regulations Part 200, and Title 49, Code of Federal Regulations Part 21, are hereby incorporated by reference and made a part of this AGREEMENT.

(g) Except as otherwise provided for by law or this AGREEMENT, the rights and remedies of the parties hereto shall not be exclusive and are in addition to any other rights and remedies provided by law or equity.

(h) That the persons signing this AGREEMENT and all related documents on behalf of the RTC and OWNER are duly authorized to so sign and have the full power and authority to bind them, and to enter into and perform the obligations hereunder.

(i) That this AGREEMENT may be executed in counterpart.

(j) Notices. Except as otherwise expressly specified in this AGREEMENT, all notices, requests, consents, approvals, agreements, authorizations, acknowledgments, waivers and other communications required or permitted hereunder shall be in writing to the addresses set forth below and shall be deemed given: (i) immediately when delivered by hand; (ii) the next business day when sent by overnight delivery by internationally recognized express courier such as Federal Express or UPS; or (iii) three (3) days after deposit in the United States mail postage prepaid, registered or certified mail, return receipt requested:

**To RTC:**

Regional Transportation Commission of Washoe County  
Attn: Michele Payne  
1105 Terminal Way, Suite 108  
Reno, NV 89502

**To OWNER:**

Rory R. Vaughn  
2775 Kietzke Lane  
Reno, NV 89502

*Signature Pages Follow*



IN WITNESS WHEREOF the parties hereto have executed this AGREEMENT the day and year first above written.

OWNER: Rory R. Vaughn

By: \_\_\_\_\_  
Rory R. Vaughn

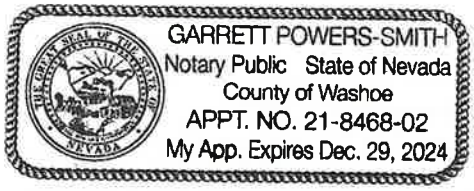
STATE OF NEVADA                    )  
  ) ss.  
COUNTY OF WASHOE                )

This instrument was acknowledged before me on 5/29/24 by Rory R. Vaughn.

S  
E  
A  
L

\_\_\_\_\_  
Notary Public

My commission expires:  
12/29/24



*RTC Signature Page Follows*

RTC:

REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY

\_\_\_\_\_  
William Thomas, Executive Director

STATE OF NEVADA                    )  
  ) ss.  
COUNTY OF WASHOE                )

This instrument was acknowledged before me on \_\_\_\_\_  
by William Thomas as Executive Director of the Regional Transportation Commission of Washoe County.

S  
E  
A  
L

\_\_\_\_\_  
Notary Public

My commission expires: \_\_\_\_\_  
\_\_\_\_\_

SCHEDULE 1

FORM OF GRANT, BARGAIN AND SALE DEED

LEGAL DESCRIPTION PREPARED BY:  
HALANA D. SALAZAR, PLS  
JACOBS ENGINEERING  
50 W. LIBERTY ST., SUITE 205  
RENO, NV 89501

**EXHIBIT "A"**  
**LEGAL DESCRIPTION**

Ptn. of APN 012-201-21  
Fee Parcel

Situate, lying and being in the City of Reno, County of Washoe, State of Nevada, and more particularly described as being a portion of the SW 1/4 of Section 7, T. 19 N., R. 20 E., M.D.M.; and more fully described by metes and bounds as follows:

BEGINNING at the intersection of the left or northerly right-of-way line of Mill Street with Grantor's westerly boundary line, 67.42 left of and at right angles to Highway Engineer's Station "M" 94+84.96 P.O.T.; said point of beginning further described as bearing S. 46°41'01" W. a distance of 3,005.92 feet from the center quarter corner of said Section 7; said corner further described as being a 3 inch brass cap in a survey well stamped "Center Sec 7/C ENGR" in Glendale Avenue; thence S. 64°02'00" E., along said northerly right-of-way line of Mill Street, a distance of 61.29 feet to the left or westerly right-of-way line of Sunshine Lane; thence along said westerly right-of-way line the following four (4) courses and distances:

- 1) from a tangent which bears the last described course, curving to the left with a radius of 21.33 feet, through an angle of 92°39'36", an arc distance of 34.50 feet;
- 2) N. 23°15'04" E. – 9.46 feet;
- 3) N. 00°28'22" E. – 22.86 feet;
- 4) S. 89°31'38" E. – 1.92 feet to the former left or westerly right-of-way line of Sunshine Lane shown on the GRANATA-CAFFERATA SUBDIVISION map filed for record on June, 10.1946 as Filing No. 142137, Records of Washoe County, Nevada;

thence S. 00°28'22" W., along said former westerly right-of-way line, a distance of 30.07 feet; thence from a tangent which bears the last described course continuing along said former westerly right of way line, curving to the right with a radius of 35.00 feet, through an angle of 115°38'00", an arc distance of 70.64

feet to the former left or northerly right-of-way line of Mill Street shown on that certain RECORD OF SURVEY MILL STREET RIGHT OF WAY MAP No. 632, File No. 135486, filed for record January 30, 1969 in the records of Washoe County, Nevada and acquired by that certain QUITCLAIM DEED dated August 19, 1969, filed for record on December 3, 1969 as Document No. 160885, Official Records of Washoe County, Nevada; thence N. 63°53'38" W., along said former northerly right-of-way line, a distance of 53.94 feet to said Grantor's westerly boundary line; thence N. 22°40'22" E., along said westerly boundary line, a distance of 23.88 feet to the point of beginning; said parcel contains an area of 2,232 square feet (0.05 of an acre).

The Basis of Bearing for this description is the NEVADA STATE PLANE COORDINATE SYSTEM, NAD 83/94 DATUM, West Zone as determined by the State of Nevada, Department of Transportation.



# EXHIBIT "B"



SCALE: 1"=50'



FEE ACQUISITION

26.92' LT. "ES" 1+47.59 P.O.T.

N 00°28'22" E  
22.86'

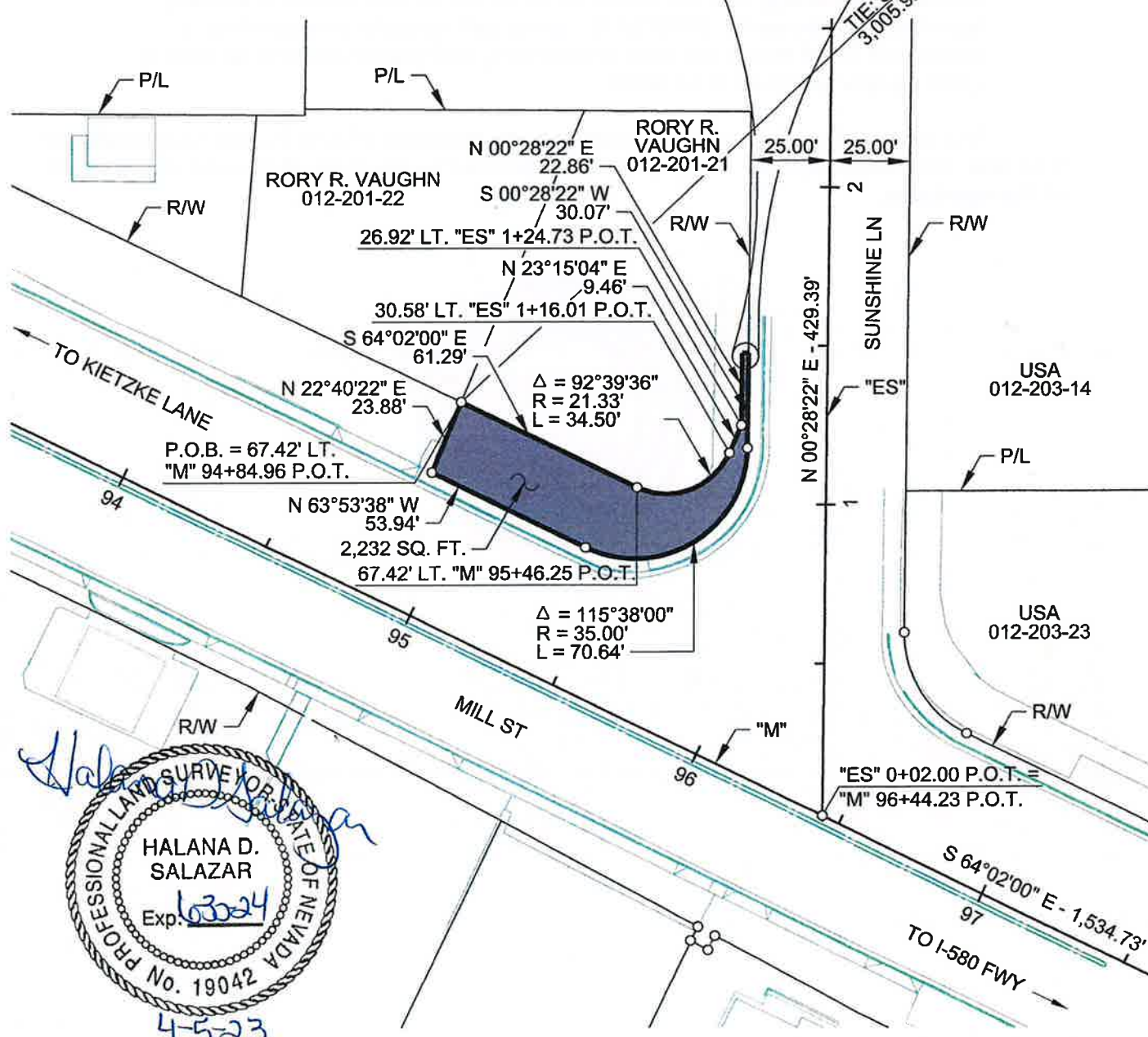
S 89°31'38" E  
1.92'

25.00' LT. "ES" 1+47.59 P.O.T.

S 00°28'22" W  
30.07'

TIE: S 46°41'01" W  
3,005.92'

C 1/4



*Halana D. Salazar*  
 HALANA D. SALAZAR  
 PROFESSIONAL LAND SURVEYOR  
 STATE OF NEVADA  
 Exp. 6/30/24  
 No. 19042  
 4-523

OWNER: RORY R. VAUGHN, AN UNMARRIED MAN  
 ASSESSOR PARCEL NO's: APN 012-201-21  
 SECTION, TOWNSHIP, RANGE: SW 1/4 SECTION 7, T. 19 N., R. 20 E.  
 AREA: 2,232 SQUARE FEET  
 LOCATION: CITY OF RENO, COUNTY OF WASHOE

PROPERTY LOCATION MAP	JOB NO: W7Y47500	<b>JACOBS</b> 50 W. LIBERTY ST. STE #205 RENO, NV 89501 (775) 329-7300
	DATE: APRIL 2023	
	DRAWN BY: SB	
	CHECKED BY: HS	

SCHEDULE 2

FORM OF TEMPORARY CONSTRUCTION EASEMENT DEED

LEGAL DESCRIPTION PREPARED BY:  
HALANA D. SALAZAR, PLS  
JACOBS ENGINEERING  
50 W. LIBERTY ST., SUITE 205  
RENO, NV 89501

**EXHIBIT "A"**  
**TEMPORARY CONSTRUCTION EASEMENT**  
**LEGAL DESCRIPTION**

Ptn. of APN 012-201-21

Situate, lying and being in the City of Reno, County of Washoe, State of Nevada, and more particularly described as being a portion of the SW 1/4 of Section 7, T. 19 N., R. 20 E., M.D.M.; and more fully described by metes and bounds as follows:

BEGINNING at the intersection of the left or northerly right-of-way line of Mill Street with Grantor's westerly boundary line, 67.42 left of and at right angles to Highway Engineer's Station "M" 94+84.96 P.O.T.; said point of beginning further described as bearing S. 46°41'01" W. a distance of 3,005.92 feet from the center quarter corner of said Section 7; said corner further described as being a 3 inch brass cap in a survey well stamped "Center Sec 7/C ENGR" in Glendale Avenue; thence N. 22°40'22" E., along said westerly boundary line, a distance of 13.03 feet; thence along the following four (4) courses and distances:

- 1) S. 64°02'00" E. – 62.04 feet;
- 2) N. 55°25'55" E. – 16.38 feet;
- 3) N. 00°28'22" E. – 26.42 feet;
- 4) S. 89°31'38" E. – 15.42 feet to a point Grantor's easterly boundary line;

thence S. 00°28'22" W., along said westerly boundary line, a distance of 5.00 feet to the westerly right-of-way line of Sunshine Lane; thence along said westerly right-of-way line the following four (4) courses and distances:

- 1) N. 89°31'38" W. – 1.92 feet;
- 2) S. 00°28'22" W. – 22.86 feet;
- 3) S. 23°15'04" W. – 9.46 feet;



- 4) from a tangent which bears S. 23°18'24" W., curving to the right with a radius of 21.33 feet, through an angle of 92°39'36", an arc distance of 34.50 feet to said northerly right-of-way line of Mill Street;

thence N. 64°02'00" W., along said northerly right-of-way line, a distance of 61.29 feet to the point of beginning;

said parcel contains an area of 1,632 square feet (0.04 of an acre).

The Basis of Bearing for this description is the NEVADA STATE PLANE COORDINATE SYSTEM, NAD 83/94 DATUM, West Zone as determined by the State of Nevada, Department of Transportation.



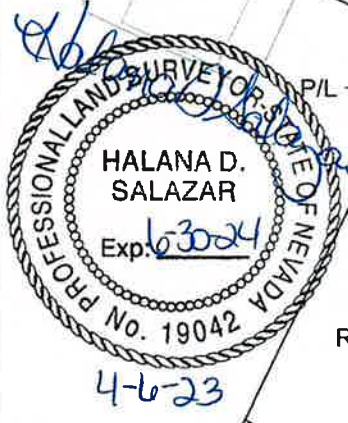
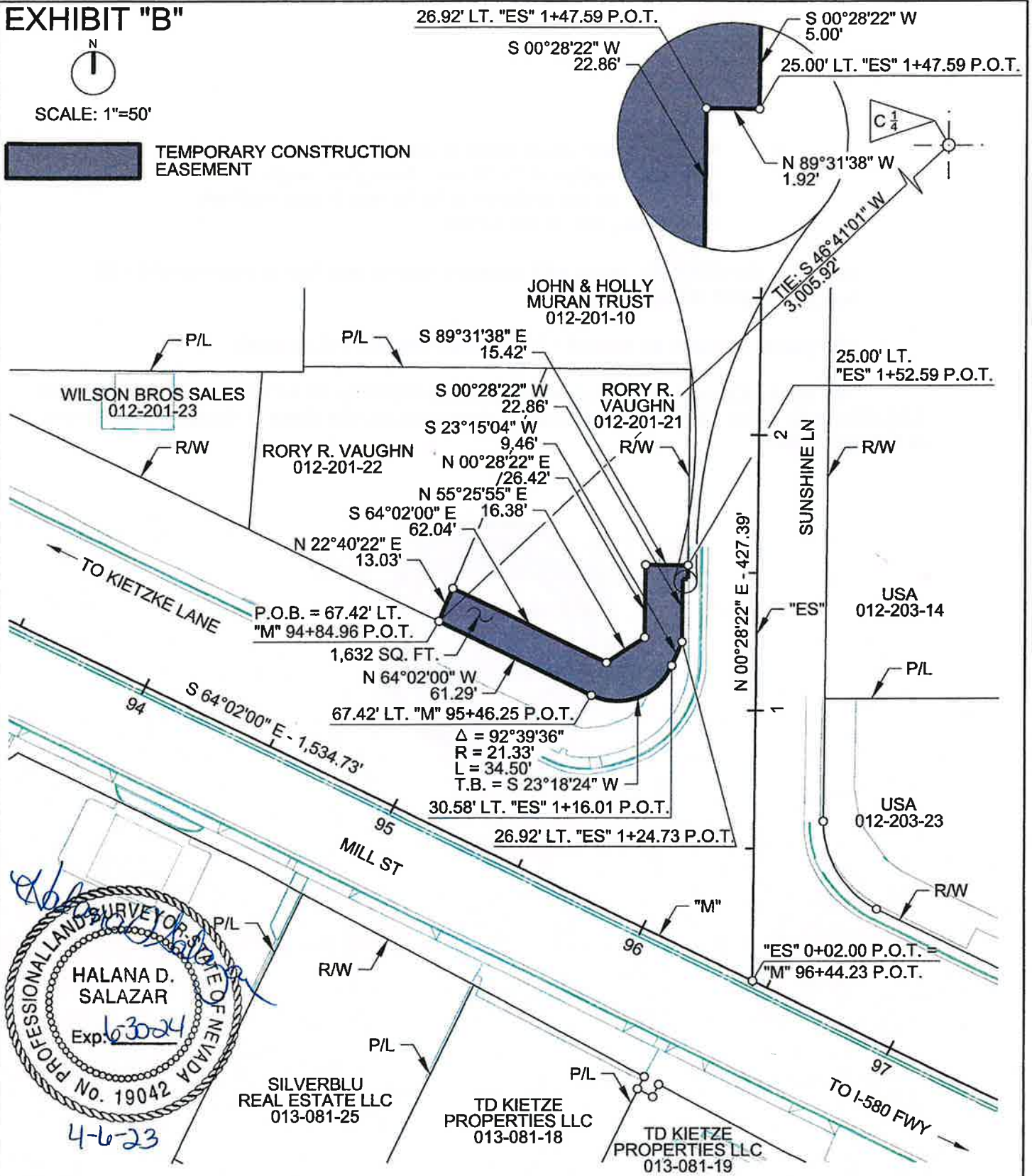
# EXHIBIT "B"



SCALE: 1"=50'



TEMPORARY CONSTRUCTION EASEMENT



OWNER: RORY R. VAUGHN, AN UNMARRIED MAN  
 APN 012-201-21  
 ASSESSOR PARCEL NO's: SW 1/4 SECTION 7, T. 19 N., R. 20 E.  
 SECTION, TOWNSHIP, RANGE: 1,632 SQUARE FEET  
 AREA: CITY OF RENO, COUNTY OF WASHOE  
 LOCATION:

PROPERTY LOCATION MAP	JOB NO: W7Y47500	<b>JACOBS</b> 50 W. LIBERTY ST. STE #205 RENO, NV 89501 (775) 329-7300
	DATE: 04/06/2023	
	DRAWN BY: SB	
	CHECKED BY: HS	



**REGIONAL TRANSPORTATION COMMISSION**

*Metropolitan Planning • Public Transportation & Operations • Engineering & Construction*

Metropolitan Planning Organization of Washoe County, Nevada

**Meeting Date:** 6/21/2024

**Agenda Item:** 4.4.3

To: Regional Transportation Commission

From: Kimberly Diegle, Project Manager

**SUBJECT: Geiger Grade Realignment Feasibility Study PSA**

**RECOMMENDED ACTION**

Approve a contract with J-U-B Engineers, Inc., to perform a feasibility study, conceptual alternatives analysis, and environmental studies for the Geiger Grade Realignment Project, in an amount not-to-exceed \$1,373,975.

**BACKGROUND AND DISCUSSION**

The realignment of Geiger Grade from Toll Road to US 395 S. Virginia Street is identified in the 2050 Regional Transportation Plan for possible construction in the 2026 - 2030 time frame. The roundabout at the intersection of SR 341 Geiger Grade and Veterans Parkway in has seen a significant increase in area traffic since the completion of Veterans Parkway (the Southeast Connector Project) and various residential developments in the last decade. While interim improvements to the roundabout are planned to be made by RTC in 2025, long term alternatives need to be evaluated to improve operations and relieve congestion at the existing intersection. The prospect of realigning Geiger Grade to connect directly with US395 south of the existing intersection was preliminarily studied in 2011 prior to the completion of the Southeast Connector. Further evaluation of realignment alternatives is now needed in order to address diminishing operations and circulation in the area as noted in both the NDOT Mount Rose Corridor Plan and the RTC South Meadows Multimodal Transportation Study.

This agreement with J-U-B Engineers, Inc. (J-U-B) is to perform a feasibility study, conceptual alternatives analysis, benefit/cost analysis, public outreach, and environmental studies. The services include project management, public and agency involvement, project development, environmental studies, and final report associated with the realignment of Geiger Grade. Following a request for approach (RFA) from professional service providers on the Streets and Highways Qualified list, J-U-B was selected to perform these engineering services.

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The anticipated schedule to complete the scope of services is:

- July 2024: Notice-to-Proceed
- Fall 2024: Initial Public and Agencies engagement
- Summer 2025: Develop project alternatives
- Fall 2025: Evaluation of alternatives
- December 2025: Complete Feasibility Study

**FISCAL IMPACT**

Funding for this project is included in the FY 2025 budget.

**PREVIOUS BOARD ACTION**

There has been no previous Board action taken.

**AGREEMENT  
FOR  
PROFESSIONAL SERVICES**

This agreement (this “Agreement”) is dated and effective as of \_\_\_\_\_, 2024, by and between the Regional Transportation Commission of Washoe County (“RTC”) and J-U-B Engineers, Incorporated (“CONSULTANT”).

WITNESSETH:

WHEREAS, RTC issued a Request for Approach for interested persons and firms from the Streets and Highways shortlist to perform a feasibility study in connection with the Geiger Grade Realignment Project; and

WHEREAS, CONSULTANT submitted a proposal (the “Proposal”) and was selected to perform the work.

NOW, THEREFORE, RTC and CONSULTANT, in consideration of the mutual covenants and other consideration set forth herein, do hereby agree as follows:

ARTICLE 1 – TERM AND ENGAGEMENT

- 1.1. The term of this Agreement shall be from the date first written above through December 31, 2025, unless terminated at an earlier date, or extended to a later date, pursuant to the provisions herein.
- 1.2. CONSULTANT will perform the work using the project team identified in the Proposal. Any changes to the project team must be approved by RTC’s Project Manager.
- 1.3. CONSULTANT will promptly, diligently and faithfully execute the work to completion in accordance with applicable professional standards subject to any delays due to strikes, acts of God, act of any government, civil disturbances, or any other cause beyond the reasonable control of CONSULTANT.
- 1.4. CONSULTANT shall not proceed with work until both parties have executed this Agreement and a purchase order has been issued to CONSULTANT. If CONSULTANT violates that prohibition, CONSULTANT forfeits any and all right to reimbursement and payment for that work and waives any and all claims against RTC, its employees, agents, and affiliates, including but not limited to monetary damages, and any other remedy available at law or in equity arising under the terms of this Agreement. Furthermore, prior to execution and issuance of a purchase order, CONSULTANT shall not rely on the terms of this Agreement in any way, including but not limited to any written or oral representations, assurances or warranties made by RTC or any of its agents, employees or affiliates, or on any dates of performance, deadlines, indemnities, or any term contained in this Agreement or otherwise.

## ARTICLE 2 - SERVICES OF CONSULTANT

### 2.1. SCOPE OF SERVICES

The scope of services consist of the tasks set forth in Exhibit A.

### 2.2. SCHEDULE OF SERVICES

Tasks and subtasks shall be completed in accordance with the schedule in Exhibit A. Any change(s) to the schedule must be approved by RTC's Project Manager.

### 2.3. CONTINGENCY

Contingency line items identified in the scope of services are for miscellaneous increases within the scope of work. Prior to the use of any contingency amounts, CONSULTANT shall provide a letter to RTC's Project Manager detailing the need, scope, and not-to-exceed budget for the proposed work. Work to be paid for out of contingency shall proceed only with the RTC Project Manager's written approval.

### 2.4. OPTIONS

RTC shall have the right to exercise its option(s) for all or any part of the optional tasks or subtasks identified in Exhibit A. CONSULTANT will prepare and submit a detailed scope of services reflecting the specific optional services requested, a schedule for such services, and a cost proposal. RTC will review and approve the scope of services and RTC and CONSULTANT will discuss and agree upon compensation and a schedule. CONSULTANT shall undertake no work on any optional task without written notice to proceed with the performance of said task. RTC, at its sole option and discretion, may select another individual or firm to perform the optional tasks or subtasks identified in Exhibit A.

### 2.5. ADDITIONAL SERVICES

CONSULTANT will provide additional services when agreed to in writing by RTC and CONSULTANT.

### 2.6. PERFORMANCE REQUIREMENTS

Any and all design and engineering work furnished by CONSULTANT shall be performed by or under the supervision of persons licensed to practice architecture, engineering, or surveying (as applicable) in the State of Nevada, by personnel who are careful, skilled, experienced and competent in their respective trades or professions, who are professionally qualified to perform the work, and who shall assume professional responsibility for the accuracy and completeness of documents prepared or checked by them, in accordance with appropriate prevailing professional standards. Notwithstanding the provision of any drawings, technical specifications, or other data by RTC, CONSULTANT shall have the

responsibility of supplying all items and details required for the deliverables required hereunder.

Any sampling and materials testing shall be performed by an approved testing laboratory accredited by AASHTO or other ASTM recognized accrediting organization in the applicable test methods. If any geotechnical or materials testing is performed by a sub-consultant, that laboratory shall maintain the required certification. Proof of certification shall be provided to RTC with this Agreement. If certification expires or is removed during the term of this Agreement, CONSULTANT shall notify RTC immediately, and propose a remedy. If an acceptable remedy cannot be agreed upon by both parties, RTC may terminate this Agreement for default.

CONSULTANT shall provide only Nevada Alliance for Quality Transportation Construction (NAQTC) qualified personnel to perform field and laboratory sampling and testing during the term of this Agreement. All test reports shall be signed by a licensed NAQTC tester and notated with his/her license number.

2.7. ERRORS AND OMISSIONS

CONSULTANT shall, without additional compensation, correct or revise any deficiencies, errors, or omissions caused by CONSULTANT in its analysis, reports, and services. CONSULTANT also agrees that if any error or omission is found, CONSULTANT will expeditiously make the necessary correction, at no expense to RTC. If an error or omission was directly caused by RTC, and not by CONSULTANT and RTC requires that such error or omission be corrected, CONSULTANT may be compensated for such additional work.

ARTICLE 3 - COMPENSATION

3.1. CONSULTANT shall be paid for hours worked at the hourly rates and rates for testing in Exhibit B. RTC shall not be responsible for any other costs or expenses except as provided in Exhibit B.

3.2. The maximum amount payable to CONSULTANT to complete each task is equal to the not-to-exceed amounts identified in Exhibit B. CONSULTANT can request in writing that RTC's Project Manager reallocate not-to-exceed amounts between tasks. A request to reallocate not-to-exceed amounts must be accompanied with a revised fee schedule, and must be approved in writing by RTC's Project Manager prior to performance of the work. In no case shall CONSULTANT be compensated in excess of the following not-to exceed amounts:

Design Services (Tasks 1 – 5)	\$1,298,975.00
Design Contingency (Optional) (Task 6)	\$75,000.00
<hr/>	
Total Not-to-Exceed Amount	\$1,373,975.00

- 3.3. For any work authorized under Section 2.5, "Additional Services," RTC and CONSULTANT will negotiate not-to-exceed amounts based on the standard hourly rates and rates for testing in Exhibit B. Any work authorized under Section 2.5, "Additional Services," when performed by persons who are not employees or individuals employed by affiliates of CONSULTANT, will be billed at a mutually agreed upon rate for such services, but not more than 105% of the amounts billed to CONSULTANT for such services.
- 3.4. CONSULTANT shall receive compensation for preparing for and/or appearing in any litigation at the request of RTC, except: (1) if such litigation costs are incurred by CONSULTANT in defending its work or services or those of any of its sub-consultants; or (2) as may be required by CONSULTANT's indemnification obligations. Compensation for litigation services requested by RTC shall be paid at a mutually agreed upon rate and/or at a reasonable rate for such services.

#### ARTICLE 4 - INVOICING

- 4.1. CONSULTANT shall submit monthly invoices in the format specified by RTC. Invoices must be submitted to [accountspayable@rtcwashoe.com](mailto:accountspayable@rtcwashoe.com). RTC's payment terms are 30 days after the receipt of the invoice. Simple interest will be paid at the rate of half a percent (0.5%) per month on all invoices approved by RTC that are not paid within thirty (30) days of receipt of the invoice.
- 4.2. RTC shall notify CONSULTANT of any disagreement with any submitted invoice for consulting services within thirty (30) days of receipt of an invoice. Any amounts not in dispute shall be promptly paid by RTC.
- 4.3. CONSULTANT shall maintain complete records supporting every request for payment that may become due. Upon request, CONSULTANT shall produce all or a portion of its records and RTC shall have the right to inspect and copy such records.

#### ARTICLE 5 - ACCESS TO INFORMATION AND PROPERTY

- 5.1. Upon request and without cost to CONSULTANT, RTC will provide all pertinent information that is reasonably available to RTC including surveys, reports and any other data relative to design and construction.
- 5.2. RTC will provide access to and make all provisions for CONSULTANT to enter upon RTC facilities and public lands, as required for CONSULTANT to perform its work under this Agreement.

#### ARTICLE 6 - OWNERSHIP OF WORK

- 6.1. Plans, reports, studies, tracings, maps, software, electronic files, licenses, programs, equipment manuals, and databases and other documents or instruments of service prepared or obtained by CONSULTANT in the course of performing work under this Agreement,



shall be delivered to and become the property of RTC. Software already developed and purchased by CONSULTANT prior to the Agreement is excluded from this requirement. CONSULTANT and its sub-consultants shall convey and transfer all copyrightable interests, trademarks, licenses, and other intellectual property rights in such materials to RTC upon completion of all services under this Agreement and upon payment in full of all compensation due to CONSULTANT in accordance with the terms of this Agreement. Basic survey notes, sketches, charts, computations and similar data prepared or obtained by CONSULTANT under this Agreement shall, upon request, also be provided to RTC.

- 6.2. CONSULTANT represents that it has secured all necessary licenses, consents, or approvals to use the components of any intellectual property, including computer software, used in providing services under this Agreement, that it has full legal title to and the right to reproduce such materials, and that it has the right to convey such title and other necessary rights and interests to RTC.
- 6.3. CONSULTANT shall bear all costs arising from the use of patented, copyrighted, trade secret, or trademarked materials, equipment, devices, or processes used on or incorporated in the services and materials produced under this Agreement.
- 6.4. CONSULTANT agrees that all reports, communications, electronic files, databases, documents, and information that it obtains or prepares in connection with performing this Agreement shall be treated as confidential material and shall not be released or published without the prior written consent of RTC; provided, however, that CONSULTANT may refer to this scope of work in connection with its promotional literature in a professional and commercially reasonable manner. The provisions of this subsection shall not apply to information in whatever form that comes into the public domain. The provisions of this paragraph also shall not restrict CONSULTANT from giving notices required by law or complying with an order to provide information or data when such order is issued by a court, administrative agency, or other entity with proper jurisdiction, or if it is reasonably necessary for CONSULTANT to defend itself from any suit or claim.

## ARTICLE 7 - TERMINATION

### 7.1. CONTRACT TERMINATION FOR DEFAULT

If CONSULTANT fails to perform services in the manner called for in this Agreement or if CONSULTANT fails to comply with any other provisions of this Agreement, RTC may terminate this Agreement for default. Termination shall be effected by serving a notice of termination on CONSULTANT setting forth the manner in which CONSULTANT is in default. CONSULTANT will only be paid the contract price for services delivered and accepted, or services performed in accordance with the manner of performance set forth in this Agreement.

If it is later determined by RTC that CONSULTANT had an excusable reason for not performing, such as a fire, flood, or events which are not the fault of or are beyond the control of CONSULTANT, RTC, after setting up a new performance schedule, may allow

CONSULTANT to continue work, or treat the termination as a termination for convenience.

7.2. CONTRACT TERMINATION FOR CONVENIENCE

RTC may terminate this Agreement, in whole or in part, at any time by written notice to CONSULTANT when it is in RTC's best interest. CONSULTANT shall be paid its costs, including contract closeout costs, and profit on work performed up to the time of termination. CONSULTANT shall promptly submit its termination claim to RTC to be paid CONSULTANT. If CONSULTANT has any property in its possession belonging to RTC, CONSULTANT will account for the same, and dispose of it in the manner RTC directs.

ARTICLE 8 - INSURANCE

- 8.1. CONSULTANT shall not commence any work or permit any employee/agent to commence any work until satisfactory proof has been submitted to RTC that all insurance requirements have been met.
- 8.2. In conjunction with the performance of the services/work required by the terms of this Agreement, CONSULTANT shall obtain all types and amounts of insurance set forth in Exhibit C, and shall comply with all provisions set forth therein.

ARTICLE 9 - HOLD HARMLESS

- 9.1. CONSULTANT's obligation under this provision is as set forth in Exhibit C. Said obligation would also extend to any liability of RTC resulting from any action to clear any lien and/or to recover for damage to RTC property.

ARTICLE 10 - EQUAL EMPLOYMENT OPPORTUNITY

- 10.1. During the performance of this Agreement, CONSULTANT agrees not to discriminate against any employee or applicant for employment because of race, color, religion, sex, age, disability, or national origin. CONSULTANT will take affirmative action to ensure that applicants are employed, and that employees are treated fairly during employment, without regard to their race, color, religion, sex, age, disability, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. CONSULTANT agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by RTC setting forth the provisions of this nondiscrimination clause.
- 10.2. CONSULTANT will, in all solicitations or advertisements for employees placed by or on behalf of CONSULTANT, state that well qualified applicants will receive consideration of employment without regard to race, color, religion, sex, age, disability, or national origin.

- 10.3. CONSULTANT will cause the foregoing provisions to be inserted in all sub-agreements for any work covered by this Agreement so that such provisions will be binding upon each sub-consultant.

## ARTICLE 11 - RESOLUTION OF CLAIMS AND DISPUTES

### 11.1. NEGOTIATED RESOLUTION

In the event that any dispute or claim arises under this Agreement, the parties shall timely cooperate and negotiate in good faith to resolve any such dispute or claim. Such cooperation shall include providing the other party with all information in order to properly evaluate the dispute or claim and making available the necessary personnel to discuss and make decisions relative to the dispute or claim.

### 11.2. MEDIATION

If the parties have been unable to reach an informal negotiated resolution to the dispute or claim within thirty (30) days following submission in writing of the dispute or claim to the other party, or such longer period of time as the parties may agree to in writing, either party may then request, in writing, that the dispute or claim be submitted to mediation (the "Mediation Notice"). After the other party's receipt or deemed receipt of the Mediation Notice, the parties shall endeavor to agree upon a mutually acceptable mediator, but if the parties have been unable to agree upon a mediator within ten (10) days following receipt of the Mediation Notice, then each party shall select a mediator and those two selected mediators shall select the mediator. A mediator selected by the parties' designated mediators shall meet the qualification set forth in as provided in Rule 4 of Part C., "Nevada Mediation Rules" of the "Rules Governing Alternative Dispute Resolutions adopted by the Nevada Supreme Court." Unless otherwise agreed to by the parties, in writing, the mediator shall have complete discretion over the conduct of the mediation proceeding. Unless otherwise agreed to by the parties, in writing, the mediation proceeding must take place within thirty (30) days following appointment of the mediator. The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in Washoe County, Nevada, unless otherwise agreed to by the parties, in writing. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

### 11.3. LITIGATION

In the event that the parties are unable to settle and/or resolve the dispute or claim as provided above, then either party may proceed with litigation in the Second Judicial District Court of the State of Nevada, County of Washoe.

### 11.4. CONTINUING CONTRACT PERFORMANCE

During the pendency of any dispute or claim the parties shall proceed diligently with performance of this Agreement and such dispute or claim shall not constitute an excuse or defense for a party's nonperformance or delay.

#### ARTICLE 12 – PROJECT MANAGERS

- 12.1. RTC's Project Manager is Kimberly Diegle, PE or such other person as is later designated in writing by RTC. RTC's Project Manager has authority to act as RTC's representative with respect to the performance of this Agreement.
- 12.2. CONSULTANT' Project Manager is Garth Oksol, PE or such other person as is later designated in writing by CONSULTANT. CONSULTANT's Project Manager has authority to act as CONSULTANT's representative with respect to the performance of this Agreement.

#### ARTICLE 13 - NOTICE

- 13.1. Notices required under this Agreement shall be given as follows:

RTC: Bill Thomas, AICP  
Executive Director  
Kimberly Diegle, PE  
RTC Project Manager  
Regional Transportation Commission  
1105 Terminal Way  
Reno, Nevada 89502  
Email: kdiegle@rtcwashoe.com  
(775) 335-1844

CONSULTANT: Garth Oksol, PE  
Lead Program Manager, Transportation Services Group  
J-U-B Engineers, Incorporated  
5190 Neil Road, Suite 500  
Reno, NV 89502  
Email: goksol@jub.com  
(775) 685-6474

#### ARTICLE 14 - DELAYS IN PERFORMANCE

- 14.1. TIME IS OF THE ESSENCE

It is understood and agreed that all times stated and referred to herein are of the essence. The period for performance may be extended by RTC's Executive Director pursuant to the process specified herein. No extension of time shall be valid unless reduced to writing and signed by RTC's Executive Director.

14.2. UNAVOIDABLE DELAYS

If the timely completion of the services under this Agreement should be unavoidably delayed, RTC may extend the time for completion of this Agreement for not less than the number of days CONSULTANT was excusably delayed. A delay is unavoidable only if the delay is not reasonably expected to occur in connection with or during CONSULTANT's performance, is not caused directly or substantially by acts, omissions, negligence or mistakes of CONSULTANT, is substantial and in fact causes CONSULTANT to miss specified completion dates, and cannot adequately be guarded against by contractual or legal means.

14.3. NOTIFICATION OF DELAYS

CONSULTANT shall notify RTC as soon as CONSULTANT has knowledge that an event has occurred or otherwise becomes aware that CONSULTANT will be delayed in the completion of the work. Within ten (10) working days thereafter, CONSULTANT shall provide such notice to RTC, in writing, furnishing as much detail on the delay as possible and requesting an extension of time.

14.4. REQUEST FOR EXTENSION

Any request by CONSULTANT for an extension of time to complete the work under this Agreement shall be made in writing to RTC. CONSULTANT shall supply to RTC documentation to substantiate and justify the additional time needed to complete the work and shall provide a revised schedule. RTC shall provide CONSULTANT with notice of its decision within a reasonable time after receipt of a request.

ARTICLE 15 - GENERAL PROVISIONS

15.1. SUCCESSORS AND ASSIGNS

RTC and CONSULTANT bind themselves and their successors and assigns to the other party and to the successors and assigns of such party, with respect to the performance of all covenants of this Agreement. Except as set forth herein, neither RTC nor CONSULTANT shall assign or transfer interest in this Agreement without the written consent of the other. Nothing herein shall be construed as creating a personal liability on the part of any officer or agent or any public body which may be a party hereto, nor shall it be construed as giving any rights or benefits hereunder to anyone other than RTC and CONSULTANT.

15.2. NON TRANSFERABILITY

This Agreement is for CONSULTANT's professional services, and CONSULTANT's rights and obligations hereunder may not be assigned without the prior written consent of RTC.

15.3. SEVERABILITY

If any part, term, article, or provision of this Agreement is, by a court of competent jurisdiction, held to be illegal, void, or unenforceable, or to be in conflict with any law of the State of Nevada, the validity of the remaining provisions or portions of this Agreement are not affected, and the rights and obligations of the parties shall be construed and enforced as if this Agreement did not contain the particular part, term, or provision held invalid.

15.4. RELATIONSHIP OF PARTIES

CONSULTANT is an independent contractor to RTC under this Agreement. Accordingly, CONSULTANT is not entitled to participate in any retirement, deferred compensation, health insurance plans or other benefits RTC provides to its employees. CONSULTANT shall be free to contract to provide similar services for others while it is under contract to RTC, so long as said services and advocacy are not in direct conflict, as determined by RTC, with services being provided by CONSULTANT to RTC.

15.5. WAIVER/BREACH

Any waiver or breach of a provision in this Agreement shall not be deemed a waiver of any other provision in this Agreement and no waiver is valid unless in writing and executed by the waiving party. An extension of the time for performance of any obligation or act shall not be deemed an extension of time for the performance of any other obligation or act. This Agreement inures to the benefit of and is binding upon the parties to this Agreement and their respective heirs, successors and assigns.

15.6. REGULATORY COMPLIANCE

- A. CONSULTANT shall comply with all applicable federal, state and local government laws, regulations and ordinances. CONSULTANT shall be responsible for obtaining all necessary permits and licenses for performance of services under this Agreement. Upon request of RTC, CONSULTANT shall furnish RTC certificates of compliance with all such laws, orders and regulations.
- B. CONSULTANT represents and warrants that none of the services to be rendered pursuant to this Agreement constitute the performance of public work, as that term is defined by Section 338.010(17) of the Nevada Revised Statutes. To the extent CONSULTANT does engage in such public work, CONSULTANT shall be responsible for paying the prevailing wage as required by Chapter 338 of the Nevada Revised Statutes.

15.7. EXCLUSIVE AGREEMENT

There are no verbal agreements, representations or understandings affecting this Agreement, and all negotiations, representations and undertakings are set forth herein with

the understanding that this Agreement constitutes the entire understanding by and between the parties.

15.8. AMENDMENTS

No alteration, amendment or modification of this Agreement shall be effective unless it is in writing and signed by both parties.

15.9. CONTINUING OBLIGATION

CONSULTANT agrees that if, because of death or any other occurrence it becomes impossible for any principal or employee of CONSULTANT to render the services required under this Agreement, neither CONSULTANT nor the surviving principals shall be relieved of any obligation to render complete performance. However, in such event, RTC may terminate this Agreement if it considers the death or incapacity of such principal or employee to be a loss of such magnitude as to affect CONSULTANT's ability to satisfactorily complete the performance of this Agreement.

15.10. APPLICABLE LAW AND VENUE

The provisions of this Agreement shall be governed and construed in accordance with the laws of the State of Nevada. The exclusive venue and court for all lawsuits concerning this Agreement shall be the Second Judicial District Court of the State of Nevada, County of Washoe, and the parties hereto submit to the jurisdiction of that District Court.

15.11. ATTORNEYS' FEES

In the event of a dispute between the parties result in a proceeding in any Court of Nevada having jurisdiction, the prevailing party shall be entitled to an award of costs and any reasonable attorneys' fees.

15.12. CERTIFICATION REQUIRED BY NEVADA SENATE BILL 27 (2017)

CONSULTANT expressly certifies and agrees, as a material part of this Agreement, that it is not currently engaged in a boycott of Israel. CONSULTANT further agrees, as a material part of this Agreement, it will not engage in a boycott of Israel for the duration of this Agreement. If, at any time during the formation or duration of this Agreement, CONSULTANT is engaged or engages in a boycott of Israel, it will constitute a material breach of this Agreement.

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IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement the day and year first above written.

REGIONAL TRANSPORTATION COMMISSION  
OF WASHOE COUNTY

By: \_\_\_\_\_  
Bill Thomas, AICP, Executive Director

J-U-B ENGINEERS, INCORPORATED

By: \_\_\_\_\_  
Lonnie Johnson, PE, Assistant Area Manager



**Exhibit A**

Scope of Services

## Exhibit A

### Scope of Services

#### INTRODUCTION

The Regional Transportation Commission of Washoe County (RTC WASHOE), in partnership with the City of Reno, and the Nevada Department of Transportation (NDOT), have begun the process to complete a Feasibility Study to determine if a realignment of Geiger Grade from Toll Road to South Virginia Street is appropriate. The Feasibility Study for the Project will compile environmental constraints, input from public and technical community members, organize and monitor input from stakeholders and technical advisory meetings, and summarize the development of conceptual alternatives. The study will also present order-of-magnitude construction costs for each alternative, develop a Benefit/Cost Ratio for each alternative, and inform the scope for the next project phase, including environmental and engineering tasks.

RTC WASHOE is anticipating a typical design-bid-build project delivery method. CONSULTANT will complete the Feasibility Study process, with NDOT as a principal partnering Agency. This scope includes those elements necessary to complete a process similar to a Planning and Environmental Linkages (PEL) study, including performing an alternatives analysis for the build/no-build preferred alternative.

The 2050 Regional Transportation Plan (RTP) currently shows the construction of these improvements completed in the 2026-2030 timeframe. Currently funding is available for the Feasibility Study. Federal Funding, including Grants, may be utilized for further design and construction.

#### BACKGROUND

The Geiger Grade Feasibility Study is in South Reno, south of the confluence of Geiger Grade and Mount Rose Highway. Numerous traffic studies have been developed in this general area, including the 2011 Preliminary Design of a Geiger Grade Realignment. The recent studies have been project or corridor specific, not specific to this Feasibility Study.

The roundabout at the intersection of SR 341 Geiger Grade and Veterans Parkway in South Reno near US395 has seen a significant increase in area traffic since the completion of Veterans Parkway (the Southeast Connector Project) and various residential developments in the last decade. While interim improvements to the roundabout are being made in the near-term, long-term alternatives need to be evaluated to improve operations and relieve congestion at the existing intersection. The prospect of realigning Geiger Grade to connect directly with US395 south of the existing intersection was preliminarily studied in 2011 prior to the completion of the Southeast Connector. Further evaluation of a realignment alternative is now needed to address diminishing operations and circulation in the area as noted in both the NDOT Mount Rose Corridor Plan and the RTC South Meadows Multimodal Transportation Study. The 2024 RTC Geiger Grade Realignment Feasibility Update & Circulation Plan identifies the present opportunities and constraints associated with the 2011 alignment concept and identified revisions to be considered.

This project involves multi-agency coordination including NDOT, City of Reno, Washoe County, and other permitting agencies. While this effort will be funded with local funds, the RTC WASHOE anticipates

utilizing federal funds for construction. Therefore, all necessary federal requirements and guidelines will need to be followed to ensure compliance with future federal funding obligations.

## **GENERAL REQUIREMENTS**

The work provides environmental and professional engineering services to advance the Project through the Feasibility Study and select a preferred alternative. The Study shall closely follow the requirements of an FHWA Planning and Environmental Linkages (PEL). A PEL represents a collaborative and integrated methodology that uses information, analysis, and products developed during planning to inform the environmental review process. The PEL process serves as the foundation for this scope of services, and the recommended alternative may be carried forward to accelerate the environmental analysis and save time in implementing the Project once construction funds are identified.

Anticipated schedule to maintain the overall Project objective:

- June 2024 - Enter into an agreement with the CONSULTANT for project management, investigation of existing conditions, conceptual alternatives analysis, public and agency involvement, and a feasibility study report.
- Q4 2024 – Existing conditions evaluations, initial public and agency engagement
  - Define Purpose and Need
  - Determine Level 2 (PEL) measurables for various options.
- Q2 2025 – Develop alternatives (No-Build Option B and Realignment Option)
- Q3 2025 – Begin evaluations of Alternatives and compare to Purpose and Need
- December 2025 – Feasibility Study Complete, preferred Alternative defined.

## **SCOPE OF SERVICES**

### **Task 1 Project Management**

The Project work shall include project management by the CONSULTANT. The CONSULTANT shall provide a Project Manager responsible for the project's timely completion and to liaison with the RTC WASHOE Project Manager. The CONSULTANT will retain the same Project Manager for the entire project duration to the extent practicable. If the CONSULTANT Project Manager is briefly absent, the CONSULTANT shall name a suitable substitute to be approved by the RTC WASHOE Project Manager. The CONSULTANT Project Manager shall be the main point of contact on the Project and shall attend all Project meetings and coordinate all aspects of the Project. The CONSULTANT shall also name task leads for each major task or discipline. The CONSULTANT Project Manager and task leads may not be changed without specific written authorization from the RTC WASHOE Project Manager.

The CONSULTANT will provide effective project management to deliver the Project within established schedules and budgets; develop a project management plan that will effectively communicate, plan, and execute the work required to complete the project successfully; conduct a risk assessment/value engineering workshop; perform continuous risk assessment and evaluation. In addition, the CONSULTANT shall integrate the RTC WASHOE's project manager into the Project Management Plan, and coordinate Project development activities with the RTC WASHOE's Project Manager, City of Reno representatives, property owners, local and state permitting agencies, utility providers, and other stakeholders within the Project area as directed.

CONSULTANT will provide project management services for the scope of work for the duration of the project assumed to be June 2024 through December 2025, approximately eighteen (18) months for the Feasibility Study. Project management includes project setup and administration, including preparation and execution of sub-consultant agreements, monthly budget monitoring and invoicing, monthly preparation and reporting of project progress (including work completed and documentation of any changes, actual and anticipated, in scope, schedule, and budget), preparation and monthly updates of the project schedule, continued management of sub-consultants, quality assurance on deliverables, coordination with the RTC WASHOE Project Manager, and project closeout.

The CONSULTANT Project Manager will be responsible for the ongoing project coordination of CONSULTANT activities for the duration of the work. The CONSULTANT Project Manager will also maintain communication, as appropriate, with local, state, federal, and private stakeholders as required for the progress of the scope of work detailed in this document. All significant communications shall be documented and reported to the RTC WASHOE Project Manager. The CONSULTANT Project Manager will coordinate with task leads to discuss the project's progress and identify issues and action items to be addressed.

The Project Manager is responsible for the contracting, coordination, and management of all sub-consultants. The CONSULTANT will be the primary point of contact for the RTC WASHOE for all team sub-consultants and be responsible for communicating and coordinating the direction from the RTC WASHOE to all team members.

## 1.1 Project Management Meetings

### 1.1.1 Project Kickoff Meetings

CONSULTANT will hold a kickoff meeting with RTC WASHOE, City of Reno, NDOT and other agency staff (as appropriate), to confirm the project objectives, approach, milestones, stakeholder and outreach approach, and potential project challenges. Five (5) CONSULTANT staff will attend the meeting. The CONSULTANT will prepare a meeting agenda and PowerPoint presentation, take, and distribute meeting minutes, and track concerns about the project from the attendees. CONSULTANT will also hold an internal kickoff meeting with CONSULTANT staff and sub-consultants to internally align the team with the goals of the RTC WASHOE and the project.

### 1.1.2 Steering Committee Meetings

The CONSULTANT will facilitate six (6) Steering Committee (SC) Meetings to discuss the study progress, upcoming milestones, scope, critical path schedule, budget, risk status, key technical issues by discipline, and make informed decisions. The SC will also discuss permitting, value engineering, risk, and constructability. The SC will also meet before public informational meetings to review materials and essential public input to achieve an appropriate balance between impacts, function, and cost that leads to broad support of the community. Local developers, nearby property owners, citizens groups, and area residents will be chosen to participate in the Stakeholder Group described under Task 2.4. SC members will be chosen to ensure both the technical (bridge design, hydraulics) and non-technical (environmental) elements of the Project are covered. The CONSULTANT will prepare an agenda and distribute meeting notes and an action item log, identifying the person responsible for resolving each

item and the expected completion date via email. It is anticipated that up to six (6) total CONSULTANT and Sub-consultant staff will attend the SC Meetings.

#### 1.1.3 Project Management Coordination Meetings

CONSULTANT Project Manager and RTC WASHOE Project Manager will hold a bi-weekly 1-hour coordination meeting with an open agenda to provide an update/status to the RTC WASHOE Project Manager.

#### 1.1.4 Internal Design Coordination Meetings

CONSULTANT will hold a 1-hour bi-weekly internal design coordination meeting with task leads, design staff as appropriate, and Sub-consultants to ensure cross-discipline coordination with tasks, design, and schedule.

### 1.2 Review of Existing Studies and Reports

CONSULTANT will perform a thorough review and analysis of existing Studies and Reports for the project area. The list of documents includes, but is not limited to:

- 2011 Preliminary Design Documentation
- Proposed Veterans Roundabout Improvement
- 2024 Geiger Grade Realignment Feasibility Update and Circulation Plan
- Mt Rose Corridor Plan – 2022
- Jigsaw Proposed Development Plan
- Washoe County Pleasant Valley Interceptor Preliminary Design Report – May 2018

### 1.3 Project Management Plan (PMP)

CONSULTANT will prepare a Project Management Plan (PMP) that will include Project Instructions, Risk Management Plan, Communications Protocols, Project Directory, Scope, Schedule, and Budget, File and Information Sharing and Storage Protocols, and the Health and Safety Plan.

The PMP will be distributed to the CONSULTANT team, including sub-consultants, and updated as needed throughout the project duration.

### 1.4 Quality Management Plan (QMP)

CONSULTANT will prepare a Quality Management Plan (QMP) specific to the Feasibility Study Project. The QMP will apply to both prime and sub-consultant team members. An independent quality review will be performed on each deliverable when submitting the milestone packages and Final Feasibility Study Report.

### 1.5 File and Document Management

CONSULTANT will update and maintain the Project Management Plan and all project files (electronic and hardcopy as appropriate) throughout the duration of the project. Copies of all outgoing and incoming correspondence will be provided to the Project Manager, or designee, on a continuing basis and distributed to the RTC WASHOE Project Manager as needed. Word processing, databases, spreadsheets, etc., will be prepared using a format compatible with Microsoft Office.

## 1.6 Deliverables

- Monthly Invoices that show staff names, hours, classifications, and billing rates, for each month of the anticipated project schedule
- Monthly Progress Reports to be included with the invoices
- Schedule updates, as necessary
- Meeting Agenda & Minutes for Kickoff Meetings
- Meeting Agenda, Minutes and Action Item Log for Design Review Committee Meetings
- Project Management Plan preparation and as-needed updates
- Quality Management Plan

## Task 2 PUBLIC AND AGENCY INVOLVEMENT

CONSULTANT will provide dedicated staff for public and agency involvement services to support the RTC WASHOE's efforts to engage and solicit feedback from project stakeholders and the public throughout the feasibility study.

### 2.1 Public Outreach Plan

CONSULTANT will develop a Public Outreach Plan that outlines specific objectives, organization and roles of stakeholders, and a schedule of target activities to accomplish the objectives of the Project. The Plan shall include a proactive public involvement process for obtaining community feedback for the feasibility study. The objectives of the proactive public involvement processes should include early and continuous involvement; reasonable public availability of technical and other information; collaborative input on and understanding of the study; open public meetings; and open access to the decision-making process. CONSULTANT will provide a draft and final copy of the Plan.

As a component of the plan, CONSULTANT will develop and maintain a stakeholder contact database. The stakeholder database will include Project team members, elected officials, businesses, agencies, residents, and neighborhood and community organizations. The database will be a single master database and will be updated as needed. Contacts obtained from meetings shall be added to the database. The database will also include a comprehensive list of all comments/questions received and the responses returned. Comments will be responded to by the public involvement team with approval from the RTC WASHOE or by RTC WASHOE staff directly.

#### Deliverables:

- Draft and final copy of the Public Involvement Plan
- Stakeholder and comment database

### 2.2 Website and Online Outreach

CONSULTANT will manage a project webpage hosted through the RTC WASHOE's website (<https://rtcwashoe.com/projects/geiger-grade-road-realignment/>) by providing content and information to the RTC WASHOE. Anticipated webpage needs by the CONSULTANT include, but are not limited to, project map, comment and subscriber form, public meeting details and materials, study links and resources, images and renderings, and schedule information.

As a component of managing the webpage, CONSULTANT will ensure public meetings are available virtually. If a separate virtual public meeting website is deemed necessary, CONSULTANT will be responsible for hosting the website and working with the RTC WASHOE to connect it to the project webpage for seamless information sharing.

Deliverables:

- Possible virtual public meeting website

### 2.3 Public Information Meetings

CONSULTANT will arrange and conduct two (2) public information meetings in an open house format with residents, stakeholders, property and business owners, and other members of the public interested in the project to solicit feedback at two key milestones. The purpose of the first meeting will be to collect data from the community on existing conditions. The purpose of the second meeting is to present the alternatives being considered and how they rank according to the alternatives analysis scoring criteria and asking the community for their feedback.

Public involvement and outreach tasks, activities and deliverables for public information meetings include:

- Developing a public meeting planning schedule
- Hosting and attending weekly planning meetings for a month leading up to the event
- Establishing meeting dates, times, and locations
- Designing and preparing bilingual mailers (for a minimum distance of ¼ mile from the project area), notices and advertisements. The RTC WASHOE will be responsible for distributing and payment for such notifications
- Designing and preparing newspaper advertisements. Advertisements should run two (2) times prior to each meeting and include both English and Spanish publications. The RTC WASHOE is responsible for payment of advertisements
- Coordinating with the RTC WASHOE's Communications Team for drafting and distributing press releases and social media notices
- Preparing a welcome packet, sign-in sheet and comment form and documenting participation
- Documenting and responding to public comments
- Assisting in preparing PowerPoint presentations, displays, exhibits and graphics
- Preparing a meeting summary
- Accommodating a virtual public meeting in addition to the in-person meeting

If necessary, it is assumed the RTC WASHOE will be responsible for securing a court reporter and Spanish interpreter for each public meeting.

Deliverables:

- PowerPoint presentation
- Welcome packet and collateral material
- Public meeting summary

### 2.4 Stakeholder Meetings

CONSULTANT will arrange and participate in up to five (5) stakeholder meetings. Stakeholder meetings may take place with, but are not limited to, Neighborhood Advisory Boards (City of Reno), Citizen Advisory Boards (Washoe County), property owners, businesses, and community groups/organizations. These efforts shall be coordinated with the RTC WASHOE Project Manager and Communications Team. Stakeholder meetings shall be documented and include the person(s)/group(s) met with, time and location, summary of topic, and issues, comments and questions raised.

Deliverables:

- Stakeholder meeting documentation

### 2.5 Pop-up Events

CONSULTANT will research and conduct all logistics for up to two (2) pop-up events. The purpose of the pop-up events is to engage with the community in smaller, informal settings by intercepting them at places they are already going. CONSULTANT will be responsible for preparing a pop-up event plan identifying event locations and time, materials required, and staffing to be approved by the RTC WASHOE. CONSULTANT will also develop necessary collateral materials needed for events such as flyers, fact sheets, infographics, etc. Any direct costs required for hosting pop-up events shall be rendered by the CONSULTANT and reimbursable by the RTC WASHOE. At the conclusion of each event, CONSULTANT will prepare a summary.

Deliverables:

- Collateral material
- Pop-up event summary

### 2.6 Community Survey

The CONSULTANT will prepare and distribute one (1) community survey. The survey shall be created and distributed electronically with hard copies available as needed. The survey will be available in both English and Spanish and must be ADA compliant. The purpose of the survey is to solicit feedback from the community on existing conditions and further the reach of data collection. It is anticipated the survey will be distributed prior to the first public information meeting. Any direct costs required for distribution of the survey shall be rendered by the CONSULTANT and reimbursable by the RTC WASHOE.

Deliverables:

- Community survey and summary of responses

## **Task 3 Project Development**

### 3.1 Geotechnical Investigation

CONSULTANT will research existing geotechnical studies and reports and perform a geotechnical investigation/analysis to include a field review of existing conditions.



CONSULTANT will not perform any field work that requires ground disturbance such as borings, test pits, or any other field work requiring vehicular access or mechanical moving of soil.

### 3.1.1 Geotechnical Investigation Report

Upon completion of field and office studies, a geotechnical investigation report will be completed for the project. General topics for the report are discussed below.

### 3.1.2 Geotechnical Feasibility Study including the following:

- Description of the project site with the geologic mapping and anticipated geologic conditions.
- Nearby geotechnical explorations with general locations and geotechnical conditions.
- Existing structural section thicknesses based on As-Built plans provided by RTC WASHOE and NDOT.
- Discussions of geotechnical considerations related to:
  - Existing pavement and proposed pavement
  - Widening existing bridge
  - Construction of a new bridge
  - Construction of new box culverts
  - Signal pole foundations

### 3.2 Topographic Survey

CONSULTANT will conduct field surveys, photogrammetric mapping, and office support to provide topographic surveys for the Geiger Grade Feasibility Study. Survey and mapping will be detailed and extensive enough to identify drainage concerns, possible utility conflicts, design challenges, river hydraulics, and right-of-way impacts.

The survey information will be provided for the full corridor width and will include cross-sections at 50-foot intervals from 200' west of South Virginia Street to 1,000' east of Toll Road. Field survey will include but is not limited to, existing structures, elevations, ditch features, hinge points, location, invert and rim elevations of all sewer and storm drain manholes and cross-manholes, culverts, location, invert and rim elevations for all water and gas valves, boxes/vaults, location, invert and rim elevations of storm drain inlets/catch basins; utility poles/anchors, fences, signs, existing survey monuments, location of underground utility Carsonite markers (if any), and any other key existing features.

The field survey budget includes location and survey of twenty (20) right-of-way centerline monuments, property corners, section corners, and/or applicable public land survey monuments.

The budget includes 40 hours of additional as-needed survey for tie-in locations and other misc. survey needs during design.

### 3.2.1 Drone Aerial Imagery and Topography

CONSULTANT will perform an aerial planimetric survey with a drone. The drone flight path will establish aerial imagery and topography for the limits bounded by the following:

- SR 341 Geiger Grade from Veterans Parkway to Shadow Hills Drive
- Toll Road from SR 341 to Gold Run Drive
- Equestrian Road
- Western Skies Drive from SR 341 to Reading Street
- Veterans Parkway from Geiger Grade to Steamboat Parkway
- US395 South Virginia Street from Towne Drive to I-580
- SR 431 Mt Rose Highway from I-580 to Geiger

### 3.2.2 Deliverables:

- Color Aerial imagery ortho photos compatible with both MicroStation and AutoCAD
- MicroStation V8i file with topographic linework
- MicroStation InRoads SS2 Existing Ground Surface with 3D break-lines
- Label callouts for Rim and pipe inverts of Storm Drains, Sewer Systems, and other utilities
- One half (1/2)-Foot existing ground contour intervals at a scale of 1"=20'
- Drone photography to be used as background for renderings.

### 3.3 Right-Of-Way Mapping and Engineering

CONSULTANT will obtain recorded right-of-way based upon Washoe County GIS information. The right-of-way will be shown on the project plans as-is, with no further resolution, and used as the basis for right-of-way engineering services.

Right-of-way engineering services include but are not limited to research ownerships and Assessor's Parcel Numbers, obtain copies of any recorded maps that identify road rights-of-way and property lines, exhibit maps, legal descriptions, and title reports for permanent and/or temporary construction easements on each parcel. Field surveys to preliminarily locate existing property lines is included in Task 3.2.

### 3.4 Subsurface Utilities

CONSULTANT will investigate and locate subsurface utilities within the bridge alignment, roadway R/W, and areas reasonably effected by project improvements, in accordance with the American Society of Civil Engineers Standard guideline for the Collection and Depiction of Existing Subsurface Utility Data, Quality Level C and D. Additionally, CONSULTANT will coordinate with Utility Owners to remove lids of surface features and document depth of utility device, or invert of pipe, within such surface features.

Based on field investigation, CONSULTANT will provide RTC WASHOE a list of utility companies whose utilities are likely to be within the Project limits or reasonably affected by the project. CONSULTANT expects the following utilities to be present:

- |                          |                                   |
|--------------------------|-----------------------------------|
| • AT&T                   | • Washoe County                   |
| • Charter Communications | • NVEnergy                        |
| • City of Reno           | • Truckee Meadows Water Authority |

RTC WASHOE will issue the initial notification to the utility agencies on the list and CONSULTANT will coordinate with the utility agencies for upcoming work, facility relocation and new installation, evaluate potential conflicts through field investigation, and investigate conflict resolution strategies.

### 3.5 Hydrology and Hydraulics

J-U-B will review the existing relevant data on the project to be as informed as possible on the history of the engineering and planning that has occurred relevant to the project site. The document review will be added as a section of the project report for future use.

J-U-B will obtain the existing Flood Insurance Study (FIS) models from FEMA using a formal request process. The FIS models will be used in the hydrologic and hydraulic modeling effort. The FIS study will be reviewed to understand the existing conditions at the proposed project site.

#### 3.5.1 Hydrologic Model Development

Depending on existing hydrologic models' availability and format, CONSULTANT will update and/or integrate the Hydrologic models for Steamboat Creek and Bailey Creek into HEC-HMS to have a modern and accurate hydrologic model for the study. In the hydrologic model CONSULTANT will determine the peak flow rates at Toll Road, Steamboat Creek, the confluence of Bailey Creek and Steamboat Creek, and potential storage basin sites. CONSULTANT will also update estimates on sediment transport/yield given in prior studies at the project site.

#### 3.5.2 Hydraulic Modeling

##### Steamboat Creek

CONSULTANT will use the existing Steamboat Creek model as a baseline and develop a new two-dimensional model of the reach for the project. The modeling will be used to support the design effort and examine the effects of alternatives. The following iterations of the model are anticipated:

- Existing conditions hydraulic model
- Proposed conditions hydraulic models to support bridge alternatives analysis that will include a three-span crossing, of which a single span will cross the creek. The modeling will include abutment modifications as needed to represent the alternatives.

##### Bailey Canyon

Bailey Canyon is a larger more extensive drainage task that will be required to understand the extent of the engineering for the project. Bailey Canyon's drainage has a FEMA Special Flood Hazard Area, potential for significant sediment yield, various major crossing and culverts, and the peak flow routing has a potentially larger effect on Steamboat Creek. Potential solutions could include upstream storage to reduce the peak flow into the creek. For this task it is assumed that the existing FIS model will need to be developed into a 2D HEC-RAS model to enable more modern analysis and accuracy. The iterations of the model are anticipated to include:

- Existing conditions hydraulic model
- Proposed conditions hydraulic models that include the impacts to the SFHA from the various alternatives.

#### 3.5.3 Analysis and Preliminary Design for Ditches and Drainage

As part of the project CONSULTANT will examine the existing ditches and storm water drainage routes. The focus will be to assess potentially suitable alternative routes and necessary realignments to quantify the impact of the various required changes for the overall project.

### 3.5.4 FEMA Considerations

FEMA consideration will be required for either a widening of existing or construction of a new crossing of Steamboat Creek. This work will include utilizing the model to assess the various alternatives and their potential impact to the FEMA mapping and permitting (Conditional Letter of Map Revision and subsequent Letter of Map Revision), based on the modeling recommendations will be made to reduce the overall impact to the floodplain.

### 3.5.5 Hydrology and Hydraulics Report

A Preliminary Hydrology and Hydraulics report will be prepared as part of this effort. This document will provide an overview of the existing conditions and proposed design solutions to enable the project to proceed. The report will discuss key considerations, provide calculations, and associated preliminary costs.

The Report is anticipated to include the following sections:

1. Executive Summary
2. Purpose and Need
3. Project Description
4. Data Gathering
5. Design Alternatives
6. Design Recommendations
7. Permitting Considerations
8. Opinion of Probable Costs

### 3.5.6 Contingency Based on Data Availability

CONSULTANT assumes that the Existing FIS studies will be sufficient for baseline modeling data input. However, based on the condition of the existing FEMA held data additional work may be required. This could include the following:

- Additional infrastructure survey data needed, Ditches, drainages, and conveyance features.
- Additional topographic data needed
- Full creation of hydrologic models (FIS model unusable)
- Inaccurate upstream or downstream FEMA model tie-in issues.

Additional work required for items listed above will be covered in Task 6, Design Contingency.

## 3.6 Traffic Analysis

### 3.6.1 Data Collection

CONSULTANT will collect new, current condition traffic volume data to serve as a baseline for existing traffic volumes and for review of travel demand model outputs compared to actual existing traffic.

CONSULTANT will:

- Conduct new AM and PM peak period (7 to 9 AM and 4 to 6 PM) mid-week turning movement counts (including bike/ped movements) at the following location(s):

- Mt. Rose Highway / Herz Boulevard
  - S. Virginia Street / Geiger Grade / Mt. Rose Highway
  - Geiger Grade / Veterans Parkway (existing roundabout)
  - Veterans Parkway / Curti Ranch Road
  - Geiger Grade / Steamboat Multifamily / WCSD Bus Barn Driveway
  - Geiger Grade / Toll Road / Equestrian Road
  - Equestrian Road / Curti Ranch Road
- Conduct AM and PM peak hour turn movement counts at the following driveways:
    - S. Virginia Street / Summit Sierra driveway
    - Veterans Parkway / Maverik driveway
    - Veterans Parkway / Esprit Apartments driveway
    - Geiger Grade / Steamboat Multifamily driveway
    - Geiger Grade / Esprit Apartments driveway
- Collect seventy-two (72) hour duration bi-directional road segment volume and classification counts using pneumatic tube counters at the following location:
    - Geiger Grade between S. Virginia Street and the Veterans Parkway roundabout
- Review and document the existing lane configurations and controls at the study intersections, including planned modifications as provided by the reviewing agencies
  - Use the collected data and other available data to graphically present the predominant travel patterns and relative weights of those patterns (similar to origin-destination survey results)
  - Prepare an Existing Conditions Technical Memorandum with supporting tables and graphics

### 3.6.2 Forecasting and Operations Analysis Report

CONSULTANT will:

- Review the Washoe County RTC WASHOE's current travel demand model for the study area
- Review the South Meadows Multimodal Forecasts and RTC WASHOE special model run
- Review the Mt. Rose Highway Corridor Study traffic volume forecasts
- Identify the traffic volumes estimated to be generated by the Jigsaw development project and extension of Damonte Ranch Parkway to Geiger Grade at the current roundabout location
- Prepare traffic forecasts and a traffic forecasting memo for the 2050 horizon year
- Review the traffic forecasting memo with RTC WASHOE and NDOT
- Perform traffic operations analysis for the AM and PM peak hours for the following intersections using Synchro/SimTraffic software:
  - Mt. Rose Highway / Herz Boulevard
  - S. Virginia Street / Geiger Grade / Mt. Rose Highway
  - Geiger Grade / Veterans Parkway

- Veterans Parkway / Curti Ranch Road
  - Geiger Grade / Steamboat Multifamily / WCSD Bus Barn Driveway
  - Geiger Grade / Toll Road / Equestrian Road
  - Equestrian Road / Curti Ranch Road
- Perform traffic operations analysis for the following scenarios:
    - Existing / Baseline Conditions
    - 2050 volumes with existing intersection configurations/controls, the Jigsaw development and Damonte Ranch Pkwy Extension are to be included in this scenario
    - 2050 volumes with improved intersections only (no new roadways, no Geiger realignment) – this scenario will identify the improvements needed to provide reasonable long-term traffic operations without a realignment or new road
    - 2050 volumes with Geiger Grade realignment to S. Virginia Street and traffic redistribution, identifying the necessary improvements
    - 10-year horizon, 2030, or 2050 volumes under one additional alternative (to be determined), identifying the necessary improvements
  - Document the traffic forecasting, operations analysis, findings, recommendations, and prepare a DRAFT traffic study report
  - Incorporate up to two (2) rounds of consolidated RTC WASHOE, NDOT, City of Reno, and Washoe County review comments, and provide a final report

### 3.6.3 Curti Ranch Road Evaluation

CONSULTANT will evaluate the potential option of converting Curti Ranch Road to a higher classification roadway, including the pros, cons, necessary improvements, and anticipated degree to which traffic would divert to Curti Ranch Road and relieve other routes/intersections.

Perform traffic operations analysis for the AM and PM peak hours for the Curti Ranch Road / Tagor Road (all way stop) intersection using Synchro/SimTraffic software.

### 3.6.4 Alternatives Analysis & Conceptual Design

CONSULTANT will develop alternatives, prepare screening criteria and comparison matrices, consider access management, micro-mobility needs, provide roundabout conceptual design support, and provide a cost estimate of traffic improvements.

### 3.6.5 Deliverables

- One Draft version of the Traffic Study Report
- One Final version of the Traffic Study Report

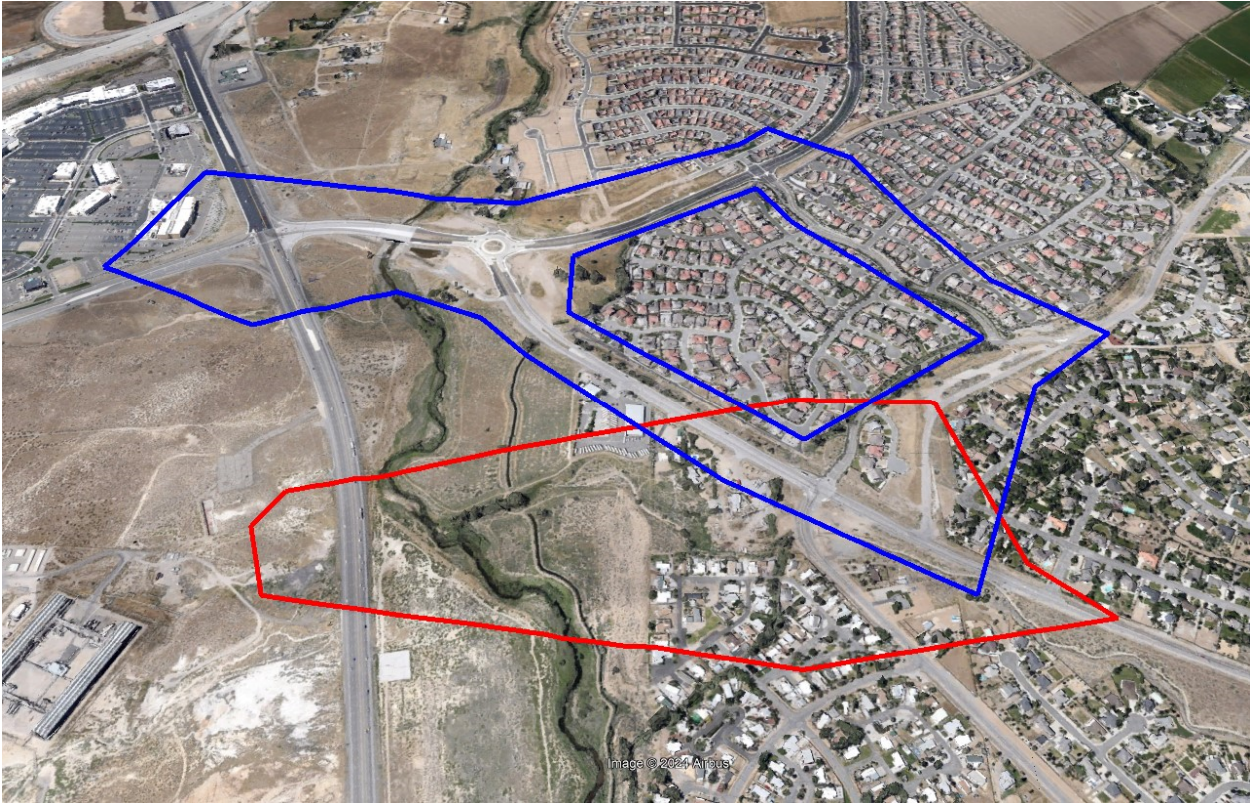


Figure 1:

Red depicts realignment corridor. Blue depicts existing corridors for potential improvements in lieu of realignment.

### 3.7 Development of Alternatives

J-U-B will collaborate with RTC WASHOE Project Manager to identify reasonable solutions that meet project needs. As part of this process, one (1) brainstorming meeting will be conducted to identify concepts (up to 5). Each of the identified concepts will be evaluated to ensure that identified concepts can be implemented. A high-level feasibility check of these concepts will be performed to screen up to five (5) Concepts. The process is identified in the table below:

- 1) Conduct brainstorming meeting with RTC WASHOE and Key Stakeholders. Brainstorm ideas. Up to five (5) preliminary concepts will be developed from the meeting.
- 2) Develop screening criteria and obtain endorsement from RTC WASHOE. Screening criteria will follow the principles of Level 1 and Level 2 screening for a traditional PEL Study.
- 3) Develop and perform qualitative screening of Concepts and evaluations based on AASHTO guidelines, RTC WASHOE and NDOT standards and study goals, and other screening criteria.
- 4) Develop up to five (5) concepts to move forward in the study. Concepts are anticipated to be a traditional No-Build scenario, a Geiger Grade Realignment, and options for improving the existing network without a Realignment.
- 5) Perform Synchro model analysis for up to four (4) developed Concepts and SIDRA model analysis for Intersection Concepts (roundabout geometry determined based on volumes and design vehicle).

6) Perform final screening of five (5) concepts including Roundabout Concept using SIDRA results and geometric evaluations.

7) Identify up to three (3) concepts advanced to Level 2 stage.

#### ASSUMPTIONS:

- One 2-hour brainstorming meeting with RTC WASHOE and Key Stakeholders staff and preparation time.
- One meeting with up to five (5) CONSULTANT staff will be in attendance.
- Screening criteria will be developed based on discussions with RTC WASHOE and Key Stakeholders.
- Qualitative preliminary evaluation will be performed for advancing preliminary ideas to concepts.
- Total four (4) concepts will be evaluated using the Synchro models.
- Total four (4) including Roundabout Concept (using SIDRA) will be evaluated from a high-level geometric fatal flaw analysis perspective.

#### DELIVERABLES:

- Summary of brainstorming meeting.
- Preliminary screening criteria.
- Synchro models for four (4) Concepts.
- SIDRA models for any (1) Roundabout Concept.
- Summary tables with results for screening analysis.

#### 3.7.1 Conceptual Design, Cost Estimates, and Phasing

We will develop concept (5% -10%) level layouts for up three (3) conceptual solutions selected by RTC WASHOE and Key Stakeholders for further evaluation, which could include additional Roundabouts. We will develop conceptual (high-level) planning cost estimates for up to three (3) concepts.

#### TASKS:

1) Conceptual geometric design development of three (3) concepts to include 2D geometric layout, lane configuration, micro-mobility connections, shoulder widths and striping.

2) Identify phasing and sequencing of selected solutions. Use selected concept and work backwards to develop short-term solutions.

3) Develop phasing and sequencing of up to three (3) Concepts.

4) Develop concept level cost estimates for up to three (3) Concepts.

5) Initial screening will include vetting the concepts through a Benefit-Cost Analysis (BCA). The BCA will occur in the following phases:

- Collection of data and information listed in Tasks 2, 3, and 4.
- Develop a Purpose and Need Statement for the Project with input from the Steering Committee.



- Develop Screening Criteria with input from the Steering Committee for each alternative to compare against the Purpose and Need.
  - Screening Criteria will include direct benefits/costs, indirect benefits/costs, intangible costs, and costs of potential risk.
- Costs and Benefits for each Option will be compared in order to rank each Option, highest BC Ratio to lowest BC Ratio. The highest BC Ratio will be considered the preferred Option.

6) Final screening in more detail will be conducted to determine a final preferred option if a clear preferred Option is not identified in Step 5 above. This work will be covered under Task 6, Design Contingency.

BCA efforts will be based on Federal Highway Administration's Benefit-Cost Analysis Tool version 2.0 (March 1, 2018) using the best available data.

#### ASSUMPTIONS:

- Conceptual 2D geometric layout development to include intersection geometric layout, lane configuration, micro-modal configuration, shoulder widths and striping.
- Geotechnical, environmental, right-of-way and hydraulic considerations affecting design will take place. Design exceptions, if any, will be identified on the concept design figures.
- Only one set of comments that change geometric alignments will be addressed on the concept layouts. No geometric alignment changes will be made to the concept designs following production concept drawings.
- Up to three (3) planning level cost estimates (order of magnitude) for concepts will be prepared. ROW findings from Task 3.3 will be used to develop ROW costs for the three (3) concepts.

#### DELIVERABLES:

- Concept layouts for up to three (3) solutions - showing concept level line work level drawings to include in the Final Feasibility Study.
- Phasing and Sequencing plan for up three (3) concepts.
- Concept level cost estimates for up to three (3) Concepts.

### 3.8 Bridge Type Selection Report

CONSULTANT will prepare a Type Selection Report (TSR) which will present the design methodology, project concerns for the bridge, retaining wall, and hydraulic structures, findings, conclusions, and recommendations to be utilized in approval and advancement of the project through completing the following tasks.

#### 3.8.1 DATA COLLECTION

CONSULTANT will work with NDOT, RTC WASHOE, City of Reno, and Washoe County to collect site data applicable to the bridge crossing. This may include as-built plans from nearby bridges or improvement projects to help in preliminary design of bridge foundations and abutments. This also includes gathering available seismic hazard data, liquefaction, scour, hazardous materials, or utilities in the area that could conflict with placements or design elements for bridge foundations.

### 3.8.2 PREPARE DESIGN CRITERIA

CONSULTANT will prepare a design criteria memorandum that will establish controlling design criteria for project approval prior to proceeding with detailed design. This memorandum will establish the standards to be adhered to including the design speed, typical section, bridge width and Geiger Grade Road concept. A review of the City of Reno, RTC WASHOE, Washoe County, AASHTO, and NDOT design criteria and guidelines will be performed and guidelines warranting consideration/ integration into the project will be noted. A draft of the memorandum will be provided to RTC WASHOE for comments and approval. Final comments will be incorporated, and the final design criteria memorandum will be prepared. This design criteria memorandum will serve as the basis for the development of the Type Selection Report, Preliminary Design, and PS&E.

Deliverables:

- One (1) copy of Draft Design Criteria Memorandum (1-2 page document).
- One (1) copy of Final Design Criteria Memorandum (1-2 page document).

### 3.8.3 PRELIMINARY BRIDGE LAYOUT

CONSULTANT will prepare conceptual bridge plan layouts for three (3) bridge type alternatives. One (1) roadway alignment and geometry (including roadway width and lane configurations), and identified above ground and below ground utilities or other known conflicts will be utilized in the TSR.

CONSULTANT will provide preliminary girder bridge and girder layout, foundation sizes and locations, and span lengths. This will identify any conflicts that need to be resolved such as utility relocation or right of way acquisitions/constraints. Bridge length and depth will be optimized to minimize impacts and cost.

The conceptual plans and estimate will be prepared in English units. The plans will address horizontal and vertical alignment, bridge layout, intersection geometry, pedestrian and bicycle facilities, ADA compliance, limits of cut and fill, right of way limits (existing and proposed), utilities, and proposed drainage needs.

Conceptual Plans will include the following plan sheets:

- Plan, Elevation, and Typical Section
- Geometrics (Foundation Plan)

If the RTC WASHOE determines additional alternatives are required, CONSULTANT will provide these alternatives on a time and material basis.

### 3.8.4 BRIDGE TYPE SELECTION

CONSULTANT will prepare a bridge type selection report that will compare the three (3) bridge alternatives discussed in 3.8.3 and provide discussion on the project challenges and advantages of each option as well as the cost comparison of each option. Items that will be discussed in the type selection report will be bridge geometry, foundation type, utility conflicts, constructability, right-of-way constraints, hydraulics, scour, foundation recommendations, soil conditions, seismic hazards, and drainage needs.

Once the type selection report has been submitted for review, CONSULTANT will provide one round of review comments, in which CONSULTANT will update the report to address comments made by key project stakeholders. CONSULTANT will also hold a type selection meeting to discuss comments and resolve any issues which arose during the review process. Following comment resolution CONSULTANT will revise the report and submit a final report.

### 3.8.5 PRELIMINARY WALL LAYOUT

CONSULTANT will review proposed project grading plans, right-of-way limits, aerial survey, and needs for retaining walls within the project limits. CONSULTANT will select the optimal retaining wall layouts to minimize heights and lengths to reduce overall project cost.

CONSULTANT will review up to two (2) retaining wall types which will include reviewing environmental and right-of-way impacts, construction schedule, and rough cost estimates.

Retaining wall alternatives will include the following:

- Mechanically Stabilized Earth (MSE) Wall
- Driven Sheet Piling Wall with Concrete Fascia

CONSULTANT will develop conceptual plans for the two (2) retaining wall types.

Conceptual Plans will include the following plan sheets:

- Wall Layout and Elevation
- Wall Typical Section

### 3.8.6 WALL TYPE SELECTION

CONSULTANT will prepare a wall type selection report that will compare the two (2) retaining wall alternatives discussed in 3.8.5 and provide discussion on the project challenges and advantages of each option as well as the cost comparison of each option. Items that will be discussed in the type selection report will be wall geometry, foundation type, utility conflicts, constructability, right-of-way constraints, soil conditions, seismic hazards, and drainage needs.

Once the type selection report has been submitted for review, CONSULTANT will provide one round of review comments, in which CONSULTANT will update the report to address comments made by key project stakeholders. CONSULTANT will also hold a type selection meeting to discuss comments and resolve any issues which arose during the review process. Following comment resolution CONSULTANT will revise the report and submit a final report.

### 3.8.7 DRAINAGE STRUCTURE

CONSULTANT will prepare a benefit cost analysis for the use of either a bridge, hydraulic structure, or a combination of the two for the convergence of the drainage channels at the northeast end of the project near the Toll Road intersection. CONSULTANT will review and propose an optimal solution to address the known flooding and hydraulic issues and provide RTC WASHOE with the best use of resources.

Deliverables:

- One Draft Bridge and Retaining Wall Type Selection Report, pdf format.
- One Final Bridge and Retaining Wall Type Selection Report, pdf format.

#### ASSUMPTIONS

- Governmental Agency fees or charges required in obtaining all required site information and project permits are the responsibility of RTC WASHOE. Possible fees may arise from requesting project data and will be paid through Task 6, Design Contingency.
- 24-hours prior notice will be required for scheduling project meetings. This will allow key stakeholders and discipline leads time to accommodate the meeting.
- All work listed to be performed by others that directly impacts the structural work will be provided to CONSULTANT prior to starting work. If items change, such as profile or alignment during the project, CONSULTANT should be notified immediately, and a meeting will be needed to discuss impacts and possible design changes. If additional scope is required, Task 6 Design Contingency will be used to cover costs.

### 3.9 Geographic Information Systems

CONSULTANT will create an interactive, web-based GIS map for use by the project team. This map will facilitate coordination and increased understanding of the diverse disciplines involved in the project. The easy-to-use interface will allow for toggling information on and off to enhance visibility of various types of data. The map will include existing conditions as well as design elements. Existing condition layers to be included will be utilities, active transportation facilities, environmental data (wetlands, hazardous materials, biological concerns), and flood hazard areas. Roadway design and noise analysis will also be included on the map.

In addition to the project team map, CONSULTANT will develop a map that can be shared with the public. The data provided will be limited to the information appropriate to be shared publicly during the process, and we will seek approval from RTC WASHOE Project Manager before sharing it.

The GIS team will work with the public involvement team to seek input from citizens in various stages of the project. This may involve specific interactive maps to enhance public understanding as well as opportunities for the public to submit comments online.

## **Task 4 Environmental Studies, Documentation and Support Services**

The CONSULTANT shall provide environmental services up to and including completion of the Feasibility Study which will follow similar requirements as an FHWA Planning and Environmental Linkages (PEL) process. CONSULTANT will identify foreseeable potential actions that would require federal agency review and provide recommendations as to the potential project alternative considerations that may be encountered.

### 4.1 Waters of the United States

The Steamboat Creek is designated “Waters of the United States”. Under Section 404 of the Clean Water Act (CWA) the US Army Corps of Engineers (USACE) regulates the placement of dredged or fill material into all waters of the US (WOTUS). Under the CWA, the USACE may issue a permit for the placement of fill material into WOTUS. An Aquatic Resources Screening Report is a tool used to document the presence of all aquatic resources located within a project boundary and to provide an assessment of the federal jurisdictional status of those aquatic resources. This survey and report are intended to delineate the presence of all potential aquatic resources found within a project area/boundary and to define the lateral extents of any aquatic resources utilizing the appropriate guidance and procedures. The assessment of the federal jurisdictional status is based on CONSULTANT’S best professional judgement and utilizes previous agency decisions on jurisdiction to support our recommendations. This report is intended for internal planning purposes and to communicate with state and local regulators but is not appropriate for use in coordinating a jurisdictional determination request from the USACE.

Under this task, CONSULTANT will complete a desktop assessment of the alternatives boundary to determine the areas that will need to be field verified for the presence of aquatic resources. All field documentation will include georeferenced photographs and USACE approved data forms consistent with the aquatic resource type being investigated.

The results of the field survey will be used to prepare the Aquatic Resources Screening Report. CONSULTANT will incorporate the information on aquatic features into a Geographic Information System (GIS) database to calculate total acreages and linear feet of aquatic resources and create figures for the report. CONSULTANT will provide a recommendation about the jurisdictional status of each of the potential features identified within the alternative’s boundary. CONSULTANT will also obtain any previous approved jurisdictional determinations from the USACE to inform our professional recommendations of the current federal jurisdictional status under the regulations in effect as of the date of the screening report.

This report is an abbreviated version of the delineation report that would be required by the USACE for any jurisdictional determination or permit request. As the RTC WASHOE will need to select a preferred alternative prior to determining the permitting needs with the USACE, this report will serve as a baseline for alternatives analysis and scope planning for those future needs.

#### Assumptions & Exclusions:

- Access to the survey area will not be restricted.
- Ground conditions must not be obstructed by the presence of snow or other conditions.
- If wetlands are suspected, this assessment is most appropriately conducted during the wet portion of the growing season (April – June). If wetlands are evaluated outside of this time period, then boundaries may be conservatively estimated with a variance in methodology for delineation.
- This report is for internal planning purposes and not for coordination with the USACE for requesting any type of jurisdictional determination.
- A draft of the report will be provided to the Client and one round of revisions will be addressed. Revisions are assumed to be editorial in nature and would not require additional scope of field work to address the comments.

#### Deliverables:

- Aquatic Resources Screening Report: includes field assessment of potential aquatic resources as identified by publicly available resources and field observations; aquatic resource mapping; supportive mapping; any previous agency decisions; recommendation of federal jurisdictional status and summary of USACE and Nevada Department of Environmental Protection (NDEP) aquatic resource permitting requirements based on the project information available.

Findings will be included in the environmental impacts and used for Level 2 screening of Alternatives.

#### 4.2 Steamboat Buckwheat other Threatened and Endangered Species Screening and State Species of Concern

Steamboat Buckwheat (*Eriogonum ovalifolium* var. *williamsiae*) is a federal and state listed endangered species that has the potential to be located within the alternative's boundaries. Under this task CONSULTANT will provide environmental consulting services to support the acquisition and execution of a Critically Endangered Species Permit from the Nevada Division of Forestry (NDF) under Nevada Revised Statute (NRS) 527. This permit will satisfy requirements outlined in NRS 527.270 in order to conduct surface disturbance within occupied habitat for the species. This work would occur over the completion of three subtasks.

##### 4.2.1 Site Assessment

CONSULTANT will work with the Client to obtain maps delineating the proposed disturbance footprint including all options and variations of the project that may be implemented. CONSULTANT biologists will use existing data from the Nevada Division of Natural Heritage (NDNH), existing site knowledge and a field verification visit to assess the potential of overlapping Steamboat Buckwheat habitat, potential habitat, and the proposed disturbance features. The fieldwork will generate a GIS map of all occurrences of Steamboat Buckwheat and protected habitat within the project area. CONSULTANT will discuss the findings of the site assessment with RTC WASHOE to determine options for project modification, mitigation and permitting implications if it becomes apparent that there is jurisdictional authority of NRS 527 over the proposed project actions.

##### 4.2.2 Agency Coordination

CONSULTANT will initiate contact with NDF as the permitting authority for informal consultation about the regulatory implication of NRS 527. CONSULTANT will pursue all avenues to avoid the permitting process via avoidance measures or disqualification of the site entirely and discuss those options with NDF. Steamboat Buckwheat is co-listed under Section 7 of the Endangered Species Act (ESA) and co-managed by the US Fish and Wildlife Service (USFWS), whom may also be involved in the consultation process. If it is determined that a permit is required to work in the proposed project area, information from the coordination effort will be used to develop a permit application and inform the breadth of mitigation measures included therein. CONSULTANT will work with the client to ensure that proposed mitigation measures are within acceptable parameters and do not conflict with core project objectives. Consultation will include desktop data collection from online resources, email correspondence and one remote meeting to review project details with the agencies. Due to the extensive botanical survey performed by CONSULTANT at this site in 2020, it is not anticipated that the agencies will require additional pre-survey fieldwork.

##### 4.2.3 Permit Application

If it is determined that a Critically Endangered Species Permit is required to work within the proposed project area, CONSULTANT will compile the data and information needed to fulfill permit application requirements outlined under NRS527.260. The permit will include a project description, maps, previous survey references and mitigation measures. CONSULTANT will submit the permit to NDF for review and approval. The work associated with this task assumes (1) application revision after draft submittal. Additional revisions, field studies or amendments requested by the agency would require a level of effort outside of this scope.

#### Assumptions & Exclusions:

- Assumes (1) meeting with the client to discuss fieldwork findings.
- Assumes objectives can be completed in (1) day of fieldwork or less.
- Assumes agency will require (1) meeting to initiate the process.
- Assumes (1) round of permit revisions before permit execution.
- Assumes no work associated with mitigation measures such as biological monitoring, flagging, plant relocation or other. Execution of mitigation measures that are identified during Task 1, will be proposed under separate work authorization as soon as that scope can be defined.

#### Deliverables:

- Map of alternatives boundary overlaid with located species and/or habitat.
- Critically Endangered Species Permit, executed by the Nevada State Forester (if required by NDF)

Findings will be included in the environmental impacts and used for Level 2 screening of Alternatives.

#### 4.3 Delineation of Hazardous Materials in Soils and Surface Water Sampling

Under this task CONSULTANT will conduct soil sampling and analysis for mercury and arsenic which are known contaminants in the Steamboat Creek watershed. Under this task CONSULTANT will collect up to fifty (50) soil samples and have them analyzed for mercury using SW7471 and arsenic using SW6020. Soil samples will be collected along the alternatives boundary to provide information regarding existing mercury and arsenic impacts. The sampling plan will be outlined in detail prior to execution but will generally include collecting samples via hand auger from different soil horizons up to two (2) feet below ground surface. Up to five surface water samples will be collected from Steamboat Creek to assess permitting options should the creek need to be rerouted and/or discharged during construction. Samples will be collected from upgradient, mid-proposed project, and downgradient and analyzed for the Nevada Profile 1 list, less WAD cyanide and uranium.

CONSULTANT will coordinate delivery of the samples to a state approved lab. Upon receipt of the sampling results from the laboratory, the data will be evaluated, and sampling exhibits will be prepared. The results will then be incorporated into a report documenting the findings and recommendations for material handling and remedial action. Under this task, CONSULTANT will provide consulting support for remedial and material handling alternatives for contaminated soil during construction. Consultant will ensure that all necessary permits are obtained to conduct the scope of work identified herein.

#### Assumptions & Exclusions:

- Access to the survey area will not be restricted.

- Soil sampling must be conducted outside of winter when the ground is not frozen.
- 50 samples are assumed for this work plan.
- The written report will require coordination with Northern Nevada Public Health, Washoe RTC WASHOE, and the NDEP prior to completion of recommendations.
- A draft of the report will be provided to the RTC WASHOE and one round of revisions will be addressed. Revisions are assumed to be editorial in nature and would not require additional scope of field work to address the comments.

Deliverables:

- Soil and Surface Water Sampling Plan.
- Sampling Results and Material Handling and Remedial Actions Report.

Findings will be included in the environmental impacts and used for Level 2 screening of Alternatives.

#### 4.4 Historic and Archaeological Resources

CONSULTANT will perform a desktop review of all previous cultural baseline investigations and historic documents related to the project area. The desktop review will identify all known historic properties in the project area, identify potential unknown historic properties, and review all previous cultural baseline investigations within the project area. Relevant sources of information to be reviewed include archival materials housed at the Nevada State Historical Society; University of Nevada-Reno, Special Collections; Nevada State Archives; and the Government Land Office (GLO) Maps. Additional data will be accessed through various pertinent archives, including but not limited to the Nevada Cultural Resources Information System (NVCRIS), historic maps, historic indices, and aerial photos. The data will be used to inform the Benefit-Cost Analysis with regards to compliance work that may need to occur due to the realignment.

CONSULTANT is prepared to perform a full Class III cultural investigation report. A Class III report requires field work and would cover an area approximately 25 acres in size. Detailed Scope and Fee for a Class III level of effort is not included in this Scope.

Findings will be included in the environmental impacts and used for Level 2 screening of Alternatives.

#### 4.5 Socioeconomic/Environmental Justice

CONSULTANT will obtain data from the US Census Bureau and American Community Survey. This will be supplemented with information from other local sources. Based on census data from task above, CONSULTANT will identify low income and/or minority neighborhoods and businesses. CONSULTANT will supplement data through additional research including analysis of school lunch recipients, housing assistance, etc.

Findings will be included in the environmental impacts and used for Level 2 screening of Alternatives.

#### 4.6 Air Quality



CONSULTANT will work with the RTC WASHOE to obtain and review the results from RTC WASHOE's Air Quality Conformance model runs. CONSULTANT will verify the recommended Alternative does not adversely affect the regions' ability to maintain Air Quality Conformance.

Findings will be included in the environmental impacts and used for Level 2 screening of Alternatives.

#### 4.7 Traffic Noise

23 Code of Federal Regulations (CFR) 772 states it is mandatory for all states to comply with the regulations for projects that are federally funded or require FHWA approval regardless of funding source. This regulation applies to all Type I projects. The Nevada Department of Transportation (NDOT) 2022 Traffic and Construction Noise Analysis and Abatement Policy is applicable to all Type I projects. This project is anticipated to be a Type I, and therefore a noise analysis is assumed to be required.

CONSULTANT will utilize FHWA's Traffic Noise Model, TNM 2.5, to predict anticipated traffic noise and recommended abatement. No field measurements for ambient noise will be performed at this time.

Findings will be included in the environmental impacts and used for Level 2 screening of Alternatives.

#### 4.8 Bicycle/Pedestrian Use

CONSULTANT will document the location of existing pedestrian and bicycle facilities and the connectivity of these facilities in the project area. Existing facilities will be compared to the current Bicycle and Pedestrian Master Plan (RTC WASHOE, 2017) to identify any gaps or deficiencies that could be addressed. CONSULTANT will coordinate with the RTC's developing Active Transportation Plan to ensure cohesive approach to bike and ped improvements. CONSULTANT will include recommendations in the various Alternatives that address current micro-mobility needs and improvements.

Findings will be included in the environmental impacts and used for Level 2 screening of Alternatives.

#### 4.9 Water Quality

As an extension of the work to be undertaken with Task 3.5, Hydrology and Hydraulics, and Task 4.3 Delineation of Hazardous Materials in Soils and Surface Water Sampling, CONSULTANT will determine the extent of potential water quality impacts that may occur because of the project implementation.

If needed, mitigation strategies will be considered.

Findings will be included in the environmental impacts and used for Level 2 screening of Alternatives.

CONSULTANT will summarize existing conditions and provide regulatory context for the following NEPA resources that may not be impacted but still require documentation within the Feasibility Study.

#### 4.10 Geologic Resources and Soil-with information from Task 3.1 and Task 4.3

#### 4.11 Floodplain Assessment-with information from Task 3.5

4.12 Vegetation and Noxious Weeds-The CONSULTANT will perform desktop survey of existing conditions and field mapping for vegetation type and presence of noxious weeds.

4.13 Paleontological Resources-The CONSULTANT will perform a desktop survey of paleontological records.

4.14 Land Use -The CONSULTANT will perform a desktop survey of current and planned land use within the study area.

4.15 Residential/Business/ROW Relocation-The CONSULTANT will summarize ROW impacts for each alternative.

4.16 Transportation Resources-The CONSULTANT will summarize impact to existing and planned transportation resources for each alternative.

4.17 Utilities and Railroads-The CONSULTANT will summarize impacts to utilities and railroads for each alternative.

4.18 Farmlands-The CONSULTANT will review and summarize NRCS farmland status for all lands within the study area.

4.19 Visual Resources-The CONSULTANT will summarize potential visual impacts for each alternative.

4.20 Section 4(f) and Section 6(f)-The CONSULTANT will review and summarize all existing and planned 4(f) and 6(f) properties within the study area.

4.21 Cumulative Impacts-The CONSULTANT will summarize the potential cumulative effects for each alternative.

4.22 Existing Conditions Report-The CONSULTANT will provide a summary report that contains all resources above with mapping, regulatory summary, potential impact for each alternative, and future steps for moving a selected alternative forward to NEPA.

4.23 Develop Purpose and Need/Logical Termini/Study Limits-The CONSULTANT will work with RTC and NDOT to develop a purpose and need statement and identify logical termini and physical limits for the study. This is not required of a Feasibility Study but is required for a PEL. It is highly recommended that FHWA be consulted for informal concurrence of these items.

#### Assumptions & Exclusions:

- FHWA and NDOT will concur (minimally informally) with P&N, Logical Termini, and Study Limits. These can be moved forward to PEL or NEPA as is or with minor edits for future project development.
- Traffic data is available to support the P&N statement.
- Three meetings with NDOT and FHWA to review/brainstorm these items.

4.24. Regulatory Agency Meetings-The CONSULTANT will lead two meetings with authorizing agencies or impacted agencies for informal notification of the project purpose and future plans. These meetings can be considered contingency and are not required of a Feasibility Study but can be effective in gaining support for future projects.

## **Task 5      Project Closeout**

### 5.1 Prepare Final Report

CONSULTANT will document the analysis to create implementable solutions. The documentation will help communicate with decision makers, the public, and stakeholders the effect a project of this type will have on the adjacent community. It also anticipated that this study will be a preliminary step for moving into environmental acceptance. The study will prepare a phasing plan for implementation for up to three (3) concepts including the Roundabout Concept. The recommendations for the study will be summarized in a report.

#### TASKS:

- 1) Prepare Draft Study Report.
- 2) Incorporate comments on draft Study Report from RTC WASHOE and Key Stakeholders.
- 3) Finalize Study Report.

#### ASSUMPTIONS:

Two (2) meetings are also anticipated to collaborate and advise RTC WASHOE on the progress and findings of the study.

#### DELIVERABLES:

- Draft Study Report.
- Final Study Report.

### 5.2 Archive Paper and Electronic Files

CONSULTANT shall securely archive all project materials and provide a final electronic copy to the RTC WASHOE. The electronic copy shall be stored on a device that is acceptable to the RTC WASHOE.

### 5.3 Communicate Project Closeout to the Client

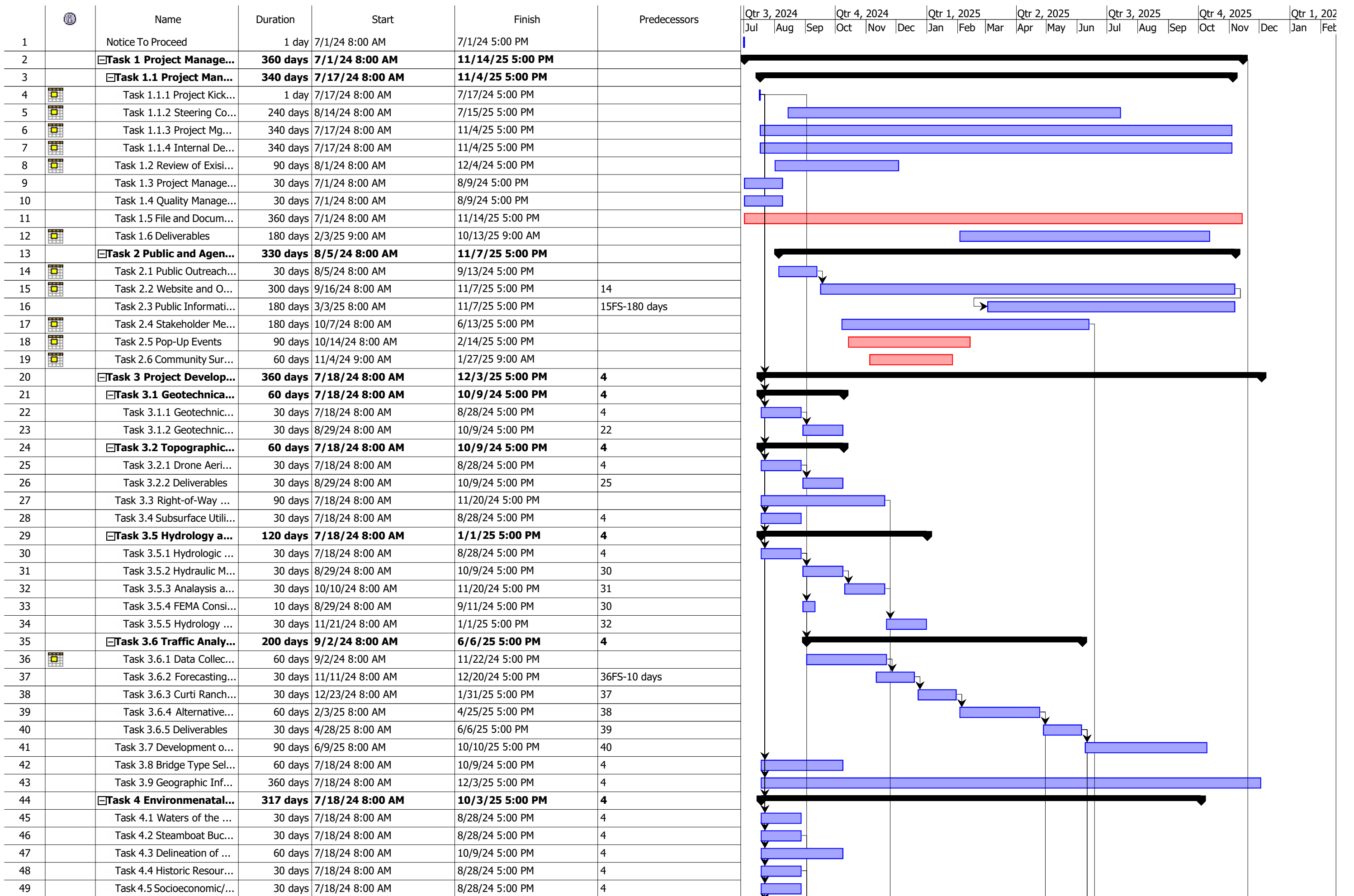
CONSULTANT shall communicate with the RTC WASHOE and Key Stakeholders that the project has been completed. At RTC WASHOE'S request, CONSULTANT will provide electronic copies of the final report to Key Stakeholders.

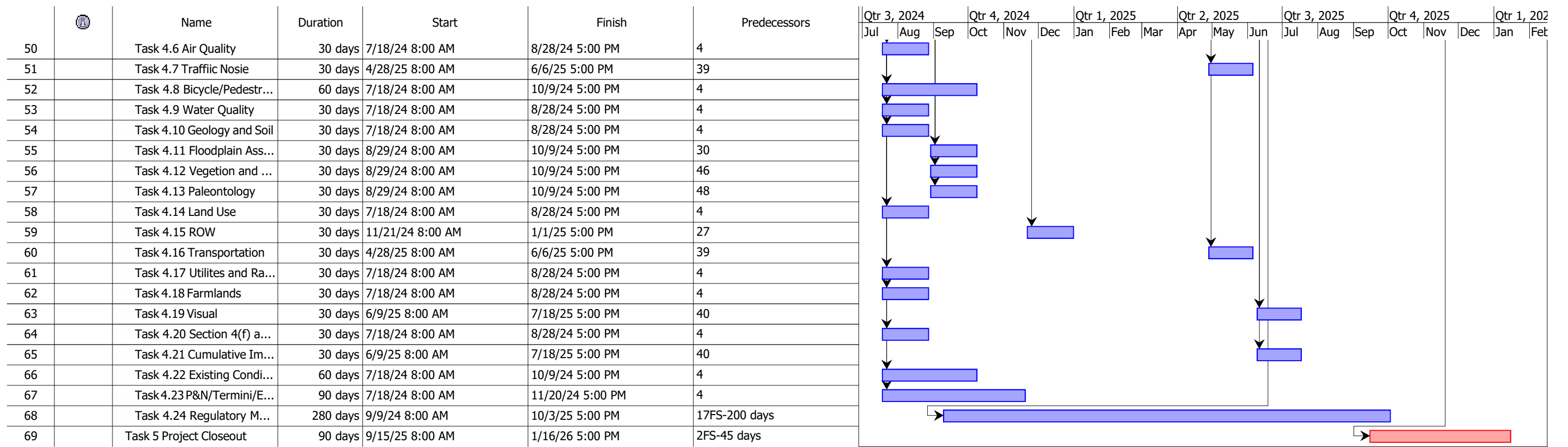
### 5.4 Close Out Financial Billing

CONSULTANT will prepare a final invoice that clearly communicates no additional invoices will be sent for this PROJECT.

## **TASK 6      Design Contingency (Optional)**

This is a contingency for miscellaneous increases within the scope of this contract in performance of services under Task 1 through Task 5. If CONSULTANT determines that it is necessary to perform work outside of the scope covered in Task 1 through Task 5, CONSULTANT shall provide a letter detailing the need, scope, and not-to-exceed budget for any proposed work. Work under this task shall proceed only with the RTC WASHOE Project Manager's written approval.





**Exhibit B**

Compensation







## **Exhibit C**

### Indemnification and Insurance Requirements

**INDEMNIFICATION AND INSURANCE REQUIREMENTS FOR**  
**PROFESSIONAL SERVICE AGREEMENTS**  
**[NRS 338 DESIGN PROFESSIONAL]**

2022-07-08 Version

**1. INTRODUCTION**

IT IS HIGHLY RECOMMENDED THAT CONSULTANTS CONFER WITH THEIR INSURANCE CARRIERS OR BROKERS TO DETERMINE THE AVAILABILITY OF THESE INSURANCE CERTIFICATES AND ENDORSEMENTS IN ADVANCE OF PROPOSAL SUBMISSION. IF THERE ARE ANY QUESTIONS REGARDING THESE INSURANCE REQUIREMENTS, IT IS RECOMMENDED THAT THE AGENT/BROKER CONTACT RTC'S FINANCE DIRECTOR AT (775) 335-1845.

**2. INDEMNIFICATION**

CONSULTANT agrees, subject to the limitations in Nevada Revised Statutes Section 338.155, to save and hold harmless and fully indemnify RTC, Washoe County, City of Reno and City of Sparks including their elected officials, officers, employees, and agents (hereafter, "Indemnitees") from and against any and all claims, proceedings, actions, liability and damages, including reasonable attorneys' fees and defense costs incurred in any action or proceeding (collectively "Damages") arising out of the:

- A. Negligence, errors, omissions, recklessness or intentional misconduct of CONSULTANT or CONSULTANT's agents, employees, officers, directors, subconsultants, or anyone else for whom CONSULTANT may be legally responsible, which are based upon or arising out of the professional services of CONSULTANT; and
- B. Violation of law or any contractual provisions or any infringement related to trade names, licenses, franchises, patents or other means of protecting interests in products or inventions resulting from the use by the Indemnitees of any materials, devices, processes, equipment, or other deliverable (including software) supplied by CONSULTANT under or as a result of this Agreement, but excluding any violation or infringement resulting from the modification or alteration by the Indemnitees of any materials, devices, processes, equipment, or other deliverable (including software) not consented to by CONSULTANT.

CONSULTANT further agrees to defend, save and hold harmless and fully indemnify the Indemnitees from and against any and all Damages arising out the negligence, errors, omissions, recklessness or intentional misconduct of CONSULTANT or CONSULTANT's agents, employees, officers, directors, subconsultants, or anyone else for whom CONSULTANT may be legally responsible, which are not based upon or arising out of the professional services of CONSULTANT.

The Damages shall include, but are not limited to, those resulting from personal injury to any person, including bodily injury, sickness, disease or death and injury to real property or personal

property, tangible or intangible, and the loss of use of any of that property, whether or not it is physically injured.

If the Indemnitees are involved in defending actions of CONSULTANT or anyone else for whom CONSULTANT is legally responsible, CONSULTANT shall reimburse the Indemnitees for the time spent by such personnel at the rate of the Indemnitees pay or compensation for such services.

If an Indemnitee is found to be liable in the proceeding, then CONSULTANT'S obligation hereunder shall be limited to the proportional share of the liability attributed to CONSULTANT.

In determining whether a claim is subject to indemnification, the incident underlying the claim shall determine the nature of the claim.

In the event of a violation or an infringement under paragraph 2.B above and the use is enjoined, CONSULTANT, at its sole expense, shall either (1) secure for the Indemnitees the right to continue using the materials by suspension of any injunction or by procuring a license or licenses for the Indemnitees; or (2) modify the materials so that they become non-infringing. This covenant shall survive the termination of the Professional Services Agreement.

The provisions of this Agreement are separate and severable and it is the intent of the Parties hereto that in the event any provision of this Agreement should be determined by any court of competent jurisdiction to be void, voidable or too restrictive for any reason whatsoever, the remaining provisions of this Agreement shall remain valid and binding upon said Parties. It is also understood and agreed that in the event any provision should be considered, by any court of competent jurisdiction, to be void because it imposes a greater obligation on CONSULTANT than is permitted by law, such court may reduce and reform such provisions to limitations which are deemed reasonable and enforceable by said court.

### **3. GENERAL REQUIREMENTS**

Prior to the start of any work on a RTC project, CONSULTANT shall purchase and maintain insurance of the types and limits as described below insuring against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by CONSULTANT, its subconsultants, or their employees, agents, or representatives. The cost of all such insurance shall be borne by CONSULTANT.

### **4. VERIFICATION OF COVERAGE**

CONSULTANT shall furnish RTC with a certificate(s) of insurance, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements set forth herein, on forms acceptable to RTC. All deductibles and self-insured retentions requiring RTC approval shall be shown on the certificate. All certificates and endorsements are to be addressed to RTC's Finance Director and be received by RTC before work commences. Upon request, CONSULTANT agrees that RTC has the right to review CONSULTANT'S and the Sub's insurance policies, or certified copies of the policies. Copies of applicable policy forms or endorsements confirming required additional insured, waiver of subrogation and notice of

cancellation provisions are required to be provided with any certificate(s) evidencing the required coverage.

## **5. NOTICE OF CANCELLATION**

CONSULTANT or its insurers shall provide at least thirty (30) days' prior written notice to RTC prior to the cancellation or non-renewal of any insurance required under this Agreement. An exception may be included to provide at least ten (10) days' written notice if cancellation is due to non-payment of premium. CONSULTANT shall be responsible to provide prior written notice to RTC as soon as practicable upon receipt of any notice of cancellation, non-renewal, reduction in required limits or other material change in the insurance required under this Agreement.

## **6. SUBCONSULTANTS & SUBCONTRACTORS**

CONSULTANT shall include all Subcontractors and Subconsultants (referred to collectively as "Subs") as insureds under its liability policies OR shall cause Subs employed by CONSULTANT to purchase and maintain separate liability coverages and limits of the types specified herein. If any Subs maintain separate liability coverages and limits, each shall include the RTC, Washoe County, City of Reno and City of Sparks as additional insureds under its commercial general liability policy, subject to the same requirements stated herein, without requiring a written contract or agreement between each of the additional insureds and any sub-consultant or sub-contractor. Any separate coverage limits of liability maintained by Subs shall be at least **\$1,000,000** per occurrence and at least **\$2,000,000** for any applicable coverage aggregates or the amount customarily carried by the Sub, whichever is GREATER. If any Subs provide their own insurance with limits less than required of the Contractor, Contractor shall include Subs in their coverage up to the full limits required of the Contractor. When requested by RTC, CONSULTANT shall furnish copies of certificates of insurance evidencing coverage for each subconsultant. CONSULTANT need not require its non-design subcontractors to carry Professional Errors and Omissions Liability insurance.

## **7. DEDUCTIBLES AND SELF-INSURED RETENTIONS**

Any deductibles or self-insured retentions that exceed \$25,000 per occurrence or claim must be declared to RTC's Finance Director prior to signing this Agreement. RTC is entitled to request and receive additional documentation, financial or otherwise, prior to giving its approval of the deductibles and self-insured retentions. Any changes to the deductibles or self-insured retentions made during the term of this Agreement or during the term of any policy must be declared to RTC's Finance Director prior to the change taking effect.

## **8. ACCEPTABILITY OF INSURERS**

Required insurance is to be placed with insurers with a Best's rating of no less than A-VII and acceptable to RTC. RTC may accept coverage with carriers having lower Best's ratings upon review of financial information concerning CONSULTANT and the insurance carrier. RTC reserves the right to require that CONSULTANT'S insurer(s) be licensed and admitted in the State

of Nevada or meet any applicable state and federal laws and regulations for non-admitted insurance placements.

## 9. OTHER CONDITIONS

- A. Failure to furnish the required certificate(s) or failure to maintain the required insurance may result in termination of this Agreement at RTC's option.
- B. If CONSULTANT fails to furnish the required certificate or fails to maintain the required insurance as set forth herein, RTC shall have the right, but not the obligation, to purchase said insurance at CONSULTANT's expense.
- C. Any waiver of CONSULTANT's obligation to furnish such certificate or maintain such insurance must be in writing and signed by an authorized representative of RTC. Failure of RTC to demand such certificate or other evidence of full compliance with these insurance requirements or failure of RTC to identify a deficiency from evidence that is provided shall not be construed as a waiver of CONSULTANT's obligation to maintain such insurance, or as a waiver as to the enforcement of any of these provisions at a later date.
- D. By requiring insurance herein, RTC does not represent that coverage and limits will necessarily be adequate to protect CONSULTANT, and such coverage and limits shall not be deemed as a limitation on CONSULTANT's liability under the indemnities granted to RTC in this contract.
- E. If CONSULTANT'S liability policies do not contain the standard ISO separation of insureds condition, or a substantially similar clause, they shall be endorsed to provide cross-liability coverage.

## 10. COMMERCIAL GENERAL LIABILITY

CONSULTANT shall maintain commercial general liability (CGL) and, if necessary, commercial umbrella insurance with a limit of not less than **\$2,000,000** each occurrence. If such CGL insurance contains a general aggregate limit, it shall be increased to equal twice the required occurrence limit or revised to apply separately to this project.

CGL insurance shall be written on ISO occurrence form CG 00 01 04 13 (or a substitute form providing equivalent coverage) and shall cover liability arising from premises, operations, products-completed operations, personal and advertising injury, and liability assumed under an insured contract (including the tort liability of another assumed in a business contract).

RTC and any other Indemnitees listed in Section 2. INDEMNIFICATION of this Agreement shall be included as an additional insured under the CGL, using ISO additional insured endorsement CG 20 10 07/04 or CG 20 33 07/04 or a substitute providing equivalent coverage, and under the commercial umbrella, if any.

This insurance shall apply as primary insurance with respect to any other insurance or self-insurance programs afforded to RTC or any other Indemnitees under this Agreement. CONSULTANT waives all rights against RTC and any other Indemnitees listed in section 2. INDEMNIFICATION of this Agreement for recovery of damages to the extent these damages are covered by the commercial general liability or commercial umbrella liability insurance maintained pursuant to this agreement. CONSULTANT's insurer shall endorse CGL policy to waive subrogation against RTC with respect to any loss paid under the policy.

## **11. COMMERCIAL AUTOMOBILE LIABILITY**

CONSULTANT shall maintain automobile liability and, if necessary, commercial umbrella liability insurance with a limit of not less than **\$1,000,000** each accident. Such insurance shall cover liability arising out of any auto (including owned, hired, and non-owned autos).

Coverage shall be written on ISO form CA 00 01, CA 00 05, CA 00 25, or a substitute form providing equivalent liability coverage for all owned, leased, hired (rented) and non-owned vehicles (as applicable). RTC may agree to accept auto liability for non-owned and hired (rented) vehicles under the CGL if CONSULTANT does not own or operate any owned or leased vehicles.

CONSULTANT waives all rights against RTC, its officers, employees and volunteers for recovery of damages to the extent these damages are covered by the automobile liability or commercial umbrella liability insurance obtained by CONSULTANT pursuant to this Agreement.

## **12. INDUSTRIAL (WORKER'S COMPENSATION AND EMPLOYER'S LIABILITY) INSURANCE**

It is understood and agreed that there shall be no Industrial (Worker's Compensation and Employer's Liability) Insurance coverage provided for CONSULTANT or any subconsultants by RTC. CONSULTANT, and any subconsultants, shall procure, pay for and maintain the required coverages.

CONSULTANT shall maintain workers' compensation and employer's liability insurance meeting the statutory requirements of the State of Nevada, including but not limited to NRS 616B.627 and NRS 617.210. The employer's liability limits shall not be less than **\$1,000,000** each accident for bodily injury by accident or **\$1,000,000** each employee for bodily injury by disease.

CONSULTANT shall provide a Final Certificate for itself and each subconsultant evidencing that CONSULTANT and each subconsultant maintained workers' compensation and employer's liability insurance throughout the entire course of the project.

If CONSULTANT, or any subconsultant is a sole proprietor, coverage for the sole proprietor must be purchased and evidence of coverage must appear on the Certificate of Insurance and Final Certificate.

CONSULTANT waives all rights against RTC, its elected officials, officers, employees and agents for recovery of damages to the extent these damages are covered by the workers compensation and employer's liability or commercial umbrella liability insurance obtained by Tenant pursuant to this agreement. CONSULTANT shall obtain an endorsement equivalent to WC 00 03 13 to affect this waiver.

### **13. PROFESSIONAL ERRORS AND OMISSIONS LIABILITY**

CONSULTANT shall maintain professional liability insurance applying to liability for a professional error, omission, or negligent act arising out of the scope of CONSULTANT'S services provided under this Agreement with a limit of not less than **\$1,000,000** each claim and annual aggregate. CONSULTANT shall maintain professional liability insurance during the term of this Agreement and, if coverage is provided on a "claims made" or "claims made and reported" basis, shall maintain coverage or purchase an extended reporting period for a period of at least three (3) years following the termination of this Agreement.



**REGIONAL TRANSPORTATION COMMISSION**

*Metropolitan Planning • Public Transportation & Operations • Engineering & Construction*

Metropolitan Planning Organization of Washoe County, Nevada

**Meeting Date:** 6/21/2024

**Agenda Item:** 4.4.4

To: Regional Transportation Commission

From: Jeff Wilbrecht, Engineering Manager

**SUBJECT: Regional Road Impact Fee Offset Agreement between RTC, Lemmon Drive Villas Property, LLC and the City of Reno**

**RECOMMENDED ACTION**

Approve a Regional Road Impact Fee (RRIF) Offset Agreement between RTC, Lemmon Drive Villas Property LLC, and the City of Reno for offset-eligible improvements to be made to the intersection of Lemmon Drive, Vista Knolls Parkway, and Sunset View Drive.

**BACKGROUND AND DISCUSSION**

Under the RRIF Program, developers who construct or dedicate improvement contained within the RRIF Capital Improvement Plan (CIP) will be credited for these contributions in RRIF Waivers. To do this, the developer must enter into a RRIF Offset Agreement that will be approved by both the RTC and the local government. The RRIF Offset Agreement specifically identifies the proposed improvements, estimated RRIF Waivers that will be earned, requirements for the quality control/quality assurance, and the duties and responsibilities of each party. The RRIF Offset Agreement being authorized by this action will result in an estimated \$346,365 in RRIF Waivers being issued to Lemmon Drive Villas Property LLC.

**FISCAL IMPACT**

No fiscal impact will result from this action. The amount of RRIF waivers to the developer will be based on Offset-Eligible Costs equal to, or less than, impact fees owed for all or a portion of the land uses within the Development of Record.

**PREVIOUS BOARD ACTION**

There has been no previous Board action taken.

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**LEMMON DRIVE at VISTA KNOLLS PARKWAY and SUN SET VIEW DRIVE  
Intersection Traffic Signal System**

**OFFSET AGREEMENT  
Offset Agreement # 513011**

**BETWEEN**

**THE REGIONAL TRANSPORTATION COMMISSION,  
A special purpose unit of the Government**

**And**

**CITY OF RENO  
a Municipal Corporation**

**And**

**Lemmon Drive Villas Property LLC**

**Developer of Record**

**For**

**Lemmon Drive Estates and Highland Project**

**Development of Record**

**North Service Area**

TABLE OF CONTENTS

1. General..... 1

    1.1 Ordinance, Manual and CIP..... 1

    1.2 Basis for this Offset Agreement..... 1

    1.3 Effective Date of Offset Agreement ..... 1

    1.4 Eligibility of Improvements..... 1

2. The Development of Record And Offered Improvements..... 1

    2.1 Description of the Development of Record ..... 1

    2.2 Offered Improvements..... 2

        2.2.1 Description of Offered Improvements..... 2

        2.2.2 Completion and Acceptance of Offered Improvements ..... 2

        2.2.3 Design and Construction Standards ..... 2

        2.2.4 Quality Assurance/Quality Control (QA/QC)..... 2

        2.2.5 Warranty ..... 2

3. RRIF Waivers ..... 3

    3.1 The Developer of Record and Development of Record..... 3

    3.2 RRIF Waivers are Personal Assets of The Developer of Record ..... 3

    3.3 Calculation of RRIF Waivers..... 3

    3.4 RRIF Waiver Usage and Transferability ..... 3

    3.5 Interim RRIF Waivers..... 3

    3.6 Final RRIF Waiver Determination..... 3

    3.7 Expiration of RRIF Waivers ..... 4

4. Miscellaneous ..... 4

    4.1 Governing Law: Venue..... 4

    4.2 Entirety and Amendments..... 4

    4.3 Invalid Provisions ..... 4

    4.4 Parties Bound and Assignment..... 4

    4.5 Further Acts ..... 4

    4.6 Headings ..... 4

    4.7 Notice..... 4

    4.8 Receipt Defined ..... 5

    4.9 Due Authorization..... 6

    4.10 Indemnification..... 6

    4.11 Termination of Offset Agreement..... 6

    4.12 Future Development Approvals..... 6

SIGNATURE PAGE ..... 7

## EXHIBITS

- EXHIBIT “A”**      **Section X of the Regional Road Impact General Administrative Manual, Current Edition**
- EXHIBIT “B1”**    **Site Plan and Description of Development of Record**
- EXHIBIT “B2”**    **Legal Description of the Development of Record**
- EXHIBIT “C”**     **Offered Improvements Applications/Submittals**
- EXHIBIT “D”**     **Letter of Approval**
- EXHIBIT “E”**     **Developer of Record QA/QC Program RTC Special Technical Specifications for Regional Road Impact Fee Projects**
- EXHIBIT “F”**     **Standard Specifications for Public Works Construction  
Section 100.17 “Material and Workmanship – Warranty of Corrections”**
- EXHIBIT “G”**     **RRIF Rate Schedule as of the Date of the RRIF Offset Agreement**

## OFFSET AGREEMENT

This Offset Agreement (“Offset Agreement”) is entered by and between the REGIONAL TRANSPORTATION COMMISSION (hereinafter designated “RTC”), a special purpose unit of Government; CITY OF RENO, a municipal corporation (hereinafter designated “Participating Local Government”); and Lemmon Drive Villas Property LLC (hereinafter designated “the Developer of Record”).

### 1. General

- 1.1 **Ordinance, Manual and CIP.** The City of Sparks, the City of Reno, Washoe County, and RTC have entered into an Interlocal Cooperative Agreement for the purposes of implementing the Regional Road Impact Fee (“RRIF”) Program. The Participating Local Government has passed a Regional Road Impact Fee Ordinance (“Ordinance”) to implement the RRIF program. RTC and the Participating Local Government have adopted the Regional Road Impact Fees General Administrative Manual, Current Edition (“Manual”), specifying the provisions and procedures for administration of the RRIF program, as well as the Regional Road Impact Fee System Capital Improvement Plan (“CIP”) Current Edition, identifying the regional streets and improvements which shall be constructed in whole or in part with funds generated from the RRIF program. The terms and provisions of the Manual and the CIP are incorporated herein by reference as if fully set forth. All capitalized terms not otherwise defined herein shall have the definitions and meanings as used in the Ordinance, Manual and CIP. Amendments approved by the RTC and local governments are incorporated by reference to the same extent as if set forth in full herein.
- 1.2 **Basis for this Offset Agreement.** The parties intend this Offset Agreement to be an Offset Agreement as provided in Section X of the Manual, to provide for waivers of Regional Road Impact Fees (“RRIF Waiver”) in exchange for contributions of Offered Improvements (which may include right-of-way (“ROW”) dedication), which may then be used to offset Regional Road Impact Fees which would otherwise be chargeable to the Developer of Record’s Development of Record. Section X of the Manual contains specific provisions pertaining to Waivers and is attached hereto and incorporated herein as Exhibit “A”.
- 1.3 **Effective Date of Offset Agreement.** This Offset Agreement shall be binding and effective as of the last date of execution below (the “Effective Date”).
- 1.4 **Eligibility of Offered Improvements.** The Offered Improvements have been identified by the Local RRIF Administrator as being included in the Exhibit “D” of the CIP, titled North Capital Improvement Plan.

### 2. The Development of Record and Offered Improvements.

- 2.1 **Description of the Development of Record.** The Development of Record for which the RRIF Waivers shall be issued is known as Lemmon Drive Estates and Highland Project. The Developer of Record owns or is the agent for the record owners of the entire Development. A site plan and narrative

description of the Development of Record, including the proposed land uses and units of development is attached hereto as Exhibit “B-1”. The legal description of the Development of Record is attached as Exhibit “B-2.”

## 2.2 **Offered Improvements.**

2.2.1 **Description of Offered Improvements.** The Developer of Record has submitted an application shown herein as Exhibit “C” describing the specific Offered Improvements which the Developer of Record proposes to construct and/or dedicate. The Offered Improvements are generally described as intersection improvements at Lemmon Drive, Vista Knolls Parkway, and Sunset View Drive. The RTC RRIF Administrator and Local RRIF Administrator have approved the application, subject to the limitations set forth in the letter of approval incorporated herein as Exhibit “D”.

2.2.2 **Completion and Acceptance of Offered Improvements.** Unless extended by written consent of the RTC RRIF Administrator, all Offered Improvements, shall be commenced within 6 months of the Effective Date, and completed in substantial conformance with approved plans within two (2) years of the date of the Offset agreement. This Offset Agreement shall terminate and be of no further force or effect if the Offered Improvements are not commenced within one (1) year of the Effective Date. The time for completion may be extended by written consent of the RTC RRIF Administrator and the Local RRIF Administrator one time for not more than one (1) year, upon a written request for extension submitted not less than ninety (90) days prior to expiration of the originally agreed time for completion. Additional extensions of the time for completion shall require an amendment to this Offset Agreement pursuant to Section 4.2. The Offered Improvements shall be accepted by the Local RRIF Administrator and the RTC RRIF Administrator upon correction by the Developer of Record of any identified deficiencies to the satisfaction of the Local RRIF Administrator and the RTC RRIF Administrator. Acceptance of the Offered Improvements by the Local RRIF Administrator and the RTC shall not be unreasonably withheld. Any real property the Developer of Record proposes to offer for dedication pursuant shall be valued pursuant to the provisions of Section X.F.2.c.(2) of the Manual.

2.2.3 **Design and Construction Standards.** All design and construction of the Offered Improvements shall be in accordance with the latest edition of the Standard Specifications as of the date of this Agreement for Public Works Construction (“Standard Specifications”), including any addenda, as adopted by the Participating Local Government and modified by the Special Technical Specifications (“STS”) as prepared by RTC and contained herein as part of Exhibit “E”. Additionally, all design and construction of Offered Improvements shall be in accordance with all policies of the RTC, including the latest version as of the date of this agreement of the following: Policy for the Street and Highway Program, CIP, and Traffic Noise Mitigation Policy Report, all incorporated herein as if fully set forth. In the case of conflicting standards, the

conflict shall be brought to the immediate attention of the RTC RRIF Administrator who shall, in conjunction with the Local RRIF Administrator, resolve the discrepancy within five (5) working days.

2.2.4 **Quality Assurance/Quality Control (QA/QC).** In making the Offered Improvements, the Developer of Record shall institute a QA/QC Program meeting the requirements of Exhibit “E”. The Developer of Record may utilize an alternate QA/QC Program with the approval of the RTC RRIF Administrator and Local RRIF Administrator.

2.2.5 **Warranty.** The Developer of Record shall warrant all materials and workmanship of the Offered Improvements in accordance with the provisions of the latest edition of the Standard Specifications. The Developer of Record is directed in particular to Section 117.00 which is contained herein as Exhibit “F”.

### 3. **RRIF Waivers.**

3.1 **The Developer of Record and Development of Record.** The Developer of Record is the party to whom all RRIF Waivers earned under this Offset Agreement shall be issued. RRIF Waivers earned under this Offset Agreement may not be applied outside of the Development of Record.

3.2 **RRIF Waivers are Personal Assets of The Developer of Record.** The parties agree that all RRIF Waivers received pursuant to this Offset Agreement shall be the personal assets of the Developer of Record.

3.3 **Calculation of RRIF Waiver.** RRIF Waivers will be expressed in dollars upon the final RRIF Waiver determination pursuant to Section 3.5. RRIF Waivers may be utilized to pay Regional Road Impact Fees which would otherwise be due for development within a Development of Record. To the extent RRIF Waivers are utilized for development of units of development and land uses in strict conformance with Exhibits “B-1” and “B-2,” RRIF Waivers earned shall be applied as if a Building Permit (or Certificate of Occupancy, whichever applies) were granted for each such unit of development as of the date of this Offset Agreement, notwithstanding that actual construction of such unit of development occurs thereafter. For sake of clarity, it is the parties’ intent that Regional Road Impact Fees for all future development within the Development of Record which is conducted in conformity with Exhibits “B-1” and “B-2” shall be “grandfathered in” at the RRIF rates existing as of the date of this Offset Agreement, up to the total amount identified in the Notice of RRIF Waiver. The rates existing as of the date of this Offset Agreement are attached hereto as Schedule 1. To the extent units of development or land uses are changed from the uses depicted in Exhibit “B-1,” or the legal description of the Development of Record is modified from the description set forth in Exhibit “B-2”, earned RRIF Waivers may be used within the Development of Record for such development, but the RRIF Waivers must be utilized at the then-current Regional Road Impact Fee rate as of the date of issuance of the Building Permit for each unit of development.

- 3.4 **RRIF Waiver Usage and Transferability.** The usage and transferability of RRIF Waivers earned under this Offset Agreement are as follows:
- 3.4.1 RRIF Waivers earned under this Offset Agreement may be used to pay for up to 100% of the Regional Road Impact Fees due as the result of development within the Development of Record.
- 3.4.2 RRIF Waivers earned under this Offset Agreement may be not be used to pay for Regional Road Impact Fees due as a result of development outside of the Development of Record.
- 3.4.3 RRIF Waivers earned under this Offset Agreement are transferable to a third party, provided that all RRIF Waivers earned under this Offset Agreement may only be used to pay for Regional Road Impact Fees due as a result of development within the Development of Record.
- 3.5 **Interim RRIF Waivers.** The Developer of Record shall be entitled to apply for and receive Interim RRIF Waivers for satisfactorily completed portions of the Offered Improvements (including Right of Way) according to the schedule at Exhibit “G”. This provision shall in no way be construed as constituting acceptance in whole or part of any of the Offered Improvements. To the extent that Offered Improvements are ultimately not accepted, or if the Developer of Record is otherwise in material default under this Offset Agreement, the Developer of Record shall pay the actual Regional Road Impact Fees which would have otherwise been due had the Developer of Record not utilized Interim RRIF Waivers.
- 3.6 **Final RRIF Waiver Determination.** The final determination of RRIF Waivers shall be calculated by the RTC RRIF Administrator after consultation with the Local RRIF Administrator within thirty (30) calendar days of final acceptance of the Offered Improvements by the RTC RRIF Administrator and the Local RRIF Administrator and submission by the Developer of Record of all documentation required by the RTC RRIF Administrator to make said final determination. The RTC RRIF Administrator shall issue a written instrument identifying the amount of the RRIF Waivers to the Developer of Record within three (3) working days of the earlier to occur of the following:
- 3.6.1 the date the appeal period of the final determination expires pursuant to Article XII of the RRIF GAM;
- 3.6.2 the date the Developer of Record waives in writing the appeal period, or;
- 3.6.3 in the event of an appeal pursuant to Article XII of the RRIF GAM, the date of a final decision on all issues on appeal.
- 3.7 **Expiration of RRIF Waivers.** RRIF Waivers shall not expire and may be used in perpetuity to pay Regional Road Impact Fees which would otherwise be due as a result of development within the Development of Record.

4. **Miscellaneous** The parties further agree as follows:

- 4.1 **Governing Law: Venue.** This Offset Agreement is being executed and delivered in Washoe County, Nevada, and is intended to be performed in the State of Nevada, and the laws of Nevada shall govern the validity, construction, enforcement and interpretation of this Offset Agreement. Venue for any legal action arising out of this Offset Agreement shall be in Washoe County, Nevada.

- 4.2 **Entirety and Amendments.** This Offset Agreement embodies the entire Offset Agreement between the parties and supersedes all prior negotiations, agreements and understandings, if any, relating to the Property, and may be amended or supplemented only by an instrument in writing executed by the party against whom enforcement is sought, provided that nothing contained in Subsection 4.2 shall be interpreted to change, amend or modify the conditions of the Development of Record approval by the Participating Local Government. No oral statements or representations made before or after the execution of this Offset Agreement regarding the subject matter of this Offset Agreement are binding on any party, nor may any such oral statements or representations be relied on by a party.
- 4.3 **Invalid Provisions.** If any provision of this Offset Agreement is held to be illegal, invalid, unenforceable under present or future laws, such provision shall be fully severable. The Offset Agreement shall be construed and enforced as if such illegal, invalid or unenforceable provision had never comprised a part of the Offset Agreement. The remaining provisions of the Offset Agreement shall remain in full force and effect and shall not be affected by the illegal, invalid or unenforceable provision or by its severance from this Offset Agreement.
- 4.4 **Parties Bound and Assignment.** The Offset Agreement shall be binding upon and inure to the benefit of the parties, and their respective heirs, personal representatives, successors and assigns. The Developer of Record may assign RRIF Waivers which have been calculated pursuant to Section 3.6 to a successor developer or developers, provided however, that such RRIF Waivers may only be utilized to offset Regional Road Impact Fees which would otherwise be due as a result of development within the Development of Record.
- 4.5 **Further Acts.** In addition to the acts recited in this Offset Agreement to be performed, the parties agree to perform, or cause to be performed, any and all further acts as may be reasonably necessary to consummate the obligations contemplated hereby.
- 4.6 **Headings.** Headings used in this Offset Agreement are used for reference purposes only and do not constitute substantive matter to be considered in construing the terms of this Offset Agreement.
- 4.7 **Notice.** All notices given pursuant to this Offset Agreement shall be in writing and shall be given by personal delivery, by facsimile transmission, by United States mail or by United States express mail or other established express delivery service (such as Federal Express), postage or delivery charge prepaid, addressed to the appropriate party at the address set forth below:

**REGIONAL TRANSPORTATION COMMISSION,  
Engineering Department**  
Attn: Jeff Wilbrecht (Engineering Manager), P.E.  
1105 Terminal Way, Suite 108  
Reno, Nevada 89502  
Telephone: (775) 335-1872

**THE CITY OF RENO**



**Community Development**

Attn: Mike Mischel, P.E.  
1 E. First Street  
Reno, Nevada 89501  
Telephone: (775) 326-6607

**Developer of Record**

Attn: Greg Garchar  
Lemmon Drive Villas Property LLC  
5000 Executive Parkway, Suite 350  
San Ramon, California 94583  
Telephone: (925) 830-2624

The persons and address to whom notices are to be given may be changed anytime by any party upon written notice to the other party. All notices given pursuant to this Offset Agreement shall be deemed given upon receipt.

- 4.8 **Receipt Defined.** For the purposes of this Offset Agreement, the term “receipt” shall mean any of the following: (a) the date of delivery of the notice or other document as shown on the return receipt; (b) the date of actual receipt of the notice or other document; or (c) in the case of refusal to accept delivery or inability to deliver the notice or other document, the earlier of: (i) the date of the attempted delivery or refusal to accept delivery; (ii) the date of the postmark on the return receipt; or (iii) the date of receipt of notice of refusal or notice of non-delivery by the sending party.
- 4.9 **Due Authorization.** The parties agree that they have the legal authority to enter into this Offset Agreement and the undersigned officer, representative or employee represents that he or she has the authority to execute this Offset Agreement on the behalf of the party represented.
- 4.10 **Indemnification.** Developer of Record shall indemnify, defend and hold harmless the RTC and the Participating Local Government, their officers, officials, employees and volunteers, from any and all costs, liabilities, damages, claims, demands, suits, action, attorneys, fees, or expenses of any kind (“claims”) that arise out of, or are in way related, in whole or in part to the negligence or misconduct, or acts or omissions, of the Developer of Record, its officers, agents, employees, members, volunteers, contractors and anyone else for whom it is legally liable, while performing or failing to perform Developer of Record’s duties under this Offset Agreement. Said indemnification excludes any claims to the extent caused by the negligence or willful misconduct of the RTC and /or the Participating Local Government. The Developer of Record’s obligations set forth in this Section shall expire and terminate as to any claims based on, related to, arising from or in connection with the Offered Improvements’ failure to comply with the Standard Specifications on the date of expiration of the applicable warranty period provided in Section 2.2.5 above.
- 4.11 **Termination of Offset Agreement.** This Offset Agreement may be unilaterally terminated by the RTC RRIF Administrator if twelve (12) consecutive months elapse without reasonable progress being made on the Offered Improvements. In the event of any such termination, Interim RRIF Waivers must be immediately surrendered or repaid in accordance with Section 3.5.

4.12 **Future Development Approvals.** The Participating Local Government agrees that future development approvals for the Development of Record shall not be denied on the basis of the policy level of service being exceeded on the Offered Improvements.

In Witness Whereof, the parties have executed this Offset Agreement on the \_\_\_\_ day of \_\_\_\_\_, 2024.

**REGIONAL TRANSPORTATION COMMISSION  
A Special Purpose Unit of Government**

By: \_\_\_\_\_  
Bill Thomas, AICP , Executive Director

STATE OF NEVADA

COUNTY OF WASHOE

The above-instrument was acknowledged before me this \_\_\_\_ day of \_\_\_\_\_, 2024, by Bill Thomas, the Executive Director of the Regional Transportation Commission.

\_\_\_\_\_  
Notary Public

**CITY OF RENO  
A Municipal Corporation**

**APPROVED AS TO LEGAL FORM:**

By: \_\_\_\_\_  
Hillary Schieve, Mayor

By: \_\_\_\_\_  
City Attorney

STATE OF NEVADA    )  
                                  ) ss  
COUNTY OF WASHOE )

The above-instrument was acknowledged before me this \_\_\_\_ day of \_\_\_\_\_, 2024 by Hillary Schieve, Mayor of the City of Reno, Nevada.

Attest by City Clerk: \_\_\_\_\_  
City Clerk

**DEVELOPER OF RECORD: Lemmon Drive Villas Property LLC**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Its: \_\_\_\_\_

STATE OF  
COUNTY OF

The above-instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 2024 by

\_\_\_\_\_.

\_\_\_\_\_  
Notary Public



**EXHIBIT "A"**  
**(Section X of the Regional Road Impact  
Fees General Administrative Manual, Current Edition)**

thirty (30) days of receiving the approved Offset Agreement from the RTC RRIF Administrator. If the RTC RRIF Administrator does not receive the signed Offset Agreement within thirty (30) days, the application for RRIF Waivers will be deemed withdrawn.

8. Unless an executed Offset Agreement expressly provides otherwise, i.e. if interim RRIF Waivers are authorized in the Offset Agreement, RRIF Waivers will not be approved in a Notice of RRIF Waivers until all Offset-Eligible Improvements have been completed and, if applicable, dedicated to the RTC or the affected Participating Local Governments as provided in the Offset Agreement.
9. Land dedications accepted as an Offset-Eligible Improvement must be accompanied by the following documentation prior to issuance of a Notice of RRIF Waiver, as provided below:
  - a. The delivery to the appropriate governmental body of an irrevocable offer of dedication, with sufficient funds to pay all costs of transfer of title including recording.
  - b. The escrow of taxes for the current year or the payment of said taxes for the year.
  - c. The issuance of a title insurance policy subsequent to recording of the deed and escrow of taxes.
10. Unless expressly provided otherwise in an Offset Agreement, it is the responsibility of the Developer of Record to submit sufficient documentation to the RTC RRIF Administrator to establish that the terms of the Offset Agreement have been met.
11. Once the RTC RRIF Administrator has made a determination that the terms of the Offset Agreement have been met, the RTC RRIF Administrator will issue a Notice of RRIF Waiver to the Developer of Record.

#### D. Contents of Applications for RRIF Waivers

1. The application for RRIF Waivers must contain the information and documentation required by this Section and sufficiently identify and describe the Offered Improvements which otherwise would have been built by the RTC with collected RRIF Fees.
2. Each application for RRIF Waivers must contain the following:
  - a. The name of the Developer of Record offering to make Offset-Eligible Improvements and requesting RRIF Waivers.
  - b. The contribution, payment, construction, or land dedication which will constitute the Offered Improvements and the legal description or

other adequate description of the project or development, referred to and the Development of Record, to which the Offered Improvements are related.

- c. The name, address, phone number, fax number, email address and a contact person of the Developer of Record.
- d. The name, Local Government File Number, and three copies of the site plan of the Development of Record.
- e. List of approved land uses and the estimated RRIF Fees for those uses within the Development of Record.
- f. Name, address, phone number, fax number, email address and contact person of the Engineer of Record.
- g. The proposed plans and specifications for the specific construction prepared and certified by a duly qualified engineer, registered and licensed in the State of Nevada.
- h. When a Developer of Record offers to dedicate right-of-way, they shall present:
  - (1) Preliminary Title Report.
  - (2) Copy of Dedication Map containing proposed dedication.
  - (3) Documentation sufficient to establish the applicant's opinion of value of property to be offered for dedication, as provided in Section X.
- i. Sufficient documentation to verify the costs of the Offered Improvements, in accordance with Section X.

#### E. Contents of Offset Agreements

- 1. No dedication or construction project may be accepted in exchange for RRIF Waivers except pursuant to an Offset Agreement, which must include the following:
  - a. The projected costs for the Offered Improvements, based on the valuation provisions of Section X, including provisions for verifying costs and facilitating changes in costs or plans.
  - b. The time by which the construction of the Offered Improvements shall be paid, completed, or dedicated and any provisions for extensions thereof.
  - c. The proposed amount in dollars and land uses of RRIF Waivers, based on the estimated costs of the Offered Improvements.



- d. The terms and conditions that must be met before the RTC RRIF Administrator will issue a Notice of RRIF Waiver, in accordance with the provisions of this Manual.
  - e. RRIF Waivers shall be limited to use for the payment of RRIF Fees associated with the Development of Record listed in the Offset Agreement. RRIF Waivers shall not expire.
  - f. RRIF Waivers shall be assigned to offset the RRIF Fees within the Development of Record pursuant to the Offset Agreement.
  - g. If the designated land uses for the Development of Record identified in the Offset Agreement change, the remaining waivers shall be re-assessed as outlined in the provisions in Section X.A.
  - h. A provision requiring that all Offset-Eligible Improvements accepted will be in accordance with RTC requirements and standards.
  - i. Any labor, work safety, prevailing wage, or other applicable laws or regulations with which the Developer of Record must comply.
  - j. Such other terms and conditions agreed to by the parties.
2. Any changes to an Offset Agreement approved by the RTC Board, other than those addressed in Section X.F, will require an amendment to the Offset Agreement using the same procedures as its original approval.
- F. Calculation of RRIF Waivers.
- 1. Eligibility.
    - a. RRIF Waivers may be approved only for Offset-Eligible Costs, which are limited to the costs the RTC otherwise would have incurred for RRIF Capital Improvements.
    - b. RRIF Waivers may be provided only pursuant to a valid Offset Agreement, executed according to the provisions of this Manual.
    - c. Offset-Eligible Costs are available for RRIF Waivers only if associated with Offset-Eligible Improvements that meet design standards approved by the RTC and the affected Participating Local Government, and only to the extent such costs do not exceed the scope of the project as planned by the RTC and reflected in the RRIF Capital Improvements Plan or as described in the applicable Offset Agreement.
  - 2. Valuation.
    - a. RRIF Waivers approved by the RTC pursuant to a Notice of RRIF Waivers will be based on, and may not exceed, the actual verified costs of the dedication or construction of the Offset-Eligible

Improvements accepted by the affected Participating Local Government.

- b. The RTC will not approve RRIF Waivers in excess of the RRIF Fees owed for a Development of Record as of the date of the applicable Offset Agreement.
- c. The amount of RRIF Waivers shall be calculated as follows:
  - (1) Construction of Facilities and Provision of Equipment. The RRIF Waivers may not exceed the actual cost of construction or equipment, as evidenced by receipts and other sufficient documentation provided by the developer of the public facility and verified by the RTC RRIF Administrator. Actual costs shall be based on local information for similar improvements; may include the cost of construction, planning feasibility, alignment studies, plan-line studies, preliminary engineering, relevant geotechnical, environmental and cultural resource studies, permitting, the cost of all lands, property, rights, easements, and franchises acquired, construction financing charges, plans and specifications, surveys, engineering and legal services, construction inspection and testing, and all other expenses necessary or incident to determining the feasibility or practicability of such construction.
  - (2) Dedication of Land.
    - (a) If the land in question is subject to a valid agreement, zoning approval or development approval, which established a valuation or prescribes a method of valuation, the agreement, zoning approval or development approval shall control.
    - (b) If the dedication is made pursuant to a condition of discretionary zoning or development approval, the value of the land shall be determined as of the date immediately preceding the discretionary development approval. The value shall be based upon the condition of the property and the regulatory zoning in place immediately prior to the discretionary approval.
    - (c) Valuation shall be based on the fair market value of the land upon execution of the Offset Agreement by the Developer of Record or final approval of the proposed Offset Agreement by the RTC Board or the governing bodies of the affected Participating Local Government, whichever is earlier.
- d. All changes in the estimate of Offset-Eligible Costs or to the approved plans and specifications (prior to or after execution of an Offset Agreement), shall require approval of the RTC RRIF Administrator. The applicant shall provide the RTC RRIF Administrator copies of all contracts or agreements made for design

services, construction, or engineering during construction within fifteen (15) days after their execution.

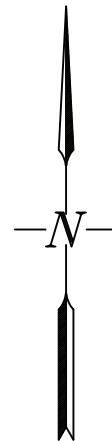
G. Usage of RRIF Waivers.

1. Participating Local Governments shall waive RRIF Fees otherwise owed either at the time of issuance of a building permit or issuance of the Certificate of Occupancy, as the case may be, if the RTC RRIF Administrator has issued a Notice of RRIF Waiver for the Development of Record.
2. RRIF Waivers may be used to pay up to 100% of the RRIF Fees due as the result of development within the Development of Record.
3. RRIF Waivers may not be used to pay for RRIF Fees due as a result of development outside of the Development of Record.
4. RRIF Waivers are transferable to a third party. To transfer RRIF Waivers, the current holder of RRIF Waivers will notify RTC through the RRIF Automation Program of the amount of RRIF Waivers to be transferred and the name and contact information of the third party. RRIF Waivers will be subtracted from the current holder's account and transferred to a new account in the name of the third party.
5. Upon transfer, RRIF Waivers may be used by the transferee to pay up to 100% of the RRIF Fees due as the result of development within the Development of Record.

**XI. UNEXPIRED CREDITS APPROVED PRIOR TO THE 5<sup>th</sup> EDITION RRIF GAM/CIP (3/2/2015) UPDATE**

- A. Applicability. This Section applies to CCFEAs and to CCFEA Credits issued pursuant to such CCFEAs.
- B. Intent. It is the intent of the RTC Board, and affected Participating Local Governments, to carry forward the policies and understanding in place when CCFEAs were entered into, prior to the changes to the adoption of the 5<sup>th</sup> Edition RRIF GAM/CIP. Therefore, to the extent possible and practical, outstanding CCFEA Credits may be used or transferred as provided prior to adoption of the 5<sup>th</sup> Edition RRIF GAM/CIP, as provided in this Section and in accordance with the terms of valid, unexpired CCFEAs.
- C. CCFEA Credit Usage.
  1. The transferability and usage of CCFEA Credits issued pursuant to a valid, unexpired CCFEA are as follows:
    - a. CCFEA Credits may be used by the Developer of Record to pay for up to 100% of the Regional Road Impact Fees on any

**EXHIBIT "B"**  
**(Site Plan and Description of Development of Record)**  
**(Must include proposed units of development and land use categories)**



Highland Project

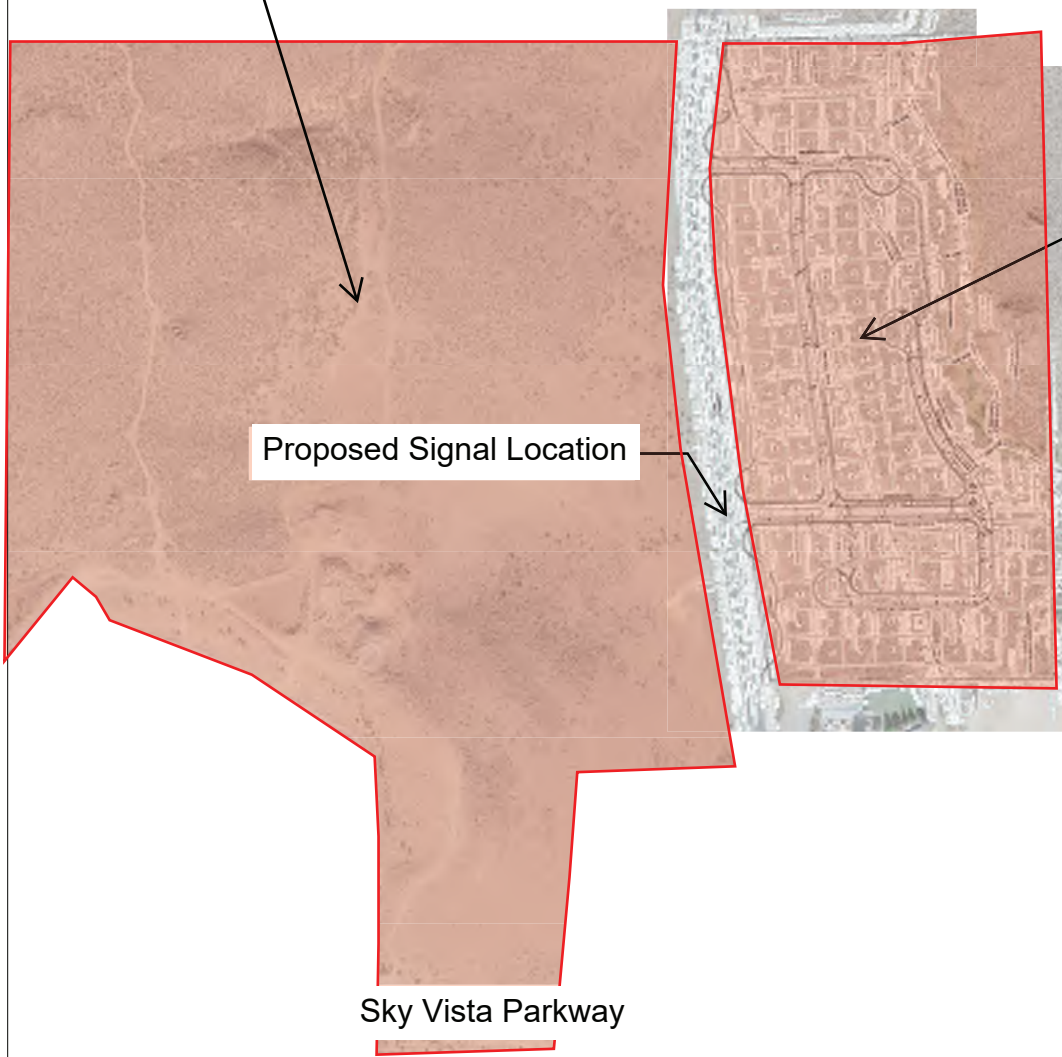
Military Road

Lemmon Drive  
Estates Project

Proposed Signal Location

Sky Vista Parkway

Buck Drive



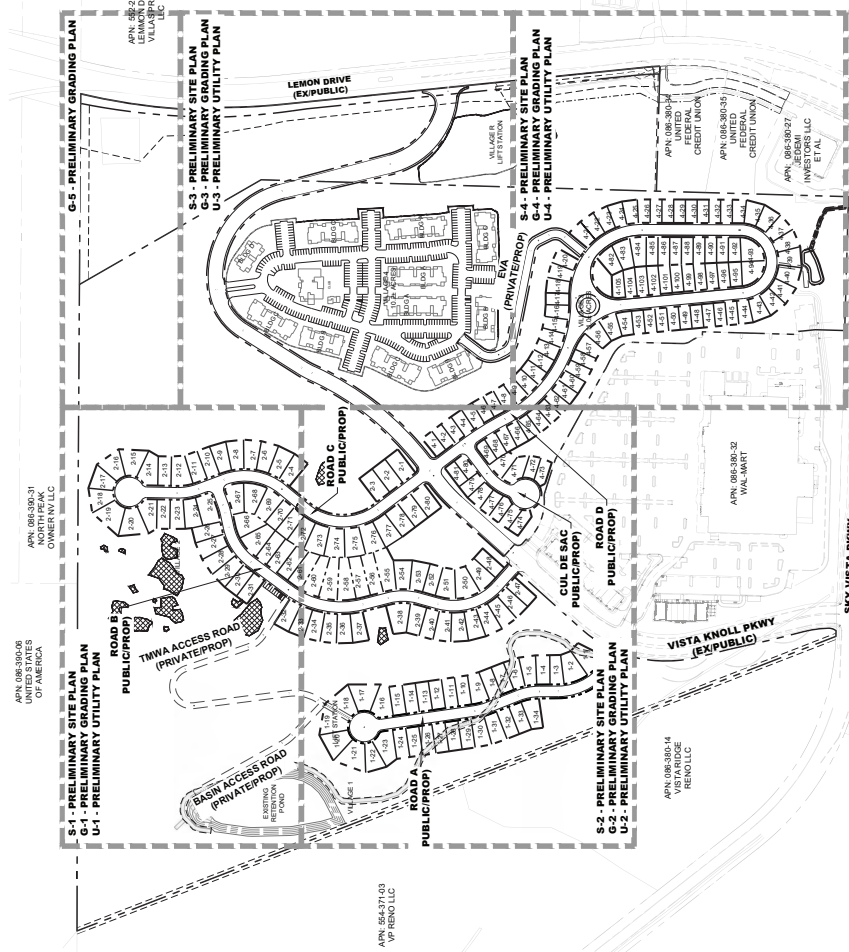
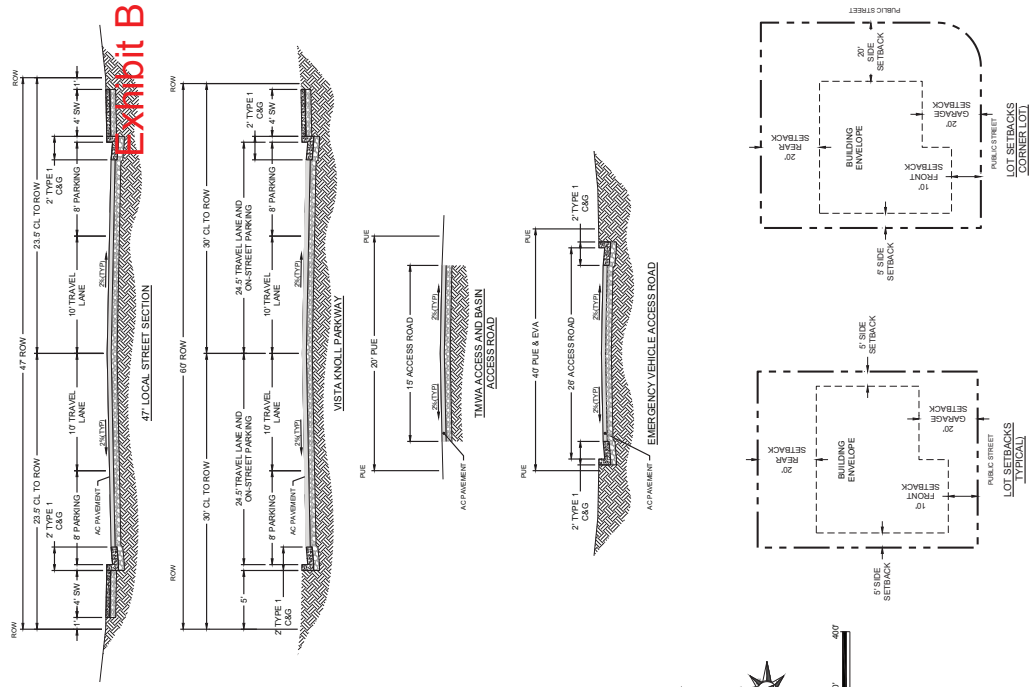




REV	DATE	DESCRIPTION	BY

8.0000 1/8" = 1'-0"  
 ORIGINAL DRAWING  
 IF NOT ONE INCH ON THIS SHEET,  
 ADJUST SCALES ACCORDINGLY.

**OV-1**  
 DRAWN BY: MCR  
 DESIGNED BY: JRL  
 CHECKED BY: BMM  
 JOB NO.: 10061.0004





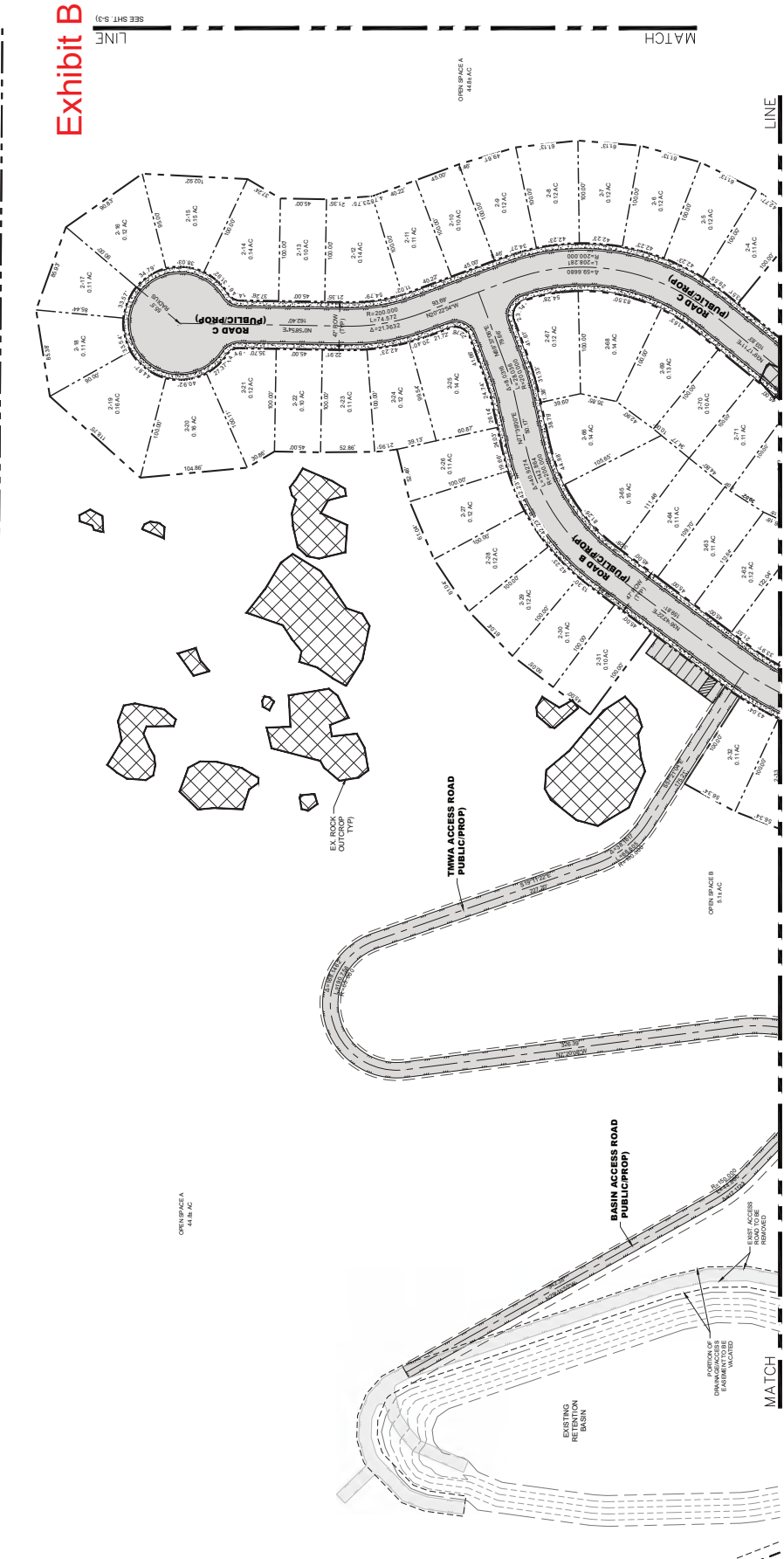
REV	DATE	DESCRIPTION

DATE: 08/04/2022  
 PRELIMINARY

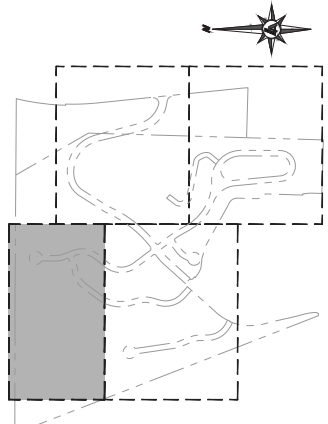
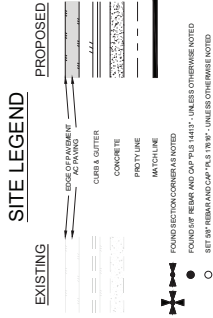
SCALE: 1"=50'  
 ORIGINAL DRAWING  
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

**S-1**

DRAWN BY: MCR  
 DESIGNED BY: JRL  
 CHECKED BY: BMM  
 JOB NO.: 10001.004



**Exhibit B**



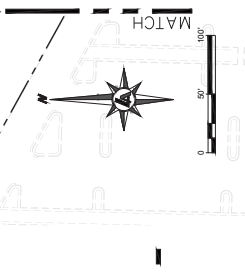




REV	DATE	DESCRIPTION	BY



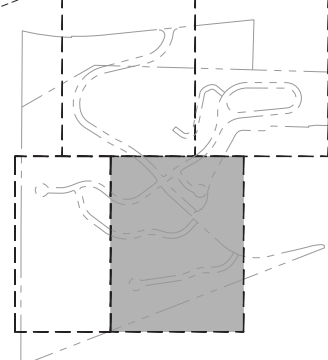
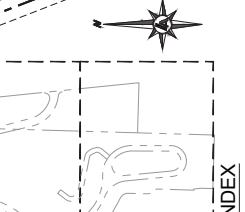
**Exhibit B**



**SITE LEGEND**

EXISTING	PROPOSED

ROUND SECTION CORNER AS NOTED  
 FOUND BY REBAR AND CAP 'X' IS 'X' UNLESS OTHERWISE NOTED  
 SET BACK REBAR AND CAP PLUS STRIP - UNLESS OTHERWISE NOTED



**SHEET INDEX**  
 SCALE: AS SHOWN

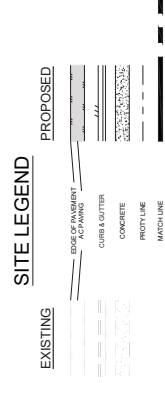
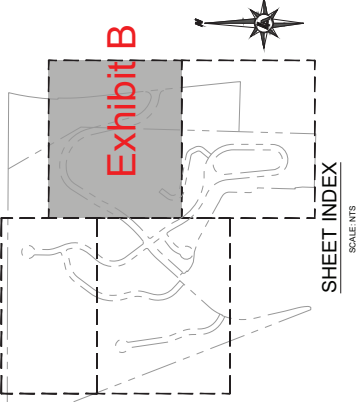
HIGHLAND - TENTATIVE MAP AND  
 CONDITIONAL USE PERMIT  
 PRELIMINARY SITE PLAN  
 CADO SV LAND LLC  
 RENO WASHOE NEVADA

REVISIONS

REV	DATE	DESCRIPTION	BY

DATE: AUGUST 2022  
 DRAWING TYPE: PRELIMINARY

DATE: AUGUST 2022  
 DRAWING TYPE: PRELIMINARY  
 DRAWN BY: MCR  
 DESIGNED BY: JRL  
 CHECKED BY: BMM  
 JOB NO: 1001.004



**PROPOSED UNIT COUNT:**

1-BED	111
2-BED	150
3-BED	102
<b>TOTAL</b>	<b>363</b>

**PROPOSED BUILDINGS:**

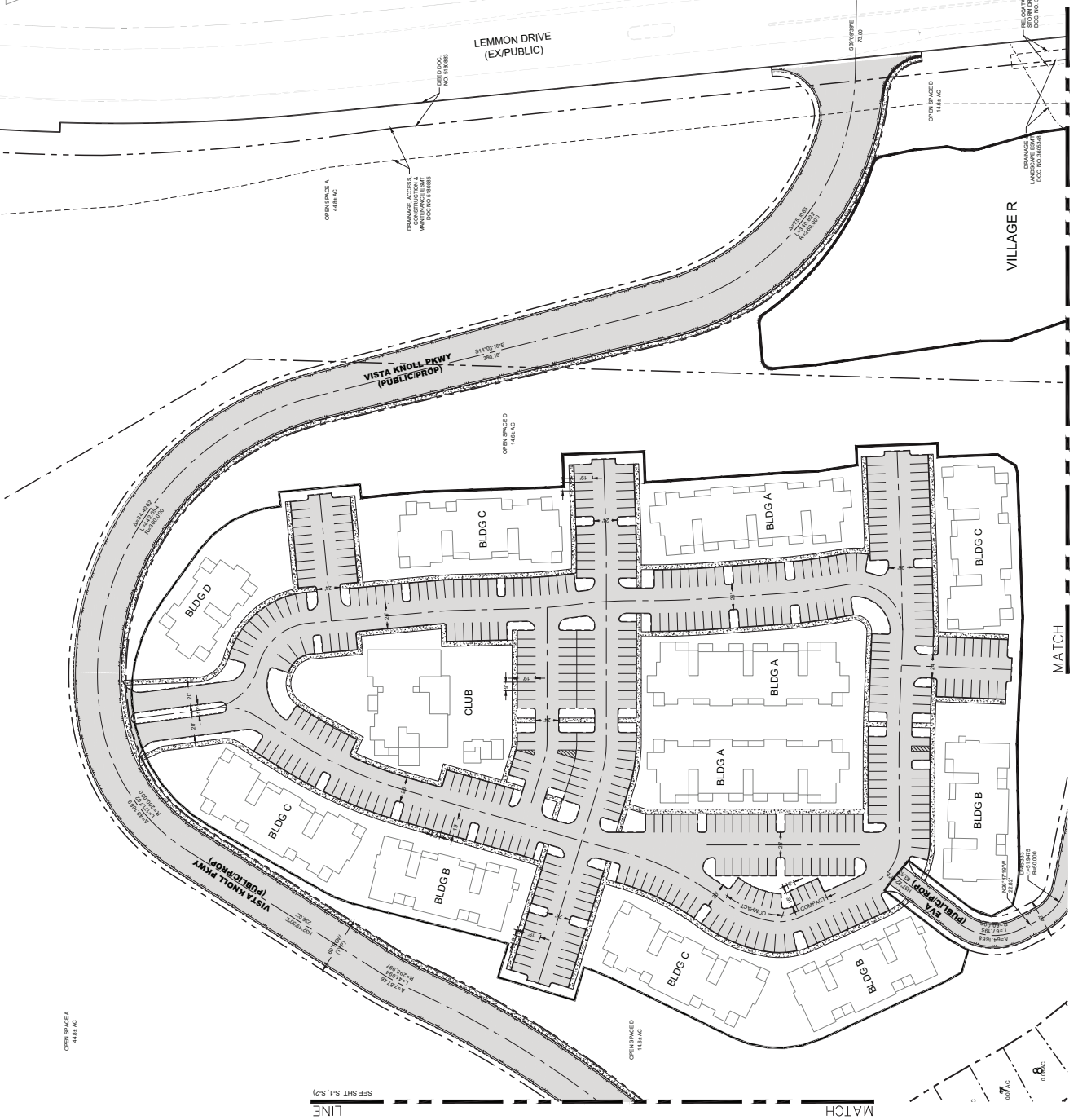
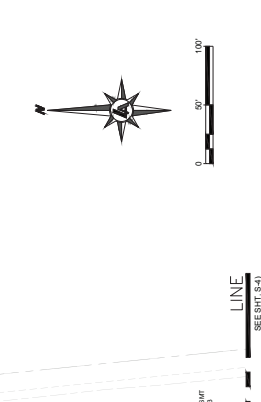
1-STORY	CLUBHOUSE
<b>TOTAL</b>	<b>12</b>

**PROPOSED PARKING:**

PROVIDED SPACES	436
PROVIDED SPACES	436
PARKING RATIO	1.50/UNIT

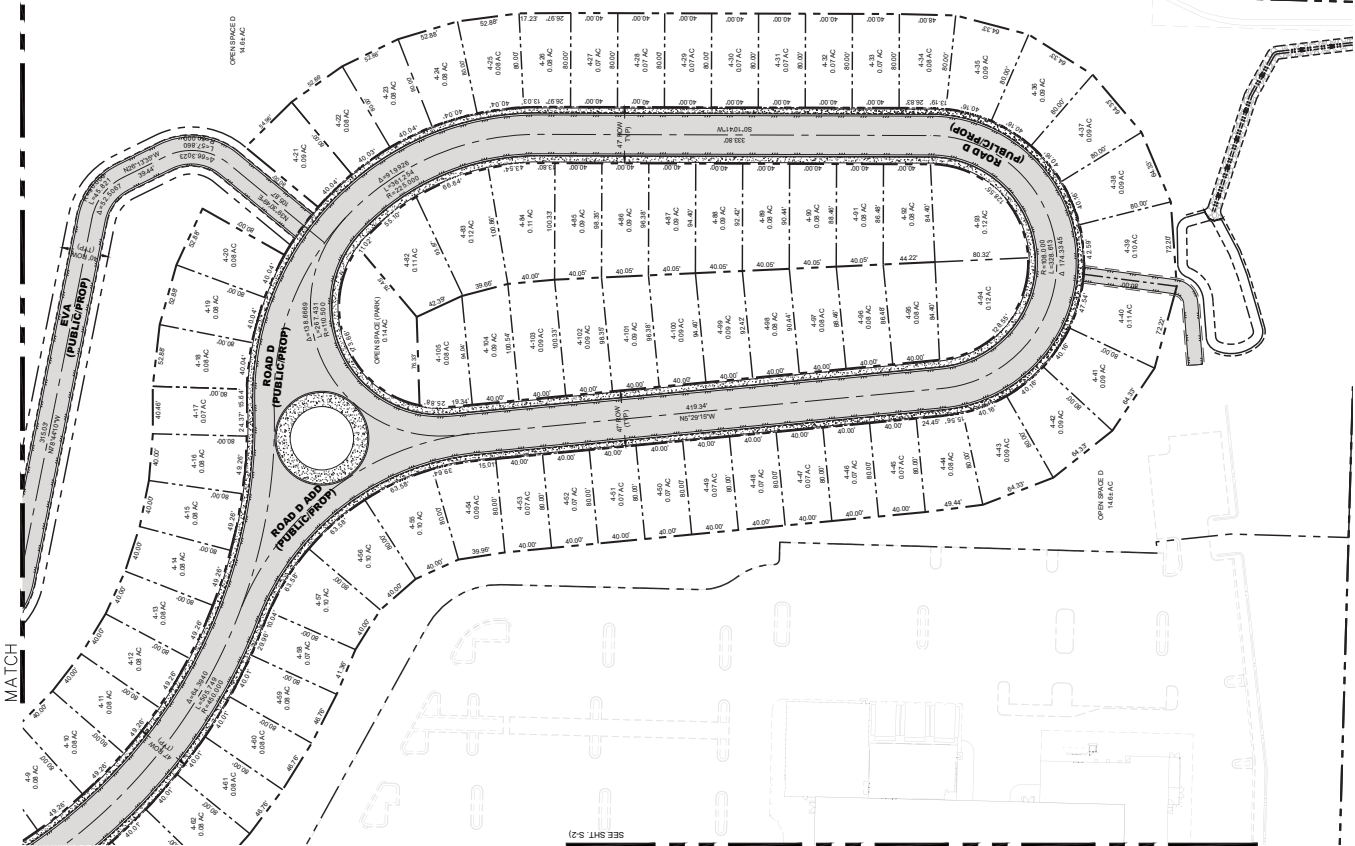
**PROPOSED PROJECT AREA:**

HARDSCAPE	4.22 AC
OPEN SPACE	3.17 AC
TOTAL PROJECT AREA	7.39 AC
VILLAGE 3 PAD	10.14 AC



LINE  
SEE SHIT (S2)

MATCH



LINE  
SEE SHIT (S3)

MATCH

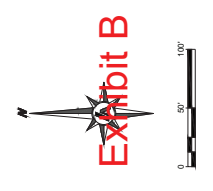
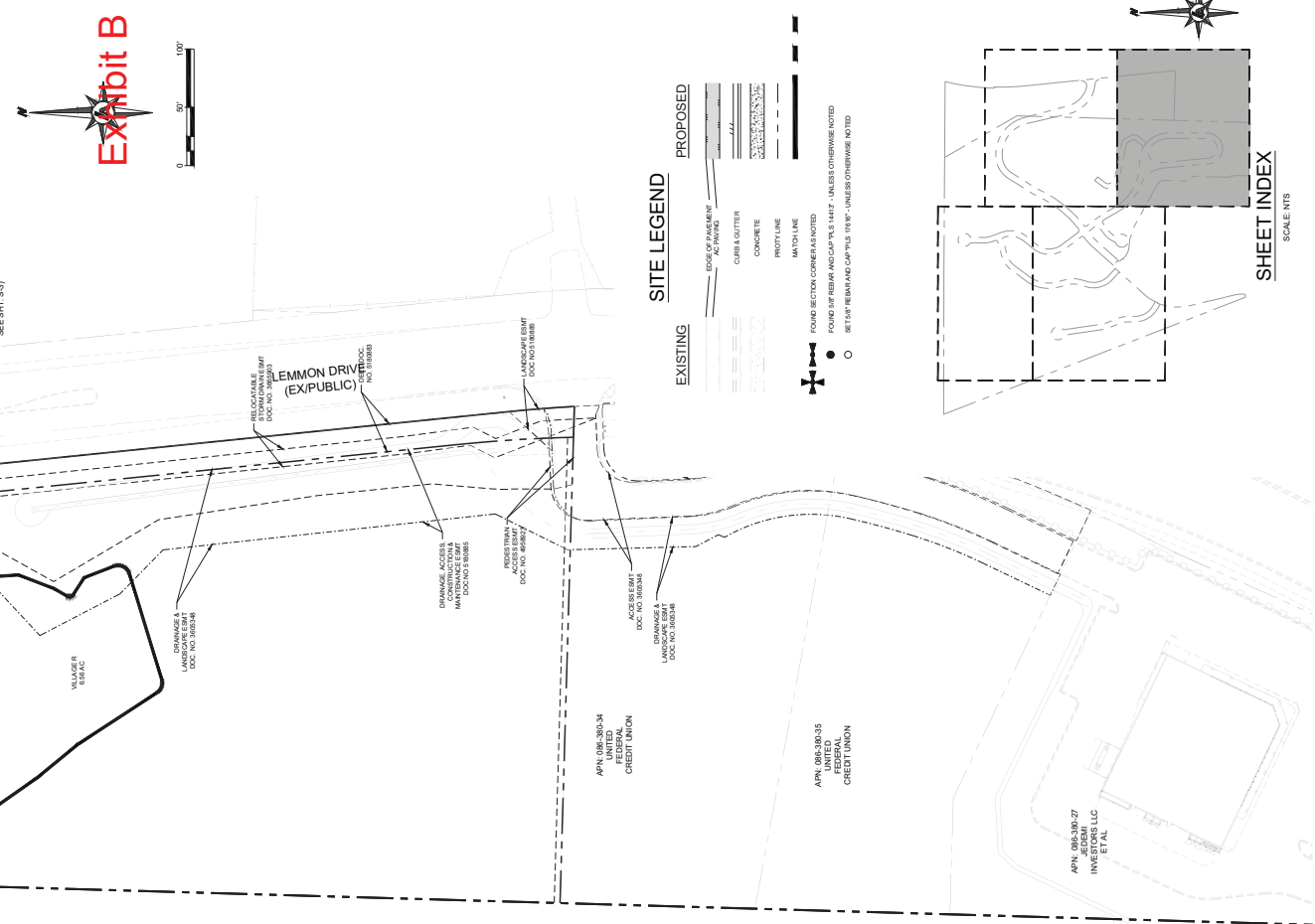


Exhibit B

LUMOS & ASSOCIATES  
9222 PROTOTYPE DRIVE  
RENO, NV 89521  
TEL: 775-782-7111  
WWW.LUMOSC.COM

PLANS ASSUMING THE BOUNDARIES OF LAND PARCELS ARE THE PROPERTY OF LAND PARCELS. USE OF THESE PLANS FOR ANY OTHER PROJECT OR IN ANY MANNER WITHOUT THE PERMISSION OF LUMOS & ASSOCIATES IS STRICTLY PROHIBITED. THE DRAWING IS NOT TO BE USED FOR ANY OTHER PROJECT WITHOUT THE PERMISSION OF LUMOS & ASSOCIATES.



NEVADA  
WASHOE  
RENO  
CADO SV LAND LLC  
HIGHLAND - TENTATIVE MAP AND  
CONDITIONAL USE PERMIT  
PRELIMINARY SITE PLAN

REV	DATE	DESCRIPTION	BY

8.5x11 INCHES  
ORIGINAL DRAWING  
IF NOT ONE INCH ON THIS SHEET,  
ADJUST SCALES ACCORDINGLY

**S-4**

DRAWN BY: MCR  
DESIGNED BY: JRL  
CHECKED BY: BMM  
JOB NO: 1001.004

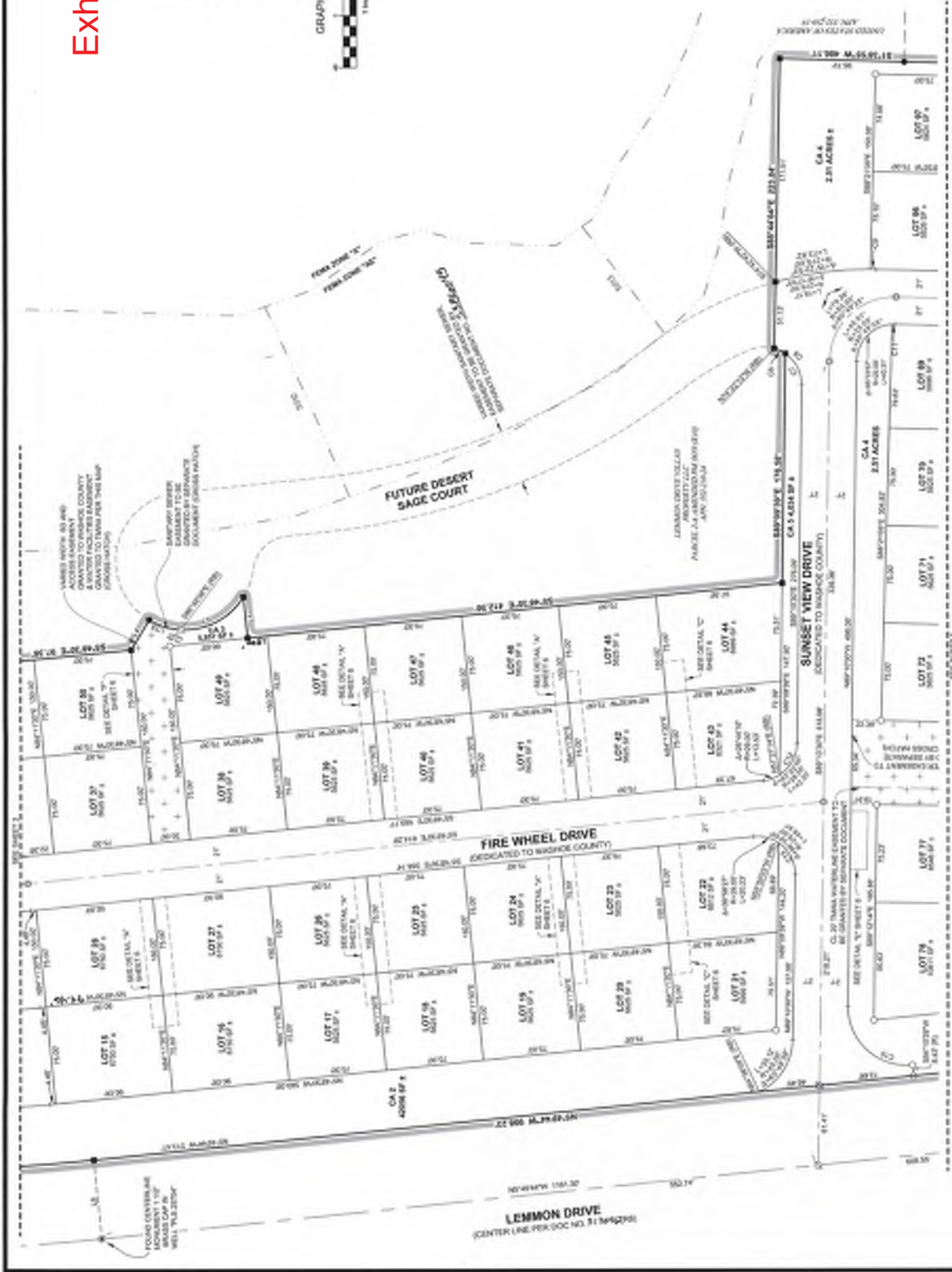
PRELIMINARY  
AUGUST 2022







# Exhibit B



OPTIONAL PLAT  
of  
**LEMMON DRIVE ESTATES, PHASE 1**  
A PORTION OF LOT 1-A, MAP NO. 500  
FILED IN THE 14th MERIDIAN, 30th T36S, 10E, 40E, WASHOE COUNTY, NEVADA

**PLANNING & ENGINEERING**  
INC. (A PROFESSIONAL CORPORATION)  
1750 N. RENO AVENUE, SUITE 200  
RENO, NEVADA 89505  
TEL: 775-784-1111  
WWW.P&E-NEVADA.COM

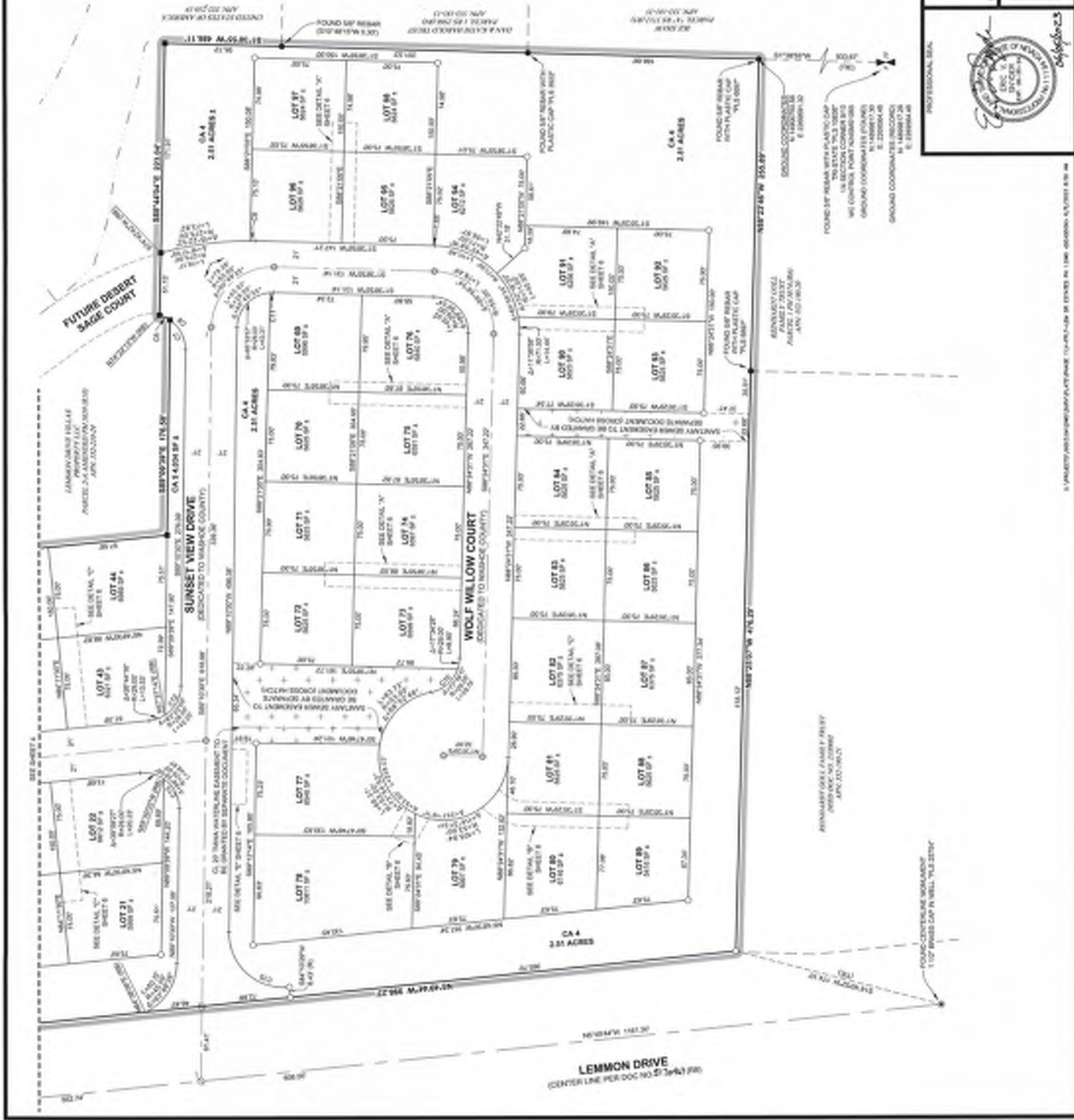
DATE: APRIL 2023  
BY: [Signature]  
CHECKED BY: [Signature]  
SCALE: 1" = 40'

4 / 6

## T5532

CLAIMS & EASEMENTS SHOULD BE MADE FOR ANY SUBSEQUENT CHANGES TO THIS MAP

Exhibit B



OFFICIAL PLAN OF  
**LEMMON DRIVE ESTATES, PHASE 1**  
 A DIVISION OF PARCEL 1-4 OF AMENDED PARCEL MAP NO. 3089  
 LOCATED IN THE NE 1/4 SECTION 12, T10N, E10E, N40W  
 MADISON COUNTY, MISSOURI

GSA INC.  
 LARS BREKSHAW  
 CIVIL ENGINEER  
 LICENSE NO. 22058M-05  
 774-850-0000 FAX: 774-850-0001 EMAIL: LBREKSHAW@GSAINC.COM

JOB NO. 2023104  
 DRAWN BY: LKB  
 CHECKED BY: GCB  
 DATE: 06/23/23  
 SHEET 5 OF 6

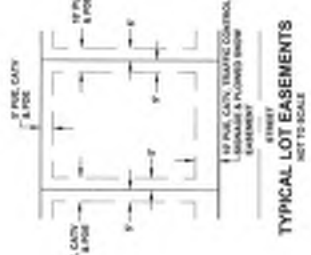
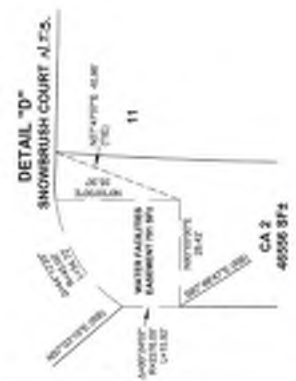
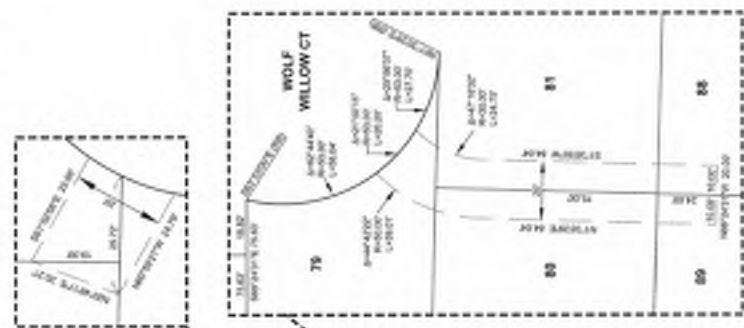
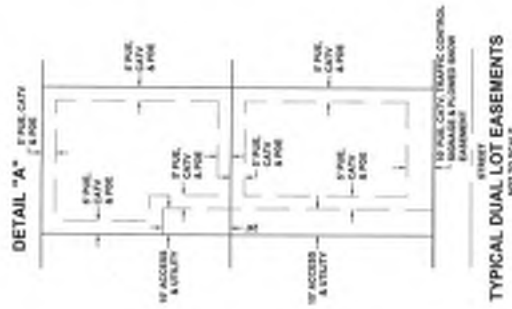
T5532

CUMULATIVE INDEXES SHOULD BE EXAMINED TO DETERMINE ANY CHANGES TO THIS MAP



Exhibit B

EASEMENT DETAIL SHEET



OPTIONAL PLAT OF  
**LEMON DRIVE ESTATES, PHASE 1**  
A PORTION OF PARCEL 1, A.C. 1.00, SECTION 14, T. 10 N., R. 10 E., S. 1000  
WINDSOR COUNTY, ILLINOIS

DATE: 10/20/24  
DRAWN BY: JMK  
CHECKED BY: JMK  
SCALE: 1/8" = 1'-0"

DATE: 6/6/24  
DRAWN BY: JMK  
CHECKED BY: JMK  
SCALE: 1/8" = 1'-0"

PROFESSIONAL SEAL  
**DAVID J. BURTON**  
ENGINEER  
1200 W. MONROE ST. SUITE 100  
MADISON, IL 62201

STATE OF ILLINOIS  
JULY 10, 1900  
NO. 6



# Exhibit B

FOUND MONUMENTS CAP WITH THE  
SECTION ASSETS LISTED THAT  
CONTROL POINT NUMBER(S)  
N 111° 11' 11" W  
N 111° 11' 11" W  
GROUND COORDINATES FOUND  
E 111° 11' 11" W  
GROUND COORDINATES FOUND  
E 111° 11' 11" W  
GROUND COORDINATES FOUND  
E 111° 11' 11" W

## LEGEND

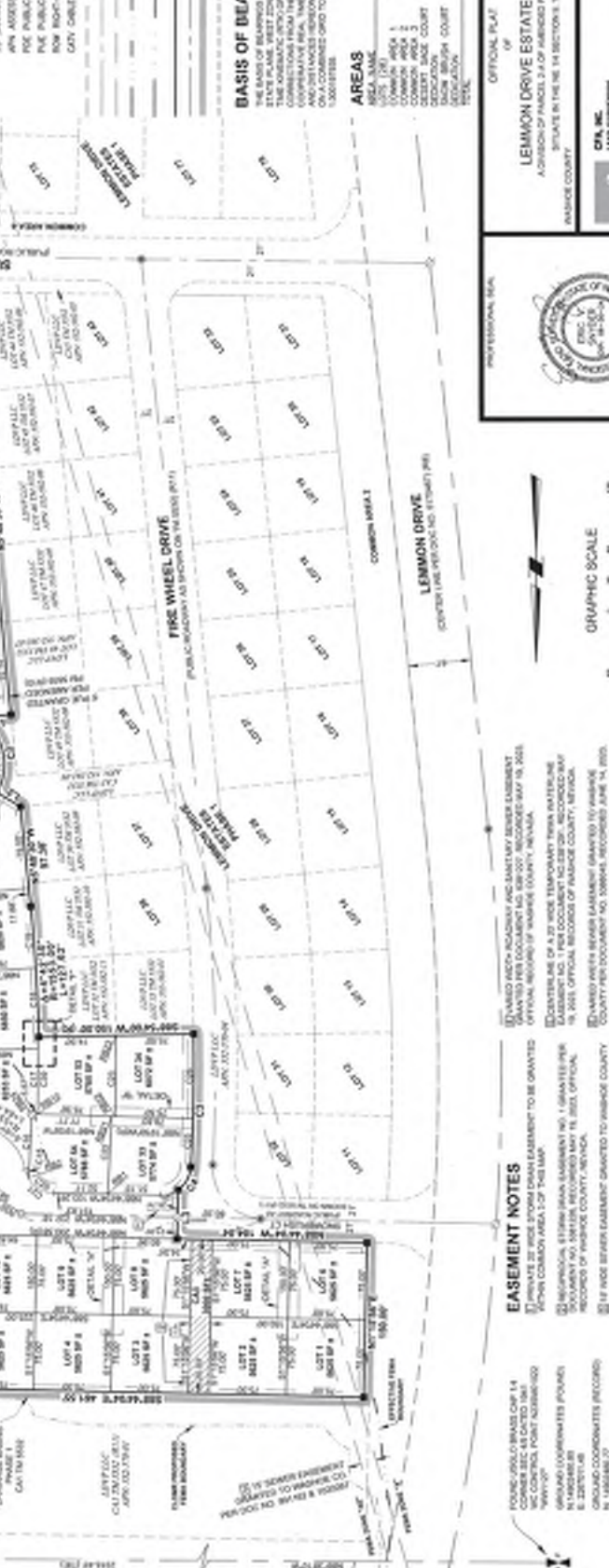
- STANDARD STREET MONUMENT TO BE SET "N 111° 11' 11" W"
- DIMENSION POINT, NOTHING FOUND OR SET
- FOUND "N 111° 11' 11" W" REMAIN WITH PLASTIC CAP
- FOUND MONUMENT AS NOTED
- FOUND DIMENSION STREET MONUMENT IN WELL "N 111° 11' 11" W"
- FOUND 1/4 SECTION CORNER
- FOUND SECTION CORNER
- GEODETIC CONTROL POINT AS NOTED
- TYPICAL PROPERTY CORNER
- MONUMENT "N 111° 11' 11" W" AT CORNER OF LOT AND OTHER "N 111° 11' 11" W" AT CORNER OF WELL, OR WELL, A OR CORNER OF LOT LINE, OR CORNER OF LOT LINE, OR CORNER OF LOT LINE
- BY RADIAL LINE
- BY RADIAL BEARING
- BY REFERENCE NUMBER
- CA COMMON AREA
- PM PARCEL MAP
- BY RECORD OF SURVEY
- BY SQUARE FOOT
- BY SQUARE FEET
- APN ADDRESS PARCEL NUMBER
- THE PUBLIC UTILITY EASEMENT
- NEW ROOF-OF-WAY
- CITY CABLE TELEVISION EASEMENT
- ADJACENT LOT LINES
- CONTIGUOUS BOUNDARY
- EASEMENT LINE
- EFFECTIVE DATE AS NOTED
- GLASS PROTECTED ZONE
- BY BENCH
- PROPERTY LINES
- SECTION LINE
- GRAPHIC BORDER

## AREAS

AREA NAME	ACRES	FEET
COMMON AREA 1	14.100	3.89
COMMON AREA 2	44.000	9.38
COMMON AREA 3	2.000	0.21
SECTION COURT	28.150	6.64
BACK SLOPE COURT	15.750	3.28
TOTAL	100.000	21.38

## BASIS OF BEARINGS

THE BASIS OF BEARINGS FOR THIS SURVEY IS THE  
MAGNETIC DECLINATION OF THE STATE OF NEVADA  
AS DETERMINED BY THE NATIONAL MAGNETIC  
DECLINATION DATA FOR THE YEAR 2011. THE  
MAGNETIC DECLINATION IS 11.111 DEGREES  
WEST. THE TRUE BEARING IS 11.111 DEGREES  
WEST OF THE MAGNETIC BEARING. THE  
MAGNETIC DECLINATION IS 11.111 DEGREES  
WEST OF THE TRUE BEARING. THE  
MAGNETIC DECLINATION IS 11.111 DEGREES  
WEST OF THE TRUE BEARING.



OFFICIAL PLAT  
OF  
**LEMMON DRIVE ESTATES, PHASE 2**  
A DIVISION OF PARCEL 3.0 OF AMENDED PARCEL MAP NO. 388  
APPROVED COUNTY



GRAPHIC SCALE  
1 INCH = 100 FEET

AREA NOTES  
1. PRIVATE EASEMENT TO BE GRANTED TO THE COMMON AREA 1 OF THIS MAP.  
2. EASEMENT TO BE GRANTED TO THE COMMON AREA 2 OF THIS MAP.  
3. EASEMENT TO BE GRANTED TO THE COMMON AREA 3 OF THIS MAP.  
4. EASEMENT TO BE GRANTED TO THE COMMON AREA 4 OF THIS MAP.  
5. EASEMENT TO BE GRANTED TO THE COMMON AREA 5 OF THIS MAP.

EASEMENT NOTES  
1. PRIVATE EASEMENT TO BE GRANTED TO THE COMMON AREA 1 OF THIS MAP.  
2. EASEMENT TO BE GRANTED TO THE COMMON AREA 2 OF THIS MAP.  
3. EASEMENT TO BE GRANTED TO THE COMMON AREA 3 OF THIS MAP.  
4. EASEMENT TO BE GRANTED TO THE COMMON AREA 4 OF THIS MAP.  
5. EASEMENT TO BE GRANTED TO THE COMMON AREA 5 OF THIS MAP.

FOUND MONUMENTS CAP WITH THE  
SECTION ASSETS LISTED THAT  
CONTROL POINT NUMBER(S)  
N 111° 11' 11" W  
N 111° 11' 11" W  
GROUND COORDINATES FOUND  
E 111° 11' 11" W  
GROUND COORDINATES FOUND  
E 111° 11' 11" W

FOUND MONUMENTS CAP WITH THE  
SECTION ASSETS LISTED THAT  
CONTROL POINT NUMBER(S)  
N 111° 11' 11" W  
N 111° 11' 11" W  
GROUND COORDINATES FOUND  
E 111° 11' 11" W  
GROUND COORDINATES FOUND  
E 111° 11' 11" W

FOUND MONUMENTS CAP WITH THE  
SECTION ASSETS LISTED THAT  
CONTROL POINT NUMBER(S)  
N 111° 11' 11" W  
N 111° 11' 11" W  
GROUND COORDINATES FOUND  
E 111° 11' 11" W  
GROUND COORDINATES FOUND  
E 111° 11' 11" W

CA 9.48 ACRES  
37° 28' 50" W 1228.11'  
57° 28' 50" W 1228.11'

CA 9.48 ACRES  
37° 28' 50" W 1228.11'  
57° 28' 50" W 1228.11'

CA 9.48 ACRES  
37° 28' 50" W 1228.11'  
57° 28' 50" W 1228.11'

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37° 28' 50" W 1228.11'  
57° 28' 50" W 1228.11'

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37° 28' 50" W 1228.11'  
57° 28' 50" W 1228.11'

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37° 28' 50" W 1228.11'  
57° 28' 50" W 1228.11'

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37° 28' 50" W 1228.11'  
57° 28' 50" W 1228.11'

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37° 28' 50" W 1228.11'  
57° 28' 50" W 1228.11'

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37° 28' 50" W 1228.11'  
57° 28' 50" W 1228.11'

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37° 28' 50" W 1228.11'  
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37° 28' 50" W 1228.11'  
57° 28' 50" W 1228.11'

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37° 28' 50" W 1228.11'  
57° 28' 50" W 1228.11'

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57° 28' 50" W 1228.11'

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37° 28' 50" W 1228.11'  
57° 28' 50" W 1228.11'

CA 9.48 ACRES  
37° 28' 50" W 1228.11'  
57° 28' 50" W 1228.11'

CA 9.48 ACRES  
37° 28' 50" W 1228.11'  
57° 28' 50" W 1228.11'

**Exhibit B**

CURVE #	BEARING	RADIUS	LENGTH
C1	18°43'21"	20.00	9.67
C2	18°43'21"	20.00	9.67
C3	18°43'21"	20.00	9.67
C4	18°43'21"	20.00	9.67
C5	18°43'21"	20.00	9.67
C6	18°43'21"	20.00	9.67
C7	18°43'21"	20.00	9.67
C8	18°43'21"	20.00	9.67
C9	18°43'21"	20.00	9.67
C10	18°43'21"	20.00	9.67
C11	18°43'21"	20.00	9.67
C12	18°43'21"	20.00	9.67
C13	18°43'21"	20.00	9.67
C14	18°43'21"	20.00	9.67
C15	18°43'21"	20.00	9.67
C16	18°43'21"	20.00	9.67
C17	18°43'21"	20.00	9.67
C18	18°43'21"	20.00	9.67
C19	18°43'21"	20.00	9.67
C20	18°43'21"	20.00	9.67
C21	18°43'21"	20.00	9.67
C22	18°43'21"	20.00	9.67
C23	18°43'21"	20.00	9.67
C24	18°43'21"	20.00	9.67
C25	18°43'21"	20.00	9.67
C26	18°43'21"	20.00	9.67
C27	18°43'21"	20.00	9.67
C28	18°43'21"	20.00	9.67
C29	18°43'21"	20.00	9.67
C30	18°43'21"	20.00	9.67
C31	18°43'21"	20.00	9.67
C32	18°43'21"	20.00	9.67
C33	18°43'21"	20.00	9.67
C34	18°43'21"	20.00	9.67
C35	18°43'21"	20.00	9.67
C36	18°43'21"	20.00	9.67
C37	18°43'21"	20.00	9.67
C38	18°43'21"	20.00	9.67
C39	18°43'21"	20.00	9.67
C40	18°43'21"	20.00	9.67

LINE #	DIRECTION	LENGTH
L1	S84°11'30"W	31.67
L2	S84°11'30"W	27.00
L3	S81°15'29"W	43.14
L4	S81°15'29"W	50.00
L5	S88°44'24"E	83.96
L6	S51°10'45"W	46.64
L7	N65°48'30"W	21.83
L8	S55°48'20"W	89.38
L9	S55°15'25"E	40.34
L10	N65°48'20"W	24.57

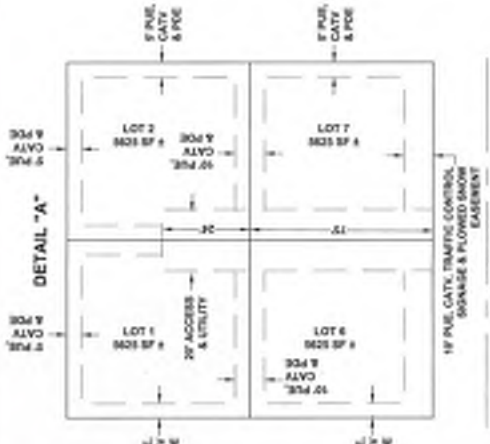
BEARING	LENGTH
R1	18°43'21"
R2	18°43'21"
R3	18°43'21"
R4	18°43'21"
R5	18°43'21"
R6	18°43'21"
R7	18°43'21"
R8	18°43'21"
R9	18°43'21"
R10	18°43'21"
R11	18°43'21"
R12	18°43'21"
R13	18°43'21"
R14	18°43'21"
R15	18°43'21"
R16	18°43'21"
R17	18°43'21"
R18	18°43'21"
R19	18°43'21"
R20	18°43'21"
R21	18°43'21"
R22	18°43'21"
R23	18°43'21"
R24	18°43'21"
R25	18°43'21"
R26	18°43'21"
R27	18°43'21"
R28	18°43'21"
R29	18°43'21"
R30	18°43'21"



TYPICAL DUAL LOT EASEMENTS  
LOTS 55, 56, 61 & 62  
NOT TO SCALE



TYPICAL DUAL LOT EASEMENTS  
LOTS 33, 34, 53 & 54  
NOT TO SCALE



TYPICAL DUAL LOT EASEMENTS  
LOTS 1-10  
NOT TO SCALE



TYPICAL TRIPLE LOT EASEMENTS  
LOTS 66, 67 & 68  
NOT TO SCALE



TYPICAL DUAL LOT EASEMENTS  
LOTS 57, 58, 59 & 60  
NOT TO SCALE



TYPICAL DUAL LOT EASEMENTS  
LOTS 55, 56, 59 & 60  
NOT TO SCALE



OFFICIAL PLAN  
OF  
LEMON DRIVE ESTATES, PHASE 2  
A DEVELOPMENT OF 16 LOTS OF APPROXIMATELY 5000  
SQUARE FEET IN THE 14 SECTION, T19N, 19E, 100N  
RANGE COUNTY, NEVADA

DATE: 10/20/2016  
DRAWN BY: JAC  
CHECKED BY: JAC  
SCALE: 1" = 40'

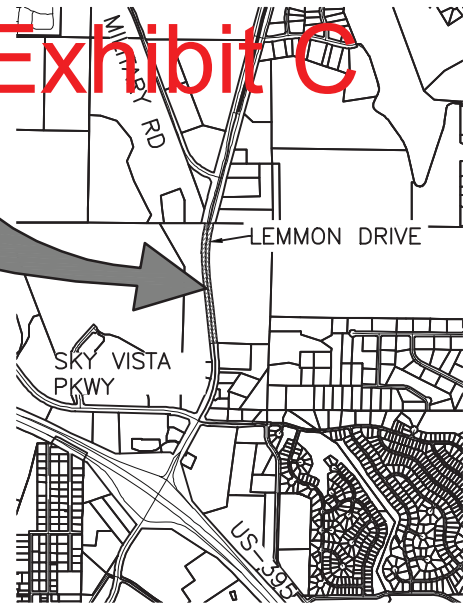
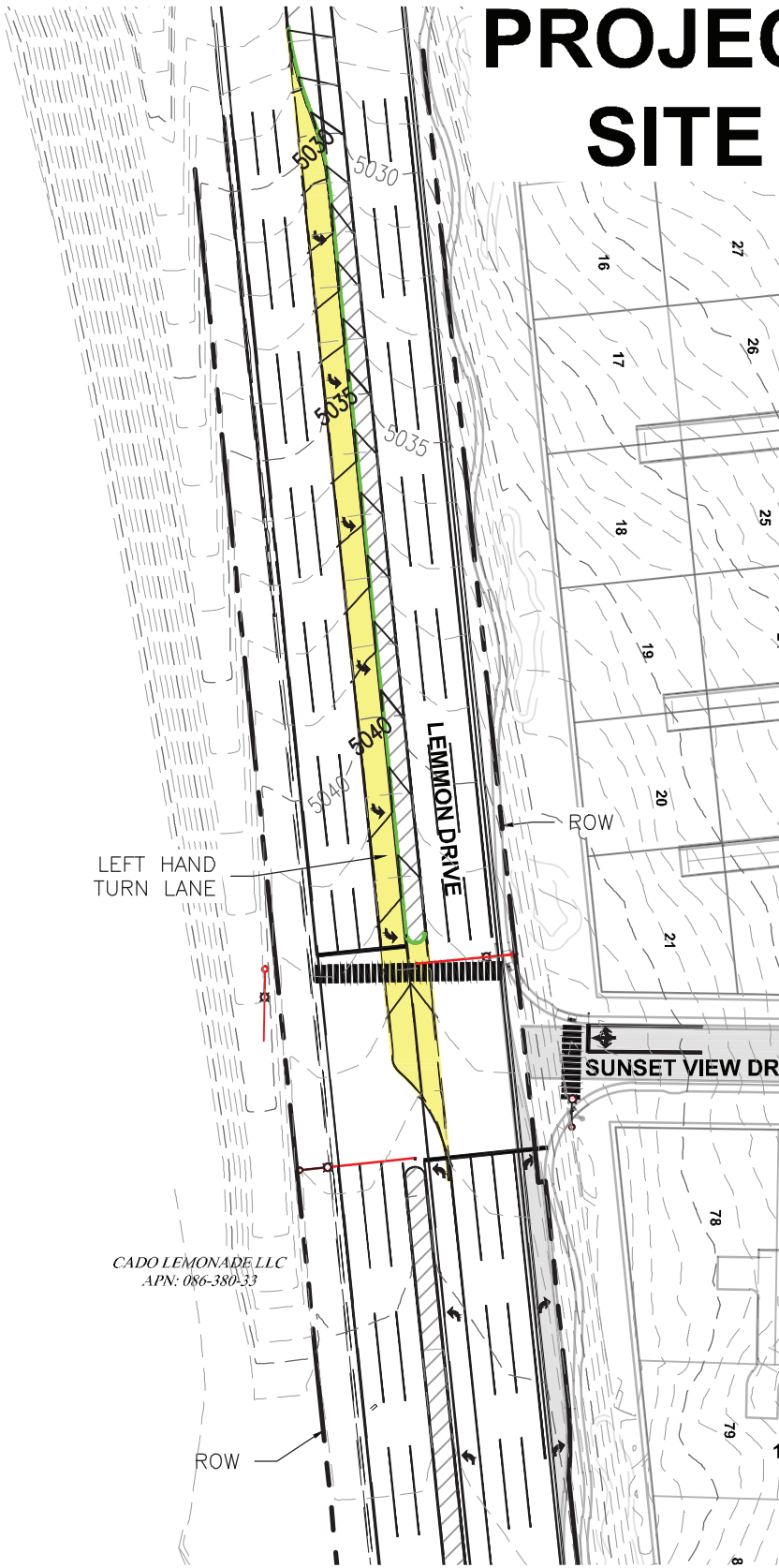
PROJECT NO.: 175-16-0000-01-10-0000-01P  
SHEET NO.: 3/3

CORRELATIVE INDEXES SHOULD BE EXAMINED FOR ANY SUBSEQUENT CHANGES TO THIS SET

**EXHIBIT "C"**  
**(Offered Improvements Application/Submittals)**

# PROJECT SITE




# Exhibit C



## VICINITY MAP

SCALE: NTS

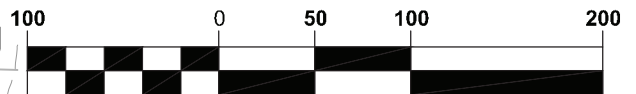
### LEGEND

-  4" AC PAVEMENT W/6" BASE
-  6" MEDIAN CURB W/6" BASE
-  INTERSECTION SIGNAL AND LIGHTS



Know what's below.  
Call before you dig.

### GRAPHIC SCALE



1 inch = 100 ft.

X:\PROJECTS\16013.04\DWG\ENGR\EXHIBITS\RTC\LEMMON INTER OVERVIEW.DWG <APOROLI>  
5/1/2024 10:04 AM



1150 CORPORATE BLVD.  
RENO, NV 89502  
(775) 856-1150

LEMMON DR ESTATES

RRIF EXHIBIT  
700A LEMMON DR  
WASHOE COUNTY, NV 89506

SHEET

1

1

OF



April 16, 2024

Dale Keller, PE  
RRIF Administrator  
Regional Transportation Commission of Washoe County  
1105 Terminal Way, Suite 108  
Reno, NV 89502

### **RRIF Offset Agreement Request: Lemmon Drive / Vista Knolls Pkwy / Sunset View Drive Signalization**

#### Introduction

Lemmon Drive Villas Property, LLC (Developer of Record) hereby formally requests a Regional Road Impact Fee (RRIF) Offset Agreement and RRIF Waivers for the installation of a traffic signal and associated roadway improvements at the Lemmon Drive / Vista Knolls Parkway Extension / Sunset View Drive intersection within the City of Reno.

The Developer of Record will construct the signalization improvements as part of the regional improvement program (2050 RTP). Previous correspondence between the City of Reno, Regional Transportation Commission, and the project's engineers has identified this as a regional capacity improvement eligible for an RRIF Offset Agreement. Specifically, the location is within the Lemmon Drive project limits in the RTP and the *Lemmon Drive Capacity Improvements Project Traffic Analysis Memorandum, February 6, 2021* performed for the RTC by Jacobs, supports signalization at this location as a regional benefit.

#### Proposed Capital Improvements

Lemmon Drive Villas Property, LLC proposes the following improvements:

The roadway improvements will be on Lemmon Drive 0.37 miles south of Military Rd and 0.3 miles north of Sky Vista/Buck Dr. They will include the installation of a traffic signal on Lemmon Drive and modifications to the existing median and curb and gutter for left and right turn lanes into the development.

The signal design is for a 3-leg intersection at Lemmon Drive and Sunset View Drive of the Lemmon Drive Estates development east of Lemmon Drive. The southbound approach will have 3 thru lanes and a dedicated left turn lane. The northbound approach will have a dedicated U-turn lane, 3 thru lanes, and a dedicated right turn lane. The westbound approach exiting the development will have a single left-thru-right lane. See attached exhibit "Signalization Diagram". The signal layout considers the existing multi-



5000 Executive Parkway, Suite 350, San Ramon, CA 94583  
Phone: (925) 355-1350  
[www.laffertycommunities.com](http://www.laffertycommunities.com)



use trail on the west side of Lemmon Drive, as well as the addition of a fourth eastbound leg when future development occurs.

In conjunction with the installation of a traffic signal, the existing median and curb and gutter need to be modified. The center median will be modified to include approximately 400' of left turn lane for the southbound approach. The existing median is 30' wide, this will be reduced to accommodate the left turn lane and buffer spacing. The curb and gutter will be modified to include approximately 200' of right turn lane for the northbound approach. There is currently no additional sidewalk or paving beyond the curb and gutter to be removed. The appropriate signing and striping for these improvements will also be completed. See the attached "Roadway Exhibit".

The project **Construction Plans and Specifications** are in near final stages. The current signal and roadway plans (*Attachment 2*) are provided for application review and final drawings will be provided.

The **Developer of Record** is:

Lemmon Drive Villas Property, LLC  
5000 Executive Parkway, Suite 350  
San Ramon, CA 94583

The **Development of Record** includes **two (2) development projects/development entities**:

**Lemmon Drive Estates** (Lemmon Drive Villas Property, LLC)

Washoe County File Numbers:

T5532 – Official Plat of Lemmon Drive Estates, Phase 1  
T5552 – Official Plat of Lemmon Drive Estates, Phase 2

The **Site Plan** for Lemmon Drive Estates shown as the Official Plats Phases 1 & 2, included as *Attachment 3*.

**Approved Land Uses** within Lemmon Drive Estates and the **Associated Regional Road Impact Fees** based on the applicable impact fee schedule (7<sup>th</sup> Edition, Year 1 Indexing, included as *Attachment 4*) are as follows:

Single Family Residential – 98 units @ \$5,455.46/unit = \$534,635.08

Lemmon Drive Estates Total Impact Fee/Eligibility = **\$534,635.08**

**Highland** (CADO SV Land LLC, c/o Capstone Advisors, Inc.)



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Phone: (925) 355-1350  
[www.laffertycommunities.com](http://www.laffertycommunities.com)





City of Reno file numbers:

LDC 23-00005 - Highland Zoning Map Amendment, Adopted Ordinance No. 6642

LDC 23-00006 - Highland Tentative Map and Conditional Use Permit

The **Tentative Map** for Highland project is included as *Attachment 5*.

**Approved Land Uses** within Highland project and the **Associated Regional Road Impact Fees** based on the applicable impact fee schedule (7<sup>th</sup> Edition, Year 1 Indexing, included as *Attachment 4*) are as follows:

Single Family Detached Residential – 219 units @ \$5,455.46/unit = \$1,194,745.74

Multi-family Residential – 288 units @ \$3,475.31/unit = \$1,000,889.28

Commercial – 3.83 acre site, estimated at 0.25 FAR = 41,700 sqft GFA @ \$7,885.77/ksqft = \$328,836.61

Highland Project Total Impact Fee/Eligibility = **\$2,524,471.63**

**Total Anticipated Impact Fee/Eligibility of the combined Developments of Record= \$3,059,106.71**

The Developer of Record (Lemmon Drive Villas Property, LLC) will earn the RRIF Waivers, which shall be applicable to only the above listed Developments of Record. Exchange/transfer of RRIF Waivers between the Developments of Record is hereby requested. The Developments of Record acknowledge that such transfer(s) shall be negotiated and contracted between the entities outside the RRIF agreement.

It is anticipated that the Highland development project will, in the future, request modification of this RRIF agreement or submit an additional RRIF Offset Agreement for completion of the fourth leg (Vista Knolls) of the traffic signal and intersection improvements. That flexibility is hereby formally requested.

The **Engineer of Record** for this offset agreement is:

Horrocks

801-763-5100 | [info@horrocks.com](mailto:info@horrocks.com) | [Horrocks.com](http://Horrocks.com)

2162 West Grove Parkway, Suite 100, Pleasant Grove, UT

Contact Persons:

Ryan Dummer, PE (Nevada Licensure Pending)  
(385) 353-2788 | [ryan.dummer@horrocks.com](mailto:ryan.dummer@horrocks.com)

Scott Newin, PM  
(801) 763-5272 | [scottn@horrocks.com](mailto:scottn@horrocks.com)



5000 Executive Parkway, Suite 350, San Ramon, CA 94583

Phone: (925) 355-1350

[www.laffertycommunities.com](http://www.laffertycommunities.com)



**Qualifications of Inspection and Testing Firm**

Any public improvements requiring sampling, testing, or quality assurance activities will be provided through an ACI and/or NAQTC certified firm.

**Preliminary Engineering Cost Estimate**

The following preliminary cost estimates were received for the proposed improvements:

- PAR Western Line Contractors, LLC- traffic signal installation: **\$425,000**
- Campbell Construction Co., Inc. - roadwork improvements: **\$351,000**

**Estimated Construction Contract - \$776,000**

The preliminary project estimate is provided below, however, the actual construction bid result will supersede the Engineer's Estimate and all costs will be updated.

**Preliminary Project Cost Estimate**

**Lemmon Drive / Vista Knolls / Sunset View Drive Traffic Signal Improvements**

Item	Description	Estimated Cost	Final Cost
1	Engineering Fees	\$50,000	
2	Permit Fees	\$5,000	
3	Construction Contract	\$776,000	
4	Inspection	\$30,000	
5	Testing	\$20,000	
6	Contingency	\$19,000	
<b>Total</b>		<b>\$900,000</b>	
<b>RRIF Waiver Amount Requested</b>		<b>\$900,000</b>	





### Traffic Design Report & Project Eligibility

Justification/explanation of the overall capacity improvements, and verification that the improvements will provide operations within policy level of service for at least 10 years, is provided in the *Highland Traffic Impact Study, August 3, 2022, Headway Transportation*, included as Attachment 6.

### Project Specifications

All work will be required to comply with the Standard Specifications for Public Works Construction (Orange Book) current edition, consistent with RTC requirements for Public Works projects.

### Construction Schedule

The signal and intersection improvements are anticipated to be completed by the end of the 2026 calendar year, and potentially within the 2025 calendar year.

Please do not hesitate to contact us with any questions or requests for additional information. We recognize that full project plans, specifications, and updates to information contained in this application will be necessary prior to execution of the final RRIF Offset Agreement. Thank you in advance for your consideration.

Sincerely,  
Lafferty Communities

Greg Garchar  
Project Manager

### Attachments:

1. Project Location Map
2. Civil Improvement Plans for Traffic Signal & Signal Design
3. Lemmon Drive Estates Final Map Phase 1 and 2
4. RTC RRIF Schedule – 7<sup>th</sup> Edition Year 1 Indexing
5. Highland Tentative Map
6. Highland Traffic Impact Study



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Phone: (925) 355-1350  
[www.laffertycommunities.com](http://www.laffertycommunities.com)

# CIVIL IMPROVEMENT PLANS LEMMON DR ESTATES PHASE 1

Exhibit C

**OWNER/DEVELOPER:**  
LAFFERTY COMMUNITIES  
BRITTANY LAFFERTY  
Vice President - Project Manager  
2000 Crow Canyon Place, No. 350  
San Ramon, California 94583

**CIVIL ENGINEER:**  
KATHLEEN MEYER P.E.

**CFA & Bowman company**  
LAND SURVEYORS  
CIVIL ENGINEERS  
LAND USE PLANNERS  
1150 CORPORATE BLVD. | RENO, NV 89502  
775-985-1159 | WWW.CFAANDBOWMAN.COM

**GEOTECHNICAL ENGINEER**  
ENGEIO INCORPORATED  
9485 DOUBLE R BLVD  
B-22  
RENO, NV 89521

**BASIS OF BEARINGS AND COORDINATES:**  
THE BEARINGS AND COORDINATES SHOWN ON THESE PLANS ARE BASED ON THE NAD 83 DATUM. THE BEARINGS AND COORDINATES ARE DETERMINED USING REAL TIME KINEMATIC (RTK) GPS OBSERVATIONS WITH CORRECTIONS FROM A NEARBY REAL TIME KINEMATIC (RTK) GPS STATION. THE BEARING BETWEEN CORNERS "SSB2" AND CORNERS "SSB1" IS TAKEN AS SHOWN. DIMENSIONS SHOWN ARE GROUND DISTANCES. CORNERED OBJECT-CORNER FACTOR: 1.00197528.

**BASIS OF ELEVATIONS:**  
NEVADA STATE PLANE COORDINATE SYSTEM, WEST ZONE (NAD 83/94)



VICINITY MAP  
SCALE: NTS

Sheet Number	Sheet Title
C1.0	TITLE SHEET
C1.1	GENERAL NOTES
C2.0	PLAT
C2.1	PLAT
C2.2	PLAT
C2.3	PLAT
C2.4	PLAT
C2.5	PLAT
C3.0	SITE - UTILITY PLAN
C3.1	SITE - UTILITY PLAN
C4.0	GRADING PLAN
C4.1	GRADING PLAN
C5.0	PLAN AND PROFILE 1
C5.1	PLAN AND PROFILE 2
C5.2	PLAN AND PROFILE 3
C5.3	PLAN AND PROFILE 4
C5.4	PLAN AND PROFILE 5
C6.0	DETAILS
C6.1	DETAILS
C6.2	DETAILS
C6.3	DETAILS
C6.4	DETAILS
C6.5	DETAILS
C6.6	DETAILS
C6.7	DETAILS
C6.8	DETAILS
C7.0	STRIPING & SIGNAGE DETAILS
C7.1	STRIPING AND SIGNAGE
C8.0	EROSION CONTROL PLAN
C8.1	EROSION CONTROL PLAN
L1-L10	LANDSCAPE PLANS
C9, CC9.8	SIGNAL PLANS
1-15	SIGNAL DESIGN

**ENGINEERS STATEMENT:**  
I, THE UNDERSIGNED, AS A LICENSED PROFESSIONAL ENGINEER, HEREBY CERTIFY THAT I AM THE DESIGNER OF THE PLANS AND I AM A MEMBER OF THE PROFESSIONAL ENGINEERS SOCIETY OF THE STATE OF NEVADA. I AM NOT PROVIDING THESE PLANS TO ANY OTHER PARTY WITHOUT THE WRITTEN CONSENT OF THE CLIENT. I AM NOT PROVIDING THESE PLANS TO ANY OTHER PARTY WITHOUT THE WRITTEN CONSENT OF THE CLIENT.

STATE OF NEVADA  
KATHLEEN MEYER P.E.  
CFA & BOWMAN COMPANY



# CIVIL IMPROVEMENT PLANS

## TRAFFIC SIGNAL LEMMON DR ESTATES

### LEMMON DR. STA: 20+00 - 30+73

#### RENO, NV 89506

Exhibit C

**OWNER/DEVELOPER:**  
 ENGINEERING DEPARTMENT  
 1105 TERMINAL WAY, STE 108  
 RENO, NV 89502  
 PHONE (775) 348-0171

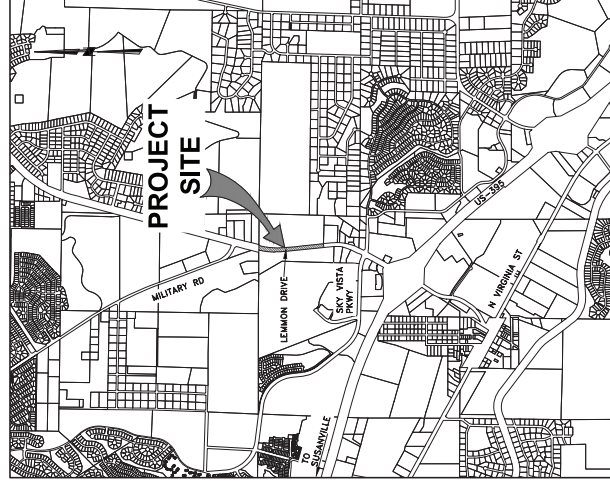
**CIVIL ENGINEER:**  
 KATHLEEN MEYER P.E.  
 CFA, a Bowman company  
**LAND SURVEYORS**  
**CIVIL ENGINEERS**  
**LAND USE PLANNERS**  
 1150 CORPORATE BLVD | RENO, NV 89502  
 775-385-1159 | WWW.CFA-RENO.COM



**GEOTECHNICAL ENGINEER**  
 ENGO INCORPORATED  
 9485 DOUBLE R BLVD  
 B-22  
 RENO, NV 89521

**BASIS OF BEARINGS AND COORDINATES:**  
 ALL BEARINGS AND COORDINATES ARE BASED ON THE NEVADA STATE PLANE COORDINATE SYSTEM, WEST ZONE (NAD 83/94). HIGH ACCURACY REFERENCE NETWORK (HARN) POINTS ARE DETERMINED USING REAL TIME KINEMATIC (RTK) GPS OBSERVATIONS WITH CORRECTIONS FROM A NEARBY CONTINENTAL SHORE STATION (CSSB). THE BEARING BETWEEN CORNERS 'SSB2' AND CORNERS 'SSB7' IS TAKEN AS THE BEARING BETWEEN CORNERS 'SSB2' AND CORNERS 'SSB7'. DIMENSIONS SHOWN ARE GROUND DISTANCES. CORNERED OBJECTS SHOWN ARE GROUND DISTANCES.

**BASIS OF ELEVATIONS:**  
 NEVADA STATE PLANE COORDINATE SYSTEM, WEST ZONE (NAD 83/94)



VICINITY MAP  
 SCALE: NTS



Sheet Number	Sheet Title
CS-0	TITLE SHEET
CS-1	GENERAL NOTES
CS-2	DEMO
CS-3	SITE PLAN
CS-4	GRADING
CS-5	SIGNAGE AND STRIPING
CS-6	DETAILS
CS-7	DETAILS
CS-8	DETAILS
1-15	SIGNAL DESIGN

**CITY OF RENO CITY COUNCIL**  
 HILARY SCHEIVE, MAYOR  
 JERRY BRENKUS, CLERK  
 JENNY BRENKUS, COUNCIL MEMBER  
 MADAM DURR, COUNCIL MEMBER  
 MEGHAN EBBY, COUNCIL MEMBER  
 MEGHAN EBBY, COUNCIL MEMBER  
 KATHLEEN TAYLOR, COUNCIL MEMBER

HILARY SCHEIVE, MAYOR \_\_\_\_\_ DATE \_\_\_\_\_

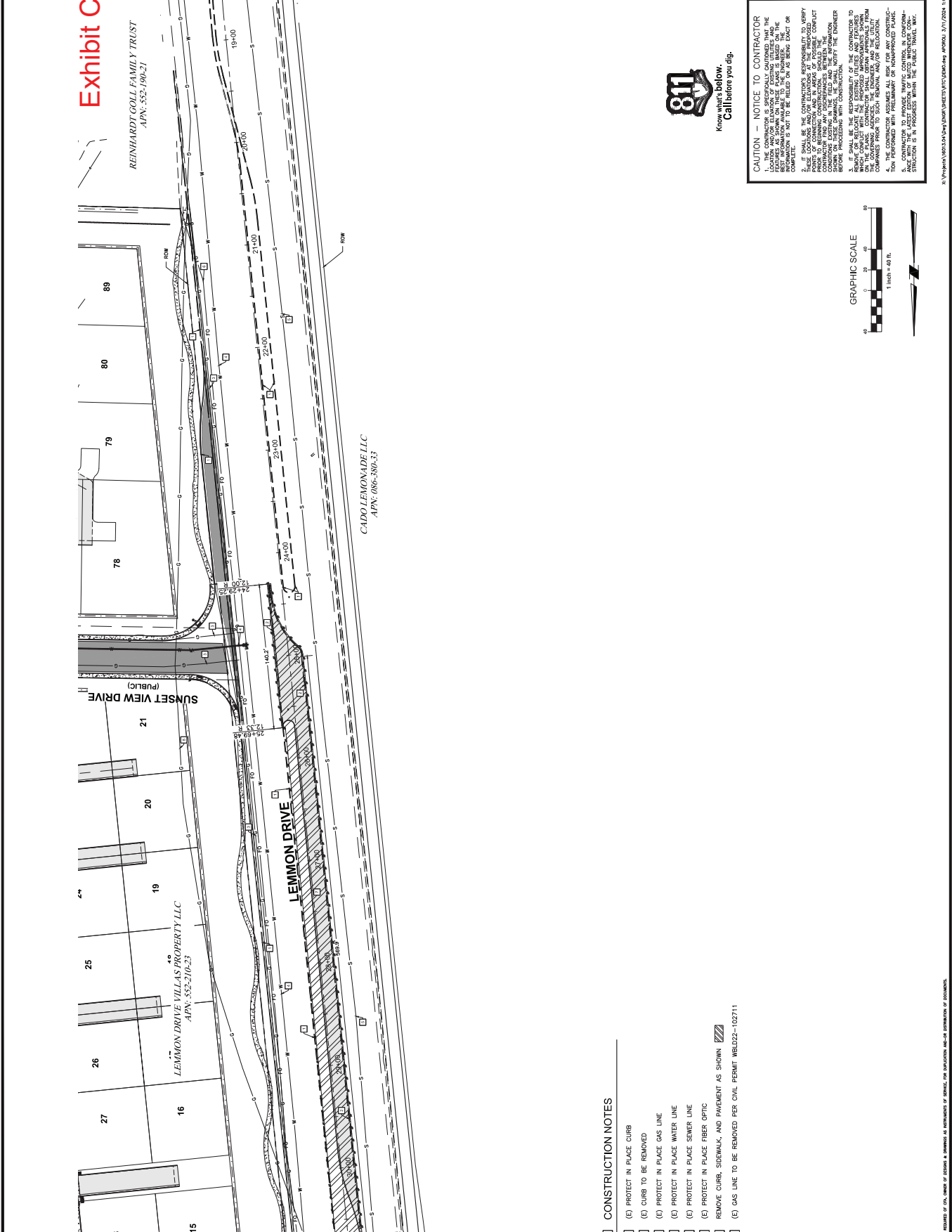
JOHN FLANSBERG, P.E., DEPUTY PUBLIC WORKS DIRECTOR \_\_\_\_\_ DATE \_\_\_\_\_

**ENGINEERS STATEMENT:**

I, THE UNDERSIGNED, AS AN ENGINEER, HEREBY CERTIFY THAT I AM A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF NEVADA AND THAT I AM A MEMBER OF THE PROFESSIONAL ENGINEERS OF THE STATE OF NEVADA.

KATHLEEN MEYER, P.E.  
 CFA, A BOWMAN COMPANY



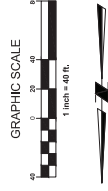


**Exhibit C**  
 REINHARDT GOLL FAMILY TRUST  
 APN: 552-190-21

LEMMON DRIVE VILLAS PROPERTY LLC  
 APN: 552-210-23

CADO LEMMON DE LLC  
 APN: 686-380-33

- CONSTRUCTION NOTES**
- 1 (E) PROTECT IN PLACE CURB
  - 2 (E) CURB TO BE REMOVED
  - 3 (E) PROTECT IN PLACE GAS LINE
  - 4 (E) PROTECT IN PLACE WATER LINE
  - 5 (E) PROTECT IN PLACE SEWER LINE
  - 6 (E) PROTECT IN PLACE FIBER OPTIC
  - 7 REMOVE CURB, SIDEWALK, AND PAVEMENT AS SHOWN
  - 8 (E) GAS LINE TO BE REMOVED PER CIVIL PERMIT #BL022-102711



**CAUTION — NOTICE TO CONTRACTOR**  
 1. THE CONTRACTOR IS SPECIFICALLY ADVISED THAT THE EXISTING UTILITIES AND CONDITIONS SHOWN ON THESE PLANS ARE BASED ON THE INFORMATION PROVIDED TO THE ENGINEER AND THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL UTILITIES AND CONDITIONS BEFORE PROCEEDING WITH CONSTRUCTION.  
 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE APPLICABLE AGENCIES PRIOR TO COMMENCING CONSTRUCTION.  
 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE APPLICABLE AGENCIES PRIOR TO COMMENCING CONSTRUCTION.  
 4. THE CONTRACTOR ASSUMES ALL RISK FOR ANY CONSTRUCTION PROCEEDING WITH INFORMATION OR INFORMATION PROVIDED HEREON.  
 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE APPLICABLE AGENCIES PRIOR TO COMMENCING CONSTRUCTION.  
 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE APPLICABLE AGENCIES PRIOR TO COMMENCING CONSTRUCTION.  
 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE APPLICABLE AGENCIES PRIOR TO COMMENCING CONSTRUCTION.  
 8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE APPLICABLE AGENCIES PRIOR TO COMMENCING CONSTRUCTION.  
 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE APPLICABLE AGENCIES PRIOR TO COMMENCING CONSTRUCTION.  
 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE APPLICABLE AGENCIES PRIOR TO COMMENCING CONSTRUCTION.



TRAFFIC SIGNAL LEMMON DR ESTATES  
 DEMO  
 CIVIL IMPROVEMENT PLANS  
 LEMMON DR. STA. 20+00 - 30+73  
 NEVADA

REVISIONS	DATE	BY	REASON



CFA a Bowman Company  
 LAND SURVEYORS  
 CIVIL ENGINEERS  
 LAND USE PLANNERS  
 1150 CORPORATE BLVD. | RENO, NV 89502  
 775-85-1150 MAIN | CFARNO.COM

NO.	DATE	BY	REVISIONS

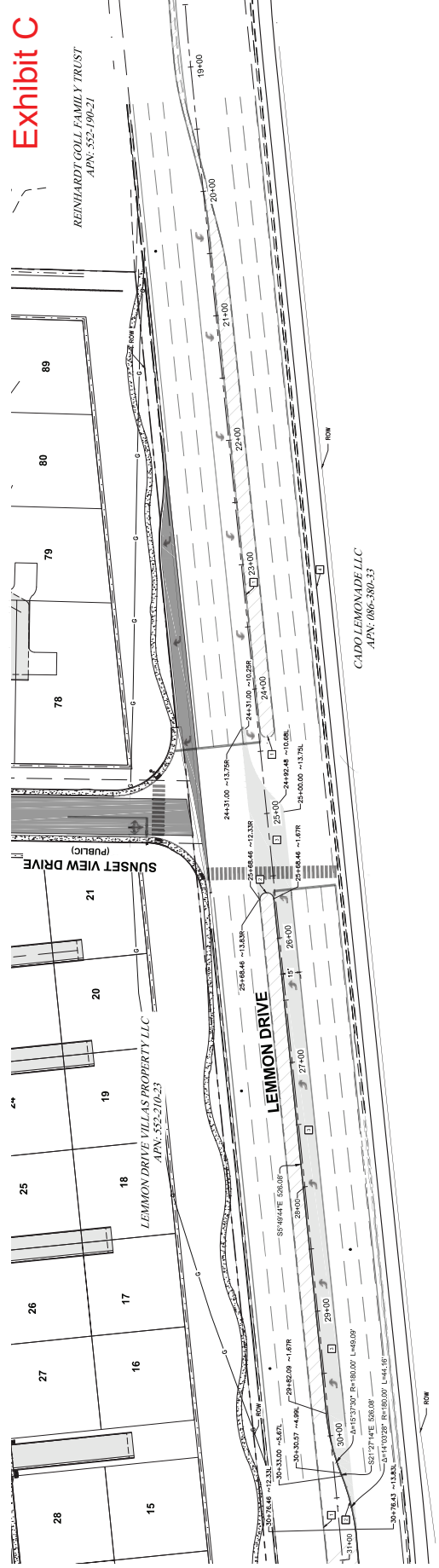


CFA a Bowman company  
 CIVIL ENGINEERS  
 LAND SURVEYORS  
 1715 CORPORATE BLVD | RENO, NV 89502  
 775-956-1150 MAIN | CFARENO.COM

TRAFFIC SIGNAL LEMMON DR ESTATES  
 SITE PLAN  
 LEMMON DR, STA. 20+00 - 30+73  
 NEVADA

DESIGNED BY: [Signature]  
 CHECKED BY: [Signature]  
 DATE: 5/11/2024

SHEET  
**C9.3**  
 24

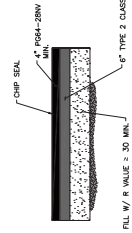


**Exhibit C**  
 REINIARDY GOLL FAMILY TRUST  
 APN: 552-190-21

CADOLEMONADE LLC  
 APN: 0865-300-33

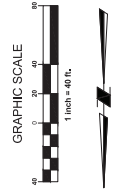
- CONSTRUCTION NOTES**
- 1 (E) MEDIAN CURB PROTECT IN PLACE
  - 2 (P) RAISED MEDIAN CURB (9.9)
  - 3 (P) PAVEMENT AS SHOWN (SEE PAVEMENT SECTION PER THIS SHEET)
  - 4 (E) SIDEWALK

- CHIP SEAL NOTE:**
- 1. THE DOUBLE CHIP SEAL SHALL BE 3" SCREENINGS ON 1/2" SCREENINGS. THE 1/2" SCREENINGS SHALL BE GRADE 2.
  - 2. THE EMULSIFIED ASPHALT USED FOR THE CHIP SEAL SHALL BE LUCRS-2H. THE THEORETICAL APPLICATION OF THE EMULSIFIED ASPHALT SHALL BE 0.38 GAL/5000. THE EMULSIFIED ASPHALT FOR THE 3" SCREEN SHALL BE 0.38 GAL/5000.
  - 3. THE FOG SEAL ON TOP OF DOUBLE CHIP SEAL SHALL BE 0.10 GAL/5000. THEORETICAL APPLICATION OF 0.10 GAL/5000.



1  
**C9.3**  
 N.T.S.  
 PAVEMENT SECTION

**CAUTION - NOTICE TO CONTRACTOR**  
 1. THE CONTRACTOR IS SPECIFICALLY ADVISED THAT THE FEATURES AND DIMENSIONS ON THESE PLANS ARE BASED ON THE INFORMATION PROVIDED TO THE ENGINEER AND THE CONTRACTOR'S OBLIGATION IS TO BE HELD IN THE EXACT OR COMPLETE.  
 2. THE CONTRACTOR'S RESPONSIBILITY IS TO VERIFY THESE CONDITIONS AND/OR DIMENSIONS AT THE PROPOSED SITE PRIOR TO BEGINNING CONSTRUCTION. SHOULD THE CONTRACTOR IDENTIFY ANY DISCREPANCIES OR INCONSISTENCIES IN THE CONDITIONS EXISTING IN THE FIELD AND THE INFORMATION PROVIDED TO THE ENGINEER, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING.  
 3. THE CONTRACTOR SHALL OBTAIN APPROVALS FROM THE APPLICABLE JURISDICTIONS AND AGENCY BEFORE COMMENCING CONSTRUCTION.  
 4. THE CONTRACTOR ASSUMES ALL RISK FOR ANY CONSTRUCTION PERFORMED WITH INFORMATION OR INFORMATION PROVIDED HEREIN. THE CONTRACTOR SHALL OBTAIN APPROVALS FROM THE APPLICABLE JURISDICTIONS AND AGENCY WITH THE LATEST EDITION OF ALL APPLICABLE REGULATIONS AND STANDARDS WITHIN THE PUBLIC TRAIL, INC.



NOTHING HEREIN CONSTITUTES A CONTRACT. THE CONTRACT SHALL BE THE LATEST EDITION OF ALL APPLICABLE REGULATIONS AND STANDARDS WITHIN THE PUBLIC TRAIL, INC.

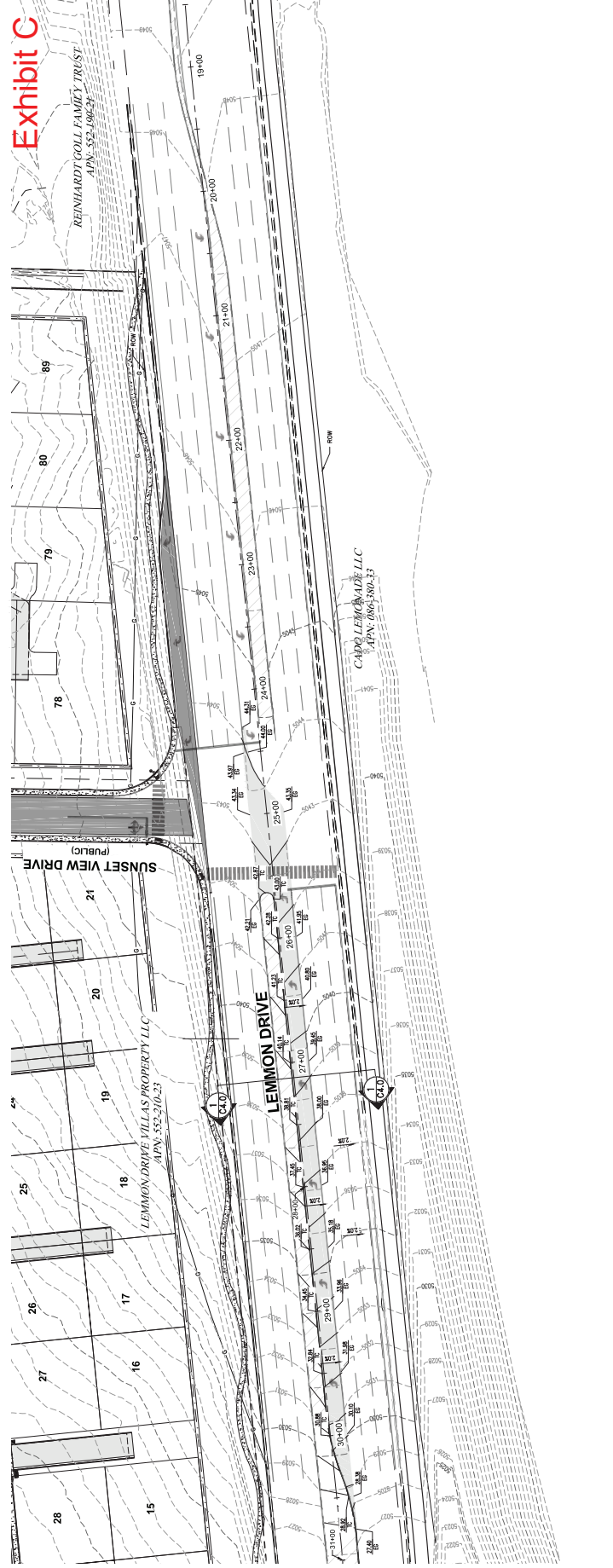


REVISIONS	DATE	BY	MARK



CFE a Bowman company  
 LAND SURVEYORS  
 CIVIL ENGINEERS  
 1150 CORPORATE BLVD. | FLEMING, NY 89502  
 775-956-1150 MAIN | CFARENO.COM

TRAFFIC SIGNAL LEMMON DR ESTATES  
 GRADING  
 LEMMON DR. STA. 20+00 - 30+73  
 NEWADA  
 DESIGNED BY: [Signature]  
 CHECKED BY: [Signature]  
 DATE: 5/11/2024

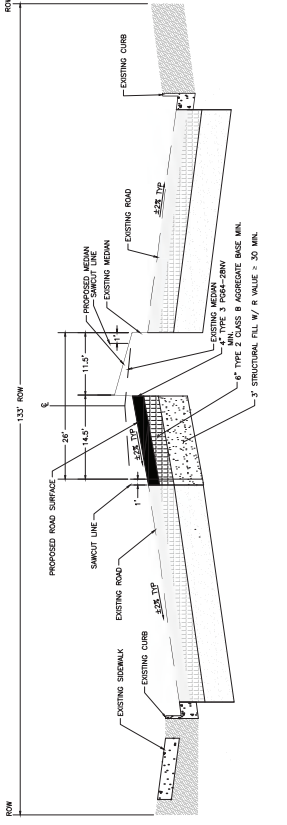


**Exhibit C**

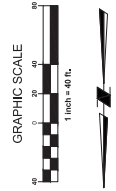
REINARDT COLL FAMILY TRUST  
 APN: 552-1902-27

CHAPPEL LEMMON DR LLC  
 APN: 08653002-33

LEMMON DRIVE TILLAS PROPERTY LLC  
 APN: 552-210-23



LEMMON DR TURN POCKET SECTION  
 C9.4 N.T.S.



- GRADING NOTES**
1. ADD 5000' TO ALL SPOT ELEVATIONS 00-50, ADD 4900' TO ALL SPOT ELEVATIONS 81-99.
  2. ALL EXCESS OR UNSUITABLE MATERIAL SHALL BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS OR IN APPROVED AREAS ON THE GRADING PLAN.
  3. FG CONTOURS AND SPOT ELEVATIONS ARE SHOWN FOR CONTRACTOR REFERENCE.
  4. SHOWINGS AND MARKINGS SHALL COMPLY WITH ADA STANDARDS.
  5. SHOULD ANY CURB OR GRADE OF A NATIVE AMERICAN BE DISCOVERED DURING SITE DEVELOPMENT, WORK SHALL TEMPORARILY STOP AND THE AREA SHALL BE PROTECTED. LOCAL, STATE, AND FEDERAL REGULATIONS AS WELL AS THE STATE HISTORIC PRESERVATION OFFICE SHALL BE IMMEDIATELY NOTIFIED PER NYS 361.10.
  6. MECHANICAL SOPE STABILIZATION IS TO BE USED FOR SLOPES STEEPER THAN 3:1 WHEN ROCK RAMP IS USED FOR SLOPE STABILIZATION. ROCK RAMP SHALL BE PLACED TO A MINIMUM DEPTH OF 12 INCHES. A DIAMETER ROCK OF GREATER.
  7. CONTACT ENGINEER FOR COORDINATION IF EXISTING GRADE DOESNT MATCH WHAT IS SHOWN.

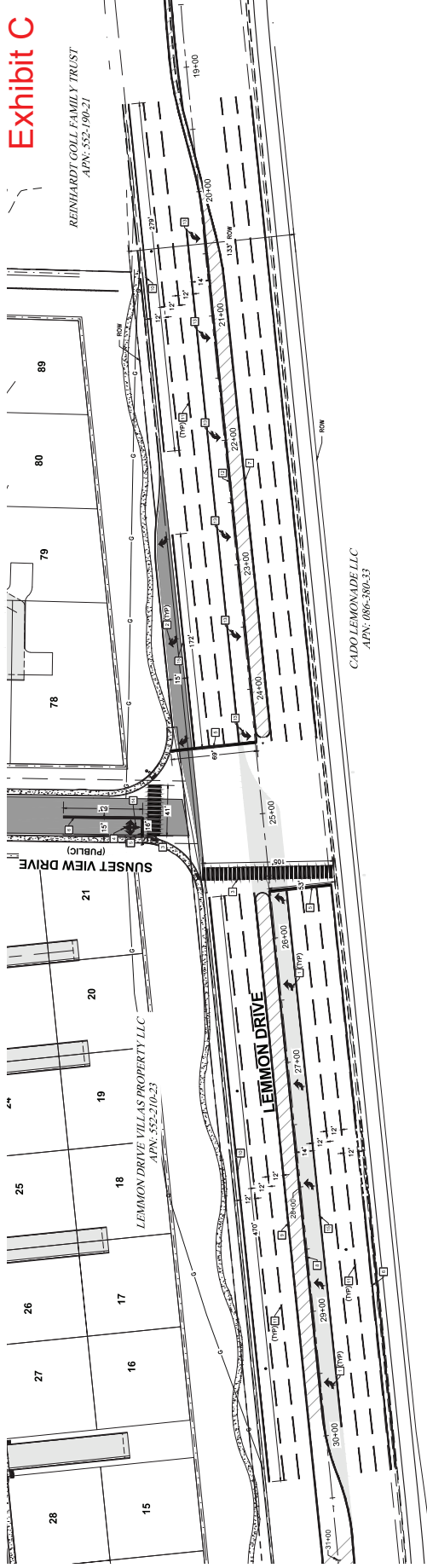
**CAUTION — NOTICE TO CONTRACTOR**

1. THE CONTRACTOR IS SPECIFICALLY ADVISED THAT THE FEATURES AND CONDITIONS ON THESE PLANS TO BE USED ON THE PROJECT ARE BASED ON THE INFORMATION PROVIDED TO THE ENGINEER AND THAT THE INFORMATION IS NOT TO BE RELIED ON BEING EXACT OR COMPLETE.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THESE CONDITIONS AND/OR ELEVATIONS AT THE PROPOSED LOCATION PRIOR TO BEGINNING CONSTRUCTION. SHOULD THE CONTRACTOR DISCOVER ANY DISCREPANCIES BETWEEN THE CONDITIONS EXISTING IN THE FIELD AND THE INFORMATION PROVIDED ON THESE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE RESULTS OF ANY TESTS OR ANALYSES OF THE SOILS AND/OR MATERIALS TO BE USED ON THE PROJECT. THE CONTRACTOR SHALL OBTAIN APPROVALS FROM THE ENGINEER PRIOR TO USING ANY MATERIALS OR METHODS THAT ARE DIFFERENT FROM THOSE SPECIFIED ON THESE PLANS.

4. THE CONTRACTOR ASSUMES ALL RISK FOR ANY CONSTRUCTION PERFORMED WITH NEGLIGENT OR UNREASONABLE CARE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS WITH THE LATEST EDITION OF ALL APPLICABLE REGULATIONS AND WITH THE LATEST EDITION OF ALL APPLICABLE CODES. PROVISIONS IN ALL APPLICABLE REGULATIONS AND CODES SHALL PREVAIL OVER ANY PROVISIONS WITHIN THESE PLANS.



**Exhibit C**  
 REINIARDY GOLL FAMILY TRUST  
 APN: 552-190-21

CADOLEMONADE LLC  
 APN: 086-300-33

LEMMON DRIVE VILLAS PROPERTY LLC  
 APN: 552-210-23

SUNSET VIEW DRIVE (Public)

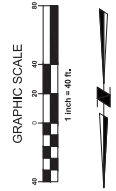
**E CONSTRUCTION NOTES**

- 1 (P) LEFT TURN ARROW PAVEMENT MARKING
- 2 (P) RIGHT TURN ARROW PAVEMENT MARKING
- 3 (P) INTERNATIONAL CROSSWALK, 24" WHITE STRIPING (REF. DTL R-420 SHEET 03-7)
- 4 (P) LEFT TURN AND RIGHT TURN LANE ARROW
- 5 (P) 2' WHITE STOP BAR
- 6 (P) 4" SOLID DOUBLE YELLOW STRIPING WITH 12" SPACING 1' FROM MEDIAN CURB
- 7 (P) 4" SOLID YELLOW 12" LF SPACING 1' FROM MEDIAN CURB
- 8 (P) 4" SOLID YELLOW 12" LF SPACING 1' FROM MEDIAN CURB
- 9 (P) 4" SOLID YELLOW 12" LF SPACING 1' FROM MEDIAN CURB
- 10 (E) 8" SOLID WHITE
- 11 (E) 4" DASHED WHITE
- 12 (E) 4" SOLID YELLOW 1148 LF SPACING 1' FROM CURB
- 13 (P) FUTURE LEFT TURN ARROW
- 14 (P) FUTURE THROUGH LANE ARROW
- 15 (P) 8" SOLID WHITE



Know what's below.  
 Call before you dig.

**CAUTION - NOTICE TO CONTRACTOR**  
 1. THE CONTRACTOR IS SPECIFICALLY ADVISED THAT THE FEATURES AND CONDITIONS SHOWN ON THESE PLANS ARE BASED ON THE INFORMATION PROVIDED TO THE ENGINEER AND THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACCURACY OF THE INFORMATION PROVIDED TO THE ENGINEER AND THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACCURACY OF THE INFORMATION PROVIDED TO THE ENGINEER AND THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACCURACY OF THE INFORMATION PROVIDED TO THE ENGINEER AND THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACCURACY OF THE INFORMATION PROVIDED TO THE ENGINEER AND THE CONTRACTOR.



REVISIONS	DATE	MARK	DESCRIPTION



**Exhibit C**

1. CURB RAMP SLOPE FOR CURB ASSESSORS SHALL NOT BE EXCEEDED IN THE AREA OF THE BASE OF THE CURB RAMP OR LANDING AREAS. OBSTRUCTIONS SUCH AS METERS, JUNCTION BOXES, POLES, THE HYDRANTS, ETC. ARE PROHIBITED. THE LOCATION AND DIMENSIONS MAY BE ADJUSTED UPON APPROVAL OF THE ENGINEER.

2. NO UP SHALL BE PERMITTED AT THE CURB RAMP SLOPE TO OUTER PAVEMENT AREA OF THE CURB RAMP.

3. PLANAR FINISH SURFACE SHALL BE FLUSH WITH THE TOP OF THE CURB RAMP.

4. ROUGH IRON TEXTURE ON CURB RAMP AND WINGS.

5. DETECTABLE WARNING SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND SHALL BE PLACED ON MIN. SIX (6") INCHES OF P.C.C.

6. ALL SLOPE RATES ARE RELATIVE TO LEVEL AND SHALL COMPLY WITH THE PUBLIC RIGHT-OF-WAY ACCESSIBILITY GUIDELINES (PROW) STANDARDS, CURRENT VERSION.

7. GUTTER SHALL MAINTAIN POSITIVE DRAINAGE TO PREVENT FLOODING.

8. DETECTABLE WARNING SHALL BE TYPE 2, CLASS B CRACKED AGGREGATE BASE. MATERIALS SHALL CONFORM TO SSPC SECTION 200.

9. PORTLAND CEMENT CONCRETE (P.C.C.) SHALL BE 4000 PSI MIN. COMPRESSIVE STRENGTH AT 28 DAYS. ALL CURB CONCRETE SHALL HAVE A COARSE AGGREGATE CONFORMING TO SIZE 3/4" MAX. ALL CURB SHALL CONFORM TO THE REQUIREMENTS OF SECTION 337.10 OF SSPC. ALL MATERIALS SHALL CONFORM TO SSPC.

10. CONTRACTORS SHALL CORRECT ANY GRADE CONFLICT WITH EXISTING BOXES. THE ENGINEER SHALL BE NOTIFIED OF ANY CONFLICTS BEFORE THE START OF CONSTRUCTION. CONTRACTORS SHALL MAINTAIN POSITIVE DRAINAGE TO PREVENT FLOODING.

11. HORIZONTAL DISTANCE TO BE DETERMINED IN THE FIELD, UPON APPROVAL OF THE ENGINEER. SUBJECT TO PROW REQUIREMENTS. CURB AT THE BACK OF WALK MAY BE KEPT. A TRANSITION FROM PEDESTRIAN RAMP IMPROVEMENTS, TRANSITION SECTIONS SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

12. CONTRACTOR SHALL CONSTRUCT ROUNDED CURBS WHERE THEY INTERSECT. ROUNDS SHALL BE MEASURED FROM FACE OF CURB. CURBS THAT INTERSECT AT A POINT SHALL NOT BE ALLOWED.

**NOTES - PEDESTRIAN RAMP**  
DRAWING NO. R-106G  
APPROVED BY: [Signature] DATE: 3/7/2024

**TRUNCATED DOMES DETAIL**  
DRAWING NO. R-106F  
APPROVED BY: [Signature] DATE: 3/7/2024

**PEDESTRIAN RAMP MIDBLOCK - TYPE 1**  
DRAWING NO. R-106D  
APPROVED BY: [Signature] DATE: 3/7/2024

**SIDEWALK DETAIL**  
DRAWING NO. R-104A  
APPROVED BY: [Signature] DATE: 3/7/2024

**POLE STREET NAME SIGN**  
DRAWING NO. R-413E  
APPROVED BY: [Signature] DATE: 3/7/2024

**TRAFFIC & LIGHTING CONDUIT TRENCH**  
DRAWING NO. R-404  
APPROVED BY: [Signature] DATE: 3/7/2024

**MONUMENTS**  
DRAWING NO. R-124  
APPROVED BY: [Signature] DATE: 3/7/2024

**P.C.C. MEDIAN CURBS**  
DRAWING NO. R-110  
APPROVED BY: [Signature] DATE: 3/7/2024





CITY OF RENO

LEMMON DRIVE & SUNSET VIEW DRIVE  
SIGNAL DESIGN **Exhibit C**

OCTOBER 2023

CONSTRUCTION DRAWINGS

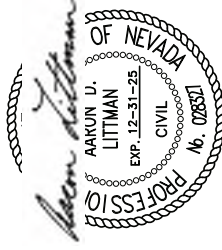
CITY OF RENO

- HILLARY SCHIEVE ..... MAYOR
- DEVON RESSE ..... AT-LARGE
- JENNY BREKHUS ..... WARD 1
- NAOMI DUERR ..... WARD 2
- MIGUEL MARTINEZ ..... WARD 3
- MEGHAN EBERT ..... WARD 4
- KATHLEEN TAYLOR ..... WARD 5

APPROVALS

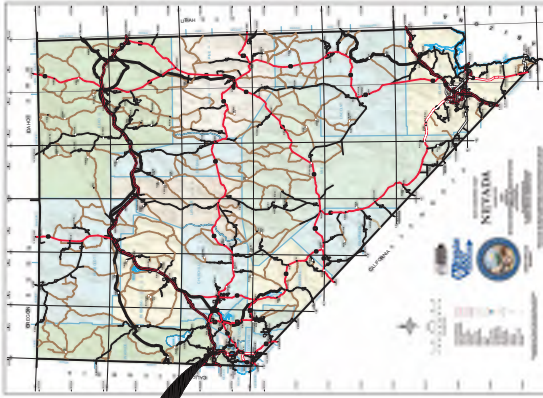
PROFESSIONAL ENGINEER \_\_\_\_\_ DATE \_\_\_\_\_

KERRIE KOSKI, PE \_\_\_\_\_ DATE \_\_\_\_\_  
PUBLIC WORKS DIRECTOR



3/6/2024  
DATE

STATE MAP



PROJECT LOCATION

VICINITY MAP



SHEET INDEX		
SHEET TITLE	DRAWING NO.	SHEET NO.
<b>GENERAL</b>		
STATE MAP, VICINITY MAP, AND SHEET INDEX	G-01	1
GENERAL NOTES	G-02	2
GENERAL DETAILS	G-03	3
GENERAL POLE DETAILS	G-04	4
GENERAL POLE FOUNDATION	G-05	5
FIBER SPLICE DIAGRAM	G-06	6
RENO TRENCH PULLBOX	G-07	7
<b>CIVIL</b>		
ALIGNMENT LAYOUT	AL-01	8
SIGNAL NOTES	SG-01	9
SIGNAL NOTES	SG-02	10
SIGNAL NOTES	SG-03	11
EQUIPMENT PLAN	SG-04	12
CONDUIT PLAN	SG-05	13
SIGNAL SCHEDULES	SG-06	14

**Exhibit C**



**WARNING**  
 0 12  
 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

SCALE  
 HORIZONTAL: N/A  
 VERTICAL: N/A

REV.	DATE	BY	DESCRIPTION

REVISIONS

2165 West Grove Parkway  
 Suite 100  
 Reno, Nevada, UT 84402  
 (801) 783-5100



LEMMON DRIVE ESTATES SIGNAL DESIGN  
 STATE MAP, VICINITY MAP AND SHEET INDEX

REVISED	DATE	PROJECT NO.
TCC	03/2024	UT-5586-22
DRAWN	DATE	SHEET NO.
TCC	03/2024	1 OF 14
CHECKED	DATE	DRAWING NO.
ADL	03/2024	G-01

**GENERAL NOTES**

1. THE PLANS/SPECIFICATIONS STRUCTURE SHALL BE AS FOLLOWS, IN ORDER OF HIERARCHY:  
 REVISION 8 EDITION  
 THE PROJECT PLANS, SPECIFICATIONS, AND DETAILS STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (ORANGE BOOK) 2012.  
 CITY OF RENO "TRAFFIC SIGNAL FIBER OPTIC INTERCONNECT SPECIFICATIONS" (CURRENT EDITION)  
 CITY OF RENO "TRAFFIC SIGNAL CONTROLLER CABINET SPECIFICATIONS" (CURRENT EDITION)  
 CITY OF RENO STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION (CURRENT EDITION)  
 NDOT STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION, 2020
2. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (ORANGE BOOK) 2012, REVISION 8 EDITION, NDOT 2014 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION CURRENT EDITION, NDOT 2020 NATIONAL PLANS FOR ROAD AND BRIDGE CONSTRUCTION, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) CURRENT EDITION, THE NATIONAL ELECTRIC CODE (NEC), AND THE NATIONAL ELECTRIC SAFETY CODE (NESS).
3. THE PRECISE LOCATIONS OF UNDERGROUND UTILITIES ARE UNKNOWN. CALL FOR UTILITY LOCATES AT LEAST 48 HOURS PRIOR TO DIGGING AND PROCEED WITH CAUTION.
4. THE CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR AND/OR REPLACE ALL UTILITIES AND FEATURES DAMAGED BY THE CONTRACTOR'S ACTIVITIES, INCLUDING LANDSCAPING AND IRRIGATION SYSTEMS. TO THEIR PRE-CONSTRUCTION CONDITION AS DETERMINED BY THE ENGINEER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DOCUMENT AND NOTIFY THE ENGINEER OF DAMAGED EQUIPMENT AND/OR FACILITIES PRIOR TO BEGINNING WORK.
5. CONCRETE FLOWWORK SHALL BE REMOVED AND REPLACED, IN KIND TO EXISTING JOINT LINES TRENCHING THROUGH AND PATCHING OF, SIDEWALK PANEL(S) OR CURB & GUTTER WILL NOT BE PERMITTED.
6. CONDUCTORS AND CABLES DAMAGED BY THE CONTRACTOR SHALL BE REPLACED, IN FULL LENGTH, AT NO COST TO THE OWNING AGENCY. SPLICING OF CONDUCTORS WILL NOT BE PERMITTED.
7. CONTRACTOR TO REMOVE ALL CONDUCTORS AND CABLES NOT USED IN THE FINISHED CONFIGURATION.
8. ALL SIGNAL EQUIPMENT, HARDWARE, UNBROKEN PULL BOX LIDS, AND SIGNS REMOVED THROUGH THE COURSE OF WORK SHALL BE DELIVERED TO THE MAINTENANCE AGENCY'S CORPORATE YARD, NO DIRECT PAYMENT.
9. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL INCIDENTAL ITEMS AND PERFORM ALL WORK AS NECESSARY TO COMPLETE FULLY FUNCTIONAL TRAFFIC SIGNAL SYSTEMS. PAYMENT FOR INCIDENTAL ITEMS SHALL BE INCLUDED WITHIN THE BID ITEMS OUTLINED IN THE OFFICIAL BID SCHEDULE.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR PROCESSING AND OBTAINING ALL "CHANGE OF LOOP" AND SERVICE APPLICATIONS THROUGH NV ENERGY. COORDINATE ALL CONNECTION/DISCONNECTIONS WITH NV ENERGY, NO DIRECT PAYMENT.
11. A CITY OF RENO EXCAVATION AND ENCROACHMENT PERMIT (SEE PERMIT) IS REQUIRED FOR THE PROJECT. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY ADDITIONAL FEES WHICH INCLUDE SIGNAL MAINTENANCE FEES. THE CONTRACTOR SHALL COMPLY WITH ALL CONDITIONS OF THE PERMIT.

1. THE CONTRACT WORK SHALL INCLUDE ALL CABINET AND EQUIPMENT WIRING RECONFIGURATIONS AS NECESSARY TO COMPLETE FULLY FUNCTIONAL SYSTEMS.
2. ALL EQUIPMENT SHALL BE IN ACCORDANCE WITH CITY OF RENO "TRAFFIC SIGNAL CONTROLLER CABINET SPECIFICATIONS" AND CITY OF RENO "TRAFFIC SIGNAL FIBER OPTIC INTERCONNECT SPECIFICATIONS" EXCEPT AS SPECIFICALLY MODIFIED IN THESE PLANS. NEW CONTROLLER ASSEMBLIES SHALL INCLUDE ALL SIGNAL CONTROLLER EQUIPMENT AS REQUIRED BY THE CITY'S EQUIPMENT SPECIFICATIONS.
3. PROGRAMMING OF CONTROLLERS AND MMUs WILL BE PERFORMED BY CITY OF RENO STAFF ONLY. DELIVER CONTROLLERS AND MMUs TO CITY OF RENO TRAFFIC ENGINEERING & OPERATIONS AT 1640 EAST COMMERCIAL ROW, RENO NV, AT LEAST TWENTY-ONE DAYS PRIOR TO SIGNAL TURN-ON. CONTACT TIM HENDRICKS AT (775) 657-4988 AT LEAST SEVEN DAYS PRIOR TO DESIRED PICK-UP FOR INSTALLATION.
4. NOTIFY THE CITY OF RENO, KURT DIETRICH (775) 394-3334, AT LEAST 72 HOURS PRIOR TO BEGINNING WORK ON THE SIGNAL SYSTEMS AND PRIOR TO TURN-ONS.
5. SIGNAL TURN-ONS SHALL BE SCHEDULED BETWEEN 5:00 AM AND 4:00 PM ON MONDAY THROUGH THURSDAY, COORDINATE WITH CITY OF RENO SIGNAL TECHNICIANS.
6. TRAFFIC SIGNAL CABINET SHALL BE MAZTEC TS2 TYPE 1 OR TYPE 2 SYSTEM READY CABINET. ALL NEW CABINETS SHALL HAVE 16 POSITION MAIN PANEL, FLASH TRANSFER RELAY MODULES FOR ALL PORTS, INCLUDE THE "D" PANEL AND "D" CABLE (D-CABLE ONLY REQUIRED FOR TS2 TYPE 1 CABINETS), HAVE ALL PLUG-INS, AND BE WIRED FOR EMERGENCY VEHICLE PREEMPTION (EVP).
7. TRAFFIC SIGNAL CONTROLLER SHALL BE MAZTEC COMMANDER M12, TYPE 2 NEMA AND NTPIC COMPLIANT CONTROLLER WITH ETHERNET. MAJUNCTION MANAGEMENT UNIT (MMU) SHALL BE EDI MMU LCD WITH ETHERNET.
8. METERED UNDERGROUND ELECTRICAL SERVICE SHALL BE TESCO CONTROLS MODEL 27-2BBS WITH PIGGY-BACK UPS BATTERY BACKUP SYSTEM OR APPROVED EQUAL. CONSTRUCT SERVICE CABINET FOUNDATION PER MANUFACTURER'S BOLT PATTERN TEMPLATE. CABINET SHALL BE UL 508 RATED. METERED SERVICES SHALL HAVE OWNING AGENCY LABELS INDICATING CITY OWNERSHIP AND ADDRESS. SYSTEM SHALL HAVE AN EVENT COUNTER AND TIMER. UPS SYSTEM SHALL BE 24 VOLT PROVIDING A MINIMUM OF 2 HOURS OF FLASHING ALL RED. SEE INDIVIDUAL METERED SERVICE EQUIPMENT SCHEDULES FOR FURTHER DETAIL.
9. SERVICE CONDUCTORS FROM METER CONTROLLER CABINET SHALL BE (Ø) #6 AWG THN-2 OR LARGER. SEE CONDUIT & CONDUCTOR SCHEDULES ON SHEETS 55-06.
10. SIGNAL HEAD BRACKETS SHALL HAVE ADEQUATE EXTENSIONS TO ALLOW SIGNAL HEAD ADJUSTMENT/TROTATION FOR DIRECT ALIGNMENT TO THE STOP BAR AT THE VIEWING LANE.
11. THE LOCATION OF NEW SIGNAL HEADS SHALL BE APPROVED BY THE ENGINEER AND OWNING AGENCY. SIGNAL HEAD TENONS SHALL BE FIELD WELDED, BY A CERTIFIED WELDER, AND LOCATED IN THE CENTER OF THE VIEWING LANE, UNLESS APPROVED OTHERWISE.
12. SIGNAL CABLE SHALL CONFORM TO MSA SPEC 19-1 OR 20-1 AND BE COLOR CODED. CABLES SHALL BE RUN FROM CONTROLLER TO POLE TERMINAL BLOCK WITHOUT SPLICING. IN-POLE CONDUCTORS PAST THE TERMINAL BLOCK SHALL BE INDIVIDUAL #14 AWG THHN/THWN-2 OR APPROVED EQUAL.

**SIGNAL EQUIPMENT SPECIFICATIONS:**

13. CABLES WITH 15 OR MORE CONDUCTORS SHALL HAVE #10 AWG NEUTRAL.
14. PULL BOXES SHALL NOT BE INSTALLED IN PEDESTRIAN RAMPS WITHOUT THE ENGINEER'S PRIOR APPROVAL.
15. THE FINAL LOCATION OF ALL POLES, PULL BOXES, CABINETS, AND CONDUIT RUNS SHALL BE APPROVED BY THE ENGINEER PRIOR TO THE INSTALLATION. CONDUIT RUNS SHOWN IN THE PLANS ARE SCHEMATIC FOR THE PURPOSE OF PLAN LEGIBILITY.
16. A FACTORY REPRESENTATIVE FROM THE MANUFACTURER OF THE SIGNAL CABINET, CONTROLLER, MMU, AND ALL NEW OR MODIFIED SIGNAL EQUIPMENT MUST BE PRESENT FOR ALL SIGNAL TURN-ONS.
17. ALL NEW HARDWARE, EXCEPT FOR SIGNAL POLES AND MAST ARMS, SHALL HAVE A FLAT BLACK POWDERCOAT FACTORY FINISH. COLOR AND FINISH SHALL BE APPROVED BY THE OWNING AGENCY PRIOR TO ORDERING.
18. ALL NEW PEDESTRIAN PUSH BUTTONS FOR TRAFFIC SIGNALS SHALL BE 2" DIAMETER. UTILIZE POLARA INS2 NAVIGATOR 2 WIRE PUSH BUTTON STATION (INS2 P85) SYSTEM OR APPROVED EQUAL. THE COLOR OF THE STATION SHOULD BE YELLOW. NEW PUSH BUTTON STATIONS SHALL HAVE 9"X15" SIZE PEDESTRIAN (R10-3a) SIGNS AND MUST HAVE CORRESPONDING STREET NAME IN BRAILLE OR RAISED PRINT. THE ARROW SHALL POINT IN THE DIRECTION OF THE CROSSING AND THE SIGN SHALL BE ALIGNED WITH THE CROSSWALK.
19. PREEMPTION EQUIPMENT SHALL BE GLOBAL TRAFFIC TECHNOLOGIES (GTT) OPTICOM MODEL 721 DETECTORS, MODEL 764 4-CANNEL CARD RACK, AND OPTICOM 138 DETECTOR CABLE OR APPROVED EQUAL SYSTEM FROM TOMAR ELECTRONICS.
20. THE LUMINAIRE FIXTURES SHALL BE CREE STR-LW3MHT08EULS1700 OR APPROVED EQUAL. PHOTO CELL TO BE LOCATED IN METERED SERVICE PEDESTAL. BACKLIGHT CONTROL SHIELDS SHALL BE INSTALLED ON ALL NEW LUMINAIRE.
21. BELL CAMERA SHALL BE GRIDS SMART GS 2 FISHEYE CAMERA VIDEO DETECTION SYSTEM WITH PERFORMANCE PLUS, INCLUDING BICYCLE DETECTION. MODULE AND SHALL INCLUDE ALL EQUIPMENT AND MATERIALS NECESSARY FOR A COMPLETELY FUNCTIONAL SYSTEM.
22. DETECTION ZONES, INCLUDING ADJUSTMENT DETECTION (NOT SHOWN ON THE PLANS) SHALL BE SET BY THE CITY OF RENO.
23. WIRELESS RADIO SYSTEM SHALL BE ETHERWAN EASYLINK SYSTEM OR APPROVED EQUAL. RADIO SYSTEM SHALL INCLUDE ANTENNAS, ETHERNET SWITCHES, CABLES, FITTINGS, AND POWER ADAPTERS FOR A FULLY FUNCTIONAL WIRELESS RADIO SYSTEM COMPATIBLE WITH EXISTING CITY OF RENO COMMUNICATION SYSTEMS. CONTRACTOR TO OBTAIN CITY APPROVAL PRIOR TO ORDERING.
24. THE LOCATION OF PAVEMENT MARKING SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION. LONGITUDINAL STRIPING SHALL BE WATERBORNE TRAFFIC PAINT. TRANSVERSE STRIPING AND SYMBOLS SHALL BE PERFORMED THERMOPLASTIC.
25. NEW SIGNS SHALL BE 3M DIAMOND GRADE (D63) WITH 3M CLEAR TRANSPARENT OVERLAY #1170 OR APPROVED EQUAL.

FOR ALL SIGNAL POLES, EXCEPT FOR TYPE 1 POLES, ATTACH A RECTANGULAR CORROSION-RESISTANT METAL IDENTIFICATION TAG, USING STAINLESS STEEL RIVETS. THE TAG SHALL BE PLACED ABOVE THE HANDLE NEAR THE BASE OF THE POLE. THE LETTERING OF THE TAG SHALL BE EITHER DEPRESSOR OR RAISED, 1/2" TALL, LEGIBLE, AND READABLE AFTER THE POLE IS COATED AND INSTALLED. THE FOLLOWING INFORMATION SHALL BE ON THE TAG: POLE TYPE AND "2014 NDOT SPEC".

**CITY OF RENO INTERCONNECT:**

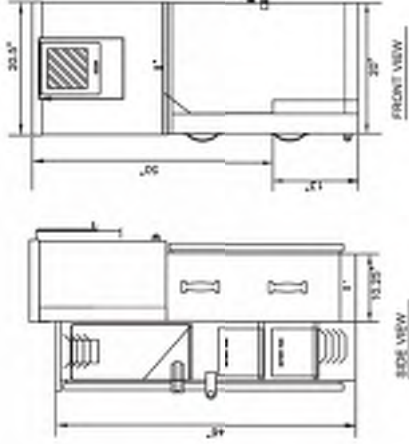
- FIBER OPTIC INTERCONNECT SYSTEM SPECIFICATIONS
1. FIBER OPTIC CABLE SHALL BE TESTED PRIOR TO INSTALLATION AND CERTIFICATION TO THAT EFFECT SUPPLIED. THE CABLE MAY BE TESTED BY CITY OF RENO PERSONNEL AT THE CONTRACTOR'S EXPENSE, PRIOR TO ACCEPTANCE.
  2. ALL FIBER AT CONTROLLER CABINET END SHALL HAVE 50 FEET OF TAIL TO REACH THE FIBER SPLICING TRAILER.
  3. ALL FIBER RUNS SHALL HAVE A FIVE (5) FOOT LOOP COILED IN EACH PULL BOX.
  4. NO BENDS GREATER THAN SIX TIMES THE FIBER DIAMETER SHALL BE ACCEPTED.
  5. ALL CONDUITS SHALL HAVE A PULL STRING INSTALLED FOR FUTURE USE. MINIMUM TENSILE STRENGTH SHALL BE 500 LBS.
  6. ANY CONDUIT CONTAINING FIBER ONLY, SHALL HAVE AN ORANGE #14 LOCATE WIRE INSTALLED.
  7. CITY FORCES WILL FURNISH AND INSTALL MODEMS, CORNING CABLE SYSTEMS, JUMPERS, MULTIMEDIA OUTLET BOXES, AND FIBER MODULES.
  8. CITY FORCES WILL INSTALL ALL FIBER ENDS AND TERMINATE FIBER OPTIC CABLES IN THE CABINET.
  9. CITY FORCES WILL TEST AND VERIFY FIBER CONNECTIONS TO THE FIBER OPTIC COMPRESSOR SYSTEM.



3/6/2024  
DATE

5	REVISIONS	SCALE	WARNING	2102 West Grove Parkway Pleasant Grove, UT 84002 (801) 783-5100	DESIGNED	DATE	PROJECT NO.
4		HORIZONTAL	0 1/2 1		TCC	03/2024	UT-5526-22
3		VERTICAL	N/A		DRAWN	03/2024	SHEET NO.
2			N/A		CHECKED	03/2024	2 OF 14
1					ADL	03/2024	DRAWING NO.
GENERAL NOTES					G-02		
<b>LEMMON DRIVE ESTATES SIGNAL DESIGN</b>							





TESCO 27-22HHS - METIRED SERVICE PEDESTAL WITH BATTERY BACKUP (TYPE III - AF) DETAIL

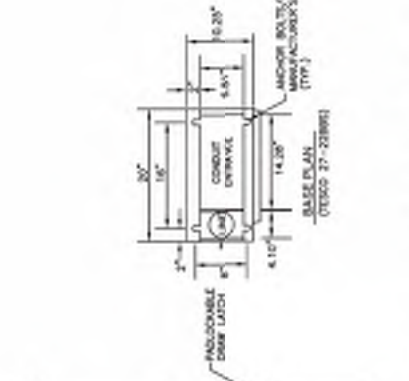
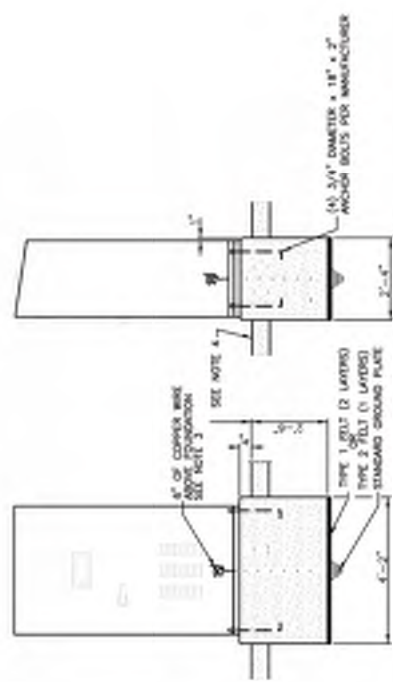
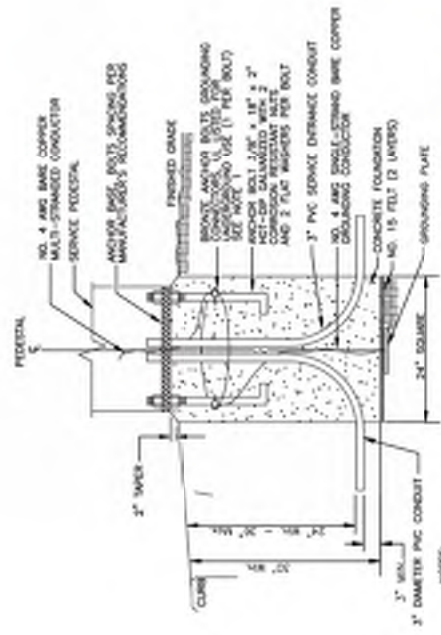


Exhibit C



- NOTES:**
1. ALL CONCRETE SHALL EXTEND ABOVE FOUNDATION A MINIMUM OF 2" AND BARE REINFORCING SHALL BE INSTALLED PRIOR TO POURING FOUNDATION. CONCRETE SHALL BE A MINIMUM OF 2" ACH.
  2. ALL CABINETS SHALL BE FINISHED WHITE ON THE INSIDE AND OUTSIDE (FACTOR FINISHED).
  3. 1/2" x 1/4" GROUND ROD MAY BE SUBSTITUTED IN LIEU OF COPPER WIRE.
  4. WHEN NOT PLACED AT BACK OF SLOTTING, A 4'-2" x 3" x 4" FRONT SLAB SHALL BE CONSTRUCTED IN FRONT OF THE CABINET DOOR. THE FRONT SLAB SHALL BE PLACED ON 3" OF TYPE 2 CLASS B CRUSHED AGGREGATE BASE. THE AGGREGATE BASE SHALL BE COMPACTED TO THE RELATIVE COMPACTED BASE. THE TOP OF FRONT SLAB SHALL BE 4" BELOW TOP OF THE CABINET FOUNDATION AND NOT HAVE A SLOPE GREATER THAN 2:08 IN ANY DIRECTION.

TYPE R-44 CABINET FOUNDATION DETAIL



- NOTES:**
1. BASE COPPER GROUNDING SHALL BE LOCATED AROUND ANCHOR BOLTS ONE THE AND CONNECTED TO EACH ANCHOR BOLT BEFORE CONTINUING DOWN TO THE GROUNDING PLATE.
  2. CONDUIT COVERS SHALL BE PARALLEL WITH CURB.
  3. IN AREAS WHERE ROW PERMITS, THE CONCRETE BASE SHALL BE PLACED AT THE BACK EDGE OF AREAS WHERE ROW PERMITS.
  4. CONDUIT COVERS SHALL OPEN TOWARD THE STREET WHEN CABINET IS LOCATED AT BACK OF MAIN CABINET COVER SHALL OPEN PARALLEL TO THE SIDEWALK FROM THE DIRECTION OF TRAFFIC WHEN LOCATED WITHIN THE SIDEWALK.
  5. GROUND PLATE SHALL BE MADE OF NONFERROUS MATERIALS (TYPICALLY BRASS OR COPPER).

SERVICE PEDESTAL FOUNDATION DETAIL



DATE: 3/6/2024

PROJECT NO: UT-5526-22

SHEET NO: 3 OF 14

DRAWING NO: G-03

NO.	DATE	BY	REVISIONS
5			
4			
3			
2			
1			

DESIGNED	TCC	DATE	03/2024
DRAWN	TCC	DATE	03/2024
CHECKED	ADL	DATE	03/2024

LEMMON DRIVE ESTATES SIGNAL DESIGN		PROJECT NO	UT-5526-22
GENERAL DETAILS		SHEET NO	3 OF 14
		DRAWING NO	G-03

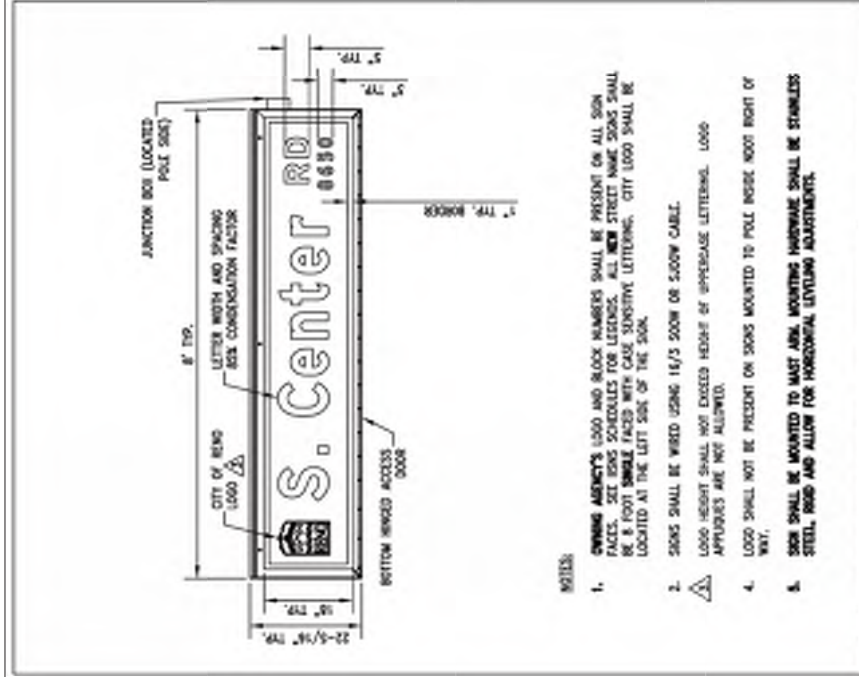
2102 West Grove Parkway Pleasant Grove, UT 84062 (801) 793-6100	
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SCALE	VERTICAL	N/A
SCALE	HORIZONTAL	N/A

WARNING: 1/2" SCALE  
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE



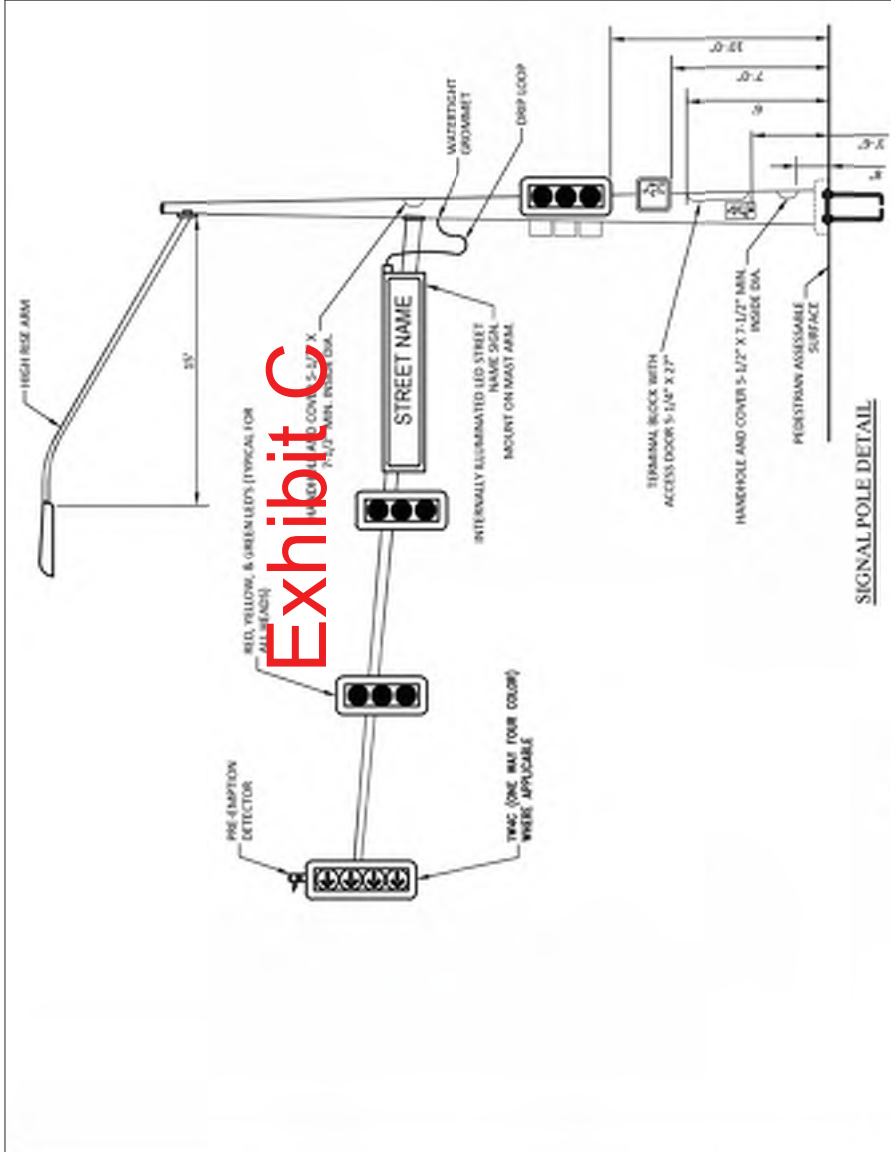
- NOTES:**
1. **OWNING AGENCY'S LOGO AND BLOCK NUMBERS SHALL BE PRESENT ON ALL SIGN FACES. SEE SIGN SCHEDULES FOR LEGENDS. ALL NEW STREET NAME SIGNS SHALL BE 8 FOOT SQUARE FACED WITH CASE SENSITIVE LETTERING. CITY LOGO SHALL BE LOCATED AT THE LEFT SIDE OF THE SIGN.**
  2. **SIGNS SHALL BE WIRED USING 16/5 500W OR 500W CABLE. LOGO HEIGHT SHALL NOT EXCEED HEIGHT OF UPPERCASE LETTERING. LOGO APPLIERS ARE NOT ALLOWED.**
  3. **LOGO SHALL NOT BE PRESENT ON SIGNS MOUNTED TO POLE INSIDE FOOT RIGHT OF WAY.**
  4. **SIGN SHALL BE MOUNTED TO MAST ARM. MOUNTING HORIZONTAL SHALL BE STAINLESS STEEL, RIGID AND ALLOW FOR HORIZONTAL LEVELING ADJUSTMENTS.**

STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION	DRAWING NO.
<b>POLE STREET NAME SIGN</b>	R-413E
APPROVED BY: [Signature]	DATE: 3/23/24

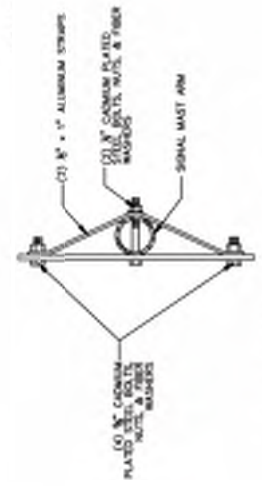
INTERNALLY ILLUMINATED STREET NAME SIGN  
FOR USE WITHIN THE CITY OF RENO ONLY



DATE: 3/6/2024



**SIGNAL POLE DETAIL**



**MAST ARM SIGN MOUNTING DETAIL**

2152 West Grove Parkway Pleasant Grove, UT 84062 (801) 783-5100	LEMMON DRIVE ESTATES SIGNAL DESIGN	DESIGNED: TCC	PROJECT NO: UT-5526-22
GENERAL POLE DETAILS		DRAWN: TCC	SHEET NO: 4 OF 14
		CHECKED: ADL	DRAWING NO: G-04

**WARNING**

SCALE: HORIZONTAL N/A, VERTICAL N/A

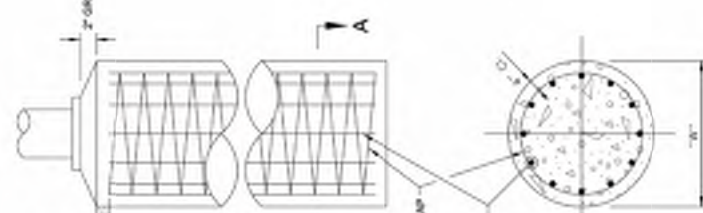
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

NO.	DATE	BY	REVISIONS

**NOTES:**

- All dimensions are nominal.
- Rubber tapes shall be rolled after application.
- When PVC tape is used as a final layer, joint Embedded splice with mechanical resulting sealing.
- Concrete shall be Class A or AA.
- Foundations which are greater than or equal to 12 feet in depth shall be constructed in accordance with Section 505. For all other foundations, the design shall be in accordance with Section 505.1 or Class AA. Foundation concrete shall conform to Standard Specification Section 501. When groundwater is encountered, construct foundations according to Subsection 505.03.02, and place concrete according to Subsection 505.03.13.
- All poles shall be installed in a hole 10.1 ft or shall be installed in a hole 15.4 ft or shall be installed in a hole 15.4 ft for Foundation.

**Exhibit C**

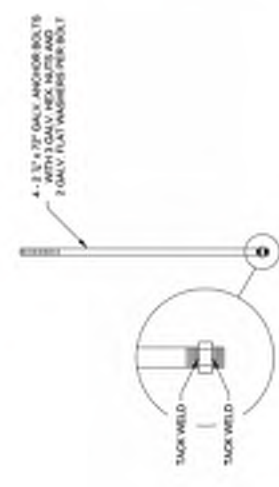


- Connect bonding wire to the reinforcing steel cage near the midpoint of the foundation or anchor bolts.
- Ground plate shall be made of nonferrous material, brass or copper. Grounding plate grounding resistance shall not exceed 100Ω. Add additional grounding as needed. Supply final grounding test results to Engineer.

**PILE FOUNDATION TABLE**

POLE TYPE	MAST ARM LENGTH	**10'	**12'	**14'	ANCHOR BOLTS EACH
1A AND 1B	N/A	3'	3'	3'	4
7	N/A	3'	3'	3'	4
ALL	ALL	SEE DETAIL ITS-11A	SEE DETAIL ITS-11A	SEE DETAIL ITS-11A	SEE DETAIL ITS-11A
STEEL POST, 30 FT	N/A	SEE DETAIL ITS-12A	SEE DETAIL ITS-12A	SEE DETAIL ITS-12A	SEE DETAIL ITS-12A
STEEL POST, 30 FT	45'	SEE DETAIL ITS-12A	SEE DETAIL ITS-12A	SEE DETAIL ITS-12A	SEE DETAIL ITS-12A
30A AND 35A	45'	SEE DETAIL ITS-12A	SEE DETAIL ITS-12A	SEE DETAIL ITS-12A	SEE DETAIL ITS-12A
30B AND 35B	45'	SEE DETAIL ITS-12A	SEE DETAIL ITS-12A	SEE DETAIL ITS-12A	SEE DETAIL ITS-12A
30B AND 35B	210'	SEE DETAIL ITS-12A	SEE DETAIL ITS-12A	SEE DETAIL ITS-12A	SEE DETAIL ITS-12A

\*\* USE EFL OVERHANGS SHOWN ON PLANS FOR ALL FOUNDATIONS.  
 \*\* NOT APPLICABLE WHEN MOUNTED ON STRUCTURES.  
 \* WHEN "W" = 2" USE 6" NAIL BARS.  
 \* WHEN "W" = 3" USE 8" NAIL BARS.  
 \* WHEN "W" = 4" USE 10" NAIL BARS.



**WARNING**

0 1/2 1

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

**REVISIONS**

NO.	DATE	BY	DESCRIPTION
1			
2			
3			
4			

SCALE

HORIZONTAL N/A

VERTICAL N/A

2102 West Grove Parkway  
 Pleasant Grove, UT 84062  
 (801) 783-5100

**Horrocks**

LEMMON DRIVE ESTATES SIGNAL DESIGN

GENERAL POLE FOUNDATION

DESIGNED: TOC  
 DRAWN: TOC  
 CHECKED: TOC  
 ADL

PROJECT NO: UT-5526-22  
 SHEET NO: 5 OF 14  
 DRAWING NO: G-05

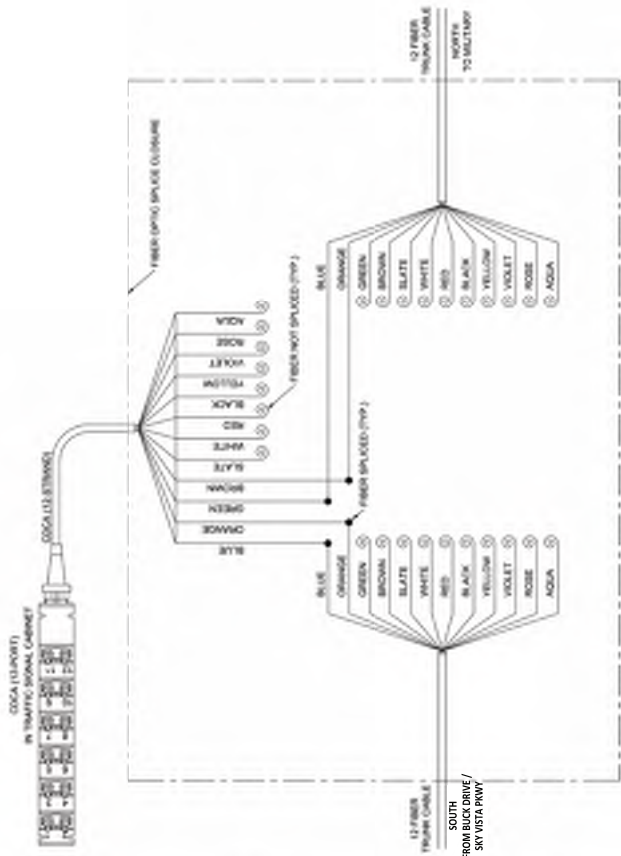
**PROFESSIONAL SEAL**

AARON D. LITTMAN  
 EXP. 12-31-25  
 CIVIL  
 No. 028501

DATE: 3/6/2024



# Exhibit C



LEMMON DRIVE & SUNSET VIEW DRIVE  
SPICE DIAGRAM



DESIGNED	TCC	DATE	03/2024	PROJECT NO.	UT-5526-22
DRAWN	TCC	DATE	03/2024	SHEET NO.	6 OF 14
CHECKED	ADL	DATE	03/2024	DRAWING NO.	G-06

LEMMON DRIVE ESTATES SIGNAL DESIGN

FIBER SPICE DIAGRAM

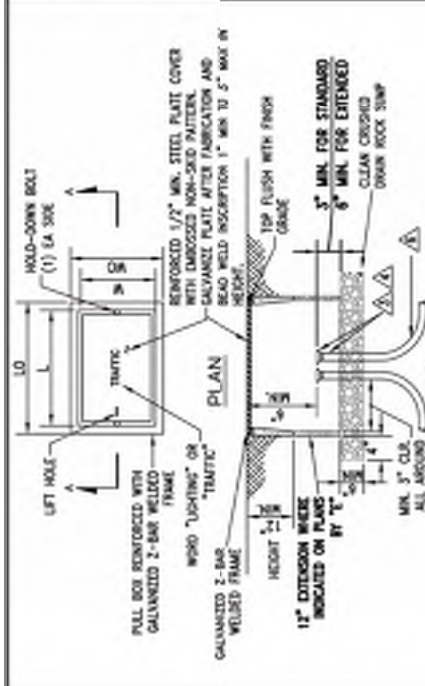
2152 West Grove Parkway  
Pleasant Grove, UT 84062  
(801) 783-5100



**WARNING**  
0 1/2 1  
IF THIS BAR DOES NOT  
MEASURE 1" THEN  
DRAWING IS NOT TO SCALE

NO.	DATE	BY	REVISIONS
5			
4			
3			
2			
1			

SCALE	N/A
HORIZONTAL	N/A
VERTICAL	N/A



TRAFFIC RATED PULL BOX MINIMUM DIMENSION TABLE

PULL BOX NO.	CONCRETE BOX L0	COVER (STEEL COVER) L1	W	H	EXTENSION E
No. 3-1/2	19"	12"	14-1/2"	8-3/4"	12"
No. 5	26"	15"	20-1/2"	10-1/2"	12"
No. 7	35"	22"	30"	17"	12"
No. 9	53"	35"	47-3/4"	30"	14"

**NOTES:**

- TRAFFIC RATED PULL BOXES SHALL BE USED AT ALL TRAFFIC SIGNALS, TRAFFIC LIGHTS, AND TRAFFIC SIGNALS. TRAFFIC RATED PULL BOXES SHALL ONLY BE USED AS APPROVED BY CITY OF RENO TRAFFIC ENGINEER.
- TRAFFIC RATED PULL BOXES SHALL BE USED IN VEHICULAR AREAS ONLY, INCLUDING, BUT NOT LIMITED TO TRAILER WALK, SERVICE APPROACHES, AND WITHIN PEDESTRIAN RAMPS AT INTERSECTION CURB RETURN OR AS APPROVED BY CITY OF RENO TRAFFIC ENGINEER.
- ALL CONDUIT TERMINATIONS SHALL HAVE A "BALL END" INSTALLATION AND BE SEALED WITH CONDUIT SEALER AFTER WIRE INSTALLATION.
- ALL EXPOSED CONDUIT SHALL BE RIGID PVC SCHEDULE 80, AND SHALL EXTEND TO A MINIMUM DEPTH OF 18 INCHES.
- CONDUIT ENDS SHALL NOT TERMINATE WITHIN A SWEEP SECTION.
- ALL METAL COVERS, METAL 2-BAR FRAME, METAL RINGS OR ANY METALLIC COMPONENT OF A PULL BOX SHALL BE BONDED TO A #6 ANGLE OR LARGER COPPER EQUIPMENT GROUNDING CONDUCTOR. BONDING AMPERS SHALL BE BONDED TO EQUIVALENT TO #6 ANGLE COPPER AND MINIMUM 25" IN LENGTH AND SHALL BE ATTACHED WITH EXOTHERMIC WELDING. PROCESS IS A MOLECULAR BONDING WITH HIGH COPPER CONTENT ALLOYS (IN EXCESS OF 92%), HIGH CORROSION RESISTANCE AND HIGH CONDUCTIVITY, AND APPROVED GROUNDING LUG.

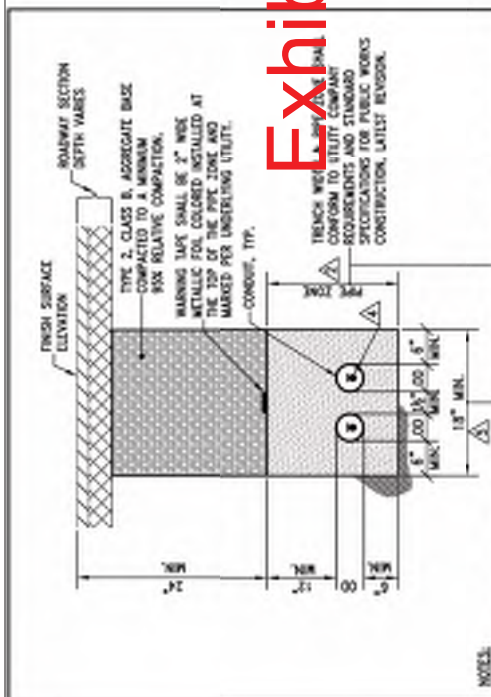
STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION

**TRAFFIC RATED PULL BOX**

DRAWING NO. R-413J

APPROVED BY: JF | DATE: 11/2013

MODIFIED BY HORROCKS.



**NOTES:**

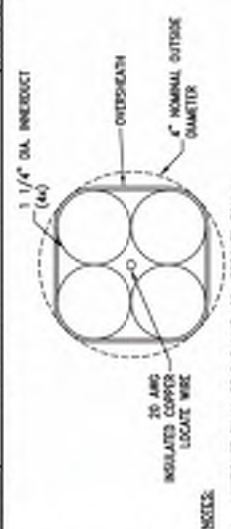
- ALL MATERIALS AND INSTALLATION PROCEDURES SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPWC), LATEST REVISION.
- BEDDING MATERIAL SHALL CONFORM TO DRIVING-UTILITY COMPANY REQUIREMENTS AS APPROVED BY THE CITY OF RENO. FOR CITY OWNED TRAFFIC AND LIGHTING UTILITIES, BEDDING MATERIAL SHALL BE CLASS A, COMPACTED TO MINIMUM PER RELATIVE COMPACTION. MATERIALS SHALL CONFORM TO SSPWC SECTION 200.
- CEMENT SLURRY BEDDING/MACKELL SHALL NOT BE USED.
- INSTALL LOCATE WIRE AND MAKE TAPE FOR ALL FIBER, UNISEL, OR FIBER-OPTIC CONDUITS. LOCATE WIRE SHALL BE 12 GAUGE WIRE TERMINATED AT END & POLYESTER PULLING TAPE SHALL BE WASTE TAPE OR APPROVED EQUAL.
- ALL DIMENSIONS SHALL CONFORM TO THE LATEST O.S.H.A. REQUIREMENTS.

STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION

**TRAFFIC & LIGHTING CONDUIT TRENCH**

DRAWING NO. R-404

APPROVED BY: JF | DATE: 11/2013



**NOTES:**

- MULTI-DUCT SHALL BE DUALINE, OR APPROVED EQUAL.
- INNERDUCT SHALL HAVE A WALL THICKNESS OF 208 11 OR THICKER.
- EACH INNERDUCT SHALL HAVE A DIFFERENT COLOR. THE COLOR SCHEME SHALL BE THE SAME FOR ALL MULTIDUCT RINGS. INNERDUCTS SHALL HAVE SMOOTH INNER WALLS.
- OVERSHEATH SHALL BE HOPE. MULTIDUCT DETAIL.

STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION

**TRAFFIC & LIGHTING CONDUIT TRENCH**

DRAWING NO. R-404

APPROVED BY: JF | DATE: 11/2013

**Exhibit C**

**PROFESSOR**

AARON D. LITTMAN

EXP. 12-31-25

CIVIL

No. 028871

OF NEVADA

3/6/2024

DATE

ISSUED	DATE	PROJECT NO.
TCC	03/2024	UT-5526-22
PRWN	03/2024	SHEET NO.
CHECKED	03/2024	7 OF 14
ADL	03/2024	DRAWING NO.

LEMMON DRIVE ESTATES SIGNAL DESIGN

RENO TRENCH PULLBOX

2102 West Grove Parkway  
Pleasant Grove, UT 84062  
(801) 783-5100

**Horrocks**

WARNING

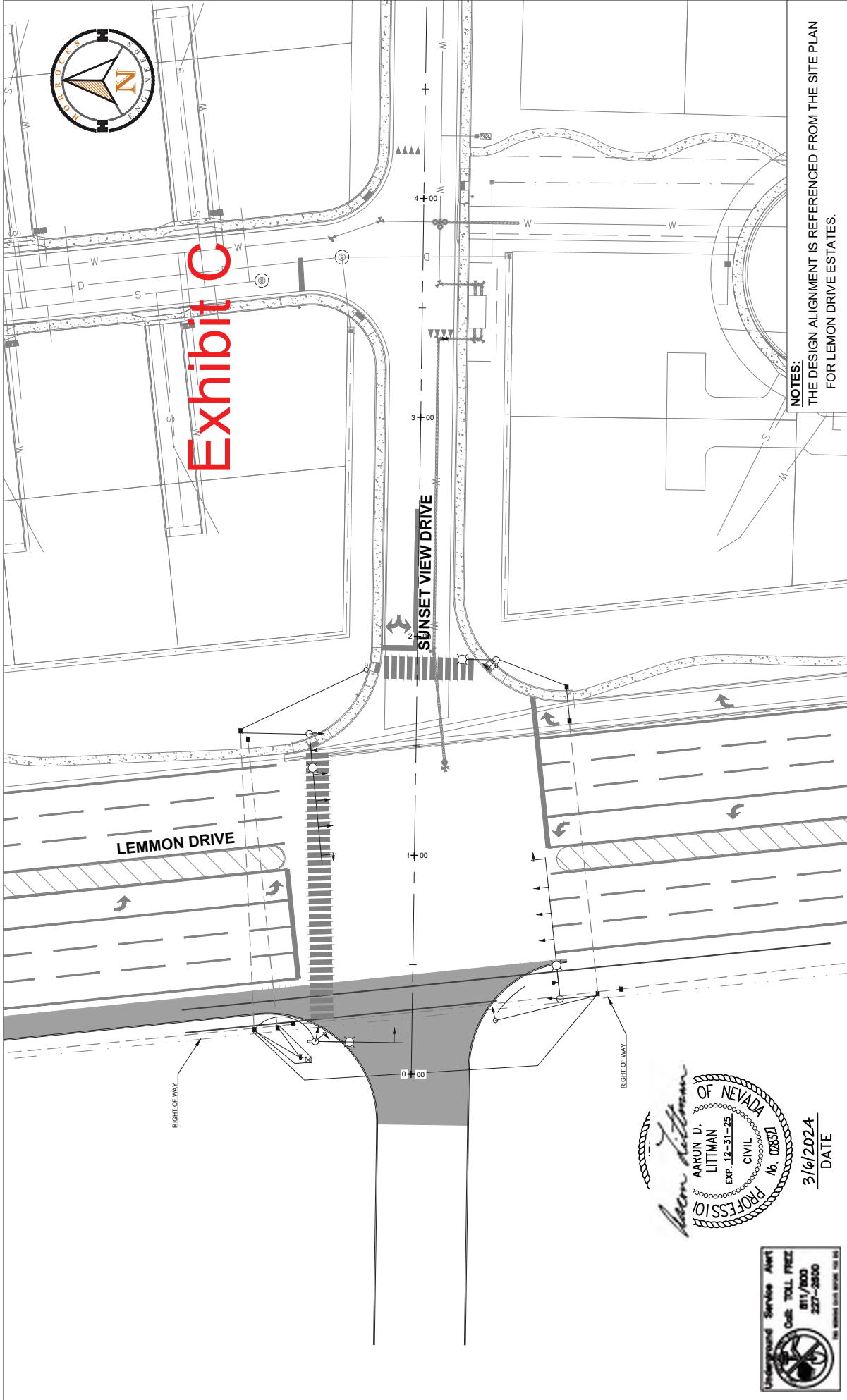
SCALE

VERTICAL N/A

VERTICAL N/A

REVISIONS

NO. DATE BY DESCRIPTION



**NOTES:**  
 THE DESIGN ALIGNMENT IS REFERENCED FROM THE SITE PLAN  
 FOR LEMMON DRIVE ESTATES.

DESIGNED	TCC	DATE	03/2024	PROJECT NO.	UT-5526-22
DRAWN	TCC	DATE	03/2024	SHEET NO.	8 OF 14
CHECKED	ADL	DATE	03/2024	DRAWING NO.	AL-01

**LEMMON DRIVE ESTATES SIGNAL DESIGN**  
**ALIGNMENT LAYOUT**

2102 West Grove Parkway  
 Pleasant Grove, UT 84062  
 (801) 783-5100



**WARNING**  
 0 1/2 1  
 IF THIS BAR DOES NOT  
 MEASURE, THEN  
 DRAWING IS NOT TO SCALE

SCALE  
 HORIZONTAL 1" = 40'  
 VERTICAL N/A

*Aaron Littman*  
**PROFESSIONAL ENGINEER OF NEVADA**  
 AARON U. LITTMAN  
 EXP. 12-31-25  
 CIVIL No. 00831

DATE  
**3/6/2024**



REV.	DATE	BY	DESCRIPTION	REVISIONS

**CITY OF RENO GENERAL TRAFFIC SIGNAL NOTES**

- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING SUBSTRUCTURES, WHETHER SHOWN OR NOT, AND TO NOTIFY ALL UTILITY COMPANIES TO VERIFY IN THE FIELD THE LOCATION OF THEIR INSTALLATIONS AT LEAST 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL PROTECT ALL SUBSTRUCTURES FROM DAMAGE, AS WELL AS ANY OTHER PUBLIC INFRASTRUCTURE. THE EXPENSE TO REPAIR OR FOR REPLACEMENT SHALL BE BORNE BY THE CONTRACTOR.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (LATEST EDITION) AND THE STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION (LATEST EDITION), AND SUPPLEMENTED BY THE STATE OF NEVADA STANDARD PLANS AND SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION).
- THE LOCATION OF CONTROLLER, PULL BOXES WITH GROUND RODS, AND CONDUIT RUNS SHALL BE WITHIN THE EXISTING RIGHT-OF-WAY OR ANY EASEMENT GRANTED OUTSIDE THE RIGHT-OF-WAY.
- DESIGN ENGINEER SHALL BE RESPONSIBLE OF THE LOCATION OF ALL ELECTRICAL, SIGNAL POLE, CONTROLLER, CONDUIT, LOOP DETECTOR, AND PULL BOXES. FINAL LOCATIONS ARE TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR AND ANY CHANGES SHALL BE APPROVED BY TRAFFIC ENGINEER.
- CONTROLLERS AND CABINETS SHALL MEET THE REQUIREMENTS OF THE NEMA STANDARD PUBLICATION (LATEST EDITION) AND THE CITY OF RENO SPECIFICATIONS FOR TRAFFIC SIGNAL CONTROLLERS AND CABINETS.
- CONTACT THE PUBLIC WORKS TRAFFIC ENGINEERING DIVISION FOR TRAFFIC-ACTUATED CONTROLLER UNIT SPECIFICATIONS.
- UNLESS SHOWN OTHERWISE, THE CONTROLLER CABINET SHALL BE WIRED FOR EIGHT (8) PHASE OPERATION WITH TWO (2) OVERLAPS AND SHALL BE FURNISHED WITH ALL NECESSARY MODULES, LOAD SWITCHES, AND EQUIPMENT REQUIRED FOR FULL EIGHT (8) PHASE OPERATION WITH TWO (2) OVERLAPS.

ALL NEW SIGNAL POLES WILL HAVE TWO (2) HANDHOLES AND AN ACCESS DOOR FOR THE TERMINAL BLOCK. SEE TRAFFIC SIGNAL POLE DETAIL DRAWING R-413A FOR TRAFFIC SIGNAL EQUIPMENT DIMENSIONS. FOR OTHER POLE DETAILS, SEE THE NEVADA DEPARTMENT OF TRANSPORTATION'S "STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION" (NDOT-SPRBC), LATEST EDITION.

UNLESS SHOWN OTHERWISE, NO. 7 PULL BOX (WITH EXTENSION) SHALL BE USED AT LOCATIONS WHERE CONDUIT RUNS CONTAIN TRAFFIC SIGNAL CABLE OR CARRY POWER. NO. 3-1/2 SHALL ONLY BE USED AS APPROVED BY CITY OF RENO TRAFFIC ENGINEER. TRAFFIC RATED BOX SHALL BE USED IN VEHICULAR AREAS ONLY, INCLUDING, BUT NOT LIMITED TO TRAVEL WAY, DRIVEWAY APPROACHES AND WITHIN PEDESTRIAN RAMPS AT INTERSECTION CURB RETURNS. ALL PULL BOXES WITH METAL LIDS SHALL BE GROUNDED PER TRAFFIC RATED PULL BOX DETAIL.

ALL EXPOSED CONDUIT SHALL BE OF A RIGID PVC SCHEDULE 80 AND SHALL EXTEND TO A MINIMUM DEPTH OF 18 INCHES.

ALL CONDUIT RUNS FOR SIGNAL CABLE SHALL CONSIST OF TWO 3" CONDUITS BETWEEN PULL BOXES AND BETWEEN THE PULL BOXES AND POLES. THERE SHALL BE THREE 3" CONDUITS FROM THE CONTROLLER CABINET TO THE PULL BOXES.

ALL CONDUIT RUNS TERMINATING IN A PULL BOX SHALL HAVE A MINIMUM OF SIX INCHES OF CLEARANCE FROM THE BOTTOM OF THE LID, AND SHALL RISE A MINIMUM OF THREE INCHES ABOVE THE TOP OF THE DRAIN ROCK.

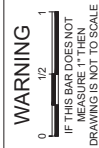
ALL NEW CONDUIT RUNS SHALL HAVE A PULL TAPE.

ALL CONDUIT TERMINATIONS SHALL HAVE A "BELL END" INSTALLATION AND BE SEALED WITH CONDUIT SEALER AFTER WIRE INSTALLATION. CONDUIT ENDS SHALL NOT TERMINATE WITHIN A SWEEP SECTION. ALL CONDUCTORS AND THEIR TERMINATION SHALL BE CLEARLY MARKED ON THE CABINET SCHEMATIC WIRING DIAGRAM.



STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION		DRAWING No.
<b>NOTES -</b>		<b>R-413F</b>
<b>TRAFFIC SIGNALS &amp; POLES</b>		APPROVED BY: JF DATE: 1/2013

MODIFIED BY HORROCKS.



REV. DATE	BY	REVISIONS	
		DESCRIPTION	REASON



2102 West Grove Parkway  
Pleasant Grove, UT 84002  
(801) 783-5100

LEMMON DRIVE ESTATES SIGNAL DESIGN

SIGNAL NOTES

MODIFIED BY HORROCKS.

STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION		DRAWING No.
<b>NOTES -</b>		<b>R-413G</b>
<b>TRAFFIC SIGNALS &amp; POLES</b>		APPROVED BY: JF DATE: 1/2013

15. THE RED, YELLOW AND GREEN INDICATION FOR ALL NEW VEHICULAR SIGNAL HEADS SHALL BE 12 INCH LIGHT EMITTING DIODE (LED) AND INCLUDE "AimGo" TECHNOLOGY. UTILIZE "GELCORE" RX11, "DIALITE" 433 SERIES OR APPROVED EQUAL. ALL PEDESTRIAN SIGNAL INDICATIONS SHALL BE COUNTDOWN "LED" WITH HAND SYMBOL (PORTLAND ORANGE) AND WALKING MAN SYMBOL (LUNAR WHITE).

16. ALL VEHICULAR HEADS SHALL HAVE "TUNNEL" VISORS WITH 4 INCH SLOT AT BOTTOM WITH LOUVERED BACK PLATES. ALL SIGNAL HEADS TO BE MANUFACTURED BY "ECONOLITE", "EAGLE" OR APPROVED EQUAL. IF DIRECTED BY THE ENGINEER, EXTRA BACK PLATES TO BE PROVIDED FOR STAGE HARDWARE SHALL BE ALUMINUM AND HAVE A BLACK FACTORY FINISH. INSTALL RETROREFLECTIVE STRIPS ON BACKPLATES PRIOR TO INSTALLATION.

17. ALL NEW PEDESTRIAN PUSH BUTTONS FOR TRAFFIC SIGNALS SHALL BE 2" DIAMETER. UTILIZE POLARA-INS2 NAVIGATOR 2 WIRE PUSH BUTTON STATION (NS2-PBS) OR APPROVED EQUAL. THE COLOR OF THE STATION SHOULD BE YELLOW. NEW PUSH BUTTON STATIONS SHALL HAVE 9"x15" SIZE PEDESTRIAN (R10-36) SIGNS AND MUST HAVE THE CORRESPONDING STREET NAME IN BRILLE OR RAISED PRINT. THE ALLOWED SIGN POINT IN THE DIRECTION OF THE CROSSING AND THE SIGN SHALL BE PLACED WITH THE CROSS WALK.

18. ALL INTERSECTIONS SHALL HAVE A BATTERY BACK UP SYSTEM. THE SYSTEM SHALL BE MOUNTED TO THE METERED SERVICE CABINET OF THE SYSTEM AND WILL BE A 24 VOLT OR 48 VOLT SYSTEM. THE CABINET SHALL BEAR A 508 UL LABEL. THE SYSTEM SHALL SUPPLY A MINIMUM UNINTERRUPTED CONTINUOUS POWER SUPPLY (UPS) SERVICE FOR UP TO 2 HOURS. THE SYSTEM SHALL FEATURE AN EVENT COUNTER AND TIMER. THE SYSTEM SHALL HAVE A TWO (2) YEAR PARTS AND LABOR TRANSFERABLE WARRANTY TO THE CITY OF RENO. THE UPS UNIT AND THE METERED PEDESTAL SHALL BE DESIGNED AS ONE COMPLETE UNIT. THE UPS SYSTEM SHALL BE A PIGGYBACK DESIGN SYSTEM AND HANG ON THE METERED SERVICE PEDESTAL.

19. WHEN CONTROLLER CABINETS ARE NOT LOCATED IN A SIDEWALK, THEY SHALL HAVE A CONCRETE SERVICE PAD INSTALLED IN FRONT OF THE CABINET, THE SAME WIDTH AS CABINET AND AT LEAST 3 FEET LONG. NO IMPROVEMENTS SHALL BE PERMITTED TO BLOCK CABINET DOOR IN COMPLIANCE WITH NEC. SPRINKLER SYSTEMS SHALL BE DIRECTED AWAY FROM AND NOT ALLOWED TO SPRAY CABINET OR PULL BOXES DIRECTLY.

20. ALL NEW TRAFFIC SIGNALS SHALL BE CONNECTED INTO THE CITY OF RENO'S TRAFFIC SIGNAL CENTRAL COMPUTER SYSTEM VIA THE NEAREST RECEIVER SITE BY FIBER-OPTIC OR AN APPROVED OTHER.

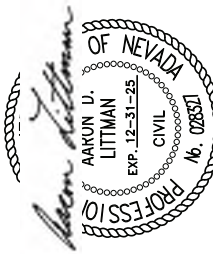
21. FOR FIBER-OPTIC AND EQUIPMENT CONTACT CITY OF RENO TRAFFIC ENGINEERING FOR LATEST SPECIFICATIONS.

22. THE LUMINAIRE FIXTURES SHALL BE GREY STR-LW3MHT08EUSV700 OR APPROVED EQUAL PHOTO CELL TO BE LOCATED IN METERED SERVICE PEDESTAL.

23. PREEMPTION OF SIGNALS BY EMERGENCY VEHICLES SHALL BE PROVIDED BY INSTALLING MODEL 762 PHASE SECTOR DETECTORS WITH THE MODEL 752N PHASE SELECTOR, OR AN APPROVED EQUAL.

24. E60P DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF RENO SUPPLEMENTAL STANDARD DRAWING DETAILS FOR PUBLIC WORKS CONSTRUCTION.

25. THE CONTRACTOR SHALL PROVIDE AN UNDERGROUND SERVICE PEDESTAL. THE MAIN BREAKER SHALL BE 100 AMP MINIMUM (120/240 VAC, 60 HZ, SINGLE PHASE, 3 WIRE) IN ACCORDANCE WITH NDOT STANDARD PLAN T-30.1.6. INDIVIDUAL CIRCUIT BREAKERS SHALL INCLUDE 120 VOLT: 30 AMP 1-POLE CIRCUIT BREAKER FOR SIGNAL; 30 AMP 2-POLE CIRCUIT BREAKER FOR LIGHTING CONTACTOR; 20 AMP 1-POLE CIRCUIT BREAKER FOR STREET LIGHTS; 20 AMP 1-POLE CIRCUIT BREAKER FOR SIGNS; 15 AMP 1-POLE CIRCUIT BREAKER FOR CONTROL; AND A 15 AMP 1-POLE CIRCUIT BREAKER FOR GPI RECEPTACLE. THE CONDUCTOR TO THE CABINET FROM THE BREAKER SHALL BE A MINIMUM OF 10 GAUGE WIRE.



3/6/2024  
DATE

DESIGNED	TC	PRODUCT NO.	UT-5526-22
DRAWN	TC	SHEET NO.	9 OF 14
CHECKED	KJC	DATE	01/04/2023
			01/04/2023

26. THE CONTRACTOR SHALL COORDINATE WITH NV ENERGY IN PROVIDING SERVICE FOR THE SIGNAL WITHIN NV ENERGY STANDARDS.

27. POWER PANEL SURGE PROTECTION SHALL BE PROVIDED AND APPROVED THROUGH THE SUBMITTAL PROCESS TO THE PUBLIC WORKS TRAFFIC ENGINEERING DIVISION.

28. EXISTING VEHICLE DETECTOR LOOPS DAMAGED BY THE CONTRACTOR SHALL BE REPLACED AND MADE FULLY FUNCTIONAL WITHIN TWO WORKING DAYS. IF NOT MADE FUNCTIONAL WITHIN THE TWO DAYS FOLLOWING DAMAGE, THE CITY MAY PERFORM THE REPAIR AND BACK-CHARGE THE CONTRACTOR AT THE EXPENSE OF \$1000 PER LOOP. SPlicing WILL NOT BE CONSIDERED AS AN ADEQUATE REPAIR.

29. THE CONTRACTOR SHALL COORDINATE TRAFFIC SIGNAL INSTALLATIONS OR MODIFICATIONS WITH THE CITY OF RENO TRAFFIC ENGINEER AT 334-2243.

30. NO SPLICES SHALL BE PERMITTED BETWEEN THE CONTROLLER CABINET AND THE TRAFFIC SIGNAL POLE. ALL CONNECTIONS SHALL BE MADE AT THE JUNCTION BOX, OR IN THE CASE OF LOOPS, AT THE LOOP STUB. ANY DEVIATION TO THIS REQUIREMENT SHALL BE APPROVED BY THE TRAFFIC ENGINEER PRIOR TO THE WORK.

31. VEHICLE DETECTOR LOOPS DAMAGED DURING CONSTRUCTION WHICH ARE PERMITTED BY THE TRAFFIC ENGINEER TO BE TEMPORARILY SPLICED, MUST BE REPLACED PRIOR TO FINAL ACCEPTANCE.

32. IF ANY PAVEMENTS MARKINGS ARE TO BE RELOCATED, VEHICLE DETECTOR LOOPS SHALL BE RELOCATED ACCORDINGLY TO REMAIN CONSISTENT WITH CITY OF RENO STANDARD DETAIL NO. R-406A AND NO. R-406B.

33. AS A PART OF ANY STREET WIDENING PROJECT OR THE ADDITION OF ANY STREET TRAVEL LANES TO EXISTING LANES, SUCH AS TURN LANES, ACCELERATION OR DECELERATION LANES, ETC., THE CONTRACTOR MUST EXTEND ANY TRAFFIC CONTROL CONDUITS AND/OR WIRING AND REPLACE ALL AFFECTED VEHICLE LOOP DETECTOR WIRING (SPlicing SHALL NOT BE ALLOWED).

34. SIGNAL EQUIPMENT SHALL BE PROVIDED AND APPROVED THROUGH THE SUBMITTAL PROCESS TO THE PUBLIC WORKS TRAFFIC ENGINEERING DIVISION.

35. FOR POLE DETAILS NOT SHOWN, SEE POLE MANUFACTURER'S DETAILED DRAWINGS.

36. ALL SIGNAL POLES SHALL CONFORM TO NDOT TYPE 35 AND 35A SPECIFICATIONS, INCLUDING BOLT CIRCLE DIMENSIONS, ANCHOR BOLTS, AND FOOTING DIMENSIONS.

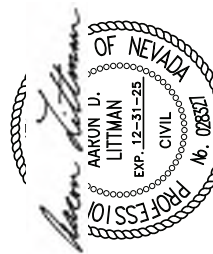
37. FINAL POLE APPROVAL AND SUBMITTALS TO BE APPROVED BY THE CITY OF RENO.

38. CLAM SHELL FOR TYPE 7D POLE TO BE USED ONLY WHEN POLE IS INCLUDED AS A SIGNAL POLE. DO NOT USE CLAM SHELL WHEN TYPE 7D POLE IS USED IN SERIES LIGHTING.

39. POLE MAY BE MANUFACTURED AS EITHER A DOUBLE OF SINGLE CANDYCANE CONFIGURATION.

40. VIDEO DETECTION MAY BE USED IF APPROVED BY THE CITY TRAFFIC ENGINEER.

# Exhibit C



3/6/2024  
DATE

DESIGNED	TC	DATE	01/04/2023	PRODUCT NO.	UT-5526-22
DRAWN	TC	DATE	01/04/2023	SHEET NO.	10 OF 14
CHECKED	KJC	DATE	01/04/2023	DRAWING NO.	SG-02

## LEMMON DRIVE ESTATES SIGNAL DESIGN

### SIGNAL NOTES

2152 West Grove Parkway  
Pleasant Grove, UT 84062  
(801) 783-5100

STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION
DRAWING No.

R-413H

APPROVED BY: JF
DATE: 1/2013



**WARNING**  
0 1/2 1  
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

SCALE	
HORIZONTAL	N/A
VERTICAL	N/A

REV.	DATE	BY	REVISIONS

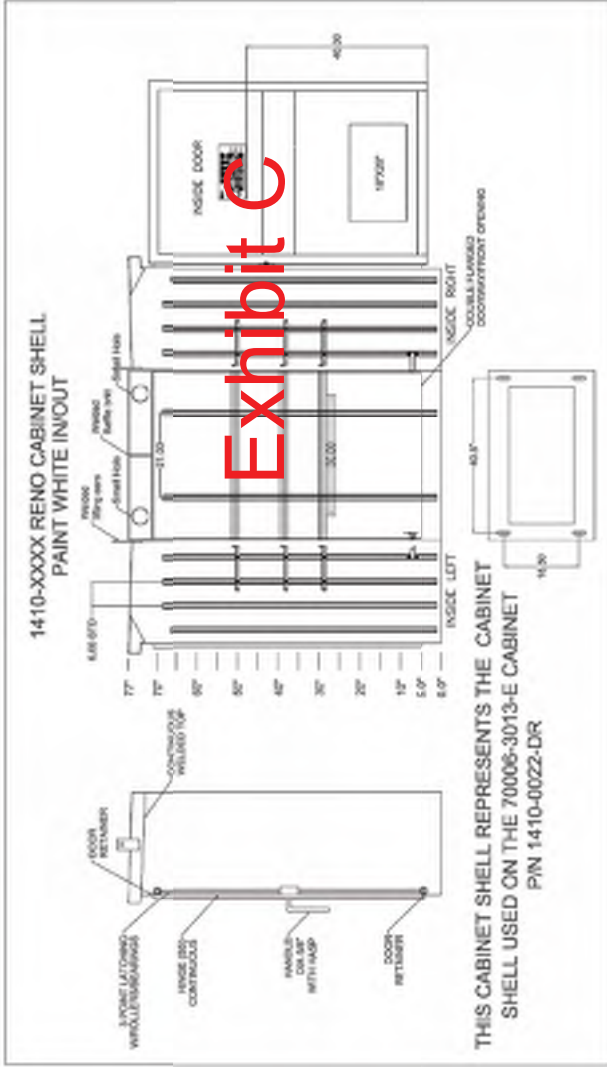
## NOTES - TRAFFIC SIGNALS & POLES



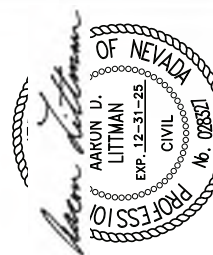
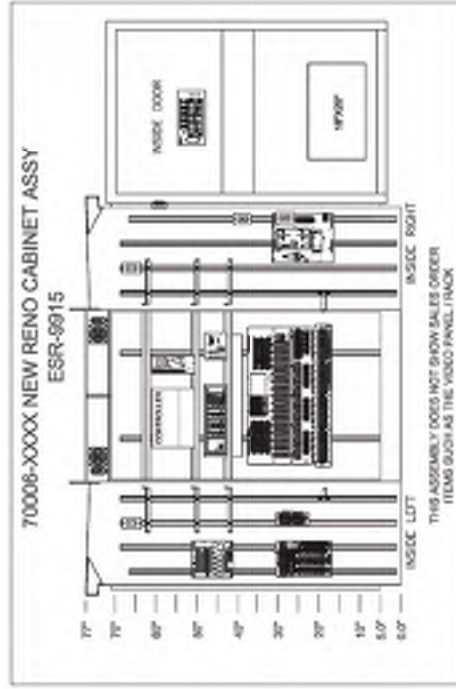
**CONTROLLER CABINET SPECIFICATIONS:**

FURNISH AND INSTALL CITY OF RENO STANDARD CABINET WITH THE FOLLOWING DIFFERENCES FOR TS2 TYPE 1 FORMAT:

1. TS2 TYPE 1 - 16 LOAD SWITCH BACKPANEL.
2. ONE DETECTOR RACK WHICH WOULD INCLUDE:
  - 2.A. 1 8RU
  - 2.B. 16 CHANNELS OF DETECTION
  - 2.C. WIRED FOR 2 CHANNEL DETECTOR CARDS ONLY (NOT 4 CHANNEL)
  - 2.D. PREEMPTION CARD SLOTS WIRED FOR EITHER 2 - 2 CHANNEL PREEMPTION OR 1 - 4 CHANNEL PREEMPTION CARD
3. ALL EXISTING SWITCHES ON POLICE PANELS STAY THE SAME
4. ALL EXISTING SWITCHES ON THE INSIDE DOOR AIR PANEL STAY THE SAME EXCEPT FOR DETECTION TEST SWITCHES
5. LOOP INTERFACE PANEL HAVE TEST SWITCHES
  - 5.A. 16 VEHICLE DETECTOR TEST SWITCHES
  - 5.B. 4 PEDESTRIAN TEST SWITCHES
  - 5.C. 4 PREEMPTION TEST SWITCHES
6. ADD LED LIGHTING INSTEAD OF THE FLUORESCENT LIGHT UNDER THE DOCUMENT DRAWER
7. REMOVE THE INCANDESCENT LIGHT FEATURE AT THE TOP AND REPLACE IT WITH LED LIGHTING AT THE TOP OF THE CABINET
8. REMOVE THE PUNCH DOWN TERMINAL BLOCK
9. TS2 TYPE 2 CONTROLLERS SHALL BE FURNISHED AND INSTALLED SO THE TYPE 1 CABINET NEEDS THE A/O POWER ADAPTER TO CONVERT IT FROM TYPE 1 TO TYPE 2
10. CABINET LAYOUT:
  - 10.A. KEEP THE POWER PANEL THE SAME
  - 10.B. KEEP THE POWER PLACEMENT THE SAME
  - 10.C. KEEP THE HEIGHT OF THE PANEL MOUNTING THE SAME FROM THE FLOOR OF THE CABINET
  - 10.D. KEEP THE SAME FILTER OPENING SIZE
  - 10.E. SAME WHITE INSIDE AND OUT
  - 10.F. SAME HINGE
  - 10.G. SAME CABINET
11. OTHER MODIFICATIONS AS REQUIRED BY THE CITY OF RENO. CONTACT JOHN BAMES, CITY OF RENO, AT (775) 334-1270 TO CONFIRM REQUIREMENTS PRIOR TO ORDERING.



THIS CABINET SHELL REPRESENTS THE CABINET SHELL USED ON THE 70006-3013-E CABINET PIN 1410-0022-DR

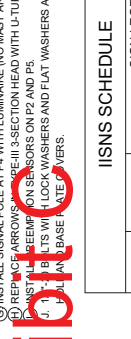


3/6/2024 DATE

DESIGNED		TC	DATE	01/04/2023	PROJECT NO.	UT-526-22
DRAWN		TC	DATE	01/04/2023	SHEET NO.	11 OF 14
CHECKED		KJC	DATE	01/04/2023	DRAWING NO.	SG-03
LEMMON DRIVE ESTATES SIGNAL DESIGN				SIGNAL NOTES		
2152 West Grove Parkway Pleasant Grove, UT 84062 (801) 783-5100						
<b>Horrocks.</b>						
SCALE		VERTICAL		N/A		
SCALE		VERTICAL		N/A		
WARNING		IF THIS BAR DOES NOT MEASURE, THEN DRAWING IS NOT TO SCALE				
REVISIONS		BY				

**CONSTRUCTION NOTES:**

- A. FURNISH AND INSTALL NEW SIGNAL POLE PER POLE SCHEDULE AND DETAILS ON G-04.
- B. FURNISH AND INSTALL NEW CONTROLLER AND CABINET ASSEMBLY. MAKE ALL CONNECTIONS.
- C. FURNISH AND INSTALL 100A METERED SERVICE WITH BATTERY BACKUP PER DETAIL ON G-04.
- D. FURNISH AND INSTALL GRIDSMART BELL CAMERA ON LUMINAIRE ARM AND CABLE CONTROLLER. MAKE ALL CONNECTIONS.
- E. FURNISH AND INSTALL PROCESSOR FOR GRIDSMART CAMERA SYSTEM IN CABINET PER MANUFACTURE SPECIFICATIONS. MAKE ALL CONNECTIONS.
- F. FURNISH AND INSTALL FIBER OPTIC CABLE. PULL TAPE AND #14 AWG LOCATE WIRE IN CONDUIT RUNS TO CONTROLLER CABINET LOCATED ON THE NORTHWEST CORNER OF THE LEMMON DRIVE AND SUNSET VIEW DRIVE SKY VISIBLE/BACK DRIVE INTERSECTION ON THE EAST SIDE OF THE LUMINAIRE (ON WEST SIDE).
- G. INSTALL SIGNAL POLE AT THE FULL LUMINAIRE (ON WEST SIDE).
- H. REFER ARROWS TO ALL 3 SECTION HEAD WITH U-TURN SYMBOLS.
- I. INSTALL PREEMPTION SENSORS ON P2 AND P5.
- J. ALL FITS WILL LOCK WASHERS AND FLAT WASHERS ARE REQUIRED FOR ALL HAND TIGHTENING AND BASE PLATE C/WERS.



**IISNS SCHEDULE**

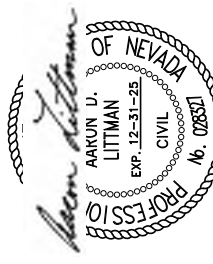
POLE	TYPE	PREFIX	SIGN LEGEND	
			STREET NAME	SUFFIX
P1	SINGLE SIDED		LEMMON	DR 8200
P2	SINGLE SIDED		SUNSET VIEW	DR
P5	SINGLE SIDED		SUNSET VIEW	DR

SEE USD DWG. NO.816.S1 FOR FONT AND LAYOUT DETAILS

**QUADRANT DETAIL**

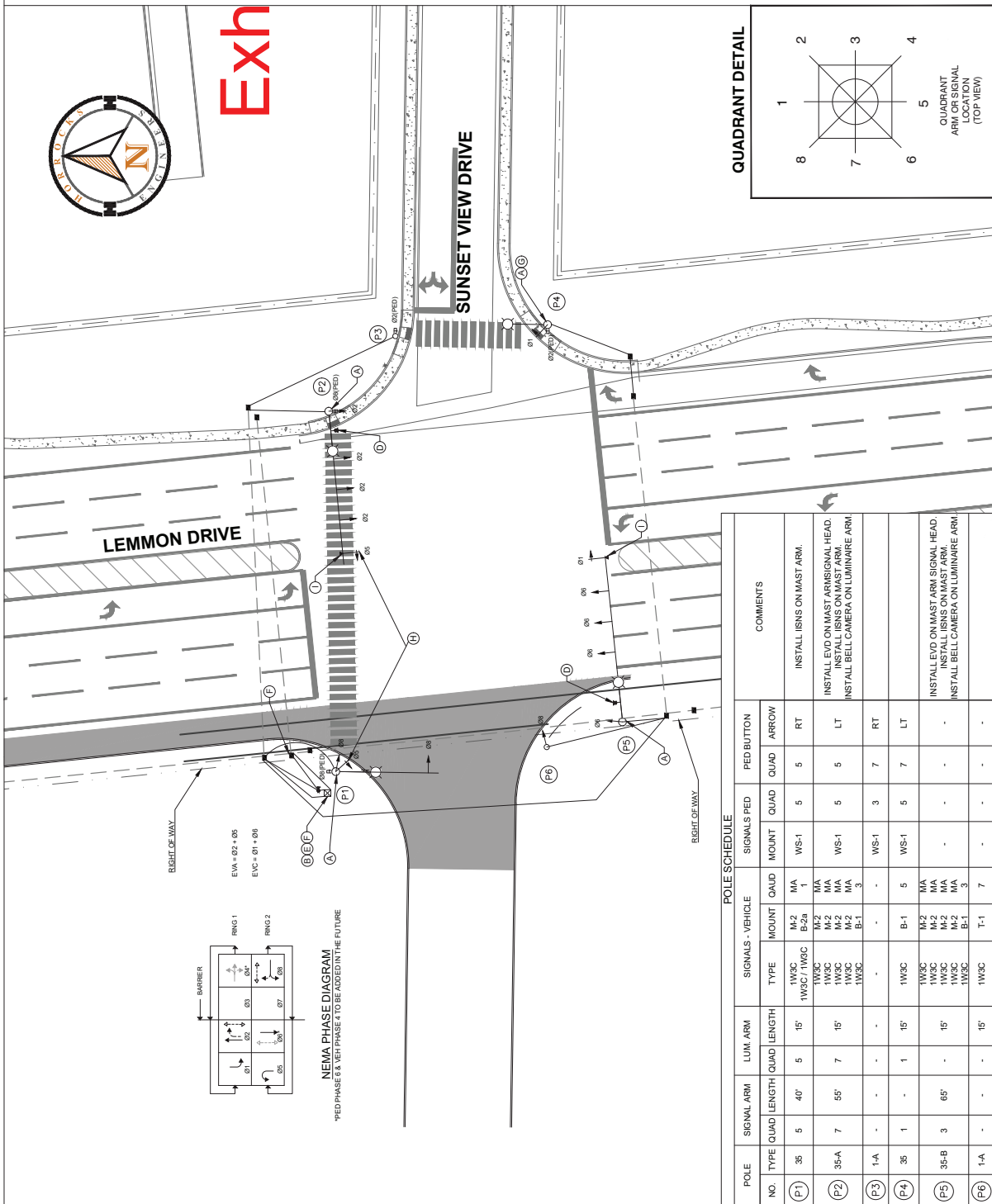


Professional Services Alert  
Call TOLL FREE 811/AROD 227-2800  
WE MEET YOU WHERE YOU ARE



3/6/2024  
DATE

DESIGNED	TCC	DATE	03/2024	PROJECT NO.	UT-5526-22
DRAWN	TCC	DATE	03/2024	SHEET NO.	12 OF 14
CHECKED	ADL	DATE	03/2024	DRAWINGS	SG-04



**LEMMON DRIVE ESTATES SIGNAL DESIGN**

2102 West Grove Parkway  
Pleasant Grove, UT 84062  
(801) 783-5100



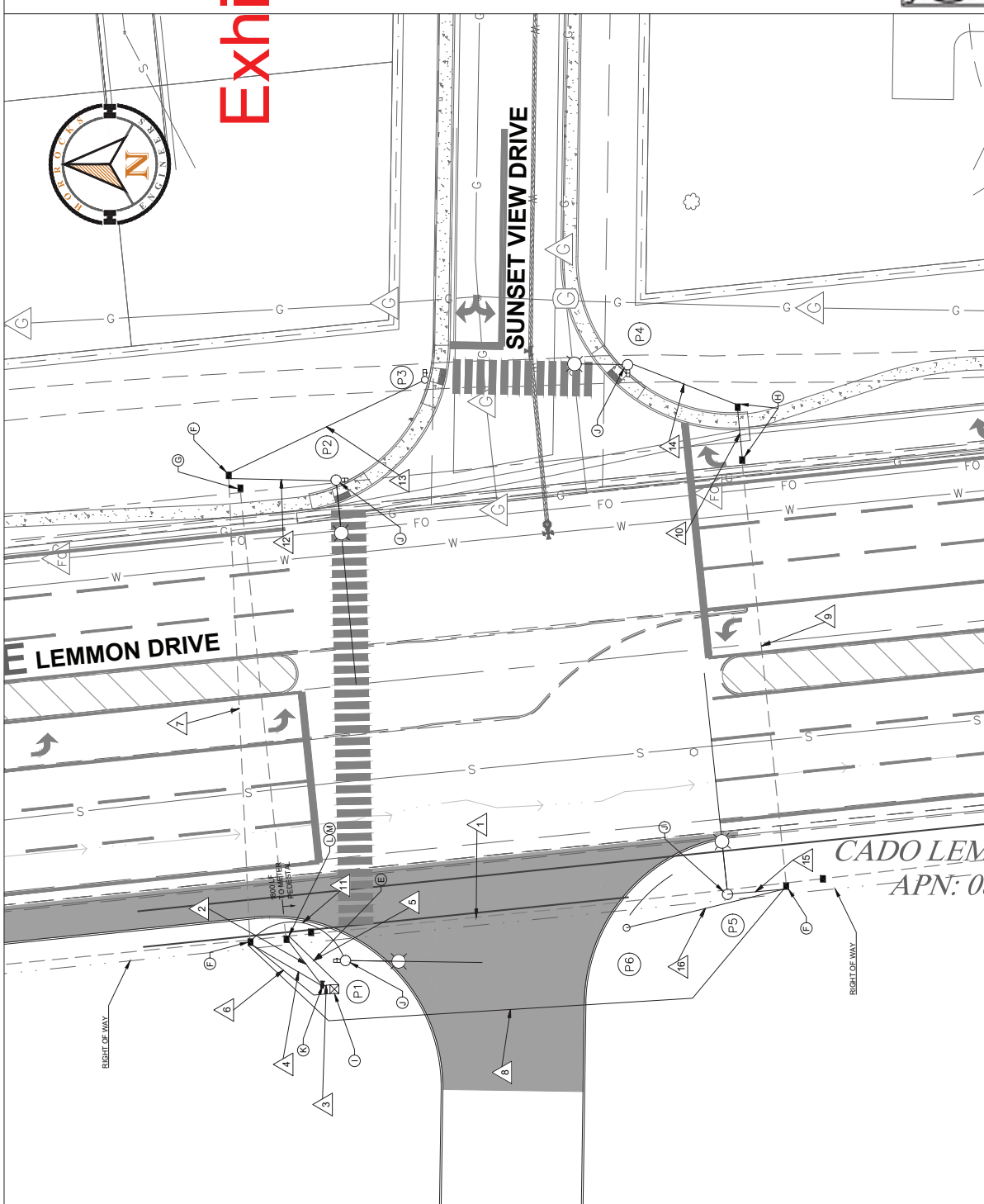
**WARNING**  
0 1/2 1  
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

SCALE	N/A
HORIZONTAL	1" = 40'
VERTICAL	N/A

NO.	DATE	BY	DESCRIPTION
REVISIONS			

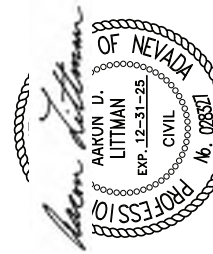
POLE	SIGNAL ARM	LUM. ARM	SIGNALS - VEHICLE	SIGNALS - PED	PED BUTTON	COMMENTS		
P1	5	40'	M2 M2 1W3C 1W3C	WS-1	5	5	RT	INSTALL IISNS ON MAST ARM.
P2	35-A	7	M2 M2 1W3C 1W3C 1W3C	WS-1	5	5	LT	INSTALL EVD ON MAST ARM SIGNAL HEAD. INSTALL IISNS ON MAST ARM. INSTALL BELL CAMERA ON LUMINAIRE ARM.
P3	1-A	-	-	WS-1	3	7	RT	
P4	35	1	M2 M2 1W3C 1W3C	WS-1	5	7	LT	INSTALL EVD ON MAST ARM SIGNAL HEAD. INSTALL IISNS ON MAST ARM. INSTALL BELL CAMERA ON LUMINAIRE ARM.
P5	35-B	3	M2 M2 1W3C 1W3C	-	-	-	-	
P6	1-A	-	M2 M2 1W3C	T-1	7	-	-	

**EQUIPMENT PLAN**



- CONSTRUCTION NOTES:**
- A. FIELD CHECK FOR EXISTING CONDUIT AND TRAFFIC PULL BOXES. EXISTING CONDUIT SHOWN PER PROJECT WY731300 DWG TS-03 AND TS-04.
  - B. FOR NEW CONDUIT, SEE TRENCH AND BORING DETAIL ON SG-S01.
  - C. CONDUIT AND WIRE SCHEDULE ON SG-S01.
  - D. INSTALL SCHEDULE 40 PVC CONDUIT PER CONDUIT SCHEDULE ON SG-S01. DISTANCE SHOWN ON PLAN REFLECTS TRENCH LENGTH, NOT ACTUAL CONDUIT LENGTH.
  - E. FURNISH AND INSTALL SCHEDULE 40 PVC CONDUIT PER NY ENERGY TYPICAL TRENCH DETAIL TEO0090. DISTANCE SHOWN ON PLAN REFLECTS TRENCH LENGTH, NOT ACTUAL CONDUIT LENGTH.
  - F. EXISTING NO. 7E PULL BOX PER PROJECT WY731300 DWG TS-03.
  - G. EXISTING NO. 7E PULL BOX MODIFIED WITH EXTENSION PER PROJECT WY731300 DWG TS-04.
  - H. REBAR AND CUTTER.
  - I. CONDUIT TYPE.
  - J. CABINET FOUNDATION PER DETAIL ON G-03.
  - K. CONDUIT SIGNAL FROM FOUNDATION PER SCHEDULE ON SG-04. AND DETAILS ON G-05.
  - L. CONTRACT TIME. RED SERVICE FOUNDATION AND FURNISH AND INSTALL 100A METERED SERVICE WITH BATTERY BACKUP PER DETAILS ON G-03.
  - M. SLICE INTO EXISTING FIBER DETAIL G-06.
  - N. POWER SERVICE POINT AT LEMMON DRIVE & BUCK DRIVE/ SKY VISTA PKWY INTERSECTION. SEE CORNER EXISTING CONDUIT PER PROJECT WY731300 TS-04.

Exhibit



3/6/2024  
DATE



DESIGNED	TCC	PROJECT NO.	UT-5526-22
DRAWN	TCC	DATE	03/2024
CHECKED	ADL	DATE	03/2024
		DATE	03/2024
		SHEET NO.	13 OF 14
		DRAWINGS	SG-05

**LEMMON DRIVE ESTATES SIGNAL DESIGN**

CONDUIT PLAN

2102 West Grove Parkway  
Pleasant Grove, UT 84062  
(801) 783-5100



**WARNING**  
0 1/2 1  
IF THIS BAR DOES NOT MEASURE, THEN DRAWING IS NOT TO SCALE

SCALE	N/A		
HORIZONTAL	1" = 30'		
VERTICAL	N/A		
REVISIONS			
REV.	DATE	BY	DESCRIPTION

**LEGEND**

- CENTERLINE
- FIBER SIGNAL CONDUIT
- FIBER OPTIC CONDUIT
- - - EXISTING CONDUIT
- (PI) SIGNAL POLE IDENTIFICATION
- MAST ARM SIGNAL POLE
- SIGNAL POLE LUMINAIRE EXTENSION WITH ARM
- MAST ARM MOUNTED SIGN
- PS POWER SOURCE
- TRAFFIC SIGNAL POLE
- TYPE 0 - 1 SECTION SIGNAL HEAD ASSEMBLY
- TYPE I - 3 SECTION SIGNAL HEAD ASSEMBLY
- TYPE II - 3 SECTION SIGNAL HEAD ASSEMBLY
- TYPE III - 3 SECTION (ALL ARROWS) SIGNAL HEAD ASSEMBLY
- TYPE IV - 4 SECTION SIGNAL HEAD ASSEMBLY
- TYPE V - 5 SECTION SIGNAL HEAD ASSEMBLY
- TYPE VI - 4 SECTION (ALL ARROWS) SIGNAL HEAD ASSEMBLY
- TYPE VII - 4 SECTION SIGNAL HEAD ASSEMBLY
- PEDESTRIAN HYBRID BEACON
- TRAFFIC SIGNAL CONTROLLER CABINET
- EXISTING NO. 7E PULL BOX
- PEDESTRIAN SIGNAL HEAD WITH PUSH BUTTON
- PUSH BUTTON
- UNDERGROUND SERVICE PEDESTAL (USP)
- PREEMPTION CONTROL SYSTEM DETECTOR

**METERED SERVICE EQUIPMENT SCHEDULE**

SERVICE LOCATION	SUNSET VIEW DR
OWNERSHIP	CITY OF RENO
VOLTAGE	120V
MAIN BREAKER	100A, 240V, 2P
PHASE	SINGLE
SIGNAL BREAKER	30A, 120V, 1P
LIGHTING BREAKER	20A, 120V, 1P
GFI RECEPTACLE	15A, 120V, 1P
CONTROL	15A, 1P, SWITCH
LIGHTING CONTACTOR	35A-2PNO, MERC

**CONDUIT RUN SCHEDULE**

RUN NO.	FROM	TO	CONDUIT SIZE	LENGTH LN FT.	GROUND	SIGNAL CABLE		LUMINAIRE & ISINS	SERVICE	EVP	INTERCONNECT	COMMENTS
						26+1 CON (14 AWG+10 AWG)	10+1 CON (14 AWG+14 AWG)					
1	SERVICE POINT BOX	FIBER PULL BOX	EX 3"					10 AWG	6 AWG		12-COUNT FIBER OPTIC + PULL TAPE + 14 AWG LOCATE WIRE	
2	FIBER PULL BOX	SERVICE PEDESTAL	3"									
3	SERVICE PEDESTAL	CONTROL CABINET	3"	5								
4	SERVICE PEDESTAL	PULL BOX FOR P1	3"	25				2				
5	FIBER PULL BOX	CONTROL CABINET	3"	15								
6	CONTROL CABINET	PULL BOX FOR P1	(4) 3"	30	1	5	2					
7	PULL BOX FOR P1	PULL BOX FOR P2	EX (2) 3"	135	1	2	1	2	1			EXISTING CONDUIT INSTALLED WITH PROJECT WY731300 TS-04.
8	PULL BOX FOR P1	PULL BOX FOR P5	(2) 3"	170	1	2	1	2	1			
9	PULL BOX FOR P5	EX PULL BOX FOR P4	EX (2) 3"	150	1	1	1	2	2			EXISTING CONDUIT INSTALLED WITH PROJECT WY731300 TS-04.
10	EX PULL BOX	RELOCATED PULL BOX	(2) 3"	15	1	1	1	2	2			EXTEND EXISTING CONDUIT TO RELOCATED PULL BOX FOR P4.
11	PULL BOX FOR P1	POLE 1 (P1)	(2) 3"	30	1	1	1	2				
12	PULL BOX FOR P2	POLE 2 (P2)	(2) 3"	30	1	1	1	2	1			
13	PULL BOX FOR P2	POLE 3 (P3)	3"	65	1	1	1					
14	PULL BOX FOR P4	POLE 4 (P4)	(2) 3"	20	1	1	1	2				
15	PULL BOX FOR P5	POLE 5 (P5)	(2) 3"	20	1	1	1	2	1			
16	PULL BOX FOR P5	POLE 6 (P6)	3"	50	1	1	1					

Exhibit C

CONDUCTORS PROVIDED BY NV ENERGY

NOTE: ALL CONDUITS SHALL HAVE A #8 AWG GREEN THW-2 OR XHHW-2 CONDUCTOR INSTALLED.



3/6/2024  
DATE

- NOTES:**
- 1. CITY OF RENO TRAFFIC CONTACT: KURT W. DIETRICH (775) 334-2243
  - 2. CONTACT CITY OF RENO TRAFFIC OPERATIONS DEVISION TO SCHEDULE/COORDINATE ON THE FOLLOWING ITEMS:
    - SALVAGED ITEMS: PROVIDE 2 DAYS NOTICE ENSURE ALL SALVAGED ITEMS HAVE ALL PARTS AND ASSOCIATED HARDWARE.
    - SIGNAL INSPECTION: 8 DAYS PRIOR TO TURN ON CONTACT REGION SIGNAL CREW TO REQUEST AN IN-PROGRESS SIGNAL INSPECTION.
    - SIGNAL TURN-ON: PROVIDE 5 DAYS NOTICE COORDINATE WITH THE CITY OF RENO TRAFFIC OPERATIONS DIVISION PRIOR TO SIGNAL TURN-ON.
  - 3. CONTRACTOR IS RESPONSIBLE TO DISPOSE OF REMOVAL ITEMS AND ASSUME RESPONSIBILITY THEREAFTER. REUSE MATERIALS ONLY AS SPECIFIED OR AS APPROVED BY THE ENGINEER.
  - 4. REFER TO NDOT STANDARD PLANS FOR DETAILS.



DESIGNED	TCC	DATE	03/2024	PROJECT NO.	UT-5236-22	DATE	03/2024
DRAWN	TCC	DATE	03/2024	SHEET NO.	14	OF	14
CHECKED	ADL	DATE	03/2024	DRAWINGS			
LEMMON DRIVE ESTATES SIGNAL DESIGN				SIGNAL SCHEDULES			
2102 West Grove Parkway Pleasant Grove, UT 84062 (801) 783-5100							
WARNING				SCALE			
0 1/2 1				HORIZONTAL N/A			
IF THIS BAR DOES NOT MEASURE, THEN DRAWING IS NOT TO SCALE				VERTICAL N/A			
REV.	DATE	BY	DESCRIPTION	REV.	DATE	BY	DESCRIPTION
				REVISIONS			

# HIGHLAND

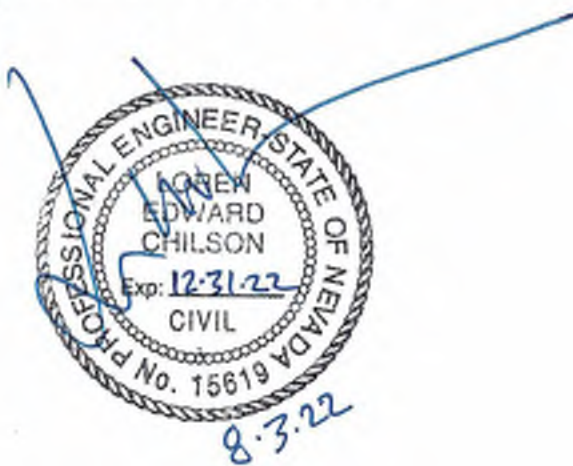
# TRAFFIC IMPACT STUDY

August 3, 2022

PREPARED FOR:

SV Land, LLC

PREPARED BY:



## **YOUR QUESTIONS ANSWERED QUICKLY**

### **Why did you perform this study?**

This Traffic Impact Study evaluates the potential traffic impacts associated with the proposed Highland project in Reno, Nevada. This study of potential transportation impacts was undertaken for planning purposes and to assist in determining what traffic controls or mitigations may be needed to reduce potential impacts, if any are found.

### **What does the project consist of?**

The project consists of 221 single-family units, 300 multifamily units, and 1.7 acres of commercial/retail use. The actual use of the commercial/retail space is not identified at this time and this study assumes 20,000 square feet of the Strip Retail Plaza land use. Any land use mix which generates equal to or less peak hour traffic would be considered equivalent from a traffic impact evaluation perspective.

### **How much traffic will the project generate?**

The project is anticipated to generate approximately 4,671 net new Daily, 309 net new AM peak hour, and 409 net new PM peak hour trips.

### **How will project traffic affect the roadway network?**

The Lemmon Drive / Sky Vista Parkway / Buck Drive intersection will operate at poor levels of service in the 20 year horizon with or without this project. A traffic signal at the Lemmon Drive / Vista Knoll Parkway intersection will provide an overall circulation benefit by adding a new high quality connection to the Walmart shopping center and thereby reducing traffic in the Lemmon Drive / Sky Vista Parkway / Buck Drive intersection. The traffic signal will also provide improved access for the Lemmon Drive Estates development and reduce U-turns at the Lemmon Drive / Military Road intersection. Therefore, a traffic signal is recommended at the Lemmon Drive / Vista Knoll Parkway intersection and will improve operations at the Lemmon Drive / Sky Vista Parkway / Buck Drive intersection.

### **Are any improvements recommended?**

It is recommended that the project construct the following improvements:

- ▶ The remaining Vista Knoll Parkway roadway segment between the North Walmart Driveway and Lemmon Drive as a two lane roadway with one travel lane in each direction and left turn lanes at intersections.
- ▶ Sidewalk connection on Vista Knoll Parkway between the North Walmart Driveway and Lemmon Drive.



- ▶ A traffic signal at the Lemmon Drive / Vista Knoll Parkway intersection, under an RRIF offset agreement, if not constructed by other development(s) prior to this project. It is anticipated that traffic signal warrants will be met under Baseline Plus Project conditions.
- ▶ All project driveways and intersections should provide adequate sight distance triangles in accordance with the current edition of AASHTO's *A Policy on Geometric Design of Highways and Streets*.
- ▶ The project will pay Regional Road Impact fees, or construct traffic signal improvements under an RRIF offset agreement, as mitigation for its impact on the regional roadway network.



**LIST OF FIGURES**

1. Project Location
2. Preliminary Site Plan
3. Baseline Traffic Volumes, Lane Configurations, and Controls
4. Project Trip Distribution and Assignment
5. Redistributed Walmart Trips
6. Baseline Plus Project Traffic Volumes, Lane Configurations, and Controls
7. Future Year Traffic Volumes, Lane Configurations, and Controls
8. Future Year Plus Project Traffic Volumes, Lane Configurations, and Controls

**LIST OF APPENDICES**

Appendix Not Included in Exhibit C

- A. NDOT Crash History Data
- B. Baseline LOS Calculations
- C. Baseline Plus Project LOS Calculations
- D. Future Year LOS Calculations
- E. Future Year Plus Project LOS Calculations





## INTRODUCTION

This report presents the findings of a Traffic Impact Study completed to assess the potential traffic impacts on local intersections associated with the Highland project in Reno, Nevada. This traffic impact study has been prepared to document existing traffic conditions, quantify traffic volumes generated by the proposed project, identify potential impacts, document findings, and make recommendations to mitigate impacts, if any are found. The location of the project is shown on **Figure 1** and the preliminary site plan is shown on **Figure 2**.

### *Study Area and Evaluated Scenarios*

The project consists of 221 single-family units, 300 multifamily units, and 20,000 square feet of commercial/retail space. The project is generally located west of Lemmon Drive between Sky Vista Parkway and Military Road. The study intersections are shown on **Figure 1** and were identified based on project location and assessment of the intersections most likely to be impacted. The following intersections are included in this study:

- ▶ Vista Knoll Parkway / North Walmart Driveway
- ▶ Vista Knoll Parkway / South Walmart Driveway
- ▶ Sky Vista Parkway / Vista Knoll Parkway
- ▶ Lemmon Drive / Vista Knoll Parkway (Project Roadway)
- ▶ Lemmon Drive / Sky Vista Parkway / Buck Drive

This study includes analysis of both the weekday AM and PM peak hours as these are the periods of time in which peak traffic is anticipated to occur. The evaluated development scenarios are:

- ▶ Baseline Conditions
- ▶ Baseline Plus Project Conditions
- ▶ Future Year Conditions (20 year horizon)
- ▶ Future Year Plus Project Conditions

## ANALYSIS METHODOLOGY

Level of service (LOS) is a term commonly used by transportation practitioners to measure and describe the operational characteristics of intersections, roadway segments, and other facilities. This term equates seconds of delay per vehicle at intersections to letter grades “A” through “F” with “A” representing optimum conditions and “F” representing breakdown or over capacity flows.



**Intersections**

The complete methodology for intersection level of service analysis is established in *the Highway Capacity Manual (HCM), 6th Edition* published by the Transportation Research Board (TRB). **Table 1** presents the delay thresholds for each level of service grade at signalized and unsignalized intersections.

**Table 1: Level of Service Definition for Intersections**

Level of Service	Brief Description	Average Delay (seconds per vehicle)	
		Signalized Intersections	Unsignalized Intersections
A	Free flow conditions.	< 10	< 10
B	Stable conditions with some affect from other vehicles.	10 to 20	10 to 15
C	Stable conditions with significant affect from other vehicles.	20 to 35	15 to 25
D	High density traffic conditions still with stable flow.	35 to 55	25 to 35
E	At or near capacity flows.	55 to 80	35 to 50
F	Over capacity conditions.	> 80	> 50

Source: *Highway Capacity Manual, 6<sup>th</sup> Edition*

Level of service calculations were performed for the study intersections using the Synchro 11 software package with analysis and results reported in accordance with *HCM* methodology.

**Level of Service Policy**

City of Reno

The Regional Transportation Commission’s (RTC) *2050 Regional Transportation Plan (RTP)* establishes level of service criteria for regional roadway facilities in the City of Reno, City of Sparks, and Washoe County. The current Level of Service policy is:

*“All regional roadway facilities projected to carry less than 27,000 ADT at the latest RTP horizon – LOS D or better.”*

*“All regional roadway facilities projected to carry 27,000 or more ADT at the latest RTP horizon – LOS E or better.”*

*“All intersections shall be designed to provide a level of service consistent with maintaining the policy level of service of the intersecting corridors”.*

Within the project vicinity, Lemmon Drive currently carries more than 27,000 ADT. Therefore, LOS “E” was used as the threshold criteria on Lemmon Drive and LOS “D” was used as the threshold criteria on all other study roadways.



Traffic engineering practitioners recognize that exceedance to LOS policies (LOS “E”/“F”) specific to minor side-street approaches during the peak hour(s) does not necessarily indicate an intersection failure or the need for mitigation. Mitigation and management strategies for minor side-street approaches must be evaluated on a case by case basis. This condition (LOS “E”/“F” for a minor side-street approach) commonly exists throughout urban and suburban areas and is manageable in most cases.

## **BASELINE CONDITIONS**

### ***Roadway Facilities***

A brief description of the existing key roadways in the study area is provided below.

*Lemmon Drive* is generally a six-lane north-south roadway with three lanes in each direction plus turn lanes at major intersections south of Military Road to US 395. It is classified as a “Medium Access Control Arterial” in the 2050 RTP. The posted speed limit is 45 mph north of Sky Vista Parkway and 35 mph south of Sky Vista Parkway. A diverging diamond interchange is currently under construction at the US 395 / Lemmon Drive interchange.

*Sky Vista Parkway* is a two-lane east-west roadway with one lane in each direction between Vista Knoll Parkway and Silver Lake Road and four lanes between Lemmon Drive and Vista Knoll Parkway. Near-term improvements on Sky Vista Parkway include widening from two lanes to four lanes between Vista Knoll Parkway and Silver Lake Road. The widening will occur prior to the subject project. It is classified as a “Medium Access Control Arterial” in the 2050 RTP. The posted speed limit is 35 mph within the study area.

*Vista Knoll Parkway* is a three-lane north-south roadway with one lane in each direction and a center turn lane. It is classified as a “Low Access Control Collector” in the 2050 RTP. The posted speed limit is 25 mph within the study area.

### ***Alternative Travel Modes***

Sidewalks exist on both sides of Sky Vista Parkway between Lemmon Drive and Vista Knoll Parkway. A sidewalk is constructed on the north side of Sky Vista Parkway west of Vista Knoll to the RTC bus stop. Additionally, a pedestrian/bike path exists on the south side of Sky Vista Parkway from Silver Lake Road to Vista Knoll Parkway which ties the sidewalk on the south side of Sky Vista Parkway between Vista Knoll and Lemmon Drive. Vista Knoll Parkway has sidewalk on the west side only south of the South Walmart Driveway and the east side only between the North Walmart Driveway and the South Walmart Driveway. Bike lanes exist on both sides of Sky Vista Parkway between Lemmon Drive and Silver Lake Road. The site has adequate access to bicycle and pedestrian facilities.



RTC Bus Route #7 provides public transit service to the project site with an existing stop at the Sky Vista Parkway / Vista Knoll Parkway intersection, as shown in **Exhibit 1**. This site is well served by public transit.

### ***Crash History***

Vehicle crash data was requested from NDOT for the most recent three year period (2017-2020) for the Lemmon Drive / Sky Vista Parkway / Buck Drive and Sky Vista Parkway / Vista Knolls Parkway intersections. A total of 51 crashes and 12 crashes were reported at the Lemmon Drive / Sky Vista Parkway / Buck Drive and Sky Vista Parkway / Vista Knolls Parkway intersections, respectively. The majority of the reported crashes occurring at the Lemmon Drive / Sky Vista Parkway / Buck Drive intersection were classified as angle (23) and rear-end (14) type crashes. Rear-end (6) was the most common reported crash type at the Lemmon Drive / Vista Knoll Parkway intersection. No fatalities were reported at either intersection. Complete crash data is provided in **Appendix A**.



**Exhibit 1. Bus Route #7**

### ***Traffic Volumes***

AM and PM peak hour traffic volumes were collected at the study intersections in March of 2022 with Washoe County School District in regular session. It is important to note that during data collection there was significant construction on Lemmon Drive. The collected turning movement counts were compared to the *Traffic Analysis Memorandum for the Lemmon Drive Capacity Improvements Project* (Jacobs, February 2021). The collected traffic volumes on Lemmon Drive were significantly lower than the Jacobs study (counts collected in 2019). Therefore, existing turning movement volumes at the Lemmon Drive / Sky Vista Parkway / Buck Drive intersection from the Jacobs study were used. In addition, traffic generated by the Quick Quack Car Wash and Lemmon Drive Estates developments were added to the existing traffic volumes to obtain Baseline Conditions traffic volumes. The Baseline Conditions intersection turning movement volumes, lane configurations, and controls are shown on **Figure 3**.

### ***Intersection Level of Service Analysis***

Baseline AM and PM peak hour intersection level of service analysis was performed for the study intersections using Synchro 11 analysis software. **Table 2** shows the Baseline Condition level of service results and the technical calculations are provided in **Appendix B**.



**Table 2: Baseline Intersection Level of Service**

Int. ID	Intersection	Control	AM		PM	
			Delay <sup>1</sup>	LOS	Delay <sup>1</sup>	LOS
1	Vista Knoll Pkwy / North Walmart Dwy	Side Street Stop				
	Overall		4.8	A	7.9	A
	Westbound Approach		9.0	A	10.6	B
2	Vista Knoll Pkwy / South Walmart Dwy	Side Street Stop				
	Overall		1.7	A	3.7	A
	Westbound Approach		9.9	A	18.0	C
3	Sky Vista Pkwy / Vista Knoll Pkwy	Signal				
	Overall		12.4	B	19.5	B
4	Lemmon Drive / Vista Knoll Parkway	Side Street Stop				
	Overall		0.7	A	1.2	A
	Westbound Approach		28.5	D	85.5	F
	Southbound Left		11.8	B	25.9	D
5	Lemmon Dr / Sky Vista Pkwy / Buck Dr	Signal				
	Overall		27.5	C	58.6	E

Notes: 1. Delay is reported in seconds per vehicle for the overall intersection for signalized and all way stop controlled intersections, and for the worst approach/movement for side street stop controlled intersections.

Source: Headway Transportation, 2022

As shown in the table, the study intersections currently operate overall within policy level of service thresholds during the AM and PM peak hours. The minor westbound approach at the Lemmon Drive / Vista Knoll Parkway intersection is expected to operate at LOS “F” during the PM peak hour assuming left turns out from the Lemmon Drive Estates project at this location.

## PROJECT CONDITIONS

### Trip Generation

Trip generation rates from the *Trip Generation Manual, 11th Edition* published by the Institute of Transportation Engineers (ITE) were used to develop trip generation estimates for the proposed project. The proposed project consists of 221 single-family units, 300 multifamily units, and 1.7 acres of commercial/retail use. Using a common Floor Area Ratio (FAR) of 0.25, the project could build approximately 18,500 square feet of commercial/retail. This study conservatively uses 20,000 square feet of commercial/retail space. It is important to note that the actual use is not identified at this time and this study assumes the Strip Retail Plaza land use. Any land use mix which generates equal to or less peak hour traffic would be considered equivalent from a traffic impact evaluation perspective.

**Table 3** shows the Daily, AM peak hour, and PM peak hour trip generation estimates.



**Table 3: Trip Generation Estimates**

Land Use (ITE Code)	Size <sup>1</sup>	Trips				
		Daily	AM	AM In/Out	PM	PM In/Out
Single-Family Housing (210)	221 du	2,084	154	40 / 114	208	131 / 77
<i>Internal Reduction</i>		-73	-1	0 / -1	-12	-9 / -3
Multifamily Housing (220)	300 du	2,022	120	29 / 91	153	96 / 57
<i>Internal Reduction</i>		-91	-1	0 / -1	-12	-9 / -3
Strip Retail Plaza (822)	20 ksf	1,088	47	28 / 19	132	66 / 66
<i>Internal Reduction</i>		-120	-2	-2 / 0	-24	-6 / -18
<i>Pass-by Reduction</i>		-239	-8	-4 / -4	-36	-18 / -18
<b>Total Trips</b>		<b>5,194</b>	<b>321</b>	<b>97 / 224</b>	<b>493</b>	<b>293 / 200</b>
<i>Internal Trip Reduction</i>		-284	-4	-2 / -2	-48	-24 / -24
<i>Pass-by Trip Reduction</i>		-239	-8	-4 / -4	-36	-18 / -18
<b>Net New Trips</b>		<b>4,671</b>	<b>309</b>	<b>91 / 218</b>	<b>409</b>	<b>251 / 158</b>

Notes: 1. du = dwelling units; ksf = 1000 square feet

Source: Headway Transportation, 2022

As shown in the table, the project is expected to generate 4,671 net new Daily, 309 net new AM peak hour, and 409 net new PM peak hour trips.

**Trip Distribution**

Project trips were distributed to the adjacent roadway network based on existing traffic volumes, the locations of complimentary land uses, and anticipated travel patterns. Project trips were distributed based on the following:

Residential

- ▶ 65% to/from the south via Lemmon Drive
- ▶ 20% to/from the west via Sky Vista Parkway
- ▶ 10% to/from the north via Lemmon Drive
- ▶ 5% to/from the west via Buck Drive

Commercial / Retail

- ▶ 35% to/from the north via Lemmon Drive
- ▶ 30% to/from the south via Lemmon Drive
- ▶ 25% to/from the west via Sky Vista Parkway
- ▶ 10% to/from the west via Buck Drive

Figure 4 shows the project trip distribution and assignment.



### **Project Access**

Primary access to the project site is proposed via Vista Knolls Parkway. The project proposes to construct the remaining portion of Vista Knolls Parkway from the North Walmart Driveway east to Lemmon Drive as a two lane roadway and left turn lanes at intersections. It is recognized that a traffic signal will be necessary at the proposed Lemmon Drive / Vista Knoll Parkway intersection to enable full access. A traffic signal at the Lemmon Drive / Vista Knoll Parkway intersection will provide an overall circulation benefit by reducing traffic through the Lemmon Drive / Sky Vista Parkway / Buck Drive intersection by creating an additional access to the existing commercial land uses (Walmart, Saint Mary's etc.). The traffic signal will also provide improved access for the Lemmon Drive Estates development and reduce U-turns at the Lemmon Drive / Military Road intersection. The traffic signal should be constructed under an RRIF offset agreement if not constructed by other development(s) prior to this project.

## **BASELINE PLUS PROJECT CONDITIONS**

### **Traffic Volumes**

Project trips (**Figure 4**) were added to the Baseline traffic volumes (**Figure 3**). Additionally, approximately fifteen percent of the existing westbound right and southbound left turning movements at the Sky Vista Parkway / Vista Knoll Parkway intersection were reassigned north to the Lemmon Drive / Vista Knoll Parkway intersection to account for the additional access as shown in **Figure 5**. The resultant Baseline Traffic Volumes, Lane Configurations, and Controls are shown in **Figure 6**.

### **Preliminary Signal Warrant Analysis**

A preliminary traffic signal warrant analysis (Warrant 2: Four-Hour Vehicle Volume) was completed for the proposed Lemmon Drive / Vista Knoll Parkway intersection based on nationally accepted standards outlined in the current edition of the *Manual on Uniform Traffic Control Devices* (MUTCD). The MUTCD states that "If the posted or statutory speed limit or the 85th-percentile speed on the major street exceeds 40 mph, Figure 4C-2 (70% factor) may be used in place of Figure 4C-1. Lemmon Drive has a posted speed of 45 mph north of Sky Vista Parkway. Therefore, Figure 4C-2 (70% factor) was used in this analysis.

Off-peak baseline turning movement volumes were developed by factoring down the Baseline Plus Project PM peak hour turning movement volumes using the following resources:

- ▶ Left-turns into the project site - ITE's *Hourly Distribution of Entering and Exiting Vehicle Trips by Land Use – Multifamily Housing* (220)
- ▶ Southbound approach volumes – historic NDOT traffic volume data (count station 0311145)

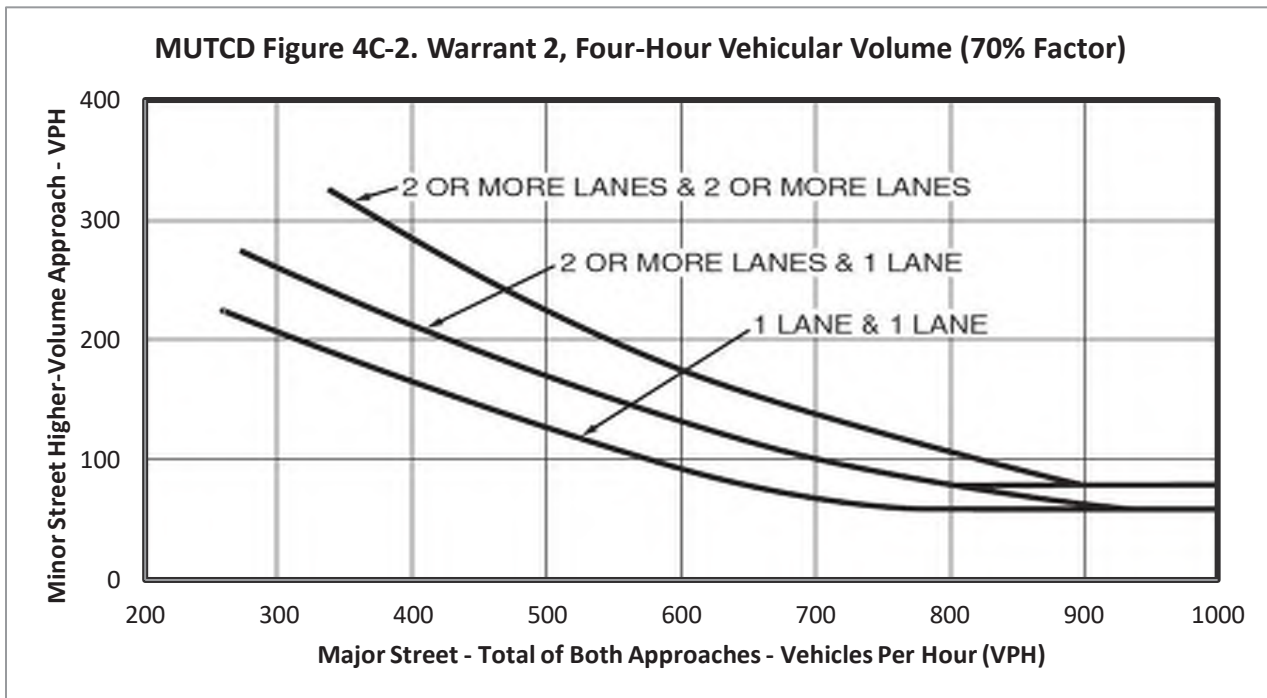
**Table 4** shows the four highest PM peak hours and the volumes are plotted on **Exhibit 2**.



The MUTCD states that “at an intersection with a high volume of left-turn traffic from the major street, the signal warrant analysis may be performed in a manner that considers the higher of the major-street left-turn volumes as the "minor-street" volume and the corresponding single direction of opposing traffic on the major street as the "major-street" volume.” Therefore, this signal warrant analysis is performed with the northbound left turn on Lemmon Drive as the minor street volume and the southbound approach on Lemmon Drive as the major street volume in accordance with accepted MUTCD methodologies.

**Table 4. Four Highest PM Peak Hours**

Hour	% of Inbound Peak Hour	Hourly Northbound Left Turn (Minor Street)	% of Peak Hour Segment Volume	Hourly Southbound Approach Volume (Major Street)
3 PM – 4 PM	72.8	96	87.0	923
4 PM – 5 PM	87.7	116	100.0	1060
5 PM – 6 PM	100.0	132	96.6	1024
6 PM – 7 PM	83.3	110	71.6	759



**Exhibit 2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)**

As shown in the exhibit, all four plotted points fall above the 2 or more lanes (southbound) & 1 lane (northbound left) curve. Thus, it is anticipated that the four-hour vehicular volume signal warrant will be met under Baseline Plus Project conditions.





**Intersection Level of Service**

**Table 5** shows the Baseline Plus Project level of service results and the technical calculations are provided in **Appendix C**. The Lemmon Drive / Vista Knoll Parkway intersection is analyzed with a traffic signal and full access.

**Table 5: Baseline Plus Project Intersection Level of Service**

Int. ID	Intersection	Control	AM		PM	
			Delay <sup>1</sup>	LOS	Delay <sup>1</sup>	LOS
1	Vista Knoll Pkwy / North Walmart Dwy	Side Street Stop				
	Overall		3.9	A	8.8	A
	Eastbound Approach		8.8	A	9.0	A
	Westbound Approach		10.1	B	16.1	C
	Northbound Left		7.4	A	7.4	A
	Southbound Left		7.4	A	7.6	A
2	Vista Knoll Pkwy / South Walmart Dwy	Side Street Stop				
	Overall		2.1	A	6.3	A
	Eastbound Approach		9.3	A	11.0	B
	Westbound Approach		11.3	B	32.1	D
	Northbound Left		7.5	A	8.0	A
	Southbound Left		7.7	A	8.4	A
3	Sky Vista Pkwy / Vista Knoll Pkwy	Signal				
	Overall		13.4	B	30.8	C
4	Lemmon Drive / Vista Knoll Parkway	Signal				
	Overall		13.7	B	14.2	B
5	Lemmon Dr / Sky Vista Pkwy / Buck Dr	Signal				
	Overall		29.0	C	54.6	D

Notes: 1. Delay is reported in seconds per vehicle for the overall intersection for signalized and all way stop controlled intersections, and for the worst approach/movement for side street stop controlled intersections.

Source: Headway Transportation, 2022

As shown in the table, the study intersections and driveways are expected to operate overall within level of service policy under Baseline Plus Project conditions.

**FUTURE YEAR CONDITIONS**

The Future Year analysis estimates operating conditions for the 20 year horizon.

**Traffic Volume Forecasts**

Future Year (20-year horizon) background traffic volumes were obtained from Scenario 2 within the *Traffic Analysis Memorandum for the Lemmon Drive Capacity Improvements Project* (Jacobs, February 2021). This subject property was included as the “Lemmon & Sky Vista Shopping Center”. Trips assigned to the



Lemmon Drive / Vista Knoll Parkway intersection in the Jacobs study were removed from the study intersections for this background (without project) analysis scenario. **Figure 7** shows the Future Year (No Project) traffic volumes at the study intersections.

**Intersection Level of Service**

AM and PM peak hour intersection level of service analysis was performed for the study intersections using Synchro analysis software. **Table 6** shows the Future Year conditions level of service results and the technical calculations are provided in **Appendix D**. Signal timing was optimized for future volumes and signal coordination using Synchro software at the Lemmon Drive / Sky Vista Parkway / Buck Drive intersection.

**Table 6: Future Intersection Level of Service**

Int. ID	Intersection	Control	AM		PM	
			Delay <sup>1</sup>	LOS	Delay <sup>1</sup>	LOS
1	Vista Knoll Pkwy / North Walmart Dwy	Side Street Stop				
	Overall		4.8	A	8.2	A
	Westbound Approach		9.0	A	11.0	B
2	Vista Knoll Pkwy / South Walmart Dwy	Side Street Stop				
	Overall		1.7	A	4.4	A
	Westbound Approach		10.1	B	21.1	C
	Southbound Left	0.0	A	8.3	A	
3	Sky Vista Pkwy / Vista Knoll Pkwy	Signal				
	Overall		15.0	B	20.4	C
4	Lemmon Drive / Vista Knoll Parkway	Side Street Stop				
	Overall		4.6	A	11.4	B
	Westbound Approach		>300	F	>300	F
	Southbound Left		21.5	C	85.7	F
5	Lemmon Dr / Sky Vista Pkwy / Buck Dr	Signal				
	Overall		97.9	F	133.7	F

Notes: 1. Delay is reported in seconds per vehicle for the overall intersection for signalized and all way stop controlled intersections, and for the worst approach/movement for side street stop controlled intersections.

Source: Headway Transportation, 2022

As shown in the table, both the Lemmon Drive / Vista Knoll Parkway (unsignalized) with full movements from Lemmon Drive Estates and the Lemmon Drive / Sky Vista Parkway / Buck Drive intersections are expected to operate at LOS “F” during the AM and PM peak hours. This analysis assumes that the Lemmon Drive / Sky Vista Parkway intersection will be coordinated with the future diverging diamond interchange (DDI). All other study intersections are expected to operate within policy level of service thresholds under Future Year (no project) conditions.



## FUTURE YEAR PLUS PROJECT CONDITIONS

### Traffic Volumes

Project trips (**Figure 4**) were added to the Future Year traffic volumes (**Figure 7**) to develop the Future Year Plus Project conditions traffic volumes, shown on **Figure 8**. Similar to the Baseline Plus Project scenario, approximately fifteen percent of the future (no project) westbound right and southbound left turning movements at the Sky Vista Parkway / Vista Knoll Parkway intersection were reassigned north to the Lemmon Drive / Vista Knoll Parkway intersection to account for the additional access.

### Intersection Level of Service

AM and PM peak hour intersection level of service analysis was performed for the study intersections based on the Future Year Plus Project traffic volumes. **Table 7** shows the level of service results and the technical calculations are provided in **Appendix E**.

**Table 7: Future Plus Project Intersection Level of Service**

Int. ID	Intersection	Control	AM		PM	
			Delay <sup>1</sup>	LOS	Delay <sup>1</sup>	LOS
1	Vista Knoll Pkwy / North Walmart Dwy	Side Street Stop				
	Overall		4.0	A	9.8	A
	Eastbound Approach		8.8	A	9.1	A
	Westbound Approach		10.2	B	17.8	C
	Northbound Left		7.4	A	7.6	A
	Southbound Left		7.4	A	9.1	A
2	Vista Knoll Pkwy / South Walmart Dwy	Side Street Stop				
	Overall		2.2	A	8.8	A
	Eastbound Approach		9.4	A	11.3	B
	Westbound Approach		11.5	B	45.0	E
	Northbound Left		7.5	A	8.1	A
	Southbound Left		7.7	A	8.5	A
3	Sky Vista Pkwy / Vista Knoll Pkwy	Signal				
	Overall		16.1	B	28.5	C
4	Lemmon Drive / Vista Knoll Parkway	Signal				
	Overall		19.7	B	17.6	B
5	Lemmon Dr / Sky Vista Pkwy / Buck Dr	Signal				
	Overall		97.9	F	138.0	F

Notes: 1. Delay is reported in seconds per vehicle for the overall intersection for signalized and all way stop controlled intersections, and for the worst approach/movement for side street stop controlled intersections.

Source: Headway Transportation, 2022

As shown in the table, it is anticipated that the westbound approach at the Vista Knoll Parkway / South Walmart Driveway will operate at LOS “E” under Future Plus Project conditions. During the PM peak hour,



it is anticipated that the 95<sup>th</sup> percentile queues on the westbound approach at the Vista Knoll Parkway / South Walmart Driveway intersection will be 5.4 vehicles (135 feet). The existing westbound approach currently has at least 150 feet of storage which is anticipated to contain queuing vehicles. Additionally, traffic can also utilize the North Walmart Driveway during peak hours which is anticipated to operate at LOS "C". This is determined to be a manageable condition and no improvements are recommended.

The Lemmon Drive / Sky Vista Parkway / Buck Drive intersection will operate at poor levels of service in the 20 year horizon with or without this project. A traffic signal at the Lemmon Drive / Vista Knoll Parkway intersection will provide an overall circulation benefit by adding a new high quality connection to the Walmart shopping center and thereby reducing traffic in the Lemmon Drive / Sky Vista Parkway / Buck Drive intersection. The traffic signal will also provide improved access for the Lemmon Drive Estates development and reduce U-turns at the Lemmon Drive / Military Road intersection. Therefore, a traffic signal is recommended at the Lemmon Drive / Vista Knoll Parkway intersection and will improve operations at the Lemmon Drive / Sky Vista Parkway / Buck Drive intersection.

95<sup>th</sup> percentile queues of approximately 150' or less are anticipated for the northbound left movement at the Lemmon Drive / Vista Knoll Parkway intersection. The Washoe County RTC is currently constructing a 450' left turn pocket that will adequately provide storage for queuing vehicles.

## CONCLUSIONS

The following is a list of our key findings and recommendations:

- ▶ The proposed project includes 221 single-family units, 300 multifamily units, and up to 20,000 square feet of commercial/retail space. It is important to note that the actual commercial/retail use is not identified at this time and this study assumes the Strip Retail Plaza land use. Any land use mix which generates equal to or less peak hour traffic is considered equivalent from a traffic impact evaluation perspective.
- ▶ The project is anticipated to generate approximately 4,671 net new Daily, 309 net new AM peak hour, and 409 net new PM peak hour trips on the external roadway network.
- ▶ A traffic signal at the Lemmon Drive / Vista Knoll Parkway intersection will provide an overall circulation benefit by adding a new high quality connection to the Walmart shopping center and thereby reducing traffic in the Lemmon Drive / Sky Vista Parkway / Buck Drive intersection. The traffic signal will also provide improved access for the Lemmon Drive Estates development and reduce U-turns at the Lemmon Drive / Military Road intersection. Therefore, a traffic signal is recommended at the Lemmon Drive / Vista Knoll Parkway intersection and will improve operations at the Lemmon Drive / Sky Vista Parkway / Buck Drive intersection.



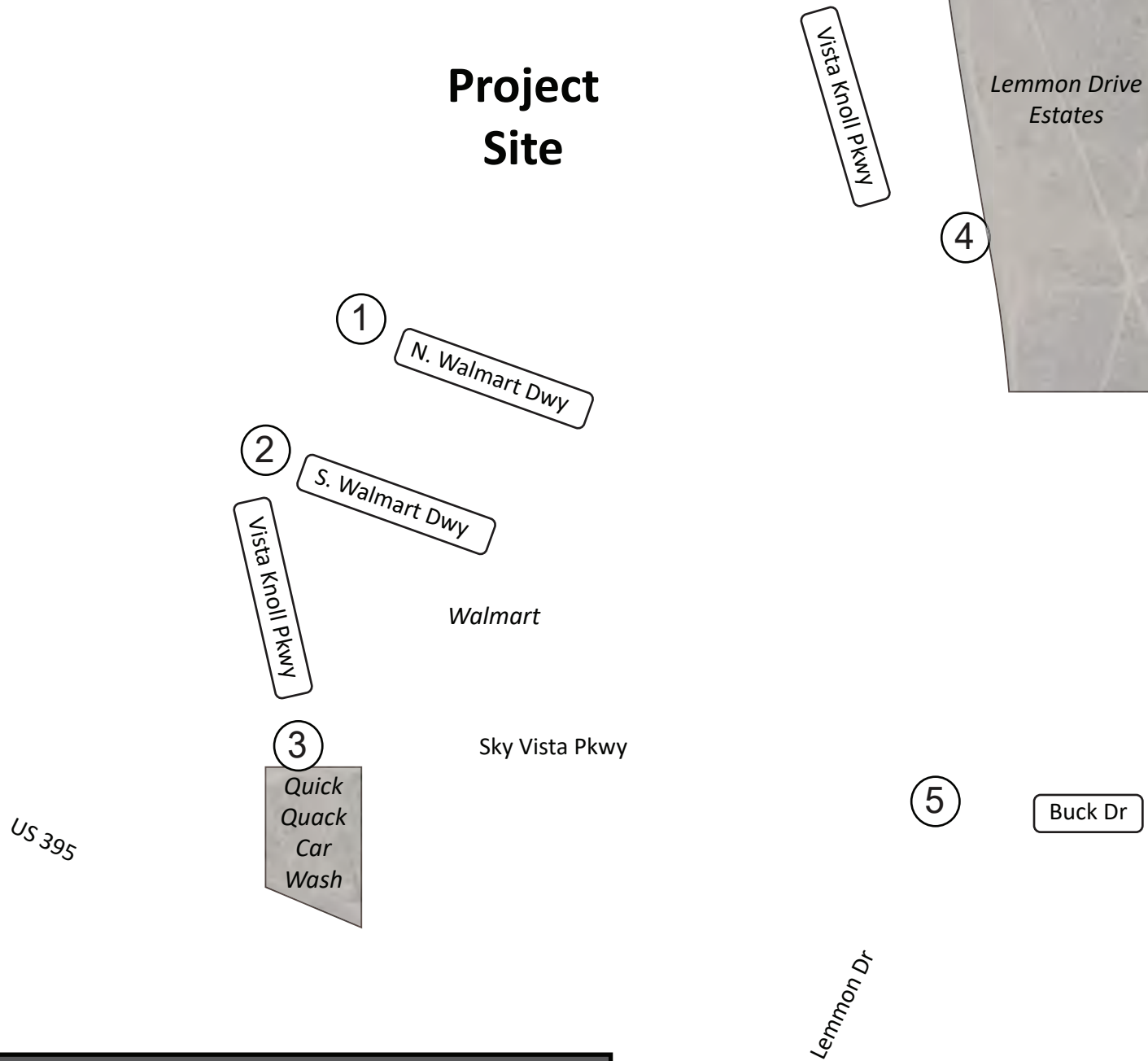
- ▶ With installation of a traffic signal, all study intersections are expected to operate within policy level of service thresholds under Baseline Plus Project conditions.
- ▶ Under Future Year (no project) conditions, the Lemmon Drive / Sky Vista Parkway / Buck Drive intersection is anticipated to operate at poor levels of service (LOS "F").
- ▶ Under Future Year Plus Project conditions, the Lemmon Drive / Sky Vista Parkway / Buck Drive intersections are anticipated to operate at poor levels of service (LOS "F").

The project will construct the following improvements:

- ▶ The remaining Vista Knoll Parkway roadway segment between the North Walmart Driveway and Lemmon Drive as a two lane roadway with one travel lane in each direction and left turn lanes at intersections.
- ▶ Sidewalk connection on Vista Knoll Parkway between the North Walmart Driveway and Lemmon Drive.
- ▶ A traffic signal at the Lemmon Drive / Vista Knoll Parkway intersection, under an RRIF offset agreement, if not constructed by other development(s) prior to this project. It is anticipated that traffic signal warrants will be met under Baseline Plus Project conditions.
- ▶ All project driveways and intersections should provide adequate sight distance triangles in accordance with the current edition of AASHTO's A Policy on Geometric Design of Highways and Streets.
- ▶ The project will pay Regional Road Impact fees, or construct traffic signal improvements under an RRIF offset agreement, as mitigation for its impact on the regional roadway network.



# Project Site



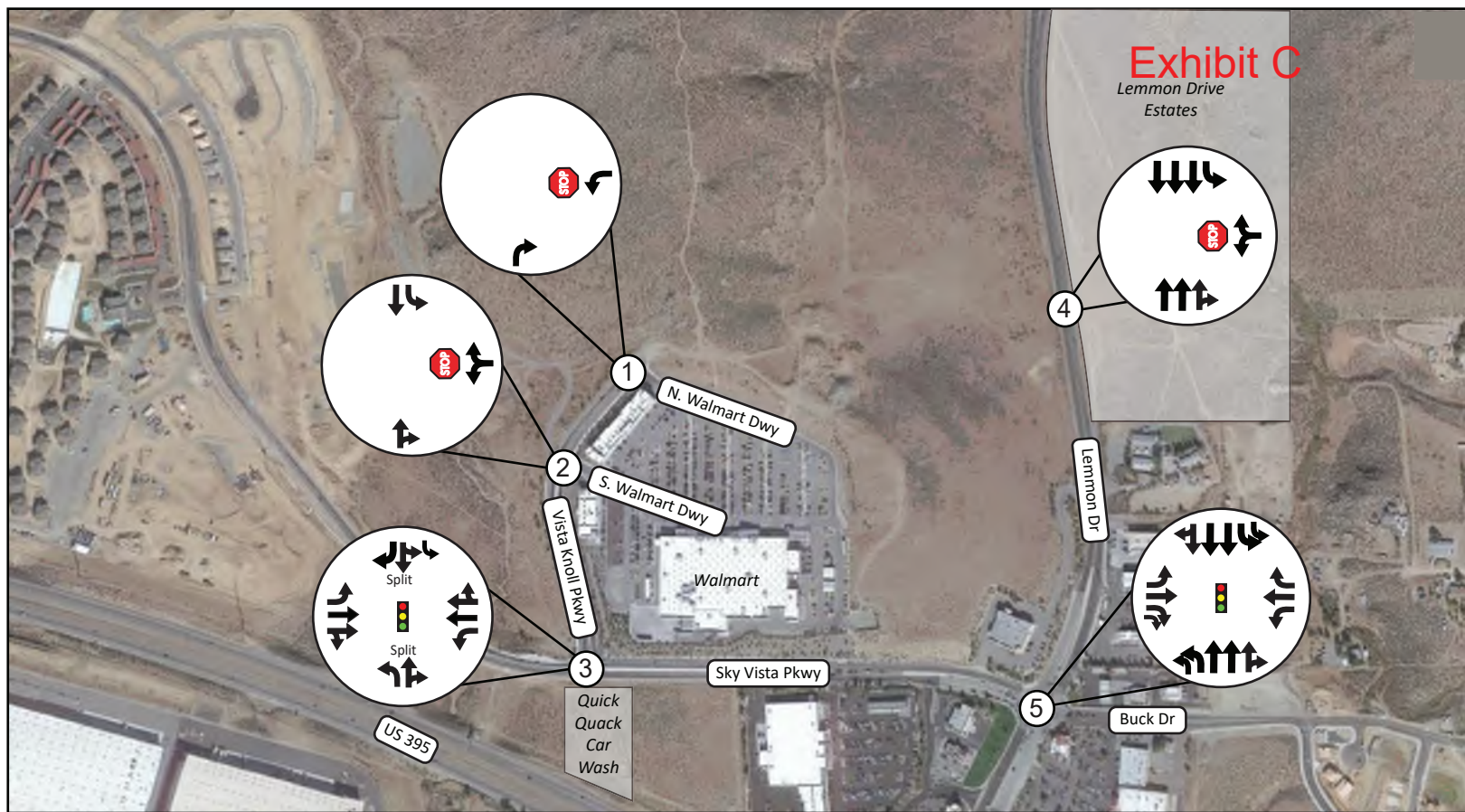
## Study Locations

- ① Vista Knoll Parkway / North Walmart Driveway
- ② Vista Knoll Parkway / South Walmart Driveway
- ③ Sky Vista Parkway / Vista Knoll Parkway
- ④ Lemmon Drive / Vista Knoll Parkway
- ⑤ Lemmon Drive / Sky Vista Parkway / Buck Drive

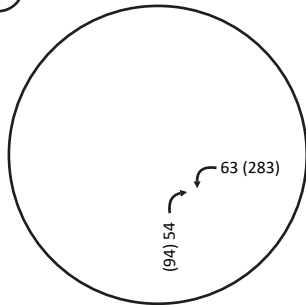
■ - Project Site

Ⓝ - Study Intersection

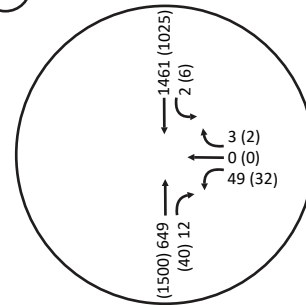




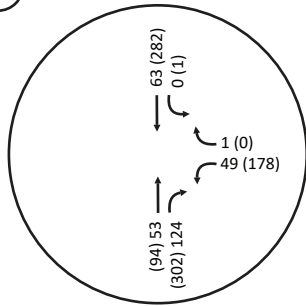
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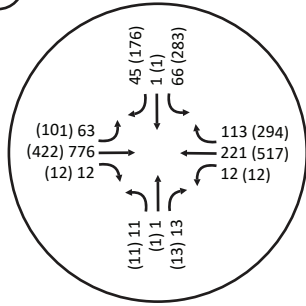
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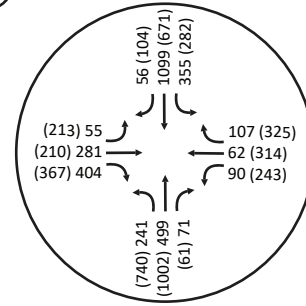
2 Vista Knoll Pkwy / S. Walmart Dwy



3 Sky Vista Pkwy / Vista Knoll Pkwy



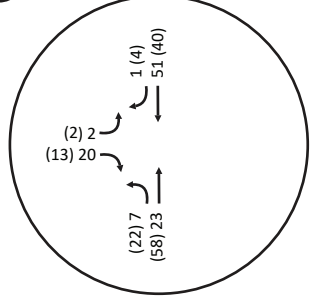
5 Lemmon Dr / Sky Vista Pkwy / Buck Dr



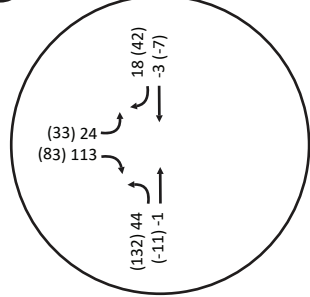




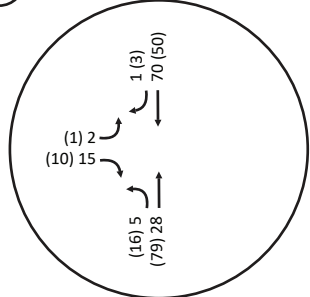
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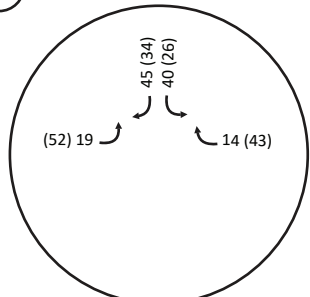
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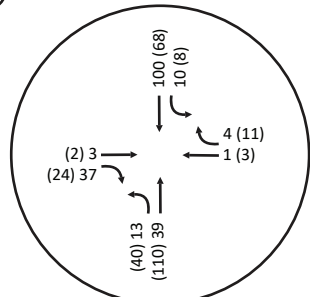
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③ Sky Vista Pkwy / Vista Knoll Pkwy

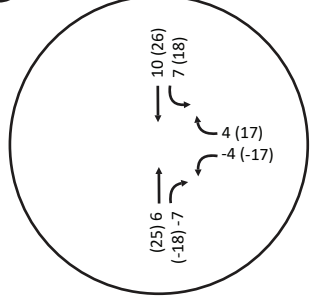


⑤ Lemmon Dr / Sky Vista Pkwy / Buck Dr

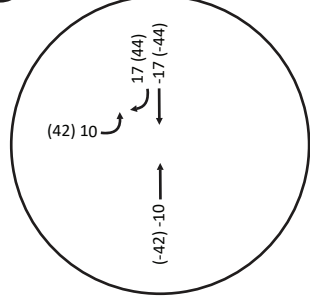




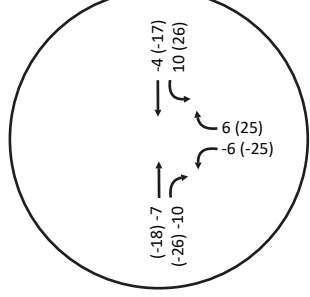
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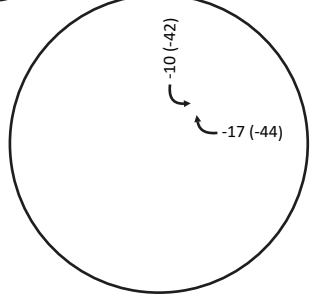
4 Lemmon Dr / Vista Knoll Pkwy



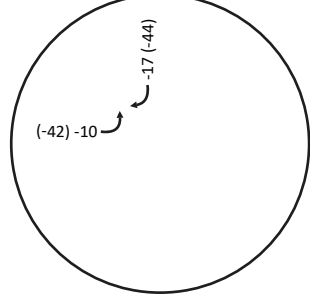
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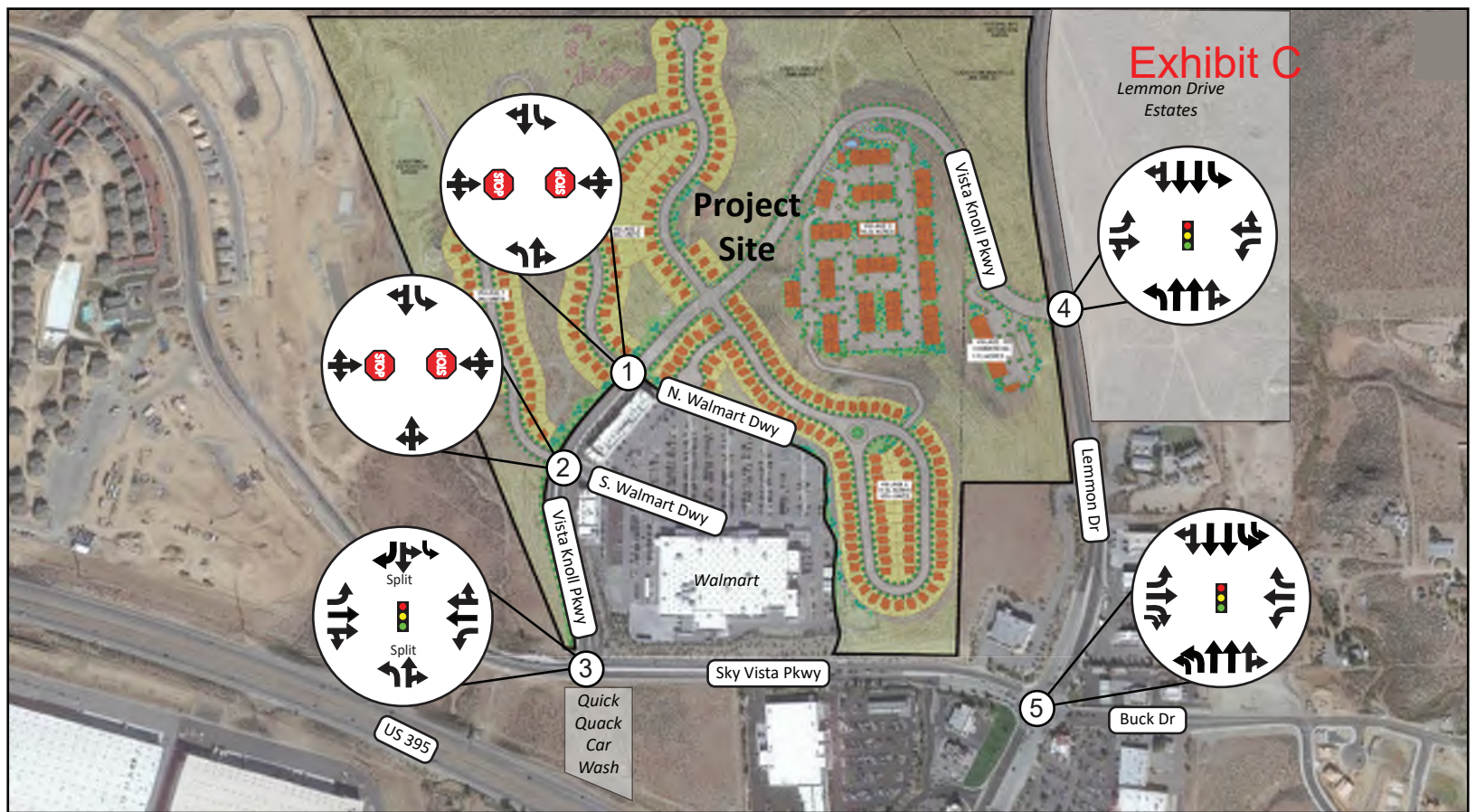


3 Sky Vista Pkwy / Vista Knoll Pkwy

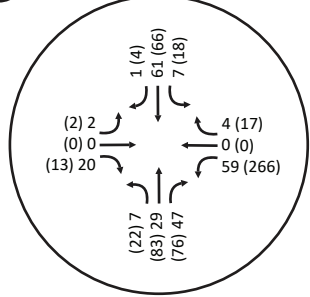


5 Lemmon Dr / Sky Vista Pkwy / Buck Dr

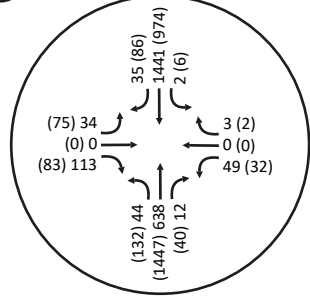




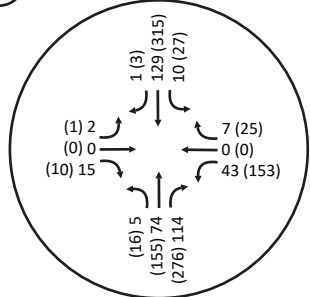
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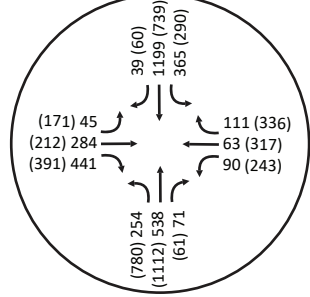
**4** Lemmon Dr / Vista Knoll Pkwy



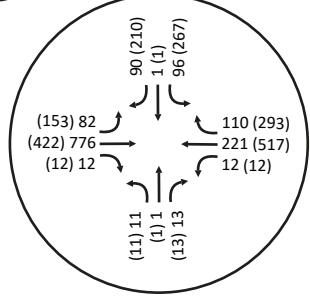
**2** Vista Knoll Pkwy / S. Walmart Dwy

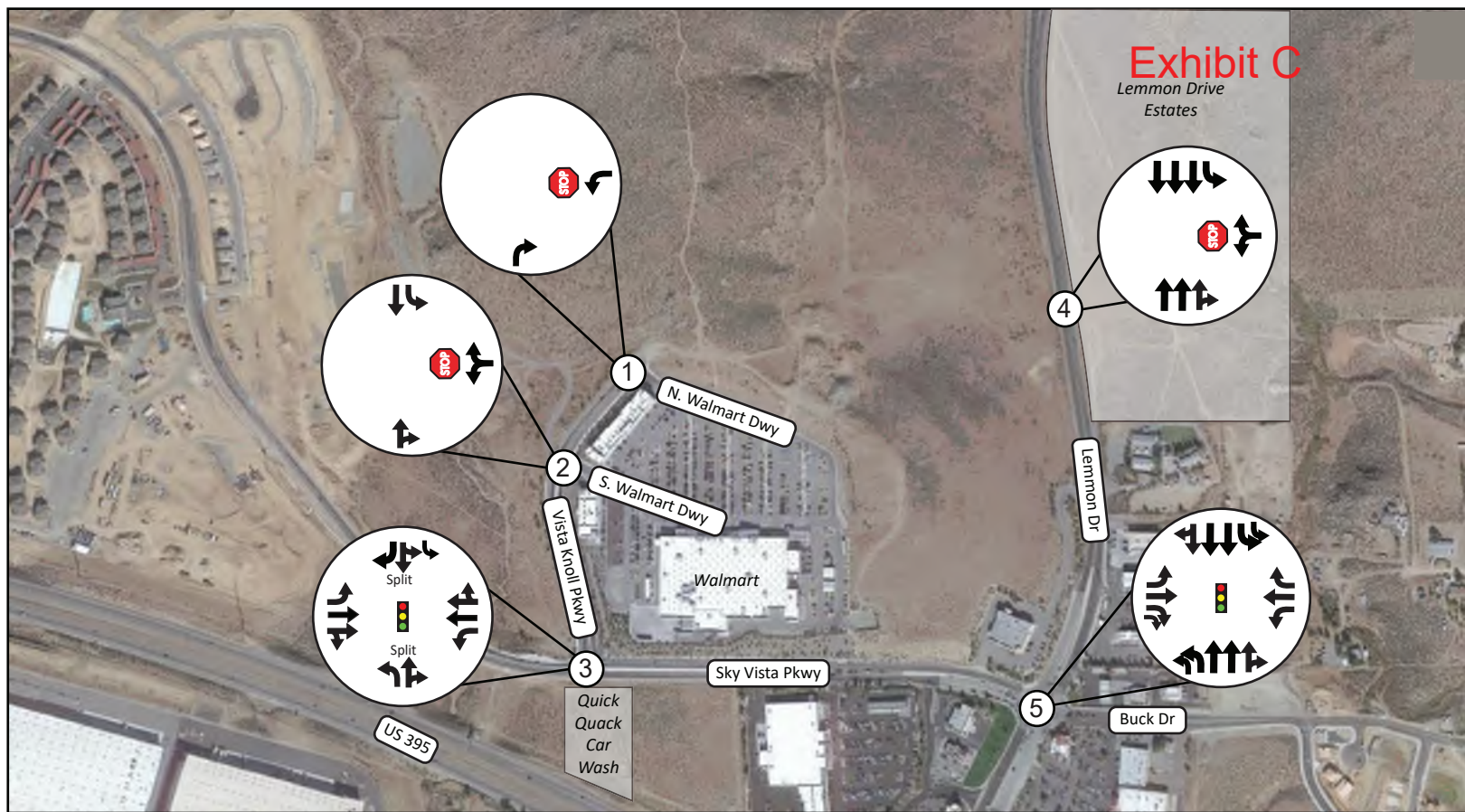


**5** Lemmon Dr / Sky Vista Pkwy / Buck Dr

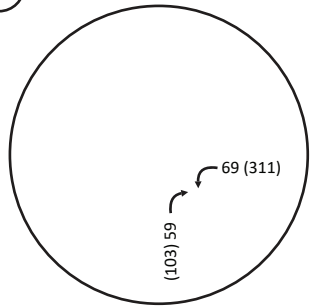


**3** Sky Vista Pkwy / Vista Knoll Pkwy

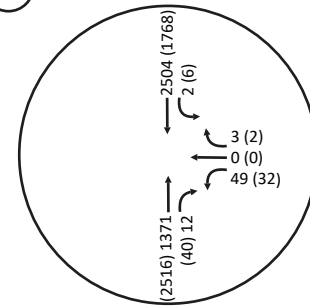




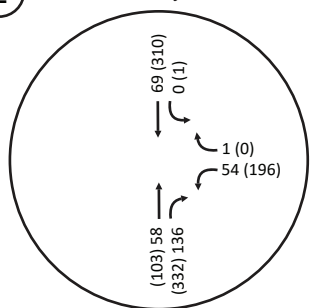
1 Vista Knoll Pkwy / N. Walmart Dwy



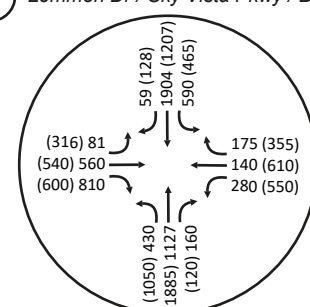
4 Lemmon Dr / Vista Knoll Pkwy



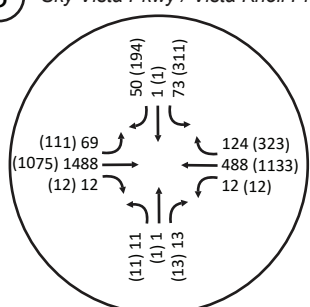
2 Vista Knoll Pkwy / S. Walmart Dwy

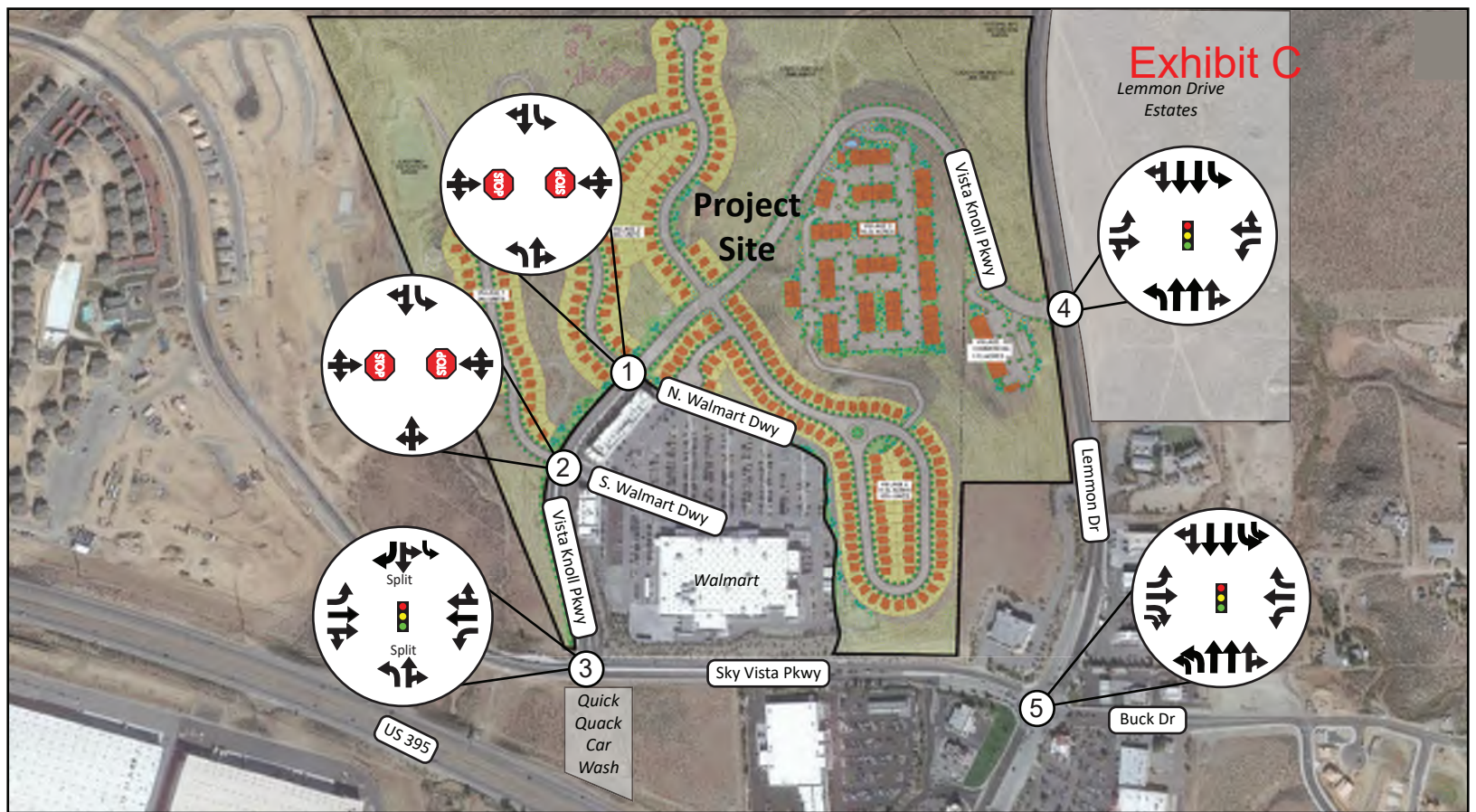


5 Lemmon Dr / Sky Vista Pkwy / Buck Dr

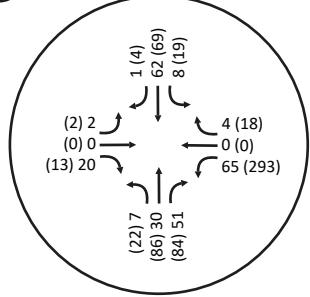


3 Sky Vista Pkwy / Vista Knoll Pkwy

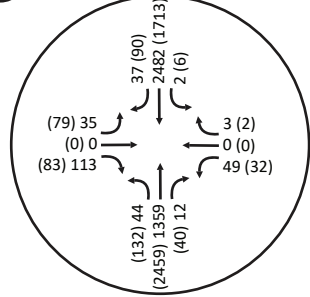




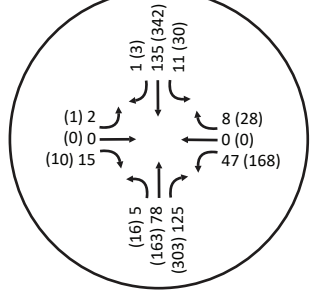
**1** Vista Knoll Pkwy / N. Walmart Dwy



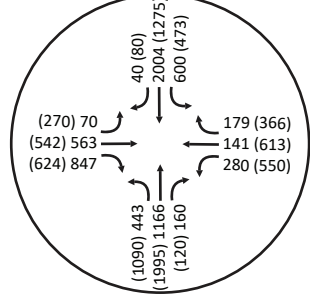
**4** Lemmon Dr / Vista Knoll Pkwy



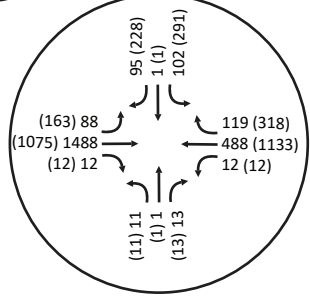
**2** Vista Knoll Pkwy / S. Walmart Dwy



**5** Lemmon Dr / Sky Vista Pkwy / Buck Dr



**3** Sky Vista Pkwy / Vista Knoll Pkwy



# Appendix A

## NDOT Crash Data History

Appendix not included in Exhibit C



# Proposal for Lemmon Estates Drive Project COR-03 Rev 01



## Campbell Construction Co., Inc.

7788 White Fir Street

Reno, NV 89431

Contact: Ric Padilla

Phone: 775-677-9111 x1011

Fax: 775-677-9191

Quote To: Lafferty Communities  
2000 Crow Canyon Place, Suite 350  
San Ramon, CA 94583  
Phone: (925) 355-1305  
Email: GGarchar@laffertycommunities.com  
Attention: Greg Garchar

Estimate No.: 22-025C-03R1  
Date of Plans: SEE CONDITIONS  
Plan Pages: SEE CONDITIONS  
Bid Date: 5/19/23  
Revision Date: 4/30/24

Proposal valid for 30 days.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
<b>GENERAL CONDITIONS</b>					
100010	Mobilization	1.00	LS	5,000.00	5,000.00
<b>General Conditions Subtotal</b>					<b>5,000.00</b>
<b>DEMOLITION</b>					
101040	Saw Cut Asphalt	826.00	LF	6.45	5,327.70
101050	Saw Cut Concrete	530.00	LF	10.40	5,512.00
101060	Demo Asphalt 4" Thick	1,735.00	SF	2.25	3,903.75
101070	Demo Concrete Flatwork 4" Thick	15,410.00	SF	1.95	30,049.50
101080	Demo Type I Median Curb	790.00	LF	12.40	9,796.00
<b>Demolition Subtotal</b>					<b>54,588.95</b>
<b>GRADING</b>					
200211	Finish Subgrade - Roadway	9,830.00	SF	1.30	12,779.00
200212	Finish Subgrade - Concrete Flatwork	6,030.00	SF	2.50	15,075.00
<b>Grading Subtotal</b>					<b>27,854.00</b>
<b>CONCRETE</b>					
800012	Type I Median Curb w/ 6" Base	530.00	LF	55.00	29,150.00
800015	Island Infill 4" Concrete w/ 4" Base	6,030.00	SF	13.00	78,390.00
<b>Concrete Subtotal</b>					<b>107,540.00</b>
<b>PAVING</b>					
900015	4" AC w/ 6" Base	9,810.00	SF	5.80	56,898.00
900017	4" AC on Existing Base	1,055.00	SF	3.65	3,850.75
900210	Slurry Seal - Roadways	10,865.00	SF	1.70	18,470.50
<b>Paving Subtotal</b>					<b>79,219.25</b>

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
<b>MISCELLANEOUS</b>					
950420	Signs & Striping	1.00	LS	24,500.00	24,500.00
	<b>Miscellaneous Subtotal</b>				<b>24,500.00</b>
	<b>Base Contract Subtotal</b>				<b>298,702.20</b>
<b>ALTERNATES</b>					
2200010	Over-Exc Turn Pocket 3' Deep	1,093.00	CY	8.55	9,345.15
2200011	Load Out & Off-Haul Expansive Clays	1,093.00	CY	23.05	25,193.65
2200015	Imp & Place Struct Fill (Turn Pocket 3' Deep)	1,093.00	CY	49.90	54,540.70
	<b>Alternates Subtotal</b>				<b>89,079.50</b>
<b>GRAND TOTAL</b>					<b>\$387,781.70</b>


**NOTES:**

## TRAFFIC SIGNAL MODIFICATIONS ON LEMMON DRIVE

1. All Electrical work is excluded from this proposal. Electrical work to be performed by others.
2. Pricing is based on CFA Civil Drawings Dated 3/11/24 Sheets C9.0 through C9.8.
3. Pricing based on this being a City of Reno Roadway.
4. 4" Asphalt to be Two Lifts Type II PG64-22 50 Blow 4% Voids w/ Rap and Lime in lieu of 4" PG64-28NV per City of Reno Standards. If the original asphalt thickness is more than stated on the drawings, we will be entitled to a price adjustment.
5. A Type II Slurry Seal is to be provided in lieu of the Chip Seal called out on Detail 1/C9.3.

All conditions and exclusions from our original proposal apply.

Respectfully Submitted,



Ric Padilla  
 Estimator / Project Manager  
 Campbell Construction Co., Inc.  
 NCL# 47204 License Limit - Unlimited CCL# 794570



**EXHIBIT 'A'**

**Summit Line Construction, Inc.**

Item #	Item Description	Qty.	Unit	Unit Cost	Total Cost	Underground Infrastructure Totals
1	3" SCH40 PVC Conduit	1	LS	\$14,880.00	\$14,880.00	\$14,880.00
2	Trench & Backfill	1	LS	\$35,607.00	\$35,607.00	\$35,607.00
3	Metered Service w/ BBS & Foundation	1	LS	\$24,557.00	\$24,557.00	\$4,285.00
4	N-36 NV Energy Pull Box	1	LS	\$2,033.00	\$2,033.00	\$2,033.00
5	#5 T/R Pull Box	1	LS	\$10,764.00	\$10,764.00	\$10,764.00
6	#9/9E T/R Pull Box	1	LS	\$5,396.00	\$5,396.00	\$5,396.00
7	Type 30/35/30-A & 35-A Pole & Foundation	1	LS	\$233,631.00	\$233,631.00	\$57,000.00
8	1-A Pole & Foundation	1	LS	\$3,573.00	\$3,573.00	\$2,100.00
9	1W3C Signal Head	1	LS	\$21,135.00	\$21,135.00	
10	Pedestrian Signal Head	1	LS	\$9,865.00	\$9,865.00	
11	Gridsmart Camera System	1	LS	\$39,567.00	\$39,567.00	
12	25C Signal Cable	1	LS	\$19,704.00	\$19,704.00	
13	10C Signal Cable	1	LS	\$7,052.00	\$7,052.00	
14	Emergency Vehicle Detector	1	LS	\$11,518.00	\$11,518.00	
15	EVD Cable	1	LS	\$2,892.00	\$2,892.00	
16	Cable - 12C - Multi Mode ( Tie-in to Existing Fiber From Buck to A	1	LS	\$23,818.00	\$23,818.00	
17	City of Reno Turn On	1	LS	\$3,836.00	\$3,836.00	
18	IISNS	1	LS	\$42,019.00	\$42,019.00	
19	Controller & Cabinet Assembly	1	LS	\$34,359.00	\$34,359.00	
20	Cabinet Foundation	1	LS	\$5,037.00	\$5,037.00	\$5,037.00
21	Pedestrian Push Button Station	1	LS	\$9,866.00	\$9,866.00	
<b>Total Proposal:</b>					<b>\$561,109.00</b>	<b>\$137,102.00</b>

**EXHIBIT "D"**  
**(Letter of Approval)**



**REGIONAL TRANSPORTATION COMMISSION**

*Metropolitan Planning • Public Transportation & Operations • Engineering & Construction*

Metropolitan Planning Organization of Washoe County, Nevada

May 16, 2024

Mr. Greg Garchar  
Lafferty Communities  
Lemmon Drive Villas Property, LLC  
5000 Executive Parkway, Suite 350  
San Ramon CA 94583

Subject: Letter of Approval for Regional Road Impact Fee Waivers, April 16, 2024 Revision

Development of Record: Lemmon Drive Estates and Highland Project

Dear Garchar,

The Regional Road Impact Fee (RRIF) Administrators for the RTC and the City of Reno have reviewed and approved your application, dated April 16, 2024, to receive RRIF waivers for the installation of the traffic signal system at the intersection of Lemmon Drive/Vista Knolls Parkway/Sun Set View. The amount of RRIF waiver issued within the City of Reno is estimated to be around \$346,365 which is the remaining balance of offset eligible improvements constructed on behalf of Washoe County. A RRIF Offset Agreement for this work is being prepared and will be forwarded to the RTC Board and the Reno City Council with a recommendation for approval. Upon approval and execution of the Offset Agreement by these bodies, the agreement will be forwarded to the Developer of Record for signature.

Please feel free to contact Jeff Wilbrecht, Engineering Manager for the RTC, at (775) 335-1872 should you have any questions regarding this subject.

Sincerely,

**REGIONAL TRANSPORTATION COMMISSION  
RRIF ADMINISTRATOR**

A handwritten signature in blue ink, appearing to read "Dale Keller", written over a horizontal line.

Dale Keller, P.E.  
RTC RRIF Administrator

**CITY OF RENO  
RRIF ADMINISTRATOR**

A handwritten signature in blue ink, appearing to read "Mike Mischel", written over a horizontal line.

Mike Mischel, P.E.  
City of Reno RRIF Administrator

DK/JW

Cc: Angela Fuss, AICP, Assistant Director of City of Reno Development Services

File: RRIF Offset Agreement # 513011

**EXHIBIT “E”  
(The Developer of Record QA/QC Program  
And  
RTC Special Technical Specifications  
For  
Regional Road Impact Fee Projects)**

**SPECIAL TECHNICAL SPECIFICATIONS**

<b>1.01</b>	<b>INSPECTION AND TESTING</b>	<b>1.15</b>	<b>BRIDGE DECKS - Deleted</b>
	1.01A <u>ASPHALT CEMENT</u>	<b>1.16</b>	<b>SLURRY SEAL</b>
	1.01B <u>BITUMINOUS PLANTMIX</u>	<b>1.17</b>	<b>MICRO-SURFACE - Deleted</b>
<b>1.02</b>	<b>REMOVAL OF EXISTING IMPROVEMENTS</b>	1.17A	<u>GENERAL</u>
<b>1.03</b>	<b>TREE ROOT MITIGATION - Deleted</b>	1.17B	<u>CONTRACTOR PERSONNEL</u>
<b>1.04</b>	<b>SUBGRADE PREPARATION- Deleted</b>	1.17C	<u>MATERIAL</u>
<b>1.05</b>	<b>OVEREXCAVATION AND STABILIZATION - Deleted</b>	1.17D	<u>MIX DESIGN</u>
<b>1.06</b>	<b>GEOSYNTHETICS - Deleted</b>	1.17E	<u>PROPORTIONING</u>
	1.06A <u>SEPARATION</u>	1.17F	<u>MIXING AND SPREADING EQUIPMENT</u>
	1.06B <u>STABILIZATION</u>	1.17G	<u>PLACEMENT</u>
	1.06C <u>REINFORCEMENT</u>	<b>1.18</b>	<b>PAVEMENT MARKINGS</b>
<b>1.07</b>	<b>TRENCH EXCAVATION</b>	1.18A	<u>TRAFFIC PAINT</u>
<b>1.08</b>	<b>PIPE - Deleted</b>	1.18B	<u>THERMOPLASTIC</u>
<b>1.09</b>	<b>ROADBED MODIFICATION - Deleted</b>	1.18C	<u>RAISED MARKERS</u>
<b>1.10</b>	<b>AGGREGATE BASE - Deleted</b>	<b>1.19</b>	<b>FLEXIBLE MEDIAN ISLAND OBJECT MARKERS</b>
<b>1.11</b>	<b>CEMENT TREATED BASE - Deleted</b>	<b>1.20</b>	<b>CHANNELIZERS</b>
	1.11A COMPOSITION OF MIXTURES	<b>1.21</b>	<b>IMPACT ATTENUATOR - Deleted</b>
	1.11B MIXING	<b>1.22</b>	<b>TRAFFIC SIGNS</b>
	1.11C SPREADING	<b>1.23</b>	<b>TRAFFIC SIGNALS</b>
	1.11D PROTECTION AND CURING	1.23A	<u>LOOP DETECTORS</u>
<b>1.12</b>	<b>PORTLAND CEMENT CONCRETE</b>	1.23B	<u>TEMPORARY MODIFICATIONS DURING CONSTRUCTION</u>
	1.12A COMPOSITION OF MIXTURES	1.23C	<u>CAMERAS</u>
	1.12B <u>SIDEWALK, CURB AND GUTTER</u>	<b>1.24</b>	<b>UTILITY ADJUSTMENTS</b>
	1.12C <u>THRUST BLOCKS</u>	1.24A	<u>VERIFICATION OF DEPTH</u>
	1.12D <u>RETAINING WALLS</u>	1.24B	<u>UTILITY MANHOLE AND VAULT ADJUSTMENTS</u>
	1.12E <u>PAVING</u>	1.24C	<u>MANHOLE PROTECTION PLAN</u>
	1.12F <u>UTILITY ADJUSTMENTS</u>	<b>1.25</b>	<b>SURVEY MONUMENTS</b>
<b>1.13</b>	<b>DETECTABLE SURFACE WARNING TILES</b>	<b>1.26</b>	<b>CERTIFICATES OF COMPLIANCE</b>
<b>1.14</b>	<b>BITUMINOUS PLANTMIX</b>		
	1.14A <u>COMPOSITION OF MIXTURES</u>		
	1.14B <u>PAVING</u>		
	I <u>SPREADING AND FINISHING</u>		
	II <u>ACCEPTANCE</u>		
	III <u>MITIGATION</u>		
	IV <u>SPECIAL PAVING CONSIDERATIONS</u>		
	V <u>TACK COAT</u>		
	VI <u>LONGITUDINAL JOINTS</u>		
	1.14C <u>PERMANENT PATCHING</u>		

**1.01 INSPECTION AND TESTING**

Quality Assurance testing and inspection will be provided by the Agency. Quality Control shall be the Contractor's responsibility. All samples shall be furnished by the Contractor without cost to the Regional Transportation Commission of Washoe County (hereinafter designated "RTC" and/or "Agency"). The Agency may waive sampling and testing if adequate information, properly certified, is available to indicate that materials comply with the terms of specifications. Any retests due to faulty workmanship or materials shall be paid for by the Contractor.

All materials furnished and work performed, shall be done in accordance with the "Standard Specifications for Public Works Construction" (hereinafter designated "Standard Specifications") sponsored and distributed by RTC, Churchill County, Carson City, the Cities of Reno and Sparks, the City of Yerington, and Washoe County, including addenda through February 29, 2012, except as modified within the "Special Technical Specifications" for XYZ (hereinafter designated "STS"); and in accordance with the "Standard Details for Public Works Construction" (hereinafter designated "Standard Details"), including updates through December 29, 2011, except as modified by the drawings for XYZ.

1.01A ASPHALT CEMENT

1. Sampling - During hot mix operations for all paving days, the Design Engineer’s designated representative shall obtain samples of all asphalt cement binders used to produce the bituminous mixture(s). During the pre-construction meeting the contractor shall provide the contact information for the certified plant representative that will be responsible for taking the asphalt cement samples. The Design Engineer’s designated representative shall contact the plant representative in advance of each paving day and coordinate the sampling in accordance with the plantmix production schedule. Asphalt cement samples shall be taken at the injection point for each “lot” (500 ton) of plantmix bituminous pavement. Plant personnel sampling bituminous material are required to be qualified in the WAQTC Asphalt Module or NAQTC Specialized Test AASHTO T40 (Sampling Bituminous Material). All sampling shall be witnessed by the Design Engineer’s representative. The plant representative shall properly label each sample which shall then be signed by both representatives.
  
2. Testing – Unless otherwise directed by the RTC Project Manager, the Design Engineer shall procure the testing of one of the samples from each paving day for compliance with Section 201 – “Bituminous Material” of the Standard Specifications at a laboratory certified to perform all required testing components.
  
3. **The sample to be tested shall be properly handled and sent to the State of Nevada Department of Transportation Materials Testing Laboratory, 1263 South Stewart Street in Carson City, Nevada.** The test result shall represent the binder material contained in all plantmix bituminous paving lots for the corresponding paving day. The remaining daily samples shall be stored at the Design Engineer’s designated laboratory throughout the duration of the Contractor’s warranty period.
  
4. Acceptance – Asphalt binder not conforming to Table 201.02-IV (PG64-28NV) of the Standard Specifications, Section 201 – “Bituminous Material” shall be assessed demerits in accordance with the following table:

TEST	LIMIT WITH TOLERANCE	REJECTION LIMIT	DEMERITS
<b>Tests on Original Asphalt Cement</b>			
Rotational viscosity (Pa.s)	3.21 Max.	3.50 Max.	21
Flash point, (°C)	222 Min.	163 Min.	21
Ductility (cm)	50 Min.	29 Min.	21
Toughness (Inch-lbs)	110 Min.	57 Min.	21
Tenacity (Inch-lbs)	75 Min.	22 Min.	21
Sieve Test (%)	1	10	21
Dynamic Shear (kPA)	0.90 Min.	0.75 Min.	21

**SPECIAL TECHNICAL SPECIFICATIONS**

<b>Tests on Residue from Rolling Thin Film Oven</b>			
Ductility (cm)	25 Min.	4 Min.	21
Dynamic Shear (kPA)	1.98 Min.	1.65 Min.	21
Average Mass Change (%)	1.00 Max.	1.01 Max.	31
<b>Tests on Residue from Pressure Aging Vessel</b>			
Dynamic Shear (kPA)	5500 Max.	6250 Max.	21
Stiffness Modulus (MPA)	330 Max.	375 Max.	21
Slope, m-value	0.290 Min.	0.245 Min.	21

Notes:

1. Demerits, up to the amount shown, shall be assessed for each test result that exceeds the "Limit with Tolerance."
2. The number of demerits assessed for each test result shall be calculated based on prorating the total demerits over the range from "Limit with Tolerance" to the "Rejection Limit."
3. The demerit/increment shall be multiplied by the difference between the noncompliant test result and the "Limit with Tolerance."
4. Demerit values for each test result will be rounded down to the nearest whole number.

The parties of the contract agree that damage will be sustained by the Agency in the event that the asphalt binder does not conform to the requirements of the specifications. In addition it is agreed that it is extremely difficult to quantify the actual damage the agency will sustain. Demerits will be used to determine mitigation that may include any necessary measures up to, and including, the assessment of liquidated damages or removal and replacement of the deficient material. The assessment of liquidated damages and the corresponding deduct from monies owed the contractor shall be in accordance with the schedule and corresponding notes below.

<b>Total Number of Demerits</b>	<b>Liquidated Damage Dollar per Ton<sup>1,2</sup></b>
1 – 2	10
3 – 5	20
6 – 9	30
10 – 14	50
15 – 20	100
21 - 30 <sup>3</sup>	75% of the cost of the asphalt binder
31 - 40 <sup>3</sup>	100% of the cost of the asphalt binder
41 or more <sup>3,4</sup>	100% + additional damages to be determined

Notes:

1. Liquidated damages will be assessed against the quantity (Tonnage) of asphalt binder used in the plantmix bituminous pavement represented by the sample tested.
2. The tons of asphalt binder shall be determined by multiplying the average of asphalt contents (by dry weight of aggregate) from all affected lots by the total tons of bituminous mixture placed.
3. Remove and replace material shown to have 21 or more demerits. Material removed shall not be paid for and all costs associated with removal shall be at the contractor's expense. Testing and inspection of replaced materials shall be as directed by the RTC Project Manager and all associated costs shall be at the contractor's expense. At the RTC Project Manager's option, materials having 21 or more demerits may be left in place and liquidated damages assessed at the percentage of asphalt binder cost shown. The cost of the asphalt binder used for assessing

**SPECIAL TECHNICAL SPECIFICATIONS**

- liquidated damages shall be \$675 per ton.
- Liquidated damages as determined by the RTC Project Manager may be in excess of the cost of the asphalt binder.

Additional samples may be tested at the Contractor’s request and expense and following approval of the RTC Project Manager. Liquidated damages assessed due to deficient asphalt binder material may be in addition to any mitigation measures or penalties that may be determined by other sections of the specifications.

1.01B BITUMINOUS PLANTMIX

Subsection 336.03.04 - “Bituminous Mixtures” of the Standard Specifications, is herewith amended as follows:

- On page 336.00-6, add the following to the fourth paragraph at the bottom half of the page regarding cores and cut samples:

Measure single core or cut sample in accordance with ASTM D3549, latest version, to the nearest 0.05" and report to the nearest 0.05" per the following examples:

<b>Individual Measurements</b>		
Using Apparatus Capable of 2 Decimal Places	Using Apparatus Capable of 1/16 Inch	Reported Thickness After Rounding
2.23" to 2.27"	2-4/16" = 2.250"	2.25"
2.28: to 2.32"	2-5/16" = 2.313"	2.30"
2.33" to 2.37"	---	2.35"
2.38" to 2.42"	2-6/16" = 2.375"	2.40"
2.43" to 2.47"	2-7/16" = 2.438"	2.45"
2.48" to 2.52"	2-8/16" = 2.500"	2.50"

For purpose of acceptance and mitigation, the average of the rounded thickness measurements of the 3 cores or cut samples for each lot shall be reported to the nearest 0.1". A number ending in 0.05" shall be rounded up. For example, both 2.35" and 2.40" are rounded to 2.4".

- On page 336.00-7, delete the fourth paragraph and replace as follows:

One fresh, hot sample of the bituminous mixture (HMA) for each “lot” shall be tested for conformance with the mix design test properties as required by STS 1.14A BITUMINOUS PLANTMIX, and in accordance with ASTM D2041, as qualified in the Standard Specifications.

Fresh, hot samples are defined as the samples obtained during construction, transported to the laboratory, molded and compacted on the same day. Reheating is allowed only for restoring heat lost, if any, during transport to the laboratory



and sample preparation. Refer to Note under item 4 below (STS 1.01B BITUMINOUS PLANTMIX - Item 4, “Preparing Field Sample”) regarding limitations on test results from reheated archived samples.

3. On page 336.00-7 under Subsection 336.03.04.01 - “Sampling” of the Standard Specifications, add the following sentence to the first paragraph:

When samples are obtained by two testing laboratories, the samples shall be split from a single sample or taken at the same time and at locations immediately adjacent to each other.

4. On page 336.00-7 under Subsection 336.03.04.02 - “Preparing Field Sample”, of the Standard Specifications, delete the second and third paragraphs and replace as follows:

If the temperature of the HMA is below the approved mix design’s compaction temperature, the temperature of the HMA shall be recorded and the sample shall be reheated to the approved mix design’s compaction temperature. Heating samples should be done by placing the sample in a covered container in an oven for a maximum of one hour or placing the sample in a mixing bowl on top of a hot plate or propane stove, for a maximum of 10 minutes, and continuously mixed until compaction temperature has been reached. Samples shall be discarded if burned during reheating.

Note: Samples well below the compaction temperature may require additional heating time. Reheating of samples beyond the maximums specified is not desirable. In such instances, new samples should be taken in the field, if possible. If this is not possible and samples must be reheated beyond the specified maximums, the test results from reheated archived samples shall not be used for direct comparison with results from tests on hot, fresh samples but only for relative comparisons.

## 1.02 REMOVAL OF EXISTING IMPROVEMENTS

This section covers the construction methods involved in removing existing improvements.

Existing Portland cement concrete (PCC) improvements shall be removed to neatly sawed edges with sawcuts made to a minimum depth of 1½ inches. No section to be replaced shall be smaller than 30 inches in length. Curb and gutter shall be sawed to depth of 1½ inches on a neat line at right angles to the curb face.

Removal of the curb and gutter shall include all existing composite material from back of curb to 12-inches in front of the lip of the gutter. The contractor shall be required to achieve a vertical, neat line in a location appropriate for the method of curb and gutter placement chosen. The Contractor shall match the existing top of curb and maintain the uniform flow line of the gutter. If a uniform flow line does not exist, the Contractor shall establish a uniform flow line as directed by the Design Engineer.

Bituminous pavement shall be removed to clean straight lines by sawcutting where the removal of existing improvements does not include the total amount of paving encountered. Where bituminous pavement adjoins a trench, the edges adjacent to the trench shall be trimmed to neat straight lines at least

9 inches wider than the trench on each side before resurfacing to insure that all areas to be resurfaced are accessible to the rollers used to compact the subgrade or paving materials. Where new pavement is to adjoin existing bituminous or concrete pavements, the existing pavement shall be sawcut or blade-cut straight.

It shall be the Contractor's responsibility to protect the integrity of the edge of pavement adjacent to the removal section.

The Contractor shall remove all existing improvements to the required depth by a method that does not damage the subgrade. Pneumatic wheel construction equipment, including, but not limited to, trucks, loaders, excavators and scrapers, will not be allowed on the exposed subgrade within the roadway section. Should the Contractor fail to utilize necessary caution to protect the subgrade or allow pneumatic wheel construction equipment on the subgrade within the roadway section after the existing surface has been removed; all overexcavation and deep stabilization shall be at the Contractor's expense.

The Contractor shall take all necessary precautions to protect existing landscaping, which may be disturbed during the execution of the work. All restoration work shall be in accordance with the applicable provisions of Section 333 – "Landscaping" of the Standard Specifications, or as specified herein.

Where lawn or landscape with topsoil has been disturbed, contaminated, or removed, the Contractor shall replace the topsoil with an imported, high quality garden topsoil to a minimum depth of 3 inches; with minimal compaction. Areas of concern may include, but are not limited to, landscaping adjacent to sidewalks, curbs and gutters, driveways, and alleys. The topsoil shall conform to Section 200.08 – "Topsoil" of the Standard Specifications.

Existing improvements; adjacent property; utilities and other facilities; and trees and plants that are not to be removed shall be protected from injury or damage resulting from the Contractor's operations.

The Contractor shall notify the U.S. Postal Service to coordinate all mailbox relocation.

Any existing improvements, including, but not limited to, retaining walls, adjacent property, utilities, sprinkler systems, signs, other facilities or appurtenances, trees and plants, which are damaged or displaced as a result of the Contractor's operation shall be replaced or restored to the original position and condition prevailing prior to start of operations at the Contractor's own expense unless otherwise directed by the RTC Project Manager or Design Engineer. In addition, removal of existing improvements shall be done in accordance with the provisions of Section 300.04 - "Protection of Utilities and Underground Facilities" of the Standard Specifications.

## **1.07 TRENCH EXCAVATION**

Subsection 305.02 - "Maximum Length of Open Trench" of the Standard Specifications, is herewith amended as follows:

1. Add the following paragraph:

Unless otherwise directed by the Design Engineer and approved by the Agency, there shall be no unprotected open trench remaining at the end of the working day. At the end of the working day, any open trench shall be protected by plating or other means approved by the Design Engineer and the Agency.

## 1.12 PORTLAND CEMENT CONCRETE

### 1.12A COMPOSITION OF MIXTURES

The Contractor shall submit in writing for approval a mix design conforming to the requirements of Subsection 337.01 - "General" of Section 337 - "Composition of Mixtures" of the Standard Specifications. All Portland Cement Concrete, unless otherwise indicated, shall have a coarse aggregate gradation conforming to Size No. 67 in Subsection 200.05.03 - "Coarse Aggregates" of the Standard Specifications. Cement shall be Type II.

If the Contractor submits a written request to use Size No. 57 in lieu of Size No. 67, and if the Agency approves this request, then air entrainment shall be adjusted to conform to ACI requirements for severe conditions.

### 1.12B SIDEWALK, CURB AND GUTTER

Concrete used for curbs, gutters, sidewalks, pedestrian ramps, and driveway aprons shall conform to the requirements of Subsection 337.10.01.01 - "Portland Cement Concrete Exposed to Freeze-Thaw Cycles" of the Standard Specifications and shall be reinforced with collated, fibrillated polypropylene fibers conforming to the requirements of Subsection 202.02.02.04 - "Polypropylene Fibers" of the Standard Specifications, at 1.5 pounds per cubic yard of concrete.

Subsection 312.10.02 - "Sidewalk Surface" of the Standard Specifications is herewith amended as follows:

1. Add the following paragraphs:
  - a) When a 10-foot straightedge is placed on the sidewalk, curb, or gutter, the surface shall not vary more than  $\frac{1}{4}$  inch from the edge of the straightedge, except at grade changes.
  - b) Curbs at pedestrian ramps shall **not** be placed monolithically with pedestrian ramps.

### 1.12C THRUST BLOCKS

Portland Cement Concrete used for thrust blocks shall have a minimum compressive strength of 3000 psi when tested at 28 days and have a 1 to 4 inch slump.

Thrust blocks shall be installed such that they bear against the pipe fitting on one side and against the undisturbed earth on the other side. The Contractor shall provide anchor blocks and support blocks on vertical bends.

Thrust block concrete shall not obstruct the removal of bolts from fittings. Concrete shall be prevented from adhering to the fittings. Either a liquid bond breaker shall be applied to the fitting, or an impervious membrane shall be used.

#### 1.12D RETAINING WALLS

Concrete used for retaining walls shall conform to the requirements of Subsection 337.10.01.01 – “Portland Cement Concrete Exposed to Freeze-Thaw Cycles” of the Standard Specifications.

#### 1.12E PAVING

#### 1.12F UTILITY ADJUSTMENTS

Concrete used for utility adjustments shall conform to the requirements of Subsection 337.10.01.01 – “Portland Cement Concrete Exposed to Freeze-Thaw Cycles” of the Standard Specifications and shall be reinforced with collated, fibrillated polypropylene fibers conforming to the requirements of Subsection 202.02.02.04 – “Polypropylene Fibers” of the Standard Specifications, at 1.5 pounds per cubic yard of concrete.

The concrete used for utility adjustments shall be protected until a minimum compressive strength of 3,000 psi is attained. The RTC Project Manager shall approve the method of protection

### **1.13 DETECTABLE SURFACE WARNING TILES**

1. The detectable surface warning tiles shall consist of precast tiles with a minimum size of 2' x 2', color dark red. Approved products include: CASTinTACT, TEKWAY DOME-TILES, ARMOR CAST WET SET TILES, and ARCIS WET SET TILES. Detectable surface warning tiles shall be constructed per manufacturer's installation guidelines and conform to ADAAG standards.
2. Proposed Substitution products are to be submitted for approval in accordance with provision 22 of the Instruction To Bidders, page ITB-4, within these documents. In order to be considered, submittal packages for alternate truncated concrete dome materials must be prepared and submitted in accordance with the requirements of STS 1.13 DETECTABLE SURFACE WARNING TILES.
3. The Contractor shall check the prefabricated panels upon delivery to verify that the proper material has been received. The panels shall be inspected by the Contractor to be free of flaws or damage occurring during manufacturing, shipping, or handling.
4. The prefabricated panels shall be installed in accordance with the Reno Standard Details and the manufacturer's recommendations.
6. Submittals shall include the following:
  - a) The product data sheet and certification from the Manufacturer that the prefabricated detectable surface warning tile panels supplied meets the requirements of STS 1.13 DETECTABLE SURFACE WARNING TILES; and
  - b) The manufacturer's installation instructions and general recommendations.

**1.14 BITUMINOUS PLANTMIX**

Bituminous Plantmix shall conform to the requirements of Section 320 - “Plantmix Bituminous Pavement” of the Standard Specifications, except as modified herein.

The Contractor shall submit in writing for approval a job mix formula conforming to Subsection 320.02 – “Composition of Mixtures” of the Standard Specifications. Type 2 aggregate conforming to Subsection 200.02.03 – “Plantmix and Roadmix Aggregate” shall be used unless otherwise specified. Preparation of the aggregates shall be in accordance with the Marination Method described in Subsection 401.03.08 – “Preparation of Aggregates”, of the Nevada Department of Transportation Standard Specifications for Road and Bridge Construction.

Unless otherwise approved by the Agency, Asphalt Cement shall be PG64-28NV for the full depth for all paving on this project. Asphalt binders shall conform to the requirements of Section 201 - “Bituminous Material” of the Standard Specifications.

1.14A COMPOSITION OF MIXTURES

Subsection 320.02.01 - “Job Control Grading Band” of the Standard Specifications, is herewith amended as follows:

1. Amend the gradation and asphalt cement content table as follows:

	<b>Maximum Tolerance</b>
Aggregate passing No. 4 and larger sieves	±7 percent
Aggregate passing No. 8 to 100 sieves	±4 percent
Aggregate passing No. 200 sieve	±2 percent
Asphalt content	-0.2% to +0.7% of total weight of mix

2. Delete the third paragraph of Subsection 337.04.01 – “Composition of Mixtures” of the Standard Specifications and replace as follows:

The optimum asphalt cement content shall be determined to 0.1 percent, by total weight of mix and dry weight of aggregate, in accordance with the Asphalt Institute’s Manual Series No. 2 (MS-2) with a target value of 3% Air Voids for light traffic conditions (design Equivalent Single Axle Load (ESAL) < 10<sup>4</sup>) and 4% Air Voids for medium and heavy traffic conditions (design ESAL > 10<sup>4</sup>). The Contractor shall use a 75-blow Marshall mix design for all streets on this project, except a 50-blow Marshall mix design for \*medium/light traffic conditions shall be used on the following streets: \*. The mix design and project control samples shall conform to MS-2 Table 5.2 - Marshall Mix Design Criteria as modified in STS Table 1.14A-1.

STS Table 1.14A-1: Modified MS-2 Table 5.2 - Marshall Mix Design Criteria

	<b>Light Traffic<sup>2</sup> Surface &amp; Base</b>		<b>Medium Traffic<sup>2</sup> Surface &amp; Base</b>		<b>Heavy Traffic<sup>2</sup> Surface &amp; Base</b>	
Marshall Method Mix Criteria <sup>1</sup>						
Compaction, Number of Blows, Each End of Specimen	50*		50		75	
Stability (pounds)	1,200 Min.*		1,200 Min.		1,800 Min.	
Flow (0.01 inches)	8 Min.	16 Max.*	8 Min.	16 Max. <sup>(8)</sup>	8 Min.	14 Max. <sup>(8)</sup>
Air Voids (percent)	2 Min.*	4 Max.*	3 Min.	5 Max.	3 Min.	5 Max.
Voids in Mineral Aggregate (percent)	See STS Table 1.14A-2 : MS-2 Table 5.3					
Voids Filled With Asphalt (percent)	70	80	65	78	65	75

Notes:

1. All criteria, not just stability value alone, must be considered in designing an asphalt paving mix. Hot mix asphalt bases that do not meet these criteria when tested at 140 °F are satisfactory if they meet the criteria when tested at 100 °F and are placed 4 inches or more below the surface.
  2. Traffic classifications  
 Light Traffic conditions resulting in a Design ESAL < 10<sup>4</sup>  
 Medium Traffic conditions resulting in a Design ESAL between 10<sup>4</sup> and 10<sup>6</sup>  
 Heavy Traffic conditions resulting in a Design ESAL > 10<sup>6</sup>
  3. Laboratory compaction efforts should closely approach the maximum density obtained in the pavement under traffic.
  4. The Flow value refers to the point where the load begins to decrease.
  5. The portion of asphalt cement lost by absorption into the aggregate particles must be allowed for when calculating percent air voids.
  6. Percent air voids are calculated at the target value.
  7. Percent voids in the mineral aggregate are to be calculated on the basis of the ASTM bulk specific gravity for the aggregate.
  8. Upon approval of Agency, flow may exceed the maximum value when polymer modified binders are used.
- \* Indicates modified value from MS-2 Table 5.2.

STS Table 1.14A-2: MS-2 Table 5.3 - Minimum Percent Voids in Mineral Aggregate (VMA)

Nominal Maximum Particle Size (inches) <sup>1, 2</sup>	Voids Filled in Mineral Aggregate (percent), Min.		
	Design Air Voids (percent) <sup>3</sup>		
	3.0	4.0	5.0
No. 16	21.5	22.5	23.5
No. 8	19.0	20.0	21.0
No. 4	16.0	17.0	18.0
3/8	14.0	15.0	16.0
1/2	13.0	14.0	15.0
3/4	12.0	13.0	14.0
1	11.0	12.0	13.0
1-1/2	10.0	11.0	12.0
2	9.5	10.5	11.5
2-1/2	9.0	10.0	11.0

Notes:

1. Standard Specifications for Wire Cloth Sieves for Testing Purposes.
2. The nominal maximum particle size is one size larger than the first sieve to retain more than 10 percent.
3. Interpolate minimum voids in the mineral aggregate (VMA) for design air void values between those listed.

1.14B PAVING

I SPREADING AND FINISHING

Subsections 320.03 - “Construction” and 320.05 - “Spreading and Finishing” of the Standard Specifications, are herewith amended as follows:

1. Add the following subsection:

**320.03.03.01 Automatic Controls.** Pavers placing the final lift of the plantmix bituminous pavement for any uniform roadway section shall be equipped with an automatic control system capable of operating in conjunction with either a ski type device of not less than 30 feet in length or a taut wire set to grade. Automatic controllers are required on each side of the paver for the final lift of the plantmix bituminous pavement.

Where a paver is matching longitudinal joints, a joint matcher ski running on automatic controls is required.

The Contractor shall furnish all equipment required and shall install all stakes and wire required for the wire system.

2. Add to the introductory paragraph of Subsection 320.05 - “Spreading and Finishing” of the Standard Specifications as follows:

Refer to STS 1.14B| SPREADING AND FINISHING - Item 1, designated as Subsection 320.03.03.01 - “Automatic Controls” of the Standard Specifications, for automatic controls requirement for bituminous pavers.

3. Add to the fourth paragraph of Subsection 320.05 - “Spreading and Finishing” of the Standard Specifications as follows:

In other areas where mechanical spreading and finishing equipment is used, loose plantmix material shall not be broadcast across the mat to repair surface irregularities. Instead, the irregular surface material shall be removed and replaced with mix, which shall be placed gently on the surface and large aggregate raked off the surface and removed before rolling. At joints, bituminous material at the edges of pavement shall be pushed back off the adjoining pavement, and the edge “pinch” rolled to provide a tight, flush joint. Loose aggregate at the edges of the pavement mat shall not be pushed across the mat with the rake and rolled into the mat, but instead will be raked off the mat and removed before rolling.

4. Add the following paragraphs after the second paragraph in Subsection 320.05.02 - “Joints”:

\*|The Contractor shall minimize the number of transverse joints in the final lift of pavement in any particular roadway segment.

“Hot” joints are joints where adjacent paving lifts are placed during the same work shift, when previously placed pavement is relatively “hot”. Joints constructed otherwise are considered “Cold” joints.

All TOP LIFT longitudinal joints shall be “Hot” joints unless otherwise approved or directed by the Agency or Design Engineer.

All “Cold” longitudinal joints directly below the TOP LIFT (final course of bituminous dense-grade pavement) shall be sawcut back a minimum of six (6) inches horizontally and to full depth of the lift, but not to exceed the depth of the lift.

For all sawcut joints, TOP LIFT or otherwise, a tack coat of asphaltic emulsion shall be applied to the contact surface prior to placement of the abutting lift.

The RTC reserves the right to sample cores directly at pavement joints to determine if workmanship (good in-place densities and absence of excessive voids and segregation) is acceptable within the joints.



## II ACCEPTANCE

Subsection 320.06 - "Acceptance" of the Standard Specifications, is herewith amended as follows:

1. Delete the introductory paragraph and replace as follows:

Plantmix bituminous pavement shall be accepted on the basis of surface tolerance, density, thickness, surface texture, conformance with the tolerances of the job mix formula, and the Marshall properties required in this subsection and in accordance with the testing requirements of Section 336 - "Inspection and Testing" of the Standard Specifications and as modified in STS 1.01 INSPECTION AND TESTING.

2. Delete the second paragraph of Subsection 320.06.01 - "Surface Tolerances" of the Standard Specifications and replace as follows:

Surface tolerances shall be evaluated, as specified in the Bid Item, by either method as described in STS 1.14Bii ACCEPTANCE - Items 3 or 4, designated as Subsection 320.06.01.01 - "Profilograph Method" and Subsection 320.06.01.02 - "12-foot Straight Edge Method," respectively.

- 3.

4. Add the following subsection:

**320.06.01.02 12-foot Straight Edge Method.**

- a) A 12 feet long straight edge shall be used. When measured longitudinally (profile), the straight edge shall be laid on the finished surface and parallel with the centerline of the roadway. For transverse (cross section) measurements, the straight edge shall be laid in a direction transverse to the centerline and extending from edge to edge of a 12 foot traffic lane.

The RTC may use a profilograph to locate pavement surfaces which display unacceptable surface tolerance. Profilograph measurement shall be in accordance with STS 1.14Bii ACCEPTANCE - Item 3 (a), designated as a portion of Subsection 320.06.01.01 - "Profilograph Method." Once identified, the conformance criterion will remain as specified below in Item 4 (b), designated as a portion of Subsection 320.06.01.02 - "12-foot Straight Edge Method," that is, not subject to the conformance criterion listed for the profilograph method.

- b) The longitudinally (profile) surface shall not vary more than 1/8 inch from the lower edge of the straightedge. The transverse (cross section) slope of the finished surface shall be uniform to a degree such that no depressions greater than 1/4 inch are present. The finished grade of the asphalt surface shall vary no more than 5/8 inch from design finished grade in both profile and cross section.

Grinding shall be done in accordance with STS 1.14B<sup>III</sup> MITIGATION - Item 3, designated as Subsection 320.07.01.01 - “Grinding for Conformance of Surface Tolerances.”

5. Delete Subsection 320.06.03 - “Thickness” of the Standard Specifications and replace as follows:

**320.06.03 Thickness.** Cut samples taken in accordance with Section 336.03.04 - “Asphalt Concrete” of the Standard Specifications and as modified in STS 1.01 INSPECTION AND TESTING shall be used to determine conformance with thickness specifications. The average thickness of cores shall be at least equal to the specified minimum thickness of the asphalt concrete pavement with no single core less than ½ inch thinner than the specified minimum thickness. Both average and single core thickness shall be compared to the specified thickness to the nearest 0.1 inch.

6. Add the following subsection:

**320.06.04 Surface Texture.** The finished texture of wearing course paving constructed using dense graded bituminous plantmix shall be dense and uniform in appearance, displaying a homogeneous distribution of fine and coarse aggregate with no apparent surface voids.

7. Add the following subsection:

**320.06.05 Job Mix Formula and Marshall Properties.** Bituminous plantmix will be tested for compliance with the job mix formula and Marshall properties on a “lot” basis. A lot is as defined in Subsection 320.06.02 - “Density” of the Standard Specifications. Each lot will be tested for job mix formula and Marshall properties compliance.

Each lot of compacted pavement will be accepted, with respect to job mix formula and Marshall properties, when test results on fresh, hot samples conform to the requirements set forth in Subsection 320.02 - “Composition of Materials” and as modified in STS 1.14<sup>I</sup> BITUMINOUS PLANTMIX, including but not limited to, Marshall air voids, stability, flow, asphalt content, and aggregate gradation. Testing shall be in accordance with Subsection 336.03.04 - “Asphalt Concrete” of the Standard Specifications and as modified in STS 1.01 INSPECTION AND TESTING.

### III MITIGATION

Subsections 320.07 - “Mitigation of Unacceptable Asphalt Concrete Pavement” and 320.09 - “Basis of Payment” of the Standard Specifications, are herewith amended as follows:

1. Add an introductory paragraph and a second paragraph for Subsection 320.07 - “Mitigation of Unacceptable Asphalt Concrete Pavement” of the Standard Specifications as follows:

**320.07 MITIGATION OF UNACCEPTABLE ASPHALT CONCRETE PAVEMENT.** The objective of mitigation is to assure the final pavement will meet the design service life of the roadway. Those portions of the constructed work which do not comply with contract specifications, as determined in accordance with Subsection 320.06 - “Acceptance” of the Standard Specifications and as modified in STS 1.14B|| ACCEPTANCE, shall be mitigated in such a manner that the performance, service life, and maintainability expectations of the originally specified project will be achieved. Payment penalties in lieu of mitigation shall be considered as a last resort and utilized only in those cases where mitigation to achieve the expected performance, service life, and maintainability is deemed by the Agency to be not possible or practical. Most paving projects affected will exhibit a variety in the type and magnitude of deficiencies that will result in a variety of mitigation approaches which may include combinations of various physical mitigation measures and payment penalties. The Agency, at its option, will decide the appropriate mitigation measures with input from the Design Engineer, testing laboratory, and Contractor.

In the event pavement mitigation is necessary to correct deficiencies, the RTC may direct the Contractor to perform some or all pavement mitigation after normal business hours, at night, and/or on weekends, to minimize impacts sustained by the public, at the Contractor’s own expense.

2. Amend Subsection 320.07.01 - “Unacceptable Surface Tolerance” of the Standard Specifications as follows:

**320.07.01 Unacceptable Surface Tolerances.** Unacceptable surface tolerance shall be corrected by either overlaying or grinding as directed by the Agency or Engineer. Grinding shall be done in accordance with STS 1.14B|| MITIGATION - Item 3, designated as Subsection 320.07.01.01 - “Grinding for Conformance of Surface Tolerances.”

Apply fog or slurry seal to ground areas after the surface tolerance specifications have been met. The Agency shall determine the type of sealant to be used.

In areas to be corrected with an overlay, grinding, followed by tack coat, may be necessary to provide a minimum 1½ inch overlay and butt joints where matching existing pavements.

3. Add the following subsection:

**320.07.01.01 Grinding for Conformance of Surface Tolerances.** The grinding machine for correcting pavement surface tolerances shall be power driven, self-propelled and specifically designed to remove, profile, smooth, and texture hot mix asphalt. The Contractor shall use a grinding machine with a wheel base of not less than 12 feet, equipped with a rotating powered mandrel drum studded with diamond blades with a cutting head not less than 3 feet wide. The grinding machine shall be equipped with an effective means for controlling dust and other particulate matter.

Do not cause strain or damage to the underlying surface of the pavement with the

grinding machine. Do not use grinding and texturing equipment that causes ravels, aggregate fractures, spalls, or disturbance of joints.

The Contractor shall perform grinding in a longitudinal direction. A satisfactorily grind will produce a uniform textured surface over the surface areas designated for grinding.

The surface of the ground pavement shall have parallel corduroy-type texture consisting of grooves between 1/12- inch and 1/8-inch wide. The peaks of the ridges shall be approximately 1/16-inch higher than the bottom of the grooves with approximately 52 to 58 evenly spaced grooves per foot.

The Contractor shall perform additional grinding as necessary to extend the ground area laterally to the nearest lane line or edge of pavement and longitudinally to lines normal to the pavement centerline.

The Contractor shall correct areas that cannot not be brought into specified surface tolerances by abrasive grinding by both removal and replacement, or by placing an overlay of hot mix asphalt. The Contractor shall obtain approval of the exact method of correction.

Fog or slurry seal shall be applied to ground areas after the surface tolerance specifications have been met. The Agency shall determine the type of sealant to be used.

4. Delete Subsections 320.07.02 - "Unacceptable Density" and Table 1 in Subsection 320.09 - "Basis of Payment" of the Standard Specifications and replace as follows:

**320.07.02 Guideline for In-place Density/Air Voids.** The RTC and the Design Engineer will consider STS Table 1.14BIII-1 or 1.14BIII-2 "Asphalt Deficiency Mitigation Matrix for In-place Density/Air Voids", as applicable for the design traffic conditions, input from the Contractor, and sound engineering analysis and judgment before requiring mitigation (i.e. removal and replacement, increased thickness, or surface treatment) and/or payment deduction (if mitigation is not practical or possible) for plantmix bituminous pavement which deviates from specification requirements. Since the matrix does not include all factors and site conditions which may affect the overall performance of the pavement, the RTC may, upon consideration of the specific circumstances, increase, reduce or waive mitigation and/or payment reduction, or combine portions of mitigation and payment reduction.

If the RTC makes a preliminary determination that mitigation, and/or payment deduction is necessary on the basis of In-place Density/Air Voids, the Contractor may submit a written request to RTC for retests. The retests shall be in accordance with Section 336 - "Inspection and Testing" of the Standard Specifications and as modified in STS 1.01 INSPECTION AND TESTING. The retests may be performed by the Agency's quality assurance laboratory or by any other approved, independent testing laboratory (the Contractor shall request the laboratory in writing for RTC approval).

SPECIAL TECHNICAL SPECIFICATIONS

Retests shall be undertaken at the Contractor's own expense. If the results of any retests are significantly different from initial testing, a "referee" test will be performed by an independent testing lab, which is mutually acceptable to the RTC and the Contractor. The RTC may waive the "referee" test if after consulting with the Design Engineer it is determined that the "referee" test is unnecessary. Fifty percent of the cost of "referee" tests shall be paid by the RTC and 50 percent shall be paid by the Contractor. The RTC may elect to make full payment and deduct the Contractor's 50 percent from progress or final payment to Contractor. The RTC will make a final determination regarding mitigation and/or payment reduction based upon the preponderance of test results and other factors.

5. Delete subsection 320.07.03 Unacceptable Thickness and replace as follows:

**320.07.03 Unacceptable Thickness.** Insufficient thickness not meeting the requirements of subsection 320.06.03 – “Acceptance – Thickness” – shall be mitigated as follows:

Thickness	Mitigation
4” - 3.76”	20% pay deduct for top lift paving
3.75” – 3.51”	50% pay deduct for top lift paving
≤ 3.5”	Remove top lift & replace or add a 1.5” Type 3 overlay

For mitigation purposes in this subsection, the thickness will be the average of all cores taken, and the cost of the top lift paving is \$0.60 per square foot per one inch of thickness.

The overlay mitigation option is allowable only at where there is no curb and gutter. Grinding may be necessary to eliminate the problems associated with raising of finish grade as determined by the governing Agency or Engineer, but in all cases, the perimeter of the corrective overlay shall be placed as a flush butt-joint formed by grinding of existing pavement abutting the overlay.

6. Add the following subsection:

**320.07.04 Unacceptable Surface Texture.** Unacceptable surface texture shall be mitigated as directed by the Agency. Required mitigation may include any necessary measures up to, and including, removal and replacement of the deficient material. If correction of surface texture results in a visually non-uniform pavement surface, the Contractor may be required to restore the pavement surface to a uniform visual appearance as directed by the Agency. Such measures shall be done at the Contractor’s own expense.

7. Add the following subsection:

**320.07.05 Guideline for Job Mix Formula and Marshall Properties.** If the compacted pavement is not in compliance with the job mix formula and all Marshall properties, mitigation shall be as directed by the Agency. Due to the complexity of the deficiency matrix, it is impossible to have a mitigation table

which covers all possible combinations of the deficiencies and all factors and site conditions which may affect the overall performance of the pavement; therefore, the RTC shall evaluate the deficiency on a case by case basis and may require any necessary measures ranging from payment deductions to removal and replacement of the deficient materials, or any combination of the mitigation measures.

The RTC may consider test results from the Contractor's quality control laboratory if submitted, provided that the sampling and testing are performed, using split samples with the Agency's quality assurance laboratory, in accordance with Section 336 - "Inspection and Testing" of the Standard Specifications and as modified in STS 1.01 INSPECTION AND TESTING.

**STS Table 1.14BIII-1**  
**Asphalt Deficiency Mitigation Matrix for In-place Density/Air Voids**  
**Light Traffic Conditions (see Note 4)**

The objective of the mitigations listed on the table below is to assure the final pavement will meet the design service life of the roadway. Reductions in payment do not achieve that goal and should be considered only if mitigation is not possible or practical. The mitigation table is an attempt to provide uniformity and fairness to the evaluation process of substandard pavements. Most paving projects affected will exhibit a variety in the type and magnitude of deficiencies that will result in a variety of mitigation approaches. The appropriate mitigation requires sound engineering analysis and judgment. The Agency will, at its option, decide the appropriate mitigation measures with input from the Design Engineer, testing laboratory, and the Contractor.

Marshall Compaction % (Note 5)	In Place Air Voids % (Rice) (Note 6)	Increase Thickness (Notes 7&8)		Surface Seal (Note 8)			Remove Replace	Payment (Note 8)		
		1"	1-1/2"	Sand Seal	Slurry Seal	Sand Blotter		100%	90%	50%
	<2			X (A)				X(A)	X	
	-							X		
	>7 & ≤ 10			X	X				X	
	> 10		X	X(A)	X(B)		X			X(A, B)
< 96 & ≥ 93	≥ 4 & ≤ 7								X	
	>7 & ≤ 10		X							X
	> 10		X(A)				X			X(A)
< 93							X			
≥ 96	<2								X	X
	-							X		
	>7 & ≤ 10	X								X
<96 & ≥ 93	≥4 & ≤ 7								X	
	>7 & 10	X								X
	> 10		X				X			X(A)
< 93							X			

Notes:

- Each 'X' represents a recommended mitigation remedy. Several X's for a single deficiency indicate alternate methods of remediation unless noted otherwise. Individual judgment must be exercised by the RTC Project Manager on each specific project.
- Each 'X' labeled either (A) or (B) represents a combination of mitigation remedies listed as group (A) or group (B).
- See STS 1.14BIII MITIGATION - Item 6, designated as Subsection 320.07.05 - "Guideline for Job Mix Formula and Marshall Properties," for mitigation required when the compacted pavement is not in compliance with the job mix design and/or Marshall properties.
- Traffic classifications:  
 Light Traffic conditions resulting in a Design ESAL <10<sup>4</sup>  
 Medium Traffic conditions resulting in a Design ESAL between 10<sup>4</sup> and 10<sup>6</sup>  
 Heavy Traffic conditions resulting in a Design ESAL >10<sup>6</sup>  
 For light traffic conditions, see Asphalt Deficiency Mitigation Matrix for Light Traffic Conditions.
- The average Marshall Compaction for the lot shall be rounded to the nearest 1 percent in accordance with the procedure described in Section 336 - "Inspection and Testing," of the Standard Specifications, Subsection 336.03.04 - "Asphalt Concrete".
- Three significant figures shall be used throughout the calculations for in-place air voids. Individual results shall be reported to the nearest 0.1 percent. All rounding shall be in accordance with the procedure described in Section 336 - "Inspection and Testing" of the Standard Specifications, Subsection 336.03.04 - "Asphalt Concrete"
- Increase total pavement thickness by the indicated amount using approved mix.
- Mitigation may not be limited to the matrix shown on this table if the pavement is also deficient in other areas.

**STS Table 1.14BIII-2  
Asphalt Deficiency Mitigation Matrix for In-place Density/Air Voids  
Medium & Heavy Traffic Conditions (see Note 4)**

The objective of the mitigations listed on the table below is to assure the final pavement will meet the design service life of the roadway. Reductions in payment do not achieve that goal and should be considered only if mitigation is not possible or practical. The mitigation table is an attempt to provide uniformity and fairness to the evaluation process of substandard pavements. Most paving projects affected will exhibit a variety in the type and magnitude of deficiencies that will result in a variety of mitigation approaches. The appropriate mitigation requires sound engineering analysis and judgment. The Agency will, at its option, decide the appropriate mitigation measures with input from the Design Engineer, testing laboratory and the Contractor.

	Marshall Compaction % (Note 5)	In Place Air Voids % (Rice) (Note 6)	Increase Thickness (Notes 7&8)	Surface Seal (Note 8)			Remove Replace	Payment (Note 8)		
				+1½"	Sand Seal	Slurry Seal		Chip Seal	100%	90%
<b>WEARING</b>	≥ 96	<3					X	X	X	
		≥3 & ≤8					X			
	>8 & ≤11		X	X	X					
	> 11	X				X				
< 96 & ≥ 93	≥ 4 & ≤ 8	X				X	X			
	>8 & ≤11	X(A)			X(B)	X	X(A)	X(B)		
	> 11	X(A)				X		X(A)		
< 93						X				
<b>NON-WEARING</b>	≥ 96	<3					X	X	X	
		≥3 & ≤8					X			
	>8 & ≤11		X							
	> 11	X				X		X		
<96 & ≥ 93	≥4 & ≤8	X					X			
	>8 & ≤11	X						X		
	> 11	X(A)				X		X(A)		
< 93						X				

Notes:

- Each 'X' represents a recommended mitigation remedy. Several X's for a single deficiency indicate alternate methods of remediation unless noted otherwise. Individual judgment must be exercised by the Engineer on each specific project.
- Each 'X' labeled either (A) or (B) represents a combination of mitigation remedies listed as group (A) or group (B).
- See STS 1.14BIII MITIGATION - Item 6, designated as Subsection 320.07.05 - "Guideline for Job Mix Formula and Marshall Properties," for mitigation required when the compacted pavement is not in compliance with the job mix design and/or Marshall properties.
- Traffic classifications:  
 Light Traffic conditions resulting in a Design ESAL <10<sup>4</sup>  
 Medium Traffic conditions resulting in a Design ESAL between 10<sup>4</sup> and 10<sup>6</sup>  
 Heavy Traffic conditions resulting in a Design ESAL >10<sup>6</sup>  
 For light traffic conditions, see Asphalt Deficiency Mitigation Matrix for Light Traffic Conditions.
- The average Marshall Compaction for the lot shall be rounded to the nearest 1 percent in accordance with the procedure described in Section 336 - "Inspection and Testing," of the Standard Specifications, Subsection 336.03.04 - "Asphalt Concrete".
- Three significant figures shall be used throughout the calculations for in-place air voids. Individual results shall be reported to the nearest 0.1 percent. All rounding shall be in accordance with the procedure described in Section 336 - "Inspection and Testing" of the Standard Specifications, Subsection 336.03.04 - "Asphalt Concrete".
- Increase total pavement thickness by the indicated amount using approved mix.
- Mitigation may not be limited to the matrix shown on this table if the pavement is also deficient in other areas.



#### IV SPECIAL PAVING CONSIDERATIONS

The Contractor shall submit, at the time of traffic control submittal, a paving plan superimposed onto the striping plan to illustrate locations of paving joints in relation to striping. The paving joints in the final lift shall be located within 6" from lane stripes, unless otherwise authorized in writing by the Engineer.

Where directed by the Engineer, the Contractor shall spread blotter sand on the surface of final-lift pavement to reduce the driveway or intersection closure time and protect the pavement surface at high traffic or critical locations.

#### V TACK COAT

Subsection 316.03.04 - "Application of Bituminous Materials" of the Standard Specifications, is herewith amended as follows:

Unless otherwise directed by the Design Engineer, cleaning and the application of a tack coat shall be provided between all paving courses that are not constructed in the same shift. Tack coat shall consist of asphalt emulsion, Type SS-1h, conforming to the requirements of Section 201 – "Bituminous Materials" of the Standard Specifications to the cleaned, cured surface, unless otherwise directed by the Design Engineer. The tack coat shall be applied in sufficient quantity to provide a continuous membrane over the cement modified material. No more tack shall be applied than can be covered in the same shift. Place the covering course over tack that is clean, free of tracking and adequately set.

#### VI LONGITUDINAL JOINTS

This specification is developed in an effort to obtain longer pavement life by adding emphasis on longitudinal joint quality. This portion of the STS will apply for the sole purpose of assessing the bonus/penalty of this specification. The longitudinal joint result will not tie to the acceptance of the pavement. This portion of the STS, however, does not eliminate any requirement as listed in all other sections of the STS.

**Bonus or Penalty for longitudinal joint applies only when the mat for the associated paving "lots" are acceptable according to STS 1.14BII Acceptance.**

1. Testing and reporting will be performed by the quality assurance laboratory (i.e. RTC's consultant). Testing will be done on the TOP LIFT<sup>1</sup> only for both HOT & COLD longitudinal joints for each joint segment. Longitudinal joint segment is defined as every 1,000 feet of longitudinal joint and any remainder that is 800 feet or longer. Testing for the longitudinal joints include Thin Lift Nuclear Test and Core Test as described in the following paragraphs.
2. Thin Lift Nuclear Test (Nuclear Gauge Test) shall be performed as follows:
  - a) Frequency & Location – Nuclear gauge readings shall be taken every 200 feet on BOTH sides of a longitudinal joint segment directly across from each other, beginning at a random location within the first 200 feet as determined by the Design Engineer.

---

<sup>1</sup> TOP LIFT is defined as the final course of bituminous dense-grade pavement.

- b) Timing – To avoid additional traffic control needed for the testing operation, nuclear gauge readings shall be taken shortly following the completion of the longitudinal joint construction.
- c) Equipment – Testing shall be performed using a gauge specifically designed for asphalt testing such as a Troxler 4640B or Troxler 3450, or approved equivalent. It is not necessary that the nuclear gauge be calibrated to the mix. However, the same nuclear gauge should be used for the same longitudinal joint segment.
- d) Testing – One 1-minute test is to be performed at each test location. The nuclear density testing shall be performed with the long axis of the nuclear density gauge parallel to the joint and with the nearest edge of the nuclear gauge no closer than 3 inches from the joint and no further than 4.5 inches from the joint. The footprint of the gauge shall be marked with keel or other product that clearly defines the test locations. All testing shall be performed in the same direction (i.e. up or down station).
- e) Re-Test – When the test result,  $t_n$ , differs more than 4 pounds per cubic foot (pcf) from the previous test,  $t_{n-1}$ , a re-test at the previous test location is required to assure that the previous test is not in error. Both test results shall be recorded. If the re-test is within 4 pcf of the original previous test result, use the original previous test result. Otherwise, keep record of the results  $t_n$  and  $t_{n-1}$  but do not use them for any further calculations. Instead, recalibrate the thin lift nuclear gauge, resume testing beginning at the  $t_{n-1}$  location, and use the new test results.

3. Core Test will be performed as follows:

- a) Frequency & Location – In addition to the coring required for the mat, one core test shall be performed for every longitudinal joint segment, location of which shall be determined as below:
  - i. Mean Joint Density (MJD) is the average of the readings of the Nuclear Gauge Test on each side of a longitudinal joint segment. The core is to be taken on the side with the lower MJD. If the MJD on both sides are equal, core on the side which was paved first.
  - ii. The core shall also be at a location where a Nuclear Gauge Test was performed and reasonably close to a core location for the mat. The core shall be centered inside of the previously marked footprint of the Nuclear Gauge Test. In no case shall the near edge of the core be closer than 3 inches from the joint.
  - iii. If coring is to occur at a location with pavement markings made of 3M tape or thermoplastic tape, adjust the core location up or down station as appropriate up to a distance of 20 feet maximum. Otherwise, remove necessary portions of the pavement markings before coring.
- b) Timing – Coring at the joint shall be at the same time of coring at the mat.
- c) Equipment – Same equipment as the standard core test for the mat.
- d) Testing – Test procedures will be the same as the standard core test (in-place density/air voids) for the mat in accordance with STS 1.01 INSPECTION AND TESTING. Use the hot sample properties from the corresponding lot, based on the core location (i.e. stationing and which side of the joint), for calculating core test results.

- e) Re-Test – Re-testing will only be allowed at the sole discretion of the RTC. If allowed, re-testing shall be at the sole cost of the Contractor and performed by a qualified third party laboratory that meets RTC’s criteria for testing. The location of the additional core(s) shall be in within 5 feet up or down station from the original core and the sampling shall be witness by the Design Engineer.

4. When applicable, the bonus and penalty is calculated as follows:

$$\text{Bonus/Penalty} = \frac{\sum F_i}{N} \times A \times T \times U$$

Where

*F* = Factor for individual longitudinal joint segment based on joint core results per STS Table 1.14BVI-1 or 1.14BVI-2 as applicable.

*N* = Total number of longitudinal joint segments.

*A* = Total pavement area of all longitudinal joint segments (SF).

*T* = Thickness of the TOP LIFT (inch).

*U* = Unit cost of the TOP LIFT (\$/inch-SF).

**For the purpose of determining Bonus/Penalty for this project, U shall be \$\*/in-SF.**

**STS Table 1.14BVI-1  
Longitudinal Joint Segment Bonus/Penalty Factor  
Light Traffic Conditions (see Note 1)**

Joint Core Results In-Place Air Voids % (Rice) (see Note 2)	Factor <i>F<sub>i</sub></i>
< 2	0%
≥ 2 & ≤ 7	+5%
> 7 & ≤ 10	0%
> 10 & ≤ 14	-5%
> 14	-50%

**STS Table 1.14BVI-2  
Longitudinal Joint Segment Bonus/Penalty Factor  
Medium & Heavy Traffic Conditions (see Note 1)**

Joint Core Results In-Place Air Voids % (Rice) (see Note 2)	Factor <i>F<sub>i</sub></i>
< 3	0%
≥ 3 & ≤ 8	+5%
> 8 & ≤ 11	0%
> 11 & ≤ 14	-5%
> 14	-50%

Notes:

1. Traffic classifications

Light Traffic conditions resulting in a Design ESAL < 10<sup>4</sup>

Medium Traffic conditions resulting in a design ESAL between 10<sup>4</sup> & 10<sup>6</sup>

- Heavy Traffic conditions resulting in a Design ESAL  $> 10^6$
2. Three significant figures shall be used throughout the calculations for in-place air voids. Individual results shall be reported to the nearest 0.1 percent. All rounding shall be in accordance with the procedure described in Section 336 – “Inspection and Test” (Subsection 336.03.04 – “Asphalt Concrete”).

5. Reporting – Field data associated with longitudinal joint testing shall be submitted to the RTC within a week of the testing. The report for the longitudinal joint testing shall be submitted to the RTC within two weeks upon completion of paving for the completed section tested. If top lift paving for the entire project are to be completed within two weeks, submit the report to the RTC within two weeks upon completion of paving for the entire project. The report shall include a Paving Plan and a Longitudinal Joint Summary Sheet as described below.
  - a) The Paving Plan shall be overlaid on the Striping Plans with stationing shown. It should include, for the top lift only, the longitudinal joint locations with identification number (ID), limits of each paving path, direction of paving, and the paving lot number at the core location. The paving plan can be of as small a scale as practical.
  - b) The template for the Longitudinal Joint Summary Sheet is available from the RTC website ([www.rtcwashoe.com](http://www.rtcwashoe.com)) under Streets & Highways, St & Hwy Resources. It shall be filled in with the following details:
    - i. The Longitudinal Joint Segment ID, joint type (hot lap, cold sawcut, etc.), station, side of joint (left/right in the up-station direction or north/south/west/east), individual density values measured, MJD (5 values for 1,000-foot joint segments and 4 for 800-foot joint segments) on each side of each joint segment, joint core test location, paving lot number at the core location, core Marshall Density, Rice Maximum Density, In-Place Air Voids, and the individual Longitudinal Joint Segment Bonus/Penalty Factors,  $F_i$ .
    - ii. The calculation for Longitudinal Joint Bonus/Penalty for the project shall be shown at the end of the sheet.
    - iii. For reference purpose, any re-test shall be noted to clearly identify the re-test, the unused test results, and the test result that was used in calculating the MJD.

#### 1.14C PERMANENT PATCHING

Permanent patching material shall be Type 3 PG64-22 bituminous plantmix, utilizing a 50 blow per side Marshall mix design with target air voids of 3%, and shall conform to the Standard Specifications. Permanent bituminous plantmix patches shall be a minimum depth of 4 inches on 6 inches of aggregate base or match existing section with bituminous plantmix depth up to 12 inches.

If, at any time, during a period of 1 year dating from the date of final acceptance of the project, there is any settlement of the permanent patches requiring repairs to be made, the Owner may notify the Contractor to immediately make such repairs as may be deemed necessary at the Contractor's own expense.

## **1.16 SLURRY SEAL**

Slurry seal shall conform to the requirements of Section 318 - "Slurry Seal" of the Standard Specifications, except as modified herein.

The Contractor shall submit in writing for approval a job mix formula conforming to the requirements of Subsection 318.02 - "Composition of Mixtures" of the Standard Specifications. Type \* aggregate conforming to the requirements of Subsection 200.02.06 - "Slurry Seal and Micro Surfacing Aggregate" shall be used unless otherwise specified. Asphalt emulsions shall conform to the requirements of Section 201 - "Bituminous Material" of the Standard Specifications.

Subsection 318.02 - "Materials" of the Standard Specifications, is herewith amended as follows:

1. Add the following to Subsection 318.06.01 - "Limitations":
  - a) The slurry seal shall not be applied when precipitation is imminent or occurring.
2. Delete Subsection 318.07.02 - "Tack Coat" in its entirety.
3. Add the following to Subsection 318.08.01 - "General":
  - a) All workers shall have sufficient experience to perform properly the work assigned to them. The Contractor shall have an experienced crew on each spreader and any other equipment.
  - b) At least 48 hours shall elapse between top lift paving and application of a bituminous seal coat.
  - c) Immediately before commencing the slurry seal operations, all metal utility covers (including survey monuments) shall be protected by thoroughly covering the surface with an appropriate adhesive and oiled or plastic paper. No adhesive material shall be permitted to cover, seal or fill the joint between the frame and cover of the structure. Covers are to be uncovered and cleaned of slurry material by the end of the same day.
  - d) Hand tools shall be available in order to remove spillage. Ridges or bumps in the finished surface shall not be permitted. The mixture shall be uniform and homogeneous after spreading on the surface and shall not show separation of the emulsion and aggregate after setting.
  - e) Adequate means shall be provided to protect the slurry seal from damage from traffic until such time that the mixture has cured sufficiently so that the slurry seal will not adhere to, or be picked up by the tires of vehicles.

## **1.18 PAVEMENT MARKINGS**

### **1.18A PAINTED PAVEMENT MARKINGS**

Permanent painted (traffic paint or epoxy paint) pavement markings shall be in accordance with Section 632 of the latest edition of "Standard Specifications for Road and Bridge Construction" published by NDOT.

**1.18A TRAFFIC PAINT**

All application methods and products shall conform to Sections 632 – “Permanent Painted Pavement Markings” and 730 – “Traffic Beads”, and Subsections 729.02.01 – “General”, 729.02.02 – “Packaging”, and 729.03.05 – “Rapid Dry Waterborne Paint Material” of the NDOT Standard Specifications for Road and Bridge Construction for Type II traffic paint, with the following exception:

1. Add the following:

At least 48 hours shall elapse between application of a bituminous seal coat and permanent pavement marking.

All traffic paint shall have a minimum of 2 coats (full width of stripe) per application of the designated material placed unless otherwise directed by the RTC Project Manager or the Design Engineer’s representative.

**1.18B PAVEMENT MARKING FILM**

Permanent pavement marking film (pavement marking tape or thermoplastic) shall be in accordance with Section 634 – “Pavement Marking Film”, of the NDOT Standard Specifications for Road and Bridge Construction.

**1.18C RAISED MARKERS**

1. Hydrant markers.

A reflective, blue street marker shall be provided to identify all fire hydrant locations. The marker shall be omnidirectional type. The marker shall be visible on approach to the fire hydrant. The marker shall be placed in accordance with Reno Fire Department Policy Appendix UFC-AP904.3.1, page AP-6.

Adhesives for raised markers shall conform to Subsection 633.02.04 - “Adhesives for Pavement Markers” of the NDOT Standard Specifications for Road and Bridge Construction.

Installation of raised markers shall conform to Subsection 633.03.01 - “Pavement Marker Installation” of the NDOT Standard Specifications for Road and Bridge Construction.

**1.22 TRAFFIC SIGNS**

**1.22A MATERIALS**

Traffic signs shall be 3M Diamond Grade (DG) 3 or 3M high intensity sheeting with a clear transparent overlay 3M 1170 or approved equal.

Street name signs shall be 3M DG3, Series 4000 or approved equal with green transparent Scotchlite Electrocut Film #1177C or approved equal. White letter and border sheeting shall be retro reflective ASTM IX 3M Diamond Grade or approved equal.

## 1.23 TRAFFIC SIGNALS

### 1.23A LOOP DETECTORS

\*| The \*| requires the Contractor to lay-out traffic signal loop detectors in accordance with \* standards and details. After the loop lay-out is marking in the field, the Contractor shall call \*| at \*| for loop lay-out inspection and approval.

\*| The Contractor shall call \*| at \*| for traffic signal loop lay-out.

All traffic signal loop detectors shall be installed prior to the placement of the final “top” lift<sup>2</sup> of the plantmix bituminous pavement material. Placement of slurry seal or micro-surface does not negate this requirement.

### 1.23B TEMPORARY TRAFFIC SIGNAL MODIFICATIONS DURING CONSTRUCTION

The Contractor shall coordinate with and secure approval from \*| (\*|) of \*| for any use of or changes to operation of existing traffic signal equipment during construction. The Contractor shall comply with \*| requirements without additional cost to the RTC.

## 1.24 UTILITY ADJUSTMENT

### 1.24A VERIFICATION OF DEPTH

Location of underground facilities shown on the plans are approximate and were not determined by field investigation. It shall be the responsibility of the Contractor to locate all existing utility structures, whether shown or not, and to notify all utility companies to verify in the field the location of their installations prior to construction. The Contractor shall protect all utility structures from damage. The expense of repair or replacement shall be borne by the Contractor (however, this in no way precludes the Contractor from recovering, from the utility company, costs to repair existing utilities which do not conform with standard specifications or details). The Contractor shall request field marking of existing utilities at least 48 hours in advance of beginning construction by calling Underground Service Alert at (800) 227-2600.

At existing underground traffic signal conduit crossings and at locations where new underground facilities cross existing facilities, the Contractor shall expose the existing facility and verify that sufficient horizontal and vertical clearance exists for the street improvements to be constructed in substantial compliance with the plans. At existing underground traffic signal conduit crossings, the Contractor shall field verify the depth of existing facilities before commencing any construction. At locations where new underground facilities are to be connected to existing facilities, the Contractor shall expose the existing facility and verify that the connection can be made as shown on the plans before commencing any construction. Any conflicts shall be brought to the Engineer’s attention as soon as they are discovered.

Utility depth verification requirements will be considered incidental to \*|, bid item \*|.

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<sup>2</sup> TOP LIFT is defined as the final course of bituminous dense-grade pavement.

#### 1.24B UTILITY MANHOLE AND VAULT ADJUSTMENT

Add to Subsection 323.05 - "Utility Manholes and Vaults" of the Standard Specifications as follows:

1. "Before lowering manholes and vaults, the Contractor shall take inventory of the utilities to be adjusted. The Contractor shall record the exact location and type of utility by labeling the assembly with numbers at locations visible for verification. The labeling shall include utility site, collar, and lid to ensure proper match of hardware when utility adjustment is completed at the conclusion of the project."

The Contractor shall submit the utility inventory list to the Engineer and utility companies upon completion of utility lowering activity. The Contractor shall also keep a copy of the utility location inventory list on the project work site at all times for emergency shutoff purposes. The Contractor may post the list on the backside of the RTC Project Information sign.

#### 1.24C MANHOLE PROTECTION PLAN

The Contractor shall be responsible for the protection of all manholes and valves during all phases of construction, including but not limited to, lowering and raising covers, and grouting of them. The Contractor shall verify all manholes and valves are clear of debris at the beginning of the project and notify the utility companies if otherwise.

A "Manhole Protection Plan" shall be submitted and approved by the Engineer prior to any manhole adjustments. The plan shall clearly identify how the contractor will protect ANY debris from entering the system and a detail of how the Contractor is prepared for emergency overflows. To the minimum, the plan shall include the name, phone number, and contact of the company the contractor will use in case of an emergency. Prior to performing any adjustments or grouting, the Engineer shall observe and verify the Contractor is in compliance with the "Manhole Protection Plan".

#### 1.25 **SURVEY MONUMENTS**

Survey monuments shall be removed prior to construction. Survey monuments shall be located and punched by a Nevada registered professional land surveyor and replaced after completion of improvements.

#### 1.26 **CERTIFICATES OF COMPLIANCE**

The Certificate of Compliance shall be signed by the manufacturer of the material or the manufacturer of assembled materials and shall state that the materials involved conform in all respects with the requirements of the specifications for this project. A Certificate of Compliance shall be furnished with each lot of material delivered to the work and the lot so certified shall be clearly identified in the certificate.

##### Materials Requiring Certificate of Compliance

1. Asphalt Cement
4. Cement
5. Concrete Curing Compound
6. Signs
7. Pavement Markings
8. Personnel certification for installation of retroreflective preformed pavement markings



**EXHIBIT “F”**  
**(Standard Specifications for Public Works Construction**  
**Section 117.00**  
**“Material and Workmanship – Warranty of Corrections”)**

## **EXHIBIT F**

### **MATERIAL AND WORKMANSHIP - WARRANTY OF CORRECTIONS**

Corrections ordered in accordance with General Provision 117.00, “Material and Workmanship” for items discovered in the year following final acceptance of the project shall be warranted for a one (1) year period following acceptance by the RTC of the correction. Should the correction itself prove defective, the Contractor shall be obliged to make further correction. The warranty period on the correction shall continue to be extended for one (1) year following acceptance by the RTC of the initial or any subsequent corrective actions.

**EXHIBIT "G"**  
**RRIF RATES AS OF DATE OF OFFSET AGREEMENT**

# REGIONAL ROAD IMPACT FEE SCHEDULE

Exhibit G

Land Use	Unit	North Service Area		South Service Area	
		VMT	Dollars (\$267.95/VMT)	VMT	Dollars (\$261.35/VMT)
<b>Residential</b>					
Single-Family	Dwelling	20.36	\$5,455.46	19.11	\$4,994.40
Multi-Family	Dwelling	12.97	\$3,475.31	12.18	\$3,183.24
<b>Industrial</b>					
General Light Industrial	1,000 GFA	6.48	\$1,736.32	6.08	\$1,589.01
Manufacturing	1,000 GFA	5.14	\$1,377.26	4.82	\$1,259.71
Warehouse	1,000 GFA	2.27	\$608.25	2.13	\$556.68
Mini-Warehouse	1,000 GFA	1.97	\$527.86	1.85	\$483.50
<b>Commercial/Retail</b>					
Commercial/Retail	1,000 GFA	29.43	\$7,885.77	27.63	\$7,221.10
Eating/Drinking Places	1,000 GFA	29.43	\$7,885.77	27.63	\$7,221.10
Casino/Gaming	1,000 GFA	60.17	\$16,122.55	56.48	\$14,761.05
<b>Office and Other Services</b>					
Schools	1,000 GFA	16.83	\$4,509.60	15.80	\$4,129.33
Day Care	1,000 GFA	16.83	\$4,509.60	15.80	\$4,129.33
Lodging	Room	4.38	\$1,173.62	4.11	\$1,074.15
Hospital	1,000 GFA	14.01	\$3,753.98	13.15	\$3,436.75
Nursing Home	1,000 GFA	8.68	\$2,325.81	8.14	\$2,127.39
Medical Office	1,000 GFA	45.47	\$12,183.69	42.68	\$11,154.42
Office and Other Services	1,000 GFA	12.73	\$3,411.00	11.95	\$3,123.13
Regional Recreational Facility	Acre	1.02	\$273.31	0.96	\$250.90

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**REGIONAL TRANSPORTATION COMMISSION**

*Metropolitan Planning • Public Transportation & Operations • Engineering & Construction*

Metropolitan Planning Organization of Washoe County, Nevada

**Meeting Date:** 6/21/2024

**Agenda Item:** 4.4.5

To: Regional Transportation Commission

From: Jeff Wilbrecht, Engineering Manager

**SUBJECT: Regional Road Impact Fee Offset Agreement between RTC, Lemmon Drive Villas Property, LLC and Washoe County**

**RECOMMENDED ACTION**

Approve a Regional Road Impact Fee (RRIF) Offset Agreement between RTC, Lemmon Drive Villas Property LLC, and Washoe County for offset-eligible improvements to be made to the intersection of Lemmon Drive, Vista Knolls Parkway, and Sunset View Drive.

**BACKGROUND AND DISCUSSION**

Under the RRIF Program, developers who construct or dedicate improvement contained within the RRIF Capital Improvement Plan (CIP) will be credited for these contributions in RRIF Waivers. To do this, the developer must enter into a RRIF Offset Agreement that will be approved by both the RTC and the local government. The RRIF Offset Agreement specifically identifies the proposed improvements, estimated RRIF Waivers that will be earned, requirements for the quality control/quality assurance, and the duties and responsibilities of each party. The RRIF Offset Agreement being authorized by this action will result in an estimated \$534,635 in RRIF Waivers being issued to Lemmon Drive Villas Property LLC.

**FISCAL IMPACT**

No fiscal impact will result from this action. The amount of RRIF waivers to the developer will be based on Offset-Eligible Costs equal to, or less than, impact fees owed for all or a portion of the land uses within the Development of Record.

**PREVIOUS BOARD ACTION**

There has been no previous Board action taken.

---

**LEMMON DRIVE at VISTA KNOLLS PARKWAY and SUN SET VIEW DRIVE  
Intersection Traffic Signal System**

**OFFSET AGREEMENT  
Offset Agreement # 513011**

**BETWEEN**

**THE REGIONAL TRANSPORTATION COMMISSION,  
A special purpose unit of the Government**

**And**

**WASHOE COUNTY  
A political subdivision of the State of Nevada**

**And**

**Lemmon Drive Villas Property LLC**

**Developer of Record**

**For**

**Lemmon Drive Estates and Highland Project**

**Development of Record**

**North Service Area**

TABLE OF CONTENTS

1. General..... 1

    1.1 Ordinance, Manual and CIP..... 1

    1.2 Basis for this Offset Agreement..... 1

    1.3 Effective Date of Offset Agreement ..... 1

    1.4 Eligibility of Improvements..... 1

2. The Development of Record And Offered Improvements..... 1

    2.1 Description of the Development of Record ..... 1

    2.2 Offered Improvements..... 2

        2.2.1 Description of Offered Improvements..... 2

        2.2.2 Completion and Acceptance of Offered Improvements ..... 2

        2.2.3 Design and Construction Standards ..... 2

        2.2.4 Quality Assurance/Quality Control (QA/QC)..... 2

        2.2.5 Warranty ..... 2

3. RRIF Waivers ..... 3

    3.1 The Developer of Record and Development of Record..... 3

    3.2 RRIF Waivers are Personal Assets of The Developer of Record ..... 3

    3.3 Calculation of RRIF Waivers..... 3

    3.4 RRIF Waiver Usage and Transferability ..... 3

    3.5 Interim RRIF Waivers..... 3

    3.6 Final RRIF Waiver Determination..... 3

    3.7 Expiration of RRIF Waivers ..... 4

4. Miscellaneous ..... 4

    4.1 Governing Law: Venue..... 4

    4.2 Entirety and Amendments..... 4

    4.3 Invalid Provisions ..... 4

    4.4 Parties Bound and Assignment..... 4

    4.5 Further Acts ..... 4

    4.6 Headings ..... 4

    4.7 Notice..... 4

    4.8 Receipt Defined ..... 5

    4.9 Due Authorization..... 6

    4.10 Indemnification..... 6

    4.11 Termination of Offset Agreement..... 6

    4.12 Future Development Approvals..... 6

SIGNATURE PAGE ..... 7

## EXHIBITS

- EXHIBIT “A”**     **Section X of the Regional Road Impact General Administrative Manual, Current Edition**
- EXHIBIT “B1”**    **Site Plan and Description of Development of Record**
- EXHIBIT “B2”**    **Legal Description of the Development of Record**
- EXHIBIT “C”**     **Offered Improvements Applications/Submittals**
- EXHIBIT “D”**     **Letter of Approval**
- EXHIBIT “E”**     **Developer of Record QA/QC Program RTC Special Technical Specifications for Regional Road Impact Fee Projects**
- EXHIBIT “F”**     **Standard Specifications for Public Works Construction  
Section 100.17 “Material and Workmanship – Warranty of Corrections”**
- EXHIBIT “G”**     **RRIF Rate Schedule as of the Date of the RRIF Offset Agreement**
- EXHIBIT “H”**     **Interim RRIF Waiver Request Schedule**



## OFFSET AGREEMENT

This Offset Agreement (“Offset Agreement”) is entered by and between the REGIONAL TRANSPORTATION COMMISSION (hereinafter designated “RTC”), a special purpose unit of Government; WASHOE COUNTY, a political subdivision of the State of Nevada, (hereinafter designated “Participating Local Government”); and Lemmon Drive Villas Property LLC (hereinafter designated “the Developer of Record”).

### 1. General

- 1.1 **Ordinance, Manual and CIP.** The City of Sparks, the City of Reno, Washoe County, and RTC have entered into an Interlocal Cooperative Agreement for the purposes of implementing the Regional Road Impact Fee (“RRIF”) Program. The Participating Local Government has passed a Regional Road Impact Fee Ordinance (“Ordinance”) to implement the RRIF program. RTC and the Participating Local Government have adopted the Regional Road Impact Fees General Administrative Manual, Current Edition (“Manual”), specifying the provisions and procedures for administration of the RRIF program, as well as the Regional Road Impact Fee System Capital Improvement Plan (“CIP”) Current Edition, identifying the regional streets and improvements which shall be constructed in whole or in part with funds generated from the RRIF program. The terms and provisions of the Manual and the CIP are incorporated herein by reference as if fully set forth. All capitalized terms not otherwise defined herein shall have the definitions and meanings as used in the Ordinance, Manual and CIP. Amendments approved by the RTC and local governments are incorporated by reference to the same extent as if set forth in full herein.
- 1.2 **Basis for this Offset Agreement.** The parties intend this Offset Agreement to be an Offset Agreement as provided in Section X of the Manual, to provide for waivers of Regional Road Impact Fees (“RRIF Waiver”) in exchange for contributions of Offered Improvements (which may include right-of-way (“ROW”) dedication), which may then be used to offset Regional Road Impact Fees which would otherwise be chargeable to the Developer of Record’s Development of Record. Section X of the Manual contains specific provisions pertaining to Waivers and is attached hereto and incorporated herein as Exhibit “A”.
- 1.3 **Effective Date of Offset Agreement.** This Offset Agreement shall be binding and effective as of the last date of execution below (the “Effective Date”).
- 1.4 **Eligibility of Offered Improvements.** The Offered Improvements have been identified by the Local RRIF Administrator as being included in the Exhibit “D” of the CIP, titled North Capital Improvement Plan.

### 2. The Development of Record and Offered Improvements.

- 2.1 **Description of the Development of Record.** The Development of Record for which the RRIF Waivers shall be issued is known as Lemmon Drive Estates and Highland Project. The Developer of Record owns or is the agent for the record owners of the entire Development. A site plan and narrative

description of the Development of Record, including the proposed land uses and units of development is attached hereto as Exhibit “B-1”. The legal description of the Development of Record is attached as Exhibit “B-2.”

## 2.2 **Offered Improvements.**

2.2.1 **Description of Offered Improvements.** The Developer of Record has submitted an application shown herein as Exhibit “C” describing the specific Offered Improvements which the Developer of Record proposes to construct and/or dedicate. The Offered Improvements are generally described as intersection improvements at Lemmon Drive, Vista Knolls Parkway, and Sunset View Drive. The RTC RRIF Administrator and Local RRIF Administrator have approved the application, subject to the limitations set forth in the letter of approval incorporated herein as Exhibit “D”.

2.2.2 **Completion and Acceptance of Offered Improvements.** Unless extended by written consent of the RTC RRIF Administrator, all Offered Improvements, shall be commenced within 6 months of the Effective Date, and completed in substantial conformance with approved plans within two (2) years of the date of the Offset Agreement. This Offset Agreement shall terminate and be of no further force or effect if the Offered Improvements are not commenced within one (1) year of the Effective Date. The time for completion may be extended by written consent of the RTC RRIF Administrator and the Local RRIF Administrator one time for not more than one (1) year, upon a written request for extension submitted not less than ninety (90) days prior to expiration of the originally agreed time for completion. Additional extensions of the time for completion shall require an amendment to this Offset Agreement pursuant to Section 4.2. The Offered Improvements shall be accepted by the Local RRIF Administrator and the RTC RRIF Administrator upon correction by the Developer of Record of any identified deficiencies to the satisfaction of the Local RRIF Administrator and the RTC RRIF Administrator. Acceptance of the Offered Improvements by the Local RRIF Administrator and the RTC shall not be unreasonably withheld.

2.2.3 **Design and Construction Standards.** All design and construction of the Offered Improvements shall be in accordance with the latest edition of the Standard Specifications as of the date of this Agreement for Public Works Construction (“Standard Specifications”), including any addenda, as adopted by the Participating Local Government and modified by the Special Technical Specifications (“STS”) as prepared by RTC and contained herein as part of Exhibit “E”. Additionally, all design and construction of Offered Improvements shall be in accordance with all policies of the RTC, including the latest version as of the date of this agreement of the following: Policy for the Street and Highway Program, CIP, and Traffic Noise Mitigation Policy Report, all incorporated herein as if fully set forth. In the case of conflicting standards, the conflict shall be brought to the immediate attention of the RTC RRIF Administrator who shall, in

conjunction with the Local RRIF Administrator, resolve the discrepancy within five (5) working days.

2.2.4 **Quality Assurance/Quality Control (QA/QC).** In making the Offered Improvements, the Developer of Record shall institute a QA/QC Program meeting the requirements of Exhibit “E”. The Developer of Record may utilize an alternate QA/QC Program with the approval of the RTC RRIF Administrator and Local RRIF Administrator.

2.2.5 **Warranty.** The Developer of Record shall warrant all materials and workmanship of the Offered Improvements in accordance with the provisions of the latest edition of the Standard Specifications. The Developer of Record is directed in particular to Section 117.00 which is contained herein as Exhibit “F”.

### 3. **RRIF Waivers.**

3.1 **The Developer of Record and Development of Record.** The Developer of Record is the party to whom all RRIF Waivers earned under this Offset Agreement shall be issued. RRIF Waivers earned under this Offset Agreement may not be applied outside of the Development of Record.

3.2 **RRIF Waivers are Personal Assets of The Developer of Record.** The parties agree that all RRIF Waivers received pursuant to this Offset Agreement shall be the personal assets of the Developer of Record.

3.3 **Calculation of RRIF Waiver.** RRIF Waivers will be expressed in dollars upon the final RRIF Waiver determination pursuant to Section 3.5. RRIF Waivers may be utilized to pay Regional Road Impact Fees which would otherwise be due for development within a Development of Record. To the extent RRIF Waivers are utilized for development of units of development and land uses in strict conformance with Exhibits “B-1” and “B-2,” RRIF Waivers earned shall be applied as if a Building Permit (or Certificate of Occupancy, whichever applies) were granted for each such unit of development as of the date of this Offset Agreement, notwithstanding that actual construction of such unit of development occurs thereafter. For sake of clarity, it is the parties’ intent that Regional Road Impact Fees for all future development within the Development of Record which is conducted in conformity with Exhibits “B-1” and “B-2” shall be “grandfathered in” at the RRIF rates existing as of the date of this Offset Agreement, up to the total amount identified in the Notice of RRIF Waiver. The rates existing as of the date of this Offset Agreement are attached hereto as Schedule 1. To the extent units of development or land uses are changed from the uses depicted in Exhibit “B-1,” or the legal description of the Development of Record is modified from the description set forth in Exhibit “B-2”, earned RRIF Waivers may be used within the Development of Record for such development, but the RRIF Waivers must be utilized at the then-current Regional Road Impact Fee rate as of the date of issuance of the Building Permit for each unit of development.

3.4 **RRIF Waiver Usage and Transferability.** The usage and transferability of RRIF Waivers earned under this Offset Agreement are as follows:

- 3.4.1 RRIF Waivers earned under this Offset Agreement may be used to pay for up to 100% of the Regional Road Impact Fees due as the result of development within the Development of Record.
- 3.4.2 RRIF Waivers earned under this Offset Agreement may not be used to pay for Regional Road Impact Fees due as a result of development outside of the Development of Record.
- 3.4.3 RRIF Waivers earned under this Offset Agreement are transferable to a third party, provided that all RRIF Waivers earned under this Offset Agreement may only be used to pay for Regional Road Impact Fees due as a result of development within the Development of Record.
- 3.5 **Interim RRIF Waivers.** The Developer of Record shall be entitled to apply for and receive Interim RRIF Waivers for satisfactorily completed portions of the Offered Improvements (including Right of Way) according to the schedule at Exhibit "G". This provision shall in no way be construed as constituting acceptance in whole or part of any of the Offered Improvements. To the extent that Offered Improvements are ultimately not accepted, or if the Developer of Record is otherwise in material default under this Offset Agreement, the Developer of Record shall pay the actual Regional Road Impact Fees which would have otherwise been due had the Developer of Record not utilized Interim RRIF Waivers.
- 3.6 **Final RRIF Waiver Determination.** The final determination of RRIF Waivers shall be calculated by the RTC RRIF Administrator after consultation with the Local RRIF Administrator within thirty (30) calendar days of final acceptance of the Offered Improvements by the RTC RRIF Administrator and the Local RRIF Administrator and submission by the Developer of Record of all documentation required by the RTC RRIF Administrator to make said final determination. The RTC RRIF Administrator shall issue a written instrument identifying the amount of the RRIF Waivers to the Developer of Record within three (3) working days of the earlier to occur of the following:
  - 3.6.1 the date the appeal period of the final determination expires pursuant to Article XII of the RRIF GAM;
  - 3.6.2 the date the Developer of Record waives in writing the appeal period, or;
  - 3.6.3 in the event of an appeal pursuant to Article XII of the RRIF GAM, the date of a final decision on all issues on appeal.
- 3.7 **Expiration of RRIF Waivers.** RRIF Waivers shall not expire and may be used in perpetuity to pay Regional Road Impact Fees which would otherwise be due as a result of development within the Development of Record.

4. **Miscellaneous** The parties further agree as follows:

- 4.1 **Governing Law: Venue.** This Offset Agreement is being executed and delivered in Washoe County, Nevada, and is intended to be performed in the State of Nevada, and the laws of Nevada shall govern the validity, construction, enforcement and interpretation of this Offset Agreement. Venue for any legal action arising out of this Offset Agreement shall be in Washoe County, Nevada.
- 4.2 **Entirety and Amendments.** This Offset Agreement embodies the entire Offset Agreement between the parties and supersedes all prior negotiations, agreements and understandings, if any, relating to the

Property, and may be amended or supplemented only by an instrument in writing executed by the party against whom enforcement is sought, provided that nothing contained in Subsection 4.2 shall be interpreted to change, amend or modify the conditions of the Development of Record approval by the Participating Local Government. No oral statements or representations made before or after the execution of this Offset Agreement regarding the subject matter of this Offset Agreement are binding on any party, nor may any such oral statements or representations be relied on by a party.

- 4.3 **Invalid Provisions.** If any provision of this Offset Agreement is held to be illegal, invalid, unenforceable under present or future laws, such provision shall be fully severable. The Offset Agreement shall be construed and enforced as if such illegal, invalid or unenforceable provision had never comprised a part of the Offset Agreement. The remaining provisions of the Offset Agreement shall remain in full force and effect and shall not be affected by the illegal, invalid or unenforceable provision or by its severance from this Offset Agreement.
- 4.4 **Parties Bound and Assignment.** The Offset Agreement shall be binding upon and inure to the benefit of the parties, and their respective heirs, personal representatives, successors and assigns. The Developer of Record may assign RRIF Waivers which have been calculated pursuant to Section 3.6 to a successor developer or developers, provided however, that such RRIF Waivers may only be utilized to offset Regional Road Impact Fees which would otherwise be due as a result of development within the Development of Record.
- 4.5 **Further Acts.** In addition to the acts recited in this Offset Agreement to be performed, the parties agree to perform, or cause to be performed, any and all further acts as may be reasonably necessary to consummate the obligations contemplated hereby.
- 4.6 **Headings.** Headings used in this Offset Agreement are used for reference purposes only and do not constitute substantive matter to be considered in construing the terms of this Offset Agreement.
- 4.7 **Notice.** All notices given pursuant to this Offset Agreement shall be in writing and shall be given by personal delivery, by facsimile transmission, by United States mail or by United States express mail or other established express delivery service (such as Federal Express), postage or delivery charge prepaid, addressed to the appropriate party at the address set forth below:

**REGIONAL TRANSPORTATION COMMISSION,  
Engineering Department**  
Attn: Jeff Wilbrecht (Engineering Manager), P.E.  
1105 Terminal Way, Suite 108  
Reno, Nevada 89502  
Telephone: (775) 335-1872

**THE CITY OF RENO**

**WASHOE COUNTY  
Public Works Department**  
Attn: Mitch Fink, P.E.

1001 E. Ninth Street  
Reno, Nevada 89520  
Telephone: (775) 328-2050

**Developer of Record**  
Attn: Greg Garchar  
Lemmon Drive Villas Property LLC  
5000 Executive Parkway, Suite 350  
San Ramon, California 94583  
Telephone: (925) 830-2624

The persons and address to whom notices are to be given may be changed anytime by any party upon written notice to the other party. All notices given pursuant to this Offset Agreement shall be deemed given upon receipt.

- 4.8 **Receipt Defined.** For the purposes of this Offset Agreement, the term “receipt” shall mean any of the following: (a) the date of delivery of the notice or other document as shown on the return receipt; (b) the date of actual receipt of the notice or other document; or (c) in the case of refusal to accept delivery or inability to deliver the notice or other document, the earlier of: (i) the date of the attempted delivery or refusal to accept delivery; (ii) the date of the postmark on the return receipt; or (iii) the date of receipt of notice of refusal or notice of non-delivery by the sending party.
- 4.9 **Due Authorization.** The parties agree that they have the legal authority to enter into this Offset Agreement and the undersigned officer, representative or employee represents that he or she has the authority to execute this offset Agreement on the behalf of the party represented.
- 4.10 **Indemnification.** Developer of Record shall indemnify, defend and hold harmless the RTC and the Participating Local Government, their officers, officials, employees and volunteers, from any and all costs, liabilities, damages, claims, demands, suits, action, attorneys, fees, or expenses of any kind (“claims”) that arise out of, or are in way related, in whole or in part to the negligence or misconduct, or acts or omissions, of the Developer of Record, its officers, agents, employees, members, volunteers, contractors and anyone else for whom it is legally liable, while performing or failing to perform Developer of Record’s duties under this Offset Agreement. Said indemnification excludes any claims to the extent caused by the negligence or willful misconduct of the RTC and /or the Participating Local Government. The Developer of Record’s obligations set forth in this Section shall expire and terminate as to any claims based on, related to, arising from or in connection with the Offered Improvements’ failure to comply with the Standard Specifications on the date of expiration of the applicable warranty period provided in Section 2.2.5 above.
- 4.11 **Termination of Offset Agreement.** This Offset Agreement may be unilaterally terminated by the RTC RRIF Administrator if twelve (12) consecutive months elapse without reasonable progress being made on the Offered Improvements. In the event of any such termination, Interim RRIF Waivers must be immediately surrendered or repaid in accordance with Section 3.5.

4.12 **Future Development Approvals.** The Participating Local Government agrees that future development approvals for the Development of Record shall not be denied on the basis of the policy level of service being exceeded on the Offered Improvements.

In Witness Whereof, the parties have executed this Offset Agreement on the \_\_\_\_ day of \_\_\_\_\_, 2024.

**REGIONAL TRANSPORTATION COMMISSION  
A Special Purpose Unit of Government**

By: \_\_\_\_\_  
Bill Thomas, AICP, Executive Director

STATE OF NEVADA

COUNTY OF WASHOE

The above-instrument was acknowledged before me this \_\_\_\_ day of \_\_\_\_\_, 2024, by Bill Thomas, Executive Director of the Regional Transportation Commission.

\_\_\_\_\_  
Notary Public

**WASHOE COUNTY  
A political subdivision of the State of Nevada**

**APPROVED AS TO LEGAL FORM:**

By: \_\_\_\_\_  
Alexis Hill, Chair of the Washoe County Commission

By: \_\_\_\_\_  
County Attorney

STATE OF NEVADA    )  
                                  ) ss  
COUNTY OF WASHOE )

The above-instrument was acknowledged before me this \_\_\_\_ day of \_\_\_\_\_, 2020 by Alexis Hill, Chair of the Washoe County Commission.

Attest by County Clerk: \_\_\_\_\_  
County Clerk



**DEVELOPER OF RECORD: Lemmon Drive Villas Property LLC**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Its: \_\_\_\_\_

STATE OF  
COUNTY OF

The above-instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 2024 by

\_\_\_\_\_.

\_\_\_\_\_  
Notary Public

**EXHIBIT "A"**  
**(Section X of the Regional Road Impact  
Fees General Administrative Manual, Current Edition)**

thirty (30) days of receiving the approved Offset Agreement from the RTC RRIF Administrator. If the RTC RRIF Administrator does not receive the signed Offset Agreement within thirty (30) days, the application for RRIF Waivers will be deemed withdrawn.

8. Unless an executed Offset Agreement expressly provides otherwise, i.e. if interim RRIF Waivers are authorized in the Offset Agreement, RRIF Waivers will not be approved in a Notice of RRIF Waivers until all Offset-Eligible Improvements have been completed and, if applicable, dedicated to the RTC or the affected Participating Local Governments as provided in the Offset Agreement.
9. Land dedications accepted as an Offset-Eligible Improvement must be accompanied by the following documentation prior to issuance of a Notice of RRIF Waiver, as provided below:
  - a. The delivery to the appropriate governmental body of an irrevocable offer of dedication, with sufficient funds to pay all costs of transfer of title including recording.
  - b. The escrow of taxes for the current year or the payment of said taxes for the year.
  - c. The issuance of a title insurance policy subsequent to recording of the deed and escrow of taxes.
10. Unless expressly provided otherwise in an Offset Agreement, it is the responsibility of the Developer of Record to submit sufficient documentation to the RTC RRIF Administrator to establish that the terms of the Offset Agreement have been met.
11. Once the RTC RRIF Administrator has made a determination that the terms of the Offset Agreement have been met, the RTC RRIF Administrator will issue a Notice of RRIF Waiver to the Developer of Record.

#### D. Contents of Applications for RRIF Waivers

1. The application for RRIF Waivers must contain the information and documentation required by this Section and sufficiently identify and describe the Offered Improvements which otherwise would have been built by the RTC with collected RRIF Fees.
2. Each application for RRIF Waivers must contain the following:
  - a. The name of the Developer of Record offering to make Offset-Eligible Improvements and requesting RRIF Waivers.
  - b. The contribution, payment, construction, or land dedication which will constitute the Offered Improvements and the legal description or

other adequate description of the project or development, referred to and the Development of Record, to which the Offered Improvements are related.

- c. The name, address, phone number, fax number, email address and a contact person of the Developer of Record.
- d. The name, Local Government File Number, and three copies of the site plan of the Development of Record.
- e. List of approved land uses and the estimated RRIF Fees for those uses within the Development of Record.
- f. Name, address, phone number, fax number, email address and contact person of the Engineer of Record.
- g. The proposed plans and specifications for the specific construction prepared and certified by a duly qualified engineer, registered and licensed in the State of Nevada.
- h. When a Developer of Record offers to dedicate right-of-way, they shall present:
  - (1) Preliminary Title Report.
  - (2) Copy of Dedication Map containing proposed dedication.
  - (3) Documentation sufficient to establish the applicant's opinion of value of property to be offered for dedication, as provided in Section X.
- i. Sufficient documentation to verify the costs of the Offered Improvements, in accordance with Section X.

#### E. Contents of Offset Agreements

1. No dedication or construction project may be accepted in exchange for RRIF Waivers except pursuant to an Offset Agreement, which must include the following:
  - a. The projected costs for the Offered Improvements, based on the valuation provisions of Section X, including provisions for verifying costs and facilitating changes in costs or plans.
  - b. The time by which the construction of the Offered Improvements shall be paid, completed, or dedicated and any provisions for extensions thereof.
  - c. The proposed amount in dollars and land uses of RRIF Waivers, based on the estimated costs of the Offered Improvements.

- d. The terms and conditions that must be met before the RTC RRIF Administrator will issue a Notice of RRIF Waiver, in accordance with the provisions of this Manual.
  - e. RRIF Waivers shall be limited to use for the payment of RRIF Fees associated with the Development of Record listed in the Offset Agreement. RRIF Waivers shall not expire.
  - f. RRIF Waivers shall be assigned to offset the RRIF Fees within the Development of Record pursuant to the Offset Agreement.
  - g. If the designated land uses for the Development of Record identified in the Offset Agreement change, the remaining waivers shall be re-assessed as outlined in the provisions in Section X.A.
  - h. A provision requiring that all Offset-Eligible Improvements accepted will be in accordance with RTC requirements and standards.
  - i. Any labor, work safety, prevailing wage, or other applicable laws or regulations with which the Developer of Record must comply.
  - j. Such other terms and conditions agreed to by the parties.
2. Any changes to an Offset Agreement approved by the RTC Board, other than those addressed in Section X.F, will require an amendment to the Offset Agreement using the same procedures as its original approval.
- F. Calculation of RRIF Waivers.
- 1. Eligibility.
    - a. RRIF Waivers may be approved only for Offset-Eligible Costs, which are limited to the costs the RTC otherwise would have incurred for RRIF Capital Improvements.
    - b. RRIF Waivers may be provided only pursuant to a valid Offset Agreement, executed according to the provisions of this Manual.
    - c. Offset-Eligible Costs are available for RRIF Waivers only if associated with Offset-Eligible Improvements that meet design standards approved by the RTC and the affected Participating Local Government, and only to the extent such costs do not exceed the scope of the project as planned by the RTC and reflected in the RRIF Capital Improvements Plan or as described in the applicable Offset Agreement.
  - 2. Valuation.
    - a. RRIF Waivers approved by the RTC pursuant to a Notice of RRIF Waivers will be based on, and may not exceed, the actual verified costs of the dedication or construction of the Offset-Eligible

Improvements accepted by the affected Participating Local Government.

- b. The RTC will not approve RRIF Waivers in excess of the RRIF Fees owed for a Development of Record as of the date of the applicable Offset Agreement.
- c. The amount of RRIF Waivers shall be calculated as follows:
  - (1) Construction of Facilities and Provision of Equipment. The RRIF Waivers may not exceed the actual cost of construction or equipment, as evidenced by receipts and other sufficient documentation provided by the developer of the public facility and verified by the RTC RRIF Administrator. Actual costs shall be based on local information for similar improvements; may include the cost of construction, planning feasibility, alignment studies, plan-line studies, preliminary engineering, relevant geotechnical, environmental and cultural resource studies, permitting, the cost of all lands, property, rights, easements, and franchises acquired, construction financing charges, plans and specifications, surveys, engineering and legal services, construction inspection and testing, and all other expenses necessary or incident to determining the feasibility or practicability of such construction.
  - (2) Dedication of Land.
    - (a) If the land in question is subject to a valid agreement, zoning approval or development approval, which established a valuation or prescribes a method of valuation, the agreement, zoning approval or development approval shall control.
    - (b) If the dedication is made pursuant to a condition of discretionary zoning or development approval, the value of the land shall be determined as of the date immediately preceding the discretionary development approval. The value shall be based upon the condition of the property and the regulatory zoning in place immediately prior to the discretionary approval.
    - (c) Valuation shall be based on the fair market value of the land upon execution of the Offset Agreement by the Developer of Record or final approval of the proposed Offset Agreement by the RTC Board or the governing bodies of the affected Participating Local Government, whichever is earlier.
- d. All changes in the estimate of Offset-Eligible Costs or to the approved plans and specifications (prior to or after execution of an Offset Agreement), shall require approval of the RTC RRIF Administrator. The applicant shall provide the RTC RRIF Administrator copies of all contracts or agreements made for design

services, construction, or engineering during construction within fifteen (15) days after their execution.

G. Usage of RRIF Waivers.

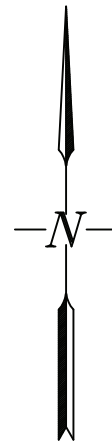
1. Participating Local Governments shall waive RRIF Fees otherwise owed either at the time of issuance of a building permit or issuance of the Certificate of Occupancy, as the case may be, if the RTC RRIF Administrator has issued a Notice of RRIF Waiver for the Development of Record.
2. RRIF Waivers may be used to pay up to 100% of the RRIF Fees due as the result of development within the Development of Record.
3. RRIF Waivers may not be used to pay for RRIF Fees due as a result of development outside of the Development of Record.
4. RRIF Waivers are transferable to a third party. To transfer RRIF Waivers, the current holder of RRIF Waivers will notify RTC through the RRIF Automation Program of the amount of RRIF Waivers to be transferred and the name and contact information of the third party. RRIF Waivers will be subtracted from the current holder's account and transferred to a new account in the name of the third party.
5. Upon transfer, RRIF Waivers may be used by the transferee to pay up to 100% of the RRIF Fees due as the result of development within the Development of Record.

**XI. UNEXPIRED CREDITS APPROVED PRIOR TO THE 5<sup>th</sup> EDITION RRIF GAM/CIP (3/2/2015) UPDATE**

- A. Applicability. This Section applies to CCFEAs and to CCFEA Credits issued pursuant to such CCFEAs.
- B. Intent. It is the intent of the RTC Board, and affected Participating Local Governments, to carry forward the policies and understanding in place when CCFEAs were entered into, prior to the changes to the adoption of the 5<sup>th</sup> Edition RRIF GAM/CIP. Therefore, to the extent possible and practical, outstanding CCFEA Credits may be used or transferred as provided prior to adoption of the 5<sup>th</sup> Edition RRIF GAM/CIP, as provided in this Section and in accordance with the terms of valid, unexpired CCFEAs.
- C. CCFEA Credit Usage.
  1. The transferability and usage of CCFEA Credits issued pursuant to a valid, unexpired CCFEA are as follows:
    - a. CCFEA Credits may be used by the Developer of Record to pay for up to 100% of the Regional Road Impact Fees on any

**EXHIBIT "B"**  
**(Site Plan and Description of Development of Record)**  
**(Must include proposed units of development and land use categories)**





Highland Project

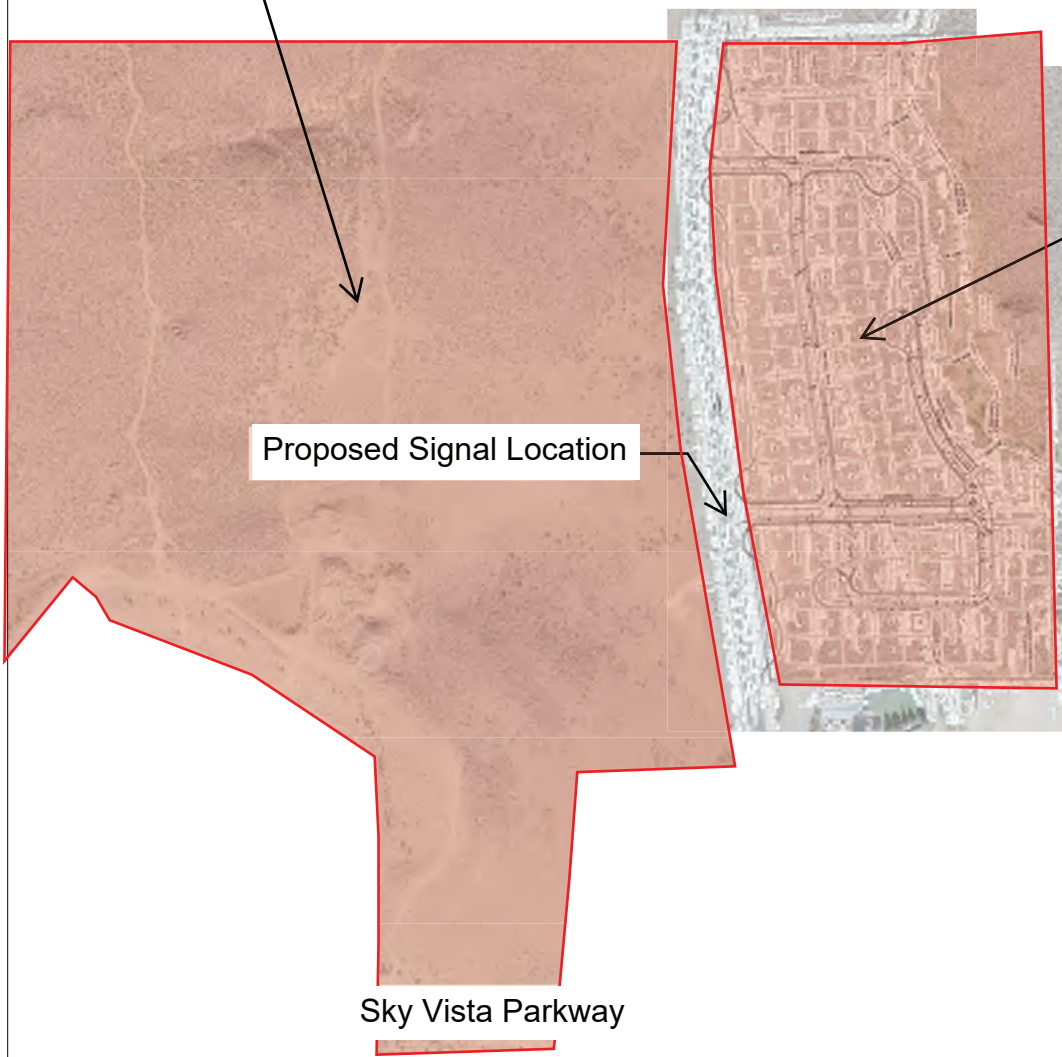
Military Road

Lemmon Drive  
Estates Project

Proposed Signal Location

Sky Vista Parkway

Buck Drive



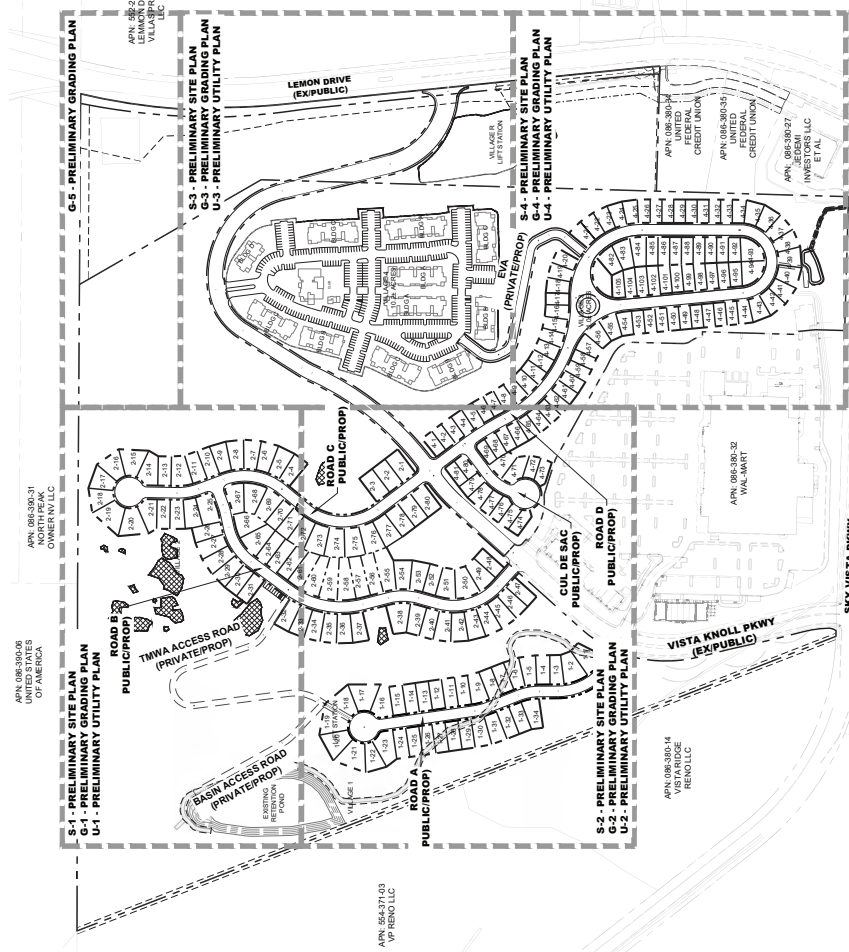
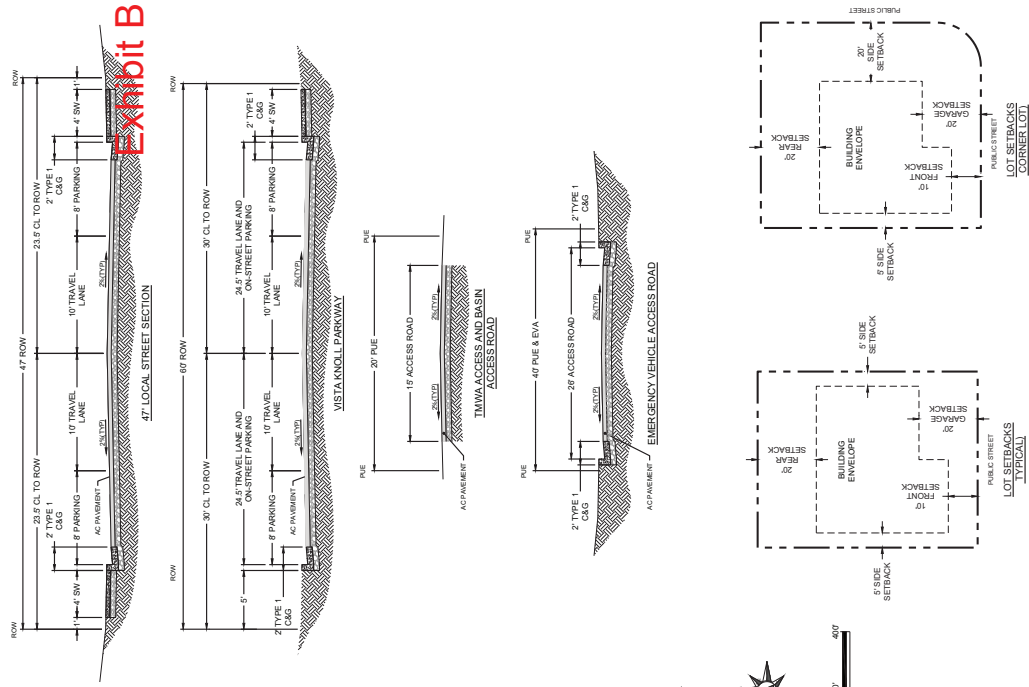




REV	DATE	DESCRIPTION	BY

SCALE: 1/8" = 1'-0"  
 ORIGINAL DRAWING  
 IF NOT ONE INCH ON THIS SHEET,  
 ADJUST SIZES ACCORDINGLY

**OV-1**  
 DRAWN BY: MCR  
 DESIGNED BY: JRL  
 CHECKED BY: BMM  
 JOB NO.: 10001.004

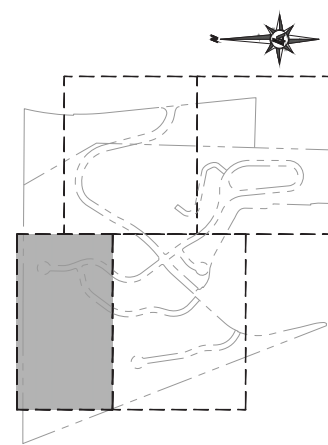
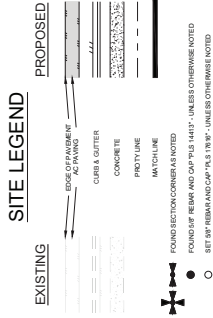
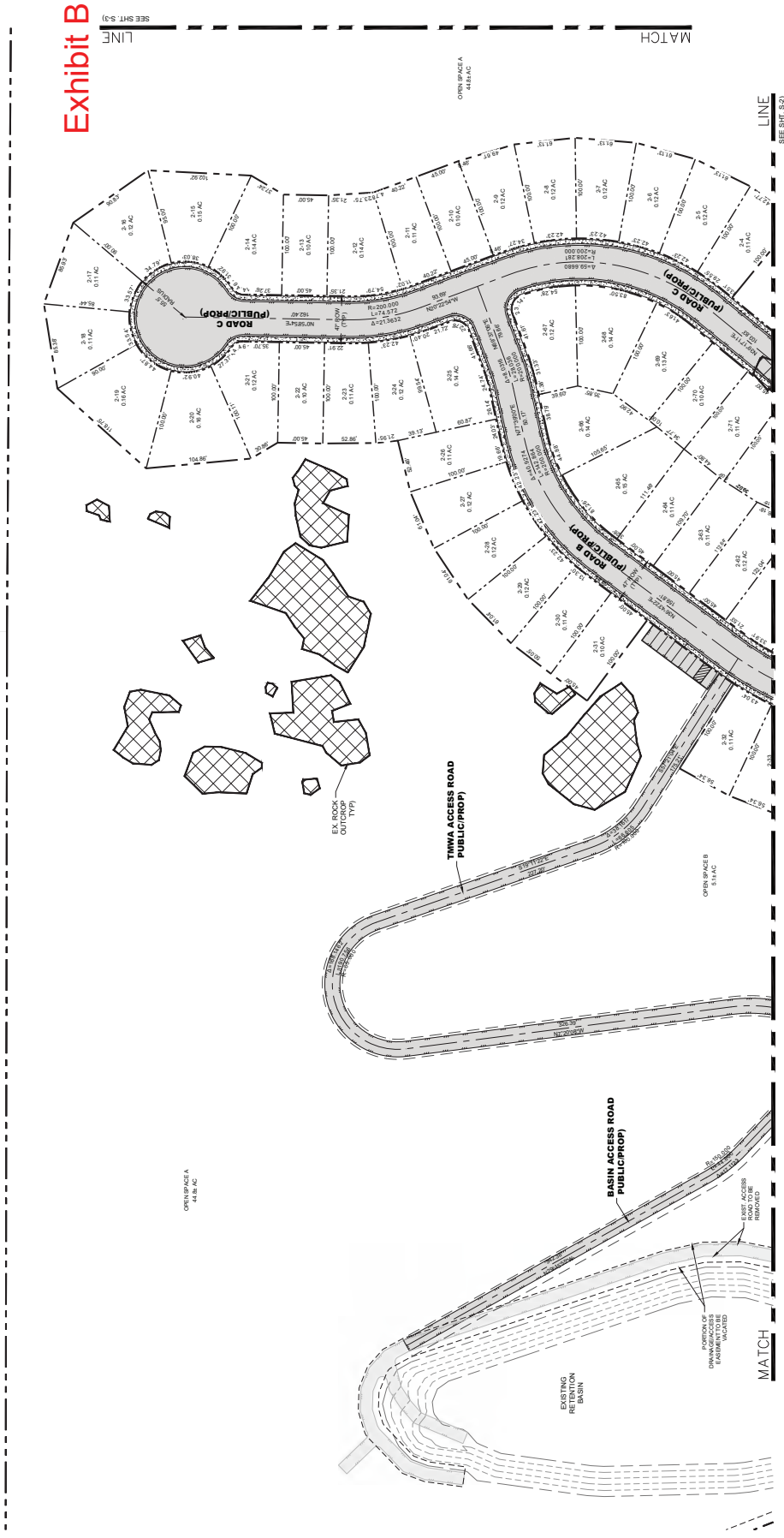




REV	DATE	DESCRIPTION

DATE: AUGUST 2022  
**PRELIMINARY**  
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 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

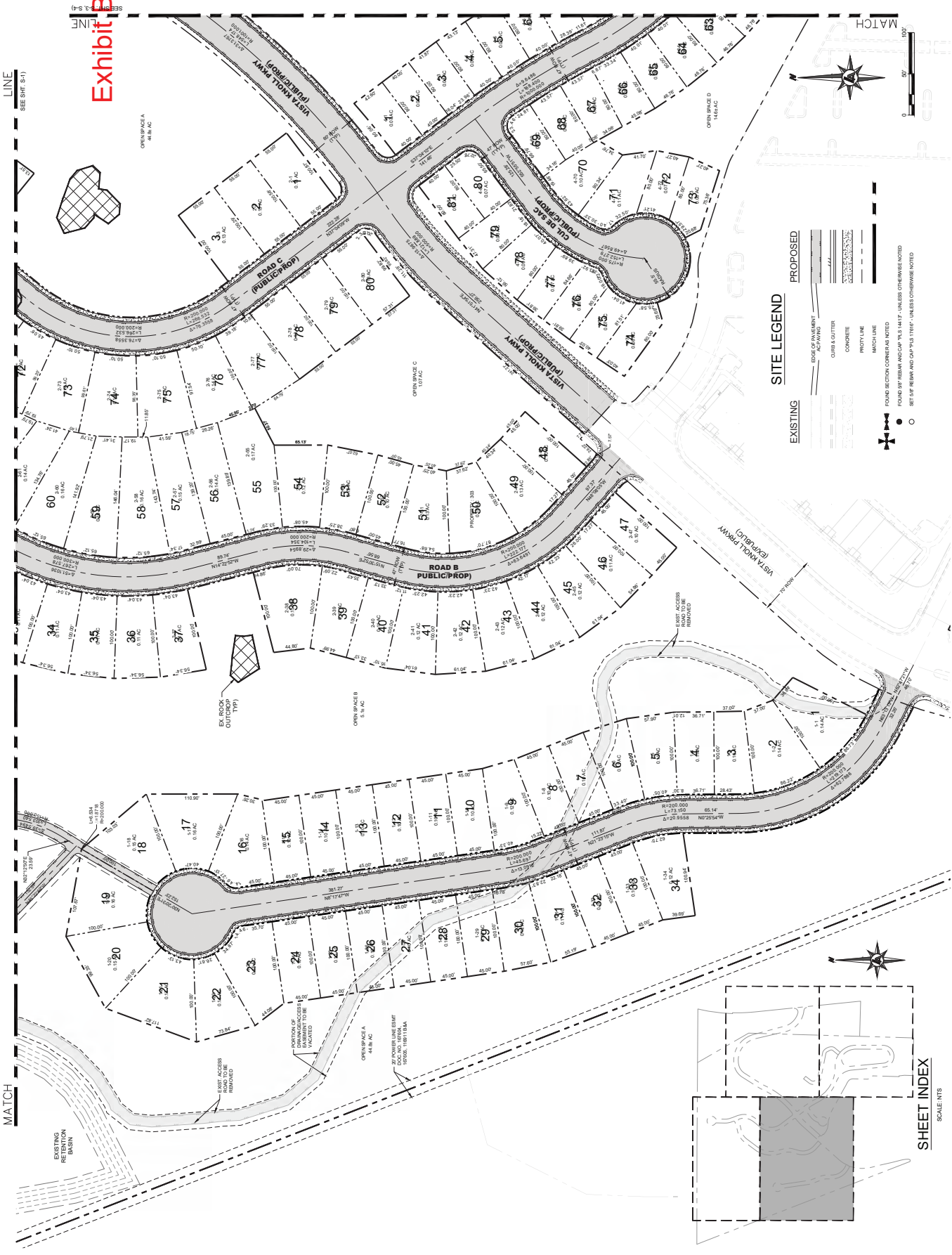
**S-1**  
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 DESIGNED BY: JRL  
 CHECKED BY: BMM  
 JOB NO.: 1001.004



**Exhibit B**  
 SEE SHRT. S-2)  
 LINE



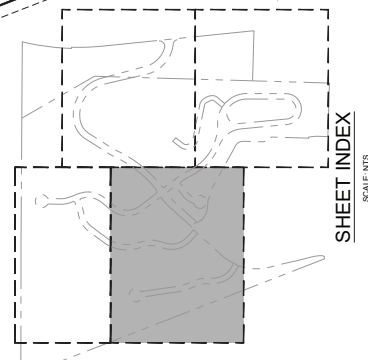
REV	DATE	DESCRIPTION	BY



**Exhibit B**

**SITE LEGEND**

	EXISTING ROAD		PROPOSED ROAD
	EXISTING EASEMENT		PROPOSED EASEMENT
	EXISTING UTILITY		PROPOSED UTILITY
	EXISTING STRUCTURE		PROPOSED STRUCTURE
	EXISTING BOUNDARY		PROPOSED BOUNDARY
	MATCH LINE		ROUND SECTION CORNER AS NOTED
	SETBACK		FOUND BY RESUB AND CAP PLUS - UNLESS OTHERWISE NOTED
	RESUB AND CAP PLUS		SET MAP, RESUB AND CAP PLUS STRIP - UNLESS OTHERWISE NOTED



LINE SEE SHEET S-1

MATCH

EXISTING RETENTION BASIN

EXIST ACCESS ROAD TO BE REMOVED

PORTION OF EXISTING EASEMENT TO BE VACATED

OPEN SPACE A 44.8 AC

20' POWER LINE EASMENT 100'x20' 100'x20'

OPEN SPACE B 10.6 AC

OPEN SPACE C 10.6 AC

EXIST ACCESS ROAD TO BE REMOVED

EXIST ACCESS ROAD TO BE REMOVED

EXIST ACCESS ROAD TO BE REMOVED

EXIST ACCESS ROAD TO BE REMOVED



NEVADA WASHOE RENO  
**HIGHLAND - TENTATIVE MAP AND  
 CONDITIONAL USE PERMIT  
 PRELIMINARY SITE PLAN**  
 CADSV LAND LLC

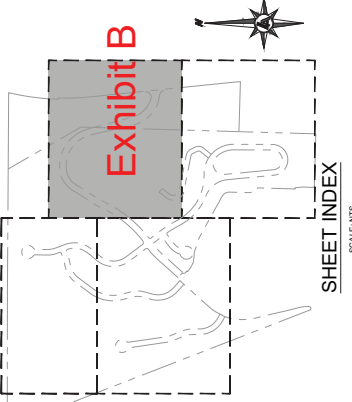
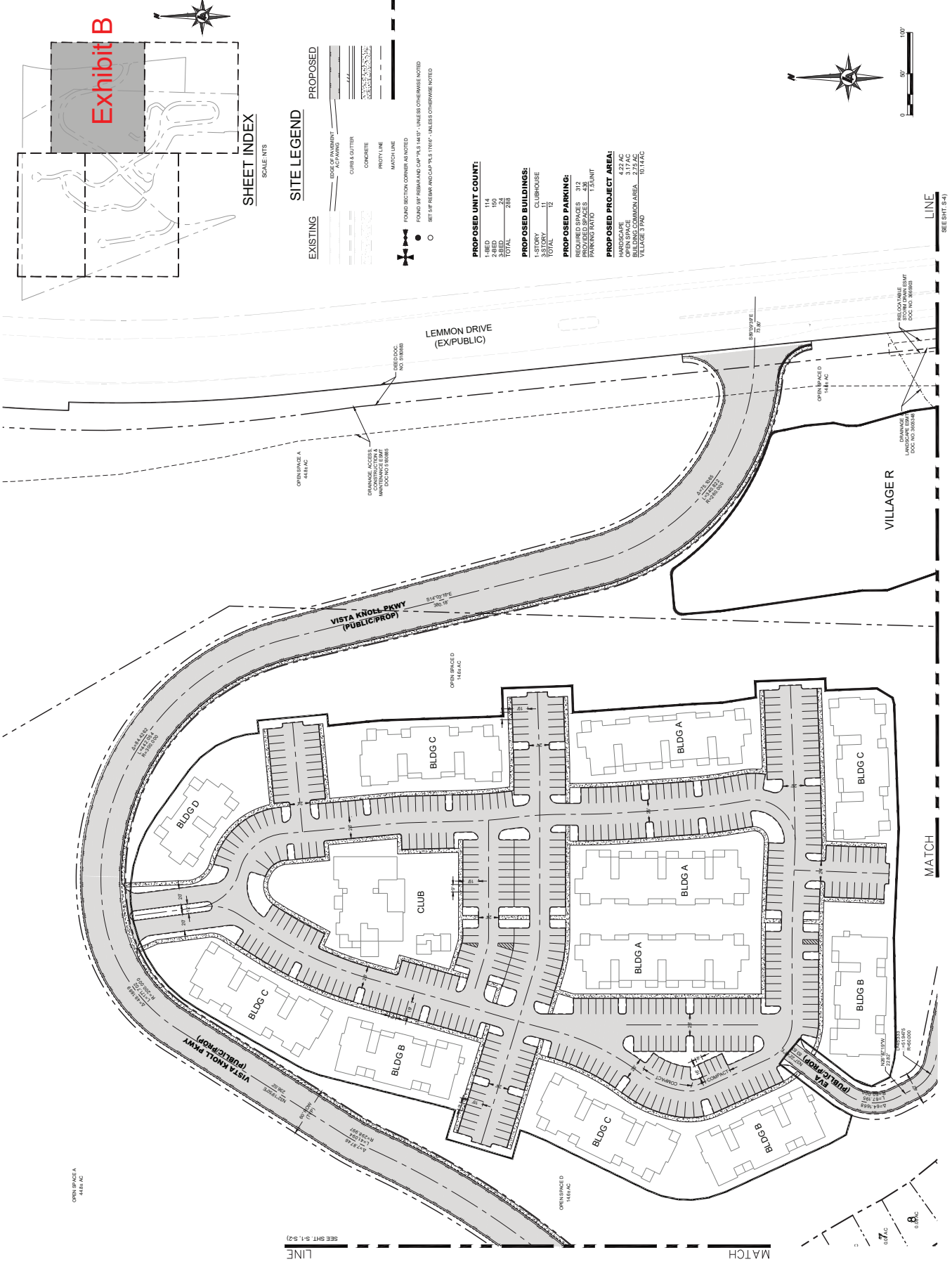
REVISIONS

REV	DATE	DESCRIPTION

BY: \_\_\_\_\_

DATE: AUGUST 2022  
**PRELIMINARY**

**S-3**  
 DRAWN BY: MCR  
 DESIGNED BY: JRL  
 CHECKED BY: BMM  
 JOB NO.: 1001.004



**SITE LEGEND**

EXISTING	PROPOSED
EXISTING DRIVEWAY	PROPOSED DRIVEWAY
EXISTING CONCRETE	PROPOSED CONCRETE
EXISTING PROXY LINE	PROPOSED PROXY LINE
EXISTING MATCH LINE	PROPOSED MATCH LINE

**PROPOSED UNIT COUNT:**

1-BED	111
2-BED	150
3-BED	282
<b>TOTAL</b>	<b>543</b>

**PROPOSED BUILDINGS:**

1-STORY CLUBHOUSE	1
<b>TOTAL</b>	<b>1</b>

**PROPOSED PARKING:**

PROVIDED SPACES	436
PROVIDED SPACES	436
PARKING RATIO	1.50/UNIT

**PROPOSED PROJECT AREA:**

HARDSCAPE	4.22 AC
OPEN SPACE	3.17 AC
TOTAL PROJECT AREA	7.39 AC
VILLAGE 3 PLAN	10.14 AC

**FOUND NOT FOUND:**  
 FOUND: 10' FURNISH AND CAP '1.5' TYP. - UNLESS OTHERWISE NOTED  
 NOT FOUND: 10' FURNISH AND CAP '1.5' TYP. - UNLESS OTHERWISE NOTED









# Exhibit B

- LEGEND**
- STANDARD STREET MONUMENT TO BE SET
  - EMERSON POINT, MONUMENT FOUND ON SET
  - FOUND 5/8" REBAR WITH INSIDE CAP "PLS 2044"
  - FOUND MONUMENT AS NOTED
  - FOUND 1 1/2" BRASS CAP IN MONUMENT WELL
  - FOUND 1/4" SECTION CORNER AS NOTED
  - FOUND SECTION CORNER AS NOTED
  - GEOMETRIC CONTROL POINT AS NOTED
  - STREET NAME CHANGE
  - TYPICAL PROPERTY CORNER - 3/4" REBAR & CAP OR 1/4" REBAR & WASHER "PLS 11114" AT CORNER OF LOT AND OTHER 3/4" REBAR & CAP "PLS 11114" AT CORNER OF LOT AND OTHER 3/4" REBAR & CAP "PLS 11114" AT CORNER OF CORNER OR PROJECTION OF LOT LINE
  - ADJACENT LOT LINES
  - CENTRALINE ROADWAY
  - EXISTENT LINE
  - FORM LINE
  - PROPERTY LINES
  - SECTION LINE
  - GRAPHIC BORDER
  - SE
  - SW
  - NE
  - NOV. BEARING
  - (N1) REFERENCE NUMBER
  - OR COMMON AREA
  - PER PARCEL MAP
  - AS RECORD OF SURVEY
  - 30 STORM DRAIN
  - 37 SQUARE FOOT
  - APN ACCESSOR PARCEL NUMBER
  - PER PUBLIC DRAINAGE DISTRICT
  - PER PUBLIC UTILITY DISTRICT
  - NEW RIGHT-OF-WAY
  - DRY CABLE TELEVISION LEGEND
  - TRIM TRACKS MEASURES WATER AUTHORITY

- FOUND/PROPOSED BRASS CAP WITH INSIDE CAP "PLS 11114" AT CORNER OF LOT AND OTHER 3/4" REBAR & CAP "PLS 11114" AT CORNER OF LOT AND OTHER 3/4" REBAR & CAP "PLS 11114" AT CORNER OF CORNER OR PROJECTION OF LOT LINE
- FOUND MONUMENT AS NOTED
- FOUND 1/4" SECTION CORNER AS NOTED
- FOUND SECTION CORNER AS NOTED
- GEOMETRIC CONTROL POINT AS NOTED
- STREET NAME CHANGE
- TYPICAL PROPERTY CORNER - 3/4" REBAR & CAP OR 1/4" REBAR & WASHER "PLS 11114" AT CORNER OF LOT AND OTHER 3/4" REBAR & CAP "PLS 11114" AT CORNER OF LOT AND OTHER 3/4" REBAR & CAP "PLS 11114" AT CORNER OF CORNER OR PROJECTION OF LOT LINE
- ADJACENT LOT LINES
- CENTRALINE ROADWAY
- EXISTENT LINE
- FORM LINE
- PROPERTY LINES
- SECTION LINE
- GRAPHIC BORDER
- SE
- SW
- NE
- NOV. BEARING
- (N1) REFERENCE NUMBER
- OR COMMON AREA
- PER PARCEL MAP
- AS RECORD OF SURVEY
- 30 STORM DRAIN
- 37 SQUARE FOOT
- APN ACCESSOR PARCEL NUMBER
- PER PUBLIC DRAINAGE DISTRICT
- PER PUBLIC UTILITY DISTRICT
- NEW RIGHT-OF-WAY
- DRY CABLE TELEVISION LEGEND
- TRIM TRACKS MEASURES WATER AUTHORITY

LINE #	DIRECTION	LENGTH
BL1	S07°28'02" E	38.89
BL2	S07°28'02" E	38.89
BL3	S07°28'02" E	41.29
BL4	S07°15'00" E	41.29
BL5	S07°15'00" E	41.29
BL6	S07°15'00" E	41.29
BL7	S07°15'00" E	41.29
BL8	S07°15'00" E	41.29
BL9	S07°15'00" E	41.29
BL10	S07°15'00" E	41.29
BL11	S07°15'00" E	41.29
BL12	S07°15'00" E	41.29
BL13	S07°15'00" E	41.29
BL14	S07°15'00" E	41.29
BL15	S07°15'00" E	41.29

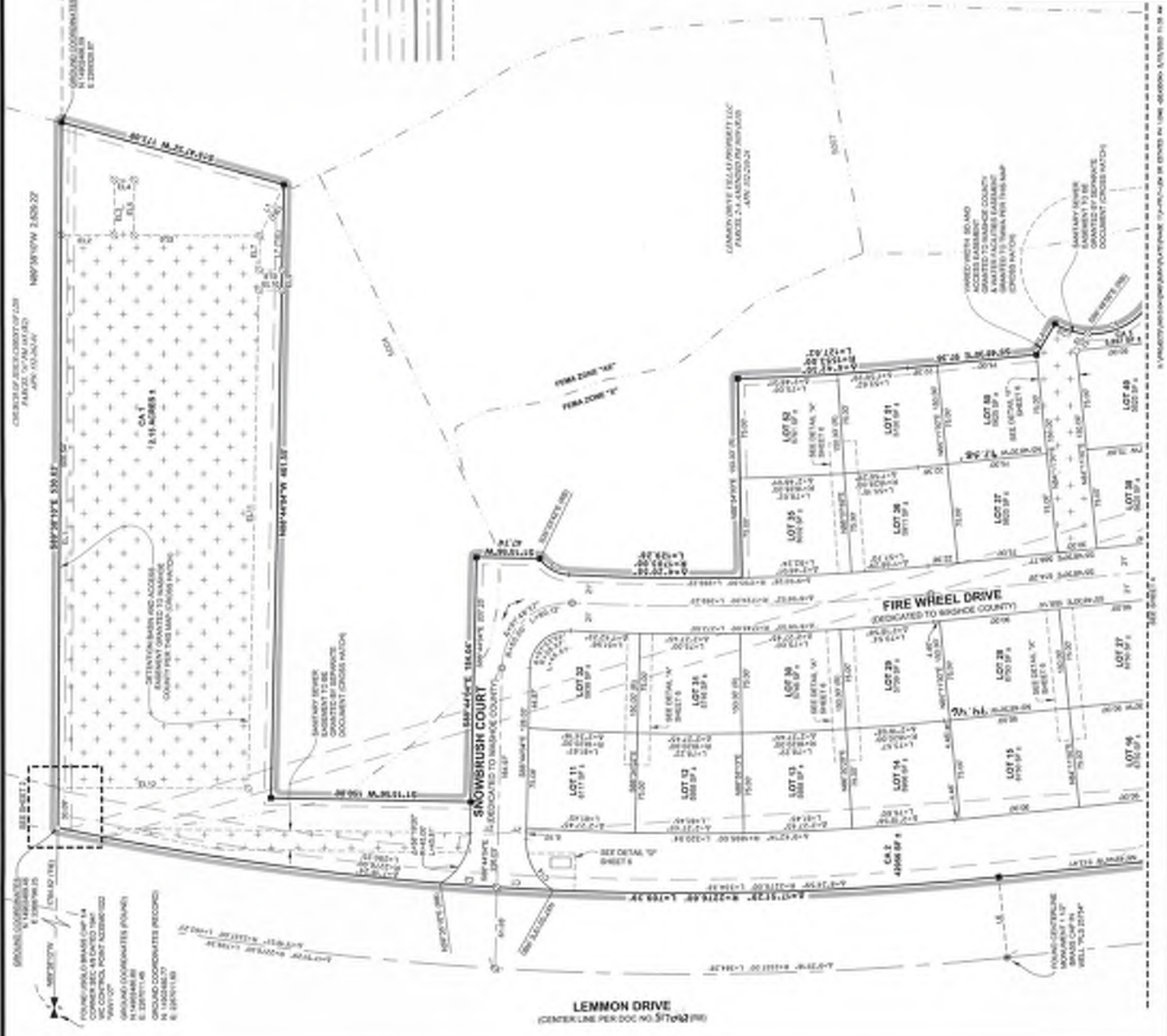
CURVE #	DATA	BEARING	LENGTH
001	272°3'	34.00	21.84



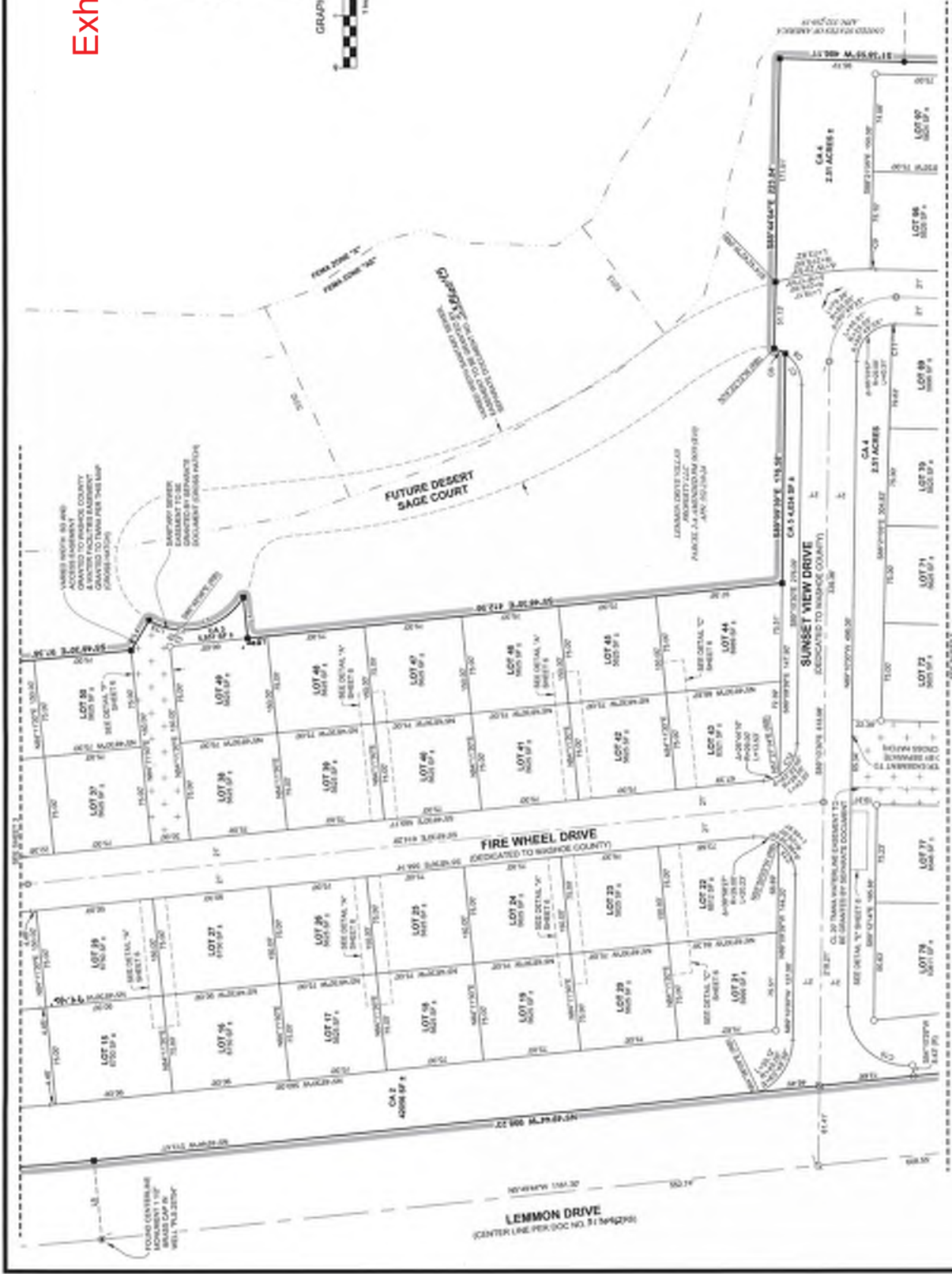
OFFICIAL PLAT OF  
**LEMMON DRIVE ESTATES, PHASE 1**  
 A DIVISION OF PARCEL 1A OF AMENDED PARCEL MAP NO. 355  
 SITUATED IN THE NE 1/4 SECTION 8, T40N, R10E, N20W  
 WASHCO COUNTY, OREGON

**CF3**  
 CFA INC.  
 LAND SURVEYING  
 CIVIL ENGINEERING  
 7000 100th Ave NE, Suite 1000  
 Bellevue, WA 98004  
 (206) 465-1111

DATE OF SURVEY: 08/30/2024  
 DATE OF PLAT: 08/30/2024  
 SHEET NO: 3 OF 6



# Exhibit B



OPTIONAL PLAT  
of  
**LEMMON DRIVE ESTATES, PHASE 1**  
A SUBDIVISION OF LOTS 16-46, MAP NO. 5386047, WASHOE COUNTY, NEVADA

**PLANNING & ENGINEERING**  
1000 W. WASHINGTON AVE., SUITE 100, LAS VEGAS, NV 89102  
TEL: 702.735.1111 FAX: 702.735.1112

**PREPARED BY:** [Signature]  
**DATE:** APRIL 2013

**SCALE:** 1" = 40'

**DATE:** APRIL 2013

**PLAT NO.:** 4/6

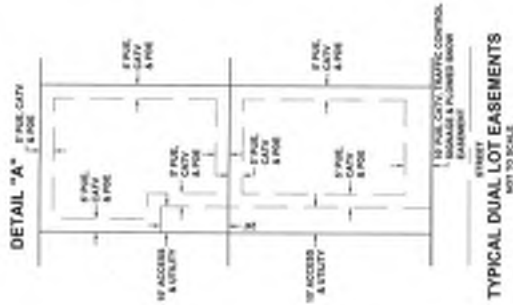
T5532

CHANGES TO THIS MAP SHOULD BE MADE BY A SUBSEQUENT PLAT.



**Exhibit B**

**EASEMENT DETAIL SHEET**



OPTIONAL PLAT  
OF  
**LEMON DRIVE ESTATES, PHASE 1**  
A PORTION OF PARCEL 1, A.C. 1.000, SECTION 14, T4N, R10E, NEAD  
WYOMING COUNTY, NEVADA

DATE: 10/1/2014  
DRAWN BY: [Signature]  
CHECKED BY: [Signature]  
SCALE: 1/8" = 1'-0"  
SHEET: 6/6

CFA, INC.  
LAND SERVICES  
CIVIL ENGINEER  
1000 W. WYOMING STREET, SUITE 100  
LAS VEGAS, NV 89102  
PH: 702-735-1111 FAX: 702-735-1112



# Exhibit B

FOUND MONUMENTS CAP WITH THE  
SECTION ASSETS LISTED THAT  
CONTROL POINT NUMBER(S)  
N 111° 11' 11" W  
N 111° 11' 11" W  
GROUND COORDINATES FOUND  
E 111° 11' 11" W  
GROUND COORDINATES FOUND  
E 111° 11' 11" W  
GROUND COORDINATES FOUND  
E 111° 11' 11" W

## LEGEND

- STANDARD STREET MONUMENT TO BE SET "N 111° 11' 11" W"
- DIMENSION POINT, NOTHING FOUND OR SET
- FOUND "N 111° 11' 11" W" REMAIN WITH PLASTIC CAP
- FOUND MONUMENT AS NOTED
- FOUND DIMENSION STREET MONUMENT IN WELL "N 111° 11' 11" W"
- FOUND 1/4 SECTION CORNER
- FOUND SECTION CORNER
- GEODETIC CONTROL POINT AS NOTED
- TYPICAL PROPERTY CORNER - "N 111° 11' 11" W" MARKED "N 111° 11' 11" W" AT CORNER OF LOT AND OTHER "N 111° 11' 11" W" MARKED "N 111° 11' 11" W" OF WELL, OR WALL, OR CURB, OR CLEAR SCENE OR PROJECTION OF LOT LINE
- BY RADIAL LINE
- BY RADIAL BEARING
- BY REFERENCE NUMBER
- CA COMMON AREA
- PM PARCEL MAP
- BY RECORD OF SURVEY
- BY SQUARE FOOT
- BY SQUARE FEET
- APN ADDRESS PARCEL NUMBER
- THE PUBLIC UTILITY EASEMENT
- NEW ROOF-OF-WAY
- CITY CABLE TELEVISION EASEMENT
- ADJACENT LOT LINES
- CONCRETE DRIVEWAY
- EASEMENT LINE
- EFFECTIVE DATE AS NOTED
- GLASS PROTECTED ZONE
- AS NOTED
- PROPERTY LINES
- SECTION LINE
- GRAPHIC BORDER

## AREAS

AREA NAME	ACRES	FEET
COMMON AREA 1	14.100	3.89
COMMON AREA 2	44.000	9.38
COMMON AREA 3	2.000	0.21
SECTION COURT	28.150	6.64
BACK SLOPE COURT	15.750	3.28
TOTAL	100.000	23.38

## BASIS OF BEARINGS

THE BASIS OF BEARINGS FOR THIS SURVEY IS THE  
MAGNETIC DECLINATION OF THE STATE OF NEVADA  
AS DETERMINED BY THE NATIONAL MAGNETIC  
DECLINATION DATA FOR THE YEAR 2011. THE  
MAGNETIC DECLINATION IS 11.111 DEGREES  
WEST. ALL BEARINGS ARE AT AN EQUAL LEVEL BASED  
ON A CORRECTION TO GROUND FACTOR OF  
1.000000000.

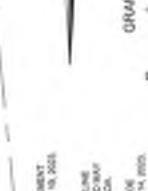


## EASEMENT NOTES

- 1. PRIVATE EASEMENT TO BE GRANTED TO THE COMMON AREA 1 OF THIS MAP.
- 2. EASEMENT TO BE GRANTED TO THE COMMON AREA 2 OF THIS MAP.
- 3. EASEMENT TO BE GRANTED TO THE COMMON AREA 3 OF THIS MAP.
- 4. EASEMENT TO BE GRANTED TO THE COMMON AREA 4 OF THIS MAP.
- 5. EASEMENT TO BE GRANTED TO THE COMMON AREA 5 OF THIS MAP.
- 6. EASEMENT TO BE GRANTED TO THE COMMON AREA 6 OF THIS MAP.
- 7. EASEMENT TO BE GRANTED TO THE COMMON AREA 7 OF THIS MAP.
- 8. EASEMENT TO BE GRANTED TO THE COMMON AREA 8 OF THIS MAP.
- 9. EASEMENT TO BE GRANTED TO THE COMMON AREA 9 OF THIS MAP.
- 10. EASEMENT TO BE GRANTED TO THE COMMON AREA 10 OF THIS MAP.

## OFFICIAL PLAN

LEMMON DRIVE ESTATES, PHASE 2  
A DIVISION OF PARCEL 3.0 OF AERIOID PARCEL MAP NO. 388  
APPROVED COUNTY



FOUND MONUMENTS CAP WITH THE  
SECTION ASSETS LISTED THAT  
CONTROL POINT NUMBER(S)  
N 111° 11' 11" W  
N 111° 11' 11" W  
GROUND COORDINATES FOUND  
E 111° 11' 11" W  
GROUND COORDINATES FOUND  
E 111° 11' 11" W

FOUND MONUMENTS CAP WITH THE  
SECTION ASSETS LISTED THAT  
CONTROL POINT NUMBER(S)  
N 111° 11' 11" W  
N 111° 11' 11" W  
GROUND COORDINATES FOUND  
E 111° 11' 11" W  
GROUND COORDINATES FOUND  
E 111° 11' 11" W

FOUND MONUMENTS CAP WITH THE  
SECTION ASSETS LISTED THAT  
CONTROL POINT NUMBER(S)  
N 111° 11' 11" W  
N 111° 11' 11" W  
GROUND COORDINATES FOUND  
E 111° 11' 11" W  
GROUND COORDINATES FOUND  
E 111° 11' 11" W

FOUND MONUMENTS CAP WITH THE  
SECTION ASSETS LISTED THAT  
CONTROL POINT NUMBER(S)  
N 111° 11' 11" W  
N 111° 11' 11" W  
GROUND COORDINATES FOUND  
E 111° 11' 11" W  
GROUND COORDINATES FOUND  
E 111° 11' 11" W

FOUND MONUMENTS CAP WITH THE  
SECTION ASSETS LISTED THAT  
CONTROL POINT NUMBER(S)  
N 111° 11' 11" W  
N 111° 11' 11" W  
GROUND COORDINATES FOUND  
E 111° 11' 11" W  
GROUND COORDINATES FOUND  
E 111° 11' 11" W

**Exhibit B**

CURVE #	BEARING	RADIUS	LENGTH
C1	S 14° 52' 30" E	20.00	3.67
C2	S 14° 52' 30" E	30.00	5.00
C3	S 14° 52' 30" E	40.00	6.28
C4	S 14° 52' 30" E	50.00	7.50
C5	S 14° 52' 30" E	60.00	8.60
C6	S 14° 52' 30" E	70.00	9.58
C7	S 14° 52' 30" E	80.00	10.45
C8	S 14° 52' 30" E	90.00	11.22
C9	S 14° 52' 30" E	100.00	11.90
C10	S 14° 52' 30" E	110.00	12.50
C11	S 14° 52' 30" E	120.00	13.03
C12	S 14° 52' 30" E	130.00	13.50
C13	S 14° 52' 30" E	140.00	13.92
C14	S 14° 52' 30" E	150.00	14.30
C15	S 14° 52' 30" E	160.00	14.64
C16	S 14° 52' 30" E	170.00	14.95
C17	S 14° 52' 30" E	180.00	15.23
C18	S 14° 52' 30" E	190.00	15.48
C19	S 14° 52' 30" E	200.00	15.70
C20	S 14° 52' 30" E	210.00	15.89
C21	S 14° 52' 30" E	220.00	16.05
C22	S 14° 52' 30" E	230.00	16.19
C23	S 14° 52' 30" E	240.00	16.30
C24	S 14° 52' 30" E	250.00	16.39
C25	S 14° 52' 30" E	260.00	16.46
C26	S 14° 52' 30" E	270.00	16.51
C27	S 14° 52' 30" E	280.00	16.54
C28	S 14° 52' 30" E	290.00	16.56
C29	S 14° 52' 30" E	300.00	16.57
C30	S 14° 52' 30" E	310.00	16.57
C31	S 14° 52' 30" E	320.00	16.56
C32	S 14° 52' 30" E	330.00	16.54
C33	S 14° 52' 30" E	340.00	16.50
C34	S 14° 52' 30" E	350.00	16.45
C35	S 14° 52' 30" E	360.00	16.39
C36	S 14° 52' 30" E	370.00	16.31
C37	S 14° 52' 30" E	380.00	16.22
C38	S 14° 52' 30" E	390.00	16.11
C39	S 14° 52' 30" E	400.00	15.99
C40	S 14° 52' 30" E	410.00	15.85
C41	S 14° 52' 30" E	420.00	15.70
C42	S 14° 52' 30" E	430.00	15.54
C43	S 14° 52' 30" E	440.00	15.37
C44	S 14° 52' 30" E	450.00	15.19
C45	S 14° 52' 30" E	460.00	15.00
C46	S 14° 52' 30" E	470.00	14.80
C47	S 14° 52' 30" E	480.00	14.59
C48	S 14° 52' 30" E	490.00	14.37
C49	S 14° 52' 30" E	500.00	14.14
C50	S 14° 52' 30" E	510.00	13.90
C51	S 14° 52' 30" E	520.00	13.65
C52	S 14° 52' 30" E	530.00	13.40
C53	S 14° 52' 30" E	540.00	13.14
C54	S 14° 52' 30" E	550.00	12.88
C55	S 14° 52' 30" E	560.00	12.61
C56	S 14° 52' 30" E	570.00	12.34
C57	S 14° 52' 30" E	580.00	12.06
C58	S 14° 52' 30" E	590.00	11.78
C59	S 14° 52' 30" E	600.00	11.49
C60	S 14° 52' 30" E	610.00	11.20
C61	S 14° 52' 30" E	620.00	10.90
C62	S 14° 52' 30" E	630.00	10.60
C63	S 14° 52' 30" E	640.00	10.30
C64	S 14° 52' 30" E	650.00	10.00
C65	S 14° 52' 30" E	660.00	9.70
C66	S 14° 52' 30" E	670.00	9.40
C67	S 14° 52' 30" E	680.00	9.10
C68	S 14° 52' 30" E	690.00	8.80
C69	S 14° 52' 30" E	700.00	8.50
C70	S 14° 52' 30" E	710.00	8.20
C71	S 14° 52' 30" E	720.00	7.90
C72	S 14° 52' 30" E	730.00	7.60
C73	S 14° 52' 30" E	740.00	7.30
C74	S 14° 52' 30" E	750.00	7.00
C75	S 14° 52' 30" E	760.00	6.70
C76	S 14° 52' 30" E	770.00	6.40
C77	S 14° 52' 30" E	780.00	6.10
C78	S 14° 52' 30" E	790.00	5.80
C79	S 14° 52' 30" E	800.00	5.50
C80	S 14° 52' 30" E	810.00	5.20
C81	S 14° 52' 30" E	820.00	4.90
C82	S 14° 52' 30" E	830.00	4.60
C83	S 14° 52' 30" E	840.00	4.30
C84	S 14° 52' 30" E	850.00	4.00
C85	S 14° 52' 30" E	860.00	3.70
C86	S 14° 52' 30" E	870.00	3.40
C87	S 14° 52' 30" E	880.00	3.10
C88	S 14° 52' 30" E	890.00	2.80
C89	S 14° 52' 30" E	900.00	2.50
C90	S 14° 52' 30" E	910.00	2.20
C91	S 14° 52' 30" E	920.00	1.90
C92	S 14° 52' 30" E	930.00	1.60
C93	S 14° 52' 30" E	940.00	1.30
C94	S 14° 52' 30" E	950.00	1.00
C95	S 14° 52' 30" E	960.00	0.70
C96	S 14° 52' 30" E	970.00	0.40
C97	S 14° 52' 30" E	980.00	0.10
C98	S 14° 52' 30" E	990.00	0.00
C99	S 14° 52' 30" E	1000.00	0.00

LINE #	DIRECTION	LENGTH
L1	S 84° 11' 30" W	31.67
L2	S 84° 11' 30" W	27.00
L3	S 84° 11' 30" W	47.14
L4	S 84° 11' 30" W	50.00
L5	S 84° 11' 30" W	83.36
L6	S 84° 11' 30" W	46.54
L7	S 84° 11' 30" W	27.83
L8	S 84° 11' 30" W	89.28
L9	S 84° 11' 30" W	40.34
L10	S 84° 11' 30" W	24.57

BEARING	DIRECTION	LENGTH
R1	S 84° 11' 30" W	31.67
R2	S 84° 11' 30" W	27.00
R3	S 84° 11' 30" W	47.14
R4	S 84° 11' 30" W	50.00
R5	S 84° 11' 30" W	83.36
R6	S 84° 11' 30" W	46.54
R7	S 84° 11' 30" W	27.83
R8	S 84° 11' 30" W	89.28
R9	S 84° 11' 30" W	40.34
R10	S 84° 11' 30" W	24.57



TYPICAL DUAL LOT EASEMENTS  
LOTS 55, 56, 61 & 62  
NOT TO SCALE



TYPICAL DUAL LOT EASEMENTS  
LOTS 33, 34, 53 & 54  
NOT TO SCALE



TYPICAL DUAL LOT EASEMENTS  
LOTS 1-10  
NOT TO SCALE



TYPICAL TRIPLE LOT EASEMENTS  
LOTS 66, 67 & 68  
NOT TO SCALE



TYPICAL DUAL LOT EASEMENTS  
LOTS 57, 58, 59 & 60  
NOT TO SCALE



TYPICAL DUAL LOT EASEMENTS  
LOTS 55, 56, 59 & 60  
NOT TO SCALE



OFFICIAL PLAN  
OF  
LEMON DRIVE ESTATES, PHASE 2  
A DEVELOPMENT OF 16 LOTS AND 1600 SQ FT OF LAND IN THE 14 SECTION, T7N, 17E, 100N  
WAGNER COUNTY, NEVADA

DATE: 08/11/2023  
DRAWN BY: JAC  
CHECKED BY: JAC  
SCALE: AS SHOWN  
SHEET: 3/3

ERIC M. ANDERSON  
REGISTERED PROFESSIONAL ENGINEER  
LICENSE NO. 11774  
1700 MAIN ST., SUITE 100  
RENO, NV 89501

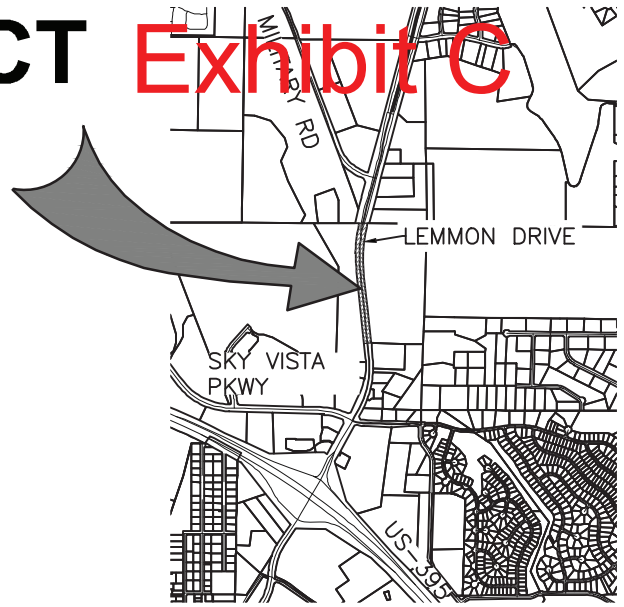
CORRELATIVE INDEXES SHOULD BE EXAMINED FOR ANY SUBSEQUENT CHANGES TO THIS SET



**EXHIBIT "C"**  
**(Offered Improvements Application/Submittals)**

# PROJECT SITE




# Exhibit C



## VICINITY MAP

SCALE: NTS

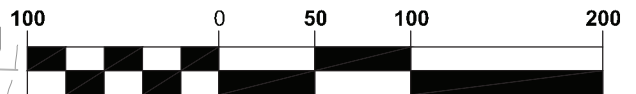
### LEGEND

-  4" AC PAVEMENT W/6" BASE
-  6" MEDIAN CURB W/6" BASE
-  INTERSECTION SIGNAL AND LIGHTS



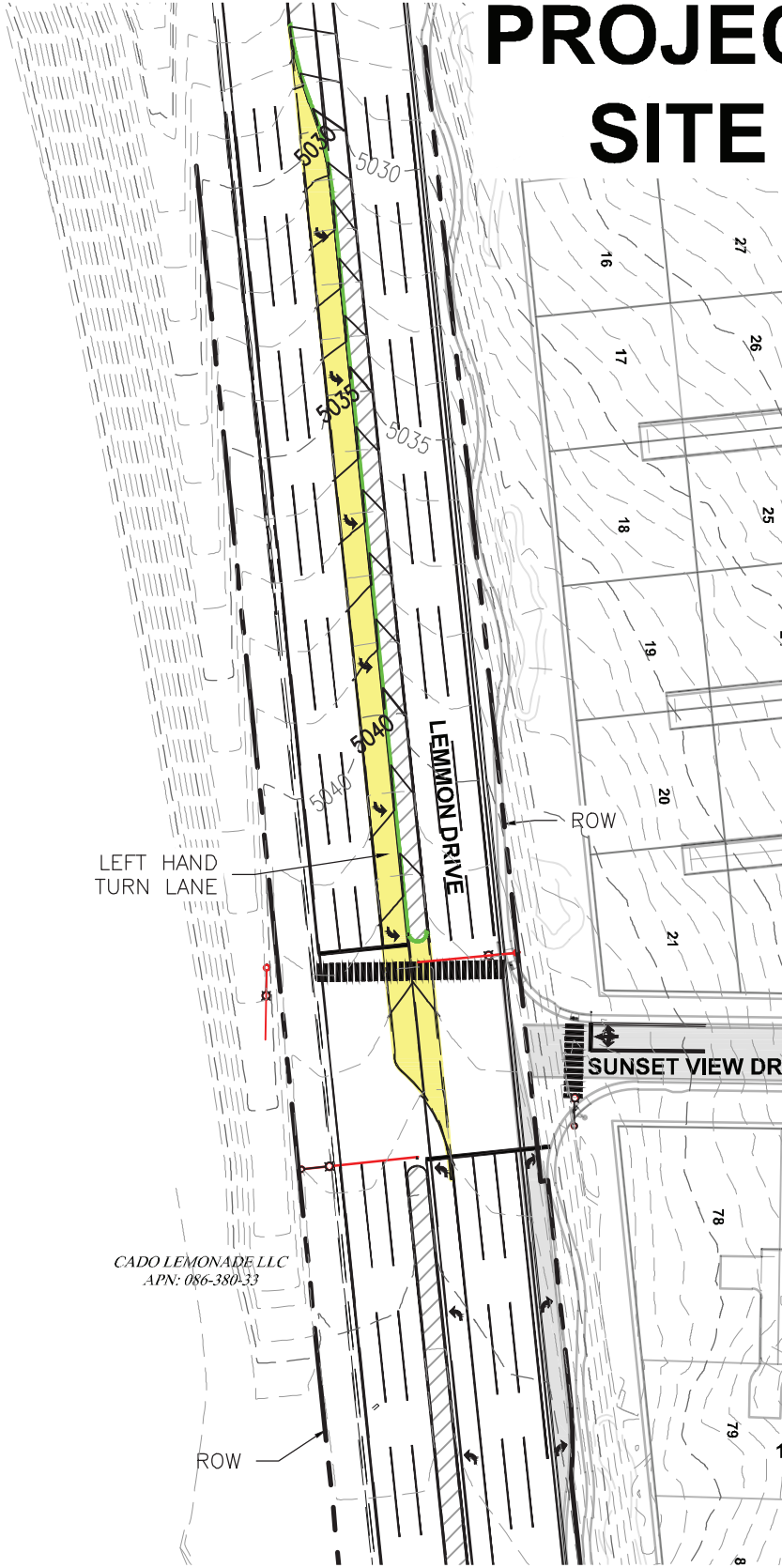
Know what's below.  
**Call** before you dig.

### GRAPHIC SCALE



1 inch = 100 ft.

X:\PROJECTS\16013.04\DWG\ENGR\EXHIBITS\RTC\LEMMON INTER OVERVIEW.DWG <APOROLI>  
5/1/2024 10:04 AM



1150 CORPORATE BLVD.  
RENO, NV 89502  
(775) 856-1150

LEMMON DR ESTATES

**RRIF EXHIBIT**  
700A LEMMON DR  
WASHOE COUNTY, NV 89506

SHEET

1

1

OF



April 16, 2024

Dale Keller, PE  
RRIF Administrator  
Regional Transportation Commission of Washoe County  
1105 Terminal Way, Suite 108  
Reno, NV 89502

### **RRIF Offset Agreement Request: Lemmon Drive / Vista Knolls Pkwy / Sunset View Drive Signalization**

#### Introduction

Lemmon Drive Villas Property, LLC (Developer of Record) hereby formally requests a Regional Road Impact Fee (RRIF) Offset Agreement and RRIF Waivers for the installation of a traffic signal and associated roadway improvements at the Lemmon Drive / Vista Knolls Parkway Extension / Sunset View Drive intersection within the City of Reno.

The Developer of Record will construct the signalization improvements as part of the regional improvement program (2050 RTP). Previous correspondence between the City of Reno, Regional Transportation Commission, and the project's engineers has identified this as a regional capacity improvement eligible for an RRIF Offset Agreement. Specifically, the location is within the Lemmon Drive project limits in the RTP and the *Lemmon Drive Capacity Improvements Project Traffic Analysis Memorandum, February 6, 2021* performed for the RTC by Jacobs, supports signalization at this location as a regional benefit.

#### Proposed Capital Improvements

Lemmon Drive Villas Property, LLC proposes the following improvements:

The roadway improvements will be on Lemmon Drive 0.37 miles south of Military Rd and 0.3 miles north of Sky Vista/Buck Dr. They will include the installation of a traffic signal on Lemmon Drive and modifications to the existing median and curb and gutter for left and right turn lanes into the development.

The signal design is for a 3-leg intersection at Lemmon Drive and Sunset View Drive of the Lemmon Drive Estates development east of Lemmon Drive. The southbound approach will have 3 thru lanes and a dedicated left turn lane. The northbound approach will have a dedicated U-turn lane, 3 thru lanes, and a dedicated right turn lane. The westbound approach exiting the development will have a single left-thru-right lane. See attached exhibit "Signalization Diagram". The signal layout considers the existing multi-



5000 Executive Parkway, Suite 350, San Ramon, CA 94583  
Phone: (925) 355-1350  
[www.laffertycommunities.com](http://www.laffertycommunities.com)



use trail on the west side of Lemmon Drive, as well as the addition of a fourth eastbound leg when future development occurs.

In conjunction with the installation of a traffic signal, the existing median and curb and gutter need to be modified. The center median will be modified to include approximately 400' of left turn lane for the southbound approach. The existing median is 30' wide, this will be reduced to accommodate the left turn lane and buffer spacing. The curb and gutter will be modified to include approximately 200' of right turn lane for the northbound approach. There is currently no additional sidewalk or paving beyond the curb and gutter to be removed. The appropriate signing and striping for these improvements will also be completed. See the attached "Roadway Exhibit".

The project **Construction Plans and Specifications** are in near final stages. The current signal and roadway plans (*Attachment 2*) are provided for application review and final drawings will be provided.

The **Developer of Record** is:

Lemmon Drive Villas Property, LLC  
5000 Executive Parkway, Suite 350  
San Ramon, CA 94583

The **Development of Record** includes **two (2) development projects/development entities**:

**Lemmon Drive Estates** (Lemmon Drive Villas Property, LLC)

Washoe County File Numbers:

T5532 – Official Plat of Lemmon Drive Estates, Phase 1  
T5552 – Official Plat of Lemmon Drive Estates, Phase 2

The **Site Plan** for Lemmon Drive Estates shown as the Official Plats Phases 1 & 2, included as *Attachment 3*.

**Approved Land Uses** within Lemmon Drive Estates and the **Associated Regional Road Impact Fees** based on the applicable impact fee schedule (7<sup>th</sup> Edition, Year 1 Indexing, included as *Attachment 4*) are as follows:

Single Family Residential – 98 units @ \$5,455.46/unit = \$534,635.08

Lemmon Drive Estates Total Impact Fee/Eligibility = **\$534,635.08**

**Highland** (CADO SV Land LLC, c/o Capstone Advisors, Inc.)



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City of Reno file numbers:

LDC 23-00005 - Highland Zoning Map Amendment, Adopted Ordinance No. 6642

LDC 23-00006 - Highland Tentative Map and Conditional Use Permit

The **Tentative Map** for Highland project is included as *Attachment 5*.

**Approved Land Uses** within Highland project and the **Associated Regional Road Impact Fees** based on the applicable impact fee schedule (7<sup>th</sup> Edition, Year 1 Indexing, included as *Attachment 4*) are as follows:

Single Family Detached Residential – 219 units @ \$5,455.46/unit = \$1,194,745.74

Multi-family Residential – 288 units @ \$3,475.31/unit = \$1,000,889.28

Commercial – 3.83 acre site, estimated at 0.25 FAR = 41,700 sqft GFA @ \$7,885.77/ksqft = \$328,836.61

Highland Project Total Impact Fee/Eligibility = **\$2,524,471.63**

**Total Anticipated Impact Fee/Eligibility of the combined Developments of Record= \$3,059,106.71**

The Developer of Record (Lemmon Drive Villas Property, LLC) will earn the RRIF Waivers, which shall be applicable to only the above listed Developments of Record. Exchange/transfer of RRIF Waivers between the Developments of Record is hereby requested. The Developments of Record acknowledge that such transfer(s) shall be negotiated and contracted between the entities outside the RRIF agreement.

It is anticipated that the Highland development project will, in the future, request modification of this RRIF agreement or submit an additional RRIF Offset Agreement for completion of the fourth leg (Vista Knolls) of the traffic signal and intersection improvements. That flexibility is hereby formally requested.

The **Engineer of Record** for this offset agreement is:

Horrocks

801-763-5100 | [info@horrocks.com](mailto:info@horrocks.com) | [Horrocks.com](http://Horrocks.com)

2162 West Grove Parkway, Suite 100, Pleasant Grove, UT

Contact Persons:

Ryan Dummer, PE (Nevada Licensure Pending)

(385) 353-2788 | [ryan.dummer@horrocks.com](mailto:ryan.dummer@horrocks.com)

Scott Newin, PM

(801) 763-5272 | [scottn@horrocks.com](mailto:scottn@horrocks.com)



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**Qualifications of Inspection and Testing Firm**

Any public improvements requiring sampling, testing, or quality assurance activities will be provided through an ACI and/or NAQTC certified firm.

**Preliminary Engineering Cost Estimate**

The following preliminary cost estimates were received for the proposed improvements:

- PAR Western Line Contractors, LLC- traffic signal installation: **\$425,000**
- Campbell Construction Co., Inc. - roadwork improvements: **\$351,000**

**Estimated Construction Contract - \$776,000**

The preliminary project estimate is provided below, however, the actual construction bid result will supersede the Engineer's Estimate and all costs will be updated.

**Preliminary Project Cost Estimate**

**Lemmon Drive / Vista Knolls / Sunset View Drive Traffic Signal Improvements**

Item	Description	Estimated Cost	Final Cost
1	Engineering Fees	\$50,000	
2	Permit Fees	\$5,000	
3	Construction Contract	\$776,000	
4	Inspection	\$30,000	
5	Testing	\$20,000	
6	Contingency	\$19,000	
<b>Total</b>		<b>\$900,000</b>	
<b>RRIF Waiver Amount Requested</b>		<b>\$900,000</b>	



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### Traffic Design Report & Project Eligibility

Justification/explanation of the overall capacity improvements, and verification that the improvements will provide operations within policy level of service for at least 10 years, is provided in the *Highland Traffic Impact Study, August 3, 2022, Headway Transportation*, included as Attachment 6.

### Project Specifications

All work will be required to comply with the Standard Specifications for Public Works Construction (Orange Book) current edition, consistent with RTC requirements for Public Works projects.

### Construction Schedule

The signal and intersection improvements are anticipated to be completed by the end of the 2026 calendar year, and potentially within the 2025 calendar year.

Please do not hesitate to contact us with any questions or requests for additional information. We recognize that full project plans, specifications, and updates to information contained in this application will be necessary prior to execution of the final RRIF Offset Agreement. Thank you in advance for your consideration.

Sincerely,  
Lafferty Communities

Greg Garchar  
Project Manager

### Attachments:

1. Project Location Map
2. Civil Improvement Plans for Traffic Signal & Signal Design
3. Lemmon Drive Estates Final Map Phase 1 and 2
4. RTC RRIF Schedule – 7<sup>th</sup> Edition Year 1 Indexing
5. Highland Tentative Map
6. Highland Traffic Impact Study



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# CIVIL IMPROVEMENT PLANS LEMMON DR ESTATES PHASE 1

Exhibit C

**OWNER/DEVELOPER:**  
LAFFERTY COMMUNITIES  
BRITTANY LAFFERTY  
Vice President - Project Manager  
2000 Crow Canyon Place, No. 350  
San Ramon, California 94583

**CIVIL ENGINEER:**  
KATHLEEN MEYER P.E.

CFA & Bowman company  
LAND SURVEYORS  
CIVIL ENGINEERS  
LAND USE PLANNERS  
1150 CORPORATE BLVD | RENO, NV 89502  
775-956-1159 | WWW.CFAANDBO.COM

**GEOTECHNICAL ENGINEER**  
ENGEO INCORPORATED  
9485 DOUBLE R BLVD  
B-22  
RENO, NV 89521

**BASIS OF BEARINGS AND COORDINATES:**  
THE BEARING AND DISTANCE METHOD WAS USED TO ESTABLISH THE CONTROL POINTS OF THE SURVEY. THE BEARING AND DISTANCE METHOD WAS USED TO ESTABLISH THE CONTROL POINTS OF THE SURVEY. THE BEARING AND DISTANCE METHOD WAS USED TO ESTABLISH THE CONTROL POINTS OF THE SURVEY. THE BEARING AND DISTANCE METHOD WAS USED TO ESTABLISH THE CONTROL POINTS OF THE SURVEY.

**BASIS OF ELEVATIONS:**  
NEVADA STATE PLANE COORDINATE SYSTEM, WEST ZONE (NAD 83/94)



VICINITY MAP  
SCALE: NTS



**ENGINEERS STATEMENT:**  
I, THE UNDERSIGNED, AS AN ENGINEER, HAVE PREPARED THESE PLANS AND SPECIFICATIONS IN ACCORDANCE WITH APPLICABLE PROVISIONS OF THE NEVADA COUNTY DEVELOPMENT CODE.  
  
KATHLEEN MEYER, P.E.  
CFA & BOWMAN COMPANY.

Sheet Number	Sheet Title
C1.0	TITLE SHEET
C1.1	GENERAL NOTES
C2.0	PLAT
C2.1	PLAT
C2.2	PLAT
C2.3	PLAT
C2.4	PLAT
C2.5	PLAT
C3.0	SITE - UTILITY PLAN
C3.1	SITE - UTILITY PLAN
C4.0	GRADING PLAN
C4.1	GRADING PLAN
C5.0	PLAN AND PROFILE 1
C5.1	PLAN AND PROFILE 2
C5.2	PLAN AND PROFILE 3
C5.3	PLAN AND PROFILE 4
C5.4	PLAN AND PROFILE 5
C6.0	DETAILS
C6.1	DETAILS
C6.2	DETAILS
C6.3	DETAILS
C6.4	DETAILS
C6.5	DETAILS
C6.6	DETAILS
C6.7	DETAILS
C6.8	STRIPING & SIGNAGE DETAILS
C7.0	STRIPING AND SIGNAGE
C7.1	STRIPING AND SIGNAGE
C8.0	EROSION CONTROL PLAN
C8.1	EROSION CONTROL PLAN
L1-L10	LANDSCAPE PLANS
C9, CC9.8	SIGNAL PLANS
1-15	SIGNAL DESIGN



# CIVIL IMPROVEMENT PLANS

## TRAFFIC SIGNAL LEMMON DR ESTATES

### LEMMON DR. STA: 20+00 - 30+73

#### RENO, NV 89506

Exhibit C

**OWNER/DEVELOPER:**  
 ENGINEERING DEPARTMENT  
 1105 TERMINAL WAY, STE 108  
 RENO, NV 89502  
 PHONE (775) 348-0171

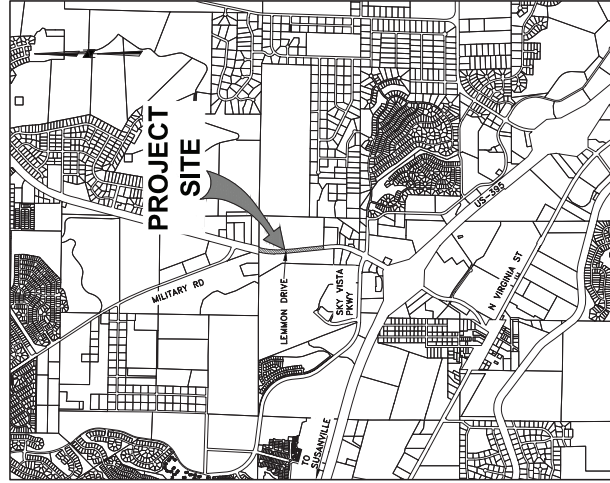
**CIVIL ENGINEER:**  
 KATHLEEN MEYER P.E.  
 C.F.A. & Bowman company  
 LAND SURVEYORS  
 CIVIL ENGINEERS  
 LAND USE PLANNERS  
 1150 CORPORATE BLVD | RENO, NV 89502  
 775-385-1159 | WWW.CFBOWMAN.COM



**GEOTECHNICAL ENGINEER**  
 ENGeo INCORPORATED  
 9485 DOUBLE R BLVD  
 B-22  
 RENO, NV 89521

**BASIS OF BEARINGS AND COORDINATES:**  
 ALL BEARINGS AND COORDINATES ARE BASED ON THE NEVADA STATE PLANE COORDINATE SYSTEM, WEST ZONE (NAD 83/94). HIGH ACCURACY REFERENCE NETWORK (HARN) POINTS ARE DETERMINED USING REAL TIME KINEMATIC (RTK) GPS OBSERVATIONS WITH CORRECTIONS FROM A NEARBY REAL TIME KINEMATIC (RTK) GPS STATION. THE BEARING BETWEEN CORNERS 'SSB2' AND CORNERS 'SSB1' IS TAKEN AS SHOWN. DIMENSIONS SHOWN ARE GROUND DISTANCES. CORNERED OBJECTS SHOWN ARE GROUND DISTANCES.

**BASIS OF ELEVATIONS:**  
 NEVADA STATE PLANE COORDINATE SYSTEM, WEST ZONE (NAD 83/94)



VICINITY MAP  
 SCALE: NTS



Sheet Number	Sheet Title
CS-0	TITLE SHEET
CS-1	GENERAL NOTES
CS-2	DEMO
CS-3	SITE PLAN
CS-4	GRADING
CS-5	SIGNAGE AND STRIPING
CS-6	DETAILS
CS-7	DETAILS
CS-8	DETAILS
1-15	SIGNAL DESIGN

**CITY OF RENO CITY COUNCIL**  
 HILARY SCHEIVE, MAYOR  
 JENNY BRENKUS, CLERK  
 JENNY BRENKUS, COUNCIL MEMBER  
 MADAM DURR, COUNCIL MEMBER  
 MEGHAN EBBY, COUNCIL MEMBER  
 MEGHAN EBBY, COUNCIL MEMBER  
 KATHLEEN TAYLOR, COUNCIL MEMBER

HILARY SCHEIVE, MAYOR \_\_\_\_\_ DATE \_\_\_\_\_  
 JOHN FLANSBERG, P.E., DEPUTY PUBLIC WORKS DIRECTOR \_\_\_\_\_ DATE \_\_\_\_\_

**ENGINEERS STATEMENT:**  
 I, THE ENGINEER, HAVE EXAMINED THE PLANS AND SPECIFICATIONS FOR THE PROJECT AND I AM Satisfied THAT THE PLANS AND SPECIFICATIONS COMPLY WITH APPLICABLE PROVISIONS OF THE NEVADA COUNTY DEVELOPMENT CODE.  
 KATHLEEN MEYER, P.E.  
 C.F.A. & BOWMAN COMPANY



REVISIONS	DATE	BY	MARK

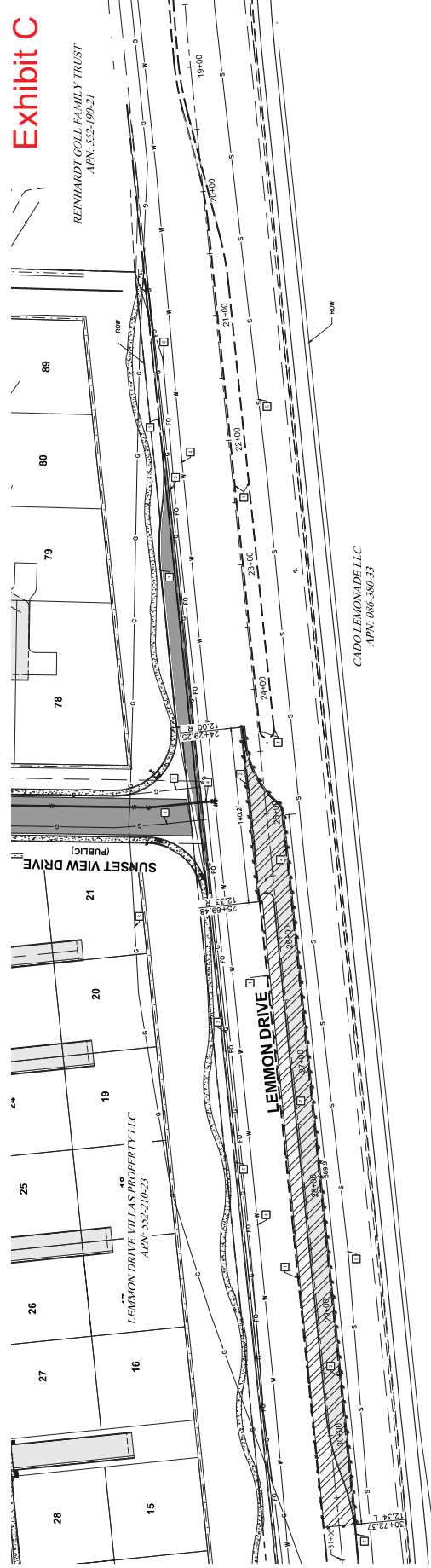


CF A Bowman Company  
 LAND SURVEYORS  
 CIVIL ENGINEERS  
 1150 CORPORATE BLVD. | RENO, NV 89502  
 775-85-1150 MAIN | CF.ARENO.COM

NEVADA  
 TRAFFIC SIGNAL LEMMON DR ESTATES  
 DEMO  
 LEMMON DR, STA. 20+00 - 30+73

DESIGNED BY: [Signature]  
 CHECKED BY: [Signature]  
 DATE: 5/11/2024

SHEET  
**C9.2**  
 24



- CONSTRUCTION NOTES**
- 1 (E) PROTECT IN PLACE CURB
  - 2 (E) CURB TO BE REMOVED
  - 3 (E) PROTECT IN PLACE GAS LINE
  - 4 (E) PROTECT IN PLACE WATER LINE
  - 5 (E) PROTECT IN PLACE SOWER LINE
  - 6 (E) PROTECT IN PLACE FIBER OPTIC
  - 7 REMOVE CURB, SIDEWALK, AND PAVEMENT AS SHOWN
  - 8 (E) GAS LINE TO BE REMOVED PER CIVIL PERMIT WBL022-102711



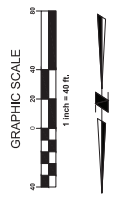
**CAUTION - NOTICE TO CONTRACTOR**

1. THE CONTRACTOR IS SPECIFICALLY ADVISED THAT THE UTILITIES AND CONDITIONS SHOWN ON THESE PLANS ARE BASED ON THE INFORMATION PROVIDED TO THE ENGINEER AND THE INFORMATION IS NOT TO BE RELIED ON BEING EXACT OR COMPLETE.

2. THE CONTRACTOR'S RESPONSIBILITY IS TO VERIFY THESE CONDITIONS AND/OR ELAVATIONS AT THE PROPOSED LOCATIONS PRIOR TO BEGINNING CONSTRUCTION. SHOULD THE CONTRACTOR DISCOVER ANY DISCREPANCIES, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY AND STOP WORK AT THE LOCATION OF THE DISCREPANCY UNTIL THE DISCREPANCY IS RESOLVED AND THE INFORMATION IS CORRECTED.

3. THE CONTRACTOR SHALL OBTAIN APPROVALS FROM ALL APPLICABLE AGENCIES AND UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS PRIOR TO BEGINNING CONSTRUCTION.

4. THE CONTRACTOR ASSUMES ALL RISK FOR ANY CONSTRUCTION PERFORMED WITH INFORMATION OR INFORMATION PROVIDED HEREON. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS PRIOR TO CONSTRUCTION.



NOTHING HEREON IS TO BE CONSIDERED AS A GUARANTEE OF ACCURACY OR A WARRANTY OF FITNESS FOR ANY PARTICULAR USE OR PURPOSE.



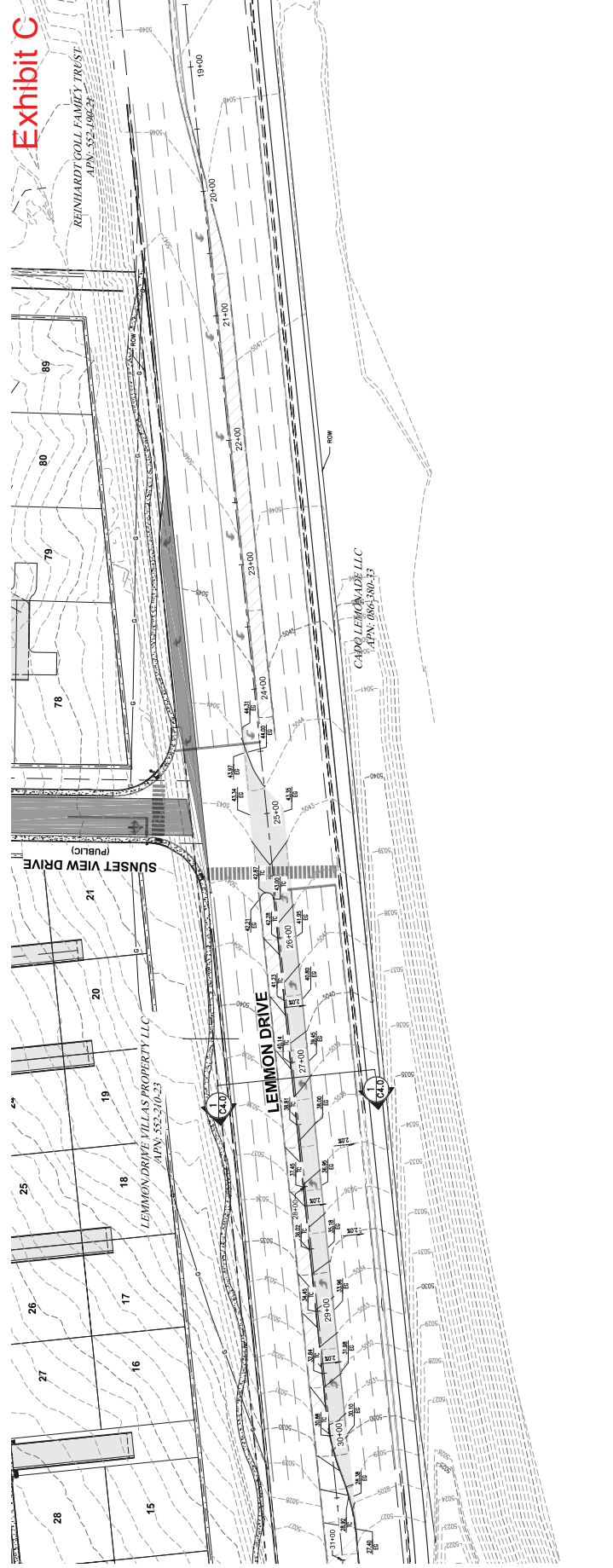
NO.	REVISIONS	DATE	BY



CFE a Bowman company  
 LAND SURVEYORS  
 CIVIL ENGINEERS  
 1150 CORPORATE BLVD | RENO, NV 89502  
 775-856-1150 MAIN | CFARENO.COM

TRAFFIC SIGNAL LEMMON DR ESTATES  
 GRADING  
 LEMMON DR, STA. 20+00 - 30+73  
 CHECKED BY: [Signature]  
 DATE: 5/11/2024  
 DESIGNED BY: [Signature]  
 DATE: 5/11/2024

SHEET  
**C9.4**  
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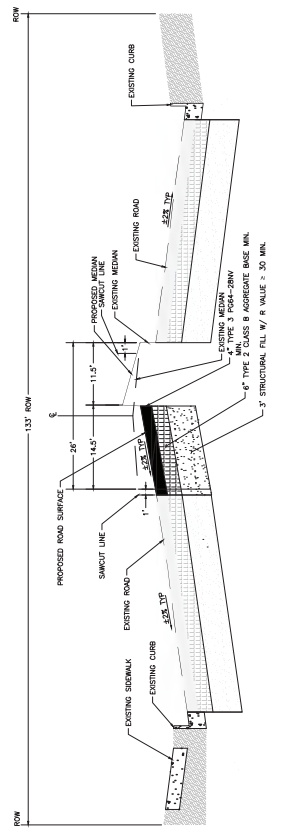


**Exhibit C**

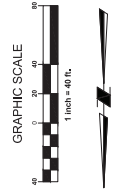
REINARDT COLL FAMILY TRUST  
 APN: 552-1902-27

CAPPO LEMMON DR LLC  
 APN: 08653002-33

LEMMON DRIVE TILLAS PROPERTY LLC  
 APN: 552-210-23



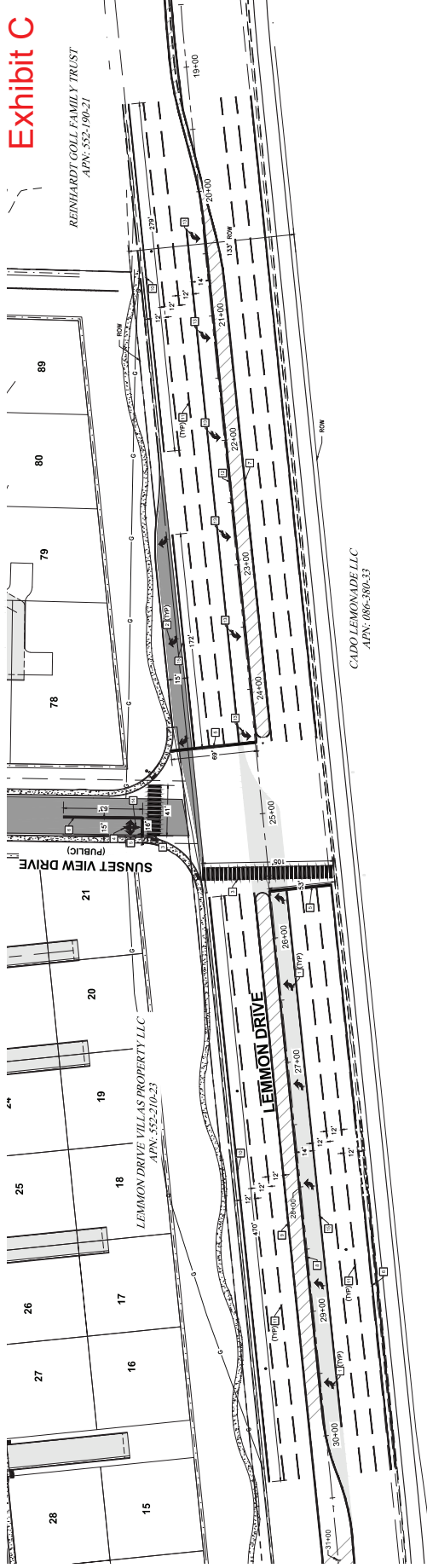
LEMMON DR TURN POCKET SECTION  
 N.T.S.



- GRADING NOTES**
1. ADD 5000' TO ALL SPOT ELEVATIONS 00-50, ADD 4900' TO ALL SPOT ELEVATIONS 51-99.
  2. ALL EXCESS OR UNSUITABLE MATERIAL SHALL BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS OR IN APPROVED AREAS ON THE GRADING PLAN.
  3. FG CONTOURS AND SPOT ELEVATIONS ARE SHOWN FOR CONTRACTOR REFERENCE.
  4. SHOWINGS AND MARKINGS SHALL COMPLY WITH ADA STANDARDS.
  5. SHOULD ANY CHAIN OR GRAPE OF A NATIVE AMERICAN BE DISCOVERED DURING SITE DEVELOPMENT, WORK SHALL TEMPORARILY STOP AND THE AREA SHALL BE PROTECTED. THE STATE HISTORIC PRESERVATION OFFICE SHALL BE IMMEDIATELY NOTIFIED PER NRS 50.170.
  6. MECHANICAL SOPE STABILIZATION IS TO BE USED FOR SLOPES STEEPER THAN 3:1 WHEN ROCK RAMP IS USED FOR SLOPE STABILIZATION. ROCK RAMP SHALL BE PLACED TO A MINIMUM DEPTH OF 12 INCHES. A DIAMETER ROCK OF GREATER.
  7. CONTACT ENGINEER FOR COORDINATION IF EXISTING GRADE DOESN'T MATCH WHAT IS SHOWN.

**CAUTION - NOTICE TO CONTRACTOR**  
 1. THE CONTRACTOR IS SPECIFICALLY ADVISED THAT THE FEATURES AND CONDITIONS ON THESE PLANS TO BE USED ON THE PROJECT ARE NOT TO BE RELIED ON BEING EXACT OR COMPLETE.  
 2. THE CONTRACTOR'S RESPONSIBILITY IS TO VERIFY THESE CONDITIONS AND/OR ELEVATIONS AT THE PROPOSED LOCATION PRIOR TO BEGINNING CONSTRUCTION. SHOULD THE CONDITIONS EXISTING IN THE FIELD AND THE INFORMATION BEFORE PROCEEDING WITH CONSTRUCTION.  
 3. THE CONTRACTOR SHALL OBTAIN PERMITS FROM THE APPROPRIATE AGENCIES PRIOR TO BEGINNING CONSTRUCTION.  
 4. THE CONTRACTOR ASSUMES ALL RISK FOR ANY CONSTRUCTION PERFORMED WITH INFORMATION OR INFORMATION PROVIDED HEREON. THE CONTRACTOR SHALL OBTAIN NECESSARY PERMITS FROM THE APPROPRIATE AGENCIES WITH THE LATEST EDITION OF MAPS AND RECORDS. PROVISION IS TO PROCEED WITH THE PUBLIC TRAVEL, MIN.

NOTING: BATTERY COUNTRY IS REQUIRED BY GPS, OWNER OF DESIGN & DRAWING IS NOT RESPONSIBLE FOR ACCURACY OR DISTRIBUTION OF DOCUMENTS.



**Exhibit C**  
 REINIARDY GOLL FAMILY TRUST  
 APN: 552-190-21

LEMMON DRIVE VILLAS PROPERTY LLC  
 APN: 552-210-23

CADOLEMONADE LLC  
 APN: 086-300-33

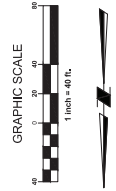
**E CONSTRUCTION NOTES**

- 1 (P) LEFT TURN ARROW PAVEMENT MARKING
- 2 (P) RIGHT TURN ARROW PAVEMENT MARKING
- 3 (P) INTERNATIONAL CROSSWALK, 24" WHITE STRIPING (REF. DTL R-420 SHEET 03-7)
- 4 (P) LEFT TURN AND RIGHT TURN LANE ARROW
- 5 (P) 2' WHITE STOP BAR
- 6 (P) 4" SOLID DOUBLE YELLOW STRIPING
- 7 (P) 4" SOLID YELLOW CURB SPACED 1' FROM MEDIAN CURB
- 8 (P) 4" SOLID YELLOW 1214 LF SPACED 1' FROM MEDIAN CURB
- 9 (P) 4" SOLID YELLOW 1210 LF SPACED 1' FROM MEDIAN CURB
- 10 (E) 8" SOLID WHITE
- 11 (E) 4" DASHED WHITE
- 12 (E) 4" SOLID YELLOW 1148 LF SPACED 1' FROM CURB
- 13 (P) FUTURE LEFT TURN ARROW
- 14 (P) FUTURE THROUGH LANE ARROW
- 15 (P) 8" SOLID WHITE



Know What's Below.  
 Call before you dig.

**CAUTION — NOTICE TO CONTRACTOR**  
 1. THE CONTRACTOR IS SPECIFICALLY ADVISED THAT THE FEATURES AND CONDITIONS ON THESE PLANS ARE BASED ON THE INFORMATION PROVIDED TO THE ENGINEER AND THE INFORMATION IS NOT TO BE RELIED ON FOR THE EXACT OR COMPLETE INFORMATION.  
 2. THE CONTRACTOR'S RESPONSIBILITY IS TO VERIFY THESE CONDITIONS AND/OR CONDITIONS AS THE PROJECT PROGRESSES. ANY CHANGES TO THE PROJECT FROM THE ORIGINAL CONDITIONS SHOULD BE REPORTED TO THE ENGINEER IMMEDIATELY.  
 3. THE CONTRACTOR SHALL OBTAIN NECESSARY PERMITS FROM THE LOCAL GOVERNMENT AND SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL GOVERNMENT.  
 4. THE CONTRACTOR ASSUMES ALL RISK FOR ANY CONSTRUCTION PERFORMED WITH THESE PLANS OR FOR ANY CONSTRUCTION PERFORMED WITHOUT THESE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL GOVERNMENT.  
 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL GOVERNMENT.



REVISIONS

NO.	DATE	DESCRIPTION

**CFA a Bowman Company**  
 LAND SURVEYORS  
 CIVIL ENGINEERS  
 1150 CORPORATE BLVD. | FARMINGDALE, NY 11735  
 775-856-1150 MAIN | CFARNO.COM

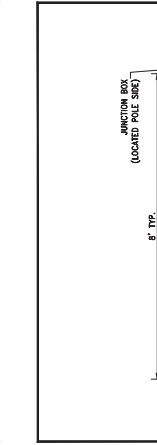
**TRAFFIC SIGNAL LEMMON DR ESTATES**  
 CIVIL IMPROVEMENT PLANS  
 LEMMON DR. STA. 20+00 - 30+73

REVISIONS  
 10/13/24  
 DESIGNED BY: JAM  
 CHECKED BY: JAM  
 DATE: 5/11/2024

SHEET  
**C9.5**  
 24

**Exhibit C**

- SHOW PAVE FINISH FOR CURBS AND SIDEWALKS SHALL BE LOCATED IN THE AREA OF THE BACK OF THE CURB RAMP OR LANDING AREA. ALL OBSTRUCTIONS SUCH AS METERS, JUNCTION BOXES, POLE BODIES, THE HYDRANTS, ETC. ARE ENCOUNTERED, THE LOCATION AND DIMENSIONS MAY BE ADJUSTED UPON APPROVAL OF THE ENGINEER.
- NO UP SHALL BE PERMITTED AT THE CURB RAMP SLOPE TO OUTER PAVEMENT AREA OF THE CURB RAMP.
- PLAIN AND FINISHED SURFACE SHALL BE FLUSH WITH THE TOP OF THE CURB RAMP AND DIMENSIONS MAY BE ADJUSTED UPON APPROVAL OF THE ENGINEER.
- ROUGH BROOD TEXTURE ON CURB RAMP AND WINGS.
- DETECTABLE WARNING SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND SHALL BE PLACED ON MIN. SIX (6") INCHES OF P.C.C.
- ALL SLOPE RATES ARE RELATIVE TO LEVEL AND SHALL COMPLY WITH THE PUBLIC RIGHT-OF-WAY ACCESSIBILITY GUIDELINES (PROVING) STANDARDS, CURRENT VERSION.
- GUTTER SHALL MAINTAIN POSITIVE DRAINAGE TO PREVENT FLOODING.
- DETECTABLE WARNING SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND SHALL BE PLACED ON MIN. SIX (6") INCHES OF P.C.C.
- APPROVED PRODUCTS INCLUDE: "ACCESS TILE", "TERRAZO DOME-TILES", "ADA COLOR RAMP RED". APPROVED PRODUCTS SHALL BE CONSTRUCTED PER MANUFACTURER'S INSTALLATION GUIDELINES AND CONFORM TO PROWMS.
- CONCRETE REMOVAL SHALL BE TO NEAR SAW CUT LINES.
- AGGREGATE BASE MATERIAL UNDER PRECASTER RAMP SHALL BE TYPE 3, CLASS B CRUSHED PORTLAND CEMENT CONCRETE (P.C.C.) SHALL BE 4000 PSI MIN. COMPRESSIVE STRENGTH AT 28 DAYS. ALL CURB AND CONCRETE SHALL HAVE A COARSE AGGREGATE CONFORMING TO SIZE 3/4" MAX. ALL CURB AND CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF SECTION 337.10 OF SSPIC. ALL MATERIALS SHALL CONFORM TO SSPIC.
- CONTRACTORS SHALL CORRECT ANY GRADE CONFLICT WITH EXISTING BOXES. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY. CONTRACTORS SHALL BE RESPONSIBLE FOR OBTAINING NECESSARY PERMITS AND CONFORM TO ALL APPLICABLE REGULATIONS AND STANDARDS.
- REINFORCEMENT AT BENT AREAS OF RAMP MAY BE RECONSTRUCTED TO AVOID THE CURB. THE HORIZONTAL DISTANCE TO BE DETERMINED IN THE FIELD, UPON APPROVAL OF THE ENGINEER. SUBJECT TO PROWMS REQUIREMENTS. CURB AT THE BACK OF WALK MAY BE KEPT. A TRANSITION BETWEEN THE CURB AND THE WALK SHALL BE KEPT. TRANSITION SECTIONS SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
- CONTRACTOR SHALL CONSTRUCT ROUNDED CURBS WHERE THEY INTERSECT. ROUNDS SHALL BE MEASURED FROM FACE OF CURB. CURBS THAT INTERSECT AT A POINT SHALL NOT BE ALLOWED.



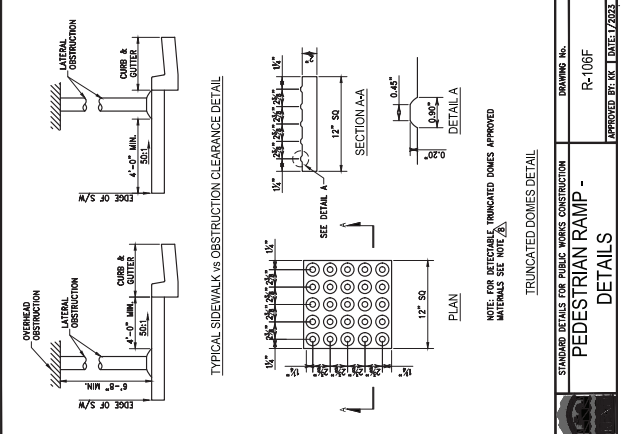
**NOTES - PEDESTRIAN RAMP**

STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION  
DRAWING NO. R-106G  
APPROVED BY: [Signature] DATE: 5/11/2024

**NOTES**

- THE CITY OF RENO LOGO AND BLOCK NUMBERS SHALL BE PRESENT ON ALL SIGN FACES. SEE ISSUES SCHEDULES FOR LEGENDS. ALL STREET NAME SIGNS SHALL BE LOCATED ON THE LEFT SIDE OF THE SIGN.
- SIGNS SHALL BE WELDED USING 16/3 SLOW OR SLOW COOL.
- LOGO HEIGHT SHALL NOT EXCEED HEIGHT OF UPPER CASE LETTERING. LOGO APPLIQUES ARE NOT ALLOWED.

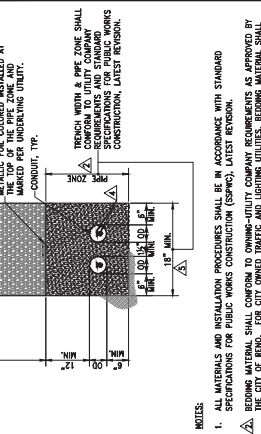
STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION  
DRAWING NO. R-413E  
APPROVED BY: [Signature] DATE: 5/11/2024



**NOTES FOR DETECTABLE INDICATED DOMES APPROVED MATERIALS SEE NOTE.**

TRUNCATED DOMES DETAIL

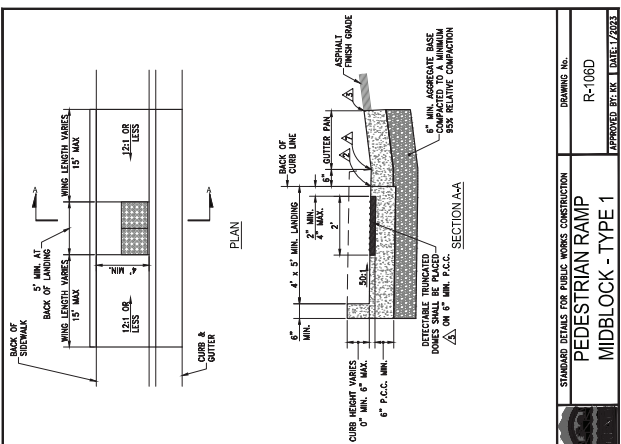
STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION  
DRAWING NO. R-106F  
APPROVED BY: [Signature] DATE: 5/11/2024



**NOTES**

- ALL MATERIALS AND INSTALLATION PROCEDURES SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPIC), LATEST VERSION.
- THE CITY OF RENO LOGO AND BLOCK NUMBERS SHALL BE PRESENT ON ALL SIGN FACES. SEE ISSUES SCHEDULES FOR LEGENDS. ALL STREET NAME SIGNS SHALL BE LOCATED ON THE LEFT SIDE OF THE SIGN.
- SIGNS SHALL BE WELDED USING 16/3 SLOW OR SLOW COOL.
- LOGO HEIGHT SHALL NOT EXCEED HEIGHT OF UPPER CASE LETTERING. LOGO APPLIQUES ARE NOT ALLOWED.

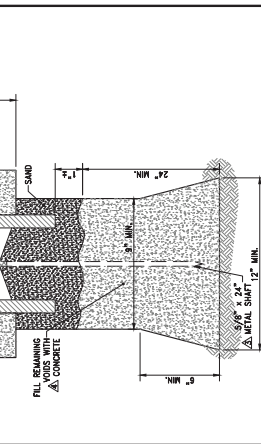
STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION  
DRAWING NO. R-404  
APPROVED BY: [Signature] DATE: 5/11/2024



**NOTES**

- ALL MATERIALS AND INSTALLATION PROCEDURES SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPIC), LATEST VERSION.
- THE CITY OF RENO LOGO AND BLOCK NUMBERS SHALL BE PRESENT ON ALL SIGN FACES. SEE ISSUES SCHEDULES FOR LEGENDS. ALL STREET NAME SIGNS SHALL BE LOCATED ON THE LEFT SIDE OF THE SIGN.
- SIGNS SHALL BE WELDED USING 16/3 SLOW OR SLOW COOL.
- LOGO HEIGHT SHALL NOT EXCEED HEIGHT OF UPPER CASE LETTERING. LOGO APPLIQUES ARE NOT ALLOWED.

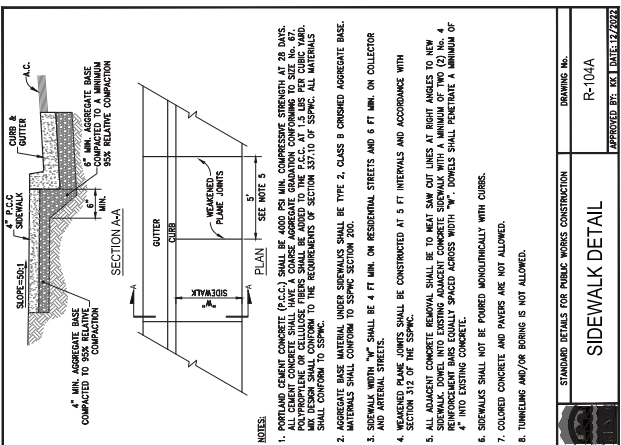
STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION  
DRAWING NO. R-106D  
APPROVED BY: [Signature] DATE: 5/11/2024



**NOTES**

- ALL MATERIALS AND INSTALLATION PROCEDURES SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPIC), LATEST VERSION.
- THE CITY OF RENO LOGO AND BLOCK NUMBERS SHALL BE PRESENT ON ALL SIGN FACES. SEE ISSUES SCHEDULES FOR LEGENDS. ALL STREET NAME SIGNS SHALL BE LOCATED ON THE LEFT SIDE OF THE SIGN.
- SIGNS SHALL BE WELDED USING 16/3 SLOW OR SLOW COOL.
- LOGO HEIGHT SHALL NOT EXCEED HEIGHT OF UPPER CASE LETTERING. LOGO APPLIQUES ARE NOT ALLOWED.

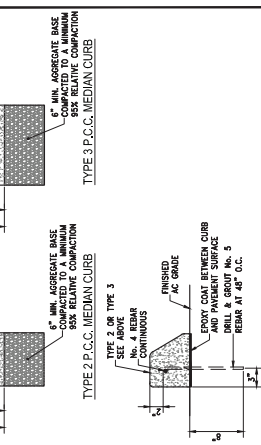
STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION  
DRAWING NO. R-124  
APPROVED BY: [Signature] DATE: 5/11/2024



**NOTES**

- PORTLAND CEMENT CONCRETE (P.C.C.) SHALL BE 4000 PSI MIN. COMPRESSIVE STRENGTH AT 28 DAYS. ALL CURB AND CONCRETE SHALL HAVE A COARSE AGGREGATE CONFORMING TO SIZE NO. 3/4" MAX. ALL CURB AND CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF SECTION 337.10 OF SSPIC. ALL MATERIALS SHALL CONFORM TO SSPIC.
- AGGREGATE BASE MATERIAL UNDER SIDEWALKS SHALL BE TYPE 3, CLASS B CRUSHED AGGREGATE. MATERIALS SHALL CONFORM TO SSPIC SECTION 200.
- SIDEWALK WITH "W" SHALL BE 4 FT MIN. ON RESIDENTIAL STREETS AND 6 FT MIN. ON COLLECTOR AND ARTERIAL STREETS.
- ALL ADJACENT CONCRETE REMOVAL SHALL BE TO NEAR SAW CUT LINES AND ACCORDANCE WITH SECTION 312 OF THE SSPIC.
- SIDEWALK, DOWEL INTO EXISTING ADJACENT CONCRETE SIDEWALK WITH A MINIMUM OF TWO (2) NO. 4 REINFORCEMENT BARS EQUALLY SPACED ACROSS WIDTH "W". DOWELS SHALL PENETRATE A MINIMUM OF 4" INTO EXISTING CONCRETE.
- SIDEWALKS SHALL NOT BE FORMED UNIDIRECTIONALLY WITH CURBS.
- COLORS CONCRETE AND PAVERS ARE NOT ALLOWED.
- TUNNELING AND/OR BORING IS NOT ALLOWED.

STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION  
DRAWING NO. R-104A  
APPROVED BY: [Signature] DATE: 5/11/2024



**NOTES**

- PORTLAND CEMENT CONCRETE (P.C.C.) SHALL BE 4000 PSI MIN. COMPRESSIVE STRENGTH AT 28 DAYS. ALL CURB AND CONCRETE SHALL HAVE A COARSE AGGREGATE CONFORMING TO SIZE NO. 3/4" MAX. ALL CURB AND CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF SECTION 337.10 OF SSPIC. ALL MATERIALS SHALL CONFORM TO SSPIC.
- AGGREGATE BASE MATERIAL UNDER MEDIAN CURBS SHALL BE TYPE 3, CLASS B CRUSHED AGGREGATE. MATERIALS SHALL CONFORM TO SSPIC SECTION 200.
- SIDEWALK WITH "W" SHALL BE 4 FT MIN. ON RESIDENTIAL STREETS AND 6 FT MIN. ON COLLECTOR AND ARTERIAL STREETS.
- ALL ADJACENT CONCRETE REMOVAL SHALL BE TO NEAR SAW CUT LINES AND ACCORDANCE WITH SECTION 312 OF THE SSPIC.
- SIDEWALK, DOWEL INTO EXISTING ADJACENT CONCRETE SIDEWALK WITH A MINIMUM OF TWO (2) NO. 4 REINFORCEMENT BARS EQUALLY SPACED ACROSS WIDTH "W". DOWELS SHALL PENETRATE A MINIMUM OF 4" INTO EXISTING CONCRETE.
- SIDEWALKS SHALL NOT BE FORMED UNIDIRECTIONALLY WITH CURBS.
- COLORS CONCRETE AND PAVERS ARE NOT ALLOWED.
- TUNNELING AND/OR BORING IS NOT ALLOWED.

STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION  
DRAWING NO. R-110  
APPROVED BY: [Signature] DATE: 5/11/2024







DATE	REVISIONS



**TRAFFIC SIGN INSTALLATION**  
 DRAWING NO. R-415  
 APPROVED BY: J.P. MURPHY



**CROSSWALK LEGEND**  
 DRAWING NO. R-420  
 APPROVED BY: J.P. MURPHY



**MEDIAN ISLAND TRAFFIC CONTROL**  
 DRAWING NO. R-418  
 APPROVED BY: J.P. MURPHY



**LIGHT POLE FOOTING**  
 DRAWING NO. R-413K  
 APPROVED BY: J.P. MURPHY

**NOTES:**  
 1. ALL STRIPES SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR STREETS AND HIGHWAYS, LATEST EDITION.  
 2. RECOMMENDATIONS AND DIMENSIONS SHALL BE IN ACCORDANCE WITH SECTION 604 OF THE LATEST EDITION OF STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, PART 202, PAVEMENT MARKINGS, EXCEPT ALL DIMENSIONS SHALL BE IN INCHES UNLESS OTHERWISE SPECIFIED.  
 3. CROSSWALK MARKINGS SHALL BE INSTALLED AT ALL TRAFFIC SIGNAL LOCATIONS AND AT OTHER LOCATIONS AS DIRECTED BY ENGINEER.  
 4. ALL STRIPES SHALL BE PAINTED WITH GLASS BEADS FULL HEIGHT AND TOP OF CURB.  
 5. ALL WORK SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), AND A POLICY ON SETBACKS OF HIGHWAYS AND STREETS (GREEN BOOK).

**NOTES:**  
 1. ALL STRIPES SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR STREETS AND HIGHWAYS, LATEST EDITION.  
 2. RECOMMENDATIONS AND DIMENSIONS SHALL BE IN ACCORDANCE WITH SECTION 604 OF THE LATEST EDITION OF STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, PART 202, PAVEMENT MARKINGS, EXCEPT ALL DIMENSIONS SHALL BE IN INCHES UNLESS OTHERWISE SPECIFIED.  
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 4. ALL STRIPES SHALL BE PAINTED WITH GLASS BEADS FULL HEIGHT AND TOP OF CURB.  
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**NOTES:**  
 1. PORTLAND GRADE CONCRETE (P.C.C.) SHALL BE 4000 PSI MIN. COMPRESSIVE STRENGTH AT 28 DAYS.  
 2. ALL CEMENT CONCRETE SHALL HAVE A COARSE AGGREGATE GRADATION CONFORMING TO SIZE NO. 97.  
 3. POLYPROPYLENE OR CELLULOSE FIBERS SHALL BE ADDED TO THE P.C.C. AT 1.5 LBS PER CUBIC YARD.  
 4. ALL DIMENSIONS SHALL BE TO THE CENTERLINE UNLESS OTHERWISE SPECIFIED.  
 5. ALL MATERIALS SHALL CONFORM TO SPECIFICATIONS OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE).  
 6. ALL DIMENSIONS SHALL BE TO THE CENTERLINE UNLESS OTHERWISE SPECIFIED.  
 7. ALL MATERIALS SHALL CONFORM TO SPECIFICATIONS OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE).  
 8. ALL DIMENSIONS SHALL BE TO THE CENTERLINE UNLESS OTHERWISE SPECIFIED.

CITY OF RENO

LEMMON DRIVE & SUNSET VIEW DRIVE  
SIGNAL DESIGN **Exhibit C**

OCTOBER 2023

CONSTRUCTION DRAWINGS

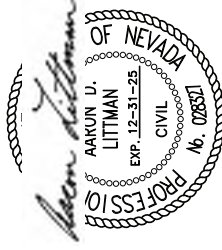
CITY OF RENO

- HILLARY SCHIEVE ..... MAYOR
- DEVON RESSE ..... AT-LARGE
- JENNY BREKHUS ..... WARD 1
- NAOMI DUERR ..... WARD 2
- MIGUEL MARTINEZ ..... WARD 3
- MEGHAN EBERT ..... WARD 4
- KATHLEEN TAYLOR ..... WARD 5

APPROVALS

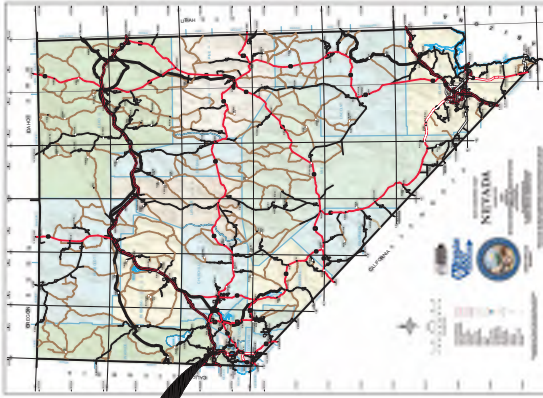
PROFESSIONAL ENGINEER \_\_\_\_\_ DATE \_\_\_\_\_

KERRIE KOSKI, PE \_\_\_\_\_ DATE \_\_\_\_\_  
PUBLIC WORKS DIRECTOR



3/6/2024  
DATE

STATE MAP



PROJECT  
LOCATION

VICINITY MAP



**WARNING**  
0 12  
IF THIS BAR DOES NOT  
MEASURE 1" THEN  
DRAWING IS NOT TO SCALE

SCALE  
HORIZONTAL N/A  
VERTICAL N/A

REVISIONS

REV.	DATE	BY	DESCRIPTION

2165 West Grove Parkway  
Suite 100  
Reno, Nevada, UT 84402  
(801) 783-5100



LEMMON DRIVE ESTATES SIGNAL DESIGN  
STATE MAP, VICINITY MAP AND SHEET INDEX

REVISED	DATE	PROJECT NO.
TCC	03/2024	UT-5586-22
DRAWN	DATE	SHEET NO.
TCC	03/2024	1 OF 14
CHECKED	DATE	DRAWING NO.
ADL	03/2024	G-01

SHEET INDEX		
SHEET TITLE	DRAWING NO.	SHEET NO.
<b>GENERAL</b>		
STATE MAP, VICINITY MAP, AND SHEET INDEX	G-01	1
GENERAL NOTES	G-02	2
GENERAL DETAILS	G-03	3
GENERAL POLE DETAILS	G-04	4
GENERAL POLE FOUNDATION	G-05	5
FIBER SPLICE DIAGRAM	G-06	6
RENO TRENCH PULLBOX	G-07	7
<b>CIVIL</b>		
ALIGNMENT LAYOUT	AL-01	8
SIGNAL NOTES	SG-01	9
SIGNAL NOTES	SG-02	10
SIGNAL NOTES	SG-03	11
EQUIPMENT PLAN	SG-04	12
CONDUIT PLAN	SG-05	13
SIGNAL SCHEDULES	SG-06	14

**Exhibit C**



3/6/2024  
DATE

## GENERAL NOTES

- THE PLANS/SPECIFICATIONS STRUCTURE SHALL BE AS FOLLOWS, IN ORDER OF HIERARCHY:  
 REVISION 8 EDITION  
 THE PROJECT PLANS, SPECIFICATIONS, AND DETAILS STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (ORANGE BOOK) 2012.  
 CITY OF RENO "TRAFFIC SIGNAL FIBER OPTIC INTERCONNECT SPECIFICATIONS" (CURRENT EDITION)  
 CITY OF RENO "TRAFFIC SIGNAL CONTROLLER CABINET SPECIFICATIONS" (CURRENT EDITION)  
 CITY OF RENO STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION (CURRENT EDITION)  
 NDOT STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION, 2020
- ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (ORANGE BOOK) 2012, REVISION 8 EDITION, NDOT 2014 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION CURRENT EDITION, NDOT 2020 NATIONAL PLANS FOR ROAD AND BRIDGE CONSTRUCTION, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) CURRENT EDITION, THE NATIONAL ELECTRIC CODE (NEC), AND THE NATIONAL ELECTRIC SAFETY CODE (NEESC).
- THE PRECISE LOCATIONS OF UNDERGROUND UTILITIES ARE UNKNOWN. CALL FOR UTILITY LOCATES AT LEAST 48 HOURS PRIOR TO DIGGING AND PROCEED WITH CAUTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR AND/OR REPLACE ALL UTILITIES AND FEATURES DAMAGED BY THE CONTRACTOR'S ACTIVITIES, INCLUDING LANDSCAPING AND IRRIGATION SYSTEMS. TO THEIR PRE-CONSTRUCTION CONDITION AS DETERMINED BY THE ENGINEER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DOCUMENT AND NOTIFY THE ENGINEER OF DAMAGED EQUIPMENT AND/OR FACILITIES PRIOR TO BEGINNING WORK.
- CONCRETE FLOWWORK SHALL BE REMOVED AND REPLACED, IN KIND TO EXISTING JOINT LINES TRENCHING THROUGH AND PATCHING OF, SIDEWALK PANEL(S) OR CURB & GUTTER WILL NOT BE PERMITTED.
- CONDUCTORS AND CABLES DAMAGED BY THE CONTRACTOR SHALL BE REPLACED, IN FULL LENGTH, AT NO COST TO THE OWNING AGENCY. SPLICING OF CONDUCTORS WILL NOT BE PERMITTED.
- CONTRACTOR TO REMOVE ALL CONDUCTORS AND CABLES NOT USED IN THE FINISHED CONFIGURATION.
- ALL SIGNAL EQUIPMENT, HARDWARE, UNBROKEN PULL BOX LIDS, AND SIGNS REMOVED THROUGH THE COURSE OF WORK SHALL BE DELIVERED TO THE MAINTENANCE AGENCY'S CORPORATE YARD, NO DIRECT PAYMENT.
- THE CONTRACTOR SHALL FURNISH AND INSTALL ALL INCIDENTAL ITEMS AND PERFORM ALL WORK AS NECESSARY TO COMPLETE FULLY FUNCTIONAL TRAFFIC SIGNAL SYSTEMS. PAYMENT FOR INCIDENTAL ITEMS SHALL BE INCLUDED WITHIN THE BID ITEMS OUTLINED IN THE OFFICIAL BID SCHEDULE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROCESSING AND OBTAINING ALL "CHANGE OF LOOP" AND SERVICE APPLICATIONS THROUGH NV ENERGY. COORDINATE ALL CONNECTION/DISCONNECTIONS WITH NV ENERGY, NO DIRECT PAYMENT.
- A CITY OF RENO EXCAVATION AND ENCROACHMENT PERMIT (SEE PERMIT) IS REQUIRED FOR THE PROJECT. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY ADDITIONAL FEES WHICH INCLUDE SIGNAL MAINTENANCE FEES. THE CONTRACTOR SHALL COMPLY WITH ALL CONDITIONS OF THE PERMIT.
- THE CONTRACT WORK SHALL INCLUDE ALL CABINET AND EQUIPMENT WIRING RECONFIGURATIONS AS NECESSARY TO COMPLETE FULLY FUNCTIONAL SYSTEMS.
- ALL EQUIPMENT SHALL BE IN ACCORDANCE WITH CITY OF RENO "TRAFFIC SIGNAL CONTROLLER CABINET SPECIFICATIONS" AND CITY OF RENO "TRAFFIC SIGNAL FIBER OPTIC INTERCONNECT SPECIFICATIONS" EXCEPT AS SPECIFICALLY MODIFIED IN THESE PLANS. NEW CONTROLLER ASSEMBLIES SHALL INCLUDE ALL SIGNAL CONTROLLER EQUIPMENT AS REQUIRED BY THE CITY'S EQUIPMENT SPECIFICATIONS.
- PROGRAMMING OF CONTROLLERS AND MMUs WILL BE PERFORMED BY CITY OF RENO STAFF ONLY. DELIVER CONTROLLERS AND MMUs TO CITY OF RENO TRAFFIC ENGINEERING & OPERATIONS AT 1640 EAST COMMERCIAL ROW, RENO NV, AT LEAST TWENTY-ONE DAYS PRIOR TO SIGNAL TURN-ON. CONTACT TIM HENDRICKS AT (775) 657-4988 AT LEAST SEVEN DAYS PRIOR TO DESIRED PICK-UP FOR INSTALLATION.
- NOTIFY THE CITY OF RENO, KURT DIETRICH (775) 394-3334, AT LEAST 72 HOURS PRIOR TO BEGINNING WORK ON THE SIGNAL SYSTEMS AND PRIOR TO TURN-ONS.
- SIGNAL TURN-ONS SHALL BE SCHEDULED BETWEEN 5:00 AM AND 4:00 PM ON MONDAY THROUGH THURSDAY, COORDINATE WITH CITY OF RENO SIGNAL TECHNICIANS.
- TRAFFIC SIGNAL CABINET SHALL BE MAZTEC TS2 TYPE 1 OR TYPE 2 SYSTEM READY CABINET. ALL NEW CABINETS SHALL HAVE 16 POSITION MAIN PANEL, FLASH TRANSFER RELAY MODULES FOR ALL PORTS, INCLUDE THE "D" PANEL AND "D" CABLE (D-CABLE ONLY REQUIRED FOR TS2 TYPE 1 CABINETS), HAVE ALL PLUG-INS, AND BE WIRED FOR EMERGENCY VEHICLE PREEMPTION (EVP).
- TRAFFIC SIGNAL CONTROLLER SHALL BE MAZTEC COMMANDER NT2, TYPE 2 NEMA AND NTPC COMPLIANT CONTROLLER WITH ETHERNET, MAJUNCTION MANAGEMENT UNIT (MMU) SHALL BE EDI MMU LCD WITH ETHERNET.
- METERED UNDERGROUND ELECTRICAL SERVICE SHALL BE TESCO CONTROLS MODEL 27-2BBS WITH PIGGY-BACK UPS BATTERY BACKUP SYSTEM OR APPROVED EQUAL. CONSTRUCT SERVICE CABINET FOUNDATION PER MANUFACTURER'S BOLT PATTERN TEMPLATE. CABINET SHALL BE UL 508 RATED. METERED SERVICES SHALL HAVE OWNING AGENCY LABELS INDICATING CITY OWNERSHIP AND ADDRESS. SYSTEM SHALL HAVE AN EVENT COUNTER AND TIMER. UPS SYSTEM SHALL BE 24 VOLT PROVIDING A MINIMUM OF 2 HOURS OF FLASHING ALL RED. SEE INDIVIDUAL METERED SERVICE EQUIPMENT SCHEDULES FOR FURTHER DETAIL.
- SERVICE CONDUCTORS FROM METER CONTROLLER CABINET SHALL BE (Ø) #6 AWG THN-2 OR LARGER. SEE CONDUIT & CONDUCTOR SCHEDULES ON SHEETS 55-06.
- HEAD BRACKETETS SHALL HAVE ADEQUATE EXTENSIONS TO ALLOW SIGNAL HEAD ADJUSTMENT ROTATION FOR DIRECT ALIGNMENT TO THE STOP BAR AT THE VIEWING LANE.
- THE LOCATION OF NEW SIGNAL HEADS SHALL BE APPROVED BY THE ENGINEER AND OWNING AGENCY. SIGNAL HEAD TENONS SHALL BE FIELD WELDED, BY A CERTIFIED WELDER, AND LOCATED IN THE CENTER OF THE VIEWING LANE, UNLESS APPROVED OTHERWISE.
- SIGNAL CABLE SHALL CONFORM TO MSA SPEC 19-1 OR 20-1 AND BE COLOR CODED. CABLES SHALL BE RUN FROM CONTROLLER TO POLE TERMINAL BLOCK WITHOUT SPLICING. IN-POLE CONDUCTORS PAST THE TERMINAL BLOCK SHALL BE INDIVIDUAL #14 AWG THHN/THWN-2 OR APPROVED EQUAL.

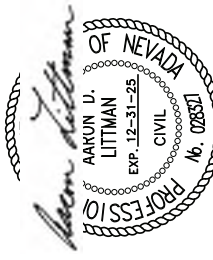
## CITY OF RENO INTERCONNECT:

### FIBER OPTIC INTERCONNECT SYSTEM SPECIFICATIONS

- FIBER OPTIC CABLE SHALL BE TESTED PRIOR TO INSTALLATION AND CERTIFICATION TO THAT EFFECT SUPPLIED. THE CABLE MAY BE TESTED BY CITY OF RENO PERSONNEL AT THE CONTRACTOR'S EXPENSE, PRIOR TO ACCEPTANCE.
- ALL FIBER AT CONTROLLER CABINET END SHALL HAVE 50 FEET OF TAIL TO REACH THE FIBER SPLICING TRAILER.
- ALL FIBER RUNS SHALL HAVE A FIVE (5) FOOT LOOP COILED IN EACH PULL BOX.
- NO BENDS GREATER THAN SIX TIMES THE FIBER DIAMETER SHALL BE ACCEPTED.
- ALL CONDUITS SHALL HAVE A PULL STRING INSTALLED FOR FUTURE USE. MINIMUM TENSILE STRENGTH SHALL BE 500 LBS.
- ANY CONDUIT CONTAINING FIBER ONLY, SHALL HAVE AN ORANGE #14 LOCATE WIRE INSTALLED.
- CITY FORCES WILL FURNISH AND INSTALL MODEMS, CORNING CABLE SYSTEMS, JUMPERS, MULTIMEDIA OUTLET BOXES, AND FIBER MODULES.
- CITY FORCES WILL INSTALL ALL FIBER ENDS AND TERMINATE FIBER OPTIC CABLES IN THE CABINET.
- CITY FORCES WILL TEST AND VERIFY FIBER CONNECTIONS TO THE FIBER OPTIC COMPRESSOR SYSTEM.

**Exhibit C**

FIBER OPTIC CABLE  
 MULTI-MODE OUTSIDE PLANT FIBER OPTIC CABLE (Ø25.0MM)  
 FIBER COUNT: 12, CENTRAL TUBE (SINGLE CENTRAL LOOSE TUBE) DESIGN, DRY WATER BLOCK CORE BU GEL, IN BUFFER TUBE WATER RESISTANCE, LASER-RATED GRADE, BLACK JACKET, BERK-TEK PART #0PD012CB51025 OR GRAYBAR PART #98477974.



3/6/2024  
 DATE

## SIGNAL EQUIPMENT SPECIFICATIONS:

- CABLES WITH 15 OR MORE CONDUCTORS SHALL HAVE #10 AWG NEUTRAL.
- PULL BOXES SHALL NOT BE INSTALLED IN PEDESTRIAN RAMPS WITHOUT THE ENGINEER'S PRIOR APPROVAL.
- THE FINAL LOCATION OF ALL POLES, PULL BOXES, CABINETS, AND CONDUIT RUNS SHALL BE APPROVED BY THE ENGINEER PRIOR TO THE INSTALLATION. CONDUIT RUNS SHOWN IN THE PLANS ARE SCHEMATIC FOR THE PURPOSE OF PLAN LEGIBILITY.
- A FACTORY REPRESENTATIVE FROM THE MANUFACTURER OF THE SIGNAL CABINET, CONTROLLER, MMU, AND ALL NEW OR MODIFIED SIGNAL EQUIPMENT MUST BE PRESENT FOR ALL SIGNAL TURN-ONS.
- ALL NEW HARDWARE, EXCEPT FOR SIGNAL POLES AND MAST ARMS, SHALL HAVE A FLAT BLACK POWDERCOAT FACTORY FINISH. COLOR AND FINISH SHALL BE APPROVED BY THE OWNING AGENCY PRIOR TO ORDERING.
- ALL NEW PEDESTRIAN PUSH BUTTONS FOR TRAFFIC SIGNALS SHALL BE 2" DIAMETER. UTILIZE POLARA INS2 NAVIGATOR 2 WIRE PUSH BUTTON STATION (INS2 PBS) SYSTEM OR APPROVED EQUAL. THE COLOR OF THE STATION SHOULD BE YELLOW. NEW PUSH BUTTON STATIONS SHALL HAVE 9X16" SIZE PEDESTRIAN (R10-3a) SIGNS AND MUST HAVE CORRESPONDING STREET NAME IN BRAILLE OR RAISED PRINT. THE ARROW SHALL POINT IN THE DIRECTION OF THE CROSSING AND THE SIGN SHALL BE ALIGNED WITH THE CROSSWALK.
- PREEMPTION EQUIPMENT SHALL BE GLOBAL TRAFFIC TECHNOLOGIES (GTT) OPTICOM MODEL 721 DETECTORS, MODEL 764 4-CANNEL CARD RACK, AND OPTICOM 138 DETECTOR CABLE OR APPROVED EQUAL SYSTEM FROM TOMAR ELECTRONICS.
- THE LUMINAIRE FIXTURES SHALL BE CREE STR-LW3MHT08EULS1700 OR APPROVED EQUAL. PHOTO CELL TO BE LOCATED IN METERED SERVICE PEDESTAL. BACKLIGHT CONTROL SHIELDS SHALL BE INSTALLED ON ALL NEW LUMINAIRE.
- BELL CAMERA SHALL BE GRIDS SMART GS 2 FISHEYE CAMERA VIDEO DETECTION SYSTEM WITH PERFORMANCE PLUS, INCLUDING BICYCLE DETECTION, MODULE AND SHALL INCLUDE ALL EQUIPMENT AND MATERIALS NECESSARY FOR A COMPLETELY FUNCTIONAL SYSTEM.
- DETECTION ZONES, INCLUDING ADJUSTMENT DETECTION (NOT SHOWN ON THE PLANS) SHALL BE SET BY THE CITY OF RENO.
- WIRELESS RADIO SYSTEM SHALL BE ETHERWAN EASYLINK SYSTEM OR APPROVED EQUAL. RADIO SYSTEM SHALL INCLUDE ANTENNAS, ETHERNET SWITCHES, CABLES, FITTINGS, AND POWER ADAPTERS FOR A FULLY FUNCTIONAL WIRELESS RADIO SYSTEM COMPATIBLE WITH EXISTING CITY OF RENO COMMUNICATION SYSTEMS. CONTRACTOR TO OBTAIN CITY APPROVAL PRIOR TO ORDERING.
- THE LOCATION OF PAVEMENT MARKING SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION. LONGITUDINAL STRIPING SHALL BE WATERBORNE TRAFFIC PAINT. TRANSVERSE STRIPING AND SYMBOLS SHALL BE PERFORMED THERMOPLASTIC.
- NEW SIGNS SHALL BE 3M DIAMOND GRADE (DGS3) WITH 3M CLEAR TRANSPARENT OVERLAY #1170 OR APPROVED EQUAL.
- FOR ALL SIGNAL POLES, EXCEPT FOR TYPE 1 POLES, ATTACH A RECTANGULAR CORROSION-RESISTANT METAL IDENTIFICATION TAG, USING STAINLESS STEEL RINGS. THE TAG SHALL BE PLACED ABOVE THE HANDLE NEAR THE BASE OF THE POLE. THE LETTERING OF THE TAG SHALL BE EITHER DEPPRESSED OR RAISED, 1/2" TALL, LEGIBLE, AND READABLE AFTER THE POLE IS COATED AND INSTALLED. THE FOLLOWING INFORMATION SHALL BE ON THE TAG: POLE TYPE AND "2014 NDOT SPEC".

**WARNING**  
 0 1/2 1  
 IF THIS BAR DOES NOT MEASURE, THEN DRAWING IS NOT TO SCALE



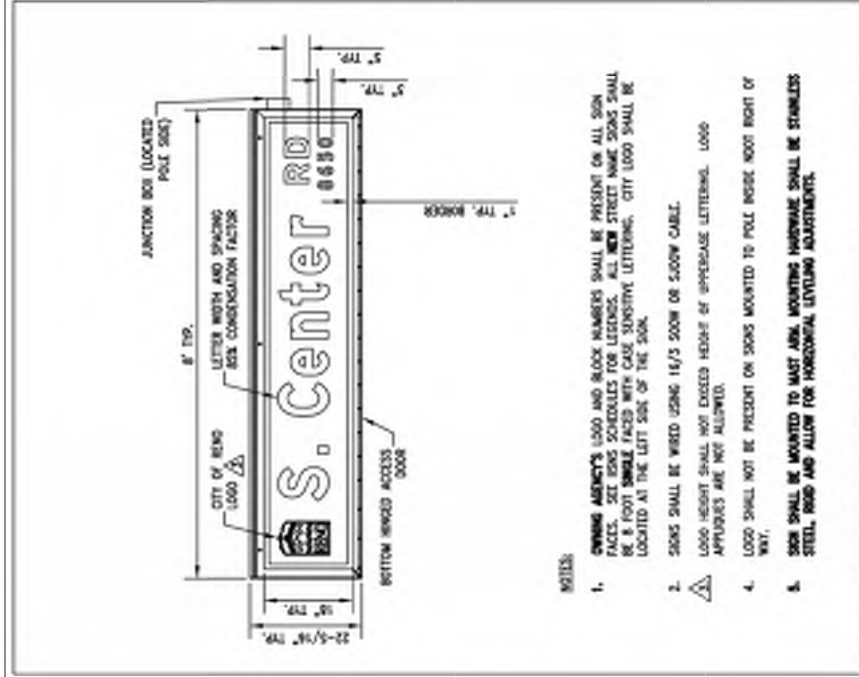
2102 West Grove Parkway  
 Pleasant Grove, UT 84002  
 (801) 783-5100

## LEMMON DRIVE ESTATES SIGNAL DESIGN

### GENERAL NOTES

DESIGNED	TCC	DATE	03/2024	PRODUCT NO.	UT-5526-22
DRAWN	TCC	DATE	03/2024	SHEET NO.	2 OF 14
CHECKED	ADL	DATE	03/2024	DRAWING NO.	G-02



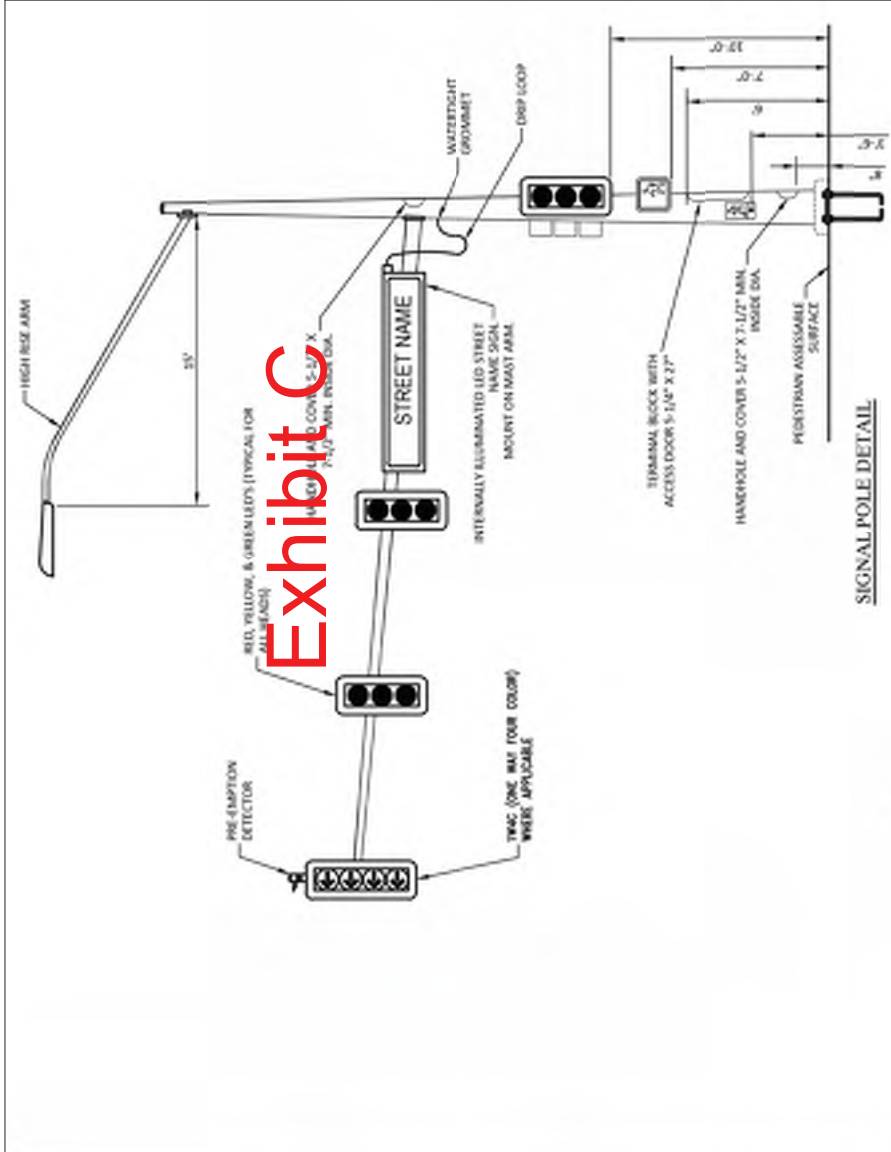


**NOTES:**

1. **OWNING AGENCY'S LOGO AND BLOCK NUMBERS SHALL BE PRESENT ON ALL SIGN FACES. SEE SIGN SCHEDULES FOR LEGENDS. ALL NEW STREET NAME SIGNS SHALL BE 8 FOOT SQUARE FACED WITH CASE SENSITIVE LETTERING. CITY LOGO SHALL BE LOCATED AT THE LEFT SIDE OF THE SIGN.**
2. **SIGNS SHALL BE WIRED USING 16/5 500W OR 500W CABLE.**
3. **LOGO HEIGHT SHALL NOT EXCEED HEIGHT OF UPPERCASE LETTERING. LOGO APPLIERS ARE NOT ALLOWED.**
4. **LOGO SHALL NOT BE PRESENT ON SIGNS MOUNTED TO POLE INSIDE FOOT RIGHT OF WAY.**
5. **SIGN SHALL BE MOUNTED TO MAST ARM. MOUNTING HARDWARE SHALL BE STAINLESS STEEL. ROAD AND ALLOW FOR HORIZONTAL LEVELING ADJUSTMENTS.**

STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION  
**POLE STREET NAME SIGN**  
 APPROVED BY: [Signature] DATE: 3/23/14  
 MODIFIED BY HORROCKS  
 INTERNALLY ILLUMINATED STREET NAME SIGN  
 (FOR USE WITHIN THE CITY OF RENO ONLY)

REVISIONS	BY	DATE	DESCRIPTION



**SIGNAL POLE DETAIL**

**MAST ARM SIGN MOUNTING DETAIL**

2152 West Grove Parkway  
 Pleasant Grove, UT 84062  
 (801) 783-5100

**Horrocks**

**WARNING**  
 SCALE: HORIZONTAL N/A, VERTICAL N/A  
 0 1/2 1  
 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

LEMMON DRIVE ESTATES SIGNAL DESIGN  
 GENERAL POLE DETAILS

DESIGNED: TCC  
 DRAWN: TCC  
 CHECKED: ADL  
 DATE: 03/2024

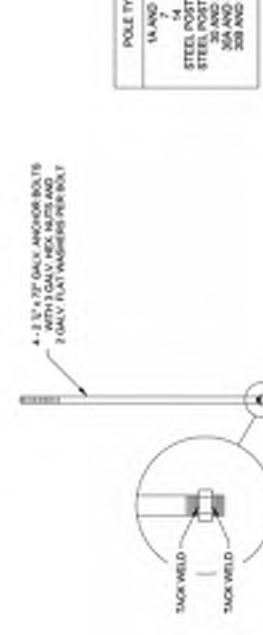
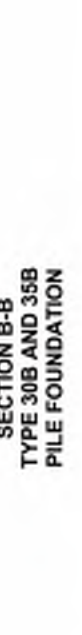
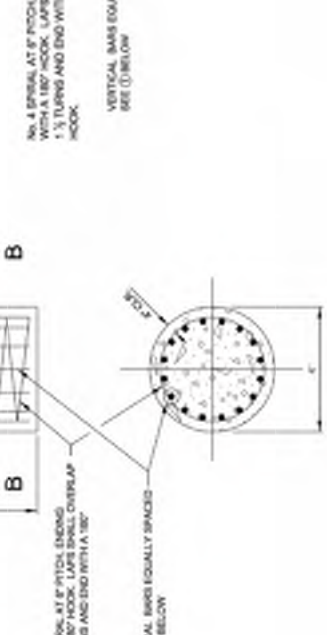
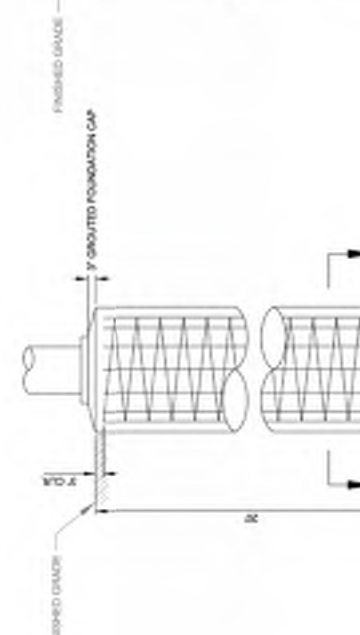
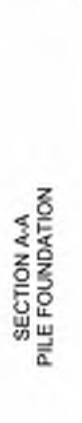
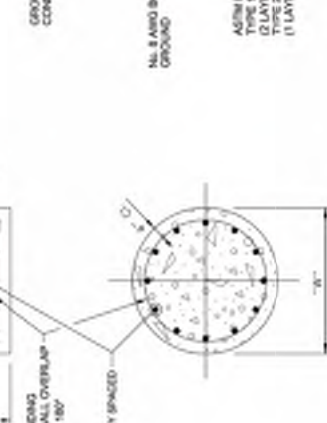
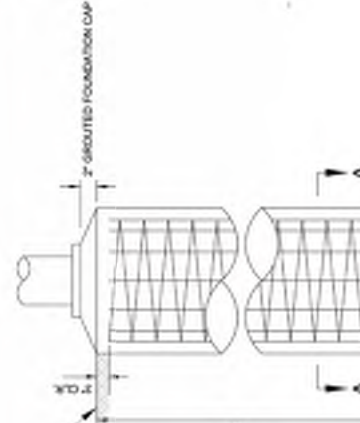
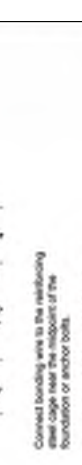
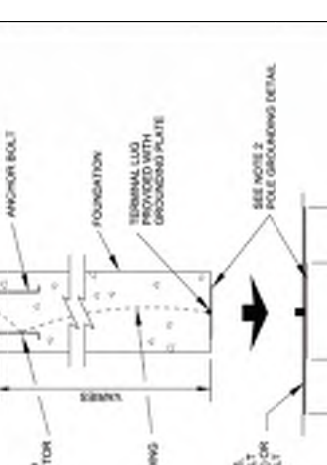
PROJECT NO: UT-5526-22  
 SHEET NO: 4 OF 14  
 DRAWING NO: G-04

**PROFESSIONAL SEAL**  
 ARKON D. LITTMAN  
 CIVIL ENGINEER  
 EXP. 12-31-25  
 No. 028871

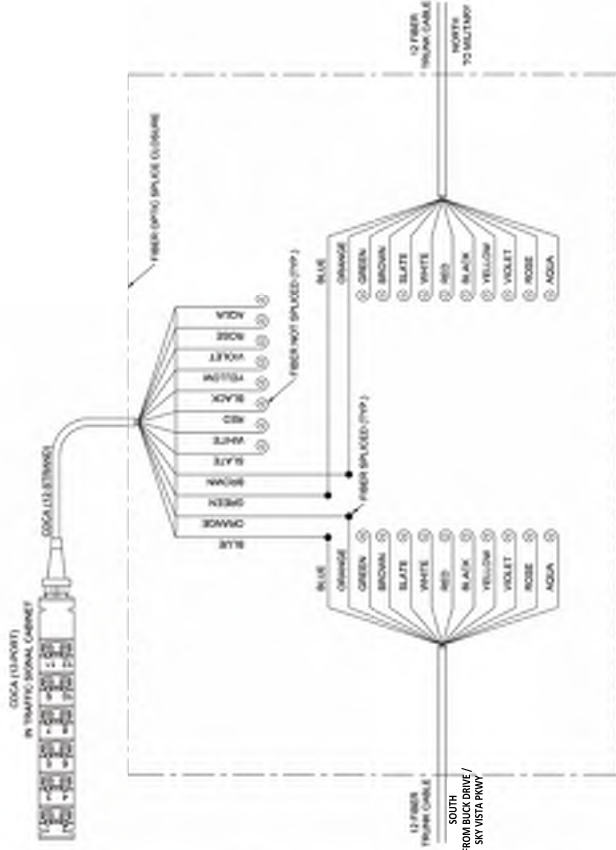
DATE: 3/6/2024

**Notes:**

- All dimensions are nominal.
- Rubber tapes shall be rolled after application.
- When PVC tape is used as a final layer, joint Embedded splice with electrical insulating coating.
- Concrete shall be Class A or AA.
- Foundations which are greater than or equal to 12 feet in depth shall be constructed in accordance with Section 505. For all other foundations, the design shall be in accordance with Section 505.1 or Class AA. Foundation concrete shall conform to Standard Specification Section 501. Where groundwater is encountered, concrete foundations according to Subsection 505.03.02, and plain concrete according to Subsection 505.03.13.
- All poles shall be installed in a hole 10.1 ft or shall be installed in a hole 15.4 ft for Foundations.



# Exhibit C



LEMMON DRIVE & SUNSET VIEW DRIVE  
SPLICE DIAGRAM



3/6/2024  
DATE

DESIGNED	TCC	PROJECT NO.	UT-5526-22
DRAWN	TCC	SHEET NO.	6 OF 14
CHECKED	ADL	DRAWING NO.	G-06
DATE	03/2024	DATE	03/2024

LEMMON DRIVE ESTATES SIGNAL DESIGN

FIBER SPLICE DIAGRAM

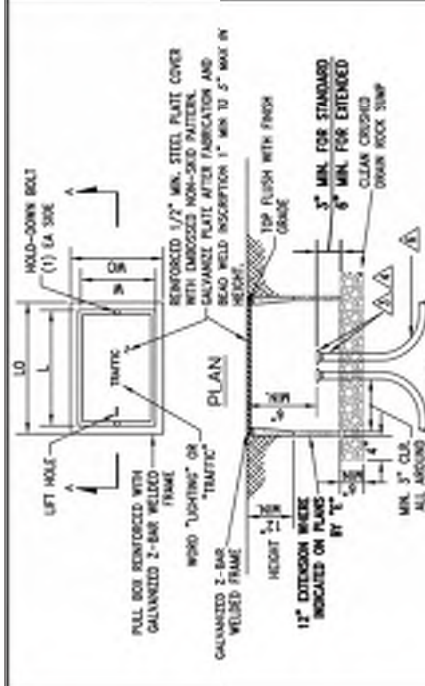
2152 West Grove Parkway  
Pleasant Grove, UT 84062  
(801) 783-5100



**WARNING**  
0 1/2 1  
IF THIS BAR DOES NOT  
MEASURE 1" THEN  
DRAWING IS NOT TO SCALE

NO.	DATE	BY	SCALE		REVISIONS
			HORIZONTAL	VERTICAL	
5			N/A	N/A	
4					
3					
2					
1					





TRAFFIC RATED PULL BOX MINIMUM DIMENSION TABLE

PULL BOX NO.	CONCRETE BOX L0	COVER (STEEL COVER) W	HEIGHT H	EXTENSION L
Nb. 3-1/2	19"	14-1/2"	8-3/4"	12"
Nb. 5	25"	20-1/2"	10-1/2"	12"
Nb. 7	35"	30"	17"	12"
Nb. 9	35"	41-3/4"	30"	14"

**NOTES:**

- TRAFFIC RATED PULL BOXES SHALL BE USED AT ALL TRAFFIC SIGNALS, TRAFFIC LIGHTS, AND TRAFFIC SIGNALS. TRAFFIC RATED PULL BOXES SHALL ONLY BE USED AS APPROVED BY CITY OF RENO TRAFFIC ENGINEER.
- TRAFFIC RATED PULL BOXES SHALL BE USED IN VEHICULAR AREAS ONLY, INCLUDING, BUT NOT LIMITED TO TRAILER WALK, SERVICE APPROACHES, AND WITHIN PEDESTRIAN RAMPS AT INTERSECTION CURB RETURN OR AS APPROVED BY CITY OF RENO TRAFFIC ENGINEER.
- ALL CONDUIT TERMINATIONS SHALL HAVE A "BALL END" INSTALLATION AND BE SEALED WITH CONDUIT SEALER AFTER WIRE INSTALLATION.
- ALL EXPOSED CONDUIT SHALL BE RIGID PVC SCHEDULE 80, AND SHALL EXTEND TO A MINIMUM DEPTH OF 18 INCHES.
- CONDUIT ENDS SHALL NOT TERMINATE WITHIN A SWEEP SECTION.
- ALL METAL COVERS, METAL 2-BAR FRAME, METAL RINGS OR ANY METALLIC COMPONENT OF A PULL BOX SHALL BE BONDED TO A #6 ANGLE OR LARGER COPPER EQUIPMENT GROUNDING CONDUCTOR. BONDING AMPERS SHALL BE BONDED TO EQUIVALENT TO #6 ANGLE COPPER AND MINIMUM 25" IN LENGTH AND SHALL BE ATTACHED WITH EXOTHERMIC WELDING. PROCESS IS A MOLECULAR BONDING WITH HIGH COPPER CONTENT ALLOYS (IN EXCESS OF 90%), HIGH CORROSION RESISTANCE AND HIGH CONDUCTIVITY, AND APPROVED GROUNDING LUG.

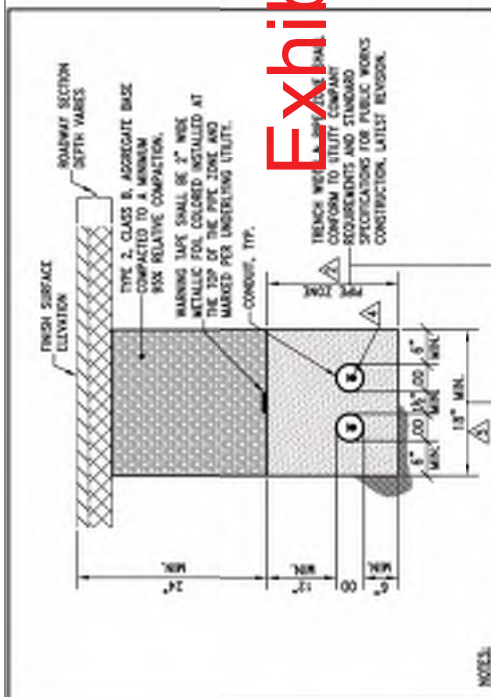
STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION

**TRAFFIC RATED PULL BOX**

DRAWING NO. R-413J

APPROVED BY: JF | DATE: 11/2013

MODIFIED BY HORROCKS.



**NOTES:**

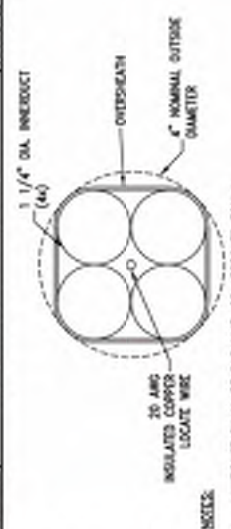
- ALL MATERIALS AND INSTALLATION PROCEDURES SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSMPC), LATEST REVISION.
- BEDDING MATERIAL SHALL CONFORM TO DRIVING-UTILITY COMPANY REQUIREMENTS AS APPROVED BY THE CITY OF RENO. FOR CITY OWNED TRAFFIC AND LIGHTING UTILITIES, BEDDING MATERIAL SHALL BE CLASS A, COMPACTED TO MINIMUM PER RELATIVE COMPACTION. MATERIALS SHALL CONFORM TO SSMPC SECTION 200.
- CEMENT SLURRY BEDDING/MACKELL SHALL NOT BE USED.
- INSTALL LOCATE WIRE AND MALE TAPE FOR ALL FIBER, UNISEE, OR FIBER-OPTIC CONDUITS. LOCATE WIRE SHALL BE 1/2 GAUGE WIRE TERMINATED AT END & POLYESTER PULLING TAPE SHALL BE MALE TAPE OR APPROVED EQUAL.
- ALL DIMENSIONS SHALL CONFORM TO THE LATEST O.S.H.A. REQUIREMENTS.

STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION

**TRAFFIC & LIGHTING CONDUIT TRENCH**

DRAWING NO. R-404

APPROVED BY: JF | DATE: 11/2013



**NOTES:**

- MULTIDUCT SHALL BE DUALINE, OR APPROVED EQUAL.
- INNERDUCT SHALL HAVE A WALL THICKNESS OF 208 11 OR THICKER.
- EACH INNERDUCT SHALL HAVE A DIFFERENT COLOR. THE COLOR SCHEME SHALL BE THE SAME FOR ALL MULTIDUCT RINGS. INNERDUCTS SHALL HAVE SMOOTH INNER WALLS.
- OVERSHEATH SHALL BE HOPE. MULTIDUCT DETAIL.

Exhibit C

**PROFESSOR**

AARON D. LITTMAN

EXP. 12-31-25

CIVIL

No. 028871

OF NEVADA

3/6/2024

DATE

ISSUED	TCC	DATE	03/2024	PROJECT NO.	UT-5526-22
DRAWN	TCC	DATE	03/2024	SHEET NO.	7 OF 14
CHECKED	ADL	DATE	03/2024	DRAWING NO.	G-07

UNAUTHORIZED SERVICE ALERT  
ONE TALL FREE  
877/8800  
227-2800

2102 West Grove Parkway  
Pleasant Grove, UT 84062  
(801) 783-5100

**Horrocks**

REVISIONS

SCALE

VERTICAL N/A

VERTICAL N/A

WARNING

0 1/2 1

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

LEMMON DRIVE ESTATES SIGNAL DESIGN

RENO TRENCH PULLBOX

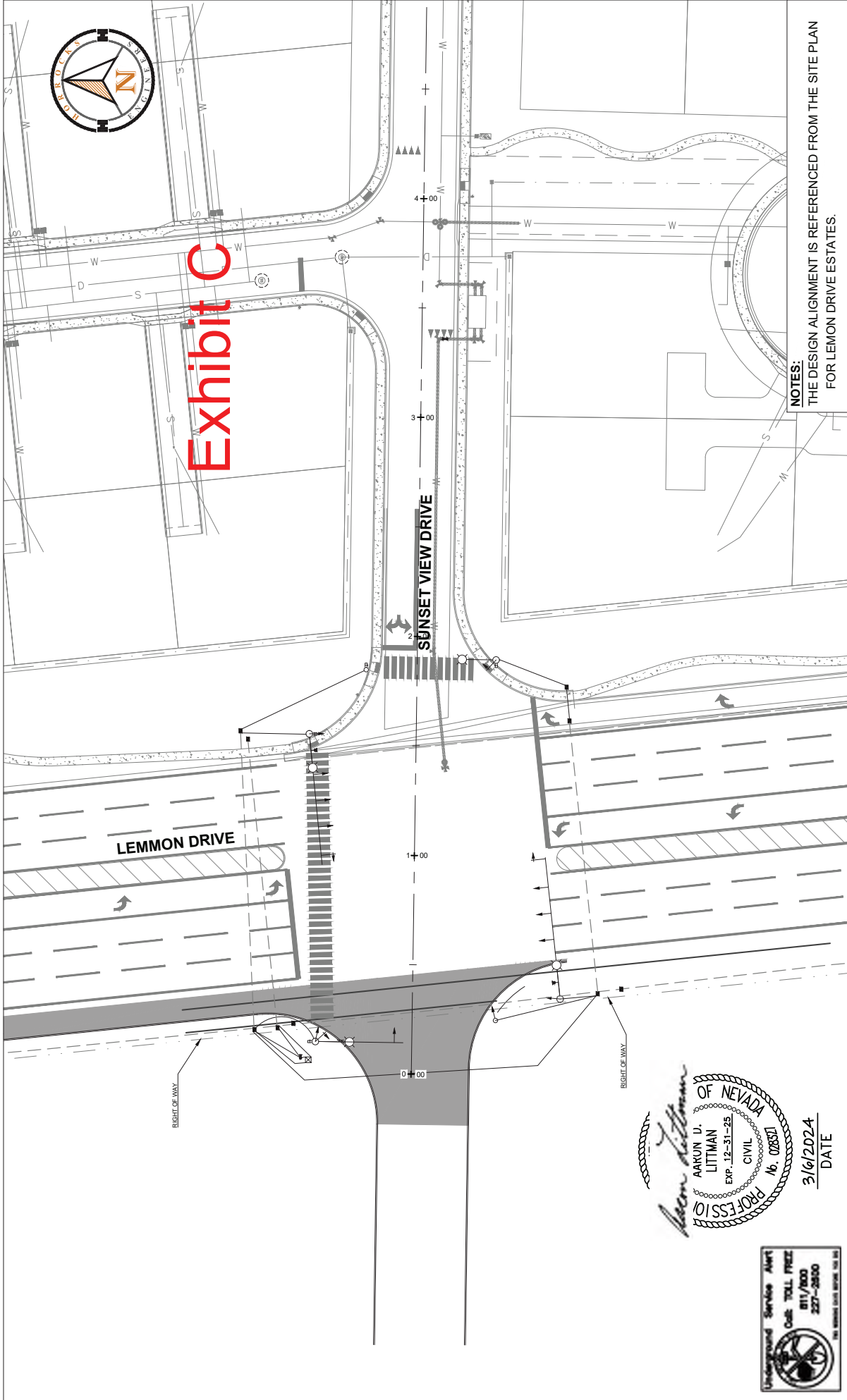
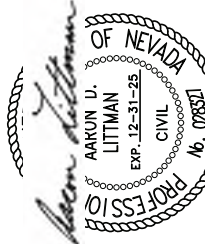


Exhibit C

SUNSET VIEW DRIVE

LEMMON DRIVE

**NOTES:**  
THE DESIGN ALIGNMENT IS REFERENCED FROM THE SITE PLAN  
FOR LEMON DRIVE ESTATES.



DATE  
3/6/2024



DESIGNED		TCC	DATE	03/2024	PROJECT NO.	UT-5526-22
DRAWN		TCC	DATE	03/2024	SHEET NO.	8 OF 14
CHECKED		ADL	DATE	03/2024	DRAWING NO.	AL-01
LEMMON DRIVE ESTATES SIGNAL DESIGN				ALIGNMENT LAYOUT		
2102 West Grove Parkway Pleasant Grove, UT 84062 (801) 783-5100						
<b>Horrocks</b>						
SCALE		WARNING				
HORIZONTAL 1" = 40'		0 1/2 1				
VERTICAL N/A		IF THIS BAR DOES NOT MEASURE, THEN DRAWING IS NOT TO SCALE				
REV.	DATE	BY	DESCRIPTION	REVISIONS		

**CITY OF RENO GENERAL TRAFFIC SIGNAL NOTES**

- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING SUBSTRUCTURES, WHETHER SHOWN OR NOT, AND TO NOTIFY ALL UTILITY COMPANIES TO VERIFY IN THE FIELD THE LOCATION OF THEIR SUBSTRUCTURES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL PROTECT ALL SUBSTRUCTURES FROM DAMAGE, AS WELL AS ANY OTHER PUBLIC INFRASTRUCTURE. THE EXPENSE TO REPAIR OR FOR REPLACEMENT SHALL BE BORNE BY THE CONTRACTOR.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (LATEST EDITION) AND THE STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION (LATEST EDITION), AND SUPPLEMENTED BY THE STATE OF NEVADA STANDARD PLANS AND SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION).
- THE LOCATION OF CONTROLLER, PULL BOXES WITH GROUND RODS, AND CONDUIT RUNS SHALL BE WITHIN THE EXISTING RIGHT-OF-WAY OR ANY EASEMENT GRANTED OUTSIDE THE RIGHT-OF-WAY.
- DESIGN ENGINEER SHALL BE RESPONSIBLE OF THE LOCATION OF ALL ELECTRICAL, SIGNAL POLE, CONTROLLER, CONDUIT, LOOP DETECTOR, AND PULL BOXES. FINAL LOCATIONS ARE TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR AND ANY CHANGES SHALL BE APPROVED BY TRAFFIC ENGINEER.
- CONTROLLERS AND CABINETS SHALL MEET THE REQUIREMENTS OF THE NEMA STANDARD PUBLICATION (LATEST EDITION) AND THE CITY OF RENO SPECIFICATIONS FOR TRAFFIC SIGNAL CONTROLLERS AND CABINETS.
- CONTACT THE PUBLIC WORKS TRAFFIC ENGINEERING DIVISION FOR TRAFFIC-ACTUATED CONTROLLER UNIT SPECIFICATIONS.
- UNLESS SHOWN OTHERWISE, THE CONTROLLER CABINET SHALL BE WIRED FOR EIGHT (8) PHASE OPERATION WITH TWO (2) OVERLAPS AND SHALL BE FURNISHED WITH ALL NECESSARY MODULES, LOAD SWITCHES, AND EQUIPMENT REQUIRED FOR FULL EIGHT (8) PHASE OPERATION WITH TWO (2) OVERLAPS.

ALL NEW SIGNAL POLES WILL HAVE TWO (2) HANDHOLES AND AN ACCESS DOOR FOR THE TERMINAL BLOCK. SEE TRAFFIC SIGNAL POLE DETAIL DRAWING R-413A FOR TRAFFIC SIGNAL EQUIPMENT DIMENSIONS. FOR OTHER POLE DETAILS, SEE THE NEVADA DEPARTMENT OF TRANSPORTATION'S "STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION" (NDOT-SPRBC), LATEST EDITION.

UNLESS SHOWN OTHERWISE, NO. 7 PULL BOX (WITH EXTENSION) SHALL BE USED AT LOCATIONS WHERE CONDUIT RUNS CONTAIN TRAFFIC SIGNAL CABLE OR CARRY POWER. NO. 3-1/2 SHALL ONLY BE USED AS APPROVED BY CITY OF RENO TRAFFIC ENGINEER. TRAFFIC RATED BOX SHALL BE USED IN VEHICULAR AREAS ONLY, INCLUDING, BUT NOT LIMITED TO TRAVEL WAY, DRIVEWAY APPROACHES AND WITHIN PEDESTRIAN RAMPS AT INTERSECTION CURB RETURNS. ALL PULL BOXES WITH METAL LIDS SHALL BE GROUNDED PER TRAFFIC RATED PULL BOX DETAIL.

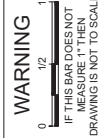
ALL EXPOSED CONDUIT SHALL BE OF A RIGID PVC SCHEDULE 80 AND SHALL EXTEND TO A MINIMUM DEPTH OF 18 INCHES.

ALL CONDUIT RUNS FOR SIGNAL CABLE SHALL CONSIST OF TWO (2) 3" CONDUITS BETWEEN PULL BOXES AND BETWEEN THE PULL BOXES AND POLES. THERE SHALL BE THREE (3) CONDUITS FROM THE CONTROLLER CABINET TO THE PULL BOXES.

ALL CONDUIT RUNS TERMINATING IN A PULL BOX SHALL HAVE A MINIMUM OF SIX INCHES OF CLEARANCE FROM THE BOTTOM OF THE LID, AND SHALL RISE A MINIMUM OF THREE INCHES ABOVE THE TOP OF THE DRAIN ROCK.

ALL NEW CONDUIT RUNS SHALL HAVE A PULL TAPE.

ALL CONDUIT TERMINATIONS SHALL HAVE A "BELL END" INSTALLATION AND BE SEALED WITH CONDUIT SEALER AFTER WIRE INSTALLATION. CONDUIT ENDS SHALL NOT TERMINATE WITHIN A SWEEP SECTION. ALL CONDUCTORS AND THEIR TERMINATION SHALL BE CLEARLY MARKED ON THE CABINET SCHEMATIC WIRING DIAGRAM.



NO.	DATE	BY	REVISIONS	
			DESCRIPTION	ASSIGNMENT
5				
4				
3				
2				
1				

SCALE  
HORIZONTAL N/A  
VERTICAL N/A

15. THE RED, YELLOW AND GREEN INDICATION FOR ALL NEW VEHICULAR SIGNAL HEADS SHALL BE 12 INCH LIGHT EMITTING DIODE (LED) AND INCLUDE "AimGo" TECHNOLOGY. UTILIZE "GELCORE" RXTT, "DIALITE" 433 SERIES OR APPROVED EQUAL. ALL PEDESTRIAN SIGNAL INDICATIONS SHALL BE COUNTDOWN "LED" WITH HAND SYMBOL (PORTLAND ORANGE) AND WALKING MAN SYMBOL (LUNAR WHITE).

16. ALL VEHICULAR HEADS SHALL HAVE "TUNNEL" VISORS WITH 4 INCH SLOT AT BOTTOM WITH LOUVERED BACK PLATES. ALL SIGNAL HEADS TO BE MANUFACTURED BY "ECONOLITE", "EAGLE" OR APPROVED EQUAL. IF DIRECTED BY THE ENGINEER, EXTRA BACK PLATES TO BE PROVIDED FOR STAGE. HARDWARE SHALL BE ALUMINUM AND HAVE A BLACK FACTORY FINISH. INSTALL RETROREFLECTIVE STRIPS ON BACKPLATES PRIOR TO INSTALLATION.

17. ALL NEW PEDESTRIAN PUSH BUTTONS FOR TRAFFIC SIGNALS SHALL BE 2" DIAMETER. UTILIZE POLARA-INS2 NAVIGATOR 2 WIRE PUSH BUTTON STATION (NS2-PBS) OR APPROVED EQUAL. THE COLOR OF THE STATION SHOULD BE YELLOW. NEW PUSH BUTTON STATIONS SHALL HAVE 9"x15" SIZE PEDESTRIAN (R10-36) SIGNS AND MUST HAVE THE CORRESPONDING STREET NAME IN BRILLE OR RAISED PRINT. THE ALLOW SIGN POINT IN THE DIRECTION OF THE CROSSING AND THE SIGN SHALL BE ALIGNED WITH THE CROSS WALK.

18. ALL INTERSECTIONS SHALL HAVE A BATTERY BACK UP SYSTEM. THE SYSTEM SHALL BE MOUNTED TO THE METERED SERVICE CABINET OF THE SYSTEM AND WILL BE A 24 VOLT OR 48 VOLT SYSTEM. THE CABINET SHALL BEAR A 508 UL LABEL. THE SYSTEM SHALL SUPPLY A MINIMUM UNINTERRUPTED CONTINUOUS POWER SUPPLY (UPS) SERVICE FOR UP TO 2 HOURS. THE SYSTEM SHALL FEATURE AN EVENT COUNTER AND TIMER. THE SYSTEM SHALL HAVE A TWO (2) YEAR PARTS AND LABOR TRANSFERABLE WARRANTY TO THE CITY OF RENO. THE UPS UNIT AND THE METERED PEDESTAL SHALL BE DESIGNED AS ONE COMPLETE UNIT. THE UPS SYSTEM SHALL BE A PIGGYBACK DESIGN SYSTEM AND HANG ON THE METERED SERVICE PEDESTAL.

19. WHEN CONTROLLER CABINETS ARE NOT LOCATED IN A SIDEWALK, THEY SHALL HAVE A CONCRETE SERVICE PAD INSTALLED IN FRONT OF THE CABINET, THE SAME WIDTH AS CABINET AND AT LEAST 3 FEET LONG. NO IMPROVEMENTS SHALL BE PERMITTED TO BLOCK CABINET DOOR IN COMPLIANCE WITH NEC. SPRINKLER SYSTEMS SHALL BE DIRECTED AWAY FROM AND NOT ALLOWED TO SPRAY CABINET OR PULL BOXES DIRECTLY.

20. ALL NEW TRAFFIC SIGNALS SHALL BE CONNECTED INTO THE CITY OF RENO'S TRAFFIC SIGNAL CENTRAL COMPUTER SYSTEM VIA THE NEAREST RECEIVER SITE BY FIBER-OPTIC OR AN APPROVED OTHER.

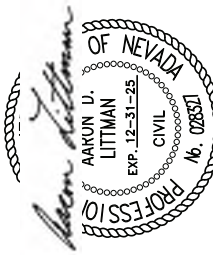
21. FOR FIBER-OPTIC AND EQUIPMENT CONTACT CITY OF RENO TRAFFIC ENGINEERING FOR LATEST SPECIFICATIONS.

22. THE LUMINAIRE FIXTURES SHALL BE GREY STR-LW3MHT08EUSV700 OR APPROVED EQUAL PHOTO CELL TO BE LOCATED IN METERED SERVICE PEDESTAL.

23. PREEMPTION OF SIGNALS BY EMERGENCY VEHICLES SHALL BE PROVIDED BY INSTALLING MODEL 762 PHASE SECTOR DETECTORS WITH THE MODEL 752N PHASE SELECTOR, OR AN APPROVED EQUAL.

24. E60P DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF RENO SUPPLEMENTAL STANDARD DRAWING DETAILS FOR PUBLIC WORKS CONSTRUCTION.

25. THE CONTRACTOR SHALL PROVIDE AN UNDERGROUND SERVICE PEDESTAL. THE MAIN BREAKER SHALL BE 100 AMP MINIMUM (120/240 VAC, 60 HZ, SINGLE PHASE, 3 WIRE) IN ACCORDANCE WITH NDOT STANDARD PLAN T-30.1.6. INDIVIDUAL CIRCUIT BREAKERS SHALL INCLUDE 120 VOLT: 30 AMP 1-POLE CIRCUIT BREAKER FOR SIGNAL; 30 AMP 2-POLE CIRCUIT BREAKER FOR LIGHTING CONTACTOR; 20 AMP 1-POLE CIRCUIT BREAKER FOR STREET LIGHTS; 20 AMP 1-POLE CIRCUIT BREAKER FOR SIGNS; 15 AMP 1-POLE CIRCUIT BREAKER FOR CONTROL; AND A 15 AMP 1-POLE CIRCUIT BREAKER FOR GPI RECEPTACLE. THE CONDUCTOR TO THE CABINET FROM THE BREAKER SHALL BE A MINIMUM OF 10 GAUGE WIRE.



3/6/2024  
DATE

DESIGNED	TC	DATE	PROJECT NO.
AWN	TC	01/04/2023	UT-5526-22
DRAWN	TC	DATE	SHEET NO.
AWN	TC	01/04/2023	8 OF 14
CHECKED	K/C	DATE	DRAWING NO.
AWN	K/C	01/04/2023	SG-01

	STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION	DRAWING NO.
	<p><b>NOTES -</b></p> <p><b>TRAFFIC SIGNALS &amp; POLES</b></p>	R-413G
APPROVED BY: JF DATE: 1/2013		MODIFIED BY: HORROCKS.

2102 West Grove Parkway Pleasant Grove, UT 84002 (801) 783-5100	LEMMON DRIVE ESTATES SIGNAL DESIGN
SIGNAL NOTES	

WARNING IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE	

	STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION	DRAWING NO.
	<p><b>NOTES -</b></p> <p><b>TRAFFIC SIGNALS &amp; POLES</b></p>	R-413F
APPROVED BY: JF DATE: 1/2013		MODIFIED BY: HORROCKS.

26. THE CONTRACTOR SHALL COORDINATE WITH NV ENERGY IN PROVIDING SERVICE FOR THE SIGNAL WITHIN NV ENERGY STANDARDS.

27. POWER PANEL SURGE PROTECTION SHALL BE PROVIDED AND APPROVED THROUGH THE SUBMITTAL PROCESS TO THE PUBLIC WORKS TRAFFIC ENGINEERING DIVISION.

28. EXISTING VEHICLE DETECTOR LOOPS DAMAGED BY THE CONTRACTOR SHALL BE REPLACED AND MADE FULLY FUNCTIONAL WITHIN TWO WORKING DAYS. IF NOT MADE FUNCTIONAL WITHIN THE TWO DAYS FOLLOWING DAMAGE, THE CITY MAY PERFORM THE REPAIR AND BACK-CHARGE THE CONTRACTOR AT THE EXPENSE OF \$1000 PER LOOP. SPlicing WILL NOT BE CONSIDERED AS AN ADEQUATE REPAIR.

29. THE CONTRACTOR SHALL COORDINATE TRAFFIC SIGNAL INSTALLATIONS OR MODIFICATIONS WITH THE CITY OF RENO TRAFFIC ENGINEER AT 334-2243.

30. NO SPLICES SHALL BE PERMITTED BETWEEN THE CONTROLLER CABINET AND THE TRAFFIC SIGNAL POLE. ALL CONNECTIONS SHALL BE MADE AT THE JUNCTION BOX, OR IN THE CASE OF LOOPS, AT THE LOOP STUB. ANY DEVIATION TO THIS REQUIREMENT SHALL BE APPROVED BY THE TRAFFIC ENGINEER PRIOR TO THE WORK.

31. VEHICLE DETECTOR LOOPS DAMAGED DURING CONSTRUCTION WHICH ARE PERMITTED BY THE TRAFFIC ENGINEER TO BE TEMPORARILY SPLICED, MUST BE REPLACED PRIOR TO FINAL ACCEPTANCE.

32. IF ANY PAVEMENTS MARKINGS ARE TO BE RELOCATED, VEHICLE DETECTOR LOOPS SHALL BE RELOCATED ACCORDINGLY TO REMAIN CONSISTENT WITH CITY OF RENO STANDARD DETAIL NO. R-406A AND NO. R-406B.

33. AS A PART OF ANY STREET WIDENING PROJECT OR THE ADDITION OF ANY STREET TRAVEL LANES TO EXISTING LANES, SUCH AS TURN LANES, ACCELERATION OR DECELERATION LANES, ETC., THE CONTRACTOR MUST EXTEND ANY TRAFFIC CONTROL CONDUITS AND/OR WIRING AND REPLACE ALL AFFECTED VEHICLE LOOP DETECTOR WIRING (SPlicing SHALL NOT BE ALLOWED).

34. SIGNAL EQUIPMENT SHALL BE PROVIDED AND APPROVED THROUGH THE SUBMITTAL PROCESS TO THE PUBLIC WORKS TRAFFIC ENGINEERING DIVISION.

35. FOR POLE DETAILS NOT SHOWN, SEE POLE MANUFACTURER'S DETAILED DRAWINGS.

36. ALL SIGNAL POLES SHALL CONFORM TO NDOT TYPE 35 AND 35A SPECIFICATIONS, INCLUDING BOLT CIRCLE DIMENSIONS, ANCHOR BOLTS, AND FOOTING DIMENSIONS.

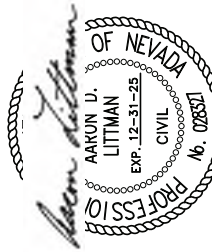
37. FINAL POLE APPROVAL AND SUBMITTALS TO BE APPROVED BY THE CITY OF RENO.

38. CLAM SHELL FOR TYPE 7D POLE TO BE USED ONLY WHEN POLE IS INCLUDED AS A SIGNAL POLE. DO NOT USE CLAM SHELL WHEN TYPE 7D POLE IS USED IN SERIES LIGHTING.

39. POLE MAY BE MANUFACTURED AS EITHER A DOUBLE OF SINGLE CANDYCANE CONFIGURATION.

40. VIDEO DETECTION MAY BE USED IF APPROVED BY THE CITY TRAFFIC ENGINEER.

# Exhibit C



3/6/2024  
DATE

DESIGNED	TC	DATE	01/04/2023	PRODUCT NO.	UT-5526-22
DRAWN	TC	DATE	01/04/2023	SHEET NO.	10 OF 14
CHECKED	KJC	DATE	01/04/2023	DRAWING NO.	SG-02

LEMMON DRIVE ESTATES SIGNAL DESIGN

SIGNAL NOTES

2152 West Grove Parkway  
Pleasant Grove, UT 84062  
(801) 783-5100

STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION

**NOTES - TRAFFIC SIGNALS & POLES**

DRAWING No. **R-413H**

APPROVED BY: JF DATE: 1/2013



**WARNING**  
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IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

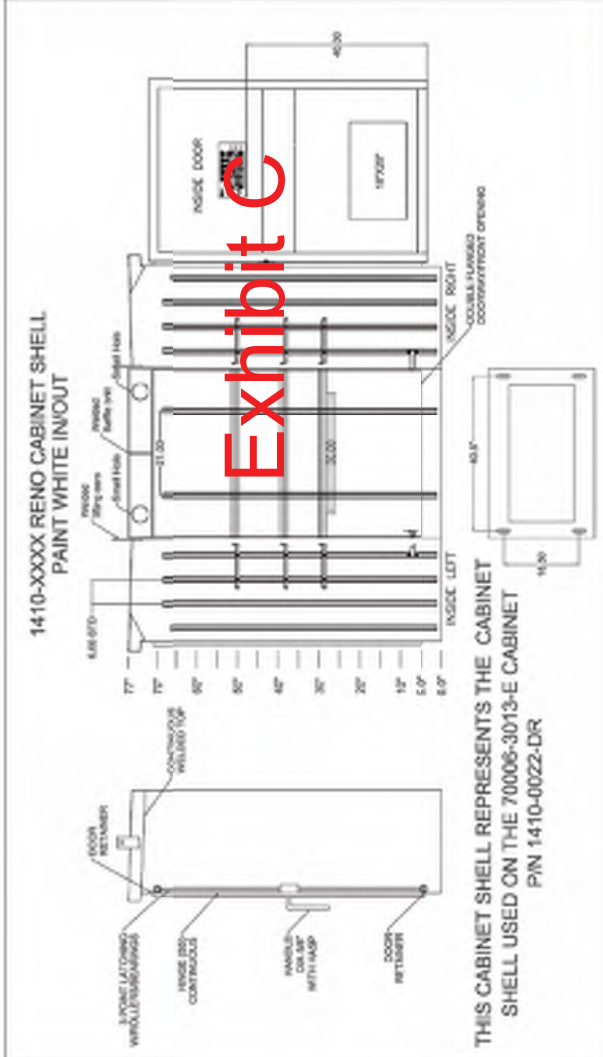
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VERTICAL N/A

NO.	DATE	BY	REVISIONS

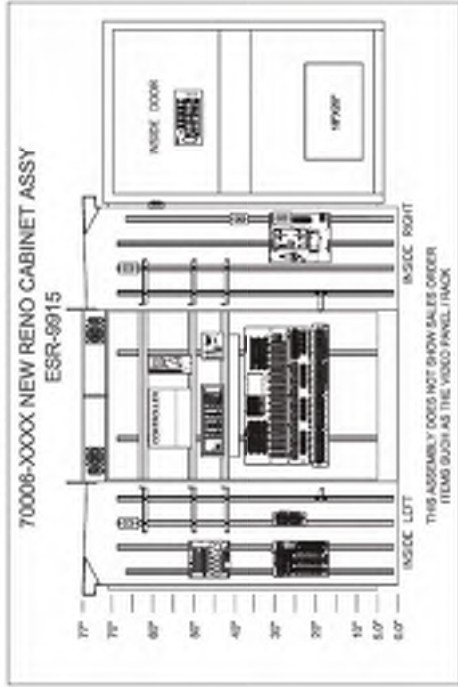
**CONTROLLER CABINET SPECIFICATIONS:**

FURNISH AND INSTALL CITY OF RENO STANDARD CABINET WITH THE FOLLOWING DIFFERENCES FOR TSS TYPE 1 FORMAT:

1. TSS TYPE 1 - 16 LOAD SWITCH BACKPANEL.
2. ONE DETECTOR RACK WHICH WOULD INCLUDE:
  - 2.A. 1 8RU
  - 2.B. 16 CHANNELS OF DETECTION
  - 2.C. WIRED FOR 2 CHANNEL DETECTOR CARDS ONLY (NOT 4 CHANNEL)
  - 2.D. PREEMPTION CARD SLOTS WIRED FOR EITHER 2 - 2 CHANNEL PREEMPTION OR 1 - 4 CHANNEL PREEMPTION CARD
3. ALL EXISTING SWITCHES ON POLICE PANELS STAY THE SAME
4. ALL EXISTING SWITCHES ON THE INSIDE DOOR AIR PANEL STAY THE SAME EXCEPT FOR DETECTION TEST SWITCHES
5. LOOP INTERFACE PANEL HAVE TEST SWITCHES
  - 5.A. 16 VEHICLE DETECTOR TEST SWITCHES
  - 5.B. 4 PEDESTRIAN TEST SWITCHES
  - 5.C. 4 PREEMPTION TEST SWITCHES
6. ADD LED LIGHTING INSTEAD OF THE FLUORESCENT LIGHT UNDER THE DOCUMENT DRAWER
7. REMOVE THE INCANDESCENT LIGHT FEATURE AT THE TOP AND REPLACE IT WITH LED LIGHTING AT THE TOP OF THE CABINET
8. REMOVE THE PUNCH DOWN TERMINAL BLOCK
9. TSS TYPE 2 CONTROLLERS SHALL BE FURNISHED AND INSTALLED SO THE TYPE 1 CABINET NEEDS THE A/O POWER ADAPTER TO CONVERT IT FROM TYPE 1 TO TYPE 2
10. CABINET LAYOUT:
  - 10.A. KEEP THE POWER PANEL THE SAME
  - 10.B. KEEP THE POWER PLACEMENT THE SAME
  - 10.C. KEEP THE HEIGHT OF THE PANEL MOUNTING THE SAME FROM THE FLOOR OF THE CABINET
  - 10.D. KEEP THE SAME FILTER OPENING SIZE
  - 10.E. SAME WHITE INSIDE AND OUT
  - 10.F. SAME HINGE
  - 10.G. SAME CABINET
11. OTHER MODIFICATIONS AS REQUIRED BY THE CITY OF RENO. CONTACT JOHN BAMES, CITY OF RENO, AT (775) 334-1270 TO CONFIRM REQUIREMENTS PRIOR TO ORDERING.

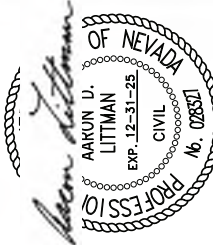


THIS CABINET SHELL REPRESENTS THE CABINET SHELL USED ON THE 70006-3013-E CABINET PIN 1410-0022-DR



70006-XXXX NEW RENO CABINET ASSY ESR-9915

3/6/2024 DATE



**WARNING**  
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IF THIS BAR DOES NOT MEASURE, THEN DRAWING IS NOT TO SCALE

SCALE  
VERTICAL N/A  
HORIZONTAL N/A

NO.	DATE	BY	REVISIONS



2152 West Grove Parkway  
Pleasant Grove, UT 84062  
(801) 783-5100

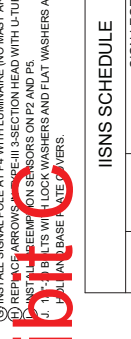
**LEMMON DRIVE ESTATES SIGNAL DESIGN**

**SIGNAL NOTES**

DESIGNED	DATE	PROJECT NO.
TC	01/04/2023	UT-5526-22
DRAWN	DATE	SHEET NO.
TC	01/04/2023	11 OF 14
CHECKED	DATE	DRAWING NO.
KJC	01/04/2023	SG-03

**CONSTRUCTION NOTES:**

- A. FURNISH AND INSTALL NEW SIGNAL POLE PER POLE SCHEDULE AND DETAILS ON G-04.
- B. FURNISH AND INSTALL NEW CONTROLLER AND CABINET ASSEMBLY. MAKE ALL CONNECTIONS.
- C. FURNISH AND INSTALL 100A METERED SERVICE WITH BATTERY BACKUP PER DETAIL ON G-04.
- D. FURNISH AND INSTALL GRIDSMART BELL CAMERA ON LUMINAIRE ARM AND CABLE CONTROLLER. MAKE ALL CONNECTIONS.
- E. FURNISH AND INSTALL PROCESSOR FOR GRIDSMART CAMERA SYSTEM IN CABINET PER MANUFACTURE SPECIFICATIONS. MAKE ALL CONNECTIONS.
- F. FURNISH AND INSTALL FIBER OPTIC CABLE. PULL TAPE AND #14 AWG LOCATE WIRE IN CONDUIT RUNS TO CONTROLLER CABINET LOCATED ON THE NORTHWEST CORNER OF THE LEMMON DRIVE AND SUNSET VIEW DRIVE SKY VISIBLE/BACK DRIVE INTERSECTION ON THE NORTHWEST CORNER OF THE LUMINAIRE (ON WEST SIDE).
- G. INSTALL SIGNAL POLE AT THE FULL LUMINAIRE (ON WEST SIDE).
- H. REFER ARROWS TO ALL 3 SECTION HEAD WITH U-TURN SYMBOLS.
- I. INSTALL PREEMPTION SENSORS ON P2 AND P5.
- J. ALL U-TURN SYMBOLS WILL LOCK WASHERS AND FLAT WASHERS ARE REQUIRED FOR ALL HAND HELD AND BASE PLATE C/WERS.

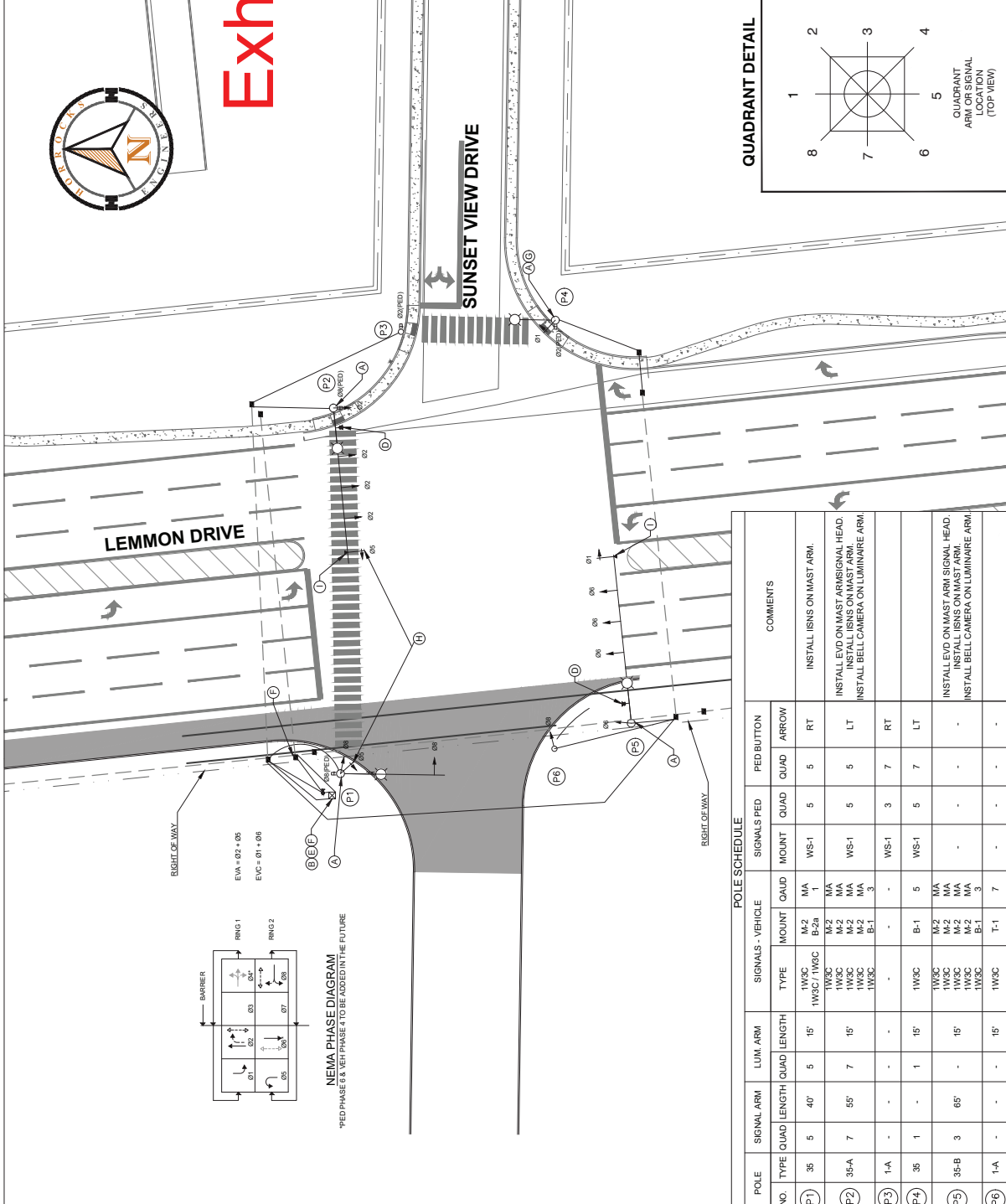
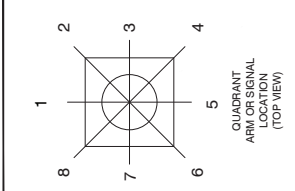


**IISNS SCHEDULE**

POLE	TYPE	PREFIX	SIGN LEGEND	
			STREET NAME	SUFFIX
P1	SINGLE SIDED		LEMMON	DR 8200
P2	SINGLE SIDED		SUNSET VIEW	DR
P5	SINGLE SIDED		SUNSET VIEW	DR

SEE USD DWG. NO.816.S1 FOR FONT AND LAYOUT DETAILS

**QUADRANT DETAIL**



**POLE SCHEDULE**

NO.	TYPE	SIGNAL ARM LENGTH	LUM. ARM QUAD	SIGNALS - VEHICLE		SIGNALS PED		PED BUTTON		COMMENTS	
				TYPE	MOUNT	QUAD	MOUNT	QUAD	ARROW		
P1	35	40'	5	1W3C 1W3C	M2 B-1	MA	WS-1	5	5	RT	INSTALL IISNS ON MAST ARM.
P2	35-A	55'	7	1W3C 1W3C 1W3C	M2 M2 B-1	MA MA 3	WS-1	5	5	LT	INSTALL EVD ON MAST ARM SIGNAL HEAD. INSTALL IISNS ON MAST ARM. INSTALL BELL CAMERA ON LUMINAIRE ARM.
P3	1-A	-	-	1W3C	-	-	WS-1	3	7	RT	
P4	35	1	1	1W3C	M2	MA	WS-1	5	7	LT	INSTALL EVD ON MAST ARM SIGNAL HEAD. INSTALL IISNS ON MAST ARM. INSTALL BELL CAMERA ON LUMINAIRE ARM.
P5	35-B	3	65'	1W3C 1W3C 1W3C	M2 M2 B-1	MA MA 3	-	-	-	-	
P6	1-A	-	-	1W3C	T-1	7	-	-	-	-	

**WARNING**  
 0 1/2 1  
 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

SCALE  
 HORIZONTAL 1" = 40'  
 VERTICAL N/A

REVISIONS

REV.	DATE	BY	DESCRIPTION

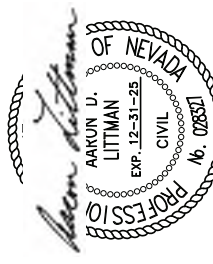
**Horrocks**

2102 West Grove Parkway  
 Pleasant Grove, UT 84062  
 (801) 783-5100

**LEMMON DRIVE ESTATES SIGNAL DESIGN**

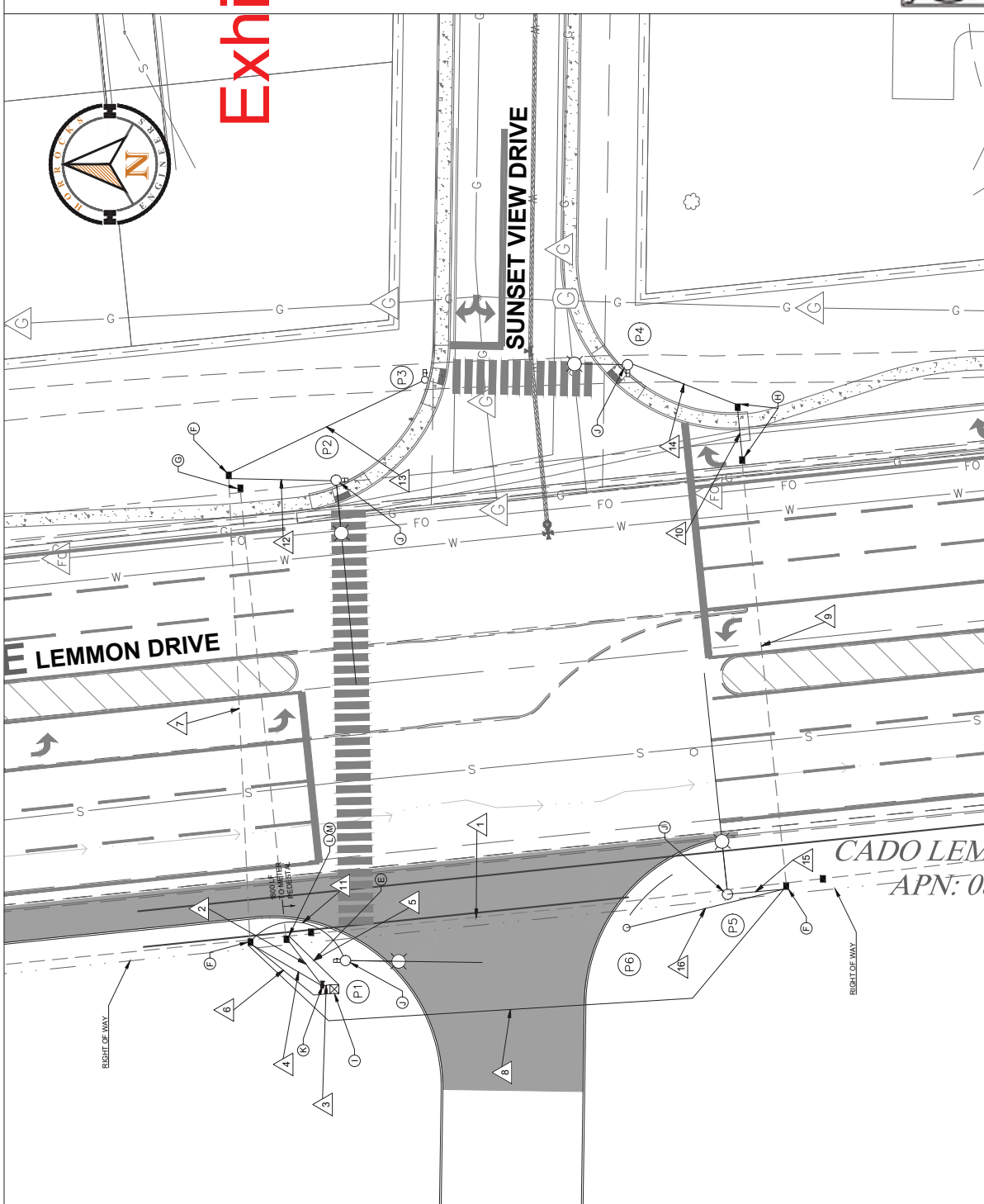
EQUIPMENT PLAN

DESIGNED	TCC	DATE	PROJECT NO.
		03/2024	UT-5526-22
DRAWN	TCC	DATE	SHEET NO.
		03/2024	12 OF 14
CHECKED	ADL	DATE	DRAWINGS
		03/2024	SG-04



DATE 3/6/2024





- CONSTRUCTION NOTES:**
- A. FIELD CHECK FOR EXISTING CONDUIT AND TRAFFIC PULL BOXES. EXISTING CONDUIT SHOWN PER PROJECT WY731300 DWG TS-03 AND TS-04.
  - B. FOR NEW CONDUIT, SEE TRENCH AND BORING DETAIL ON SG-S01.
  - C. CONDUIT AND WIRE SCHEDULE ON SG-S01.
  - D. INSTALL SCHEDULE 40 PVC CONDUIT PER CONDUIT SCHEDULE ON SG-S01. DISTANCE SHOWN ON PLAN REFLECTS TRENCH LENGTH, NOT ACTUAL CONDUIT LENGTH.
  - E. FURNISH AND INSTALL SCHEDULE 40 PVC CONDUIT PER NY ENERGY TYPICAL TRENCH DETAIL TEO0090. DISTANCE SHOWN ON PLAN REFLECTS TRENCH LENGTH, NOT ACTUAL CONDUIT LENGTH.
  - F. EXISTING NO. 7E PULL BOX PER PROJECT WY731300 DWG TS-03.
  - G. EXISTING NO. 7E PULL BOX MODIFIED WITH EXTENSION PER PROJECT WY731300 DWG TS-04.
  - H. REBAR AND CUTTER.
  - I. CONDUIT TYPE.
  - J. CABINET FOUNDATION PER DETAIL ON G-03.
  - K. CONDUIT SIGNAL FROM FOUNDATION PER SCHEDULE ON SG-04. AND DETAILS ON G-05.
  - L. CONTRACT TIME. RED SERVICE FOUNDATION AND FURNISH AND INSTALL 100A METERED SERVICE WITH BATTERY BACKUP PER DETAILS ON G-03.
  - M. SLICE INTO EXISTING FIBER DETAIL G-06.
  - N. POWER SERVICE POINT AT LEMMON DRIVE & BUCK DRIVE/ SKY VISTA PKWY INTERSECTION. SEE CORNER EXISTING CONDUIT PER PROJECT WY731300 TS-04.

Exhibit



3/6/2024  
DATE



<p>2102 West Grove Parkway Pleasant Grove, UT 84062 (801) 783-5100</p>		<p>LEMMON DRIVE ESTATES SIGNAL DESIGN</p>		<p>PROJECT NO. UT-5526-22</p>
<p><b>Horrocks.</b></p>		<p>CONDUIT PLAN</p>		<p>SHEET NO. 13 OF 14</p>
<p><b>WARNING</b> 0 1/2 1 IF THIS BAR DOES NOT MEASURE, THEN DRAWING IS NOT TO SCALE</p>		<p>SCALE HORIZONTAL 1" = 30' VERTICAL N/A</p>		<p>DATE 03/2024</p>
<p>REVISIONS</p>		<p>DATE BY DESCRIPTION</p>		<p>DATE 03/2024</p>
<p>DESIGNED TCC</p>		<p>DRAWN TCC</p>		<p>CHECKED ADL</p>
<p>PROJECT NO. UT-5526-22</p>		<p>DATE 03/2024</p>		<p>DRAWING NO. SG-05</p>

**LEGEND**

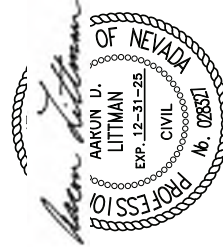
- CENTERLINE
- FIBER SIGNAL CONDUIT
- FIBER OPTIC CONDUIT
- - - EXISTING CONDUIT
- (PI) SIGNAL POLE IDENTIFICATION
- MAST ARM SIGNAL POLE
- SIGNAL POLE LUMINAIRE EXTENSION WITH ARM
- MAST ARM MOUNTED SIGN
- PS POWER SOURCE
- TRAFFIC SIGNAL POLE
- TYPE 0 - 1 SECTION SIGNAL HEAD ASSEMBLY
- TYPE I - 3 SECTION SIGNAL HEAD ASSEMBLY
- TYPE II - 3 SECTION SIGNAL HEAD ASSEMBLY
- TYPE III - 3 SECTION (ALL ARROWS) SIGNAL HEAD ASSEMBLY
- TYPE IV - 4 SECTION SIGNAL HEAD ASSEMBLY
- TYPE V - 5 SECTION SIGNAL HEAD ASSEMBLY
- TYPE VI - 4 SECTION (ALL ARROWS) SIGNAL HEAD ASSEMBLY
- TYPE VII - 4 SECTION SIGNAL HEAD ASSEMBLY
- PEDESTRIAN HYBRID BEACON
- TRAFFIC SIGNAL CONTROLLER CABINET
- EXISTING NO. 7E PULL BOX
- PEDESTRIAN SIGNAL HEAD WITH PUSH BUTTON
- PUSH BUTTON
- UNDERGROUND SERVICE PEDESTAL (USP)
- PREEMPTION CONTROL SYSTEM DETECTOR

METERED SERVICE EQUIPMENT SCHEDULE	
SERVICE LOCATION	SUNSET VIEW DR
OWNERSHIP	CITY OF RENO
VOLTAGE	120V
MAIN BREAKER	100A, 240V, 2P
PHASE	SINGLE
SIGNAL BREAKER	30A, 120V, 1P
LIGHTING BREAKER	20A, 120V, 1P
GFI RECEPTACLE	15A, 120V, 1P
CONTROL	15A, 1P, SWITCH
LIGHTING CONTACTOR	35A-2PNO, MERC

**CONDUIT RUN SCHEDULE**

RUN NO.	FROM	TO	CONDUIT SIZE	LENGTH LN FT.	GROUND	SIGNAL CABLE		LUMINAIRE & ISINS	SERVICE	EVP	INTERCONNECT	COMMENTS
						26+1 CON (14 AWG+10 AWG)	10+1 CON (14 AWG+14 AWG)					
CONDUCTORS PROVIDED BY NV ENERGY												
1	SERVICE POINT BOX	FIBER PULL BOX	EX 3"					10 AWG	6 AWG		12-COUNT FIBER OPTIC + PULL TAPE + 14 AWG LOCATE WIRE	
2	FIBER PULL BOX	SERVICE PEDESTAL	3"									
3	SERVICE PEDESTAL	CONTROL CABINET	3"	5								
4	SERVICE PEDESTAL	PULL BOX FOR P1	3"	25				2				
5	FIBER PULL BOX	CONTROL CABINET	3"	15								
6	CONTROL CABINET	PULL BOX FOR P1	(4) 3"	30	1	5	2					
7	PULL BOX FOR P1	PULL BOX FOR P2	EX (2) 3"	135	1	2	1	2	1			EXISTING CONDUIT INSTALLED WITH PROJECT WY731300 TS-04.
8	PULL BOX FOR P1	PULL BOX FOR P5	(2) 3"	170	1	2	1	2	1			
9	PULL BOX FOR P5	EX PULL BOX FOR P4	EX (2) 3"	150	1	1	1	2	2			EXISTING CONDUIT INSTALLED WITH PROJECT WY731300 TS-04.
10	EX PULL BOX	RELOCATED PULL BOX	(2) 3"	15	1	1	1	2	2			EXTEND EXISTING CONDUIT TO RELOCATED PULL BOX FOR P4.
11	PULL BOX FOR P1	POLE 1 (P1)	(2) 3"	30	1	1	1	2				
12	PULL BOX FOR P2	POLE 2 (P2)	(2) 3"	30	1	1	1	2	1			
13	PULL BOX FOR P2	POLE 3 (P3)	3"	65	1	1	1					
14	PULL BOX FOR P4	POLE 4 (P4)	(2) 3"	20	1	1	1	2				
15	PULL BOX FOR P5	POLE 5 (P5)	(2) 3"	20	1	1	1	2	1			
16	PULL BOX FOR P5	POLE 6 (P6)	3"	50	1	1	1					

NOTE: ALL CONDUITS SHALL HAVE A #8 AWG GREEN THW-2 OR XHHW-2 CONDUCTOR INSTALLED.



3/6/2024  
DATE

**NOTES:**

- CITY OF RENO TRAFFIC CONTACT  
KURT W. DIETRICH  
(775) 334-2243  
PHONE
- CONTACT CITY OF RENO TRAFFIC OPERATIONS DEVISION TO SCHEDULE/COORDINATE ON THE FOLLOWING ITEMS:  
**SALVAGED ITEMS:** PROVIDE 2 DAYS NOTICE ENSURE ALL SALVAGED ITEMS HAVE ALL PARTS AND ASSOCIATED HARDWARE.  
**SIGNAL INSPECTION:** 8 DAYS PRIOR TO TURN ON CONTACT REGION SIGNAL CREW TO REQUEST AN IN-PROGRESS SIGNAL INSPECTION.  
**SIGNAL TURN-ON:** PROVIDE 5 DAYS NOTICE COORDINATE WITH THE CITY OF RENO TRAFFIC OPERATIONS DIVISION PRIOR TO SIGNAL TURN-ON.  
CONTRACTOR IS RESPONSIBLE TO DISPOSE OF REMOVAL ITEMS AND ASSUME RESPONSIBILITY THEREAFTER. REUSE MATERIALS ONLY AS SPECIFIED OR AS APPROVED BY THE ENGINEER.
- REFER TO NDOT STANDARD PLANS FOR DETAILS.



DESIGNED	TCC	DATE	03/2024	PROJECT NO.	UT-5236-22
DRAWN	TCC	DATE	03/2024	SHEET NO.	14 OF 14
CHECKED	ADL	DATE	03/2024	DRAWINGS	SG-06

LEMMON DRIVE ESTATES SIGNAL DESIGN	
SIGNAL SCHEDULES	

2102 West Grove Parkway  
Pleasant Grove, UT 84062  
(801) 783-5100



**WARNING**  
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IF THIS BAR DOES NOT MEASURE, THEN DRAWING IS NOT TO SCALE

SCALE	VERTICAL	N/A
SCALE	VERTICAL	N/A
REVISIONS	BY	DESCRIPTION
5		
4		
3		
2		
1		



# HIGHLAND

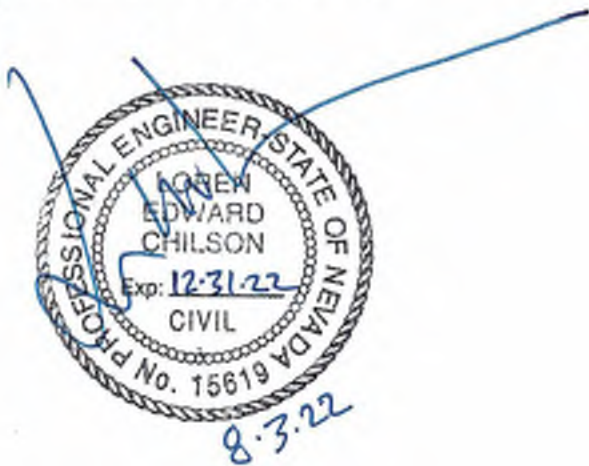
# TRAFFIC IMPACT STUDY

August 3, 2022

PREPARED FOR:

SV Land, LLC

PREPARED BY:



## **YOUR QUESTIONS ANSWERED QUICKLY**

### **Why did you perform this study?**

This Traffic Impact Study evaluates the potential traffic impacts associated with the proposed Highland project in Reno, Nevada. This study of potential transportation impacts was undertaken for planning purposes and to assist in determining what traffic controls or mitigations may be needed to reduce potential impacts, if any are found.

### **What does the project consist of?**

The project consists of 221 single-family units, 300 multifamily units, and 1.7 acres of commercial/retail use. The actual use of the commercial/retail space is not identified at this time and this study assumes 20,000 square feet of the Strip Retail Plaza land use. Any land use mix which generates equal to or less peak hour traffic would be considered equivalent from a traffic impact evaluation perspective.

### **How much traffic will the project generate?**

The project is anticipated to generate approximately 4,671 net new Daily, 309 net new AM peak hour, and 409 net new PM peak hour trips.

### **How will project traffic affect the roadway network?**

The Lemmon Drive / Sky Vista Parkway / Buck Drive intersection will operate at poor levels of service in the 20 year horizon with or without this project. A traffic signal at the Lemmon Drive / Vista Knoll Parkway intersection will provide an overall circulation benefit by adding a new high quality connection to the Walmart shopping center and thereby reducing traffic in the Lemmon Drive / Sky Vista Parkway / Buck Drive intersection. The traffic signal will also provide improved access for the Lemmon Drive Estates development and reduce U-turns at the Lemmon Drive / Military Road intersection. Therefore, a traffic signal is recommended at the Lemmon Drive / Vista Knoll Parkway intersection and will improve operations at the Lemmon Drive / Sky Vista Parkway / Buck Drive intersection.

### **Are any improvements recommended?**

It is recommended that the project construct the following improvements:

- ▶ The remaining Vista Knoll Parkway roadway segment between the North Walmart Driveway and Lemmon Drive as a two lane roadway with one travel lane in each direction and left turn lanes at intersections.
- ▶ Sidewalk connection on Vista Knoll Parkway between the North Walmart Driveway and Lemmon Drive.



- ▶ A traffic signal at the Lemmon Drive / Vista Knoll Parkway intersection, under an RRIF offset agreement, if not constructed by other development(s) prior to this project. It is anticipated that traffic signal warrants will be met under Baseline Plus Project conditions.
- ▶ All project driveways and intersections should provide adequate sight distance triangles in accordance with the current edition of AASHTO's *A Policy on Geometric Design of Highways and Streets*.
- ▶ The project will pay Regional Road Impact fees, or construct traffic signal improvements under an RRIF offset agreement, as mitigation for its impact on the regional roadway network.



**LIST OF FIGURES**

1. Project Location
2. Preliminary Site Plan
3. Baseline Traffic Volumes, Lane Configurations, and Controls
4. Project Trip Distribution and Assignment
5. Redistributed Walmart Trips
6. Baseline Plus Project Traffic Volumes, Lane Configurations, and Controls
7. Future Year Traffic Volumes, Lane Configurations, and Controls
8. Future Year Plus Project Traffic Volumes, Lane Configurations, and Controls

**LIST OF APPENDICES**

Appendix Not Included in Exhibit C

- A. NDOT Crash History Data
- B. Baseline LOS Calculations
- C. Baseline Plus Project LOS Calculations
- D. Future Year LOS Calculations
- E. Future Year Plus Project LOS Calculations



## INTRODUCTION

This report presents the findings of a Traffic Impact Study completed to assess the potential traffic impacts on local intersections associated with the Highland project in Reno, Nevada. This traffic impact study has been prepared to document existing traffic conditions, quantify traffic volumes generated by the proposed project, identify potential impacts, document findings, and make recommendations to mitigate impacts, if any are found. The location of the project is shown on **Figure 1** and the preliminary site plan is shown on **Figure 2**.

### *Study Area and Evaluated Scenarios*

The project consists of 221 single-family units, 300 multifamily units, and 20,000 square feet of commercial/retail space. The project is generally located west of Lemmon Drive between Sky Vista Parkway and Military Road. The study intersections are shown on **Figure 1** and were identified based on project location and assessment of the intersections most likely to be impacted. The following intersections are included in this study:

- ▶ Vista Knoll Parkway / North Walmart Driveway
- ▶ Vista Knoll Parkway / South Walmart Driveway
- ▶ Sky Vista Parkway / Vista Knoll Parkway
- ▶ Lemmon Drive / Vista Knoll Parkway (Project Roadway)
- ▶ Lemmon Drive / Sky Vista Parkway / Buck Drive

This study includes analysis of both the weekday AM and PM peak hours as these are the periods of time in which peak traffic is anticipated to occur. The evaluated development scenarios are:

- ▶ Baseline Conditions
- ▶ Baseline Plus Project Conditions
- ▶ Future Year Conditions (20 year horizon)
- ▶ Future Year Plus Project Conditions

## ANALYSIS METHODOLOGY

Level of service (LOS) is a term commonly used by transportation practitioners to measure and describe the operational characteristics of intersections, roadway segments, and other facilities. This term equates seconds of delay per vehicle at intersections to letter grades “A” through “F” with “A” representing optimum conditions and “F” representing breakdown or over capacity flows.



**Intersections**

The complete methodology for intersection level of service analysis is established in *the Highway Capacity Manual (HCM), 6th Edition* published by the Transportation Research Board (TRB). **Table 1** presents the delay thresholds for each level of service grade at signalized and unsignalized intersections.

**Table 1: Level of Service Definition for Intersections**

Level of Service	Brief Description	Average Delay (seconds per vehicle)	
		Signalized Intersections	Unsignalized Intersections
A	Free flow conditions.	< 10	< 10
B	Stable conditions with some affect from other vehicles.	10 to 20	10 to 15
C	Stable conditions with significant affect from other vehicles.	20 to 35	15 to 25
D	High density traffic conditions still with stable flow.	35 to 55	25 to 35
E	At or near capacity flows.	55 to 80	35 to 50
F	Over capacity conditions.	> 80	> 50

Source: *Highway Capacity Manual, 6th Edition*

Level of service calculations were performed for the study intersections using the Synchro 11 software package with analysis and results reported in accordance with *HCM* methodology.

**Level of Service Policy**

City of Reno

The Regional Transportation Commission’s (RTC) *2050 Regional Transportation Plan (RTP)* establishes level of service criteria for regional roadway facilities in the City of Reno, City of Sparks, and Washoe County. The current Level of Service policy is:

*“All regional roadway facilities projected to carry less than 27,000 ADT at the latest RTP horizon – LOS D or better.”*

*“All regional roadway facilities projected to carry 27,000 or more ADT at the latest RTP horizon – LOS E or better.”*

*“All intersections shall be designed to provide a level of service consistent with maintaining the policy level of service of the intersecting corridors”.*

Within the project vicinity, Lemmon Drive currently carries more than 27,000 ADT. Therefore, LOS “E” was used as the threshold criteria on Lemmon Drive and LOS “D” was used as the threshold criteria on all other study roadways.



Traffic engineering practitioners recognize that exceedance to LOS policies (LOS “E”/“F”) specific to minor side-street approaches during the peak hour(s) does not necessarily indicate an intersection failure or the need for mitigation. Mitigation and management strategies for minor side-street approaches must be evaluated on a case by case basis. This condition (LOS “E”/“F” for a minor side-street approach) commonly exists throughout urban and suburban areas and is manageable in most cases.

## **BASELINE CONDITIONS**

### ***Roadway Facilities***

A brief description of the existing key roadways in the study area is provided below.

*Lemmon Drive* is generally a six-lane north-south roadway with three lanes in each direction plus turn lanes at major intersections south of Military Road to US 395. It is classified as a “Medium Access Control Arterial” in the 2050 RTP. The posted speed limit is 45 mph north of Sky Vista Parkway and 35 mph south of Sky Vista Parkway. A diverging diamond interchange is currently under construction at the US 395 / Lemmon Drive interchange.

*Sky Vista Parkway* is a two-lane east-west roadway with one lane in each direction between Vista Knoll Parkway and Silver Lake Road and four lanes between Lemmon Drive and Vista Knoll Parkway. Near-term improvements on Sky Vista Parkway include widening from two lanes to four lanes between Vista Knoll Parkway and Silver Lake Road. The widening will occur prior to the subject project. It is classified as a “Medium Access Control Arterial” in the 2050 RTP. The posted speed limit is 35 mph within the study area.

*Vista Knoll Parkway* is a three-lane north-south roadway with one lane in each direction and a center turn lane. It is classified as a “Low Access Control Collector” in the 2050 RTP. The posted speed limit is 25 mph within the study area.

### ***Alternative Travel Modes***

Sidewalks exist on both sides of Sky Vista Parkway between Lemmon Drive and Vista Knoll Parkway. A sidewalk is constructed on the north side of Sky Vista Parkway west of Vista Knoll to the RTC bus stop. Additionally, a pedestrian/bike path exists on the south side of Sky Vista Parkway from Silver Lake Road to Vista Knoll Parkway which ties the sidewalk on the south side of Sky Vista Parkway between Vista Knoll and Lemmon Drive. Vista Knoll Parkway has sidewalk on the west side only south of the South Walmart Driveway and the east side only between the North Walmart Driveway and the South Walmart Driveway. Bike lanes exist on both sides of Sky Vista Parkway between Lemmon Drive and Silver Lake Road. The site has adequate access to bicycle and pedestrian facilities.



RTC Bus Route #7 provides public transit service to the project site with an existing stop at the Sky Vista Parkway / Vista Knoll Parkway intersection, as shown in **Exhibit 1**. This site is well served by public transit.

### ***Crash History***

Vehicle crash data was requested from NDOT for the most recent three year period (2017-2020) for the Lemmon Drive / Sky Vista Parkway / Buck Drive and Sky Vista Parkway / Vista Knolls Parkway intersections. A total of 51 crashes and 12 crashes were reported at the Lemmon Drive / Sky Vista Parkway / Buck Drive and Sky Vista Parkway / Vista Knolls Parkway intersections, respectively. The majority of the reported crashes occurring at the Lemmon Drive / Sky Vista Parkway / Buck Drive intersection were classified as angle (23) and rear-end (14) type crashes. Rear-end (6) was the most common reported crash type at the Lemmon Drive / Vista Knoll Parkway intersection. No fatalities were reported at either intersection. Complete crash data is provided in **Appendix A**.



**Exhibit 1. Bus Route #7**

### ***Traffic Volumes***

AM and PM peak hour traffic volumes were collected at the study intersections in March of 2022 with Washoe County School District in regular session. It is important to note that during data collection there was significant construction on Lemmon Drive. The collected turning movement counts were compared to the *Traffic Analysis Memorandum for the Lemmon Drive Capacity Improvements Project* (Jacobs, February 2021). The collected traffic volumes on Lemmon Drive were significantly lower than the Jacobs study (counts collected in 2019). Therefore, existing turning movement volumes at the Lemmon Drive / Sky Vista Parkway / Buck Drive intersection from the Jacobs study were used. In addition, traffic generated by the Quick Quack Car Wash and Lemmon Drive Estates developments were added to the existing traffic volumes to obtain Baseline Conditions traffic volumes. The Baseline Conditions intersection turning movement volumes, lane configurations, and controls are shown on **Figure 3**.

### ***Intersection Level of Service Analysis***

Baseline AM and PM peak hour intersection level of service analysis was performed for the study intersections using Synchro 11 analysis software. **Table 2** shows the Baseline Condition level of service results and the technical calculations are provided in **Appendix B**.





**Table 2: Baseline Intersection Level of Service**

Int. ID	Intersection	Control	AM		PM	
			Delay <sup>1</sup>	LOS	Delay <sup>1</sup>	LOS
1	Vista Knoll Pkwy / North Walmart Dwy	Side Street Stop				
	Overall		4.8	A	7.9	A
	Westbound Approach		9.0	A	10.6	B
2	Vista Knoll Pkwy / South Walmart Dwy	Side Street Stop				
	Overall		1.7	A	3.7	A
	Westbound Approach		9.9	A	18.0	C
	Southbound Left		0.0	A	8.2	A
3	Sky Vista Pkwy / Vista Knoll Pkwy	Signal				
	Overall		12.4	B	19.5	B
4	Lemmon Drive / Vista Knoll Parkway	Side Street Stop				
	Overall		0.7	A	1.2	A
	Westbound Approach		28.5	D	85.5	F
	Southbound Left		11.8	B	25.9	D
5	Lemmon Dr / Sky Vista Pkwy / Buck Dr	Signal				
	Overall		27.5	C	58.6	E

Notes: 1. Delay is reported in seconds per vehicle for the overall intersection for signalized and all way stop controlled intersections, and for the worst approach/movement for side street stop controlled intersections.

Source: Headway Transportation, 2022

As shown in the table, the study intersections currently operate overall within policy level of service thresholds during the AM and PM peak hours. The minor westbound approach at the Lemmon Drive / Vista Knoll Parkway intersection is expected to operate at LOS “F” during the PM peak hour assuming left turns out from the Lemmon Drive Estates project at this location.

## PROJECT CONDITIONS

### Trip Generation

Trip generation rates from the *Trip Generation Manual, 11th Edition* published by the Institute of Transportation Engineers (ITE) were used to develop trip generation estimates for the proposed project. The proposed project consists of 221 single-family units, 300 multifamily units, and 1.7 acres of commercial/retail use. Using a common Floor Area Ratio (FAR) of 0.25, the project could build approximately 18,500 square feet of commercial/retail. This study conservatively uses 20,000 square feet of commercial/retail space. It is important to note that the actual use is not identified at this time and this study assumes the Strip Retail Plaza land use. Any land use mix which generates equal to or less peak hour traffic would be considered equivalent from a traffic impact evaluation perspective.

**Table 3** shows the Daily, AM peak hour, and PM peak hour trip generation estimates.



**Table 3: Trip Generation Estimates**

Land Use (ITE Code)	Size <sup>1</sup>	Trips				
		Daily	AM	AM In/Out	PM	PM In/Out
Single-Family Housing (210)	221 du	2,084	154	40 / 114	208	131 / 77
<i>Internal Reduction</i>		-73	-1	0 / -1	-12	-9 / -3
Multifamily Housing (220)	300 du	2,022	120	29 / 91	153	96 / 57
<i>Internal Reduction</i>		-91	-1	0 / -1	-12	-9 / -3
Strip Retail Plaza (822)	20 ksf	1,088	47	28 / 19	132	66 / 66
<i>Internal Reduction</i>		-120	-2	-2 / 0	-24	-6 / -18
<i>Pass-by Reduction</i>		-239	-8	-4 / -4	-36	-18 / -18
<b>Total Trips</b>		<b>5,194</b>	<b>321</b>	<b>97 / 224</b>	<b>493</b>	<b>293 / 200</b>
<i>Internal Trip Reduction</i>		-284	-4	-2 / -2	-48	-24 / -24
<i>Pass-by Trip Reduction</i>		-239	-8	-4 / -4	-36	-18 / -18
<b>Net New Trips</b>		<b>4,671</b>	<b>309</b>	<b>91 / 218</b>	<b>409</b>	<b>251 / 158</b>

Notes: 1. du = dwelling units; ksf = 1000 square feet

Source: Headway Transportation, 2022

As shown in the table, the project is expected to generate 4,671 net new Daily, 309 net new AM peak hour, and 409 net new PM peak hour trips.

**Trip Distribution**

Project trips were distributed to the adjacent roadway network based on existing traffic volumes, the locations of complimentary land uses, and anticipated travel patterns. Project trips were distributed based on the following:

Residential

- ▶ 65% to/from the south via Lemmon Drive
- ▶ 20% to/from the west via Sky Vista Parkway
- ▶ 10% to/from the north via Lemmon Drive
- ▶ 5% to/from the west via Buck Drive

Commercial / Retail

- ▶ 35% to/from the north via Lemmon Drive
- ▶ 30% to/from the south via Lemmon Drive
- ▶ 25% to/from the west via Sky Vista Parkway
- ▶ 10% to/from the west via Buck Drive

Figure 4 shows the project trip distribution and assignment.



### **Project Access**

Primary access to the project site is proposed via Vista Knolls Parkway. The project proposes to construct the remaining portion of Vista Knolls Parkway from the North Walmart Driveway east to Lemmon Drive as a two lane roadway and left turn lanes at intersections. It is recognized that a traffic signal will be necessary at the proposed Lemmon Drive / Vista Knoll Parkway intersection to enable full access. A traffic signal at the Lemmon Drive / Vista Knoll Parkway intersection will provide an overall circulation benefit by reducing traffic through the Lemmon Drive / Sky Vista Parkway / Buck Drive intersection by creating an additional access to the existing commercial land uses (Walmart, Saint Mary's etc.). The traffic signal will also provide improved access for the Lemmon Drive Estates development and reduce U-turns at the Lemmon Drive / Military Road intersection. The traffic signal should be constructed under an RRIF offset agreement if not constructed by other development(s) prior to this project.

## **BASELINE PLUS PROJECT CONDITIONS**

### **Traffic Volumes**

Project trips (**Figure 4**) were added to the Baseline traffic volumes (**Figure 3**). Additionally, approximately fifteen percent of the existing westbound right and southbound left turning movements at the Sky Vista Parkway / Vista Knoll Parkway intersection were reassigned north to the Lemmon Drive / Vista Knoll Parkway intersection to account for the additional access as shown in **Figure 5**. The resultant Baseline Traffic Volumes, Lane Configurations, and Controls are shown in **Figure 6**.

### **Preliminary Signal Warrant Analysis**

A preliminary traffic signal warrant analysis (Warrant 2: Four-Hour Vehicle Volume) was completed for the proposed Lemmon Drive / Vista Knoll Parkway intersection based on nationally accepted standards outlined in the current edition of the *Manual on Uniform Traffic Control Devices* (MUTCD). The MUTCD states that "If the posted or statutory speed limit or the 85th-percentile speed on the major street exceeds 40 mph, Figure 4C-2 (70% factor) may be used in place of Figure 4C-1. Lemmon Drive has a posted speed of 45 mph north of Sky Vista Parkway. Therefore, Figure 4C-2 (70% factor) was used in this analysis.

Off-peak baseline turning movement volumes were developed by factoring down the Baseline Plus Project PM peak hour turning movement volumes using the following resources:

- ▶ Left-turns into the project site - ITE's *Hourly Distribution of Entering and Exiting Vehicle Trips by Land Use – Multifamily Housing* (220)
- ▶ Southbound approach volumes – historic NDOT traffic volume data (count station 0311145)

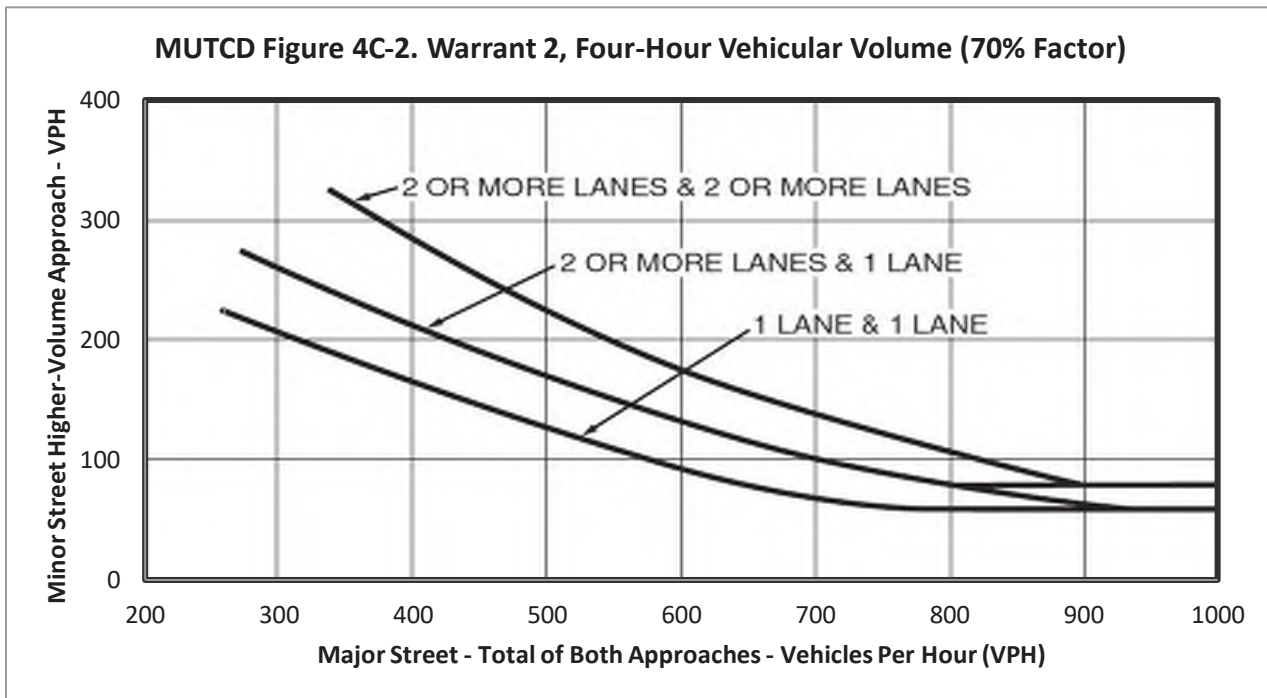
**Table 4** shows the four highest PM peak hours and the volumes are plotted on **Exhibit 2**.



The MUTCD states that “at an intersection with a high volume of left-turn traffic from the major street, the signal warrant analysis may be performed in a manner that considers the higher of the major-street left-turn volumes as the "minor-street" volume and the corresponding single direction of opposing traffic on the major street as the "major-street" volume.” Therefore, this signal warrant analysis is performed with the northbound left turn on Lemmon Drive as the minor street volume and the southbound approach on Lemmon Drive as the major street volume in accordance with accepted MUTCD methodologies.

**Table 4. Four Highest PM Peak Hours**

Hour	% of Inbound Peak Hour	Hourly Northbound Left Turn (Minor Street)	% of Peak Hour Segment Volume	Hourly Southbound Approach Volume (Major Street)
3 PM – 4 PM	72.8	96	87.0	923
4 PM – 5 PM	87.7	116	100.0	1060
5 PM – 6 PM	100.0	132	96.6	1024
6 PM – 7 PM	83.3	110	71.6	759



**Exhibit 2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)**

As shown in the exhibit, all four plotted points fall above the 2 or more lanes (southbound) & 1 lane (northbound left) curve. Thus, it is anticipated that the four-hour vehicular volume signal warrant will be met under Baseline Plus Project conditions.



**Intersection Level of Service**

**Table 5** shows the Baseline Plus Project level of service results and the technical calculations are provided in **Appendix C**. The Lemmon Drive / Vista Knoll Parkway intersection is analyzed with a traffic signal and full access.

**Table 5: Baseline Plus Project Intersection Level of Service**

Int. ID	Intersection	Control	AM		PM	
			Delay <sup>1</sup>	LOS	Delay <sup>1</sup>	LOS
1	Vista Knoll Pkwy / North Walmart Dwy	Side Street Stop				
	Overall		3.9	A	8.8	A
	Eastbound Approach		8.8	A	9.0	A
	Westbound Approach		10.1	B	16.1	C
	Northbound Left		7.4	A	7.4	A
	Southbound Left		7.4	A	7.6	A
2	Vista Knoll Pkwy / South Walmart Dwy	Side Street Stop				
	Overall		2.1	A	6.3	A
	Eastbound Approach		9.3	A	11.0	B
	Westbound Approach		11.3	B	32.1	D
	Northbound Left		7.5	A	8.0	A
	Southbound Left		7.7	A	8.4	A
3	Sky Vista Pkwy / Vista Knoll Pkwy	Signal				
	Overall		13.4	B	30.8	C
4	Lemmon Drive / Vista Knoll Parkway	Signal				
	Overall		13.7	B	14.2	B
5	Lemmon Dr / Sky Vista Pkwy / Buck Dr	Signal				
	Overall		29.0	C	54.6	D

Notes: 1. Delay is reported in seconds per vehicle for the overall intersection for signalized and all way stop controlled intersections, and for the worst approach/movement for side street stop controlled intersections.

Source: Headway Transportation, 2022

As shown in the table, the study intersections and driveways are expected to operate overall within level of service policy under Baseline Plus Project conditions.

**FUTURE YEAR CONDITIONS**

The Future Year analysis estimates operating conditions for the 20 year horizon.

**Traffic Volume Forecasts**

Future Year (20-year horizon) background traffic volumes were obtained from Scenario 2 within the *Traffic Analysis Memorandum for the Lemmon Drive Capacity Improvements Project* (Jacobs, February 2021). This subject property was included as the “Lemmon & Sky Vista Shopping Center”. Trips assigned to the



Lemmon Drive / Vista Knoll Parkway intersection in the Jacobs study were removed from the study intersections for this background (without project) analysis scenario. **Figure 7** shows the Future Year (No Project) traffic volumes at the study intersections.

**Intersection Level of Service**

AM and PM peak hour intersection level of service analysis was performed for the study intersections using Synchro analysis software. **Table 6** shows the Future Year conditions level of service results and the technical calculations are provided in **Appendix D**. Signal timing was optimized for future volumes and signal coordination using Synchro software at the Lemmon Drive / Sky Vista Parkway / Buck Drive intersection.

**Table 6: Future Intersection Level of Service**

Int. ID	Intersection	Control	AM		PM	
			Delay <sup>1</sup>	LOS	Delay <sup>1</sup>	LOS
1	Vista Knoll Pkwy / North Walmart Dwy	Side Street Stop				
	Overall		4.8	A	8.2	A
	Westbound Approach		9.0	A	11.0	B
2	Vista Knoll Pkwy / South Walmart Dwy	Side Street Stop				
	Overall		1.7	A	4.4	A
	Westbound Approach		10.1	B	21.1	C
	Southbound Left	0.0	A	8.3	A	
3	Sky Vista Pkwy / Vista Knoll Pkwy	Signal				
	Overall		15.0	B	20.4	C
4	Lemmon Drive / Vista Knoll Parkway	Side Street Stop				
	Overall		4.6	A	11.4	B
	Westbound Approach		>300	F	>300	F
	Southbound Left		21.5	C	85.7	F
5	Lemmon Dr / Sky Vista Pkwy / Buck Dr	Signal				
	Overall		97.9	F	133.7	F

Notes: 1. Delay is reported in seconds per vehicle for the overall intersection for signalized and all way stop controlled intersections, and for the worst approach/movement for side street stop controlled intersections.

Source: Headway Transportation, 2022

As shown in the table, both the Lemmon Drive / Vista Knoll Parkway (unsignalized) with full movements from Lemmon Drive Estates and the Lemmon Drive / Sky Vista Parkway / Buck Drive intersections are expected to operate at LOS “F” during the AM and PM peak hours. This analysis assumes that the Lemmon Drive / Sky Vista Parkway intersection will be coordinated with the future diverging diamond interchange (DDI). All other study intersections are expected to operate within policy level of service thresholds under Future Year (no project) conditions.



## FUTURE YEAR PLUS PROJECT CONDITIONS

### Traffic Volumes

Project trips (**Figure 4**) were added to the Future Year traffic volumes (**Figure 7**) to develop the Future Year Plus Project conditions traffic volumes, shown on **Figure 8**. Similar to the Baseline Plus Project scenario, approximately fifteen percent of the future (no project) westbound right and southbound left turning movements at the Sky Vista Parkway / Vista Knoll Parkway intersection were reassigned north to the Lemmon Drive / Vista Knoll Parkway intersection to account for the additional access.

### Intersection Level of Service

AM and PM peak hour intersection level of service analysis was performed for the study intersections based on the Future Year Plus Project traffic volumes. **Table 7** shows the level of service results and the technical calculations are provided in **Appendix E**.

**Table 7: Future Plus Project Intersection Level of Service**

Int. ID	Intersection	Control	AM		PM	
			Delay <sup>1</sup>	LOS	Delay <sup>1</sup>	LOS
1	Vista Knoll Pkwy / North Walmart Dwy	Side Street Stop				
	Overall		4.0	A	9.8	A
	Eastbound Approach		8.8	A	9.1	A
	Westbound Approach		10.2	B	17.8	C
	Northbound Left		7.4	A	7.6	A
	Southbound Left		7.4	A	9.1	A
2	Vista Knoll Pkwy / South Walmart Dwy	Side Street Stop				
	Overall		2.2	A	8.8	A
	Eastbound Approach		9.4	A	11.3	B
	Westbound Approach		11.5	B	45.0	E
	Northbound Left		7.5	A	8.1	A
	Southbound Left		7.7	A	8.5	A
3	Sky Vista Pkwy / Vista Knoll Pkwy	Signal				
	Overall		16.1	B	28.5	C
4	Lemmon Drive / Vista Knoll Parkway	Signal				
	Overall		19.7	B	17.6	B
5	Lemmon Dr / Sky Vista Pkwy / Buck Dr	Signal				
	Overall		97.9	F	138.0	F

Notes: 1. Delay is reported in seconds per vehicle for the overall intersection for signalized and all way stop controlled intersections, and for the worst approach/movement for side street stop controlled intersections.

Source: Headway Transportation, 2022

As shown in the table, it is anticipated that the westbound approach at the Vista Knoll Parkway / South Walmart Driveway will operate at LOS “E” under Future Plus Project conditions. During the PM peak hour,



it is anticipated that the 95<sup>th</sup> percentile queues on the westbound approach at the Vista Knoll Parkway / South Walmart Driveway intersection will be 5.4 vehicles (135 feet). The existing westbound approach currently has at least 150 feet of storage which is anticipated to contain queuing vehicles. Additionally, traffic can also utilize the North Walmart Driveway during peak hours which is anticipated to operate at LOS "C". This is determined to be a manageable condition and no improvements are recommended.

The Lemmon Drive / Sky Vista Parkway / Buck Drive intersection will operate at poor levels of service in the 20 year horizon with or without this project. A traffic signal at the Lemmon Drive / Vista Knoll Parkway intersection will provide an overall circulation benefit by adding a new high quality connection to the Walmart shopping center and thereby reducing traffic in the Lemmon Drive / Sky Vista Parkway / Buck Drive intersection. The traffic signal will also provide improved access for the Lemmon Drive Estates development and reduce U-turns at the Lemmon Drive / Military Road intersection. Therefore, a traffic signal is recommended at the Lemmon Drive / Vista Knoll Parkway intersection and will improve operations at the Lemmon Drive / Sky Vista Parkway / Buck Drive intersection.

95<sup>th</sup> percentile queues of approximately 150' or less are anticipated for the northbound left movement at the Lemmon Drive / Vista Knoll Parkway intersection. The Washoe County RTC is currently constructing a 450' left turn pocket that will adequately provide storage for queuing vehicles.

## CONCLUSIONS

The following is a list of our key findings and recommendations:

- ▶ The proposed project includes 221 single-family units, 300 multifamily units, and up to 20,000 square feet of commercial/retail space. It is important to note that the actual commercial/retail use is not identified at this time and this study assumes the Strip Retail Plaza land use. Any land use mix which generates equal to or less peak hour traffic is considered equivalent from a traffic impact evaluation perspective.
- ▶ The project is anticipated to generate approximately 4,671 net new Daily, 309 net new AM peak hour, and 409 net new PM peak hour trips on the external roadway network.
- ▶ A traffic signal at the Lemmon Drive / Vista Knoll Parkway intersection will provide an overall circulation benefit by adding a new high quality connection to the Walmart shopping center and thereby reducing traffic in the Lemmon Drive / Sky Vista Parkway / Buck Drive intersection. The traffic signal will also provide improved access for the Lemmon Drive Estates development and reduce U-turns at the Lemmon Drive / Military Road intersection. Therefore, a traffic signal is recommended at the Lemmon Drive / Vista Knoll Parkway intersection and will improve operations at the Lemmon Drive / Sky Vista Parkway / Buck Drive intersection.





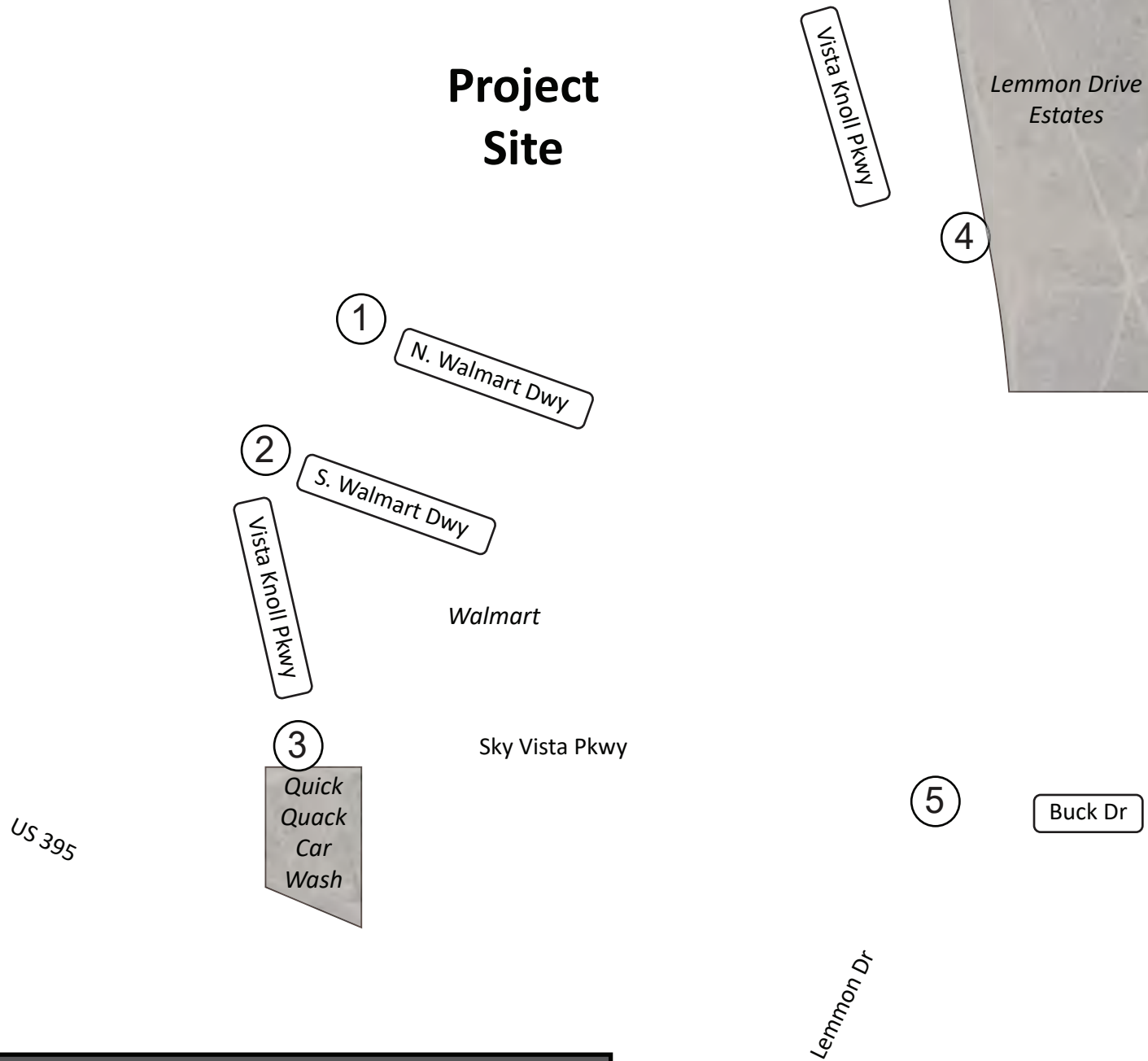
- ▶ With installation of a traffic signal, all study intersections are expected to operate within policy level of service thresholds under Baseline Plus Project conditions.
- ▶ Under Future Year (no project) conditions, the Lemmon Drive / Sky Vista Parkway / Buck Drive intersection is anticipated to operate at poor levels of service (LOS "F").
- ▶ Under Future Year Plus Project conditions, the Lemmon Drive / Sky Vista Parkway / Buck Drive intersections are anticipated to operate at poor levels of service (LOS "F").

The project will construct the following improvements:

- ▶ The remaining Vista Knoll Parkway roadway segment between the North Walmart Driveway and Lemmon Drive as a two lane roadway with one travel lane in each direction and left turn lanes at intersections.
- ▶ Sidewalk connection on Vista Knoll Parkway between the North Walmart Driveway and Lemmon Drive.
- ▶ A traffic signal at the Lemmon Drive / Vista Knoll Parkway intersection, under an RRIF offset agreement, if not constructed by other development(s) prior to this project. It is anticipated that traffic signal warrants will be met under Baseline Plus Project conditions.
- ▶ All project driveways and intersections should provide adequate sight distance triangles in accordance with the current edition of AASHTO's A Policy on Geometric Design of Highways and Streets.
- ▶ The project will pay Regional Road Impact fees, or construct traffic signal improvements under an RRIF offset agreement, as mitigation for its impact on the regional roadway network.



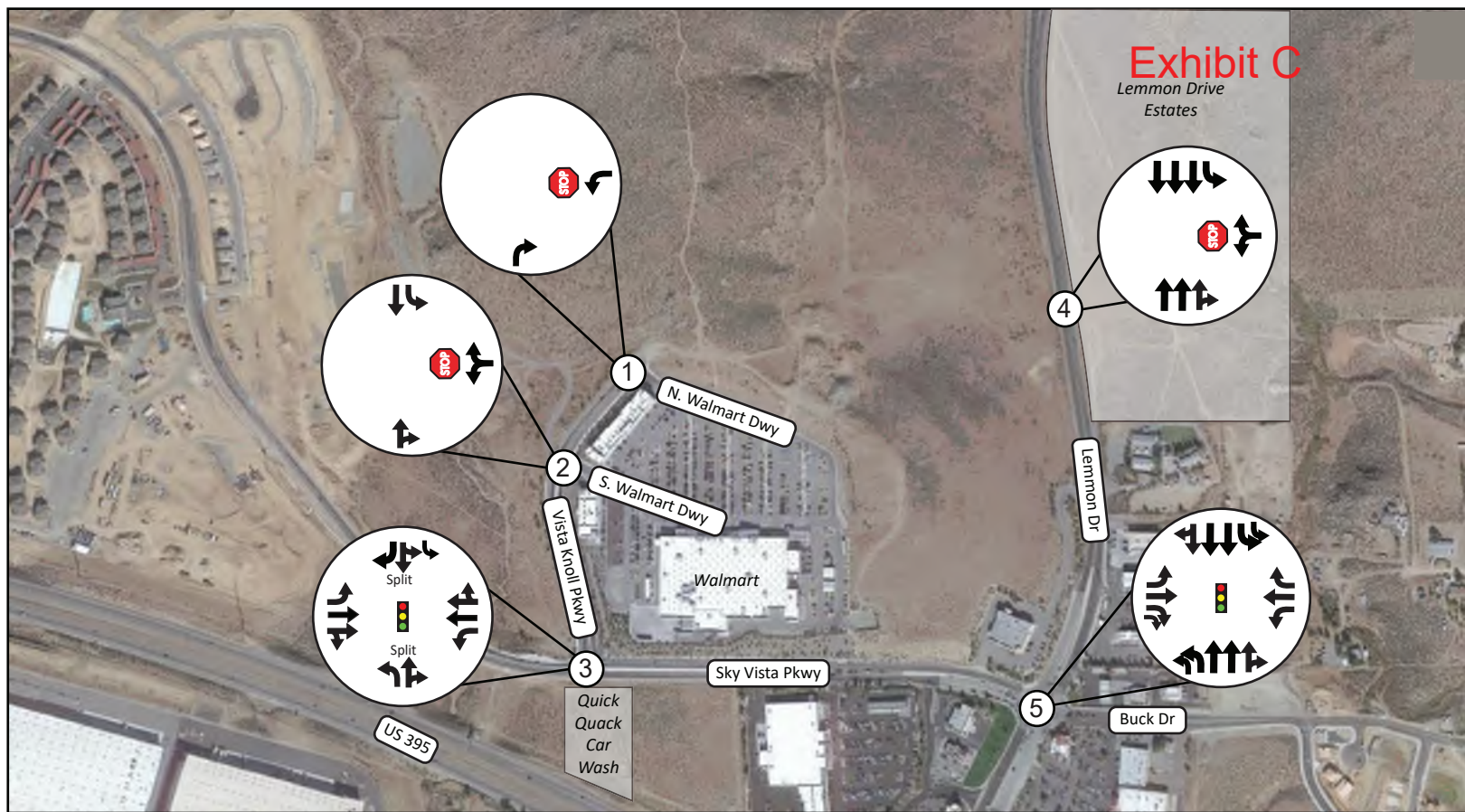
# Project Site



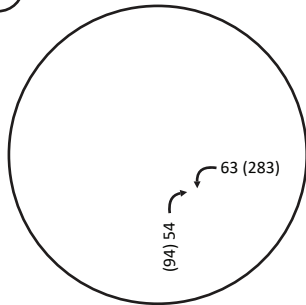
## Study Locations

- ① Vista Knoll Parkway / North Walmart Driveway
- ② Vista Knoll Parkway / South Walmart Driveway
- ③ Sky Vista Parkway / Vista Knoll Parkway
- ④ Lemmon Drive / Vista Knoll Parkway
- ⑤ Lemmon Drive / Sky Vista Parkway / Buck Drive

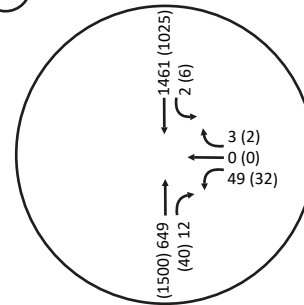




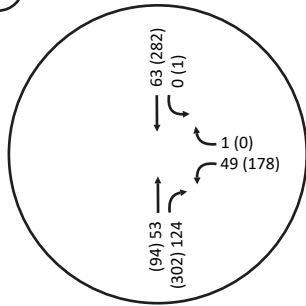
**1** Vista Knoll Pkwy / N. Walmart Dwy



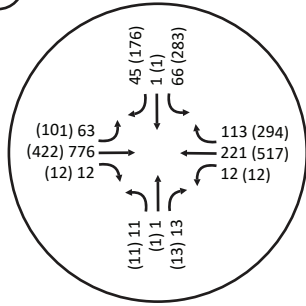
**4** Lemmon Dr / Vista Knoll Pkwy



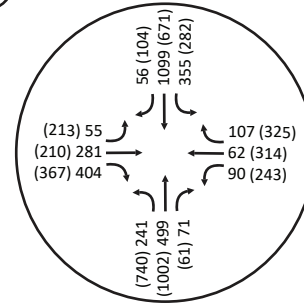
**2** Vista Knoll Pkwy / S. Walmart Dwy



**3** Sky Vista Pkwy / Vista Knoll Pkwy

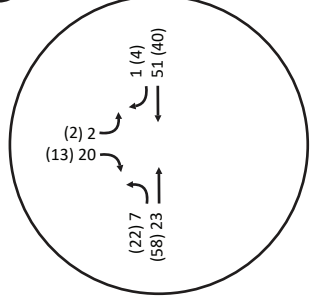


**5** Lemmon Dr / Sky Vista Pkwy / Buck Dr

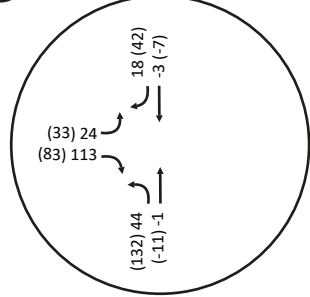




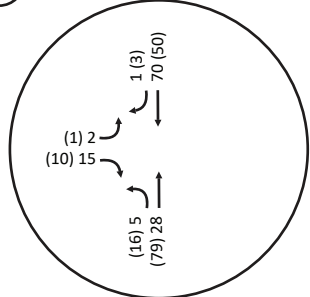
① Vista Knoll Pkwy / N. Walmart Dwy



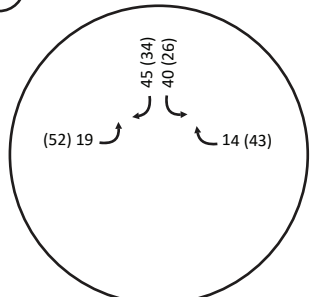
④ Lemmon Dr / Vista Knoll Pkwy



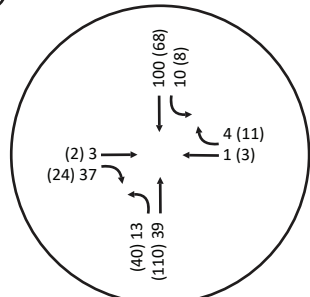
② Vista Knoll Pkwy / S. Walmart Dwy



③ Sky Vista Pkwy / Vista Knoll Pkwy

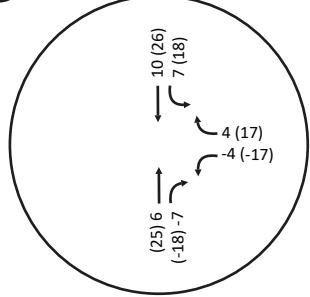


⑤ Lemmon Dr / Sky Vista Pkwy / Buck Dr

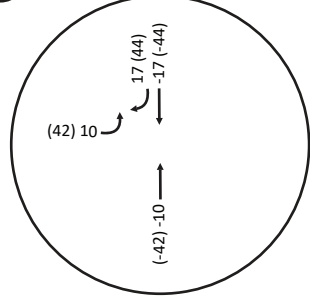




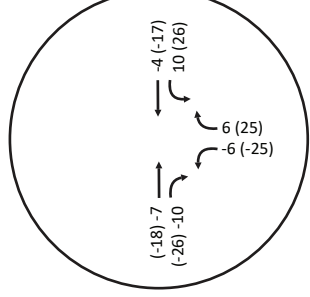
1 Vista Knoll Pkwy / N. Walmart Dwy



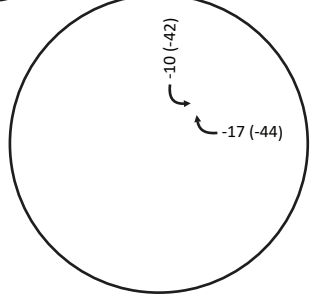
4 Lemmon Dr / Vista Knoll Pkwy



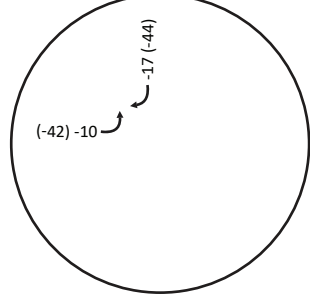
2 Vista Knoll Pkwy / S. Walmart Dwy

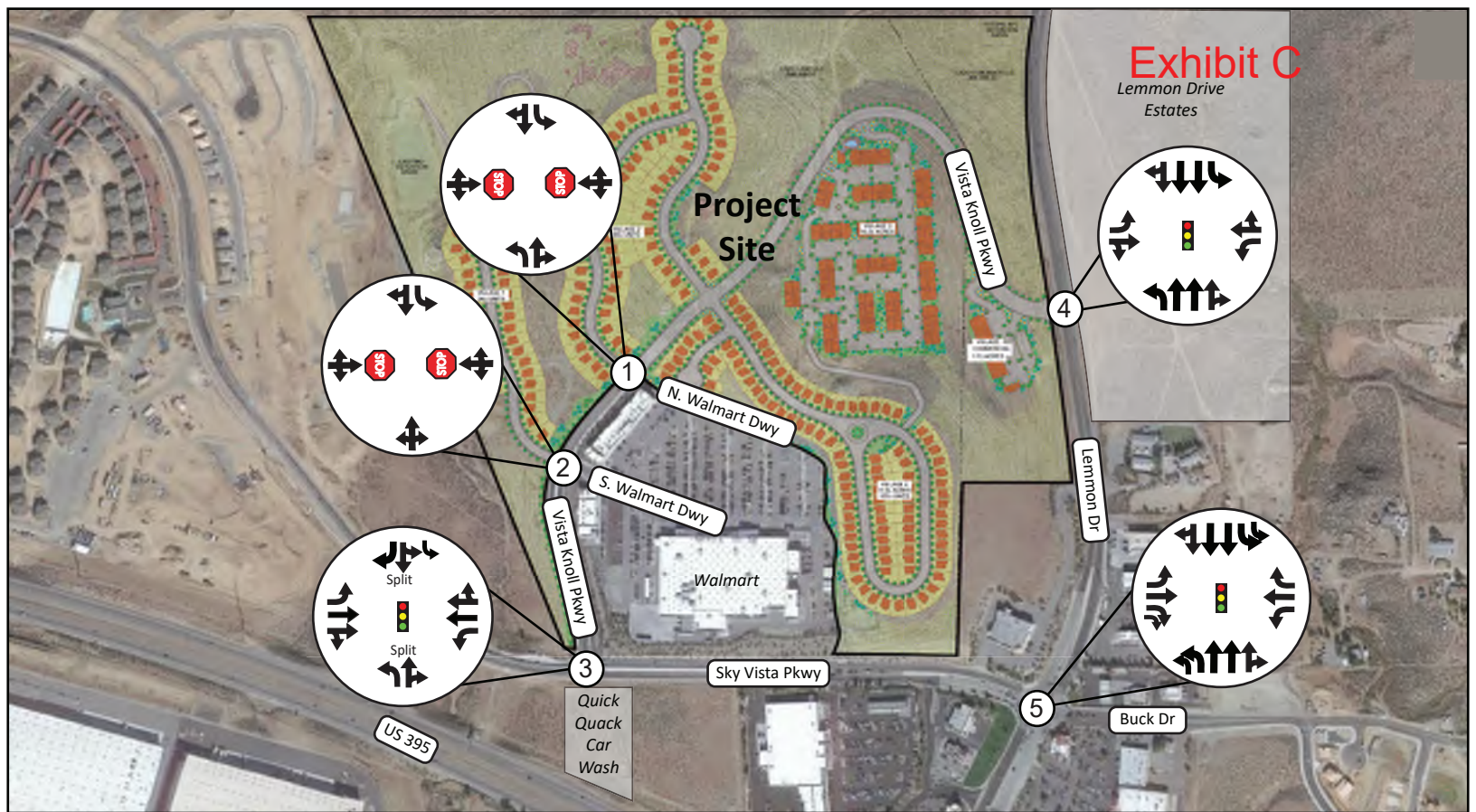


3 Sky Vista Pkwy / Vista Knoll Pkwy

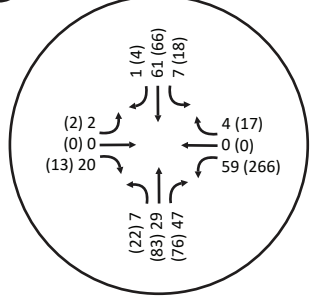


5 Lemmon Dr / Sky Vista Pkwy / Buck Dr

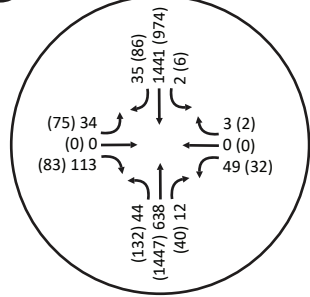




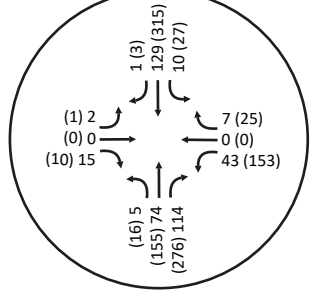
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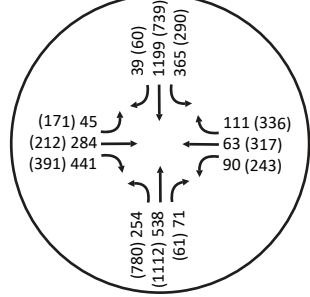
**4** Lemmon Dr / Vista Knoll Pkwy



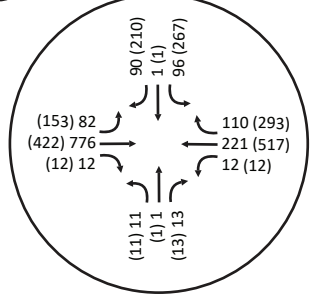
**2** Vista Knoll Pkwy / S. Walmart Dwy

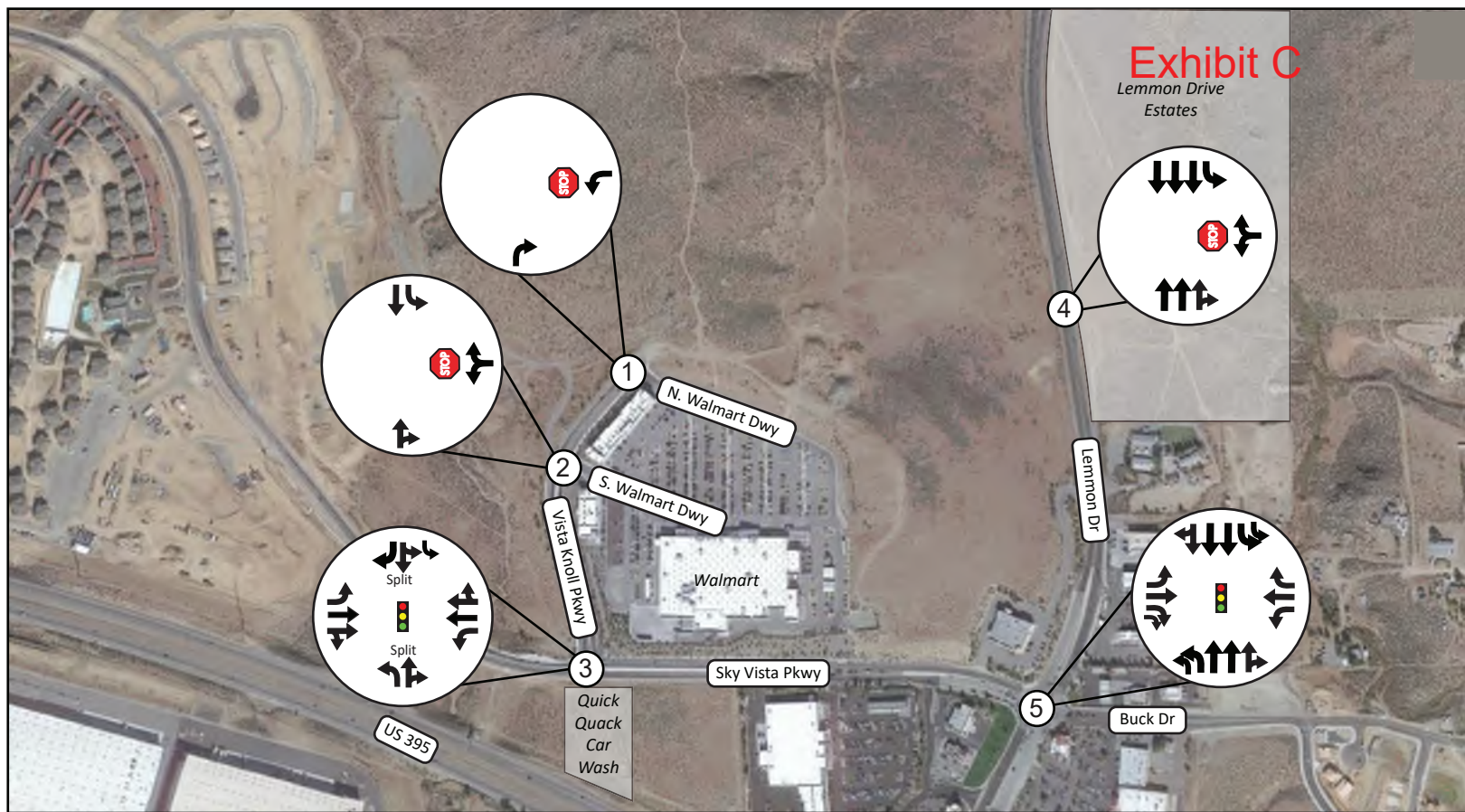


**5** Lemmon Dr / Sky Vista Pkwy / Buck Dr

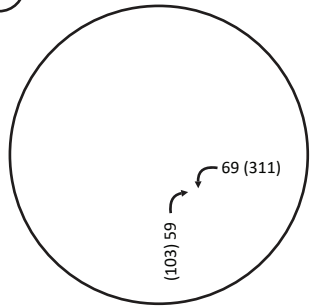


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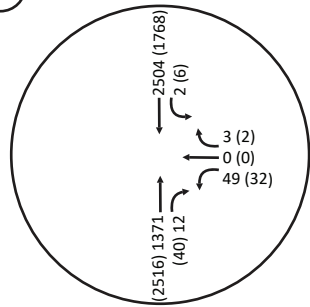




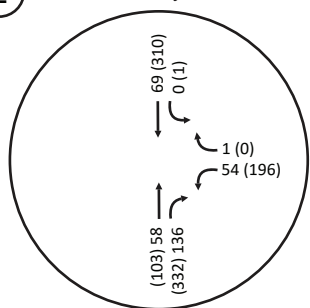
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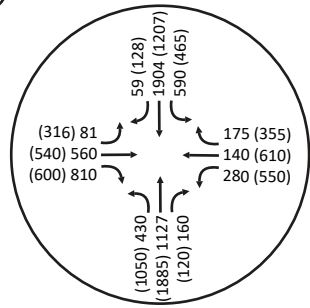
4 Lemmon Dr / Vista Knoll Pkwy



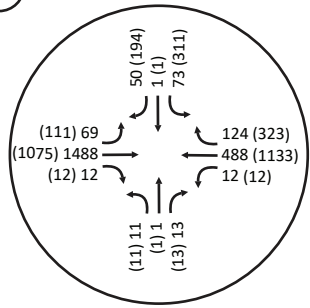
2 Vista Knoll Pkwy / S. Walmart Dwy



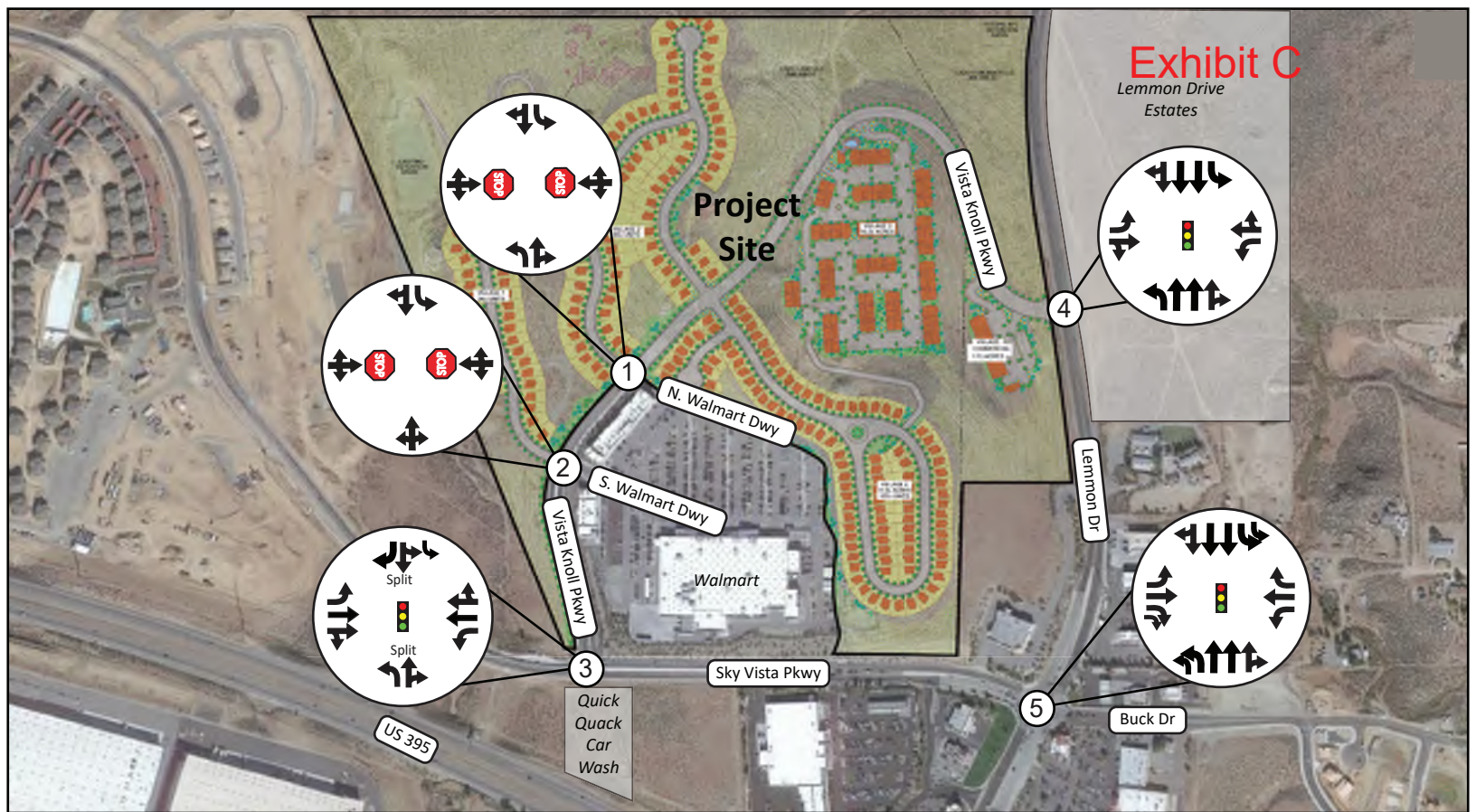
5 Lemmon Dr / Sky Vista Pkwy / Buck Dr



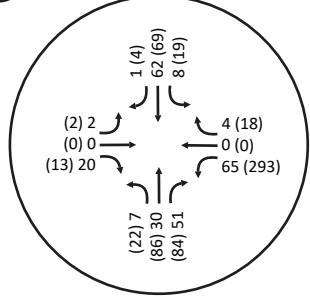
3 Sky Vista Pkwy / Vista Knoll Pkwy



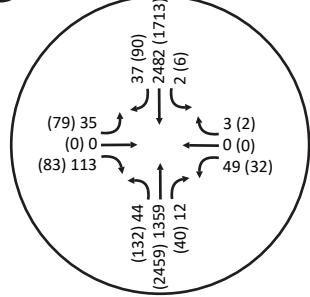




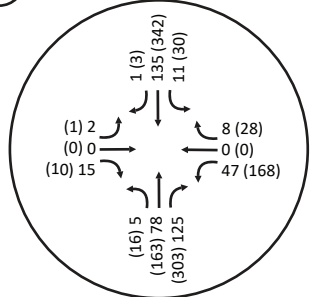
**1** Vista Knoll Pkwy / N. Walmart Dwy



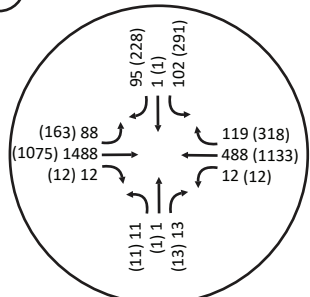
**4** Lemmon Dr / Vista Knoll Pkwy



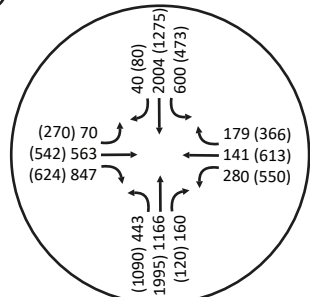
**2** Vista Knoll Pkwy / S. Walmart Dwy



**3** Sky Vista Pkwy / Vista Knoll Pkwy



**5** Lemmon Dr / Sky Vista Pkwy / Buck Dr



# Appendix A

## NDOT Crash Data History

Appendix not included in Exhibit C



# Proposal for Lemmon Estates Drive Project COR-03 Rev 01



## Campbell Construction Co., Inc.

7788 White Fir Street

Reno, NV 89431

Contact: Ric Padilla

Phone: 775-677-9111 x1011

Fax: 775-677-9191

Quote To: Lafferty Communities  
2000 Crow Canyon Place, Suite 350  
San Ramon, CA 94583  
Phone: (925) 355-1305  
Email: GGarchar@laffertycommunities.com  
Attention: Greg Garchar

Estimate No.: 22-025C-03R1  
Date of Plans: SEE CONDITIONS  
Plan Pages: SEE CONDITIONS  
Bid Date: 5/19/23  
Revision Date: 4/30/24

Proposal valid for 30 days.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
<b>GENERAL CONDITIONS</b>					
100010	Mobilization	1.00	LS	5,000.00	5,000.00
<b>General Conditions Subtotal</b>					<b>5,000.00</b>
<b>DEMOLITION</b>					
101040	Saw Cut Asphalt	826.00	LF	6.45	5,327.70
101050	Saw Cut Concrete	530.00	LF	10.40	5,512.00
101060	Demo Asphalt 4" Thick	1,735.00	SF	2.25	3,903.75
101070	Demo Concrete Flatwork 4" Thick	15,410.00	SF	1.95	30,049.50
101080	Demo Type I Median Curb	790.00	LF	12.40	9,796.00
<b>Demolition Subtotal</b>					<b>54,588.95</b>
<b>GRADING</b>					
200211	Finish Subgrade - Roadway	9,830.00	SF	1.30	12,779.00
200212	Finish Subgrade - Concrete Flatwork	6,030.00	SF	2.50	15,075.00
<b>Grading Subtotal</b>					<b>27,854.00</b>
<b>CONCRETE</b>					
800012	Type I Median Curb w/ 6" Base	530.00	LF	55.00	29,150.00
800015	Island Infill 4" Concrete w/ 4" Base	6,030.00	SF	13.00	78,390.00
<b>Concrete Subtotal</b>					<b>107,540.00</b>
<b>PAVING</b>					
900015	4" AC w/ 6" Base	9,810.00	SF	5.80	56,898.00
900017	4" AC on Existing Base	1,055.00	SF	3.65	3,850.75
900210	Slurry Seal - Roadways	10,865.00	SF	1.70	18,470.50
<b>Paving Subtotal</b>					<b>79,219.25</b>

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
<b>MISCELLANEOUS</b>					
950420	Signs & Striping	1.00	LS	24,500.00	24,500.00
	<b>Miscellaneous Subtotal</b>				<b>24,500.00</b>
	<b>Base Contract Subtotal</b>				<b>298,702.20</b>
<b>ALTERNATES</b>					
2200010	Over-Exc Turn Pocket 3' Deep	1,093.00	CY	8.55	9,345.15
2200011	Load Out & Off-Haul Expansive Clays	1,093.00	CY	23.05	25,193.65
2200015	Imp & Place Struct Fill (Turn Pocket 3' Deep)	1,093.00	CY	49.90	54,540.70
	<b>Alternates Subtotal</b>				<b>89,079.50</b>
<b>GRAND TOTAL</b>					<b>\$387,781.70</b>

**NOTES:**

## TRAFFIC SIGNAL MODIFICATIONS ON LEMMON DRIVE

1. All Electrical work is excluded from this proposal. Electrical work to be performed by others.
2. Pricing is based on CFA Civil Drawings Dated 3/11/24 Sheets C9.0 through C9.8.
3. Pricing based on this being a City of Reno Roadway.
4. 4" Asphalt to be Two Lifts Type II PG64-22 50 Blow 4% Voids w/ Rap and Lime in lieu of 4" PG64-28NV per City of Reno Standards. If the original asphalt thickness is more than stated on the drawings, we will be entitled to a price adjustment.
5. A Type II Slurry Seal is to be provided in lieu of the Chip Seal called out on Detail 1/C9.3.

All conditions and exclusions from our original proposal apply.

Respectfully Submitted,

Ric Padilla  
 Estimator / Project Manager  
 Campbell Construction Co., Inc.  
 NCL# 47204 License Limit - Unlimited CCL# 794570

**EXHIBIT 'A'**

**Summit Line Construction, Inc.**

Item #	Item Description	Qty.	Unit	Unit Cost	Total Cost	Underground Infrastructure Totals
1	3" SCH40 PVC Conduit	1	LS	\$14,880.00	\$14,880.00	\$14,880.00
2	Trench & Backfill	1	LS	\$35,607.00	\$35,607.00	\$35,607.00
3	Metered Service w/ BBS & Foundation	1	LS	\$24,557.00	\$24,557.00	\$4,285.00
4	N-36 NV Energy Pull Box	1	LS	\$2,033.00	\$2,033.00	\$2,033.00
5	#5 T/R Pull Box	1	LS	\$10,764.00	\$10,764.00	\$10,764.00
6	#9/9E T/R Pull Box	1	LS	\$5,396.00	\$5,396.00	\$5,396.00
7	Type 30/35/30-A & 35-A Pole & Foundation	1	LS	\$233,631.00	\$233,631.00	\$57,000.00
8	1-A Pole & Foundation	1	LS	\$3,573.00	\$3,573.00	\$2,100.00
9	1W3C Signal Head	1	LS	\$21,135.00	\$21,135.00	
10	Pedestrian Signal Head	1	LS	\$9,865.00	\$9,865.00	
11	Gridsmart Camera System	1	LS	\$39,567.00	\$39,567.00	
12	25C Signal Cable	1	LS	\$19,704.00	\$19,704.00	
13	10C Signal Cable	1	LS	\$7,052.00	\$7,052.00	
14	Emergency Vehicle Detector	1	LS	\$11,518.00	\$11,518.00	
15	EVD Cable	1	LS	\$2,892.00	\$2,892.00	
16	Cable - 12C - Multi Mode ( Tie-in to Existing Fiber From Buck to A	1	LS	\$23,818.00	\$23,818.00	
17	City of Reno Turn On	1	LS	\$3,836.00	\$3,836.00	
18	IISNS	1	LS	\$42,019.00	\$42,019.00	
19	Controller & Cabinet Assembly	1	LS	\$34,359.00	\$34,359.00	
20	Cabinet Foundation	1	LS	\$5,037.00	\$5,037.00	\$5,037.00
21	Pedestrian Push Button Station	1	LS	\$9,866.00	\$9,866.00	
<b>Total Proposal:</b>					<b>\$561,109.00</b>	<b>\$137,102.00</b>

**EXHIBIT "D"**  
**(Letter of Approval)**



**REGIONAL TRANSPORTATION COMMISSION**

*Metropolitan Planning • Public Transportation & Operations • Engineering & Construction*

Metropolitan Planning Organization of Washoe County, Nevada

May 16, 2024

Mr. Greg Garchar  
Lafferty Communities  
Lemmon Drive Villas Property, LLC  
5000 Executive Parkway, Suite 350  
San Ramon CA 94583

Subject: Letter of Approval for Regional Road Impact Fee Waivers, April 16, 2024 Revision

Development of Record: Lemmon Drive Estates and Highland Project

Dear Garchar,


The Regional Road Impact Fee (RRIF) Administrators for the RTC and Washoe County have reviewed and approved your application, dated April 16, 2024, for the installation of the traffic signal system at the intersection of Lemmon Drive/Vista Knolls Parkway/Sun Set View. The amount of RRIF waiver is specific to the impact fees generated through development within Washoe County in the amount of \$534,635. A RRIF Offset Agreement for this work is being prepared and will be forwarded to the RTC Board and Washoe County Commission with a recommendation for approval. Upon approval and execution of the Offset Agreement by these bodies, the agreement will be forwarded to the Developer of Record for signature.

Please feel free to contact Jeff Wilbrecht, Engineering Manager for the RTC, at (775) 335-1872 should you have any questions regarding this subject.

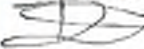
Sincerely,

**REGIONAL TRANSPORTATION COMMISSION  
RRIF ADMINISTRATOR**

**WASHOE COUNTY  
RRIF ADMINISTRATOR**

DocuSigned by:  
  
3AA1800C54C142F

Dale Keller, P.E.  
Engineering Director

DocuSigned by:  
  
1BB4050A9E664C3

Dwayne Smith, P.E.  
Washoe County RRIF Administrator

DK/JW

Cc: Mitch Fink P.E., Washoe County

File: RRIF Offset Agreement # 513011

**EXHIBIT “E”  
(The Developer of Record QA/QC Program  
And  
RTC Special Technical Specifications  
For  
Regional Road Impact Fee Projects)**



**SPECIAL TECHNICAL SPECIFICATIONS**

<b>1.01</b>	<b>INSPECTION AND TESTING</b>	<b>1.15</b>	<b>BRIDGE DECKS - Deleted</b>
	1.01A <u>ASPHALT CEMENT</u>	<b>1.16</b>	<b>SLURRY SEAL</b>
	1.01B <u>BITUMINOUS PLANTMIX</u>	<b>1.17</b>	<b>MICRO-SURFACE - Deleted</b>
<b>1.02</b>	<b>REMOVAL OF EXISTING IMPROVEMENTS</b>	1.17A	<u>GENERAL</u>
<b>1.03</b>	<b>TREE ROOT MITIGATION - Deleted</b>	1.17B	<u>CONTRACTOR PERSONNEL</u>
<b>1.04</b>	<b>SUBGRADE PREPARATION- Deleted</b>	1.17C	<u>MATERIAL</u>
<b>1.05</b>	<b>OVEREXCAVATION AND STABILIZATION - Deleted</b>	1.17D	<u>MIX DESIGN</u>
<b>1.06</b>	<b>GEOSYNTHETICS - Deleted</b>	1.17E	<u>PROPORTIONING</u>
	1.06A <u>SEPARATION</u>	1.17F	<u>MIXING AND SPREADING EQUIPMENT</u>
	1.06B <u>STABILIZATION</u>	1.17G	<u>PLACEMENT</u>
	1.06C <u>REINFORCEMENT</u>	<b>1.18</b>	<b>PAVEMENT MARKINGS</b>
<b>1.07</b>	<b>TRENCH EXCAVATION</b>	1.18A	<u>TRAFFIC PAINT</u>
<b>1.08</b>	<b>PIPE - Deleted</b>	1.18B	<u>THERMOPLASTIC</u>
<b>1.09</b>	<b>ROADBED MODIFICATION - Deleted</b>	1.18C	<u>RAISED MARKERS</u>
<b>1.10</b>	<b>AGGREGATE BASE - Deleted</b>	<b>1.19</b>	<b>FLEXIBLE MEDIAN ISLAND OBJECT MARKERS</b>
<b>1.11</b>	<b>CEMENT TREATED BASE - Deleted</b>	<b>1.20</b>	<b>CHANNELIZERS</b>
	1.11A COMPOSITION OF MIXTURES	<b>1.21</b>	<b>IMPACT ATTENUATOR - Deleted</b>
	1.11B MIXING	<b>1.22</b>	<b>TRAFFIC SIGNS</b>
	1.11C SPREADING	<b>1.23</b>	<b>TRAFFIC SIGNALS</b>
	1.11D PROTECTION AND CURING	1.23A	<u>LOOP DETECTORS</u>
<b>1.12</b>	<b>PORTLAND CEMENT CONCRETE</b>	1.23B	<u>TEMPORARY MODIFICATIONS DURING CONSTRUCTION</u>
	1.12A COMPOSITION OF MIXTURES	1.23C	<u>CAMERAS</u>
	1.12B <u>SIDEWALK, CURB AND GUTTER</u>	<b>1.24</b>	<b>UTILITY ADJUSTMENTS</b>
	1.12C <u>THRUST BLOCKS</u>	1.24A	<u>VERIFICATION OF DEPTH</u>
	1.12D <u>RETAINING WALLS</u>	1.24B	<u>UTILITY MANHOLE AND VAULT ADJUSTMENTS</u>
	1.12E <u>PAVING</u>	1.24C	<u>MANHOLE PROTECTION PLAN</u>
	1.12F <u>UTILITY ADJUSTMENTS</u>	<b>1.25</b>	<b>SURVEY MONUMENTS</b>
<b>1.13</b>	<b>DETECTABLE SURFACE WARNING TILES</b>	<b>1.26</b>	<b>CERTIFICATES OF COMPLIANCE</b>
<b>1.14</b>	<b>BITUMINOUS PLANTMIX</b>		
	1.14A <u>COMPOSITION OF MIXTURES</u>		
	1.14B <u>PAVING</u>		
	I <u>SPREADING AND FINISHING</u>		
	II <u>ACCEPTANCE</u>		
	III <u>MITIGATION</u>		
	IV <u>SPECIAL PAVING CONSIDERATIONS</u>		
	V <u>TACK COAT</u>		
	VI <u>LONGITUDINAL JOINTS</u>		
	1.14C <u>PERMANENT PATCHING</u>		

**1.01 INSPECTION AND TESTING**

Quality Assurance testing and inspection will be provided by the Agency. Quality Control shall be the Contractor's responsibility. All samples shall be furnished by the Contractor without cost to the Regional Transportation Commission of Washoe County (hereinafter designated "RTC" and/or "Agency"). The Agency may waive sampling and testing if adequate information, properly certified, is available to indicate that materials comply with the terms of specifications. Any retests due to faulty workmanship or materials shall be paid for by the Contractor.

All materials furnished and work performed, shall be done in accordance with the "Standard Specifications for Public Works Construction" (hereinafter designated "Standard Specifications") sponsored and distributed by RTC, Churchill County, Carson City, the Cities of Reno and Sparks, the City of Yerington, and Washoe County, including addenda through February 29, 2012, except as modified within the "Special Technical Specifications" for XYZ (hereinafter designated "STS"); and in accordance with the "Standard Details for Public Works Construction" (hereinafter designated "Standard Details"), including updates through December 29, 2011, except as modified by the drawings for XYZ.

1.01A ASPHALT CEMENT

1. Sampling - During hot mix operations for all paving days, the Design Engineer’s designated representative shall obtain samples of all asphalt cement binders used to produce the bituminous mixture(s). During the pre-construction meeting the contractor shall provide the contact information for the certified plant representative that will be responsible for taking the asphalt cement samples. The Design Engineer’s designated representative shall contact the plant representative in advance of each paving day and coordinate the sampling in accordance with the plantmix production schedule. Asphalt cement samples shall be taken at the injection point for each “lot” (500 ton) of plantmix bituminous pavement. Plant personnel sampling bituminous material are required to be qualified in the WAQTC Asphalt Module or NAQTC Specialized Test AASHTO T40 (Sampling Bituminous Material). All sampling shall be witnessed by the Design Engineer’s representative. The plant representative shall properly label each sample which shall then be signed by both representatives.
  
2. Testing – Unless otherwise directed by the RTC Project Manager, the Design Engineer shall procure the testing of one of the samples from each paving day for compliance with Section 201 – “Bituminous Material” of the Standard Specifications at a laboratory certified to perform all required testing components.
  
3. **The sample to be tested shall be properly handled and sent to the State of Nevada Department of Transportation Materials Testing Laboratory, 1263 South Stewart Street in Carson City, Nevada.** The test result shall represent the binder material contained in all plantmix bituminous paving lots for the corresponding paving day. The remaining daily samples shall be stored at the Design Engineer’s designated laboratory throughout the duration of the Contractor’s warranty period.
  
4. Acceptance – Asphalt binder not conforming to Table 201.02-IV (PG64-28NV) of the Standard Specifications, Section 201 – “Bituminous Material” shall be assessed demerits in accordance with the following table:

TEST	LIMIT WITH TOLERANCE	REJECTION LIMIT	DEMERITS
<b>Tests on Original Asphalt Cement</b>			
Rotational viscosity (Pa.s)	3.21 Max.	3.50 Max.	21
Flash point, (°C)	222 Min.	163 Min.	21
Ductility (cm)	50 Min.	29 Min.	21
Toughness (Inch-lbs)	110 Min.	57 Min.	21
Tenacity (Inch-lbs)	75 Min.	22 Min.	21
Sieve Test (%)	1	10	21
Dynamic Shear (kPA)	0.90 Min.	0.75 Min.	21

**SPECIAL TECHNICAL SPECIFICATIONS**

<b>Tests on Residue from Rolling Thin Film Oven</b>			
Ductility (cm)	25 Min.	4 Min.	21
Dynamic Shear (kPA)	1.98 Min.	1.65 Min.	21
Average Mass Change (%)	1.00 Max.	1.01 Max.	31
<b>Tests on Residue from Pressure Aging Vessel</b>			
Dynamic Shear (kPA)	5500 Max.	6250 Max.	21
Stiffness Modulus (MPA)	330 Max.	375 Max.	21
Slope, m-value	0.290 Min.	0.245 Min.	21

Notes:

1. Demerits, up to the amount shown, shall be assessed for each test result that exceeds the "Limit with Tolerance."
2. The number of demerits assessed for each test result shall be calculated based on prorating the total demerits over the range from "Limit with Tolerance" to the "Rejection Limit."
3. The demerit/increment shall be multiplied by the difference between the noncompliant test result and the "Limit with Tolerance."
4. Demerit values for each test result will be rounded down to the nearest whole number.

The parties of the contract agree that damage will be sustained by the Agency in the event that the asphalt binder does not conform to the requirements of the specifications. In addition it is agreed that it is extremely difficult to quantify the actual damage the agency will sustain. Demerits will be used to determine mitigation that may include any necessary measures up to, and including, the assessment of liquidated damages or removal and replacement of the deficient material. The assessment of liquidated damages and the corresponding deduct from monies owed the contractor shall be in accordance with the schedule and corresponding notes below.

<b>Total Number of Demerits</b>	<b>Liquidated Damage Dollar per Ton<sup>1,2</sup></b>
1 – 2	10
3 – 5	20
6 – 9	30
10 – 14	50
15 – 20	100
21 - 30 <sup>3</sup>	75% of the cost of the asphalt binder
31 - 40 <sup>3</sup>	100% of the cost of the asphalt binder
41 or more <sup>3,4</sup>	100% + additional damages to be determined

Notes:

1. Liquidated damages will be assessed against the quantity (Tonnage) of asphalt binder used in the plantmix bituminous pavement represented by the sample tested.
2. The tons of asphalt binder shall be determined by multiplying the average of asphalt contents (by dry weight of aggregate) from all affected lots by the total tons of bituminous mixture placed.
3. Remove and replace material shown to have 21 or more demerits. Material removed shall not be paid for and all costs associated with removal shall be at the contractor's expense. Testing and inspection of replaced materials shall be as directed by the RTC Project Manager and all associated costs shall be at the contractor's expense. At the RTC Project Manager's option, materials having 21 or more demerits may be left in place and liquidated damages assessed at the percentage of asphalt binder cost shown. The cost of the asphalt binder used for assessing

SPECIAL TECHNICAL SPECIFICATIONS

- liquidated damages shall be \$675 per ton.
4. Liquidated damages as determined by the RTC Project Manager may be in excess of the cost of the asphalt binder.

Additional samples may be tested at the Contractor’s request and expense and following approval of the RTC Project Manager. Liquidated damages assessed due to deficient asphalt binder material may be in addition to any mitigation measures or penalties that may be determined by other sections of the specifications.

1.01B BITUMINOUS PLANTMIX

Subsection 336.03.04 - “Bituminous Mixtures” of the Standard Specifications, is herewith amended as follows:

1. On page 336.00-6, add the following to the fourth paragraph at the bottom half of the page regarding cores and cut samples:

Measure single core or cut sample in accordance with ASTM D3549, latest version, to the nearest 0.05" and report to the nearest 0.05" per the following examples:

<b>Individual Measurements</b>		
Using Apparatus Capable of 2 Decimal Places	Using Apparatus Capable of 1/16 Inch	Reported Thickness After Rounding
2.23" to 2.27"	2-4/16" = 2.250"	2.25"
2.28: to 2.32"	2-5/16" = 2.313"	2.30"
2.33" to 2.37"	---	2.35"
2.38" to 2.42"	2-6/16" = 2.375"	2.40"
2.43" to 2.47"	2-7/16" = 2.438"	2.45"
2.48" to 2.52"	2-8/16" = 2.500"	2.50"

For purpose of acceptance and mitigation, the average of the rounded thickness measurements of the 3 cores or cut samples for each lot shall be reported to the nearest 0.1". A number ending in 0.05" shall be rounded up. For example, both 2.35" and 2.40" are rounded to 2.4".

2. On page 336.00-7, delete the fourth paragraph and replace as follows:

One fresh, hot sample of the bituminous mixture (HMA) for each “lot” shall be tested for conformance with the mix design test properties as required by STS 1.14A BITUMINOUS PLANTMIX, and in accordance with ASTM D2041, as qualified in the Standard Specifications.

Fresh, hot samples are defined as the samples obtained during construction, transported to the laboratory, molded and compacted on the same day. Reheating is allowed only for restoring heat lost, if any, during transport to the laboratory

and sample preparation. Refer to Note under item 4 below (STS 1.01B BITUMINOUS PLANTMIX - Item 4, “Preparing Field Sample”) regarding limitations on test results from reheated archived samples.

3. On page 336.00-7 under Subsection 336.03.04.01 - “Sampling” of the Standard Specifications, add the following sentence to the first paragraph:

When samples are obtained by two testing laboratories, the samples shall be split from a single sample or taken at the same time and at locations immediately adjacent to each other.

4. On page 336.00-7 under Subsection 336.03.04.02 - “Preparing Field Sample”, of the Standard Specifications, delete the second and third paragraphs and replace as follows:

If the temperature of the HMA is below the approved mix design’s compaction temperature, the temperature of the HMA shall be recorded and the sample shall be reheated to the approved mix design’s compaction temperature. Heating samples should be done by placing the sample in a covered container in an oven for a maximum of one hour or placing the sample in a mixing bowl on top of a hot plate or propane stove, for a maximum of 10 minutes, and continuously mixed until compaction temperature has been reached. Samples shall be discarded if burned during reheating.

Note: Samples well below the compaction temperature may require additional heating time. Reheating of samples beyond the maximums specified is not desirable. In such instances, new samples should be taken in the field, if possible. If this is not possible and samples must be reheated beyond the specified maximums, the test results from reheated archived samples shall not be used for direct comparison with results from tests on hot, fresh samples but only for relative comparisons.

## 1.02 REMOVAL OF EXISTING IMPROVEMENTS

This section covers the construction methods involved in removing existing improvements.

Existing Portland cement concrete (PCC) improvements shall be removed to neatly sawed edges with sawcuts made to a minimum depth of 1½ inches. No section to be replaced shall be smaller than 30 inches in length. Curb and gutter shall be sawed to depth of 1½ inches on a neat line at right angles to the curb face.

Removal of the curb and gutter shall include all existing composite material from back of curb to 12-inches in front of the lip of the gutter. The contractor shall be required to achieve a vertical, neat line in a location appropriate for the method of curb and gutter placement chosen. The Contractor shall match the existing top of curb and maintain the uniform flow line of the gutter. If a uniform flow line does not exist, the Contractor shall establish a uniform flow line as directed by the Design Engineer.

Bituminous pavement shall be removed to clean straight lines by sawcutting where the removal of existing improvements does not include the total amount of paving encountered. Where bituminous pavement adjoins a trench, the edges adjacent to the trench shall be trimmed to neat straight lines at least

9 inches wider than the trench on each side before resurfacing to insure that all areas to be resurfaced are accessible to the rollers used to compact the subgrade or paving materials. Where new pavement is to adjoin existing bituminous or concrete pavements, the existing pavement shall be sawcut or blade-cut straight.

It shall be the Contractor's responsibility to protect the integrity of the edge of pavement adjacent to the removal section.

The Contractor shall remove all existing improvements to the required depth by a method that does not damage the subgrade. Pneumatic wheel construction equipment, including, but not limited to, trucks, loaders, excavators and scrapers, will not be allowed on the exposed subgrade within the roadway section. Should the Contractor fail to utilize necessary caution to protect the subgrade or allow pneumatic wheel construction equipment on the subgrade within the roadway section after the existing surface has been removed; all overexcavation and deep stabilization shall be at the Contractor's expense.

The Contractor shall take all necessary precautions to protect existing landscaping, which may be disturbed during the execution of the work. All restoration work shall be in accordance with the applicable provisions of Section 333 – "Landscaping" of the Standard Specifications, or as specified herein.

Where lawn or landscape with topsoil has been disturbed, contaminated, or removed, the Contractor shall replace the topsoil with an imported, high quality garden topsoil to a minimum depth of 3 inches; with minimal compaction. Areas of concern may include, but are not limited to, landscaping adjacent to sidewalks, curbs and gutters, driveways, and alleys. The topsoil shall conform to Section 200.08 – "Topsoil" of the Standard Specifications.

Existing improvements; adjacent property; utilities and other facilities; and trees and plants that are not to be removed shall be protected from injury or damage resulting from the Contractor's operations.

The Contractor shall notify the U.S. Postal Service to coordinate all mailbox relocation.

Any existing improvements, including, but not limited to, retaining walls, adjacent property, utilities, sprinkler systems, signs, other facilities or appurtenances, trees and plants, which are damaged or displaced as a result of the Contractor's operation shall be replaced or restored to the original position and condition prevailing prior to start of operations at the Contractor's own expense unless otherwise directed by the RTC Project Manager or Design Engineer. In addition, removal of existing improvements shall be done in accordance with the provisions of Section 300.04 - "Protection of Utilities and Underground Facilities" of the Standard Specifications.

## **1.07 TRENCH EXCAVATION**

Subsection 305.02 - "Maximum Length of Open Trench" of the Standard Specifications, is herewith amended as follows:

1. Add the following paragraph:

Unless otherwise directed by the Design Engineer and approved by the Agency, there shall be no unprotected open trench remaining at the end of the working day. At the end of the working day, any open trench shall be protected by plating or other means approved by the Design Engineer and the Agency.

## 1.12 PORTLAND CEMENT CONCRETE

### 1.12A COMPOSITION OF MIXTURES

The Contractor shall submit in writing for approval a mix design conforming to the requirements of Subsection 337.01 - "General" of Section 337 - "Composition of Mixtures" of the Standard Specifications. All Portland Cement Concrete, unless otherwise indicated, shall have a coarse aggregate gradation conforming to Size No. 67 in Subsection 200.05.03 - "Coarse Aggregates" of the Standard Specifications. Cement shall be Type II.

If the Contractor submits a written request to use Size No. 57 in lieu of Size No. 67, and if the Agency approves this request, then air entrainment shall be adjusted to conform to ACI requirements for severe conditions.

### 1.12B SIDEWALK, CURB AND GUTTER

Concrete used for curbs, gutters, sidewalks, pedestrian ramps, and driveway aprons shall conform to the requirements of Subsection 337.10.01.01 - "Portland Cement Concrete Exposed to Freeze-Thaw Cycles" of the Standard Specifications and shall be reinforced with collated, fibrillated polypropylene fibers conforming to the requirements of Subsection 202.02.02.04 - "Polypropylene Fibers" of the Standard Specifications, at 1.5 pounds per cubic yard of concrete.

Subsection 312.10.02 - "Sidewalk Surface" of the Standard Specifications is herewith amended as follows:

1. Add the following paragraphs:
  - a) When a 10-foot straightedge is placed on the sidewalk, curb, or gutter, the surface shall not vary more than  $\frac{1}{4}$  inch from the edge of the straightedge, except at grade changes.
  - b) Curbs at pedestrian ramps shall **not** be placed monolithically with pedestrian ramps.

### 1.12C THRUST BLOCKS

Portland Cement Concrete used for thrust blocks shall have a minimum compressive strength of 3000 psi when tested at 28 days and have a 1 to 4 inch slump.

Thrust blocks shall be installed such that they bear against the pipe fitting on one side and against the undisturbed earth on the other side. The Contractor shall provide anchor blocks and support blocks on vertical bends.

Thrust block concrete shall not obstruct the removal of bolts from fittings. Concrete shall be prevented from adhering to the fittings. Either a liquid bond breaker shall be applied to the fitting, or an impervious membrane shall be used.

#### 1.12D RETAINING WALLS

Concrete used for retaining walls shall conform to the requirements of Subsection 337.10.01.01 – “Portland Cement Concrete Exposed to Freeze-Thaw Cycles” of the Standard Specifications.

#### 1.12E PAVING

#### 1.12F UTILITY ADJUSTMENTS

Concrete used for utility adjustments shall conform to the requirements of Subsection 337.10.01.01 – “Portland Cement Concrete Exposed to Freeze-Thaw Cycles” of the Standard Specifications and shall be reinforced with collated, fibrillated polypropylene fibers conforming to the requirements of Subsection 202.02.02.04 – “Polypropylene Fibers” of the Standard Specifications, at 1.5 pounds per cubic yard of concrete.

The concrete used for utility adjustments shall be protected until a minimum compressive strength of 3,000 psi is attained. The RTC Project Manager shall approve the method of protection

### **1.13 DETECTABLE SURFACE WARNING TILES**

1. The detectable surface warning tiles shall consist of precast tiles with a minimum size of 2' x 2', color dark red. Approved products include: CASTinTACT, TEKWAY DOME-TILES, ARMOR CAST WET SET TILES, and ARCIS WET SET TILES. Detectable surface warning tiles shall be constructed per manufacturer's installation guidelines and conform to ADAAG standards.
2. Proposed Substitution products are to be submitted for approval in accordance with provision 22 of the Instruction To Bidders, page ITB-4, within these documents. In order to be considered, submittal packages for alternate truncated concrete dome materials must be prepared and submitted in accordance with the requirements of STS 1.13 DETECTABLE SURFACE WARNING TILES.
3. The Contractor shall check the prefabricated panels upon delivery to verify that the proper material has been received. The panels shall be inspected by the Contractor to be free of flaws or damage occurring during manufacturing, shipping, or handling.
4. The prefabricated panels shall be installed in accordance with the Reno Standard Details and the manufacturer's recommendations.
6. Submittals shall include the following:
  - a) The product data sheet and certification from the Manufacturer that the prefabricated detectable surface warning tile panels supplied meets the requirements of STS 1.13 DETECTABLE SURFACE WARNING TILES; and
  - b) The manufacturer's installation instructions and general recommendations.



**1.14 BITUMINOUS PLANTMIX**

Bituminous Plantmix shall conform to the requirements of Section 320 - “Plantmix Bituminous Pavement” of the Standard Specifications, except as modified herein.

The Contractor shall submit in writing for approval a job mix formula conforming to Subsection 320.02 – “Composition of Mixtures” of the Standard Specifications. Type 2 aggregate conforming to Subsection 200.02.03 – “Plantmix and Roadmix Aggregate” shall be used unless otherwise specified. Preparation of the aggregates shall be in accordance with the Marination Method described in Subsection 401.03.08 – “Preparation of Aggregates”, of the Nevada Department of Transportation Standard Specifications for Road and Bridge Construction.

Unless otherwise approved by the Agency, Asphalt Cement shall be PG64-28NV for the full depth for all paving on this project. Asphalt binders shall conform to the requirements of Section 201 - “Bituminous Material” of the Standard Specifications.

1.14A COMPOSITION OF MIXTURES

Subsection 320.02.01 - “Job Control Grading Band” of the Standard Specifications, is herewith amended as follows:

1. Amend the gradation and asphalt cement content table as follows:

	<b>Maximum Tolerance</b>
Aggregate passing No. 4 and larger sieves	±7 percent
Aggregate passing No. 8 to 100 sieves	±4 percent
Aggregate passing No. 200 sieve	±2 percent
Asphalt content	-0.2% to +0.7% of total weight of mix

2. Delete the third paragraph of Subsection 337.04.01 – “Composition of Mixtures” of the Standard Specifications and replace as follows:

The optimum asphalt cement content shall be determined to 0.1 percent, by total weight of mix and dry weight of aggregate, in accordance with the Asphalt Institute’s Manual Series No. 2 (MS-2) with a target value of 3% Air Voids for light traffic conditions (design Equivalent Single Axle Load (ESAL) < 10<sup>4</sup>) and 4% Air Voids for medium and heavy traffic conditions (design ESAL > 10<sup>4</sup>). The Contractor shall use a 75-blow Marshall mix design for all streets on this project, except a 50-blow Marshall mix design for \*medium/light traffic conditions shall be used on the following streets: \*. The mix design and project control samples shall conform to MS-2 Table 5.2 - Marshall Mix Design Criteria as modified in STS Table 1.14A-1.

STS Table 1.14A-1: Modified MS-2 Table 5.2 - Marshall Mix Design Criteria

	<b>Light Traffic<sup>2</sup> Surface &amp; Base</b>		<b>Medium Traffic<sup>2</sup> Surface &amp; Base</b>		<b>Heavy Traffic<sup>2</sup> Surface &amp; Base</b>	
Marshall Method Mix Criteria <sup>1</sup>						
Compaction, Number of Blows, Each End of Specimen	50*		50		75	
Stability (pounds)	1,200 Min.*		1,200 Min.		1,800 Min.	
Flow (0.01 inches)	8 Min.	16 Max.*	8 Min.	16 Max. <sup>(8)</sup>	8 Min.	14 Max. <sup>(8)</sup>
Air Voids (percent)	2 Min.*	4 Max.*	3 Min.	5 Max.	3 Min.	5 Max.
Voids in Mineral Aggregate (percent)	See STS Table 1.14A-2 : MS-2 Table 5.3					
Voids Filled With Asphalt (percent)	70	80	65	78	65	75

Notes:

1. All criteria, not just stability value alone, must be considered in designing an asphalt paving mix. Hot mix asphalt bases that do not meet these criteria when tested at 140 °F are satisfactory if they meet the criteria when tested at 100 °F and are placed 4 inches or more below the surface.
  2. Traffic classifications  
 Light Traffic conditions resulting in a Design ESAL < 10<sup>4</sup>  
 Medium Traffic conditions resulting in a Design ESAL between 10<sup>4</sup> and 10<sup>6</sup>  
 Heavy Traffic conditions resulting in a Design ESAL > 10<sup>6</sup>
  3. Laboratory compaction efforts should closely approach the maximum density obtained in the pavement under traffic.
  4. The Flow value refers to the point where the load begins to decrease.
  5. The portion of asphalt cement lost by absorption into the aggregate particles must be allowed for when calculating percent air voids.
  6. Percent air voids are calculated at the target value.
  7. Percent voids in the mineral aggregate are to be calculated on the basis of the ASTM bulk specific gravity for the aggregate.
  8. Upon approval of Agency, flow may exceed the maximum value when polymer modified binders are used.
- \* Indicates modified value from MS-2 Table 5.2.

STS Table 1.14A-2: MS-2 Table 5.3 - Minimum Percent Voids in Mineral Aggregate (VMA)

Nominal Maximum Particle Size (inches) <sup>1, 2</sup>	Voids Filled in Mineral Aggregate (percent), Min.		
	Design Air Voids (percent) <sup>3</sup>		
	3.0	4.0	5.0
No. 16	21.5	22.5	23.5
No. 8	19.0	20.0	21.0
No. 4	16.0	17.0	18.0
3/8	14.0	15.0	16.0
1/2	13.0	14.0	15.0
3/4	12.0	13.0	14.0
1	11.0	12.0	13.0
1-1/2	10.0	11.0	12.0
2	9.5	10.5	11.5
2-1/2	9.0	10.0	11.0

Notes:

1. Standard Specifications for Wire Cloth Sieves for Testing Purposes.
2. The nominal maximum particle size is one size larger than the first sieve to retain more than 10 percent.
3. Interpolate minimum voids in the mineral aggregate (VMA) for design air void values between those listed.

1.14B PAVING

I SPREADING AND FINISHING

Subsections 320.03 - “Construction” and 320.05 - “Spreading and Finishing” of the Standard Specifications, are herewith amended as follows:

1. Add the following subsection:

**320.03.03.01 Automatic Controls.** Pavers placing the final lift of the plantmix bituminous pavement for any uniform roadway section shall be equipped with an automatic control system capable of operating in conjunction with either a ski type device of not less than 30 feet in length or a taut wire set to grade. Automatic controllers are required on each side of the paver for the final lift of the plantmix bituminous pavement.

Where a paver is matching longitudinal joints, a joint matcher ski running on automatic controls is required.

The Contractor shall furnish all equipment required and shall install all stakes and wire required for the wire system.

2. Add to the introductory paragraph of Subsection 320.05 - “Spreading and Finishing” of the Standard Specifications as follows:

Refer to STS 1.14B| SPREADING AND FINISHING - Item 1, designated as Subsection 320.03.03.01 - “Automatic Controls” of the Standard Specifications, for automatic controls requirement for bituminous pavers.

3. Add to the fourth paragraph of Subsection 320.05 - “Spreading and Finishing” of the Standard Specifications as follows:

In other areas where mechanical spreading and finishing equipment is used, loose plantmix material shall not be broadcast across the mat to repair surface irregularities. Instead, the irregular surface material shall be removed and replaced with mix, which shall be placed gently on the surface and large aggregate raked off the surface and removed before rolling. At joints, bituminous material at the edges of pavement shall be pushed back off the adjoining pavement, and the edge “pinch” rolled to provide a tight, flush joint. Loose aggregate at the edges of the pavement mat shall not be pushed across the mat with the rake and rolled into the mat, but instead will be raked off the mat and removed before rolling.

4. Add the following paragraphs after the second paragraph in Subsection 320.05.02 - “Joints”:

\*|The Contractor shall minimize the number of transverse joints in the final lift of pavement in any particular roadway segment.

“Hot” joints are joints where adjacent paving lifts are placed during the same work shift, when previously placed pavement is relatively “hot”. Joints constructed otherwise are considered “Cold” joints.

All TOP LIFT longitudinal joints shall be “Hot” joints unless otherwise approved or directed by the Agency or Design Engineer.

All “Cold” longitudinal joints directly below the TOP LIFT (final course of bituminous dense-grade pavement) shall be sawcut back a minimum of six (6) inches horizontally and to full depth of the lift, but not to exceed the depth of the lift.

For all sawcut joints, TOP LIFT or otherwise, a tack coat of asphaltic emulsion shall be applied to the contact surface prior to placement of the abutting lift.

The RTC reserves the right to sample cores directly at pavement joints to determine if workmanship (good in-place densities and absence of excessive voids and segregation) is acceptable within the joints.

## II ACCEPTANCE

Subsection 320.06 - "Acceptance" of the Standard Specifications, is herewith amended as follows:

1. Delete the introductory paragraph and replace as follows:

Plantmix bituminous pavement shall be accepted on the basis of surface tolerance, density, thickness, surface texture, conformance with the tolerances of the job mix formula, and the Marshall properties required in this subsection and in accordance with the testing requirements of Section 336 - "Inspection and Testing" of the Standard Specifications and as modified in STS 1.01 INSPECTION AND TESTING.

2. Delete the second paragraph of Subsection 320.06.01 - "Surface Tolerances" of the Standard Specifications and replace as follows:

Surface tolerances shall be evaluated, as specified in the Bid Item, by either method as described in STS 1.14Bii ACCEPTANCE - Items 3 or 4, designated as Subsection 320.06.01.01 - "Profilograph Method" and Subsection 320.06.01.02 - "12-foot Straight Edge Method," respectively.

- 3.

4. Add the following subsection:

**320.06.01.02 12-foot Straight Edge Method.**

- a) A 12 feet long straight edge shall be used. When measured longitudinally (profile), the straight edge shall be laid on the finished surface and parallel with the centerline of the roadway. For transverse (cross section) measurements, the straight edge shall be laid in a direction transverse to the centerline and extending from edge to edge of a 12 foot traffic lane.

The RTC may use a profilograph to locate pavement surfaces which display unacceptable surface tolerance. Profilograph measurement shall be in accordance with STS 1.14Bii ACCEPTANCE - Item 3 (a), designated as a portion of Subsection 320.06.01.01 - "Profilograph Method." Once identified, the conformance criterion will remain as specified below in Item 4 (b), designated as a portion of Subsection 320.06.01.02 - "12-foot Straight Edge Method," that is, not subject to the conformance criterion listed for the profilograph method.

- b) The longitudinally (profile) surface shall not vary more than 1/8 inch from the lower edge of the straightedge. The transverse (cross section) slope of the finished surface shall be uniform to a degree such that no depressions greater than 1/4 inch are present. The finished grade of the asphalt surface shall vary no more than 5/8 inch from design finished grade in both profile and cross section.

Grinding shall be done in accordance with STS 1.14B<sup>III</sup> MITIGATION - Item 3, designated as Subsection 320.07.01.01 - “Grinding for Conformance of Surface Tolerances.”

5. Delete Subsection 320.06.03 - “Thickness” of the Standard Specifications and replace as follows:

**320.06.03 Thickness.** Cut samples taken in accordance with Section 336.03.04 - “Asphalt Concrete” of the Standard Specifications and as modified in STS 1.01 INSPECTION AND TESTING shall be used to determine conformance with thickness specifications. The average thickness of cores shall be at least equal to the specified minimum thickness of the asphalt concrete pavement with no single core less than ½ inch thinner than the specified minimum thickness. Both average and single core thickness shall be compared to the specified thickness to the nearest 0.1 inch.

6. Add the following subsection:

**320.06.04 Surface Texture.** The finished texture of wearing course paving constructed using dense graded bituminous plantmix shall be dense and uniform in appearance, displaying a homogeneous distribution of fine and coarse aggregate with no apparent surface voids.

7. Add the following subsection:

**320.06.05 Job Mix Formula and Marshall Properties.** Bituminous plantmix will be tested for compliance with the job mix formula and Marshall properties on a “lot” basis. A lot is as defined in Subsection 320.06.02 - “Density” of the Standard Specifications. Each lot will be tested for job mix formula and Marshall properties compliance.

Each lot of compacted pavement will be accepted, with respect to job mix formula and Marshall properties, when test results on fresh, hot samples conform to the requirements set forth in Subsection 320.02 - “Composition of Materials” and as modified in STS 1.14<sup>I</sup> BITUMINOUS PLANTMIX, including but not limited to, Marshall air voids, stability, flow, asphalt content, and aggregate gradation. Testing shall be in accordance with Subsection 336.03.04 - “Asphalt Concrete” of the Standard Specifications and as modified in STS 1.01 INSPECTION AND TESTING.

### III MITIGATION

Subsections 320.07 - “Mitigation of Unacceptable Asphalt Concrete Pavement” and 320.09 - “Basis of Payment” of the Standard Specifications, are herewith amended as follows:

1. Add an introductory paragraph and a second paragraph for Subsection 320.07 - “Mitigation of Unacceptable Asphalt Concrete Pavement” of the Standard Specifications as follows:

**320.07 MITIGATION OF UNACCEPTABLE ASPHALT CONCRETE PAVEMENT.** The objective of mitigation is to assure the final pavement will meet the design service life of the roadway. Those portions of the constructed work which do not comply with contract specifications, as determined in accordance with Subsection 320.06 - “Acceptance” of the Standard Specifications and as modified in STS 1.14B|| ACCEPTANCE, shall be mitigated in such a manner that the performance, service life, and maintainability expectations of the originally specified project will be achieved. Payment penalties in lieu of mitigation shall be considered as a last resort and utilized only in those cases where mitigation to achieve the expected performance, service life, and maintainability is deemed by the Agency to be not possible or practical. Most paving projects affected will exhibit a variety in the type and magnitude of deficiencies that will result in a variety of mitigation approaches which may include combinations of various physical mitigation measures and payment penalties. The Agency, at its option, will decide the appropriate mitigation measures with input from the Design Engineer, testing laboratory, and Contractor.

In the event pavement mitigation is necessary to correct deficiencies, the RTC may direct the Contractor to perform some or all pavement mitigation after normal business hours, at night, and/or on weekends, to minimize impacts sustained by the public, at the Contractor’s own expense.

2. Amend Subsection 320.07.01 - “Unacceptable Surface Tolerance” of the Standard Specifications as follows:

**320.07.01 Unacceptable Surface Tolerances.** Unacceptable surface tolerance shall be corrected by either overlaying or grinding as directed by the Agency or Engineer. Grinding shall be done in accordance with STS 1.14B|| MITIGATION - Item 3, designated as Subsection 320.07.01.01 - “Grinding for Conformance of Surface Tolerances.”

Apply fog or slurry seal to ground areas after the surface tolerance specifications have been met. The Agency shall determine the type of sealant to be used.

In areas to be corrected with an overlay, grinding, followed by tack coat, may be necessary to provide a minimum 1½ inch overlay and butt joints where matching existing pavements.

3. Add the following subsection:

**320.07.01.01 Grinding for Conformance of Surface Tolerances.** The grinding machine for correcting pavement surface tolerances shall be power driven, self-propelled and specifically designed to remove, profile, smooth, and texture hot mix asphalt. The Contractor shall use a grinding machine with a wheel base of not less than 12 feet, equipped with a rotating powered mandrel drum studded with diamond blades with a cutting head not less than 3 feet wide. The grinding machine shall be equipped with an effective means for controlling dust and other particulate matter.

Do not cause strain or damage to the underlying surface of the pavement with the

grinding machine. Do not use grinding and texturing equipment that causes ravels, aggregate fractures, spalls, or disturbance of joints.

The Contractor shall perform grinding in a longitudinal direction. A satisfactorily grind will produce a uniform textured surface over the surface areas designated for grinding.

The surface of the ground pavement shall have parallel corduroy-type texture consisting of grooves between 1/12- inch and 1/8-inch wide. The peaks of the ridges shall be approximately 1/16-inch higher than the bottom of the grooves with approximately 52 to 58 evenly spaced grooves per foot.

The Contractor shall perform additional grinding as necessary to extend the ground area laterally to the nearest lane line or edge of pavement and longitudinally to lines normal to the pavement centerline.

The Contractor shall correct areas that cannot not be brought into specified surface tolerances by abrasive grinding by both removal and replacement, or by placing an overlay of hot mix asphalt. The Contractor shall obtain approval of the exact method of correction.

Fog or slurry seal shall be applied to ground areas after the surface tolerance specifications have been met. The Agency shall determine the type of sealant to be used.

4. Delete Subsections 320.07.02 - "Unacceptable Density" and Table 1 in Subsection 320.09 - "Basis of Payment" of the Standard Specifications and replace as follows:

**320.07.02 Guideline for In-place Density/Air Voids.** The RTC and the Design Engineer will consider STS Table 1.14BIII-1 or 1.14BIII-2 "Asphalt Deficiency Mitigation Matrix for In-place Density/Air Voids", as applicable for the design traffic conditions, input from the Contractor, and sound engineering analysis and judgment before requiring mitigation (i.e. removal and replacement, increased thickness, or surface treatment) and/or payment deduction (if mitigation is not practical or possible) for plantmix bituminous pavement which deviates from specification requirements. Since the matrix does not include all factors and site conditions which may affect the overall performance of the pavement, the RTC may, upon consideration of the specific circumstances, increase, reduce or waive mitigation and/or payment reduction, or combine portions of mitigation and payment reduction.

If the RTC makes a preliminary determination that mitigation, and/or payment deduction is necessary on the basis of In-place Density/Air Voids, the Contractor may submit a written request to RTC for retests. The retests shall be in accordance with Section 336 - "Inspection and Testing" of the Standard Specifications and as modified in STS 1.01 INSPECTION AND TESTING. The retests may be performed by the Agency's quality assurance laboratory or by any other approved, independent testing laboratory (the Contractor shall request the laboratory in writing for RTC approval).



SPECIAL TECHNICAL SPECIFICATIONS

Retests shall be undertaken at the Contractor's own expense. If the results of any retests are significantly different from initial testing, a "referee" test will be performed by an independent testing lab, which is mutually acceptable to the RTC and the Contractor. The RTC may waive the "referee" test if after consulting with the Design Engineer it is determined that the "referee" test is unnecessary. Fifty percent of the cost of "referee" tests shall be paid by the RTC and 50 percent shall be paid by the Contractor. The RTC may elect to make full payment and deduct the Contractor's 50 percent from progress or final payment to Contractor. The RTC will make a final determination regarding mitigation and/or payment reduction based upon the preponderance of test results and other factors.

5. Delete subsection 320.07.03 Unacceptable Thickness and replace as follows:

**320.07.03 Unacceptable Thickness.** Insufficient thickness not meeting the requirements of subsection 320.06.03 – “Acceptance – Thickness” – shall be mitigated as follows:

Thickness	Mitigation
4” - 3.76”	20% pay deduct for top lift paving
3.75” – 3.51”	50% pay deduct for top lift paving
≤ 3.5”	Remove top lift & replace or add a 1.5” Type 3 overlay

For mitigation purposes in this subsection, the thickness will be the average of all cores taken, and the cost of the top lift paving is \$0.60 per square foot per one inch of thickness.

The overlay mitigation option is allowable only at where there is no curb and gutter. Grinding may be necessary to eliminate the problems associated with raising of finish grade as determined by the governing Agency or Engineer, but in all cases, the perimeter of the corrective overlay shall be placed as a flush butt-joint formed by grinding of existing pavement abutting the overlay.

6. Add the following subsection:

**320.07.04 Unacceptable Surface Texture.** Unacceptable surface texture shall be mitigated as directed by the Agency. Required mitigation may include any necessary measures up to, and including, removal and replacement of the deficient material. If correction of surface texture results in a visually non-uniform pavement surface, the Contractor may be required to restore the pavement surface to a uniform visual appearance as directed by the Agency. Such measures shall be done at the Contractor’s own expense.

7. Add the following subsection:

**320.07.05 Guideline for Job Mix Formula and Marshall Properties.** If the compacted pavement is not in compliance with the job mix formula and all Marshall properties, mitigation shall be as directed by the Agency. Due to the complexity of the deficiency matrix, it is impossible to have a mitigation table

which covers all possible combinations of the deficiencies and all factors and site conditions which may affect the overall performance of the pavement; therefore, the RTC shall evaluate the deficiency on a case by case basis and may require any necessary measures ranging from payment deductions to removal and replacement of the deficient materials, or any combination of the mitigation measures.

The RTC may consider test results from the Contractor's quality control laboratory if submitted, provided that the sampling and testing are performed, using split samples with the Agency's quality assurance laboratory, in accordance with Section 336 - "Inspection and Testing" of the Standard Specifications and as modified in STS 1.01 INSPECTION AND TESTING.

**STS Table 1.14BIII-1**  
**Asphalt Deficiency Mitigation Matrix for In-place Density/Air Voids**  
**Light Traffic Conditions (see Note 4)**

The objective of the mitigations listed on the table below is to assure the final pavement will meet the design service life of the roadway. Reductions in payment do not achieve that goal and should be considered only if mitigation is not possible or practical. The mitigation table is an attempt to provide uniformity and fairness to the evaluation process of substandard pavements. Most paving projects affected will exhibit a variety in the type and magnitude of deficiencies that will result in a variety of mitigation approaches. The appropriate mitigation requires sound engineering analysis and judgment. The Agency will, at its option, decide the appropriate mitigation measures with input from the Design Engineer, testing laboratory, and the Contractor.

Marshall Compaction % (Note 5)	In Place Air Voids % (Rice) (Note 6)	Increase Thickness (Notes 7&8)		Surface Seal (Note 8)			Remove Replace	Payment (Note 8)		
		1"	1-1/2"	Sand Seal	Slurry Seal	Sand Blotter		100%	90%	50%
	<2			X (A)				X(A)	X	
	-							X		
	>7 & ≤ 10			X	X				X	
	> 10		X	X(A)	X(B)		X			X(A, B)
< 96 & ≥ 93	≥ 4 & ≤ 7								X	
	>7 & ≤ 10		X							X
	> 10		X(A)				X			X(A)
< 93							X			
≥ 96	<2								X	X
	-							X		
	>7 & ≤ 10	X								X
<96 & ≥ 93	≥4 & ≤ 7								X	
	>7 & 10	X								X
	> 10		X				X			X(A)
< 93							X			

Notes:

- Each 'X' represents a recommended mitigation remedy. Several X's for a single deficiency indicate alternate methods of remediation unless noted otherwise. Individual judgment must be exercised by the RTC Project Manager on each specific project.
- Each 'X' labeled either (A) or (B) represents a combination of mitigation remedies listed as group (A) or group (B).
- See STS 1.14BIII MITIGATION - Item 6, designated as Subsection 320.07.05 - "Guideline for Job Mix Formula and Marshall Properties," for mitigation required when the compacted pavement is not in compliance with the job mix design and/or Marshall properties.
- Traffic classifications:  
 Light Traffic conditions resulting in a Design ESAL <10<sup>4</sup>  
 Medium Traffic conditions resulting in a Design ESAL between 10<sup>4</sup> and 10<sup>6</sup>  
 Heavy Traffic conditions resulting in a Design ESAL >10<sup>6</sup>  
 For light traffic conditions, see Asphalt Deficiency Mitigation Matrix for Light Traffic Conditions.
- The average Marshall Compaction for the lot shall be rounded to the nearest 1 percent in accordance with the procedure described in Section 336 - "Inspection and Testing," of the Standard Specifications, Subsection 336.03.04 - "Asphalt Concrete".
- Three significant figures shall be used throughout the calculations for in-place air voids. Individual results shall be reported to the nearest 0.1 percent. All rounding shall be in accordance with the procedure described in Section 336 - "Inspection and Testing" of the Standard Specifications, Subsection 336.03.04 - "Asphalt Concrete"
- Increase total pavement thickness by the indicated amount using approved mix.
- Mitigation may not be limited to the matrix shown on this table if the pavement is also deficient in other areas.

**STS Table 1.14BIII-2  
Asphalt Deficiency Mitigation Matrix for In-place Density/Air Voids  
Medium & Heavy Traffic Conditions (see Note 4)**

The objective of the mitigations listed on the table below is to assure the final pavement will meet the design service life of the roadway. Reductions in payment do not achieve that goal and should be considered only if mitigation is not possible or practical. The mitigation table is an attempt to provide uniformity and fairness to the evaluation process of substandard pavements. Most paving projects affected will exhibit a variety in the type and magnitude of deficiencies that will result in a variety of mitigation approaches. The appropriate mitigation requires sound engineering analysis and judgment. The Agency will, at its option, decide the appropriate mitigation measures with input from the Design Engineer, testing laboratory and the Contractor.

	Marshall Compaction % (Note 5)	In Place Air Voids % (Rice) (Note 6)	Increase Thickness (Notes 7&8)	Surface Seal (Note 8)			Remove Replace	Payment (Note 8)		
				+1½"	Sand Seal	Slurry Seal		Chip Seal	100%	90%
WEARING	≥ 96	<3					X	X	X	
		≥3 & ≤8					X			
	>8 & ≤11		X	X	X					
	> 11	X				X				
< 96 & ≥ 93	≥ 4 & ≤ 8	X				X	X			
	>8 & ≤11	X(A)			X(B)	X	X(A)	X(B)		
	> 11	X(A)				X		X(A)		
< 93						X				
NON-WEARING	≥ 96	<3					X	X	X	
		≥3 & ≤8					X			
	>8 & ≤11		X							
	> 11	X				X		X		
<96 & ≥ 93	≥4 & ≤8	X					X			
	>8 & ≤11	X						X		
	> 11	X(A)				X		X(A)		
< 93						X				

Notes:

- Each 'X' represents a recommended mitigation remedy. Several X's for a single deficiency indicate alternate methods of remediation unless noted otherwise. Individual judgment must be exercised by the Engineer on each specific project.
- Each 'X' labeled either (A) or (B) represents a combination of mitigation remedies listed as group (A) or group (B).
- See STS 1.14BIII MITIGATION - Item 6, designated as Subsection 320.07.05 - "Guideline for Job Mix Formula and Marshall Properties," for mitigation required when the compacted pavement is not in compliance with the job mix design and/or Marshall properties.
- Traffic classifications:  
 Light Traffic conditions resulting in a Design ESAL <10<sup>4</sup>  
 Medium Traffic conditions resulting in a Design ESAL between 10<sup>4</sup> and 10<sup>6</sup>  
 Heavy Traffic conditions resulting in a Design ESAL >10<sup>6</sup>  
 For light traffic conditions, see Asphalt Deficiency Mitigation Matrix for Light Traffic Conditions.
- The average Marshall Compaction for the lot shall be rounded to the nearest 1 percent in accordance with the procedure described in Section 336 - "Inspection and Testing," of the Standard Specifications, Subsection 336.03.04 - "Asphalt Concrete".
- Three significant figures shall be used throughout the calculations for in-place air voids. Individual results shall be reported to the nearest 0.1 percent. All rounding shall be in accordance with the procedure described in Section 336 - "Inspection and Testing" of the Standard Specifications, Subsection 336.03.04 - "Asphalt Concrete".
- Increase total pavement thickness by the indicated amount using approved mix.
- Mitigation may not be limited to the matrix shown on this table if the pavement is also deficient in other areas.

#### IV SPECIAL PAVING CONSIDERATIONS

The Contractor shall submit, at the time of traffic control submittal, a paving plan superimposed onto the striping plan to illustrate locations of paving joints in relation to striping. The paving joints in the final lift shall be located within 6" from lane stripes, unless otherwise authorized in writing by the Engineer.

Where directed by the Engineer, the Contractor shall spread blotter sand on the surface of final-lift pavement to reduce the driveway or intersection closure time and protect the pavement surface at high traffic or critical locations.

#### V TACK COAT

Subsection 316.03.04 - "Application of Bituminous Materials" of the Standard Specifications, is herewith amended as follows:

Unless otherwise directed by the Design Engineer, cleaning and the application of a tack coat shall be provided between all paving courses that are not constructed in the same shift. Tack coat shall consist of asphalt emulsion, Type SS-1h, conforming to the requirements of Section 201 – "Bituminous Materials" of the Standard Specifications to the cleaned, cured surface, unless otherwise directed by the Design Engineer. The tack coat shall be applied in sufficient quantity to provide a continuous membrane over the cement modified material. No more tack shall be applied than can be covered in the same shift. Place the covering course over tack that is clean, free of tracking and adequately set.

#### VI LONGITUDINAL JOINTS

This specification is developed in an effort to obtain longer pavement life by adding emphasis on longitudinal joint quality. This portion of the STS will apply for the sole purpose of assessing the bonus/penalty of this specification. The longitudinal joint result will not tie to the acceptance of the pavement. This portion of the STS, however, does not eliminate any requirement as listed in all other sections of the STS.

**Bonus or Penalty for longitudinal joint applies only when the mat for the associated paving "lots" are acceptable according to STS 1.14BII Acceptance.**

1. Testing and reporting will be performed by the quality assurance laboratory (i.e. RTC's consultant). Testing will be done on the TOP LIFT<sup>1</sup> only for both HOT & COLD longitudinal joints for each joint segment. Longitudinal joint segment is defined as every 1,000 feet of longitudinal joint and any remainder that is 800 feet or longer. Testing for the longitudinal joints include Thin Lift Nuclear Test and Core Test as described in the following paragraphs.
2. Thin Lift Nuclear Test (Nuclear Gauge Test) shall be performed as follows:
  - a) Frequency & Location – Nuclear gauge readings shall be taken every 200 feet on BOTH sides of a longitudinal joint segment directly across from each other, beginning at a random location within the first 200 feet as determined by the Design Engineer.

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<sup>1</sup> TOP LIFT is defined as the final course of bituminous dense-grade pavement.

- b) Timing – To avoid additional traffic control needed for the testing operation, nuclear gauge readings shall be taken shortly following the completion of the longitudinal joint construction.
- c) Equipment – Testing shall be performed using a gauge specifically designed for asphalt testing such as a Troxler 4640B or Troxler 3450, or approved equivalent. It is not necessary that the nuclear gauge be calibrated to the mix. However, the same nuclear gauge should be used for the same longitudinal joint segment.
- d) Testing – One 1-minute test is to be performed at each test location. The nuclear density testing shall be performed with the long axis of the nuclear density gauge parallel to the joint and with the nearest edge of the nuclear gauge no closer than 3 inches from the joint and no further than 4.5 inches from the joint. The footprint of the gauge shall be marked with keel or other product that clearly defines the test locations. All testing shall be performed in the same direction (i.e. up or down station).
- e) Re-Test – When the test result,  $t_n$ , differs more than 4 pounds per cubic foot (pcf) from the previous test,  $t_{n-1}$ , a re-test at the previous test location is required to assure that the previous test is not in error. Both test results shall be recorded. If the re-test is within 4 pcf of the original previous test result, use the original previous test result. Otherwise, keep record of the results  $t_n$  and  $t_{n-1}$  but do not use them for any further calculations. Instead, recalibrate the thin lift nuclear gauge, resume testing beginning at the  $t_{n-1}$  location, and use the new test results.

3. Core Test will be performed as follows:

- a) Frequency & Location – In addition to the coring required for the mat, one core test shall be performed for every longitudinal joint segment, location of which shall be determined as below:
  - i. Mean Joint Density (MJD) is the average of the readings of the Nuclear Gauge Test on each side of a longitudinal joint segment. The core is to be taken on the side with the lower MJD. If the MJD on both sides are equal, core on the side which was paved first.
  - ii. The core shall also be at a location where a Nuclear Gauge Test was performed and reasonably close to a core location for the mat. The core shall be centered inside of the previously marked footprint of the Nuclear Gauge Test. In no case shall the near edge of the core be closer than 3 inches from the joint.
  - iii. If coring is to occur at a location with pavement markings made of 3M tape or thermoplastic tape, adjust the core location up or down station as appropriate up to a distance of 20 feet maximum. Otherwise, remove necessary portions of the pavement markings before coring.
- b) Timing – Coring at the joint shall be at the same time of coring at the mat.
- c) Equipment – Same equipment as the standard core test for the mat.
- d) Testing – Test procedures will be the same as the standard core test (in-place density/air voids) for the mat in accordance with STS 1.01 INSPECTION AND TESTING. Use the hot sample properties from the corresponding lot, based on the core location (i.e. stationing and which side of the joint), for calculating core test results.

- e) Re-Test – Re-testing will only be allowed at the sole discretion of the RTC. If allowed, re-testing shall be at the sole cost of the Contractor and performed by a qualified third party laboratory that meets RTC’s criteria for testing. The location of the additional core(s) shall be in within 5 feet up or down station from the original core and the sampling shall be witness by the Design Engineer.

4. When applicable, the bonus and penalty is calculated as follows:

$$\text{Bonus/Penalty} = \frac{\sum F_i}{N} \times A \times T \times U$$

Where

*F* = Factor for individual longitudinal joint segment based on joint core results per STS Table 1.14BVI-1 or 1.14BVI-2 as applicable.

*N* = Total number of longitudinal joint segments.

*A* = Total pavement area of all longitudinal joint segments (SF).

*T* = Thickness of the TOP LIFT (inch).

*U* = Unit cost of the TOP LIFT (\$/inch-SF).

**For the purpose of determining Bonus/Penalty for this project, U shall be \$\*/in-SF.**

**STS Table 1.14BVI-1  
Longitudinal Joint Segment Bonus/Penalty Factor  
Light Traffic Conditions (see Note 1)**

Joint Core Results In-Place Air Voids % (Rice) (see Note 2)	Factor <i>F<sub>i</sub></i>
< 2	0%
≥ 2 & ≤ 7	+5%
> 7 & ≤ 10	0%
> 10 & ≤ 14	-5%
> 14	-50%

**STS Table 1.14BVI-2  
Longitudinal Joint Segment Bonus/Penalty Factor  
Medium & Heavy Traffic Conditions (see Note 1)**

Joint Core Results In-Place Air Voids % (Rice) (see Note 2)	Factor <i>F<sub>i</sub></i>
< 3	0%
≥ 3 & ≤ 8	+5%
> 8 & ≤ 11	0%
> 11 & ≤ 14	-5%
> 14	-50%

Notes:

1. Traffic classifications

Light Traffic conditions resulting in a Design ESAL < 10<sup>4</sup>

Medium Traffic conditions resulting in a design ESAL between 10<sup>4</sup> & 10<sup>6</sup>

- Heavy Traffic conditions resulting in a Design ESAL  $> 10^6$
2. Three significant figures shall be used throughout the calculations for in-place air voids. Individual results shall be reported to the nearest 0.1 percent. All rounding shall be in accordance with the procedure described in Section 336 – “Inspection and Test” (Subsection 336.03.04 – “Asphalt Concrete”).

5. Reporting – Field data associated with longitudinal joint testing shall be submitted to the RTC within a week of the testing. The report for the longitudinal joint testing shall be submitted to the RTC within two weeks upon completion of paving for the completed section tested. If top lift paving for the entire project are to be completed within two weeks, submit the report to the RTC within two weeks upon completion of paving for the entire project. The report shall include a Paving Plan and a Longitudinal Joint Summary Sheet as described below.
  - a) The Paving Plan shall be overlaid on the Striping Plans with stationing shown. It should include, for the top lift only, the longitudinal joint locations with identification number (ID), limits of each paving path, direction of paving, and the paving lot number at the core location. The paving plan can be of as small a scale as practical.
  - b) The template for the Longitudinal Joint Summary Sheet is available from the RTC website ([www.rtcwashoe.com](http://www.rtcwashoe.com)) under Streets & Highways, St & Hwy Resources. It shall be filled in with the following details:
    - i. The Longitudinal Joint Segment ID, joint type (hot lap, cold sawcut, etc.), station, side of joint (left/right in the up-station direction or north/south/west/east), individual density values measured, MJD (5 values for 1,000-foot joint segments and 4 for 800-foot joint segments) on each side of each joint segment, joint core test location, paving lot number at the core location, core Marshall Density, Rice Maximum Density, In-Place Air Voids, and the individual Longitudinal Joint Segment Bonus/Penalty Factors,  $F_i$ .
    - ii. The calculation for Longitudinal Joint Bonus/Penalty for the project shall be shown at the end of the sheet.
    - iii. For reference purpose, any re-test shall be noted to clearly identify the re-test, the unused test results, and the test result that was used in calculating the MJD.

#### 1.14C PERMANENT PATCHING

Permanent patching material shall be Type 3 PG64-22 bituminous plantmix, utilizing a 50 blow per side Marshall mix design with target air voids of 3%, and shall conform to the Standard Specifications. Permanent bituminous plantmix patches shall be a minimum depth of 4 inches on 6 inches of aggregate base or match existing section with bituminous plantmix depth up to 12 inches.

If, at any time, during a period of 1 year dating from the date of final acceptance of the project, there is any settlement of the permanent patches requiring repairs to be made, the Owner may notify the Contractor to immediately make such repairs as may be deemed necessary at the Contractor's own expense.



## **1.16 SLURRY SEAL**

Slurry seal shall conform to the requirements of Section 318 - "Slurry Seal" of the Standard Specifications, except as modified herein.

The Contractor shall submit in writing for approval a job mix formula conforming to the requirements of Subsection 318.02 - "Composition of Mixtures" of the Standard Specifications. Type \* aggregate conforming to the requirements of Subsection 200.02.06 - "Slurry Seal and Micro Surfacing Aggregate" shall be used unless otherwise specified. Asphalt emulsions shall conform to the requirements of Section 201 - "Bituminous Material" of the Standard Specifications.

Subsection 318.02 - "Materials" of the Standard Specifications, is herewith amended as follows:

1. Add the following to Subsection 318.06.01 - "Limitations":
  - a) The slurry seal shall not be applied when precipitation is imminent or occurring.
2. Delete Subsection 318.07.02 - "Tack Coat" in its entirety.
3. Add the following to Subsection 318.08.01 - "General":
  - a) All workers shall have sufficient experience to perform properly the work assigned to them. The Contractor shall have an experienced crew on each spreader and any other equipment.
  - b) At least 48 hours shall elapse between top lift paving and application of a bituminous seal coat.
  - c) Immediately before commencing the slurry seal operations, all metal utility covers (including survey monuments) shall be protected by thoroughly covering the surface with an appropriate adhesive and oiled or plastic paper. No adhesive material shall be permitted to cover, seal or fill the joint between the frame and cover of the structure. Covers are to be uncovered and cleaned of slurry material by the end of the same day.
  - d) Hand tools shall be available in order to remove spillage. Ridges or bumps in the finished surface shall not be permitted. The mixture shall be uniform and homogeneous after spreading on the surface and shall not show separation of the emulsion and aggregate after setting.
  - e) Adequate means shall be provided to protect the slurry seal from damage from traffic until such time that the mixture has cured sufficiently so that the slurry seal will not adhere to, or be picked up by the tires of vehicles.

## **1.18 PAVEMENT MARKINGS**

### **1.18A PAINTED PAVEMENT MARKINGS**

Permanent painted (traffic paint or epoxy paint) pavement markings shall be in accordance with Section 632 of the latest edition of "Standard Specifications for Road and Bridge Construction" published by NDOT.

#### 1.18A TRAFFIC PAINT

All application methods and products shall conform to Sections 632 – “Permanent Painted Pavement Markings” and 730 – “Traffic Beads”, and Subsections 729.02.01 – “General”, 729.02.02 – “Packaging”, and 729.03.05 – “Rapid Dry Waterborne Paint Material” of the NDOT Standard Specifications for Road and Bridge Construction for Type II traffic paint, with the following exception:

1. Add the following:

At least 48 hours shall elapse between application of a bituminous seal coat and permanent pavement marking.

All traffic paint shall have a minimum of 2 coats (full width of stripe) per application of the designated material placed unless otherwise directed by the RTC Project Manager or the Design Engineer’s representative.

#### 1.18B PAVEMENT MARKING FILM

Permanent pavement marking film (pavement marking tape or thermoplastic) shall be in accordance with Section 634 – “Pavement Marking Film”, of the NDOT Standard Specifications for Road and Bridge Construction.

#### 1.18C RAISED MARKERS

1. Hydrant markers.

A reflective, blue street marker shall be provided to identify all fire hydrant locations. The marker shall be omnidirectional type. The marker shall be visible on approach to the fire hydrant. The marker shall be placed in accordance with Reno Fire Department Policy Appendix UFC-AP904.3.1, page AP-6.

Adhesives for raised markers shall conform to Subsection 633.02.04 - “Adhesives for Pavement Markers” of the NDOT Standard Specifications for Road and Bridge Construction.

Installation of raised markers shall conform to Subsection 633.03.01 - “Pavement Marker Installation” of the NDOT Standard Specifications for Road and Bridge Construction.

### 1.22 **TRAFFIC SIGNS**

#### 1.22A MATERIALS

Traffic signs shall be 3M Diamond Grade (DG) 3 or 3M high intensity sheeting with a clear transparent overlay 3M 1170 or approved equal.

Street name signs shall be 3M DG3, Series 4000 or approved equal with green transparent Scotchlite Electrocut Film #1177C or approved equal. White letter and border sheeting shall be retro reflective ASTM IX 3M Diamond Grade or approved equal.

## 1.23 TRAFFIC SIGNALS

### 1.23A LOOP DETECTORS

\*| The \*| requires the Contractor to lay-out traffic signal loop detectors in accordance with \* standards and details. After the loop lay-out is marking in the field, the Contractor shall call \*| at \*| for loop lay-out inspection and approval.

\*| The Contractor shall call \*| at \*| for traffic signal loop lay-out.

All traffic signal loop detectors shall be installed prior to the placement of the final “top” lift<sup>2</sup> of the plantmix bituminous pavement material. Placement of slurry seal or micro-surface does not negate this requirement.

### 1.23B TEMPORARY TRAFFIC SIGNAL MODIFICATIONS DURING CONSTRUCTION

The Contractor shall coordinate with and secure approval from \*| (\*|) of \*| for any use of or changes to operation of existing traffic signal equipment during construction. The Contractor shall comply with \*| requirements without additional cost to the RTC.

## 1.24 UTILITY ADJUSTMENT

### 1.24A VERIFICATION OF DEPTH

Location of underground facilities shown on the plans are approximate and were not determined by field investigation. It shall be the responsibility of the Contractor to locate all existing utility structures, whether shown or not, and to notify all utility companies to verify in the field the location of their installations prior to construction. The Contractor shall protect all utility structures from damage. The expense of repair or replacement shall be borne by the Contractor (however, this in no way precludes the Contractor from recovering, from the utility company, costs to repair existing utilities which do not conform with standard specifications or details). The Contractor shall request field marking of existing utilities at least 48 hours in advance of beginning construction by calling Underground Service Alert at (800) 227-2600.

At existing underground traffic signal conduit crossings and at locations where new underground facilities cross existing facilities, the Contractor shall expose the existing facility and verify that sufficient horizontal and vertical clearance exists for the street improvements to be constructed in substantial compliance with the plans. At existing underground traffic signal conduit crossings, the Contractor shall field verify the depth of existing facilities before commencing any construction. At locations where new underground facilities are to be connected to existing facilities, the Contractor shall expose the existing facility and verify that the connection can be made as shown on the plans before commencing any construction. Any conflicts shall be brought to the Engineer’s attention as soon as they are discovered.

Utility depth verification requirements will be considered incidental to \*|, bid item \*|.

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<sup>2</sup> TOP LIFT is defined as the final course of bituminous dense-grade pavement.

**1.24B UTILITY MANHOLE AND VAULT ADJUSTMENT**

Add to Subsection 323.05 - "Utility Manholes and Vaults" of the Standard Specifications as follows:

1. "Before lowering manholes and vaults, the Contractor shall take inventory of the utilities to be adjusted. The Contractor shall record the exact location and type of utility by labeling the assembly with numbers at locations visible for verification. The labeling shall include utility site, collar, and lid to ensure proper match of hardware when utility adjustment is completed at the conclusion of the project."

The Contractor shall submit the utility inventory list to the Engineer and utility companies upon completion of utility lowering activity. The Contractor shall also keep a copy of the utility location inventory list on the project work site at all times for emergency shutoff purposes. The Contractor may post the list on the backside of the RTC Project Information sign.

**1.24C MANHOLE PROTECTION PLAN**

The Contractor shall be responsible for the protection of all manholes and valves during all phases of construction, including but not limited to, lowering and raising covers, and grouting of them. The Contractor shall verify all manholes and valves are clear of debris at the beginning of the project and notify the utility companies if otherwise.

A "Manhole Protection Plan" shall be submitted and approved by the Engineer prior to any manhole adjustments. The plan shall clearly identify how the contractor will protect ANY debris from entering the system and a detail of how the Contractor is prepared for emergency overflows. To the minimum, the plan shall include the name, phone number, and contact of the company the contractor will use in case of an emergency. Prior to performing any adjustments or grouting, the Engineer shall observe and verify the Contractor is in compliance with the "Manhole Protection Plan".

**1.25 SURVEY MONUMENTS**

Survey monuments shall be removed prior to construction. Survey monuments shall be located and punched by a Nevada registered professional land surveyor and replaced after completion of improvements.

**1.26 CERTIFICATES OF COMPLIANCE**

The Certificate of Compliance shall be signed by the manufacturer of the material or the manufacturer of assembled materials and shall state that the materials involved conform in all respects with the requirements of the specifications for this project. A Certificate of Compliance shall be furnished with each lot of material delivered to the work and the lot so certified shall be clearly identified in the certificate.

**Materials Requiring Certificate of Compliance**

1. Asphalt Cement
4. Cement
5. Concrete Curing Compound
6. Signs
7. Pavement Markings
8. Personnel certification for installation of retroreflective preformed pavement markings

**EXHIBIT “F”**  
**(Standard Specifications for Public Works Construction**  
**Section 117.00**  
**“Material and Workmanship – Warranty of Corrections”)**

## **EXHIBIT F**

### **MATERIAL AND WORKMANSHIP - WARRANTY OF CORRECTIONS**

Corrections ordered in accordance with General Provision 117.00, “Material and Workmanship” for items discovered in the year following final acceptance of the project shall be warranted for a one (1) year period following acceptance by the RTC of the correction. Should the correction itself prove defective, the Contractor shall be obliged to make further correction. The warranty period on the correction shall continue to be extended for one (1) year following acceptance by the RTC of the initial or any subsequent corrective actions.

**EXHIBIT "G"**  
**(RRIF Rates as Of Date Of Offset Agreement)**

# REGIONAL ROAD IMPACT FEE SCHEDULE

Exhibit G

Land Use	Unit	North Service Area		South Service Area	
		VMT	Dollars (\$267.95/VMT)	VMT	Dollars (\$261.35/VMT)
<b>Residential</b>					
Single-Family	Dwelling	20.36	\$5,455.46	19.11	\$4,994.40
Multi-Family	Dwelling	12.97	\$3,475.31	12.18	\$3,183.24
<b>Industrial</b>					
General Light Industrial	1,000 GFA	6.48	\$1,736.32	6.08	\$1,589.01
Manufacturing	1,000 GFA	5.14	\$1,377.26	4.82	\$1,259.71
Warehouse	1,000 GFA	2.27	\$608.25	2.13	\$556.68
Mini-Warehouse	1,000 GFA	1.97	\$527.86	1.85	\$483.50
<b>Commercial/Retail</b>					
Commercial/Retail	1,000 GFA	29.43	\$7,885.77	27.63	\$7,221.10
Eating/Drinking Places	1,000 GFA	29.43	\$7,885.77	27.63	\$7,221.10
Casino/Gaming	1,000 GFA	60.17	\$16,122.55	56.48	\$14,761.05
<b>Office and Other Services</b>					
Schools	1,000 GFA	16.83	\$4,509.60	15.80	\$4,129.33
Day Care	1,000 GFA	16.83	\$4,509.60	15.80	\$4,129.33
Lodging	Room	4.38	\$1,173.62	4.11	\$1,074.15
Hospital	1,000 GFA	14.01	\$3,753.98	13.15	\$3,436.75
Nursing Home	1,000 GFA	8.68	\$2,325.81	8.14	\$2,127.39
Medical Office	1,000 GFA	45.47	\$12,183.69	42.68	\$11,154.42
Office and Other Services	1,000 GFA	12.73	\$3,411.00	11.95	\$3,123.13
Regional Recreational Facility	Acre	1.02	\$273.31	0.96	\$250.90

**Regional Road  
Impact Fee  
(RRIF)**

**7<sup>th</sup> Edition  
Year 1 Indexing**

Effective  
1/31/2023

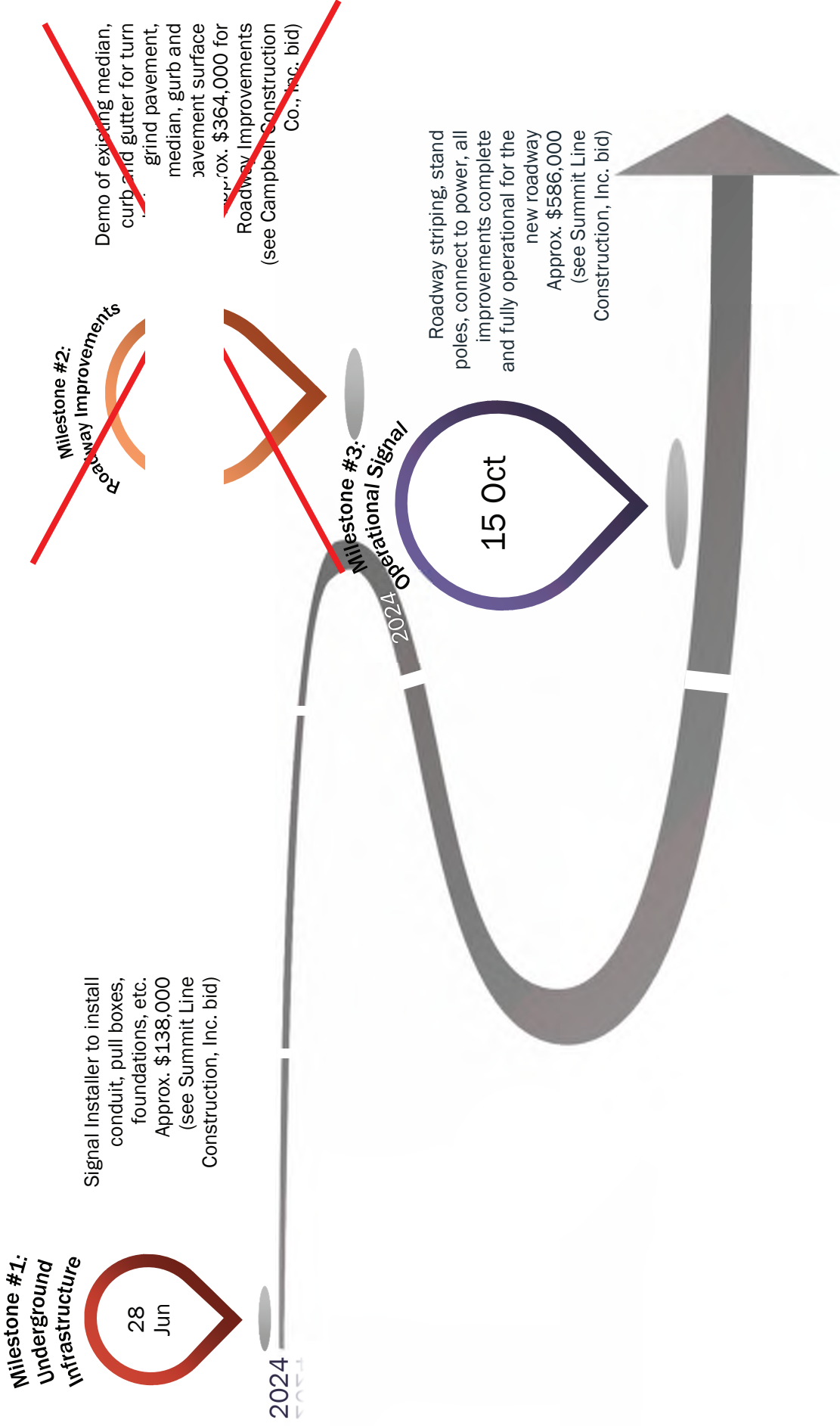
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**EXHIBIT "H"**  
**(Interim RRIF Waiver Request Schedule)**



# Lemmon Drive Traffic Signal RRIF Milestones



**REGIONAL TRANSPORTATION COMMISSION**

*Metropolitan Planning • Public Transportation & Operations • Engineering & Construction*

Metropolitan Planning Organization of Washoe County, Nevada

**Meeting Date:** 6/21/2024

**Agenda Item:** 4.5.1

To: Regional Transportation Commission

From: James Gee, Director of Public Transportation and Operations

**SUBJECT: Janitorial and Porter Services**

**RECOMMENDED ACTION**

Approve a contract with Qual-Econ LLC, for janitorial and porter services for the RTC facilities, for a total not-to-exceed amount of \$3,162,190.12 beginning FY25 for four years.

**BACKGROUND AND DISCUSSION**

The RTC issued a Request for Proposals in March 2024. The RFP requested proposals for Janitorial and Porter services for RTC facilities. The RFP submission deadline was April 12, 2024. Proposals were received from three firms. A three-person proposal evaluation team of RTC staff reviewed and ranked the proposals. The proposals were evaluated based on the criteria set forth in the RFP.

Staff is recommending award to Qual-Econ U.S.A, Inc., because they received the highest ranking based upon the evaluation criteria. The amount of the agreement is not-to-exceed \$3,162,190.12 over four years.

**FISCAL IMPACT**

Local Sales Tax appropriations are included in the FY2025 budget for this action.

**PREVIOUS BOARD ACTION**

There has been no previous Board action taken.

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# AGREEMENT FOR GOODS AND SERVICES

## Janitorial and Porter Services

This agreement (“Agreement”) is dated and effective as of July 01, 2024, by and between the Regional Transportation Commission of Washoe County, Nevada (“RTC”) and Qual-Econ U.S.A. LLC. (“Contractor”).

1. **Term.** The term of this agreement shall commence on the effective date above and shall end on June 30, 2028.
2. **Scope of Work.** Contractor shall provide the goods and services described in the scope of work attached as Exhibit A
3. **Time for Performance.** The work shall be completed pursuant to the schedule of deliverables attached as Exhibit B.
4. **Compensation.** RTC shall pay Contractor for the services pursuant to, and in an amount not to exceed \$3,162,190.12, the pricing and fee schedule attached as Exhibit B.
5. **Proceeding with Work.** Contractor shall not proceed with work until both parties have executed this Agreement and RTC has issued a purchase order. If Contractor proceeds with work before those conditions have been satisfied, Contractor shall forfeit any and all right to reimbursement and payment for work performed during that period. In the event Contractor violates this section, Contractor waives any and all claims and damages against RTC, its employees, agents, and affiliates, including but not limited to monetary damages, and any other remedy available at law or in equity arising under the terms of this Agreement.
6. **Invoices/Payment.** Contractor shall submit invoices to [accountspayable@rtcwashoe.com](mailto:accountspayable@rtcwashoe.com). RTC’s payment terms are 30 days after the receipt of the invoice. Simple interest will be paid at the rate of half a percent (0.5%) per month on all invoices approved by RTC that are not paid within thirty (30) days of receipt of the invoice.
7. **Legal/Regulatory Compliance.**
  - a. Contractor shall comply with all applicable federal, state and local government laws, regulations and ordinances. Contractor shall be responsible for obtaining all necessary permits and licenses for performance of services under this Agreement. Upon request of RTC, Contractor shall furnish RTC certificates of compliance with all such laws, orders and regulations.
  - b. Contractor represents and warrants that none of the services to be rendered pursuant to this Agreement constitute the performance of public work, as that term is defined by Section 338.010(17) of the Nevada Revised Statutes. To the extent Contractor does engage in such public work, Contractor shall be responsible for paying the prevailing wage as required by Chapter 338 of the Nevada Revised Statutes.
8. **Insurance.** Contractor shall obtain all types and amounts of insurance set forth in Exhibit C, and shall comply with all of its terms. Contractor shall not commence any work or permit any

employee/agent to commence any work until satisfactory proof has been submitted to RTC that all insurance requirements have been met.

**9. Indemnification.** Contractor's obligations are set forth in Exhibit C. Said obligation would also extend to any liability of RTC resulting from any action to clear any lien and/or to recover for damage to RTC property.

**10. Termination.**

- a. Mutual Assent. This Agreement may be terminated by mutual written agreement of the parties.
- b. Convenience. RTC may terminate this Agreement in whole or in part for convenience upon written notice to Contractor.
- c. Default. Either party may terminate this Agreement for default by providing written notice of termination, provided that the non-defaulting party must first provide written notice of default and give the defaulting party and opportunity to cure the default within a reasonable period of time.

**11. Rights, Remedies and Disputes**

- a. RTC shall have the following rights in the event that RTC deems the Contractor guilty of a breach of any term under the Agreement:
  - i. The right to take over and complete the work or any part thereof as agency for and at the expense of the Contractor, either directly or through other contractors;
  - ii. The right to cancel this Agreement as to any or all of the work yet to be performed;
  - iii. The right to specific performance, an injunction or any other appropriate equitable remedy; and
  - iv. The right to money damages.
- b. Inasmuch as the Contractor can be adequately compensated by money damages for any breach of this Agreement, which may be committed by RTC, the Contractor expressly agrees that no default, act or omission of RTC shall constitute a material breach of this Contract, entitling Contractor to cancel or rescind the Agreement (unless RTC directs Contractor to do so) or to suspend or abandon performance.
- c. Disputes arising in the performance of this Agreement that are not resolved by agreement of the parties shall be decided in writing by the authorized representative of RTC's Executive Director. This decision shall be final and conclusive unless within 10 days from the date of receipt of its copy, Contractor mails or otherwise furnishes a written appeal to RTC's Executive Director. In connection with any such appeal, Contractor shall be afforded an opportunity to be heard and to offer evidence in support of its position. The decision of RTC's Executive Director shall be binding upon the Contractor and the Contractor shall abide by the decision.
- d. Unless otherwise directed by RTC, Contractor shall continue performance under this Agreement while matters in dispute are being resolved.

**12. Fees and Penalties**

There are fees and performance penalties that if assessed will be deducted from the Contractor's invoice. These fees and performance penalties are listed in Exhibit D.

**13. Records.** Contractor will permit RTC access to any books, documents, papers and records of Contractor pertaining to this Agreement, and shall maintain such records for a period of not less than three years.

**14. Exhibits.** The exhibits to this Agreement, and any additional terms and conditions specified therein, are a material part hereof and are incorporated by reference as though fully set forth herein.

**15. Exclusive Agreement.** This Agreement constitutes the entire agreement of the parties and supersedes any prior verbal or written statements or agreements between the parties.

**16. Amendment.** No alteration, amendment or modification of this Agreement shall be effective unless it is in writing and signed by both parties.

**17. No Assignment.** Contractor shall not assign, sublease, or transfer this Agreement or any interest therein, directly or indirectly by operation of law, without the prior written consent of RTC. Any attempt to do so without the prior written consent of RTC shall be null and void, and any assignee, sublessee, or transferee shall acquire no right or interest by reason thereof.

**18. Governing Law.** This Agreement shall be construed in accordance with and governed by the laws of the State of Nevada.

**19. Venue.** Any lawsuit brought to enforce this Agreement shall be brought in the Second Judicial District Court of the State of Nevada, County of Washoe appropriate court in the State of Nevada.

**20. Attorneys' Fees.** In the event of a dispute between the parties result in a proceeding in any Court of Nevada having jurisdiction, the prevailing party shall be entitled to an award of costs and any reasonable attorneys' fees.

**21. Certification Required by Nevada Senate Bill 27 (2017).** Contractor expressly certifies and agrees, as a material part of this Agreement, that it is not currently engaged in a boycott of Israel. Contractor further agrees, as a material part of this Agreement, it will not engage in a boycott of Israel for the duration of this Agreement. If, at any time during the formation or duration of this Agreement, Contractor is engaged or engages in a boycott of Israel, it will constitute a material breach of this Agreement.

REGIONAL TRANSPORTATION  
COMMISSION OF WASHOE COUNTY

BY: \_\_\_\_\_  
Bill Thomas, AICP, Executive Director

QUAL-ECON U.S.A.

BY: \_\_\_\_\_  
Jason Shinar, President

SAMPLE

**Exhibit A**  
**Scope of Service**  
**ALL SITES**

**General Scope of Work**

It is the intent of these Technical Specifications to clearly state the scope of work and other requirements of services covered within the Contract Documents during the period of services. It is understood, that the scope of work covers all addresses, as listed in this document and that the successful contractor will perform **work at every site listed**.

1. The contractor shall provide all labor, equipment, materials and supplies to perform the work tasks outlined in the Schedule of Tasks for each one of the listed facilities at the specified frequencies and within the specified work hours for the duration of the contract in accordance with generally accepted industry standards.
2. The specified work hours can be changed by RTC with written direction.
3. Janitors and Porters must be able to communicate effectively with RTC personnel in English
4. Listed facilities may be changed due to adding or remove space from the scope of work as space use and/or building modifications occur.
5. The RTC reserves the right to implement single stream recycling in RTC facilities and Contractor tasks are not expected to be impacted significantly. However, some modification of recycling materials tasks may be expected.
6. Contractor shall coordinate all monthly and quarterly work at least 48 hours prior to starting work. An initial schedule shall be submitted by the successful contractor and approved by the RTC at the time the contract is approved. Contractor shall notify the FM Supervisor via email within 24 hours after monthly or quarterly work is completed for inspection and acceptance for payment.

**Supplies Provided by Contractor**

All cleaning products used at RTC sites shall be Green Seal certified. A list of products is found at [www.greenseal.org](http://www.greenseal.org). Submit proof of certification to FM Supervisor for all products proposed to be used prior to the start of the contract.

**Contractor On-Site Storage**

The RTC shall make available for use by the contractor the closet spaces for the storage of cleaning tools. All janitorial items shall be stored neatly within the provided storage areas and the area shall be maintained in a clean and tidy condition by the contractor. All cleaning tools (mops, buckets, etc.) shall be cleaned after use prior to being returned to storage. No storage allowed outside of designated storage areas.



The contractor is expressly prohibited from storing any cleaning agents at any RTC site overnight without the express written permission by RTC. Without written permission, cleaning agents must be removed from RTC property on a daily basis when contractor personnel have completed their work.

### **Security Responsibilities of Contractor**

All Contractor personnel that will be on RTC premises shall undergo a background check by the Washoe County Sheriff's Department. The background check shall be initiated prior to performing work at any RTC facility. Work may be performed while the Sheriff's Department conducts the background check. Background check information shall be provided to the RTC for security clearance. Upon completion of the background check, Contractor personnel must pass a review of the background information by RTC Security Department to continue performing work at any RTC facility. The Contractor shall pay the cost of the background checks.

Any damage noticed by Contractor employees shall immediately be reported to the Facilities Maintenance Supervisor, RIDE Supervisor or security staff.

The Contractor is responsible that all personnel working on-site are familiar with the RTC security system and procedures, and can properly operate the system prior to working on site. When contractor personnel are on-site, the contractor shall be responsible for maintaining the security of the premises by ensuring that all doors are locked. Upon leaving the site, the contractor shall ensure that all security systems are in-place and all appropriate doors are secured.

“If you see something, say something” The contractor shall familiarize staff with procures to properly report suspicious activity to either RTC security staff on site and/or local law enforcement. It is recommended that contractor provide information to staff regarding this program. <https://www.dhs.gov/see-something-say-something>

Fees and penalties will be listed in Exhibit D of the Contract. **All costs incurred by the procuring agency shall be deducted from invoices received for janitorial/porter services upon approval of such costs by the Procuring Officer.**

### **Supplies Provided by Contractor**

The Contractor shall provide the following supplies for installation in the appropriate dispensers and vending machines by contractor personnel:

- 1.) Hand lotion (1105 Terminal building only)
- 2.) Paper towels
- 3.) Paper seat covers
- 4.) Toilet tissue
- 5.) Liquid hand soap
- 6.) Waterless urinal traps (Centennial Plaza only)
- 7.) Urinal deodorizers
- 8.) Vending machine female products

All other materials and supplies, along with Material Safety Data Sheet (MSDS), shall be provided by the Contractor and included in the BID price. It shall be the Contractor's responsibility to submit required MSDS sheets to the Procuring Officer before bringing such materials or supplies onto the site. All products used at RTC sites shall be Green Seal certified. A list of products is found at [www.greenseal.org](http://www.greenseal.org). Submit proof of certification to Project Manager for all projects proposed for all products to be used.

Supplies which were previously provided by the RTC will now be required to provide by the vendor. The estimated quantities for materials provided by the RTC in previous years are provided below. This represents estimated usage of materials in the previous years and are a historical representation of usage but they are not a guarantee of quantities required or necessary to meet contract requirements.

<b>Supplies</b>	<b>Annual QTY (Cases)</b>
Toilet Paper	513.00
Paper Towels	692.00
Toilet Seat Covers	22.00
Hand Soap	628.00
Urinal Traps (CP)	30.00
Blue Seal Trap Liquid (CP)	16.00
Trash Can Liners Lrg	178.00
Trash Can Liners Med	265.00
Trash Can Liners Sm	129.00
Biohazard Kits	TBD
Urinal Deodorizers	TBD

**Equipment provided by RTC**

The RTC will supply the following equipment and supplies for Contractor employee use:

- 1.) Radios (4<sup>th</sup> Street Station only)

The RTC will be responsible for the repair and maintenance for normal wear and tear of RTC supplied radios listed above. Damage caused by negligence, accident, loss or abuse shall be the responsibility of the contractor.

The Contractor shall also be issued a set of keys/access cards (mechanical and/or electronic) by the FM Supervisor. It will be the responsibility of the Contractor and its employees to protect the keys from loss. In the event that the issued keys are lost, stolen or misplaced by the Contractor's representative/employees, Contractor must notify the FM Supervisor as soon as Contractor is aware of lost, stolen or misplaced keys. Contractor shall be liable for the cost of installing new locks on all applicable facility doors as well as the cost of duplicating keys.

Fees and Penalties as listed in Exhibit D of the contract will be assessed for lost, stolen or broken equipment. **All costs incurred by the Procuring Agency shall be deducted from invoices received for janitorial/porter services upon approval of such costs by the Facilities Administrator. (This includes full replacement costs for all lost or stolen radios or other RTC equipment.)**

### **Equipment provided by Contractor**

The Contractor will supply the following equipment and supplies for Contractor employee use:

- 1) All trash can liners
- 2) Mops and buckets
- 3) Brooms
- 4) Rolling trash cans
- 5) Floor buffer/scrubbing machine
- 6) Side walk vacuum

The Contractor shall supply all other equipment necessary to provide the services outlined in these technical specifications.

Storm water pollution prevention plan (SWPPP). The RTC has specific plans for 4<sup>th</sup> Street Station and Centennial Plaza locations. The contractor shall be familiar with these and adhere to these plans. No wash water shall be discharged into the storm drains at any RTC location. In addition, the contract is required to comply with all local, regional, state and federal laws pertaining to proper waste disposal.

Lost and Found Contractor shall follow RTC lost and found procedures and properly secure all items found at RTC locations.

### **SCHEDULE OF TASKS**

#### **600 SUTRO FACILITY MAINTENANCE BUILDING**

### **Times of Service**

For this portion of the work, the term "daily" shall mean two days per week (Tuesday and Thursday) excluding the following holidays: Thanksgiving, the day after Thanksgiving, Christmas, New Year's Day, and Independence Day. All other tasks shall be performed as outlined (e.g. weekly, monthly and quarterly). All activities regardless of the day performed, shall be commenced and completed between the hours of 6:00 p.m. and 1:00 a.m.

### **Specified Areas for Service**

Entire buildings with the following exclusions:

- 1.) Facility Maintenance Building Administration area and storage bays.  
(See Site Diagrams)

### **Daily Tasks**

Empty all trash cans inside buildings, dispose of trash in dumpster, and replace trash can liners as necessary. Do not overfill dumpster. Contractor shall consult with RTC Facilities Supervisor and/or staff if dumpster is full. (Additional waste disposal fee may be applied and Contractor shall be responsible for dumpster overfill cost if they fail to consult with RTC Facilities Supervisor or staff.)

Empty recycle materials into recycle bin as necessary, and coordinate pickup as necessary.

Dry and wet mop all tiled floor areas and restroom floor surfaces. Remove smudge/shoe marks. All restroom floors shall be wet mopped with disinfectant solution. Corners and wall base shall not display streaks and/or dirty mop water build-up. Dust and wet mop lunch area.

Clean, polish, disinfect all restroom facility washbasins, toilets, showers, lockers (top, sides, and interior), and urinals including exposed metal areas. Special attention shall be paid to the underside of urinals and toilets.

Clean and replenish all towel cabinets, paper dispensers, seat covers, tissue holders and soap dispensers, these supplies to be provided by the Contractor.

Clean and disinfect all tables, countertops, and exterior of refrigerators, microwave ovens, and water coolers.

Dust desks, furniture, including tops of cabinets and ledges. Do not dust computers or printers.

Clean all door glass and mirrors, removing fingerprints and smudges.

Change out light bulbs in designated work areas.

### **Weekly Tasks**

Spray buff/polish all facility-wide tile and linoleum floor surfaces.

Thoroughly clean all restroom tile wall surfaces, including wall cove base, interior/exterior stall panels and shower curtains where applicable. Contractor must use disinfectant solution.

Clean interior of microwave ovens in break room areas.

### **Monthly Tasks**

Wash all vinyl chair seats and backs with suitable cleaner and conditioner.

Wash all wastebaskets and install new liners.

Clean and reseal/wax all restroom floor surfaces using a non-skid sealer or wax.

Clean and wax all tile floors in Facility Maintenance area.

**Quarterly Tasks**

Strip, clean and or wax all tile floors for protection and for weekly spray buffing.  
(FM Supervisor must be notified prior to scheduling this task)

Wipe/vacuum dust from all HVAC vents and returns.

Items above will be inspected and enforced by RTC Staff.

SAMPLE

## **SCHEDULE OF TASKS**

### **1105 TERMINAL WAY**

#### **Times of Service**

For this portion of the work, the term "daily" shall mean five days per week (Monday through Friday) excluding the following holidays: Thanksgiving, the day after Thanksgiving, Christmas, New Year's Day, and Independence Day. All activities performed Monday through Friday shall be commenced and completed between the hours of 5:00 p.m. and 10:00 p.m. Tasks scheduled for Saturday or Sunday shall be completed between the hours of 7:00 a.m. and 5:00 p.m.

#### **Specified Area for Services**

Most of building, except for some tenant occupied areas (See Site Diagram).

#### **Daily Tasks**

Empty all trash cans inside buildings, dispose of trash in dumpster, clean area around dumpster and replace trash can liners as necessary. Do not overfill dumpster. Contractor shall consult with RTC Facilities Supervisor or staff if dumpster is full. (Additional waste disposal fee may be applied and Contractor shall be responsible for dumpster overfill cost if they fail to consult with RTC Facilities Supervisor or staff.)

Empty all trash cans outside of building.

Empty recycle materials into recycle bin as necessary, and coordinate pickup as necessary.

Clean interior walls, doors, and door jams of smudge marks, fingerprints, and dirt.

Spot vacuum carpeted areas and spot clean as necessary.

Clean elevator (there are two elevators in this building), and this includes but is not limited to the door tracks, clean and polish the interior and exterior elevator doors, walls and the lights, vacuum the interior floors and wipe off exterior push buttons.

Dry and wet mop all tiled entrances and restroom floor surfaces. Remove smudge/shoe marks. All restroom floors shall be wet mopped with disinfectant solution. Corners and wall base shall not exhibit streaks and/or dirty mop water build-up.

Clean, polish, disinfect all restroom facility washbasins, toilets, showers, lockers (top and sides), and urinals including exposed metal areas. Special attention shall be paid to the underside of urinals and toilets.

Clean and replenish all towel cabinets, paper dispensers, seat covers, tissue holders, soap dispensers, and feminine protection vending machines (if applicable); these supplies to be provided by the Contractor.

Clean the exterior of vending machines.

Clean and disinfect all drinking fountains.

Clean and disinfect all sinks, tables, countertops, cupboards, and the exterior of microwave ovens and refrigerators.

Dust desks, furniture, including tops of cabinets and ledges. Do not dust computers or printers.

Clean all door glass and mirrors, removing fingerprints and smudges.

Clean the entrance glass around the doors of the north and south building entrances.

Clean interior glass at the elevator lobby of the second and third floors.

Change out light bulbs in designated work areas.

Remove recycle materials from containers located in the break room and copier areas as well as offices of the RTC departments.

### **Weekly Tasks**

Spray buff/polish all facility-wide tile and linoleum floor surfaces.

Thoroughly clean all restroom tile wall surfaces, fixtures, base wall cove, interior/exterior stall panels and shower curtains where applicable, removing smudge marks, etc. Must use disinfectant solution.

Flush all floor drains.

Clean interior of microwave ovens in break room areas.

Clean picnic tables and benches outside the building located on the west side of the parking lot of bird droppings and other soils. Pick up any debris in picnic bench area. Empty exterior garbage cans.

Sweep outside the entrance areas (north and south mid building and east and west ends of building) to remove debris (leaves, trash etc.). Empty exterior garbage cans. Wipe off benches, bike racks, windows, lights and bollards around entrances.

### **Monthly Tasks**

Vacuum all upholstered chairs including those in meeting rooms.

Wash all vinyl chair seats and backs with suitable cleaner and conditioner.

Wash all wastebaskets and install new liners.

Vacuum the exhaust fans in all restrooms.

Clean and reseal/wax all restroom floor surfaces using a non-skid sealer or wax.

Vacuum all carpeted areas in their entirety.

Sweep interior stairs and stairwells.

Clean dumpster area.

### **Quarterly Tasks**

Strip, clean and or wax all tile floors for protection and for weekly spray buffing.  
(FM Supervisor must be notified prior to scheduling this task)

Clean interior partition windows in the RTC offices.

Wipe/vacuum dust from all HVAC vents and returns.

### **Bi-Annual Tasks**

Shampoos / clean carpets (or more frequently if needed.)

Clean windows (interior glass only.)



## **SCHEDULE OF TASKS**

### **1421 VICTORIAN AVENUE CENTENNIAL PLAZA**

#### **Times of Service:**

For this portion of the work, the term "daily" shall mean five days per week (Monday through Friday) excluding the following holidays: Thanksgiving, the day after Thanksgiving, Christmas, New Year's Day, and Independence Day. All activities, regardless of the day performed, shall be commenced and completed between the hours of 11:00 p.m. and 2:00 a.m. The restrooms for Centennial Plaza may be open 24 hours a day. Service may be interrupted to accommodate RTC patrons that need the use of the restroom facilities during cleaning.

#### **Specified Area for Services:**

Janitorial services for the Main building (excluding Grey Hound occupied retail space.) Porter services for the entire sight. (See Site Diagrams)

#### **Daily Tasks**

Empty all trash cans inside buildings, dispose of trash in dumpster, clean area around dumpster and replace trash can liners as necessary. Do not overfill dumpster. Contractor shall consult with RTC Facilities Supervisor or staff if dumpster is full. (Additional waste disposal fee may be applied and Contractor shall be responsible for dumpster overfill cost if they fail to consult with RTC Facilities Supervisor or staff.)

Empty recycle materials into recycle bin as necessary, and coordinate pick up and/or place into recycle containers as directed.

Spot vacuum carpeted areas and spot clean as necessary, including entry and vestibule mats.

Sweep and mop all brick paver floor surfaces in hallways and waiting areas.

The restrooms shall be cleaned at the beginning of the shift, and as frequently as needed to maintain a clean and hygienic space. Restroom cleaning and closure should be timed to avoid bus schedule "pulses." At mid-shift, and at the end of the shift, all public and employee restrooms will be spot checked and restocked. Duties shall include restocking of toilet paper, hand towels, wiping down wash basins, and sweeping floors.

Dry and wet mop all restroom floor surfaces. Remove smudge/shoe marks. All restroom floors shall be wet mopped with disinfectant solution. Corners and wall base shall not exhibit streaks and/or dirty mop water build-up. Used disinfectant shall be poured down floor drains.

Clean, polish, disinfect all restroom facility washbasins, toilets, showers, lockers (top and sides), and urinals including exposed metal areas. Special attention shall be paid to the underside of urinals and toilets.

Clean and replenish all towel cabinets, paper dispensers, seat covers, tissue holders, soap dispensers, and feminine protection vending machines; these supplies to be provided by the Contractor.

Clean and disinfect all drinking fountains.

Clean and disinfect all tables, countertops, and exterior of refrigerators and microwave ovens.

Dust desks, furniture, including tops of cabinets and ledges. Do not dust computers or printers.

Clean all door glass, sidelights and mirrors to remove smudge marks and fingerprints.

Spot clean doors, walls, woodwork and metalwork.

Panels, signs, pictures and artwork shall be dusted periodically and spot cleaned as necessary.

Clean public telephones, ATM, ticket machines and vending machines with germicidal cleaner.

### **Weekly Tasks**

Spray buff/polish all facility-wide tile and linoleum floor surfaces.

Thoroughly clean all restroom tile wall surfaces, interior/exterior stall panels and shower curtains where applicable, removing smudge marks, etc. Must use disinfectant solution.

Clean interior of microwave ovens in break room areas.

### **Bi-monthly Tasks**

Clean all windows up to the top of the door level. Inside and out that is reachable without additional equipment.

### **Monthly Tasks**

Wash all wastebaskets and install new liners.

Vacuum all upholstered chairs including those in meeting rooms.

Wash all vinyl chair backs with suitable cleaner and conditioner.

Dust all blinds.

Machine scrub and reseal/wax all restroom floor surfaces using a non-skid sealer or wax.

Vacuum all carpeted areas in their entirety.

### **Quarterly Tasks**

Strip, clean, machine scrub, and or wax all interior, facility-wide tile floor surfaces.  
(FM Supervisor must be notified prior to scheduling this task)

Wipe/vacuum dust from all HVAC vents and returns.

### **Biannual Tasks**

Clean carpet in driver lounge / lunch room area

Clean all windows in the facility, inside and out. This will be inspected by RTC Staff.  
(FM Supervisor must be notified prior to scheduling this task)

### **Porter Service**

Porter is the term used that will describe employees provided by the Contractor paid on an hourly basis. This service is separate from the janitorial service provided under the above sections. The day porter will not perform the interval janitorial services. All porter duties will be general maintenance and janitorial in nature. All contractors should personally visit the Centennial Plaza facility to be fully aware and prepared for the scope of work and requirements before submitting a bid.

### **Specific Area for Porter Service:**

Porter services for the public areas and entire site and grounds. Including all exterior surfaces, sidewalks, columns, pillars, bollards, walls, etc. (See Appendix B for site diagrams)

**Service Requirements** – Centennial Plaza must be maintained hourly to preserve the facility in a clean manner for our passengers. It is expected that cleanliness, trash collection, etc., will be maintained at high standards throughout the life of this Contract.

Day porter services will be required seven days per week, 365 days per year, between the hours of 6:00 a.m. to 6:00 p.m., twelve (12) hours per day. Only one Contractor employee will be on duty at any one time. The Contractor will be responsible for ensuring that the required services are uninterrupted during all holidays plus any employee sick leave or vacations. Any unworked hours due to sick leave or other failures to report to work shall either be covered by additional contractor staff or credited to the RTC.

The Procuring Agency shall have the option to purchase additional day porter services at the rate quoted in the Bid Worksheet. Such service additions may be used for special Centennial Plaza events. (Rib Cook Off, Hot August Nights, etc.)

**Required Daily Duties** - Required day porter duties shall include, but not be limited to:

All trash, paper, glass, cigarette butts, gum, leaves, etc., will be removed from the concrete and exterior brick paver surface on a continuous daily basis. This duty also includes all trash located in the landscaped areas and bus drive lanes, from facility edge to edge.

Interior building floor surfaces will be dust mopped or swept once every two hours throughout the day, with particular attention given to entrance areas.

Check all exterior trash cans throughout the shift. All exterior trash cans shall have their exteriors cleaned and be emptied as needed with new trash can liners installed. All trash is to be deposited in the disposal bin on the southwest side of the facility.

Check all interior trash cans throughout the shift. All interior trash cans will be emptied and new trash can liners installed as needed. All trash is to be deposited in the disposal bin on the southwest side of the facility. Do not overfill dumpster. Contractor shall consult with RTC Facilities Supervisor or staff if dumpster is full. (Additional waste disposal fee may be applied and Contractor shall be responsible for dumpster overfill cost if they fail to consult with RTC Facilities Supervisor or staff.)

All exterior ash trays by the building doors will be emptied and cleaned four times per day.

Every hour, all public and employee restrooms will be spot checked and restocked. Duties shall include general pick up of trash, restocking of toilet paper, hand towels, wiping down wash basins, sweeping floors, emptying trash cans if full, and check soap dispensers to ensure proper operation.

Any damage noticed by Contractor employees shall immediately be reported to the RIDE Supervisor, Facilities Maintenance, or security staff. Any damages that create an immediate safety hazard shall be cordoned off with tape, cones or other markings to keep the general public from contacting this area.

During days of snow, Contractor employees shall start and assist with snow removal from pedestrian walkways at the facility for passenger safety.

The RTC Facility Maintenance staff and the on-duty RIDE supervisor shall provide special instructions for special duty assignments during special events or to take care of incidents (including, but not limited to, spills, messes or any other duties that require janitorial help on the property) and other related duties.

**Uniforms** - All Contractor employees will be required to wear uniforms with the name of the company attached to the front of the uniform shirt. Contractor shall be responsible for supplying its employees with such uniforms while ensuring that they are clean and in good repair.

Uniforms shall consist of matching slacks and shirts, either short or long sleeve, depending upon seasonal changes. During summer months, slacks may be supplemented with shorts that match the uniform color. Shoes may be tennis shoes, white or black during the summer, or black boots during winter months. All jackets, either light or heavy, must also be a color that matches the uniform.

SAMPLE

## **SCHEDULE OF TASKS**

### **200 EAST 4<sup>TH</sup> STREET**

### **FOURTH STREET STATION**

#### **Times of Janitorial Service:**

For this portion of the work, the term "daily" shall mean seven days per week. There will be no exclusions for holidays. All activities, regardless of the day performed, shall be commenced and completed between the hours of 11:00 p.m. and 2:00 a.m. The restrooms for 4<sup>th</sup> Street Station may be open 24 hours a day. Service may be interrupted to accommodate RTC patrons that need the use of the restroom facilities during cleaning.

#### **Specified Area for Janitorial Service:**

Janitorial services for the buildings. (See Site Diagrams)

#### **Daily Janitorial Tasks**

Empty all trash cans inside buildings, dispose of trash in dumpster, and replace trash can liners as necessary. Do not overfill dumpster. Contractor shall consult with RTC Facilities Supervisor or staff if dumpster is full. (Additional waste disposal fee may be applied and Contractor shall be responsible for dumpster overfill cost if they fail to consult with RTC Facilities Supervisor or staff.)

Empty recycle materials into recycle bin as necessary, and coordinate pick up and/or place into recycle containers as directed.

Spot vacuum carpeted areas and spot clean as necessary, including entry and vestibule mats.

Sweep and mop all terrazzo floor surfaces in hallways and waiting areas. Instructions for this will be provided upon award.

The restrooms shall be cleaned at the beginning of the shift, and as frequently as needed to maintain a clean and hygienic space. Contractor shall only close one men's room and/or one women's room at a time. It is preferred that a male attendant be available to clean the men's room and a female attendant be available to clean the women's restroom in order to minimize the need to completely close restrooms for routine cleaning. Restroom cleaning and closure should be timed to avoid bus schedule "pulses." At mid-shift, and at the end of the shift, all public and employee restrooms will be spot checked and restocked. Duties shall include restocking of toilet paper, hand towels, wiping down wash basins, and sweeping floors.

Dry and wet mop all restroom floor surfaces. Remove smudge/shoe marks. All restroom floors shall be wet mopped with disinfectant solution. Corners and wall base shall not exhibit streaks and/or dirty mop water build-up. Used disinfectant shall be poured down floor drains.

Clean, polish, disinfect all restroom facility washbasins, toilets, showers, lockers (top and sides), and urinals including exposed metal areas. Special attention shall be paid to the underside of urinals and toilets.

Clean and replenish all towel cabinets, paper dispensers, seat covers, tissue holders, soap dispensers, and feminine protection vending machines; these supplies to be provided by the Contractor.

Clean and disinfect all drinking fountains.

Clean and disinfect all tables, countertops, and exterior of refrigerators and microwave ovens.

Dust desks, furniture, including tops of cabinets and ledges. Do not dust computers or printers.

Clean all door glass, sidelights and mirrors to remove smudge marks and fingerprints.

Spot clean doors, walls, woodwork and metalwork.

Panels, pictures and artwork shall be dusted periodically and spot cleaned as necessary.

Artificial plants and planters should be dusted and cleaned as needed.

Clean public telephones, ATM, ticket machines and vending machines with germicidal cleaner. This will include all flower beds and tree wells NOT in "driveways".

### **Weekly Janitorial Tasks**

Spray buff/polish all facility-wide tile and linoleum floor surfaces.  
(FM Supervisor must be notified prior to scheduling this task)

Thoroughly clean all restroom tile wall surfaces, interior/exterior stall panels and shower curtains where applicable, removing smudge marks, etc. Must use disinfectant solution.

Clean interior of microwave ovens in break room areas.

### **Bi-monthly Janitorial Tasks**

Clean all windows up to the top of the door level.  
(FM Supervisor must be notified prior to scheduling this task)

### **Monthly Janitorial Tasks**

Wash all wastebaskets and install new liners.

Vacuum all upholstered chairs including those in meeting rooms.

Wash all vinyl chair backs with suitable cleaner and conditioner.

Dust all blinds.

Machine scrub and reseal/wax all restroom floor surfaces using a non-skid sealer or wax.

Vacuum all carpeted areas in their entirety.

### **Quarterly Janitorial Tasks**

Strip, clean, machine scrub, and or wax all interior, facility-wide tile floor surfaces. (FM Supervisor must be notified prior to scheduling this task)

### **Biannual Janitorial Tasks**

Clean carpets in the facility

Clean all windows in the facility. (FM Supervisor must be notified prior to scheduling this task)

### **Porter Service**

Porter is the term used that will describe the employees supplied by the Contractor. This service is separate from the janitorial service provided under the above sections. The day porter will not perform the interval janitorial services. All porter duties will be general maintenance and janitorial in nature. All contractors should personally visit the 4<sup>th</sup> Street Station facility to be fully aware and prepared for the scope of work and requirements before submitting a bid.

### **Specified Area for Porter Service:**

Porter services for the public areas and entire sight and grounds. Including all exterior surfaces, sidewalks, columns, pillars, bollards, walls, etc. (See Appendix B for site diagrams)

**Service Requirements** – 4<sup>th</sup> Street Station must be maintained continually to preserve the facility in a clean manner for our passengers. It is expected that cleanliness, trash collection, etc., will be maintained at high standards throughout the life of this Contract.

Day porter services will be required seven days per week, 365 days per year,



- 1.) Two (2) porters on duty between the hours of 5:00 a.m. to 2:00 p.m.,
- 2.) One (1) porter supplementing the first two porters from the hours of 8:00 a.m. to 5:00 p.m.
- 3.) Two (2) Swing Shift porters shall be on duty between 2:00 p.m. and 11:00 p.m.
- 4.) One (1) porter shall be on duty for the third shift will occur from 11:00 p.m. to 5:00 a.m.

For a total of forty-six (46) working hours each day. The porter on duty between 6:00 p.m. and 5:00 a.m. will be equipped with a cell phone so that RTC personnel have a point of contact for clean up at the Centennial Plaza facility if necessary, otherwise these porters will be stationed at Fourth Street Station. These porters will have reliable transportation to be able to travel between each facility depending on the needs requested by RTC personnel. Up to three Contractor employees may be on duty any one time. The Contractor will be responsible for ensuring that the required services are uninterrupted during the day. At least one porter shall be on duty at all times, including lunch hours. The Contractor shall also ensure services are uninterrupted during all holidays, employee sick leave or vacations. A supervisor shall be provided upon award.

The RTC shall have the option to purchase additional day porter services at the rate quoted in the Bid Worksheet. Such service additions may be used for special 4<sup>th</sup> Street Station events.

**Required Daily Duties** - Required day porter duties shall include, but not be limited to:

All trash, paper, glass, cigarette butts, leaves, etc., will be removed from the concrete and exterior brick paver surface on a continuous daily basis. This duty also includes all trash located in the landscaped areas, including planters, and bus drive lanes, from facility edge to edge. This duty may also require the removal of hard trash (e.g. gum).

Interior building floor surfaces will be dust mopped or swept once every two hours throughout the day, with particular attention given to entrance areas. Exterior surfaces such as walls, windows, columns, etc., shall be spot cleaned and kept free of graffiti, smudges, etc.

Check all exterior trash cans throughout the shift. All exterior trash cans will be wiped down and emptied as needed with new trash can liners installed. All trash is to be deposited in the appropriate containers on the south side of the facility. Contractor shall not over fill the dumpsters. Contractor shall ensure that recycled materials are sorted and no contaminated materials are placed into the recycling bins.

Check all interior trash cans throughout the shift. All interior trash cans will be emptied and new trash can liners installed as needed. All trash is to be deposited in the appropriate containers on the south side of the facility. Do not overfill dumpster. Contractor shall consult with RTC Facilities Supervisor or staff if dumpster is full. (Additional waste disposal fee may be applied and Contractor shall be responsible for dumpster overfill cost if they fail to consult with RTC Facilities Supervisor or staff.)

All exterior ash trays by the building doors will be emptied and cleaned four times per day.

Every hour, all public and employee restrooms will be spot checked and restocked. Duties shall include general pick up of trash, restocking of toilet paper, hand towels, wiping down wash basins, sweeping floors, emptying trash cans if full, and check soap dispensers to ensure proper operation.

Any damage noticed by Contractor employees shall immediately be reported to the RIDE Supervisor, Facilities Maintenance, or security staff. Any damages that create an immediate safety hazard shall be cordoned off with tape, cones or other markings to keep the general public from contacting this area.

During days of snow, Contractor employees shall start and assist with snow removal and spread ice melt at the facility for passenger safety.

The RTC Facility Maintenance staff shall act directly as the Contractor employee's supervisor for special duty assignment or to take care of incidents (including, but not limited to, spills, messes or any other duties that require janitorial help on the property) and other related duties.

**Uniforms** - All Contractor employees will be required to wear uniforms with the name of the company attached to the front of the uniform shirt. Contractor shall be responsible for supplying its employees with such uniforms while ensuring that they are clean and in good repair.

Uniforms shall consist of matching slacks and shirts, either short or long sleeve, depending upon seasonal changes. During summer months, slacks may be supplemented with shorts that match the uniform color. Shoes may be tennis shoes, white or black during the summer, or black boots during winter months. All jackets, either light or heavy, must also be a color that matches the uniform.

Exhibit B – Compensation

Location	Sutro	Terminal Way	Centennial Plaza	4 <sup>th</sup> Street Station
Daily Janitorial Services	458.33	3,151.00	1,432.27	4,812.43
Weekly Janitorial Services	114.58	286.45	630.20	601.55
Monthly Janitorial Services	95.19	370.19	66.11	174.52
Quarterly Janitorial Services	31.73	116.34	126.92	211.54
Bi-annual Janitorial Services	0.00	296.15	121.63	76.68
Porter Services	0.00	0.00	9,651.33	36,996.77
Estimated supplies	197.33	377.00	786.67	1,104.00
<b>Total (Per Month)</b>	<b>897.16</b>	<b>4,597.13</b>	<b>12,815.13</b>	<b>43,977.49</b>

Please provide the annual cost by service type and location for year 1.

Location	Sutro	Terminal Way	Centennial Plaza	4 <sup>th</sup> Street Station
Daily Janitorial Services	5,499.96	37,812.00	17,187.24	57,749.16
Weekly Janitorial Services	1,374.96	3,437.40	7,562.40	7,218.60
Monthly Janitorial Services	1,142.28	4,442.28	793.32	2,094.24
Quarterly Janitorial Services	380.76	1,396.08	1,523.04	2,538.48
Bi-annual Janitorial Services	0.00	3,553.80	1,459.56	920.16
Porter Services	0.00	0.00	115,815.96	443,961.24
Estimated supplies	2,367.96	4,524.00	9,440.04	13,248.00
<b>Total (Per Year)</b>	<b>10,765.92</b>	<b>55,165.56</b>	<b>153,781.56</b>	<b>527,729.88</b>

Please provide inflation rate for years 2-4 for services. 3.75%

Please provide inflation rate for years 2-4 for supplies. 3.75%

Please provide the total annual contract cost for years 1-4 of the contract.

Total cost for Services and supplies for year 1	\$747,442.92
Total cost for Services and supplies for year 2	\$775,472.03
Total cost for Services and supplies for year 3	\$804,552.23
Total cost for Services and supplies for year 4	\$834,722.94
<b>Total cost for 4-year contract</b>	<b>\$3,162,190.12</b>

Year 2: Sutro \$11,169.64 Terminal \$57,234.27 Centennial \$159,548.37 4<sup>th</sup> street \$547,519.75

Year 3: Sutro \$11,588.50 Terminal \$59,380.55 Centennial \$165,531.43 4<sup>th</sup> street \$568,051.75

Year 4: Sutro \$12,023.07 Terminal \$61,607.32 Centennial \$171,738.86 4<sup>th</sup> street \$589,353.69

Vendor will invoice for services on a monthly per location.

## EXHIBIT C

### INDEMNIFICATION AND INSURANCE REQUIREMENTS FOR MAINTENANCE, OPERATIONS & SERVICE AGREEMENTS

2022-03-09 Version

#### 1. INTRODUCTION

IT IS HIGHLY RECOMMENDED THAT BIDDERS CONFER WITH THEIR INSURANCE CARRIERS OR BROKERS TO DETERMINE THE AVAILABILITY OF THESE INSURANCE CERTIFICATES AND ENDORSEMENTS IN ADVANCE OF BID OR PROPOSAL SUBMISSION. IF THERE ARE ANY QUESTIONS REGARDING THESE INSURANCE REQUIREMENTS, IT IS RECOMMENDED THAT THE AGENT/BROKER CONTACT RTC'S FINANCE DIRECTOR DIRECTLY AT (775) 335-1845.

#### 2. INDEMNIFICATION

CONTRACTOR agrees to defend save and hold harmless and fully indemnify RTC, Washoe County, City of Reno, and City of Sparks, including their elected officials, officers, employees, and agents (hereafter, "Indemnitees") from and against any and all claims, proceedings, actions, liability and damages, including reasonable attorneys' fees and defense costs incurred in any action or proceeding (collectively "Damages") arising out of:

- A. Any breach of duty, neglect, or negligent error, misstatement, misleading statement or omission committed in the conduct of CONTRACTOR'S profession by CONTRACTOR, its employees, agents, officers, directors, Subs (as that term is defined below) , or anyone else for which CONTRACTOR may be legally responsible; and
- B. The negligent acts of CONTRACTOR, its employees, agents, officers, directors, subs, or anyone else for which CONTRACTOR is legally responsible; and
- C. The infringement of any patent or copyright resulting from the use by the Indemnitees of any equipment, part, component, or other deliverable (including software) supplied by CONTRACTOR under or as a result of this Agreement, but excluding any infringement resulting from the modification or alteration by the Indemnitees of any equipment, part, component, or other deliverable (including software) except as consented to by CONTRACTOR.

The Damages shall include, but are not limited to, those resulting from personal injury to any person, including bodily injury, sickness, disease or death and injury to real property or personal property, tangible or intangible, and the loss of use of any of that property, whether or not it is physically injured.

If the Indemnitees are involved in defending actions, CONTRACTOR shall reimburse the Indemnitees for the time spent by such personnel at the rate the Indemnitees pay for such services.

If an Indemnitee is found to be liable in the proceeding, then CONTRACTOR'S obligation here under shall be limited to the proportional share of the liability attributed to CONTRACTOR.

In determining whether a claim is subject to indemnification, the incident underlying the claim shall determine the nature of the claim.

In the event of a violation or an infringement under paragraph 2.C above and the use is enjoined, CONTRACTOR, at its sole expense, shall either (1) secure for the Indemnitees the right to continue using the materials by suspension of any injunction or by procuring a license or licenses for the Indemnitees; or (2) modify the materials so that they become non-infringing. This covenant shall survive the termination of this Agreement.

### **3. GENERAL REQUIREMENTS**

Prior to the start of any work on a RTC project, CONTRACTOR shall purchase and maintain insurance of the types and limits as described herein insuring against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by CONTRACTOR, its Subs, or their employees, agents, or representatives. The cost of all such insurance shall be borne by CONTRACTOR.

### **4. VERIFICATION OF COVERAGE**

CONTRACTOR shall furnish RTC with a certificate(s) of insurance, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements set forth herein, on forms acceptable to RTC. All deductibles and self-insured retentions requiring RTC approval shall be shown on the certificate. All certificates and endorsements are to be addressed to RTC's Finance Director and be received by RTC before work commences. Upon request, RTC reserves the right to review complete, certified copies of all required insurance policies, including all Subs' policies. Copies of applicable policy forms or endorsements confirming required additional insured, waiver of subrogation and notice of cancellation provisions are required to be provided with any certificate(s) evidencing the required coverage.

### **5. NOTICE OF CANCELLATION**

Contractor or its insurers shall provide at least thirty (30) days' prior written notice to RTC prior to the cancellation or non-renewal of any insurance required under this Agreement. An exception may be included to provide at least ten (10) days' written notice if cancellation is due to non-payment of premium. CONTRACTOR shall be responsible to provide prior written notice to RTC as soon as practicable upon receipt of any notice of cancellation, non-renewal, reduction in required limits or other material change in the insurance required under this Agreement.

### **6. SUBCONTRACTORS & SUBCONSULTANTS**

CONTRACTOR shall include all subcontractors and subconsultants (referred to collectively as "Subs") as insureds under its liability policies OR it shall require its Subs to maintain separate liability coverages and limits of the same types specified herein. If any Subs maintain separate liability coverages and limits, each shall include the RTC, Washoe County, City of Reno and City of Sparks as additional insureds under its commercial general liability policy subject to the same requirements stated herein without requiring a written contract or agreement between each of the

additional insureds and any sub-consultant or sub-contractor. Any separate coverage limits of liability maintained by Subs shall be at least be \$1,000,000 per occurrence \$1,000,000 for any applicable coverage aggregates for or the amount customarily carried by the Sub, whichever is GREATER. If any Subs provide their own insurance with limits less than required of the Contractor, Contractor shall include Subs in their coverage up to the full limits required of the Contractor. When requested by RTC, CONTRACTOR shall furnish copies of certificates of insurance evidencing coverage for each Sub. CONTRACTOR shall require its Subs provide appropriate certificates and endorsements from their own insurance carriers naming CONTRACTOR and the Indemnitees (see paragraph 2 above) as additional insureds.

## **7. DEDUCTIBLES AND SELF-INSURED RETENTIONS**

Any deductibles or self-insured retentions that exceed \$25,000 per occurrence or claim must be declared to RTC's Finance Director prior to signing this Contract. RTC is entitled to request and receive additional documentation, financial or otherwise, prior to giving its approval of the deductibles and self-insured retentions. Any changes to the deductibles or self-insured retentions made during the term of this Contract or during the term of any policy must be declared to RTC's Finance Director prior to the change taking effect. Contractor is responsible for any losses within deductibles or self-insured retentions.

## **8. ACCEPTABILITY OF INSURERS**

Insurance is to be placed with insurers with a Best's rating of no less than A-VII and acceptable to RTC. RTC may accept coverage with carriers having lower Best's ratings upon review of financial information concerning CONTRACTOR and insurance carrier. RTC reserves the right to require that CONTRACTOR'S insurer be a licensed and admitted insurer in the State of Nevada or meet any applicable state and federal laws and regulations for non-admitted insurance placements.

## **9. MISCELLANEOUS CONDITIONS**

- A. Failure to furnish the required certificate(s) or failure to maintain the required insurance may result in termination of this Agreement at RTC's option.
- B. If CONTRACTOR fails to furnish the required certificate or fails to maintain the required insurance as set forth herein, RTC shall have the right, but not the obligation, to purchase said insurance at CONTRACTOR's expense.
- C. Any waiver of CONTRACTOR's obligation to furnish such certificate or maintain such insurance must be in writing and signed by an authorized representative of RTC. Failure of RTC to demand such certificate or other evidence of full compliance with these insurance requirements or failure of RTC to identify a deficiency from evidence that is provided shall not be construed as a waiver of CONTRACTOR's obligation to maintain such insurance, or as a waiver as to the enforcement of any of these provisions at a later date.

- D. By requiring insurance herein, RTC does not represent that coverage and limits will necessarily be adequate to protect CONTRACTOR, and such coverage and limits shall not be deemed as a limitation on CONTRACTOR's liability under the indemnities granted to RTC in this contract.
- E. If CONTRACTOR'S liability policies do not contain the standard ISO separation of insureds condition, or a substantially similar clause, they shall be endorsed to provide cross-liability coverage.

## **10. COMMERCIAL GENERAL LIABILITY**

CONTRACTOR shall maintain commercial general liability (CGL) and, if necessary, commercial umbrella insurance with a limit of not less than \$1,000,000 each occurrence. If such CGL insurance contains a general aggregate limit, it shall be increased to equal twice the required occurrence limit or revised to apply separately to this project or location.

CGL insurance shall be written on ISO occurrence form CG 00 01 04 13 (or a substitute form providing equivalent coverage) and shall cover liability arising from premises, operations, products-completed operations, personal and advertising injury, and liability assumed under an insured contract (including the tort liability of another assumed in a business contract).

There shall be no endorsement or modification of the CGL limiting the scope of coverage for liability arising from pollution, explosion, collapse, underground property damage, or damage to the named insured's work. In addition, coverage for Explosion, Collapse and Underground exposures (as applicable to the project) must be reflected in the insurance certificates.

RTC and any other Indemnitees listed in section 2. INDEMNIFICATION of this Agreement shall be included as an additional insured under the CGL, using ISO additional insured endorsement CG 20 10 07/04 or a substitute providing equivalent coverage, and under the commercial umbrella, if any.

This insurance shall apply as primary insurance with respect to any other insurance or self-insurance programs afforded to RTC or any other Indemnitees under this Agreement

The status of RTC as an additional insured under a CGL obtained in compliance with this agreement shall not restrict coverage under such CGL with respect to the escape of release of pollutants at or from a site owned or occupied by or rented or loaned to RTC.

CONTRACTOR waives all rights against RTC and any other Indemnitees listed in section 2. INDEMNIFICATION of this Agreement for recovery of damages to the extent these damages are covered by the commercial general liability or commercial umbrella liability insurance maintained pursuant to this agreement. CONTRACTOR's insurer shall endorse CGL policy to waive subrogation against RTC with respect to any loss paid under the policy.

**Continuing Completed Operations Liability Insurance.** CONTRACTOR shall maintain commercial general liability (CGL) and, if necessary, commercial umbrella liability insurance, both applicable to liability arising out of CONTRACTOR's completed operations, with a limit of not less than \$1,000,000 each occurrence for at least 5 years following substantial completion of the work.

- a. Continuing CGL insurance shall be written on ISO occurrence form CG 00 01 04 13 (or a substitute form providing equivalent coverage) and shall, at minimum, cover liability arising from products-completed operations and liability assumed under an insured contract
- b. Continuing CGL insurance shall have a products-completed operations aggregate of at least two times the each occurrence limit.
- c. Continuing commercial umbrella coverage, if any, shall include liability coverage for damage to the insured's completed work equivalent to that provided under ISO form CG 00 01.

## **11. COMMERCIAL AUTOMOBILE LIABILITY**

CONTRACTOR shall maintain automobile liability and, if necessary, commercial umbrella liability insurance with a limit of not less than \$1,000,000 each accident. Such insurance shall cover liability arising out of any auto (including owned, hired, and non-owned autos).

Coverage shall be written on ISO form CA 00 01, CA 00 05, CA 00 25, or a substitute form providing equivalent liability coverage for all owned, leased, hired (rented) and non-owned vehicles (as applicable). RTC may agree to accept auto liability for non-owned and hired (rented) vehicles under the CGL if CONTRACTOR does not own or operate any owned or leased vehicles.

CONTRACTOR waives all rights against RTC, its officers, employees and volunteers for recovery of damages to the extent these damages are covered by the automobile liability or commercial umbrella liability insurance obtained by CONTRACTOR pursuant to this Agreement.

In lieu of a separate Business Auto Liability Policy, RTC may agree to accept Auto Liability covered in the General Liability Policy, if CONTRACTOR does not have any owned or leased automobiles and non-owned and hired auto liability coverage is included.

If project involves the transport of hazardous wastes or other materials that could be considered pollutants, CONTRACTOR shall maintain pollution liability coverage equivalent to that provided under the ISO pollution liability-broadened coverage for covered autos endorsement (CA 99 48) shall be provided, and, if applicable, the Motor Carrier Act endorsement (MCS 90) shall be attached.



**Waiver of Subrogation.** CONTRACTOR waives all rights against RTC and its agents, officers, directors and employees for recovery of damages to the extent these damages are covered by the business auto liability or commercial umbrella liability insurance obtained by Contractor pursuant to this agreement.

## **12. INDUSTRIAL (WORKER'S COMPENSATION AND EMPLOYER'S LIABILITY) INSURANCE**

It is understood and agreed that there shall be no Industrial (Worker's Compensation and Employer's Liability) Insurance coverage provided for CONTRACTOR or any Sub by RTC. CONTRACTOR, and any Subs, shall procure, pay for and maintain required coverages.

CONTRACTOR shall maintain workers' compensation and employer's liability insurance meeting the statutory requirements of the State of Nevada, including but not limited to NRS 616B.627 and NRS 617.210. The employer's liability limits shall not be less than \$1,000,000 each accident for bodily injury by accident or \$1,000,000 each employee for bodily injury by disease.

Should CONTRACTOR be self-funded for Industrial Insurance, CONTRACTOR shall so notify RTC in writing prior to the signing of a Contract. RTC reserves the right to accept or reject a self-funded CONTRACTOR and to approve the amount of any self-insured retentions. CONTRACTOR agrees that RTC is entitled to obtain additional documentation, financial or otherwise, for review prior to entering into a Contract with the self-funded CONTRACTOR.

Upon completion of the project, CONTRACTOR shall, if requested by RTC, provide RTC with a Final Certificate for itself and each Sub showing that CONTRACTOR and each Sub had maintained Industrial Insurance by paying all premiums due throughout the entire course of the project.

If CONTRACTOR or Sub is a sole proprietor, coverage for the sole proprietor must be purchased and evidence of coverage must appear on the Certificate of Insurance and Final Certificate.

CONTRACTOR waives all rights against RTC, its elected officials, officers, employees and agents. for recovery of damages to the extent these damages are covered by the workers compensation and employer's liability or commercial umbrella liability insurance obtained by Tenant pursuant to this agreement. CONTRACTOR shall obtain an endorsement equivalent to WC 00 03 13 to affect this waiver.

## **13. CRIME INSURANCE**

If CONSULTANT will have care, custody or control of RTC money, securities or other property, CONSULTANT shall maintain crime insurance including coverage for the loss of money, securities and other property by employees or other parties with a limit not less than \$1,000,000 per occurrence. Coverage shall be endorsed to include coverage for loss of RTC money, securities and other property in the care, custody or control of CONSULTANT.

## EXHIBIT D

### FEES AND PENALTIES COST SHEET

- (1) **Triggered Alarms:** A penalty in the amount of Fifty Dollars (\$50) per occurrence shall be imposed in addition to any fees incurred by the RTC from the Reno or Sparks Police Departments or contracted security services if an alarm is triggered by the contractor's employee. Examples include not properly disarming the alarm system or failure to disarm the alarm system.
- (2) **Lost or Broken Keys.** A rekeying fee in the amount of Fifty Dollars (\$50) per occurrence shall be imposed for the replacement of any keys to the RTC facilities. The keys can be either standard mechanical or the electronic badges that are issued to the contractor for access to the RTC facilities.
- (3) **Lost or Broken Equipment.** A penalty in the amount of Fifty Dollars (\$50) per occurrence shall be imposed in addition to the cost of the replacement of the broken equipment.
- (4) **Not Wearing Uniforms.** A penalty in the amount of Twenty-Five Dollars (\$25) per day shall be imposed if the Contractor's employee fails to report for duty as a porter for transit facilities; Fourth Street Station or Centennial Plaza, in uniform. The uniform requirements are detailed in the scope of work portion of the contract.
- (5) **Failure to provide supervisor available on site.** A penalty in the amount of \$50.00 per incident for failure to provide supervisor on site at the 4<sup>th</sup> Street Station during regular hours of work.
- (6) **Overfilling of Dumpsters.** A fee in the amount of \$25.00 per incident for the overfilling of dumpsters that result in a fee from Waste Management (or Waste Contractor) in addition to the fee incurred by RTC.



## **REGIONAL TRANSPORTATION COMMISSION**

*Metropolitan Planning • Public Transportation & Operations • Engineering & Construction*

Metropolitan Planning Organization of Washoe County, Nevada

**Meeting Date:** 6/21/2024

**Agenda Item:** 4.6.1

To: Regional Transportation Commission

From: Christian Schonlau, Director of Finance, CFO

**SUBJECT: Annual Insurance Renewal**

### **RECOMMENDED ACTION**

Authorize the Executive Director to bind annual insurance coverage effective July 1, 2024, for automobile liability, general liability, public officials' errors and omissions (E&O), property, earthquake/flood, crime, cyber, pollution liability, social engineering, fiduciary liability, employment practices liability, and workers' compensation; and approve the RTC's continued membership in in the Nevada Public Agency Insurance Pool (POOL) and Public Agency Compensation Trust (PACT).

### **BACKGROUND AND DISCUSSION**

The Nevada Public Agency Insurance Pool (NPAIP) was formed in 1987 by Nevada public entities to provide a stable and consistent alternative to the commercial insurance markets. The pool provides property & casualty coverage as well as risk management, human resources and loss control services to its members. Membership in the pool includes counties, cities, school districts, special districts and towns. The pool is governed by a Board of Directors represented by members. NPAIP provides property/casualty coverage to a diverse group of more than 100 Nevada public entities.

NPAIP provides broad, manuscript property coverage with a maximum limit per loss of \$300,000,000. NPAIP also provides \$150,000,000 shared aggregate limits separately for Earthquake and Flood losses, subject to a \$25,000,000 aggregate sub-limit for flood losses in flood zone A. Property coverage will be subject to a deductible of \$25,000 per event, including for earthquake and flood losses. Coverage is also included for boiler & machinery (equipment breakdown) with a policy limit of \$100,000,000 per loss. Physical damage coverage is also included for scheduled vehicles both on and off-premises (does not include the Buses & Coaches).

NPAIP provides liability limits of \$10,000,000 each event/each member subject to a member annual aggregate liability limit of \$10,000,000 for Auto Liability, General Liability, Personal Injury Liability, Employment Practices Liability, Law Enforcement Liability and Wrongful Acts (Errors & Omissions) Liability. Coverage will be subject to a \$25,000 deductible per event/wrongful act.

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NPAIP provides Cyber Risk Security coverage for Privacy or Security Liability per event and in the aggregate for each member. This limit was reduced from \$3,000,000 to \$1,000,000 at renewal, due to challenges in cyber market. Coverage also includes \$100,000 for Security Failure/Privacy Event Management Coverage, \$250,000 in Network Interruption Coverage and \$50,000 for Proof of Loss Preparation Costs. For this renewal, coverage will be subject to a \$15,000,000 aggregate limit for all NPAIP members combined.

NPAIP also provides Environmental Liability with coverage for Third Party Claims for Bodily Injury, Property Damage or Remediation Expense, First Party Remediation Expense and Emergency Response Expense with each incident limit of \$2,000,000, subject to an annual aggregate limit of \$10,000,000 and \$25,000 deductible. Coverage is also included for Business Interruption with a limit of \$2,000,000 up to 365 days.

The total NPAIP renewal premium is increasing from \$318,897 to \$325,997, an increase of 2.2%. After several years of increasing rates in the insurance markets, the NPAIP negotiated a favorable renewal for its members.

The U.S. property/casualty (P/C) industry recorded a ten-year high underwriting loss of \$38 billion in 2023, according to AM Best. Catastrophic losses, inflation and increased reinsurance costs were all contributing factors. Commercial property/casualty premiums increased by an average of 7.73% in the first quarter, according to the Council of Insurance Agents and Brokers. Property rates increased by an average of 10.1% and commercial auto was up 9.8%.

The industry experienced \$65 billion in CAT losses in 2023, including \$35 due to secondary perils (hail, tornadoes, thunderstorms, wildfires). This follows several years of record and above average catastrophic losses. The overall combined ratio for the P&C industry increased from 103.1 to 103.7 from 2022 to 2023, which includes loss and expense ratios.

The RTC RIDE contractor, Keolis Transit Services LLC, is responsible for automobile and general liability losses for the RTC RIDE system. The RTC ACCESS contractor, MTM LLC, is responsible for automobile and general liability losses for RTC ACCESS and RTC FlexRide. RTC still has responsibility for automobile/general liability for RTC support vehicles, RTC road programs, and RTC facilities.

Staff is recommending renewal of Crime Insurance with limits of \$5,000,000 for employee theft, forgery, computer fraud, funds transfer fraud, money orders and counterfeit currency fraud and Fiduciary Liability with a limit of \$4,000,000. The deductible for employee theft and money & securities on-premises is \$500,000 to provide coverage excess of the limit provided by the NPAIP and \$25,000 for the other listed coverage. Coverage will include social engineering fraud with a limit of \$250,000 and \$100,000 deductible. The renewal premium for the Crime and Fiduciary Liability coverage is \$14,510, a reduction of 3.4%.

RTC's Workers Compensation and Employer's Liability coverage is provided through the Public Agency Compensation Trust (PACT), which is a Nevada based insurance pool that was formed under Nevada's Interlocal Cooperation Act in 1996. PACT provides workers compensation, claims and risk management services to its Nevada government entity members. This premium is estimated and subject to audit based on actual payroll once the policy term is completed.

The estimated proposed total cost of the insurance coverage is \$400,040. The total estimated cost represents an increase of \$11,237 or 2.9%% when compared to the prior year's final renewal costs.

The RTC has maintained an agreement with the Reno office of USI Insurance Services LLC for the purpose of brokering insurance coverage as required for the effective operation of the RTC.

In concurrence with USI Insurance Services, staff recommends that the coverage be bound effective July 1, 2024.

The broker's compensation for these renewals is included as part of the overall insurance cost. Last year, the broker's total compensation was reduced from \$33,416 to \$27,852. This year, the broker's total estimated annual compensation at renewal will be \$28,240, an increase of 2%. The broker provides insurance services, risk management services and contract review services throughout the year as a component of the broker's compensation.

Staff has always looked to protect the agency at the best possible price against catastrophic losses that have the potential to inhibit the agency's ability to continue providing the necessary transportation services for our community. Staff believes this program accomplishes that goal.

### **FISCAL IMPACT**

Funding for the insurance coverage is included in the RTC FY 2025 Budget.

### **PREVIOUS BOARD ACTION**

6/16/2023      Authorized the Executive Director to bind annual insurance coverage effective July 1, 2023.

**REGIONAL TRANSPORTATION COMMISSION**  
**Attachment A. INSURANCE RENEWAL COST RECAP**

Coverage	Renewal Limits	Renewal Deductibles	Renewal Insurer	2023/24 Premiums	2024/25 Premiums	\$ Variance	% Var.
Property Earthquake Flood Flood A/V Cyber Security Employee Theft Pollution Liability	\$300,000,000 per loss \$150,000,000* \$150,000,000* \$25,000,000* \$1,000,000 \$500,000 \$2,000,000	\$25,000 \$25,000 \$25,000 \$25,000 None \$25,000 \$25,000	Nevada Public Agency Insurance Pool (POOL)	\$318,897	\$325,997	\$7,101	2.2%
General Liability, Auto Liability, Employment Practices & Wrongful Acts Liability	\$10,000,000 per event \$10,000,000 aggregate	\$25,000	Nevada Public Agency Insurance Pool (POOL)	Included above			
Workers Comp. Employer's Liability	Statutory Coverage \$2,000,000	N/A (Nil)	Public Agency Compensation Trust (PACT)	\$44,805^	\$49,454^	\$4,649	10.4%
Crime	Employee Theft: \$5M On Premises: \$5M Other Coverages: \$5M Social Engineering: \$250k	\$500,000 \$500,000 \$25,000 <b>\$100,000</b>	Federal Ins. Co. (Chubb)	\$15,014	\$14,510	(\$504)	(3.4%)
Fiduciary Liability	Limit: \$4,000,000	N/A (Nil)	Federal Ins. Co. (Chubb)	\$10,088	\$10,079	(\$9)	(0.1%)
<b>Total Annual Insurance Cost</b>				<b>\$388,803</b>	<b>\$400,040</b>	<b>\$11,237</b>	<b>2.9%</b>
<i>Broker Compensation (Included Above)</i>				<i>\$27,852</i>	<i>\$28,240</i>	<i>\$568</i>	<i>2%</i>

\* Shared, Annual Aggregate Limits    ^ Estimated & Auditable Premium  
 All coverage is subject to policy terms, conditions, sub-limits, and exclusions.



**REGIONAL TRANSPORTATION COMMISSION**

*Metropolitan Planning • Public Transportation & Operations • Engineering & Construction*

Metropolitan Planning Organization of Washoe County, Nevada

**Meeting Date:** 6/21/2024

**Agenda Item: 5.1.**

To: Regional Transportation Commission

From: Graham Dollarhide, Planning Manager

**SUBJECT: FFY 2023-2027 RTIP Amendment No. 3**

**RECOMMENDED ACTION**

Conduct a public hearing regarding approval of Amendment No. 3 to the FFY 2023-2027 Regional Transportation Improvement Program (RTIP); adopt a resolution approving Amendment No. 3 to the FFY 2023-2027 Regional Transportation Improvement Program (RTIP).

**BACKGROUND AND DISCUSSION**

Amendment No. 3 is required to add and change projects. The amendment includes the addition of two projects, led by the Nevada Department of Transportation (NDOT), that will investigate the feasibility of extending transportation routes to the east of the Reno-Sparks region. The amended projects, also led by NDOT, involve various phases of work for three projects in the region. A full list of these projects is provided below, with additional details included with the attached project listing.

An air quality analysis for the proposed amendment was not required as the added and amended projects are either exempt from transportation conformity requirements or have already complied with this requirement and the associated amendment does not involve a change to the project scope.

A complete list of the projects included within this amendment, as well as a brief description of the changes to each project, are as follows:

- Tahoe Pyramid Trail East Feasibility Study – new project to determine appropriate alignment of final segments of the Tahoe Pyramid Trail
  - South Meadows Connector – Alignment Study – new project to perform investigate potential alignments for an extension of South Meadows Parkway to the east
  - I-580 Bowers to Mount Rose Highway - Preservation – amendment to project that increases total project funding, changes mix of funding (addition of federal funds), and moves construction back one year
  - SR 659, N. McCarran Intersection Improvements – amendment to project that decreases project cost and changes project limits
-

- I-80 East, WA – Final Design – amendment to project that moves project back and adds funding for the design phase

The CMAC and the TAC received a presentation on the Proposed Amendment to the RTIP at their June meetings. At the CMAC meeting, committee member Panah Stauffer highlighted the importance of assessing the environmental impact of highway expansion, particularly regarding greenhouse gas emissions, especially in the proposed South Meadows Expansion towards the Tahoe Reno Industrial Center. Earl Brynelson and Ryan Bernadett proposed integrating carpool, alternative fuel, and bus lanes in the I-80 East expansion project to the Tahoe Reno Industrial Center to promote sustainable transit options. At the TAC meeting, Craig Petersen expressed concerns regarding the widening of I-80 between Vista Boulevard and USA Parkway, emphasizing that such projects tend to increase Vehicle Miles Traveled (VMT) and air pollution despite reducing congestion. He highlighted the risk of Washoe County exceeding federal ozone limits and suggested exploring mass transit options like HOV lanes and park-and-ride. Kyle Chisholm inquired about the South Meadows Connector study, which Graham Dollarhide clarified as a feasibility study. Chris Kuhn from NDOT explained the study's purpose and potential future phases, including public outreach and environmental studies. Kevin Verre provided updates on the Tahoe Pyramid Trail East feasibility study.

A public comment period preceded this public hearing (May 29, 2024 – June 18, 2024). The draft documents were posted on the agency website and a notice was published in the Reno Gazette-Journal, Sparks Tribune, and El Sol de Nevada per the RTC Public Participation Plan. No comments have been received as of the drafting of this staff report.

### **FISCAL IMPACT**

Funding for the project cost estimates in the proposed amendment have been budgeted based on anticipated federal, state and local revenue sources.

### **PREVIOUS BOARD ACTION**

01/19/2024 Approved Amendment No. 2 to the FFY 2023-2027 RTIP.  
11/17/2023 Approved Amendment No. 1 to the FFY 2023-2027 RTIP.  
08/18/2023 Approved the FFY 2023-2027 RTIP.



## **RESOLUTION 24-08**

### **RESOLUTION AUTHORIZING THE ADOPTION OF AMENDMENT NO. 3 TO THE FEDERAL FISCAL YEARS (FFY) 2023-2027 REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM (RTIP) FOR THE RENO-SPARKS URBANIZED AREA.**

**WHEREAS**, Title 23 Code of Federal Regulations, Part 450, and Title 49 Code of Federal Regulations, Part 613, require the preparation of a Regional Transportation Improvement Program (RTIP) by the Metropolitan Planning Organization (MPO) at least every four years; and

**WHEREAS**, the Regional Transportation Commission of Washoe County (RTC) has been designated by the Governor of the State of Nevada as the Metropolitan Planning Organization (MPO) for Washoe County; and

**WHEREAS**, the RTC, through the conduct of a continuing, comprehensive and coordinated transportation planning process carried out in conjunction with the RTC member entities and the Nevada Department of Transportation and in conformance with all applicable federal requirements, prepared the FFY 2023-2027 RTIP which includes all federal and non-federal regionally significant transportation projects; and

**WHEREAS**, the RTC finds Amendment No. 3 to the FFY 2023-2027 RTIP in conformance with the 2050 Regional Transportation Plan (RTP); and

**WHEREAS**, the RTC finds that pursuant to Title 40 of the Code of Federal Regulations, Part 93, this RTIP amendment conforms with the intent of the State Air Quality Implementation Plan; and,

**WHEREAS**, the RTC finds that current fiscal resources are adequate to develop, operate and maintain the transportation system, and finds that the FFY 2023-2027 RTIP is limited to projects for which funds are available or committed; and

**WHEREAS**, the FFY 2023-2027 RTIP has been prepared through a process of community and agency coordination and participation in accordance with the RTC's adopted Public Participation Plan and all applicable federal requirements;

**NOW, THEREFORE, BE IT RESOLVED** that the Regional Transportation Commission does hereby adopt and endorse Amendment No. 3 to the FFY 2023-2027 Regional Transportation Improvement Program.

## **CERTIFICATE**

The undersigned, duly qualified Chairperson of the Regional Transportation Commission, certifies that the foregoing is a true and correct copy of a resolution adopted at a legally convened meeting held on June 21, 2024.

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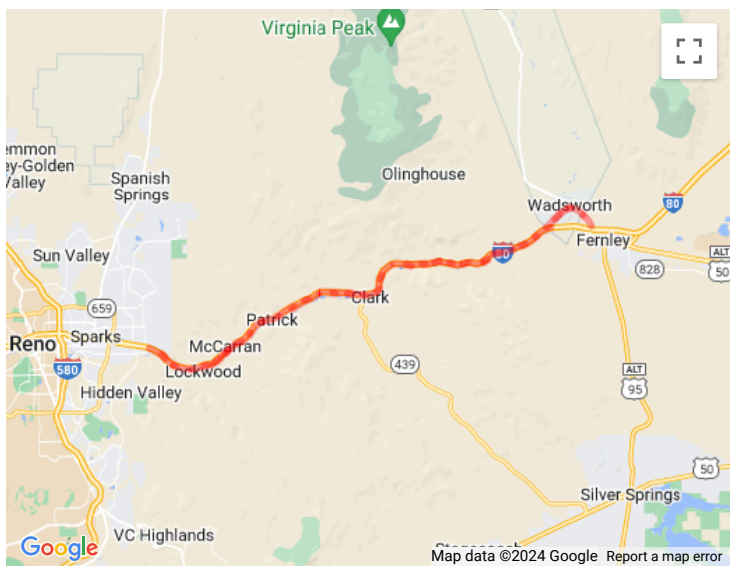
Alexis Hill, Vice Chair  
Regional Transportation Commission

ALL Transportation Improvement Program, 23-04-RTC Washoe Amendment 2023-2027

5 Projects Listed

<i>State TIP ID</i> XS20240015	<i>MPO/TIP</i> RTC Washoe 23-04	<i>Local ID</i>	<i>Total Cost</i> \$351,000
<i>Lead Agency</i> Nevada DOT	<i>Contact</i> REBECCA KAPULER 775-888-7120	<i>NDOT</i> District 2	<i>County</i> LYON, WASHOE
<i>Project Type</i> @Studies	<i>Air Quality</i> Exempt	<i>TCM</i> No	<i>Construction</i> N/A
<i>Project Name</i> Tahoe Pyramid Trail East Feasibility Study (TAP)			
<i>Project Limits</i> At From VISTA BLVD To FERNLEY of Distance (mile) 26 Begin: 20 End: 46			
<i>Scope</i> A feasibility study will be completed to identify an alternative transportation and infrastructure route to complete the last segments of the Tahoe Pyramid Trail, connecting Sparks to TRIC, Wadsworth and Fernley.			

Phase	Fund Source	Prior	FY2023	FY2024	FY2025	FY2026	FY2027	Future	Total
OTHER	Local Fund	-	-	\$19,000	-	-	-	-	\$19,000
OTHER	TAP FLEX STBG	-	-	\$332,000	-	-	-	-	\$332,000
<i>Total Other</i>		-	-	\$351,000	-	-	-	-	\$351,000
<b>Total Programmed</b>		-	-	<b>\$351,000</b>	-	-	-	-	<b>\$351,000</b>



**Version History**

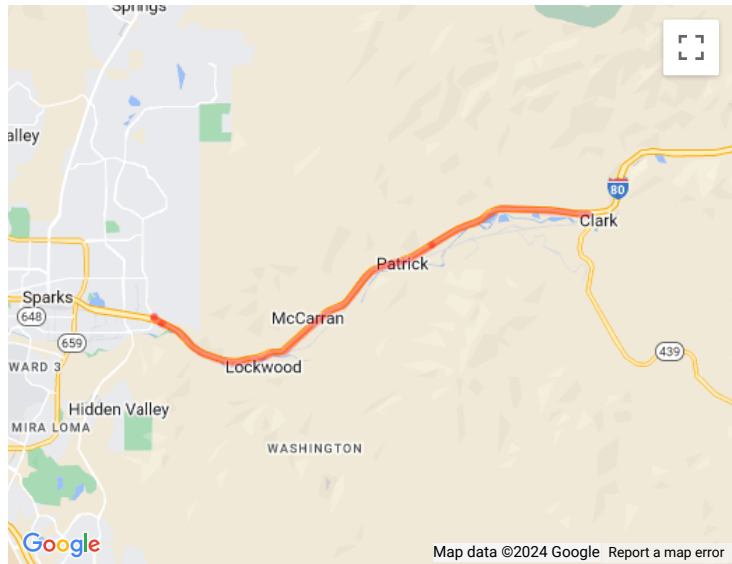
<i>TIP Document</i>	<i>MPO Approval</i>	<i>State Approval</i>	<i>FHWA Approval</i>	<i>FTA Approval</i>
23-04 Amendment 2023-2027	Pending	Pending	Pending	N/A

**Current Change Reason**

SCHEDULE / FUNDING / SCOPE - New Project

<i>State TIP ID</i> WA20190047	<i>MPO/TIP</i> RTC Washoe 23-04	<i>Local ID</i>	<i>Total Cost</i> \$8,000,000
<i>Lead Agency</i> Nevada DOT	<i>Contact</i> CHRISTOPHER KUHN 775-888-7720	<i>NDOT</i> District 2	<i>County</i> WASHOE
<i>Project Type</i> @Capacity	<i>Air Quality</i> Non-Exempt	<i>TCM</i> Yes	<i>Construction</i> N/A
<i>Project Name</i> I80 East, WA - Final Design			
<i>Project Limits</i> At From Vista Blvd To USA Parkway of Distance (mile) 13.08 Begin: 19.67 End: 32.75			
<i>Scope</i> PRELIMINARY ENGINEERING - WIDEN TO THREE LANES EACH DIRECTION			

Phase	Fund Source	Prior	FY2023	FY2024	FY2025	FY2026	FY2027	Future	Total
PE	State Gas Tax	-	-	-	\$8,000,000	-	-	-	\$8,000,000
<i>Total Preliminary Engineering</i>		-	-	-	\$8,000,000	-	-	-	\$8,000,000
<i>Total Programmed</i>		-	-	-	\$8,000,000	-	-	-	\$8,000,000



**Version History**

<i>TIP Document</i>	<i>MPO Approval</i>	<i>State Approval</i>	<i>FHWA Approval</i>	<i>FTA Approval</i>
20-23 Amendment 2020-2024	03/31/2020	03/31/2020	04/06/2020	N/A
21-00 Adoption 2021-2025	08/28/2020	08/31/2020	09/21/2020	09/24/2020
23-04 Amendment 2023-2027	Pending	Pending	Pending	N/A

**Current Change Reason**

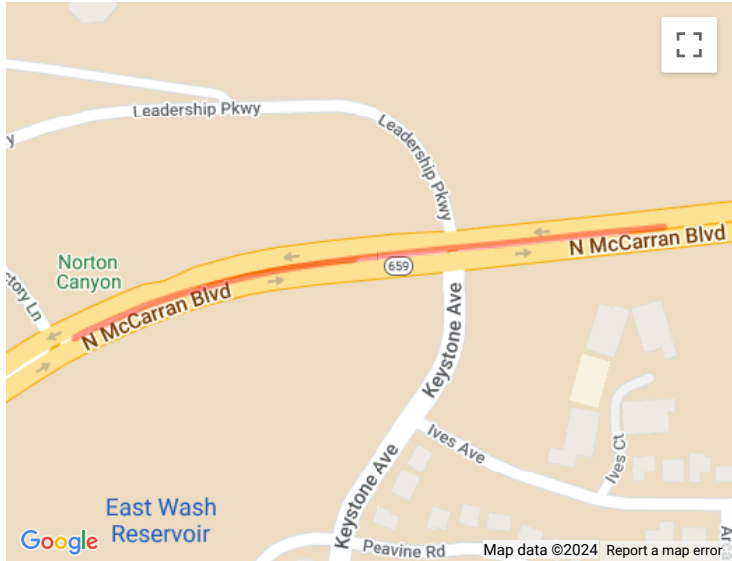
SCHEDULE / FUNDING / SCOPE - Other, Updated Fund amounts

*Funding Change(s):*

Total project cost decreased from to \$8,000,000

State TIP ID	WA20220001	MPO/TIP	RTC Washoe 23-04	Local ID		Total Cost	\$3,362,000
Lead Agency	Nevada DOT	Contact	Brian Deal 775-888-7654	NDOT	District 2	County	WASHOE
Project Type	@Interchange/Intersection	Air Quality	Exempt	TCM	No	Construction2024 start	
Project Name	SR 659, N. McCarran Intersection Improvements						
Project Limits	At From WA MP 9.321 To WA MP 9.615 of Distance (mile) 0.3 Begin: 9.32 End: 9.62						
Scope	INTERSECTION AND SAFETY IMPROVEMENTS						

Phase	Fund Source	Prior	FY2023	FY2024	FY2025	FY2026	FY2027	Future	Total
PE	State Gas Tax	-	\$207,000	-	-	-	-	-	\$207,000
	<i>Total Preliminary Engineering</i>	-	\$207,000	-	-	-	-	-	\$207,000
ROW	State Gas Tax	-	-	\$5,000	-	-	-	-	\$5,000
	<i>Total Right of Way</i>	-	-	\$5,000	-	-	-	-	\$5,000
CON	Local Fuel Tax - RTCWA	-	-	\$700,000	-	-	-	-	\$700,000
CON	State Gas Tax	-	-	\$2,450,000	-	-	-	-	\$2,450,000
	<i>Total Construction</i>	-	-	\$3,150,000	-	-	-	-	\$3,150,000
	<b><i>Total Programmed</i></b>	-	<b>\$207,000</b>	<b>\$3,155,000</b>	-	-	-	-	<b>\$3,362,000</b>



**Version History**

TIP Document	MPO Approval	State Approval	FHWA Approval	FTA Approval
21-07 Amendment 2021-2025	05/20/2022	05/27/2022	05/31/2022	05/27/2022
21-92 Amendment 2021-2025	01/20/2023	02/28/2023	N/A	N/A
23-00 Adoption 2023-2027	08/18/2023	08/22/2023	08/30/2023	08/29/2023
23-04 Amendment 2023-2027	Pending	Pending	Pending	N/A

**Current Change Reason**

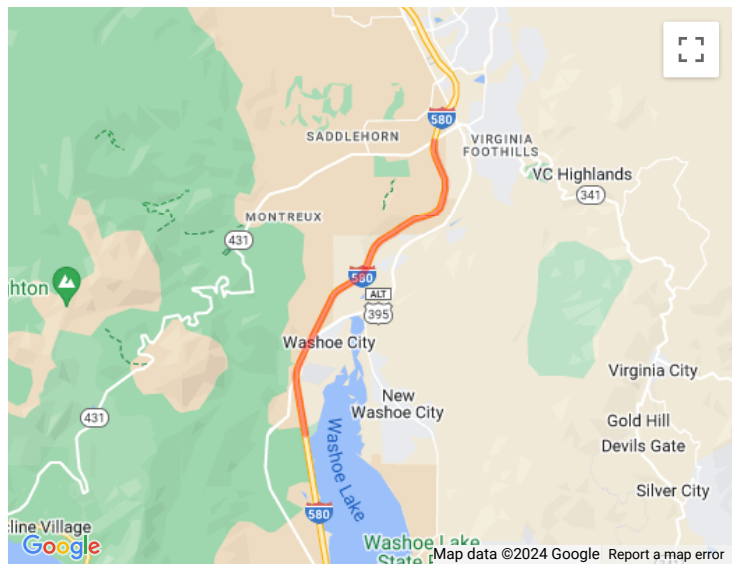
SCHEDULE / FUNDING / SCOPE - Significant change in the design or scope of any project identified in the STIP/RTIP.

**Funding Change(s):**

Total project cost decreased from \$3,446,000 to \$3,362,000

<i>State TIP ID</i> WA20220019	<i>MPO/TIP</i> RTC Washoe 23-04	<i>Local ID</i>	<i>Total Cost</i> \$24,500,000
<i>Lead Agency</i> Nevada DOT	<i>Contact</i> SHAWN PATERSON 775-888-7655	<i>NDOT</i> District 2	<i>County</i> WASHOE
<i>Project Type</i> @Preservation	<i>Air Quality</i> Exempt	<i>TCM</i> No	<i>Construction</i> 2025 start
<i>Project Name</i> I 580 Bowers to Mount Rose Highway- Preservation			
<i>Project Limits</i> At From WA MP 5.4 To WA MP 14.95 of Distance (mile) 9.59 Begin: 5.36 End: 14.95			
<i>Scope</i> Mill and fill w/ OG, profile grind concrete sections			

Phase	Fund Source	Prior	FY2023	FY2024	FY2025	FY2026	FY2027	Future	Total
PE	State Gas Tax	-	\$300,000	-	-	-	-	-	\$300,000
	<i>Total Preliminary Engineering</i>	-	\$300,000	-	-	-	-	-	\$300,000
CON	NHPP	-	-	-	\$17,242,500	-	-	-	\$17,242,500
CON	STBG State-Wide	-	-	-	\$5,747,500	-	-	-	\$5,747,500
CON	State Match - Nv	-	-	-	\$1,210,000	-	-	-	\$1,210,000
	<i>Total Construction</i>	-	-	-	\$24,200,000	-	-	-	\$24,200,000
	<b><i>Total Programmed</i></b>	-	<b>\$300,000</b>	-	<b>\$24,200,000</b>	-	-	-	<b>\$24,500,000</b>



**Version History**

<i>TIP Document</i>	<i>MPO Approval</i>	<i>State Approval</i>	<i>FHWA Approval</i>	<i>FTA Approval</i>
21-91 Amendment 2021-2025	09/16/2022	11/10/2022	11/30/2022	11/10/2022
21-97 Amendment 2021-2025	05/04/2023	05/11/2023	N/A	N/A
23-00 Adoption 2023-2027	08/18/2023	08/22/2023	08/30/2023	08/29/2023
23-04 Amendment 2023-2027	<i>Pending</i>	<i>Pending</i>	<i>Pending</i>	N/A

**Current Change Reason**

SCHEDULE / FUNDING / SCOPE - Other, Federalized Funds

*Funding Change(s):*

Total project cost increased from \$21,903,000 to \$24,500,000

<i>State TIP ID</i> WA20240001	<i>MPO/TIP</i> RTC Washoe 23-04	<i>Local ID</i>	<i>Total Cost</i> \$2,700,000
<i>Lead Agency</i> Nevada DOT	<i>Contact</i> CHRISTOPHER KUHN 775-888-7720	<i>NDOT</i> District 2	<i>County</i> WASHOE
<i>Project Type</i> @Studies	<i>Air Quality</i> Exempt	<i>TCM</i> No	<i>Construction</i> N/A
<i>Project Name</i> South Meadows Connector - Alignment Study			
<i>Project Limits</i>	At At		
<i>Scope</i>	Alignment study		

Phase	Fund Source	Prior	FY2023	FY2024	FY2025	FY2026	FY2027	Future	Total
PE	State Gas Tax	-	-	-	\$2,700,000	-	-	-	\$2,700,000
	<i>Total Preliminary Engineering</i>	-	-	-	\$2,700,000	-	-	-	\$2,700,000
	<i>Total Programmed</i>	-	-	-	<b>\$2,700,000</b>	-	-	-	<b>\$2,700,000</b>

\*Map Has Not Been Mark

**Version History**

<i>TIP Document</i>	<i>MPO Approval</i>	<i>State Approval</i>	<i>FHWA Approval</i>	<i>FTA Approval</i>
23-04 Amendment 2023-2027	Pending	Pending	Pending	N/A

**Current Change Reason**

SCHEDULE / FUNDING / SCOPE - New Project

\*Not Location Specific

Regional Transportation Commission of Washoe County  
P.O. Box 30002  
Reno, Nevada 89520

June 13, 2024

Subject: I-80 East Widening Project in the 2023-2027 Regional Transportation Improvement Plan

Dear RTC Washoe Board Members:

Northern Nevada Public Health, Air Quality Management Division (AQMD) has the responsibility to maintain the federal national ambient air quality standards (NAAQS) in Washoe County, Nevada. This letter is being written to express AQMD's concern regarding the widening of I-80 between Vista Boulevard and USA Parkway.

Since this amendment to the Regional Transportation Improvement Plan (RTIP) only changes the timeline and funding for the project, AQMD does not have a problem with this action item. AQMD would like to use this opportunity to express our concern with the project itself and the negative impact that this project will have on our air quality. As you may know, ozone pollution in Washoe County is at the federal air quality limit. Although we have not been designated nonattainment for ozone yet, it remains a major problem in our region.

The ozone NAAQS are currently under review by EPA and could be strengthened to the point in which Washoe County is designated as nonattainment. In order to remedy this, government organizations, citizens, and stakeholders need to engage in proactive measures to reduce emissions that cause ozone pollution. Tailpipe emissions from fossil-fuel vehicles are the largest source of ozone causing pollution in Washoe County. Reduction of vehicle miles traveled (VMT) is the best way to decrease the outsized impact that motor vehicles have on our ozone pollution. If Washoe County is designated nonattainment for ozone, AQMD will be required by the federal Clean Air Act to implement emission controls that will add constraints to businesses, governmental organizations, and the community. Specifically in the transportation sector, a Motor Vehicle Emission Budget (MVEB) will be set that could limit and/or delay the number of projects that increase VMT.

As it relates to this project, AQMD suggests that the following VMT reducing initiatives be evaluated as a potential alternative solution to the roadway capacity problems that this travel corridor experiences:

1. **Carpool Initiatives:** In order to decrease VMT and reduce congestion, this project should be designed to make carpooling easier and more desirable. AQMD suggests that one of the travel lanes in each direction should be a high-occupancy vehicle (HOV) lane. Additionally, a park and ride area should be constructed to help facilitate the carpooling of employees traveling from Reno-Sparks to the Tahoe-Reno Industrial Center (TRIC).
2. **Expanded Public Transportation:** According to the "Purpose and Need" section of the NDOT public information website, this section of I-80 experiences on average, approximately 26,000 vehicles daily in each direction. Of that, approximately 20,000 are traveling to and from TRIC. With that many people traveling to and from the same location, this corridor presents a great opportunity for public transportation. AQMD suggests that a public transportation system be implemented to



Date: June 13, 2024  
Subject: I-80 East Widening Project  
Page: 2 of 2



decrease VMTs and reduce congestion. Some suggestions include an intercity bus route (similar to the RTC route between Carson City and Reno) or commuter rail.

Ideally, these alternatives would be evaluated based on their feasibility and presented to the public and stakeholders as alternatives to the road widening. As our region grows, this travel corridor will continue to present problems for commuters. Giving the public and stakeholders the opportunity to provide input on a list of solutions would help inform how transportation planning for that stretch of road should proceed.

Thank you for the opportunity to provide comments and suggestions on this project. Feel free to contact me at 775-784-7200 if I can be of further assistance.

Sincerely,

A handwritten signature in blue ink that reads 'Francisco Vega'.

Francisco Vega, P.E., MBA  
Director, Air Quality Management Division  
Northern Nevada Public Health

cc:

Xuan Wang, RTC  
Graham Dollarhide, RTC  
Craig Petersen, AQMD  
Matt McCarthy, AQMD  
Brendan Schnieder, AQMD



**REGIONAL TRANSPORTATION COMMISSION**

*Metropolitan Planning • Public Transportation & Operations • Engineering & Construction*

Metropolitan Planning Organization of Washoe County, Nevada

**Meeting Date:** 6/21/2024

**Agenda Item: 6.1.**

To: Regional Transportation Commission

From: Dale Keller, Deputy Executive Director

**SUBJECT: Transportation and Tahoe-Reno Industrial Center**

**RECOMMENDED ACTION**

Discuss transportation issues and needs in relation to the Tahoe-Reno Industrial Center as requested by Chair Lawson, and provide input and direction to the Executive Director.

**BACKGROUND AND DISCUSSION**

At the May 2024 Board Meeting, Chair Lawson requested an agenda item be added to a future meeting on the transportation issues and needs in relation to Tahoe-Reno Industrial Center.

In January 2020, NDOT completed the I-80 Corridor Study for the North McCarran Boulevard to USA Parkway segment of the freeway. This study noted that the I-80 corridor from the City of Sparks to SR 439 (USA Parkway) has seen a significant increase in congestion and safety concerns. It identified multiple corridor options (see attached exhibits from the NDOT study). The study chose the widening of I-80 as the preferred course of action.

The status of the consideration of alternative transportation solutions is as follows:

1. NDOT has funded a study to evaluate the feasibility of the Steamboat Parkway Extension;
2. NDOT has submitted an INFRA grant for funding of the I-80 widening between Vista and USA Parkway;
3. RTC has partially funded a study to evaluate and define the potential for commuter rail from the downtowns of Reno and Sparks to TRIC.

RTC staff is not aware of any effort to further define and evaluate the potential for a new roadway from TRIC to La Posada.

This item supports the FY2024 RTC Goal, "Lead a multi-county effort to define transportation future

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related to Washoe County, Tahoe-Reno Industrial Center, and Fernley."

**FISCAL IMPACT**

There is no immediate fiscal impact related to this action. If the Board directs staff to pursue evaluation of the TRIC to La Posada corridor the Executive Director will advise the Board of the expected cost and source of funding for such action before any expenses are incurred.

**PREVIOUS BOARD ACTION**

6/16/2023      Approve the RTC Goals for Fiscal Year (FY) 2024.

Figure 3. Previous Studies and Projects Identified Within the Region

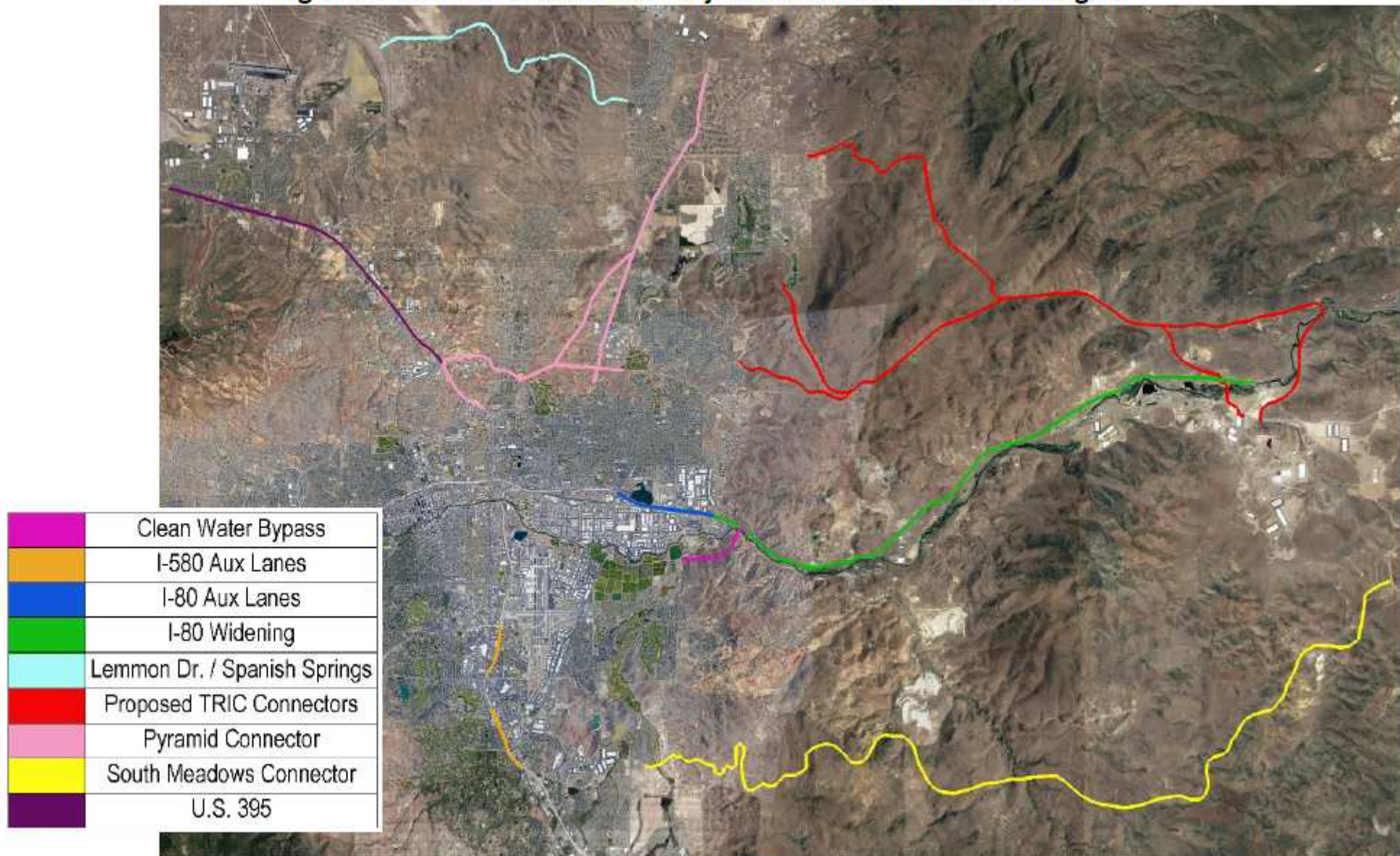
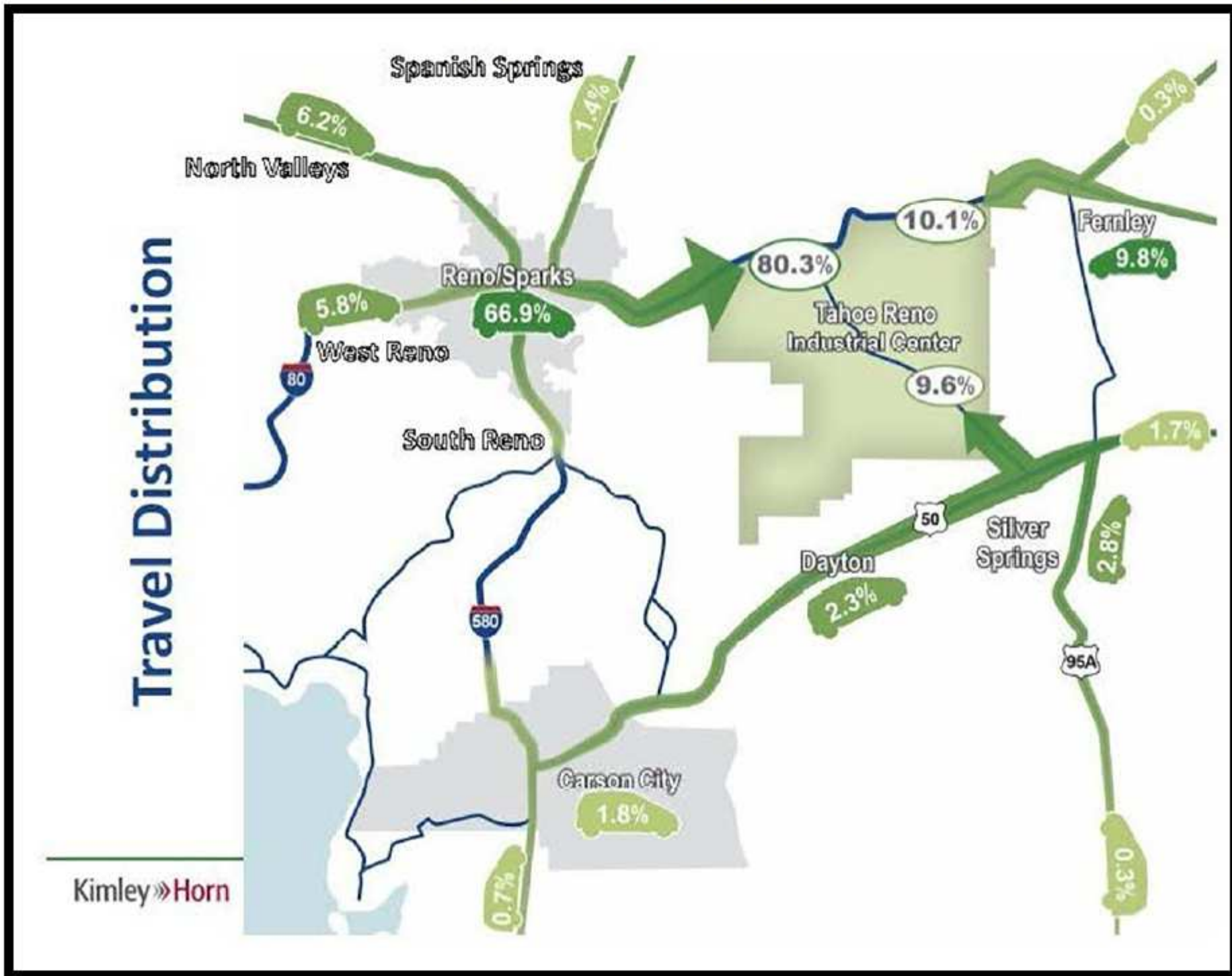


Figure 5. Travel distribution



Source: NDOT Inter-County and Regional Transit Plan, Kimley-Horn



**REGIONAL TRANSPORTATION COMMISSION**

*Metropolitan Planning • Public Transportation & Operations • Engineering & Construction*

Metropolitan Planning Organization of Washoe County, Nevada

**Meeting Date:** 6/21/2024

**Agenda Item: 7.1.**

To: Regional Transportation Commission

From: Bill Thomas, Executive Director

**SUBJECT: Executive Director Report**

**RECOMMENDED ACTION**

Monthly verbal update/messages from RTC Executive Director Bill Thomas - no action taken.

**FISCAL IMPACT**

There is no fiscal impact related to this action.

**PREVIOUS BOARD ACTION**

There has been no previous Board action taken.

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**REGIONAL TRANSPORTATION COMMISSION**

*Metropolitan Planning • Public Transportation & Operations • Engineering & Construction*

Metropolitan Planning Organization of Washoe County, Nevada

**Meeting Date:** 6/21/2024

**Agenda Item: 7.2.**

To: Regional Transportation Commission

From: Paul Nelson, Government Affairs Officer

**SUBJECT: Federal Report Discussion**

**RECOMMENDED ACTION**

Monthly verbal update/messages from Paul Nelson, RTC Government Affairs Officer on federal matters related to the RTC - no action will be taken.

**FISCAL IMPACT**

There is no fiscal impact related to this action.

**PREVIOUS BOARD ACTION**

There has been no previous Board action taken.

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**REGIONAL TRANSPORTATION COMMISSION**

*Metropolitan Planning • Public Transportation & Operations • Engineering & Construction*

Metropolitan Planning Organization of Washoe County, Nevada

**Meeting Date:** 6/21/2024

**Agenda Item: 7.3.**

To: Regional Transportation Commission

From: Tracy Larkin Thomason, NDOT Director

**SUBJECT: NDOT Report**

**RECOMMENDED ACTION**

Monthly verbal update/messages from NDOT Director Tracy Larkin Thomason or designated NDOT Deputy Director - no action will be taken.

**FISCAL IMPACT**

There is no fiscal impact related to this action.

**PREVIOUS BOARD ACTION**

There has been no previous Board action taken.

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