EAGLE MOUNTAIN
PLANNING COMMISSION MEETING

DECEMBER 9, 2025, 5:30 PM
EAGLE MOUNTAIN CITY COUNCIL CHAMBERS
1650 EAST STAGECOACH RUN, EAGLE MOUNTAIN, UTAH 84005

5:30 PM – PLANNING COMMISSION WORK SESSION

1. DISCUSSION ITEMS

1.A. DISCUSSION - Horizon Master Development Plan

6:30 PM PLANNING COMMISSION POLICY SESSION

2. CALL TO ORDER

3. PLEDGE OF ALLEGIANCE

4. DECLARATION OF CONFLICTS OF INTEREST

5. MINUTES

5.A. November 25, 2025 Planning Commission Minutes

6. STATUS REPORT

7. ACTION AND ADVISORY ITEMS

7.A. MOTION - 2026 Planning Commission Schedule

7.B. PUBLIC HEARING / ACTION ITEM - An Ordinance of Eagle Mountain, Utah, Approving the Horizon Master Development Plan.

BACKGROUND: (*Presented by Senior Planner, Robert Hobbs*) A request by Caden Hazard for Master Development Plan and for Preliminary Plat Approval for 110 single-family detached residential lots with open space all on/for approximately 109 acres of property located in Section 30, T5S, R1W, on the north side of Pony Express Parkway and Lone Tree Parkway (County Assessor Parcels/Serial # 58:040:0378) addressed as 2434 E. Pony Express Parkway in Eagle Mountain City; application set identified as the: “Horizon” project.

7.C. PUBLIC HEARING / ACTION ITEM - Hidden Hollow Amenity Exchange (Minor) Site Plan Amendment

BACKGROUND: (*Presented by Senior Planner, Robert Hobbs*) A request by Cadence Homes to amend an approved site plan pertaining to the Hidden Hollow clubhouse amenity. Proposed is the substitution of a gym and additional lawn games for a swimming pool. The property under consideration is Parcel D in Hidden Hollow Phase C Plat 5 (County parcel/serial # 68:202:0536) at the southeast corner of the intersection of N. Smooth Way and N. Carlton Way in Eagle Mountain, UT 84005.

7.D. PUBLIC HEARING / ACTION ITEM - An Ordinance of Eagle Mountain City, Utah, Amending the Eagle Mountain Municipal Code Chapter 17.60.120 General

Fencing/screening provisions.

BACKGROUND (*Presented by Senior Planner, Robert Hobbs)* A proposal to enact an ordinance amending Title 17, Chapter 60 Section 120.P (General Fencing/Screening Requirements. Maintenance Required) by specifying that all fences, walls and retaining structures shall be kept in good repair/condition etc., listing the terms of that standard and requiring that repairs shall be executed in a timely fashion.

7.E. PUBLIC HEARING / ACTION ITEM - An Ordinance of Eagle Mountain City, Utah Approving the Pacific Springs Development Agreement.

BACKGROUND: (*Presented by City Attorney, Marcus Draper*) R5 Homes is working on getting permits for lots 511–514 in Pacific Springs A5. However, per EMMC 16.35.090, they are required to install privacy screening "prior to any building permits being issued in that phase of development that abuts such right-of-way." R5 Homes is requesting flexibility--through a development agreement--to install the fencing after home construction on the lots to avoid potential damage during the building process.

7.F. PUBLIC HEARING / ACTION ITEM - An Ordinance of Eagle Mountain City, Utah, Amending the Eagle Mountain Municipal Code 17.80.080.

BACKGROUND: (*Presented by Planner, Steven Lehmitz*) Code amendment to EMMC 17.80.080 to allow and add standards for off-premises directional signage related to data center/large-scale development projects.

8. DISCUSSION ITEMS

9. AGENDA REVIEW

10. NEXT SCHEDULED MEETING

11. ADJOURNMENT

THE PUBLIC IS INVITED TO PARTICIPATE IN PUBLIC MEETINGS FOR ALL AGENDAS.

In accordance with the Americans with Disabilities Act, Eagle Mountain City will make reasonable accommodations for participation in all Public Meetings and Work Sessions. Please call the City Recorder's Office at least 3 working days prior to the meeting at 801-789-6611. This meeting may be held telephonically to allow a member of the public body to participate. This agenda is subject to change with a minimum 24-hour notice.

	EAGLE MOUNTAIN CITY **PLANNING COMMISSION MEETING** **DECEMBER 9, 2025**
TITLE:	November 25, 2025, Planning Commission meeting minutes
ITEM TYPE:	Minutes
FISCAL IMPACT:	N/A
APPLICANT:	N/A

CURRENT GENERAL PLAN DESIGNATION & ZONE	ACREAGE
N/A	N/A

PUBLIC HEARING
No

PREPARED BY
Megan Green, Planning Secretary

PRESENTED BY

RECOMMENDATION:
N/A

BACKGROUND:
N/A

ITEMS FOR CONSIDERATION:
N/A

PLANNING COMMISSION ACTION/RECOMMENDATION:
N/A

ATTACHMENTS:
1. PCPH 11.25.2025 Meeting Minutes Draft to PC

EAGLE MOUNTAIN PLANNING COMMISSION MEETING MINUTES

November 25, 2025 5:30 p.m.
Eagle Mountain City Council Chambers
1650 East Stagecoach Run, Eagle Mountain, Utah 84005

COMMISSION MEMBERS PRESENT: Commissioners Jason Allen, Rod Hess, Robert Fox, Brent Strong, and Craig Whiting.

CITY STAFF PRESENT: Brandon Larsen, Community Development Director; Marcus Draper, City Attorney; David Salazar, Assistant City Engineer; Robert Hobbs, Senior Planner; Steven Lehmitz, Planner; Mickie Mills, Planner; and Megan Green, Planning Secretary.

5:30 P.M. – Eagle Mountain City Planning Commission Work Session

Commissioner Allen called the meeting to order at 5:39 p.m.

1. Discussion Items

1.A. DISCUSSION ITEMS – White Hills Country Estates Rezone

Steven Lehmitz and the Commissioners discussed the White Hills Country Estates Rezone including:

- The size and current use of the parcels.
- The cost of rezoning and future growth.
- Overlay zones for White Hills to maintain previous animal rights, grandfathering, and non-conforming uses.

1.B. AGENDA REVIEW – Agenda Items for the Planning Commission Policy Session were discussed.

Commissioner Allen adjourned the work session at 6:22 p.m.

6:30 P.M. – Eagle Mountain City Planning Commission Policy Session

2. Commissioner Allen called the policy session to order at 6:31 p.m. noting that Commissioner Free was excused.

3. Pledge of Allegiance

Commissioner Allen led the Pledge of Allegiance.

4. Declaration of Conflicts of Interest

None.

5. Approval of Meeting Minutes

5.A.

MOTION: ***Commissioner Whiting moved to approve the minutes of November 12, 2025, Planning Commission meeting with 2 corrections, that the Policy Session start time is changed to the correct time and that on Item 7.A. Commissioner Fox's vote is changed from "no" to "excused". Commissioner Strong seconded the motion.***

Jason Allen	**Yes**
Robert Fox	**Abstain**
Rod Hess	**Yes**

Brent Strong	**Yes**
Craig Whiting	**Yes**
Bryan Free	**Excused**

The motion passed with 4 yes and 1 abstention vote.

6. Status Report

Community Development Director Brandon Larsen reviewed the planning items discussed and voted upon during the City Council meeting.

7. Action and Advisory Items

7.A. Master Site Plan - Firefly NPA 9 Phase A

Presentation Summary: In 2023, the Pole Canyon 2010 era Master Development Plan and Master Development Agreement were amended and re-stated to recompose the project into the Firefly planned community. The changeover included a collection of changes to layout and building design concepts. Submittal of the Master Site Plan comes on the heels of the City's approval of the Firefly project. Firefly NPA 9 Phase A is one among various anticipated site plans (with associated plats) to be submitted to the City for review and approval. It is the first to come forward since the project was re-entitled with condos — which are allowed for by the community's approved build-out plan. It is shown on the development's Land Use Master Plan as being slated for 370 units on some [projected] 32 acres overall.

Applicants Statements: David Vitek from Candlelight Homes and the community of Firefly provided updates on the community and the development. The applicant also explained their ideas behind the Galaxy themed park.

Discussion summary:

- Robert Hobbs presented the Firefly development Master Site Plan and Preliminary Plat.
- The plan includes apartment-style stacked condos and a Galaxy themed park.
- The Commissioners expressed appreciation for the architectural design.

Commissioner Allen opened the public hearing at 6:48 p.m. As there were no comments, he closed the hearing.

MOTION: ***Commissioner Hess moved to recommend approval to the City Council of Item 7.A., Master Site Plan - Firefly NPA 9 Phase A, with the noted recommendations from Staff included in the Agenda. Commissioner Whiting seconded the motion.***

Jason Allen	**Yes**
Robert Fox	**Yes**
Rod Hess	**Yes**
Brent Strong	**Yes**
Craig Whiting	**Yes**
Bryan Free	**Excused**

The motion passed with a unanimous vote.

7.B. Firefly NPA 9 Phase A Preliminary Plat

Presentation summary: In 2023, the Pole Canyon 2010 era Master Development Plan and Master Development Agreement were amended and re-stated to recompose the project into the Firefly planned community. The changeover included a collection of changes to layout and building design concepts. Submittal of the Master Site Plan comes on the heels of the City's approval of the Firefly project. Firefly NPA 9 Phase A is one among various anticipated site plans (with associated plats) to be submitted to the City for review and approval. It is the first to come forward since the project was re-entitled with condos — which are allowed for by the community's approved build-out plan. It is shown on the development's Land Use Master Plan as being slated for 370 units on some [projected] 32 acres overall.

Discussion summary:

- Commissioner Hess questioned the Applicant on the native seed mix that is being used and if it will be irrigated to be established.
- Who is responsible for maintaining the grass and parks were discussed.
- If an amphitheater will be included in the Community one day was also discussed.

Commissioner Allen opened the public hearing at 6:48 p.m. As there were no comments, he closed the hearing.

MOTION: ***Commissioner Strong moved to approve Item 7.B., Firefly NPA 9 Phase A Preliminary Plat, with the noted recommendations from Staff included in the Agenda. Commissioner Fox seconded the motion.***

Jason Allen	**Yes**
Robert Fox	**Yes**
Rod Hess	**Yes**
Brent Strong	**Yes**
Craig Whiting	**Yes**
Bryan Free	**Excused**

The motion passed with a unanimous vote.

7.C. Spring Run Plaza MDP and Rezone

Presentation Summary Points: The Applicants for Spring Run Plaza are proposing a Master Development Plan for a 27.35-acre parcel located on the northeast corner of Spring Run Parkway and SR-73. The first phase of the project (8.15 acres) would be rezoned to Commercial Community and likely subdivided into six lots (see page 4 of the attached plan set). The current proposal would leave the zoning as Commercial on the rest of the parcel (being proposed as two lots) with the understanding that when it is ready for development, this MDP and the associated MDA would be amended. Since the City Council meeting on February 18, 2025, the Applicants have worked with Staff, elected officials, and neighboring property owners to determine the width and alignment of Road A. Road A will be classified as a minor arterial (122' right-of-way), though only a portion of it will be constructed with the Spring Run Plaza development (see page 7 of the attached plan set). It is anticipated that Road A will be widened as needed, either due to further development of the property or the ability to create a connection elsewhere.

Applicant's statements summary: Jason Thompson with AWA Engineering explained the changes in the development plan, including the elimination of one lot.

Discussion summary points:

- Steven Lehmitz presents the Spring Run Plaza development plan.
- Commissioners discussed the rezoning of roads to agriculture and the overall development plan.
- Commissioner Hess questioned the inconsistency in zoning public rights-of-way as agriculture. Marcus Draper explains the process and cost implications of rezoning public rights-of-way.

Commissioner Allen opened the public hearing at 6:56 p.m. As there were no comments, he closed the hearing.

MOTION: ***Commissioner Whiting moved to recommend approval to the City Council of Item 7.C., Spring Run Plaza MDP and Rezone, with rights-of-way containing roads A and B, be rezoned as agriculture. Commissioner Strong seconded the motion.***

Jason Allen	**Yes**
Robert Fox	**Yes**
Rod Hess	**Yes**
Brent Strong	**Yes**
Craig Whiting	**Yes**
Bryan Free	**Excused**

The motion passed with a unanimous vote.

Commissioner Hess stated that he strongly recommends the City consider being unique. Commercial areas will be just like every other new suburban development, because drive-thrus are great for business. It's not anti-business. He believes it is poor land planning on Eagle Mountain's part.

7.D. Ordinance Amending Noticing Requirements in EMMC 16.05, 16.55, and 17.05

Presentation Summary Points: This code amendment effectively removes all newspaper noticing requirements and instead requires a notice on the public noticing website to match current practices.

Discussion summary points:

- Mickey Mills presented the code amendment to remove newspaper noticing requirements.
- Commissioners discussed the benefits of the amendment and approve it with a positive recommendation.

Commissioner Allen opened the public hearing at 7:00 p.m. As there were no comments, he closed the hearing.

MOTION: ***Commissioner Whiting moved to recommend approval to the City Council of Item 7.D., Ordinance Amending Noticing Requirements in EMMC 16.05, 16.55, and 17.05. Commissioner Strong seconded the motion.***

Jason Allen	**Yes**
Robert Fox	**Yes**
Rod Hess	**Yes**
Brent Strong	**Yes**
Craig Whiting	**Yes**
Bryan Free	**Excused**

The motion passed with a unanimous vote.

7.E. White Hills Rezone

Presentation Summary Points: When the City's Zoning Map was adopted on February 20, 2024, it was determined that some areas of the City would be labeled as Under Review since it wasn't fully known what the zoning was in those areas. The White Hills area was one of those areas. This rezone proposal seeks to officially rezone properties within this area with current zones. The Future Land Use Map would be amended to maintain compatibility with the proposed rezones.

Proposed Zoning:

Agriculture: These properties are around ten or more acres. It was deemed as the best zone for properties of this size.

Commercial Neighborhood (CN): The two parcels proposed as Commercial Neighborhood are shown on the Future Land Use Map as Community Commercial, making the rezone compatible with the Future Land Use Map.

Public Facilities: These two parcels are owned by the City and contain a well house.

Residential 1 (R1): These lots are 1/4 acre in size. The R1 zone seems to be the best fit for these lots.

Rural Agricultural 1 (RA1): These are 5+ acre properties with the majority of them containing residential dwellings.

Discussion summary points:

- Steven Lehmitz explained the proposed zoning changes for White Hills and White Hills Country Estates.

- Commissioners discussed the impact of the changes on property owners and the need for consistency.
- Commissioner Whiting reviewed the zones, noting a strong consensus among property owners to allow subdividing.
- Commissioners Allen and Whiting discussed the minimum lot size requirements in RA2 zones.
- Commissioner Strong and Allen agreed on maintaining a decent lot size while allowing subdivision.

Commissioner Allen opened the public hearing at 7:06 p.m.

Duane Webber, Woodruff Berry, Joe Watterson, and Troy Furse made public comments.

Commissioner Allen closed the public hearing at 7:14 p.m.

MOTION: ***Commissioner Allen moved to recommend approval to the City Council of Item 7.E., White Hills Rezone, with the Staff condition as noted in the staff report and changing parcels in White Hills Country Estates A to RA2, and J & J Ranches Subdivision be changed to Agriculture. Commissioner Whiting seconded the motion.***

Jason Allen	**Yes**
Robert Fox	**Yes**
Rod Hess	**Yes**
Brent Strong	**Yes**
Craig Whiting	**Yes**
Bryan Free	**Excused**

The motion passed with a unanimous vote.

Commissioner Whiting reminded the public to come to the City Council meeting on December 16, 2025. He also recommended the City Council look closely at what the rights are with the White Hills quarter-acre lots so they can make it right for those residents.

7.F. Amending the General Plan for Eagle Mountain's Annexation Policy Declaration

Presentation Summary Points: In conjunction with Eagle Mountain City's General Plan update process, the City is proposing an updated annexation policy plan. This key document identifies areas of unincorporated Utah County from which the City is willing to consider annexation requests.
The plan identifies six (6) annexation areas, which are described and highlighted in the document. Each description of a given area identifies the benefits and challenges associated therewith. This proposal was presented at a Planning Commission meeting especially for affected entities on November 12, 2025. Affected entity is defined in the "Items for Consideration" section. This proposal was also presented to the Council on November 18, 2025. Based on feedback received, the Council appeared to be generally supportive. One revision or addition that was proposed, which seemed to be supported by multiple members of Council, is identifying key desirable or undesirable land uses
for each of the six (6) areas.

Discussion summary points:

- **Brandon Larsen presented the current and proposed annexation plans, highlighting areas of interest for energy, transportation, and recreation.**
- **Commissioners Allen and Whiting discussed the overlap with neighboring cities' Annexation Plans, collaboration with neighboring cities, and healthy competition.**
- **Commissioner Hess raised concerns about the City's ability to meet current needs and the potential impact of annexation on funding.**
- **Commissioner Fox clarified that the Annexation Plan is a proposal, not a binding decision, and emphasized the property owners' rights.**

- **Commissioners Strong and Whiting discussed the potential benefits and risks of including small modular reactors in the Annexation Plan.**

Commissioner Allen opened the public hearing at 8:02 p.m.

Todd Crowther, Joy Rasmussen, Hollie Mckinney, and Michael Weber make public comments.

Commissioner Allen closed the public hearing at 8:16 p.m.

MOTION: ***Commissioner Allen moved to recommend approval to the City Council of Item 7.F., Amending the General Plan for Eagle Mountain's Annexation Policy Declaration, with the recommendation of extending Area 1 to Utah Lake. Commissioner Strong seconded the motion.***

Jason Allen	**Yes**
Robert Fox	**Yes**
Rod Hess	**Yes**
Brent Strong	**Yes**
Craig Whiting	**Yes**
Bryan Free	**Excused**

The motion passed with a unanimous vote.

5. Next Scheduled Meeting

The next Planning Commission meeting is scheduled for December 9, 2025.

6. Adjournment

MOTION: ***Commissioner Whiting moved to adjourn the meeting at 8:34 p.m. Commissioner Strong seconded the motion.***

Jason Allen	**Yes**
Robert Fox	**Yes**
Rod Hess	**Yes**
Brent Strong	**Yes**
Craig Whiting	**Yes**
Bryan Free	**Excused**

The motion passed with a unanimous vote.

The meeting was adjourned at 8:34 p.m.

Approved by the Planning Commission on

_____

Brandon Larsen
Community Development Director

	EAGLE MOUNTAIN CITY **PLANNING COMMISSION MEETING** **DECEMBER 9, 2025**
TITLE:	2026 Planning Commission Schedule
ITEM TYPE:	Discussion Item
FISCAL IMPACT:	N/A
APPLICANT:	N/A

CURRENT GENERAL PLAN DESIGNATION & ZONE	ACREAGE
N/A	N/A

PUBLIC HEARING
No

PREPARED BY
Shawna Ellis, Community Development Office Manager

PRESENTED BY
Brandon Larsen

RECOMMENDATION:
N/A

BACKGROUND:
N/A

ITEMS FOR CONSIDERATION:
N/A

PLANNING COMMISSION ACTION/RECOMMENDATION:
N/A

ATTACHMENTS:
1. EMC PC 2026 Calendar

EAGLE MOUNTAIN PLANNING COMMISSION

2026 MEETING SCHEDULE

Eagle Mountain City Planning Commission, 1650 E. Stagecoach Run, Eagle Mountain, Utah

Work Sessions : 5:30 p.m.

Policy Sessions 6:30 p.m.

January 13, 27

February 10, 24

March 10, 24

April 14, 28

May 12, 26

June 9, 23

July 14, 28

August 11, 25

September 8, 22

October 13, 27

November 10

December 8

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	EAGLE MOUNTAIN CITY **PLANNING COMMISSION MEETING** **DECEMBER 9, 2025**
TITLE:	Horizon Master Community MDP/Plat Review
ITEM TYPE:	Master Development Plan
FISCAL IMPACT:	N/A
APPLICANT:	Caden Hazard

CURRENT GENERAL PLAN DESIGNATION & ZONE	ACREAGE
Foothill Residential/Foothill Residential	109.33

PUBLIC HEARING
Yes

PREPARED BY
Robert Hobbs, Senior Planner

PRESENTED BY
Robert Hobbs

RECOMMENDATION:

—

BACKGROUND:
Earlier this year, this matter was noticed as a combination Master Development Plan (MDP) (project is over 50 acres), Rezone (Ag and Country Residential to Foothill Residential), and Preliminary Plat (actually a redo of one entitled years ago). After research was begun as part of this report's generation, it was discovered that in 2024, the passage of Ord. O-49-24 had rezoned the property from Agriculture and Country Residential to Foothill Residential. The City's zoning map had not been updated to show the property as being [now] zoned Foothill Residential by the time the application process was started. Subsequently, the matter was tabled pending resolution regarding how to process the application set. Should a MDP (with an associated preliminary plat) be processed [as applied for] or, rather, should a Preliminary Plat application with a future, standard Development Agreement be developed and used to authorize the project were it to be ultimately approved?

Given that noticing for a Master Development Plan and Rezone (besides the plat) was done in, or about, August based on a zoning map error, and, that the application package was tabled, Staff re-noticed the matter for Planning Commission consideration once we knew the item was ready to [again] go forward. It was decided to continue reviewing the Applicant's request as a combination MDP with an associated preliminary plat proposal. *Questions remain regarding the entitlement/subdivision rights afforded to the proposed development, but — as noted — the application set was cleared for renewed formal review.*

ITEMS FOR CONSIDERATION:
MASTER DEVELOPMENT PLANS
General considerations appertaining to Master Development Plans [their review and approval] are found in EMMC 16.10.030. & 16.10.070. All facts and any projected approval outcomes relevant to a Master Development Plan, such as the Trails at Hidden Valley, should be considered. City Engineering/Public Works have commented that, "[they] have no problems with the traffic plan".

16.10.070 Criteria for approval of MDPs. A master development application shall be evaluated using the following criteria. The planning commission and city council will determine compliance with these criteria:

A. General Criteria.

1. Slope. Is the slope of each area designated for development suitable for the intended development? Does the application restrict development from areas with a slope greater than 25 percent?

1. Slope. Is the slope of each area designated for development suitable for the intended development? Does the application restrict development from areas with a slope greater than 25 percent?

Attached is a "Slope Analysis Plan" prepared on 12/31/24. It identifies area encumbered by slopes classed at 0-15%, 15-25%, 25-30%, & 30-100%. Non-buildable areas are those at or exceeding 25% slope figured as an average across a property (e.g., a building lot). It depicts the amount of area assigned to those slope differentials as being 23.81 acres, 45.60 acres, 19.14 acres, and 23.18 acres respectively.

Concerns regarding the impact and applicability of the City's Hillside Ordinance passed on February 02, 2010, as Ord. # O-03-2010 and now codified as EMMC 15.80 et al have been expressed. Same for the ridge-line ordinance made effective in early 2018. *The Applicant claims exemption to those ordinances, indicating an early plat rendition of what is being proposed currently was approved by the City in 2007* (see attached narrative) *as some portions of the proposed plat appear non-compliant.*

2. Natural Hazards. Can the proposed development reasonably be established without hazard of slope failure (rockfall, landslides, debris flows, and similar earth movements)?

Unknown at this time/TBD

.

3. Storm Water Runoff. Does the application include development methods that will not accelerate runoff and erosion in a way that would have adverse downslope or downstream impacts?

Unknown at this time/TBD

4. Protection of Natural Channels and Ridgelines. Will the proposed development be reasonably compatible with the protection of natural channels and comply with the ridge line protections as provided in Chapter 17.62 EMMC, where applicable?

Unknown at this time/TBD. *An issue that bears discussion is whether the City's ridgeline ordinance (passed on January 16, 2018 as O-14-2018 and codified as EMMC 17.62 et al) applies to the development.*

5. Flooding. Will the proposed development be reasonably safe from flooding, including alluvial fan flooding?

Unknown at this time/TBD

6. Soil Characteristics. Is the soil in each area designated for development generally suitable for that development? Soil characteristics that shall be considered in answering this question include depth

to rock, depth to water table, texture, permeability, expansiveness, corrosivity, and runoff potential. The suitability tables found in the Soil Survey of the Fairfield-Nephi Area, Utah, parts of Juab, Sanpete, and Utah Counties issued by the USDA Soil Conservation Service may be used in answering this question.

Unknown at this time/TBD. Nevertheless, building of a school and houses on adjoining lands nearby has occurred.

B. Criteria Related to Infrastructure.

1. Utilities. Can the proposed development be adequately served by existing and proposed utilities for the project area?

City Engineering commented on June 26, 2025, that they had "concerns related to utilities in the area" (Storm, Water & Wastewater). Public Works noted regarding the project on June 17, 2025, as follows: "Update water model; major concern with fire flow, City should not rely on mechanical equipment to maintain fire flow. Water system is not looped;12" water line ties in[to] what?"

2. Streets. Does the street plan comply with the transportation master plan? Can the proposed development be adequately served by the city's transportation master plan and the project's proposed local streets?

City Engineering indicated on June 26, 2025, that they had, "Traffic flow concerns to Pony [Express Parkway]." . Specifics regarding cul-de-sacs, block lengths and connectivity index compliance are also assessed during preliminary plat review. The attached Traffic Impact Analysis (TIA) summarizes and concludes that, "1. There is already a median break along Pony Express Parkway at the proposed access location. 2. As with most unsignalized intersections along Pony Express there is peak hour congestion for left turn egress. 3. If the congestion is unacceptable, then drivers can travel up to Lone Tree Parkway and there is a southbound left turn lane that can be used as a U-turn." Further, "ideally, a westbound right turn lane would be recommended as a deceleration lane but there [are] not right turn lanes along this section of Pony Express Parkway even at the signalized intersections." Streets are proposed to all be locals internally. Staff has similar limited access and multiple lot frontages on/along Walnut drive -- which road effectually serves as a kind of *de facto* collector. This is similar to the recent concern expressed about Lower Hidden Valley's Red Pine road proposed on the other side of Pony Express.

3. Water Rights. Is there legally enforceable documentation to the satisfaction of the city attorney that substantiates the ability of the applicant to convey water rights to the city sufficient to meet the development need, including both the building lots and common improved open space?

The attached "Inventory of Water Rights" apparently indicates that there is a presumed balance of 90.48 acre-feet available to/for the project.

C. Criteria Related to Compatibility.

1. Compatible Development – Adjacent Parcels. Will the proposed development be reasonably compatible with existing or vested uses on adjoining lands? Is the proposed plan consistent with the city's future land use map or requested amendment?

Project property is zoned Foothill Residential (FR) (1/4-acre [10,890 sq. ft.] min. bldg. lot size /

1/2-acre [21,780 sq. ft.] min. avg. bldg. lot size) required. Code-compatible residential zones that may abut/buffer FR zoning include the RD2 and R1 Zones. The adjoining properties in the Lone Tree Circle Five Ranch (Plats A, B, D, E, & F) feature varying lot sizes, with the smallest being 1/4 acre and the majority being ~1/3 to 1/2 acre in size. That project is zoned Town Core Residential [equivalent modern zone is RD2 with 1/2-acre min. bldg. lot sizes and 3/4-acre avg. bldg. lot sizes being minimal]. Proposed Lower Hidden Valley townhouse and single-family detached building lots to the east (part of, and zoned as, the Lower Hidden Valley Master Planned Community) across Pony Express Parkway and fronting/along Red Pine Road are likely proposed to be sized smaller than those contemplated by the Horizon project. The Applicant has submitted a "Compatibility Statement" — copy hereto attached. Given the totality of surrounding zoning and development, Staff considers the 1/4-acre min., 1/2-acre avg., 1.11-acre largest lot size, with an overall density of 1.01 du/a sizing/density of Horizon to be sufficiently compatible with adjacent, developed or pre-development stage land(s).

D. Criteria Related to Design.

1. Open Space.

a. Does the proposed development include the improved open space required by this title?

Yes, see open space comments below under the platting analysis section.

b. Does the proposed pattern of development attempt to make effective use of the open space?

To the extent which they have such, it may be argued they do. See open space comments below under the platting analysis section.

c. Does the development incorporate trails, parks, and other open spaces included in the city's parks, trails, and open space master plan?

Unknown at this time/TBD

d. Does the plan attempt to combine open spaces into larger, more usable parks and open spaces?

Yes — to the extent that open space exists in the project.

2. Public Facilities. Does the proposed development include land designated for public uses, including churches, schools, community centers, etc.?

No

At the end of the day, approval of any MDP and MDA has a certain amount of subjectivity to it.

DEVELOPMENT AGREEMENT(S)

Authorized under UCA 10-9a-532 as a contract between a private and public entity [the City], one (Master DA) may be crafted for use with this application.

PRELIMINARY PLAT APPROVAL

Approval of Preliminary Plats is based upon compliance with City code requirements [Conclusions of Law] and requirements of any applicable Development Agreement(s). Approval criteria for a Preliminary Plat are stated in EMMC § 16.20. Plat application types and their reviews are administrative in nature. Therefore, plats are to be approved if all required elements and code

compliance are provided in their plan/plat drawings. Some criteria are subjective.

Note that EMMC 16.30.080 ["Rural residential subdivisions"] has special provisions governing rural-type developments. It reads as follows:
"Subdivisions that are to be reviewed under agricultural, RA1, RA2, RD1, RD2, or *FR* zone development standards (see Chapters 17.20 and 17.25 EMMC) *may not be required to install the same public improvements as subdivisions developed in other zones. Requirements to install curbs, gutters, sidewalks, water and sewer utilities, and streetlights may be waived* by the city council after a recommendation from the planning commission, upon condition that the developer provides for pedestrian circulation and accommodates water and sewer utilities and surface drainage throughout the subdivision. Necessary facilities may include, but not be limited to, trails and pathways, storm drainage detention ponds or secondary water facilities."

Preliminary Plat (EMMC § 16.20) Opinion:
The subdivision aspect of the combined application set has been reviewed by the DRC Committee and most suggested corrections/revisions are incorporated into plat drawings.

Plat Data, Standards & Findings:
Land Use Zone(s): FR
Total Acreage: 109.33
Total Lot Count: 110 (with 4 additional open space parcels — 2 City owned and, apparently, 2 HOA owned) (1.01 du/a overall)
Total Acreage in Lots: 55.00
Total Acreage in Asphalt Pavement Area: 10.39
Total Acreage in Open Space/Parcels: 42.79 acres (40.57/2.22)

FR Zoned Area:
Required Minimum [Building] Lot Size: 10,890 sq. ft.
Proposed Minimum [Building] Lot Size: 11,140 sq. ft.
Largest Proposed [Building] Lot Size: 55,439 sq. ft.
Maximum Lot Size: n/a
Required Average [Building] Lot Size: 21,780 sq. ft.
Proposed Average {Building] Lot Size: 21,780 sq. ft.
Lot dimensions: *Compliant*

RsOW:
Internal subdivision rights-of-way are proposed to be "rural" (i.e., 50' wide) in accordance with EMMC 16.35.130b & 140. Horizon Loop and Walnut Drive are slated to have an 8' asphalt trail on one side of the roads and an 8.5' wide parkstrip on the other side. At the widened asphalt section between the intersection of Walnut Drive and Horizon Loop, the paved travelway widens by 4' and the parkstrip narrows to 4.5'. Widths and rural profiles are agreeable. *Compliant*

The Fire Department has approved the use and layout of Horizon Loop and a fire access road (within Phases 4 & 5) to satisfy the rule of 30 maximum. That is, fire code and EMMC 126.35.070.I both require that, "The number of dwelling units [building lots] on a single fire apparatus access road [street] shall not exceed 30." Typically, when at least two ways in/out of a project or portion thereof exist, then that rule is usually met. *Compliant*

The "block length" or travel distance between pedestrian and/or vehicular intersections of/for sections of the project's roads exceed allowed norms. *Non-compliant*
See comments under the Street heading of the MDP findings section to see comments regarding Walnut Drive (aside from what Fire has said about project ingress/egress).

Connectivity Index Required:
FR land: 1.50. Provided: 1.5 (6 links/4 nodes). *Compliant*

Utilities:
Plans provided. Utilities reviewed by Engineering and Public Works. Open Space by Parks — comments made during DRC and reflected in attached plans. Streetlights are not required by EMMC 16.35.100.c. Water demand, given 110 building lots with a 1/2 acre average, calculated at .45 per household and 2 acre-feet per lot for irrigation — presumed need for 269.50 acre feet worth of water shares—49.5 minimum for purely domestic (indoor) use. Applicant attests that they have sufficient water shares (circa 98) to cover the allocation required for the project. See 16.10.070.B.3 comments above under the MDP section. *Apparently Compliant*

Landscaping/Open Space: The project has 2.22 acres of open space split into two parcels. Developer proposes development of trails within 42.57 acres of open space slated to be owned and maintained by the City. Within that open space, Developer proposes varying trails include a concreted stairway with landings, rail and lighting. Developer seeks credit for the overbuild cost of that particular amenity to be applied against their normal open space amenity cost(s).

17.25.050 Generally applicable provisions.
All development projects within any residential zone shall conform to the following general requirements:
...
"**B. Open Space and Trails.** Lots and roads shall be arranged to best protect contiguous open space areas, ridgelines, hillsides, drainages, wildlife habitat and corridors, and provide useable open space or trail access to useable open space. All developments shall connect to existing adjacent trails and wildlife corridors and continue them through the development and shall provide regional trails and corridors if included in the city's general plan, parks and open space plan, or bike and pedestrian plan. Rather than including large areas of unbuildable land in lots, developers are encouraged to preserve and dedicate these areas as public open space. The approval authority may require the developer to pay a fee in lieu according to EMMC 16.35.105(A)(12), or may consider, at their discretion, alternative open space plans. Alternative plans will be evaluated based upon the benefit to the neighborhood/community, proximity to existing amenities or natural features, and the unique nature of the site, and may include additional trails, preservation/dedication of additional open space areas, and unique improvements/amenities. Alternative plans may include a proposed "buy-down" of open space acreage with additional amenities at a rate of 150 points per acre (required acreage x 100 points + "bought-down" acreage x 150 points). Parks and trails must be improved as required by the standards set forth in Chapter 16.35 EMMC....."

16.35.105 Park and improved open space requirements.
The amount of land required for parks shall be calculated during the master development plan, preliminary plat and/or site plan approval process, according to the requirements in EMMC 17.25.040, Residential development standards (@ 750 sq. per building lot for Horizon = 1.89 acres total w/ 2.22 provided. [*Compliant in terms of dedicated land area])*. The park requirements are intended to be flexible in order to best meet the recreational needs of a neighborhood. A 12' wide stairway (6" risers w/ 14" tread) climbs some 160 vertically and is located on an outboard open space area that is part of the property. The nature trail/stairway amenity is at least 1,620' long "as the crow flies".

A. All improved open space must meet the following requirements:
...

10. Natural open space areas shall be left in their natural state. These areas may be improved with paved trails and necessary improvements to establish trails and any associated viewing areas. Any disturbed open space caused by construction activities shall be restored to its natural state and the required revegetation shall not be counted towards improved open space requirements. Improvements within the open space shall be counted toward the minimum amenity requirement for a project. Only the amenity and not the adjacent area containing the amenity may be counted toward the required element points, at the approval authority's discretion.

11. Open space shall be fully improved prior to recording the first plat in a project, or a separate cash escrow of $3,750 per lot must be put in place with the city with each plat to cover the anticipated cost of park improvements. For example: final plat = 20 lots; cash escrow for final plat = $75,000 ($3,750 x 20).

12. Fee in Lieu. An applicant may request to pay, or the city may require the applicant to pay, a fee in lieu of dedication and construction of improved open space, to be paid with the recordation of each final plat. The fee shall be calculated as follows:

a. The fee in lieu shall be calculated at a rate of $3.75 per square foot of required improved open space, plus the appraised value of the open space. If a fee in lieu is collected, the city shall determine the timing and location of park improvements, but the improvements should be made on a park that benefits the future residents of the development. If the developer is required to improve an existing park, the improvements shall be made prior to recording the first plat.

Example:
44-Lot Subdivision
Required open space = 44,000 sq ft x $3.75 = $165,000
Appraised value = $35,000
$165,000 + $35,000 = $200,000
$200,000/44 lots = $4,545.45

Correspondence:
Any correspondence from agencies or the citizenry is hereafter attached to this document for perusal. Agency comments may express opinions regarding the plat application or be geared towards recommending Conditions of Approval for a development should it be approved, or, directing corrections to the final plat or related construction drawings. Any written material submitted by the public post noticing of the December hearing is attached.

Miscellaneous:
1. The Wildlife Corridor is also another issue that will have to be vetted by City decision makers.

2. A section or portion of the project (N/NE) appears to perhaps be in area earmarked as a Ridge-line Protection Zone. That zone's controls specify that,

"Property within 50 vertical feet of prominent ridges may be included within private lots; however, shall be deemed unbuildable, and shall provide a public pedestrian easement to the city for the purpose of creating an integrated and connected system of ridgeline trails, which tie into neighboring development.
No structure, accessory structure, or ancillary structure may be built within the ridgeline setback area, with the exception of public infrastructure, public lookout towers, benches, or other public viewpoint or recreation structures. No cuts, fills, clearing, or grading shall occur within the

ridgeline setback, except for public trails, structures, and infrastructure. Development within close proximity to prominent ridges shall comply with ridgeline design standards found within this chapter." Again, Staff will, having more time, be able to comment more comprehensively on the proposed plat's conformance to the ridgeline standards. *Seemingly Non-Compliant*

3. Garbage collection as per normal single-family neighborhood with cans for each home; and,

4. Project to be dark-sky compliant. Homes, as required (upper 3 phases), to have fire sprinklers.

5. The sound wall (6') required by City code will be on the Applicant's property, but due to topography and storm drain pond retaining needs, the trees the City requires will need to be placed in front of the wall along Pony on City property per the developer.

6. Plat's "general notes":

GENERAL NOTES

1. SEE SHEETS 5 & 6 FOR EXISTING CONTOURS.
2. THERE ARE SMALL AREAS IN THIS SUBDIVISION LOTS WITH A NATURAL GRADE THAT EXCEEDS 25% IN RELATION TO THE PROPOSED LOT LAYOUT. A SLOPE ANALYSIS PLAN HAS BEEN PROVIDED FOR THIS SITE.
3. BUILDING SETBACKS ARE SHOWN IN THE SETBACK DIAGRAM
4. ALL ROADS WILL BE PUBLIC AND MEET CITY STANDARDS.
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6. ALL OUTDOOR LIGHTING MUST BE FULL CUT-OFF, DARK SKY COMPLIANT IN ACCORDANCE WITH CITY CODE.
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10. PROPOSED ZONE = FR
11. THERE ARE NO IRRIGATION DITCHES OR STRUCTURES, CANALS, WELLS, STREAMS, SIGNIFICANT ROCK OUTCROPPINGS, WETLANDS, FLOOD PLAINS, OR OTHER NATURAL FEATURES ON SITE.
12. PUBLIC UTILITY EASEMENTS ARE 10' FRONT, AND 10' REAR AND SIDES ON EACH LOT.

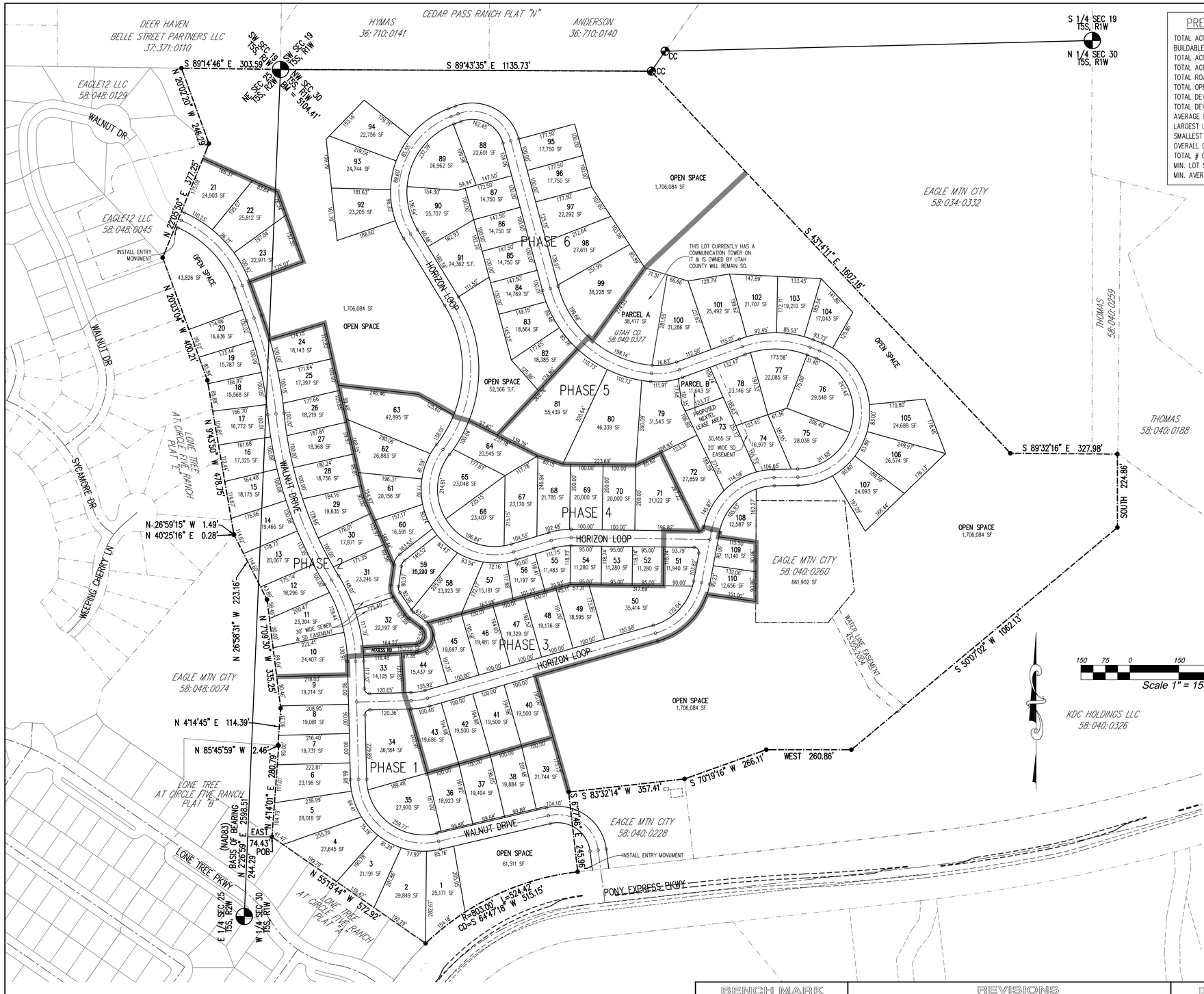
Summary: Staff has questions about the project's status and the following issues [mostly code related] affecting this project's plan/plat design to include: 1. Satisfactory resolution of apparent utility issues (per City Engineering/Public Works); and, 2. Hillside and ridge-line issues; and, 3. Satisfactory resolution of any Wildlife Corridor vector/area issues related to the project; and, 4. Decrease/waiver of caps on "block lengths" where such exceed allowed norms; and, 5. Obtainment of permission or ownership of the City owned Parcel # 58:040:0228 over which the Applicant proposes to construct the main road entry/exit to the development and an accessory 20-stall parking lot on the same parcel; and, 6. Walnut functionality.

PLANNING COMMISSION ACTION/RECOMMENDATION:
N/A

ATTACHMENTS:

1. Vicinty Map and Legal Description
2. Horizon Developer Narrative Ltr.
3. Master Plan
4. Land Use Plan
5. Horizon Preliminary Plan 073025-PrePlat 1.corrected acreage.7_30_25
6. Horizon Traffic Impact Analysis Report
7. Horizon Slope Analysis
8. Banked Water Rights
9. IFFP

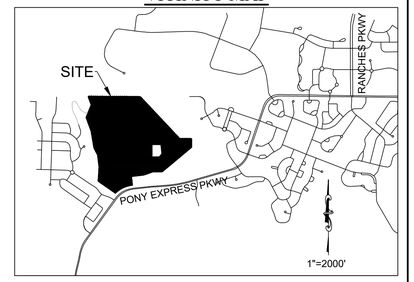
10. 2023 Adopted Wildlife Corridor Map
11. Proposed Amended Wildlife Corridor



PRELIM PLAN LAND CALCULATIONS

TOTAL ACREAGE:	109.33 ACRES
BUILDABLE ACREAGE:	66.19 ACRES
TOTAL ACREAGE IN LOTS:	55.00 ACRES
TOTAL ACREAGE IN PARCELS:	1.15 ACRES
TOTAL ROADWAY AREA:	10.04 ACRES
TOTAL OPEN SPACE:	43.14 ACRES
TOTAL DEVELOPED OPEN SPACE REQUIRED:	1.89 ACRES
TOTAL DEVELOPED OPEN SPACE PROVIDED:	2.36 ACRES
AVERAGE LOT SIZE:	21,780 SF/0.50 ACRES
LARGEST LOT SIZE:	55,439 SF/1.11 ACRES
SMALLEST LOT SIZE:	11,140 SF/0.26 ACRES
OVERALL DENSITY:	1.01 LOTS/ACRE
TOTAL # OF LOTS:	110 LOTS
MIN. LOT SIZE ALLOWED:	10,890 S.F.
MIN. AVERAGE LOT SIZE:	21,780 S.F.

VICINITY MAP



LEGAL DESCRIPTION

Beginning at a point located North 2°26'59" East along section line 244.29 feet and East 74.43 feet from the West Quarter Corner of Section 30, Township 5 South, Range 1 West, Salt Lake Base and Meridian; thence along the easterly boundary of Lone Tree at Circle Five Ranch Plat "B" the following two courses and distances: 1) North 4°14'01" East 280.79 feet, and 2) North 85°45'59" West 2.46 feet; thence North 4°14'45" East 114.39 feet; thence North 7°09'30" West 335.25 feet; thence North 26°58'31" West 223.16 feet; thence along the easterly boundary of Lone Tree at Circle Five Ranch Plat "E" the following four courses and distances: 1) North 40°25'16" East 0.28 feet, 2) North 26°59'15" West 1.49 feet, 3) North 9°43'50" West 478.75 feet, and 4) North 20°03'04" West 400.21 feet; thence North 22°05'50" East 377.25 feet; thence North 20°02'20" West 246.29 feet; thence South 89°14'46" East along section line 303.59 feet to the Northwest Corner of Section 30; thence South 89°43'35" East along section line 1135.73 feet; thence South 43°14'11" East 1607.16 feet; thence South 89°32'16" East 327.98 feet; thence South 224.86 feet; thence South 50°07'02" West 1062.13 feet; thence West 260.86 feet; thence South 70°19'16" West 266.11 feet; thence South 83°32'14" West 357.41 feet; thence South 6°27'46" East 245.96 feet; thence along the arc of a 803.00 foot radius non-tangent curve to the left 524.42 feet through a central angle of 37°25'05" (chord bears South 64°47'18" West 515.15 feet); thence North 55°15'44" West along the northerly boundary of Lone Tree at Circle Five Ranch Plat "A" a distance of 572.92 feet to the point of beginning.

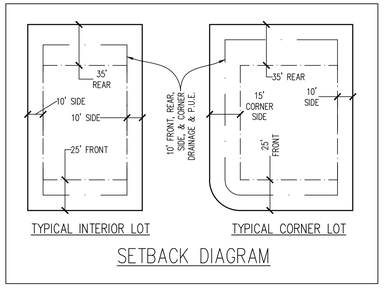
Less and Excepting therefrom the following:

Beginning at a point located North 2°26'59" East along section line 1767.77 feet and East 990.97 feet from the West Quarter Corner of Section 30, Township 5 South, Range 1 West, Salt Lake Base and Meridian; thence North 36°02'03" East 274.03 feet; thence South 73°10'04" East 71.31 feet; thence South 9°33'35" West 281.55 feet; thence along the arc of a 327.50 foot radius non-tangent curve to the right 201.30 feet through a central angle of 35°13'00" (chord bears North 67°13'46" West 198.14 feet) to the point of beginning.

Also Less and Excepting therefrom the following:

Beginning at a point located North 2°26'59" East along section line 902.29 feet and East 1528.45 feet from the West Quarter Corner of Section 30, Township 5 South, Range 1 West, Salt Lake Base and Meridian; thence North 0°16'25" East 373.66 feet; thence South 89°43'35" East 271.29 feet; thence South 6°02'19" East 277.33 feet; thence South 39°41'05" West 126.85 feet; thence North 89°43'35" West 221.24 feet to the point of beginning.

Total Area = 108.45 Acres



SETBACK DIAGRAM

GENERAL NOTES

1. SEE SHEETS 5 & 6 FOR EXISTING CONTOURS.
2. THERE ARE SMALL AREAS IN THIS SUBDIVISION LOTS WITH A NATURAL GRADE THAT EXCEEDS 25% IN RELATION TO THE PROPOSED LOT LAYOUT. A SLOPE ANALYSIS PLAN HAS BEEN PROVIDED FOR THIS SITE.
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PROPOSED ZONE: FOOTHILL RESIDENTIAL

SHEET INDEX

SURVEYOR:
AZTEC ENGINEERING INC.
732 N. 780 W.
AMERICAN FORK, UT. 84003
AZTECENGINEERING@GMAIL.COM

BENCH MARK

NW CORNER, SECTION 30, TOWNSHIP 5 SOUTH, RANGE 1 WEST, SALT LAKE BASE AND MERIDIAN
ELEVATION = 5104.41'

REVISIONS

Rev.	Date	Description

Developer: Belle Street Partners
c/o Scott Hazard
3688 E. Campus Drive Suite 100, Eagle Mountain, UT 84005
Phone: (801) 636-1858

EXCEL ENGINEERING
David W. Peterson, P.E., License #270393
12 West 100 North, Suite 201C, American Fork, UT 84003
P: (801) 756-4504; david@excelcivil.com

HORIZON
EAGLE MOUNTAIN UTAH

Drawn by: G.J.Y.
Designed by: G.J.Y.
Checked by: D.W.P.

PRELIMINARY PLAT

LOCATED IN THE NW CORNER OF SECTION 30, TOWNSHIP 5 SOUTH, RANGE 1 WEST, SLB&M

Scale: 1"=150'
Date: 03/28/25

The following is a brief background of the Horizon Master Plan, formerly known as the Circle 5 Ranch development originally vested on Utah County Parcel # 58:040:0378.

1. A preliminary plat for Circle 5 Ranch was approved by the Eagle Mountain Planning Commission in 2007.
2. The approved preliminary plat includes 81 single-family lot ranging between 0.35 and 1.08 acres in size, as well as natural open space and residential streets.
3. In 2007 the Eagle Mountain Municipal Code did not contain expiration language related to preliminary plats, but Section 16.20.060 Expirations and Extensions of Approvals was added to the EMMC in 2010.
4. In the fall of 2024, EM City initiated zone change applications for multiple parcels throughout the City in an effort to update the underlying zoning from zoning associated with expired master plans (in this case, The Ranches master plan) to a current zone recognized by the City.
5. During the City Council meeting that addressed the Circle 5 Ranch parcel, the developer (Scot Hazard) and the City Council agreed that a Foothill residential zone would be the most appropriate zone for the property and most consistent with the vested plat. The Council adopted the FH zone during that meeting.
6. During that same City Council meeting in the fall of 2024, some discussion took place about the ongoing validity of a plat vesting that does not expire. Rather than try the details of such a discussion, the City Council and developer agreed that the developer would work towards updating the preliminary plat, include developable land that was specifically excluded from the original vesting (these were proposed multi-family parcels, permitted under the original Ranches MP zoning), bring the design to current standards as much as possible considering the constraints of topography, access, and connectivity, and present a new master plan for the City Council's review.
7. Some elements of the City's current code cannot be complied with while maintaining the general design of the approved preliminary plat in the updated and revised plan, such as: cross-block connectivity, block length, and egress compliant with "typical" fire code design intent (the fire chief has reviewed the proposed plan and has approved the layout and egress in its proposed form – fire sprinklers will be required in the upper 3 phases of the master plan). Another matter includes the ridgeline protection zone. Compatibility with the ridge line ordinance is nearly impossible, as a significant number of the lots load from roads centered on the ridge lines. Finally, the property lies within the wildlife overlay zone that was adopted after the preliminary plat vesting. In conversations with Todd Black, the City's wildlife biologist, the proposed Horizon design would

not adversely affect the deer migration through this area, especially as this area is no longer identified as a primary migration route.

8. In addition to the single family lots added (some from more efficient redesign, others from the land previously proposed as multi-family parcels), the developer has added significant improved open space, including nature path trail systems, and an iconic 360 concrete stair amenity similar to those found near Dixie Tech in St George, UT -- https://www.utahsadventurefamily.com/tech-ridge-stairs-dragon-tail-steps-st-george/
9. Mailbox locations and turnouts consistent with EMMC have also been added to the master plan.

EAGLE MOUNTAIN CITY

2025 WASTEWATER MASTER PLAN REPORT

Prepared by:

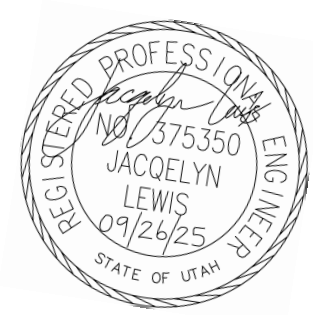
JWO ENGINEERING

1307 N Locust Lane

Provo, UT 84604

Contact: Jacqelyn Lewis, P.E.

309-271-9981



September 2025

JWO ENGINEERING
A Professional Limited Liability Company

1307 N Locust Lane
Provo, Utah 84604
801-828-7805

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JWO ENGINEERING
A Professional Limited Liability Company

1307 N Locust Lane
Provo, Utah 84604
801-828-7805

EXECUTIVE SUMMARY

JWO Engineering, PLLC was contracted to complete a wastewater master plan for Eagle Mountain City (EMC). This report will evaluate necessary infrastructure for wastewater conveyance and treatment for the buildout conditions based on projected growth.

The following table is a summary of projects, and their estimated costs that JWO Engineering, PLLC recommends being completed within the next 5 years for EMC. Please refer to the rest of this report for a complete list of recommended projects and their estimated costs. Estimated costs in this table are concept level estimates based on 2025 costs. In the Budgeting section of this report, the costs were adjusted using an assumed inflation rate for each year. Actual costs will be determined by the project details and economic conditions at the time of the work being carried out. Please see the Exhibits within the report depicting the proposed pipeline projects.

An urgent recommendation is to begin designing and constructing the East and West Sewer Trunklines as soon as possible.

Table 1 – Recommended Collection Improvements Within Next 5 Years

Collection Improvement Project	2025 Estimate (Millions)	
East Trunkline	$	24.24
West Trunkline	$	12.14
Pole Canyon Trunkline	$	15.92
Steeplechase LS Upgrade	$	0.40
Annual GIS updates (5yr)	$	0.01
Total for next 5 years	$	52.71

Table 2 - Recommended Treatment Improvements Within Next 5 Years

Treatment Improvement Project	2025 Estimate (Millions)	
WWTP 6 MGD Expansion	$	120.00
Treated Water Disposal	$	15.00
Total for next 5 years	$	135.00

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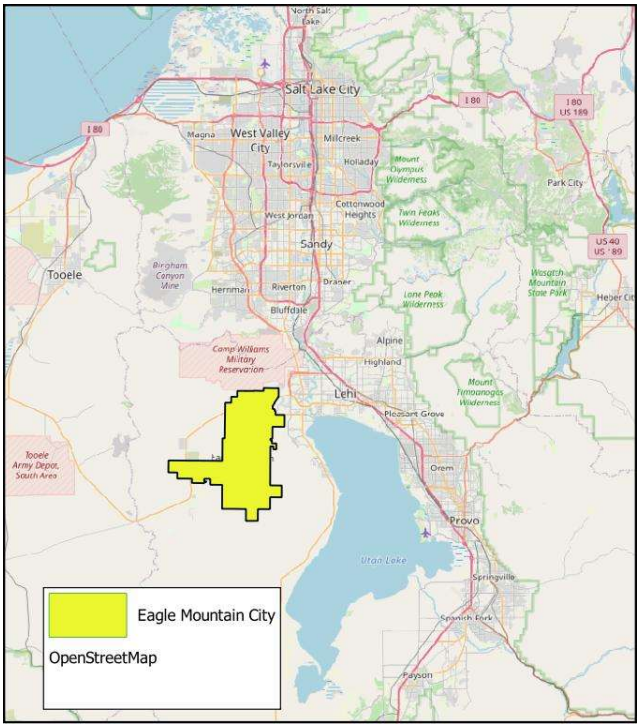

Figure 1 - Vicinity Map

BACKGROUND

Eagle Mountain City (EMC) located in Utah County near Utah Lake as shown in the vicinity map above and is one of the fastest growing cities in the US. Since its incorporation in 1996 it has grown from a population of less than 300 to over 73,000 at the start of 2025, and consequently has undergone rapid development. Recent annual growth rates have averaged 10% and it is anticipated to continue with this growth as numerous new developments have been approved and underway. EMC has also recently annexed adjacent land, just over 300 Acres, which will add to the growth and expected population. The average household size in the state of Utah is 3.09. EMC has an average household size of 4.37 people, one of the highest in the nation.

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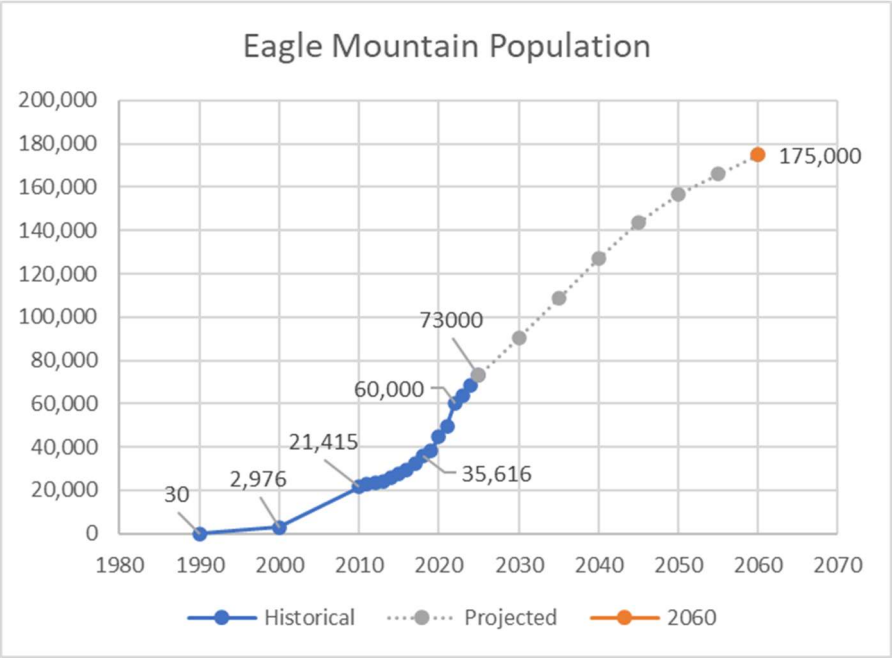

Figure 2 - Eagle Mountain City Population Chart

With only an estimated 19 square miles as being developed of EMC's 50 square miles, there is still much growth anticipated. It is projected that the city will continue to grow rapidly, with a population of 175,000 by 2060. Proper planning of city infrastructure is a crucial component of sustaining this expansion. The last EMC IFFP was completed in 2022, and before that was 2018. The population has more than doubled since 2018. Minimal infrastructure has been added or improved since 2018, but as the population continually increases rapidly, EMC will need to make infrastructure improvements a priority to support this population growth.

EMC's wastewater system contains three separate service areas designated as the North Service Area (NSA) the South Service Area (SSA) and the West Service Area (WSA). These service areas are approximate and may vary with continued development and improvements. The NSA conveys flows to the East and are treated by Timpanogos Special Services District. Flows from the SSA and WSA flow South and East respectively to the existing WWTP to be treated by EMC. The flows treated by EMC are treated and disposed of by means of Rapid Infiltration Basins (RIBs).

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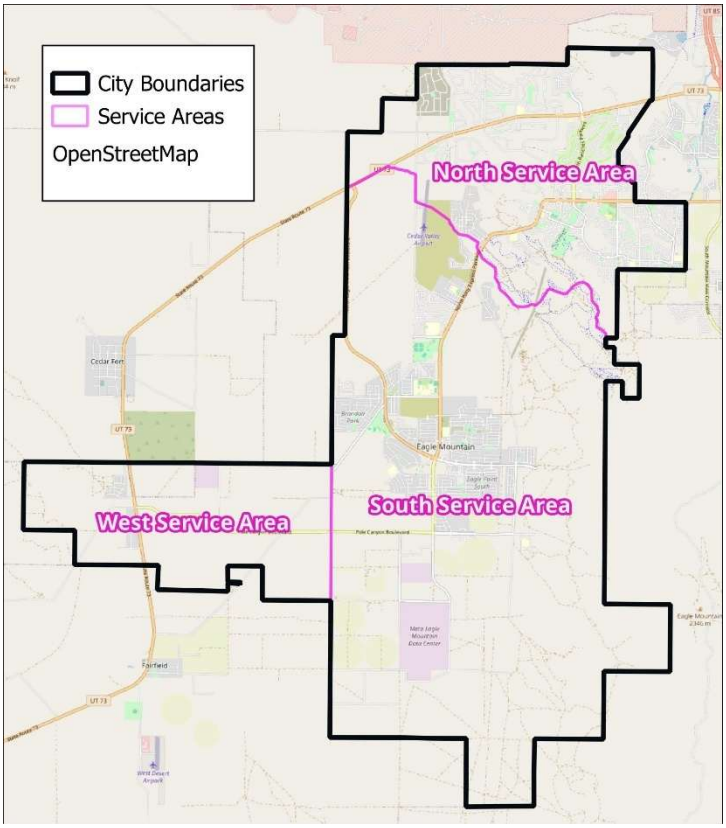

Figure 3 - Service Areas

GEOGRAPHIC INFORMATION SYSTEM (GIS)

EMC provided GIS shape files for their wastewater facilities. These files were used to compare existing facilities with proposed improvements. Field verification is needed as the shape files were not complete. There were main lines missing from the WSA to the WWTP. Numerous pipes were without details such as sizes, materials and depths. It is recommended that EMC update their GIS files to accurately depict the current completed infrastructure of EMC. The GIS files should be kept up to date as new wastewater infrastructure is added to EMC. Some information in this plan may be inaccurate due to omissions in the available GIS information.

EXISTING REPORTS

Current available reports addressing EMC's wastewater situation include the 2024 EMC WSA WW IFFP, EMC Impact Fee Facilities Plan Report from 2012 (IFFP 2012), 2018 (IFFP 2018), and 2022 (IFFP 2022). Eagle Mountain General Plan (2018) was also used for future land use and density populations. Some data from these existing reports was used in our assessment of the existing and proposed EMC wastewater water facility conditions.

EQUIVALENT RESIDENT CONNECTIONS (ERC'S)

An Equivalent Residential Connection (ERC) alternatively referred to as an Equivalent Residential Unit (ERU) represents the design flowrate from one residential connection. The previous report,

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2022 IFFP, recommended an ERC flowrate of 220 gallons per day. Existing water meter data was provided for the winter months throughout EMC. Winter months were used as they would not include water used for irrigation. Actual values of ERUs were calculated and are shown in the table below. While multi-family residences can be smaller households, EMC continues to be at an above average household size implying that even smaller housing doesn't always result in a smaller household. This report will continue to use an ERC value of 220 gallons per day.

Table 3 – Calculated ERU Values

NSA ERU	240 gpd
SSA/WSA ERU	220 gpd

Current ERU's were obtained from EMC and used for the existing wastewater model.

Table 4 - Existing ERU Count

	Current # ERU's
NSA	8,027
SSA	6,744
WSA	134

ERU's per Acre can vary significantly depending on land use. Residential will be on the higher end with values between 8 and 4. On the other end, half acre lots would be a value of 2.0. Industrial and commercial users will generally be on the lower end but also vary greatly depending on the type of industry. As future developments are not yet known a value of 3.4 ERU/Acre will be used.

LEVEL OF SERVICE

EMC's current wastewater system design requirements are defined by the current city ordinances and construction standards. Wastewater pipes shall be lined non-reinforced concrete, lined reinforced concrete, or PVC and have a minimum velocity of 2 foot per second unless otherwise approved by the City Engineer. This report recommends that the standards be updated to require all concrete pipe to be lined and be corrosion resistant. Minimum slopes for pipes consistent with state standards are found in the table below:

Table 5 - Minimum Pipe Slope

Pipe Diameter	Minimum Slope
4"	2.000%
6"	1.000%
8"	0.334%
10"	0.248%
12"	0.194%
14"	0.158%
15"	0.144%
16"	0.132%
18"	0.113%
21"	0.092%
24"	0.077%
27"	0.066%
30"	0.057%
36"	0.045%

Service levels indicate how effectively a piece of infrastructure meets the city's expectations and potential need for improvement. The amount of flow that a sewer pipe can convey is a combination of its size and slope. If the pipe becomes too full, a backup in the system can occur. As pipe diameter increases, the capacity changes significantly with depth of flow. Larger pipes will have a smaller peaking factor as well as the ability to carry additional depth of flow. The level of service (LoS) for pipes in the city is broken into four levels that help determine the need for pipe size upgrades and are defined in the table below.

Table 6 - Level of Service Criteria

Level of Service	Pipe Diameter (in)	% Full with Peak Flow	Design Peak Factor
A	<18"	50%	2.50
	21"-30"	67%	2.25
	30"<	75%	2.00
B	<18"	67%	2.50
	21"-30"	75%	2.25
	30"<	85%	2.00
C	<18"	75%	2.50
	21"-30"	85%	2.25
	30"<	95%	2.00
D	<18"	85%	2.50
	21"-30"	95%	2.25
	30"<	100%	2.00

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LoS D is considered failing. Pipes at 100% full would be a surcharged condition. Pipes at system build-out should be designed for LoS condition A with the associated peak factor.

EXCESS CAPACITY

All sewer pipes within EMC are currently not designed for excess capacity.

PIPE LOADING CAPACITY

EMC requested the maximum capacity of pipe based on minimum slope using 220 gpm as the ERU. Capacity is calculated for each LoS as laid out in the table above. The table below calculates the capacity of a pipe with varied depth of flow or %full with the peak factors applied.

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Table 7 - Pipe Flow Calculator

JWO Engineering

Pipe Flow Calculator — Flow/ERU 220 (gpd)

Service level A										
Diameter	% full	Depth	Up Invert	Down Invert	Length	Minimum	Mannings	Peak	Q avg	Capacity
(in)		(in)	(elev)	(elev)	(ft)	Slope	N	Factor	(gpd)	(ERU's)
8	50%	4.00	4500.00	4499.9967	1	0.00334	0.012	4.00	61,115	277
10	50%	5.00	4500.00	4499.9975	1	0.00248	0.012	4.00	95,484	434
12	50%	6.00	4500.00	4499.9981	1	0.00194	0.012	3.00	183,104	832
15	50%	7.50	4500.00	4499.9986	1	0.00144	0.012	3.00	286,029	1,300
18	50%	9.00	4500.00	4499.9989	1	0.00113	0.012	2.50	494,426	2,247
21	50%	10.50	4500.00	4499.9991	1	0.00092	0.012	2.50	672,950	3,058
24	67%	16.08	4500.00	4499.9992	1	0.00077	0.012	2.50	1,387,606	6,307
27	67%	18.09	4500.00	4499.9993	1	0.00066	0.012	2.50	1,758,738	7,994
30	67%	20.10	4500.00	4499.9994	1	0.00057	0.012	2.50	2,164,652	9,839
36	75%	27.00	4500.00	4499.9992	1	0.00082	0.012	2.00	6,096,841	27,712
42	75%	31.50	4500.00	4499.9992	1	0.00082	0.012	2.00	9,196,697	41,803

Service level B										
Diameter	% full	Depth	Up Invert	Down Invert	Length	Minimum	Mannings	Peak	Ave Flow	Capacity
(in)		(in)	(elev)	(elev)	(ft)	Slope	N	Factor	(gpd)	(ERU's)
8	67%	5.36	4500.00	4499.9967	1	0.00334	0.012	4.00	96,479	438
10	67%	6.70	4500.00	4499.9975	1	0.00248	0.012	4.00	150,736	685
12	67%	8.04	4500.00	4499.9981	1	0.00194	0.012	3.00	289,057	1,313
15	67%	10.05	4500.00	4499.9986	1	0.00144	0.012	3.00	451,538	2,052
18	67%	12.06	4500.00	4499.9989	1	0.00113	0.012	2.50	780,523	3,547
21	67%	14.07	4500.00	4499.9991	1	0.00092	0.012	2.50	1,062,350	4,828
24	75%	18.00	4500.00	4499.9992	1	0.00077	0.012	2.50	1,603,064	7,286
27	75%	20.25	4500.00	4499.9993	1	0.00066	0.012	2.50	2,031,823	9,235
30	75%	22.50	4500.00	4499.9994	1	0.00057	0.012	2.50	2,500,764	11,367
36	85%	30.60	4500.00	4499.9996	1	0.00045	0.012	2.00	5,103,764	23,198
42	85%	35.70	4500.00	4499.9996	1	0.00045	0.012	2.00	7,698,703	34,994

Service level C										
Diameter	% full	Depth	Up Invert	Down Invert	Length	Minimum	Mannings	Peak	Ave Flow	Capacity
(in)		(in)	(elev)	(elev)	(ft)	Slope	N	Factor	(gpd)	(ERU's)
8	75%	6.00	4500.00	4499.9967	1	0.00334	0.012	4.00	111,460	506
10	75%	7.50	4500.00	4499.9975	1	0.00248	0.012	4.00	174,141	791
12	75%	9.00	4500.00	4499.9981	1	0.00194	0.012	3.00	333,940	1,517
15	75%	11.25	4500.00	4499.9986	1	0.00144	0.012	3.00	521,649	2,371
18	75%	13.50	4500.00	4499.9989	1	0.00113	0.012	2.50	901,717	4,098
21	75%	15.75	4500.00	4499.9991	1	0.00092	0.012	2.50	1,227,304	5,578
24	85%	20.40	4500.00	4499.9992	1	0.00077	0.012	2.50	1,811,495	8,234
27	85%	22.95	4500.00	4499.9993	1	0.00066	0.012	2.50	2,296,001	10,436
30	85%	25.50	4500.00	4499.9994	1	0.00057	0.012	2.50	2,825,915	12,845
36	95%	34.20	4500.00	4499.9996	1	0.00045	0.012	2.00	5,322,053	24,191
42	95%	39.90	4500.00	4499.9996	1	0.00045	0.012	2.00	8,027,978	36,490

Service level D										
Diameter	% full	Depth	Up Invert	Down Invert	Length	Minimum	Mannings	Peak	Ave Flow	Capacity
(in)		(in)	(elev)	(elev)	(ft)	Slope	N	Factor	(gpd)	(ERU's)
8	85%	6.80	4500.00	4499.9967	1	0.00334	0.012	4.00	125,952	572
10	85%	8.50	4500.00	4499.9975	1	0.00248	0.012	4.00	196,783	894
12	85%	10.20	4500.00	4499.9981	1	0.00194	0.012	3.00	377,359	1,715
15	85%	12.75	4500.00	4499.9986	1	0.00144	0.012	3.00	589,474	2,679
18	85%	15.30	4500.00	4499.9989	1	0.00113	0.012	2.50	1,018,959	4,631
21	85%	17.85	4500.00	4499.9991	1	0.00092	0.012	2.50	1,386,879	6,303
24	95%	22.80	4500.00	4499.9992	1	0.00077	0.012	2.50	1,888,973	8,586
27	95%	25.65	4500.00	4499.9993	1	0.00066	0.012	2.50	2,394,202	10,882
30	95%	28.50	4500.00	4499.9994	1	0.00057	0.012	2.50	2,946,780	13,394
36	100%	36.00	4500.00	4499.9996	1	0.00045	0.012	2.00	4,952,961	22,513
42	100%	42.00	4500.00	4499.9996	1	0.00045	0.012	2.00	7,471,227	33,960

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WASTEWATER SYSTEM ANALYSIS

EXISTING CONDITIONS

The EMC wastewater network consists of approximately 956,000 LF of pipe with nearly 4200 manholes. There are a total of 5 lift stations currently serviced by EMC (Lone Tree, Lakeview, New Park, Pole Canyon, and Steeplechase), and 4 privately operated lift stations (Brylee Farms, Scenic Mountain 1 and 2, and Silverlake). There are potentially four additional lift stations being constructed which will be added to the wastewater system. QTS LS will be serviced by EMC, and Oquirrh Mountain, Pinnacles, and Rose Ranch will be privately owned and operated. Flows to TSSD for the past 2 months have been about 1.75 MGD. Flows to EMC WWTP have been about 1.5 MGD.

North Service Area (NSA)

The NSA is estimated to be 80% developed of its nearly 12 square miles of land and accounts for approximately 57% of the total city population. The majority of this service area is residential and all flows are conveyed to be treated with TSSD. It has three lift stations managed by EMC; Lakeview, Lone Tree and New Park, and three private lift stations; Scenic Mountain 1 and 2, and Silver Lake within the system. Each of these lift stations are currently in operation. Septic systems were not included in the existing model.

Improvements have been planned to convert the Lone Tree lift station to an overwatch type facility due to the age and condition of the existing pumps. The new overwatch pump station will continue to discharge to the NSA at this time.

The figure below shows the existing NSA with pipe diameters from the provided shape files, as well as lift stations.

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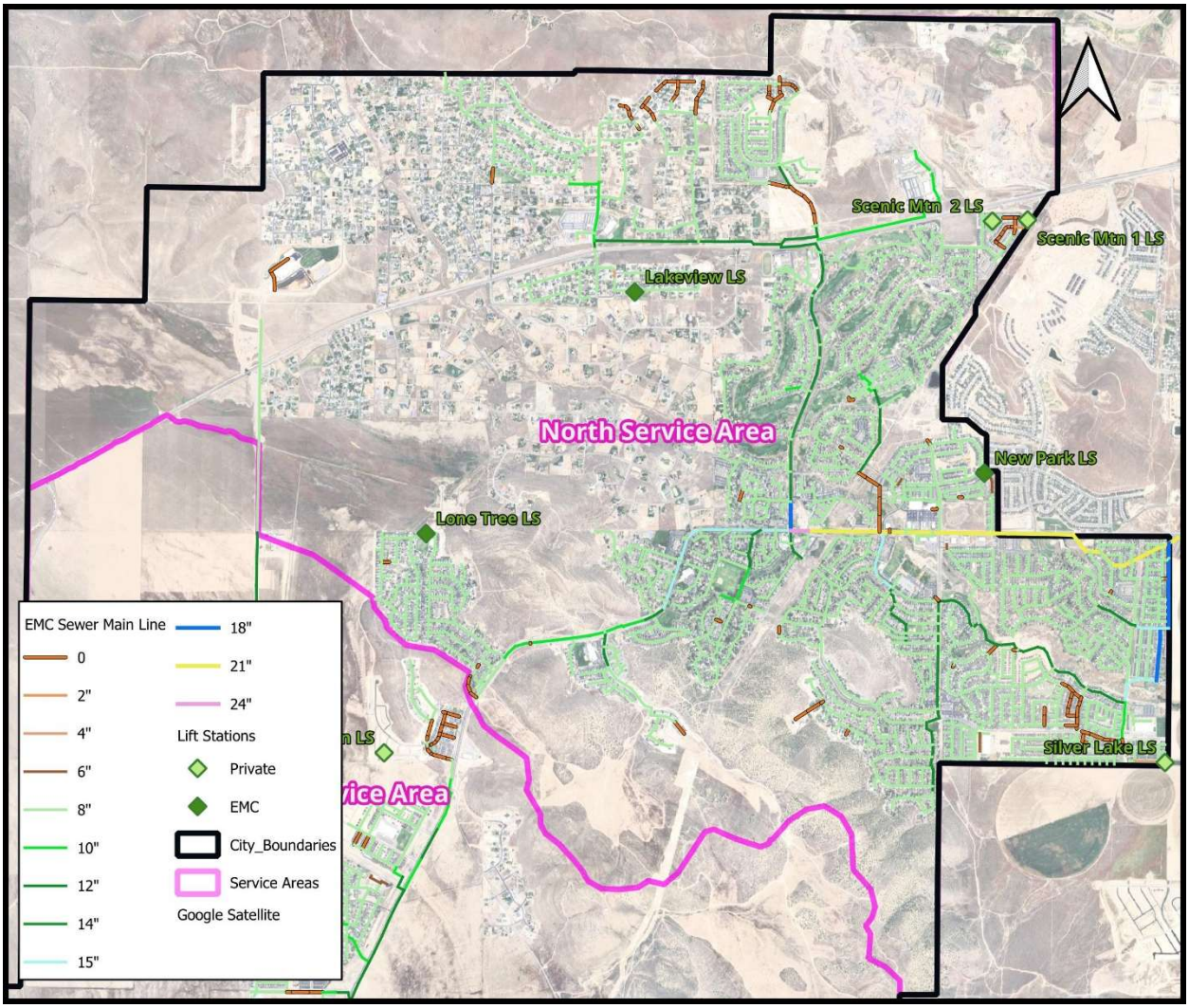

Figure 4 - Existing NSA

South Service Area (SSA)

The SSA is estimated to be 30% developed of its 31.5 square miles of land and accounts for approximately 40% of the total city population. This service area includes the Meta/Facebook sites which each have a lift station, Steeplechase LS. An additional industrial site, QTS is currently being developed and will have its own lift station to convey flows to EMC WWTP. The QTS LS is not yet in service. There are four private lift stations in this service area, Brylee Farms and Oquirrh Mountain, Pinnacles, and Rose Ranch. Only Brylee Farms LS is currently in operation. Several new developments have already been approved and are underway in this service area.

Previous IFFP reports have shown that Pony Express Parkway sewer pipes near the WWTP have been nearly at capacity and will not be able to convey additional future flows with continued development.

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The figure below shows the existing SSA with pipe diameters from the provided shape files, as well as lift stations.

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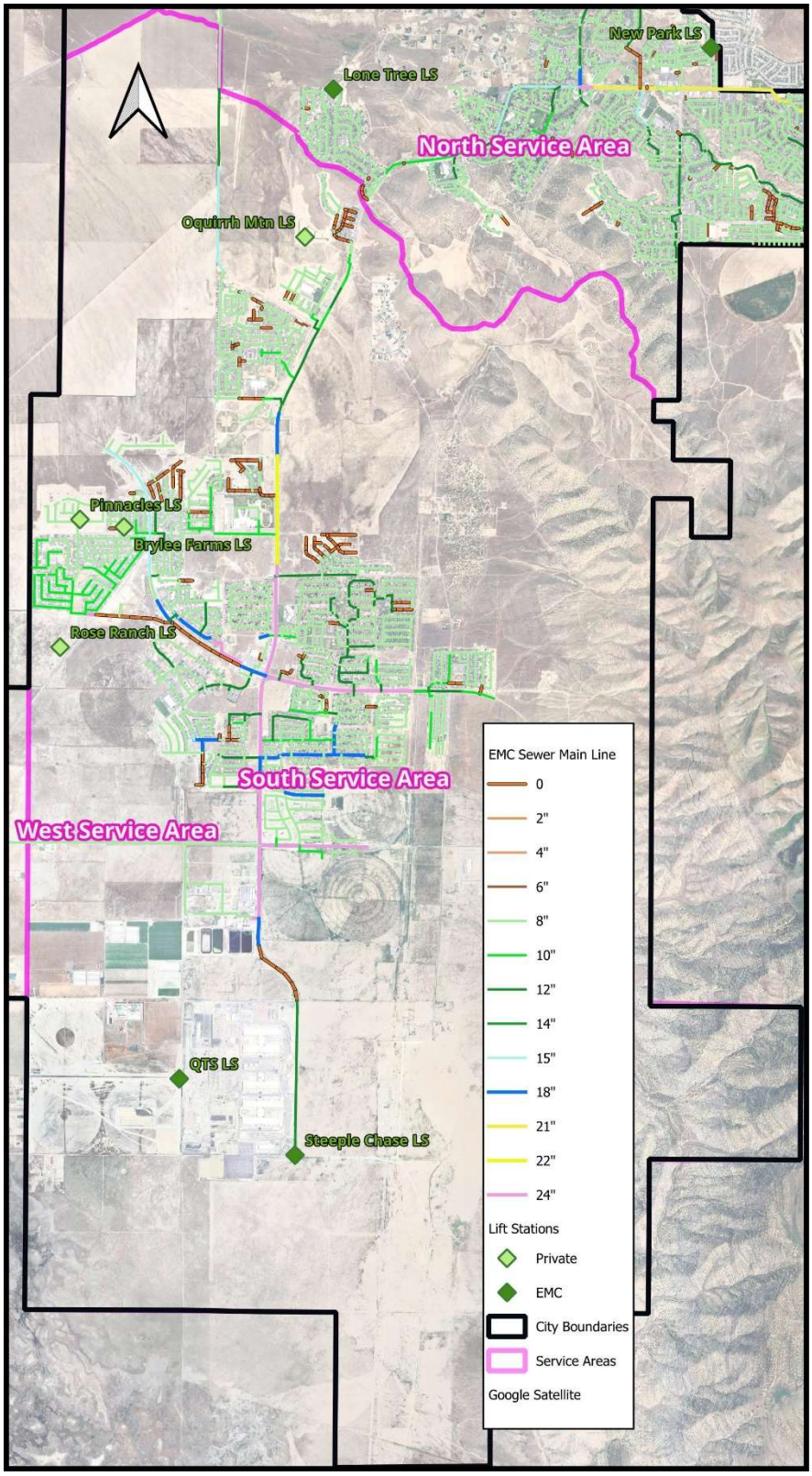

Figure 5 - Existing SSA

West Service Area (WSA)

The WSA is estimated to be less than 10% developed of its 7.4 square miles of land and accounts for approximately 3% of the total city population. More than 90% of the land within the WSA is currently used for farming or has not yet been developed. There is one industrial user, Tyson Foods Plant which has a holding tank to help more evenly distribute flows being discharged. The Firefly development is underway and will occupy just over 4 square miles of the WSA.

The WSA currently contains only a small wastewater network that collects flows from Tyson Foods and White Hills Subdivision and is pumped by means of Pole Canyon LS to EMC WWTP. This is the only LS in the WSA. There has been a temporary line to the LS from Tyson Foods. This line will be replaced once pipes in Pole Canyon Road are upsized with the Firefly development. Partial construction has been completed for a deep Pole Canyon Trunkline to replace the existing LS and have increased future flows from the WSA conveyed by gravity to the EMC WWTP.

The figure below shows the existing SSA with pipe diameters from the provided shape files, as well as lift stations.

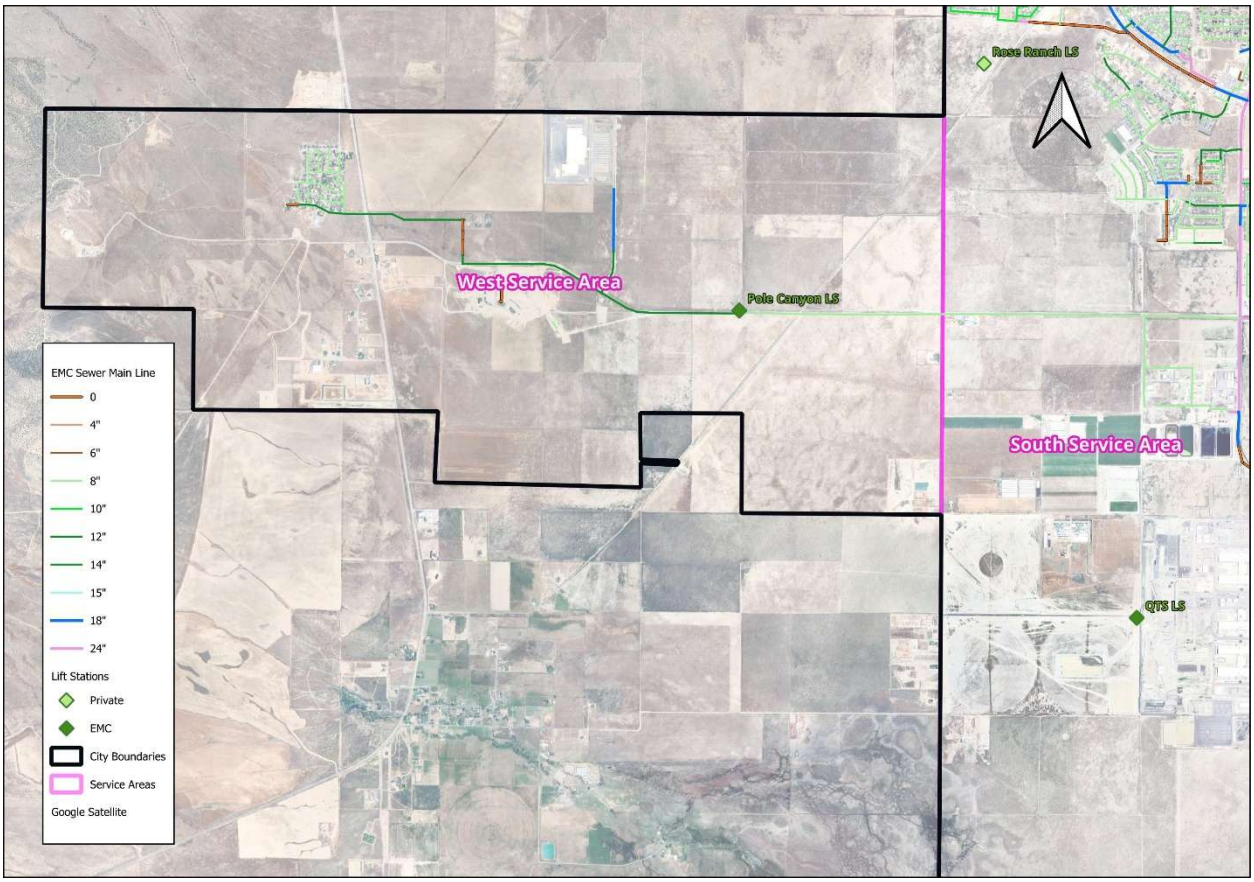

Figure 6 - Existing WSA

Treatment Plant

The EMC WWTP has recently been expanded to accommodate flows of 2.4 MGD with construction being nearly complete. Currently the WWTP is under design for additional capacity to be able to accommodate an additional 6.0 MGD bringing the total WWTP capacity to 8.4 MGD. The average total flows treated by the WWTP for the last 2 months is about 1.5 MGD. While the current capacity is 2.4 MGD by volume it should be noted that for solids loading it is already nearly at capacity necessitating the immediate need for additional capacity as growth continues.

EXISTING CONDITIONS MODEL

Advanced Engineering and Environmental Services, LLC (AE2S) modeled the sewer system using InfoWorks ICM. InfoWorks is able to import existing shape files and its data to create a system model with pipe diameters and elevations. EMC provided the existing shape files for the existing EMC wastewater system to create this model. However, as the model was run and evaluated, it was apparent that the shape files were not complete and fully updated. There were several pipes with no diameter, and many other fields with no information that will be helpful for evaluation such as "Year" (presuming that to be the year the pipe was installed) and "CUTDEPTH" (presuming that is the depth of cover). The manhole shape file appears to have multiple fields for rim and or invert elevations. These fields should be edited to be consistent and complete. Field names should be edited to help understand the difference between "INVERT" and "INVERTELEV", and "Elevation" and "RIMELEV". It was evident that some manholes used "Elevation" for a rim elevation, while others used "RIMELEV" for that information. Fields should be consistently used throughout the shapefile to avoid confusion. Since EMC GIS data provided was incomplete, slopes of existing pipes were either linearly interpolated between upstream and downstream manholes, or for larger gaps in pipe inverts, a minimum slope based on diameter was assumed.

Pipe capacities are of most concern at the confluences of pipes or along main trunklines. While smaller pipes are still included in the model, these pipes generally do not carry significant flows.

The existing wastewater infrastructure was evaluated for their current LoS based on existing discharges during peak flows. EMC provided daily flow data from October to March which determined the average and peak day flows. The calculated peak factor for the NSA was 2.74 and for the SSA/WSA it was 1.82 for existing conditions. The model used a peak factor of 2.0 for both SA in the existing conditions model. The model results discussed below for each service area are based on peak flows. Exhibits showing the existing diameters and model results for each service area based on existing conditions with peak flows are included.

North Service Area (NSA)

Pipes

Of most concern in this service area are pipes within Silverlake. The 21" main trunkline as it conveys flows to TSSD is shown to be at a LoS D. Based on data provided, it has a high point at manhole ID 3455. It is recommended that EMC confirm the invert depths at this manhole and the manholes upstream and downstream from it and update the GIS files. Additionally, the 18" line flowing towards the 21" line is shown at a LoS D. These inverts should also be verified. Two sections of pipe

along the main trunkline towards TSSD are in LoS B categories. The trunkline conveying flows from the far north areas is hovering between LoS A and LoS B. Assuming invert elevations provided are correct, these pipelines are full and should carefully consider any additional flows into these trunklines. All other existing pipes are within the LoS A criteria. As several pipe sections are already exceeding LoS A, adding any additional flows to these pipelines would exceed the recommended capacity based on LoS.

Manholes

There are no known issues with existing manholes, and it is presumed that all existing manholes have a LoS A.

Lift Stations and Force Mains

The peak flow condition for a lift station is the capacity of the pumps. No peak factor was applied to the lift stations.

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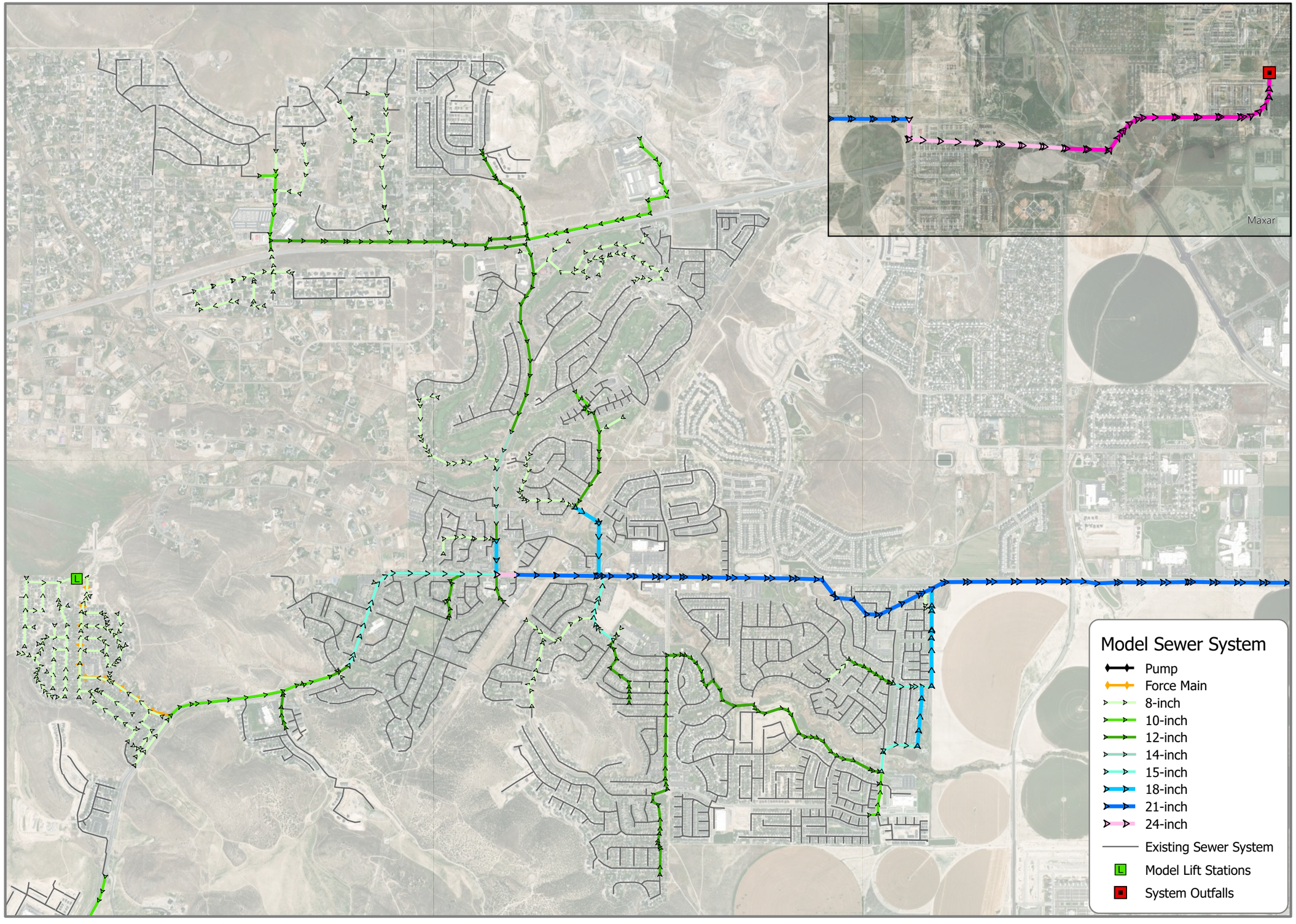

N

0 500 1,000

Feet

1 inch equals 1,874 feet

Locator Map Not to Scale

Eagle Mountain City
Utah, UT

EXISTING WASTEWATER SYSTEM

NORTH SERVICE AREA

DIAMETER (IN)

WASTEWATER SYSTEM MASTER PLAN

Date: 5/8/2025

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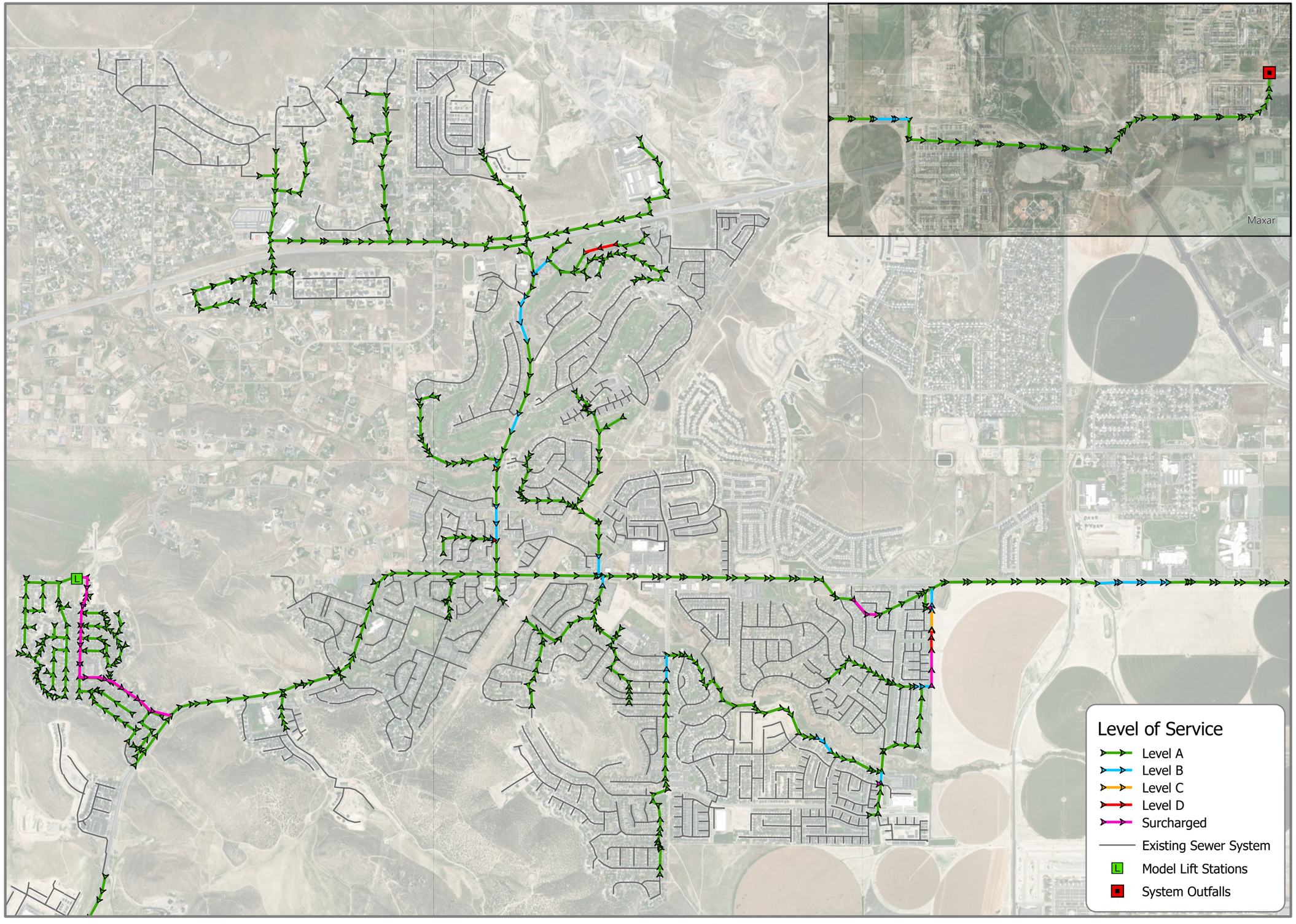

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Feet

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Locator Map Not to Scale

Eagle Mountain City
Utah, UT

EXISTING WASTEWATER SYSTEM

NORTH SERVICE AREA

LEVEL OF SERVICE

WASTEWATER SYSTEM MASTER PLAN

Date: 6/16/2025

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South Service Area (SSA)

Pipes

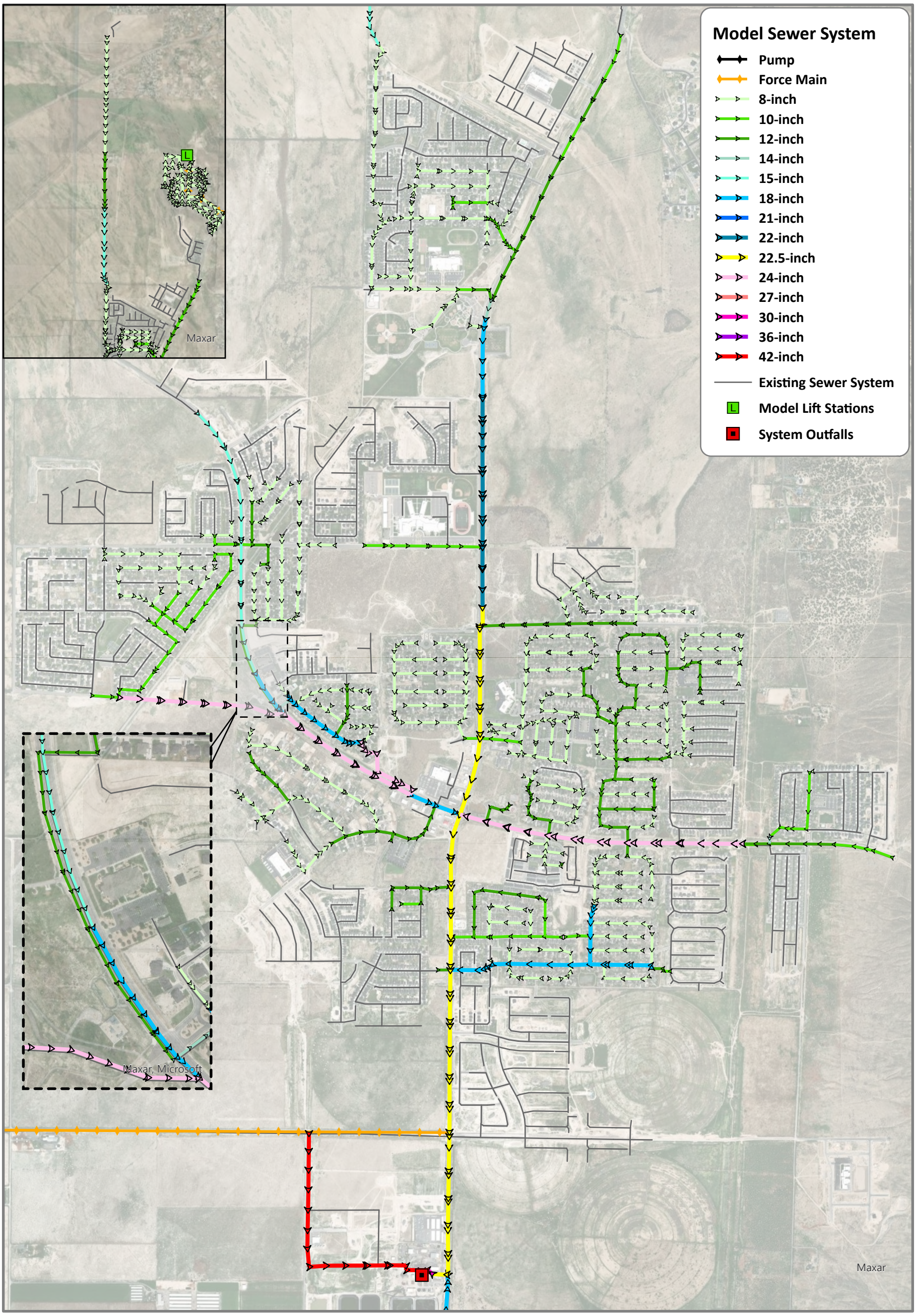
The peak flow model shows that the main trunkline in Pony Express Parkway is at a LoS C south of Pole Canyon Blvd as it approaches the WWTP indicating this trunkline is at capacity. The existing shape files labeled several pipes north of this area as 24" and one section of 18". It was requested to verify this diameter and was determined the nominal diameter was 24" but the actual inside diameter for 22.5". The model was run with these pipes at 22.5" diameter. There are a few lines at confluences that are not at a LoS A. It is expected for this to happen at confluences. These locations should be evaluated to ensure invert elevations are correct. All other existing pipes are within the LoS A criteria.

Manholes

There are no known issues with existing manholes, and it is presumed that all existing manholes have a LoS A.

Lift Stations and Force Mains

The peak flow condition for a lift station is the capacity of the pumps. No peak factor was applied to the lift stations. Brylee Farms LS and Steeple Chase LS are the only operating lift stations in the SSA.



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N

0 500 1,000

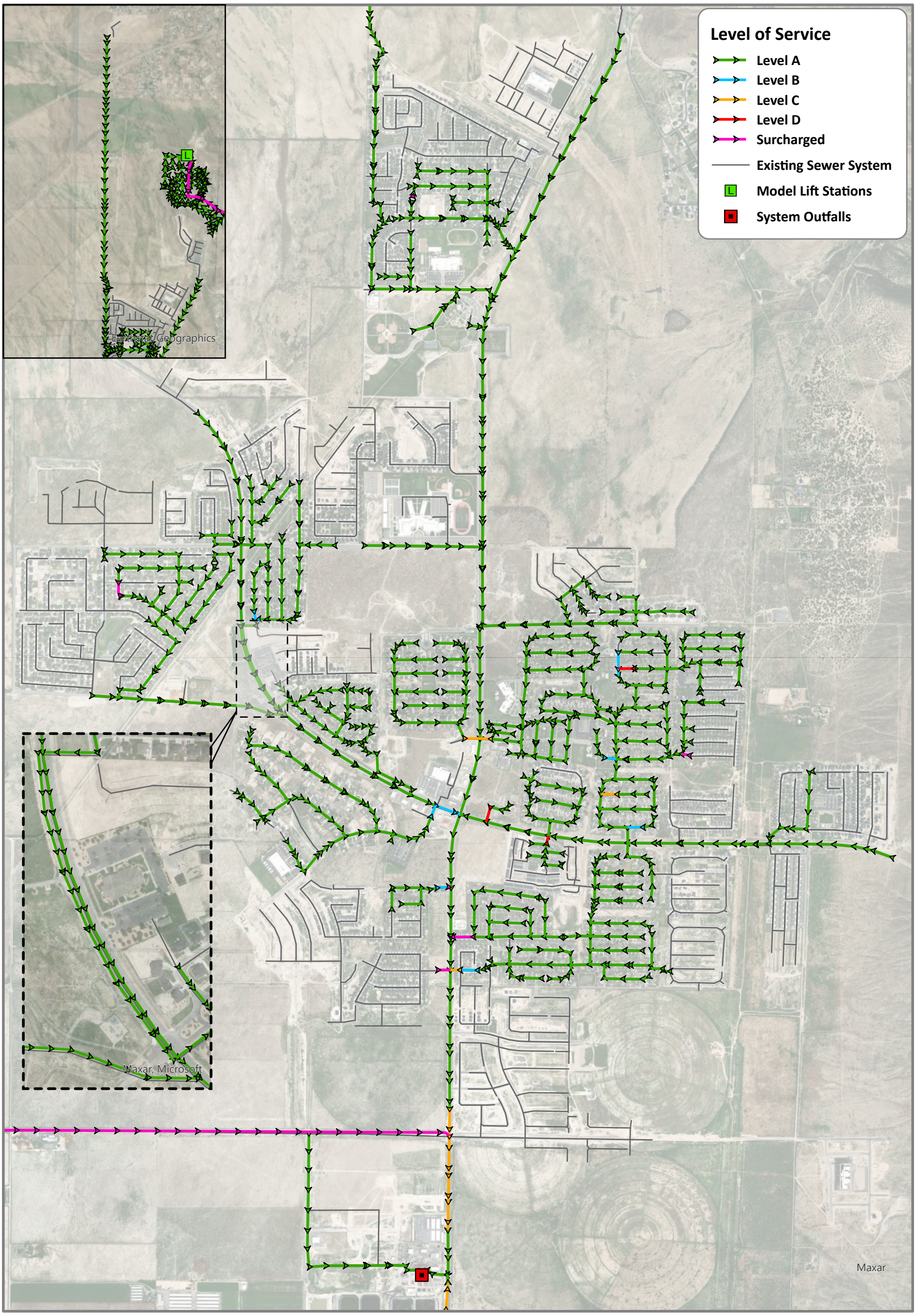
Feet

1 inch = 1,750 feet

EXISTING WASTEWATER SYSTEM SOUTH SERVICE AREA DIAMETER (IN)

WASTEWATER SYSTEM MASTER PLAN
Eagle Mountain City | Utah, UT

Date: 6/17/2025



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Locator Map Not to Scale

N

0 500 1,000

Feet

1 inch = 1,750 feet

EXISTING WASTEWATER SYSTEM
SOUTH SERVICE AREA
LEVEL OF SERVICE

WASTEWATER SYSTEM MASTER PLAN
Eagle Mountain City | Utah, UT

Date: 6/17/2025

West Service Area (WSA)

Pipes

All existing pipes are within the LoS A criteria.

Manholes

There are no known issues with existing manholes, and it is presumed that all existing manholes have a LoS A.

Lift Stations and Force Mains

Pole Canyon LS is the only lift station in the WSA. The peak flow condition for a lift station is the capacity of the pumps. No peak factor was applied to the lift stations.

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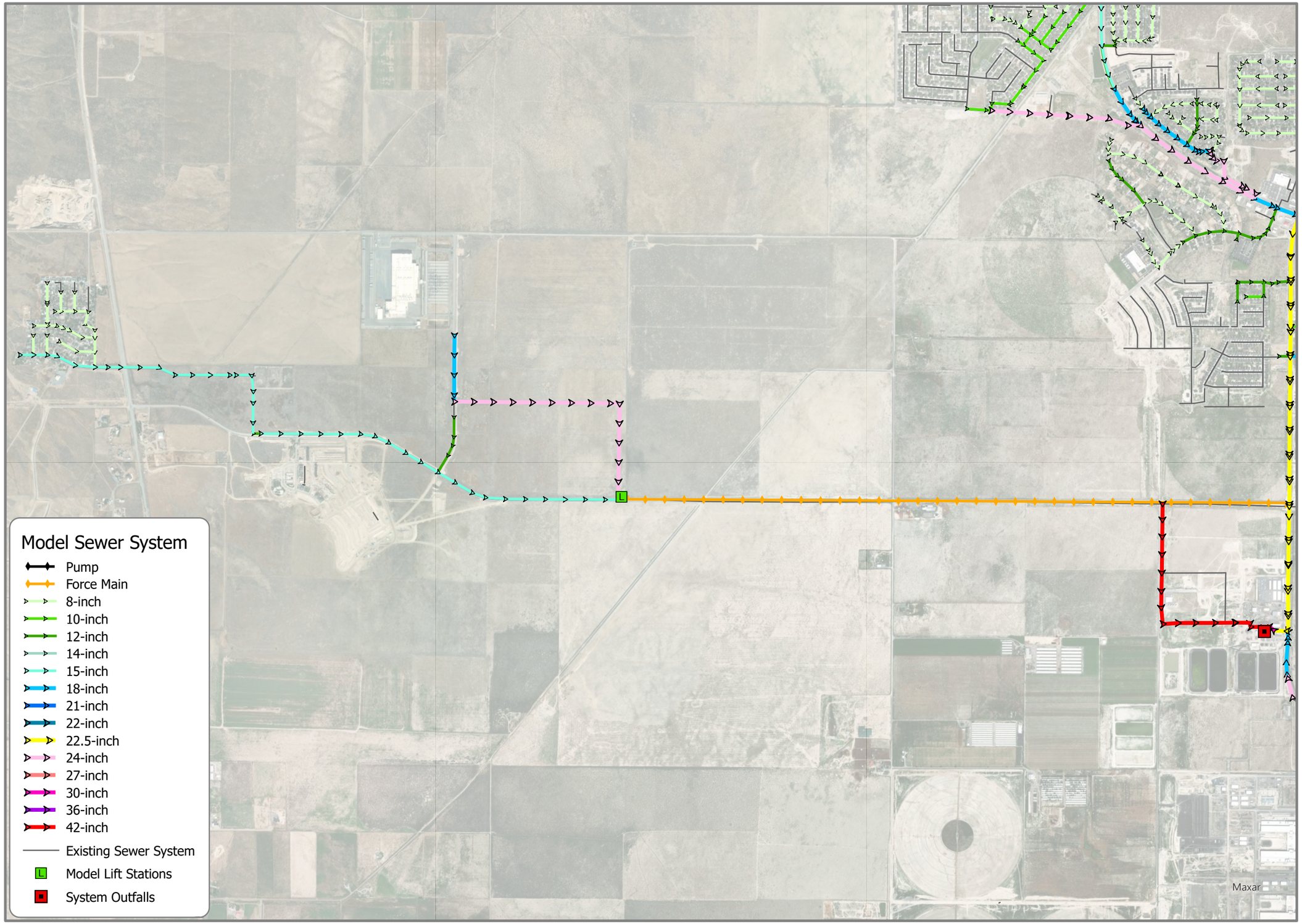

N

0 500 1,000

Feet

1 inch equals 1,874 feet

Locator Map Not to Scale

Eagle Mountain City
Utah, UT

EXISTING WASTEWATER SYSTEM

WEST SERVICE AREA

DIAMETER (IN)

WASTEWATER SYSTEM MASTER PLAN

Date: 6/16/2025

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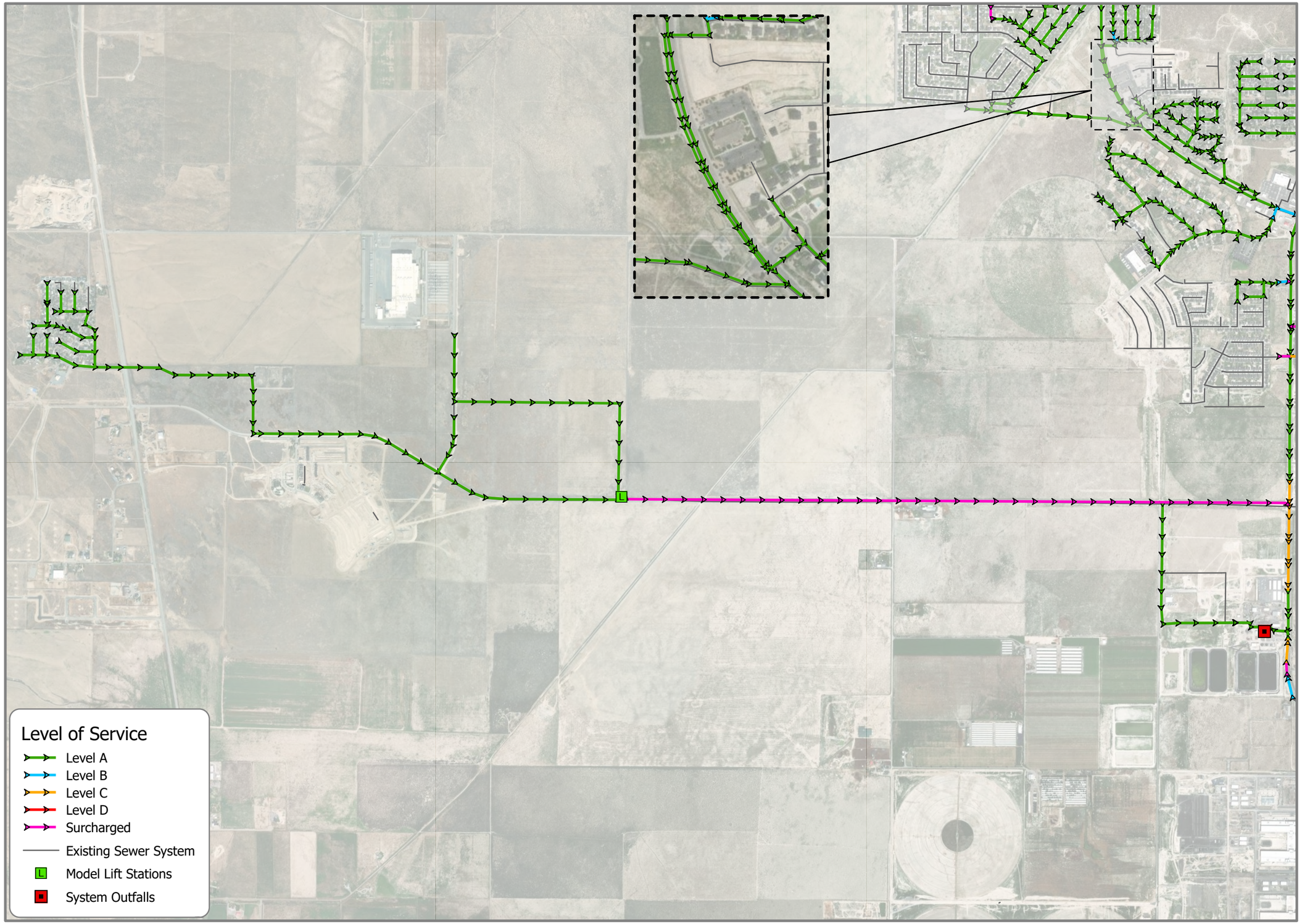

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Feet

1 inch equals 1,874 feet

Locator Map Not to Scale

Eagle Mountain City
Utah, UT

EXISTING WASTEWATER SYSTEM

WEST SERVICE AREA

LEVEL OF SERVICE

WASTEWATER SYSTEM MASTER PLAN

Date: 6/17/2025

Coordinate System: NAD 1983 StatePlane Utah Central FIPS 4302 Feet | Edited by: JCalhoon

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PROJECTED CONDITIONS WITH EXISTING INFRASTRUCTURE

The existing infrastructure was evaluated for flows anticipated with future development and growth.

Current septic users were not anticipated to connect to the wastewater system.

New industrial or commercial users should be evaluated on an individual basis as wastewater flows vary significantly depending on the type of industry.

Tyson Foods has an agreement to discharge up to 700 gpm into the wastewater system. Currently they average only 57 gpm. For the projected flows a value of 75 gpm with a peak factor of 2.0 was used. Tyson Foods has a holding tank so that flows are discharged between the hours of 10pm and 5am. This is to ensure that their flows will not compound with residential peak flows.

Generally speaking, the EMC wastewater infrastructure is relatively new. However, with time the infrastructure may experience inflow and infiltration, and pipe and manhole deterioration. It is recommended that EMC monitor their system for these conditions as the infrastructure ages with time. Infiltration is expected to remain low due to percolating soils. Inflow should be minimal with routine maintenance.

All areas south of the existing WWTP are lower in elevation. There is one industrial user in this area that pumps flows north to the WWTP.

Projected ERU's for undeveloped areas that do not have approved plans, were approximated by using a factor of 3.4 ERU/Acre. If areas are known to be planned for a lower or higher density, this value may be revised for given areas which may also reduce the amount of anticipated flows. An increase in ERU counts for a given area will affect the LoS for the wastewater system. A few of the areas have partially been developed. Only the areas where the majority of the area has not been developed are included. See the figure below showing the undeveloped areas ERU counts.

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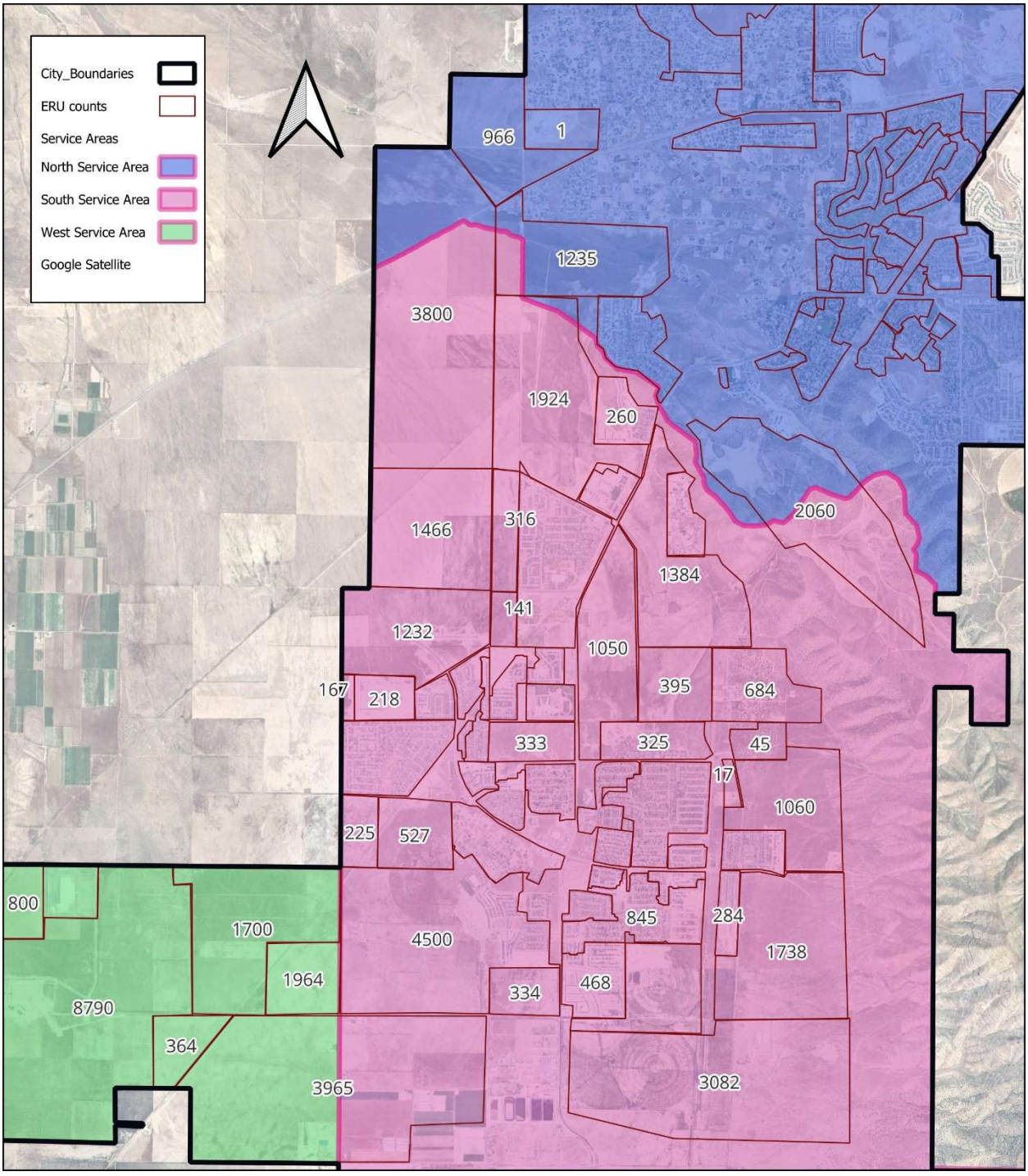

Figure 7 - Future ERU Estimates

The table below shows the added ERU's per service area as shown above. Note that the "other" areas are ones that will not be able to be conveyed by gravity with the existing trunklines and will either need an additional trunkline or lift stations to pump flows to the existing WWTP.

Table 8 - ERU's for Existing Service Areas

	Current ERU's	Added ERU's	Total ERU's at Build-out
NSA	8,027	3,473	11,500
SSA	6,744	26,956	33,700
SSA other		7,900	7,900
WSA	134	13,666	13,800
WSA other		4,000	4,000
Total			**71,000**

North Service Area (NSA)

TSSD Trunkline

All flows from the NSA are conveyed East through the TSSD Trunkline to TSSD. The trunkline diameter pipe as it leaves EMC is 21". As it approaches TSSD it transitions to 24" and 30" pipe. The existing model conditions for this stretch of pipe is approaching LoS B in some pipes which means that it is nearly at capacity now. Additional flows would cause additional pipe segments to exceed LoS A.

South Service Area (SSA)

Pony Express Trunkline

All flows from the SSA are conveyed south through the Pony Express Trunkline to EMC WWTP. The largest diameter pipe is 22.5" with slopes of 0.027% or greater. This slope is determined from the existing shape files and is less than the minimum slope for 24" pipe which is 0.077%. Assuming the shape files are accurate, this means that the 22.5" pipe is at a lesser slope than the minimum slope. The existing model has this trunkline currently conveying 6,744 ERU's which is at a LoS of C according to the model near the WWTP. A 22.5" pipe with 0.027% slope should be able to carry 6,176 ERU's with a LoS A (67% full). The additional anticipated ERU's needed to be conveyed through this pipe for the SSA based on projected growth is nearly 27,000. The existing Pony Express Trunkline cannot accommodate the additional anticipated flows.

West Service Area (WSA)

Pole Canyon Trunkline

Currently flows from the WSA are conveyed west to the EMC WWTP by means of a 12" force main. With planned development in the WSA this force main will be replaced with a deep gravity sewer. The largest pipe diameters being 36" and 42" with a slope of 0.082% or greater. Anticipated development would bring the number of ERU's to be conveyed in this pipeline to 13,755 ERU's. Using the ERU Capacity Table included earlier in this report, the capacity of 36" and 42" pipe would be 27,712 and 41,803 ERU's respectively. The planned pipe diameters for this trunkline are adequate.

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IMPROVEMENTS NEEDED/RECOMMENDATIONS

JWO Engineering, PLLC evaluated the existing model as well as EMC projected growth and development plans for the wastewater system. Several improvements are needed for the wastewater system in order for EMC to continue growing and meet wastewater needs.

Improvement recommendations have been broken down by service area and discussed below. It is also recommended that the service area boundaries be revised with the proposed trunkline additions. Exhibits for build-out or projected conditions with proposed trunklines are included for each service area below.

PROJECTED CONDITIONS MODEL

Advanced Engineering and Environmental Services, LLC (AE2S) modeled the wastewater system with proposed trunklines and projected flows using Infoworks. A standard peak factor of 2.0 was used for projected flow conditions. Peak flows were evaluated for the proposed wastewater system to maintain a LoS A.

Projected ERU's for undeveloped areas that do not have approved plans, were approximated by using a factor of 3.4 ERU/Acre. If areas are known to be planned for a lower or higher density, this value may be revised for given areas which may also reduce the amount of anticipated flows. Once diameters are determined based on anticipated flows and ERU counts, any future development should be within the estimated ERU counts. An increase in ERU counts for a given area will affect the LoS for the wastewater system.

Current septic users were not anticipated to connect to the wastewater system in this model.

New industrial or commercial users should be evaluated on an individual basis as wastewater flows vary significantly depending on the type of industry.

Tyson Foods has an agreement to discharge up to 700 gpm into the wastewater system. Currently they average only 57 gpm. For the projected flows a value of 75 gpm with a peak factor of 2.0 was used. Tyson Foods has a holding tank so that flows are discharged between the hours of 10pm and 5am. This is to ensure that their flows will not compound with residential peak flows.

A new trunkline on the East side (East Trunkline) was added to facilitate flows from the existing 15" sewer line in Airport Road over to the East bench. This trunkline is within the SSA and will not connect to the Pony Express Trunkline, but will go directly to the EMC WWTP. This pipe will accommodate all developments East of this pipeline as well as conveying the flows from Airport Road. Flows from areas to the northwest of Airport Road will also be conveyed in this trunkline with a branch line. This is to help alleviate the flows in the Pony Express Parkway trunkline as it is already nearly at capacity and developments are continuing to be approved and constructed. See the figure below for the area this trunkline will collect from as well as the estimated ERU counts.

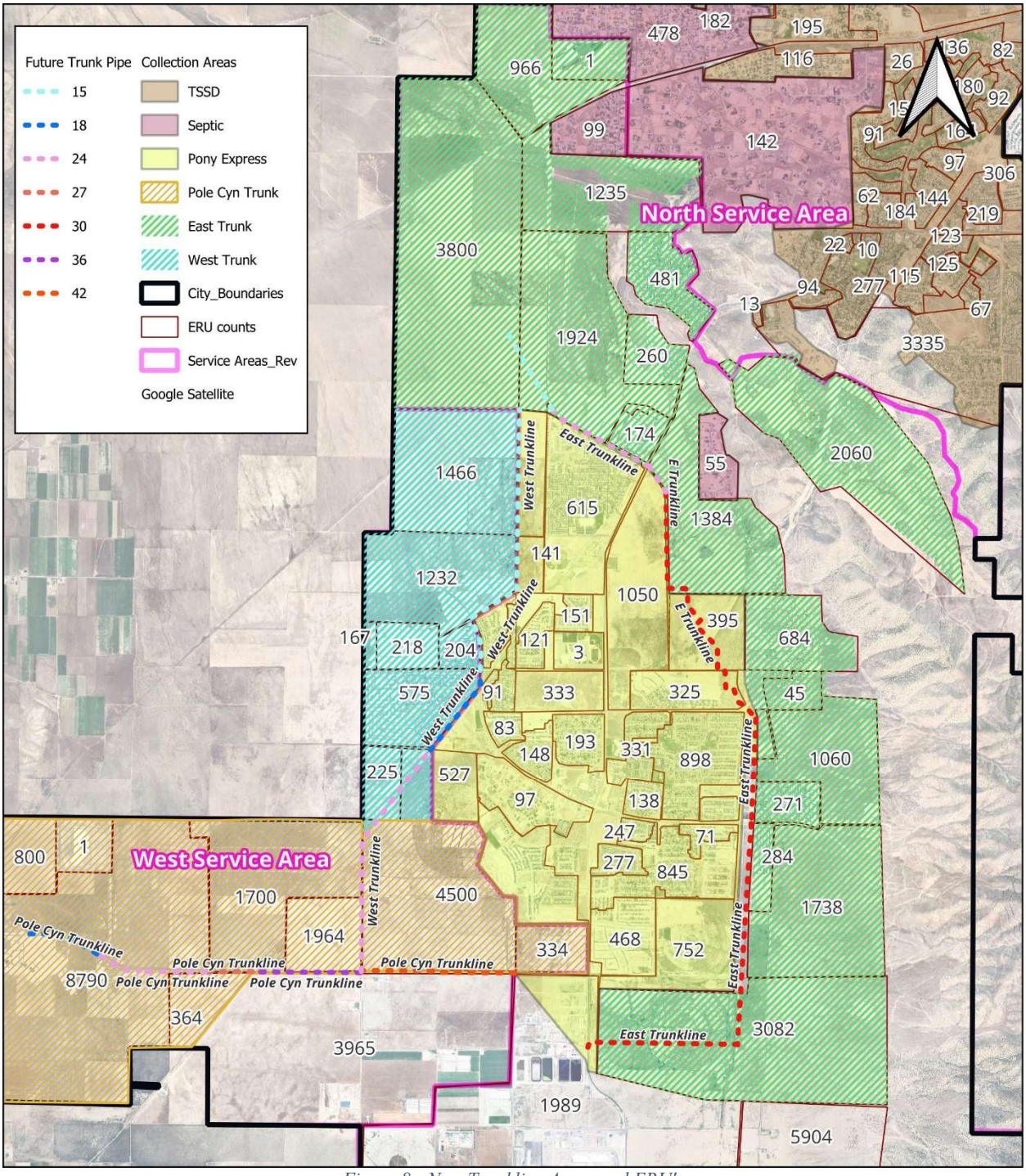

Figure 8 - New Trunkline Areas and ERU's

An additional trunkline was also added on the east side of the WSA (West Trunkline) to intercept flows from Brandon Park and other future developments in the area by gravity to help alleviate the flows into Pony Express Parkway Trunkline. This new trunkline will tie into the new Pole Canyon

Trunkline and be part of the WSA. The new West Trunkline will service the areas west of the trunkline. See the figure above for the collection area of this trunkline. Existing private lift stations remain in this model. If the West Trunkline is desired to accommodate Pinnacles and Brylee Farms by gravity and eliminate the private lift stations, it will need to be at a depth of 20’ at Aviator Avenue. An additional branch line will need to be constructed within Aviator Avenue to both Pinnacles and Brylee Farms lift stations. To eliminate the Rose Ranch lift station, the depth of the proposed sewer lines for that development will need to be known to determine the depth of the trunkline along the Lehi-Fairfield Road. It is estimated that a depth of 11’ will be needed at Williard Peak Drive to collect flows from Brandon Park development.

Lone Tree LS was previously modeled as conveying flows to the NSA or TSSD as that is the existing condition. EMC had indicated that these flows in the future would be pumped to Old Airport Road and conveyed through the East Trunkline to EMC WWTP. This would happen by constructing a new force main from the existing lift station to Old Airport Road. This project is not anticipated to happen within the next 5 years. The buildout model has moved these flows to the SSA which would be collected by the existing 15” pipe in Airport Road.

All areas south of the existing WWTP will need to be pumped to the WWTP as that area is lower in elevation. It may be favorable to have regional lift stations by geography. This can be determined as these areas are better determined for actual land use and developed.

The area west of the existing WWTP will need to have its own trunkline, which may include a lift station and force main to reach the existing WWTP.

The figure below shows the revised service area boundaries based on the new trunklines and collection areas discussed above.

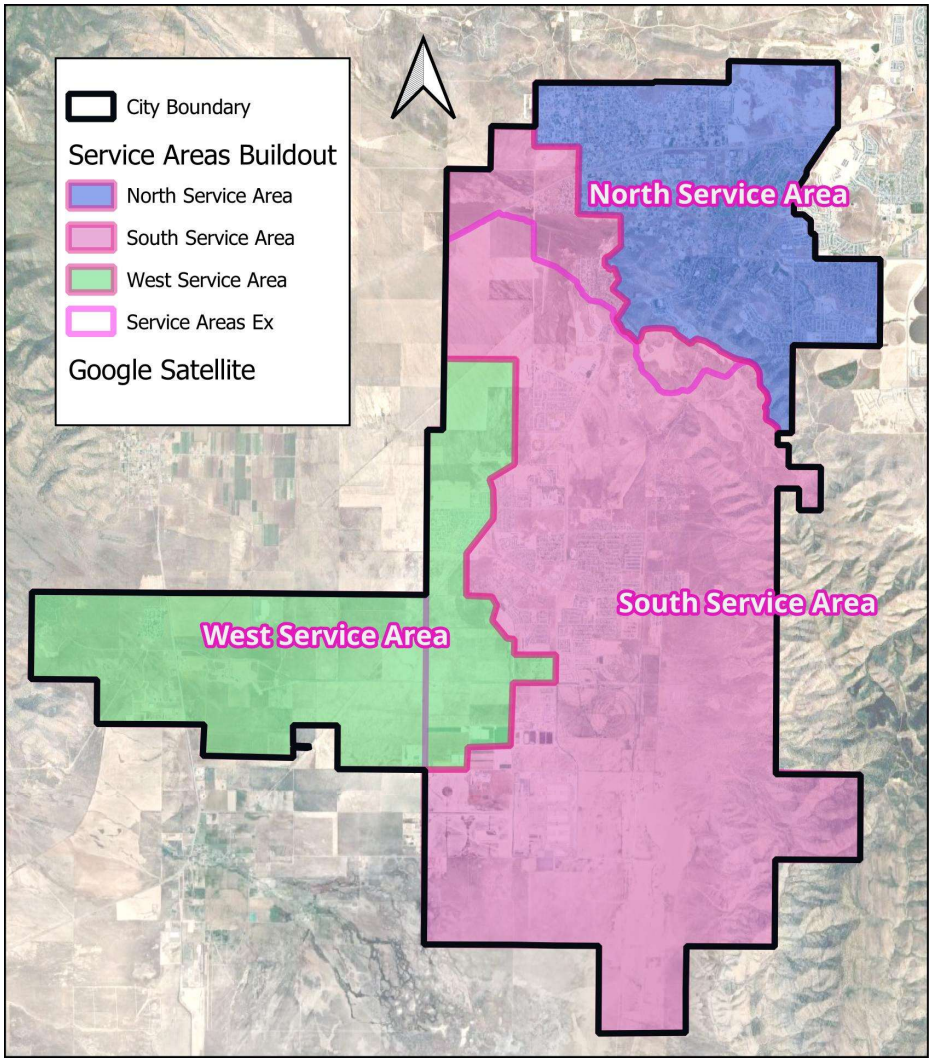

Figure 9 - Buildout Service Area Boundaries

Locations and numbers of manholes will need to follow Utah Administrative Code R317-3-3-Sewers, Section 2.6. Exact number of manholes for proposed pipes will be determined by topography, slopes, curves in the roads, changes in diameter, changes in direction and confluences of pipes. Numbers of manholes were estimated in the model.

As the service area boundaries have been revised, the number of additional ERU's is adjusted as well. The table below shows the number of ERU's added to each service area based on the revised boundaries and trunklines.

The ERU counts that are under "other" will either need to be pumped to the existing WWTP or have a separate trunkline and were not included in the model.

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Table 9 - Projected ERU's per Build-out Service Areas

	Total Aniticipated ERU's at Build-out
NSA	7,800
SSA	28,500
SSA other	7,900
WSA	22,700
WSA other	4,000
Total	**71,000**

North Service Area (NSA)

Pipes

No additional flows were added as this area is considered to be built out. Lone Tree flows were moved to the SSA. If there are any areas where significant growth is expected, these flows should be added and a model run again. The pipes in Silverlake are still a concern to address and verify GIS data is correct. This model does not account for any inflow or infiltration. As the wastewater system ages, it will be necessary to keep inflow and infiltration to a minimum to ensure there are no surcharge conditions. Any industrial or commercial users using large amounts of water should be evaluated and the model run again to ensure LoS A capacities are not exceeded. All other existing pipes are within the LoS A criteria.

Looking forward, it is recommended that EMC consider lining the existing TSSD trunkline in Pony Express with CIPP (cast in place pipe). The timing of this project would be determined by the quality of the existing pipe and or detection of significant inflow and infiltration. It is not anticipated that this project would be necessary within the next 5 years. For Master planning purposes, a CIPP lined pipe would not affect modeling results.

Manholes

There are no known issues with existing manholes, and it is presumed that all existing manholes have a LoS A. Existing manholes should be monitored for signs of deterioration. Manholes exhibiting deterioration should be noted and monitored to be scheduled for future lining or replacement.

Lift Stations and Force Mains

Lone Tree Lift Station flows were modeled in the SSA for buildout. The peak flow condition for a lift station is the capacity of the pumps. No peak factor was applied to the lift stations.

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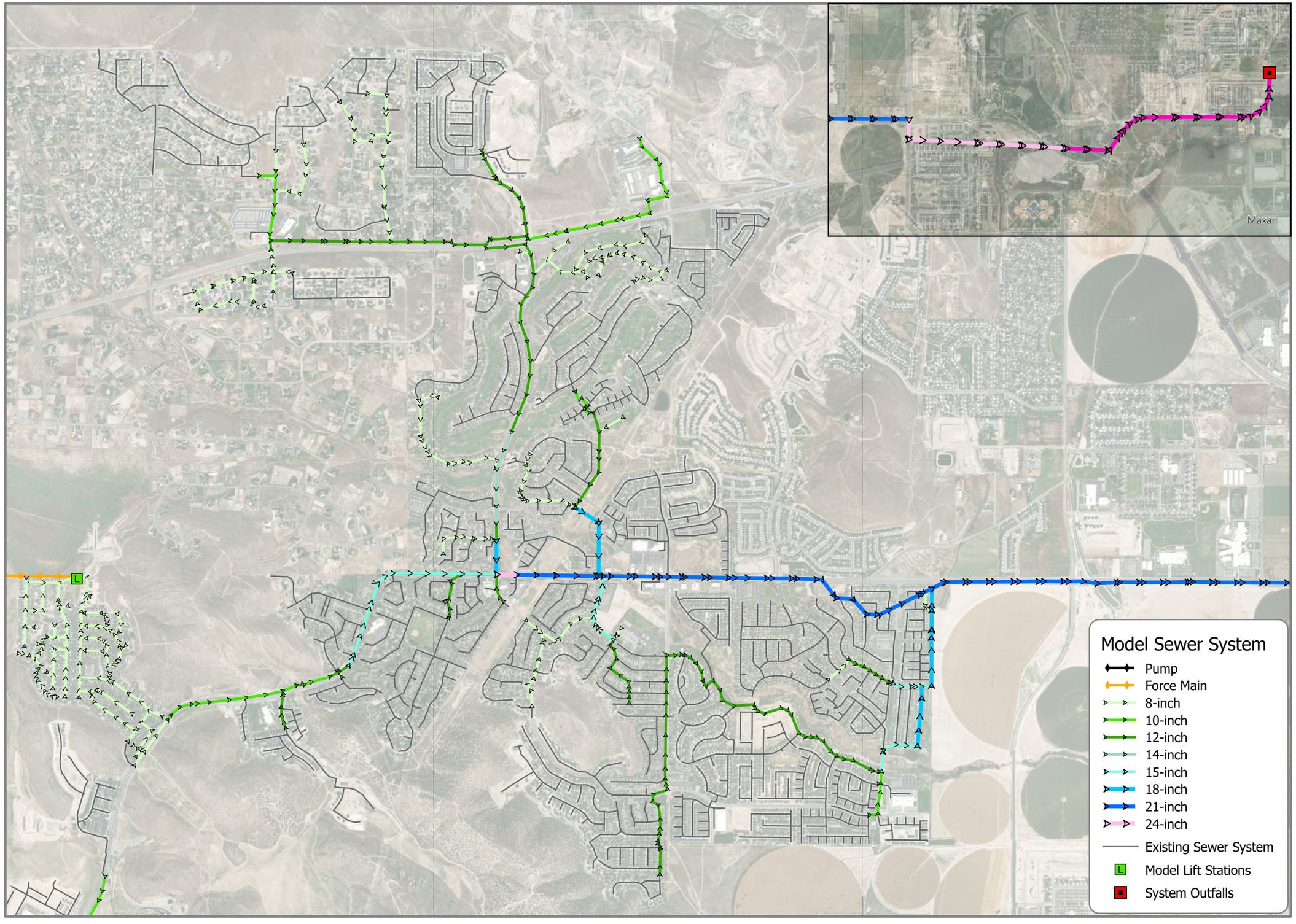

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Feet

1 inch equals 1,874 feet

Locator Map Not to Scale

Eagle Mountain City
Utah, UT

FUTURE WASTEWATER SYSTEM

NORTH SERVICE AREA

DIAMETER (IN)

WASTEWATER SYSTEM MASTER PLAN

Date: 6/17/2025

Coordinate System: NAD 1983 StatePlane Utah Central FIPS 4302 Feet | Edited by: JCalhoon

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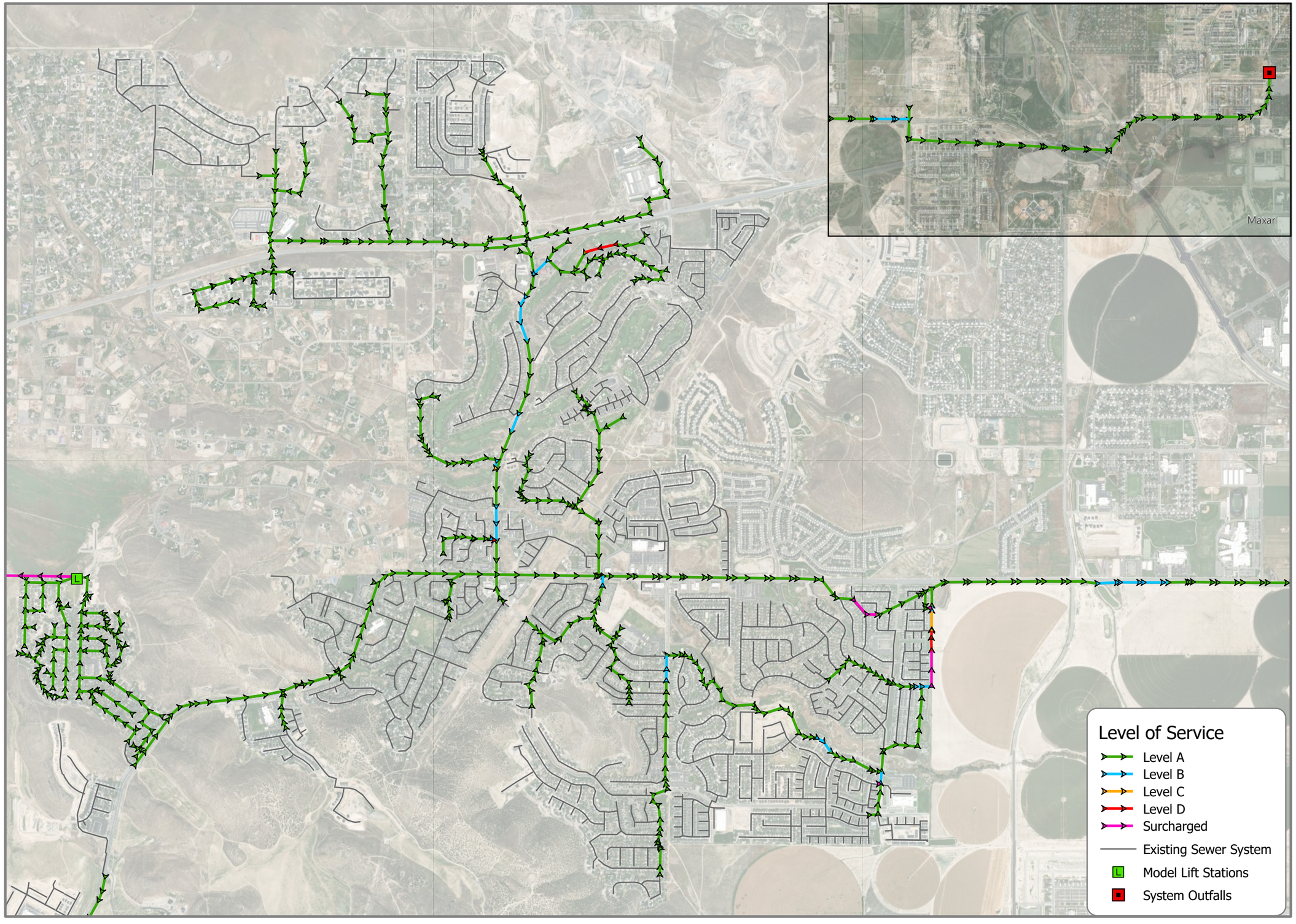

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Feet

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Locator Map Not to Scale

Eagle Mountain City
Utah, UT

FUTURE WASTEWATER SYSTEM

NORTH SERVICE AREA

ANTICIPATED LEVEL OF SERVICE

WASTEWATER SYSTEM MASTER PLAN

Date: 6/17/2025

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South Service Area (SSA)

Pipes

As noted in the existing conditions model, the pipe sections south of Pole Canyon Blvd in Pony Express Parkway are still of concern. With projected flows these same pipes are at LoS C and D. Some existing flows are no longer flowing to the Pony Express Trunkline and have been modeled in the West and East Trunklines. However, there are still undeveloped areas that would contribute to the Pony Express Trunkline. There are still several places of confluence shown at LoS C and should be verified for elevations. All other existing pipes are within the LoS A criteria.

Manholes

There are no known issues with existing manholes, and it is presumed that all existing manholes have a LoS A.

Lift Stations and Force Mains

The West Trunkline picks up the private lift station flows from Brylee Farms, Rose Ranch and Pinnacles. The peak flow condition for the remaining lift stations is the capacity of the pumps. No peak factor was applied to the lift stations.

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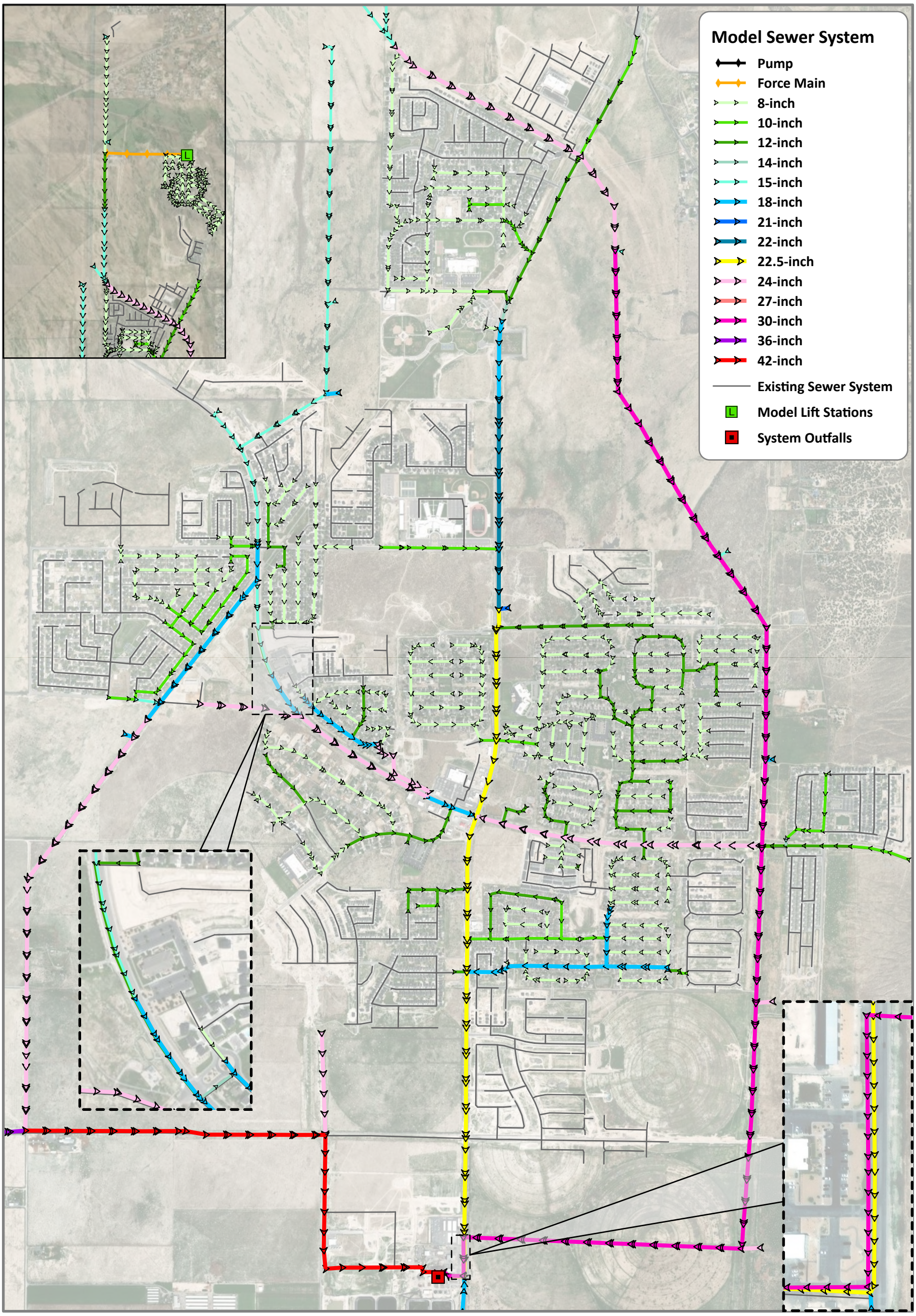

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FUTURE WASTEWATER SYSTEM SOUTH SERVICE AREA DIAMETER (IN)

WASTEWATER SYSTEM MASTER PLAN
Eagle Mountain City | Utah, UT

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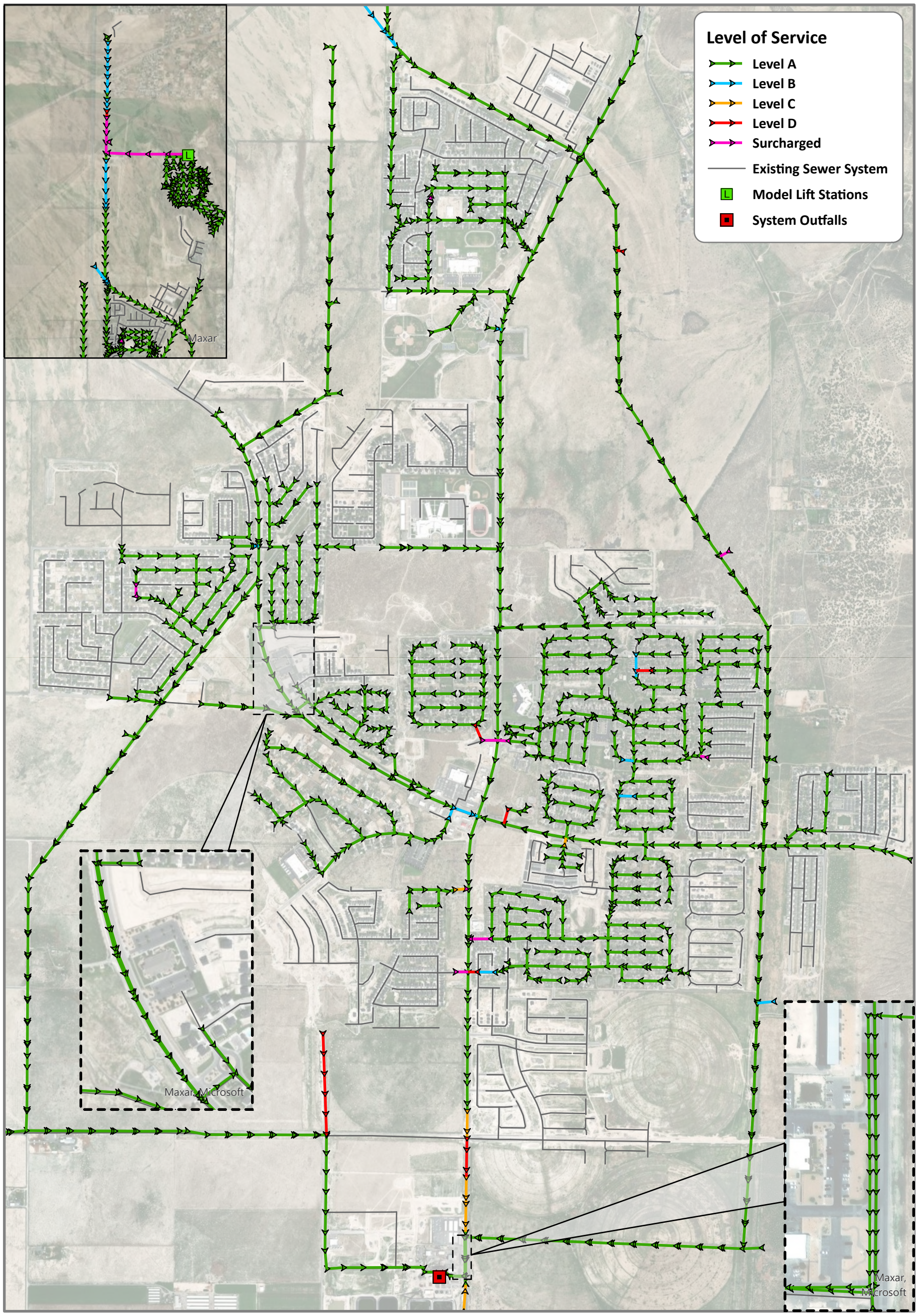

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WASTEWATER SYSTEM MASTER PLAN
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West Service Area (WSA)

Pipes

The proposed Pole Canyon Trunkline was designed as a 36" pipe. This was based on peak flows from OWR or Firefly with an ERU of 220 gpd, peak factor of 2.5, and meeting the condition of not exceeding 75% full. This calculation did include the recently annexed 300 Acres and the proposed Tract development and was a peak flow of 5,686 gpm, or average flow of 2,275 gpm. This was defined in the ARMDA agreement though it is not the city standard. If a peak factor of 2.0 is used the peak flow is 4,549 gpm. A 36" pipe flowing 50% full with a slope of 0.00082 and using an N value of 0.013, the capacity is 4,286 gpm, which would require the pipe diameter to be 42". Pipes upstream of 16000 West, where the new West trunkline connects are adequately sized for LoS A criteria.

The build out wastewater model used a 42" diameter pipe downstream of the proposed West Trunkline would be at LoS A with the additional West Trunkline flows. A portion of the 18" Pole Canyon pipeline is at a LoS B, just past 50% capacity. This is due to the alternative design criteria in the ARMDA agreement. As the LoS criteria in this report had not been set forth prior to the Firefly development, the ARMDA agreement criteria will be followed. Additional flows from the Harmony development will enter the wastewater system at a 24" stub as the trunkline turns south to the WWTP. All other pipes are within the LoS A criteria.

Manholes

There are no known issues with existing manholes, and it is presumed that all existing manholes have a LoS A.

Lift Stations and Force Mains

With the Pole Canyon Trunkline, the Pole Canyon LS will no longer be in service. The depth of the West Trunkline will determine if the Brylee Farms, Pinnacles and Rose Park LS are still needed.

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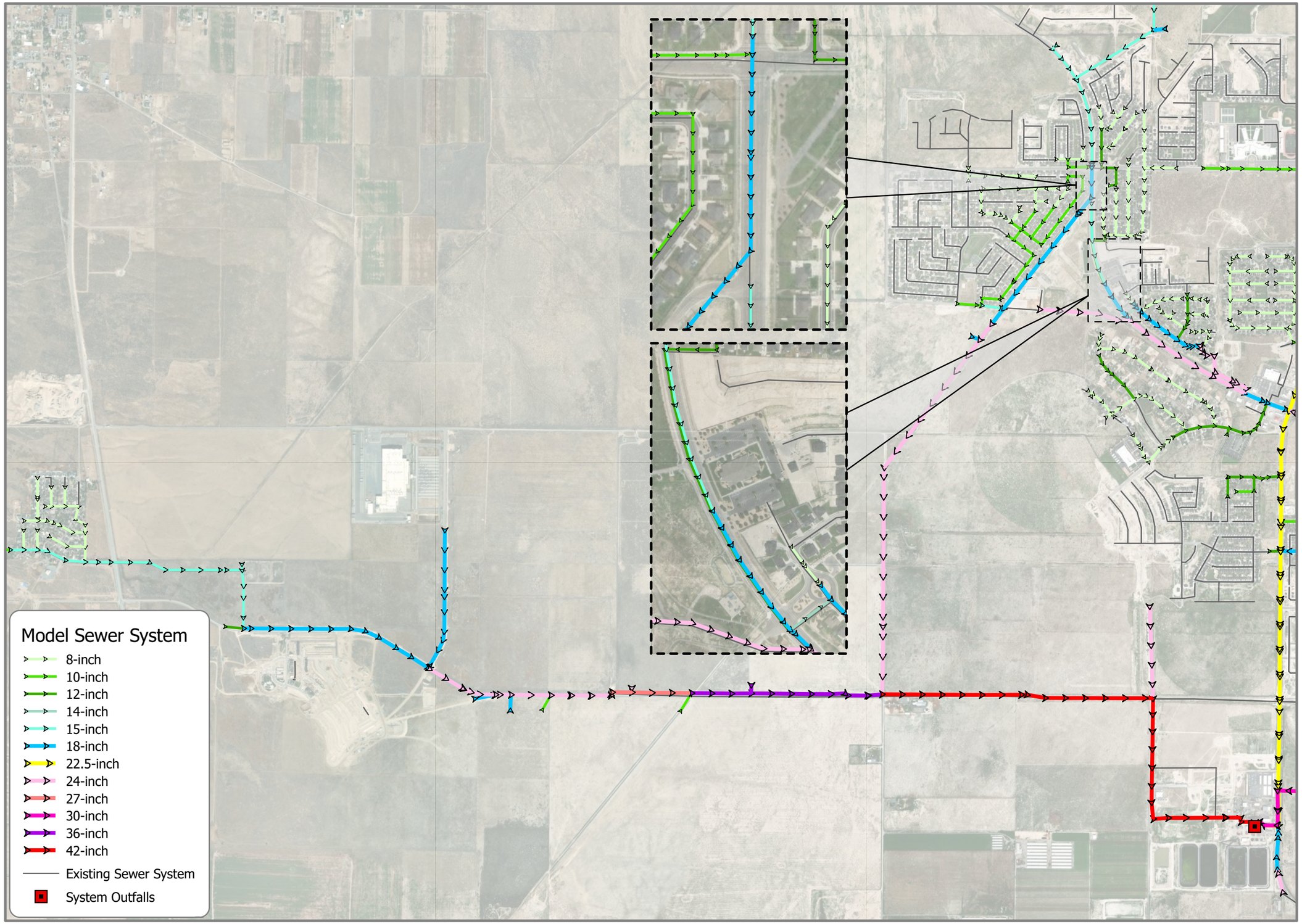

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Locator Map Not to Scale

Eagle Mountain City
Utah, UT

FUTURE WASTEWATER SYSTEM

WEST SERVICE AREA

DIAMETER (IN)

WASTEWATER SYSTEM MASTER PLAN

Date: 7/28/2025

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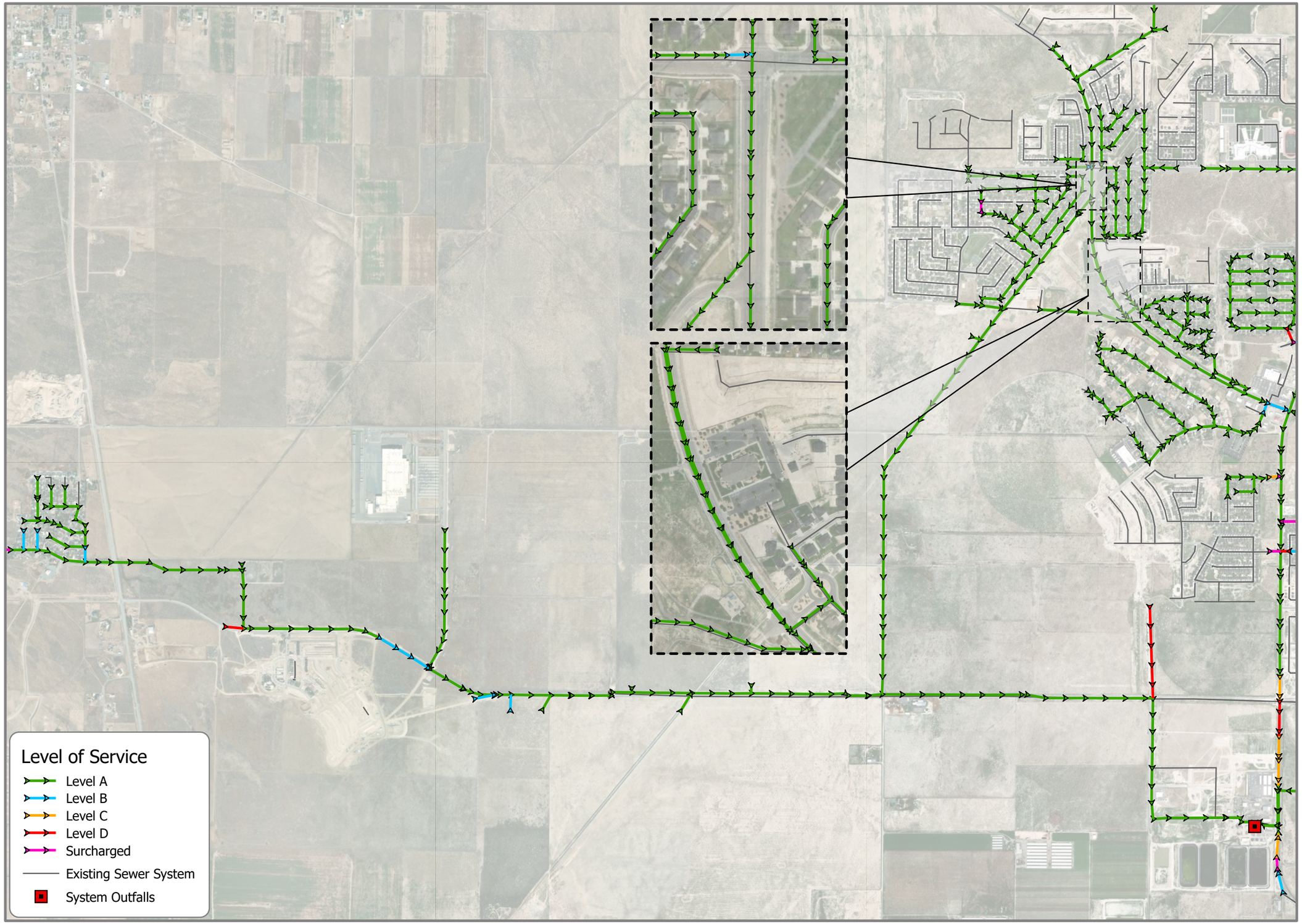

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Treatment Plant

The EMC WWTP has recently been expanded to accommodate flows of 2.4 MGD with construction being nearly complete. Currently the WWTP is under design for additional capacity to be able to accommodate an additional 6.0 MGD bringing the WWTP capacity to 8.0 MGD. The average total flows treated by the WWTP for the last 2 months is about 1.5 MGD. While the current capacity is 2.4 MGD by flow it should be noted that for loading it is already nearly at capacity. With some modifications to the existing oxidation ditch system it is anticipated that the capacity of the existing plant can be 2.0 MGD by flow.

The SSA added an additional 896 ERU's in 2023 and is anticipated to continue growing rapidly. The WSA added 2 ERU's in 2023 but is anticipated to add 500 residential units or ERU's each year with anticipated development beginning in 2025.

The anticipated build-out population for EMC is 240,000. Using a value of 65 gpcd the projected flows to be treated would be 15.6 MGD, or 71,009 ERU's. This is for all of EMC residents. The WWTP will not be treating flows from the NSA. The NSA is nearly at build-out with flows of 1.76 MGD. There are approximately 280 ERU's to be added with residential lots and commercial or industrial areas. With Lone Tree lift station being pumped to the SSA, this removes 481 ERU's from the NSA. The anticipated NSA projected flows based on these conditions would be 1.72 MGD.

There are also several areas that are septic and not anticipated to connect to the wastewater system. It is estimated that there will be approximately 822 lots or ERU's that will remain on septic service. These septic users would account for 0.18 MGD. With the NSA and septic users combined it is nearly 2MGD, leaving approximately 14.0 MGD to be treated by the EMC WWTP for build-out conditions.

The Figures below show these anticipated flows both in ERU's and MGD. The ERU count based on 65 gpcd is 71,009, which is nearly the same as the ERU's calculated by anticipated growth for flows. The total anticipated ERU's at buildout based on areas and a density of 3.4 ERU/Acre was 70,744 ERU's. As these anticipated values are based on alternative methods, they still come very close to the same value. While the values could potentially vary due to actual commercial or industrial users, it shows that both methods come to a similar value. A value of 71,000 ERU's for build-out will be used.

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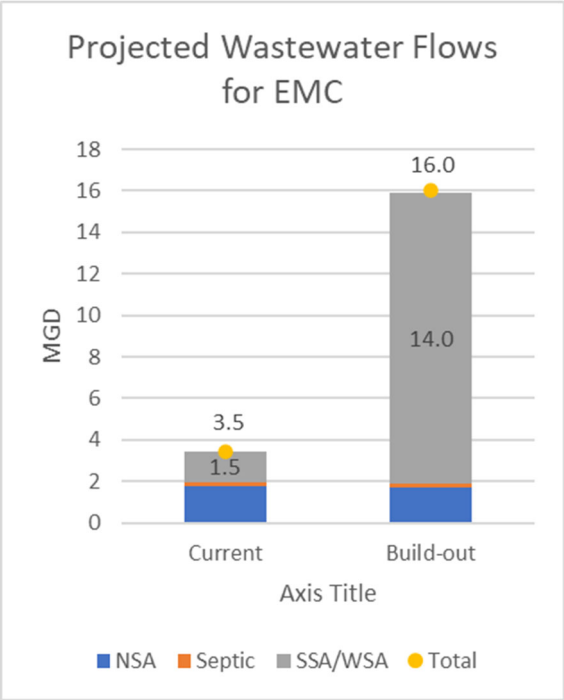

Figure 10 - Projected Wastewater Flows in MGD

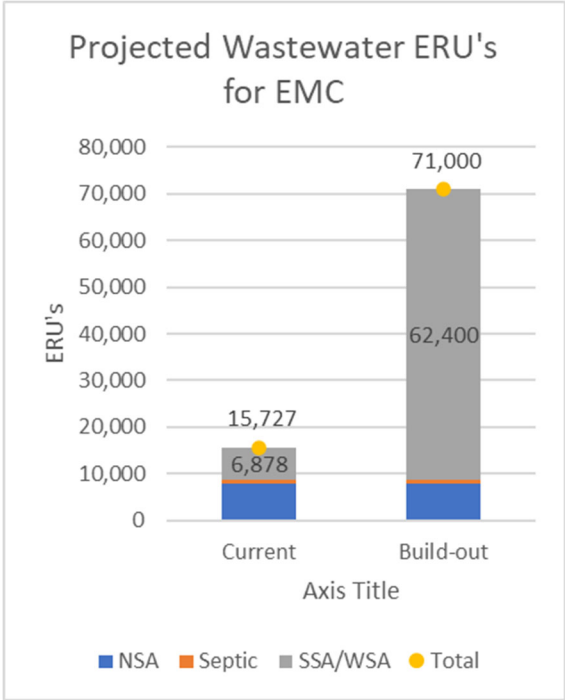

Figure 11 - Projected Wastewater Flows in ERU's

A key issue in treatment plant expansion is the lead time to procure large electrical equipment including transformers and switch gear. These are currently expected to take up to 2 years to obtain. An initial task in the plant expansion design should be determining the electrical power requirement and beginning the process of procuring additional supply from the power company.

Treated Water Disposal Options

With additional water being treated plans need to be made for what to do with additional treated water. Currently the treated water is sent to rapid infiltration basins (RIB's). Construction is currently underway to further treat the treated effluent to meet type 1 water standards for reuse. This water can be used for irrigation of parks. EMC does not yet have the permit or infrastructure to allow additional type 1 water to be used at parks or by residents. The RIB's will not be able to handle the additional treated effluent.

Deep well injection is recommended for treated effluent disposal but requires sample wells and a permit approval from the State. This will take some time for approval.

Another option would be to convey treated effluent to the sinks that are south of the WWTP, just outside the EMC boundary. EMC already has an easement to the city boundary. To flow by gravity it would be minimal slope and large pipe diameter for 3 miles. It would be recommended to pump a low head and decrease the pipe diameter for these 3 miles. EMC would need to acquire property to discharge at this location. EMC would also need to obtain permit approval from the state.

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A third option would be to convey treated effluent up to Tickville Gulch on Airport Road, which would ultimately discharge to Utah Lake. This would require pumping the treated effluent 7.5 miles. The alignment could follow the East Trunkline to Airport Road and then continue North until Tickville Gulch. This option would again require permit approval from the state.

As all disposal options will require permit approval and it is unknown which would be approved the quickest, it is recommended that EMC pursue each of these options as the need for disposal will be within the next 6 months.

PROPOSED FEATURE COSTS

Estimated costs for the proposed improvements are shown in the tables below. All costs are shown in 2025 dollars. Numbers of manholes are estimated and may vary from the number shown in the table below. Cost will be affected by pipe depth and these additional costs are accounted for in the estimates below. All projects are recommended to be completed within the next five years to support continued growth rates.

Pipe Segments and Manholes

Pipe segments for each trunkline are listed by reach.

Table 10 –Estimated Improvement Costs for East Trunkline

East Trunkline		Pipe	DS MH			Est		Mobilization	Traffic	Contingency	Engineering	Total
REACH	LF	Dia	Depth	Slope	Piping Cost	#MH	MH cost		Control			
Airport Rd to Pony Express	3,800	24"	10'	0.718%	$1,368,000	11	$121,000	$ 148,900	$ 98,274	$ 434,044	$ 325,533	$ 2,495,750
Pony Express to turn	1,155	24"	10'	0.077%	$ 415,800	4	$ 44,000	$ 45,980	$ 30,347	$ 134,032	$ 100,524	$ 770,682
south to Eagle Quest	3,334	30"	8'	0.265%	$1,283,590	9	$ 99,000	$ 138,259	$ -	$ 380,212	$ 285,159	$ 2,186,220
east to Eagle Quest	718	30"	23'	0.057%	$ 987,250	2	$ 48,000	$ 103,525	$ -	$ 284,694	$ 213,520	$ 1,636,989
south into EQ	578	30"	16'	0.057%	$ 311,542	2	$ 26,000	$ 33,754	$ -	$ 92,824	$ 69,618	$ 533,738
diagonal east in EQ	684	30"	16'	0.057%	$ 553,356	2	$ 36,000	$ 58,936	$ -	$ 162,073	$ 121,555	$ 931,919
diagonal west in EQ	247	30"	12'	0.057%	$ 133,133	1	$ 13,000	$ 14,613	$ -	$ 40,187	$ 30,140	$ 231,073
diagonal east in EQ	1,106	30"	15'	0.057%	$ 596,134	3	$ 39,000	$ 63,513	$ -	$ 174,662	$ 130,996	$ 931,919
south to Aviator Way	832	30"	9'	0.057%	$ 320,320	3	$ 33,000	$ 35,332	$ -	$ 97,163	$ 72,872	$ 558,687
east on Aviator Way	286	30"	12'	0.057%	$ 154,154	1	$ 13,000	$ 16,715	$ 11,032	$ 48,725	$ 36,544	$ 280,171
south into Sunset Flats	590	30"	8'	0.119%	$ 227,150	2	$ 22,000	$ 24,915	$ -	$ 68,516	$ 51,387	$ 393,968
east in Sunset Flats	235	30"	12'	0.057%	$ 90,475	1	$ 11,000	$ 10,148	$ -	$ 27,906	$ 20,929	$ 160,457
south diagonal east in SF	533	30"	10'	0.057%	$ 205,205	2	$ 22,000	$ 22,721	$ -	$ 62,481	$ 46,861	$ 359,268
diagonal east out of SF	263	30"	16'	0.057%	$ 212,767	1	$ 18,000	$ 23,077	$ -	$ 63,461	$ 47,596	$ 364,900
diagonal across util	492	30"	22'	0.057%	$ 676,500	2	$ 48,000	$ 72,450	$ 47,817	$ 211,192	$ 158,394	$ 1,214,353
south to EM Blvd	3,662	30"	8'	0.478%	$1,409,870	10	$110,000	$ 151,987	$ -	$ 417,964	$ 313,473	$ 2,403,294
from EM Blvd South	7,325	30"	8'	0.124%	$2,820,125	20	$220,000	$ 304,013	$ -	$ 836,034	$ 627,026	$ 4,807,198
west to Pony Express	5,300	30"	8'	0.429%	$2,040,500	15	$165,000	$ 220,550	$ -	$ 606,513	$ 454,884	$ 3,487,447
south to WWTP	705	30"	8'	0.057%	$ 271,425	2	$ 22,000	$ 29,343	$ 19,366	$ 85,533	$ 64,150	$ 491,817
											Total	$24,239,852

Table 11 –Estimated Improvement Costs for West Trunkline

West Trunkline		Pipe	DS MH			Est		Mobilization	Traffic	Contingency	Engineering	Total
REACH	LF	Dia	Depth	Slope	Piping Cost	#MH	MH cost		Control			
south to E Desert Rd	6,274	15"	12'	0.711%	$1,568,598	17	$187,000	$ 175,560	$ -	$ 482,789	$ 362,092	$ 2,776,039
SW on E Desert Rd to EM Blvd	1,861	15"	12'	0.635%	$ 465,218	5	$ 55,000	$ 52,022	$ 34,334	$ 151,643	$ 113,733	$ 871,950
south on EM Blvd to Aviator Way	1,809	15"	12'	0.642%	$ 587,948	5	$ 65,000	$ 65,295	$ 43,095	$ 190,334	$ 142,751	$ 1,094,422
south on EM Blvd to Lehi-Fairfield	660	18"	12'	0.330%	$ 184,822	2	$ 22,000	$ 20,682	$ 13,650	$ 60,289	$ 45,217	$ 346,660
SW on Lehi-Fairfield to Williard Pea	2,737	18"	11'	0.432%	$ 766,357	8	$ 88,000	$ 85,436	$ 16,916	$ 239,177	$ 179,383	$ 1,375,269
SW on Lehi-Fairfield to 4000 N	3,107	24"	12'	0.213%	$1,118,610	9	$ 99,000	$ 121,761	$ 24,109	$ 340,870	$ 255,652	$ 1,960,002
SW on Lehi-Fairfield to boundary	850	24"	13'	0.077%	$ 428,178	3	$ 39,000	$ 46,718	$ 9,250	$ 130,787	$ 98,090	$ 752,023
south to Tiffany lane	4,626	24"	14'	0.262%	$2,331,554	13	$169,000	$ 250,055	$ 33,007	$ 695,904	$ 521,928	$ 4,001,450
											Total	$13,177,814

Table 12 –Estimated Improvement Costs for Pole Canyon Trunkline

Pole Canyon Trunkline		Pipe	DS MH			Est		Mobilization	Traffic	Contingency	Engineering	Total
REACH	LF	Dia	Depth	Slope	Piping Cost	#MH	MH cost		Control			
to Tyson conn	2,569	18"	10'	0.728%	$ 719,186	7	$ 77,000	$ 79,619	$ 52,548	$ 232,088	$ 174,066	$ 1,334,507
to straight Pole Canyon	1,521	24"	10'	0.366%	$ 547,409	5	$ 55,000	$ 60,241	$ 39,759	$ 175,602	$ 131,702	$ 1,009,712
to Pole Canyon LS	2,307	27"	10'	0.129%	$ -	7	$ 77,000	$ 7,700	$ 5,082	$ 22,446	$ 16,834	$ 129,062
to Lehi-Fairfield conn	1,639	30"	10'	0.143%	$ 631,027	5	$ 55,000	$ 68,603	$ 45,278	$ 199,977	$ 149,983	$ 1,149,866
to 1600 W/West Trunkline	3,878	36"	10'	0.376%	$1,648,095	3	$ 33,000	$ 168,109	$110,952	$ 490,039	$ 367,529	$ 2,817,725
to Magnolia	5,332	42"	18'	0.071%	$5,598,600	3	$ 54,000	$ 565,260	$373,072	$ 1,647,733	$1,235,800	$ 9,474,464
											Total	$15,915,336

Lift Stations and Force Mains

The Pole Canyon Trunkline is already under construction and should be complete before needing to upsize the Pole Canyon LS. In the case that the trunkline is not online in time, the estimated cost of adding a new upsized generator, additional pump and upgrading the impeller and motors on the 2 existing pumps at Pole Canyon Lift Station would be approximately $500,000. This cost includes materials as well as mobilization, engineering, and contingency costs.

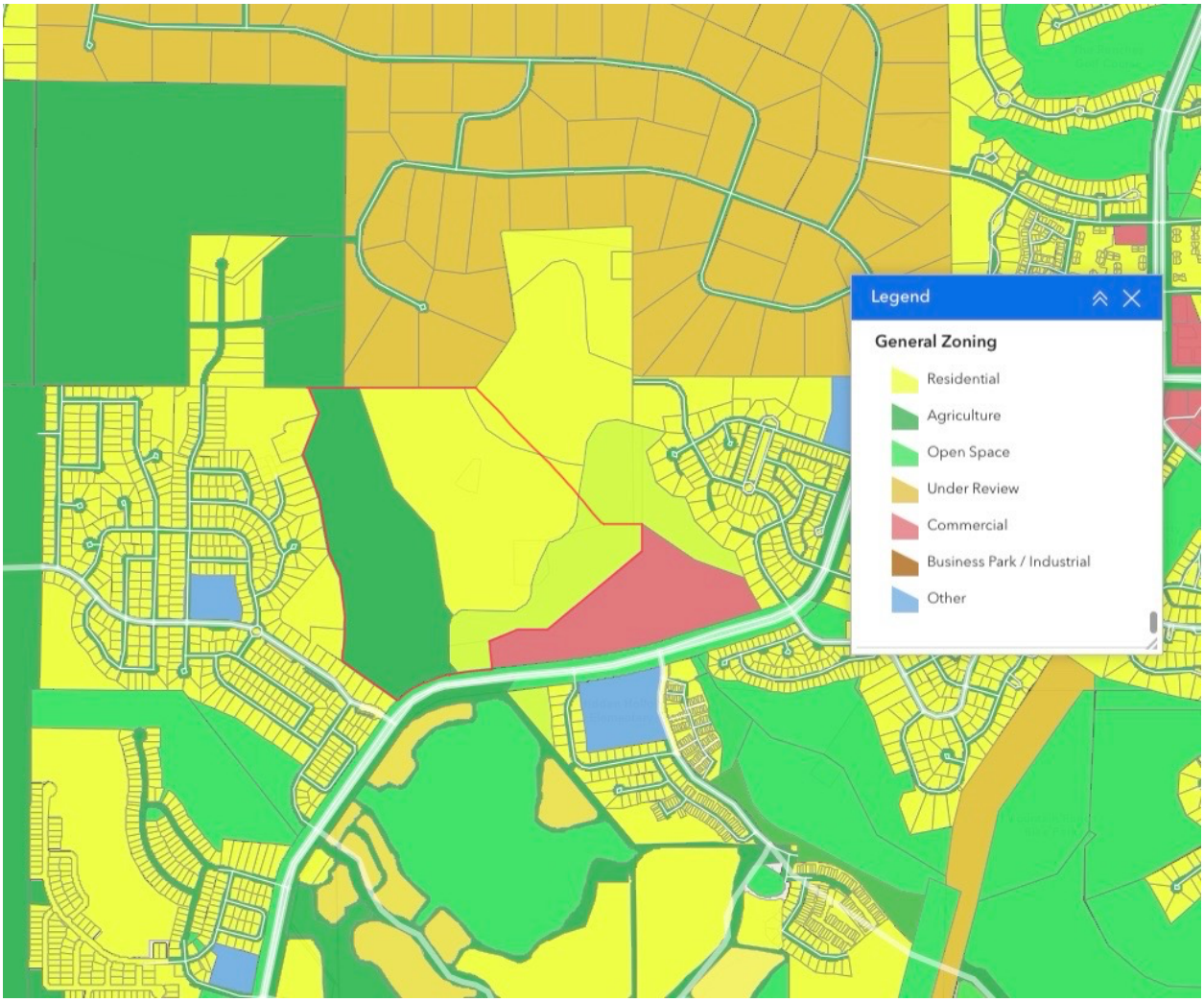
The existing Steeplechase wastewater lift station will also need to be upgraded due to other entities sending flows there. This will need to take place in 2026 and is estimated to be approximately $400,000 for the necessary improvements.

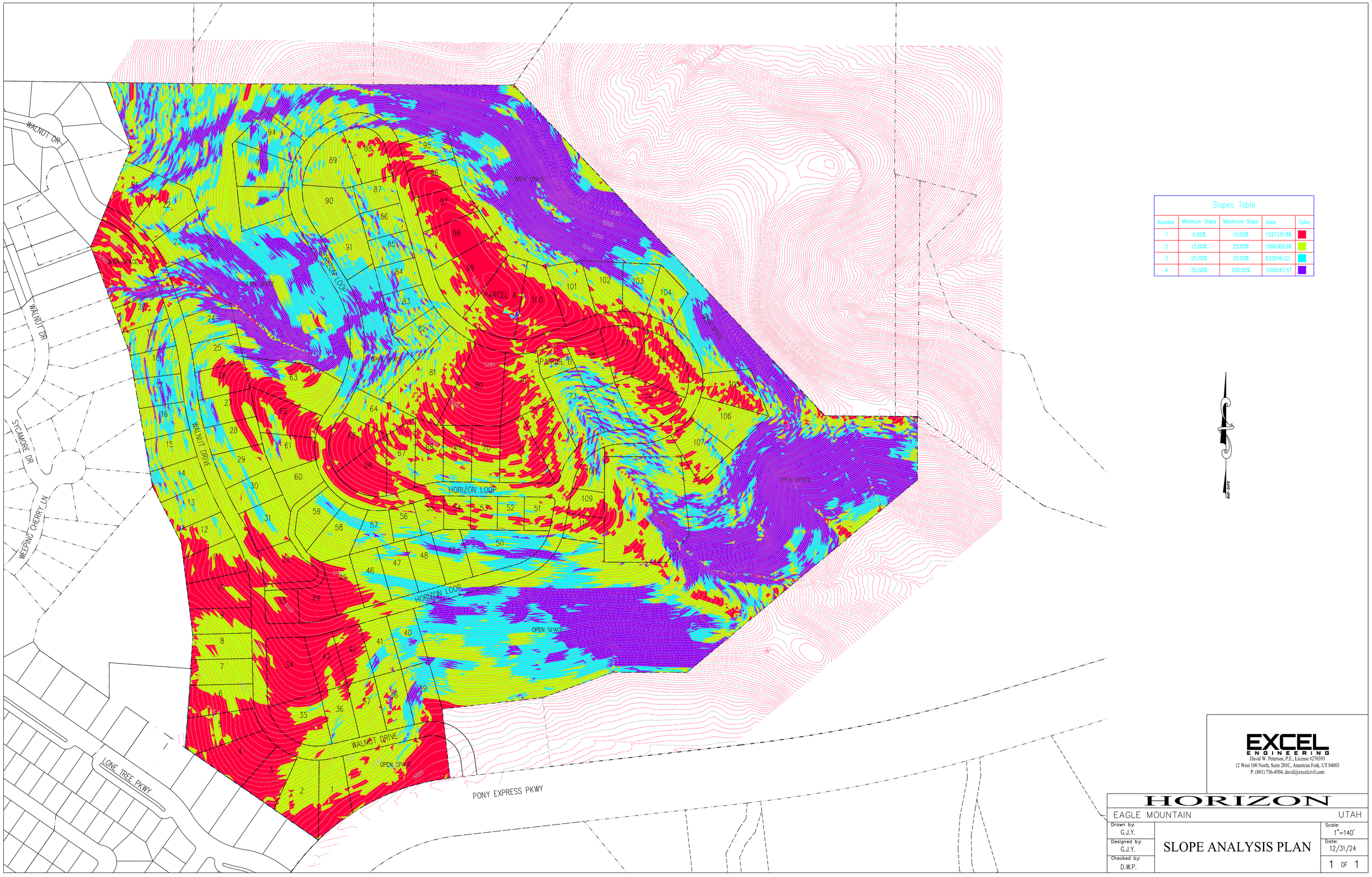
Treatment Plant

The cost of increasing the WWTP capacity using MBR treatment for an additional 6.0 MGD is estimated to be about $120,000,000 depending on peaking factors and what treatment level is required. As the WWTP will service both WSA and SSA, growth in each service area would need to be evaluated to determine the cost sharing proportions. This cost includes labor, materials, engineering, and contingency as well as additional electrical source capacity.

Disposal costs will vary depending on which option is selected. However, it is recommended that EMC plan for about $15 M to address this need.

Existing Conditions





Slopes Table				
Number	Minimum Slope	Maximum Slope	Area	Color
1	0.00%	15.00%	1037331.88	
2	15.00%	25.00%	1986368.66	
3	25.00%	30.00%	833646.22	
4	30.00%	100.00%	1009547.57	

EXCEL ENGINEERING
David W. Peterson, P.E., License #270393
12 West 100 North, Suite 201C, American Fork, UT 84003
P: (801) 756-4504; david@excelcivil.com

HORIZON

EAGLE MOUNTAIN UTAH

Drawn by: G.J.Y.	SLOPE ANALYSIS PLAN	Scale: 1"=140'
Designed by: G.J.Y.		Date: 12/31/24
Checked by: D.W.P.		1 OF 1

Compatibility Statement

The proposed development has been designed to ensure compatibility with the surrounding land uses and the broader goals of the city. Located within an area that includes a mix of residential and open, the project complements existing development patterns in terms of density and layout. Surrounding properties are currently residential and open space and the proposed plat aligns with these uses by providing appropriate transitions in scale and street connectivity.

Internally, the development promotes compatibility through a well-organized street network, pedestrian connectivity, and integrated open space. Lot configurations, infrastructure placement, and access points have been arranged to ensure smooth traffic flow and maintain neighborhood cohesion. Design guidelines or CC&Rs will help regulate architectural styles, fencing, and landscaping to support a unified appearance and long-term community quality.

Overall, the proposed preliminary plat is consistent with the city's planning objectives and zoning regulations, and it will contribute positively to the built environment while respecting the character and function of neighboring areas.

Environmental Impact Report

In collaboration with the City's wildlife biologist, Todd Black, it has been determined that at the time of this application there are no foreseeable adverse environmental impacts to be expected as a result of the proposed development.

As noted in the following exhibit, the desire for connections to adjacent open space have been expressed. The shaded green in exhibit shows the open space/wildlife corridor connected to city property. The width of which is approximately 650' at it's widest point and 140' at its narrowest. This corridor of open space meets the connectivity needs of the wildlife in the area as well as preserves the property's vested development rights.

In an effort to maintain a beautiful and open landscape, no wildlife fencing is to be installed by the city to restrict wildlife movement within the corridor. Such fencing has been deemed unnecessary and of little impact to the wildlife using it by the City's wildlife biologist. The developer agrees to restrict access to open space to designated trail heads and will disallow access from private property where lot lines meet with open space boundaries.

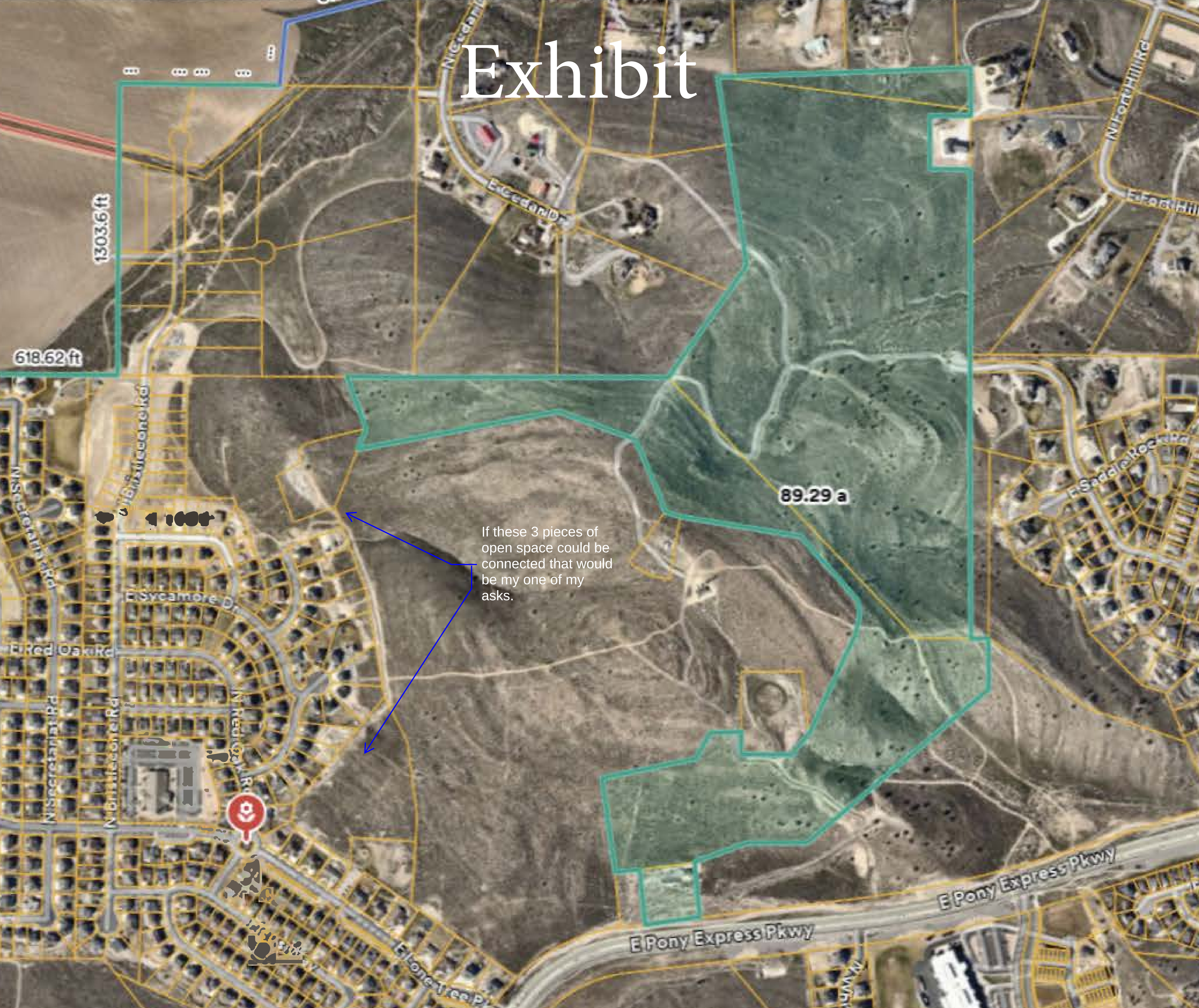


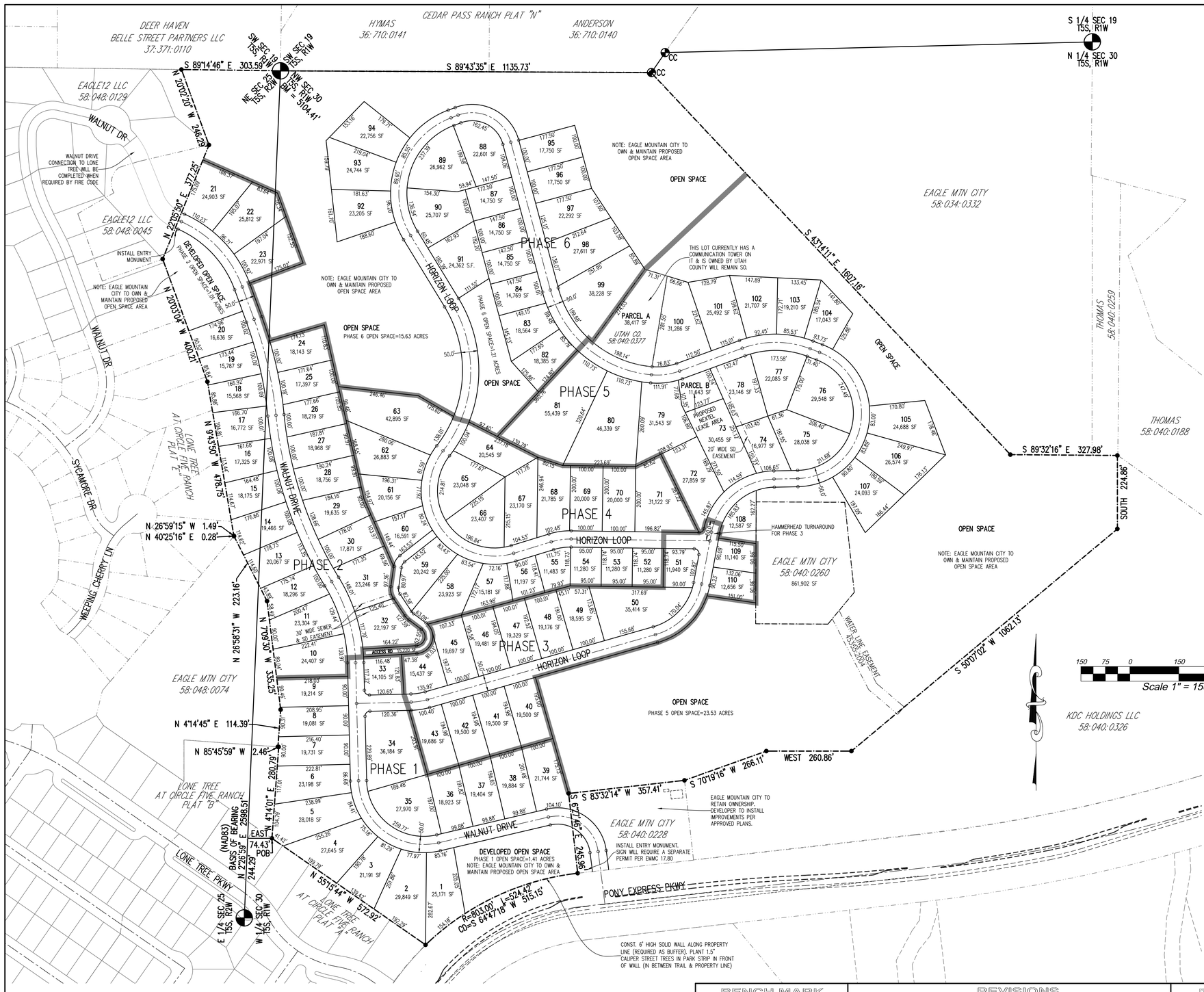
Exhibit
1303.6 ft
618.62 ft
89.29 a
E Sycamore Dr
E Red Oak Rd
E Pony Express Pkwy
E Pony Express Pkwy
If these 3 pieces of open space could be connected that would be my one of my asks.

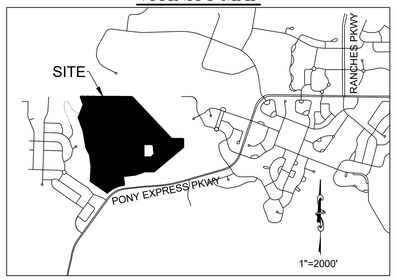
Proposed Land Use and Zoning Map

Phasing, roads, water retention/detention, open spaces, trails, amenities can all be seen in the maps provided in the Horizon Preliminary Plan document. All of the project will be zoned Foothill Residential.

Parks, Open Space, and Trails Plan

The Horizon subdivision includes a large trail system to take advantage of the surrounding open space and integrates into an already established biking trail system on the property. These trials will connect into surround city trail systems to provide pedestrian connectivity. A notable amenity planned into the project is a recreational staircase for the public to use for leisure and fitness. We feel these amenities will be well used and unique to the city and will meet the city's current requirements for parks, trails, and open space.





LEGAL DESCRIPTION

Beginning at a point located North 2°26'59" East along section line 244.29 feet and East 74.43 feet from the West Quarter Corner of Section 30, Township 5 South, Range 1 West, Salt Lake Base and Meridian; thence along the easterly boundary of Lone Tree at Circle Five Ranch Plat "B" the following two courses and distances: 1) North 4°14'01" East 280.79 feet, and 2) North 85°45'59" West 2.46 feet; thence North 4°14'45" East 114.39 feet; thence North 7°09'30" West 335.25 feet; thence North 26°58'31" West 223.16 feet; thence along the easterly boundary of Lone Tree at Circle Five Ranch Plat "E" the following four courses and distances: 1) North 40°25'16" East 0.28 feet, 2) North 26°59'15" West 1.49 feet, 3) North 9°43'50" West 478.75 feet, and 4) North 20°03'04" West 400.21 feet; thence North 22°05'50" East 377.25 feet; thence North 20°02'20" West 246.29 feet; thence South 89°14'46" East along section line 303.59 feet to the Northwest Corner of Section 30; thence South 89°43'35" East along section line 1135.73 feet; thence South 43°14'11" East 1607.16 feet; thence South 89°32'16" East 327.98 feet; thence South 224.86 feet; thence South 50°07'02" West 1062.13 feet; thence West 260.86 feet; thence South 70°19'16" West 266.11 feet; thence South 83°32'14" West 357.41 feet; thence South 6°27'46" East 245.96 feet; thence along the arc of a 803.00 foot radius non-tangent curve to the left 524.42 feet through a central angle of 37°25'05" (chord bears South 64°47'18" West 515.15 feet); thence North 55°15'44" West along the northerly boundary of Lone Tree at Circle Five Ranch Plat "A" a distance of 572.92 feet to the point of beginning.

Less and Excepting therefrom the following:

Beginning at a point located North 2°26'59" East along section line 1767.77 feet and East 990.97 feet from the West Quarter Corner of Section 30, Township 5 South, Range 1 West, Salt Lake Base and Meridian; thence North 36°02'03" East 274.03 feet; thence South 73°10'04" East 71.31 feet; thence South 9°33'35" West 281.55 feet; thence along the arc of a 327.50 foot radius non-tangent curve to the right 201.30 feet through a central angle of 35°13'00" (chord bears North 67°13'46" West 198.14 feet) to the point of beginning.

Also Less and Excepting therefrom the following:

Beginning at a point located North 2°26'59" East along section line 902.29 feet and East 1528.45 feet from the West Quarter Corner of Section 30, Township 5 South, Range 1 West, Salt Lake Base and Meridian; thence North 0°16'25" East 373.66 feet; thence South 89°43'35" East 271.29 feet; thence South 6°02'19" East 277.33 feet; thence South 39°41'05" West 126.85 feet; thence North 89°43'35" West 221.24 feet to the point of beginning.

Total Area = 108.45 Acres

PRELIM PLAN LAND CALCULATIONS

TOTAL ACREAGE:	109.33 ACRES
BUILDABLE ACREAGE:	66.19 ACRES
TOTAL ACREAGE IN LOTS:	55.00 ACRES
TOTAL ACREAGE IN PARCELS*:	1.15 ACRES
TOTAL ROADWAY AREA:	10.39 ACRES
TOTAL OPEN SPACE:	42.79 ACRES
TOTAL DEVELOPED OPEN SPACE REQUIRED:	1.89 ACRES
TOTAL DEVELOPED OPEN SPACE PROVIDED:	2.42 ACRES
AVERAGE LOT SIZE:	21,780 SF/0.50 ACRES
LARGEST LOT SIZE:	55,439 SF/1.11 ACRES
SMALLEST LOT SIZE:	11,140 SF/0.26 ACRES
OVERALL DENSITY:	1.01 LOTS/ACRE
TOTAL # OF LOTS:	110 LOTS
MIN. LOT SIZE ALLOWED:	10,890 S.F.
MIN. AVERAGE LOT SIZE:	21,780 S.F.

*PARCEL A IS INCLUDED IN THESE TABULATIONS BUT IS EXCLUDED IN THE LEGAL DESCRIPTION

GENERAL NOTES

1. SEE SHEETS 5 & 6 FOR EXISTING CONTOURS.
2. THERE ARE SMALL AREAS IN THIS SUBDIVISION LOTS WITH A NATURAL GRADE THAT EXCEEDS 25% IN RELATION TO THE PROPOSED LOT LAYOUT. A SLOPE ANALYSIS PLAN HAS BEEN PROVIDED FOR THIS SITE.
3. PROPOSED ZONE = FR. BUILDING SETBACKS SHALL BE AS PER FR ZONE AND GENERAL FOR PRIMARY AND ACCESSORY STRUCTURES.
4. ALL ROADS WILL BE PUBLIC AND MEET CITY STANDARDS.
5. A FIRE FLOW ANALYSIS IS REQUIRED AFTER INSTALLATION OF FIRE HYDRANTS AND PRIOR TO BUILDING PERMITS.
6. NO STREET LIGHTING IS PROPOSED. DEVELOPER IS REQUESTING A WAIVER.
7. HOMES CONSTRUCTED WITHIN THIS SUBDIVISION MUST COMPLY WITH CITY CODE ARCHITECTURAL DESIGN REVIEW.
8. CITY WILL OWN AND MAINTAIN THE PROPOSED OPEN SPACE AREAS SHOWN ON THIS PRELIMINARY PLAT.
9. TURNAROUNDS WILL BE PROVIDED AT PHASING LINES WITH A 60-FOOT RADIUS PAVED TURN AROUND OR AN APPROVED PAVED HAMMERHEAD FIRE TURN AROUND PER EAGLE MOUNTAIN STANDARDS.
10. THERE ARE NO IRRIGATION DITCHES OR STRUCTURES, CANALS, WELLS, STREAMS, SIGNIFICANT ROCK OUTCROPPINGS, WETLANDS, FLOOD PLAINS, OR OTHER NATURAL FEATURES ON SITE.
11. PUBLIC UTILITY EASEMENTS ARE 10' FRONT, AND 10' REAR AND SIDES ON EACH LOT.
12. SEE SHEET 5 & 6 FOR ROAD CONTOURS SHOWING HOW ROADS WILL BE GRADED AND CONNECT.

SHEET INDEX

PROPOSED ZONE: FOOTHILL RESIDENTIAL

SURVEYOR:
AZTEC ENGINEERING INC.
732 N. 780 W.
AMERICAN FORK, UT. 84003
AZTECENGINEERING@GMAIL.COM

BENCH MARK
NW CORNER, SECTION 30, TOWNSHIP 5 SOUTH, RANGE 1 WEST, SALT LAKE BASE AND MERIDIAN
ELEVATION = 5104.41'

REVISIONS

Rev.	Date	Description
1	07/10/25	REVISED AS PER CITY COMMENTS

Developer: Belle Street Partners
c/o Scott Hazard
3688 E. Campus Drive Suite 100, Eagle Mountain, UT 84005
Phone: (801) 636-1858

EXCEL ENGINEERING
David W. Peterson, P.E., License #270393
12 West 100 North, Suite 201C, American Fork, UT 84003
P: (801) 756-4504; david@excelcivil.com

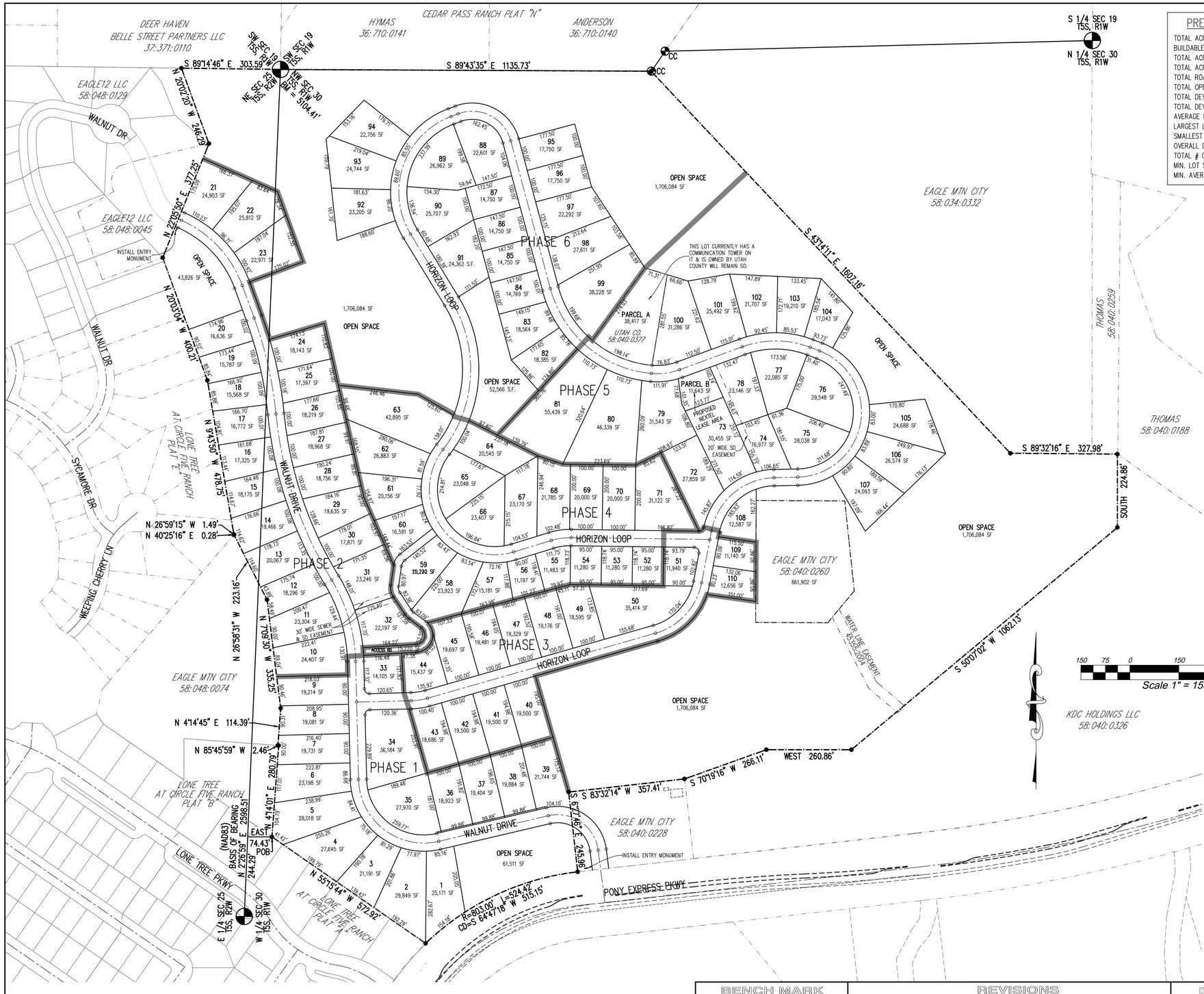
HORIZON
EAGLE MOUNTAIN UTAH

Drawn by: G.J.Y.
Designed by: G.J.Y.
Checked by: D.W.P.

PRELIMINARY PLAT

LOCATED IN THE NW CORNER OF SECTION 30, TOWNSHIP 5 SOUTH, RANGE 1 WEST, SLB&M

Scale: 1"=150'
Date: 03/28/25



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BUILDABLE ACREAGE:	66.19 ACRES
TOTAL ACREAGE IN LOTS:	55.00 ACRES
TOTAL ACREAGE IN PARCELS:	1.15 ACRES
TOTAL ROADWAY AREA:	10.04 ACRES
TOTAL OPEN SPACE:	43.14 ACRES
TOTAL DEVELOPED OPEN SPACE REQUIRED:	1.89 ACRES
TOTAL DEVELOPED OPEN SPACE PROVIDED:	2.36 ACRES
AVERAGE LOT SIZE:	21,780 SF/0.50 ACRES
LARGEST LOT SIZE:	55,439 SF/1.11 ACRES
SMALLEST LOT SIZE:	11,140 SF/0.26 ACRES
OVERALL DENSITY:	1.01 LOTS/ACRE
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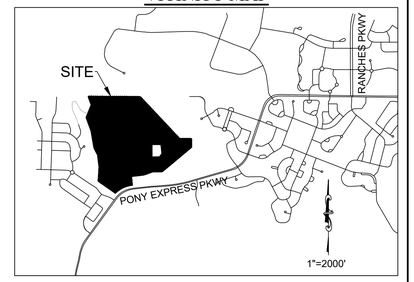
VICINITY MAP



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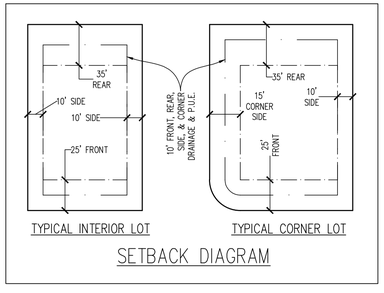

SETBACK DIAGRAM

GENERAL NOTES

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2. THERE ARE SMALL AREAS IN THIS SUBDIVISION LOTS WITH A NATURAL GRADE THAT EXCEEDS 25% IN RELATION TO THE PROPOSED LOT LAYOUT. A SLOPE ANALYSIS PLAN HAS BEEN PROVIDED FOR THIS SITE.
3. BUILDING SETBACKS ARE SHOWN IN THE SETBACK DIAGRAM
4. ALL ROADS WILL BE PUBLIC AND MEET CITY STANDARDS.
5. A FIRE FLOW ANALYSIS IS REQUIRED AFTER INSTALLATION OF FIRE HYDRANTS AND PRIOR TO BUILDING PERMITS.
6. ALL OUTDOOR LIGHTING MUST BE FULL CUT-OFF, DARK SKY COMPLIANT IN ACCORDANCE WITH CITY CODE.
7. HOMES CONSTRUCTED WITHIN THIS SUBDIVISION MUST COMPLY WITH CITY CODE ARCHITECTURAL DESIGN REVIEW.
8. CITY WILL OWN AND MAINTAIN THE PROPOSED OPEN SPACE AREAS SHOWN ON THIS PRELIMINARY PLAT.
9. TURNAROUNDS WILL BE PROVIDED AT PHASING LINES WITH A 60-FOOT RADIUS PAVED TURN AROUND OR AN APPROVED PAVED HAMMERHEAD FIRE TURN AROUND PER EAGLE MOUNTAIN STANDARDS.
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SHEET INDEX

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BENCH MARK

NW CORNER, SECTION 30, TOWNSHIP 5 SOUTH, RANGE 1 WEST, SALT LAKE BASE AND MERIDIAN
ELEVATION = 5104.41'

REVISIONS

Rev.	Date	Description

Developer: Belle Street Partners
c/o Scott Hazard
3688 E. Campus Drive Suite 100, Eagle Mountain, UT 84005
Phone: (801) 636-1858

EXCEL ENGINEERING
David W. Peterson, P.E., License #270393
12 West 100 North, Suite 201C, American Fork, UT 84003
P: (801) 756-4504; david@excelcivil.com

HORIZON
EAGLE MOUNTAIN UTAH

Drawn by: G.J.Y.
Designed by: G.J.Y.
Checked by: D.W.P.

PRELIMINARY PLAT

LOCATED IN THE NW CORNER OF SECTION 30, TOWNSHIP 5 SOUTH, RANGE 1 WEST, SLB&M

Scale: 1"=150'
Date: 03/28/25

Horizon Development
Pony Express Parkway and
Walnut Drive
Traffic Impact Study

Eagle Mountain, Utah

January 2025

TRAFFIC STUDY

TRANSPORTATION ENGINEERING

A-Trans Engineering
P.O. Box 521651
Salt Lake City, Utah 84152
(801) 949-0348 telephone
(801) 582-6252 fax

Horizon Development
Pony Express Parkway and
Walnut Drive
Traffic Impact Analysis

Eagle Mountain, Utah

Category II

January 2025

Prepared by:

A-Trans Engineering
Joseph Perrin, PhD, PE, PTOE
P.O. Box City, 521651
Salt Lake City, Utah 84152
(801) 949-0348
atrans@comcast.net

Table of Contents

Table of Figures

Table of Tables

I. Introduction and Summary

This traffic impact analysis is for the proposed Horizon development located north east of Lone Tree Parkway and Pony Express Parkway in Eagle Mountain, Utah. The development is planned to include 110 single family homes. The new land use site is projected to generate 77 AM and 103 PM peak hour trips with 1,037 daily trips. The site will access the road network by connecting into Pony Express Parkway approximately 690 feet north east of Lone Tree Parkway.

Table 1 shows the results of the analysis.

Table 1: Analysis Results and Summary

		2025 Existing	2025 Total	2030 Background	2030 Total
Pony Express Pkwy / Lone Tree Pkwy	AM	Total delay at 16.8/B	Total delay at 17.1/B	Total delay at 18.4/B	Total delay at 18.7/B
	PM	Total delay at 17.0/B	Total delay at 17.4/B	Total delay at 18.9/B	Total delay at 19.1/B
Pony Express Pkwy / Walnut Street	AM		Side street delay (SBL) at >100/F		Side street delay (SBL) at >100/F
	PM		Side street delay (SBL) at >100/F		Side street delay (SBL) at >100/F

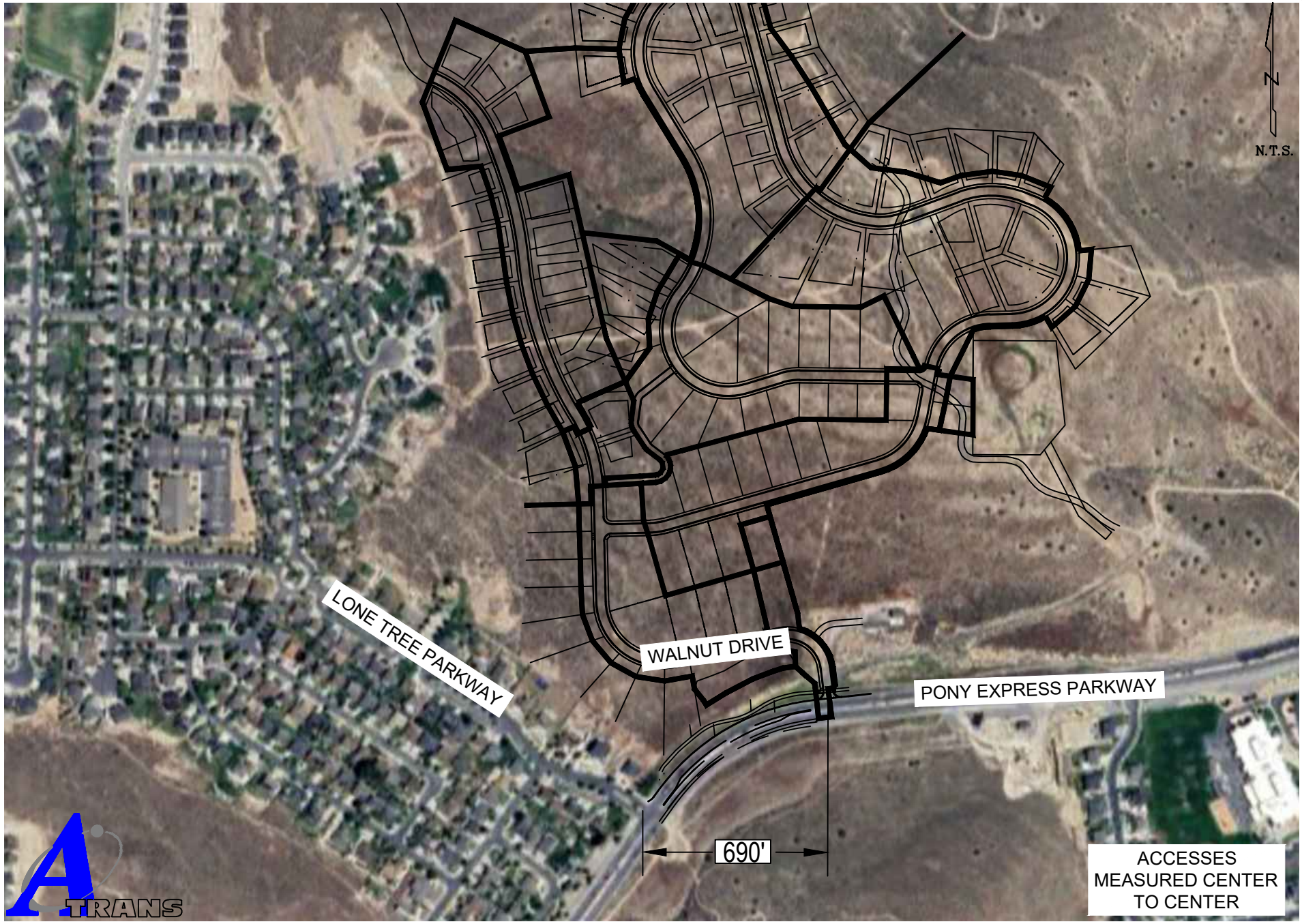
- **There is already a median break along Pony Express Parkway at the proposed access location.**
- **As with most unsignalized intersections along Pony Express there is peak hour congestion for left turn egress.**
- **If the congestion is unacceptable, then drivers can travel up to Lone Tree Parkway and the there is a southbound left turn lane that can be used as a U-turn.**

II. Proposed Project

This traffic impact analysis is for the proposed Horizon property located north east of Lone Tree Parkway and Pony Express Parkway in Eagle Mountain, Utah. The development is planned to include 110 single family homes. The new land use site is projected to generate 77 AM and 103 PM peak hour trips with 1,037 daily trips.

This site is planning a single access on Pony Express Parkway located approximately 690 feet north east of Lone Tree Parkway. A secondary connection to the Lone Tree Parkway neighborhood is also planned but is primarily for a secondary emergency access because it requires out of direction travel from the neighborhood to use it.

The proposed conceptual site plan and access spacing are shown in Figure 1.



A-TRANS TRANSPORTATION ENGINEERING
P.O. BOX 521651, SLC, UT 84152
Phone: 801-949-0348 Fax: 801-582-6252

Figure 1

Conceptual Site Plan

III. Study Area Conditions

The study area includes the following intersection.

- Pony Express Parkway / Lone Tree Parkway

Figure 2 shows the location of the site. Figure 3 shows existing intersection geometry.

Pony Express Parkway

Pony Express Parkway (RT 2881) is a 4 lane facility with two lanes in each direction. Based on the traffic counts collected at the Lone Tree Parkway and Pony Express Parkway intersection, daily traffic is estimated at 26,000 vehicles per day with a posted speed limit of 35 MPH.

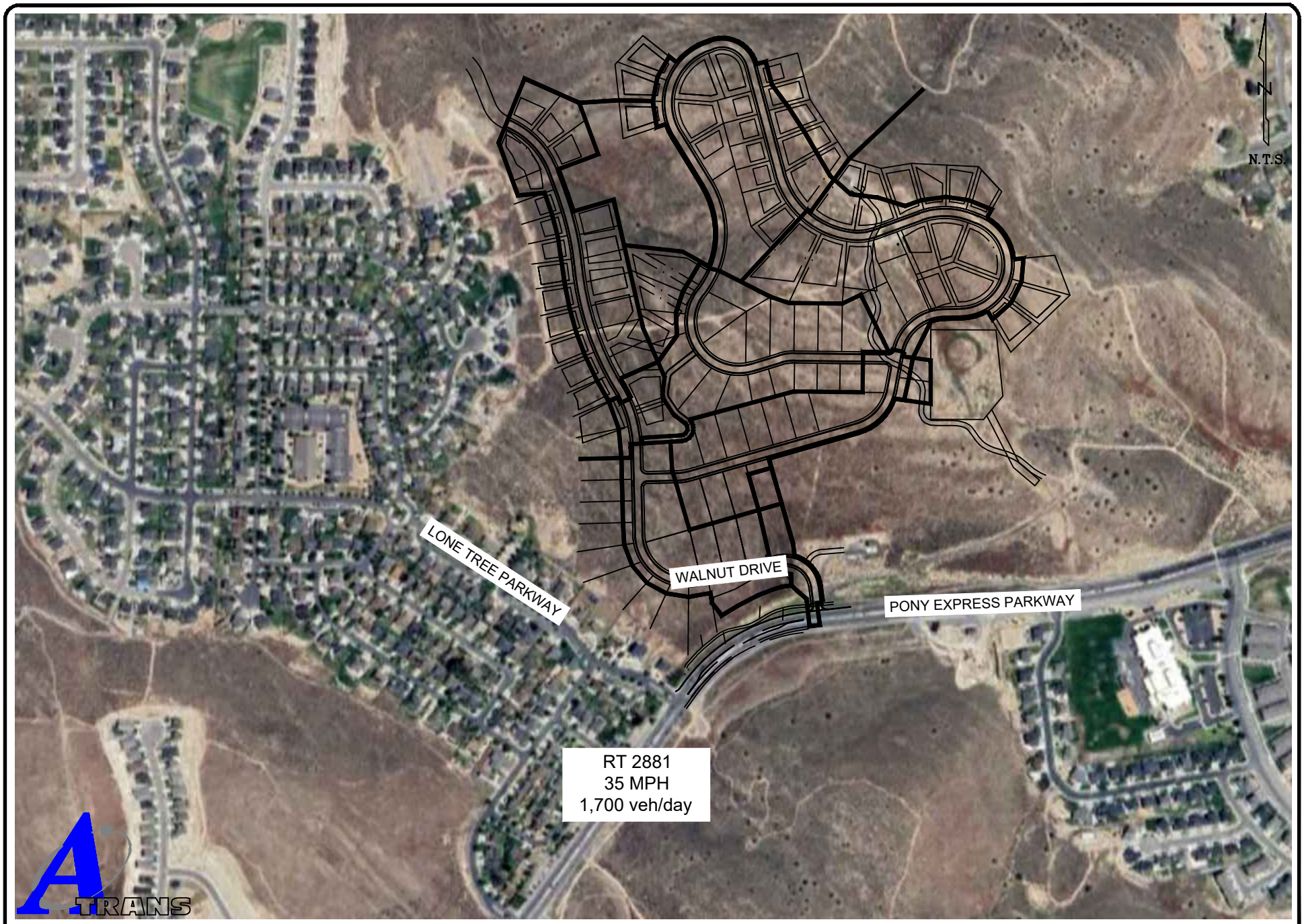


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Figure 2

Site Location

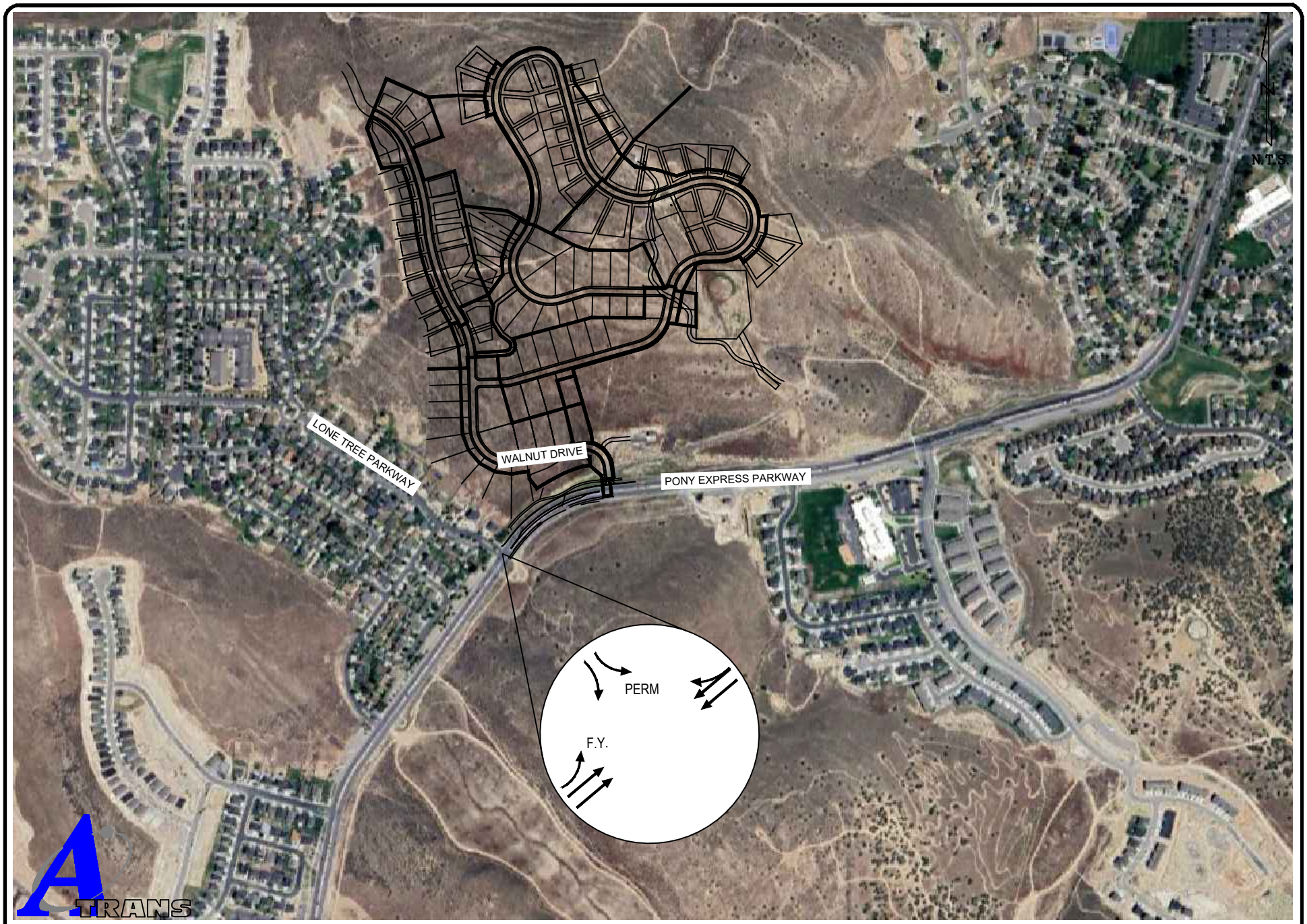

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Figure 3

Existing Geometry

IV. Analysis of Existing Condition

The existing traffic counts were performed January 7th – January 9th, 2025 during the AM (7:00 – 9:00 AM) and PM (4:00 – 6:00 PM) peak periods. 2025 Existing Traffic volumes used in the study are shown in Figure 4.

The Highway Capacity Manual defines the Level of Service (LOS) for both signalized and unsignalized intersections as a range of average experienced delay. LOS is a qualitative rating of traveler satisfaction from A to F whereby LOS A is good and LOS F poor. Table 2 shows the LOS range by delay for unsignalized and signalized intersections and accesses.

Table 2: Intersection LOS-Delay Relationship

	Unsignalized	Signalized
Level of Service	Total Delay per Vehicle (sec)	Total Delay per Vehicle (sec)
A	≤ 10.0	≤ 10.0
B	> 10.0 and ≤ 15.0	> 10.0 and ≤ 20.0
C	> 15.0 and ≤ 25.0	> 20.0 and ≤ 35.0
D	> 25.0 and ≤ 35.0	> 35.0 and ≤ 55.0
E	> 35.0 and ≤ 50.0	> 55.0 and ≤ 80.0
F	> 50.0	> 80.0

The analysis shows that Pony Express Parkway / Lone Tree Parkway operates at LOS B in the AM and PM peak period. Table 3 shows the Existing Level of Service for Pony Express Parkway / Lone Tree Parkway signalized intersection.

Table 3: Existing Level of Service

	Pony Express Pkwy / Lone Tree Pkwy	
AM	16.8	B
PM	17.2	B

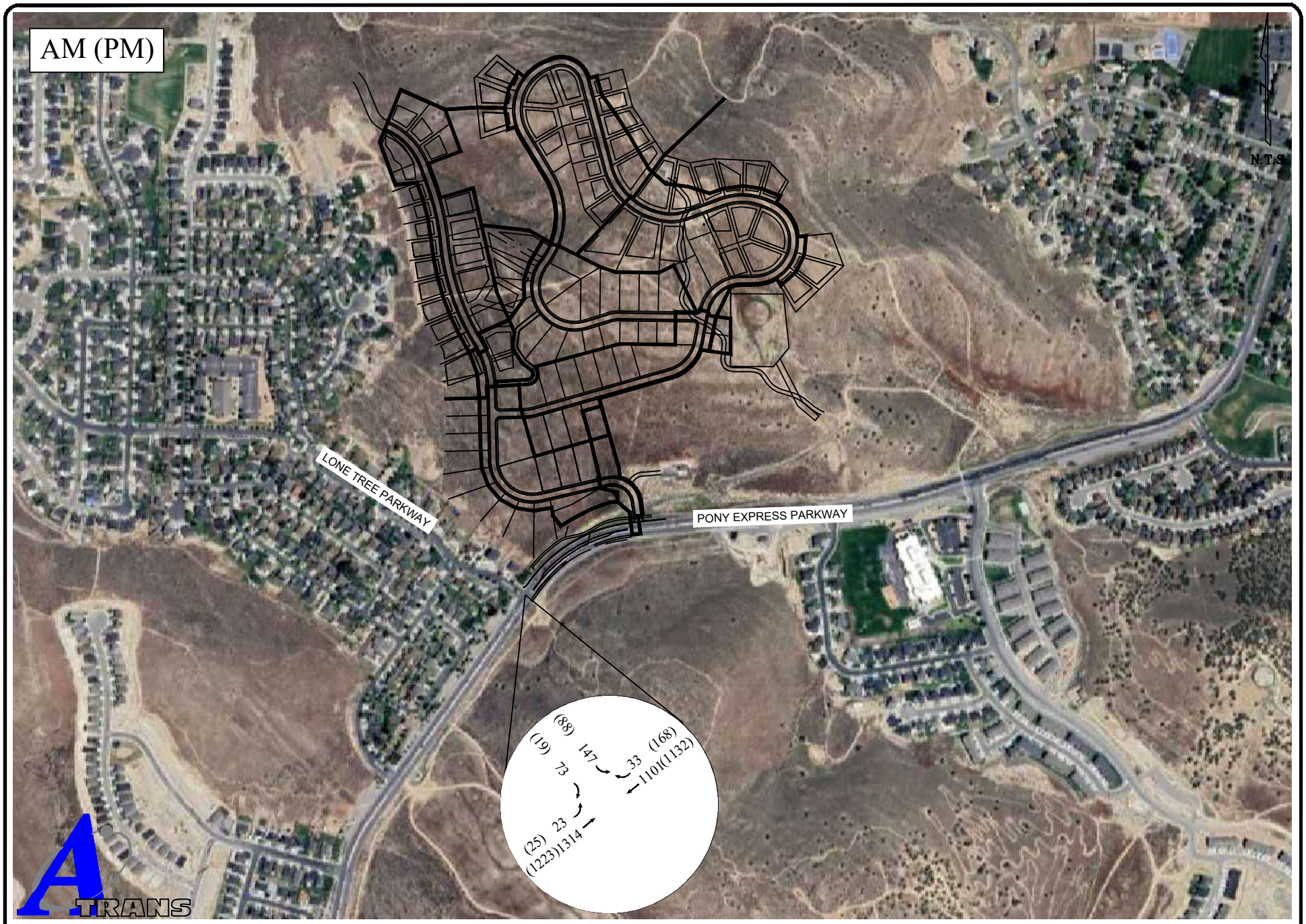

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Figure 4

Existing Traffic

V. Projected Traffic

A. Trip Generation

Trip generation for the site was done using The Institute of Transportation Engineers (ITE) *Trip Generation* (11th Edition) handbook. The site is planned to include 110 single family homes. The site is projected to generate 77 AM and 103 PM peak hour trips with 1,037 daily trips. The trip generation for the site is shown in Table 4.

Table 4: Trip Generation for Site

Land Use Type	Density	Land Use #	Trip Rate	Trips	% In	% Out	Trips In	Trips Out
AM								
Single family homes	110	210	0.70	77	25%	75%	19	58
PM								
Single family homes	110	210	0.94	103	63%	37%	65	38
Daily								
Single family homes	110	210	9.43	1,037				

B. Trip Distribution

Origin-destination was determined from evaluating the location of neighboring residential development and commercial centers as well as the existing traffic patterns of trips at the counted intersections. This was used as a baseline for origin destination and engineering judgment was applied to this to determine the following OD for the site.

- 70% to/from east on Pony Express Parkway
- 30% to/from south west on Pony Express Parkway

Origin Destination is shown in Figure 5. Site trip distribution is shown in Figure 6.

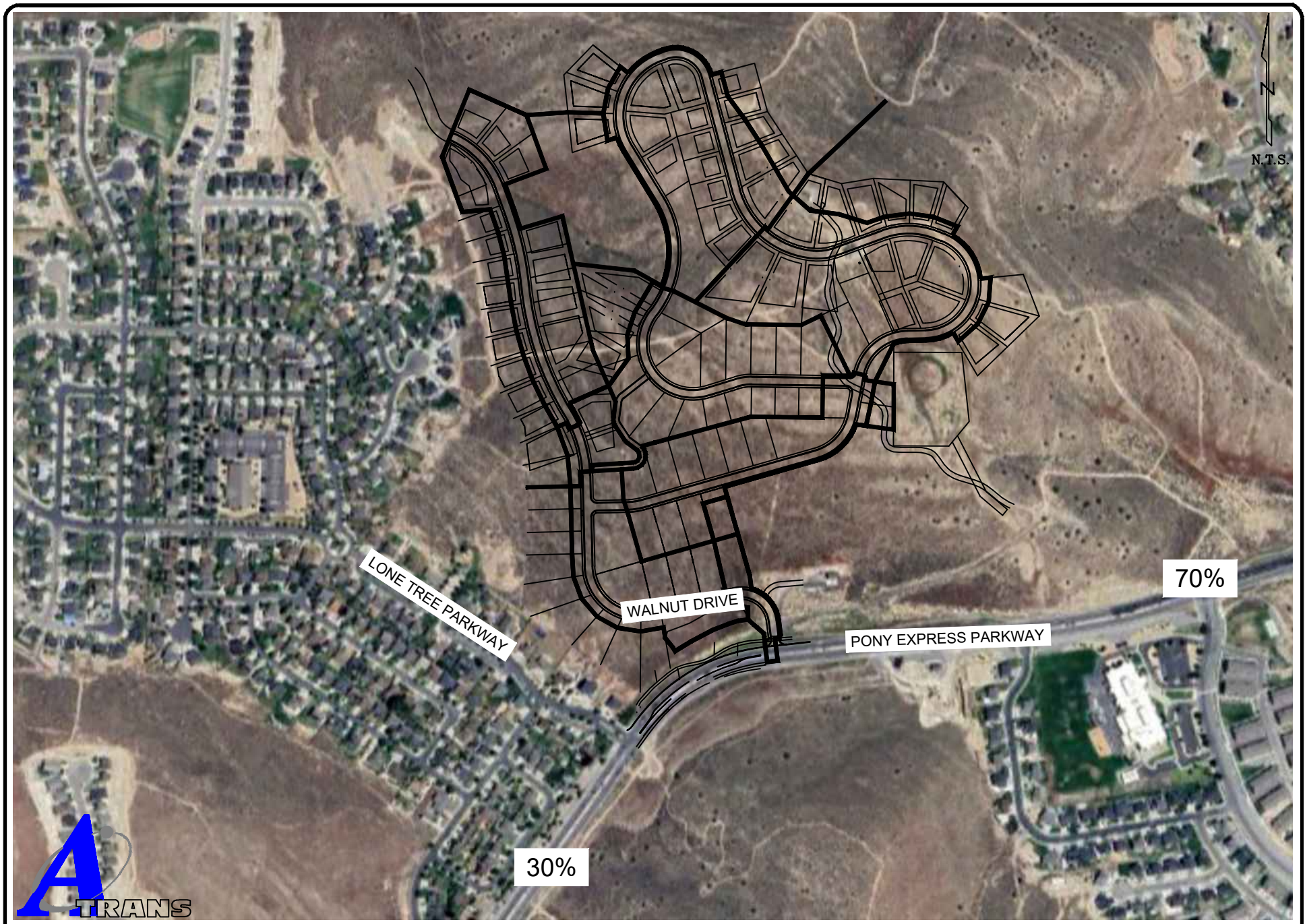

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Figure 5

Origin Destination

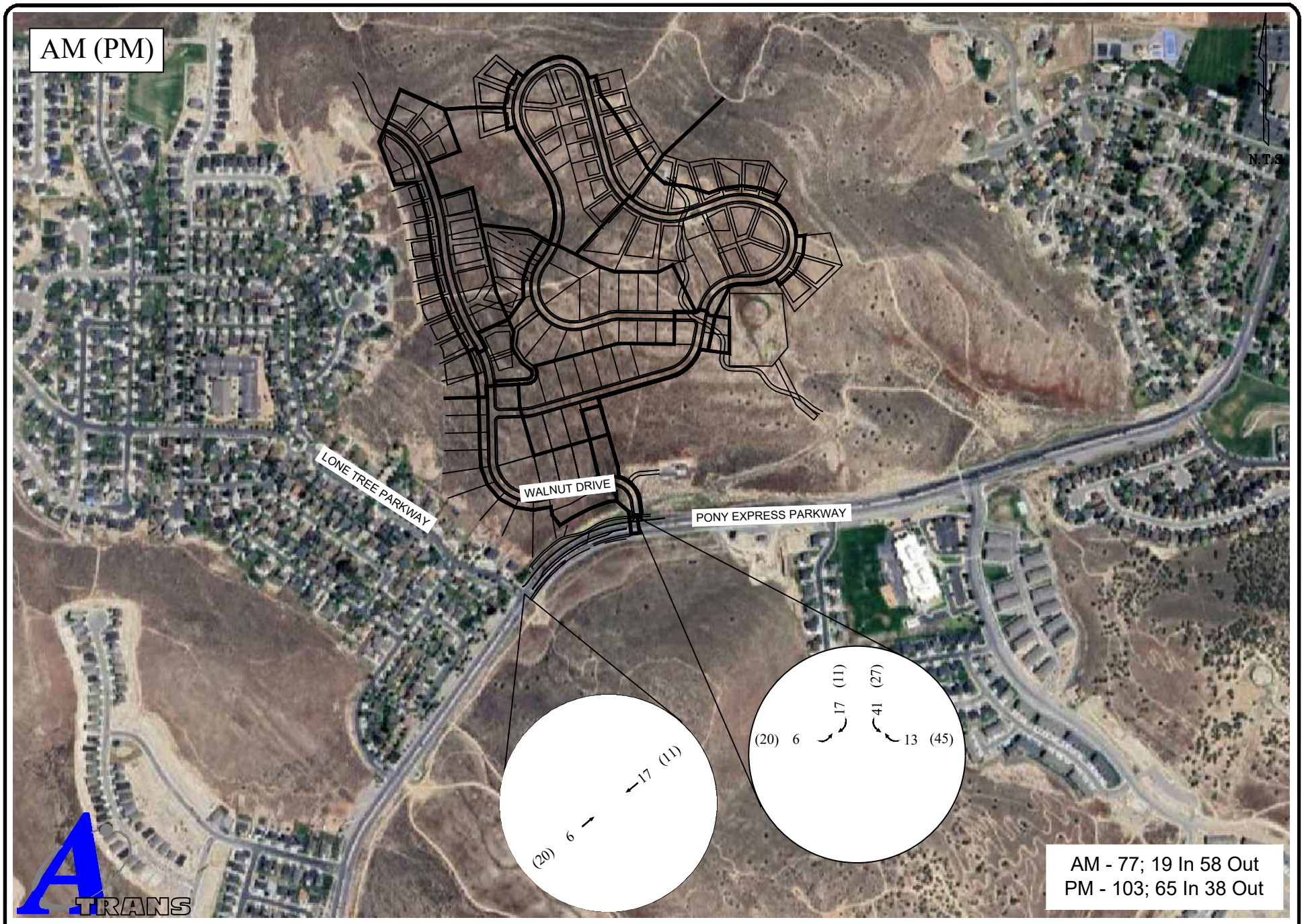

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Figure 6

Site Trip Distribution

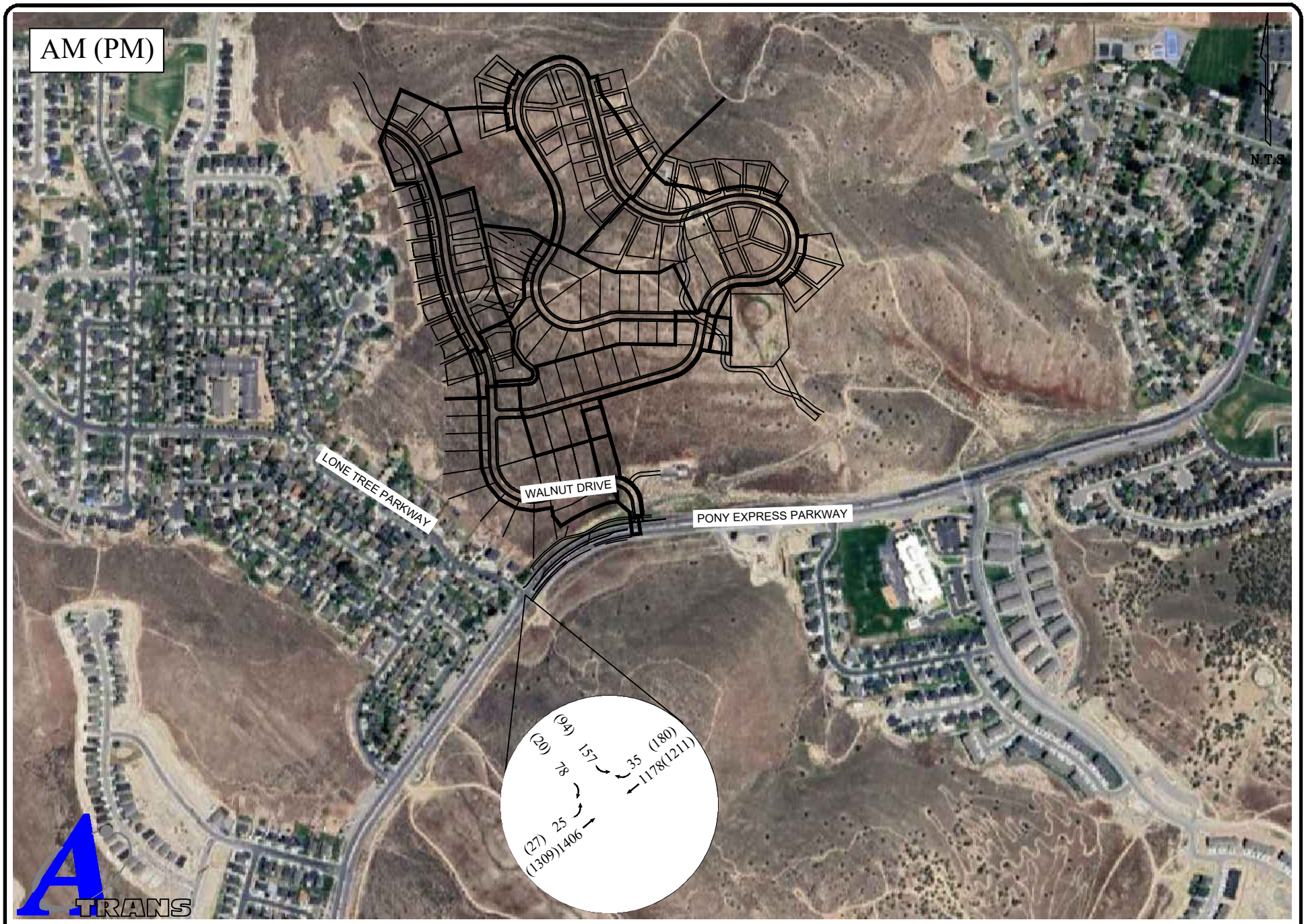
VI. Growth

Growth in the area was determined from UDOT's Traffic on Utah Highways and projections from WFRC. The volumes and utilized to determine growth in the area is shown in Table 5. Based on this data an average growth of 1.48% is assumed. The 2030 growth factor is 1.07.

Table 5: Growth Projections

Road:	Pony Express Parkway	
Year	AADT	Growth
2013	1,500	
2014	1,500	0%
2015	1,500	0%
2016	1,600	7%
2017	1,700	6%
2018	1,700	0%
2019	1,700	0%
2020	1,500	-12%
2021	1,700	13%
2022	1,700	0%
2023	1,700	0%
Average		**1.4%**

Background traffic is determined by multiplying the existing traffic by the growth factor for 2030. 2030 Background Traffic is shown in Figure 7. Total traffic in the area for the future projection years is derived by adding the non-site volume forecasts (background traffic) to the site generated traffic. Opening Day Total Traffic is shown in Figure 8. 2030 Total Traffic is shown in Figure 9.



A-TRANS TRANSPORTATION ENGINEERING P.O. BOX 521651, SLC, UT 84152 Phone: 801-949-0348 Fax: 801-582-6252	Figure 7	2030 Background Traffic

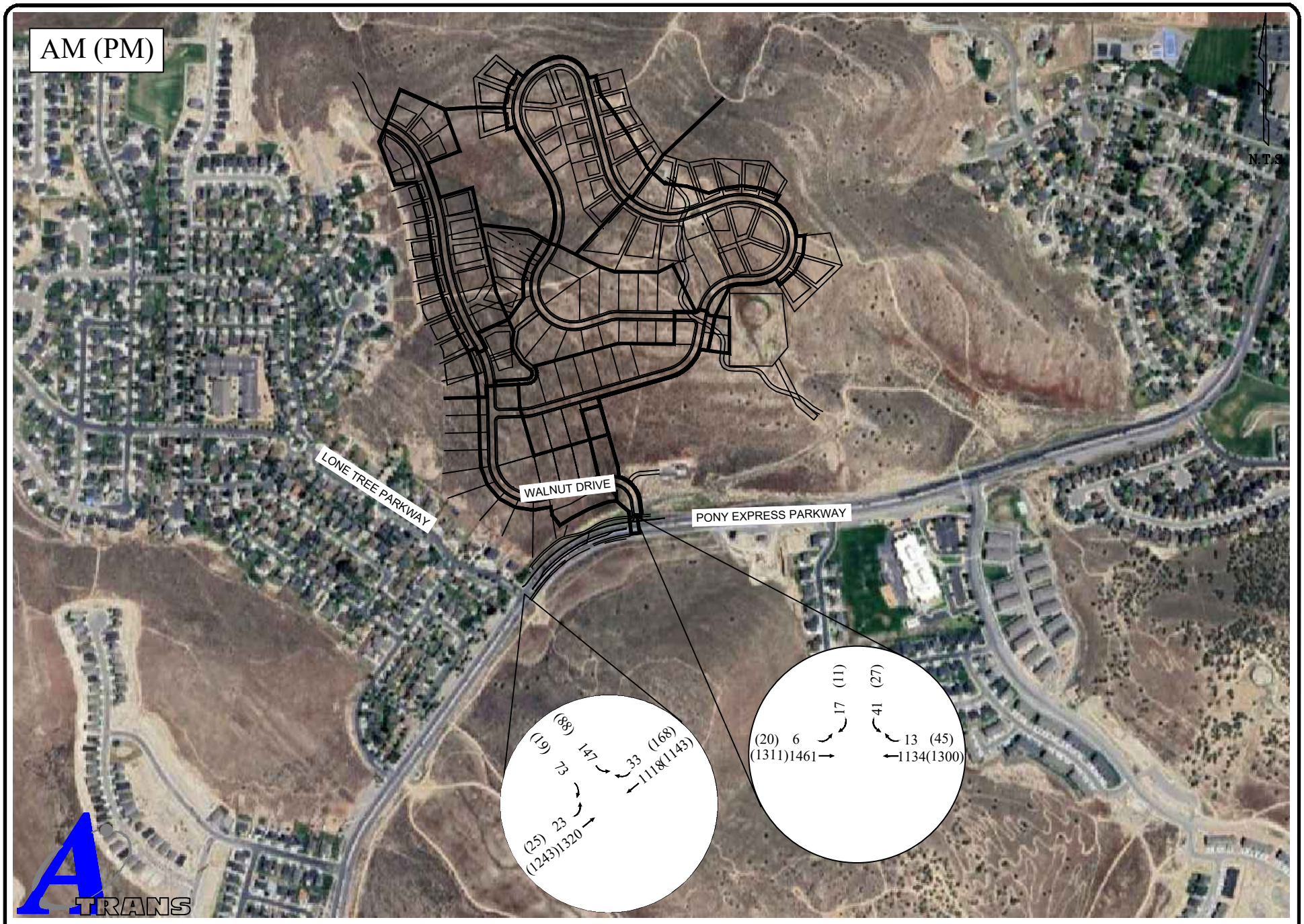


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Figure 8

2025 Total Traffic

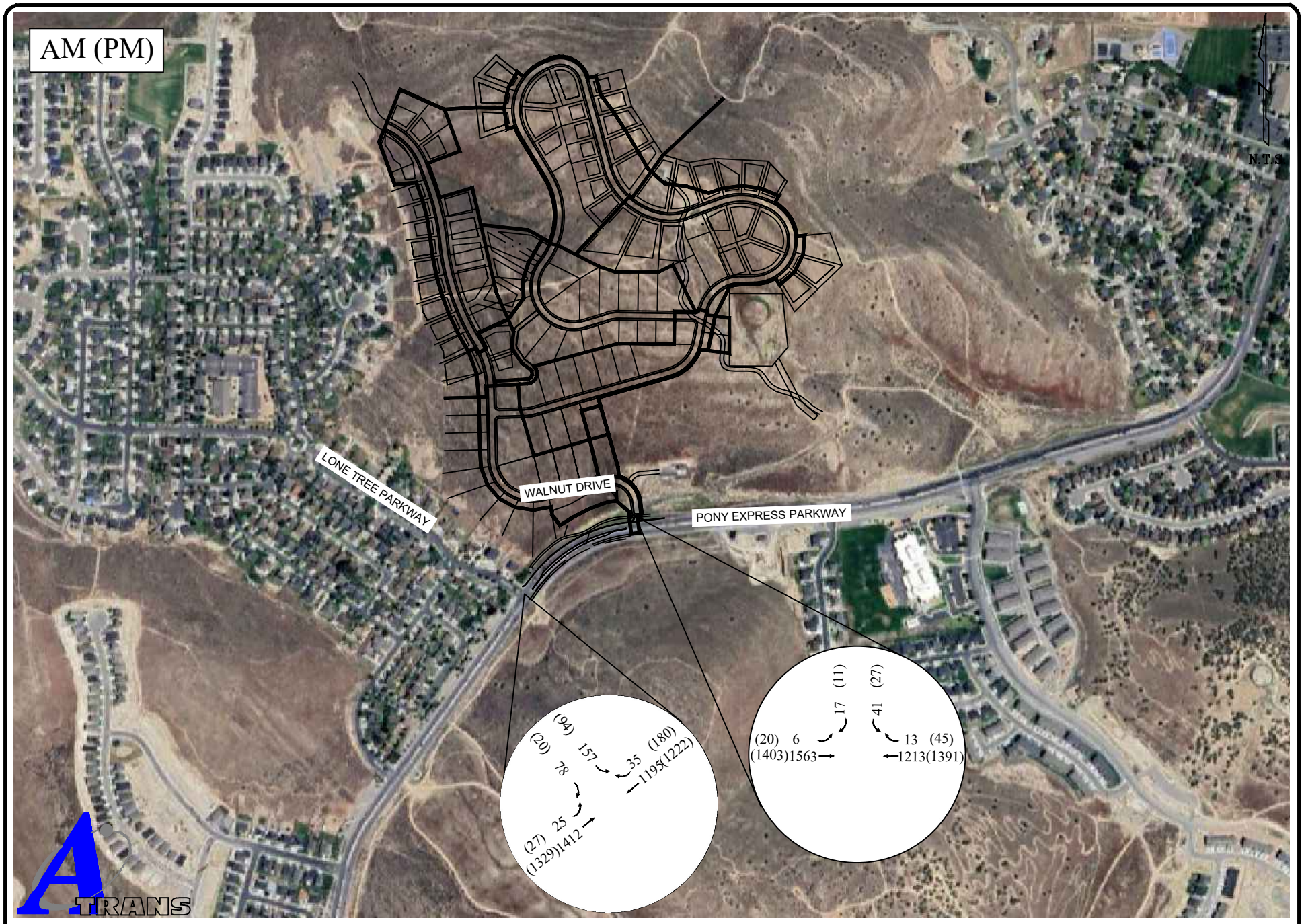

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Figure 9

2030 Total Traffic

VII. Traffic Analysis

A. Level of Service Analysis

The intersection and access analysis evaluates the performance of each intersection and access using the measure of performance of delay and level of service (LOS). Table 6 provides a summary of the analysis. Tables 7-8 show the intersection and access analysis.

Table 6: Analysis Results

		2025 Existing	2025 Total	2030 Background	2028 Total
Pony Express Pkwy / Lone Tree Pkwy	AM	Total delay at 16.8/B	Total delay at 17.1/B	Total delay at 18.4/B	Total delay at 18.7/B
	PM	Total delay at 17.0/B	Total delay at 17.4/B	Total delay at 18.9/B	Total delay at 19.1/B
Pony Express Pkwy / Walnut Street	AM		Side street delay (SBL) at >100/F		Side street delay (SBL) at >100/F
	PM		Side street delay (SBL) at >100/F		Side street delay (SBL) at >100/F

Table 7: Pony Express Parkway / Lone Tree Parkway Intersection Analysis

		SEL	SER	NEL	NET	SWT	INT
2025 Existing	AM	16.9 B	5.0 A	7.5 A	15.0 B	19.8 B	16.8 B
	PM	17.5 B	8.3 A	7.2 A	12.7 B	21.8 C	17.2 B
2030 Background	AM	17.2 B	4.9 A	7.6 A	16.6 B	21.8 C	18.4 B
	PM	18.1 B	8.2 A	7.2 A	13.4 B	24.7 C	18.9 B
2025 Total	AM	16.9 B	5.0 A	7.5 A	15.1 B	20.3 C	17.1 B
	PM	17.6 B	8.3 A	7.1 A	12.9 B	22.0 C	17.4 B
2030 Total	AM	17.2 B	5.0 A	7.6 A	16.7 B	22.4 C	18.7 B
	PM	18.2 B	8.2 A	7.2 A	13.5 B	24.9 C	19.1 B

Table 8: Pony Express Parkway / Walnut Street Intersection Analysis

		EBL	SBL	SBR
2025 Total	AM	11.6 B	>100 F	13.7 B
	PM	13.3 B	>100 F	14.8 B
2030 Total	AM	12.1 B	>100 F	14.3 B
	PM	14.1 B	>100 F	15.6 C

B. Queue Analysis

Based on the projected traffic, queue storage length requirements can be determined. To determine if sufficient storage space exists to accommodate the projected demand, the intersection and accesses included in this traffic study are analyzed for queue storage capacity. The available queue storage lengths and queue storage recommendations are provided by the HCM analysis and are done through Synchro and shown in Table 9.

Table 9: 2030 Queue Analysis

Queue (feet)		EBL	NBL	SBL	SBR
Lone Tree / Pony Express	Available	75	65		
	AM Projected	90	13		
	PM Projected	65	15		
Walnut Drive / Pony Express	Recommended	85		100	100
	AM Projected	25		100	100
	PM Projected	50		100	100

There is an existing left turn lane and already a break in the center median at the proposed access, Walnut Drive. Ideally, auxiliary lanes would be installed so there would be a separate southbound right and left turn lane as this would alleviate some of the peak hour congestion. Similar, a westbound right turn lane would allow traffic to exit the travel lane before decelerating.

VIII. Conclusions

This traffic impact analysis is for the proposed Horizon property located north east of Lone Tree Parkway and Pony Express Parkway in Eagle Mountain, Utah. The development is planned to include 110 single family homes. The new land use site is projected to generate 77 AM and 103 PM peak hour trips with 1,037 daily trips. The site will access the road network by connecting into Pony Express Parkway approximately 690 feet north east of Lone Tree Parkway.

The following comments are made about the project:

- **There is already a median break along Pony Express Parkway at the proposed access location.**
- **As with most unsignalized intersections along Pony Express there is peak hour congestion for left turn egress.**
- **If the congestion is unacceptable, then drivers can travel up to Lone Tree Parkway and the there is a southbound left turn lane that can be used as a U-turn.**

Ideally, a westbound right turn lane would be recommended as a deceleration lane but there is not right turn lanes along this section of Pony Express Parkway even at the signalized intersections.

APPENDICES

Appendix A	Traffic Counts and Projections
Appendix B	Without Site Intersection Analyses
Appendix C	With Site Intersection Analysis

Appendix A Traffic Counts and Projections

AM PEAK HOUR VOLUMES

Ped = 6

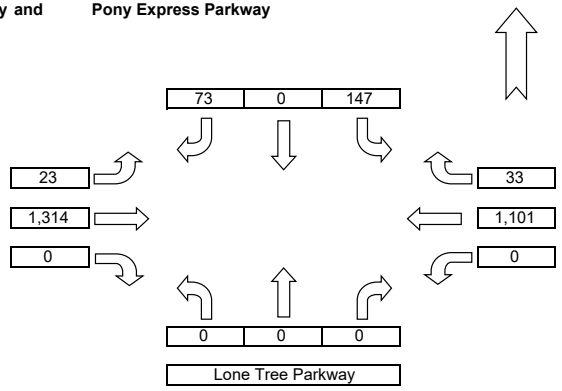
INTERSECTION: **Lone Tree Parkway and Pony Express Parkway**

N-S STREET: **Lone Tree Parkway**
E-W STREET: **Pony Express Parkway**

COUNT DATE: **January 9, 2025**
Day of the Week: **Thursday**
NOTES:

COUNT TIME:
FROM: **7:00 AM**
TO: **9:00 AM**

PK HR VOLUME:	2,691
PHF:	0.92
PEAK HOUR:	
FROM:	TO:
7:10 AM	8:10 AM



AM Traffic

COUNT DATA INPUT: Name: Kim Name: Kim Name: Kim Name: Kim

TIME PERIOD		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL 5'	TOTAL 15'	PEDESTRIAN	
FROM:	TO:	NBL	NBT	NBR	EBL	EBT	EBR	SBL	SBT	SBR	WBL	WBT	WBR	VOLUMES	VOLUMES	E/W	N/S
7:00 AM	7:05 AM	0	0	0	3	99	0	12	0	0	0	75	1	190	559	0	0
7:05 AM	7:10 AM	0	0	0	1	89	0	8	0	4	0	45	2	149	623	0	0
7:10 AM	7:15 AM	0	0	0	2	115	0	14	0	4	0	85	0	220	701	1	0
7:15 AM	7:20 AM	0	0	0	0	124	0	15	0	8	0	107	0	254	728	0	0
7:20 AM	7:25 AM	0	0	0	2	107	0	13	0	7	0	96	2	227	725	0	0
7:25 AM	7:30 AM	0	0	0	1	122	0	7	0	6	0	111	0	247	714	1	0
7:30 AM	7:35 AM	0	0	0	2	113	0	11	0	4	0	119	2	251	671	1	0
7:35 AM	7:40 AM	0	0	0	2	94	0	21	0	11	0	85	3	216	604	0	0
7:40 AM	7:45 AM	0	0	0	0	89	0	13	0	8	0	90	4	204	609	2	0
7:45 AM	7:50 AM	0	0	0	1	94	0	5	0	0	0	81	3	184	609	1	0
7:50 AM	7:55 AM	0	0	0	3	108	0	11	0	8	0	87	4	221	669	0	0
7:55 AM	8:00 AM	0	0	0	2	102	0	12	0	7	0	77	4	204	667	0	0
8:00 AM	8:05 AM	0	0	0	4	121	0	17	0	5	0	91	6	244	659	0	0
8:05 AM	8:10 AM	0	0	0	4	125	0	8	0	5	0	72	5	219	639	0	0
8:10 AM	8:15 AM	0	0	0	0	96	0	13	0	3	0	78	6	196	578	0	0
8:15 AM	8:20 AM	0	0	0	2	122	0	13	0	3	0	79	5	224	557	0	1
8:20 AM	8:25 AM	0	0	0	2	79	0	5	0	4	0	64	4	158	478	0	0
8:25 AM	8:30 AM	0	0	0	2	103	0	9	0	3	0	54	4	175	458	0	0
8:30 AM	8:35 AM	0	0	0	1	77	0	6	0	1	0	54	6	145	431	0	0
8:35 AM	8:40 AM	0	0	0	2	79	0	6	0	1	0	49	1	138	429	0	0
8:40 AM	8:45 AM	0	0	0	2	83	0	7	0	4	0	47	5	148	445	0	0
8:45 AM	8:50 AM	0	0	0	3	74	0	16	0	5	0	42	3	143	460	0	0
8:50 AM	8:55 AM	0	0	0	3	84	0	7	0	5	0	49	6	154	317	0	2
8:55 AM	9:00 AM	0	0	0	6	85	0	11	0	10	0	45	6	163	163	0	0

PM PEAK HOUR VOLUMES

Ped = 8

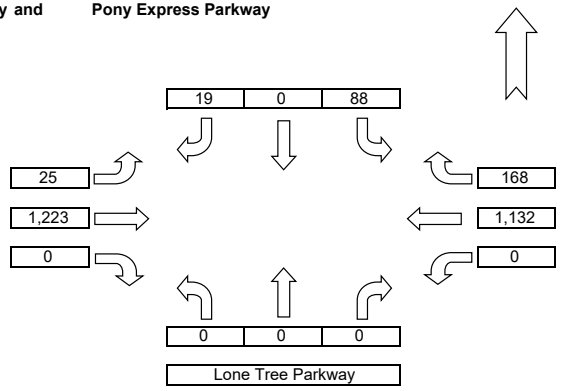
INTERSECTION: **Lone Tree Parkway and Pony Express Parkway**

N-S STREET: **Lone Tree Parkway**
E-W STREET: **Pony Express Parkway**

COUNT DATE: **January 7, 2025**
Day of the Week: **Tuesday**
NOTES:

COUNT TIME:
FROM: **4:10 PM**
TO: **6:00 PM**

PK HR VOLUME:	2,655
PHF:	0.84
PEAK HOUR:	
FROM: 5:00 PM	TO: 6:00 PM



AM Traffic

COUNT DATA INPUT: Name: Julie Name: Julie Name: Julie Name: Julie

TIME PERIOD		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL 5'	TOTAL 15'	PEDESTRIAN	
FROM:	TO:	NBL	NBT	NBR	EBL	EBT	EBR	SBL	SBT	SBR	WBL	WBT	WBR	VOLUMES	VOLUMES	E/W	N/S
4:10 PM	4:15 PM	0	0	0	0	11	0	7	0	1	0	7	2	28	348	0	0
4:15 PM	4:20 PM	0	0	0	2	50	0	7	0	2	0	73	7	141	494	0	0
4:20 PM	4:25 PM	0	0	0	1	81	0	3	0	4	0	79	11	179	520	1	0
4:25 PM	4:30 PM	0	0	0	3	73	0	7	0	1	0	77	13	174	556	2	0
4:30 PM	4:35 PM	0	0	0	3	82	1	7	0	0	0	64	10	167	568	1	1
4:35 PM	4:40 PM	0	0	0	3	97	0	9	0	0	0	94	12	215	628	0	0
4:40 PM	4:45 PM	0	0	0	0	93	0	11	0	1	0	72	9	186	586	0	0
4:45 PM	4:50 PM	0	0	0	2	111	0	5	0	2	0	95	12	227	580	1	1
4:50 PM	4:55 PM	0	0	0	2	79	0	8	0	3	0	70	11	173	548	0	0
4:55 PM	5:00 PM	0	0	0	0	77	0	4	0	3	0	82	14	180	581	1	0
5:00 PM	5:05 PM	0	0	0	1	85	0	9	0	0	0	83	17	195	601	0	0
5:05 PM	5:10 PM	0	0	0	3	113	0	5	0	0	0	77	8	206	611	0	0
5:10 PM	5:15 PM	0	0	0	1	100	0	6	0	0	0	79	14	200	625	0	0
5:15 PM	5:20 PM	0	0	0	3	96	0	7	0	1	0	91	7	205	682	0	0
5:20 PM	5:25 PM	0	0	0	2	83	0	9	0	6	0	110	10	220	708	1	2
5:25 PM	5:30 PM	0	0	0	1	133	0	3	0	1	0	106	13	257	787	2	0
5:30 PM	5:35 PM	0	0	0	2	104	0	8	0	4	0	97	16	231	775	0	0
5:35 PM	5:40 PM	0	0	0	0	145	0	7	0	2	0	126	19	299	775	0	0
5:40 PM	5:45 PM	0	0	0	3	119	0	10	0	0	0	95	18	245	655	1	0
5:45 PM	5:50 PM	0	0	0	2	94	0	5	0	3	0	105	22	231	597	2	0
5:50 PM	5:55 PM	0	0	0	4	82	0	12	0	1	0	71	9	179	366	0	0
5:55 PM	6:00 PM	0	0	0	3	69	0	7	0	1	0	92	15	187	187	0	0
6:00 PM	6:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:05 PM	6:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

			Trip Rate			Trips			In / Out %				Land Use	New			
ITE 11th Edition	Size	Land Use	AM	PM	Daily	AM	PM	Daily	AM IN	AM Out	PM IN	PM OUT		AM IN	AM Out	PM IN	PM OUT
Horizon - Eagle Mountain	110	210	0.70	0.94	9.43	77	103	1037	25%	75%	63%	37%	Horizon - E	19	58	65	38

Historic Growth

1.45%	Growth Factor	Years	Analysis Year
	1.00	0	2025
	1.07	5	2030
	1.43	25	2050

Straight line growth assumed within the study horizon
Source: Traffic on Utah Highways

Road:	Pony Express	
Year	AADT	Growth
2013	1,500	
2014	1,500	0%
2015	1,500	0%
2016	1,600	7%
2017	1,700	6%
2018	1,700	0%
2019	1,700	0%
2020	1,500	-12%
2021	1,700	13%
2022	1,700	0%
2023	1,700	0%
Average		1.4%

1	Pony Express and Lone Tree			1.07	
	2025	Site	2025	2030	2030
AM	Existing	Phase I	Total	Background	Total
EBL	23		23	25	25
EBT	1314	6	1320	1406	1412
EBR			0	0	0
WBL			0	0	0
WBT	1101	17	1118	1178	1195
WBR	33		33	35	35
NBL			0	0	0
NBT			0	0	0
NBR			0	0	0
SBL	147		147	157	157
SBT			0	0	0
SBR	73		73	78	78
East	2595	23		2777	2800
West	2511	23		2687	2710
North	276	0		295	295
South	0	0		0	0

% Increase
1

	2025	Site	2025	2030	2030
PM	Existing	Phase I	Total	Background	Total
EBL	25		25	27	27
EBT	1223	20	1243	1309	1329
EBR			0	0	0
WBL			0	0	0
WBT	1132	11	1143	1211	1222
WBR	168		168	180	180
NBL			0	0	0
NBT			0	0	0
NBR			0	0	0
SBL	88		88	94	94
SBT			0	0	0
SBR	19		19	20	20
East	2611	31		2794	2825
West	2399	31		2567	2598
North	300	0		321	321
South	0	0		0	0

% Increae
1

2	Pony Express and Walnut Drive			1.07	
	2025	Site	2025	2030	2030
AM	Existing	Phase I	Total	Background	Total
EBL		6	6	0	6
EBT	1461		1461	1563	1563
EBR			0	0	0
WBL			0	0	0
WBT	1134		1134	1213	1213
WBR		13	13	0	13
NBL			0	0	0
NBT			0	0	0
NBR			0	0	0
SBL		41	41	0	41
SBT			0	0	0
SBR		17	17	0	17
East	2595	54		2777	2831
West	2595	23		2777	2800
North	0	77		0	77
South	0	0		0	0

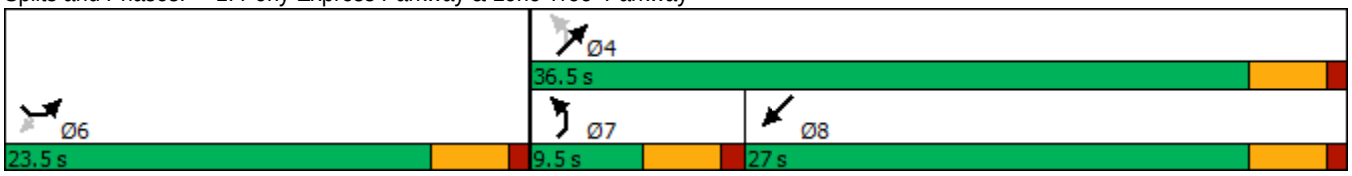
	2025	Site	2025	2030	2030
PM	Existing	Phase I	Total	Background	Total
EBL		20	20	0	20
EBT	1311		1311	1403	1403
EBR			0	0	0
WBL			0	0	0
WBT	1300		1300	1391	1391
WBR		45	45	0	45
NBL			0	0	0
NBT			0	0	0
NBR			0	0	0
SBL		27	27	0	27
SBT			0	0	0
SBR		11	11	0	11
East	2611	72		2794	2866
West	2611	31		2794	2825
North	0	103		0	103
South	0	0		0	0

Appendix B Without Site Intersection Analyses

Lane Group	SEL	SER	NEL	NET	SWT
Lane Configurations					
Traffic Volume (vph)	147	73	23	1314	1101
Future Volume (vph)	147	73	23	1314	1101
Turn Type	Prot	Perm	pm+pt	NA	NA
Protected Phases	6		7	4	8
Permitted Phases		6	4		
Detector Phase	6	6	7	4	8
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5
Total Split (s)	23.5	23.5	9.5	36.5	27.0
Total Split (%)	39.2%	39.2%	15.8%	60.8%	45.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	Max	Max	None	None	None
Act Effct Green (s)	19.1	19.1	29.9	29.9	26.2
Actuated g/C Ratio	0.33	0.33	0.52	0.52	0.45
v/c Ratio	0.28	0.14	0.10	0.78	0.77
Control Delay	16.9	5.0	7.5	15.0	19.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	16.9	5.0	7.5	15.0	19.8
LOS	B	A	A	B	B
Approach Delay	12.9			14.9	19.8
Approach LOS	B			B	B

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 58	
Natural Cycle: 60	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay: 16.8	Intersection LOS: B
Intersection Capacity Utilization 52.0%	ICU Level of Service A
Analysis Period (min) 15	

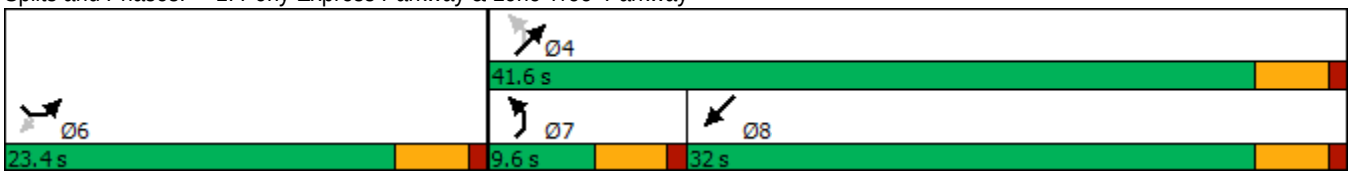
Splits and Phases: 1: Pony Express Parkway & Lone Tree Parkway



Lane Group	SEL	SER	NEL	NET	SWT
Lane Configurations					
Traffic Volume (vph)	88	19	25	1223	1132
Future Volume (vph)	88	19	25	1223	1132
Turn Type	Prot	Perm	pm+pt	NA	NA
Protected Phases	6		7	4	8
Permitted Phases		6	4		
Detector Phase	6	6	7	4	8
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5
Total Split (s)	23.4	23.4	9.6	41.6	32.0
Total Split (%)	36.0%	36.0%	14.8%	64.0%	49.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	Max	Max	None	None	None
Act Effct Green (s)	19.0	19.0	32.2	32.2	28.7
Actuated g/C Ratio	0.32	0.32	0.53	0.53	0.48
v/c Ratio	0.17	0.04	0.11	0.70	0.85
Control Delay	17.5	8.3	7.2	12.7	21.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	17.5	8.3	7.2	12.7	21.8
LOS	B	A	A	B	C
Approach Delay	15.8			12.6	21.8
Approach LOS	B			B	C

Intersection Summary	
Cycle Length: 65	
Actuated Cycle Length: 60.3	
Natural Cycle: 65	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 17.2	Intersection LOS: B
Intersection Capacity Utilization 49.0%	ICU Level of Service A
Analysis Period (min) 15	

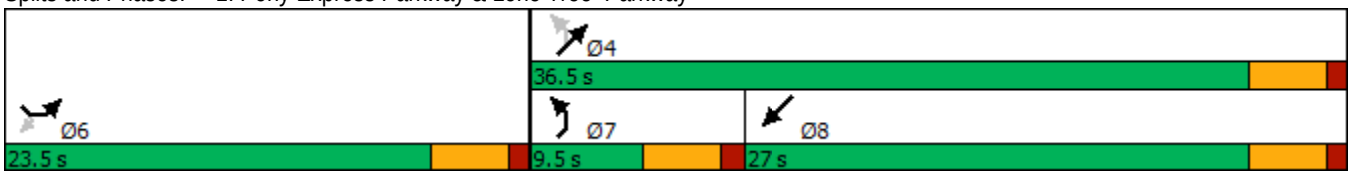
Splits and Phases: 1: Pony Express Parkway & Lone Tree Parkway



Lane Group	SEL	SER	NEL	NET	SWT
Lane Configurations					
Traffic Volume (vph)	157	78	25	1406	1178
Future Volume (vph)	157	78	25	1406	1178
Turn Type	Prot	Perm	pm+pt	NA	NA
Protected Phases	6		7	4	8
Permitted Phases		6	4		
Detector Phase	6	6	7	4	8
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5
Total Split (s)	23.5	23.5	9.5	36.5	27.0
Total Split (%)	39.2%	39.2%	15.8%	60.8%	45.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	Max	Max	None	None	None
Act Effct Green (s)	19.0	19.0	30.8	30.8	27.0
Actuated g/C Ratio	0.32	0.32	0.52	0.52	0.46
v/c Ratio	0.30	0.15	0.11	0.83	0.81
Control Delay	17.2	4.9	7.6	16.6	21.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	17.2	4.9	7.6	16.6	21.8
LOS	B	A	A	B	C
Approach Delay	13.2			16.4	21.8
Approach LOS	B			B	C

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 58.8	
Natural Cycle: 60	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 18.4	Intersection LOS: B
Intersection Capacity Utilization 55.1%	ICU Level of Service B
Analysis Period (min) 15	

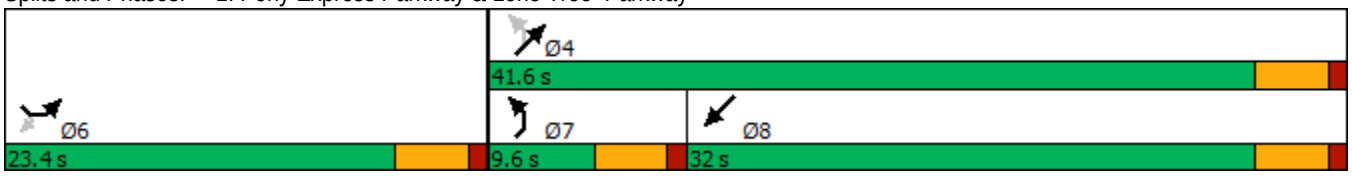
Splits and Phases: 1: Pony Express Parkway & Lone Tree Parkway



Lane Group	SEL	SER	NEL	NET	SWT
Lane Configurations					
Traffic Volume (vph)	94	20	27	1309	1211
Future Volume (vph)	94	20	27	1309	1211
Turn Type	Prot	Perm	pm+pt	NA	NA
Protected Phases	6		7	4	8
Permitted Phases		6	4		
Detector Phase	6	6	7	4	8
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5
Total Split (s)	23.4	23.4	9.6	41.6	32.0
Total Split (%)	36.0%	36.0%	14.8%	64.0%	49.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	Max	Max	None	None	None
Act Effct Green (s)	19.0	19.0	33.5	33.5	29.9
Actuated g/C Ratio	0.31	0.31	0.54	0.54	0.49
v/c Ratio	0.19	0.04	0.12	0.74	0.89
Control Delay	18.1	8.2	7.2	13.4	24.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	18.1	8.2	7.2	13.4	24.7
LOS	B	A	A	B	C
Approach Delay	16.3			13.2	24.7
Approach LOS	B			B	C

Intersection Summary	
Cycle Length: 65	
Actuated Cycle Length: 61.5	
Natural Cycle: 70	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 18.9	Intersection LOS: B
Intersection Capacity Utilization 51.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1: Pony Express Parkway & Lone Tree Parkway

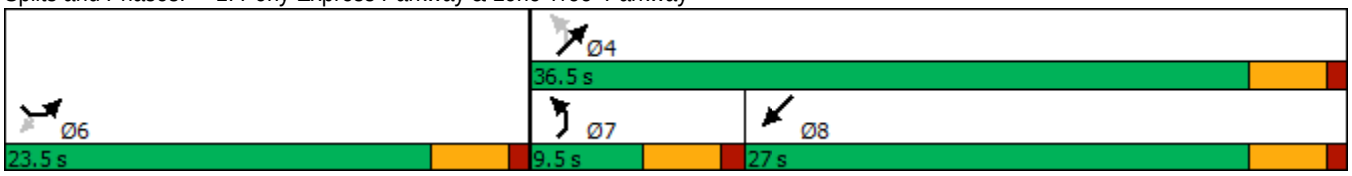


Appendix C With Site Intersection Analyses

Lane Group	SEL	SER	NEL	NET	SWT
Lane Configurations					
Traffic Volume (vph)	147	73	23	1320	1118
Future Volume (vph)	147	73	23	1320	1118
Turn Type	Prot	Perm	pm+pt	NA	NA
Protected Phases	6		7	4	8
Permitted Phases		6	4		
Detector Phase	6	6	7	4	8
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5
Total Split (s)	23.5	23.5	9.5	36.5	27.0
Total Split (%)	39.2%	39.2%	15.8%	60.8%	45.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	Max	Max	None	None	None
Act Effct Green (s)	19.1	19.1	30.0	30.0	26.3
Actuated g/C Ratio	0.33	0.33	0.52	0.52	0.45
v/c Ratio	0.28	0.14	0.10	0.79	0.78
Control Delay	16.9	5.0	7.5	15.1	20.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	16.9	5.0	7.5	15.1	20.3
LOS	B	A	A	B	C
Approach Delay	13.0			15.0	20.3
Approach LOS	B			B	C

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 58.1	
Natural Cycle: 60	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay: 17.1	Intersection LOS: B
Intersection Capacity Utilization 52.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1: Pony Express Parkway & Lone Tree Parkway



Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	1451	1134	13	41	17
Future Vol, veh/h	8	1451	1134	13	41	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	100	0	100
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	1577	1233	14	45	18

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1247	0	-	0	2040	617
Stage 1	-	-	-	-	1233	-
Stage 2	-	-	-	-	807	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	554	-	-	-	49	433
Stage 1	-	-	-	-	238	-
Stage 2	-	-	-	-	399	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	554	-	-	-	48	433
Mov Cap-2 Maneuver	-	-	-	-	48	-
Stage 1	-	-	-	-	234	-
Stage 2	-	-	-	-	399	-

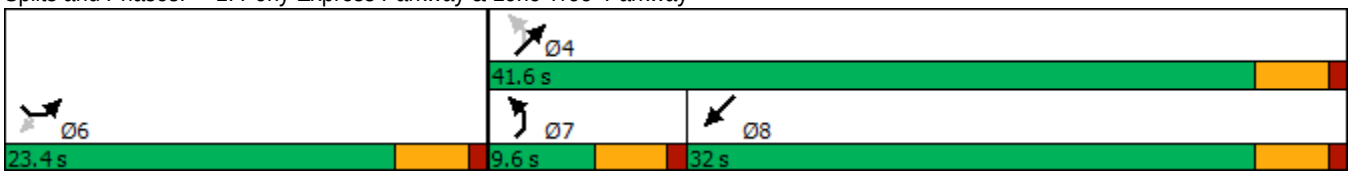
Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	174.8
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	554	-	-	-	48	433
HCM Lane V/C Ratio	0.016	-	-	-	0.928	0.043
HCM Control Delay (s)	11.6	-	-	-	241.6	13.7
HCM Lane LOS	B	-	-	-	F	B
HCM 95th %tile Q(veh)	0	-	-	-	3.9	0.1

Lane Group	SEL	SER	NEL	NET	SWT
Lane Configurations					
Traffic Volume (vph)	88	19	25	1243	1143
Future Volume (vph)	88	19	25	1243	1143
Turn Type	Prot	Perm	pm+pt	NA	NA
Protected Phases	6		7	4	8
Permitted Phases		6	4		
Detector Phase	6	6	7	4	8
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5
Total Split (s)	23.4	23.4	9.6	41.6	32.0
Total Split (%)	36.0%	36.0%	14.8%	64.0%	49.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	Max	Max	None	None	None
Act Effct Green (s)	19.0	19.0	32.5	32.5	28.9
Actuated g/C Ratio	0.31	0.31	0.54	0.54	0.48
v/c Ratio	0.17	0.04	0.11	0.71	0.85
Control Delay	17.6	8.3	7.1	12.9	22.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	17.6	8.3	7.1	12.9	22.0
LOS	B	A	A	B	C
Approach Delay	15.9			12.7	22.0
Approach LOS	B			B	C

Intersection Summary	
Cycle Length: 65	
Actuated Cycle Length: 60.5	
Natural Cycle: 65	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 17.4	Intersection LOS: B
Intersection Capacity Utilization 49.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1: Pony Express Parkway & Lone Tree Parkway



Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	20	1311	1300	45	27	11
Future Vol, veh/h	20	1311	1300	45	27	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	100	0	100
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	1425	1413	49	29	12

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1462	0	-	0	2170	707
Stage 1	-	-	-	-	1413	-
Stage 2	-	-	-	-	757	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	458	-	-	-	40	378
Stage 1	-	-	-	-	191	-
Stage 2	-	-	-	-	424	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	458	-	-	-	38	378
Mov Cap-2 Maneuver	-	-	-	-	38	-
Stage 1	-	-	-	-	182	-
Stage 2	-	-	-	-	424	-

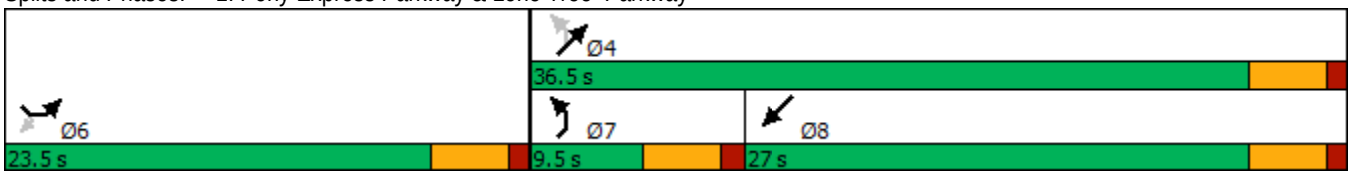
Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	172.8
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	458	-	-	-	38	378
HCM Lane V/C Ratio	0.047	-	-	-	0.772	0.032
HCM Control Delay (s)	13.3	-	-	-	237.1	14.8
HCM Lane LOS	B	-	-	-	F	B
HCM 95th %tile Q(veh)	0.1	-	-	-	2.8	0.1

Lane Group	SEL	SER	NEL	NET	SWT
Lane Configurations					
Traffic Volume (vph)	157	78	25	1412	1195
Future Volume (vph)	157	78	25	1412	1195
Turn Type	Prot	Perm	pm+pt	NA	NA
Protected Phases	6		7	4	8
Permitted Phases		6	4		
Detector Phase	6	6	7	4	8
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5
Total Split (s)	23.5	23.5	9.5	36.5	27.0
Total Split (%)	39.2%	39.2%	15.8%	60.8%	45.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	Max	Max	None	None	None
Act Effct Green (s)	19.0	19.0	30.8	30.8	27.1
Actuated g/C Ratio	0.32	0.32	0.52	0.52	0.46
v/c Ratio	0.30	0.15	0.11	0.83	0.82
Control Delay	17.2	5.0	7.6	16.7	22.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	17.2	5.0	7.6	16.7	22.4
LOS	B	A	A	B	C
Approach Delay	13.2			16.6	22.4
Approach LOS	B			B	C

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 58.9	
Natural Cycle: 65	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 18.7	Intersection LOS: B
Intersection Capacity Utilization 55.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 1: Pony Express Parkway & Lone Tree Parkway



Intersection	
Int Delay, s/veh	5.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	1563	1213	13	41	17
Future Vol, veh/h	6	1563	1213	13	41	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	100	0	100
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	1699	1318	14	45	18

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1332	0	-	0	2182	659
Stage 1	-	-	-	-	1318	-
Stage 2	-	-	-	-	864	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	514	-	-	-	~ 39	406
Stage 1	-	-	-	-	214	-
Stage 2	-	-	-	-	373	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	514	-	-	-	~ 38	406
Mov Cap-2 Maneuver	-	-	-	-	~ 38	-
Stage 1	-	-	-	-	211	-
Stage 2	-	-	-	-	373	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	262.6
HCM LOS			F

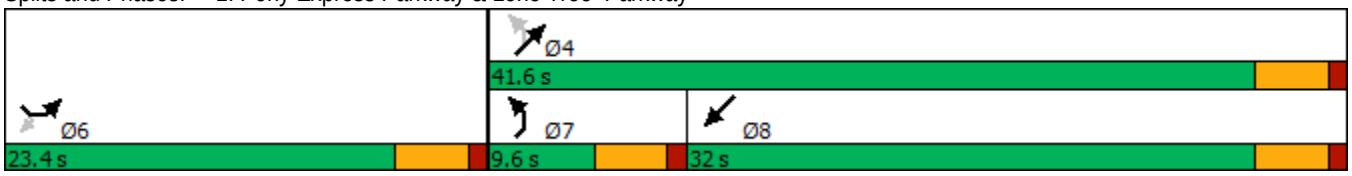
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	514	-	-	-	38	406
HCM Lane V/C Ratio	0.013	-	-	-	1.173	0.046
HCM Control Delay (s)	12.1	-	-	-	$ 365.6	14.3
HCM Lane LOS	B	-	-	-	F	B
HCM 95th %tile Q(veh)	0	-	-	-	4.5	0.1

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	SEL	SER	NEL	NET	SWT
Lane Configurations					
Traffic Volume (vph)	94	20	27	1329	1222
Future Volume (vph)	94	20	27	1329	1222
Turn Type	Prot	Perm	pm+pt	NA	NA
Protected Phases	6		7	4	8
Permitted Phases		6	4		
Detector Phase	6	6	7	4	8
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5
Total Split (s)	23.4	23.4	9.6	41.6	32.0
Total Split (%)	36.0%	36.0%	14.8%	64.0%	49.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	Max	Max	None	None	None
Act Effct Green (s)	19.0	19.0	33.9	33.9	30.2
Actuated g/C Ratio	0.31	0.31	0.55	0.55	0.49
v/c Ratio	0.19	0.04	0.12	0.75	0.89
Control Delay	18.2	8.2	7.2	13.5	24.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	18.2	8.2	7.2	13.5	24.9
LOS	B	A	A	B	C
Approach Delay	16.4			13.4	24.9
Approach LOS	B			B	C

Intersection Summary	
Cycle Length: 65	
Actuated Cycle Length: 61.9	
Natural Cycle: 70	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 19.1	Intersection LOS: B
Intersection Capacity Utilization 52.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1: Pony Express Parkway & Lone Tree Parkway



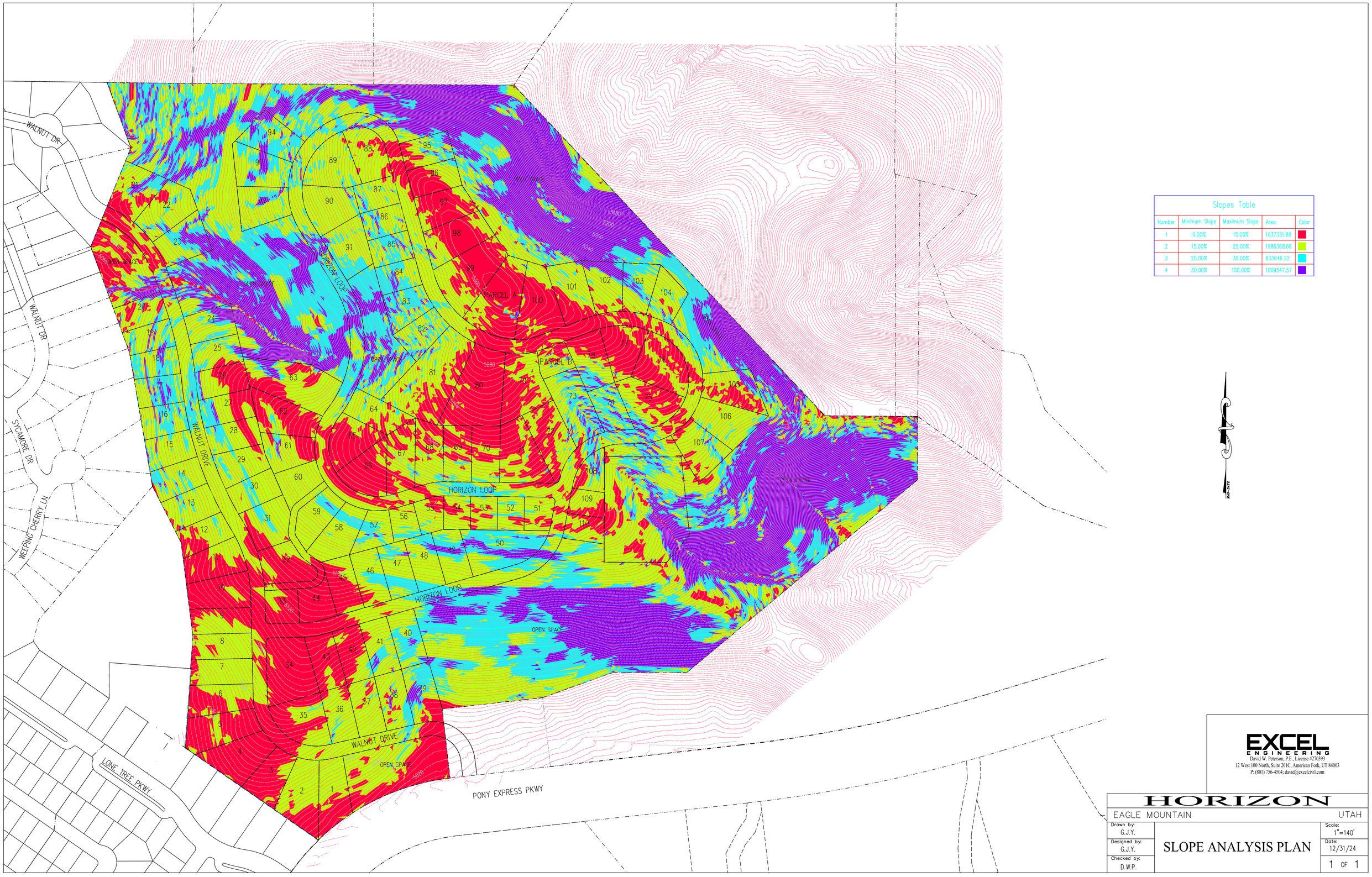
Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	20	1403	1391	45	27	11
Future Vol, veh/h	20	1403	1391	45	27	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	100	0	100
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	1525	1512	49	29	12

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1561	0	-	0	2319	756
Stage 1	-	-	-	-	1512	-
Stage 2	-	-	-	-	807	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	419	-	-	-	32	351
Stage 1	-	-	-	-	169	-
Stage 2	-	-	-	-	399	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	419	-	-	-	30	351
Mov Cap-2 Maneuver	-	-	-	-	30	-
Stage 1	-	-	-	-	160	-
Stage 2	-	-	-	-	399	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	253.2
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	419	-	-	-	30	351
HCM Lane V/C Ratio	0.052	-	-	-	0.978	0.034
HCM Control Delay (s)	14.1	-	-	-	$ 350	15.6
HCM Lane LOS	B	-	-	-	F	C
HCM 95th %tile Q(veh)	0.2	-	-	-	3.3	0.1



Slopes Table				
Number	Minimum Slope	Maximum Slope	Area	Color
1	0.00%	15.00%	1037331.88	
2	15.00%	25.00%	1986368.66	
3	25.00%	30.00%	833646.22	
4	30.00%	100.00%	1009547.57	

EXCEL ENGINEERING
David W. Peterson, P.E., License #270393
12 West 100 North, Suite 201C, American Fork, UT 84003
P: (801) 756-4504; david@excelcivil.com

HORIZON

EAGLE MOUNTAIN UTAH

Drawn by: G.J.Y.	SLOPE ANALYSIS PLAN	Scale: 1"=140'
Designed by: G.J.Y.		Date: 12/31/24
Checked by: D.W.P.		1 OF 1

Inventory of Water Rights

Water Right Number: 54-1225 (Originally Hardy inventory)

Entity: Belle Street Investments, LLC

Document Date	Entry Number	Document	Grantor	Grantee or Subdivision	Acre-feet Transferred	Balance
7/28/2020		Banked Water Transfer Request	(see transfer form)	Belle Street Investments, LLC	106.72	106.72
3/23/2023		Banked Water Allocation Form	Belle Street Investments	Eagle Mountain City	16.24	90.48
						90.48

Developer has 90.48 acre feet banked with Eagle Mountain City. Should this development require more water than what is banked with the City, the developer is currently contracting to purchase additional water rights, a portion of which can be allocated for use in this project.

EAGLE MOUNTAIN CITY

2025 WASTEWATER IFFP REPORT

Prepared by:

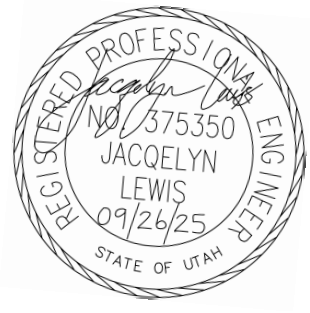
JWO ENGINEERING

1307 N Locust Lane

Provo, UT 84604

Contact: Jacqelyn Lewis, P.E.

309-271-9981



September 2025

JWO ENGINEERING
A Professional Limited Liability Company

1307 N Locust Lane
Provo, Utah 84604
801-828-7805

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JWO ENGINEERING
A Professional Limited Liability Company

1307 N Locust Lane
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EXECUTIVE SUMMARY

JWO Engineering, PLLC was contracted to complete a wastewater Impact Fee Facilities Plan (IFFP) Eagle Mountain City (EMC). This report uses information from the 2025 Wastewater Master Plan and will evaluate costs for necessary infrastructure for wastewater conveyance and treatment within the next five – ten years for EMC as well as a budget for these projects. As EMC is experiencing high growth rates, JWO Engineering, PLLC recommends that this IFFP focus on 5 years as the rapid growth rate in the city may bring additional needs to light in the next 5 years. This IFFP is based on projected growth as explained in the 2025 Wastewater Master Plan.

An IFFP fills the requirements established by Utah code Title 11 Chapter 36a, the "Impact Fees Act," and will assist EMC in determining impact fees to fund necessary capital improvements for future anticipated growth.

The following table is a summary of projects, and their estimated costs that are listed in the 2025 Wastewater Master Plan to be completed within the next 5 years for EMC. Please refer to the 2025 Wastewater Master Plan for a complete list of recommended projects and their estimated costs. Estimated costs in this table are concept level estimates based on 2025 costs. In the Budgeting section of this report, the costs were adjusted using an assumed inflation rate for each year. Actual costs will be determined by the project details and economic conditions at the time of the work being carried out. Please see the Exhibits within this report depicting the proposed pipeline projects.

Table 1 – Recommended Collection Improvements Within Next 5 Years

Collection Improvement Project	2025 Estimate (Millions)	
East Trunkline	$	24.24
West Trunkline	$	12.14
Pole Canyon Trunkline	$	15.92
Steeplechase LS Upgrade	$	0.40
Total for next 5 years	$	52.70

Table 2 - Recommended Treatment Improvements Within Next 5 Years

Treatment Improvement Project	2025 Estimate (Millions)	
WWTP 6 MGD Expansion	$	120.00
Treated Water Disposal	$	15.00
Total for next 5 years	$	135.00

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Table 3 - Recommended EMC Wastewater Improvements Within Next 5 Years

EMC Wastewater Project	2025 Estimate (Millions)
Administration Building	$ 6.00
Annual GIS updates (5yr)	$ 0.01
Total for next 5 years	$ 6.01

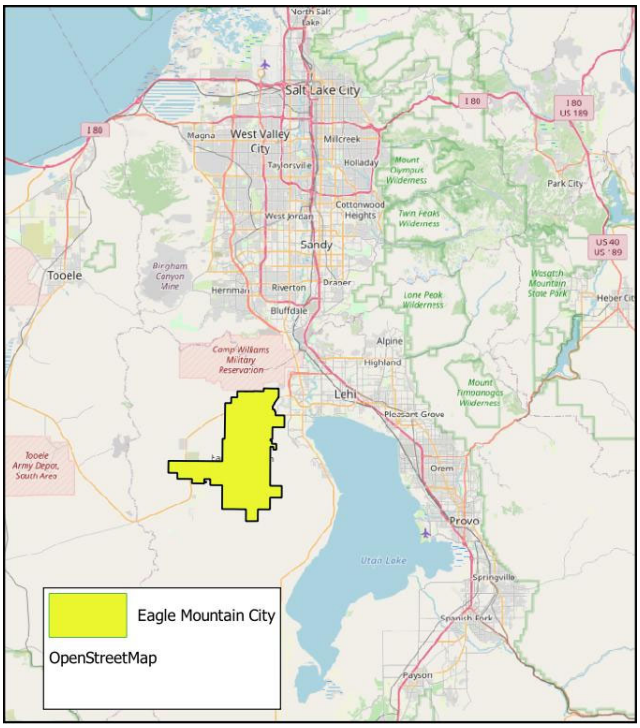

Figure 1 - Vicinity Map

BACKGROUND

Please see the 2025 Wastewater Master Plan for more detailed information. Eagle Mountain City (EMC) located in Utah County near Utah Lake as shown in the vicinity map above and is one of the fastest growing cities in the US. The average household size in the state of Utah is 3.09. EMC has an average household size of 4.37 people, one of the highest in the nation.

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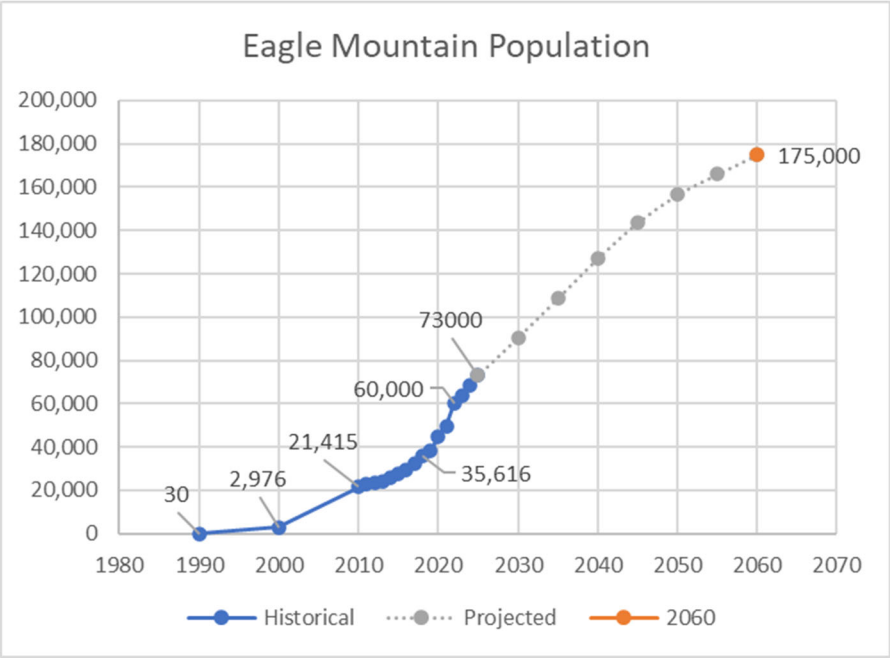

Figure 2 - Eagle Mountain City Population Chart

The figure above depicts the anticipated growth of EMC with a population of 175,000 by 2060. The buildout population is expected to be 240,000.

EMC's wastewater system contains three separate service areas designated as the North Service Area (NSA) the South Service Area (SSA) and the West Service Area (WSA). These service areas are approximate and may vary with continued development and improvements. The NSA conveys flows to the East and are treated by Timpanogos Special Services District. Flows from the SSA and WSA flow South and East respectively to the existing WWTP to be treated by EMC. The flows treated by EMC are treated and disposed of by means of Rapid Infiltration Basins (RIBs). These service areas were recently adjusted with the 2025 Wastewater Master Plan and are shown in the figure below.

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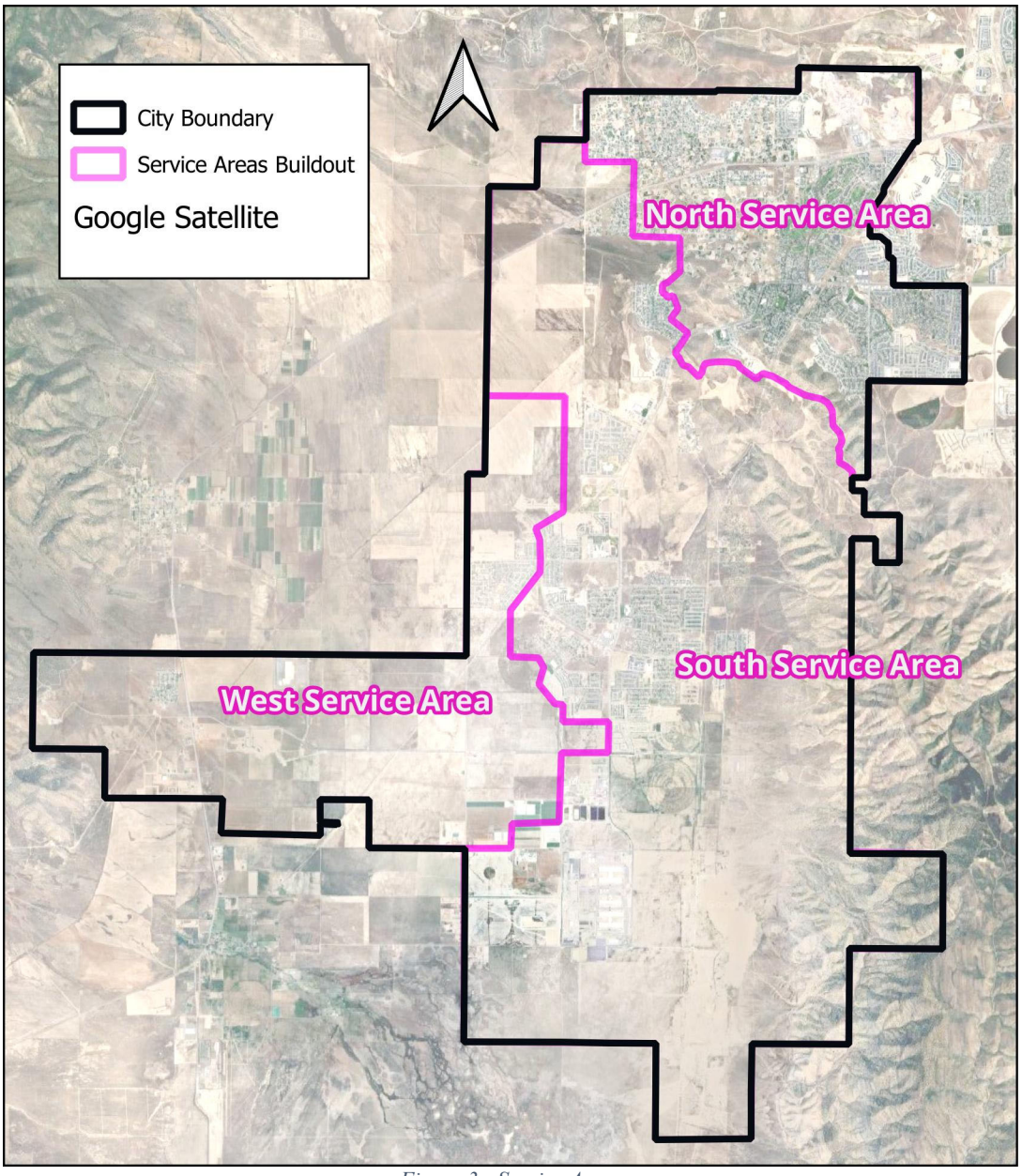

Figure 3 - Service Areas

EXISTING REPORTS

Current available reports addressing EMC's wastewater situation include the 2025 Wastewater Master Plan, EM WWTP Flows and Loads Report, 2024 EMC WSA WW IFFP, EMC Impact Fee Facilities Plan Report from 2012 (IFFP 2012), 2018 (IFFP 2018), and 2022 (IFFP 2022). Eagle Mountain General Plan (2018) was also used for future land use and density populations. Some data from these existing reports was used in our assessment of the existing and proposed EMC wastewater water facility conditions.

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EQUIVALENT RESIDENT CONNECTIONS (ERC'S)

An Equivalent Residential Connection (ERC) alternatively referred to as an Equivalent Residential Unit (ERU) represents the design flowrate from one residential connection. The 2025 Wastewater Master Plan established an ERC value of 220 gallons per day.

Current ERU's were obtained from EMC and are shown in the table below.

Table 4 - Existing ERU Count

	Current # ERU's
NSA	8,027
SSA	6,744
WSA	134

Industrial and commercial users will vary significantly with the number of ERU's they would need. New Industrial and commercial users should be evaluated individually to determine the number of ERU's needed and the capacity of the system to accommodate their need.

IMPACT FEE FACILITIES PLAN

Impact fees look up to 5 years ahead for what infrastructure will be needed based on anticipated growth. With impending continual growth, all improvement projects should begin as soon as possible to alleviate capacity concerns for the existing wastewater system. Improvements were organized into potential improvements projects. Exact project items included in each project may vary as deemed appropriate or necessity warrants. The table below shows the projects needed for anticipated growth as well as the estimated needed capacity within the next 5 years. Actual needed capacities may vary and require additional projects to be completed earlier than shown. An anticipated construction year is also listed for each project. Projected costs are shown for each year assuming 4% inflation for each year after 2025. These construction costs include materials, mobilization, traffic control, engineering and contingency. These construction costs do not include right-of-way acquisition and if needed for a project would be an additional cost to the project.

Table 5 - Total Improvement Costs

Improvement Project	2025 Estimate (Millions)	Estimated Construction Year	Cost with Inflation (Millions)	Anticipated %Capacity Needed in Next 5 years
East Trunkline	$ 24.24	2025	$ 24.24	15%
West Trunkline	$ 12.14	2026	$ 12.63	50%
Pole Canyon Trunkline	$ 15.92	2026	$ 16.55	30%
Steeplechase LS Upgrade	$ 0.40	2026	$ 0.42	
WWTP 6 MGD Expansion	$ 120.00	2026	$ 124.80	

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There is not a % Capacity needed for the wastewater treatment plant. This is due to a difference of flows vs solids. Generally speaking the capacity of a WWTP is determined by the amount of flows coming in. However, there is also a capacity for loading, or solids. The existing WWTP is nearly at capacity for solids despite it being a 2.4 MGD capacity and having an average of 1.9 MGD of flows. This is discussed in greater detail in EM WWTP Flows and Loads Report. There is an immediate and urgent need to increase the capacity of the WWTP. The capacity needed can be evaluated by ERU's being served. With the increased capacity of 6 MGD serving ERU's of 220 gpd, each ERU would need 0.036% of the WWTP.

Pole Canyon Trunkline will be constructed as part of the Firefly Development. EMC will need to construct the East and West Trunklines. The Steeplechase LS upgrade cost would include transitioning to an overwatch system, interconnect existing 3" and 4" force mains with a valve vault and achieve a capacity of around 200 gpm. If additional capacity is needed, a new force main will need to be constructed. The costs included in this report do not account for a new force main. It is not yet determined what the exact needs are for this upgrade, however, it is known that the existing LS is at capacity and that any additional flows will require an upgrade. As this upgrade is specific to the industrial/commercial user, these costs would not be attributed to residential user impact fees.

There are not any EMC WW construction needs for the NSA. This is because the NSA is nearly built out and the trunklines have been constructed. This does not mean that there would be no impact fee for the NSA. The NSA WW flows are conveyed to Timpanogos Special Service District (TSSD). The NSA impact fee should meet the TSSD impact fee requirement. At the time of this report, the TSSD general sewer impact fee is nearly $6,000 and expected to increase. Actual impact fee would be determined by the type of user or connection. The existing agreement between EMC and TSSD does not allow for additional land areas to be added to the NSA and treated by TSSD.

The figure below shows the 2025 Wastewater Master Plan proposed trunklines with the recommended diameter.

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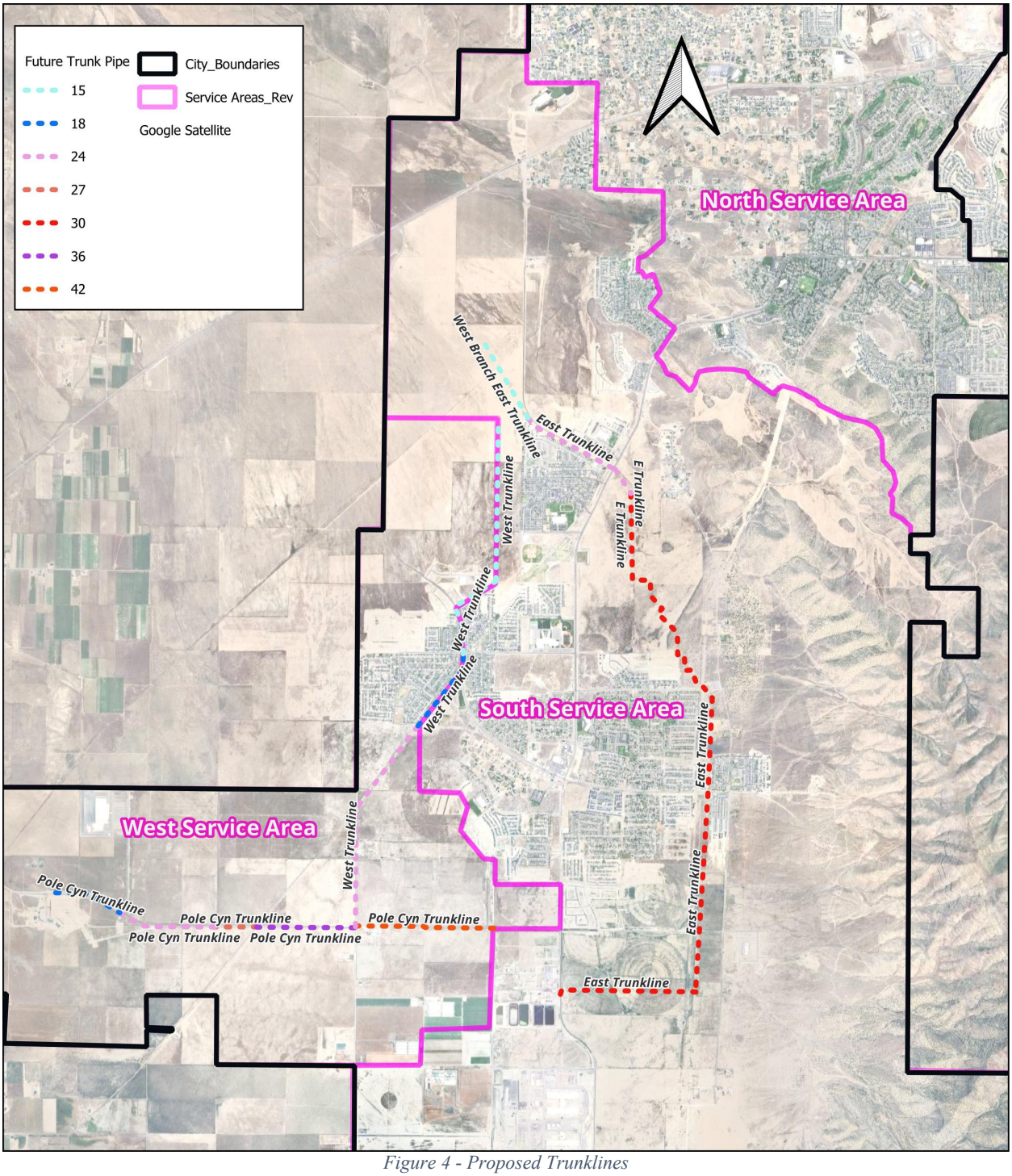

Figure 4 - Proposed Trunklines

To help understand what areas are included with each trunkline, the following exhibit shows each area as well as estimated ERU's for sub-areas for build-out conditions. Areas that have approved plans show the number of ERU's based on those plans. Areas without approved plans

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were estimated by the area and a value of 3.4 ERU/Acre as established in the 2025 Wastewater Master Plan. Industrial and Commercial users will be evaluated on an individual basis as those demands will vary significantly depending on the type of industry.

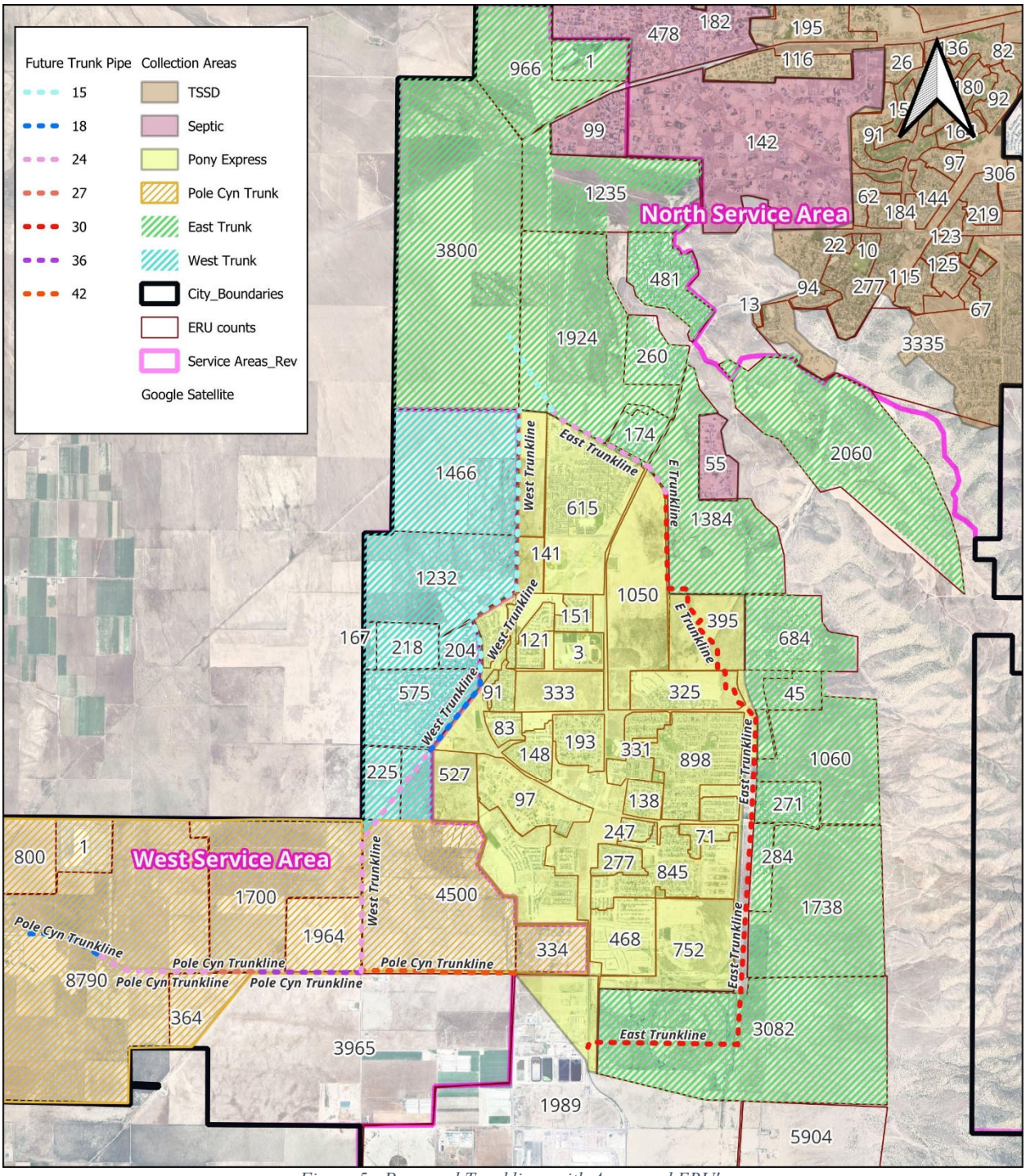

Figure 5 - Proposed Trunklines with Areas and ERU's

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The table below shows the estimated ERU's at build-out for each trunkline that conveys flows to EMC WWTP. "Other" ERU's are not able to be conveyed by the existing or proposed trunklines. These areas will require their own trunkline and or lift stations to be conveyed to the existing WWTP. It is assumed that existing septic homes will remain on septic systems. Pole Canyon Trunkline will also convey West Trunkline flows.

For additional details on projected flows to the EMC WWTP, please see the Technical Memorandum Report titled, "EM WWTP Flows and Loads" by AE2S.

Table 6 - ERU's per Trunkline for Build-out

SA	Trunkline	Total Aniticipated ERU's at Build-out
SSA	Pony Exp Trunk	9,000
SSA	East Trunk	19,500
SSA	Other	7,900
SSA	Septic	55
WSA	Pole Cyn Trunk*	18,600
WSA	West Trunk	4,100
WSA	Other	4,000
WSA	Septic	48
Total		**63,000**

To better facilitate the needs of wastewater conveyance and treatment within EMC a new administration building is needed. The estimated cost for this new building, which would be located at the wastewater treatment plant facility, is estimated to be $12,000,000. As this building would house water as well as wastewater personnel, only 50% of the construction costs would be attributed to wastewater costs. Construction is anticipated to begin in 2026.

BONDS AND REIMBURSEMENTS

EMC has notified JWO Engineering, PLLC with existing bond and agreement information. They are listed below and should be accounted for in impact fee analysis.

Table 7 - EMC Agreement Information

Number	Agreement Name	Description	Balance Remaining
2020-67	Monte Vista Ranch L.C.	42" sewer trunkline	$ 1,944,791.48

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Table 8 - EMC Bond Information

Bond Name and Description	Details	Outstanding principal as of 6/30/2025
Water and Sewer Revenue Bonds 2008	wastewater treatment plant	$ 1,369,000.00
Water and Sewer Refunding Bonds 2014	57% wastewater portion	$ 4,939,050.00
Water and Sewer Refunding Bonds 2108-A	57% wastewater portion	$ 162,450.00

BUDGETING

In order to have funds available for the projects anticipated within the next 5 years, a budget needs to be established. The table below shows the estimated cost each year with inflated costs. While actual construction years and projects may vary, using these costs will help Eagle Mountain City plan for continued growth at an accelerated rate.

Table 9- Annual Budgets

Construction Year	Budget (Millions)
2025	$ 24.24
2026	$ 154.39
2027	$ -
2028	$ -
2029	$ -
2030	$ -
Average Annual Budget	$ 29.77

RECOMMENDATIONS

It is recommended that EMC update their GIS files to accurately depict the current completed infrastructure of EMC. The GIS files should be kept up to date as new wastewater infrastructure is added to EMC. Efforts should also be made to update the existing GIS files to reflect actual elevations and pipe diameters as new pipes and infrastructure are added to the system. A budget of $2,000/year is included in the EMC Wastewater fees.

Improvement projects to be completed within the next 5 years are shown in the tables below.

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Table 10 - Next Five Years Collection Project Estimates

Collection Improvement Project	2025 Estimate (Millions)
East Trunkline	$ 24.24
West Trunkline	$ 12.14
Pole Canyon Trunkline	$ 15.92
Steeplechase LS Upgrade	$ 0.40
Total for next 5 years	$ 52.70

Table 11 - Next Five Years Treatment Project Estimates

Treatment Improvement Project	2025 Estimate (Millions)
WWTP 6 MGD Expansion	$ 120.00
Treated Water Disposal	$ 15.00
Total for next 5 years	$ 135.00

Table 12 - Next Five Years EMC Wastewater Project Estimates

EMC Wastewater Project	2025 Estimate (Millions)
Administration Building	$ 6.00
Annual GIS updates (5yr)	$ 0.01
Total for next 5 years	$ 6.01

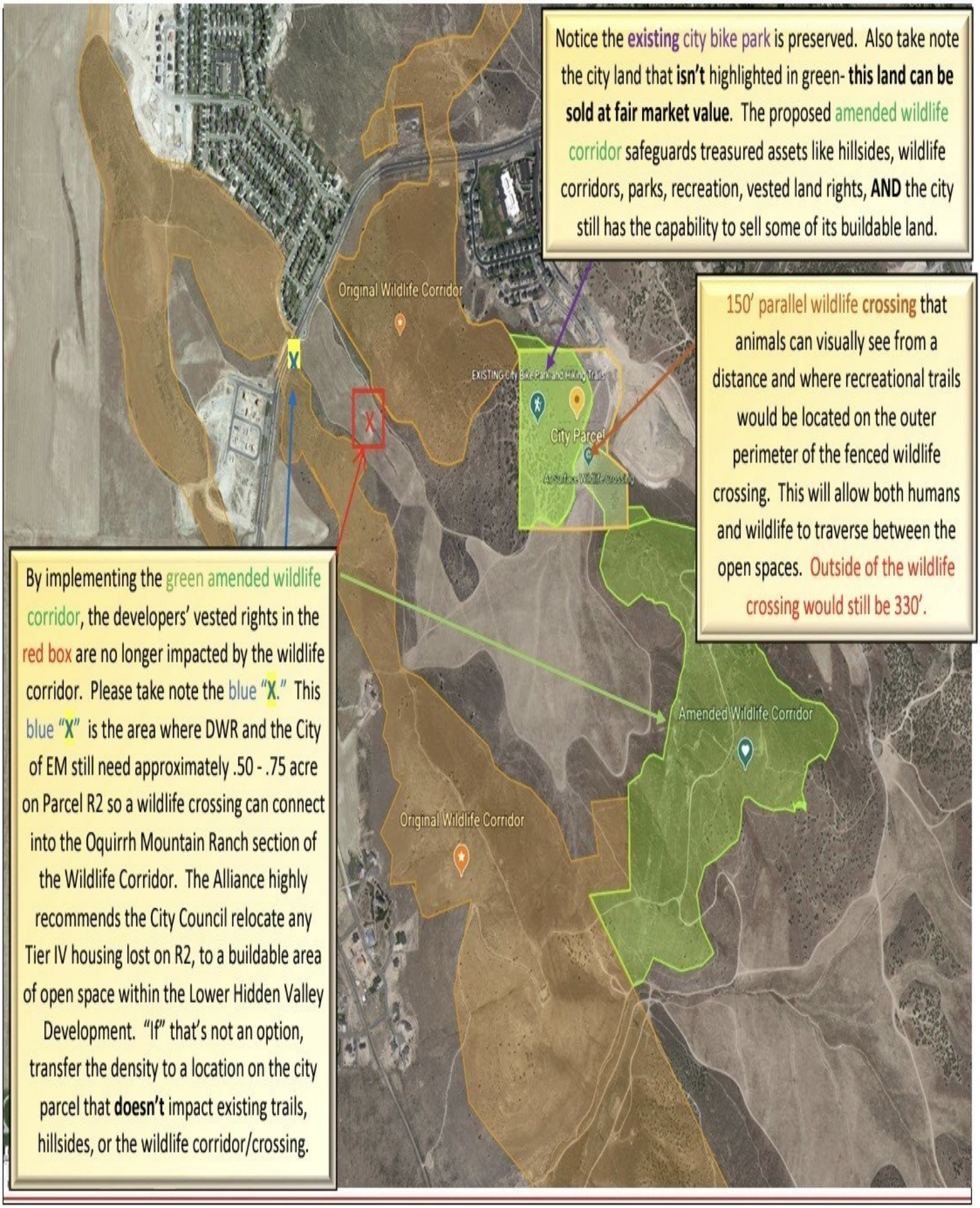
The estimated average annual budget is just under $30 million for the collection improvement projects. The construction and costs will be necessary in the next year so the average is not representative of how the funding will be needed. JWO Engineering, PLLC recommends that Eagle Mountain City break the treatment plant and treated water disposal costs out due to the size of those items. 6MGD with an ERU of 220 gal/day should provide for an additional 27,000 ERU's. An impact fee cost would be in the $20 per gallon range or $4400 per ERU. The treatment portion of the fee would account for the treatment costs and treated water disposal and the impact fee for the other wastewater improvements should be evaluated based on the number of units anticipated to be completed in each service area vs the costs for the infrastructure. Annual GIS updates and the administration building costs would be applied to each household connected to EMC wastewater system. The annual budget for all costs other than the treatment plant would be $12 million.

It is recommended that within 5 years Eagle Mountain City re-evaluate the wastewater improvement needs as well as anticipated construction years and costs.

Wildlife Corridor

N

PROPOSED AMENDED WILDLIFE CORRIDOR



Notice the **existing** city bike park is preserved. Also take note the city land that **isn't** highlighted in green- **this land can be sold at fair market value**. The proposed amended wildlife corridor safeguards treasured assets like hillsides, wildlife corridors, parks, recreation, vested land rights, **AND** the city still has the capability to sell some of its buildable land.

150' parallel wildlife **crossing** that animals can visually see from a distance and where recreational trails would be located on the outer perimeter of the fenced wildlife crossing. This will allow both humans and wildlife to traverse between the open spaces. Outside of the wildlife crossing would still be 330'.

By implementing the green amended wildlife corridor, the developers' vested rights in the red box are no longer impacted by the wildlife corridor. Please take note the blue "X." This blue "X" is the area where DWR and the City of EM still need approximately .50 - .75 acre on Parcel R2 so a wildlife crossing can connect into the Oquirrh Mountain Ranch section of the Wildlife Corridor. The Alliance highly recommends the City Council relocate any Tier IV housing lost on R2, to a buildable area of open space within the Lower Hidden Valley Development. "If" that's not an option, transfer the density to a location on the city parcel that **doesn't** impact existing trails, hillsides, or the wildlife corridor/crossing.

	EAGLE MOUNTAIN CITY **PLANNING COMMISSION MEETING** **DECEMBER 9, 2025**
TITLE:	Hidden Hollow Pool Amenity
ITEM TYPE:	Site Plan
FISCAL IMPACT:	N/A
APPLICANT:	Cadence Homes; Hunter Smith representing

CURRENT GENERAL PLAN DESIGNATION & ZONE	ACREAGE
Foothill Residential/Parks and Open Space	3.1

PUBLIC HEARING
Yes

PREPARED BY
Robert Hobbs, Senior Planner

PRESENTED BY
Robert Hobbs

RECOMMENDATION:
Staff is [again] neutral respecting this request, finding arguments for and against its merit.

BACKGROUND:
(Justification - see Applicant's attached narrative and survey)...

This matter is a second request/attempt by Cadence Homes to receive approval to trade-out a required swimming pool for the Hidden Hollow development. Proposed is the substitution of a gym and additional lawn games for a swimming pool. The property under consideration is Parcel D in Hidden Hollow Phase C Plat 5 (County parcel/serial # 68:202:0536) at the southeast corner of the intersection of N. Smooth Way and N. Carlton Way in Eagle Mountain, UT 84005.

Although a recent code amendment permits administrative (Staff-level) review of site plans, the specific criteria outlined in that amendment—along with the code referenced in the 'Items for Consideration' section of this report—necessitated processing the Applicant's request as a standard site plan amendment. As such, review by both the Planning Commission and City Council is required, since site plans in our City must be reviewed sequentially by these two bodies. That said, Staff considers the proposed amenity swap to be minor in nature and scope, especially when compared to other types of possible site plan revisions.

ITEMS FOR CONSIDERATION:
Code Matter(s):

"17.25.050 Generally applicable provisions.All development projects within any residential zone shall conform to the following general requirements:

L. Clubhouse and Swimming Pool. All multifamily developments in the MF1 and MF2 zones shall include a swimming pool in addition to the clubhouse. The approval authority of a preliminary plat or site plan may consider and approve alternatives to these improvements if the improvements are considered comparable or equivalent in cost and in benefit to the future residents. For this

determination they should consider the size of units, the type of units, the proximity to other recreational amenities, and any unique attributes of the property.

1. Clubhouse or Community Center. A clubhouse facility that is centrally located in the development is intended to provide a recreational and social amenity to residents. Clubhouses or community centers shall be a minimum of 1,500 square feet (not including leasing office area) and accommodate at least seven and one-half square feet of clubhouse area per residential unit being served by the clubhouse. Developments may provide multiple clubhouses to fulfill this requirement. The clubhouse does not count towards fulfilling the amenity requirements found in Chapter 16.35 EMMC.

a. Clubhouse Improvements and Completion. Clubhouses shall include food serving facilities, large gathering areas suited to community meetings and events, restroom facilities, and amenities that may include exercise equipment, multimedia equipment, facilities to accommodate the arts, indoor recreation (basketball, volleyball, etc.), or upgraded food preparation or service facilities. The clubhouse shall be adjacent to the pool....
…
2. Swimming Pool. An in-ground swimming pool that is centrally located in the development is intended to provide a recreational and social amenity to residents. The pool shall be a minimum of 1,000 square feet in size and must accommodate at least four square feet of pool space per residential unit being served by the pool [Staff - based on plat C, this would equate to 128 sq. ft. of pool area]...."

Comments:
After being denied approval of the pool swap on October 7th of this year, the Applicants asked Staff to reschedule the matter again before the Planning Commission and City Council. They have indicated they have new information that they believe will convince the City to approve their request. Attached is all of the information we had by the time this report was ready for publication (see new survey screenshot exhibit/attachment).

As stated in October, assessment of the Applicant's proposal relegates the City to subjectively assessing, generally, whether the cost and demand for the proposed 600 sq. ft. gym, covered outdoor patio and cornhole courts [in the grass by the clubhouse, under the patio cover, in the clubhouse add-on?] would offset the cost and appeal of a pool. The pool, expectedly, would cost more to construct and maintain (e.g., pool deck, board, ladder, furniture, insurance, fencing, keyed gate, etc.) than a 600 sq. ft., inset gym. Further, the pool would only have seasonal availability — but may be more universally accessible or desirable than a gym (which has a more limited target user group but its own initial fixed expenses — especially equipment). A gym would likely be a lesser long-term maintenance expense. The Applicant indicates they surveyed their residents to ascertain the desirability of a pool vs. other amenities they desire.

The space to be devoted to the proposed substitute amenities would roughly be the same as, or less than, that required for the pool per code. The Applicant notes in their narrative that they already have [separate] plans for "a large playground and pickleball court" on Parcel D. It should be noted that the requirement to have some of the gym features in the clubhouse are redundant with what the Applicant proposes.

Other than a couple of minor plan correction items cited by Public Works Staff, outside departments had no comments respecting the proposed pool conversion. Site plan standards stemming from EMMC 17.100 are not germane to this matter, the clubhouse being separately reviewed through plan review.

PLANNING COMMISSION ACTION/RECOMMENDATION:
N/A

ATTACHMENTS:

1. NoD - Hidden Hollow C minor site plan amendment.Oct 2025 (1)
2. Justification Narrative
3. Hidden Hollow Clubhouse Survey
4. CADENCE CLUBHOUSE 09.02.25

NOTICE OF DECISION
SITE PLAN AMENDMENT
HIDDEN HOLLOW PHASE C

Project Summary:
A request by Cadence Homes to amend an approved site plan pertaining to the Hidden Hollow clubhouse amenity, substituting a gym and additional lawn games for a/the required swimming pool. (Opengov report # PLGA-25-56)

Applicant/Representative:
Cadence Homes; Hunter Smith representing

Decision Summary:
The Eagle Mountain City Council, during their regularly scheduled public meeting of October 07, 2025, voted to deny the above referenced request. Consequently, in providing amenities for Phase C of Hidden Hollow, compliance with EMMC 17.25.050.L is, and shall be, required of the developer.

EAGLE MOUNTAIN CITY/DRC

Robert Hobbs
Robert Hobbs – Senior Planner
(signed electronically)

Date: October 08, 2025

cc: Leesa Holland, Building
Steven Lehmitz, Planning
Gina Olsen, City Recorder

To the City of Eagle Mountain,

Thank you for taking the time to review our request to make adjustments to the amenity at the Hidden Hollow Community. As you know, the city requires all multifamily developments to include a clubhouse and a swimming pool per code 17.25.050. Included in this code is the ability to approve alternatives that are "considered comparable or equivalent in cost and benefit" to the residents and future residents of the community. We would like to request an alternative to a swimming pool and instead construct a gym, additional outdoor uses, and a covered patio as part of the clubhouse.

A few reasons we suggest an alternative to a swimming pool include:

- The community experiences a lot of wind and the landscape surrounding the community is dry and dusty, which combined with the wind will result in increased maintenance costs for the HOA
- Seasonality of pool operations would allow it to be accessible for only a few months of the year (typically Memorial Day to Labor Day)
- Community feedback suggests other uses instead of pool
- Want to maintain HOA fees

As we thought about alternatives to a swimming pool, we wanted to find something that would allow residents the ability to use the amenity throughout the entire year. We decided a survey of the current residents in the community would give us a good idea of what will be used. The survey showed most respondents requesting a larger playground, with other respondents asking for a larger clubhouse and gathering space, additional pickleball courts, and a basketball court. Our currently approved amenity does include a large playground and pickleball court which will be constructed with the amenity and open space known as "Parcel D" on Plat 5. A follow-up question asked for additional ideas and a gym was the most frequent suggestion with other suggestions including a splash pad and outdoor games area. The survey results showed the most interest in more gathering space and a gym.

This led us to our current proposal of a 600 sf gym, a covered patio and grill attached to the clubhouse, and cornhole courts. The gym will include machines, free weights, and a yoga/stretching area. The covered patio will include tables, a grill, and storage accessible by residents. We feel that including each of these provides amenities to the residents that can be used year round and accommodate all residents and future residents.

One of the stipulations for the city code is the alternative must be "considered comparable or equivalent in cost and benefit." With this in mind, we asked a pool contractor to give us a quote on the pool which came back between $150,000 and $175,000. We also asked for

bids on the gym, covered patio and grill, and cornhole courts. The total of these estimates came back between $145,000 and $167,000.

For the above reasons, we request the city consider and approve our proposed alternative amenities to the Hidden Hollow community. By approving this proposal we will provide the residents with amenities to their community that can be used year round and accommodate any resident who lives in the community now or in the future.

HH Clubhouse Survey

We are excited to share that construction will soon begin on our new clubhouse, located in the center of the community. Earlier this year, we asked for your ideas on what you would like to see included. After reviewing all the feedback, we have narrowed it down to two final options and would love your input before a final decision is made.

Please note that while your feedback is very important, the final decision will ultimately depend on both ownership and the requirements set by the City of Eagle Mountain.

Option 1: Swimming Pool
Open seasonally from June 1 to August 31 each year.
Would include an increase to the monthly Common Area Maintenance (CAM) fee to cover maintenance and insurance costs.

Option 2: Fitness Center
A 600 square foot gym attached to the clubhouse.
No anticipated increase to the monthly CAM fee.

In addition to either option, the clubhouse area will also feature a new playground and pickleball court in the grassy area behind the building once construction is complete.

We are genuinely excited about these improvements coming to our community and appreciate your participation in helping shape what is next for Hidden Hollow.

Clubhouse Options

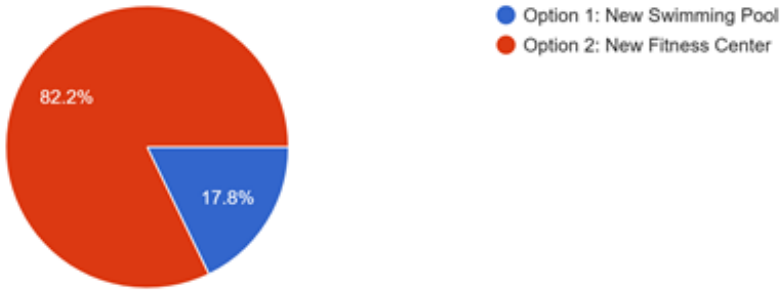
Multiple choice

- Option 1: New Swimming Pool
- Option 2: New Fitness Center
- Add option or add "Other"

Required

Clubhouse Options

73 responses



GENERAL SITE NOTES

A. ALL FINISH GRADING TO SLOPE AWAY FROM PROPOSED STRUCTURES AT MIN 5% SLOPE FOR AT LEAST 10'-0" ON ALL SIDES OF STRUCTURES.
B. DRAINAGE PATTERN OF FINISHED GRADING SHALL NOT DRAIN ONTO ANY ADJACENT PROPERTIES.
C. CONTRACTOR TO PRESERVE AS MUCH OF THE NATURAL VEGETATION ON SITE AS POSSIBLE & CONFORM TO ALL NATURAL VEGETATION
D. DUST, MUD, & EROSION SHALL BE CONTROLLED BY WHATEVER MEANS NECESSARY, AND THE ROADWAY SHALL BE KEPT FREE OF MATERIALS AND DEBRIS AT ALL TIMES.
E. PROVIDE GAS LINE AS SHOWN. COORDINATE FINAL SIZES.

A
G002
SITE PLAN
SCALE: 1" = 20'-0"

CADENCE
HOMES

2801 N. THANKSGIVING WAY
STE.#100
LEHI, UTAH 84043

BUS: 801.768.0503
FAX: 801.410.1565
EMAIL:
RYAN@CADENCEHOMES.COM

CADENCE HOMES - CLUBHOUSE
EAGLE MOUNTAIN UTAH

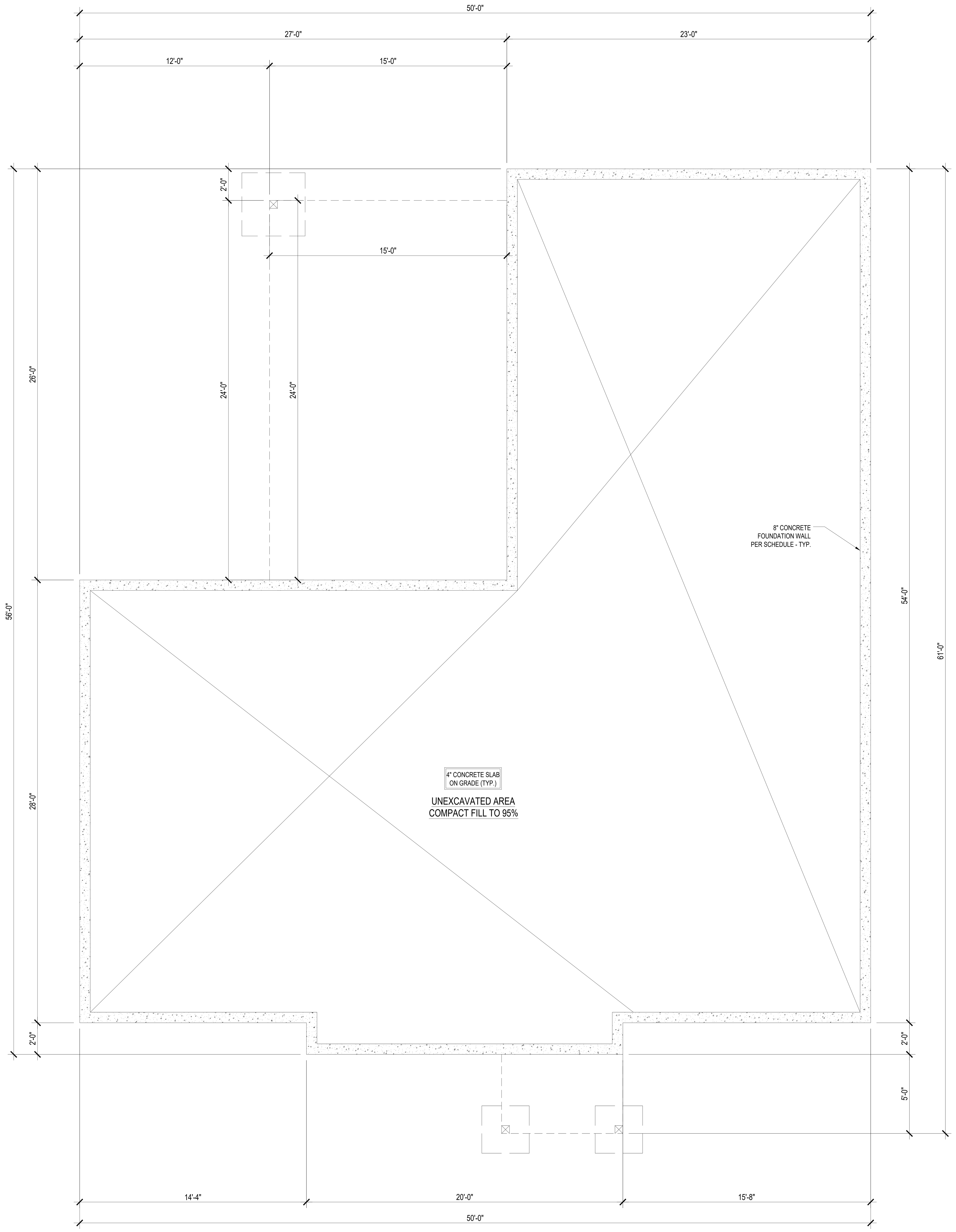
N CARLTON LN
HIDDEN HOLLOW

PLOT SCALE: 1"=20'-0"
DATE: 09.02.25
JOB: TOWN-HOA
0536
RM

ISSUES/REVISIONS:	DATE:

SITE PLAN

G002



A
A100

FOUNDATION FLOOR PLAN

SCALE: 1/4" = 1'-0"

STRUCTURAL NOTES

A. PLANS ARE NOT COMPLETE WITHOUT STRUCTURAL CALCULATIONS.
B. REFER TO SHEET SD.0 FOR GENERAL STRUCTURAL NOTES.
C. ROOF SHEATHING TO BE APA RATED 7/16" OSB OR CDX PLYWOOD WITH 8d NAILS @ 6" O.C. EDGE, 12" O.C. FIELD.
D. FLOOR SHEATHING TO BE APA RATED 3/4" T&G W/ 10d NAILS OR SIMPSON WSNTL2LS#8 WOOD SCREWS @ 6" O.C. EDGES, 12" O.C. FIELD.
E. EXTERIOR STUD WALLS TO BE 2X6 @ 16" O.C. U.N.O. GARAGE WALLS MAY BE 2X4 @ 16" O.C. UP TO 10'-0" TALL U.N.O.
F. USE (14) 16d NAILS BETWEEN TOP PLATE SPLICE POINTS, 4'-0" LAP SPLICE (MIN)
G. INSTALL ALL SIMPSON HARDWARE PER MANUFACTURES SPECS.
H. HOLD DOWNS SHALL BE INSTALLED ON (2) FULL HEIGHT KING STUDS (MIN)
I. FLOOR JOISTS TO BE 14" FLOOR TRUSSES BY OTHERS.
J. ROOF RAFTERS TO BE 2X8 DF-L#2 @ 24" O.C. U.N.O.
K. PROVIDE 2X SQUASH BLOCKING AT FLOOR FRAMING TO MATCH DIMENSIONS OF POST ABOVE.
L. ALL DETAILS SHALL APPLY AT ALL SIMILAR SITUATIONS.
M. IF SUSPENDED PORCH SLAB EXCEEDS 6" THICKNESS, PROVIDE #4 BARS @ 18" O.C. 1½" FROM TOP OF SLAB IN ADDITION TO BOTTOM STEEL AS NOTED ON PLANS.
N. ALL LUMBER NOT PERMANENTLY PROTECTED FROM THE ELEMENTS SHALL BE PRESERVATIVE TREATED OR OF A DECAY RESISTANT SPECIES. CONTACT LEI ENGINEERING AND SURVEYORS, INC. IF A DIFFERENT SPECIES IS TO BE USED.

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
	DUPLEX OUTLET (GROUNDED)
WP	WEATHER PROTECTED GFCI DUPLEX OUTLET
	WALL MOUNTED FIXTURE
GFCI	GROUND FAULT CIRCUIT INTERUPTER
AFCI	ARC FAULT CIRCUIT INTERUPTER
	220 v OUTLET
	FAN
SM CO2	SMOKE DETECTOR WIRED IN SERIES W/ CO_2 DETECTOR
$ $3 $4	SWITCH, 3 WAY SWITCH, 4 WAY SWITCH
	PENDANT LIGHT FIXTURE
	RECESSED LIGHT
	CEILING FIXTURE
PC	PULL CHORD INCADESCENT
	CEILING FAN

- OWNER IS TO DETERMINE ALL LOCATION OF OUTLETS AND SWITCHES
- FINISH MATERIAL PER OWNER
- ALL ELECTRICAL ON THIS SHEET IS SCHEMATIC FOR PERMIT PURPOSES ACTUAL LOCATIONS AND AMOUNT IS PER OWNER
- ALL ELECTRICAL WORK IS DESIGN BUILD AND IS TO MEET ALL CURRENT CODE REQUIREMENTS

FLOOR PLAN GENERAL NOTES:

1. SEE GENERAL NOTES ON SHEET G002 FOR ADDITIONAL REQUIREMENTS.
2. EXTERIOR DIMENSIONS ARE FROM EXTERIOR FACES OF FOUNDATION WALLS AND FROM ROUGH FRAMING. DIMENSIONS PRECLUDE SHEATHING, STONE AND BRICK.
3. ALL INTERIOR DIMENSIONS ARE TO FACE OF STUD WALL.
4. INTERIOR STUD WALL TO BE 3 1/2" (2X4 FRAMING @ 16. O.C.) , UNLESS OTHERWISE NOTED.
5. EXTERIOR STUD WALL & PLUMBING WALLS TO BE 5 1/2 "(2X6 FRAMING @ 16 O.C.) , UNLESS OTHERWISE NOTED.
6. GENERAL CONTRACTOR TO VERIFY ALL CONDITIONS BEFORE CONSTRUCTION.
7. SEE STRUCTURAL DRAWINGS AND CALCULATIONS FOR ALL STRUCTURAL REQUIREMENTS. INCLUDING FOUNDATION WALL SPECIFICATIONS, SHEARWALL AND HOLDOWN REQUIREMENTS.

FLOOR PLAN KEY NOTES: (X)

1. FLOOR DRAIN, COORDINATE WITH PLUMBING CONTRACTOR.
2. SEISMIC STRAPS FOR WATER HEATER AS REQUIRED. STRAPS SIZED AS PER IRC P2801.2.
3. MILLWORK COUNTER/CABINETS, COORDINATE STYLE AND FINISH WITH OWNER.
4. INSTALL ROD AND SHELF OR CLOSET ORGANIZER SYSTEM. OWNER TO SELECT CONFIGURATION.
5. RAILING TO CONFORM WITH CURRENT IRC REQUIREMENTS. COORDINATE FINISHES. OPEN GUARDS SHALL HAVE BALUSTERS OR ORNAMENTS PATTERN SUCH THAT A 4" DIAMETER SPHERE CANNOT PASS THROUGH ANY OPENING. IRC 312.2.
6. WALL LINE ABOVE/BELOW.
7. PROVIDE 5/8" TYPE X GYPSUM BOARD FOR 1 HOUR FIRE RATING TAPED AT SEPARATION WALLS AND CEILING BETWEEN HOUSE AND GARAGE AS REQUIRED BY IRC.
8. 22X30 ATTIC ACCESS.
9. PROVIDE MECHANICAL & ELECTRICAL ACCESS PANEL TO JETTED TUB AS REQUIRED BY MANUFACTURER.
10. STRUCTURAL COLUMN, SEE STRUCTURAL.
11. WALK-IN SHOWER. GLASS TO BE TEMPERED PER IRC.
12. PROVIDE HOOD ABOVE STOVE. COORDINATE WITH MECHANICAL & OWNER FOR STYLE & REQUIREMENTS.
13. PRE-MANUFACTURED WINDOW WELL. SEE 9/A501 FOR DETAILS.
14. PROVIDE DRAINAGE PAN FOR WASHER.
15. PROVIDE VENTILATION FOR DRYER PER IRC.
16. COORDINATE CONCRETE STAIRS WITH FINAL GRADING AND LANDSCAPING.
17. CONCRETE STOOP.
18. MECHANICAL EQUIPMENT TO RUN IN SHAFT TO ROOF.
19. OPTIONAL FEATURES. VERIFY WITH OWNER.
20. PROVIDE 5/8 " TYPE X GYPSUM BOARD ANYWHERE STAIRS ARE ACCESSED FROM BELOW.
21. DOOR TO BE 20 MIN. FIRE RATED OR BETTER. R309.2
22. SLOPE GARAGE FLOOR TO FRONT OF GARAGE @ 2% SLOPE MIN. OR TO F.D. COORDINATE WITH CONTRACTOR.
23. WHITEWATER WHIRLPOOL JETTED TUB.
24. COORDINATE WOOD PORCH & STEPS WITH FINAL GRADING AND LANDSCAPING.
25. FRAME WALL FOR FUTURE REMOVAL.
26. PAINTED HALF WALL WITH WOOD CAP. VERIFY WITH CONTRACTOR.
27. FIREPLACE. (GAS, ELECTRIC, WOOD) VERIFY DESIGN WITH CONTRACTOR.
28. 12" FURR DOWN @ CEILING FOR MECHANICAL. COORDINATE FINAL DESIGN WITH MECHANICAL CONTRACTOR.

FOOTINGS AND FOUNDATIONS, EXCAVATIONS, GRADING AND FILL SHALL COMPLY WITH THE PROVISIONS OF THE GEOTECHNICAL REPORT.

FOUNDATION WALL SCHEDULE

MAX HEIGHT	REINFORCEMENT
3' FOUNDATION WALL	#4 BARS @ 24" O.C. VERT., (3) #4 BARS HORIZ.
8' FOUNDATION WALL (BRACED @ T.OW.)	#4 BARS @ 24" O.C. VERT., (6) #4 BARS HORIZ.
9' FOUNDATION WALL (BRACED @ T.OW.)	#4 BARS @ 16" O.C. VERT., (7) #4 BARS HORIZ.

NOTES:
1. USE ½" DIAMETER x 7" EMBEDMENT ANCHOR BOLTS @ 32" O.C. W/ 3"x3"x¼" (0.229") PLATE WASHERS AT ALL EXTERIOR AND SHEAR WALLS U.N.O. (EDGE OF PLATE WASHER TO BE LOCATED WITHIN ½" OF SHEATHED EDGE OF SILL PLATE).
2. f'c=3,000 PSI, fy=60,000 PSI. NO SPECIAL INSPECTION REQUIRED.
3. PLACE (1) #4 BAR BELOW AND ON EACH SIDE OF EACH OPENING AND (2) #4 BARS ABOVE EACH OPENING. BARS SHALL BE PLACED WITHIN 2" OF THE OPENINGS AND EXTEND 24" BEYOND THE EDGE OF THE OPENING, VERTICAL BARS MAY TERMINATE 3" FROM THE TOP OF THE CONCRETE. OPENING REINFORCEMENT IS IN ADDITION TO STANDARD WALL REINFORCEMENT.
4. TOP AND BOTTOM BARS SHALL BE WITHIN 4" OF THE TOP AND BOTTOM OF THE WALL.
5. PLACE REINFORCEMENT IN THE CENTER OF THE WALL U.N.O.

FOOTING SCHEDULE (FT#)

DESIG.	LENGTH	WIDTH	DEPTH	LENGTHWISE REINFORCEMENT				CROSSWISE REINFORCEMENT				CAPACITY	NOTE
				QTY.	SIZE	LENGTH	SPACING	QTY.	SIZE	LENGTH	SPACING		
FT1	CONT.	20"	10"	2	#4	CONT.	EQ.	-	-	-	-	2500 PLF	
FT2	CONT.	18"	10"	2	#4	CONT.	EQ.	-	-	-	-	2250 PLF	SEE DETAIL 19/SD.1
FT3	24"	24"	10"	3	#4	18"	EQ.	3	#4	18"	EQ.	6000 LBS	
FT4	30"	30"	10"	3	#4	24"	EQ.	3	#4	24"	EQ.	9375 LBS	
FT5	36"	36"	10"	4	#4	30"	EQ.	4	#4	30"	EQ.	13500 LBS	
FT6	42"	42"	10"	4	#4	36"	EQ.	4	#4	36"	EQ.	18375 LBS	
FT7	48"	48"	10"	5	#4	42"	EQ.	5	#4	42"	EQ.	24000 LBS	

NOTES:
1. f'c=2,500 PSI, fy=60,000 PSI. NO SPECIAL INSPECTION REQUIRED.
2. FOOTINGS SHALL BEAR ON UNDISTURBED NATIVE SOILS OR STRUCTURAL COMPACTED FILL (95% COMPACTION), SPECIFIED AND TESTED BY A REGISTERED GEOTECHNICAL ENGINEER.
3. ALL FOOTINGS SHALL BEAR BELOW THE FROST LINE OF THE LOCALITY. (30" U.N.O.) PROVIDE 12" DIAMETER SONO-TUBE AT EXTERIOR SPOT FOOTINGS PER DETAIL 20/SD.1
4. PROVIDE J-BARS TO MATCH VERTICAL FOUNDATION WALL REINFORCEMENT WITH 24" MINIMUM LAP SPLICE INTO FOUNDATION WALL.
5. CENTER FOOTING UNDER FOUNDATION WALL U.N.O.

HOLDOWN SCHEDULE

SYMBOL	HOLDOWN/STRAP
	STHD10/10RJ HOLDOWN SEE DETAIL 15/SD.1

CADENCE HOMES

2801 N. THANKSGIVING WAY
STE.#100
LEHI, UTAH 84043
BUS: 801.768.0503
FAX: 801.410.1565
EMAIL:
RYAN@CADENCEHOMES.COM

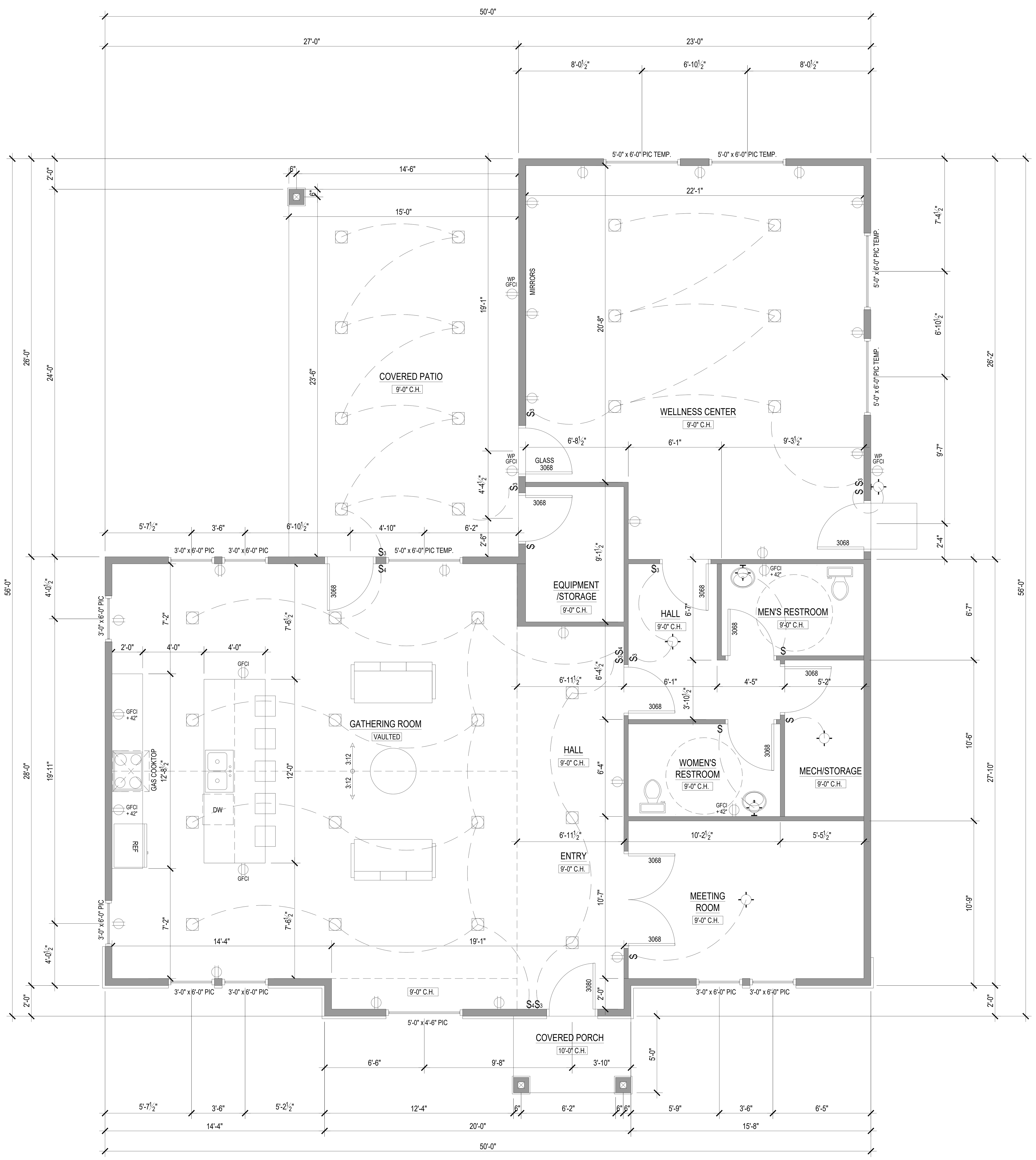
CADENCE HOMES - CLUBHOUSE
EAGLE MOUNTAIN
UTAH
N CARLTON LN
HIDDEN HOLLOW

PLOT SCALE: 1/4"=1'-0"
DATE: 09.02.25
JOB: TOWN-HOA
0536
RM

ISSUES/REVISIONS:	DATE:

FOUNDATION FLOOR PLAN

A100



STRUCTURAL NOTES

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B. REFER TO SHEET SD.0 FOR GENERAL STRUCTURAL NOTES.
C. ROOF SHEATHING TO BE APA RATED 7/16" OSB OR CDX PLYWOOD WITH 8d NAILS @ 6" O.C. EDGE, 12" O.C. FIELD.
D. FLOOR SHEATHING TO BE APA RATED 3/4" T&G W/ 10d NAILS OR SIMPSON WSNTL2LS#8 WOOD SCREWS @ 6" O.C. EDGES, 12" O.C. FIELD.
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F. USE (14) 16d NAILS BETWEEN TOP PLATE SPLICE POINTS, 4'-0" LAP SPLICE (MIN)
G. INSTALL ALL SIMPSON HARDWARE PER MANUFACTURES SPECS.
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HOLDOWN SCHEDULE

SYMBOL	HOLDOWN/STRAP
	STHD10/10RJ HOLDOWN SEE DETAIL 15/SD.1

FLOOR PLAN GENERAL NOTES:

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FLOOR PLAN KEY NOTES: X

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13. PRE-MANUFACTURED WINDOW WELL. SEE 9/A501 FOR DETAILS.
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20. PROVIDE 5/8 " TYPE X GYPSUM BOARD ANYWHERE STAIRS ARE ACCESSED FROM BELOW.
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22. SLOPE GARAGE FLOOR TO FRONT OF GARAGE @ 2% SLOPE MIN. OR TO F.D. COORDINATE WITH CONTRACTOR.
23. WHITEWATER WHIRLPOOL JETTED TUB.
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26. PAINTED HALF WALL WITH WOOD CAP. VERIFY WITH CONTRACTOR.
27. FIREPLACE. (GAS, ELECTRIC, WOOD) VERIFY DESIGN WITH CONTRACTOR.
28. 12" FURR DOWN @ CEILING FOR MECHANICAL. COORDINATE FINAL DESIGN WITH MECHANICAL CONTRACTOR.

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
	DUPLEX OUTLET (GROUNDED)
WP	WEATHER PROTECTED GFCI DUPLEX OUTLET
	WALL MOUNTED FIXTURE
GFCI	GROUND FAULT CIRCUIT INTERUPTER
AFCI	ARC FAULT CIRCUIT INTERUPTER
	220 v OUTLET
	FAN
SM CO2	SMOKE DETECTOR WIRED IN SERIES W/ CO_2 DETECTOR
\$ \$3 \$4	SWITCH, 3 WAY SWITCH, 4 WAY SWITCH
	PENDANT LIGHT FIXTURE
	RECESSED LIGHT
	CEILING FIXTURE
PC	PULL CHORD INCADESCENT
	CEILING FAN

- OWNER IS TO DETERMINE ALL LOCATION OF OUTLETS AND SWITCHES
- FINISH MATERIAL PER OWNER
- ALL ELECTRICAL ON THIS SHEET IS SCHEMATIC FOR PERMIT PURPOSES ACTUAL LOCATIONS AND AMOUNT IS PER OWNER
- ALL ELECTRICAL WORK IS DESIGN BUILD AND IS TO MEET ALL CURRENT CODE REQUIREMENTS

SHEAR WALL SCHEDULE [1,3,4]

DESIG.	MATERIAL	8d NAILS		1½" 16 GAGE STAPLES		CAPACITY		NOTE
		EDGE	FIELD	EDGE	FIELD	WIND	SEISMIC	
1	7/16" OSB OR CDX PLYWOOD	6"	12"	3½"	12"	360	260	2,5
2	7/16" OSB OR CDX PLYWOOD	4"	12"	2" [6]	12"	530	350	2,5
3	7/16" OSB OR CDX PLYWOOD	3"	12"	-	-	685	490	2,5,6
4	7/16" OSB OR CDX PLYWOOD	2"	12"	-	-	895	640	2,5,6
5	½" SHEET ROCK OR BETTER	6"	12"	-	-	90	90	7
6	½" SHEET ROCK	4"	12"	-	-	155	155	7

NOTES:
1. WALL STUDS ARE TO BE SPACED AT 16" O.C. U.N.O.
2. SHEATH ABOVE AND BELOW OPENINGS IN PERFORATED SHEAR WALLS AS PER THE ADJACENT SHEAR WALL DESIGNATION ON EACH SIDE OF THE OPENING.
3. USE (2) KING STUDS AT EACH END OF SHEAR PANELS (SHEAR WALL CHORDS) U.N.O.
4. ALL PANEL EDGES SHALL BE BLOCKED WITH 2x OR WIDER FRAMING WITH EDGE NAILING AT ALL SUPPORTS AND PANEL EDGES U.N.O.
5. WHERE PANELS ARE APPLIED ON BOTH FACES OF A WALL AND NAIL SPACING IS LESS THAN 6" O.C. ON EITHER SIDE, PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS.
6. FRAMING AT ADJOINING PANEL EDGES AND SILL PLATES SHALL BE 3x OR WIDER FOR EDGE NAILING 3" O.C. OR LESS. NAILS AT ADJOINING PANEL EDGES AND INTO SILL PLATES SHALL BE STAGGERED. (DOUBLE 2x FRAMING STITCH-NAILED WITH STAGGERED 16d NAILS WITH SPACING EQUAL TO THE SHEAR WALL EDGE NAILING IS AN ADEQUATE SUBSTITUTE FOR 3x FRAMING.)
7. FASTENERS FOR SHEET ROCK SHEARWALLS SHALL BE NO. 6 TYPE S OR W DRYWALL SCREWS 1¼" LONG IN LIEU OF 8d NAILS.

A / A101
MAIN FLOOR PLAN
2,038 S.F. SCALE: 1/4" = 1'-0"

CADENCE HOMES

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EMAIL:
RYAN@CADENCEHOMES.COM

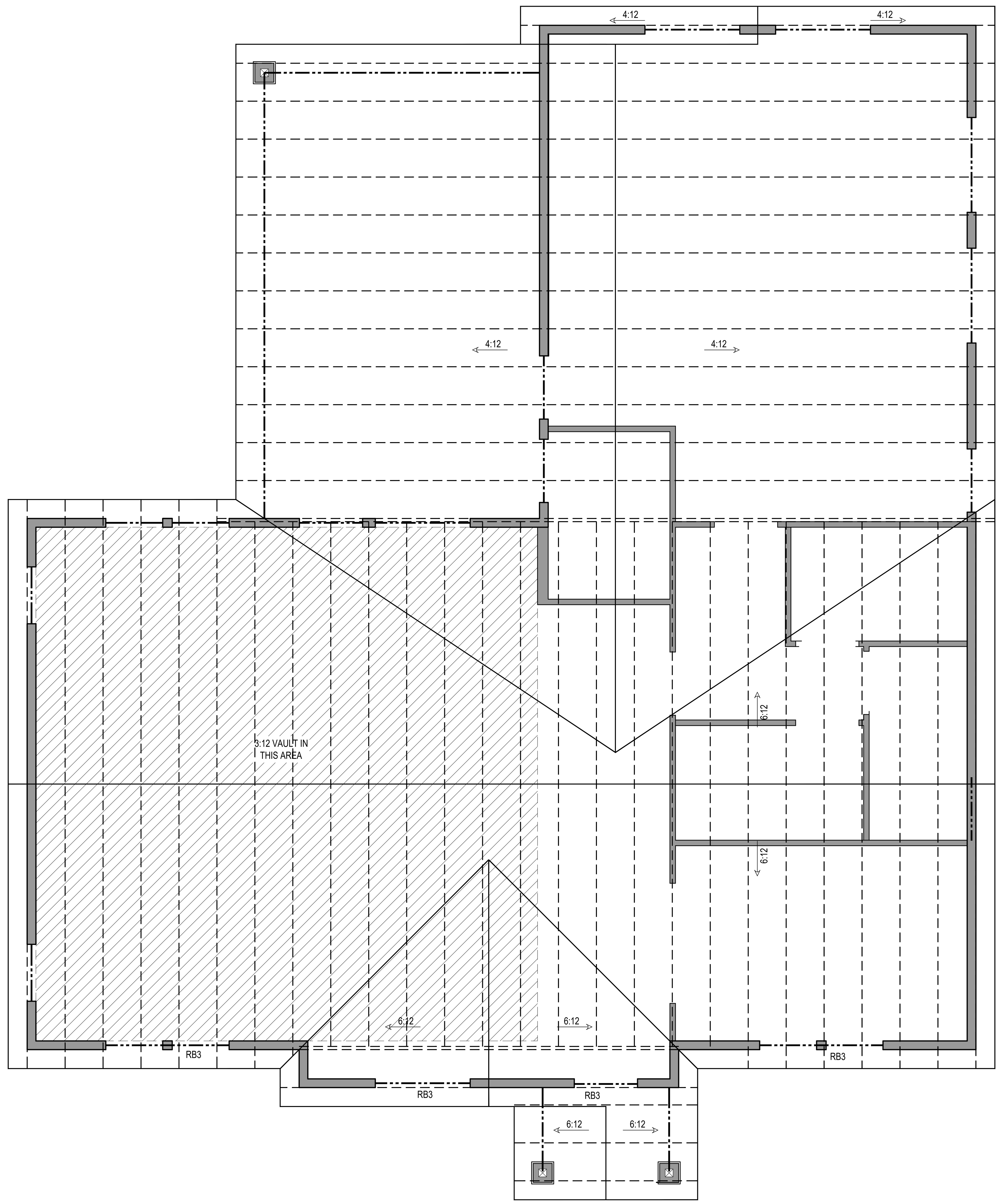
CADENCE HOMES - CLUBHOUSE
UTAH
EAGLE MOUNTAIN
N CARLTON LN
HIDDEN HOLLOW

PLOT SCALE: 1/4"=1'-0"
DATE: 09.02.25
JOB: TOWN-HOA
0536
RM

ISSUES/REVISIONS:	DATE:

MAIN FLOOR PLAN

A101



STRUCTURAL NOTES:

A. PLANS ARE NOT COMPLETE WITHOUT STRUCTURAL CALCULATIONS.
B. REFER TO SHEET SD.0 FOR GENERAL STRUCTURAL NOTES.
C. ROOF SHEATHING TO BE APA RATED 7/16" OSB OR CDX PLYWOOD WITH 8d NAILS @ 6" O.C. EDGE, 12" O.C. FIELD.
D. FLOOR SHEATHING TO BE APA RATED 3/4" T&G W/ 10d NAILS OR SIMPSON WSNTL2LS#8 WOOD SCREWS @ 6" O.C. EDGES, 12" O.C. FIELD.
E. EXTERIOR STUD WALLS TO BE 2X6 @ 16" O.C. U.N.O. GARAGE WALLS MAY BE 2X4 @ 16" O.C. UP TO 10'-0" TALL U.N.O.
F. USE (14) 16d NAILS BETWEEN TOP PLATE SPLICE POINTS, 4'-0" LAP SPLICE (MIN)
G. INSTALL ALL SIMPSON HARDWARE PER MANUFACTURES SPECS.
H. HOLD DOWNS SHALL BE INSTALLED ON (2) FULL HEIGHT KING STUDS (MIN)
I. FLOOR JOISTS TO BE 14" FLOOR TRUSSES BY OTHERS.
J. ROOF RAFTERS TO BE 2X8 DF-L#2 @ 24" O.C. U.N.O.
K. PROVIDE 2X SQUASH BLOCKING AT FLOOR FRAMING TO MATCH DIMENSIONS OF POST ABOVE.
L. ALL DETAILS SHALL APPLY AT ALL SIMILAR SITUATIONS.
M. IF SUSPENDED PORCH SLAB EXCEEDS 6" THICKNESS, PROVIDE #4 BARS @ 18" O.C. 1 1/2" FROM TOP OF SLAB IN ADDITION TO BOTTOM STEEL AS NOTED ON PLANS.
N. ALL LUMBER NOT PERMANENTLY PROTECTED FROM THE ELEMENTS SHALL BE PRESERVATIVE TREATED OR OF A DECAY RESISTANT SPECIES. CONTACT LEI ENGINEERING AND SURVEYORS, INC. IF A DIFFERENT SPECIES IS TO BE USED.

POST SCHEDULE (P#)

DESIG.	POST SIZE
P1	(1) 2x
P2	(2) 2x
P3	(3) 2x
P4	(4) 2x
P5	(5) 2x
P6	4x4
P7	6x6
P8	3½"x5¼" PARALLAM POST
P9	5¼"x5¼" PARALLAM POST

NOTES:
1. POSTS INDICATE NUMBER OF TRIMMER STUDS WHEN SPECIFIED AT HEADERS. ALL OTHER POST DESIGNATIONS REFER TO FULL HEIGHT KING STUDS U.N.O.
2. INSTALL (1) TRIMMER AND (1) KING STUD EACH SIDE OF EACH OPENING U.N.O.
3. INSTALL (2) TRIMMER STUDS AT EACH SIDE OF OPENINGS GREATER THAN 6'-0" WIDE U.N.O.
4. INSTALL (2) KING STUDS EACH SIDE OF OPENINGS GREATER THAN 8'-0" WIDE U.N.O.
5. 2x BUILT-UP POSTS SHALL BE THE SAME WIDTH OF THE WALL IN WHICH THEY ARE FRAMED U.N.O.
6. NAIL EACH PLY OF 2x BUILT-UP POSTS W/ 16d NAILS @ 6" O.C. STAGGERED U.N.O.
7. POSTS THAT ARE NOT FRAMED WITHIN A STUD WALL SHALL BE BRACED WITH BC OR AC POST CAP AND PB OR ABA POST BASE U.N.O.

BEAM SCHEDULE

DESIG.	QTY.	SIZE	TYPE
RB1	2	2x6	DF-L#2
RB2	2	2x10	DF-L#2
RB3	2	2x8	DF-L#2
RB4	1	3½"x9"	GLULAM
RB5	1	5½"x12"	GLULAM
OR	1	6¾"x12"	GLULAM
RB6	2	1¾"x9½"	MICROLLAM
OR	1	3½"x9"	GLULAM
RB7	2	1¾"x9½"	TIMBERSTRAND
OR	1	3½"x9"	GLULAM
RB8	1	5½"x9"	GLULAM
RB9	2	2x10	DF-L#2
RB10	2	2x10	DF-L#2
RB11	2	2x10	DF-L#2
RB12	-	NOT USED	-
RB13	2	1¾"x9½"	TIMBERSTRAND
OR	1	3½"x10½"	GLULAM
RB14	2	2x10	DF-L#2
RB15	-	NOT USED	-
RB16	2	2x10	DF-L#2

A / A103 ROOF FRAMING PLAN
SCALE: 1/4" = 1'-0"

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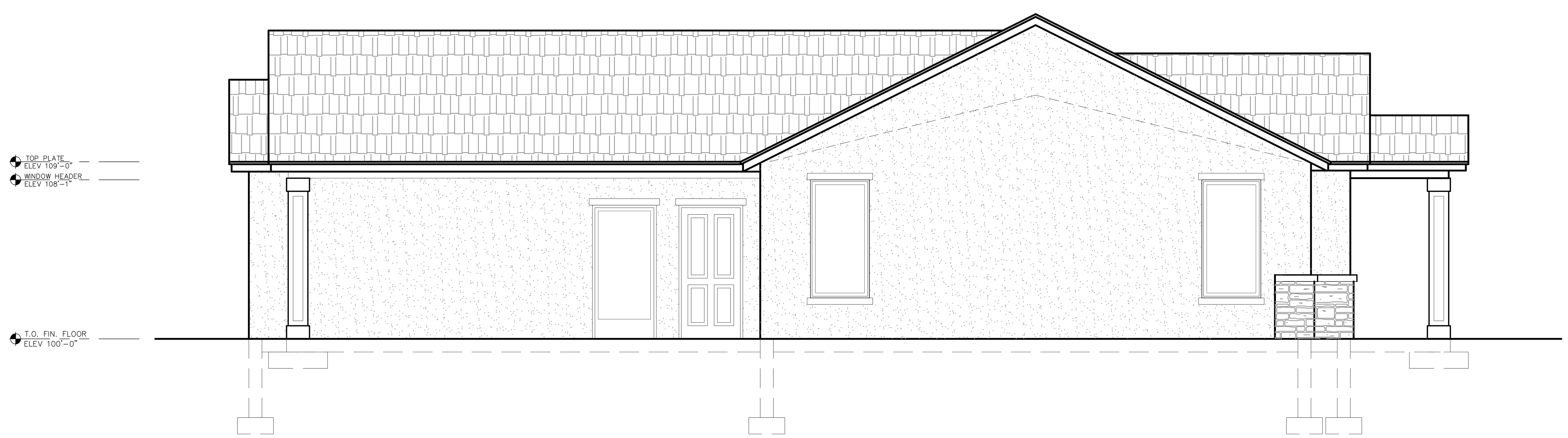
PLOT SCALE: 1/4"=1'-0"
DATE: 09.02.25
JOB: TOWN-HOA
0536
RM

ISSUES/REVISIONS:	DATE:

ROOF FRAMING PLAN

A103

A
A201
FRONT ELEVATION
SCALE: 1/4" = 1'-0"



B
A201
LEFT ELEVATION
SCALE: 1/4" = 1'-0"

ELEVATION GENERAL NOTES:

1. FIREPLACE CHIMNEYS SHALL EXTEND AT LEAST 2'-0" ABOVE THE ROOF OR ANY PART OF THE BUILDING WITHIN 10'-0" IRC 1001.8.
2. PROVIDE METAL FLASHING AT ALL INTERSECTIONS OF SIDING, STUCCO, BRICK, STONE ETC.
3. FULL RAIN GUTTERS WITH DOWNSPOUTS EXTENDED 10'-0" AWAY FROM FOUNDATION WALLS OR AS REQUIRED BY LOCAL CODE.
4. ROOFING TO BE ARCHITECTURAL GRADE 30 YR. ASPHALT SHINGLES WITH (6) NAILS PER SHINGLE.
5. ALL EAVES AND VALLEYS TO HAVE ICE & WATER SHIELD.
6. ALL WINDOWS & GLASS UNITS TO BE DOUBLE GLAZED LOW- E.

ELEVATION KEY NOTES: X

1. HARDI PLANK LAP SIDING - CEDARMILL.
2. HARDI TRIM.
3. HARDI PANEL VERTICAL SIDING - CEDARMILL WITH HARDI BATTON STRIPS @ 16" O.C.
4. HARDIE SHINGLES - SHAKE STAGGERED.
5. HARDIE SOFFIT & 2x6 FASCIA (UNLESS OTHERWISE SPECIFIED - CEDARMILL. COORDINATE WITH GUTTER SYSTEM.
6. NOT USED.
7. 30 YEAR ARCHITECTURAL GRADE SHINGLE. COORDINATE STYLE AND COLOR WITH OWNER.
8. CULTURED STONE, COORDINATE WITH OWNER.
9. PRE-MANUFACTURED ROOF VENT. PROVIDE REQUIRED AMOUNT FROM VENTING CALCULATIONS AND I.R.C.
10. DECORATIVE COLUMN, SEE DETAIL 7/A401.
11. RAILING TO CONFORM WITH CURRENT IRC REQUIREMENTS. COORDINATE FINISHES. OPEN GUARDS SHALL HAVE BALUSTERS OR ORNAMENTAL PATTERN SUCH THAT A 4" DIAMETER SPHERE CANNOT PASS THROUGH ANY OPENING. IRC 312.2.
12. OVERHEAD GARAGE DOOR. SEE PLANS FOR SIZE. NOTCH FOUNDATION AS REQUIRED. STYLE AS PER OWNER.
13. CONCRETE STOOP.
14. COORDINATE CONCRETE STAIRS WITH FINAL GRADING AND LANDSCAPING.
15. CONCRETE FOOTING. SEE SHEET A100 FOR STRUCTURAL.
16. SLOPE GRADE 1" PER FOOT AWAY FROM STRUCTURE.
17. 12" POP-OUT.
18. CONCRETE FOUNDATION WALL, SEE SHEET A100 FOR STRUCTURAL.
19. PRE-MANUFACTURED STONE CAP.
20. WOOD BRACKET.
21. COORDINATE WOOD PORCH & STEPS WITH FINAL GRADING AND LANDSCAPING.
22. DOUBLE GLAZED LOW-E VINYL WINDOW. SEE PLANS FOR SIZES.
23. STEPPED FOUNDATION WALL. SEE STRUCTURAL SHEETS FOR DETAILS.
24. WOOD BEAM. SEE STRUCTURAL.

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N CARLTON LN
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PLOT SCALE: 1/4"=1'-0"
DATE: 09.02.25
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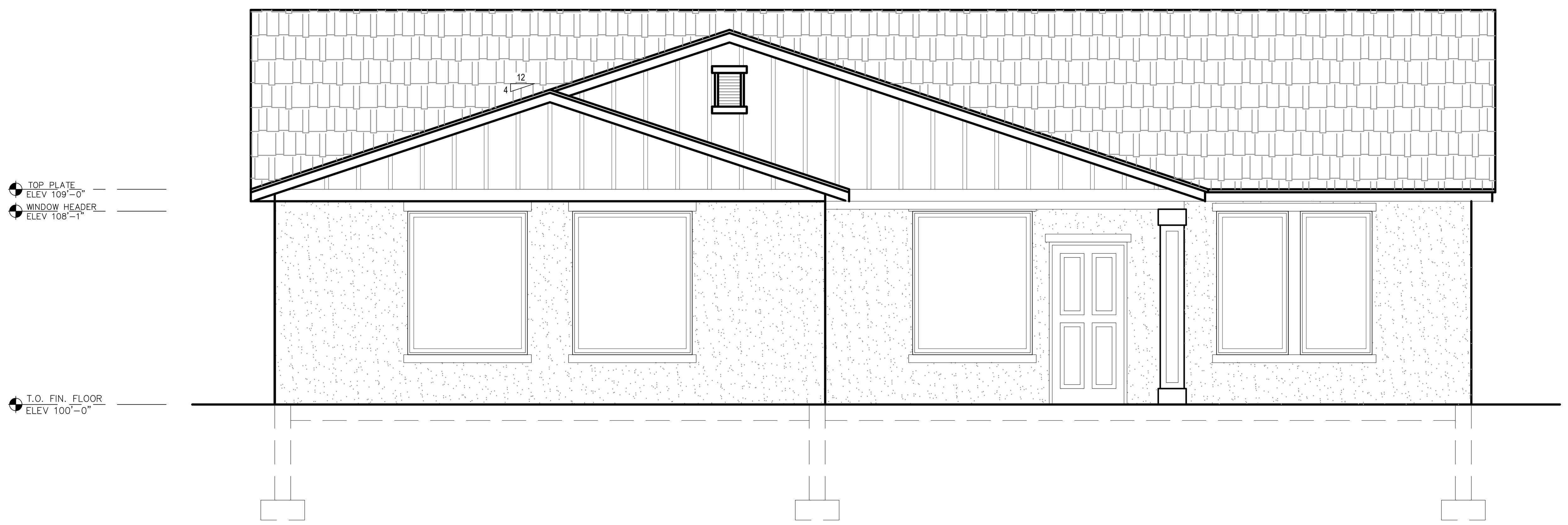
ISSUES/REVISIONS:	DATE:

EXTERIOR
ELEVATIONS

A201



A
A202
REAR ELEVATION
SCALE: 1/4" = 1'-0"

B
A202
RIGHT ELEVATION
SCALE: 1/4" = 1'-0"

ELEVATION GENERAL NOTES:

1. FIREPLACE CHIMNEYS SHALL EXTEND AT LEAST 2'-0" ABOVE THE ROOF OR ANY PART OF THE BUILDING WITHIN 10'-0" IRC 1001.8.
2. PROVIDE METAL FLASHING AT ALL INTERSECTIONS OF SIDING, STUCCO, BRICK, STONE ETC.
3. FULL RAIN GUTTERS WITH DOWNSPOUTS EXTENDED 10'-0" AWAY FROM FOUNDATION WALLS OR AS REQUIRED BY LOCAL CODE.
4. ROOFING TO BE ARCHITECTURAL GRADE 30 YR. ASPHALT SHINGLES WITH (6) NAILS PER SHINGLE.
5. ALL EAVES AND VALLEYS TO HAVE ICE & WATER SHIELD.
6. ALL WINDOWS & GLASS UNITS TO BE DOUBLE GLAZED LOW- E.

ELEVATION KEY NOTES: (X)

1. HARDI PLANK LAP SIDING - CEDARMILL.
2. HARDI TRIM.
3. HARDI PANEL VERTICAL SIDING - CEDARMILL WITH HARDI BATTON STRIPS @ 16" O.C.
4. HARDIE SHINGLES - SHAKE STAGGERED.
5. HARDIE SOFFIT & 2x6 FASCIA (UNLESS OTHERWISE SPECIFIED - CEDARMILL. COORDINATE WITH GUTTER SYSTEM.
6. NOT USED.
7. 30 YEAR ARCHITECTURAL GRADE SHINGLE. COORDINATE STYLE AND COLOR WITH OWNER.
8. CULTURED STONE, COORDINATE WITH OWNER.
9. PRE-MANUFACTURED ROOF VENT. PROVIDE REQUIRED AMOUNT FROM VENTING CALCULATIONS AND I.R.C.
10. DECORATIVE COLUMN, SEE DETAIL 7/A401.
11. RAILING TO CONFORM WITH CURRENT IRC REQUIREMENTS. COORDINATE FINISHES. OPEN GUARDS SHALL HAVE BALUSTERS OR ORNAMENTAL PATTERN SUCH THAT A 4" DIAMETER SPHERE CANNOT PASS THROUGH ANY OPENING. IRC 312.2.
12. OVERHEAD GARAGE DOOR. SEE PLANS FOR SIZE. NOTCH FOUNDATION AS REQUIRED. STYLE AS PER OWNER.
13. CONCRETE STOOP.
14. COORDINATE CONCRETE STAIRS WITH FINAL GRADING AND LANDSCAPING.
15. CONCRETE FOOTING. SEE SHEET A100 FOR STRUCTURAL.
16. SLOPE GRADE 1" PER FOOT AWAY FROM STRUCTURE.
17. 12" POP-OUT.
18. CONCRETE FOUNDATION WALL, SEE SHEET A100 FOR STRUCTURAL.
19. PRE-MANUFACTURED STONE CAP.
20. WOOD BRACKET.
21. COORDINATE WOOD PORCH & STEPS WITH FINAL GRADING AND LANDSCAPING.
22. DOUBLE GLAZED LOW-E VINYL WINDOW. SEE PLANS FOR SIZES.
23. STEPPED FOUNDATION WALL. SEE STRUCTURAL SHEETS FOR DETAILS.
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0536
RM

ISSUES/REVISIONS:	DATE:

EXTERIOR ELEVATIONS

A202

	EAGLE MOUNTAIN CITY **PLANNING COMMISSION MEETING** **DECEMBER 9, 2025**
TITLE:	Fence Code Patch Amendment
ITEM TYPE:	Development Code Amendment
FISCAL IMPACT:	N/A
APPLICANT:	City-initiated

CURRENT GENERAL PLAN DESIGNATION & ZONE	ACREAGE
N/A	N/A

PUBLIC HEARING
Yes

PREPARED BY
Robert Hobbs, Senior Planner

PRESENTED BY
Robert Hobbs

RECOMMENDATION:
Staff recommends that the Planning Commission advance a positive recommendation concerning the draft amendment(s) subject to any revisions/conditions suggested by the Commission.

BACKGROUND:
A pair of Neighborhood Improvement cases prompted the drafting of the attached code amendment designed to clarify and strengthen the City's disposition regarding maintenance of fences, walls and retaining structures. Legal counsel has reviewed the draft.

ITEMS FOR CONSIDERATION:
The Planning Commission should consider the potential consequences associated with the proposed code changes if recommended for adoption. Ordinances pertaining to Development Code Amendments, and processing of the same, may be found in EMMC 17.05.120 & UCA 10-9a-501.

PLANNING COMMISSION ACTION/RECOMMENDATION:
N/A

ATTACHMENTS:
1. Fence maintenance code patch.Sept 2025

17.60.120 General fencing/screening provisions.

P. Maintenance Required. All fences, walls, and retaining structures shall be maintained in good repair/condition and in a safe, upright condition.

Fences shall be:

1. Structurally sound, stable, and free of hazards.

2. Free of missing, broken, rotted, burned, decayed, destroyed (whole or in part) or severely bent components -- including slats, posts, and panels.

3. Kept painted, stained or cleaned to appear as new or nearly new.

4. Kept free of graffiti, unsightly damage, or deterioration that constitutes a visual or aesthetic nuisance.

5. Repaired or removed if they become severely damaged, dilapidated, dangerous, or abandoned.

Maintenance and repairs shall be completed in a timely and workmanlike manner using materials of comparable quality.

Fences that are not maintained shall be deemed unlawful.

~~P~~. Q. Abatement – Abatement of Unlawful Fences. The following fences are declared unlawful nuisances and shall be subject to the enforcement provisions of EMMC Title 4:

1. Any fence or wall (including retaining walls with walls or fences atop the same) that is in whole or in part weak, or constructed of broken, unsightly, inferior or old, worn materials of a flammable nature that may impair the value of the adjoining land.

2. Any fence (including retaining walls with walls or fences atop the same) constructed or maintained for the purpose of maliciously annoying the owners or occupants of an abutting property. Such fences or walls are considered as “spite” fences/walls.

3. Any fence (including retaining walls with walls or fences atop the same) not constructed or maintained in accordance with this section.

~~Q~~. R. Temporary Fencing. Temporary fencing may be approved by the city (e.g., during site plan review) for causes related to construction area protection, interim open air yard use prior to construction of a structure on that land area in commercial or industrial zones, or for security prior to installation of a permanent fence.

WHEN RECORDED, RETURN TO:

Eagle Mountain City
Attn: Gina L. Olsen, City Recorder
1650 Stagecoach Run
Eagle Mountain, UT 84005

DEVELOPMENT AGREEMENT FOR PACIFIC SPRINGS PLAT A-5

This Development Agreement for Pacific Springs Plat A-5 ("Agreement") is made and entered into as of the ____ day of _____, 2025, by and between Eagle Mountain City, a political subdivision of the State of Utah ("City") and R5 Development, LLC, a Utah limited liability company ("Developer").

RECITALS

A. On March 27, 2025, Developer received approval from the City for Pacific Springs Plat A-5. Lots 511-514 abut Desert Willow Drive, which is designated as a collector road on the City's Transportation Master Plan.

B. Eagle Mountain Municipal Code requires that privacy screening be installed prior to the issuance of a building permit. Due to complications arising from prior non-compliance with the City Code in adjoining plats by a different builder, Developer has been unable to install the required fencing.

C. The Parties desire to enter into this Agreement to allow for flexibility in the timing of fencing installation while ensuring the completion of such improvements through financial security.

D. The Parties have cooperated in the preparation of this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby agrees as follows.

AMENDMENT

1. **Recitals**. The above stated Recitals are incorporated herein as part of this Agreement..

2. **Fence Completion and Security Timing**.

2.1. *Surety Bond*. With the application for any building permit for Lots 511-514, Developer shall post a bond that shall cover 110% of the estimated cost of constructing fencing along designated arterial and collector roadways in accordance with the approved plans and City standards (the "Fence Improvements"). This surety bond shall guarantee the completion of the Fence Improvements.

2.2. *Building Permits*. Upon posting of the surety bond described in Section 2.1 above, the City shall agree to not withhold issuance of building permits within the applicable subdivision solely on the basis that the Fence Improvements have not yet been completed.

2.3. *Certificates of Occupancy*. Notwithstanding Section 2.2 above, the Parties agree that the City may withhold certificates of occupancy for structures located within the applicable subdivision until the Fence Improvements have been fully completed, inspected, and approved by the City.

3. **Executing on Bond**. If the City is required to execute on the Surety Bond and construct the Fence Improvements, Developer shall be liable to City for any expenses or costs not covered by the Surety Bond.

4. **Severability**. Except as specifically stated herein, any provision of this Agreement, or portion thereof, that is declared by a court of competent jurisdiction to be invalid or unenforceable shall not affect the validity of the remainder of this Agreement and each paragraph of this Agreement will be valid and enforceable to the fullest extent permitted by law.

5. **No Waiver**. Failure of a party hereto to exercise any right hereunder shall not be deemed a waiver of any such right and shall not affect the right of such party to exercise at some future time said right or any other right it may have hereunder. The provisions may be waived only in writing and signed by the party intended to be benefited by the provisions being waived.

6. **Applicable Law**. This Agreement and the construction thereof, and the rights, remedies, duties, and obligations of the parties which arise hereunder, are to be construed and enforced in accordance with the laws of the State of Utah.

7. **Notices**. Any notices required or permitted to be given pursuant to this Agreement shall be in writing and shall be deemed to have been sufficiently given or served for all purposes when presented personally, or four (4) days after being sent by registered or certified mail, properly addressed to the parties as follows:

To the Developer:

To the City:

City Recorder
Eagle Mountain City
1650 E. Stagecoach Run
Eagle Mountain, UT 84005

8. **Counterparts**. This Agreement may be executed in multiple parts as originals or by facsimile copies of executed originals; provided, however, if executed and evidence of execution is made by facsimile copy, then an original shall be provided to the other party within seven (7) days of receipt of said facsimile copy.

9. **Hold Harmless**. Developer shall hold City, its officers, agents, employees, consultants, special counsel, and representatives harmless from liability for damages or equitable relief arising out of

claims for personal injury or property damage arising from direct or indirect operations of Developer or its contractors, subcontractors, agents, employees or other persons acting on its behalf, in connection with this Agreement.

10. **Remedies**. Developer acknowledges and agrees that Developer's sole and exclusive remedy under this Agreement shall be specific performance of the rights granted in this Agreement and City's obligations under this Agreement. IN NO EVENT SHALL CITY BE LIABLE TO DEVELOPER, THEIR SUCCESSORS OR ASSIGNS, FOR ANY INDIRECT, SPECIAL, PUNITIVE, INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS, COSTS OF DELAY, OR LIABILITIES TO THIRD PARTIES.

11. **Relationship of the Parties**. This Agreement is not intended to create any partnership, joint venture or other arrangement between City and Developer. This Agreement is not intended to create any third-party beneficiary rights for any person or entity not a party to this Agreement.

12. **Title and Authority**. Developer expressly warrants and represents to City that it is a limited liability company in good standing and that such company owns or controls all right, title and interest in and to Lots 511-514 and that no portion of those lots, or any right, title or interest therein has been sold, assigned or otherwise transferred to any other entity or individual. Developer further warrants and represents that no portion of Lots 511-514 is subject to any lawsuit or pending legal claim of any kind. Developer warrants that the undersigned individual has full power and authority to enter into this Agreement on behalf of Developer. Developer understands that City is relying on such representations and warranties in executing this Agreement.

13. **Governmental Immunity**. The City is a governmental entity under the "Utah Governmental Immunity Act" *(Utah Code Ann. § 63G-7-101, et seq.)* ("Immunity Act"). Nothing herein shall be construed as a waiver of any defenses available under the Immunity Act nor does City waive any limits of liability provided by the Immunity Act or any other provisions of Utah law.

14. **Binding Agreement**. This Agreement shall be binding upon and shall inure to the benefit of the successors and assigns of the respective parties hereto.

15. **Amendment**. This Agreement may not be modified or amended except by an instrument in writing signed by both Parties.

16. **Recording**. The Parties shall cause this Agreement to be recorded in the records of the Utah County Recorder.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement by and through their respective, duly authorized representatives as of the day and year first herein above written.

[signatures on following pages]

CITY

EAGLE MOUNTAIN CITY

_____
TOM WESTMORELAND, Mayor

ATTEST

_____
GINA L. OLSEN, City Recorder

_____
MARCUS DRAPER, City Attorney
Approved as to form and legality

CITY ACKNOWLEDGEMENT

STATE OF UTAH)
:ss
COUNTY OF UTAH)

On the _____ day of _____, 2025, personally appeared before me TOM WESTMORELAND, who being by me duly sworn, did say that he is the MAYOR OF EAGLE MOUNTAIN CITY, a political subdivision of the State of Utah, and that said instrument was signed in behalf of the City by authority of its City Council and said Mayor acknowledged to me that the City executed the same.

_____
NOTARY PUBLIC

DEVELOPER

R5 DEVELOPMENT, LLC
A Utah limited liability company

_____

_____, _____

DEVELOPER ACKNOWLEDGMENT

STATE OF UTAH)
:ss
COUNTY OF UTAH)

On the _____ day of _____, 2025, personally appeared before me _____ duly sworn, did say that he is the _____ of R5 Development, LLC, a Utah limited liability company and that the foregoing instrument was duly authorized by the company at a lawful meeting held by authority of its operating agreement and signed in behalf of said company.

_____
NOTARY PUBLIC

	EAGLE MOUNTAIN CITY **PLANNING COMMISSION MEETING** **DECEMBER 9, 2025**
TITLE:	Data Center Directional Signage Code Amendment
ITEM TYPE:	Development Code Amendment
FISCAL IMPACT:	N/A
APPLICANT:	City-initiated

CURRENT GENERAL PLAN DESIGNATION & ZONE	ACREAGE
N/A	N/A

PUBLIC HEARING
Yes

PREPARED BY
Steven Lehmitz, Planner

PRESENTED BY
Steven Lehmitz

RECOMMENDATION:
Staff recommends that the Planning Commission forward a positive recommendation of the proposed code amendment to the City Council.

BACKGROUND:
Staff has been approached on a couple of occasions by data center representatives wanting to construct directional signage for their trucks and workers. Our current code does not allow for such signage, but Staff feels that it is worth considering the proposed code amendment to help reduce traffic along roads such as Pony Express Parkway by keeping it on SR-73 for as long as possible.

ITEMS FOR CONSIDERATION:
The Planning Commission should consider the potential consequences associated with the proposed code changes if approved. Ordinances pertaining to development code amendments, and processing of the same, may be found in EMMC 17.05.120.

PLANNING COMMISSION ACTION/RECOMMENDATION:
N/A

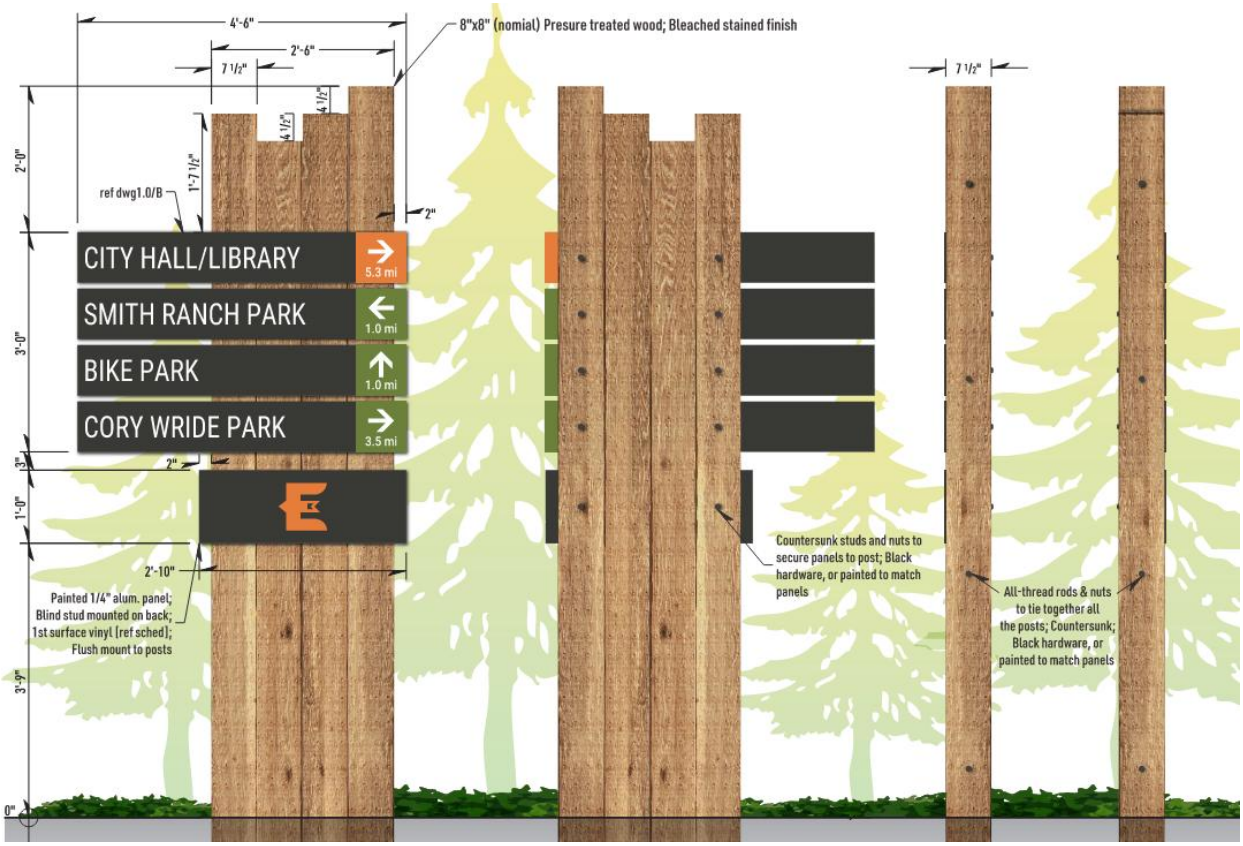
ATTACHMENTS:
1. Draft Code Amendment

17.80.080 Off-premises directional, ~~and~~ ladder, and data center signs.

Directional off-premises signs are intended to direct traffic to City facilities or parks. They are located in the shoulder of the City's right-of-way along City streets and are only permitted as this chapter allows. Ladder signs are intended to direct traffic to a business with an active City business license, subdivision or development project, model home, neighborhood, or not-for-profit entity. Data center and/or large-scale development directional signs are intended to direct truck, trade, and employee traffic along preferred routes to the relevant construction sites. No other off-premises signs are permitted in the right-of-way, unless specifically allowed in this chapter.

A. Directional Signs. The City may place directional signs leading to City facilities in any appropriate right-of-way location. Directional signs located in the City's right-of-way shall be constructed and maintained in accordance with Figure 17.80.080(A).

Figure 17.80.080(A)



B. For ladder sign advertising, all advertisers must have an active Eagle Mountain City business license (if required to obtain a license) and be current members of the Valley Crossroads Chamber of Commerce. Advertising priority shall be given in the following order:

a. Commercial or home-based businesses located within Eagle Mountain City and nonprofits with primary operations within Eagle Mountain City.

b. Residential or commercial developers advertising for active projects within Eagle Mountain City.

c. Commercial or home-based businesses not located within Eagle Mountain City and nonprofits with primary operations outside Eagle Mountain City.

1. Application. Interested advertisers shall submit, on forms prepared by Eagle Mountain City, an application to the Economic Development Director or Valley Crossroads Chamber of Commerce if a separate concessions agreement has been entered into, to be added to a wait list for advertising space on ladder signs. Application shall include:

a. Business name, address, and business type.

b. Eagle Mountain City business license number (if required).

c. Proof of Valley Crossroads Chamber of Commerce membership.

d. Signage requested.

e. Preferred location of sign.

2. Sign Inserts. The sign inserts may contain advertising and/or directional information. All advertising copy shall be approved by the Economic Development Director or designee. Sign copy shall be readable from 30 feet (minimum of three-inch-tall letters). The logo at the top of each sign shall be the approved Eagle Mountain City logo or as approved by City Council. There are four allowable insert sizes on each ladder sign structure: small (16-inch by 72-inch) (see Figure 17.80.080(B)(2)(a)), medium (32-inch by 72-inch) (see Figure 17.80.080(B)(2)(b)), large (80-inch by 72-inch) (see Figure 17.80.080(B)(2)(c)), or extra-large (96-inch by 72-inch) (see Figure 17.80.080(B)(2)(d)) sign inserts. The total advertising area may not exceed 96 inches by 72 inches. Advertisers may reserve a maximum of two large or extra-large size signs throughout the city. Any additional space would be limited to small or medium size sign inserts. The maximum sign structures a single entity, or its associated affiliates, may advertise on is five.

Figure 17.80.080(B)(2)(a)

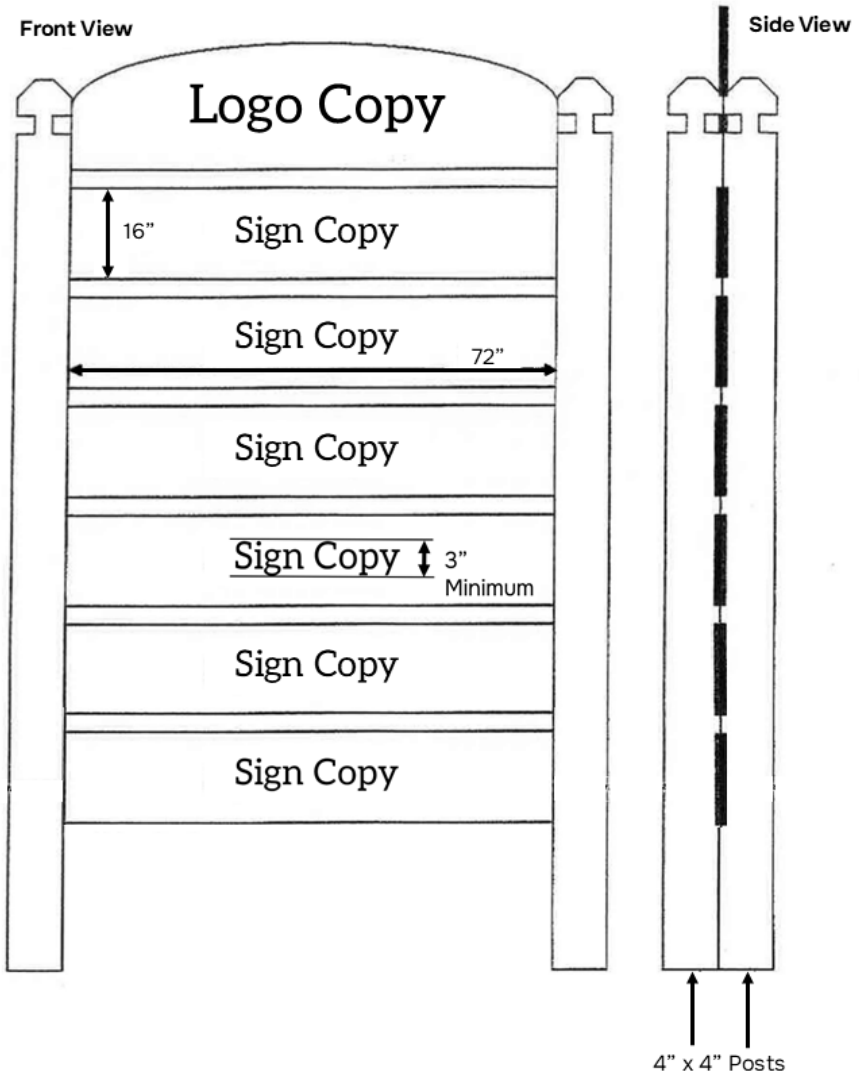


Figure 17.80.080(B)(2)(b)

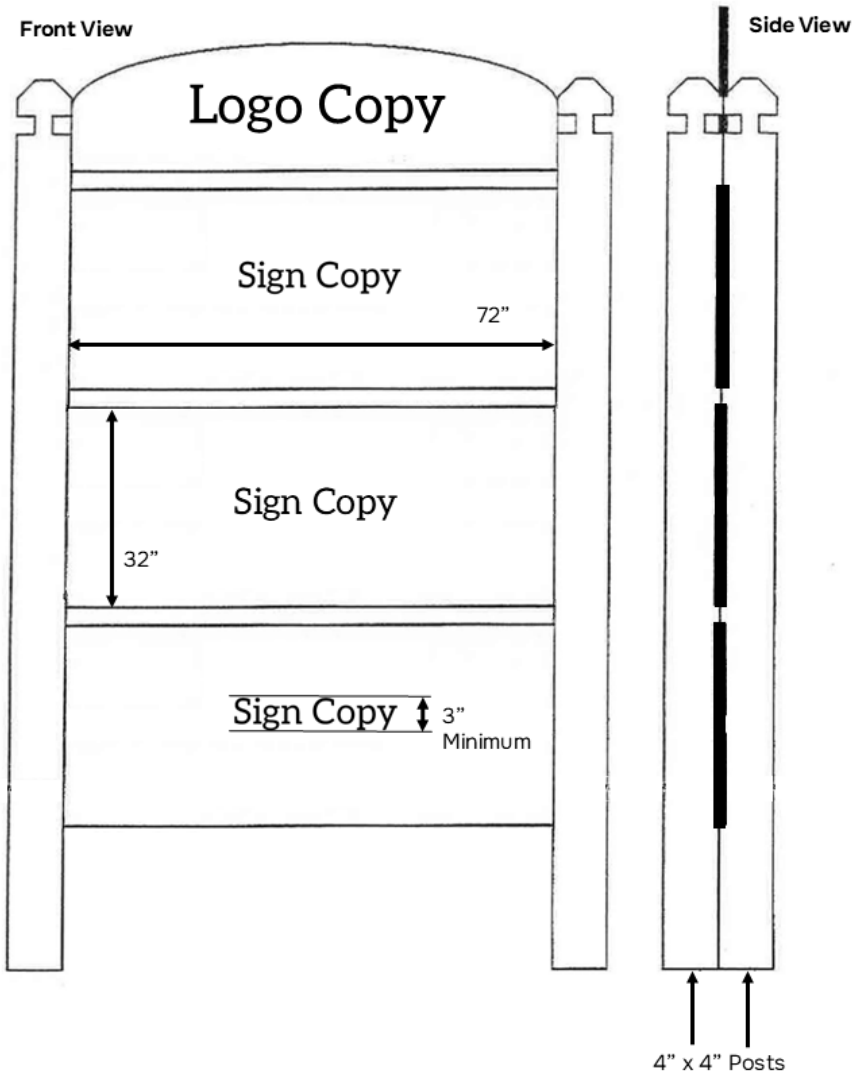


Figure 17.80.080(B)(2)(c)

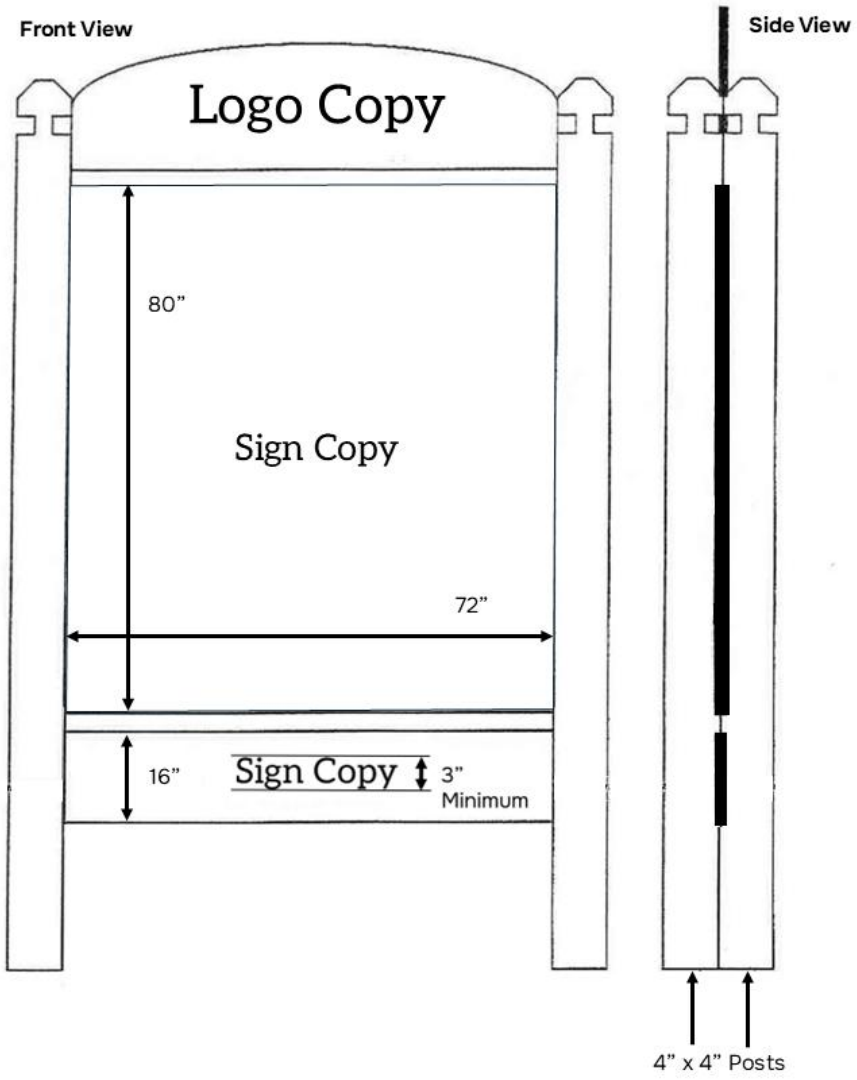
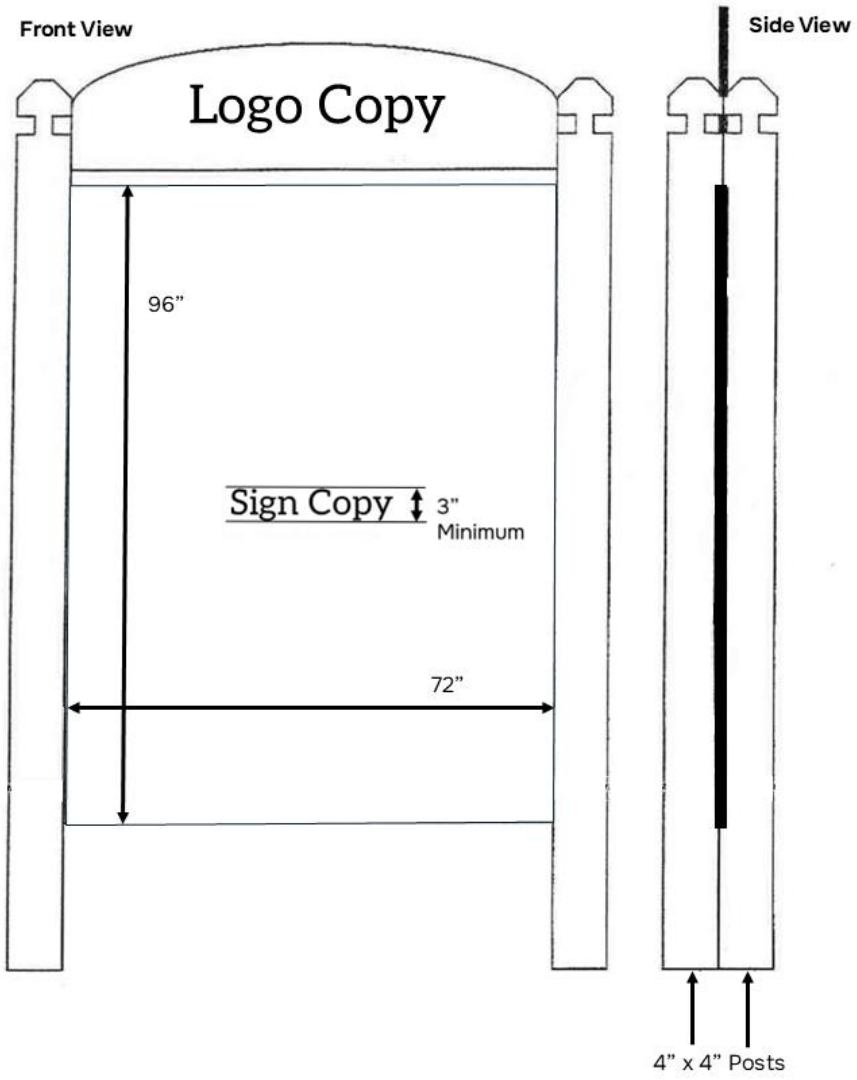


Figure 17.80.080(B)(2)(d)



3. Billing and Payment. Eagle Mountain City or designee may bill advertisers on a semiannual or annual basis. Signs may be removed for nonpayment after 30 days.

4. Maintenance. Sign structures and slats shall be maintained in good repair and shall be repainted, repaired, or otherwise maintained in good visual condition. Sign structures shall be painted Monterrey Grey.

5. New Signs. The Economic Development Director or designee shall determine which signs from the approved map should be constructed. Businesses shall be drawn from the wait list. Existing signs should be filled before new signs are added.

6. Maximum Number. Excluding any directional signs to City facilities, the maximum number of ladder signs that will be permitted in the rights-of-way is 60.

C. Sign Ownership. The City shall maintain ownership of all signs, and may contract out the construction, maintenance, and management of the signs.

D. Location. Signs may be located on arterial or collector roads throughout the City, and generally spaced at least 1,000 feet apart, excluding any ladder signs used exclusively for City facilities. Within business areas and near major intersections the signs may be spaced closer together, but no less than 300 feet apart. No on-site or commercial advertising sign existing at the time of relocation of or construction of a new ladder sign may be blocked or obstructed. Specific ladder sign locations are designated on the approved map. If a sign location is requested outside of the approved map, the City Council may amend the map and approve the new location. In all cases, the placement of signs shall not create a traffic hazard.

E. Data Center/Large-scale Development Directional Signs. Applicants with an approved site plan within the Regional Technology and Industry (RTI) Overlay Zone may apply to construct off-premises signs intended to direct their construction traffic to their sites. This includes their truck, trade, and employee traffic.

1. Application. Applicants shall submit an application for data center/large-scale development directional signs on forms prepared by the Planning Director. No application shall be processed without an approved site plan, the required materials, and the sign permit fee. The Planning Director may permit an application to be processed concurrently with a site plan application, with approval contingent on site plan approval.

    a. The applicant shall submit a site plan with the proposed sign locations to be approved by the Planning Director. The Planning Director shall ensure that the signs are located outside of clear vision areas and placed safely and strategically to guide the site traffic along City-preferred routes.

    b. The applicant shall provide colored graphics of the proposed sign faces.

    c. The applicant is required to obtain all necessary approvals from property owners and submit proof of such approval(s).

2. Signs shall not exceed eight feet in height and 32 square feet per side. Height is measured from the average natural grade to the topmost part of the sign. No more than two sides are permitted.

3. If construction traffic is expected during hours of darkness, the signs shall maintain the needed visibility, either through reflective materials or dark-sky compliant lighting.

4. Signs shall be maintained in good repair and not become a public nuisance or safety hazard.

5. If multiple applicants propose directional signs at the same location, colocation of the signs is strongly encouraged.

6. Signs proposed by the same applicant shall be no closer than one-half mile (2,640 feet) from each other. Exceptions may be granted by the Planning Director if the proximity of intersections necessitates closer locations.

7. The City-preferred routes include keeping traffic on SR-73 to 4000 N or Pole Canyon Boulevard and then along either of those streets.

8. Signs shall be allowed until development of the site is complete, or the master development approval has expired, whichever comes first.