



EAGLE MOUNTAIN PLANNING COMMISSION MEETING

March 12, 2019, 5:30 PM

Eagle Mountain City Council Chambers

1650 East Stagecoach Run Eagle Mountain UT 84005

5:30 P.M. - EAGLE MOUNTAIN CITY PLANNING COMMISSION WORK SESSION

1. DISCUSSION ITEM

- 1.A. Planning Commission Strategy Session
Staff and the Planning Commission will discuss effective communication strategies and the format of future Planning Commission Meetings, and overview future development projects.

6:30 P.M. - EAGLE MOUNTAIN CITY PLANNING COMMISSION POLICY SESSION

2. PLEDGE OF ALLEGIANCE

3. DECLARATION OF CONFLICTS OF INTEREST

4. APPROVAL OF MEETING MINUTES

- 4.A. February 12, 2019 Minutes
Regular Planning Commission Meeting
[02.12.2019 PC Minutes](#)

5. ACTION AND ADVISORY ITEMS

- 5.A. Eagle Heights Village, Conditional Use Permit, Site Plan, and Master Development Plan - Public Hearing
A Conditional Use Permit, Site Plan, and Master Development Plan for 310 duplexes located on approximately 51.38 acres for a project density of approximately 6.033 DU/AC. Eagle Heights Village is located south of Eagle Mountain Boulevard, and east of Lake Mountain Road (Parcel 59:018:0037).
[Eagle Pointe Village Site Plan](#)

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 accommodation 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 801-789-6610. 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.

Preliminary Plans
Parks and Open Space Worksheet
Landscape, Parks, and Amenity Plans
Elevations
Grading, Drainage and Erosion Report
Phase I Environmental Report
Geotechnical Report
Traffic Impact Study
Letter of Support -- Enterprise

- 5.B. Lone Tree F Preliminary Plat - Public Hearing
Recommendation to the City Council for a Preliminary Plat consisting of 57 single-family lots.
[Lone Tree F Preliminary slope analysis.pdf](#)
[Lone Tree II Preliminary Plat \(3-8-06\).pdf](#)
[Park Plan.pdf](#)
[Preliminary Plat.pdf](#)

6. **NEXT SCHEDULED MEETING**

March 26, 2019

7. **ADJOURNMENT**

CERTIFICATE OF POSTING

The undersigned, duly appointed City Recorder, does hereby certify that the above agenda notice was posted on this **(Enter Date of Posting Here)** on the Eagle Mountain City bulletin boards, the Eagle Mountain City website www.emcity.org, posted to the Utah State public notice website <http://www.utah.gov/pmn/index.html>, and was emailed to at least one newspaper of general circulation within the jurisdiction of the public body.

Fionnuala B. Kofoed, MMC, City Recorder



EAGLE MOUNTAIN
Planning Commission MEETING
MINUTES

February 12, 2019, 6:00 p.m.
Eagle Mountain City Council Chambers
1650 East Stagecoach Run, Eagle Mountain, Utah 84005

6:00 P.M. - Eagle Mountain City Planning Commission Policy Session

COMMISSION MEMBERS PRESENT: Matthew Everett, Rich Wood, Brett Wright, and DeLin Anderson. Jared Gray arrived at 6:05 p.m. and was excused at 6:55 p.m.

OFFICIALS PRESENT: Councilmembers Melissa Clark and Stephanie Gricius

CITY STAFF PRESENT: Michael Hadley, Planning Manager; Tayler Jensen, Planner; Lianne Pengra, Recording Secretary

Commissioner Everett opened the meeting at 6:00 p.m.

1) [Pledge of Allegiance](#)

Commissioner Everett led the Pledge of Allegiance.

2) [Declaration of Conflicts of Interest](#)

None.

3) [Approval of Meeting Minutes](#)

[3.A January 22, 2019 Meeting Minutes](#)

MOTION: *Brett Wright moved to approve the January 22, 2019, Planning Commission meeting minutes. Rich Wood seconded the motion. Those voting aye: Matthew Everett, DeLin Anderson, Brett Wright, and Rich Wood. The motion passed with a unanimous vote.*

4) [Action and Advisory Items](#)

[4.A Eagle Village](#)

Planner Tayler Jensen said the amended preliminary plat for Eagle Village contains 69 single-family units on approximately 14.17 acres, for an overall project density of 4.87 dwelling units per acre. He stated 24% of the lots have frontages exceeding 60 feet, and only 20% are required. He noted that eleven lots have frontage of only 50 feet, and the

Planning Commission should decide if the open space behind the lots provides sufficient justification to approve the lots as presented. He explained staff's opinion is that the lot frontages are justified, as the City requested the green space on the ends of Pheasant Road due to a storm line easement; however, staff recommends lot 151 be removed, as a large portion of the lot is encumbered by sewer and storm drain utility easements.

Mr. Jensen said connectivity in the project exceeds minimum standards. One block in the project is too long, but the existence of Bountiful Lane could be justification for an exception. The applicant has planned 0.878 acres of approved open space and will further improve 1.028 acres of unimproved City open space. The project is required to provide 156 amenity points and is providing 192 points.

Commissioner Wood asked for clarification on the lots with 50-foot frontages. Mr. Jensen explained the green space is forty feet wide, and if removed from the plan, that area could be spread throughout the lots to create approved frontages.

Commissioner Wright asked for the current vested rights in the preliminary plat. Mr. Jensen said the project is currently vested with 139 Tier III townhome units. The applicant has lowered the total number of lots to 69 single-family units.

Applicant Ed Patterson said the plan has been reconfigured to comply with Municipal Code. He explained the desire was to include 60-foot frontages throughout the plan. One lot was removed to ensure a 300-foot distance between access points on Pony Express Parkway. They also included connecting trails throughout the project.

Commissioner Everett asked if the applicant would be willing to remove lot 151. Mr. Patterson said they would like to retain as many lots as possible, and can build an existing floor plan on lot 151 with the driveway located over the easement. Commissioner Wood stated the driveway would need to be removed if access to the utilities was needed in the future.

Commissioner Everett stated removing lot 151 will allow the other lots along Robin Lane to be widened, and will allow the easement to be located so that access will not be as impactful to the homeowner.

Commissioner Everett confirmed with staff that the improved park would be dedicated to the City.

Commissioner Wood asked the reasoning for the open space on either end of Pheasant Road, as it causes the lots along Sparrow Lane and Robin Lane to be out of compliance. He asked if the open space could be shifted to allow for larger lot frontages. Mr. Jensen said the open space was placed at the City's request, as a storm line is located under those areas. He stated the current version is the tenth or eleventh revision, and is the best possible design.

Mr. Jensen noted staff's opinion is the frontages along Sparrow Lane warrant an exception due to the applicant including the open space over the storm drain easement.

Commissioner Wood expressed concerns regarding the applicant's ability to protect the homeowners along the trails that run between properties.

Commissioner Everett opened the public hearing at 6:19 p.m. As there were no comments, he closed the hearing.

Commissioner Gray confirmed with staff that the easement on lot 151 was in place before the applicant designed the project.

Commissioner Wood asked if a pedestrian connection between the lots along Bountiful Lane and Lark Road is beneficial to the plan, or if it would negatively impact residents along the trail. Commissioner Everett stated it would be a burden on the applicant to redesign the project again, and the lot lines do not match up for a straight trail. He stated he is not concerned with the 50-foot lot frontages along Sparrow Lane.

Commissioner Wood asked if the frontages on lots 116-118 met Municipal Code, as they are between 28 and 30 feet. Mr. Jensen clarified the frontage requirement along curves such as the one in question is 20 feet.

Commissioner Gray stated he likes the trail and residents who do not want to live along a trail will not buy those lots. He stated if a low fence is installed on either side of the trail, no dark alleys are created. Commissioner Wright asked if not including the trail would cause the plan to be greatly out of compliance. Mr. Jensen stated the loop is 100 feet longer than allowed before a pedestrian trail is required, but noted sidewalks are in place for pedestrian connectivity.

MOTION: ***Brett Wright moved to recommend approval of the Eagle Village amended preliminary plat to the City Council, with the condition that lot 151 shall be removed from the plan. Rich Wood seconded the motion. Those voting aye: Matthew Everett, DeLin Anderson, Brett Wright, Rich Wood, and Jared Gray. The motion passed with a unanimous vote.***

4.B Ames Construction Extractive Overlay Zone

Planning Manager Michael Hadley stated the proposal is to add the overlay to 160 acres of property located on southeast boundary of Eagle Mountain. He said the property is surrounded by Bureau of Land Management property to the north and east, agriculture land to the west, and the property to the south is outside of City boundaries. He stated the requested starting point for excavation is behind a knoll and will not be visible to the north.

Mr. Hadley explained the reason for the overlay request is to provide materials to the Facebook site. The applicant is currently bringing materials via truck from a location outside City limits.

Mr. Hadley stated criteria for approval includes compliance with the Future Land Use Plan, which shows the area as Foothill Residential and Parks & Open Space. Regarding City services, traffic generation, and property values, the rezone is not anticipated to create any burdens on City services; it is anticipated to reduce the number of truck trips on City roads going to and from the Facebook site; and it is not anticipated to have negative impacts on neighboring properties. SITLA supports the proposal.

Mr. Hadley said if approved, the developer must comply with Municipal Code 17.54, Extractive Industries Overlay Zone. A maximum of ten acres of land may be processed at a time, and reclamation must be completed before moving on to additional acreage. The applicant must comply with State of Utah Department of Natural Resources small mining operations regulations. Any blasting must comply with Municipal Code 8.25, Explosives. The hours of operation for vehicles entering and leaving the site will be restricted to 7:00 a.m. to 9:00 p.m. Trucks leaving property shall only be allowed on an approved route. Dust control shall meet Utah Department of Environmental Quality fugitive dust control plan standards.

Mr. Hadley explained the applicant has stated the materials will be used for the Facebook site. They may use the material for sites within Eagle Mountain's commercial areas, and will not sell material to outside entities. This will not be a public pit, which is noted in the agreement.

Commissioner Wood stated he spoke with Councilmember Colby Curtis and discussed previous overlay applications for this site. He said Councilmember Curtis explained the Council wanted a reclamation bond in place, wanted to limit the amount of mining, and wanted restrict the overlay to 25 total acres. He stated he does not feel the Council will adjust the conditions of approval, and the Planning Commission should include the previous Council conditions in any motions made for the item.

Commissioner Gray asked about wind restrictions, and stated a \$25,000 reclamation bond would not be enough to return the land to its original state. Mr. Hadley said a specific wind speed at which operations must cease is noted in the agreement.

Commissioner Gray asked for the estimated tonnage to be removed, and if the excavation would impact the ridgeline. Mr. Hadley explained the applicant wants to disturb five acres at a time, and does not have a final tonnage total at this time. The applicant expressed they will excavate as material is needed. It is expected to be operated five to six days a week until the Facebook project is complete; after that time, the operations will only be as needed.

Commissioner Gray asked if there is a City benefit and what the taxes paid to the City will be based on. Mr. Hadley said some taxes might go to the City, based on what is sold to Facebook, but since SITLA owns the mineral rights on the property, taxes may not come to the City. A large benefit to the City is that roads will be protected, as trucks currently travel along Pony Express Parkway and Eagle Mountain Boulevard. This overlay would remove that truck traffic.

Discussion ensued regarding future projects that may utilize material from this site, and how to govern where the material may be transported to.

Mr. Hadley explained the southern portion of the City is designated for larger projects such as Facebook. Commissioner Gray said he would like the agreement to specify truck traffic route restrictions, and that the applicant will maintain the gravel roads from Facebook to the excavation site. Mr. Hadley stated the applicant will maintain the roads, as well as control dust along the route.

Commissioner Wood asked if loads are required to be covered. Commissioner Gray explained loads are not required to be covered if the material is six inches below the truck's sideboards.

Cole Piling with Ames Construction explained the Utah Division of Oil, Gas and Mining (DOGM) sets specific requirements regarding reclamation through their permitting process. Ten acres can be disturbed at a time, and that land must be reclaimed before moving on. Mr. Piling stated most gravel pits are not permitted through DOGM, so what the Commissioners have seen in other reclaimed areas does not accurately depict what is required for the site under discussion. According to DOGM standards, reclamation requires adding top soil to the property and adding natural landscaping to bring it back to its original state.

Commissioner Wood asked if blasting is part of the excavation plan, and if the excavation would impact the ridgeline. Mr. Piling said the site may require blasting, but they will not know until they have started the project; all blasting permits will go through the City Council. He explained the plan is to keep excavation on the south side of the hill in order to be hidden from the north side. Tonnage will be restricted by the air quality permit, and they do not have a set quantity at this time.

Commissioner Wright asked why the applicant cannot continue supplying the material as they currently do. Mr. Piling explained transporting material from a closer location is a cost savings to Ames, as they will not have to purchase and transport material from another company outside the City.

Mr. Piling explained Ames does not offer commercial sales; they are project-based only. Other Ames projects outside of the City likely would be supplied from other sources. He stated they would like to retain the option to move material to other locations, if needed.

Commissioner Wood said he does not want to allow operations to begin at 7:00 a.m. City Council recommended operating hours of 8:00 a.m. to 7:00 p.m. Monday through Friday, and 9:00 a.m. to 7:00 p.m. on Saturday. Mr. Piling said they can control when trucks are loaded, but cannot keep the trucks from driving on City streets and arriving earlier. He explained the Facebook trucks are stationed at the Facebook site, so they will not be traveling through the City.

Commissioner Wright asked if the applicant has plans to operate an asphalt or concrete plant. Mr. Piling said not to his knowledge. Mr. Hadley explained the applicant has specified in previous discussions that they will not operate an asphalt or concrete plant.

Commissioner Everett asked how long it would take to process ten acres, and if ten acres would provide the material Facebook requires. Commissioner Wright asked how much of the hillside would be removed, and how deep of a pit will be created. Mr. Piling said the timeline to excavate ten acres depends on the specific area, but ten acres would likely meet the immediate demand for Facebook. They have not surveyed the land to determine how much material is within the first ten acres. He explained if drilling or blasting is needed, the land will be benched for safety reasons.

Commissioner Everett said he does not want to approve the overlay for the entire 160 acres. He prefers to allow the overlay on ten acres at this time to ensure any concerns can be addressed that arise in the excavation in the first ten acres.

Commissioner Wood expressed concerns that the overlay is not specific in location, time frame, or amount to be excavated, as he does not know what he is approving.

Commissioner Everett opened the public hearing at 7:07 p.m.

Jeff Ruth asked if the property would be closed to public use. He stated he appreciates that the permit is not for mass grading, but does not want blasting allowed.

Commissioner Everett closed the public hearing at 7:09 p.m.

Commissioner Wood asked if the excavation would meet the ridgeline ordinance. Mr. Hadley said the site is currently zoned Agriculture, and the BLM land around the site will not be developed. He explained the applicant is not building homes.

Commissioner Everett stated his preference to restrict the excavation to thirty acres within the area designated as Parks and Open Space on the Future Land Use Plan. Mr. Hadley said his opinion would be to not specify acreage, but state a lesser area is desired.

Commissioner Wright said he understands the need for aggregate, but does not think this site is needed. He expressed concerns that the land is designated as Foothill Residential and the intent is to have view lots in future development.

Commissioner Wood stated an overlay of 160 acres is too large; he said the approval needs to be limited to a ten-acre parcel. He does not see any benefits to the City.

Commissioner Anderson said he is opposed to approving the overlay over the entire 160 acres, but he prefers a percentage versus a set acreage. He does not want the applicant to return every three months for another rezone. The local pit will remove truck traffic from City streets, which is a benefit to the City. He said they can provide recommendations to the City Council that material excavated from the site must remain within the City. This will negate the possibility of material being transported along City roads to another

municipality. Commissioner Wright stated he does not see the removal of truck traffic as a long-term benefit to the City.

Commissioner Wood directed staff to include the minutes from this Planning Commission meeting in the item's packet for the City Council. He expressed frustration that the Council did not understand the reasons behind the Planning Commission's decisions for previous items. He stated if the Planning Commission is spending time discussing applications, the Council should be aware of the discussions.

Commissioner Everett said a previous City Council condition required a monthly tonnage report. That report can be used to police where the aggregate is going, in order to keep it within the City. He said he prefers to recommend approval with set conditions, versus tabling or recommending denial of the application, as he does not want the State to have the ability to allow the mine to locate in a less desirable area of the City.

- MOTION:** ***Rich Wood moved to recommend approval of the Ames Construction Extractive Overlay Zone to the City Council with the following conditions:***
- 1. Developer must comply with all provisions of Municipal Code Chapter 17.54, Extractive Industries Overlay Zone;***
 - 2. A maximum of 10 acres of land may be processed at a time;***
 - 3. All required blasting must obtain a permit and follow requirements in accordance with Municipal Code Chapter 8.25, Explosives;***
 - 4. Hours of operation for pit operations and trucks entering or leaving the site may only be from 8 AM to 7 PM;***
 - 5. A truck route map must be submitted to and approved by the City Engineer;***
 - 6. Dust control for the property and the approved access roads must meet the site-specific Utah Department of Environmental Quality Fugitive Dust Control Plan;***
 - 7. Material may only be used in Eagle Mountain commercial designated areas, to be monitored through monthly tonnage reports provided to the City;***
 - 8. The overlay shall not exceed 25 contiguous acres; and***
 - 9. Mining shall not impact the ridgeline nor encroach upon the designated Foothill Residential area as noted on the Future Land Use Map.***
- DeLin Anderson seconded the motion. Those voting aye: Matthew Everett, DeLin Anderson, and Rich Wood. Those voting nay: Brett Wright. The motion passed with a vote of 3:1.***

5) Discussion Items

5.A Eagle Heights Village Concept Plan

Mr. Jensen explained the conceptual plan is for 316 twin home units on 50 acres, for a project density of 6.32 dwelling units per acre. Eagle Heights Village is located south of Eagle Mountain Boulevard and east of Lake Mountain Road.

Curt Peterson with Horizon Development said they have developed 1,100 multifamily units in Utah. Horizon Development owns and manages the units they build. The units are high-end with two-car garages and private backyards. The community will contain two community centers, as well as other amenities including play areas, community areas, themed age-appropriate pocket parks, and community gardens. They do not include pools in their developments due to maintenance costs and the fact that other amenities fill the need for pools. The community centers employ full-time staff to manage daily operations, and a full-time maintenance staff is employed to maintain the structures. A professional landscape company is contracted to maintain the front yards.

Mr. Peterson showed examples of similar floorplans, amenities, and structural designs, and explained the rental process.

Commissioner Wood recommended larger pavilions and tables in place of gazebos. He stated the plan needs to include a pool and additional open space, and the roads should not be straight lines; variance is needed.

Commissioner Wright said he likes the home designs, but does not like the layout. He suggested more parks and open space in the center of the development. He stated the Municipal Code requires two pools with adjacent clubhouses for the number of units proposed. He also stated the open space should be grouped together, versus smaller pocket parks throughout the development.

Commissioner Everett agreed that a pool is needed for the development.

Discussion ensued regarding pool requirements and maintenance costs, as well as comparable amenities.

Mr. Jensen explained the plan can develop with a density up to Tier IV. The property is vested with rights included in the current Municipal Code, and will not be held to future changes in zoning requirements.

6) [Next scheduled meeting – February 26, 2019](#)

7) [Adjournment](#)

MOTION: *DeLin Anderson moved to adjourn the meeting at 8:49 p.m. Rich Wood seconded the motion. Those voting aye: Matthew Everett, DeLin Anderson, Brett Wright, and Rich Wood. The motion passed with a unanimous vote.*



**EAGLE MOUNTAIN CITY
PLANNING COMMISSION MEETING
MARCH 12, 2019**

TITLE:	Eagle Heights Village, Conditional Use Permit, Site Plan, and Master Development Plan - Public Hearing
ITEM TYPE:	Preliminary Plat & Site Plan
APPLICANT:	J Kirt Peterson (Horizon Development)

ACTION ITEM:

Yes

PUBLIC HEARING:

Yes

REQUIRED FINDINGS:

Per 17.25.140 of EMMC buildings within Tier III developments shall be twenty feet (20') unless otherwise approved by the City Council. The applicant is proposing the buildings with separations greater than twenty feet (20') thus this project complies with building separations.

The project isn't within 200' feet of a 25% slope thus no slope stability study is required.

Per 17.60.150 of EMMC "New subdivisions that are being proposed adjacent to existing or approved subdivisions and master development plans, building lots in an agriculture zone, or Camp Williams and BLM properties shall have lots that transition in accordance" to the standards within table 17.60.150(1) as the adjacent property is un-built, agriculture land (not building lots), and the nearest lots (those in Eagle Point I and J across Eagle Mountain Boulevard) are under 1/4 of an acre in size. Per 17.60.150 Duplexes are allowed adjacent to 1/4 acre lots, thus this proposal meets the lot size transitioning requirement.

Per 17.30 multifamily developments are required to provide clubhouses

BACKGROUND:

The Eagle Mountain Planning Commission reviewed a concept plan for the Eagle Heights Village project on February 12th 2019. The applicant has made changes to the plan since that meeting in order to address many of the Commission's concerns.

The applicant has proposed for the Master Development Plan to also serve as a Preliminary Plat.

Eagle Heights Village is proposing 310 units on 51.38 acres for an overall project density of 6.033 DU/AC making this a Tier III development, which requires a Conditional Use Permit, Site Plan, and a Master Development Plan.

The Planning Commission is the approval authority for the Conditional Use Permit, and shall make a recommendation for the Site Plan, and Master Development Plan, thus at least two motions will be required.

ITEMS FOR CONSIDERATION:

Eagle Mountain Boulevard is shown on the City's master transportation plan as a Major Collector road (94' ROW) with forty and a half feet (40.5') on each side of the median, currently there is approximately thirty-five feet (35') of Right-of-Way currently on the south side of Eagle Mountain Boulevard, meaning the applicant will need to dedicate approximately five and a half feet (5.5') of ROW along Eagle Mountain Boulevard. The applicant currently shows a pedestrian path in this area, which can (and should) remain in the shown location, but within City ROW.

According to the Alpine School District school boundary map, Eagle Heights Village will send elementary students to Mountain Trails Elementary School. Currently the nearest pathway on the south side of Eagle Mountain Boulevard is approximately 1,800 feet from the property boundaries. In order to provide a safe route to school (SRTS), the applicant has proposed a crosswalk across

that are a minimum of 1,200 SF in size, per code a clubhouse may serve up to 250 units. The applicant is proposing to provide 310 units and two clubhouses (one of 3,500 Square Feet, and one of 1,440 Square Feet) thus they meet this requirement.

Per 17.55.120(c) EMMC Two-Family Dwellings require: "2 stalls per dwelling unit with 1 space per unit to be within a fully enclosed garage." The applicant is proposing for each unit to have a 2 car garage, thus the applicant complies with this code.

17.72.040.F.1 states: "Multifamily structures shall utilize at least two exterior materials, including stucco, vinyl or fiber/cement siding, decorative rock/stone, brick or other material deemed appropriate by the planning director, each material shall be used on a minimum of 30% of the building, and used on all sides of the building." The proposed elevations do include multiple materials, but the percentages of materials should be confirmed to be at least 30%.

PREPARED BY:

Tayler Jensen, Planning

the Eagle Mountain Boulevard connecting to existing trails on the north side of Eagle Mountain Boulevard. If the Planning Commission and City Council do not believe that the proposed crosswalk does enough to provide SRTS it may be appropriate to require the applicant to connect the trail along the south side of Eagle Mountain Boulevard to existing trails to the west. If the Planning Commission and/or City Council requires the applicant to complete the off-site trail the applicant should be granted amenity points for the installation of the off-site trail, which may result in the applicant removing or reducing the size or scale of currently proposed open space amenities within the project, or use it as a buy-down of required open space acreage.

Per 16.30.090 of EMMC the minimum connectivity score for a Tier III development is 1.75. This project has a connectivity score of 1.76. The maximum block length for a Tier III development is 600 feet (or 900 feet with a mid-block pedestrian connection); the project does contain mid-block pedestrian connections so 900' long blocks do comply with code; however, the longest block length within this development is approximately 1,015 Feet (Stallion Street {from Oak Blvd to Ivy Lane}). Thus in order to comply with connectivity standards an additional road connection is needed between Oak Blvd and Stallion Street.

Per 17.60.120.R of EMMC developments with "side or rear lot lines abutting an arterial road or collector road right-of-way shall install privacy fencing consistent with Eagle Mountain collector and arterial fencing standards found in 16.35.090"; an applicant may propose alternative fencing standards to the City Council." This development will require collector road fencing for all lots that back onto Eagle Mountain Boulevard, Lake Mountain Road, and units on the west side of the project (adjacent to the future arterial road, commonly referred to as "Airport Road"). This fencing shall be consistent with the adopted fencing standards, unless the applicant receives approval from the City Council for an alternative fencing standard.

Per 16.35.105 EMMC, an applicant is required to provide 1,000 SF of improved open space per unit; in addition to improved open space an applicant is required to provide 100 amenity points per acre. All parks are required to provide a mixture of amenities, and no more than 33% of the required amenity points may be met by a combination of trails and parking. Section 16.35.130 goes on to state: "An applicant may propose a "buy down" of open space acreage by including additional amenities at a ratio of 150 points per acre, to be approved at the discretion of the Planning Commission and City Council." This buy down has been used in the Oak Hollow project. This code is intended to encourage developers to build parks that are smaller in size but provide higher quality amenities.

This proposal is for 310 units thus the development is required to provide 7.12 Acres of improved open space and 712 amenity points. The applicant is proposing to provide 3.17 acres of improved open space, and buy down the

remaining 3.95 acres of improved open space (approximately 55%). 3.95 acres of improved open space would require 395 amenity points, so at 150% 592.5 amenity points would be required. The applicant would be required a total of 1,304.5 amenity points (712 + 592.5) to meet the open space buy down provision. The applicant is proposing a total of 1,682 amenity points; however, they are assigning amenity points to community centers (for improvements within the centers above 1,200 SF) and for sports court lighting. We have not assigned amenity points to these items in the past, thus it is up to the Planning Commission and City Council to determine if these items are appropriate for amenity point credit.

The applicant has completed a traffic study. The traffic study shows the existing level of service for the study intersections (Eagle Mountain Boulevard and Pony Express Parkway & Lake Mountain Road and Eagle Mountain Boulevard) as Level of Service (LOS) A. With the project and mitigation the Traffic Study shows all intersections with a LOS A. The recommended mitigation is:

- Restriping the eastbound approach of Pony Express Parkway/Eagle Mountain Boulevard intersection with two lanes entering the roundabout. The inner lane would be for left-turn and through vehicles and the outer lane would be for right-turn vehicles only. The City Engineer has reviewed this traffic study and has some concerns that the roundabout may not be wide enough to allow for two traffic lanes throughout it. Traffic Studies completed for other projects anticipate the need for a traffic signal at the roundabout. The applicant shall be required to comply with any traffic mitigation required by the Eagle Mountain City Engineer.

Per EMMC 17.30 multifamily developments that have 150 or more units must provide a 1,000-sf pool, which may serve up to 250 units. The applicant is proposing 310 units which requires two swimming pools. The applicant is proposing one swimming pool of 1,350 square feet. In the past the City Council and Planning Commission have allowed developers to provide one larger pool instead of two smaller pools. The City Council previously determined that pools should provide at least 4SF of pool space per dwelling unit served. For 310 units that would be 1,240 SF. The proposed swimming pool of 1,350 SF provides approximately 4.35 SF per dwelling unit which is similar to what has been required for other developments.

17.72.030.C. states "Garages and parking areas should be placed to the rear of buildings, accessed by a service drive...If garages are placed on the front facade, they shall be staggered and set back so as to minimize their appearance from the street. Garages shall never dominate the street-facing facade." This project has garages placed along the front facade of the buildings, and while some of the elevations attempt to pull the garages back, the elevations are to a large extent dominated by garages. It is up to the Planning Commission and the City Council to determine if the garages

dominate the elevations or not.

17.72.030.D. of EMMC states: "The different elements of a site shall be arranged in a way that maximizes usable open/plaza space. This is especially important in multifamily projects. Buildings should be clustered and open space should be combined in larger, more usable areas. Creativity with open space design is also encouraged." The open space in this project is not clustered together, and instead is provided in several small parks spread through the development. The use of concrete planter boxes and a splash pad/pool area are creative design elements. It is up to the Planning Commission and City Council to determine if the applicant's proposed parks plan meets the intent of this code.

17.72.040 defines architectural standards for multifamily developments including: sloping roofs, overhanging eaves, multiple roof planes and heights , and for vertical and horizontal articulation and relief that "reduces the perceived scale of buildings." 17.72.04.E.2 states "Multifamily buildings shall incorporate a majority of the following architectural detailing: decorative shutters, bay windows, pop-outs, trellis or arbor structures, porches, decorative gables, dormer windows, exposed timbers, balconies, columns, turrets, decorative trim and moldings, detailed grilles and railings, architectural lighting, decorative masonry pattern, window grids, and decorative doors and windows. All sides of a building shall include the chosen details, where applicable." The proposed elevations have sloping roof planes and heights, and some articulation, but the walls remain largely panelized, and the buildings do not appear to incorporate a majority of the features called for in code. It is up to the Planning Commission and City Council to determine if the features provided meet the intent of code.

RECOMMENDATION:

The following recommendations are provided for the Planning Commissions benefit and may be read or referenced when making a motion:

I Move that the Eagle Mountain Planning Commission approve the Eagle Heights Village Conditional Use Permit with the following condition(s)

1) any conditions the Planning Commission feels are appropriate

If the Planning Commission feels that approval of the Site Plan, and Master Development Plan is appropriate the following motion could be used:

I move that the Eagle Mountain Planning Commission recommend approval of the Eagle Heights Village Site Plan and Master Development Plan to the City Council with the following conditions:

1) Rock/stone shall make up at least 30% of the building and be used on all sides of the buildings.

- 2) 5.5 feet of right-of-way along Eagle Mountain Boulevard shall be dedicated to the City at the time of plat recording.
- 3) An additional road connection shall be provided between Oak Blvd and Stallion Street (in the northern section of the project).
- 4) Collector Road Fencing shall be required adjacent to Eagle Mountain Boulevard, Lake Mountain Road, and the Future Airport Road.
- 5) Comply with any traffic mitigation required by the City Engineer.
- 6) Additional open space shall be provided, combined with an existing open space area, to create a larger more useable park area with a grass play field.
- 7) Any other conditions the Planning Commission deems appropriate (related to safe routes to school, park layout/amenities, road/lot layout, etc.).

If the Planning Commission requires additional information to make a recommendation the following recommendation is appropriate:

I move that the Planning Commission table the Eagle Heights Village Site Plan and Master Development Plan until the applicant has provided the following information:

- 1) detailed request of what is needed to make a recommendation

If you feel that the Eagle Heights Village Site Plan and Master Development Plan should be denied the following motion would be appropriate:

I move that the Eagle Mountain Planning Commission recommend denial of the Eagle Heights Village Site Plan and Master Development Plan to the City Council based on the following findings of fact:

- 1) detailed findings of fact supporting recommendation of denial (specific to code-related items).

Attachments:

Eagle Pointe Village Site Plan
Preliminary Plans
Parks and Open Space Worksheet
Landscape, Parks, and Amenity Plans
Elevations
Grading, Drainage and Erosion Report
Phase I Environmental Report
Geotechnical Report
Traffic Impact Study
Letter of Support -- Enterprise

- ① CLUBHOUSE
- ② PARKING LOT
- ③ POCKET PARK
- ④ PLAYGROUND
- ⑤ MAINTENANCE BUILDING
- ⑥ RETENTION POND

<u>BUILDING TYPES</u>	<u>COLOR</u>	<u>QUANTITY</u>
CWG III ADA	GREEN	16
EAGLE (4BDRM)	PURPLE	12
OAKS	BLACK	11
FRONTIER	BLUE	50
CWG 3	MAGENTA	44
CWG 4 ADA	RED	4
CEDAR	TAN	18

PART OF SECTION 18
TOWNSHIP 6 SOUTH RANGE 1 WEST
SALT LAKE BASE AND MERIDIAN
EAGLE MOUNTAIN, UTAH

0 100 200ft.
SCALE 1" = 100'-0"

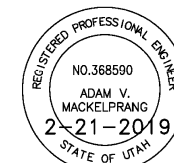


VICINITY MAP

PROJECT



REVISION		 ALLIANCE CONSULTING ENGINEERS	
DATE	BY		
		150 EAST 200 NORTH SUITE P LOGAN, UTAH 84321	
		EAGLE POINTE VILLAGE SITE PLAN	
		PART OF SECTION 18 TOWNSHIP 6 SOUTH RANGE 1 WEST SALT LAKE BASE AND MERIDIAN EAGLE MOUNTAIN, UTAH	
SCALE: AS NOTED	DRAWN BY: AM	CHECKED BY: AM	DATE: 9-2018
APPROVED BY: BL		DWG DATA: EAGLEMNTNCONCEPT.DWG	



SITE REFERENCE NOTES

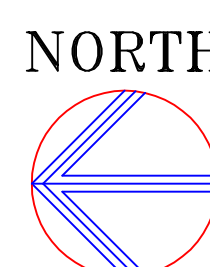
- ① CLUBHOUSE
- ② PARKING LOT
- ③ POCKET PARK
- ④ PLAYGROUND
- ⑤ MAINTENANCE BUILDING
- ⑥ RETENTION POND

<u>BUILDING TYPES</u>	<u>COLOR</u>	<u>QUANTITY</u>
CWG III ADA	GREEN	16
EAGLE (4BDRM)	PURPLE	12
OAKS	BLACK	11
FRONTIER	BLUE	50
CWG 3	MAGENTA	44
CWG 4 ADA	RED	4
CEDAR	TAN	18

EAGLE POINTE VILLAGE

PART OF SECTION 18
TOWNSHIP 6 SOUTH RANGE 1 WEST
SALT LAKE BASE AND MERIDIAN
EAGLE MOUNTAIN, UTAH

SITE PLAN



0 100 200ft.
SCALE 1" = 100'-0"

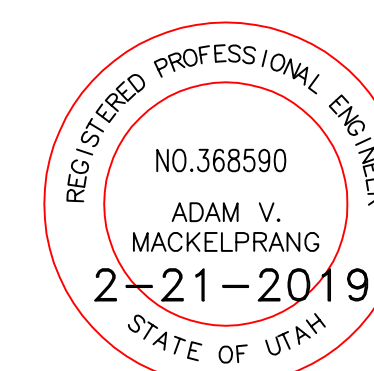


VICINITY MAP

PROJECT



REVISION		 ALLIANCE CONSULTING ENGINEERS	
DATE	BY		
		150 EAST 200 NORTH SUITE P LOGAN, UTAH 84321	
		EAGLE POINTE VILLAGE SITE PLAN	
		PART OF SECTION 18 TOWNSHIP 6 SOUTH RANGE 1 WEST SALT LAKE BASE AND MERIDIAN EAGLE MOUNTAIN, UTAH	
SCALE:	AS NOTED	DRAWN BY:	AM
		APPROVED BY:	BL
		CHECKED BY:	AM
		DATE: 9-2018	
		DWG DATA: EAGLE.MNTNCONCEPT.DWG	



SITE REFERENCE NOTES

- ① CLUBHOUSE

② PARKING LOT

③ POCKET PARK

④ PLAYGROUND

⑤ MAINTENANCE BUILDING

⑥ RETENTION POND
- BUILDING TYPES

OWG III ADA

MARGES TRIPLE

OAKS

SPRINGS III

OWG

OWG 4 ADA

LR 4
- COLOR

GREEN

PURPLE

MAGENTA

BLUE

RED

BLACK

TAN
- QUANTITY

13

30

34

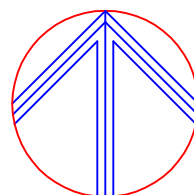
32

22

14

EAGLE HEIGHTS VILLAGE
PART OF SECTION 18
TOWNSHIP 6 SOUTH RANGE 1 WEST
SALT LAKE BASE AND MERIDIAN
EAGLE MOUNTAIN, UTAH
PRELIMINARY PLAT OVERALL

NORTH

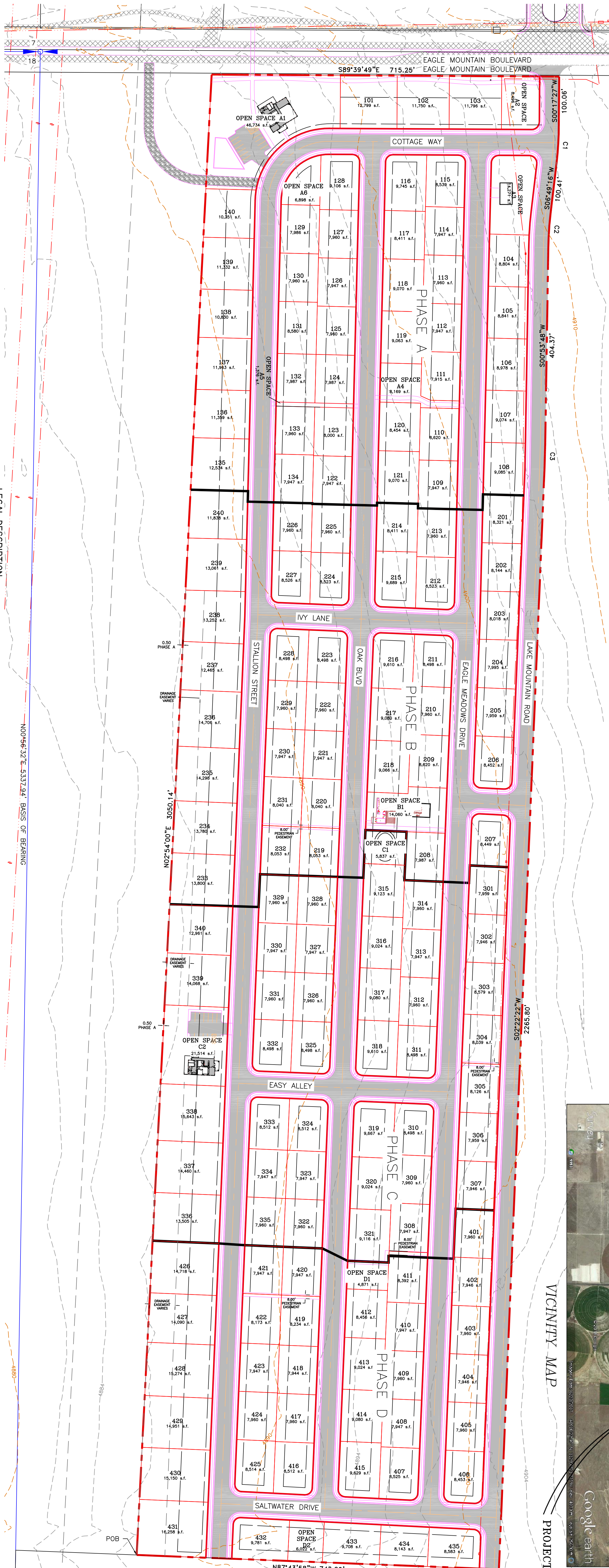


0 100 200 FT.
SCALE 1" = 100'-0"



VICINITY MAP

PROJECT



LEGAL DESCRIPTION

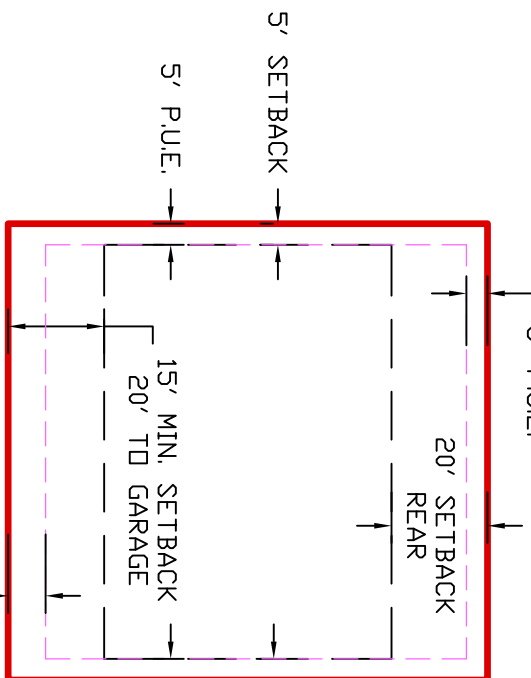
Port of the East Half of Section 18, Township 6 South, Range 1 West of the Salt Lake Base & Meridian described as follows:
Commencing at the South Quarter Corner of Section 18, Township 6 South, Range 1 West of the Salt Lake Base and Meridian thence North 2253.61 feet, thence East 37.06 feet; thence S87°43'58"E 249.24 feet to the POINT OF BEGINNING and running
thence N 02°54'00" E 3,050.14 feet to the south right of way line Eagle Mountain Blvd;
thence S 89°39'49" E 715.25 feet along said south right of way line;
thence S 00°17'27" W 100.06 feet;
thence Southerly, 80.92 feet along a curve to the right having a radius of 710.00 feet, a central angle of 08°31'49" and a chord that bears S 03°53'21" W 80.88 feet;
thence Southerly, 71.35 feet along a curve to the left having a radius of 690.00 feet, a central angle of 05°55'28" and a chord that bears S 03°51'32" W 71.32 feet;
thence Southerly, 51.78 feet along a curve to the right having a radius of 2,010.00 feet, a central angle of 01°28'34" and a chord that bears S 01°38'05" W 223.61 feet;
thence N 87°43'58" W 746.29 feet to the point of beginning,
containing 51.38 acres, more or less

PLAT CALCULATIONS

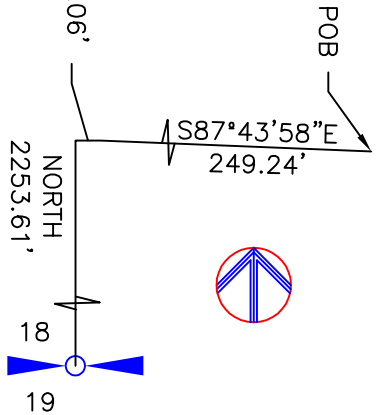
TOTAL ACRES: 51.38 AC.
BUILDABLE ACRES: 32.92 AC.
TOTAL OPEN SPACE: 3.17 AC.
TYPICAL LOT SIZE: 9,528 s.f.
SMALLEST LOT SIZE: 7915 s.f.
OVERALL DENSITY: 3.0 LOTS/AC.
TOTAL # OF LOTS: 155

CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	80.92	710.00	6°31'49"	N03°53'21"E	80.88
C2	71.35	690.00	5°55'28"	S03°51'32"W	71.32
C3	51.78	2010.00	1°28'34"	N01°38'05"E	51.78

TYP LOT EASEMENT/SETBACK



POB TIE



REVISION	DATE	BY
1 of 7		

ALLIANCE CONSULTING ENGINEERS

EAGLE HEIGHTS VILLAGE
PRELIMINARY PLAT OVERALL

ADAM V. MACKELPRANG
STATE OF UTAH
2-28-2019

PLAT OF SECTION 18, TOWNSHIP 6 SOUTH RANGE 1 WEST, SALT LAKE BASE AND MERIDIAN, EAGLE MOUNTAIN, UTAH

SCALE: AS NOTED

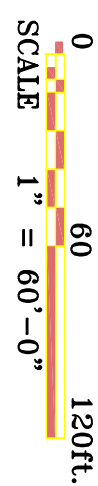
DRAWN BY: AM

CHECKED BY: AM

DATE: 9-2018

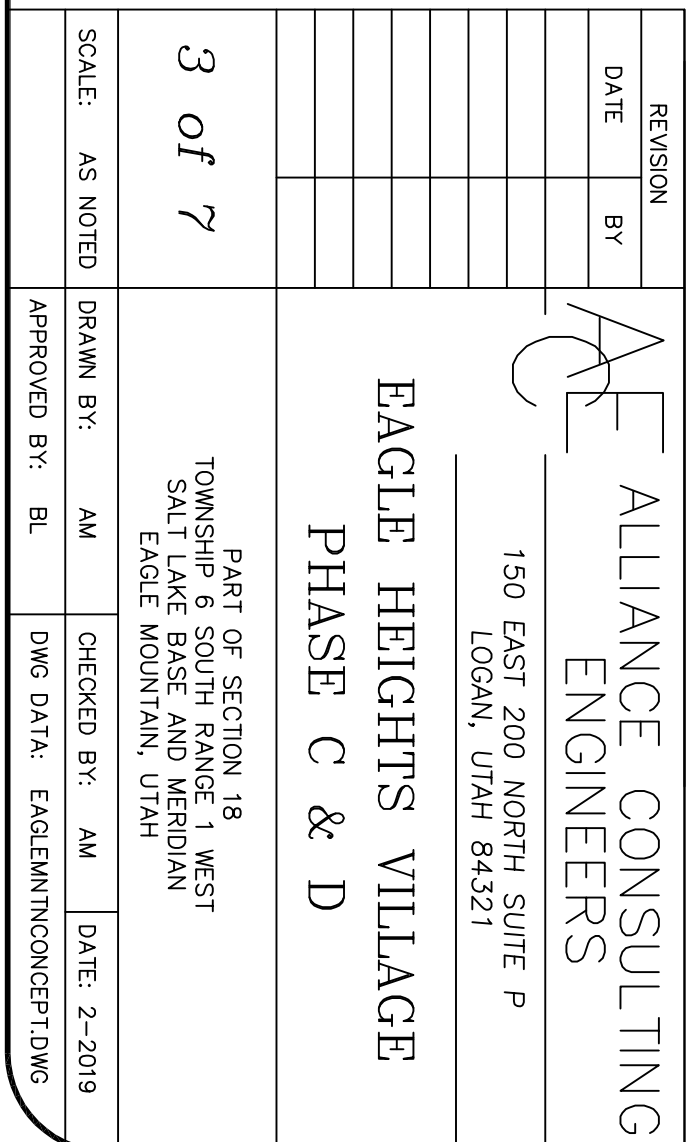
APPROVED BY: BL

DWG DATA: EAGLEMANCONCEPT.DWG



PART OF SECTION 18
TOWNSHIP 6 SOUTH RANGE 1 WEST
SALT LAKE BASE AND MERIDIAN
EAGLE MOUNTAIN, UTAH
PRELIMINARY PLAT
PHASE C & D

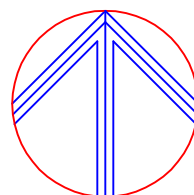
THERE ARE NOT SLOPES OVER 10% ON THE SITE



EAGLE HEIGHTS VILLAGE

PART OF SECTION 18
TOWNSHIP 6 SOUTH RANGE 1 WEST
SALT LAKE BASE AND MERIDIAN
EAGLE MOUNTAIN, UTAH
WATER ANALYSIS

NORTH



0 120 240ft.
SCALE 1" = 120'-0"

A WATER MODEL WAS ESTABLISHED USING EPANET 2 IN ORDER TO DEMONSTRATE THAT ADEQUATE PRESSURE AND FLOW WOULD BE AVAILABLE FOR THE DEVELOPMENT WITHOUT CREATING A NEGATIVE IMPACT ON EXISTING USERS.

USING THE FOLLOWING ESTIMATIONS:

- TANK ELEVATION: 5207.00
- PEAK INSTANTANEOUS DEMAND (PID) NORTH OF EAGLE MOUNTAIN BLVD: 356 GPM (130 ERU)
- PEAK DAY DEMAND (PDD) NORTH OF EAGLE MOUNTAIN BLVD: 129 GPM
- PID WEST OF EAGLE MOUNTAIN BLVD: 3145 GPM (2000 ERU)
- PDD WEST OF EAGLE MOUNTAIN BLVD: 1983 GPM
- PID FROM NEW DEVELOPMENT: 698 GPM (312 ERU)
- PDD FROM NEW DEVELOPMENT: 309 GPM

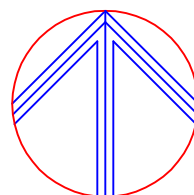
AS SHOWN BELOW THE PROJECT WILL HAVE ADEQUATE PRESSURE WHILE AFFECTING A CHANGE IN LINE PRESSURE OF ABOUT 1%.



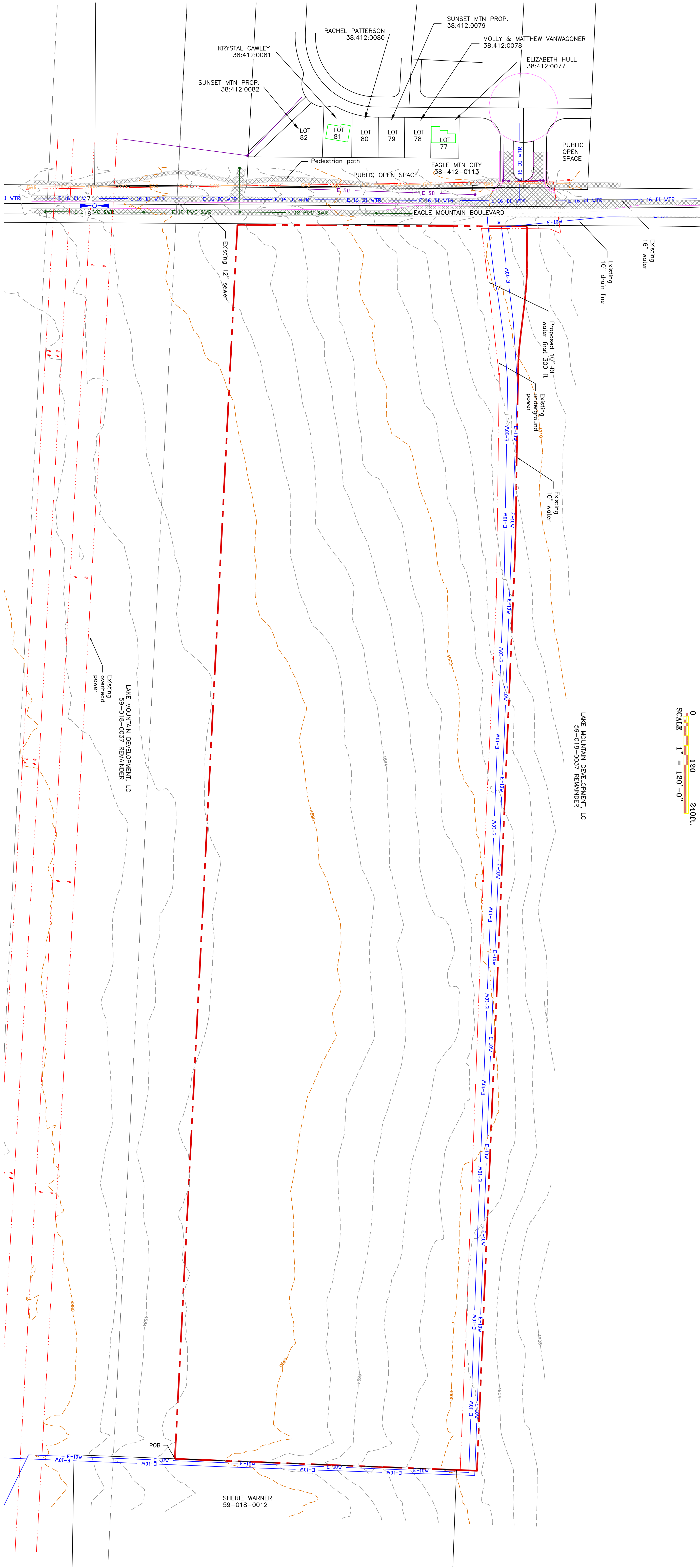
REVISION		ALLIANCE CONSULTING ENGINEERS 150 EAST 200 NORTH SUITE P LOGAN, UTAH 84321 EAGLE HEIGHTS VILLAGE WATER ANALYSIS			
DATE	BY				
		PART OF SECTION 18 TOWNSHIP 6 SOUTH RANGE 1 WEST SALT LAKE BASE AND MERIDIAN EAGLE MOUNTAIN, UTAH			
4 of 7		DRAWN BY: AM	CHECKED BY: AM	DATE: 2-2019	
SCALE: AS NOTED		APPROVED BY: BL	DWG DATA: EAGLEMTNCONCEPT.DWG		

EAGLE HEIGHTS VILLAGE
PART OF SECTION 18
TOWNSHIP 6 SOUTH RANGE 1 WEST
SALT LAKE BASE AND MERIDIAN
EAGLE MOUNTAIN, UTAH
CONTEXT PLAN

NORTH

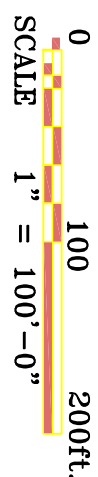


0 120 240ft.
SCALE 1" = 120'-0"



REVISION		ALLIANCE CONSULTING ENGINEERS 150 EAST 200 NORTH SUITE P LOGAN, UTAH 84321			
DATE	BY				
		EAGLE HEIGHTS VILLAGE CONTEXT PLAN			
5 of 7		PART OF SECTION 18 TOWNSHIP 6 SOUTH RANGE 1 WEST SALT LAKE BASE AND MERIDIAN EAGLE MOUNTAIN, UTAH			
SCALE: AS NOTED	DRAWN BY: AM	CHECKED BY: AM	DATE: 2-2019	APPROVED BY: BL	DWG DATA: EAGLEMTNCONCEPT.DWG

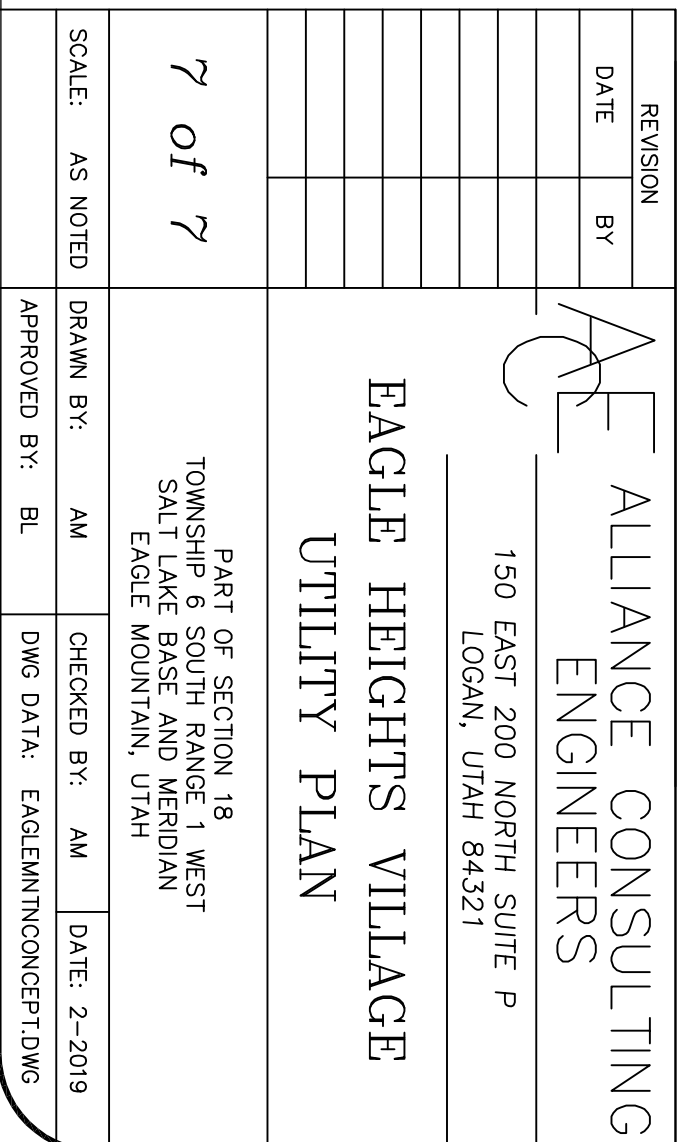
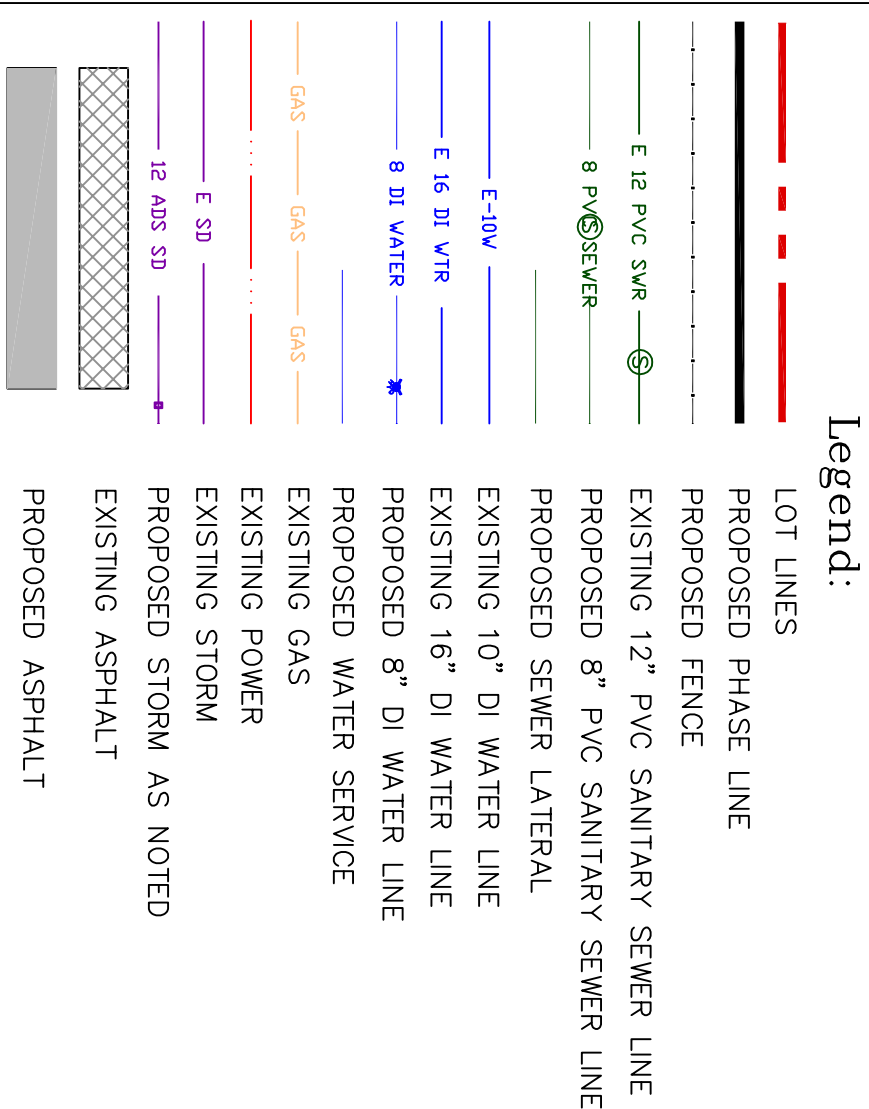
- | BUILDING TYPES | COLOR | QUANTITY |
|----------------|---------|----------|
| CMG III ADA | GREEN | 16 |
| EAGLE (4BDRM) | PURPLE | 12 |
| OAKS | BLACK | 11 |
| FRONTIER | BLUE | 50 |
| CMG 3 | MAGENTA | 44 |
| CMG 4 ADA | RED | 4 |
| CEDAR | TAN | 18 |



PROJECT

[illegible]

PART OF SECTION 18
TOWNSHIP 6 SOUTH RANGE 1 WEST
SALT LAKE BASE AND MERIDIAN
EAGLE MOUNTAIN, UTAH
UTILITY PLAN



Parks & Open Space Worksheet

Directions: Submit a completed worksheet with your preliminary plat or site plan application and park designs are subject to approval by the Planning Commission and City Council.

Required Improved Open Space

Residential Lots/Units		Required Open Space (Square Feet)		Required Open Space (Acres)
310	X 1,000 =	310,000.00	/ 43,560 =	7.12

Park Fee-In-Lieu (if applicable)

Required Open Space (Square Feet)		Total Fee-in-Lieu
310,000.00	X \$3.75	\$1,162,500.00

Required Amenities

Required Open Space (Acres)	
7.12	X 100

Parks & Improved Open Space Elements/Amenities

Park Feature / Improvement	Points Available	Proposed Quantities
Bench/Picnic Table (w/ shade structure or trees)	2	8
Bicycle Rack (4+ bikes)	2	5
Trees (5) (a majority must be shade trees)	2	55
Shade Structure	4	0
Drinking Fountain	5	0
Asphalt or Concrete Trails - 8ft wide, excluding sidewalks along streets (per 100 linear feet)	6	800
Parking* (5 Stalls)	6	6
Swings (4+ Swings)	7	0
Concrete Basketball Court (1/2 Court)	20	0
Pavilion w/tables, garbage receptacles, barbeques (per 100 square feet)	4	2200
Playground Equipment* <u>Per \$1,000</u>	2	150,000
Splash Pad* <u>Per \$1,000</u>	2	75000
Tennis court (6,600 sq ft or 55' x 120')	100	
Sports court (6,600 sq ft or 55'x120')	100	1
Restroom (600+ sq ft)	100	0
Restroom (1,200+ sq ft)	200	
Public Art	Varies	
Other: Garden Boxes	Varies	
Other: Lighting at Sports Court	Varies	
Other: Masonry Fencing	Varies	
Other: Community Center 1 - 3,500 SF	Varies	
Other: Community Center 2 - 1,440 SF	Varies	
Other:	Varies	
Other:	Varies	

Total

* Public art should reflect the neighborhood or community identity or culture. Creativity is encouraged in playground equipment awarded more points than Standard Equipment. Costs for playground equipment and splash pads reflect equipment costs only improved open space, and must be in addition to any required parking for the development.

Buydown is 150 points per acre.

Required Park Area

Provided Open Space

on. Proposed amenities ty Council
Open Space (Acres)
Acres
y Points
Required Amenity Points
711.66
Proposed Points
16
10
22
0
0
48
36
0
0
88
300
150
0
100
0
0
100
50
0
690
72
0
1,682

Traditional Open Space Calculation

86,127.00
1.977204

and splash pads, and may be
: Parking must be adjacent to

6.47

0.65

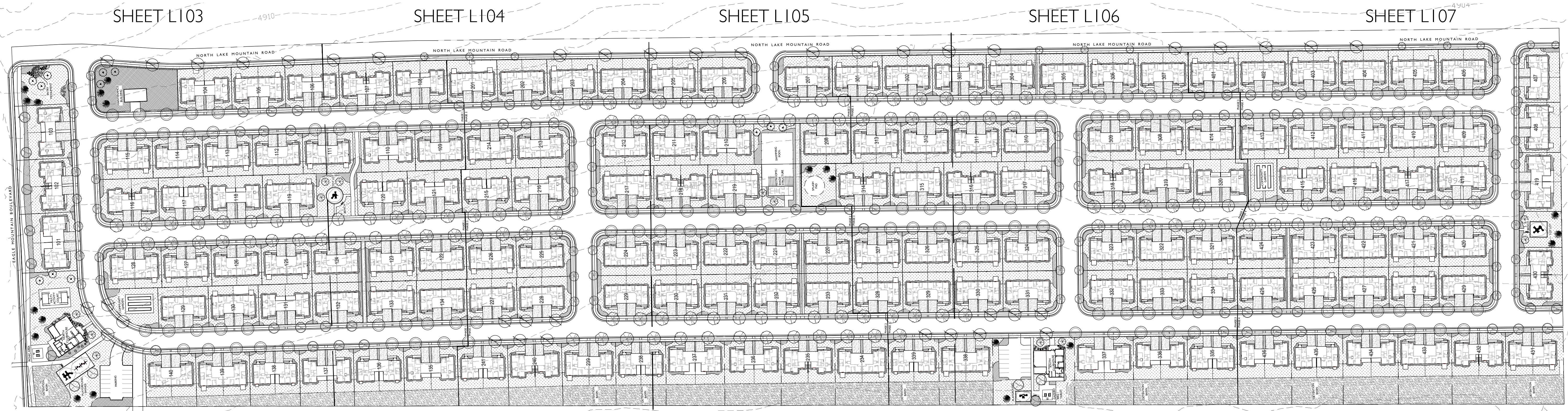
2.69



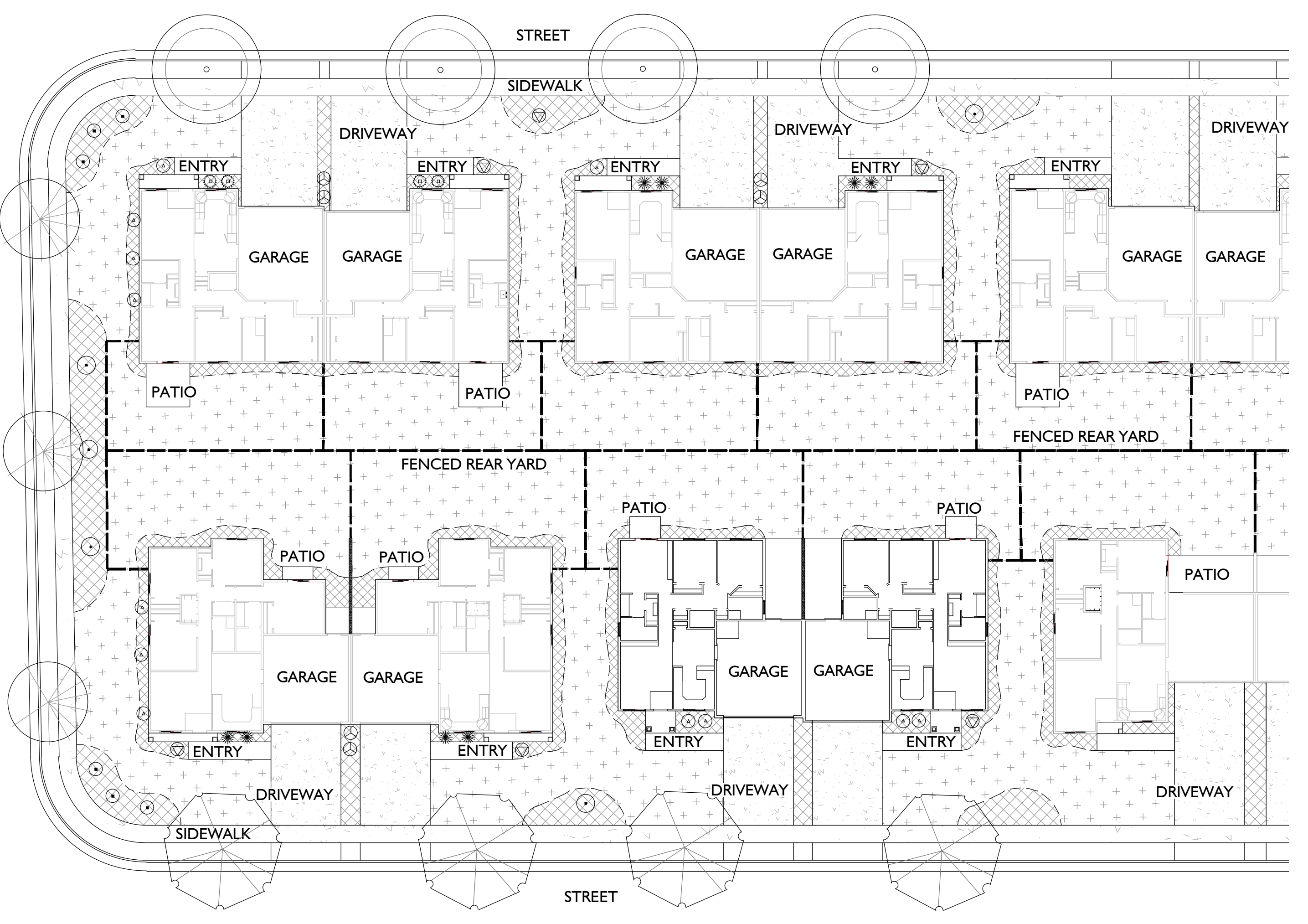
ISSUE DESCRIP.	DATE
	03.01.2019

#	REV. DESCRIPTION	DATE

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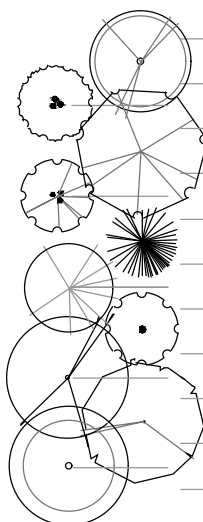
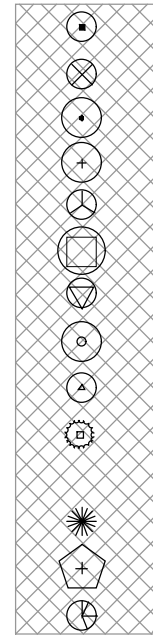


OVERALL LANDSCAPE PLAN
SCALE: 1"=100'-0" NORTH



TYPICAL UNIT LANDSCAPE PLAN
SCALE: 1"=20'-0" NORTH

LANDSCAPE SCHEDULE

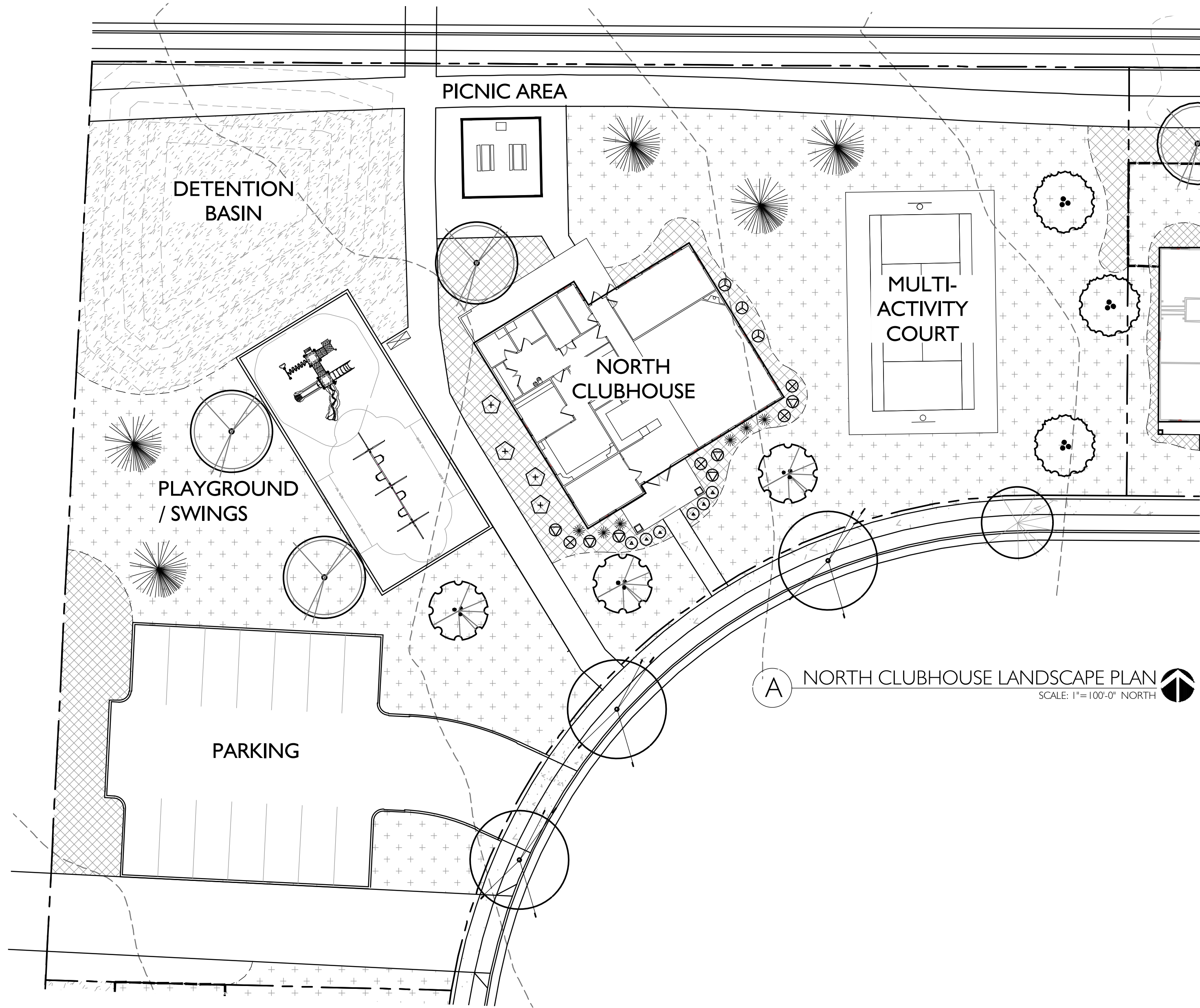
SYM	QTY	SCIENTIFIC NAME	COMMON NAME	SIZE					
	463	TREES							
	70	ACER TRUN. x A. PLAT. 'WARRENRED'	PACIFIC SUNSET MAPLE	2" CAL.					
	12	CERCIS CANADENSIS - CLUMP	EASTERN REDBUD - CLUMP	15 GAL.					
	85	GLEDITSIA TRIA. INERMIS 'IMPERIAL'	IMPERIAL HONEYLOCUST	2" CAL.					
	12	MALUS 'RADIANT' - CLUMP	RADIANT CRABAPPLE - CLUMP	15 GAL.					
	20	PICEA PUNGENS GLAUCA	COLORADO BLUE SPRUCE	7"					
	60	PRUNUS VIRGINIANA 'CANADA RED'	CANADA RED CHOKECHERRY	2" CAL.					
	11	SYRINGA RETICULATA 'IVORY SILK'	I. S. JAPANESE TREE LILAC	2" CAL.					
	40	TILIA CORDATA 'GREENSPIRE'	I. S. JAPANESE TREE LILAC	2" CAL.					
	44	ULMUS X 'FRONTIER'	FRONTIER ELM	2" CAL.					
	109	ZELKOVA SERRATA 'GREEN VASE'	GREEN VASE ZELKOVA	2" CAL.					
	SHRUBS								
		BERBERIS THUN. ATRO. 'RUBY CAROUSEL'	RUBY CAROUSEL BARBERRY	2 GAL.					
		PINUS MUGO MUGUS	DWARF MUGO PINE	2 GAL.					
		PHYSOCARPUS OPULUS 'SUMMER WINE'	SUMMER WINE NINEBARK	2 GAL.					
		EUONYMUS ALATUS COMPACTA	DWARF BURNING BUSH	2 GAL.					
		EUONYMUS FORTUNEI	EOUNYMUS	2 GAL.					
		PRUNUS x CISTENA	CISTENA PLUM	2 GAL.					
		POTENTILLA FRUTICOSA	SHRUBBY CINQUEFOIL	2 GAL.					
		RHUS AROMATICA 'GROW LOW'	GROW LOW SUMAC	2 GAL.					
		SPIRAEA BUMALDA	SPIREA	2 GAL.					
		TAXUS BACCATA REPANDENS	DWARF ENGLISH YEW						
	ORNAMENTAL GRASSES								
		CALAMAGROSTIS x ACUT. 'KARL FOERSTER'	K. F. FEATHER GRASS	1 GAL.					
		MISCANTHUS SINENSIS 'GRACILLIMUS'	SLENDER MAIDEN GRASS	1 GAL.					
		PANICUM VIRGATUM 'HEAVY METAL'	HEAVY METAL SWITCH GRASS	1 GAL.					
	TURF								
	511,047 S.F.	CHANSHARE IMPERIAL BLUE		SOD					
	118,696 S.F.	GRASS - NON-IRRIGATED							
		Name	Variety	Scientific Name	Bulk Lbs.	Bulk %	PLS Lbs.	PLS %	PLS/Acre
		Wheatgrass, Crested	Ephraim	Agropyron Christiantum	4.59	27.03%	4.59	27.03%	4
		Wheatgrass, Streambank	Sodar	lanceolatus ssp. lanceolatus	4.59	27.03%	4.59	27.03%	4
		Fescue, Sheep	VNS	Festuca vira var. ovina	1.15	6.76%	1.15	6.76%	1
		Lewis Flax	Appar.	Linum Lewisii	1.15	6.76%	1.15	6.76%	1
		Wheatgrass, Western	Barton	Pascopyrum smithii	2.30	13.51%	2.30	13.51%	2
		Bluegrass, Sandberg	VNS	Poa secunda	0.57	3.38%	0.57	3.38%	0.5
		Wheatgrass, Snake River	Secar	Elymus wawawaiensis	2.30	13.51%	2.30	13.51%	2
		Alkali sacaton	VNS	Sporobolus airoides	0.34	2.03%	0.34	2.03%	0.3
		Total			17.00	100.0%	17.00	100.0%	14.8
	MULCH								
		CRUSHED GRAVEL MULCH - STAKER PARSONS, COPPER CANYON, 1" 1 1/2" 3" MIN.							

LANDSCAPE TABULATIONS

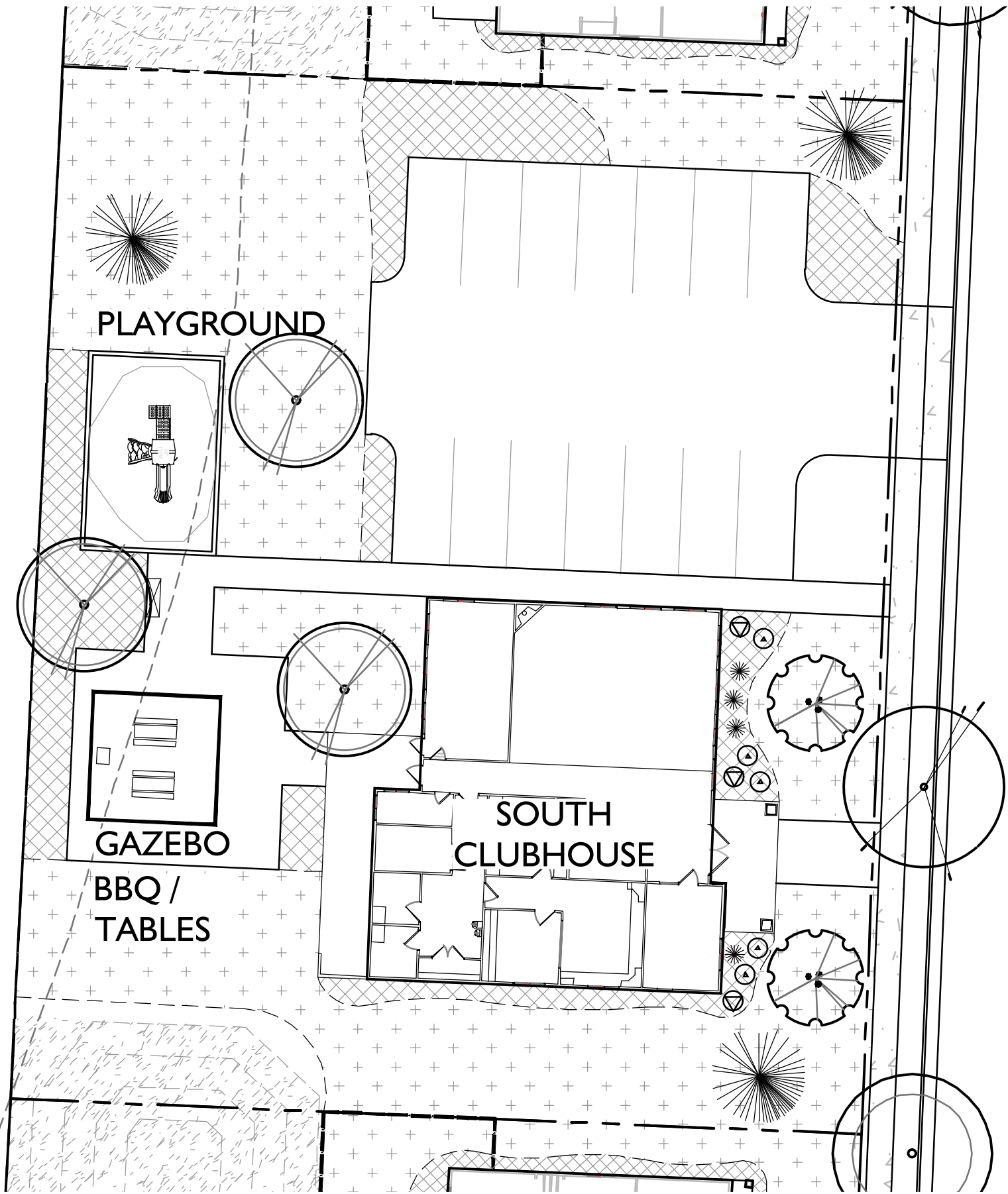
TOTAL PROJECT LANDSCAPE AREA	761,390 S.F.
TURF AREAS	511,047 S.F. 67%
PLANTER BED AREAS	131,647 S.F. 17%
NATIVE REVEGATION AREAS	118,696 S.F. 16%
TREES PROVIDED - TURF AND PLANTER AREAS	463 TREES

LANDSCAPE GENERAL NOTES

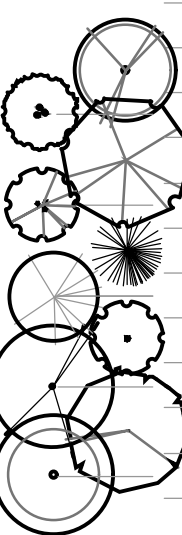
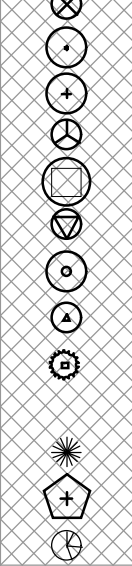
- Contractor shall locate and verify the existence of all utilities within project area prior to commencement of work.
- Do not commence planting operation until rough grading has been completed.
- All plants shall bear the same relationship to finished grade as the original grade before digging.
- All alterations to these drawings during construction shall be approved by the Project Representative and recorded on "as Built" drawings by the Contractor.
- Pre-emergent herbicide shall be used prior to mulch placement.
- All plant materials shall conform to the minimum guidelines established by the American Standard for Nursery Stock, published by the American Nursery Association, Inc.
- All plants to be balled and burlapped or container grown, unless otherwise noted on the plant list.
- The contractor shall supply all plant material in quantities sufficient to complete the planting shown on the drawings.
- Any proposed substitutions of plant species shall be made with plants of equivalent overall form, height, branching habit, flower, leaf color, fruit and culture only as approved by the Project Representative.
- The Contractor shall locate and verify all existing utility lines prior to planting and shall report any conflicts to the Landscape Architect.
- Stake location of all proposed planting for approval by the Landscape Architect prior to commencement of planting.
- All turf areas shall receive four inches (4") of topsoil prior to planting. All shrub, groundcover, and perennial beds shall receive four inches (4") of topsoil prior to planting.
- Submit topsoil report prepared by a qualified soil testing laboratory prior to soil placement. Topsoil shall meet the following mechanical analysis:
Sand (0.05 - 2.0 mm Dia.) 20 - 70%
Clay (0.002 - 0.05 mm Dia.) 20 - 70%
The max. retained on a #10 sieve will be 15 percent. the topsoil shall meet the following analysis criteria:
pH Range of 5.5 to 8.2, a min. of 4% and max. of 8% organic matter content and free of stones 3/4" or larger. Soluble salts <2 dS/m or mmho/cm and sodium absorption ration (sar) <6.
- All tree rings and plant beds to receive mulch as specified in the Landscape Schedule.

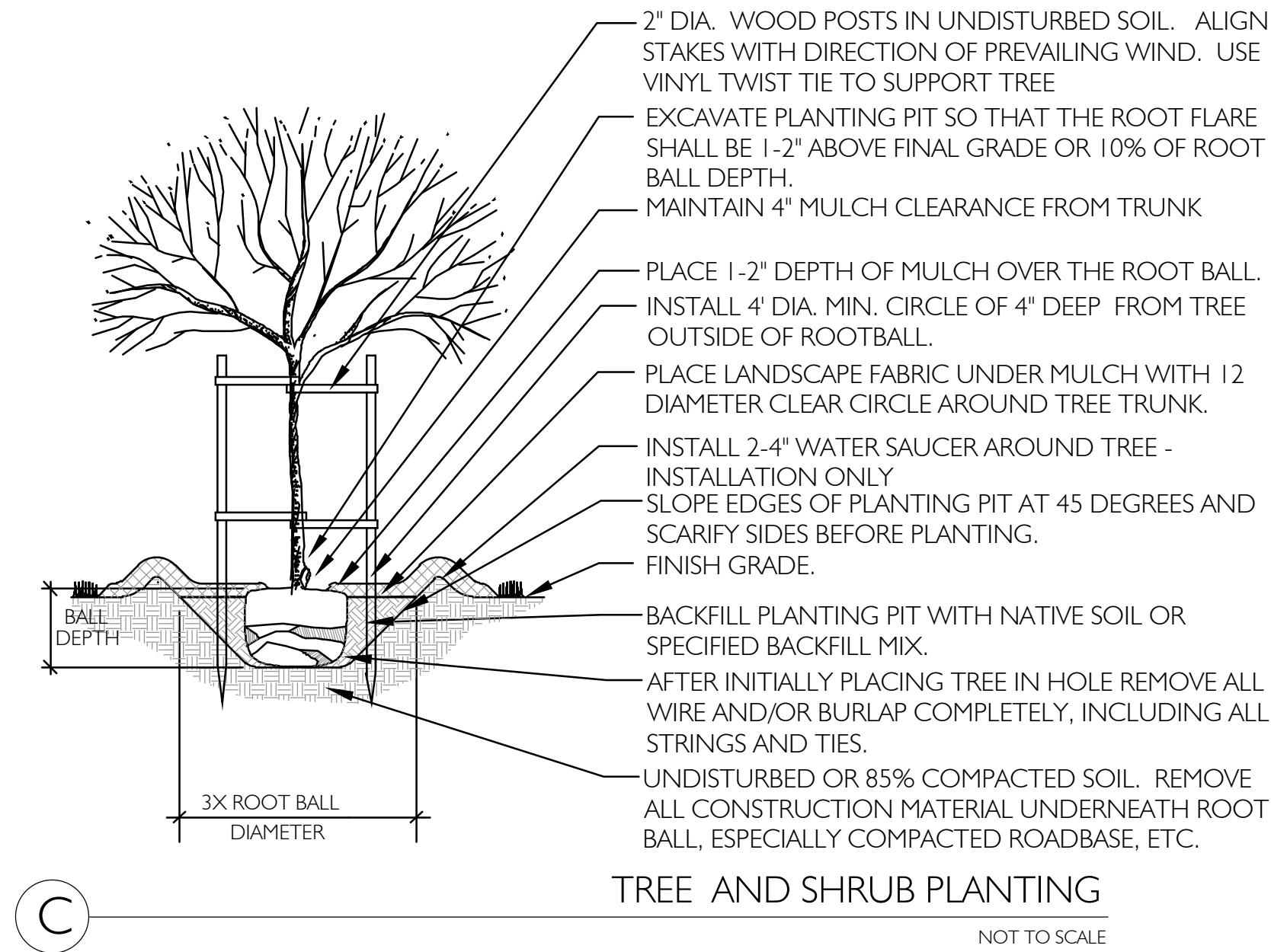


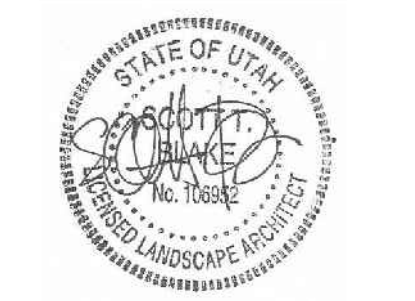
A NORTH CLUBHOUSE LANDSCAPE PLAN
SCALE: 1"=100'-0" NORTH



B SOUTH CLUBHOUSE LANDSCAPE PLAN
SCALE: 1"=100'-0" NORTH

LANDSCAPE SCHEDULE								
SYM	QTY	SCIENTIFIC NAME	COMMON NAME	SIZE				
	463	TREES						
	70	ACER TRUN. x A. PLAT. 'WARRENRED'	PACIFIC SUNSET MAPLE	2" CAL.				
	12	CERCIS CANADENSIS - CLUMP	EASTERN REDBUD - CLUMP	15 GAL.				
	85	GLEDITSIA TRIA. INERMIS 'IMPERIAL'	IMPERIAL HONEYLOCUST	2" CAL.				
	12	MALUS 'RADIANT' - CLUMP	RADIANT CRABAPPLE - CLUMP	15 GAL.				
	20	PICEA PUNGENS GLAUCA	COLORADO BLUE SPRUCE	7'				
	60	PRUNUS VIRGINIANA 'CANADA RED'	CANADA RED CHOKECHERRY	2" CAL.				
	11	SYRINGA RETICULATA 'IVORY SILK'	I. S. JAPANESE TREE LILAC	2" CAL.				
	40	TILIA CORDATA 'GREENSPIRE'	I. S. JAPANESE TREE LILAC	2" CAL.				
	44	ULMUS X 'FRONTIER'	FRONTIER ELM	2" CAL.				
	109	ZELKOVA SERRATA 'GREEN VASE'	GREEN VASE ZELKOVA	2" CAL.				
	SHRUBS							
		BERBERIS THUN. ATRO. 'RUBY CAROUSEL'	RUBY CAROUSEL BARBERRY	2 GAL.				
		PINUS MUGO MUGUS	DWARF MUGO PINE	2 GAL.				
		PHYSOCARPUS OPULUS 'SUMMER WINE'	SUMMER WINE NINEBARK	2 GAL.				
		EUONYMUS ALATUS COMPACTA	DWARF BURNING BUSH	2 GAL.				
		EUONYMUS FORTUNEI	EOUNYMUS	2 GAL.				
		PRUNUS x CISTENA	CISTENA PLUM	2 GAL.				
		POTENTILLA FRUTICOSA	SHRUBBY CINQUEFOIL	2 GAL.				
		RHUS AROMATICA 'GROW LOW'	GROW LOW SUMAC	2 GAL.				
		SPIRAEA BUMALDA	SPIREA	2 GAL.				
		TAXUS BACCATA REPANDENS	DWARF ENGLISH YEW					
	ORNAMENTAL GRASSES							
		CALAMAGROSTIS x ACUT. 'KARL FOERSTER'	K. F. FEATHER GRASS	1 GAL.				
		MISCANTHUS SINENSIS 'GRACILLIMUS'	SLENDER MAIDEN GRASS	1 GAL.				
		PANICUM VIRGATUM 'HEAVY METAL'	HEAVY METAL SWITCH GRASS	1 GAL.				
	TURF							
	511,047 S.F. CHANSHARE IMPERIAL BLUE			SOD				
	118,696 S.F. GRASS - NON-IRRIGATED							
		Name	Variety	Scientific Name	Bulk Lbs.	Bulk %	PLS Lbs.	PLS %
	Wheatgrass, Crested	Ephraim	Agropyron Christiantum	4.59	27.03%	4.59	27.03%	4
	Wheatgrass, Streambank	Sodar	lancoelatus ssp. Lanceolatus	4.59	27.03%	4.59	27.03%	4
	Fescue, Sheep	VNS	Festuca vina var. ovina	1.15	6.76%	1.15	6.76%	1
	Lewis Flax	Appar.	Linum Lewwisii	1.15	6.76%	1.15	6.76%	1
	Wheatgrass, Western	Barton	Pascopyrum smithii	2.30	13.51%	2.30	13.51%	2
	Bluegrass, Sandberg	VNS	Poa secunda	0.57	3.38%	0.57	3.38%	0.5
	Wheatgrass, Snake River	Secar	Elymus wawawaiensis	2.30	13.51%	2.30	13.51%	2
	Alkali sacaton	VNS	Sporobolus airoides	0.34	2.03%	0.34	2.03%	0.3
	Total			17.00	100.0%	17.00	100.0%	14.8
MULCH								
CRUSHED GRAVEL MULCH - STAKER PARSONS, COPPER CANYON, 1"-1 1/2"								3" MIN.





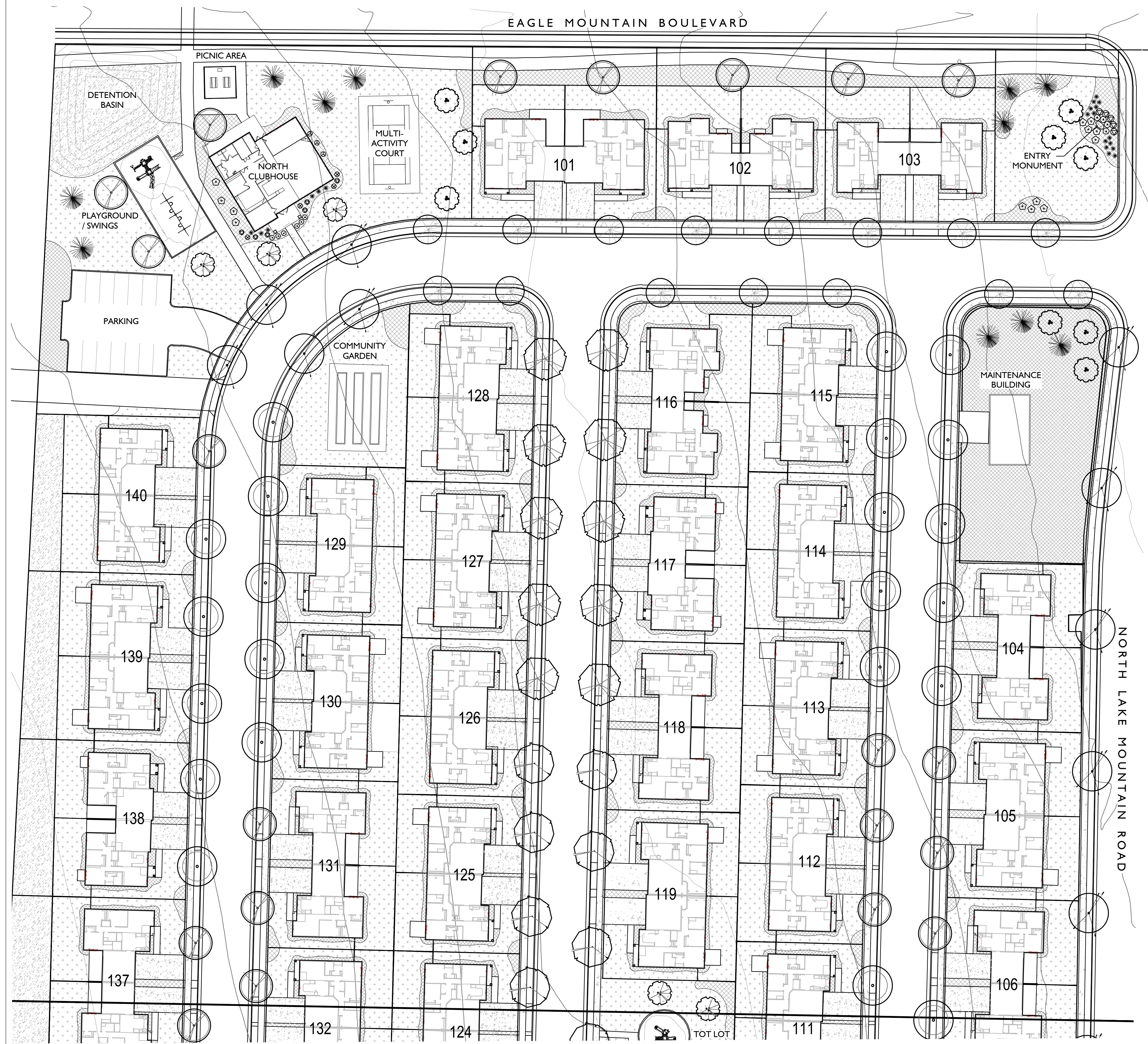
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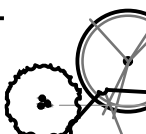
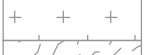
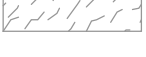
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EAGLE HEIGHTS VILLAGE
EAGLE MOUNTAIN BOULEVARD
EAGLE MOUNTAIN, UTAH

LANDSCAPE PLAN

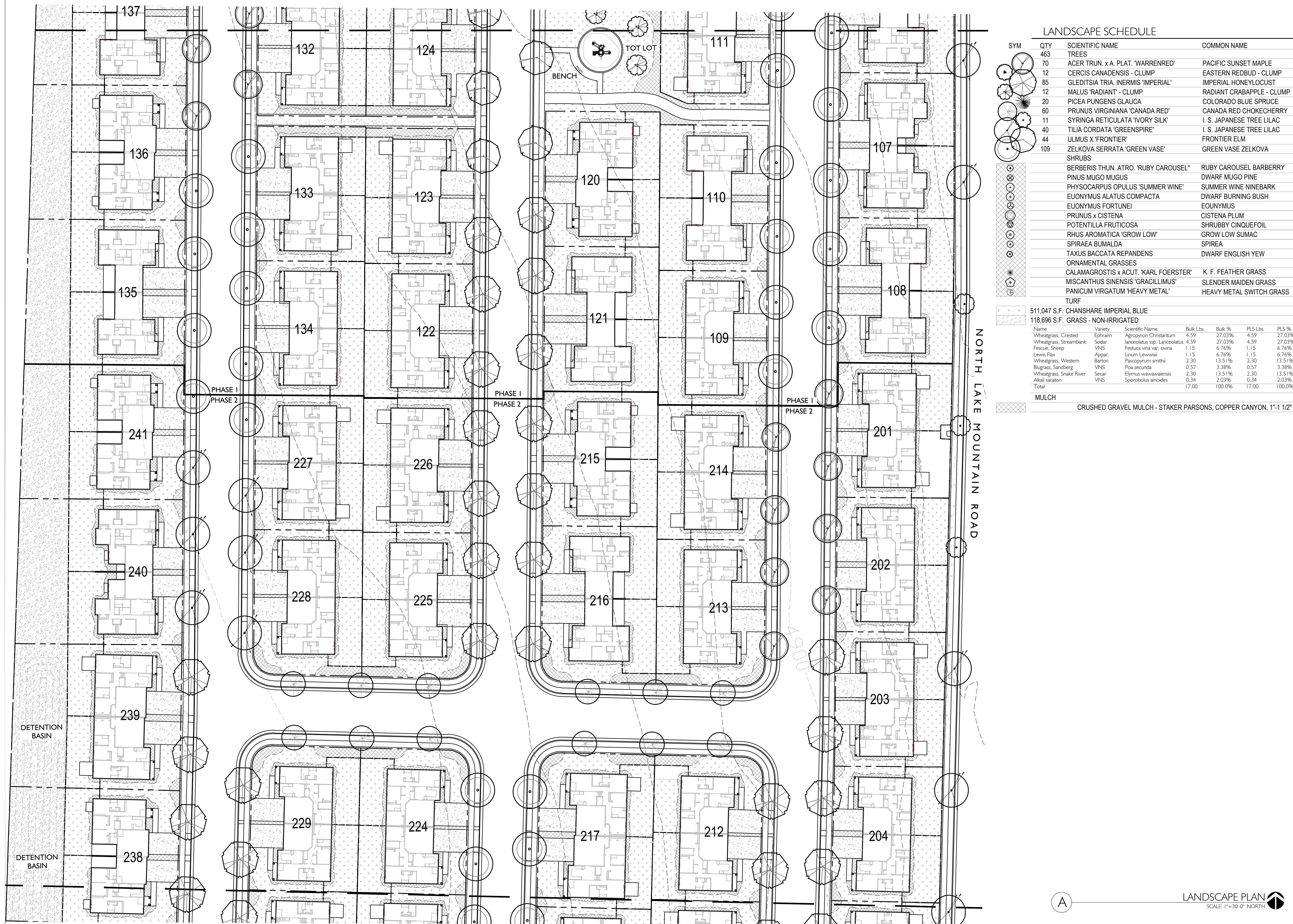


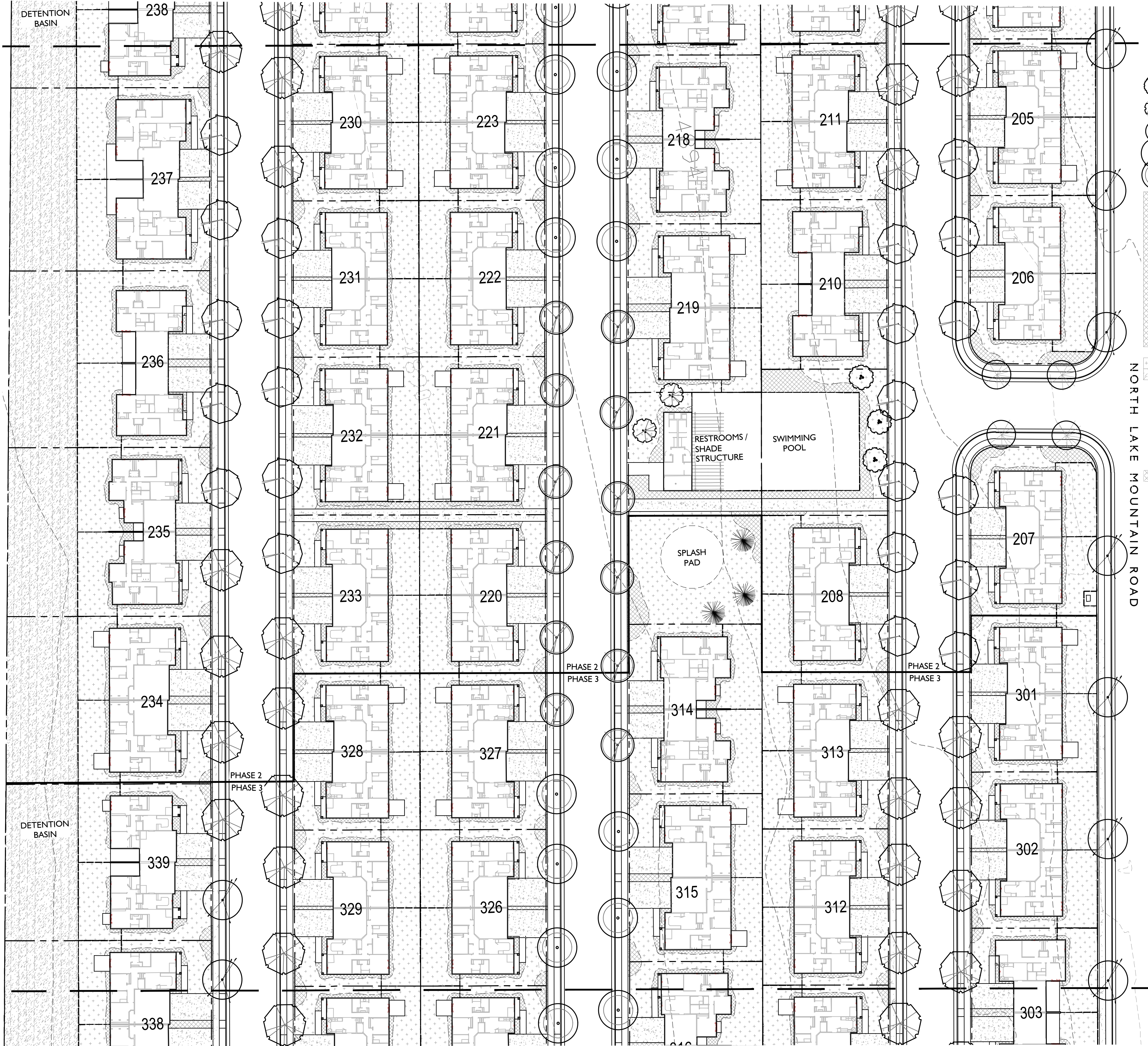
LANDSCAPE SCHEDULE

SYM	QTY	SCIENTIFIC NAME	COMMON NAME			
	463	TREES				
	70	ACER TRUN. x A. PLAT. 'WARRENRED'	PACIFIC SUNSET MAPLE			
	12	CERCIS CANADENSIS - CLUMP	EASTERN REDBUD - CLUMP			
	85	GLEDTISIA TRIA. INERMIS 'IMPERIAL'	IMPERIAL HONEYLOCUST			
	12	MALUS 'RADIANT' - CLUMP	RADIANT CRABAPPLE - CLUMP			
	20	PICEA PUNGENS GLAUCA	COLORADO BLUE SPRUCE			
	60	PRUNUS VIRGINIANA 'CANADA RED'	CANADA RED CHOKECHERRY			
	11	SYRINGA RETICULATA 'IVORY SILK'	I. S. JAPANESE TREE LILAC			
	40	TILIA CORDATA 'GREENSPIRE'	I. S. JAPANESE TREE LILAC			
	44	ULMUS X 'FRONTIER'	FRONTIER ELM			
	109	ZELKOVA SERRATA 'GREEN VASE'	GREEN VASE ZELKOVA			
	SHRUBS					
		BERBERIS THUN. ATRO. 'RUBY CAROUSEL'	RUBY CAROUSEL BARBERRY			
		PINUS MUGO MUGUS	DWARF MUGO PINE			
		PHYSOCARPUS OPULUS 'SUMMER WINE'	SUMMER WINE NINEBARK			
		EUONYMUS ALATUS COMPACTA	DWARF BURNING BUSH			
		EUONYMUS FORTUNEI	EUONYMUS			
		PRUNUS x CISTENA	CISTENA PLUM			
		POTENTILLA FRUTICOSA	SHRUBBY CINQUEFOIL			
		RHUS AROMATICA 'GROW LOW'	GROW LOW SUMAC			
		SPIRAEA BUMALDA	SPIREA			
		TAXUS BACCATA REPANDENS	DWARF ENGLISH YEW			
	ORNAMENTAL GRASSES					
		CALAMAGROSTIS x ACUT. 'KARL FOERSTER'	K. F. FEATHER GRASS			
		MISCANTHUS SINENSIS 'GRACILLIMUS'	SLENDER MAIDEN GRASS			
		PANICUM VIRGATUM 'HEAVY METAL'	HEAVY METAL SWITCH GRASS			
	TURF					
	511,047 S.F. CHANSHARE IMPERIAL BLUE					
	118,696 S.F. GRASS - NON-IRRIGATED					
Name	Variety	Scientific Name	Bulk Lbs.	Bulk %	PLS Lbs.	PLS %
Wheatgrass, Crested	Ephraim	Agropyron Christantum	4.59	27.03%	4.59	27.03%
Wheatgrass, Streambank	Sodax	lanceolatus ssp. lanceolatus	4.59	27.03%	4.59	27.03%
Fescue, Sheep	VNS	Festuca vira var. ovina	1.15	6.76%	1.15	6.76%
Lewis Flax	Appar.	Linum Lewisii	1.15	6.76%	1.15	6.76%
Wheatgrass, Western	Barton	Pascopyrum smithii	2.30	13.51%	2.30	13.51%
Blugrass, Sandberg	VNS	Poa secunda	0.57	3.38%	0.57	3.38%
Wheatgrass, Snake River	Secar	Elymus wawawaiensis	2.30	13.51%	2.30	13.51%
Alkali sacaton	VNS	Sporobolus airoides	0.34	2.03%	0.34	2.03%
Total			17.00	100.0%	17.00	100.0%
MULCH						
CRUSHED GRAVEL MULCH - STAKER PARSONS, COPPER CANYON, 1"-1 1/2"						

A

LANDSCAPE PLAN
SCALE: 1"=30'-0" NORTH





LANDSCAPE SCHEDULE				
SYM	QTY	SCIENTIFIC NAME	COMMON NAME	
	463	TREES		
	70	ACER TRUN. x A. PLAT. 'WARRENRED'	PACIFIC SUNSET MAPLE	
	12	CERCIS CANADENSIS - CLUMP	EASTERN REDBUD - CLUMP	
	85	GLEDITIA TRIA. INERMIS 'IMPERIAL'	IMPERIAL HONEYLOCUST	
	12	MALUS 'RADIANT' - CLUMP	RADIANT CRABAPPLE - CLUMP	
	20	PICEA PUNGENS GLAUCA	COLORADO BLUE SPRUCE	
	60	PRUNUS VIRGINIANA 'CANADA RED'	CANADA RED CHOKECHERRY	
	11	SYRINGA RETICULATA 'IVORY SILK'	I. S. JAPANESE TREE LILAC	
	40	TILIA CORDATA 'GREENSPIRE'	I. S. JAPANESE TREE LILAC	
	44	ULMUS X 'FRONTIER'	FRONTIER ELM	
	109	ZELKOVA SERRATA 'GREEN VASE'	GREEN VASE ZELKOVA	
	SHRUBS			
	BERBERIS THUN. ATRO. 'RUBY CAROUSEL'		RUBY CAROUSEL BARBERRY	
	PINUS MUGO MUGUS		DWARF MUGO PINE	
	PHYSOCARPUS OPULUS 'SUMMER WINE'		SUMMER WINE NINEBARK	
	EUONYMUS ALATUS COMPACTA		DWARF BURNING BUSH	
	EUONYMUS FORTUNEI		EOUNYMUS	
	PRUNUS x CISTENA		CISTENA PLUM	
	POTENTILLA FRUTICOSA		SHRUBBY CINQUEFOIL	
	RHUS AROMATICA 'GROW LOW'		GROW LOW SUMAC	
	SPIRAEA BUMALDA		SPIREA	
	TAXUS BACCATA REPANDENS		DWARF ENGLISH YEW	
	ORNAMENTAL GRASSES			
	CALAMAGROSTIS x ACUT. 'KARL FOERSTER'		K. F. FEATHER GRASS	
	MISCANTHUS SINENSIS 'GRACILLIMUS'		SLENDER MAIDEN GRASS	
	PANICUM VIRGATUM 'HEAVY METAL'		HEAVY METAL SWITCH GRASS	
	TURF			
	511,047 S.F. CHANSHARE IMPERIAL BLUE			
	118,696 S.F. GRASS - NON-IRRIGATED			
	Name	Variety	Scientific Name	Bulk Lbs.
	Wheatgrass, Crested	Ephraim	Agropyron Christantum	4.59
	Wheatgrass, Streambank	Sodra	lanceolatus ssp. Lanceolatus	4.59
	Fescue, Sheep	VNS	Festuca vira var. ovina	1.15
	Lewis Flax	Appar.	Linum Lewwisii	1.15
	Wheatgrass, Western	Barton	Pascopyrum smithii	2.30
	Bluegrass, Sandberg	VNS	Poa secunda	0.57
	Wheatgrass, Snake River	Secar	Elymus wawawalaensis	2.30
	Alkali sacaton	VNS	Sporobolus aioides	0.34
	Total			17.00
	MULCH			
	CRUSHED GRAVEL MULCH - STAKER PARSONS, COPPER CANYON, 1"-1 1/2"			





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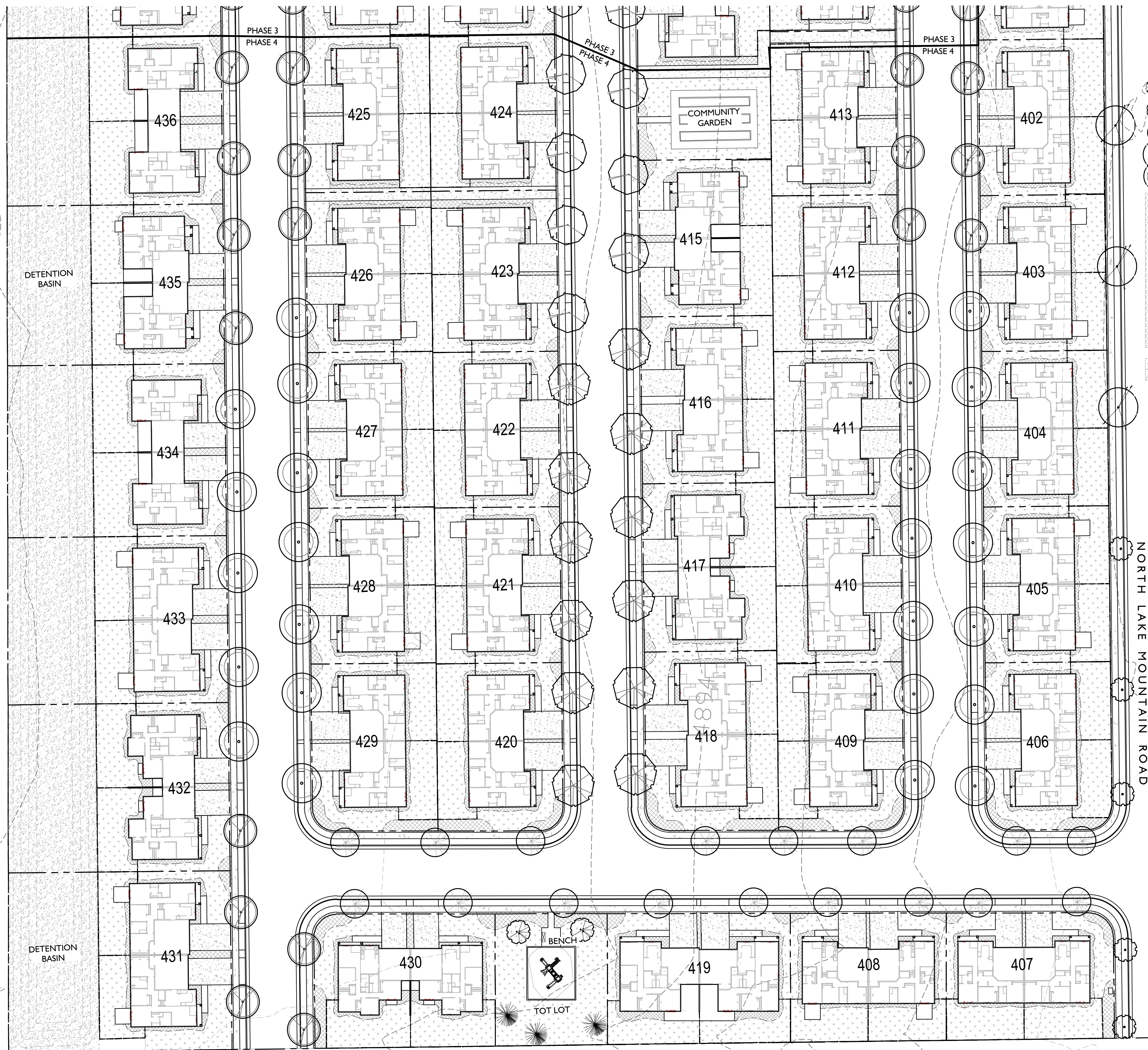
LANDSCAPE SCHEDULE

SYM	QTY	SCIENTIFIC NAME	COMMON NAME
	463	TREES	
	70	ACER TRUN. x A. PLAT. 'WARRENRED'	PACIFIC SUNSET MAPLE
	12	CERCIS CANADENSIS - CLUMP	EASTERN REDBUD - CLUMP
	85	GLEDTISIA TRIA. INERMIS 'IMPERIAL'	IMPERIAL HONEYLOCUST
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	40	TILIA CORDATA 'GREENSPIRE'	I. S. JAPANESE TREE LILAC
	44	ULMUS X 'FRONTIER'	FRONTIER ELM
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		SHRUBS	
		BERBERIS THUN. ATRO. 'RUBY CAROUSEL'	RUBY CAROUSEL BARBERRY
		PINUS MUGO MUGUS	DWARF MUGO PINE
		PHYSOCARPUS OPULUS 'SUMMER WINE'	SUMMER WINE NINEBARK
		EUONYMUS ALATUS COMPACTA	DWARF BURNING BUSH
		EUONYMUS FORTUNEI	EOUNYMUS
		PRUNUS x CISTENA	CISTENA PLUM
		POTENTILLA FRUTICOSA	SHRUBBY CINQUEFOIL
		RHUS AROMATICA 'GROW LOW'	GROW LOW SUMAC
		SPIRAEA BIMALDA	SPIREA
		TAXUS BACCATA REPANDENS	DWARF ENGLISH YEW
		ORNAMENTAL GRASSES	
		CALAMAGROSIS x ACUT. 'KARL FOERSTER'	K. F. FEATHER GRASS
		MISCANTHUS SINENSIS 'GRACILLIMUS'	SLENDER MAIDEN GRASS
		PANICUM VIRGATUM 'HEAVY METAL'	HEAVY METAL SWITCH GRASS

511,047 S.F. CHANSHARE IMPERIAL BLUE

118,696 S.F. GRASS - NON-IRRIGATED

Name	Variety	Scientific Name	Bulk Lbs.	Bulk %	PLS Lbs.	PLS %
Wheatgrass, Crested	Ephraim	Agropyron Christantum	4.59	27.03%	4.59	27.03%
Wheatgrass, Streambank	Sodas	lanceolatus ssp. lanceolatus	4.59	27.03%	4.59	27.03%
Fescue, Sheep	VNS	Festuca viria var. ovina	1.15	6.76%	1.15	6.76%



A

LANDSCAPE PLAN
SCALE: 1"=30'-0" NORTHEAGLE HEIGHTS VILLAGE
EAGLE MOUNTAIN BOULEVARD
EAGLE MOUNTAIN, UTAHLANDSCAPE
PLAN

L107

PARK AMENITIES

PARK #1

COMMUNITY CENTER
GAZEBO
PLAYGROUND
SPORT COURT
PARKING
SHADE TREES
GRASS PLAY AREA
SITE SECURITY CAMERAS

PARK #2

GARDEN BOXES
BENCH

PARK #3

PLAYGROUND
BENCH
SHADE TREES
LAWN PLAY AREA

PARK #4

SWIMMING POOL
RESTROOMS
SPLASH PAD

PARK #5

GARDEN BOXES
BENCH

PARK #6

PLAYGROUND
BENCH
SHADE TREES
LAWN PLAY AREA

PARK #7

COMMUNITY CENTER
GAZEBO
PARKING
SHADE TREES
GRASS PLAY AREA
SITE SECURITY CAMERAS

STB

DESIGN

LANDSCAPE ARCHITECTURE
& LAND PLANNING
699 E. WEST TEMPLE, 201D
SALT LAKE CITY, UTAH 84102
PH/MO/TXT 801.554.6146
SCOTT@STBDDESIGNLLC.COM

EAGLE
HEIGHTS
VILLAGE

EAGLE MOUNTAIN BLVD.
EAGLE MOUNTAIN, UTAH



NORTH
DATE: 03.01.2019

OVERALL PARKS
MASTER PLAN

LI00

PARK I AMENITIES

COMMUNITY CENTER - 3,500 S.F.

Exercise Room, Full Kitchen, 2 Bathrooms,
Multi-Use Room

GAZEBO - 1,100 S.F. Area

2 Picnic Tables, Built-In BBQ, Drinking Fountain,
Trash Receptacles, Concrete Surface

PLAYGROUND

Playground - Playworld #350-1716 or equal

Swings - 4

Poured in Place Rubber Landing Surface

SPORT COURT

Full-Size Basketball Court, Conc. Surface

PARKING - 15 Stalls

SHADE TREES

GRASS PLAY AREA

EXTERIOR SECURITY CAMERAS

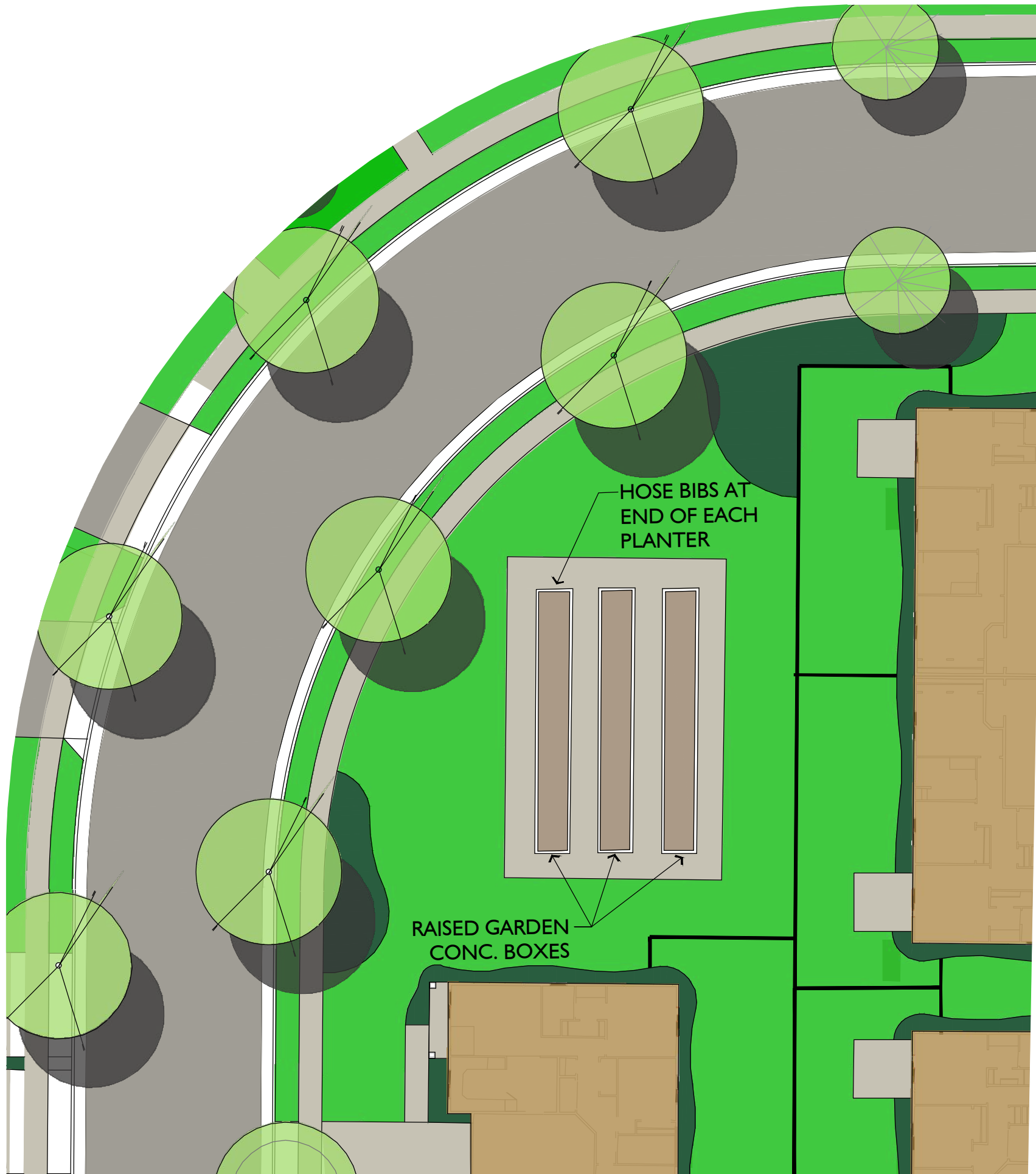


EAGLE HEIGHTS VILLAGE

EAGLE MOUNTAIN BLVD.
EAGLE MOUNTAIN, UTAH

 NORTH
SCALE: 1"=30'-0"
DATE: 03.01.2019

L101



PARK 2 AMENITIES

GARDEN BOXES

Raised Colored Concrete Boxes

SITTING AREA

SHADE TREES

GRASS AREA



LANDSCAPE ARCHITECTURE
& LAND PLANNING

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EAGLE HEIGHTS VILLAGE

EAGLE MOUNTAIN BLVD.
EAGLE MOUNTAIN, UTAH

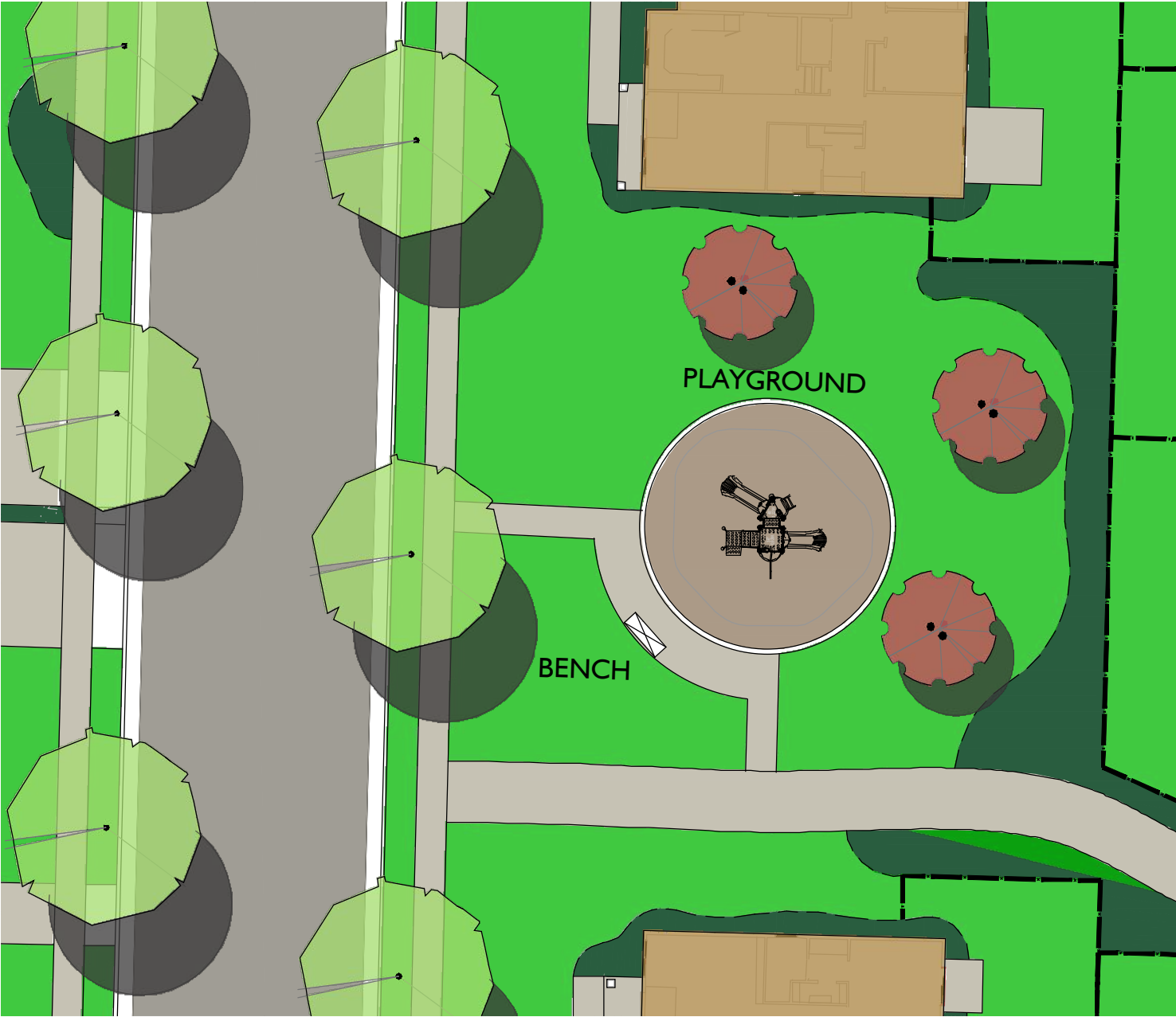


PARK 2

LI02

EAGLE
HEIGHTS
VILLAGE

EAGLE MOUNTAIN BLVD.
EAGLE MOUNTAIN, UTAH



PARK 3 AMENITIES

- PLAYGROUND
 - Play Equipment, Playworld, #350-1738 or equal
 - Poured in Place Rubber Landing Surface
- SITTING AREA
- SHADE TREES
- GRASS AND PLAY AREA





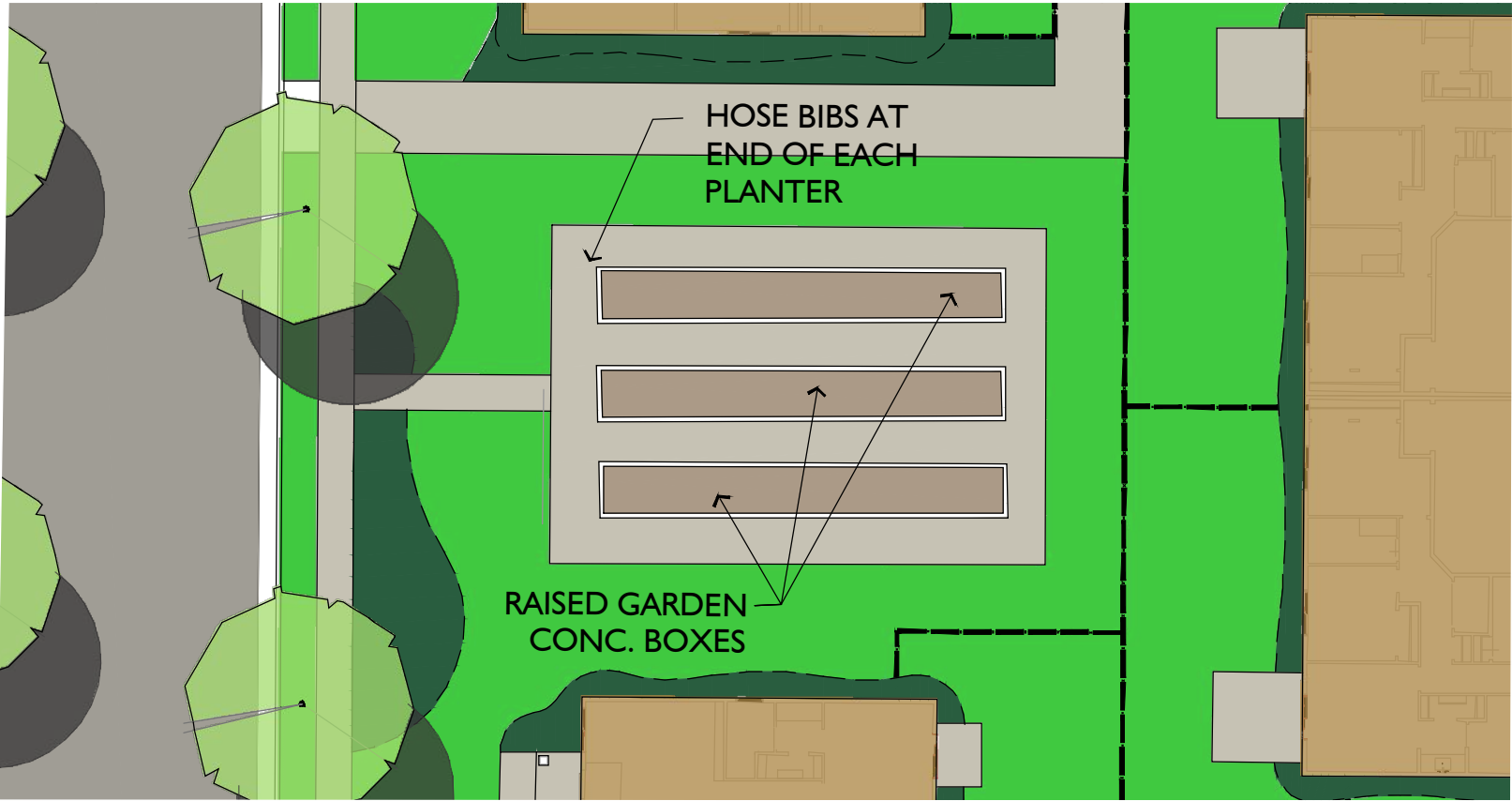
PARK 4 AMENITIES

SWIMMING POOL
RESTROOM / CHANGING ROOMS
SPLASH PAD

EAGLE
HEIGHTS
VILLAGE

EAGLE MOUNTAIN BLVD.
EAGLE MOUNTAIN, UTAH

EAGLE
HEIGHTS
VILLAGE
EAGLE MOUNTAIN BLVD.
EAGLE MOUNTAIN, UTAH



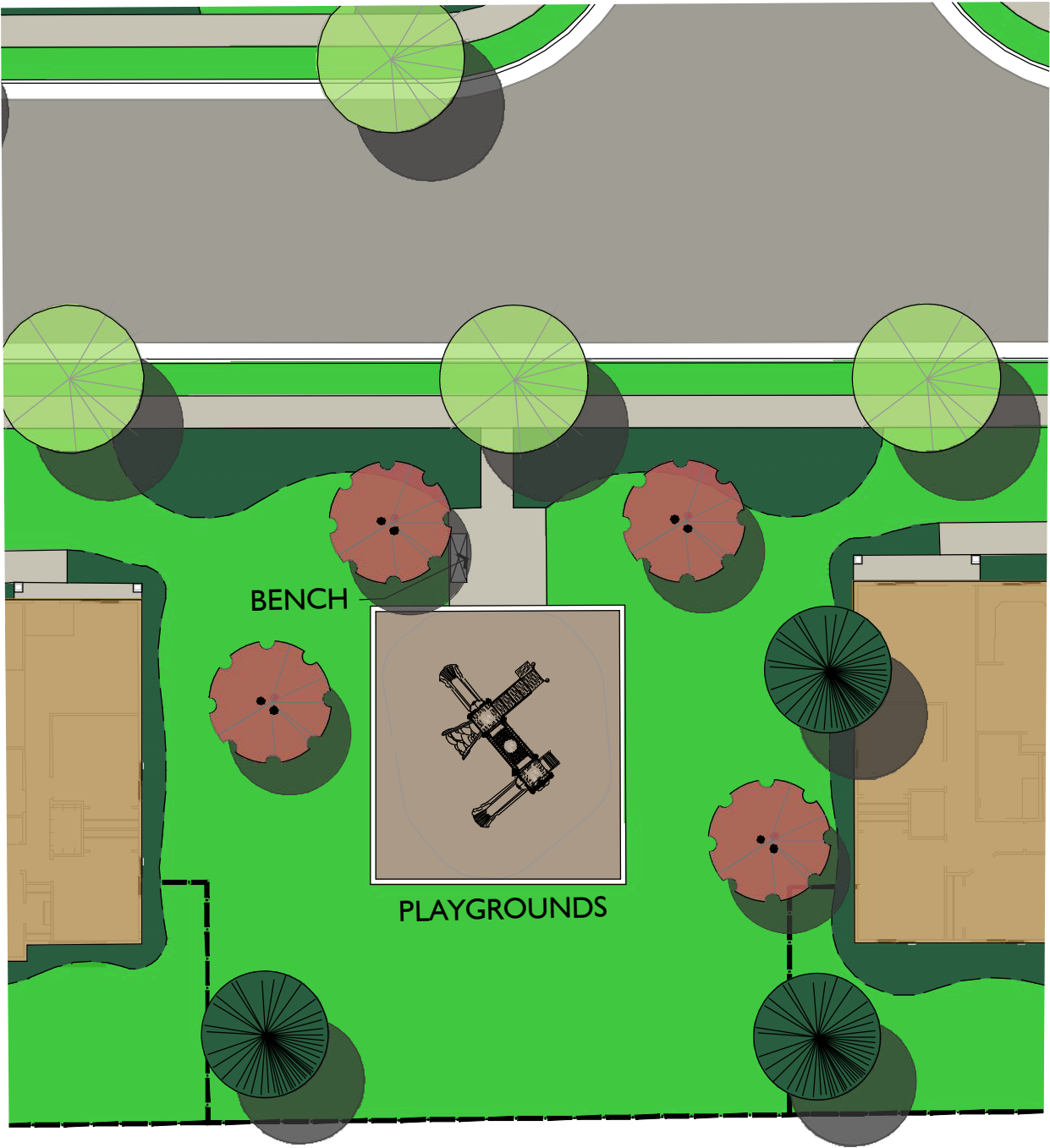
- PARK 5 AMENITIES
- GARDEN BOXES
 - Raised Colored Concrete Boxes
 - SITTING AREA
 - SHADE TREES
 - GRASS AREA

EAGLE HEIGHTS VILLAGE

EAGLE MOUNTAIN BLVD.
EAGLE MOUNTAIN, UTAH

PARK 6 AMENITIES

- PLAYGROUND
 - Play Equipment, Playworld, #350-1814 or equal
 - Poured in Place Rubber Landing Surface
- SITTING AREA
- SHADE TREES
- GRASS AND PLAY AREA





PARK 7 AMENITIES

COMMUNITY CENTER - 1,440 S.F.

Full Kitchen, 2 Bathrooms,
Multi-Use Room

GAZEBO - 1,100 S.F. Area

2 Picnic Tables, Built-In BBQ,
Drinking Fountain, Trash
Receptacles, Concrete Surface

PLAYGROUND

Play Equipment, Playworld, Mighty Fun Mountain,
#PSD-1101 or equal
Poured in Place Rubber Landing Surface



PARKING - 15 Stalls

SHADE TREES

GRASS PLAY AREA

EXTERIOR SECURITY CAMERAS



LANDSCAPE ARCHITECTURE
& LAND PLANNING

699 E. WEST TEMPLE, 201D
SALT LAKE CITY, UTAH 84102
PH/MO/TXT 801.554.6146
SCOTT@STBDESIGNLLC.COM

EAGLE HEIGHTS VILLAGE

EAGLE MOUNTAIN BLVD.
EAGLE MOUNTAIN, UTAH



NORTH
SCALE: 1"=20'-0"
DATE: 03.01.2019

PARK 7

L107











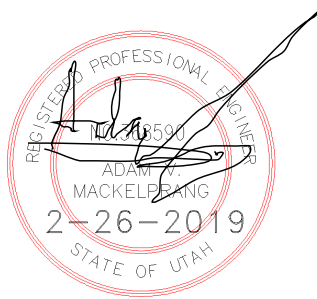


GRADING, DRAINAGE AND EROSION REPORT

FOR

EAGLE HEIGHTS VILLAGE

EAGLE MOUNTAIN, UTAH



PREPARED BY

ALLIANCE CONSULTING ENGINEERS

150 East 200 North

Logan, Utah

(435) 755-5121

February, 2019

TABLE OF CONTENTS

INTRODUCTION

DESIGN

OFFSITE FLOW

FLOODPLAIN

METHODOLOGY

WATER QUALITY ANALYSIS

EROSION ANALYSIS

INTRODUCTION

Eagle Heights Village is a multi-family development located along Lake Mountain Road at Eagle Mountain Boulevard in Eagle Mountain, Utah. The project will be comprised of 155 duplex units on 51.38 acres. The project will use curb and gutter, storm boxes, and storm lines to convey storm water on the site to one of three retention ponds.

DESIGN

OFFSITE FLOW

In order to accurately plan the storm water for the site I first looked at the surrounding area and the impact that it might have. The project is bordered by Eagle Mountain Boulevard on the north, by an open field on the west, and by dirt roads on the east and south. Further to the east lies the Lake Mountain Range. A map (USGS overlay) showing the extended adjacent property of the development has been included in Appendix A. Per the USGS overlay shown in Appendix A there are no major mountain drainage paths that will adversely affect the project. In addition, using the aerial imagery of Google earth, it can be seen that the drainage swales coming from the Lake Mountain range end before intersecting with the existing dirt road on the east of the project.

FLOODPLAIN

A quick search of the FEMA records also indicated that none of the project is included in a flood zone.

METHODOLOGY

For the hydrology study, the SCS curve method was used to analyze the peak flows and required storage from this subdivision site and adjacent areas. The existing soil types and associated Hydrological soil groups were obtained from the NRCS website. The soils per the NRC are as follows: 19.0% Genola fine sandy loam, 35.8% Linoyer very fine sandy loam (slope 0-1%), and 45.3% Linoyer very fine sandy loam (slope 2-5%). Each of these soils is considered part of Hydrologic group B for computations. The NRCS soil maps and soil information is included in Appendix B. Based on the TR-55 a curve number of 85 was selected for the post developed site.

The site was subdivided into 4 drainage paths (A through D) to the 2 retention ponds with each drainage path further subdivided in order to analyze the storm pipe sizes required. Inlet boxes and storm pipes have been shown to indicate how water will get to each pond. Flow arrows have been added to indicate the flow direction of each road. Sub-basin A will be the only path to feed the pond at the northwest corner of the project, while the 3 other paths (B-D) will connect to the 2 larger ponds along the west side of the project. These ponds will be connected together essentially creating one large pond. The hydrology for the area was then evaluated using rainfall intensities for the 10 year (for pipe sizing) and 100 year (full retention pond sizing) rainfall events as required by City

code.

A map of each hydrology area is shown on the Hydrology Map in Appendix C. Included on this map is the area of each sub-basin along with some selected points which includes the time of concentration to said point along with the 10 year peak flow. While not included at this time, this information will be used to size the pipes during final design. As the ponds used in the development will be retention, there will be no impact on the property downstream. A summary of the required pond sizes is shown below, with the calculation shown in Appendix D.

The calculations require the following pond.

Pond A (area A): 8,242 cf retention

Pond B (area B-D): 140,566 cf retention

WATER QUALITY ANALYSIS

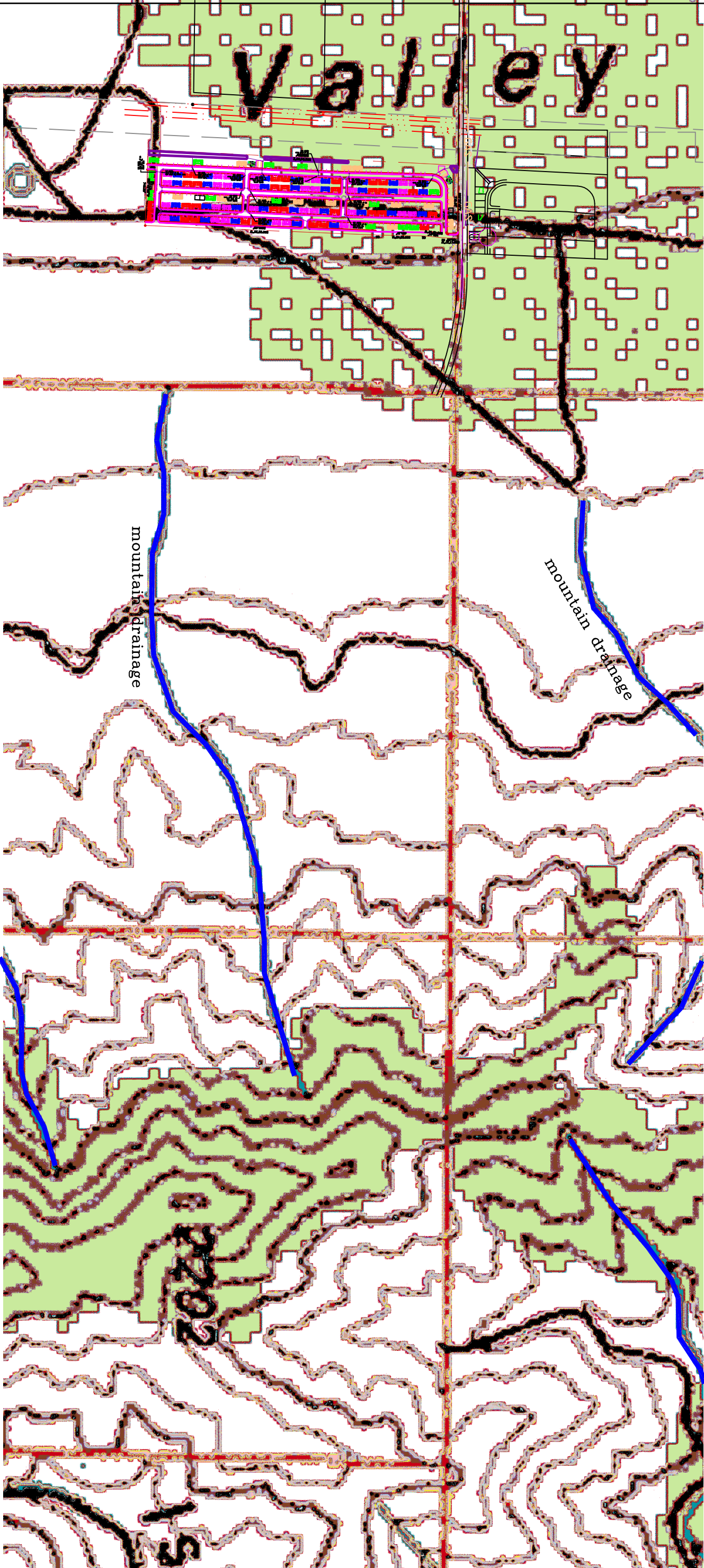
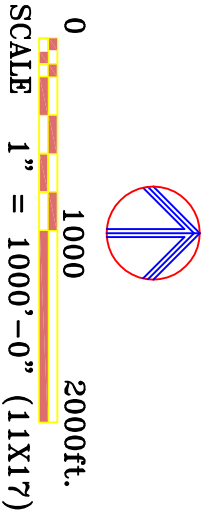
All storm water on site will be diverted to one of three retention ponds. These ponds will be used to retain any impurities which enter in the storm system. As such the project will not degrade the water quality of any off site waters.

EROSION ANALYSIS

As the site is considered relatively flat (1-3%) the amount of erosion during construction will be minimal. The subdivision has been designed to follow the grade of the existing ground in order to eliminate any large cuts or fills. The site for each unit, as it is constructed, will be graded to force the runoff to the property lines. A typical plan showing this has been included in Appendix E. A detailed erosion control plan, per State requirements, will be submitted during the final submittal which will include specifics for the contractor to follow in order to further limit erosion related issues.

APPENDIX A
OFFSITE DRAINAGE MAP

EAGLE POINTE VILLAGE
PART OF SECTION 18
TOWNSHIP 6 SOUTH RANGE 1 WEST
SALT LAKE BASE AND MERIDIAN
EAGLE MOUNTAIN, UTAH
OFFSITE DRAINAGE MAP
NORTH



APPENDIX B
NRCS SOIL INFORMATION

Soil Map—Fairfield-Nephi Area, Utah



MAP LEGEND

Area of Interest (AOI)		Area of Interest (AOI)		Spoil Area
Soils			Story Spot	
			Very Stony Spot	
			Wet Spot	
			Other	
Special Point Features			Special Line Features	
			Water Features	
				Streams and Canals
			Transportation	
				Rails
				Interstate Highways
				US Routes
				Major Roads
				Local Roads
			Background	
				Aerial Photography
				
				
				
				
				
				
				
				

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Fairfield-Nephi Area, Utah
Survey Area Data: Version 12, Sep 12, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 6, 2010—Nov 21, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

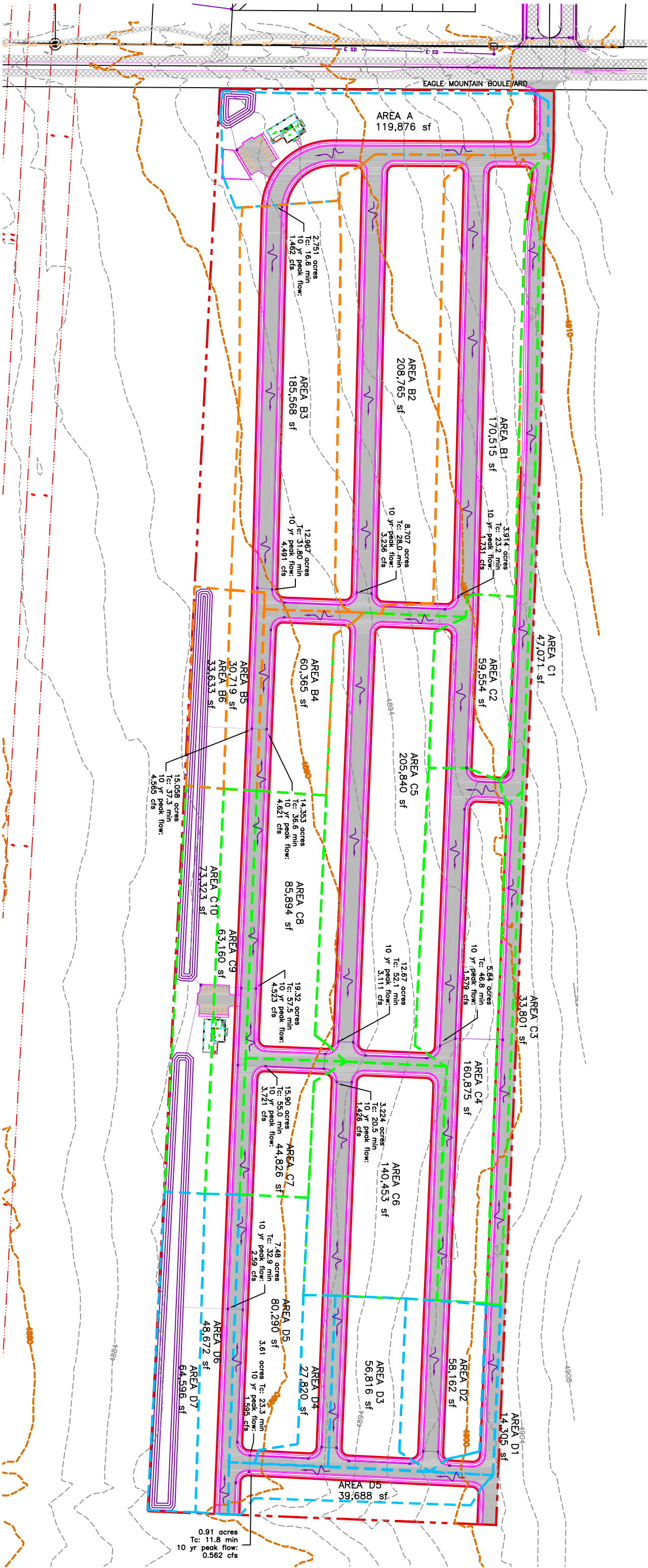
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
GaBP	Genola fine sandy loam, hummocky, 1 to 2 percent slopes	10.1	19.0%
LaA	Linoyer very fine sandy loam, 0 to 1 percent slopes	19.1	35.8%
LaC	Linoyer very fine sandy loam, 2 to 5 percent slopes	24.1	45.3%
Totals for Area of Interest		53.3	100.0%

APPENDIX C HYDROLOGY MAP

EAGLE POINTE VILLAGE
PART OF SECTION 18
TOWNSHIP 6 SOUTH RANGE 1 WEST
SALT LAKE BASE AND MERIDIAN
EAGLE MOUNTAIN, UTAH
HYDROLOGY MAP

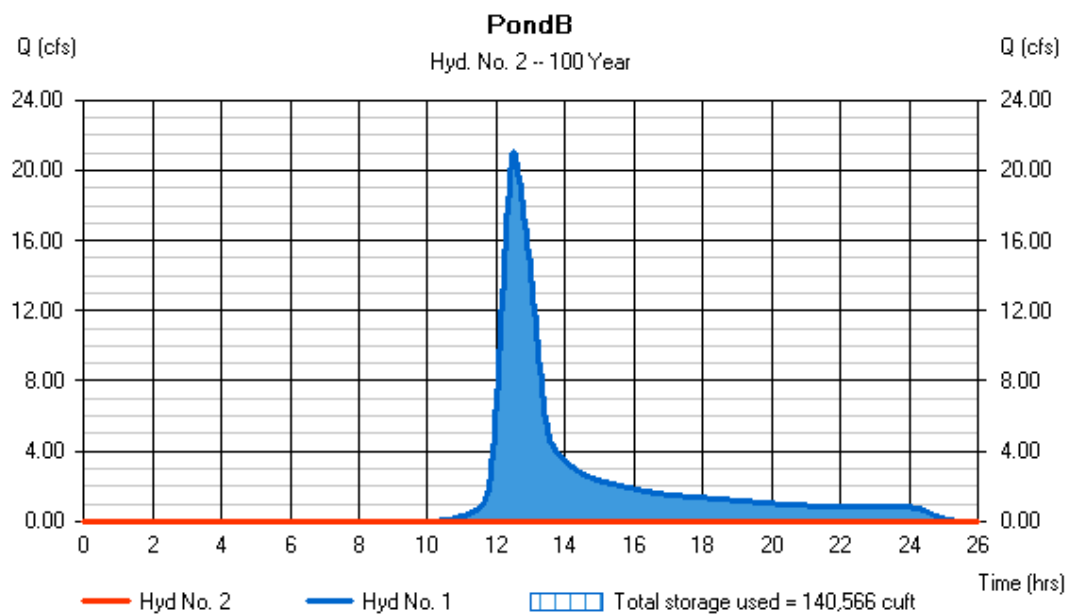
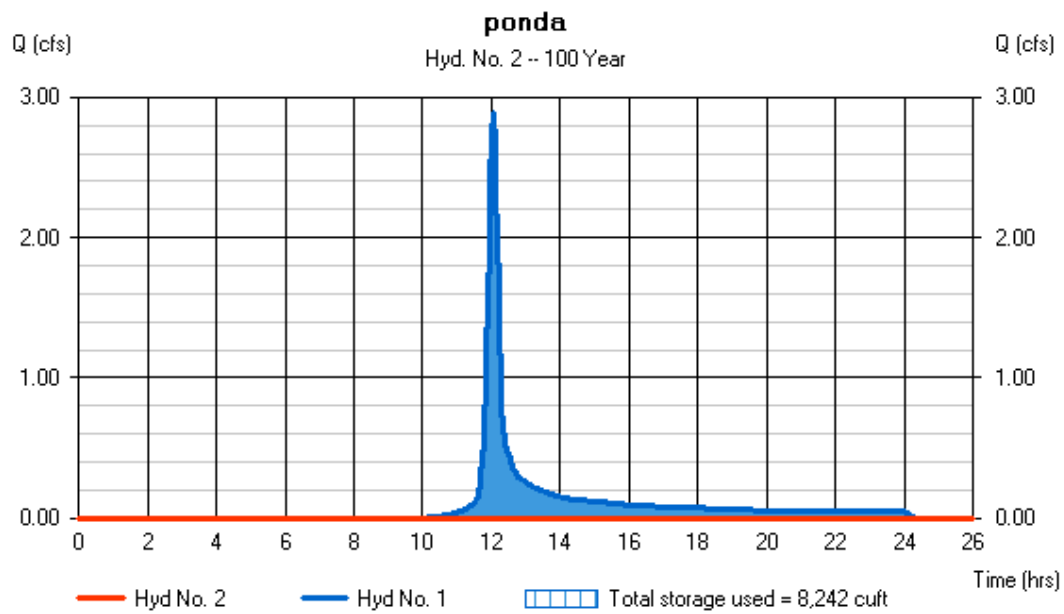


0 100 200ft.
SCALE 1" = 100'-0" (24X36)
1" = 200'-0" (11X17)



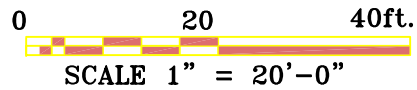
APPENDIX D

POND CALCULATIONS

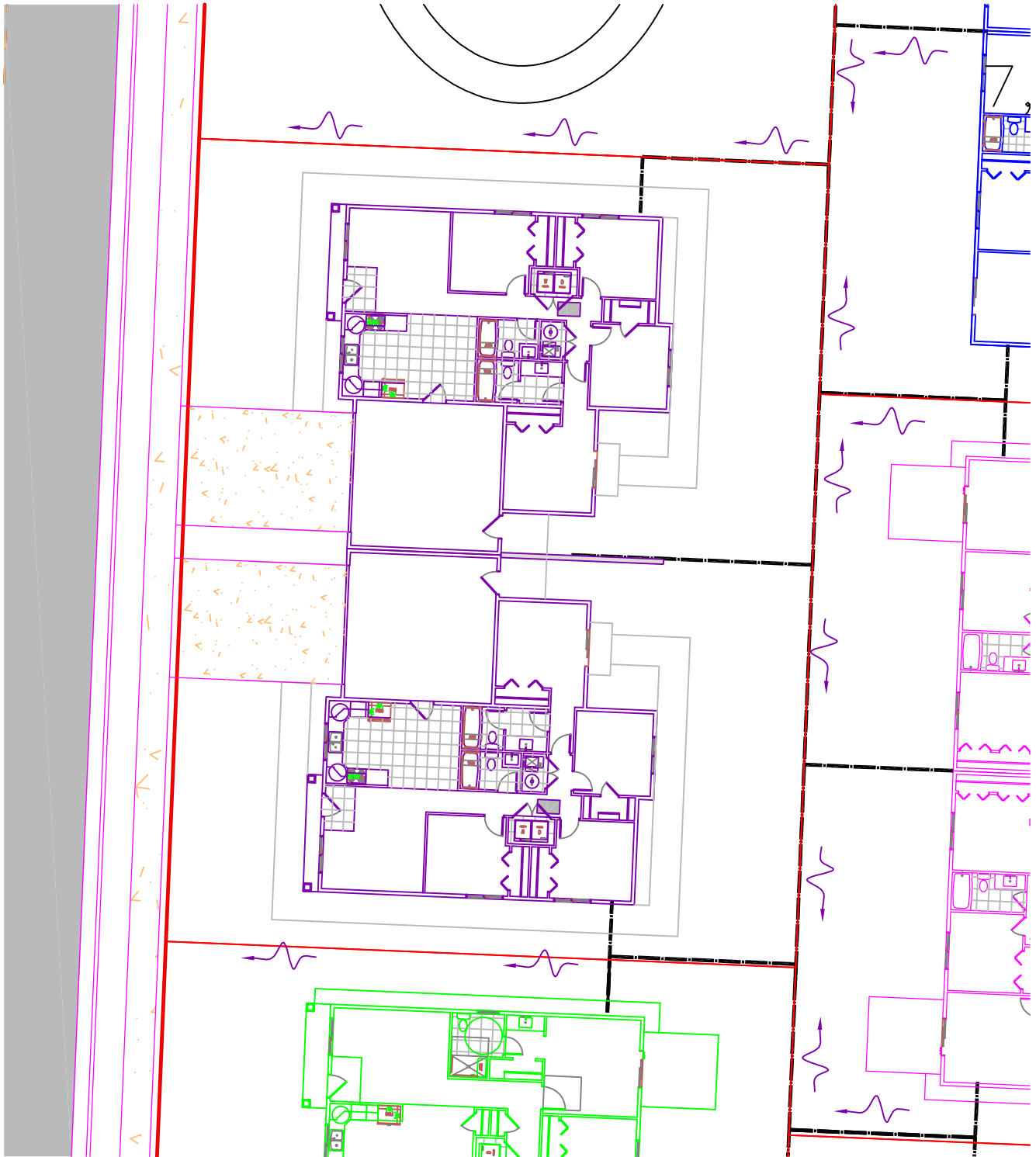


APPENDIX E
TYPICAL LOT GRADING

EAGLE POINTE VILLAGE
TYPICAL LOT GRADING



SWALES ARE TO BE LOCATED ON THE UPHILL SIDE OF THE PROPERTY LINE TO CONTROL RUNOFF FROM UPHILL LOT. DOWNHILL LOTS ARE RESPONSIBLE FOR ROUTING DISCHARGE FROM UPHILL LOTS TO THE STREET AS SHOWN. SWALES TO BE BUILT DURING CONSTRUCTION IN LOTS ADJACENT TO ANY EXISTING HOUSE OR PRIVATE PROPERTY TO AVOID EROSION AND AS A PROTECTION OF POSSIBLE FLOODING.



PHASE I ENVIRONMENTAL SITE ASSESSMENT

EAGLE MOUNTAIN PROPERTY

Approximately East Eagle Mountain Boulevard & North Lake Mountain
Road
Eagle Mountain, Utah

WT Reference No. 6128JA159

Prepared For:

Horizon Development Enterprises, LLC
1466 North Highway 89, Suite 220
Farmington, Utah 84025

September 25, 2018



Sarah Reddinger
Environmental Scientist



Vicki L. Aullman
Environmental Project Manager, SLC



September 25, 2018

Horizon Development Enterprises, LLC
1466 North Highway 89, Suite 220
Farmington, Utah 84025

Attn: Mr. Kirt Peterson

Re: Phase I Environmental Site Assessment WT Job No. 6128JA159
Eagle Mountain Property
Approximately East Eagle Mountain Boulevard & North Lake Mountain Road
Eagle Mountain, Utah

Western Technologies Inc. presents this Phase I Environmental Site Assessment of the Eagle Mountain Property at approximately East Eagle Mountain Boulevard & North Lake Mountain Road in Eagle Mountain, Utah. The results of our assessment, significant findings and conclusions are presented in the enclosed report.

This report completes the agreed scope of services. If you have any questions or if we may be of further assistance to you, please do not hesitate to contact us. Thank you for allowing us to provide these services.

Sincerely,
WESTERN TECHNOLOGIES INC.

Vicki L. Aullman
Environmental Project Manager

Copies to: Addressee (1)

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EXECUTIVE SUMMARY

Western Technologies Inc. (WT) completed a Phase I Environmental Site Assessment (ESA) of the Eagle Mountain Property at approximately Eagle Mountain Boulevard and North Lake Mountain Road, Eagle Mountain, Utah. The purpose of this ESA was to identify to the extent feasible, pursuant to the processes described herein, recognized environmental conditions (RECs), in connection with the Property.

The Property consisted of vacant, undeveloped land and is planned for development as a residential subdivision. The entire parcel is approximately 195.7 acres. The ground surface was covered with weeds and dirt. A couple of dirt roads run through the Property. North Lake Mountain Road paved road ran through the Property. Utilities were along the adjoining streets and new residential housing was to the north and far west of the Property. The mountain was located to the east and vacant undeveloped farm land was to the south. Large power lines ran from north to south along the western portion of the Property and several pad mounted transformers were located on the Property along North Mountain Road.

WT did not observe evidence of physical features indicative of past uses of the Property, or to the extent observable, of the adjoining sites or surrounding area on historic aerials and topographic maps. Historic aerial photographs and topographic maps indicate the Property has been vacant, undeveloped land since at least 1939. WT did not find information through this ESA process to suggest that offsite locations had contributed to or caused potential impacts leading to recognized environmental conditions on the Property, under current conditions.

WT found no regulatory agency database entries pertaining to the Property or sites within the designated ASTM minimum search distances.

This ESA revealed no evidence of RECs currently in connection with the Property, and WT makes no recommendations for further assessment at this time. If additional information becomes available or known that may suggest the presence of RECs currently in connection with the Property, contact this firm for potential recommendations.

PHASE I ENVIRONMENTAL SITE ASSESSMENT

EAGLE MOUNTAIN PROPERTY APPROXIMATELY EAST EAGLE MOUNTAIN BOULEVARD & NORTH LAKE MOUNTAIN ROAD EAGLE MOUNTAIN, UTAH

JOB NO. 6128JA159

1.0 INTRODUCTION

This report presents the results of a Phase I Environmental Site Assessment (ESA) of the Eagle Mountain Property at approximately East Eagle Mountain Boulevard & North Lake Mountain Road, Eagle Mountain, Utah ("the Property"). According to Utah County Assessor records, the Property consists of a portion of parcel number 59:018:0037 and is part of the Eagle Mountain Property. The cadastral description of the Property relative to the U.S. Public Land Survey System is generally within the northeastern quarter of Section 18, Township 6 South, Range 1 West, Eagle Mountain, Utah County, Utah. Figure 1 in Appendix A shows the approximate location of the Property.

1.1 Project Authorization

Western Technologies Inc. (WT) was authorized by Horizon Development Enterprises, LLC to perform this ESA according to WT Contract No. 6128PA141 dated August 24, 2018.

1.2 User Reliance

WT prepared this ESA for Horizon Development Enterprises, LLC. This ESA may not be utilized or relied upon by any other person or entity without the express written consent of WT and the completion of the User's responsibilities as described in ASTM E 1527-13 and the All Appropriate Inquiries Rule (AAI Rule).

1.3 Environmental Professionals Statement

By our signatures on this report, We, Sarah Reddinger and Vicki L. Aullman, declare that, to the best of our professional knowledge and belief, We meet the definition of Environmental Professional as defined in 40 CFR § 312.10. We have the specific qualifications, based on education, training, and experience, to assess a property of the nature, history, and setting of the Property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

1.4 Purpose

The purpose of this ESA was to identify, to the extent feasible pursuant to the processes described herein, recognized environmental conditions (RECs) in connection with the Property. According to the ASTM E 1527-13, RECs are "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term includes hazardous substances

and petroleum products under circumstances in compliance with applicable law. The term is not intended to include de minimis conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.”

1.5 Scope of Services

The scope of services for this ESA generally followed the applicable provisions of the Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM E1527-13) and the scope and limitations in our contract for this project, and consisted of a reconnaissance of the Property, interviews, a review of physical setting information, reviews of historical use research, reviews of standard Federal and State databases and local records, and preparation of this report.

2.0 PROPERTY AND AREA INFORMATION

The reconnaissance of the Property was performed by Vicki L. Aullman on September 12, 2018. No limiting conditions were encountered during the reconnaissance of the Property. Pictures taken during the reconnaissance of the Property are included in Appendix B. Figure 2 in Appendix A depicts general features observed on the Property.

2.1 Current Property Use and Occupancy

The Property consisted of vacant, undeveloped land and is planned for development as a residential subdivision. The entire parcel is approximately 195.7 acres. The ground surface was covered with weeds and dirt.

2.2 Property Improvements and Features

A couple of dirt roads run through the Property. North Lake Mountain Road paved road ran through the Property. Utilities were along the adjoining streets and new residential housing was to the north and far west of the Property. The mountain was located to the east and vacant undeveloped farm land was to the south. Large power lines ran from north to south along the western portion of the Property and several pad mounted transformers were located on the Property along North Mountain Road.

2.3 Utilities

Utilities serving the surrounding Property included water, power, gas, sewer and phone at the roads at the west and north side.

2.4 Current Adjoining Property Use and Description

The area of the Property was within a residential and vacant area of Eagle Mountain, Utah. The sites adjoining the Property consisted of the following:

- North was residential housing across Eagle Mountain Boulevard.
- South was vacant undeveloped farmland.
- West was vacant undeveloped land and a new residential subdivision.
- East was vacant undeveloped farm land and to the far east was the mountain side.

Based on our observations during the reconnaissance, we did not identify evidence of potential RECs on the Property resulting from activities on the adjoining sites.

2.5 Physical Setting Sources

Topographic maps from the United States Geological Survey (USGS) and hydrogeologic reports from the Utah Geological Survey (UGS) were reviewed as standard physical setting sources of information about Property and surrounding area. The physical setting information represents a general indication of topographic and hydrogeologic conditions that may reflect pathways for the migration of hazardous substances and petroleum products onto or away from the Property. However, this regionally-based information may not accurately describe current site-specific physical setting conditions.

According to the USGS Cedar Fort Quadrangle 7.5 Minute Series topographic map (1997), the Property has an approximate elevation ranging from 4,890 to 4,930 feet above Mean Sea Level (MSL) and the terrain slopes down to the northeast.

3.0 RECONNAISSANCE FOR KNOWN AND SUSPECT RECS

This section provides information about potential sources of known and suspect RECs in connection with the Property.

3.1 Potential PCB Sources

Electrical transformers, capacitors, and possibly hydraulic equipment including elevators, are potential sources of PCBs.

Pad mounted transformers were installed along North Lake Mountain Road and were labeled as PacifiCorp transformers. All existing PacifiCorp Power transformers were declared PCB free in 1986, meaning they contain less than 1 ppm of PCBs. The transformers were labeled as containing No PCBs.

3.2 Aboveground Storage Tanks (ASTs)

ASTs consist of portable fuel tanks on construction sites, portable fertilizer tanks in agricultural fields, process tanks in industrial applications, large bulk storage tanks at distribution facilities, storage tanks for the dispensing of fuel and lubricants and for the collection of liquid waste materials, and as integral fuel tanks to back-up power generators.

No ASTs or surface indications of former ASTs were noted during the reconnaissance.

3.3 Underground Storage Tanks (USTs)

Surface indications of existing or former USTs includes pump islands, fill ports, vent pipes, vapor monitoring wells, inventory monitoring equipment, asphalt patches over former tank pits or fuel lines, and remedial systems.

None of the listed surface indications of existing or former USTs was noted during the reconnaissance.

3.4 Hazardous Substances, Petroleum Products, and Containers

At the time of the reconnaissance, WT did not observe indications of the usage, storage, or disposal of hazardous substances or petroleum products in connection with current Property uses. WT did not observe the presence of containers, including drums, pails, bags, bins, silos, or pressurized cylinders, holding hazardous or unknown substances or petroleum products.

3.5 Solid Waste Indicators

Indications of solid waste storage or disposal include dumpsters, roll-off containers, waste piles, uncontrolled disposal of trash, demolition debris, construction debris, or vegetation, wildcat dumping, tires, litter, unusual mounding or depressions, fill or suspected fill from unknown sources, and debris commingled in disturbed surface areas.

Solid waste indicators were not observed on the Property during the reconnaissance.

3.6 Wastewater, Stormwater, and Other Liquid Discharges

Wastewater discharges include existing or former surface impoundments, oil/water separators, sumps, catch basins, injection wells, drywells receiving non-storm water related discharges, wastewater treatment systems, septic systems including tanks, leach fields, and seepage pits, exterior pipe discharges, pits, ponds, and lagoons.

Indications of the listed wastewater or stormwater discharges were not seen on the Property during the reconnaissance.

Indications of spills or releases of liquid phase materials consist of odors, pools of liquid, stains,

corrosion or discoloration on floors, pavement or the ground surface, sheens on water, and stressed vegetation.

No surface indications of the listed liquid waste indicators were observed on the Property during the reconnaissance.

3.7 Air Emission Control Equipment

Air emission control equipment can include laboratory hoods, exterior vent stacks, incinerators, chimneys, bag houses, cyclones, and paint booths and result in the generation of used products or materials consisting of hazardous substances or petroleum products.

No indications of air emission control equipment were noted on the Property during the reconnaissance.

3.8 Existing or Former Wells

Wells can be identified through the presence of well casings extending above the ground surface, turbines or pumps, a water storage tank, pressure tank, or water distribution piping, or traffic-rated covers over monitoring wells. Water produced from wells can be utilized for irrigation, public distribution, personal consumption, or environmental or hydrological monitoring or remediation.

No indications of groundwater wells were observed on the Property during the reconnaissance. According to the State of Utah Department of Water Rights website (maps.waterrights.utah.gov), there are no recorded wells on the Property.

4.0 INTERVIEWS

This section summarizes information from interviews conducted as part of this ESA. Questionnaires completed by interviewees and other correspondence are presented in Appendix C.

4.1 Interviews with the User of this Report

Horizon Development Enterprises, LLC has been identified as the "User" of this ESA and Mr. Kirt Peterson, representing the User provided information consistent with the User Responsibilities described by ASTM E1527-13 by answering and returning WT's User Questionnaire about the Property.

They did not know of any documents or reports that would be helpful in reviewing the environmental conditions of the Property. The User indicated that the purchase price of the Property is consistent with the fair market value for comparable properties. They were not aware of a valuation reduction of the Property due to environmental issues.

The User was not aware of environmental clean-up liens, engineering controls, institutional controls, or land use restrictions, or of litigation or administrative actions regarding environmental laws. They

were not aware of commonly known or reasonably ascertainable information about the Property and they did not identify any special knowledge about the Property, the surrounding area, or the type of business occurring on the Property, based on their personal and professional experience.

4.2 Interviews with the Property Owner, Current Operators, or Occupants

Ms. Angie Poulsen completed WT's owner questionnaire on behalf of Tiffany Walden, the current Property Manager/Owner and representative of Lake Mountain Development LLC. She has been familiar with the Property for ten years. She was unaware of any environmental issues with the Property.

4.3 Interviews with Past Owners, Operators, or Occupants

WT did not interview past owners, operators, or occupants of the Property because past owners were not available. However, as the historical use of the Property is well documented by other sources, WT does not believe this data gap is significant.

4.4 Interviews with Others

WT routinely contacts State and Local Government Agencies about information and records concerning the Property. These contacts/interviews may be made by telephone or writing, and they are documented in Section 6 of this report. If WT identifies government officials with specific information about the Property, these interviews are also summarized in this section of the report. We did not identify government officials with direct knowledge of the Property.

WT did not identify other individuals likely to possess information useful for the identification of RECs at the Property; consequently, no additional interviews were conducted.

5.0 HISTORICAL RECORDS INFORMATION

The objective of consulting historical sources was to develop a history of obvious uses of the Property back to 1940, or to the first developed use of the Property, whichever is earlier, unless a data failure occurred. The earliest standard historical source reviewed for this ESA was dated 1939. Therefore, data failure occurred while attempting to document historical uses back to 1940 or the first developed use. Additionally, the intervals between some standard historical sources reviewed for this ESA exceeded 5 years between 1939 and 2016. However, the available historical documents indicate the Property was primarily vacant undeveloped land on and surrounding the Property. Therefore, the data gaps have no impact on the conclusion that there are no recognized environmental conditions currently in connection with the Property.

5.1 Property Tax Files

According to Utah County Assessor records, the Property is owned by Lake Mountain Development LLC and the parcel number is 59:018:0037. The overall parcel area is 195.7 acres, of which the Property is the western majority.

5.2 Land Title Records

A chain-of-title was not provided to WT by the Client or Owner.

5.3 Zoning/Land Use Records

The Eagle Mountain Planning Department was contacted for information about zoning and land use classifications for the Property and surrounding area. According to the City's website, the Property is within the zoning designation of Incorporated City Limits.

5.4 Local Street Directories

Local Street Directories are annual publications that list the names of telephone service recipients by address. The information contained in Local Street Directories may be useful in determining the type of facility or business that operated at a particular address in a given year.

Available volumes of City Directories from the University of Utah Marriott Library Special Collections department did not provide coverage of the Property.

5.5 Building Inspection Records

Building Inspection Records were not inspected as historical records indicated no structures on the Property.

5.6 Fire Insurance Maps

Fire Insurance maps were produced by private fire insurance map companies and depicted physical features and developments on land. These maps typically cover older sections of metropolitan areas.

Available Fire Insurance Maps from the University of Utah Marriott Library Special Collections department did not provide coverage of the Property.

5.7 Topographic Maps and Atlases

Topographic maps were reviewed for evidence of prior land uses or structures on or adjacent to the Property. Cedar Fort and Saratoga Springs 7.5-minute series maps from 1951, 1968, 1969, 1975, 1993, 1994, 1997, and 2014 depicted the general area in which the Property is located.

The Property was depicted as vacant land, with an unimproved road travelling north-south through the center portion. In 1994, a power line was also depicted on the western portion of the Property and the road was shown as paved.

5.8 Aerial Photography

Aerial photographs from GeoSearch proprietary sources were reviewed. A total of sixteen aerial photographs with dates ranging from 1939 to 2016 were reviewed. Selected copies aerial photographs are presented in Appendix D.

Review of On Site Conditions

In the 1939 to 2016 photographs, the Property was depicted as primarily vacant, undeveloped land. From 1981 forward, the western Property area was used as an agricultural field, and Lake Mountain Road and Eagle Mountain Road appear established.

Review of Off Site Conditions

In the 1939 to 1975 photograph, the area surrounding the Property was depicted as primarily undeveloped, vacant land. By 1981, Eagle Mountain Road appears to be developed to the north of the Property and the west-adjacent properties are agricultural fields.

6.0 ENVIRONMENTAL RECORDS REVIEW

WT obtained a commercial database report from GeoSearch that included information extracted from regulatory databases and lists kept by the United States Environmental Protection Agency (USEPA) and the Utah Department of Environmental Quality (UDEQ). A copy of the database report with descriptions and release dates of the searched databases, and maps showing locations relative to the Property, is presented in Appendix E. WT also contacted local agency representatives concerning additional records information pertaining to the Property.

6.1 Federal USEPA Records Results

The Federal records maintained by the USEPA included: the National Priorities List (NPL); Comprehensive Environmental Response Compensation Liability Information System (CERCLIS) including No Further Remedial Action Planned (NFRAP) Sites; Resource Conservation Recovery Act (RCRA) Database of hazardous waste generators; RCRA Treatment Storage Disposal Facilities; RCRA Corrective Action Sites (CORRACTS); federally registered engineering or administrative controls; federal brownfields sites; and the Emergency Response Notification System (ERNS) Database.

The database findings did not identify the Property or sites within the designated ASTM minimum search distances in the searched Federal USEPA databases.

6.2 Utah UDEQ Records Results

The State/Tribal records maintained by the Utah Department of Environmental Quality (UDEQ) include: the State/Tribal Sites, Solid Waste Landfills, Registered Underground Storage Tanks (USTs), and Leaking

Underground Storage Tanks (LUSTs), Brownfields, Voluntary Compliance Program (VCP), State Spills 90, and Tribal lands/sites. Engineering Controls/Institutional Controls records are not maintained by the State of Utah.

The database findings did not identify the Property or sites within the designated ASTM minimum search distances in the searched UDEQ databases.

6.3 Additional Records Reviews

WT searched the State of Utah Department of Water Rights well registration records on line and found no groundwater wells on the Property.

7.0 SUMMARY OF ASSESSMENT

7.1 Findings

This section presents our opinion regarding the probable impact to the Property from known or suspect RECs which may include current RECs, historical RECs, de minimis conditions, or other environmental conditions, that were identifiable from the records reviews, interviews, and site reconnaissance

- The results of this ESA did not identify conditions likely to indicate RECs on the Property.

7.2 Conclusions and Recommendations

WT performed this ESA in general agreement with the scope and limitations of ASTM E 1527-13 of the Eagle Mountain Property at approximately Eagle Mountain Boulevard & North Lake Mountain Road in Eagle Mountain, Utah.

This assessment has revealed no evidence of RECs currently in connection with the Property, and WT makes no recommendations for further assessment at this time. If additional information becomes available or known that may suggest the presence of recognized environmental conditions currently in connection with the Property, contact this firm for potential recommendations.

8.0 LIMITATIONS

WT has performed its services in accordance with its contract with the Client, utilizing the degree of skill and care practiced by firms providing similar services in the locality of the Property. No other warranty or representation, either express or implied, is made. Not every property warrants the same level of assessment. The level of inquiry for this assessment was guided by factors including the type of property subject to assessment, the expertise and risk tolerance of the user, reasonable limits on time and cost as specified in our contract, and the ability to obtain information that was reasonably ascertainable and practically reviewable. There is a point at which the cost of information obtained or the time required to gather it outweighs the likely usefulness of the information and such cost and delay may, in fact, be a material detriment to the orderly completion of transactions.

Our review of third party information was limited as set forth in the discussion presented herein and was based on our actual knowledge of the information as presented. All results and opinions contained in third party information, including public records, are the sole responsibility of the entity producing the information. An evaluation of the completeness, accuracy, or appropriateness of the test methods or procedures employed by others was outside the scope of this ESA.

This assessment was limited to the identification of conditions likely to indicate RECs in connection with the Property, according to the definitions, scope and limitations contained in ASTM E 1527-13. No environmental site assessment can wholly eliminate uncertainty regarding the potential for RECs in connection with a property. The performance of an assessment according to ASTM E 1527-13 is intended to reduce, but not eliminate, uncertainty regarding the potential for RECs in connection with a property, recognizing reasonable limits of time and cost. Therefore, if none are identified as a result of this assessment, such a conclusion should not be construed as a guaranteed absence of RECs.

The “User” or “Users” identified by ASTM E 1527-13, including the addressee, any third parties acknowledged in writing by WT, and recipients of reliance letters, are obligated to conduct the “Additional Inquiries” identified in 40 CFR §312.22 and ASTM E1527-13 independently of the Environmental Professional. These Additional Inquiries include searches for environmental clean-up liens, an assessment of the User’s specialized knowledge or experience, an assessment of the relationship of the purchase price to fair market value, and an assessment of commonly known or reasonably ascertainable information about the property.

Nothing in this ESA, nor in our contract, subsequent correspondence, or reliance letters, shall relieve a User of this report from post-acquisition “Continuing Obligations” as required by CERCLA.

9.0 REFERENCES

9.1 Contacts

Horizon Development Enterprises LLC., Mr. Kirt Peterson, 1466 North HWY 89, Suite 220, Farmington, UT 84025, 801-312-9341, kirt@horizonutah.net

Tiffany Walden, Manager/Owner Maintenance Director and Partnership, 1754 East Cedar Trails Way, Eagle Mountain, Utah, waldentiffany@gmail.com (801) 633-1661

9.2 Reports and Publications

Standard Practice for Environmental Site Assessments: Phase 1 Environmental Site Assessment Process, ASTM Designation: E 1527 - 13. American Society for Testing and Materials (ASTM); West Conshohocken, Pennsylvania; 2013.

The United States Code of Federal Regulations, Title 40, Part 312, Standards and Practices for All Appropriate Inquiries, 2013.

GeoSearch Radius Map[™] Report; Milford, Connecticut including proprietary aerial photographs. 1939, 1950, 1953, 1966, 1975, 1981, 1987, 1993, 1997, 2003, 2004, 2006, 2009, 2011, 2014, 2016.

United States Geological Survey, Cedar Fort & Saratoga Springs 7.5-Minute Series Topographic Maps dated 1951, 1968, 1969, 1975, 1993, 1994, 1997 and 2014.

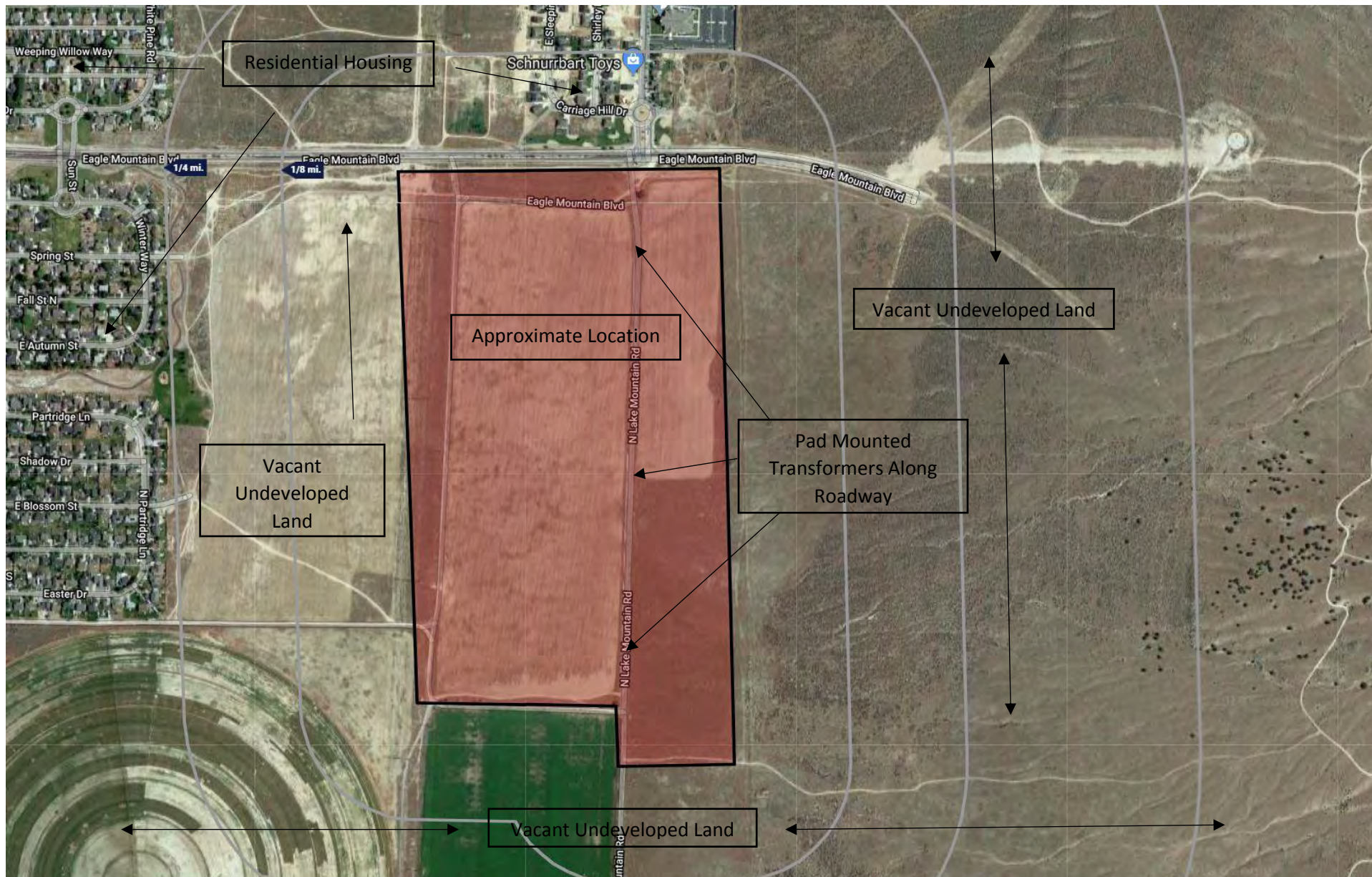
Utah Division of Water Rights, Water Rights Database, www.waterrights.utah.gov.

APPENDIX A FIGURES



Figure 1: Environmental Site Assessment





**APPENDIX B
PICTURE LOG**

Eagle Mountain Property
Eagle Mountain Boulevard & North Lake Mountain Road, Eagle Mountain, Utah
Photographic Log

WESTERN TECHNOLOGIES INC.

WT Job No.: 6128JA159

Date: 9-12-18



Picture 1 – Looking to the northeast from the northwest side of the Property.



Picture 2 – Looking to the southwest from the northwest side of the Property along the dirt road.



Picture 3 – Looking to the northwest from the northwest corner of the Property.



Picture 4 – Looking to the southwest from the northwest side of the Property.



Picture 5 – Looking to the southwest from the northwest side of the Property



Picture 6 – Looking to the north east from the northwest side c87 the Property.

Eagle Mountain Property
Eagle Mountain Boulevard & North Lake Mountain Road, Eagle Mountain, Utah
Photographic Log

WESTERN TECHNOLOGIES INC.

WT Job No.: 6128JA159

Date: 9-12-18



Picture 7 – Looking to the southwest from North Lake Mountain Road on the north end of the Property.



Picture 8 – Looking to the southeast from North Lake Mountain Road on the north end of the Property.



Picture 9 – Looking to the southeast from the southwest corner of the Property.



Picture 10 – Looking north from the south end of the Property in the center near North Lake Mountain Road.



Picture 11 – Pad mounted transformers were observed along North Lake Mountain Road.



Picture 12 – Sewer lines were observed along North Lake Mountain Road and Eagle Mountain Boulevard.

88

Eagle Mountain Property
Eagle Mountain Boulevard & North Lake Mountain Road, Eagle Mountain, Utah
Photographic Log

WESTERN TECHNOLOGIES INC.

WT Job No.: 6128JA159

Date: 9-12-18



Picture 13 – Looking towards the north end of the Property from North Lake Mountain Road.



Picture 14 – Looking towards the south from North Lake Mountain Road.



Picture 15 – Looking to the southeast from the North Lake Mountain Road.



Picture 16 – Irrigation water lines were observed during the site walk.



Picture 17 – Looking to the northeast from the southeast corner of the Property.



Picture 18 – Looking to the southwest from the southeast corner of the Property.

APPENDIX C
INTERVIEWS AND CORRESPONDENCE

**PHASE I ENVIRONMENTAL SITE ASSESSMENT
USER QUESTIONNAIRE PER ASTM E1527-05
WT Job No. 6128JA159 - Eagle Mountain Property**

Western Technologies Inc. requests your assistance to identify and assemble information described by the *User Responsibilities* criteria of the ASTM standard. The *User* is defined as a purchaser, potential tenant, owner, lender or property manager, or other party seeking to use the assessment report. For all "Yes" answers, please provide copies, references, or additional information on an attached sheet.

Your Name: Kirt Peterson Tel: 801-683-7386
User's Name: Eagle Pointe Village, LLC, Horizon Development Enterprises, LLC, Apex Construction, LLC
Property Name: Eagle Pointe Village
Property Address: Approximately 2600 east Eagle Mountain Blvd City: Eagle Mountain State: Utah

Has a search made you aware of any environmental clean-up liens against the Property that are filed or recorded under federal, tribal, state, or local law? (40 CFR 312.26).

Circle

Yes ☒ No

Are you aware of any Activity and Use Restrictions, recorded in land title records or in registries or publicly available lists, applicable to the Property, including Engineering Controls, Institutional Controls or Land Use Restrictions, that are applicable to or run with the Property? (40 CFR 312.26(b)(6,7)).

Yes ☒ No

Do you have any specialized knowledge or experience relating to the Property, surrounding areas, or adjoining properties, or with the types of activities and processes conducted at the Property, surrounding areas, or adjoining properties? (40 CFR 312.28)?

Yes ☒ No

Does the purchase price being paid for the Property reasonably reflect the fair market value of the Property? (40 CFR 312.29(a))

☒ Yes ☐ No

If not, have you considered whether the differential in price could be attributed to the presence or possible presence of contamination from hazardous substances or petroleum products? (40 CFR 312.29(b))

Yes ☒ No

Are you aware of commonly known or reasonably ascertainable information about the Property or surrounding area (e.g. past uses, water quality problems, environmental compliance issues, or permit violations), that might be obtained from current or former owners or operators, local officials, or local members of the public, that might suggest a release or threatened release of hazardous substances or petroleum products on, at, or in the Property? (40 CFR 312.30)

Yes ☒ No

Do you know of any pending, threatened, or past litigation or administrative action relevant to hazardous substances or petroleum products on, in, or from the Property? (ASTM E1527-05, Sec. 10.9)

Yes ☒ No

Do you know of any notices or other correspondence from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products? (ASTM E1527-05, Sec. 10.9)

Yes ☒ No

In addition to one of the requirements to satisfy a potential Landowner Liability Protection claim under the Comprehensive Environmental Response, Compensation, and Liability Act, what is your reason for performing this study? (ASTM E1527-05, Sec. 6.7)

Lender's Requirements	☒ Yes ☐ No	Insurance Requirements	☒ Yes ☐ No
Planning/Zoning Requirements	☒ Yes ☐ No	Baseline Review	☒ Yes ☐ No
Other: _____	☒ Yes ☐ No	Business Operations Planning	☒ Yes ☐ No

Do you know of any of the following types of helpful documents about the Property and can you provide copies to WT before the site inspection? (ASTM E1527-05, Sec. 10.8)

Environmental site assessment reports	☒ Yes ☐ No	NPDES Permits	☒ Yes ☐ No
Environmental compliance audit reports	☒ Yes ☐ No	Wastewater Permits	☒ Yes ☐ No
Underground Injection Permits	☒ Yes ☐ No	Solid Waste Permits	☒ Yes ☐ No
Hazardous Waste Generator Notices	☒ Yes ☐ No	Air Emissions Permits	☒ Yes ☐ No
Community Right-To-Know Plan	☒ Yes ☐ No	UST Registrations	☒ Yes ☐ No
Environmental Management Plan	☒ Yes ☐ No	AST Registrations	☒ Yes ☐ No
Hydrogeologic Reports	☒ Yes ☐ No	Material Safety Data Sheets	☒ Yes ☐ No
Geotechnical Reports	☒ Yes ☐ No	Safety Plans	☒ Yes ☐ No
SARA Title III/Form R Reports	☒ Yes ☐ No	Spill Control Countermeasures Plan	☒ Yes ☐ No
Risk Assessments	☒ Yes ☐ No	Notices of Violations	☒ Yes ☐ No
Chain-of-Title Records	☒ Yes ☐ No	Institutional/Engineering Controls	☒ Yes ☐ No

Signature: [Signature] Date: 9-14-18

WESTERN TECHNOLOGIES INC.
PHASE I ENVIRONMENTAL SITE ASSESSMENT
PROPERTY OWNER KEY SITE MANAGER QUESTIONNAIRE
WT Job No. 6128JA159 - Eagle Mountain Property

PROPERTY INFORMATION

Address: Approximately 2600 East Eagle Mountain Blvd City: Eagle Mountain State: Utah

Parcel Nos: A portion of 59-018-0037

Major Cross Streets: Lake Mountain Road

Current Occupants: 0

Current Activities: 0

OWNER / OCCUPANT / KEY SITE MANAGER INFORMATION

Name: Tiffany Walden

Years Familiar w/Property: 10

Business Affiliation: Manager/Owner

Address: 1754 East Cedar Trails Way

City: Eagle Mountain

State: Utah

Tel: 801-633-1661

Fax:

E-Mail: Waldentiffany@gmail.com

Relationship to the Property (please check all that apply):

Owner

- ☐ Individual Owner
- ☐ Corporation
- ☒ Partnership
- ☐ Trust/Trustee
- ☐ Owner's Broker

Occupant

- ☐ Owner Occupant
- ☐ Sole Occupant
- ☐ Major Occupant

Key Site Manager

- ☐ Property Manager
- ☐ Facilities Manager
- ☒ **Maintenance** Director
- ☐ Plant Supervisor
- ☐ Leasing Agent

UTILITY INFORMATION

1. Please list the service providers for the following utilities:

Electric: Rocky Mountain Power

Gas: Questar Gas

Water: Eagle Mountain City

Sewer: Eagle Mountain City

Solid Waste: Eagle Mountain City

WESTERN TECHNOLOGIES INC.
PHASE I ENVIRONMENTAL SITE ASSESSMENT
PROPERTY OWNER KEY SITE MANAGER QUESTIONNAIRE
WT Job No. 6128JA159 - Eagle Mountain Property

2. What is the method of heating for buildings on the Property? Gas and or Electric
3. What is the method of cooling for buildings on the Property? Electric air conditioner

STORAGE TANKS

4. Y ☒ N Unk Are there any aboveground storage tanks (ASTs) currently located on the Property? If yes explain.
5. Y ☒ N Unk Are you aware of any past ASTs located on the Property? If yes explain.
6. Y ☒ N Unk Are there any underground storage tanks (USTs) currently located on the Property? If yes explain.
7. Y ☒ N Unk Are you aware of any past USTs located on the Property? If yes explain.

HAZARDOUS SUBSTANCES, PETROLEUM PRODUCTS, AND CONTAINERS

8. Y ☒ N Unk Are there any containers of hazardous chemicals currently stored or used on the Property? If yes explain.
9. Y ☒ N Unk Are you aware of past uses of hazardous chemicals on the Property? If yes explain.
9. Y ☒ N Unk Have you observed or are you aware of stained soils on the Property? If yes explain.
10. Y ☒ N Unk Do you know of any current or previous in-ground hydraulic lifts on the Property? If yes, has hydraulic oil ever been added to the lifts? Are service records available for the lifts?

WESTERN TECHNOLOGIES INC.
PHASE I ENVIRONMENTAL SITE ASSESSMENT
PROPERTY OWNER KEY SITE MANAGER QUESTIONNAIRE
WT Job No. 6128JA159 - Eagle Mountain Property

11. Y ☒ N Unk Have pesticides ever been mixed, stored, or applied on the Property? If yes, were applications made by hand, by truck, or by aerial spraying?
If yes explain.

WESTERN TECHNOLOGIES INC.
PHASE I ENVIRONMENTAL SITE ASSESSMENT
PROPERTY OWNER KEY SITE MANAGER QUESTIONNAIRE
WT Job No. 6128JA159 - Eagle Mountain Property

SOLID WASTE

12. Y ☒ N Unk Are you aware of or do you have any prior knowledge of buried debris on the Property or that the Property has been used as a landfill or for other waste handling activities?
If yes explain.
13. Y ☒ N Unk Do you know if soil from an unknown source, construction debris, demolition debris, or landscaping debris was placed on the Property?
If yes explain.
14. Y ☒ N Unk Do you know if used tires were ever discarded on the Property?
If yes explain.
15. Y ☒ N Unk Are you aware of any former stock ponds, wastewater ponds, silage pits, or other excavations that have been filled on the Property?
If yes explain.

WASTEWATER AND LIQUID DISCHARGES

16. Y ☒ N Unk Are you aware of or do you have any prior knowledge of pits, ponds or lagoons for waste treatment or disposal on the Property?
If yes explain.
17. Y ☒ N Unk Are you aware of any current or past wastewater interceptors, sand filters, sumps, or clarifiers on the Property?
If yes explain.
18. Y ☒ N Unk Are there any current or past septic systems located on the Property?
If yes explain.

STORMWATER AND DRAINAGE PROVISIONS

19. Y ☒ N Unk Are there any dry wells located on the Property? Do you know if they are registered with the state agency? If so, can you provide copies of the registration records?
20. Y ☒ N Unk Are there any existing or former water wells located on the Property? Were the wells used for irrigation, domestic supply, or monitoring? Are the wells registered with the appropriate water resources agency?
If yes, explain.

WESTERN TECHNOLOGIES INC.
PHASE I ENVIRONMENTAL SITE ASSESSMENT
PROPERTY OWNER KEY SITE MANAGER QUESTIONNAIRE
WT Job No. 6128JA159 - Eagle Mountain Property

CURRENT/PREVIOUS ENVIRONMENTAL INVESTIGATION OR REGULATORY ACTION

21. Y **(N)** Unk Are you aware of any previous environmental inspections, environmental investigations, environmental site assessments, environmental violations, pending law suits or administrative actions, or environmental liens relating to the Property, or to current or past owners, occupants, or facilities which were on the Property?
 If yes, explain.

AVAILABILITY OF HELPFUL ENVIRONMENTAL DOCUMENTS

22. Do you know of any of the following types of helpful documents about the Property and can you provide copies to WT before the site inspection?

	<u>Yes</u>	<u>No</u>		<u>Yes</u>	<u>No</u>
Prior environmental assessment reports	☐	x	NPDES Permits	☐	x
Environmental audit reports	☐	x	Wastewater Permits	☐	x
Hazardous Waste Generator Notices	☐	x	Air Emissions Permits	☐	x
Community Right-To-Know Plan	☐	x	UST Registrations	☐	x
Environmental Management Plan	☐	x	AST Registrations	☐	x
Hydrogeologic Reports	☐	x	Material Safety Data Sheets	☐	x
Geotechnical Reports		x	Safety Plans		x
SARA Title III/Form R Reports		x	Spill		x
Prevention Control/		x			
Title Records		x			
Countermeasures Plan		x			
Hazardous Waste Manifest		x	Waste Oil Disposal Records	No	
Water Well Records		x	Drywell Registration Records	NO	

PRIOR SITE USES AND OCCUPANTS

23. Y **(N)** Unk Can you identify any prior occupants on the Property? If yes, please list their business names, dates of occupancy, contact person, and contact information, if available:

24. Y **(N)** Unk If you own the Property, can you identify the immediate prior owner or other prior owners? If yes, please list names and contact information, if available:

WESTERN TECHNOLOGIES INC.
PHASE I ENVIRONMENTAL SITE ASSESSMENT
PROPERTY OWNER KEY SITE MANAGER QUESTIONNAIRE
WT Job No. 6128JA159 - Eagle Mountain Property

ADDITIONAL COMMENTS

25. Please feel free to make any additional comments;

SIGNATURE

Printed Name: Angie Poulsen
Company/Title: Chief Financial officer
Signature: Angie Poulsen
Date Completed: 9/17/18

APPENDIX D
HISTORICAL RECORDS



0 500
feet



Eagle Mountain Property
USDA
2016

GeoSearch



Eagle Mountain Property
USDA
2014

GeoSearch



Eagle Mountain Property
USDA
2011

GeoSearch



Eagle Mountain Property
USDA
2009

GeoSearch



0 500
feet



Eagle Mountain Property
USDA
2006

GeoSearch



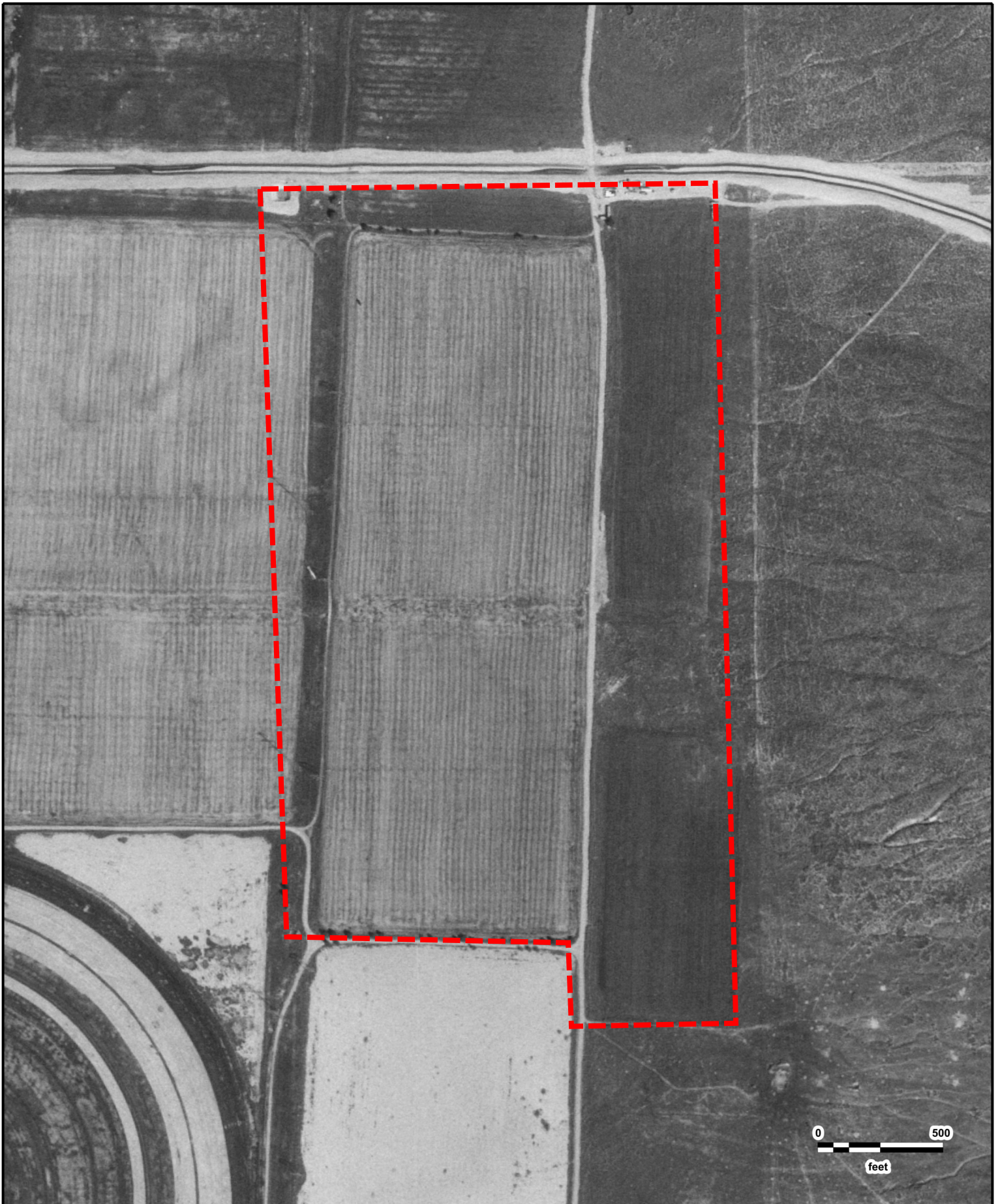
Eagle Mountain Property
USDA
2004

GeoSearch



Eagle Mountain Property
USDA
2003

GeoSearch



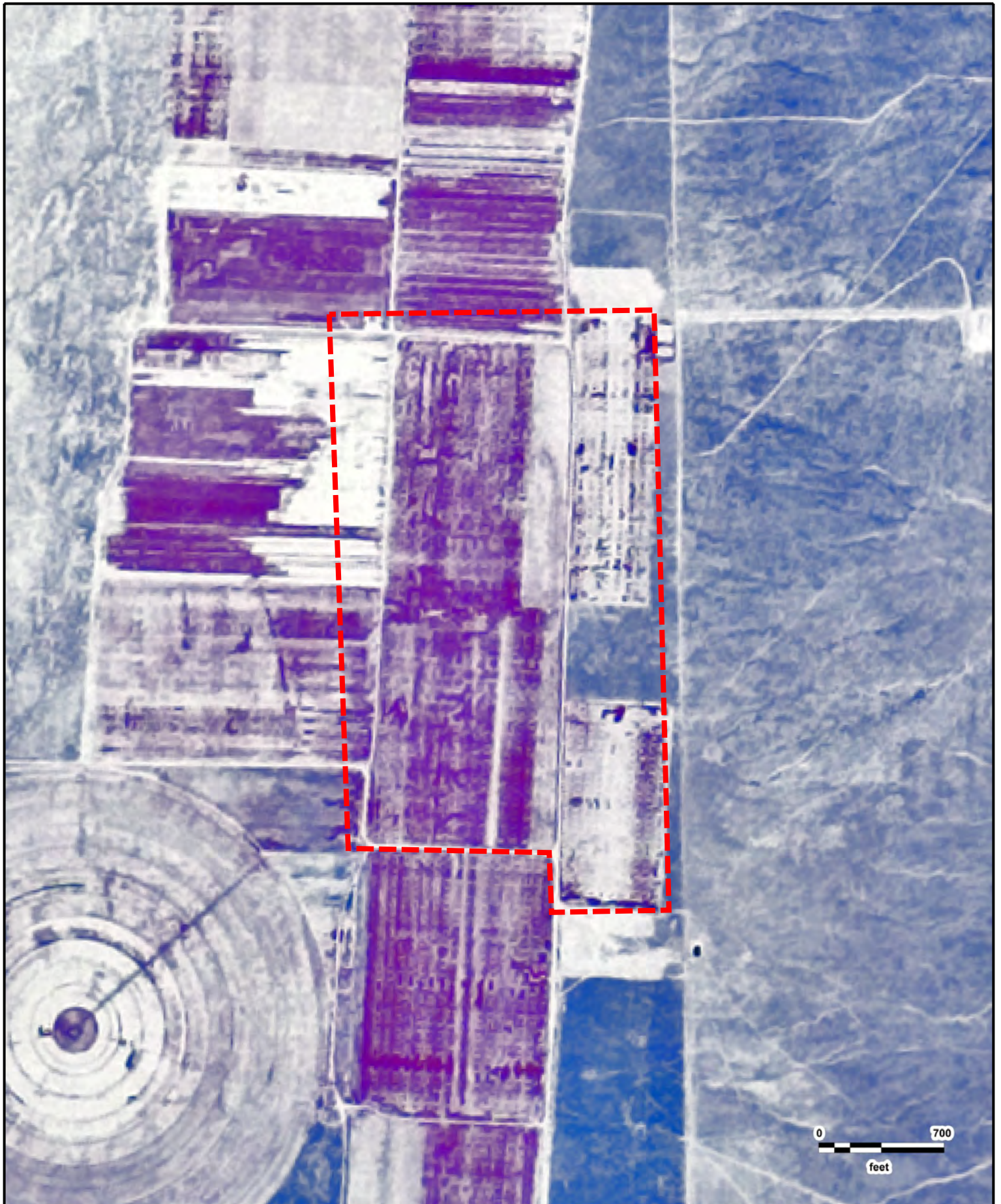
Eagle Mountain Property
USGS
10/01/1997

GeoSearch



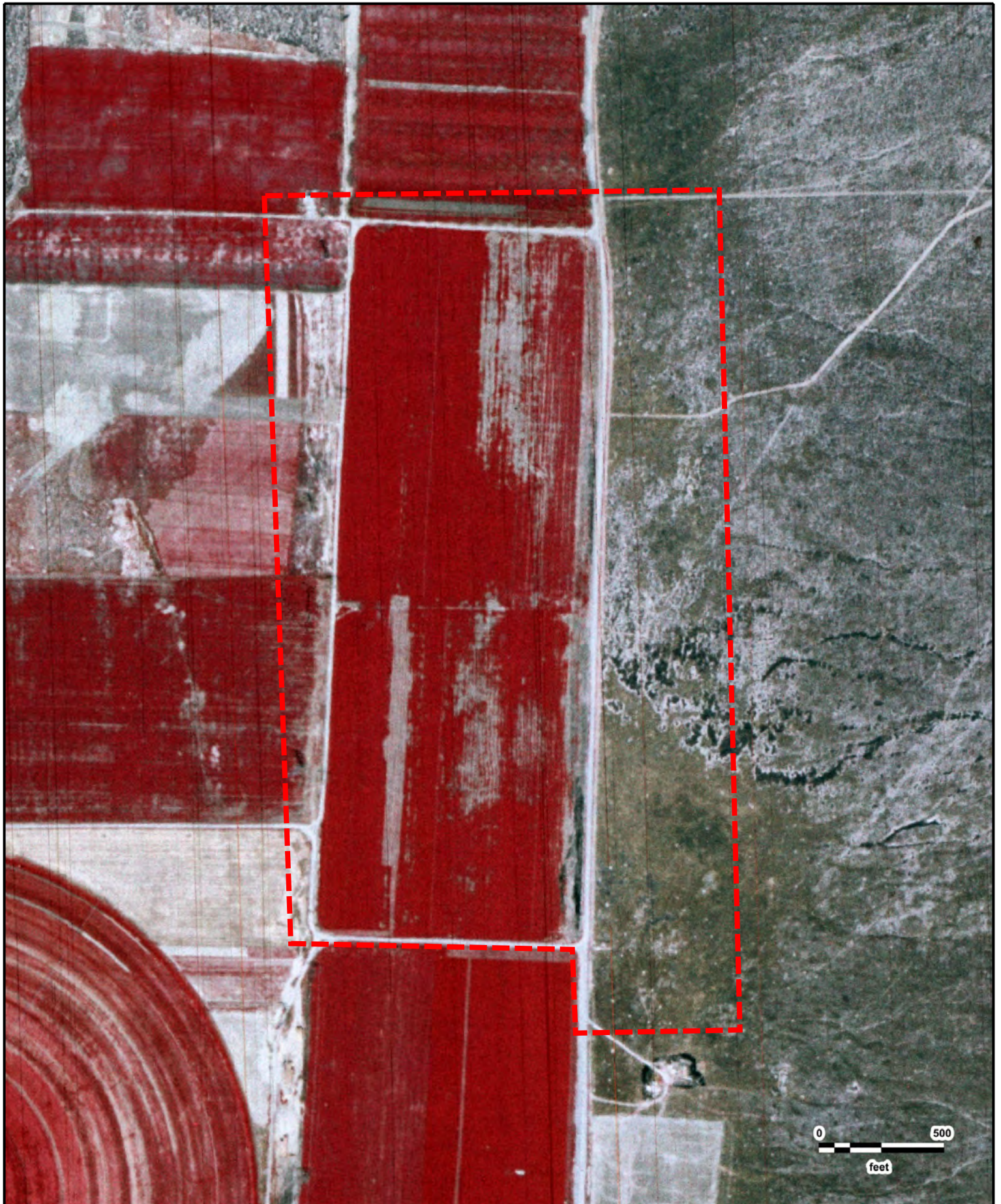
Eagle Mountain Property
USGS
08/17/1993

GeoSearch



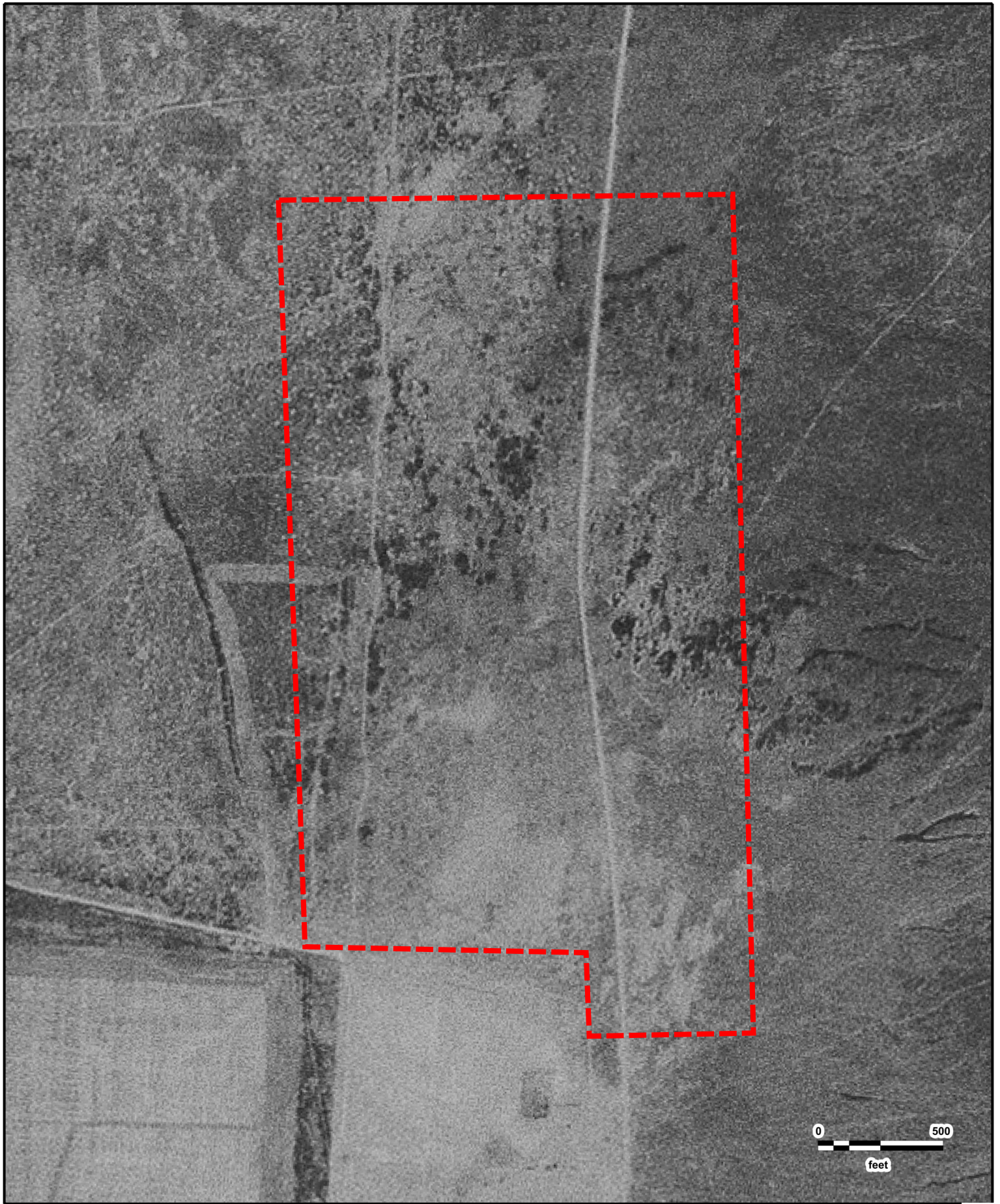
Eagle Mountain Property
USGS
07/18/1987

GeoSearch



Eagle Mountain Property
USGS
08/04/1981

GeoSearch



0 500
feet



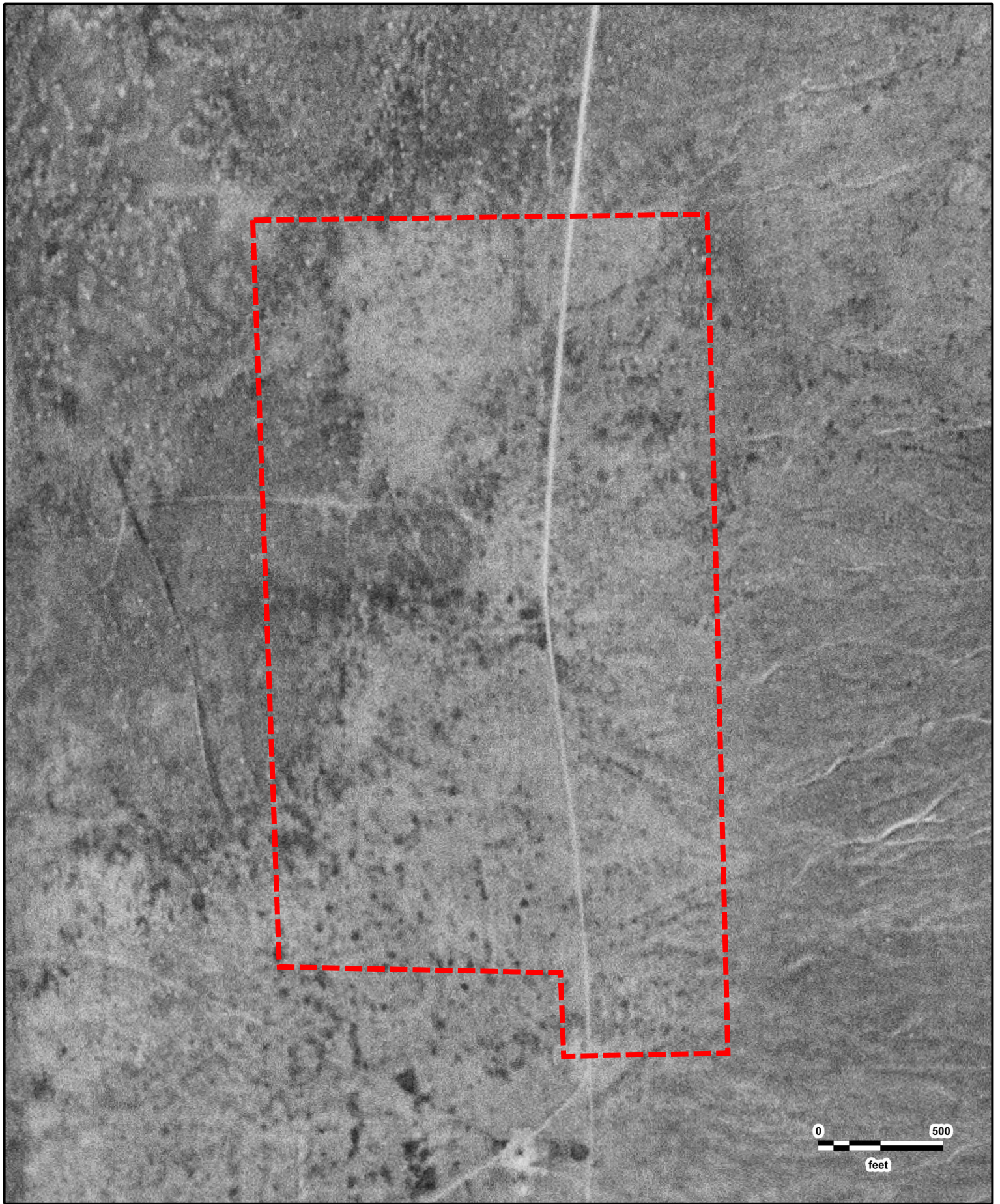
Eagle Mountain Property
USGS
09/02/1975

GeoSearch



Eagle Mountain Property
USGS
08/06/1966

GeoSearch



Eagle Mountain Property
AMS
08/02/1953

GeoSearch

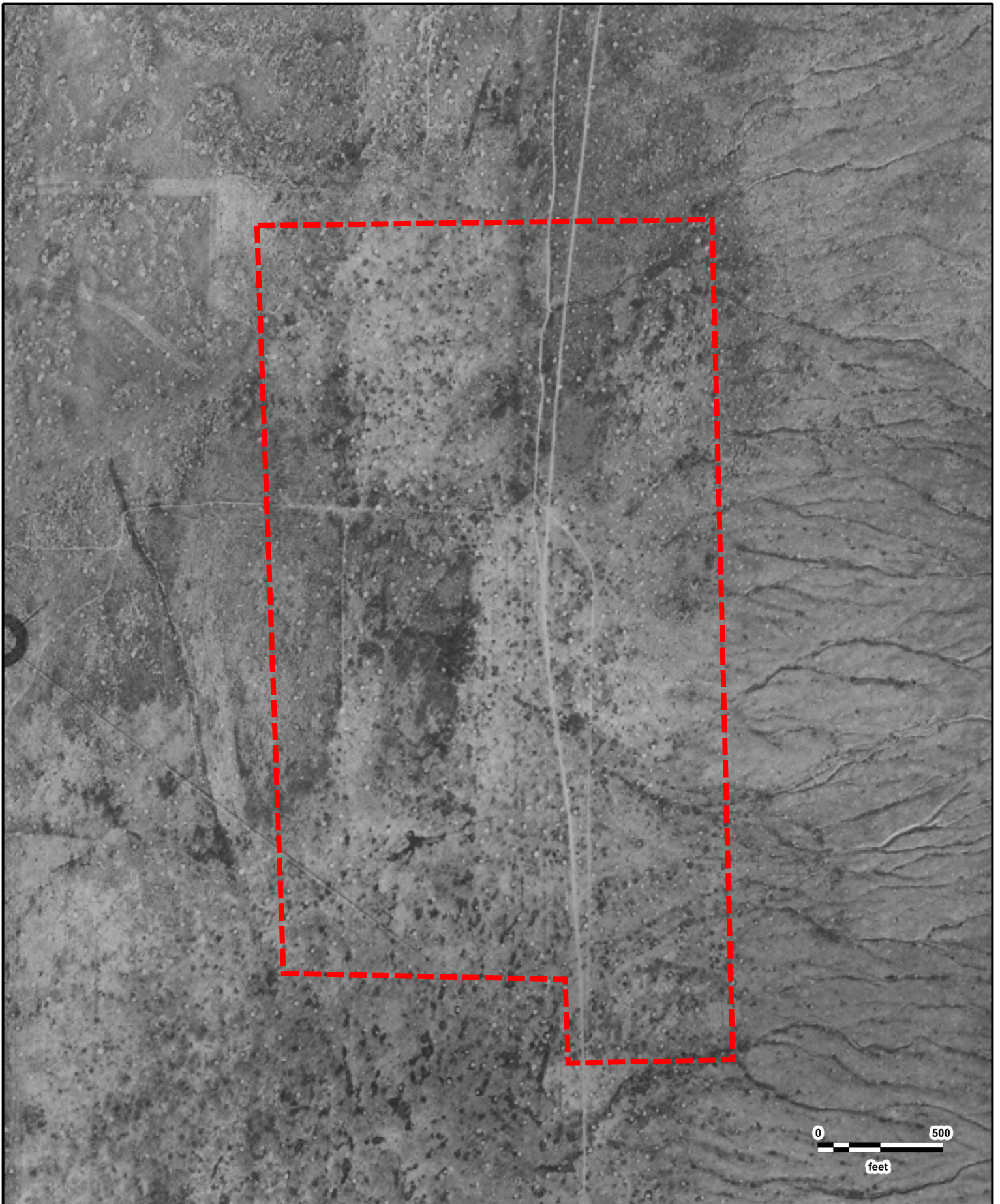


0 500
feet



Eagle Mountain Property
USGS
06/26/1950

GeoSearch



Eagle Mountain Property
USBR
10/12/1939

GeoSearch

APPENDIX E
DATABASE REPORT

Radius Report

[NEW: GeoLens by Geosearch](#)

Target Property:

Eagle Mountain Property

Eagle Mountain Blvd & N Lake Mountain Rd

Eagle Mountain, Utah County, Utah 84013

Prepared For:

Western Technologies Inc- Salt Lake City

Order #: 114665

Job #: 257005

Project #: 6128JA159

Date: 09/14/2018

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<i>Unlocatable Report</i>	See Attachment
<i>Zip Report</i>	See Attachment

Disclaimer

This report was designed by GeoSearch to meet or exceed the records search requirements of the All Appropriate Inquiries Rule (40 CFR §312.26) and the current version of the ASTM International E1527, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process or, if applicable, the custom requirements requested by the entity that ordered this report. The records and databases of records used to compile this report were collected from various federal, state and local governmental entities. It is the goal of GeoSearch to meet or exceed the 40 CFR §312.26 and E1527 requirements for updating records by using the best available technology. GeoSearch contacts the appropriate governmental entities on a recurring basis. Depending on the frequency with which a record source or database of records is updated by the governmental entity, the data used to prepare this report may be updated monthly, quarterly, semi-annually, or annually.

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Target Property Summary

Target Property Information

Eagle Mountain Property
Eagle Mountain Blvd & N Lake Mountain Rd
Eagle Mountain, Utah 84013

Coordinates

Area centroid (-111.99370, 40.3008700)
4,894 feet above sea level

USGS Quadrangle

Saratoga Springs, UT

Geographic Coverage Information

County/Parish: Utah (UT)

ZipCode(s):

Eagle Mountain UT: 84005
Cedar Valley UT: 84013

Database Summary

FEDERAL LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
EMERGENCY RESPONSE NOTIFICATION SYSTEM	ERNSUT	0	0	TP/AP
FEDERAL ENGINEERING INSTITUTIONAL CONTROL SITES	EC	0	0	TP/AP
LAND USE CONTROL INFORMATION SYSTEM	LUCIS	0	0	TP/AP
RCRA SITES WITH CONTROLS	RCRASC	0	0	TP/AP
RESOURCE CONSERVATION & RECOVERY ACT - GENERATOR	RCRAGR08	0	0	0.1250
RESOURCE CONSERVATION & RECOVERY ACT - NON-GENERATOR	RCRANGR08	0	0	0.1250
FEMA OWNED STORAGE TANKS	FEMAUST	0	0	0.2500
BROWNFIELDS MANAGEMENT SYSTEM	BF	0	0	0.5000
DELISTED NATIONAL PRIORITIES LIST	DNPL	0	0	0.5000
NO LONGER REGULATED RCRA NON-CORRACTS TSD FACILITIES	NLRRCRAT	0	0	0.5000
RESOURCE CONSERVATION & RECOVERY ACT - NON-CORRACTS TREATMENT, STORAGE & DISPOSAL FACILITIES	RCRAT	0	0	0.5000
SUPERFUND ENTERPRISE MANAGEMENT SYSTEM	SEMS	0	0	0.5000
SUPERFUND ENTERPRISE MANAGEMENT SYSTEM ARCHIVED SITE INVENTORY	SEMSARCH	0	0	0.5000
NATIONAL PRIORITIES LIST	NPL	0	0	1.0000
NO LONGER REGULATED RCRA CORRECTIVE ACTION FACILITIES	NLRRCRAC	0	0	1.0000
PROPOSED NATIONAL PRIORITIES LIST	PNPL	0	0	1.0000
RESOURCE CONSERVATION & RECOVERY ACT - CORRECTIVE ACTION FACILITIES	RCRAC	0	0	1.0000
RESOURCE CONSERVATION & RECOVERY ACT - SUBJECT TO CORRECTIVE ACTION FACILITIES	RCRASUBC	0	0	1.0000
SUB-TOTAL		0	0	

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
AEROMETRIC INFORMATION RETRIEVAL SYSTEM / AIR FACILITY SUBSYSTEM	AIRSAFS	0	0	TP/AP
BIENNIAL REPORTING SYSTEM	BRS	0	0	TP/AP
CERCLIS LIENS	SFLIENS	0	0	TP/AP
CLANDESTINE DRUG LABORATORY LOCATIONS	CDL	0	0	TP/AP
EPA DOCKET DATA	DOCKETS	0	0	TP/AP
ENFORCEMENT AND COMPLIANCE HISTORY INFORMATION	ECHOR08	0	0	TP/AP

Database Summary

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
FACILITY REGISTRY SYSTEM	FRSUT	0	0	TP/AP
HAZARDOUS MATERIALS INCIDENT REPORTING SYSTEM	HMIRSR08	0	0	TP/AP
INTEGRATED COMPLIANCE INFORMATION SYSTEM (FORMERLY DOCKETS)	ICIS	0	0	TP/AP
INTEGRATED COMPLIANCE INFORMATION SYSTEM NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	ICISNPDES	0	0	TP/AP
MATERIAL LICENSING TRACKING SYSTEM	MLTS	0	0	TP/AP
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	NPDESR08	0	0	TP/AP
PCB ACTIVITY DATABASE SYSTEM	PADS	0	0	TP/AP
PERMIT COMPLIANCE SYSTEM	PCSR08	0	0	TP/AP
SEMS LIEN ON PROPERTY	SEMSLIENS	0	0	TP/AP
SECTION SEVEN TRACKING SYSTEM	SSTS	0	0	TP/AP
TOXIC SUBSTANCE CONTROL ACT INVENTORY	TSCA	0	0	TP/AP
TOXICS RELEASE INVENTORY	TRI	0	0	TP/AP
ALTERNATIVE FUELING STATIONS	ALTFUELS	0	0	0.2500
HISTORICAL GAS STATIONS	HISTPST	0	0	0.2500
INTEGRATED COMPLIANCE INFORMATION SYSTEM DRYCLEANERS	ICISCLEANERS	0	0	0.2500
MINE SAFETY AND HEALTH ADMINISTRATION MASTER INDEX FILE	MSHA	0	0	0.2500
MINERAL RESOURCE DATA SYSTEM	MRDS	0	0	0.2500
OPEN DUMP INVENTORY	ODI	0	0	0.5000
SURFACE MINING CONTROL AND RECLAMATION ACT SITES	SMCRA	0	0	0.5000
URANIUM MILL TAILINGS RADIATION CONTROL ACT SITES	USUMTRCA	0	0	0.5000
DEPARTMENT OF DEFENSE SITES	DOD	0	0	1.0000
FORMER MILITARY NIKE MISSILE SITES	NMS	0	0	1.0000
FORMERLY USED DEFENSE SITES	FUDS	0	0	1.0000
FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM	FUSRAP	0	0	1.0000
RECORD OF DECISION SYSTEM	RODS	0	0	1.0000
SUB-TOTAL		0	0	

Database Summary

STATE (UT) LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
INSTITUTIONAL ENGINEERING CONTROLS REGISTRY	ICEC	0	0	TP/AP
REGISTERED UNDERGROUND STORAGE TANKS	RUST	0	0	0.2500
BROWNFIELD PROPERTIES	BF	0	0	0.5000
CERCLIS SITES	CERCLIS	0	0	0.5000
LANDFILL AND SOLID WASTE DISPOSAL SITES	LFSWDS	0	0	0.5000
LEAKING UNDERGROUND STORAGE TANKS	LUST	0	0	0.5000
VOLUNTARY CLEANUP PROGRAM SITES	VCP	0	0	0.5000
NATIONAL PRIORITIES LIST	NPL	0	0	1.0000

SUB-TOTAL		0	0	
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Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
TIER II FACILITIES	TIERII	0	0	TP/AP

SUB-TOTAL		0	0	
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Database Summary

TRIBAL LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
UNDERGROUND STORAGE TANKS ON TRIBAL LANDS	USTR08	0	0	0.2500
LEAKING UNDERGROUND STORAGE TANKS ON TRIBAL LANDS	LUSTR08	0	0	0.5000
OPEN DUMP INVENTORY ON TRIBAL LANDS	ODINDIAN	0	0	0.5000

SUB-TOTAL		0	0	
-----------	--	---	---	--

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
INDIAN RESERVATIONS	INDIANRES	0	0	1.0000

SUB-TOTAL		0	0	
-----------	--	---	---	--

TOTAL		0	0	
-------	--	---	---	--

Database Radius Summary

FEDERAL LISTING

Standard environmental records are displayed in **bold**.

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
AIRSAFS	0.0200	0	NS	NS	NS	NS	NS	0
BRS	0.0200	0	NS	NS	NS	NS	NS	0
CDL	0.0200	0	NS	NS	NS	NS	NS	0
DOCKETS	0.0200	0	NS	NS	NS	NS	NS	0
EC	0.0200	0	NS	NS	NS	NS	NS	0
ECHOR08	0.0200	0	NS	NS	NS	NS	NS	0
ERNSUT	0.0200	0	NS	NS	NS	NS	NS	0
FRSUT	0.0200	0	NS	NS	NS	NS	NS	0
HMIRSR08	0.0200	0	NS	NS	NS	NS	NS	0
ICIS	0.0200	0	NS	NS	NS	NS	NS	0
ICISNPDES	0.0200	0	NS	NS	NS	NS	NS	0
LUCIS	0.0200	0	NS	NS	NS	NS	NS	0
MLTS	0.0200	0	NS	NS	NS	NS	NS	0
NPDES08	0.0200	0	NS	NS	NS	NS	NS	0
PADS	0.0200	0	NS	NS	NS	NS	NS	0
PCSR08	0.0200	0	NS	NS	NS	NS	NS	0
RCRASC	0.0200	0	NS	NS	NS	NS	NS	0
SEMSLIENS	0.0200	0	NS	NS	NS	NS	NS	0
SFLIENS	0.0200	0	NS	NS	NS	NS	NS	0
SSTS	0.0200	0	NS	NS	NS	NS	NS	0
TRI	0.0200	0	NS	NS	NS	NS	NS	0
TSCA	0.0200	0	NS	NS	NS	NS	NS	0
RCRAGR08	0.1250	0	0	NS	NS	NS	NS	0
RCRANGR08	0.1250	0	0	NS	NS	NS	NS	0
ALTFUELS	0.2500	0	0	0	NS	NS	NS	0
FEMAUST	0.2500	0	0	0	NS	NS	NS	0
HISTPST	0.2500	0	0	0	NS	NS	NS	0
ICISCLEANERS	0.2500	0	0	0	NS	NS	NS	0
MRDS	0.2500	0	0	0	NS	NS	NS	0
MSHA	0.2500	0	0	0	NS	NS	NS	0
BF	0.5000	0	0	0	0	NS	NS	0
DNPL	0.5000	0	0	0	0	NS	NS	0
NLRRCRAT	0.5000	0	0	0	0	NS	NS	0
ODI	0.5000	0	0	0	0	NS	NS	0
RCRAT	0.5000	0	0	0	0	NS	NS	0

Database Radius Summary

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
SEMS	0.5000	0	0	0	0	NS	NS	0
SEMSARCH	0.5000	0	0	0	0	NS	NS	0
SMCRA	0.5000	0	0	0	0	NS	NS	0
USUMTRCA	0.5000	0	0	0	0	NS	NS	0
DOD	1.0000	0	0	0	0	0	NS	0
FUDS	1.0000	0	0	0	0	0	NS	0
FUSRAP	1.0000	0	0	0	0	0	NS	0
NLRRCRAC	1.0000	0	0	0	0	0	NS	0
NMS	1.0000	0	0	0	0	0	NS	0
NPL	1.0000	0	0	0	0	0	NS	0
PNPL	1.0000	0	0	0	0	0	NS	0
RCRAC	1.0000	0	0	0	0	0	NS	0
RCRASUBC	1.0000	0	0	0	0	0	NS	0
RODS	1.0000	0	0	0	0	0	NS	0
SUB-TOTAL		0	0	0	0	0	0	0

Database Radius Summary

STATE (UT) LISTING

Standard environmental records are displayed in **bold**.

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
ICEC	0.0200	0	NS	NS	NS	NS	NS	0
TIERII	0.0200	0	NS	NS	NS	NS	NS	0
RUST	0.2500	0	0	0	NS	NS	NS	0
BF	0.5000	0	0	0	0	NS	NS	0
CERCLIS	0.5000	0	0	0	0	NS	NS	0
LFSWDS	0.5000	0	0	0	0	NS	NS	0
LUST	0.5000	0	0	0	0	NS	NS	0
VCP	0.5000	0	0	0	0	NS	NS	0
NPL	1.0000	0	0	0	0	0	NS	0
SUB-TOTAL		0	0	0	0	0	0	0

Database Radius Summary

TRIBAL LISTING

Standard environmental records are displayed in **bold**.

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
USTR08	0.2500	0	0	0	NS	NS	NS	0
LUSTR08	0.5000	0	0	0	0	NS	NS	0
ODINDIAN	0.5000	0	0	0	0	NS	NS	0
INDIANRES	1.0000	0	0	0	0	0	NS	0

SUB-TOTAL		0	0	0	0	0	0	0
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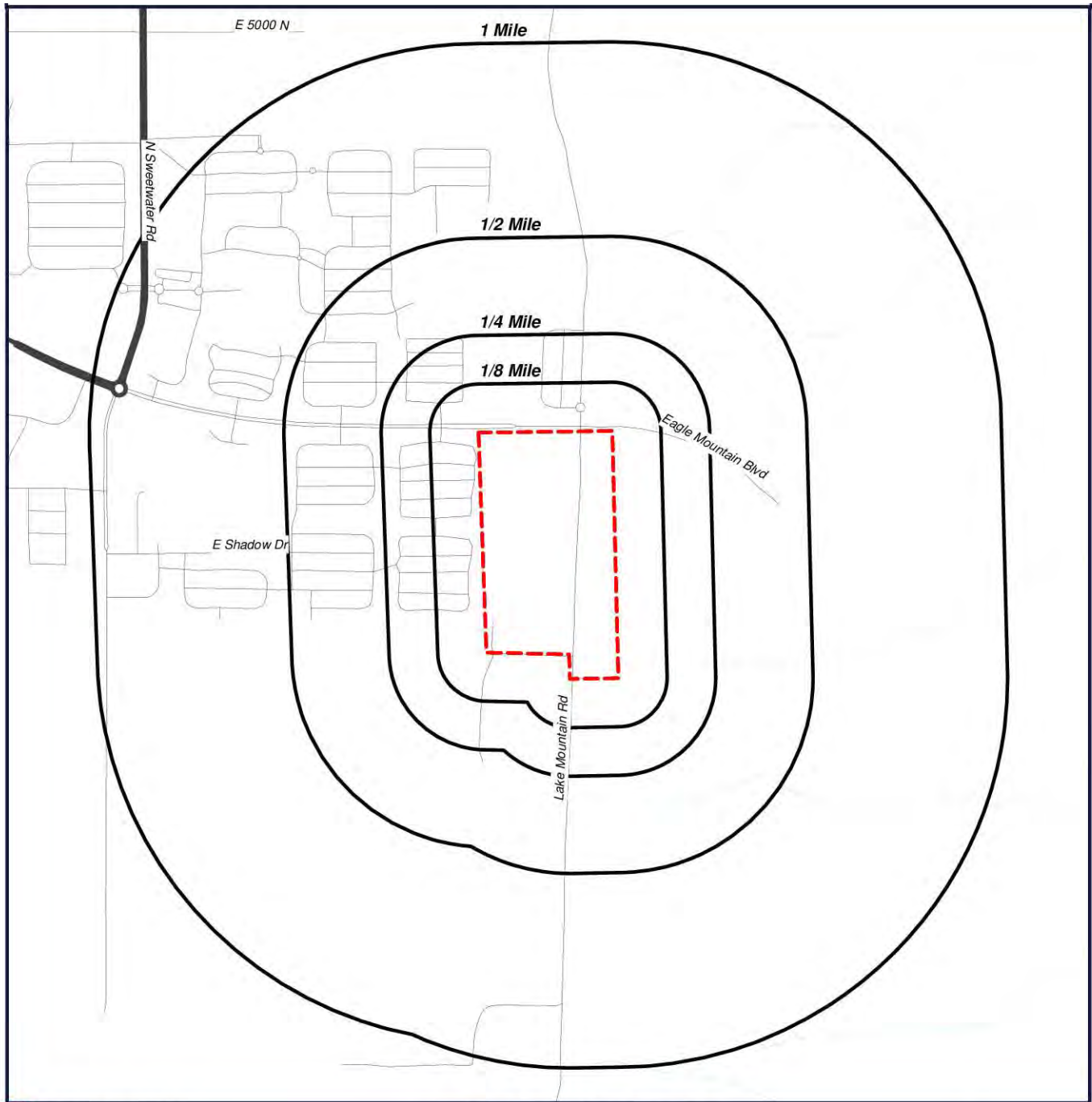
TOTAL		0	0	0	0	0	0	0
-------	--	---	---	---	---	---	---	---

NOTES:

NS = NOT SEARCHED

TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

Radius Map 1



 Target Property (TP)

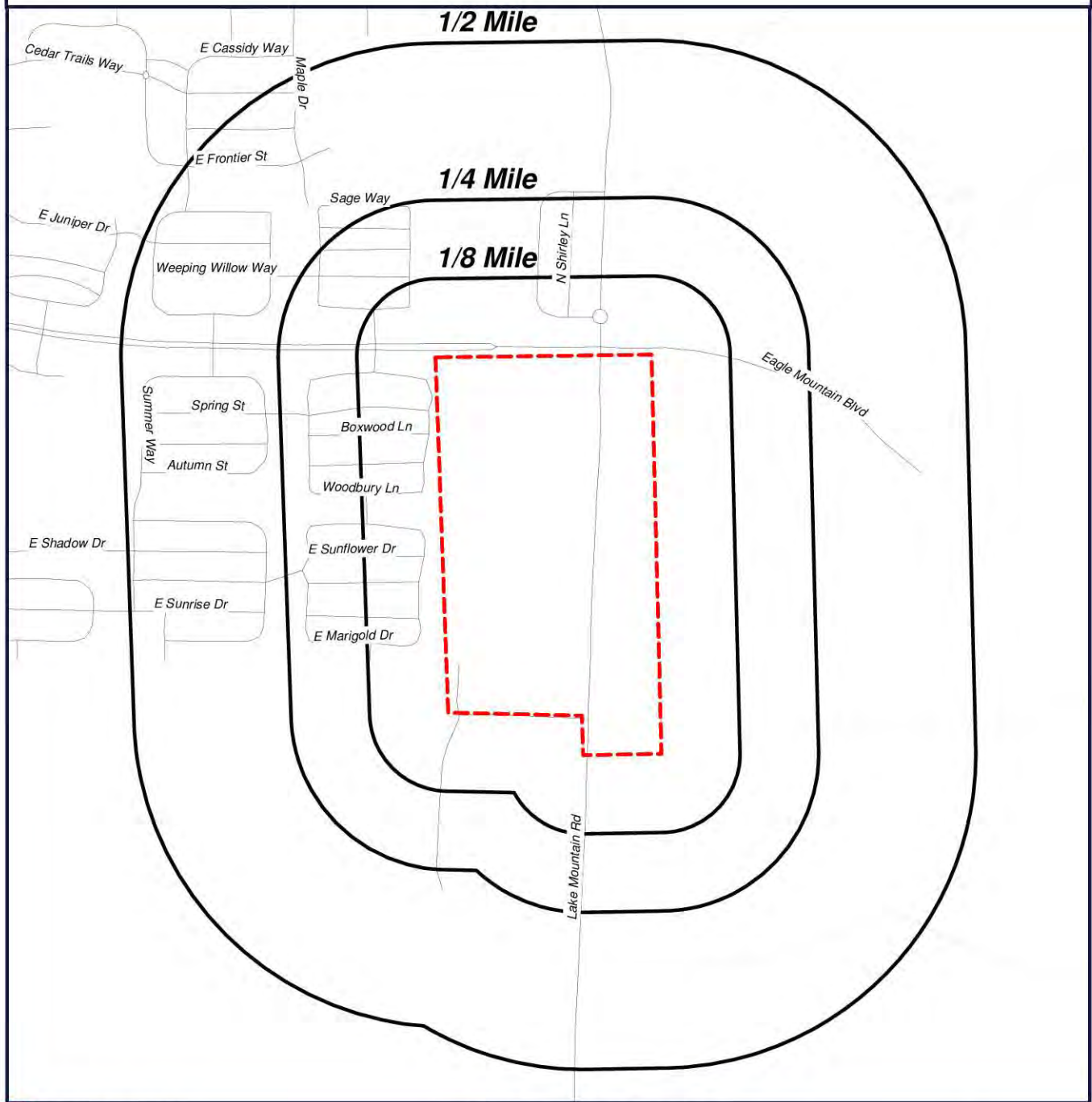
Eagle Mountain Property
Eagle Mountain Blvd & N Lake
Mountain Rd
Eagle Mountain, Utah
84013



0' 1050' 2100' 3150'
SCALE: 1" = 2100'

[Click here to access Satellite view](#)

Radius Map 2



 Target Property (TP)

Eagle Mountain Property
Eagle Mountain Blvd & N Lake
Mountain Rd
Eagle Mountain, Utah
84013



0' 650' 1300' 1950'
 SCALE: 1" = 1300'

[Click here to access Satellite view](#)

Ortho Map



 Target Property (TP)

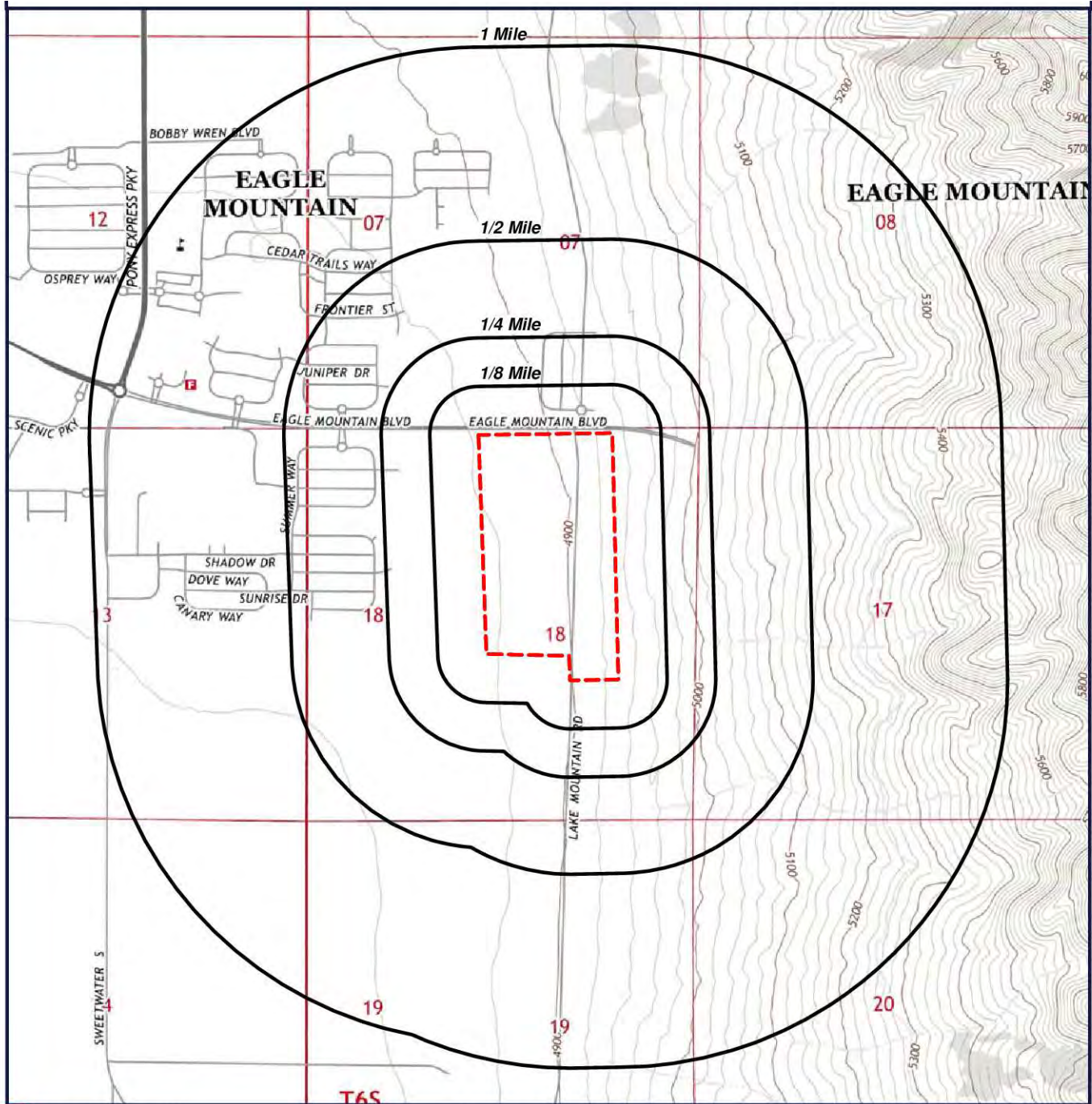
**Quadrangle(s): Saratoga
Springs
Eagle Mountain Property
Eagle Mountain Blvd & N Lake
Mountain Rd
Eagle Mountain, Utah
84013**



0' 650' 1300' 1950'
SCALE: 1" = 1300'

[Click here to access Satellite view](#)

Topographic Map



Target Property (TP)

Quadrangle(s): Saratoga
Springs
Source: USGS, 02/05/2014
Eagle Mountain Property
Eagle Mountain Blvd & N Lake
Mountain Rd
Eagle Mountain, Utah
84013



0' 1050' 2100' 3150'
 SCALE: 1" = 2100'

[Click here to access Satellite view](#)

Located Sites Summary

No Records Found.

Elevation Summary

Elevations are collected from the USGS 3D Elevation Program 1/3 arc-second (approximately 10 meters) layer hosted at the NGTOC. .

Target Property Elevation: 4894 ft.

NOTE: Standard environmental records are displayed in **bold**.

No Records Found.

Unlocated Sites Summary

This list contains sites that could not be mapped due to limited or incomplete address information.

No Records Found

Environmental Records Definitions - FEDERAL

AIRSAFS

Aerometric Information Retrieval System / Air Facility Subsystem

VERSION DATE: 10/20/14

The United States Environmental Protection Agency (EPA) modified the Aerometric Information Retrieval System (AIRS) to a database that exclusively tracks the compliance of stationary sources of air pollution with EPA regulations: the Air Facility Subsystem (AFS). Since this change in 2001, the management of the AIRS/AFS database was assigned to EPA's Office of Enforcement and Compliance Assurance.

BRS

Biennial Reporting System

VERSION DATE: 12/31/11

The United States Environmental Protection Agency (EPA), in cooperation with the States, biennially collects information regarding the generation, management, and final disposition of hazardous wastes regulated under the Resource Conservation and Recovery Act of 1976 (RCRA), as amended. The Biennial Report captures detailed data on the generation of hazardous waste from large quantity generators and data on waste management practices from treatment, storage and disposal facilities. Currently, the EPA states that data collected between 1991 and 1997 was originally a part of the defunct Biennial Reporting System and is now incorporated into the RCRAInfo data system.

CDL

Clandestine Drug Laboratory Locations

VERSION DATE: 07/01/16

The U.S. Department of Justice ("the Department") provides this information as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments. The Department does not establish, implement, enforce, or certify compliance with clean-up or remediation standards for contaminated sites; the public should contact a state or local health department or environmental protection agency for that information.

DOCKETS

EPA Docket Data

VERSION DATE: 12/22/05

The United States Environmental Protection Agency Docket data lists Civil Case Defendants, filing dates as far back as 1971, laws broken including section, violations that occurred, pollutants involved, penalties assessed and superfund awards by facility and location. Please refer to ICIS database as source of current data.

EC

Federal Engineering Institutional Control Sites

VERSION DATE: 08/03/15

This database includes site locations where Engineering and/or Institutional Controls have been identified as part

Environmental Records Definitions - FEDERAL

of a selected remedy for the site as defined by United States Environmental Protection Agency official remedy decision documents. A site listing does not indicate that the institutional and engineering controls are currently in place nor will be in place once the remedy is complete; it only indicates that the decision to include either of them in the remedy is documented as of the completed date of the document. Institutional controls are actions, such as legal controls, that help minimize the potential for human exposure to contamination by ensuring appropriate land or resource use. Engineering controls include caps, barriers, or other device engineering to prevent access, exposure, or continued migration of contamination.

ECHOR08 Enforcement and Compliance History Information

VERSION DATE: 08/26/17

The EPA's Enforcement and Compliance History Online (ECHO) database, provides compliance and enforcement information for facilities nationwide. This database includes facilities regulated as Clean Air Act stationary sources, Clean Water Act direct dischargers, Resource Conservation and Recovery Act hazardous waste handlers, Safe Drinking Water Act public water systems along with other data, such as Toxics Release Inventory releases.

ERNSUT Emergency Response Notification System

VERSION DATE: 04/29/18

This National Response Center database contains data on reported releases of oil, chemical, radiological, biological, and/or etiological discharges into the environment anywhere in the United States and its territories. The data comes from spill reports made to the U.S. Environmental Protection Agency, U.S. Coast Guard, the National Response Center and/or the U.S. Department of Transportation.

FRSUT Facility Registry System

VERSION DATE: 04/17/18

The United States Environmental Protection Agency's Office of Environmental Information (OEI) developed the Facility Registry System (FRS) as the centrally managed database that identifies facilities, sites or places subject to environmental regulations or of environmental interest. The Facility Registry System replaced the Facility Index System or FINDS database.

HMIRSR08 Hazardous Materials Incident Reporting System

VERSION DATE: 03/27/18

The HMIRS database contains unintentional hazardous materials release information reported to the U.S. Department of Transportation located in EPA Region 8. This region includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

ICIS Integrated Compliance Information System (formerly DOCKETS)

VERSION DATE: 09/23/17

Environmental Records Definitions - FEDERAL

ICIS is a case activity tracking and management system for civil, judicial, and administrative federal Environmental Protection Agency enforcement cases. ICIS contains information on federal administrative and federal judicial cases under the following environmental statutes: the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act, the Emergency Planning and Community Right-to-Know Act - Section 313, the Toxic Substances Control Act, the Federal Insecticide, Fungicide, and Rodenticide Act, the Comprehensive Environmental Response, Compensation, and Liability Act, the Safe Drinking Water Act, and the Marine Protection, Research, and Sanctuaries Act.

ICISNPDES Integrated Compliance Information System National Pollutant Discharge Elimination System

VERSION DATE: 07/09/17

Authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States.

LUCIS Land Use Control Information System

VERSION DATE: 09/01/06

The LUCIS database is maintained by the U.S. Department of the Navy and contains information for former Base Realignment and Closure (BRAC) properties across the United States.

MLTS Material Licensing Tracking System

VERSION DATE: 06/29/17

MLTS is a list of approximately 8,100 sites which have or use radioactive materials subject to the United States Nuclear Regulatory Commission (NRC) licensing requirements.

NPDESR08 National Pollutant Discharge Elimination System

VERSION DATE: 04/01/07

Authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. The NPDES database was collected from December 2002 until April 2007. Refer to the PCS and/or ICIS-NPDES database as source of current data. This database includes permitted facilities located in EPA Region 8. This region includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

PADS PCB Activity Database System

VERSION DATE: 07/18/17

PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Environmental Records Definitions - FEDERAL

PCSR08

Permit Compliance System

VERSION DATE: 08/01/12

The Permit Compliance System is used in tracking enforcement status and permit compliance of facilities controlled by the National Pollutant Discharge Elimination System (NPDES) under the Clean Water Act and is maintained by the United States Environmental Protection Agency's Office of Compliance. PCS is designed to support the NPDES program at the state, regional, and national levels. This database includes permitted facilities located in EPA Region 8. This region includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming. PCS has been modernized, and no longer exists. National Pollutant Discharge Elimination System (ICIS-NPDES) data can now be found in Integrated Compliance Information System (ICIS).

RCRASC

RCRA Sites with Controls

VERSION DATE: 03/21/18

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities with institutional controls in place.

SEMSLIENS

SEMS Lien on Property

VERSION DATE: 06/08/18

The U.S. Environmental Protection Agency's (EPA) Office of Solid Waste and Emergency Response, Office of Superfund Remediation and Technology Innovation (OSRTI), has implemented The Superfund Enterprise Management System (SEMS), formerly known as CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System) to track and report on clean-up and enforcement activities taking place at Superfund sites. SEMS represents a joint development and ongoing collaboration between Superfund's Remedial, Removal, Federal Facilities, Enforcement and Emergency Response programs. This is a listing of SEMS sites with a lien on the property.

SFLIENS

CERCLIS Liens

VERSION DATE: 06/08/12

A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which United States Environmental Protection Agency has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties. This database contains those CERCLIS sites where the Lien on Property action is complete.

Environmental Records Definitions - FEDERAL

SSTS Section Seven Tracking System

VERSION DATE: 02/01/17

The United States Environmental Protection Agency tracks information on pesticide establishments through the Section Seven Tracking System (SSTS). SSTS records the registration of new establishments and records pesticide production at each establishment. The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) requires that production of pesticides or devices be conducted in a registered pesticide-producing or device-producing establishment. ("Production" includes formulation, packaging, repackaging, and relabeling.)

TRI Toxics Release Inventory

VERSION DATE: 12/31/16

The Toxics Release Inventory, provided by the United States Environmental Protection Agency, includes data on toxic chemical releases and waste management activities from certain industries as well as federal and tribal facilities. This inventory contains information about the types and amounts of toxic chemicals that are released each year to the air, water, and land as well as information on the quantities of toxic chemicals sent to other facilities for further waste management.

TSCA Toxic Substance Control Act Inventory

VERSION DATE: 12/31/12

The Toxic Substances Control Act (TSCA) was enacted in 1976 to ensure that chemicals manufactured, imported, processed, or distributed in commerce, or used or disposed of in the United States do not pose any unreasonable risks to human health or the environment. TSCA section 8(b) provides the United States Environmental Protection Agency authority to "compile, keep current, and publish a list of each chemical substance that is manufactured or processed in the United States." This TSCA Chemical Substance Inventory contains non-confidential information on the production amount of toxic chemicals from each manufacturer and importer site.

RCRAGR08 Resource Conservation & Recovery Act - Generator

VERSION DATE: 03/01/18

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities currently generating hazardous waste. EPA Region 8 includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

Environmental Records Definitions - FEDERAL

RCRANGR08

Resource Conservation & Recovery Act - Non-Generator

VERSION DATE: 03/01/18

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities classified as non-generators. Non-Generators do not presently generate hazardous waste. EPA Region 8 includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

ALTFUELS

Alternative Fueling Stations

VERSION DATE: 01/22/18

Nationwide list of alternative fueling stations made available by the US Department of Energy's Office of Energy Efficiency & Renewable Energy. Includes Biodiesel stations, Ethanol (E85) stations, Liquefied Petroleum Gas (Propane) stations, Ethanol (E85) stations, Natural Gas stations, Hydrogen stations, and Electric Vehicle Supply Equipment (EVSE).

FEMAUST

FEMA Owned Storage Tanks

VERSION DATE: 12/01/16

This is a listing of FEMA owned underground and aboveground storage tank sites. For security reasons, address information is not released to the public according to the U.S. Department of Homeland Security.

HISTPST

Historical Gas Stations

VERSION DATE: NR

This historic directory of service stations is provided by the Cities Service Company. The directory includes Cities Service filling stations that were located throughout the United States in 1930.

ICISCLEANERS

Integrated Compliance Information System Drycleaners

VERSION DATE: 09/23/17

This is a listing of drycleaner facilities from the Integrated Compliance Information System (ICIS). The Environmental Protection Agency (EPA) tracks facilities that possess NAIC and SIC codes that classify businesses as drycleaner establishments.

MRDS

Mineral Resource Data System

VERSION DATE: 03/15/16

Environmental Records Definitions - FEDERAL

MRDS (Mineral Resource Data System) is a collection of reports describing metallic and nonmetallic mineral resources throughout the world. Included are deposit name, location, commodity, deposit description, geologic characteristics, production, reserves, resources, and references. This database contains the records previously provided in the Mineral Resource Data System (MRDS) of USGS and the Mineral Availability System/Mineral Industry Locator System (MAS/MILS) originated in the U.S. Bureau of Mines, which is now part of USGS.

MSHA Mine Safety and Health Administration Master Index File

VERSION DATE: 09/01/17

The Mine dataset lists all Coal and Metal/Non-Metal mines under MSHA's jurisdiction since 1/1/1970. It includes such information as the current status of each mine (Active, Abandoned, NonProducing, etc.), the current owner and operating company, commodity codes and physical attributes of the mine. Mine ID is the unique key for this data. This information is provided by the United States Department of Labor - Mine Safety and Health Administration (MSHA).

BF Brownfields Management System

VERSION DATE: 06/27/18

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. The United States Environmental Protection Agency maintains this database to track activities in the various brown field grant programs including grantee assessment, site cleanup and site redevelopment. This database included tribal brownfield sites.

DNPL Delisted National Priorities List

VERSION DATE: 06/08/18

This database includes sites from the United States Environmental Protection Agency's Final National Priorities List (NPL) where remedies have proven to be satisfactory or sites where the original analyses were inaccurate, and the site is no longer appropriate for inclusion on the NPL, and final publication in the Federal Register has occurred.

NLRRCRAT No Longer Regulated RCRA Non-CORRACTS TSD Facilities

VERSION DATE: 03/01/18

This database includes RCRA Non-Corrective Action TSD facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements. This listing includes facilities that formerly treated, stored or disposed of hazardous waste.

ODI Open Dump Inventory

VERSION DATE: 06/01/85

Environmental Records Definitions - FEDERAL

The open dump inventory was published by the United States Environmental Protection Agency. An "open dump" is defined as a facility or site where solid waste is disposed of which is not a sanitary landfill which meets the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944) and which is not a facility for disposal of hazardous waste. This inventory has not been updated since June 1985.

RCRAT Resource Conservation & Recovery Act - Non-CORRACTS Treatment, Storage & Disposal Facilities

VERSION DATE: 03/01/18

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities recognized as hazardous waste treatment, storage, and disposal sites (TSD).

SEMS Superfund Enterprise Management System

VERSION DATE: 06/08/18

The U.S. Environmental Protection Agency's (EPA) Office of Solid Waste and Emergency Response, Office of Superfund Remediation and Technology Innovation (OSRTI), has implemented The Superfund Enterprise Management System (SEMS), formerly known as CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System) to track and report on clean-up and enforcement activities taking place at Superfund sites. SEMS represents a joint development and ongoing collaboration between Superfund's Remedial, Removal, Federal Facilities, Enforcement and Emergency Response programs.

SEMSARCH Superfund Enterprise Management System Archived Site Inventory

VERSION DATE: 06/08/18

The Superfund Enterprise Management System Archive listing (SEMS-ARCHIVE) has replaced the CERCLIS NFRAP reporting system in 2015. This listing reflect sites that have been assessed and no further remediation is planned and is of no further interest under the Superfund program.

SMCRA Surface Mining Control and Reclamation Act Sites

VERSION DATE: 08/25/17

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Environmental Records Definitions - FEDERAL

USUMTRCA Uranium Mill Tailings Radiation Control Act Sites

VERSION DATE: 03/04/17

The Legacy Management Office of the Department of Energy (DOE) manages radioactive and chemical waste, environmental contamination, and hazardous material at over 100 sites across the U.S. The L.M. Office manages this database of sites registered under the Uranium Mill Tailings Control Act (UMTRCA).

DOD Department of Defense Sites

VERSION DATE: 12/01/14

This information originates from the National Atlas of the United States Federal Lands data, which includes lands owned or administered by the Federal government. Army DOD, Army Corps of Engineers DOD, Air Force DOD, Navy DOD and Marine DOD areas of 640 acres or more are included.

FUDS Formerly Used Defense Sites

VERSION DATE: 06/01/15

The Formerly Used Defense Sites (FUDS) inventory includes properties previously owned by or leased to the United States and under Secretary of Defense Jurisdiction, as well as Munitions Response Areas (MRAs). The remediation of these properties is the responsibility of the Department of Defense. This data is provided by the U.S. Army Corps of Engineers (USACE), the boundaries/polygon data are based on preliminary findings and not all properties currently have polygon data available. **DISCLAIMER:** This data represents the results of data collection/processing for a specific USACE activity and is in no way to be considered comprehensive or to be used in any legal or official capacity as presented on this site. While the USACE has made a reasonable effort to insure the accuracy of the maps and associated data, it should be explicitly noted that USACE makes no warranty, representation or guaranty, either expressed or implied, as to the content, sequence, accuracy, timeliness or completeness of any of the data provided herein. For additional information on Formerly Used Defense Sites please contact the USACE Public Affairs Office at (202) 528-4285.

FUSRAP Formerly Utilized Sites Remedial Action Program

VERSION DATE: 03/04/17

The U.S. DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from the Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations. The DOE Office of Legacy Management (LM) established long-term surveillance and maintenance (LTS&M) requirements for remediated FUSRAP sites. DOE evaluates the final site conditions of a remediated site on the basis of risk for different future uses. DOE then confirms that LTS&M requirements will maintain protectiveness.

NLRRCRAC No Longer Regulated RCRA Corrective Action Facilities

VERSION DATE: 03/01/18

Environmental Records Definitions - FEDERAL

This database includes RCRA Corrective Action facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements.

NMS Former Military Nike Missile Sites

VERSION DATE: 12/01/84

This information was taken from report DRXTH-AS-IA-83A016 (Historical Overview of the Nike Missile System, 12/1984) which was performed by Environmental Science and Engineering, Inc. for the U.S. Army Toxic and Hazardous Materials Agency Assessment Division. The Nike system was deployed between 1954 and the mid-1970's. Among the substances used or stored on Nike sites were liquid missile fuel (JP-4); starter fluids (UDKH, aniline, and furfuryl alcohol); oxidizer (IRFNA); hydrocarbons (motor oil, hydraulic fluid, diesel fuel, gasoline, heating oil); solvents (carbon tetrachloride, trichloroethylene, trichloroethane, stoddard solvent); and battery electrolyte. The quantities of material a disposed of and procedures for disposal are not documented in published reports. Virtually all information concerning the potential for contamination at Nike sites is confined to personnel who were assigned to Nike sites.

During deactivation most hardware was shipped to depot-level supply points. There were reportedly instances where excess materials were disposed of on or near the site itself at closure. There was reportedly no routine site decontamination.

NPL National Priorities List

VERSION DATE: 06/08/18

This database includes United States Environmental Protection Agency (EPA) National Priorities List sites that fall under the EPA's Superfund program, established to fund the cleanup of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action.

PNPL Proposed National Priorities List

VERSION DATE: 06/08/18

This database contains sites proposed to be included on the National Priorities List (NPL) in the Federal Register. The United States Environmental Protection Agency investigates these sites to determine if they may present long-term threats to public health or the environment.

RCRAC Resource Conservation & Recovery Act - Corrective Action Facilities

VERSION DATE: 03/01/18

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities with corrective action activity.

Environmental Records Definitions - FEDERAL

RCRASUBC

Resource Conservation & Recovery Act - Subject to Corrective Action Facilities

VERSION DATE: 03/01/18

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities subject to corrective actions.

RODS

Record of Decision System

VERSION DATE: 06/08/18

These decision documents maintained by the United States Environmental Protection Agency describe the chosen remedy for NPL (Superfund) site remediation. They also include site history, site description, site characteristics, community participation, enforcement activities, past and present activities, contaminated media, the contaminants present, and scope and role of response action.

Environmental Records Definitions - STATE (UT)

ICEC Institutional Engineering Controls Registry

VERSION DATE: 07/01/18

The Utah Department of Environmental Quality is required to maintain a record of the properties subject to environmental covenants/institutional controls established under Utah Code, Title 19, Chapter 10. This list Leaking Underground Storage Tank sites, CERCLA/Superfund Branch Sites, and Voluntary Cleanup sites that have environmental controls established under this statute and pursuant to Utah Code Ann. §§ 57-25-101 et seq and controls established prior to the enactment of this statute. The controls have been recorded by the owner of the real property in the county recorder's office in the county where the real property is located.

TIERII Tier II Facilities

VERSION DATE: 06/04/18

This database contains locations of Tier II facilities under the Emergency Planning and Community Right-to-Know Act (EPCRA). This data is maintained by the Utah Department of Environmental Quality's Division of Environmental Response and Remediation (DERR). The DERR assumes no responsibility or liability for the accuracy of the location of these facilities. This database also includes some Tier II facility information from the Utah Automated Geographic Reference Center (AGRC) for informational purposes. Qualifying facilities report on hazardous and toxic chemicals and are labeled either tier I or tier II. Locations are based on coordinates derived from maps and GPS data. These locations represent sites, not contaminated areas.

RUST Registered Underground Storage Tanks

VERSION DATE: 06/03/18

The Utah State Underground Storage Tank program of the Department of Environmental Quality provides this list of underground storage tank sites.

BF Brownfield Properties

VERSION DATE: 07/04/18

This database of brownfields (targeted) and other brownfield (non-targeted) properties is maintained by the Utah Department of Environmental Quality's Division of Environmental Response and Remediation (DERR). Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped open land, and both improves and protects the environment. The DERR assumes no responsibility or liability for the accuracy of the location of these properties.

CERCLIS CERCLIS Sites

VERSION DATE: 07/04/18

This database of Comprehensive Environmental Response, Compensation, and Liability System sites is

Environmental Records Definitions - STATE (UT)

maintained by the Utah Department of Environmental Quality's Division of Environmental Response and Remediation (DERR). The CERCLA Branch of the DERR performs site investigations of potentially contaminated sites within the State of Utah to determine whether or not they pose a threat to human health and the environment and should be included on the Federal Superfund National Priorities List. The DERR assumes no responsibility or liability for the accuracy of the location of these properties.

LFSWDS Landfill and Solid Waste Disposal Sites

VERSION DATE: 04/17/18

This list of permitted solid waste facilities is provided by the Utah Department of Environmental Quality.

LUST Leaking Underground Storage Tanks

VERSION DATE: 06/03/18

The Utah State Underground Storage Tank program of the Department of Environmental Quality provides this list of leaking underground storage tank sites. The primary goal of this program is to protect human health and the environment from leaking underground storage tanks. The UST staff oversees UST notification, installation, inspection, removal, and compliance with State and Federal UST regulations concerning release prevention and remediation.

VCP Voluntary Cleanup Program Sites

VERSION DATE: 07/05/18

This list of Voluntary Cleanup Program sites is maintained by the Utah Department of Environmental Quality's Division of Environmental Response and Remediation (DERR). The DERR assumes no responsibility or liability for the accuracy of the location of these facilities. In 1997, the Utah Voluntary Cleanup Program (VCP) was created to promote the voluntary cleanup of contaminated sites. The VCP is intended to encourage redevelopment of Brownfields and other impacted sites by providing a streamlined cleanup program. This database also includes some Voluntary Cleanup information from the Utah Automated Geographic Reference Center (AGRC) for informational purposes. Locations are based on coordinates derived from maps and GPS data.

NPL National Priorities List

VERSION DATE: 07/04/18

The National Priorities List (NPL) is provided by the Utah Department of Environmental Quality's Division of Environmental Response and Remediation (DERR). Before a cleanup of a hazardous waste site can take place under Superfund, it must be included on the National Priority List. The NPL is a published list of hazardous waste sites that are eligible for extensive, long-term cleanup action under the Superfund program. When no responsible party can be found, listing on the NPL allows EPA and the State to access the Superfund Trust fund to pay for site cleanup. The DERR assumes no responsibility or liability for the accuracy of the location of these properties.

Environmental Records Definitions - TRIBAL

USTR08 Underground Storage Tanks On Tribal Lands

VERSION DATE: 04/25/18

This database, provided by the United States Environmental Protection Agency (EPA), contains underground storage tanks on Tribal lands located in EPA Region 8. This region includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

LUSTR08 Leaking Underground Storage Tanks On Tribal Lands

VERSION DATE: 04/25/18

This database, provided by the United States Environmental Protection Agency (EPA), contains leaking underground storage tanks on Tribal lands located in EPA Region 8. This region includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

ODINDIAN Open Dump Inventory on Tribal Lands

VERSION DATE: 11/08/06

This Indian Health Service database contains information about facilities and sites on tribal lands where solid waste is disposed of, which are not sanitary landfills or hazardous waste disposal facilities, and which meet the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944).

INDIANRES Indian Reservations

VERSION DATE: 01/01/00

The Department of Interior and Bureau of Indian Affairs maintains this database that includes American Indian Reservations, off-reservation trust lands, public domain allotments, Alaska Native Regional Corporations and Recognized State Reservations.

GEOTECHNICAL EVALUATION REPORT

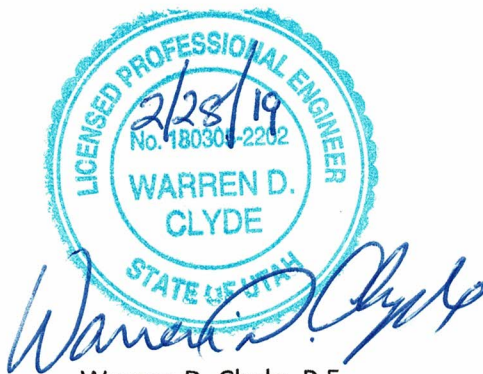
EAGLE POINTE VILLAGE

SWC Eagle Mountain Blvd. and Lake Mountain Road
Eagle Mountain, Utah
WT Reference No. 6129JT028

PREPARED FOR:

Horizon Development Enterprises LLC
1466 North Highway 89, Suite 220
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Attn: Mr. Kirt Peterson

February 28, 2019



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**GEOTECHNICAL EVALUATION
EAGLE POINTE VILLAGE
SWC EAGLE MOUNTAIN BLVD. AND LAKE MOUNTAIN ROAD
EAGLE MOUNTAIN, UTAH
WT JOB NO. 6129JT028**

1.0 PURPOSE

This report contains the results of our geotechnical evaluation for the proposed Eagle Pointe Village, and was performed in general accordance with our contract. The purpose of our services is to provide information and recommendations regarding:

- Subsurface conditions
- Groundwater
- Geology
- Geologic hazards
- Foundation design parameters
- Lateral earth pressures
- Retaining walls
- Seismic considerations
- Slabs-on-grade
- Drainage
- Corrosivity to concrete
- Pavements
- Excavation conditions
- Earthwork, including site preparation, fill placement, and suitability of existing soils for fill materials, and compaction

Results of the field exploration, field and laboratory tests are presented in the Appendices.

2.0 PROJECT DESCRIPTION

Project information supplied by Mr. Kirt Peterson on January 9, 2019 indicates that the project will consist of approximately 157 one-story, slab-on-grade duplex homes using wood frame construction. The maximum wall and column loads are assumed to be 3 to 5 kips per linear foot and 75 to 100 kips, respectively. We anticipate that the ground floor level will be within three feet of the existing site grades and that no extraordinary slab criteria are required. On-site asphalt paved

areas for local roadways and rigid pavement sections for driveways and walkways will be constructed. Final site grading plans were not available at the time of this report. Should our assumptions not be correct, we should be notified immediately.

3.0 SCOPE OF SERVICES

3.1 Field Exploration

Twenty-two test pits were excavated to a depth of 15 feet below existing grade in the proposed subdivision area. In addition, three infiltration tests were performed within or near the proposed retention/detention basins. The borings were at the approximate locations shown on the attached Boring Location Diagram. A field log was prepared for each boring. These logs contain visual classifications of the materials encountered during drilling as well as interpolation of the subsurface conditions between samples. Final logs, included in Appendix A, represent our interpretation of the field logs and may include modifications based on laboratory observations and tests of the field samples. The final logs describe the materials encountered, their thicknesses, and the locations where samples were obtained.

The Unified Soil Classification System was used to classify soils. The soil classification symbols appear on the boring logs and are briefly described in Appendix A. Local and regional geologic characteristics were used to estimate the seismic design criteria and liquefaction potential.

3.2 Laboratory Analyses

Laboratory analyses were performed on representative soil samples to aid in material classification and to estimate pertinent engineering properties of the on-site soils for preparation of this report. The following tests were performed in general accordance with applicable procedures, and the results are presented in Appendix B.

- Field moisture content
- In-situ soil density
- Collapse
- Sieve analysis
- Liquid limit and plasticity index
- Water soluble sulfate content

3.3 Analyses and Report

Analyses were performed and this report was prepared for the exclusive purpose of providing geotechnical engineering and/or testing information and recommendations. The scope of services for this project does not include, either specifically or by implication, any environmental assessment of the site or identification of contaminated or hazardous materials or conditions. If the owner is concerned about the potential for such contamination, other studies should be undertaken. We are available to discuss the scope of such studies with you.

This geotechnical engineering report includes a description of the project, a discussion of the field and laboratory testing programs, a discussion of the subsurface conditions, and design recommendations as required to satisfy the purpose previously described.

4.0 SITE CONDITIONS

4.1 Surface

At the time of our exploration, the site was vacant ground. The ground surface was relatively flat and had been disked and planted. Site drainage trended to the southwest sheet surface flow.

4.2 Subsurface

As presented on the boring logs, subsurface soils to the extending to the full depth of exploration consisted of layers of silty clay, silt, and silty sand. Near surface soils are of low to medium plasticity. The in-situ unit weights of the soils was very low.

4.3 Groundwater

Groundwater was not encountered at the time of exploration. These observations represent the groundwater conditions at the time of measurements and may not be indicative of other times. Groundwater levels can be expected to fluctuate with varying seasonal and weather conditions, groundwater withdrawal and recharge, local irrigation practices, and future development.

4.4 Geology and Geologic Hazards

The site is located in the Cedar Valley in the Basin and Range province on lacustrine silt and clay. The soils consist of calcareous silt with minor clay and fine-grained sand. The nearest mapped fault is 1/2-mile to the east (*Geologic Map of the Saratoga Springs 7.5' Quadrangle, Utah County, Utah*, UGS 2004).

The site is located in a "Very Low" liquefaction potential area according to the *Selected Critical Facilities and Geologic Hazards, Utah County, Utah*, map UGS.

5.0 GEOTECHNICAL PROPERTIES & ANALYSIS

5.1 Laboratory Tests

Laboratory test results (see Appendix B) indicate that native subsoils near shallow foundation level exhibit moderate compressibility at existing water contents. Significant additional compression occurs when the water content is increased.

Near-surface soils are of low to medium plasticity. These soils typically exhibit low expansion potential when re-compacted, confined by loads approximating floor loads and saturated. Slabs-on-grade supported on re-compacted native soils have a low potential for heaving if the water content of the soil increases. Densification of the soil by the passage of construction equipment may increase the expansion potential of the native clayey soil.

Chemical tests were performed on a representative sample to determine the sulfate exposure for concrete due to sulfates in the on-site soils. The sulfate content test was performed by American West Analytical Laboratories and the results are presented in **Appendix B**.

5.2 Field Tests

Existing subsoils near shallow foundation level exhibited low resistance to excavation. This corresponds to a low moderate bearing capacity for existing soils in their present condition. However, excavation resistance exhibited some variability between test locations and significant additional compression was observed when the moisture content was increased in laboratory tests. This represents a potential for differential settlements within structures supported on the existing soils in their present condition.

The test pit logs included in this report are indicators of subsurface conditions only at the specific location and date noted. Variations from the field conditions represented by the borings may become evident during construction. If variations appear, we should be contacted to re-evaluate our recommendations.

5.3 Infiltration Tests

Three infiltration tests were performed at depths of 2.5 to 5 feet below existing site grades in or near the proposed storm water retention basins. The tests were performed in 7- inch diameter unlined bore holes. The following tabulation presents the infiltration test results:

Infiltration Test Location	Test Depth, (ft.)	Infiltration Rate
		Minutes/inch
PT-1	4 to 5	21
PT-2	4 to 5	41
PT-3	4 to 5	5
PT-4	4 to 5	8
PT-5	4 to 5	6
PT-6	4 to 5	4
PT-7	4 to 5	2
PT-8	4 to 5	8

The boring log and percolation test results included in this report are indicators of subsurface conditions only at the specific location and date noted. Variations from the field conditions represented by the boring may become evident during construction. If variations appear, we should be contacted to re-evaluate percolation rates.

6.0 RECOMMENDATIONS

6.1 General

Recommendations contained in this report are based on our understanding of the project criteria described in **Section 2.0**, and the assumption that the soil and subsurface conditions are those disclosed by the borings. Others may change the plans, final

elevations, number and type of structures, foundation loads, and floor levels during design or construction. Substantially different subsurface conditions from those described herein may be encountered or become known. Any changes in the project criteria or subsurface conditions shall be brought to our attention in writing.

6.2 Design Considerations

Laboratory tests indicate the presence of low density, collapsible silt and clay soils. These soils may experience additional consolidation with an increase in moisture content. Structures and related improvements situated on collapsible clay soils could be subject to relatively large movements if the foundation soils experience an increase in moisture content. The collapsible soils appear to extend to a depth of 7.5 to 10 feet below the existing ground surface.

6.3 Foundations

Conventional spread-type footings may be used to support the proposed structures with basements. The footings should bear on engineered fills extending to non-collapsible soils achieved by removal and re-compaction or replacement of the soils below footings. The depth and lateral extent of the engineered fills is presented in the **Earthwork** section of this report. Any existing fill on the Site should not be used for support of foundations without removal and re-compaction.

Alternative footing depths and allowable bearing capacities are presented in the following tabulation:

Footing Depth Below Finished Grade (ft) ¹	Allowable Bearing Capacity (psf) ²
1.5	1500
2.5 ³	1500

¹ Finished grade is the lowest adjacent grade for perimeter footings and floor level for interior footings.

² Allowable bearing capacities assume fulfillment of **EARTHWORK** recommendations.

³ Minimum depth for frost protection for exterior footings or footings in unheated spaces.

The allowable bearing capacities apply to dead loads plus design live load conditions. Recommended minimum widths of column and wall footings are 30 inches and 24 inches, respectively.

Thickened slab sections can be used to support interior partitions, provided that:

- loads do not exceed 700 plf,
- thickened sections have a minimum width of 12 inches, and
- thickness and reinforcement are consistent with structural requirements.

We anticipate that the total and differential movement of the proposed structures, supported as recommended, should be less than 1-inch and ½-inch, respectively. Additional foundation movements could occur if water from any source infiltrates the foundation soils. Therefore, proper drainage should be provided in the final design and during construction.

All footings, stem walls, and masonry walls should be reinforced to reduce the potential for distress caused by differential foundation movements. The use of joints at openings or other discontinuities in masonry walls is recommended.

We recommend that the geotechnical engineer or his representative observe the footing excavations before reinforcing steel and concrete are placed. This observation is to assess whether the soils exposed are similar to those anticipated for support of the footings. Any soft, loose or unacceptable soils should be undercut to suitable materials and backfilled with approved fill materials or lean concrete. Soil backfill should be properly compacted.

6.4 Lateral Design Criteria

Lateral loads may be resisted by concrete interface friction and by passive resistance. For shallow foundations bearing on properly compacted fill at this site, we recommend the following lateral resistance criteria:

- Coefficient of Friction 0.25
- Passive Pressure.....250 psf/ft

The frictional resistance and the passive pressure may be combined without reduction in determining the total lateral resistance.

It is important that all backfill be properly placed and compacted. Backfill should be mechanically compacted in layers. Flooding or jetting should not be permitted. Care should be taken not to damage the walls when placing the backfill. Backfills should be observed and tested during placement.

Fill against footings, stem walls, basement walls, and retaining walls should be compacted to densities specified in **EARTHWORK**. Medium to high plasticity clay soils should not be used as backfill against retaining walls. Compaction of each lift adjacent to walls should be accomplished with hand-operated tampers or other lightweight compactors. Over-compaction may cause excessive lateral earth pressures that could result in wall movements.

6.5 **Seismic Considerations**

Liquefaction potential at the Site is shown as “Very Low” according to the *Selected Critical Facilities and Geologic Hazards, Utah County, Utah* map. Based upon the absence of groundwater and fine grained soils encountered in the borings, the potential for liquefaction is considered by WT to be very low.

For structural designs based upon the International Building Code 2015, the following criteria will apply:

- The seismic site class for the on-site soils is D.
- S_s , the mapped spectral acceleration for short periods, is 0.725 g.
- S_1 , the mapped spectral acceleration for one second periods, is 0.248 g.
- The design spectral response acceleration parameter for short period S_{DS} is 0.590 g.
- The design spectral response acceleration parameter for 1-second period S_{D1} is 0.315 g.
- Spectral response acceleration SM_s is 0.885 g.
- Spectral response acceleration SM_1 is 0.472 g.

6.6 **Conventional Slab-on-Grade Support**

Floor slabs can be supported on properly placed and compacted fill or approved natural soils. The slab subgrade should be prepared by the procedures outlined in this report. A minimum 4-inch layer of base course should be provided beneath all slabs to help prevent capillary rise and a damp slab.

For design of interior slabs-on-grade, we recommend using a modulus of subgrade reaction (k) of 150 pounds per cubic inch (pci) for the on-site clays or silts and a value of 225 pci for a minimum of 12 inches of imported fill material.

The use of vapor retarders is desirable for any slab-on-grade where the floor will be covered by products using water based adhesives, wood, vinyl backed carpet, impermeable floor coatings (urethane, epoxy, acrylic terrazzo, etc.) or where the floor will be in contact with moisture sensitive equipment or product. The design and installation should be in accordance with the recommendation given in ACI 302.1R-15 and 302.2R-15.

All concrete placement and curing operations should follow the American Concrete Institute manual recommendations. Improper curing techniques and/or high slump (high water-cement ratio) could cause excessive shrinkage, cracking or curling. Concrete slabs should be allowed to cure adequately before placing vinyl or other moisture sensitive floor covering.

6.7 Drainage

The major cause of soil problems in this vicinity is moisture increase in soils below structures. Therefore, it is extremely important that positive drainage be provided during construction and maintained throughout the life of the proposed structures. Infiltration of water into utility or foundation excavations must be prevented during construction.

In areas where sidewalks or paving do not immediately adjoin the structure, protective slopes should be provided with an outfall of about five percent for at least 10 feet from perimeter walls. Backfill against footings, exterior walls, and in utility and sprinkler line trenches should be well compacted and free of all construction debris to minimize the possibility of moisture infiltration.

If planters and/or landscaping are adjacent to or near the structure, we recommend the following:

- Grades should slope away from the structures.
- Only shallow rooted landscaping should be used.
- Watering should be kept to a minimum.

6.8 Corrosivity to Concrete

Based upon the soil test from Test Pit TP-1 at the surface, the exposure categories and classes for concrete in accordance with **Section 1904 Durability Requirements** for concrete of the *2015 International Building Code*, sulfate exposure from the soils at the site classify as “not applicable” (Class S0) according to Table 4.2.1 of ACI 318-11, Building Code Requirements for Structural Concrete.

6.9 Pavements

The on-site soils are considered as poor quality materials for support of pavements. The Road type designations may include local roads and a minor collector roadway. Based upon these designations, a daily traffic value of 17 Equivalent 18-kip Single Axle Loads (ESAL) was estimated for local roads and a daily traffic value of 86 ESALS were used for the minor collector road. A resilient modulus (M_r) of 4,500 pounds per square inch correlating with a CBR of 3 was assigned to the on-site soil. A reliability value of 85 percent was assigned for local roads and 90 percent for the minor collector that corresponds to occasional interruption of traffic for pavement repairs. Based upon these parameters, the resulting pavement sections according to the AASHTO procedure for a 20-year design life are:

Traffic Area	Asphaltic Concrete (inches)	Base Course (inches)	Subbase Course (inches)
Local Streets	3	6	9
Minor Collector	4	8	12

The "design life" of a pavement is defined as the expected life at the end of which reconstruction of the pavement will need to occur. Normal maintenance, including crack sealing, slurry sealing, and/or chip sealing, should be performed during the life of the pavement.

Bituminous surfacing should be constructed of dense-graded, central plant-mix, asphalt concrete. Base course material should conform with specification requirements for Untreated Base of the City of Eagle Mountain specifications. Eagle Mountain City Design Standards require engineered fill in the any right-of-way to consist of AASHTO A-1 or A-2 soils only. The local soils are clays and silts which do not meet this designation. Therefore the native soils may not be used in right-of-ways.

Material and compaction requirements should conform to recommendations presented under **Earthwork**. The gradient of paved surfaces should ensure positive drainage. Water should not pond in areas directly adjoining paved sections.

7.0 EARTHWORK

7.1 General

The conclusions contained in this report for the proposed construction are contingent upon compliance with recommendations presented in this section. Any excavating, trenching, or disturbance that occurs after completion of the earthwork must be backfilled, compacted and tested in accordance with the recommendations contained herein. It is not reasonable to rely upon our conclusions and recommendations if any future unobserved and untested trenching, earthwork activities or backfilling occurs.

Although fills or underground facilities such as septic tanks, cesspools, basements, utilities, and dry wells were not observed, such features might be encountered during construction. These features should be demolished in accordance with the recommendations of the geotechnical engineer. Any loose or disturbed soils resulting from demolition should be removed or re-compacted as engineered fill and any excavations should be backfilled in accordance with recommendations presented herein.

7.2 Site Clearing

Strip and remove any existing vegetation, organic topsoil, debris, fill and any other deleterious materials from the building and pavement areas. The building area is defined as that area within the building footprint plus five feet beyond the perimeter of the footprint. All exposed surfaces should be free of mounds and depressions that could prevent uniform compaction.

7.3 Excavation

We anticipate that excavations for shallow foundations and utility trenches for the proposed construction can be accomplished with conventional equipment.

On-site clayey soils will pump or become unworkable at high water contents. Workability may be improved by scarifying and drying. Over-excavation of wet zones and replacement

with granular materials may be necessary. The use of lightweight excavation and compaction equipment may be required to minimize subgrade pumping.

The clay native soils are moisture sensitive, therefore moisture control and lift thickness is critical in order to obtain compaction. The native clay soils are difficult to compact especially in cold or wet weather conditions.

The soils to be penetrated by the proposed excavations may vary significantly across the site. Our soil classifications are based solely on the materials encountered in widely spaced exploratory test borings. The contractor should verify that similar conditions exist throughout the proposed area of excavation. If different subsurface conditions are found at the time of construction, we should be contacted immediately to evaluate the conditions encountered.

7.4 Temporary Excavations and Slopes

Temporary, un-surcharged construction excavations should be sloped or shored. Slopes should not be steeper than 1 to 1 (Horizontal to Vertical) in sands and gravels and 0.5H to 1V in fine-grained soils. Slopes may need to be flattened depending on conditions exposed during construction. If there is not enough space for sloped excavations, shoring should be used. Exposed slopes should be kept moist (not saturated) during construction. Underpinning may be required to protect adjacent structures, if excavations are deeper than existing foundations.

If any excavation, including a utility trench, is extended to a depth of more than 20 feet, it will be necessary to have the side slopes designed by a professional engineer.

As a safety measure, it is recommended that all vehicles and soil piles be kept a minimum lateral distance back from the crest of the slope at least equal to the slope height. The exposed slope face should be protected against the elements.

We recommend that the contractor retain a geotechnical engineer to observe the soils exposed in all excavations and provide engineering design for the slopes. This will provide an opportunity to classify the soil types encountered, and to modify the excavation slopes as necessary. This also allows the opportunity to analyze the stability of the excavation slopes during construction.

7.5 Building Pad Preparation

Due to the extent of the collapsible soils encountered in the test pits, mass grading of the site below the structures is recommended. Remove existing soils throughout the entire building envelope area to a minimum depth of 7.5 feet below the existing ground surface. Following the removal, scarify, moisten or dry as required, and recompact the bottom of the excavation to a minimum depth of 10 inches. Refill the excavation with properly compacted engineered fill material. The removal and replacement should extend laterally a minimum of five feet beyond the perimeter of the building envelopes.

7.6 Foundation Preparation

If the site is prepared according to the building pad preparation section above specialized treatment of existing soils within foundation areas is not required. Footings should bear upon compacted engineered fill. If the excavation for the buildings are done on an individual basis, then the soils below the footings must be removed to non-collapsible soils and be re-compacted to the requirements for engineered fill.

7.7 Conventional Interior Slab Preparation

Soils below interior slabs should bear upon compacted engineered fill in the same manner as for foundations

7.8 Exterior Slab Preparation

Compacted subgrade soils expand due to frost or settle when the water content increases. Therefore, exterior concrete grade slabs may heave or settle, resulting in cracking or vertical offsets. To reduce the potential for damage, we recommend:

- Use of fill with low expansion potential
- Use of fill with low to negligible frost susceptibility
- Placement of effective control joints on relatively close centers
- Moisture-density control during placement of subgrade fills
- Provision for adequate drainage in areas adjoining the slabs
- Use of designs which allow vertical movement between the exterior slabs and adjoining structural elements

7.9 Pavement Preparation

The subgrade should be scarified, moistened as required, and re-compacted for a minimum depth of 10 inches prior to placement of fill and pavement materials.

7.10 Materials

Clean on-site native soils imported materials may be used as fill material for the following:

- foundation areas
- interior slab areas
- pavement areas
- backfill

Imported soils in Eagle Mountain City right-of-ways must conform to AASHTO A1 or A2 designations

Imported soils should conform to the following:

- Gradation (ASTM C136):

	percent finer by weight
6"	100
4"	85-100
¾"	70-95
No. 4 Sieve	50-85
No. 200 Sieve	25 (max)
- Maximum Plasticity Index (PI) 11

Frozen soils should not be used as fill or backfill.

The materials used as engineered fill should be reasonable free of rocks or lumps having a particle diameter greater than 6 inches. Acceptance of the quantity of oversize material shall be at the discretion of the geotechnical engineer.

7.11 Placement and Compaction

- a. Place and compact fill in horizontal lifts, using equipment and procedures that will produce recommended water contents and densities throughout the lift.
- b. Uncompacted fill lifts should not exceed 10 inches for granular soils and 6 inches for clay soils.
- c. No fill should be placed over frozen ground.
- d. Materials should be compacted to the following:

Minimum Percent Material Compaction (ASTM D1557)

- On-site soil, reworked and fill:
 - Below footings 95
 - Below slabs-on-grade..... 95
 - Below pavement 95
- Imported soil:
 - Below footings 95
 - Below slabs-on-grade..... 95
 - Below pavement 95
- Aggregate base 95
- Nonstructural backfill..... 90

On-site clayey soils should be compacted within a water content range of one percent below to three percent above optimum. Imported granular soils should be compacted within a water content range of two percent below to three percent above optimum.

7.12 Compliance

Recommendations for foundations, slabs-on-grade, and pavements supported on compacted fills or prepared subgrade depend upon compliance with the **EARTHWORK** recommendations. To assess compliance, observation and testing should be performed under the direction of a WT geotechnical engineer. Please contact us to provide these observation and testing services.

8.0 LIMITATIONS

This report has been prepared assuming the project criteria described in Section 2.0. If changes in the project criteria occur, or if different subsurface conditions are encountered or become known, the conclusions and recommendations presented herein shall become invalid. In any such event, contact WT to assess the effect that such variations may have on our conclusions and recommendations. If WT is not retained for the construction observation and testing services to determine compliance with this report, our professional responsibility is accordingly limited.

The recommendations presented are based entirely upon data derived from a limited number of samples obtained from widely spaced borings. The attached logs are indicators of subsurface conditions only at the specific locations and times noted. This report assumes the uniformity of the geology and soil structure between borings, however variations can and often do exist. Whenever any deviation, difference or change is encountered or becomes known, WT should be contacted.

This report is for the exclusive benefit of our client alone. There are no intended third-party beneficiaries of our contract with the client or this report, and nothing contained in the contract or this report shall create any express or implied contractual or any other relationship with, or claim or cause of action for, any third party against WT.

This report is valid until the earlier of one year from the date of issuance, a change in circumstances, or discovered variations. After expiration, no person or entity shall have any right to rely on this report without the express written authorization of WT.

9.0 CLOSURE

We prepared this report as an aid to the designers of the proposed project. The comments, statements, recommendations and conclusions set forth in this report reflect the opinions of the authors. These opinions are based upon data obtained at the location of the borings, and from laboratory tests. Work on your project was performed in accordance with generally accepted standards and practices utilized by professionals providing similar services in this locality. No other warranty, express or implied, is made.



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PROJECT: EAGLE POINTE VILLAGE
REFERENCE NO.: 6129JT028

VICINITY MAP

PLATE

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SITE REFERENCE NOTES

- ① CLUBHOUSE
- ② PARKING LOT
- ③ POCKET PARK
- ④ PLAYGROUND
- ⑤ MAINTENANCE BUILDING
- ⑥ RETENTION POND

BUILDING TYPE'S	COLOR	QUANTITY
CWG 11 ADA	GREEN	13
MARGES TRIPLE	PURPLE	31
DAKES	MAGENTA	34
SPRINGS II	BLUE	32
CWG	RED	32
CWG 4 ADA	BLACK	2
LR 4	TAN	14

EAGLE POINTE VILLAGE

PART OF SECTION 18
TOWNSHIP 6 SOUTH RANGE 1 WEST
SALT LAKE BASE AND MERIDIAN
EAGLE MOUNTAIN, UTAH

SITE PLAN

NORTH

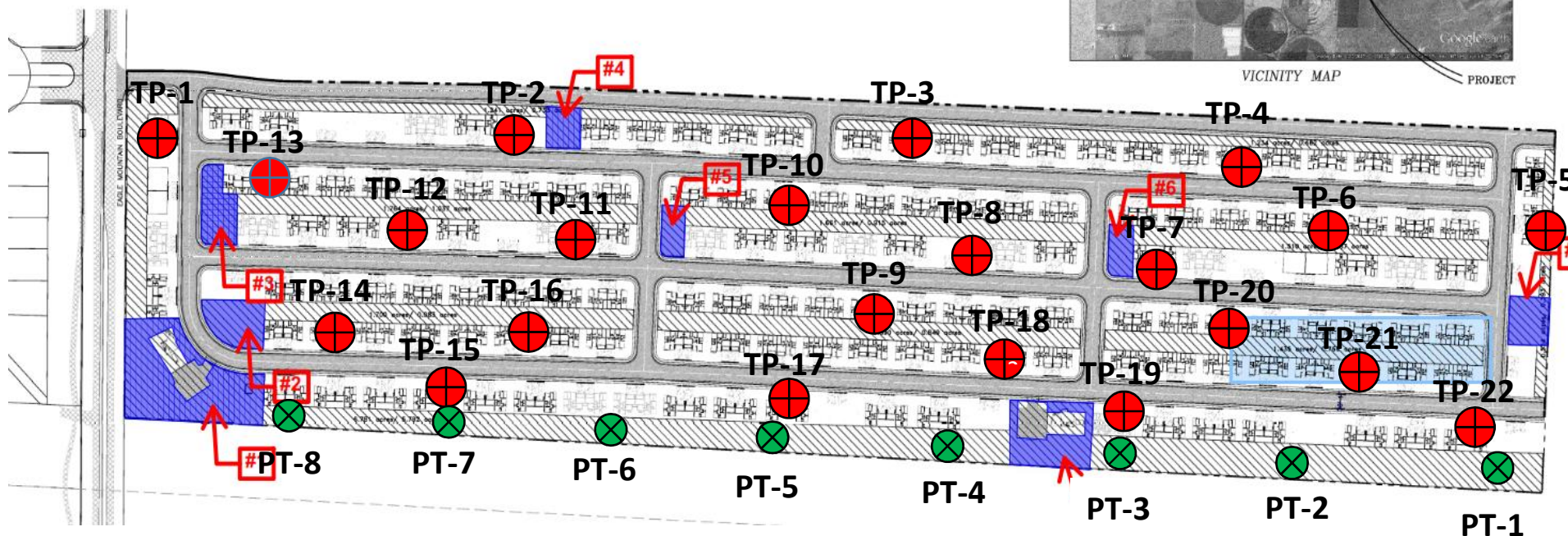


NOT TO SCALE



VICINITY MAP

PROJECT



APPROXIMATE STORM WATER INFILTRATION TEST LOCATION



APPROXIMATE TEST PIT LOCATION

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BORING LOCATION DIAGRAM

PLATE

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APPENDIX A

Allowable Soil Bearing Capacity	The recommended maximum contact stress developed at the interface of the foundation element and the supporting material.
Backfill	A specified material placed and compacted in a confined area.
Base Course	A layer of specified aggregate material placed on a subgrade or subbase.
Base Course Grade	Top of base course.
Bench	A horizontal surface in a sloped deposit.
Caisson/Drilled Shaft	A concrete foundation element cast in a circular excavation which may have an enlarged base (or belled caisson).
Concrete Slabs-On-Grade	A concrete surface layer cast directly upon base course, subbase or subgrade.
Crushed Rock Base Course	A base course composed of crushed rock of a specified gradation.
Differential Settlement	Unequal settlement between or within foundation elements of a structure.
Engineered Fill	Specified soil or aggregate material placed and compacted to specified density and/or moisture conditions under observations of a representative of a soil engineer.
Existing Fill	Materials deposited through the action of man prior to exploration of the site.
Existing Grade	The ground surface at the time of field exploration.
Expansive Potential	The potential of a soil to expand (increase in volume) due to absorption of moisture.
Fill	Materials deposited by the actions of man.
Finished Grade	The final grade created as a part of the project.
Gravel Base Course	A base course composed of naturally occurring gravel with a specified gradation.
Heave	Upward movement.
Native Grade	The naturally occurring ground surface.
Native Soil	Naturally occurring on-site soil.
Rock	A natural aggregate of mineral grains connected by strong and permanent cohesive forces. Usually requires drilling, wedging, blasting or other methods of extraordinary force for excavation.
Sand and Gravel Base Course	A base course of sand and gravel of a specified gradation.
Sand Base Course	A base course composed primarily of sand of a specified gradation.
Scarify	To mechanically loosen soil or break down existing soil structure.
Settlement	Downward movement.
Soil	Any unconsolidated material composed of discrete solid particles, derived from the physical and/or chemical disintegration of vegetable or mineral matter, which can be separated by gentle mechanical means such as agitation in water.
Strip	To remove from present location.
Subbase	A layer of specified material placed to form a layer between the subgrade and base course.
Subbase Grade	Top of subbase.
Subgrade	Prepared native soil surface.



COARSE-GRAINED SOILS

LESS THAN 50% FINES

GROUP SYMBOLS	DESCRIPTION	MAJOR DIVISIONS
GW	WELL-GRADED GRAVEL OR WELL-GRADED GRAVEL WITH SAND, LESS THAN 5% FINES	GRAVELS MORE THAN HALF OF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE SIZE
GP	POORLY-GRADED GRAVEL OR POORLY-GRADED GRAVEL WITH SAND, LESS THAN 5% FINES	
GM	SILTY GRAVEL OR SILTY GRAVEL WITH SAND, MORE THAN 12% FINES	
GC	CLAYEY GRAVEL OR CLAYEY GRAVEL WITH SAND, MORE THAN 12% FINES	
SW	WELL-GRADED SAND OR WELL-GRADED SAND WITH GRAVEL, LESS THAN 5% FINES	SANDS MORE THAN HALF OF COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE SIZE
SP	POORLY-GRADED SAND OR POORLY-GRADED SAND WITH GRAVEL, LESS THAN 5% FINES	
SM	SILTY SAND OR SILTY SAND WITH GRAVEL, MORE THAN 12% FINES	
SC	CLAYEY SAND OR CLAYEY SAND WITH GRAVEL, MORE THAN 12% FINES	

NOTE: Coarse-grained soils receive dual symbols if they contain 5% to 12% fines (e.g., SW-SM, GP-GC).

FINE-GRAINED SOILS

MORE THAN 50% FINES

GROUP SYMBOLS	DESCRIPTION	MAJOR DIVISIONS
ML	SILT, SILT WITH SAND OR GRAVEL, SANDY SILT, OR GRAVELLY SILT	SILTS AND CLAYS LIQUID LIMIT LESS THAN 50
CL	LEAN CLAY OF LOW TO MEDIUM PLASTICITY, SANDY CLAY, OR GRAVELLY CLAY	
OL	ORGANIC SILT OR ORGANIC CLAY OF LOW TO MEDIUM PLASTICITY	
MH	ELASTIC SILT, SANDY ELASTIC SILT, OR GRAVELLY ELASTIC SILT	SILTS AND CLAYS LIQUID LIMIT MORE THAN 50
CH	FAT CLAY OF HIGH PLASTICITY, SANDY FAT CLAY, OR GRAVELLY FAT CLAY	
OH	ORGANIC SILT OR ORGANIC CLAY OF HIGH PLASTICITY	
PT	PEAT AND OTHER HIGHLY ORGANIC SOILS	HIGHLY ORGANIC SOILS

NOTE: Fine-grained soils may receive dual classification based upon plasticity characteristics (e.g. CL-ML).

SOIL SIZES

COMPONENT	SIZE RANGE
BOULDERS	Above 12 in.
COBBLES	3 in. – 12 in.
GRAVEL	No. 4 – 3 in.
Coarse	¾ in. – 3 in.
Fine	No. 4 – ¾ in.
SAND	No. 200 – No. 4
Coarse	No. 10 – No. 4
Medium	No. 40 – No. 10
Fine	No. 200 – No. 40
Fines (Silt or Clay)	Below No. 200

NOTE: Only sizes smaller than three inches are used to classify soils

CONSISTENCY

CLAYS & SILTS	BLOWS PER FOOT
VERY SOFT	0 – 2
SOFT	3 – 4
FIRM	5 – 8
STIFF	9 – 15
VERY STIFF	16 – 30
HARD	OVER 30

RELATIVE DENSITY

SANDS & GRAVELS	BLOWS PER FOOT
VERY LOOSE	0 – 4
LOOSE	5 – 10
MEDIUM DENSE	11 – 30
DENSE	31 – 50
VERY DENSE	OVER 50

NOTE: Number of blows using 140-pound hammer falling 30 inches to drive a 2-inch-OD (1½-inch ID) split-barrel sampler (ASTM D1586).

PLASTICITY OF FINE GRAINED SOILS

PLASTICITY INDEX	TERM
0	NON-PLASTIC
1 – 7	LOW
8 – 20	MEDIUM
Over 20	HIGH

DEFINITION OF WATER CONTENT

DRY
SLIGHTLY DAMP
DAMP
MOIST
WET
SATURATED

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METHOD OF CLASSIFICATION

PLATE

A-2

The number shown in **"TEST PIT"** refers to the approximate location of the same number indicated on the "Test Pit Location Diagram" as positioned in the field by pacing or measurement from property lines and/or existing features, or through the use of Global Positioning System (GPS) devices. The accuracy of GPS devices is variable.

"EQUIPMENT TYPE" refers to the equipment used in the excavation of the test pit, and may include the width of the bucket on the excavator and the use of "rock" teeth or attachments.

"SAMPLE TYPE" refers to the form of sample recovery, in which **N** = Split-barrel sample, **R** = Ring sample, **G** = Grab Sample, **CS** = California style split-barrel sample, **B** = Bucket sample.

"USCS" refers to the "Unified Soil Classification System" Group Symbol for the soil type as defined by ASTM D2487 and D2488. The soils were classified visually in the field, and where appropriate, classifications were modified by visual examination of samples in the laboratory and/or by appropriate tests.

These notes and test pit logs are intended for use in conjunction with the purposes of our services defined in the text. Test pit log data should not be construed as part of the construction plans nor as defining construction conditions.

The Test Pit logs depict our interpretations of subsurface conditions at the locations and on the date(s) noted. Variations in subsurface conditions and characteristics may occur between test pits. Groundwater levels may fluctuate due to seasonal variations and other factors.

The stratification lines shown on the test pit logs represent our interpretation of the approximate boundary between soil or rock types based upon visual field classification at the test pit location. The transition between materials is approximate and may be more or less gradual than indicated.

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TEST PIT LOG NOTES

PLATE

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THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

DATE DRILLED: 2-19-19		TEST PIT NO. TP- 1		EQUIPMENT TYPE: CAT 315C L				
LOCATION: See Location Diagram				DRILLING TYPE: 36" Bucket				
ELEVATION: Not Determined				FIELD ENGINEER: M. Schedel				
MOISTURE CONTENT (% OF DRY WT.)	DRY DENSITY (LBS/CU FT)	SAMPLE TYPE	SAMPLE	BLOWS/FT.	DEPTH (FEET)	USCS	GRAPHIC	SOIL DESCRIPTION
		G						TOPSOIL; sandy silt, brown, organics, moist
						CL- ML		SILTY CLAY; with sand, brown, damp
		R						
		G			5			
8.9		G						... light brown
6.4		G			10			... with gravel
		G			15			
								TEST PIT TERMINATED AT 15.5 FEET
N- STANDARD SAMPLER R- RING SAMPLER CS- CALIFORNIA STYLE SAMPLER G- GRAB SAMPLE B- BUCKET SAMPLE						NOTES: Groundwater Not Encountered		
Geotechnical Environmental Inspections Materials  Western Technologies Inc. The Quality People Since 1955						PROJECT: EAGLE POINTE VILLAGE LOCATION: EAGLE MOUNTAIN, UTAH PROJECT NO.: 6129JT028		PLATE A-4 174
						TEST PIT LOG		

THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

DATE DRILLED: 2-19-19		TEST PIT NO. TP- 2		EQUIPMENT TYPE: CAT 315C L					
LOCATION: See Location Diagram				DRILLING TYPE: 36" Bucket					
ELEVATION: Not Determined				FIELD ENGINEER: M. Schedel					
MOISTURE CONTENT (% OF DRY WT.)	DRY DENSITY (LBS/CU FT)	SAMPLE TYPE	SAMPLE	BLOWS/FT.	DEPTH (FEET)	USCS	GRAPHIC	SOIL DESCRIPTION	
								TOPSOIL; sandy silt, brown, organics, moist	
						CL- ML		SANDY SILTY CLAY; light brown, pinholes, roots, damp	
		G R				SM		SILTY SAND; light brown, slightly damp	
		G			5				
		G							
		G			10			... with gravel	
		G			15			... damp	
								TEST PIT TERMINATED AT 15.5 FEET	
N- STANDARD SAMPLER R- RING SAMPLER CS- CALIFORNIA STYLE SAMPLER G- GRAB SAMPLE B- BUCKET SAMPLE								NOTES: Groundwater Not Encountered	
Geotechnical Environmental Inspections Materials								PROJECT: EAGLE POINTE VILLAGE LOCATION: EAGLE MOUNTAIN, UTAH PROJECT NO.: 6129JT028	PLATE 175
Western Technologies Inc. The Quality People Since 1955								TEST PIT LOG	A-5

THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

DATE DRILLED: 2-19-19		TEST PIT NO. TP- 3		EQUIPMENT TYPE: CAT 315C L				
LOCATION: See Location Diagram				DRILLING TYPE: 36" Bucket				
ELEVATION: Not Determined				FIELD ENGINEER: M. Schedel				
MOISTURE CONTENT (% OF DRY WT.)	DRY DENSITY (LBS/CU FT)	SAMPLE TYPE	SAMPLE	BLOWS/FT.	DEPTH (FEET)	USCS	GRAPHIC	SOIL DESCRIPTION
								TOPSOIL; silty sand, brown, organics, moist
						ML		SANDY SILT; light brown, pinholes, small roots, slightly damp
		G						
					5			... no roots
		G						
						SM		SILTY SAND; light brown, damp
		G						
					10			
		G						
		G			15			
								TEST PIT TERMINATED AT 15.5 FEET
N- STANDARD SAMPLER R- RING SAMPLER CS- CALIFORNIA STYLE SAMPLER G- GRAB SAMPLE B- BUCKET SAMPLE								NOTES: Groundwater Not Encountered
Geotechnical Environmental Inspections Materials								PROJECT: EAGLE POINTE VILLAGE LOCATION: EAGLE MOUNTAIN, UTAH PROJECT NO.: 6129JT028
 Western Technologies Inc. The Quality People Since 1955								PLATE 176 A-6
TEST PIT LOG								

THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

DATE DRILLED: 2-19-19		TEST PIT NO. TP- 4		EQUIPMENT TYPE: CAT 315C L				
LOCATION: See Location Diagram				DRILLING TYPE: 36" Bucket				
ELEVATION: Not Determined				FIELD ENGINEER: M. Schedel				
MOISTURE CONTENT (% OF DRY WT.)	DRY DENSITY (LBS/CU FT)	SAMPLE TYPE	SAMPLE	BLOWS/FT.	DEPTH (FEET)	USCS	GRAPHIC	SOIL DESCRIPTION
								TOPSOIL; silty sand, brown, organics, moist
						ML		SANDY SILT; light brown, pinholes, small roots, slightly damp
		R						
					5			... no roots
		R						
						SM		SILTY SAND; light brown, slightly damp
		G						
					10	ML		SANDY SILT; light brown, slightly damp
		G						
						SM		SILTY SAND; light brown, damp
					15			
		G						
								TEST PIT TERMINATED AT 15.5 FEET
N- STANDARD SAMPLER R- RING SAMPLER CS- CALIFORNIA STYLE SAMPLER G- GRAB SAMPLE B- BUCKET SAMPLE								NOTES: Groundwater Not Encountered
Geotechnical Environmental Inspections Materials								PROJECT: EAGLE POINTE VILLAGE LOCATION: EAGLE MOUNTAIN, UTAH PROJECT NO.: 6129JT028
 Western Technologies Inc. The Quality People Since 1955								TEST PIT LOG
								PLATE A-7

THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

DATE DRILLED: 2-19-19			TEST PIT NO. TP- 5			EQUIPMENT TYPE: CAT 315C L		
LOCATION: See Location Diagram						DRILLING TYPE: 36" Bucket		
ELEVATION: Not Determined						FIELD ENGINEER: M. Schedel		
MOISTURE CONTENT (% OF DRY WT.)	DRY DENSITY (LBS/CU FT)	SAMPLE TYPE	SAMPLE	BLOWS/FT.	DEPTH (FEET)	USCS	GRAPHIC	SOIL DESCRIPTION
6.7		R			0			TOPSOIL; silty sand, brown, organics, moist
								SILTY CLAY; with sand, light brown, pinholes, small roots, slightly damp
								SILTY SAND; pale brown, small roots, slightly damp
								... no roots
								... light brown
		G			5			
		G						
		G			10			
		G			15			
								TEST PIT TERMINATED AT 15.5 FEET
N- STANDARD SAMPLER R- RING SAMPLER CS- CALIFORNIA STYLE SAMPLER G- GRAB SAMPLE B- BUCKET SAMPLE						NOTES: Groundwater Not Encountered		
Geotechnical Environmental Inspections Materials						PROJECT: EAGLE POINTE VILLAGE LOCATION: EAGLE MOUNTAIN, UTAH PROJECT NO.: 6129JT028		
Western Technologies Inc. The Quality People Since 1955						TEST PIT LOG		
						PLATE 178 A-8		

THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

DATE DRILLED: 2-19-19		TEST PIT NO. TP- 6		EQUIPMENT TYPE: CAT 315C L				
LOCATION: See Location Diagram				DRILLING TYPE: 36" Bucket				
ELEVATION: Not Determined				FIELD ENGINEER: M. Schedel				
MOISTURE CONTENT (% OF DRY WT.)	DRY DENSITY (LBS/CU FT)	SAMPLE TYPE	SAMPLE	BLOWS/FT.	DEPTH (FEET)	USCS	GRAPHIC	SOIL DESCRIPTION
								TOPSOIL; silty sand, brown, organics, moist
						ML		SANDY SILT; pale brown, pinholes, organics, slightly damp
		R						
					5	SM		SILTY SAND; pale brown, pinholes, slightly damp
		R						
		G						... no pinholes
					10			... light brown
		G						
						ML		SANDY SILT; light brown, pinholes, damp
					15			
		G						
		R						
								TEST PIT TERMINATED AT 15.5 FEET
N- STANDARD SAMPLER R- RING SAMPLER CS- CALIFORNIA STYLE SAMPLER G- GRAB SAMPLE B- BUCKET SAMPLE								NOTES: Groundwater Not Encountered
Geotechnical Environmental Inspections Materials								PROJECT: EAGLE POINTE VILLAGE LOCATION: EAGLE MOUNTAIN, UTAH PROJECT NO.: 6129JT028
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TEST PIT LOG								

THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

DATE DRILLED: 2-19-19		TEST PIT NO. TP- 7		EQUIPMENT TYPE: CAT 315C L					
LOCATION: See Location Diagram				DRILLING TYPE: 36" Bucket					
ELEVATION: Not Determined				FIELD ENGINEER: M. Schedel					
MOISTURE CONTENT (% OF DRY WT.)	DRY DENSITY (LBS/CU FT)	SAMPLE TYPE	SAMPLE	BLOWS/FT.	DEPTH (FEET)	USCS	GRAPHIC	SOIL DESCRIPTION	
								TOPSOIL; silty sand, brown, organics, moist	
						ML		SANDY SILT; pale brown, pinholes, slightly damp	
		G							
						SM		SILTY SAND; pale brown, slightly damp	
		G			5				
		G							
		G			10			... light brown	
		G			15			... damp	
								TEST PIT TERMINATED AT 15.5 FEET	
N- STANDARD SAMPLER R- RING SAMPLER CS- CALIFORNIA STYLE SAMPLER G- GRAB SAMPLE B- BUCKET SAMPLE								NOTES: Groundwater Not Encountered	
Geotechnical Environmental Inspections Materials								PROJECT: EAGLE POINTE VILLAGE LOCATION: EAGLE MOUNTAIN, UTAH PROJECT NO.: 6129JT028	PLATE 180
Western Technologies Inc. The Quality People Since 1955								TEST PIT LOG	A-10

THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

DATE DRILLED: 2-19-19		TEST PIT NO. TP- 8		EQUIPMENT TYPE: CAT 315C L					
LOCATION: See Location Diagram				DRILLING TYPE: 36" Bucket					
ELEVATION: Not Determined				FIELD ENGINEER: M. Schedel					
MOISTURE CONTENT (% OF DRY WT.)	DRY DENSITY (LBS/CU FT)	SAMPLE TYPE	SAMPLE	BLOWS/FT.	DEPTH (FEET)	USCS	GRAPHIC	SOIL DESCRIPTION	
9.5								TOPSOIL; silty sand, brown, organics, moist	
						ML		SILT; with sand, pale brown, pinholes, roots, slightly damp	
		R							
		R		5					
		G						... light brown	
					10				
		G							
						CL- ML		SANDY SILTY CLAY; brown with white streaks, damp	
		G		15				TEST PIT TERMINATED AT 15.5 FEET	
N- STANDARD SAMPLER R- RING SAMPLER CS- CALIFORNIA STYLE SAMPLER G- GRAB SAMPLE B- BUCKET SAMPLE								NOTES: Groundwater Not Encountered	
Geotechnical Environmental Inspections Materials								PROJECT: EAGLE POINTE VILLAGE LOCATION: EAGLE MOUNTAIN, UTAH PROJECT NO.: 6129JT028	PLATE 181
Western Technologies Inc. The Quality People Since 1955								TEST PIT LOG	A-11

THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

DATE DRILLED: 2-20-19		TEST PIT NO. TP- 9		EQUIPMENT TYPE: CAT 315C L				
LOCATION: See Location Diagram				DRILLING TYPE: 36" Bucket				
ELEVATION: Not Determined				FIELD ENGINEER: M. Schedel				
MOISTURE CONTENT (% OF DRY WT.)	DRY DENSITY (LBS/CU FT)	SAMPLE TYPE	SAMPLE	BLOWS/FT.	DEPTH (FEET)	USCS	GRAPHIC	SOIL DESCRIPTION
								TOPSOIL; silty sand, brown, organics, moist
						SM		SILTY SAND; pale brown, small roots, slightly damp
		G						
					5			... no roots
		G						
								... light brown
		G			10			
		G			15			... light gray, damp
								TEST PIT TERMINATED AT 15.5 FEET
N- STANDARD SAMPLER R- RING SAMPLER CS- CALIFORNIA STYLE SAMPLER G- GRAB SAMPLE B- BUCKET SAMPLE								NOTES: Groundwater Not Encountered
Geotechnical Environmental Inspections Materials								PROJECT: EAGLE POINTE VILLAGE LOCATION: EAGLE MOUNTAIN, UTAH PROJECT NO.: 6129JT028
 Western Technologies Inc. The Quality People Since 1955								PLATE 182 A-12
TEST PIT LOG								

THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

DATE DRILLED: 2-20-19		TEST PIT NO. TP-10		EQUIPMENT TYPE: CAT 315C L				
LOCATION: See Location Diagram				DRILLING TYPE: 36" Bucket				
ELEVATION: Not Determined				FIELD ENGINEER: M. Schedel				
MOISTURE CONTENT (% OF DRY WT.)	DRY DENSITY (LBS/CU FT)	SAMPLE TYPE	SAMPLE	BLOWS/FT.	DEPTH (FEET)	USCS	GRAPHIC	SOIL DESCRIPTION
								TOPSOIL; silty sand, brown, organics, moist
						ML		SANDY SILT; pale brown, pinholes, small roots, slightly damp
		R						
						SM		SILTY SAND; light brown, slightly damp
		G			5			
		G						
		G			10			
						CL		SANDY CLAY; brown, damp
		G			15			
		R						
								TEST PIT TERMINATED AT 15.5 FEET
N- STANDARD SAMPLER R- RING SAMPLER CS- CALIFORNIA STYLE SAMPLER G- GRAB SAMPLE B- BUCKET SAMPLE								NOTES: Groundwater Not Encountered
Geotechnical Environmental Inspections Materials								PROJECT: EAGLE POINTE VILLAGE LOCATION: EAGLE MOUNTAIN, UTAH PROJECT NO.: 6129JT028
 Western Technologies Inc. The Quality People Since 1955								PLATE 183 A-13
TEST PIT LOG								

THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

DATE DRILLED: 2-20-19		TEST PIT NO. TP-11		EQUIPMENT TYPE: CAT 315C L				
LOCATION: See Location Diagram				DRILLING TYPE: 36" Bucket				
ELEVATION: Not Determined				FIELD ENGINEER: M. Schedel				
MOISTURE CONTENT (% OF DRY WT.)	DRY DENSITY (LBS/CU FT)	SAMPLE TYPE	SAMPLE	BLOWS/FT.	DEPTH (FEET)	USCS	GRAPHIC	SOIL DESCRIPTION
								TOPSOIL; silty sand, brown, organics, moist
						ML		SANDY SILT; pale brown, pinholes, small roots, slightly damp
		R						
						SM		SILTY SAND; light brown, small roots, slightly damp
		G			5			
								... no roots
		G						
					10			
		G						
						SC		CLAYEY SAND; gray, damp
		G			15			TEST PIT TERMINATED AT 15.5 FEET
N- STANDARD SAMPLER R- RING SAMPLER CS- CALIFORNIA STYLE SAMPLER G- GRAB SAMPLE B- BUCKET SAMPLE								NOTES: Groundwater Not Encountered
Geotechnical Environmental Inspections Materials								PROJECT: EAGLE POINTE VILLAGE LOCATION: EAGLE MOUNTAIN, UTAH PROJECT NO.: 6129JT028
 Western Technologies Inc. The Quality People Since 1955								PLATE 184 A-14
TEST PIT LOG								

THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

DATE DRILLED: 2-20-19		TEST PIT NO. TP-12		EQUIPMENT TYPE: CAT 315C L				
LOCATION: See Location Diagram				DRILLING TYPE: 36" Bucket				
ELEVATION: Not Determined				FIELD ENGINEER: M. Schedel				
MOISTURE CONTENT (% OF DRY WT.)	DRY DENSITY (LBS/CU FT)	SAMPLE TYPE	SAMPLE	BLOWS/FT.	DEPTH (FEET)	USCS	GRAPHIC	SOIL DESCRIPTION
								TOPSOIL; silty sand, brown, organics, moist
						ML		SANDY SILT; light brown, pinholes, small roots, slightly damp
		R						
						SM		SILTY SAND; light brown, small roots, slightly damp
		G			5			
								... no roots
		G						
					10			
		G						
						SC		CLAYEY SAND; brown, damp
		G			15			
								TEST PIT TERMINATED AT 15.5 FEET
N- STANDARD SAMPLER R- RING SAMPLER CS- CALIFORNIA STYLE SAMPLER G- GRAB SAMPLE B- BUCKET SAMPLE								NOTES: Groundwater Not Encountered
Geotechnical Environmental Inspections Materials								PROJECT: EAGLE POINTE VILLAGE LOCATION: EAGLE MOUNTAIN, UTAH PROJECT NO.: 6129JT028
 Western Technologies Inc. The Quality People Since 1955								PLATE 185 A-15
TEST PIT LOG								

THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

DATE DRILLED: 2-20-19		TEST PIT NO. TP-13		EQUIPMENT TYPE: CAT 315C L				
LOCATION: See Location Diagram				DRILLING TYPE: 36" Bucket				
ELEVATION: Not Determined				FIELD ENGINEER: M. Schedel				
MOISTURE CONTENT (% OF DRY WT.)	DRY DENSITY (LBS/CU FT)	SAMPLE TYPE	SAMPLE	BLOWS/FT.	DEPTH (FEET)	USCS	GRAPHIC	SOIL DESCRIPTION
								TOPSOIL; silty sand, brown, organics, moist
						ML		SANDY SILT; pale brown, pinholes, small roots, slightly damp
		R						
						SM		SILTY SAND; light brown, small roots, slightly damp
		G			5			
		G						... no roots
		G			10			
		G			15			... damp
								TEST PIT TERMINATED AT 15.5 FEET
N- STANDARD SAMPLER R- RING SAMPLER CS- CALIFORNIA STYLE SAMPLER G- GRAB SAMPLE B- BUCKET SAMPLE								NOTES: Groundwater Not Encountered
Geotechnical Environmental Inspections Materials  Western Technologies Inc. The Quality People Since 1955								PROJECT: EAGLE POINTE VILLAGE LOCATION: EAGLE MOUNTAIN, UTAH PROJECT NO.: 6129JT028
TEST PIT LOG								PLATE 186 A-16

THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

DATE DRILLED: 2-20-19		TEST PIT NO. TP-14		EQUIPMENT TYPE: CAT 315C L				
LOCATION: See Location Diagram				DRILLING TYPE: 36" Bucket				
ELEVATION: Not Determined				FIELD ENGINEER: M. Schedel				
MOISTURE CONTENT (% OF DRY WT.)	DRY DENSITY (LBS/CU FT)	SAMPLE TYPE	SAMPLE	BLOWS/FT.	DEPTH (FEET)	USCS	GRAPHIC	SOIL DESCRIPTION
								TOPSOIL; silty sand, brown, organics, moist
7.8	61	R				CL-ML		SILTY CLAY; with sand, light brown, pinholes, small roots, slightly damp
9.3	70	R			5			
						SM		SILTY SAND; light brown, slightly damp
		G						
18.6	60	R			10	CL		CLAY; some sand, brown, damp
								... gray, iron oxide stains, shells
		G			15			
								TEST PIT TERMINATED AT 15.5 FEET
N- STANDARD SAMPLER R- RING SAMPLER CS- CALIFORNIA STYLE SAMPLER G- GRAB SAMPLE B- BUCKET SAMPLE								NOTES: Groundwater Not Encountered
Geotechnical Environmental Inspections Materials								PROJECT: EAGLE POINTE VILLAGE LOCATION: EAGLE MOUNTAIN, UTAH PROJECT NO.: 6129JT028
 Western Technologies Inc. The Quality People Since 1955								PLATE 187 A-17
TEST PIT LOG								

THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

DATE DRILLED: 2-20-19		TEST PIT NO. TP-15		EQUIPMENT TYPE: CAT 315C L				
LOCATION: See Location Diagram				DRILLING TYPE: 36" Bucket				
ELEVATION: Not Determined				FIELD ENGINEER: M. Schedel				
MOISTURE CONTENT (% OF DRY WT.)	DRY DENSITY (LBS/CU FT)	SAMPLE TYPE	SAMPLE	BLOWS/FT.	DEPTH (FEET)	USCS	GRAPHIC	SOIL DESCRIPTION
								TOPSOIL; silty sand, brown, organics, moist
						ML		SANDY SILT; light brown, pinholes, small roots, slightly damp
		R						
						SM		SILTY SAND; light brown, small roots, slightly damp
		G			5			
						SC-SM		SILTY CLAYEY SAND; light brown, damp
		G						
						SM		SILTY SAND; light gray, slightly damp
		G			10			
						CL-ML		SANDY SILTY CLAY; light gray, iron oxide stains, damp
		G			15			
								TEST PIT TERMINATED AT 15.5 FEET
N- STANDARD SAMPLER R- RING SAMPLER CS- CALIFORNIA STYLE SAMPLER G- GRAB SAMPLE B- BUCKET SAMPLE								NOTES: Groundwater Not Encountered
Geotechnical Environmental Inspections Materials								PROJECT: EAGLE POINTE VILLAGE LOCATION: EAGLE MOUNTAIN, UTAH PROJECT NO.: 6129JT028
 Western Technologies Inc. The Quality People Since 1955								TEST PIT LOG
								PLATE 188 A-18

THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

DATE DRILLED: 2-20-19		TEST PIT NO. TP-16		EQUIPMENT TYPE: CAT 315C L				
LOCATION: See Location Diagram				DRILLING TYPE: 36" Bucket				
ELEVATION: Not Determined				FIELD ENGINEER: M. Schedel				
MOISTURE CONTENT (% OF DRY WT.)	DRY DENSITY (LBS/CU FT)	SAMPLE TYPE	SAMPLE	BLOWS/FT.	DEPTH (FEET)	USCS	GRAPHIC	SOIL DESCRIPTION
								TOPSOIL; silty sand, brown, organics, moist
						SM		SILTY SAND; brown, some pinholes, small roots, slightly damp
		G						
					5			
		G						
		G				SC-SM		SILTY CLAYEY SAND; light brown, slightly damp
		G			10			... brown with white streaks, damp
						CL		SANDY CLAY; gray, iron oxide stains, damp
		G			15			
								TEST PIT TERMINATED AT 15.5 FEET
N- STANDARD SAMPLER R- RING SAMPLER CS- CALIFORNIA STYLE SAMPLER G- GRAB SAMPLE B- BUCKET SAMPLE								NOTES: Groundwater Not Encountered
Geotechnical Environmental Inspections Materials								PROJECT: EAGLE POINTE VILLAGE LOCATION: EAGLE MOUNTAIN, UTAH PROJECT NO.: 6129JT028
 Western Technologies Inc. The Quality People Since 1955								PLATE 189 A-19
TEST PIT LOG								

THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

DATE DRILLED: 2-20-19			TEST PIT NO. TP-17			EQUIPMENT TYPE: CAT 315C L		
LOCATION: See Location Diagram						DRILLING TYPE: 36" Bucket		
ELEVATION: Not Determined						FIELD ENGINEER: M. Schedel		
MOISTURE CONTENT (% OF DRY WT.)	DRY DENSITY (LBS/CU FT)	SAMPLE TYPE	SAMPLE	BLOWS/FT.	DEPTH (FEET)	USCS	GRAPHIC	SOIL DESCRIPTION
								TOPSOIL; silty sand, brown, organics, moist
						SM		SILTY SAND; brown, small roots, slightly damp
		G						
						ML		SANDY SILT; light brown, pinholes, small roots, slightly damp
		R			5			
						SC		CLAYEY SAND; brown with white streaks, some pinholes, slightly damp
		R						
						SM		SILTY SAND; light gray, slightly damp
		G			10			
						ML		SANDY SILT; gray, iron oxide stains, damp
		G			15			
								TEST PIT TERMINATED AT 15.5 FEET
N- STANDARD SAMPLER R- RING SAMPLER CS- CALIFORNIA STYLE SAMPLER G- GRAB SAMPLE B- BUCKET SAMPLE						NOTES: Groundwater Not Encountered		
Geotechnical Environmental Inspections Materials						Western Technologies Inc. The Quality People Since 1955		
PROJECT: EAGLE POINTE VILLAGE LOCATION: EAGLE MOUNTAIN, UTAH PROJECT NO.: 6129JT028						PLATE 190 A-20		
TEST PIT LOG								

THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

DATE DRILLED: 2-20-19		TEST PIT NO. TP-18		EQUIPMENT TYPE: CAT 315C L	
LOCATION: See Location Diagram				DRILLING TYPE: 36" Bucket	
ELEVATION: Not Determined				FIELD ENGINEER: M. Schedel	

MOISTURE CONTENT (% OF DRY WT.)	DRY DENSITY (LBS/CU FT)	SAMPLE TYPE	SAMPLE	BLOWS/FT.	DEPTH (FEET)	USCS	GRAPHIC	SOIL DESCRIPTION
								TOPSOIL; silty sand, brown, organics, moist
						ML		SANDY SILT; light brown, pinholes, small roots, slightly damp
		R						
					5			
		R						
						SM		SILTY SAND; light brown, slightly damp
		G						
					10			... damp
		G						
					15			... gray, slightly damp
		G						TEST PIT TERMINATED AT 15.5 FEET

N- STANDARD SAMPLER R- RING SAMPLER CS- CALIFORNIA STYLE SAMPLER G- GRAB SAMPLE B- BUCKET SAMPLE	NOTES: Groundwater Not Encountered
--	---

Geotechnical Environmental Inspections Materials  Western Technologies Inc. The Quality People Since 1955	PROJECT: EAGLE POINTE VILLAGE LOCATION: EAGLE MOUNTAIN, UTAH PROJECT NO.: 6129JT028	PLATE 191 A-21
	TEST PIT LOG	

THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

DATE DRILLED: 2-21-19		TEST PIT NO. TP-19		EQUIPMENT TYPE: CAT 315C L					
LOCATION: See Location Diagram				DRILLING TYPE: 36" Bucket					
ELEVATION: Not Determined				FIELD ENGINEER: M. Schedel					
MOISTURE CONTENT (% OF DRY WT.)	DRY DENSITY (LBS/CU FT)	SAMPLE TYPE	SAMPLE	BLOWS/FT.	DEPTH (FEET)	USCS	GRAPHIC	SOIL DESCRIPTION	
								TOPSOIL; silty sand, brown, organics, moist	
						SM		SILTY SAND; brown, small roots, damp	
		G				ML		SILT; trace sand, light brown, pinholes, small roots, slightly damp	
16.0	53	R			5				
13.6	57	R				CL		CLAY; some sand, light brown, some pinholes, slightly damp	
		G R			10				
						SM		SILTY GRAVELLY SAND; gray and brown, slightly damp	
		G			15				
								TEST PIT TERMINATED AT 15.5 FEET	
N- STANDARD SAMPLER R- RING SAMPLER CS- CALIFORNIA STYLE SAMPLER G- GRAB SAMPLE B- BUCKET SAMPLE								NOTES: Groundwater Not Encountered	
Geotechnical Environmental Inspections Materials								PROJECT: EAGLE POINTE VILLAGE LOCATION: EAGLE MOUNTAIN, UTAH PROJECT NO.: 6129JT028	PLATE A-22
 Western Technologies Inc. The Quality People Since 1955								TEST PIT LOG	

THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

DATE DRILLED: 2-21-19		TEST PIT NO. TP-20		EQUIPMENT TYPE: CAT 315C L				
LOCATION: See Location Diagram				DRILLING TYPE: 36" Bucket				
ELEVATION: Not Determined				FIELD ENGINEER: M. Schedel				
MOISTURE CONTENT (% OF DRY WT.)	DRY DENSITY (LBS/CU FT)	SAMPLE TYPE	SAMPLE	BLOWS/FT.	DEPTH (FEET)	USCS	GRAPHIC	SOIL DESCRIPTION
								TOPSOIL; silty sand, brown, organics, moist
						ML		SANDY SILT; light brown, pinholes, organics, slightly damp
		R						
					5			
		R						
						SM		SILTY SAND; light brown, slightly damp
		G						
						SC-SM		SILTY CLAYEY SAND; light brown, slightly damp
		G			10	SM		SILTY SAND; light gray, slightly damp
		G			15			
								TEST PIT TERMINATED AT 15.5 FEET
N- STANDARD SAMPLER R- RING SAMPLER CS- CALIFORNIA STYLE SAMPLER G- GRAB SAMPLE B- BUCKET SAMPLE								NOTES: Groundwater Not Encountered
Geotechnical Environmental Inspections Materials								PROJECT: EAGLE POINTE VILLAGE LOCATION: EAGLE MOUNTAIN, UTAH PROJECT NO.: 6129JT028
 Western Technologies Inc. The Quality People Since 1955								TEST PIT LOG
								PLATE 193 A-23

THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

DATE DRILLED: 2-21-19		TEST PIT NO. TP-21		EQUIPMENT TYPE: CAT 315C L					
LOCATION: See Location Diagram				DRILLING TYPE: 36" Bucket					
ELEVATION: Not Determined				FIELD ENGINEER: M. Schedel					
MOISTURE CONTENT (% OF DRY WT.)	DRY DENSITY (LBS/CU FT)	SAMPLE TYPE	SAMPLE	BLOWS/FT.	DEPTH (FEET)	USCS	GRAPHIC	SOIL DESCRIPTION	
								TOPSOIL; silty sand, brown, organics, moist	
						ML		SANDY SILT; light brown, pinholes, small roots, slightly damp	
		R							
					5				
		R							
						SM		SILTY SAND; light brown, slightly damp	
		G							
					10				
		G							
						CL		SANDY CLAY; light gray with red streaks, shells, slightly damp	
					15				
		G R						TEST PIT TERMINATED AT 15.5 FEET	
N- STANDARD SAMPLER R- RING SAMPLER CS- CALIFORNIA STYLE SAMPLER G- GRAB SAMPLE B- BUCKET SAMPLE								NOTES: Groundwater Not Encountered	
Geotechnical Environmental Inspections Materials								PROJECT: EAGLE POINTE VILLAGE LOCATION: EAGLE MOUNTAIN, UTAH PROJECT NO.: 6129JT028	PLATE 194
Western Technologies Inc. The Quality People Since 1955								TEST PIT LOG	A-24

THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

DATE DRILLED: 2-21-19		TEST PIT NO. TP-22		EQUIPMENT TYPE: CAT 315C L				
LOCATION: See Location Diagram				DRILLING TYPE: 36" Bucket				
ELEVATION: Not Determined				FIELD ENGINEER: M. Schedel				
MOISTURE CONTENT (% OF DRY WT.)	DRY DENSITY (LBS/CU FT)	SAMPLE TYPE	SAMPLE	BLOWS/FT.	DEPTH (FEET)	USCS	GRAPHIC	SOIL DESCRIPTION
								TOPSOIL; silty sand, brown, organics, moist
						CL-ML		SANDY SILTY CLAY; light brown, pinholes, small roots, slightly damp
		R						
					5			
		R						
						SM		SILTY SAND; light brown, slightly damp
		G						
						SC		CLAYEY SAND; gray, slightly damp
		G			10			
						SC-SM		SILTY CLAYEY SAND; light gray and brown, slightly damp
		G			15			
								TEST PIT TERMINATED AT 15.5 FEET
N- STANDARD SAMPLER R- RING SAMPLER CS- CALIFORNIA STYLE SAMPLER G- GRAB SAMPLE B- BUCKET SAMPLE								NOTES: Groundwater Not Encountered
Geotechnical Environmental Inspections Materials								PROJECT: EAGLE POINTE VILLAGE LOCATION: EAGLE MOUNTAIN, UTAH PROJECT NO.: 6129JT028
 Western Technologies Inc. The Quality People Since 1955								TEST PIT LOG
								PLATE 195 A-25

APPENDIX B

Test Pit No.	Sample Depth (ft)	USCS Class.	Initial Dry Density (pcf)	Initial Water Content (%)	Percent Passing		Atterberg Limits		Collapse/Compression Properties			Remarks
					#4	#200	LL	PI	Surcharge (ksf)	Total Compression (%)		
										In-Situ	After Saturation	
TP-1	7.5	ML	--	8.9	99	71	22	2				
TP-1	10	CL-ML	--	6.4	76	53	22	4				
TP-5	2.5	CL-ML	--	6.7	100	77	24	5				
TP-8	2.5	ML		5.6	100	75	32	1	1.6	-4.31	-14.41	1, 2, 4
TP-8	10	ML	--	9.5	100	79	23	3				
TP-14	2.5	CL-ML	60.8	7.8	100	76	35	5	1.7	-3.49	-13.34	1, 2, 4
TP-14	5	CL-ML	70.4	9.3	100	84	23	6	1.67	-4.26	-15.25	1, 2, 4
TP-14	10	CL	60.2	18.6	100	91	33	11	1.7	-7.87	-26.50	1, 2, 4
TP-19	5	CL	52.7	16.0	100	96	31	11	1.7	-4.86	-17.47	1, 4
TP-19	7.5	CL	56.9	13.6	100	93	32	11	1.6	-4.92	-19.81	1, 2, 4
TP-19	10	CL			100	88	26	8	1.7	-2.46	-2.54	1, 4

NOTES: Initial Dry Density and initial Water Content are in-situ values unless otherwise noted.
NP = Non-plastic

REMARKS – Collapse / Compression

1. Submerged to approximate saturation.
2. Sample disturbance observed.
3. Slight rebound after saturation.
4. Additional compression after saturation.



INORGANIC ANALYTICAL REPORT

Client: Western Technologies, Inc. **Contact:** Warren Clyde
Project: Eagle Pointe Village / 6129PO086
Lab Sample ID: 1902479-001
Client Sample ID: 6129JT028 TP-1 @ 0'
Collection Date: 2/19/2019
Received Date: 2/25/2019 1346h

Analytical Results

3440 South 700 West
Salt Lake City, UT 84119

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Sulfate	mg/kg-dry		2/26/2019 647h	SM4500-SO4-E	6.35	< 6.35	&

& - Analysis is performed on a 1:1 DI water extract for soils.

Phone: (801) 263-8686
Toll Free: (888) 263-8686
Fax: (801) 263-8687
e-mail: awal@awal-labs.com
web: www.awal-labs.com

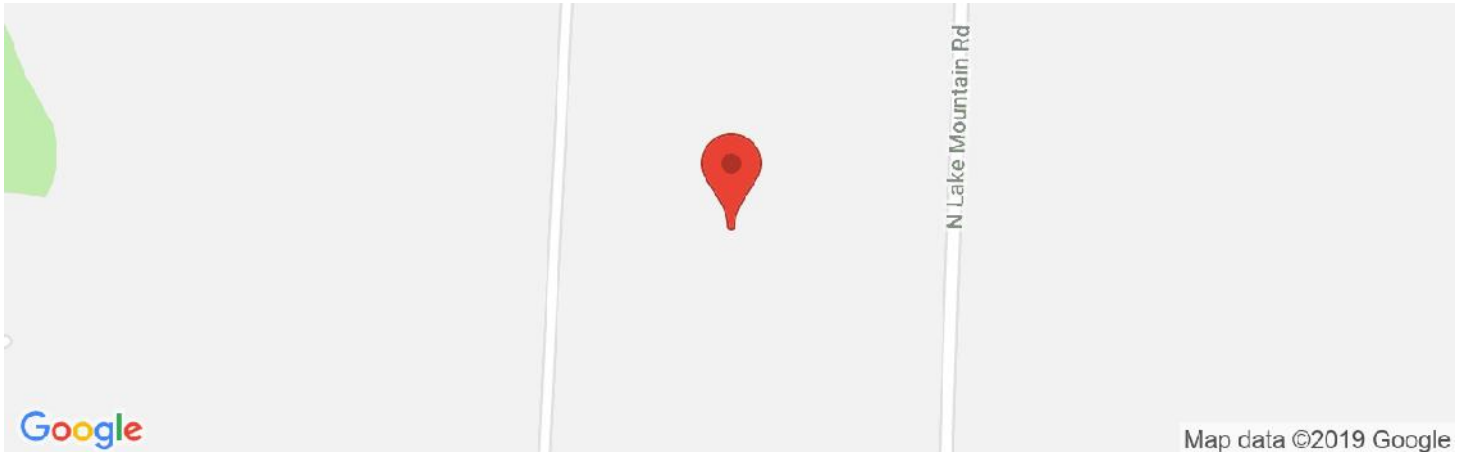
Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer



EAGLE POINTE VILLAGE

Latitude, Longitude: 40.300943, -111.994579

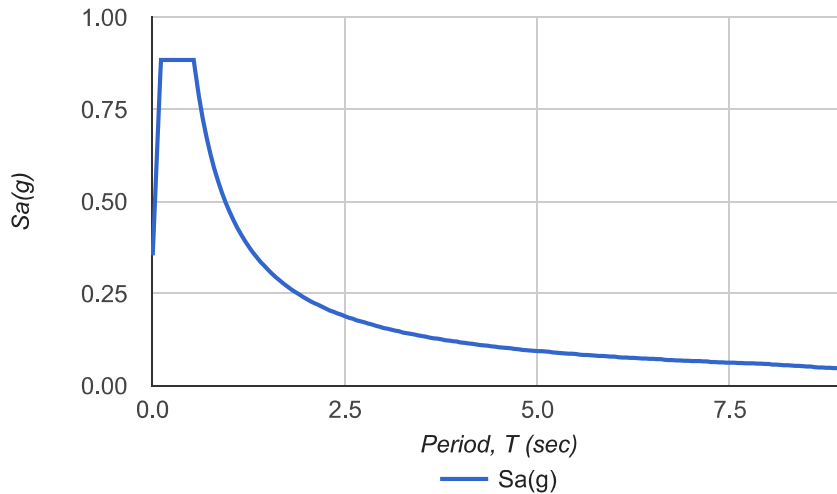


Date	2/28/2019, 12:00:36 PM
Design Code Reference Document	IBC-2015
Risk Category	II
Site Class	D - Stiff Soil

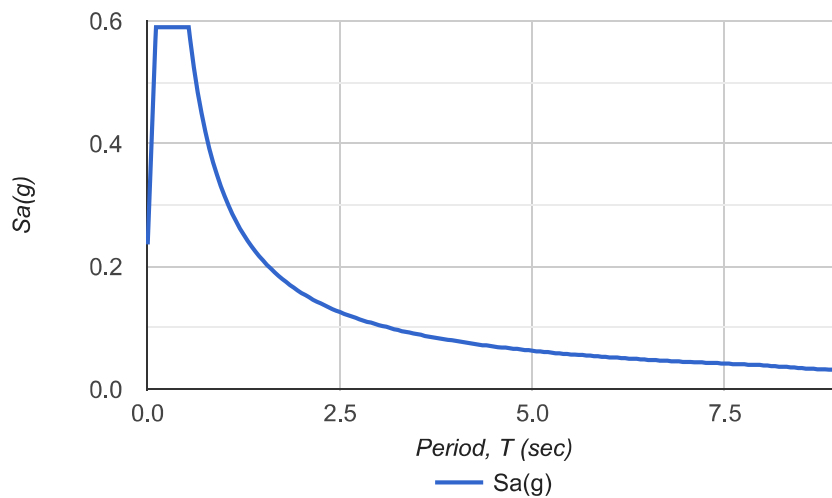
Type	Value	Description
S_S	0.725	MCE_R ground motion. (for 0.2 second period)
S_1	0.248	MCE_R ground motion. (for 1.0s period)
S_{MS}	0.885	Site-modified spectral acceleration value
S_{M1}	0.472	Site-modified spectral acceleration value
S_{DS}	0.59	Numeric seismic design value at 0.2 second SA
S_{D1}	0.315	Numeric seismic design value at 1.0 second SA

Type	Value	Description
SDC	D	Seismic design category
F_a	1.22	Site amplification factor at 0.2 second
F_v	1.904	Site amplification factor at 1.0 second
PGA	0.287	MCE_G peak ground acceleration
F_{PGA}	1.227	Site amplification factor at PGA
PGA_M	0.352	Site modified peak ground acceleration
T_L	8	Long-period transition period in seconds
S_{sRT}	0.725	Probabilistic risk-targeted ground motion. (0.2 second)
S_{sUH}	0.8	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration
S_{sD}	1.5	Factored deterministic acceleration value. (0.2 second)
S_{1RT}	0.248	Probabilistic risk-targeted ground motion. (1.0 second)
S_{1UH}	0.275	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration.
S_{1D}	0.6	Factored deterministic acceleration value. (1.0 second)
$PGAd$	0.6	Factored deterministic acceleration value. (Peak Ground Acceleration)
C_{RS}	0.907	Mapped value of the risk coefficient at short periods
C_{R1}	0.901	Mapped value of the risk coefficient at a period of 1 s

MCER Response Spectrum



Design Response Spectrum

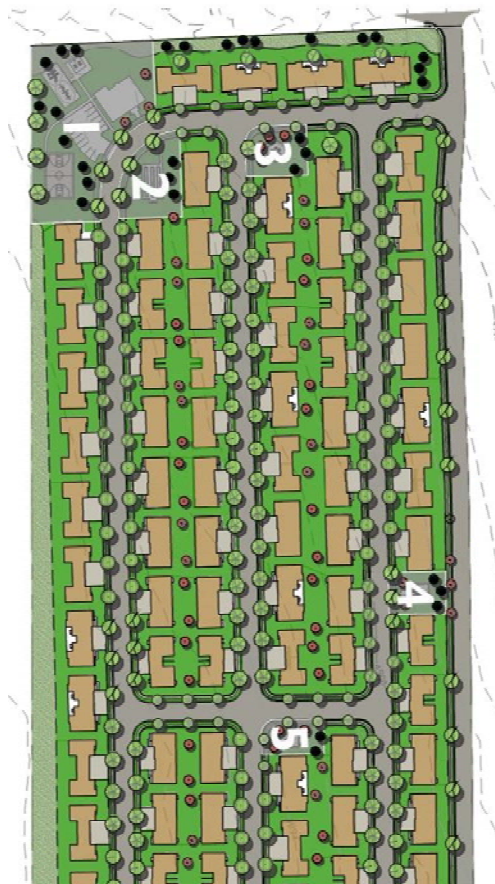


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Eagle Heights Village

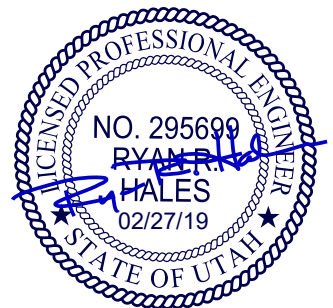
Traffic Impact Study



Eagle Mountain, Utah

February 27, 2019

UT19-1417



EXECUTIVE SUMMARY

This study addresses the traffic impacts associated with the proposed Eagle Heights Village development located in Eagle Mountain, Utah. The proposed project is located on the south side of Eagle Mountain Boulevard, near Lake Mountain Road.

Included within the analyses for this study are the traffic operations and recommended mitigation measures for existing conditions and plus project conditions (conditions after development of the proposed project) at key intersections and roadways near the site. Future 2024 conditions were also analyzed.

The evening peak hour level of service (LOS) was computed for each study intersection. The results of this analysis are shown in Table ES-1. Recommended storage lengths are shown in Table ES-2.

TABLE ES-1 LOS Analysis - Evening Peak Hour Eagle Mountain - Eagle Heights Village TIS					
Intersection	Level of Service (Sec/Veh) ¹				
	Existing (2019)		Future (2024)		
	Background	Plus Project	Background	Plus Project	Mitigated Plus Project
Pony Express Pkwy / Eagle Mountain Blvd	A (5.5)	A (6.8)	B (10.4)	C (20.2)	A (9.0)
Lake Mountain Road / Eagle Mountain Blvd	A (4.1) / NB	A (4.4) / NB	A (5.4) / NB	A (5.6) / NB	A (5.7) / NB
Access 1 / Lake Mountain Road ²	-	A (4.7) / EB	-	A (5.0) / EB	A (5.0) / EB
Access 2 / Lake Mountain Road ²	-	A (4.2) / EB	-	A (4.3) / EB	A (4.1) / EB
Access 3 / Lake Mountain Road ²	-	A (3.9) / EB	-	A (3.9) / EB	A (3.9) / EB
1. Intersection LOS and delay (seconds/vehicle) values represent the overall intersection average for roundabout, signalized, all-way stop controlled intersections and the worst approach for all other unsignalized intersections. 2. This intersection is a project access and was only analyzed in "plus project" scenarios. Source: Hales Engineering, February 2019					

TABLE ES-2
Recommended Storage Lengths
Eagle Mountain - Eagle Heights Village TIS

Intersection	Storage Length (feet)							
	Northbound		Southbound		Eastbound		Westbound	
	LT	RT	LT	RT	LT	RT	LT	RT
Pony Express Pkwy / Eagle Mountain Blvd	-	-	-	-	-	200	-	-
Lake Mountain Road / Eagle Mountain Blvd	-	-	-	-	100	-	-	-

Source: Hales Engineering, February 2019

SUMMARY OF KEY FINDINGS/RECOMMENDATIONS

The following is a summary of key findings and recommendations:

- All study intersections are currently operating at an acceptable LOS during the evening peak hour in existing (2019) background conditions.
- The development will consist of 316 residential townhome units.
- All study intersections are anticipated to operate at an acceptable LOS during the evening peak hour with project traffic added.
- All study intersections are anticipated to operate at an acceptable LOS during the evening peak hour in future (2024) background conditions.
 - A 95th percentile queue length of approximately 270 feet is anticipated at the Pony Express Parkway / Eagle Mountain Boulevard intersection on the eastbound approach. This queue length approaches upstream intersections.
- All study intersections are anticipated to operate at an acceptable LOS during the evening peak hour in future (2024) plus project conditions.
 - A 95th percentile queue length of approximately 650 feet is anticipated at the Pony Express Parkway / Eagle Mountain Boulevard intersection on the eastbound approach. This queue length blocks upstream intersections.
 - **Recommendation:** Restripe eastbound approach of the Pony Express Parkway / Eagle Mountain Boulevard intersection with two lanes entering the roundabout. The inner lane would be for left-turn and through vehicles, and the outer lane would be for right-turn vehicles only.
- Based on a mitigated scenario of the future (2024) plus project conditions, it is anticipated that there will be no significant queueing with the two eastbound lanes striped at the roundabout. It is also anticipated that all intersections will operate at acceptable levels of service.

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I. INTRODUCTION

A. Purpose

This study addresses the traffic impacts associated with the proposed Eagle Heights Village development located in Eagle Mountain, Utah. The proposed project is located on the south side of Eagle Mountain Boulevard, near Lake Mountain Road. Figure 1 shows a vicinity map of the proposed development.

Included within the analyses for this study are the traffic operations and recommended mitigation measures for existing conditions and plus project conditions (conditions after development of the proposed project) at key intersections and roadways near the site. Future 2024 conditions were also analyzed.

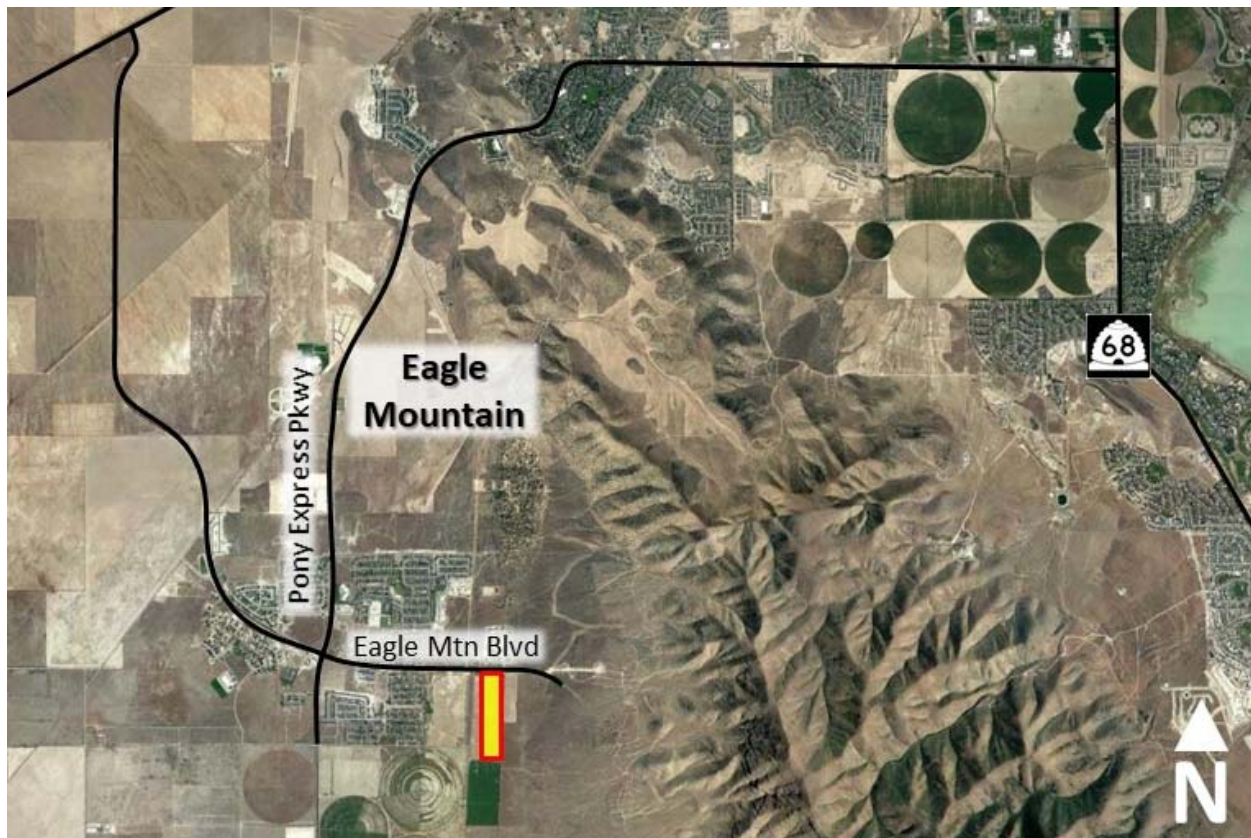


Figure 1: Vicinity map showing the project location in Eagle Mountain, Utah

B. Scope

The study area was defined based on conversations with the development team. This study was scoped to evaluate the traffic operational performance impacts of the project on the following intersections:

- Pony Express Parkway / Eagle Mountain Boulevard
- Lake Mountain Road / Eagle Mountain Boulevard
- Project Access (3) / Lake Mountain Road

C. Analysis Methodology

Level of service (LOS) is a term that describes the operating performance of an intersection or roadway. LOS is measured quantitatively and reported on a scale from A to F, with A representing the best performance and F the worst. Table 1 provides a brief description of each LOS letter designation and an accompanying average delay per vehicle for both signalized and unsignalized intersections. Figure 2 provides a visual representation of each LOS letter designation.

The *Highway Capacity Manual* (HCM), 6th Edition, 2016 methodology was used in this study to remain consistent with “state-of-the-practice” professional standards. This methodology has different quantitative evaluations for signalized and unsignalized intersections. For signalized and all-way stop intersections, the LOS is provided for the overall intersection (weighted average of all approach delays). For all other unsignalized intersections, LOS is reported based on the worst approach.

Using Synchro/SimTraffic software, which follow the HCM methodology, the peak hour LOS was computed for each study intersection. Multiple runs of SimTraffic were used to provide a statistical evaluation of the interaction between the intersections. The detailed LOS reports are provided in Appendix B. Hales Engineering also calculated the 95th percentile queue lengths for each of the study intersections using SimTraffic. The detailed queue length reports are provided in Appendix D.

D. Level of Service Standards

For the purposes of this study, a minimum acceptable intersection performance for each of the study intersections was set at LOS D. If levels of service E or F conditions exist, an explanation and/or mitigation measures will be presented. An LOS D threshold is consistent with “state-of-the-practice” traffic engineering principles for urbanized areas.

Table 1: Level of Service Description

Level of Service	Description of Traffic Conditions	Average Delay (seconds/vehicle)
Signalized Intersections		Overall Intersection
A	Extremely favorable progression and a very low level of control delay. Individual users are virtually unaffected by others in the traffic stream.	$0 \leq 10.0$
B	Good progression and a low level of control delay. The presence of other users in the traffic stream becomes noticeable.	$> 10.0 \text{ and } \leq 20.0$
C	Fair progression and a moderate level of control delay. The operation of individual users becomes somewhat affected by interactions with others in the traffic stream.	$>20.0 \text{ and } \leq 35.0$
D	Marginal progression with relatively elevated levels of control delay. Operating conditions are noticeably more constrained.	$> 35.0 \text{ and } \leq 55.0$
E	Poor progression with unacceptably elevated levels of control delay. Operating conditions are at or near capacity.	$> 55.0 \text{ and } \leq 80.0$
F	Unacceptable progression with forced or breakdown operating conditions.	> 80.0
Unsignalized Intersections		Worst Approach
A	Free Flow / Insignificant Delay	$0 \leq 10.0$
B	Stable Operations / Minimum Delays	$>10.0 \text{ and } \leq 15.0$
C	Stable Operations / Acceptable Delays	$>15.0 \text{ and } \leq 25.0$
D	Approaching Unstable Flows / Tolerable Delays	$>25.0 \text{ and } \leq 35.0$
E	Unstable Operations / Significant Delays Can Occur	$>35.0 \text{ and } \leq 50.0$
F	Forced Flows / Unpredictable Flows / Excessive Delays Occur	> 50.0

Source: Hales Engineering Descriptions, based on the *Highway Capacity Manual* (HCM), 6th Edition, 2016 Methodology (Transportation Research Board)

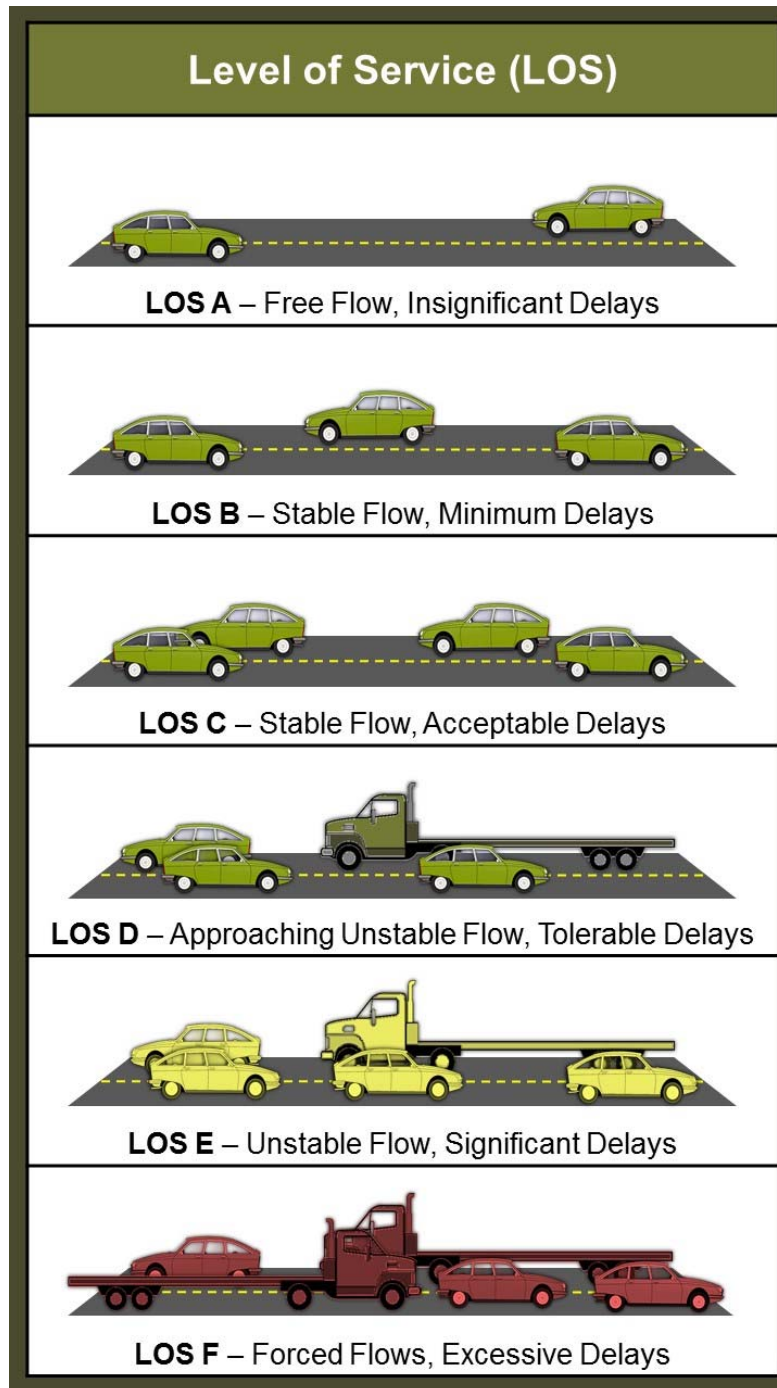


Figure 2: Visual representation of the LOS letter designations

II. EXISTING (2019) BACKGROUND CONDITIONS

A. Purpose

The purpose of the background analysis is to study the intersections and roadways during the peak travel periods of the day with background traffic and geometric conditions. Through this analysis, background traffic operational deficiencies can be identified, and potential mitigation measures recommended. This analysis provides a baseline condition that may be compared to the build conditions to identify the impacts of the development.

B. Roadway System

The primary roadways that will provide access to the project site are described below:

Eagle Mountain Boulevard – is a city-maintained roadway which is classified by the Eagle Mountain Future Transportation Master Plan (July 2018) as a minor arterial. The roadway has one travel lane in each direction separated by a raised median. The posted speed limit is 35 mph in the study area.

Lake Mountain Road – is a city-maintained roadway which is classified by the Eagle Mountain Future Transportation Master Plan (July 2018) as a local road. The roadway has one travel lane in each direction north of Eagle Mountain Boulevard. The posted speed limit is 25 mph in the study area.

C. Traffic Volumes

Weekday morning (7:00 to 9:00 a.m.) and evening (4:00 to 6:00 p.m.) peak period traffic counts were performed at the following intersections:

- Pony Express Parkway / Eagle Mountain Boulevard
- Lake Mountain Road / Eagle Mountain Boulevard

The counts were performed within the last year for other traffic impact studies in the area. Counts were last performed at the Pony Express Parkway / Eagle Mountain Boulevard intersection on Wednesday, September 5, 2018. Counts were last performed at the Lake Mountain Road / Eagle Mountain Boulevard intersection on Wednesday, March 7, 2018. The morning peak hour was determined to be between 7:00 and 8:00 a.m., and the evening peak hour was determined to be between 4:45 and 5:45 p.m. The evening peak hour volumes were slightly higher than the morning peak hour volumes. Therefore, the evening peak hour volumes were used in the analysis to represent the worst-case conditions. Detailed count data are included in Appendix A.

In order to account for immediate growth in the study area, Hales Engineering added project traffic from nearby developments to the background traffic collected at the study intersections. This was done based on the traffic impact studies completed for the Eagle Village and Patterson residential projects. Figure 3 shows the existing evening peak hour volumes (including traffic from other nearby projects) as well as intersection geometry at the study intersections.

D. Level of Service Analysis

Hales Engineering determined that all study intersections are currently operating at acceptable levels of service during the evening peak hour, as shown in Table 2. These results serve as a baseline condition for the impact analysis of the proposed development during existing (2019) conditions.

Table 2: Existing (2019) Background Evening Peak Hour Level of Service

Intersection		Worst Approach			Overall Intersection	
Description	Control	Approach ^{1,3}	Aver. Delay (Sec/Veh) ¹	LOS ¹	Aver. Delay (Sec/Veh) ²	LOS ²
Pony Express Pkwy / Eagle Mountain Blvd	Round-about	-	-	-	5.5	A
Lake Mountain Road / Eagle Mountain Blvd	NB/SB Stop	NB	4.1	A	-	-

1. This represents the worst approach LOS and delay (seconds / vehicle) and is only reported for non-all-way stop unsignalized intersections.
 2. This represents the overall intersection LOS and delay (seconds / vehicle) and is reported for all-way stop and signal-controlled intersections.
 3. SB = Southbound approach, etc.

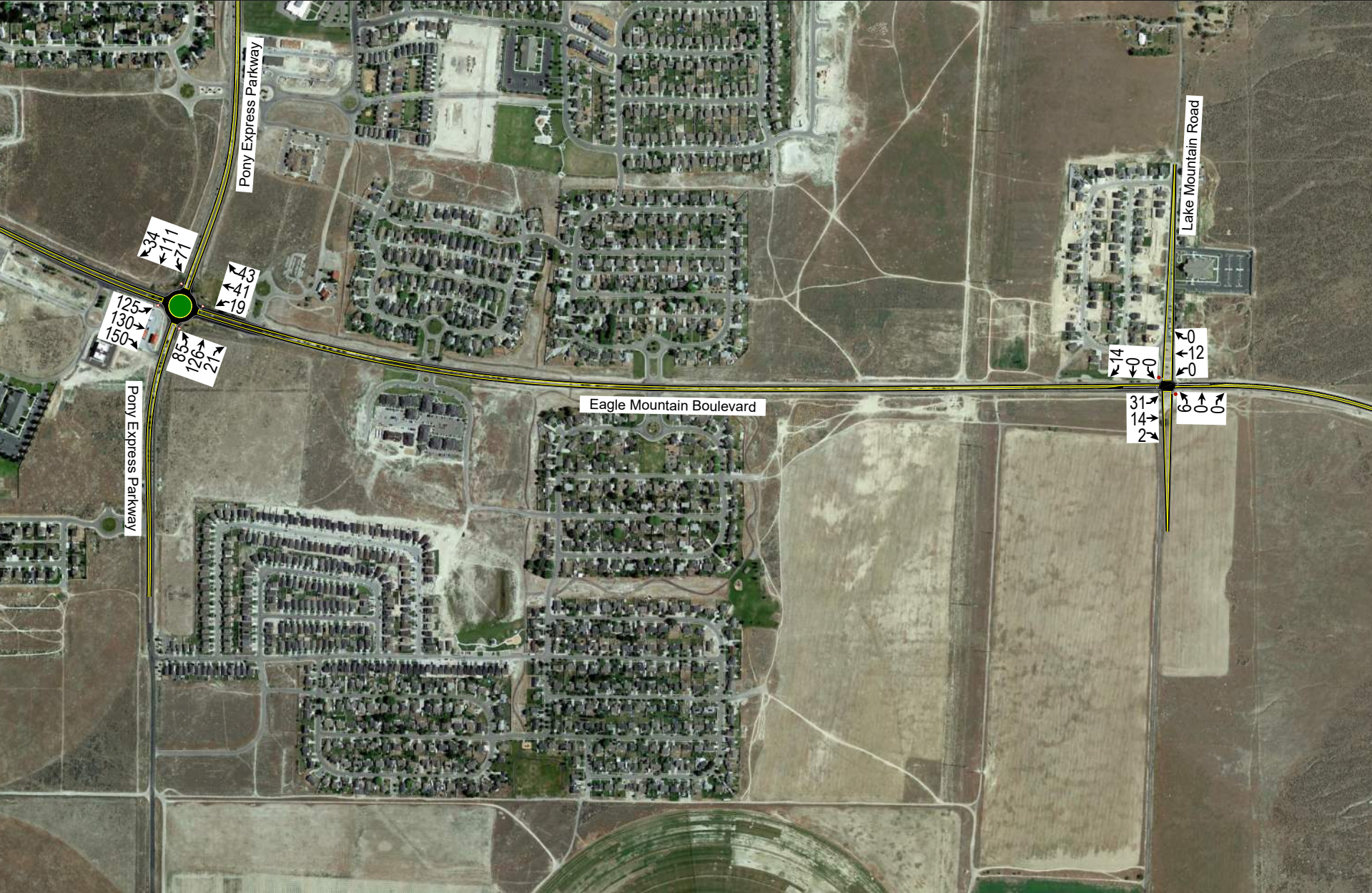
Source: Hales Engineering, February 2019

E. Queuing Analysis

Hales Engineering calculated the 95th percentile queue lengths for each of the study intersections. No significant queuing was observed during the evening peak hour.

F. Mitigation Measures

No mitigation measures are recommended.



III. PROJECT CONDITIONS

A. Purpose

The project conditions discussion explains the type and intensity of development. This provides the basis for trip generation, distribution, and assignment of project trips to the surrounding study intersections defined in Chapter I.

B. Project Description

The proposed Eagle Heights Village development is located on the south side of Eagle Mountain Boulevard, near Lake Mountain Road. The development will consist of residential townhome units. The townhome units will be built in duplex buildings throughout the project. A concept plan for the proposed developments is provided in Appendix C.

The proposed land use for the development has been identified as follows:

- Townhomes 316 Units

C. Trip Generation

Trip generation for the development was calculated using trip generation rates published in the Institute of Transportation Engineers (ITE), *Trip Generation*, 10th Edition, 2017. Trip Generation for the proposed project is included in Table 3.

The total trip generation for the development is as follows:

- Daily Trips: 2,350
- Morning Peak Hour Trips: 144
- Evening Peak Hour Trips: 166

D. Trip Distribution and Assignment

Project traffic is assigned to the roadway network based on the type of trip and the proximity of project access points to major streets, high population densities, and regional trip attractions. Existing travel patterns observed during data collection also provide helpful guidance to establishing these distribution percentages, especially near the site. For the proposed area, it has been observed that commuters generally travel via Eagle Mountain Boulevard to the west

Table 3
Eagle Mountain - Eagle Heights Village TIS
Trip Generation

Weekday Daily	# of	Unit	Trip	%	%	Trips	Trips	Total Daily
Land Use ¹	Units	Type	Generation	Entering	Exiting	Entering	Exiting	Trips
Multifamily Housing (Low-Rise) (220)	316	Dwelling Units	2,350	50%	50%	1,175	1,175	2,350
Project Total Daily Trips						1,175	1,175	2,350
Morning Peak Hour	# of	Unit	Trip	%	%	Trips	Trips	Total a.m.
Land Use ¹	Units	Type	Generation	Entering	Exiting	Entering	Exiting	Trips
Multifamily Housing (Low-Rise) (220)	316	Dwelling Units	144	23%	77%	33	111	144
Project Total a.m. Peak Hour Trips						33	111	144
Evening Peak Hour	# of	Unit	Trip	%	%	Trips	Trips	Total p.m.
Land Use ¹	Units	Type	Generation	Entering	Exiting	Entering	Exiting	Trips
Multifamily Housing (Low-Rise) (220)	316	Dwelling Units	166	63%	37%	105	61	166
Project Total p.m. Peak Hour Trips						105	61	166

1. Land Use Code from the Institute of Transportation Engineers (ITE) *Trip Generation*, 10th Edition, 2017.

SOURCE: Hales Engineering, February 2019

The resulting distribution of project generated trips during the evening peak hour is as follows:

To/From Project:

- 45% North
- 55% West

These trip distribution assumptions were used to assign the evening peak hour generated traffic at the study intersections to create trip assignment for the proposed development. Trip assignment for the development is shown in Figure 4.

E. Access

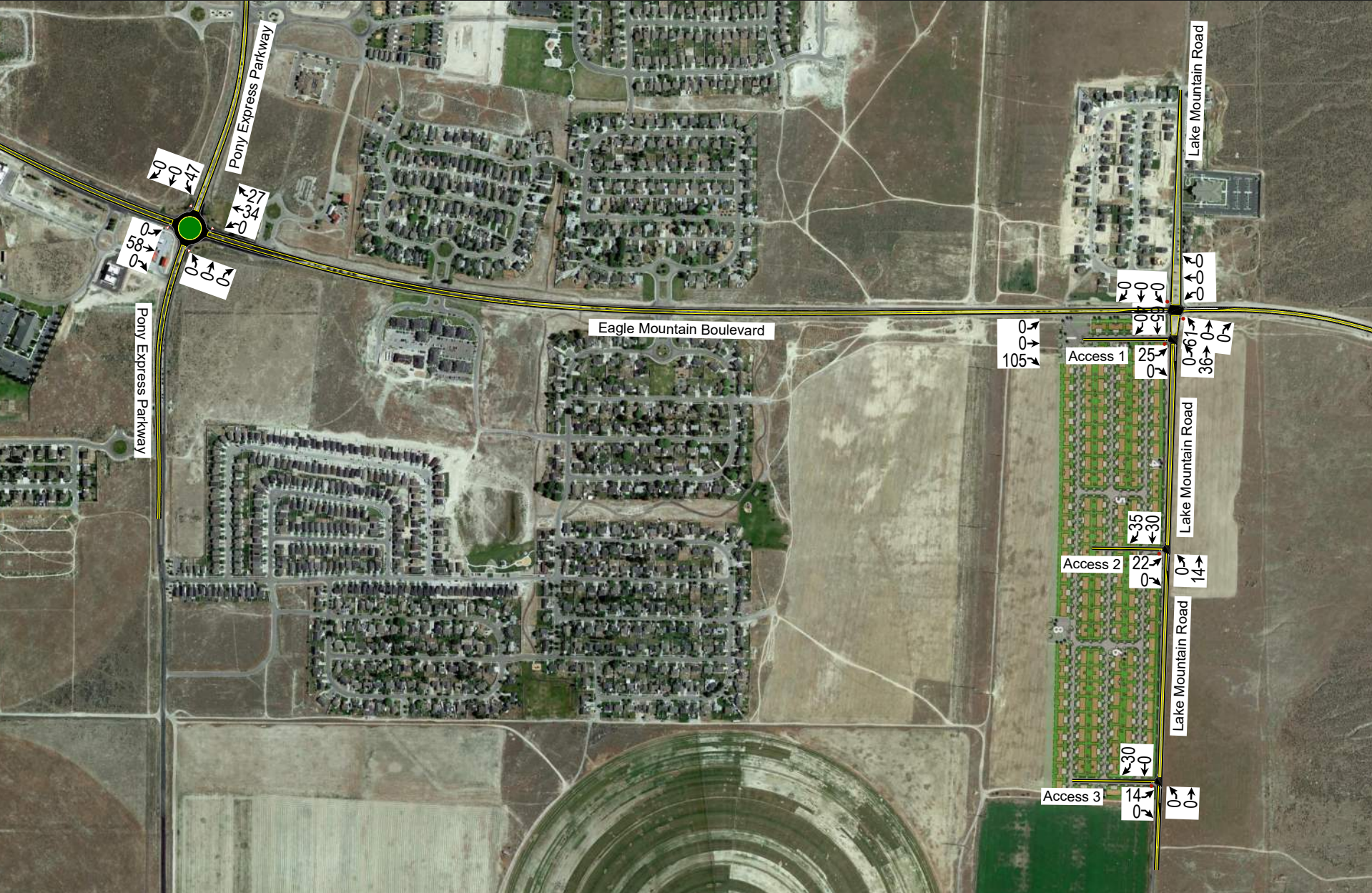
The proposed access for the site will be gained at the following locations (see also concept plan in Appendix C):

Lake Mountain Road:

- Access 1 will be located approximately 200 feet south of Eagle Mountain Boulevard. It will access the project on the west side of Lake Mountain Road. It is anticipated that the access will be stop-controlled at the access.
- Access 2 will be located approximately 1,500 feet south of Eagle Mountain Boulevard. It will access the project on the west side of Lake Mountain Road. It is anticipated that the access will be stop-controlled at the access.
- Access 3 will be located approximately 3,000 feet south of Eagle Mountain Boulevard. It will access the project on the west side of Lake Mountain Road. It is anticipated that the access will be stop-controlled at the access.

Eagle Mountain Eagle Heights Village TIS
Trip Assignment

Evening Peak Hour
Figure 4



IV. EXISTING (2019) PLUS PROJECT CONDITIONS

A. Purpose

The purpose of the existing (2019) plus project analysis is to study the intersections and roadways during the peak travel periods of the day for existing background traffic and geometric conditions plus the net trips generated by the proposed development. This scenario provides valuable insight into the potential impacts of the proposed project on background traffic conditions.

B. Traffic Volumes

Hales Engineering added the project trips discussed in Chapter III to the existing (2019) background traffic volumes to predict turning movement volumes for existing (2019) plus project conditions. Existing (2019) plus project evening peak hour turning movement volumes are shown in Figure 5.

C. Level of Service Analysis

Hales Engineering determined that all intersections are anticipated to operate at acceptable levels of service during the evening peak hour with project traffic added, as shown in Table 4.

Table 4: Existing (2019) Plus Project Evening Peak Hour Level of Service

Intersection		Worst Approach			Overall Intersection	
Description	Control	Approach ^{1,3}	Aver. Delay (Sec/Veh) ¹	LOS ¹	Aver. Delay (Sec/Veh) ²	LOS ²
Pony Express Pkwy / Eagle Mountain Blvd	Round-about	-	-	-	6.8	A
Lake Mountain Road / Eagle Mountain Blvd	NB/SB Stop	NB	4.4	A	-	-
Access 1 / Lake Mountain Road	EB Stop	EB	4.7	A	-	-
Access 2 / Lake Mountain Road	EB Stop	EB	4.2	A	-	-
Access 3 / Lake Mountain Road	EB Stop	EB	3.9	A	-	-

1. This represents the worst approach LOS and delay (seconds / vehicle) and is only reported for non-all-way stop unsignalized intersections.

2. This represents the overall intersection LOS and delay (seconds / vehicle) and is reported for all-way stop and signal-controlled intersections.

3. SB = Southbound approach, etc.

Source: Hales Engineering, February 2019



D. Queuing Analysis

Hales Engineering calculated the 95th percentile queue lengths for each of the study intersections. No significant queuing is anticipated during the evening peak hour.

E. Mitigation Measures

No mitigation measures are recommended.

V. FUTURE (2024) BACKGROUND CONDITIONS

A. Purpose

The purpose of the future (2024) background analysis is to study the intersections and roadways during the peak travel periods of the day for future background traffic and geometric conditions. Through this analysis, future background traffic operational deficiencies can be identified, and potential mitigation measures recommended.

B. Roadway Network

According to the Mountainland Association of Governments (MAG) Regional Transportation Plan, TransPlan40, there are no projects planned before 2024 in the study area. Therefore, no changes were made to the roadway network for the future (2024) analysis.

C. Traffic Volumes

Hales Engineering obtained future (2024) forecasted volumes from the Wasatch Front Regional Council (WFRC) / MAG travel demand model. Peak period turning movement counts were estimated using National Cooperative Highway Research Program (NCHRP) 255 methodologies which utilize existing peak period turn volumes and future average weekday daily traffic (AWDT) volumes to project the future turn volumes at the major intersections.

In addition to applying future growth, Hales Engineering also took into account traffic from future developments in the vicinity, namely the Eagle Village and Patterson residential developments. Future (2024) evening peak hour turning movement volumes are shown in Figure 6.

D. Level of Service Analysis

Hales Engineering determined that all study intersections are anticipated to operate at acceptable levels of service during the evening peak hour in future (2024) background conditions, as shown in Table 5. These results serve as a baseline condition for the impact analysis of the proposed development for future (2024) conditions.

E. Queuing Analysis

Hales Engineering calculated the 95th percentile queue lengths for each of the study intersections. A 95th percentile queue length of approximately 270 feet is anticipated at the Pony Express Parkway / Eagle Mountain Boulevard intersection on the eastbound approach. This queue length approaches other intersections upstream.

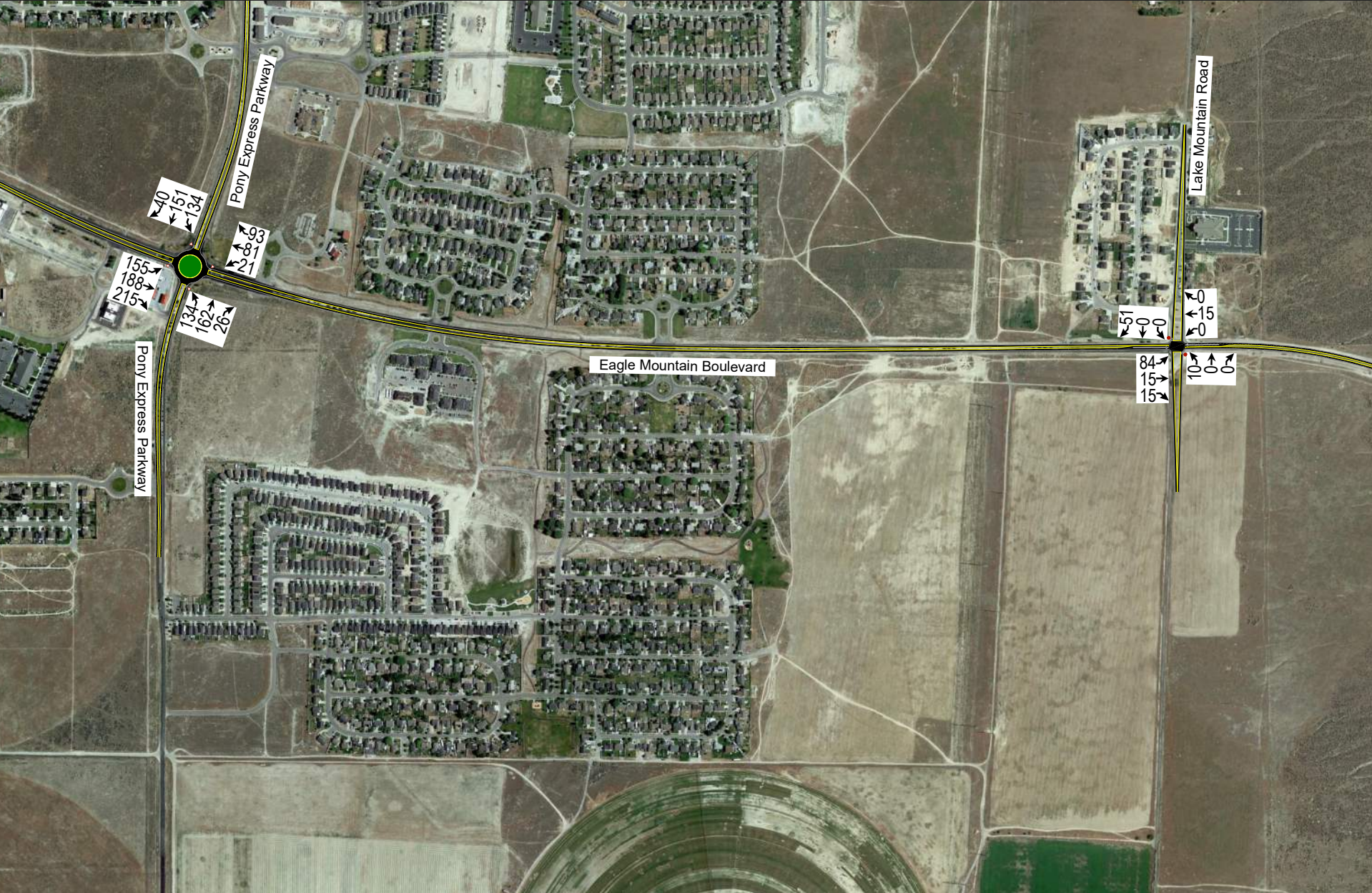


Table 5: Future (2024) Background Evening Peak Hour Level of Service

Intersection		Worst Approach			Overall Intersection	
Description	Control	Approach ^{1,3}	Aver. Delay (Sec/Veh) ¹	LOS ¹	Aver. Delay (Sec/Veh) ²	LOS ²
Pony Express Pkwy / Eagle Mountain Blvd	Round-about	-	-	-	10.4	B
Lake Mountain Road / Eagle Mountain Blvd	NB/SB Stop	NB	5.4	A	-	-

1. This represents the worst approach LOS and delay (seconds / vehicle) and is only reported for non-all-way stop unsignalized intersections.
 2. This represents the overall intersection LOS and delay (seconds / vehicle) and is reported for all-way stop and signal-controlled intersections.
 3. SB = Southbound approach, etc.

Source: Hales Engineering, February 2019

F. Mitigation Measures

No mitigation measures are recommended.

VI. FUTURE (2024) PLUS PROJECT CONDITIONS

A. Purpose

The purpose of the future (2024) plus project analysis is to study the intersections and roadways during the peak travel periods of the day for future background traffic and geometric conditions plus the net trips generated by the proposed development. This scenario provides valuable insight into the potential impacts of the proposed project on future background traffic conditions.

B. Traffic Volumes

Hales Engineering added the project trips discussed in Chapter III to the future (2024) background traffic volumes to predict turning movement volumes for future (2024) plus project conditions. Future (2024) plus project evening peak hour turning movement volumes are shown in Figure 7.

C. Level of Service Analysis

Hales Engineering determined that all intersections are anticipated to operate at acceptable levels of service during the evening peak hour, as shown in Table 6.

Table 6: Future (2024) Plus Project Evening Peak Hour Level of Service

Intersection		Worst Approach			Overall Intersection	
Description	Control	Approach ^{1,3}	Aver. Delay (Sec/Veh) ¹	LOS ¹	Aver. Delay (Sec/Veh) ²	LOS ²
Pony Express Pkwy / Eagle Mountain Blvd	Round-about	-	-	-	20.2	C
Lake Mountain Road / Eagle Mountain Blvd	NB/SB Stop	NB	5.6	A	-	-
Access 1 / Lake Mountain Road	EB Stop	EB	5.0	A	-	-
Access 2 / Lake Mountain Road	EB Stop	EB	4.3	A	-	-
Access 3 / Lake Mountain Road	EB Stop	EB	3.9	A	-	-

1. This represents the worst approach LOS and delay (seconds / vehicle) and is only reported for non-all-way stop unsignalized intersections.

2. This represents the overall intersection LOS and delay (seconds / vehicle) and is reported for all-way stop and signal-controlled intersections.

3. SB = Southbound approach, etc.

Source: Hales Engineering, February 2019



D. Queuing Analysis

Hales Engineering calculated the 95th percentile queue lengths for each of the study intersections. A 95th percentile queue length of approximately 650 feet is anticipated at the Pony Express Parkway / Eagle Mountain Boulevard intersection on the eastbound approach. This queue length blocks intersections upstream along Eagle Mountain Boulevard.

E. Mitigation Measures

It is recommended that the eastbound approach of the Pony Express Parkway / Eagle Mountain Boulevard intersection be restriped with two lanes entering the roundabout. The inner lane would be a shared through and left-turn lane while the outer lane would be for right-turns only. There is sufficient pavement width existing to support these lanes. It is anticipated that this improvement will reduce queuing and delays at the intersection.

F. Mitigated Scenario

Hales Engineering ran a mitigated scenario of future (2024) plus project conditions to determine the impact of the proposed mitigation measure. Hales Engineering determined that all intersections are anticipated to operate at acceptable levels of service during the evening peak hour, as shown in Table 7. No significant queuing is anticipated.

Table 7: Mitigated Future (2024) Plus Project Evening Peak Hour Level of Service

Intersection		Worst Approach			Overall Intersection	
Description	Control	Approach ^{1,3}	Aver. Delay (Sec/Veh) ¹	LOS ¹	Aver. Delay (Sec/Veh) ²	LOS ²
Pony Express Pkwy / Eagle Mountain Blvd	Round-about	-	-	-	9.0	A
Lake Mountain Road / Eagle Mountain Blvd	NB/SB Stop	NB	5.7	A	-	-
Access 1 / Lake Mountain Road	EB Stop	EB	5.0	A	-	-
Access 2 / Lake Mountain Road	EB Stop	EB	4.1	A	-	-
Access 3 / Lake Mountain Road	EB Stop	EB	3.9	A	-	-

1. This represents the worst approach LOS and delay (seconds / vehicle) and is only reported for non-all-way stop unsignalized intersections.

2. This represents the overall intersection LOS and delay (seconds / vehicle) and is reported for all-way stop and signal-controlled intersections.

3. SB = Southbound approach, etc.

Source: Hales Engineering, February 2019

G. Recommended Storage Lengths

Hales Engineering determined recommended storage lengths based on the 95th percentile queue lengths given in the mitigated future (2024) plus project scenario. These storage lengths do not include the taper length. Recommended storage lengths for the study intersections are shown in Table 8.

Table 8: Recommended Storage Lengths

Recommended Storage Lengths Eagle Mountain - Eagle Heights Village TIS								
Intersection	Storage Length (feet)							
	Northbound		Southbound		Eastbound		Westbound	
	LT	RT	LT	RT	LT	RT	LT	RT
Pony Express Pkwy / Eagle Mountain Blvd	-	-	-	-	-	200	-	-
Lake Mountain Road / Eagle Mountain Blvd	-	-	-	-	100	-	-	-
Source: Hales Engineering, February 2019								

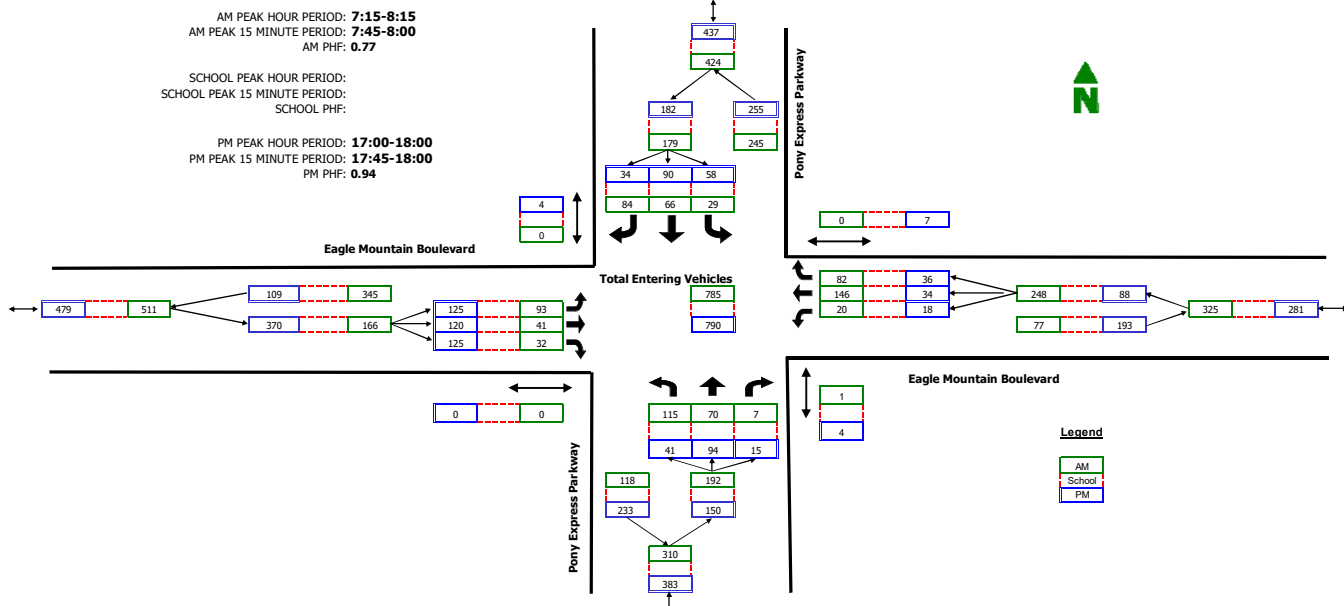
APPENDIX A

Turning Movement Counts

Intersection Turning Movement Summary

Intersection: Pony Express Parkway / Eagle Mountain Boulevard
 North/South: Pony Express Parkway
 East/West: Eagle Mountain Boulevard
 Jurisdiction: Eagle Mountain
 Project Title: Eagle Village TIS
 Project No: UT18-1315
 Weather: Clear

Date: 9-5-18, Wed
 Day of Week Adjustment: 100.0%
 Month of Year Adjustment: 100.0%
 Adjustment Station #: 0
 Growth Rate: 0.0%
 Number of Years: 0



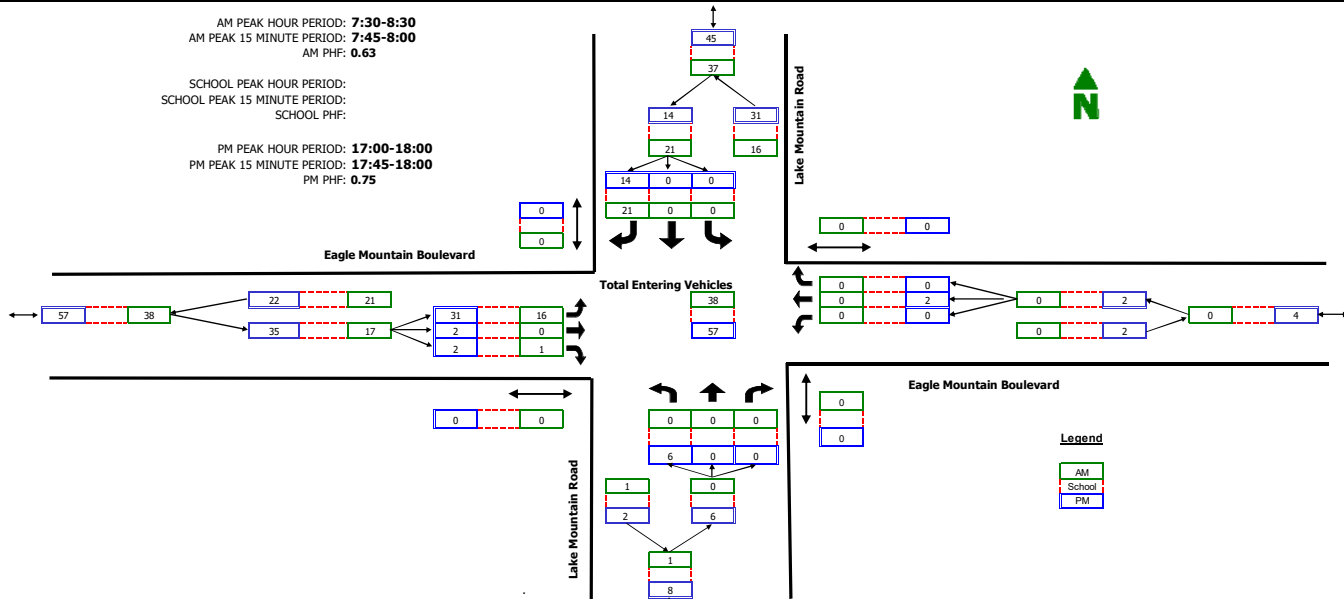
RAW COUNT SUMMARIES	Pony Express Parkway Northbound				Pony Express Parkway Southbound				Eagle Mountain Boulevard Eastbound				Eagle Mountain Boulevard Westbound				TOTAL
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
AM PERIOD COUNTS																	
Period	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	TOTAL
7:00-7:15	35	16	0	0	1	6	13	0	10	2	6	0	7	46	29	0	171
7:15-7:30	28	10	0	0	1	14	20	0	13	6	5	0	5	48	25	0	175
7:30-7:45	30	13	2	1	4	13	15	0	20	9	6	0	8	38	9	0	167
7:45-8:00	37	29	4	0	13	20	30	0	30	16	11	34	4	34	28	0	256
8:00-8:15	20	18	1	0	11	19	19	0	30	10	10	0	3	26	20	0	187
8:15-8:30	15	12	4	0	7	17	9	0	15	10	3	0	3	13	5	0	113
8:30-8:45	13	13	0	0	2	9	16	0	11	5	6	0	3	16	9	0	103
8:45-9:00	25	24	1	0	4	16	22	0	17	10	14	0	3	21	16	0	173
MIDDAY PERIOD COUNTS																	
Period	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	TOTAL
9:00-9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15-9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30-9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45-10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00-10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15-10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30-10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45-11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00-11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15-11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30-11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45-12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00-12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15-12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30-12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45-13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00-13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15-13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30-13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45-14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00-14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15-14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30-14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45-15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00-15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15-15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30-15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45-16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM PERIOD COUNTS																	
Period	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	TOTAL
16:00-16:15	9	18	2	0	15	27	8	0	30	18	22	0	7	16	11	0	183
16:15-16:30	8	15	1	0	19	30	3	0	22	22	24	0	2	12	7	0	165
16:30-16:45	9	26	0	0	15	30	16	0	15	24	26	0	4	11	13	0	189
16:45-17:00	9	10	5	0	16	13	10	2	24	22	25	0	6	13	12	0	165
17:00-17:15	14	23	3	0	10	18	10	0	29	23	30	0	2	9	9	0	180
17:15-17:30	8	16	4	0	17	32	7	34	31	26	0	9	12	6	5	0	202
17:30-17:45	10	30	4	4	20	22	8	0	25	29	30	0	1	9	11	2	199
17:45-18:00	9	25	4	0	11	18	9	0	37	37	39	0	6	4	10	0	209

Intersection Turning Movement Summary

Intersection: Lake Mountain Road / Eagle Mountain Boulevard
 North/South: Lake Mountain Road
 East/West: Eagle Mountain Boulevard
 Jurisdiction: Eagle Mountain
 Project Title: Patterson TIS
 Project No: UT18-1202
 Weather: Clear

Date: 3-7-18, Wed
 Day of Week Adjustment: 100.0%
 Month of Year Adjustment: 100.0%
 Adjustment Station #: 0
 Growth Rate: 0.0%
 Number of Years: 0

AM PEAK HOUR PERIOD: 7:30-8:30
 AM PEAK 15 MINUTE PERIOD: 7:45-8:00
 AM PHF: 0.63
 SCHOOL PEAK HOUR PERIOD:
 SCHOOL PEAK 15 MINUTE PERIOD:
 SCHOOL PHF:
 PM PEAK HOUR PERIOD: 17:00-18:00
 PM PEAK 15 MINUTE PERIOD: 17:45-18:00
 PM PHF: 0.75



RAW COUNT SUMMARIES	Lake Mountain Road Northbound				Lake Mountain Road Southbound				Eagle Mountain Boulevard Eastbound				Eagle Mountain Boulevard Westbound				TOTAL
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
AM PERIOD COUNTS																	
Period	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	TOTAL
7:00-7:15	1	0	0	0	0	0	2	0	1	0	1	0	0	0	0	0	5
7:15-7:30	0	0	0	0	0	0	3	0	2	0	0	0	0	0	0	0	5
7:30-7:45	0	0	0	0	0	0	4	0	3	0	0	0	0	0	0	0	7
7:45-8:00	0	0	0	0	0	0	10	0	5	0	0	0	0	0	0	0	15
8:00-8:15	0	0	0	0	0	0	3	0	4	0	0	0	0	0	0	0	7
8:15-8:30	0	0	0	0	0	0	4	0	4	1	0	0	0	0	0	0	9
8:30-8:45	0	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	3
8:45-9:00	0	0	0	0	0	0	6	0	5	0	0	0	0	0	0	0	11
MIDDAY PERIOD COUNTS																	
Period	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	TOTAL
9:00-9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15-9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30-9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45-10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00-10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15-10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30-10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45-11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00-11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15-11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30-11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45-12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00-12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15-12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30-12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45-13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00-13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15-13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30-13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45-14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00-14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15-14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30-14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45-15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00-15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15-15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30-15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45-16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM PERIOD COUNTS																	
Period	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	TOTAL
16:00-16:15	0	0	0	0	0	0	4	0	6	0	1	0	0	0	0	0	11
16:15-16:30	1	0	0	0	0	0	4	0	9	0	0	0	0	0	0	0	14
16:30-16:45	1	0	0	0	0	0	2	0	3	0	0	0	0	0	0	0	6
16:45-17:00	2	0	0	0	0	1	3	0	7	1	0	0	0	1	0	0	15
17:00-17:15	3	0	0	0	0	0	2	0	4	1	1	0	0	1	0	0	12
17:15-17:30	1	0	0	0	0	0	6	0	8	0	0	0	0	0	0	0	15
17:30-17:45	0	0	0	0	0	0	0	0	9	1	0	0	0	0	0	0	11
17:45-18:00	2	0	0	0	0	0	6	0	10	0	1	0	0	0	0	0	19

APPENDIX B

LOS Results

SimTraffic LOS Report

Project: Eagle Mountain Eagle Heights Village TIS
Analysis Period: Existing (2019) Background
Time Period: Evening Peak Hour **Project #: UT19-1417**

Intersection: Pony Express Parkway & Eagle Mountain Boulevard
Type: Roundabout

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	85	82	96	4.5	A
	T	126	124	98	5.9	A
	R	21	22	104	4.3	A
	Subtotal	232	228	98	5.2	A
SB	L	71	68	95	3.8	A
	T	111	113	102	5.4	A
	R	34	36	106	3.8	A
	Subtotal	216	217	100	4.6	A
EB	L	125	117	93	6.1	A
	T	130	126	97	7.3	A
	R	150	152	102	5.8	A
	Subtotal	405	395	98	6.4	A
WB	L	19	17	89	4.1	A
	T	41	43	104	5.7	A
	R	43	47	110	4.2	A
	Subtotal	103	107	104	4.8	A
Total		956	947	99	5.5	A

Intersection: Lake Mountain Road & Eagle Mountain Boulevard
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	6	7	112	4.1	A
	Subtotal	6	7	117	4.1	A
SB	R	14	14	102	2.6	A
	Subtotal	14	14	100	2.6	A
EB	L	31	30	98	3.3	A
	T	190	183	97	1.6	A
	R	2	3	150	2.2	A
	Subtotal	223	216	97	1.8	A
WB	T	12	12	102	0.1	A
	Subtotal	12	12	100	0.1	A
Total		254	249	98	1.9	A

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #1 4:45

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.3	0.3	0.2	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.1
Total Delay (hr)	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	5.6	6.5	4.8	3.2	5.3	4.3	4.0	5.5	4.0	3.3	5.2	3.4
Vehicles Entered	28	29	34	5	11	11	21	31	5	17	25	8
Vehicles Exited	28	29	34	4	10	11	20	30	5	17	25	8
Hourly Exit Rate	112	116	136	16	40	44	80	120	20	68	100	32
Input Volume	118	122	141	18	39	40	80	119	20	67	104	32
% of Volume	95	95	96	89	103	110	100	101	100	101	96	100

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #1 4:45

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.2
Total Delay (hr)	0.3
Total Del/Veh (s)	5.0
Vehicles Entered	225
Vehicles Exited	221
Hourly Exit Rate	884
Input Volume	900
% of Volume	98

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #2 5:00

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.3	0.3	0.3	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
Total Delay (hr)	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.8	6.8	5.0	3.6	4.8	3.8	4.1	5.7	4.2	3.6	5.0	3.6
Vehicles Entered	27	31	38	4	10	10	19	28	6	15	28	8
Vehicles Exited	26	31	38	4	10	11	20	29	6	15	28	9
Hourly Exit Rate	104	124	152	16	40	44	80	116	24	60	112	36
Input Volume	118	122	141	18	39	40	80	119	20	67	104	32
% of Volume	88	102	108	89	103	110	100	97	120	90	108	112

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #2 5:00

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.2
Total Delay (hr)	0.3
Total Del/Veh (s)	5.0
Vehicles Entered	224
Vehicles Exited	227
Hourly Exit Rate	908
Input Volume	900
% of Volume	101

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #3 5:15

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.4	0.4	0.3	0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.3	0.2
Total Delay (hr)	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0
Total Del/Veh (s)	6.6	7.6	6.5	4.3	6.2	4.0	4.8	6.0	4.6	3.8	5.4	3.9
Vehicles Entered	32	37	45	5	12	16	25	34	6	18	32	12
Vehicles Exited	32	37	45	4	12	15	25	34	6	18	32	11
Hourly Exit Rate	128	148	180	16	48	60	100	136	24	72	128	44
Input Volume	147	153	176	22	48	51	100	148	25	84	131	40
% of Volume	87	97	102	73	100	118	100	92	96	86	98	110

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #3 5:15

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.3
Total Delay (hr)	0.5
Total Del/Veh (s)	5.8
Vehicles Entered	274
Vehicles Exited	271
Hourly Exit Rate	1084
Input Volume	1125
% of Volume	96

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #4 5:30

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.3	0.3	0.3	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2
Total Delay (hr)	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	5.8	7.0	5.9	3.5	5.0	3.5	4.4	5.5	3.6	3.8	5.3	3.6
Vehicles Entered	30	29	34	4	11	9	18	30	5	18	28	8
Vehicles Exited	30	29	35	4	11	10	18	31	5	18	29	9
Hourly Exit Rate	120	116	140	16	44	40	72	124	20	72	116	36
Input Volume	118	122	141	18	39	40	80	119	20	67	104	32
% of Volume	102	95	99	89	113	100	90	104	100	107	112	112

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #4 5:30

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.2
Total Delay (hr)	0.4
Total Del/Veh (s)	5.2
Vehicles Entered	224
Vehicles Exited	229
Hourly Exit Rate	916
Input Volume	900
% of Volume	102

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Entire Run

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.3	0.3	0.3	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
Total Delay (hr)	0.2	0.3	0.2	0.0	0.1	0.1	0.1	0.2	0.0	0.1	0.2	0.0
Total Del/Veh (s)	6.1	7.3	5.8	4.1	5.7	4.2	4.5	5.9	4.3	3.8	5.4	3.8
Vehicles Entered	118	126	152	18	44	46	82	123	22	68	113	37
Vehicles Exited	117	126	152	17	43	47	82	124	22	68	113	36
Hourly Exit Rate	117	126	152	17	43	47	82	124	22	68	113	36
Input Volume	125	130	150	19	41	43	85	126	21	71	111	34
% of Volume	93	97	102	89	104	110	96	98	104	95	102	106

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Entire Run

Movement	All
Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.2
Total Delay (hr)	1.5
Total Del/Veh (s)	5.5
Vehicles Entered	949
Vehicles Exited	947
Hourly Exit Rate	947
Input Volume	956
% of Volume	99

2: Lake Mountain Road & Eagle Mountain Boulevard Performance by movement Interval #1 4:45

Movement	EBL	EBT	EBR	WBT	NBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.1	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	2.9	1.4	0.6	0.1	4.0	2.6	1.6
Vehicles Entered	6	43	1	3	2	3	58
Vehicles Exited	6	45	0	3	2	3	59
Hourly Exit Rate	24	180	0	12	8	12	236
Input Volume	29	178	2	11	6	13	239
% of Volume	83	101	0	109	133	92	99

2: Lake Mountain Road & Eagle Mountain Boulevard Performance by movement Interval #2 5:00

Movement	EBL	EBT	EBR	WBT	NBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0		0.1	0.1	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	3.2	1.7	0.2	0.0	4.8	2.0	2.0
Vehicles Entered	7	46	0	3	2	2	60
Vehicles Exited	7	45	1	3	2	2	60
Hourly Exit Rate	28	180	4	12	8	8	240
Input Volume	29	178	2	11	6	13	239
% of Volume	97	101	200	109	133	62	100

2: Lake Mountain Road & Eagle Mountain Boulevard Performance by movement Interval #3 5:15

Movement	EBL	EBT	EBR	WBT	NBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0		0.1	0.1	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	3.4	1.7	3.6	0.1	4.2	2.4	2.1
Vehicles Entered	10	51	0	3	2	5	71
Vehicles Exited	9	50	0	3	2	5	69
Hourly Exit Rate	36	200	0	12	8	20	276
Input Volume	36	224	2	14	7	16	299
% of Volume	100	89	0	86	114	125	92

2: Lake Mountain Road & Eagle Mountain Boulevard Performance by movement Interval #4 5:30

Movement	EBL	EBT	EBR	WBT	NBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.1	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	2.6	1.3	2.1	0.1	3.1	2.8	1.5
Vehicles Entered	8	44	1	3	1	3	60
Vehicles Exited	8	43	1	3	1	3	59
Hourly Exit Rate	32	172	4	12	4	12	236
Input Volume	29	178	2	11	6	13	239
% of Volume	110	97	200	109	67	92	99

2: Lake Mountain Road & Eagle Mountain Boulevard Performance by movement Entire Run

Movement	EBL	EBT	EBR	WBT	NBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.1	0.1	0.0
Total Delay (hr)	0.0	0.1	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	3.3	1.6	2.2	0.1	4.1	2.6	1.9
Vehicles Entered	31	183	3	12	7	14	250
Vehicles Exited	30	183	3	12	7	14	249
Hourly Exit Rate	30	183	3	12	7	14	249
Input Volume	31	190	2	12	6	14	254
% of Volume	98	97	150	102	112	102	98

Total Network Performance By Interval

Interval Start	4:45	5:00	5:15	5:30	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.2	0.2	0.3	0.2	0.2
Total Delay (hr)	0.4	0.4	0.6	0.4	1.8
Total Del/Veh (s)	5.9	6.0	6.9	6.0	6.8
Vehicles Entered	225	224	273	224	949
Vehicles Exited	222	227	269	229	946
Hourly Exit Rate	888	908	1076	916	946
Input Volume	1874	1874	2341	1874	1991
% of Volume	47	48	46	49	48

Intersection: 1: Pony Express Parkway & Eagle Mountain Boulevard, Interval #1

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	80	42	61	54
Average Queue (ft)	36	15	30	18
95th Queue (ft)	83	44	66	53
Link Distance (ft)	2390	5860	1672	2225
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 1: Pony Express Parkway & Eagle Mountain Boulevard, Interval #2

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	63	42	60	46
Average Queue (ft)	37	18	31	19
95th Queue (ft)	70	49	64	53
Link Distance (ft)	2390	5860	1672	2225
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 1: Pony Express Parkway & Eagle Mountain Boulevard, Interval #3

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	98	53	70	61
Average Queue (ft)	53	24	37	23
95th Queue (ft)	100	56	77	66
Link Distance (ft)	2390	5860	1672	2225
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 1: Pony Express Parkway & Eagle Mountain Boulevard, Interval #4

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	83	35	55	51
Average Queue (ft)	45	20	28	17
95th Queue (ft)	91	47	61	52
Link Distance (ft)	2390	5860	1672	2225
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 1: Pony Express Parkway & Eagle Mountain Boulevard, All Intervals

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	110	60	80	79
Average Queue (ft)	43	19	32	19
95th Queue (ft)	88	50	67	56
Link Distance (ft)	2390	5860	1672	2225
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Lake Mountain Road & Eagle Mountain Boulevard, Interval #1

Movement	NB	SB
Directions Served	LTR	LTR
Maximum Queue (ft)	30	24
Average Queue (ft)	7	9
95th Queue (ft)	28	30
Link Distance (ft)	844	1300
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 2: Lake Mountain Road & Eagle Mountain Boulevard, Interval #2

Movement	EB	NB	SB
Directions Served	L	LTR	LTR
Maximum Queue (ft)	6	28	24
Average Queue (ft)	1	5	6
95th Queue (ft)	9	24	25
Link Distance (ft)		844	1300
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	200		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Lake Mountain Road & Eagle Mountain Boulevard, Interval #3

Movement	EB	NB	SB
Directions Served	L	LTR	LTR
Maximum Queue (ft)	6	27	32
Average Queue (ft)	1	8	12
95th Queue (ft)	9	29	35
Link Distance (ft)		844	1300
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	200		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Lake Mountain Road & Eagle Mountain Boulevard, Interval #4

Movement	NB	SB
Directions Served	LTR	LTR
Maximum Queue (ft)	15	24
Average Queue (ft)	3	10
95th Queue (ft)	17	31
Link Distance (ft)	844	1300
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 2: Lake Mountain Road & Eagle Mountain Boulevard, All Intervals

Movement	EB	NB	SB
Directions Served	L	LTR	LTR
Maximum Queue (ft)	12	31	32
Average Queue (ft)	0	6	9
95th Queue (ft)	6	25	31
Link Distance (ft)		844	1300
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	200		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty, Interval #1: 0
Network wide Queuing Penalty, Interval #2: 0
Network wide Queuing Penalty, Interval #3: 0
Network wide Queuing Penalty, Interval #4: 0
Network wide Queuing Penalty, All Intervals: 0

SimTraffic LOS Report

Project: Eagle Mountain Eagle Heights Village TIS
Analysis Period: Existing (2019) Plus Project
Time Period: Evening Peak Hour **Project #: UT19-1417**

Intersection: Pony Express Parkway & Eagle Mountain Boulevard
Type: Roundabout

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	85	84	99	5.4	A
	T	126	125	99	6.9	A
	R	21	22	104	5.4	A
	Subtotal	232	231	100	6.2	A
SB	L	118	115	97	4.3	A
	T	111	109	98	6.0	A
	R	34	34	100	4.4	A
	Subtotal	263	258	98	5.0	A
EB	L	125	126	101	7.5	A
	T	188	182	97	9.5	A
	R	150	142	95	7.7	A
	Subtotal	463	450	97	8.4	A
WB	L	19	19	100	5.4	A
	T	75	74	98	7.2	A
	R	70	68	97	6.0	A
	Subtotal	164	161	98	6.5	A
Total		1,122	1,100	98	6.8	A

Intersection: Lake Mountain Road & Eagle Mountain Boulevard
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	67	63	94	4.5	A
	T	1	1	133	0.5	A
	Subtotal	68	64	94	4.4	A
SB	R	14	13	95	3.2	A
	Subtotal	14	13	93	3.2	A
EB	L	31	30	98	5.6	A
	T	189	184	97	2.4	A
	R	107	108	101	4.1	A
	Subtotal	327	322	98	3.3	A
WB	T	12	12	102	0.2	A
	Subtotal	12	12	100	0.2	A
Total		420	411	98	3.4	A

SimTraffic LOS Report

Project: Eagle Mountain Eagle Heights Village TIS
Analysis Period: Existing (2019) Plus Project
Time Period: Evening Peak Hour **Project #:** UT19-1417

Intersection: Lake Mountain Road & Access 1
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	T	43	42	97	0.4	A
	Subtotal	43	42	98	0.4	A
SB	T	67	67	100	0.3	A
	R	40	41	102	0.2	A
	Subtotal	107	108	101	0.3	A
EB	L	25	24	95	4.7	A
	Subtotal	25	24	96	4.7	A
Total		176	174	99	0.9	A

Intersection: Lake Mountain Road & Access 2
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	T	20	21	104	0.4	A
	Subtotal	20	21	105	0.4	A
SB	T	33	32	98	0.9	A
	R	35	36	103	0.6	A
	Subtotal	68	68	100	0.7	A
EB	L	22	20	90	4.2	A
	Subtotal	22	20	91	4.2	A
Total		110	109	99	1.3	A

SimTraffic LOS Report

Project: Eagle Mountain Eagle Heights Village TIS
Analysis Period: Existing (2019) Plus Project
Time Period: Evening Peak Hour **Project #:** UT19-1417

Intersection: Lake Mountain Road & Access 3
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	T	6	6	96	0.0	A
	Subtotal	6	6	100	0.0	A
SB	T	2	2	89	1.6	A
	R	30	29	97	0.4	A
	Subtotal	32	31	97	0.5	A
EB	L	14	14	102	3.9	A
	Subtotal	14	14	100	3.9	A
Total		52	51	98	1.4	A

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #1 4:45

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.3	0.3	0.3	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
Total Delay (hr)	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Total Del/Veh (s)	5.9	7.8	6.1	4.0	6.6	5.3	5.2	6.0	6.0	4.1	5.3	4.2
Vehicles Entered	29	44	32	5	18	14	18	31	4	26	24	9
Vehicles Exited	29	43	32	5	18	14	18	31	4	26	24	10
Hourly Exit Rate	116	172	128	20	72	56	72	124	16	104	96	40
Input Volume	118	177	141	18	71	66	80	119	20	111	104	32
% of Volume	98	97	91	111	101	85	90	104	80	94	92	125

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #1 4:45

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.2
Total Delay (hr)	0.4
Total Del/Veh (s)	5.9
Vehicles Entered	254
Vehicles Exited	254
Hourly Exit Rate	1016
Input Volume	1057
% of Volume	96

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #2 5:00

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.3	0.3	0.3	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.2
Total Delay (hr)	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Total Del/Veh (s)	6.0	7.7	6.1	4.5	6.4	4.9	4.6	6.4	5.0	3.9	5.5	4.4
Vehicles Entered	30	41	33	5	16	16	22	28	6	28	26	7
Vehicles Exited	30	41	33	5	16	16	22	28	6	27	27	7
Hourly Exit Rate	120	164	132	20	64	64	88	112	24	108	108	28
Input Volume	118	177	141	18	71	66	80	119	20	111	104	32
% of Volume	102	93	94	111	90	97	110	94	120	97	104	88

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #2 5:00

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.2
Total Delay (hr)	0.4
Total Del/Veh (s)	5.8
Vehicles Entered	258
Vehicles Exited	258
Hourly Exit Rate	1032
Input Volume	1057
% of Volume	98

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #3 5:15

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.5	0.5	0.5	0.0	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.3
Total Delay (hr)	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0
Total Del/Veh (s)	9.1	11.0	9.9	6.5	7.0	5.3	5.8	7.2	5.7	4.2	6.2	4.4
Vehicles Entered	35	53	42	5	22	21	23	37	6	35	34	10
Vehicles Exited	35	53	42	4	20	20	24	37	6	34	34	10
Hourly Exit Rate	140	212	168	16	80	80	96	148	24	136	136	40
Input Volume	147	221	176	22	88	82	100	148	25	139	131	40
% of Volume	95	96	95	73	91	98	96	100	96	98	104	100

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #3 5:15

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.3
Total Delay (hr)	0.7
Total Del/Veh (s)	7.7
Vehicles Entered	323
Vehicles Exited	319
Hourly Exit Rate	1276
Input Volume	1319
% of Volume	97

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #4 5:30

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.4	0.4	0.3	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.2
Total Delay (hr)	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Total Del/Veh (s)	7.1	9.0	6.9	5.5	6.6	6.0	5.0	7.0	4.9	4.1	5.7	4.0
Vehicles Entered	31	43	35	5	17	16	20	29	6	27	24	7
Vehicles Exited	32	45	36	5	19	17	20	29	6	29	24	8
Hourly Exit Rate	128	180	144	20	76	68	80	116	24	116	96	32
Input Volume	118	177	141	18	71	66	80	119	20	111	104	32
% of Volume	108	102	102	111	107	103	100	97	120	105	92	100

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #4 5:30

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.3
Total Delay (hr)	0.5
Total Del/Veh (s)	6.5
Vehicles Entered	260
Vehicles Exited	270
Hourly Exit Rate	1080
Input Volume	1057
% of Volume	102

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Entire Run

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.4	0.4	0.4	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.2
Total Delay (hr)	0.3	0.5	0.3	0.0	0.2	0.1	0.1	0.2	0.0	0.1	0.2	0.0
Total Del/Veh (s)	7.5	9.5	7.7	5.4	7.2	6.0	5.4	6.9	5.4	4.3	6.0	4.4
Vehicles Entered	126	181	143	19	74	68	83	125	22	115	110	34
Vehicles Exited	126	182	142	19	74	68	84	125	22	115	109	34
Hourly Exit Rate	126	182	142	19	74	68	84	125	22	115	109	34
Input Volume	125	188	150	19	75	70	85	126	21	118	111	34
% of Volume	101	97	95	100	98	97	99	99	104	97	98	100

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Entire Run

Movement	All
Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.3
Total Delay (hr)	2.1
Total Del/Veh (s)	6.8
Vehicles Entered	1100
Vehicles Exited	1100
Hourly Exit Rate	1100
Input Volume	1122
% of Volume	98

2: Lake Mountain Road & Eagle Mountain Boulevard Performance by movement Interval #1 4:45

Movement	EBL	EBT	EBR	WBT	NBL	NBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0		0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	4.4	2.2	3.2	0.2	4.3		3.4	2.9
Vehicles Entered	8	40	26	3	14	0	3	94
Vehicles Exited	8	40	26	3	14	0	3	94
Hourly Exit Rate	32	160	104	12	56	0	12	376
Input Volume	29	178	101	11	63	1	13	396
% of Volume	110	90	103	109	89	0	92	95

2: Lake Mountain Road & Eagle Mountain Boulevard Performance by movement Interval #2 5:00

Movement	EBL	EBT	EBR	WBT	NBL	NBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0		0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	5.2	1.9	3.5	0.2	4.1		2.9	2.9
Vehicles Entered	6	42	25	3	15	0	4	95
Vehicles Exited	7	41	25	3	15	0	4	95
Hourly Exit Rate	28	164	100	12	60	0	16	380
Input Volume	29	178	101	11	63	1	13	396
% of Volume	97	92	99	109	95	0	123	96

2: Lake Mountain Road & Eagle Mountain Boulevard Performance by movement Interval #3 5:15

Movement	EBL	EBT	EBR	WBT	NBL	NBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0		0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	5.9	2.5	3.9	0.1	4.5		2.6	3.4
Vehicles Entered	8	55	30	3	19	0	4	119
Vehicles Exited	7	56	30	3	19	0	3	118
Hourly Exit Rate	28	224	120	12	76	0	12	472
Input Volume	36	223	126	14	79	0	16	494
% of Volume	78	100	95	86	96		75	96

2: Lake Mountain Road & Eagle Mountain Boulevard Performance by movement Interval #4 5:30

Movement	EBL	EBT	EBR	WBT	NBL	NBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0		0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	5.0	2.3	4.0	0.1	4.7		3.2	3.3
Vehicles Entered	7	47	26	2	15	0	3	100
Vehicles Exited	8	47	28	2	15	0	3	103
Hourly Exit Rate	32	188	112	8	60	0	12	412
Input Volume	29	178	101	11	63	1	13	396
% of Volume	110	106	111	73	95	0	92	104

2: Lake Mountain Road & Eagle Mountain Boulevard Performance by movement Entire Run

Movement	EBL	EBT	EBR	WBT	NBL	NBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0
Total Delay (hr)	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.4
Total Del/Veh (s)	5.6	2.4	4.1	0.2	4.5	0.5	3.2	3.4
Vehicles Entered	28	184	107	12	63	1	13	408
Vehicles Exited	30	184	108	12	63	1	13	411
Hourly Exit Rate	30	184	108	12	63	1	13	411
Input Volume	31	189	107	12	67	1	14	420
% of Volume	98	97	101	102	94	133	95	98

3: Lake Mountain Road & Access 1 Performance by movement Interval #1 4:45

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.3	0.4	0.2	0.2	0.8
Vehicles Entered	5	9	14	12	40
Vehicles Exited	5	9	14	12	40
Hourly Exit Rate	20	36	56	48	160
Input Volume	24	41	63	38	166
% of Volume	83	88	89	126	96

3: Lake Mountain Road & Access 1 Performance by movement Interval #2 5:00

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.5	0.4	0.3	0.2	0.8
Vehicles Entered	5	11	15	10	41
Vehicles Exited	5	11	15	10	41
Hourly Exit Rate	20	44	60	40	164
Input Volume	24	41	63	38	166
% of Volume	83	107	95	105	99

3: Lake Mountain Road & Access 1 Performance by movement Interval #3 5:15

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	5.4	0.5	0.3	0.1	1.1
Vehicles Entered	8	12	20	9	49
Vehicles Exited	8	12	20	9	49
Hourly Exit Rate	32	48	80	36	196
Input Volume	29	50	79	47	205
% of Volume	110	96	101	77	96

3: Lake Mountain Road & Access 1 Performance by movement Interval #4 5:30

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	5.1	0.4	0.4	0.1	0.9
Vehicles Entered	5	10	18	10	43
Vehicles Exited	5	10	18	10	43
Hourly Exit Rate	20	40	72	40	172
Input Volume	24	41	63	38	166
% of Volume	83	98	114	105	104

3: Lake Mountain Road & Access 1 Performance by movement Entire Run

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.7	0.4	0.3	0.2	0.9
Vehicles Entered	24	42	67	41	174
Vehicles Exited	24	42	67	41	174
Hourly Exit Rate	24	42	67	41	174
Input Volume	25	43	67	40	176
% of Volume	95	97	100	102	99

4: Lake Mountain Road & Access 2 Performance by movement Interval #1 4:45

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.0	0.4	0.1	0.4	1.1
Vehicles Entered	5	4	7	7	23
Vehicles Exited	5	4	7	7	23
Hourly Exit Rate	20	16	28	28	92
Input Volume	21	19	31	33	104
% of Volume	95	84	90	85	88

4: Lake Mountain Road & Access 2 Performance by movement Interval #2 5:00

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	3.9	0.3	1.1	0.5	1.4
Vehicles Entered	6	5	7	8	26
Vehicles Exited	6	5	7	9	27
Hourly Exit Rate	24	20	28	36	108
Input Volume	21	19	31	33	104
% of Volume	114	105	90	109	104

4: Lake Mountain Road & Access 2 Performance by movement Interval #3 5:15

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.1	0.4	1.1	0.7	1.5
Vehicles Entered	6	6	10	11	33
Vehicles Exited	6	6	10	10	32
Hourly Exit Rate	24	24	40	40	128
Input Volume	26	24	38	41	129
% of Volume	92	100	105	98	99

4: Lake Mountain Road & Access 2 Performance by movement Interval #4 5:30

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.2	0.4	1.0	0.5	1.2
Vehicles Entered	4	5	8	10	27
Vehicles Exited	4	5	8	10	27
Hourly Exit Rate	16	20	32	40	108
Input Volume	21	19	31	33	104
% of Volume	76	105	103	121	104

4: Lake Mountain Road & Access 2 Performance by movement Entire Run

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.2	0.4	0.9	0.6	1.3
Vehicles Entered	20	21	32	36	109
Vehicles Exited	20	21	32	36	109
Hourly Exit Rate	20	21	32	36	109
Input Volume	22	20	33	35	110
% of Volume	90	104	98	103	99

5: Lake Mountain Road & Access 3 Performance by movement Interval #1 4:45

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1		0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.3	0.0		0.2	1.5
Vehicles Entered	3	1	0	6	10
Vehicles Exited	3	1	0	6	10
Hourly Exit Rate	12	4	0	24	40
Input Volume	13	6	2	28	49
% of Volume	92	67	0	86	82

5: Lake Mountain Road & Access 3 Performance by movement Interval #2 5:00

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1		0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	3.8	0.0		0.3	1.3
Vehicles Entered	3	2	0	7	12
Vehicles Exited	3	2	0	6	11
Hourly Exit Rate	12	8	0	24	44
Input Volume	13	6	2	28	49
% of Volume	92	133	0	86	90

5: Lake Mountain Road & Access 3 Performance by movement Interval #3 5:15

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.3	0.0	0.3	0.6	1.4
Vehicles Entered	4	2	1	9	16
Vehicles Exited	4	2	1	9	16
Hourly Exit Rate	16	8	4	36	64
Input Volume	16	7	3	35	61
% of Volume	100	114	133	103	105

5: Lake Mountain Road & Access 3 Performance by movement Interval #4 5:30

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.3	0.0	0.3	0.5	1.3
Vehicles Entered	3	1	1	7	12
Vehicles Exited	3	2	1	7	13
Hourly Exit Rate	12	8	4	28	52
Input Volume	13	6	2	28	49
% of Volume	92	133	200	100	106

5: Lake Mountain Road & Access 3 Performance by movement Entire Run

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	3.9	0.0	1.6	0.4	1.4
Vehicles Entered	14	6	2	28	50
Vehicles Exited	14	6	2	29	51
Hourly Exit Rate	14	6	2	29	51
Input Volume	14	6	2	30	52
% of Volume	102	96	89	97	98

Total Network Performance By Interval

Interval Start	4:45	5:00	5:15	5:30	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.2	0.2	0.3	0.3	0.3
Total Delay (hr)	0.6	0.6	1.0	0.7	2.9
Total Del/Veh (s)	7.6	7.6	9.8	8.3	9.2
Vehicles Entered	254	261	323	258	1101
Vehicles Exited	255	257	311	275	1107
Hourly Exit Rate	1020	1028	1244	1100	1107
Input Volume	2664	2664	3319	2664	2828
% of Volume	38	39	37	41	39

Intersection: 1: Pony Express Parkway & Eagle Mountain Boulevard, Interval #1

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	91	57	67	49
Average Queue (ft)	47	27	38	20
95th Queue (ft)	98	63	70	55
Link Distance (ft)	2390	5855	1672	2225
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 1: Pony Express Parkway & Eagle Mountain Boulevard, Interval #2

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	105	56	66	59
Average Queue (ft)	50	28	35	25
95th Queue (ft)	103	63	69	63
Link Distance (ft)	2390	5855	1672	2225
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 1: Pony Express Parkway & Eagle Mountain Boulevard, Interval #3

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	144	61	75	65
Average Queue (ft)	80	33	47	31
95th Queue (ft)	153	68	83	69
Link Distance (ft)	2390	5855	1672	2225
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 1: Pony Express Parkway & Eagle Mountain Boulevard, Interval #4

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	112	64	68	54
Average Queue (ft)	61	28	39	27
95th Queue (ft)	113	67	74	62
Link Distance (ft)	2390	5855	1672	2225
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 1: Pony Express Parkway & Eagle Mountain Boulevard, All Intervals

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	155	78	83	72
Average Queue (ft)	60	29	40	26
95th Queue (ft)	121	66	75	63
Link Distance (ft)	2390	5855	1672	2225
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Lake Mountain Road & Eagle Mountain Boulevard, Interval #1

Movement	EB	NB	SB
Directions Served	L	LTR	LTR
Maximum Queue (ft)	6	40	28
Average Queue (ft)	1	24	11
95th Queue (ft)	9	45	33
Link Distance (ft)		113	1292
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	200		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Lake Mountain Road & Eagle Mountain Boulevard, Interval #2

Movement	EB	NB	SB
Directions Served	L	LTR	LTR
Maximum Queue (ft)	6	33	28
Average Queue (ft)	1	25	10
95th Queue (ft)	9	41	32
Link Distance (ft)		113	1292
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	200		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Lake Mountain Road & Eagle Mountain Boulevard, Interval #3

Movement	NB	SB
Directions Served	LTR	LTR
Maximum Queue (ft)	47	28
Average Queue (ft)	29	11
95th Queue (ft)	53	34
Link Distance (ft)	113	1292
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 2: Lake Mountain Road & Eagle Mountain Boulevard, Interval #4

Movement	EB	NB	SB
Directions Served	L	LTR	LTR
Maximum Queue (ft)	6	51	28
Average Queue (ft)	1	28	9
95th Queue (ft)	9	55	31
Link Distance (ft)		113	1292
Upstream Blk Time (%)		0	
Queuing Penalty (veh)		0	
Storage Bay Dist (ft)	200		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Lake Mountain Road & Eagle Mountain Boulevard, All Intervals

Movement	EB	NB	SB
Directions Served	L	LTR	LTR
Maximum Queue (ft)	18	58	31
Average Queue (ft)	1	27	10
95th Queue (ft)	8	49	32
Link Distance (ft)		113	1292
Upstream Blk Time (%)		0	
Queuing Penalty (veh)		0	
Storage Bay Dist (ft)	200		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Lake Mountain Road & Access 1, Interval #1

Movement	EB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	16
95th Queue (ft)	41
Link Distance (ft)	504
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 3: Lake Mountain Road & Access 1, Interval #2

Movement	EB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	16
95th Queue (ft)	41
Link Distance (ft)	504
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 3: Lake Mountain Road & Access 1, Interval #3

Movement	EB
Directions Served	LR
Maximum Queue (ft)	44
Average Queue (ft)	22
95th Queue (ft)	54
Link Distance (ft)	504
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 3: Lake Mountain Road & Access 1, Interval #4

Movement	EB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	16
95th Queue (ft)	41
Link Distance (ft)	504
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 3: Lake Mountain Road & Access 1, All Intervals

Movement	EB
Directions Served	LR
Maximum Queue (ft)	44
Average Queue (ft)	17
95th Queue (ft)	45
Link Distance (ft)	504
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Lake Mountain Road & Access 2, Interval #1

Movement	EB
Directions Served	LR
Maximum Queue (ft)	34
Average Queue (ft)	17
95th Queue (ft)	43
Link Distance (ft)	420
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Lake Mountain Road & Access 2, Interval #2

Movement	EB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	17
95th Queue (ft)	42
Link Distance (ft)	420
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Lake Mountain Road & Access 2, Interval #3

Movement	EB
Directions Served	LR
Maximum Queue (ft)	39
Average Queue (ft)	16
95th Queue (ft)	44
Link Distance (ft)	420
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Lake Mountain Road & Access 2, Interval #4

Movement	EB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	15
95th Queue (ft)	40
Link Distance (ft)	420
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Lake Mountain Road & Access 2, All Intervals

Movement	EB
Directions Served	LR
Maximum Queue (ft)	40
Average Queue (ft)	16
95th Queue (ft)	43
Link Distance (ft)	420
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Lake Mountain Road & Access 3, Interval #1

Movement	EB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	11
95th Queue (ft)	35
Link Distance (ft)	492
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Lake Mountain Road & Access 3, Interval #2

Movement	EB
Directions Served	LR
Maximum Queue (ft)	30
Average Queue (ft)	10
95th Queue (ft)	34
Link Distance (ft)	492
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Lake Mountain Road & Access 3, Interval #3

Movement	EB
Directions Served	LR
Maximum Queue (ft)	30
Average Queue (ft)	12
95th Queue (ft)	37
Link Distance (ft)	492
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Lake Mountain Road & Access 3, Interval #4

Movement	EB
Directions Served	LR
Maximum Queue (ft)	28
Average Queue (ft)	10
95th Queue (ft)	33
Link Distance (ft)	492
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Lake Mountain Road & Access 3, All Intervals

Movement	EB
Directions Served	LR
Maximum Queue (ft)	33
Average Queue (ft)	11
95th Queue (ft)	35
Link Distance (ft)	492
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty, Interval #1: 0
Network wide Queuing Penalty, Interval #2: 0
Network wide Queuing Penalty, Interval #3: 0
Network wide Queuing Penalty, Interval #4: 0
Network wide Queuing Penalty, All Intervals: 0

SimTraffic LOS Report

Project: Eagle Mountain Eagle Heights Village TIS
Analysis Period: Future(2024) Background
Time Period: Evening Peak Hour **Project #:** UT19-1417

Intersection: Pony Express Parkway & Eagle Mountain Boulevard
Type: Roundabout

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	134	134	100	7.4	A
	T	162	163	101	8.9	A
	R	26	23	89	7.8	A
	Subtotal	322	320	99	8.2	A
SB	L	134	133	99	5.3	A
	T	151	155	103	6.9	A
	R	40	42	104	5.8	A
	Subtotal	325	330	102	6.1	A
EB	L	155	156	101	14.8	B
	T	188	186	99	15.6	C
	R	215	218	102	15.6	C
	Subtotal	558	560	100	15.4	C
WB	L	21	21	99	6.1	A
	T	81	78	97	8.2	A
	R	93	95	102	6.5	A
	Subtotal	195	194	99	7.1	A
Total		1,400	1,404	100	10.4	B

Intersection: Lake Mountain Road & Eagle Mountain Boulevard
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	10	9	92	5.4	A
	Subtotal	10	9	90	5.4	A
SB	R	51	50	98	2.9	A
	Subtotal	51	50	98	2.9	A
EB	L	84	82	98	5.8	A
	T	249	244	98	2.9	A
	R	15	15	100	4.1	A
	Subtotal	348	341	98	3.7	A
WB	T	15	16	107	0.2	A
	Subtotal	15	16	107	0.2	A
Total		424	416	98	3.5	A

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #1 4:45

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.4	0.4	0.4	0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.3	0.3
Total Delay (hr)	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0
Total Del/Veh (s)	9.8	10.6	9.2	5.9	7.4	5.5	6.0	7.3	6.9	4.8	6.2	4.9
Vehicles Entered	38	43	50	5	19	23	34	39	6	29	38	9
Vehicles Exited	38	42	50	5	20	22	34	38	6	28	37	10
Hourly Exit Rate	152	168	200	20	80	88	136	152	24	112	148	40
Input Volume	146	177	202	20	76	88	126	152	24	126	142	38
% of Volume	104	95	99	100	105	100	108	100	100	89	104	105

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #1 4:45

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.3
Total Delay (hr)	0.7
Total Del/Veh (s)	7.6
Vehicles Entered	333
Vehicles Exited	330
Hourly Exit Rate	1320
Input Volume	1317
% of Volume	100

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #2 5:00

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.4	0.4	0.3	0.3	0.1	0.1	0.3	0.3	0.2	0.3	0.3	0.3
Total Delay (hr)	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0
Total Del/Veh (s)	8.5	10.0	7.8	5.0	7.5	5.4	6.5	7.9	5.7	4.5	6.6	5.5
Vehicles Entered	37	44	50	5	17	22	32	42	6	31	34	12
Vehicles Exited	36	44	50	5	17	22	31	42	6	30	35	12
Hourly Exit Rate	144	176	200	20	68	88	124	168	24	120	140	48
Input Volume	146	177	202	20	76	88	126	152	24	126	142	38
% of Volume	99	99	99	100	89	100	98	111	100	95	99	126

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #2 5:00

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.3
Total Delay (hr)	0.7
Total Del/Veh (s)	7.4
Vehicles Entered	332
Vehicles Exited	330
Hourly Exit Rate	1320
Input Volume	1317
% of Volume	100

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #3 5:15

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.5	0.5	0.4	0.1	0.1	0.1	0.3	0.3	0.2	0.4	0.3	0.3
Total Delay (hr)	0.3	0.4	0.5	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0
Total Del/Veh (s)	22.8	23.4	25.2	7.2	8.1	7.2	8.7	10.8	8.9	5.8	7.4	6.5
Vehicles Entered	45	53	68	6	24	29	37	45	7	39	48	12
Vehicles Exited	43	51	65	7	22	29	38	46	8	40	47	12
Hourly Exit Rate	172	204	260	28	88	116	152	184	32	160	188	48
Input Volume	182	221	253	25	95	109	158	191	31	158	178	47
% of Volume	95	92	103	112	93	106	96	96	103	101	106	102

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #3 5:15

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.4
Total Delay (hr)	1.7
Total Del/Veh (s)	14.4
Vehicles Entered	413
Vehicles Exited	408
Hourly Exit Rate	1632
Input Volume	1648
% of Volume	99

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #4 5:30

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.4	0.4	0.3	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3
Total Delay (hr)	0.2	0.2	0.2	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0
Total Del/Veh (s)	13.7	13.4	13.3	5.1	7.0	5.4	6.7	8.8	6.6	4.8	6.5	5.4
Vehicles Entered	36	46	51	5	17	21	32	37	4	35	35	9
Vehicles Exited	39	48	54	5	18	22	32	36	4	35	36	9
Hourly Exit Rate	156	192	216	20	72	88	128	144	16	140	144	36
Input Volume	146	177	202	20	76	88	126	152	24	126	142	38
% of Volume	107	108	107	100	95	100	102	95	67	111	101	95

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #4 5:30

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.3
Total Delay (hr)	0.9
Total Del/Veh (s)	9.4
Vehicles Entered	328
Vehicles Exited	338
Hourly Exit Rate	1352
Input Volume	1317
% of Volume	103

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Entire Run

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.4	0.4	0.4	0.2	0.1	0.1	0.3	0.3	0.2	0.3	0.3	0.3
Total Delay (hr)	0.6	0.8	1.0	0.0	0.2	0.2	0.3	0.4	0.1	0.2	0.3	0.1
Total Del/Veh (s)	14.8	15.6	15.6	6.1	8.2	6.5	7.4	8.9	7.8	5.3	6.9	5.8
Vehicles Entered	156	186	218	22	77	96	134	163	23	134	155	42
Vehicles Exited	156	186	218	21	78	95	134	163	23	133	155	42
Hourly Exit Rate	156	186	218	21	78	95	134	163	23	133	155	42
Input Volume	155	188	215	21	81	93	134	162	26	134	151	40
% of Volume	101	99	102	99	97	102	100	101	89	99	103	104

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Entire Run

Movement	All
Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.3
Total Delay (hr)	4.1
Total Del/Veh (s)	10.4
Vehicles Entered	1406
Vehicles Exited	1404
Hourly Exit Rate	1404
Input Volume	1400
% of Volume	100

2: Lake Mountain Road & Eagle Mountain Boulevard Performance by movement Interval #1 4:45

Movement	EBL	EBT	EBR	WBT	NBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.1	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	4.1	2.4	3.8	0.1	5.0	2.8	2.8
Vehicles Entered	18	55	4	4	2	11	94
Vehicles Exited	18	54	3	4	2	11	92
Hourly Exit Rate	72	216	12	16	8	44	368
Input Volume	79	234	14	14	9	48	398
% of Volume	91	92	86	114	89	92	92

2: Lake Mountain Road & Eagle Mountain Boulevard Performance by movement Interval #2 5:00

Movement	EBL	EBT	EBR	WBT	NBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.1	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	5.6	2.5	3.0	0.1	5.0	2.8	3.1
Vehicles Entered	19	58	4	3	2	12	98
Vehicles Exited	19	58	4	4	2	12	99
Hourly Exit Rate	76	232	16	16	8	48	396
Input Volume	79	234	14	14	9	48	398
% of Volume	96	99	114	114	89	100	99

2: Lake Mountain Road & Eagle Mountain Boulevard Performance by movement Interval #3 5:15

Movement	EBL	EBT	EBR	WBT	NBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.1	0.1	0.0
Total Delay (hr)	0.0	0.1	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	6.0	3.1	5.3	0.2	5.4	3.0	3.7
Vehicles Entered	23	71	4	5	3	16	122
Vehicles Exited	21	70	4	5	3	16	119
Hourly Exit Rate	84	280	16	20	12	64	476
Input Volume	99	293	18	18	12	60	500
% of Volume	85	96	89	111	100	107	95

2: Lake Mountain Road & Eagle Mountain Boulevard Performance by movement Interval #4 5:30

Movement	EBL	EBT	EBR	WBT	NBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.1	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	5.5	2.6	2.4	0.3	6.0	2.7	3.3
Vehicles Entered	22	62	3	3	2	12	104
Vehicles Exited	23	62	3	3	2	12	105
Hourly Exit Rate	92	248	12	12	8	48	420
Input Volume	79	234	14	14	9	48	398
% of Volume	116	106	86	86	89	100	106

2: Lake Mountain Road & Eagle Mountain Boulevard Performance by movement Entire Run

Movement	EBL	EBT	EBR	WBT	NBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.1	0.1	0.0
Total Delay (hr)	0.1	0.2	0.0	0.0	0.0	0.0	0.4
Total Del/Veh (s)	5.8	2.9	4.1	0.2	5.4	2.9	3.5
Vehicles Entered	82	245	15	16	9	50	417
Vehicles Exited	82	244	15	16	9	50	416
Hourly Exit Rate	82	244	15	16	9	50	416
Input Volume	84	249	15	15	10	51	424
% of Volume	98	98	100	107	92	98	98

Total Network Performance By Interval

Interval Start	4:45	5:00	5:15	5:30	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.3	0.3	0.4	0.3	0.3
Total Delay (hr)	0.9	0.9	2.1	1.2	5.1
Total Del/Veh (s)	9.1	8.9	16.3	10.7	12.7
Vehicles Entered	332	332	415	329	1405
Vehicles Exited	326	333	398	346	1404
Hourly Exit Rate	1304	1332	1592	1384	1404
Input Volume	2812	2812	3521	2812	2989
% of Volume	46	47	45	49	47

Intersection: 1: Pony Express Parkway & Eagle Mountain Boulevard, Interval #1

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	158	62	91	73
Average Queue (ft)	77	33	49	36
95th Queue (ft)	151	67	94	75
Link Distance (ft)	2390	5860	1672	2225
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 1: Pony Express Parkway & Eagle Mountain Boulevard, Interval #2

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	131	71	84	78
Average Queue (ft)	71	33	53	36
95th Queue (ft)	139	71	88	80
Link Distance (ft)	2390	5860	1672	2225
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 1: Pony Express Parkway & Eagle Mountain Boulevard, Interval #3

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	332	86	123	92
Average Queue (ft)	182	47	72	48
95th Queue (ft)	400	85	132	92
Link Distance (ft)	2390	5860	1672	2225
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 1: Pony Express Parkway & Eagle Mountain Boulevard, Interval #4

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	238	67	100	74
Average Queue (ft)	107	35	52	37
95th Queue (ft)	258	69	109	78
Link Distance (ft)	2390	5860	1672	2225
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 1: Pony Express Parkway & Eagle Mountain Boulevard, All Intervals

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	356	92	136	101
Average Queue (ft)	109	37	56	39
95th Queue (ft)	269	74	109	82
Link Distance (ft)	2390	5860	1672	2225
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Lake Mountain Road & Eagle Mountain Boulevard, Interval #1

Movement	EB	NB	SB
Directions Served	L	LTR	LTR
Maximum Queue (ft)	23	24	36
Average Queue (ft)	5	7	22
95th Queue (ft)	24	28	43
Link Distance (ft)		844	1300
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	200		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Lake Mountain Road & Eagle Mountain Boulevard, Interval #2

Movement	EB	NB	SB
Directions Served	L	LTR	LTR
Maximum Queue (ft)	9	30	34
Average Queue (ft)	1	9	22
95th Queue (ft)	11	32	45
Link Distance (ft)		844	1300
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	200		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Lake Mountain Road & Eagle Mountain Boulevard, Interval #3

Movement	EB	NB	SB
Directions Served	L	LTR	LTR
Maximum Queue (ft)	24	27	39
Average Queue (ft)	5	10	26
95th Queue (ft)	27	32	47
Link Distance (ft)		844	1300
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	200		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Lake Mountain Road & Eagle Mountain Boulevard, Interval #4

Movement	EB	NB	SB
Directions Served	L	LTR	LTR
Maximum Queue (ft)	6	27	34
Average Queue (ft)	1	7	22
95th Queue (ft)	9	28	42
Link Distance (ft)		844	1300
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	200		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Lake Mountain Road & Eagle Mountain Boulevard, All Intervals

Movement	EB	NB	SB
Directions Served	L	LTR	LTR
Maximum Queue (ft)	38	31	49
Average Queue (ft)	3	8	23
95th Queue (ft)	19	30	44
Link Distance (ft)		844	1300
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	200		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty, Interval #1: 0
Network wide Queuing Penalty, Interval #2: 0
Network wide Queuing Penalty, Interval #3: 0
Network wide Queuing Penalty, Interval #4: 0
Network wide Queuing Penalty, All Intervals: 0

SimTraffic LOS Report

Project: Eagle Mountain Eagle Heights Village TIS
Analysis Period: Future (2024) Plus Project
Time Period: Evening Peak Hour **Project #: UT19-1417**

Intersection: Pony Express Parkway & Eagle Mountain Boulevard
Type: Roundabout

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	134	132	99	8.4	A
	T	162	164	101	10.1	B
	R	26	25	97	9.0	A
	Subtotal	322	321	100	9.3	A
SB	L	181	178	98	6.4	A
	T	151	152	101	8.0	A
	R	40	43	107	6.0	A
	Subtotal	372	373	100	7.0	A
EB	L	155	150	97	37.6	E
	T	246	241	98	39.3	E
	R	215	215	100	39.0	E
	Subtotal	616	606	98	38.8	E
WB	L	21	21	99	8.4	A
	T	115	112	98	9.5	A
	R	120	115	96	7.8	A
	Subtotal	256	248	97	8.6	A
Total		1,566	1,548	99	20.2	C

Intersection: Lake Mountain Road & Eagle Mountain Boulevard
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	71	74	104	5.6	A
	Subtotal	71	74	104	5.6	A
SB	R	51	48	94	3.3	A
	Subtotal	51	48	94	3.3	A
EB	L	84	80	95	7.3	A
	T	249	243	98	3.6	A
	R	120	121	101	5.9	A
	Subtotal	453	444	98	4.9	A
WB	T	15	14	93	0.2	A
	Subtotal	15	14	93	0.2	A
Total		590	580	98	4.7	A

SimTraffic LOS Report

Project: Eagle Mountain Eagle Heights Village TIS
Analysis Period: Future (2024) Plus Project
Time Period: Evening Peak Hour **Project #:** UT19-1417

Intersection: Lake Mountain Road & Access 1
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	T	48	46	97	0.5	A
	Subtotal	48	46	96	0.5	A
SB	T	80	80	99	0.3	A
	R	40	42	104	0.2	A
	Subtotal	120	122	102	0.3	A
EB	L	25	29	115	5.0	A
	Subtotal	25	29	116	5.0	A
Total		194	197	102	1.0	A

Intersection: Lake Mountain Road & Access 2
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	T	24	23	94	0.4	A
	Subtotal	24	23	96	0.4	A
SB	T	45	42	94	0.8	A
	R	35	36	103	0.7	A
	Subtotal	80	78	98	0.8	A
EB	L	22	22	99	4.3	A
	Subtotal	22	22	100	4.3	A
Total		126	123	97	1.3	A

SimTraffic LOS Report

Project: Eagle Mountain Eagle Heights Village TIS
Analysis Period: Future (2024) Plus Project
Time Period: Evening Peak Hour **Project #:** UT19-1417

Intersection: Lake Mountain Road & Access 3
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	T	10	9	92	0.0	A
	Subtotal	10	9	90	0.0	A
SB	T	15	14	93	0.7	A
	R	30	28	94	0.5	A
	Subtotal	45	42	93	0.6	A
EB	L	14	13	95	3.9	A
	Subtotal	14	13	93	3.9	A
Total		68	64	94	1.2	A

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #1 4:45

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.5	0.5	0.5	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.2
Total Delay (hr)	0.2	0.3	0.2	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0
Total Del/Veh (s)	14.7	16.8	12.6	6.8	8.5	6.5	6.8	8.5	7.3	5.6	7.4	5.2
Vehicles Entered	35	59	46	5	28	28	31	38	6	42	37	9
Vehicles Exited	36	59	46	5	27	27	31	39	6	42	36	9
Hourly Exit Rate	144	236	184	20	108	108	124	156	24	168	144	36
Input Volume	146	232	202	20	108	113	126	152	24	170	142	38
% of Volume	99	102	91	100	100	96	98	103	100	99	101	95

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #1 4:45

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.3
Total Delay (hr)	1.1
Total Del/Veh (s)	10.1
Vehicles Entered	364
Vehicles Exited	363
Hourly Exit Rate	1452
Input Volume	1473
% of Volume	99

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #2 5:00

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.4	0.4	0.4	0.1	0.1	0.1	0.3	0.2	0.3	0.3	0.3	0.3
Total Delay (hr)	0.1	0.2	0.2	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0
Total Del/Veh (s)	10.7	12.0	10.7	8.4	8.8	6.4	6.6	7.8	7.0	5.6	7.4	5.3
Vehicles Entered	36	55	50	5	27	26	33	37	6	40	36	11
Vehicles Exited	35	55	49	5	27	27	32	37	6	39	36	11
Hourly Exit Rate	140	220	196	20	108	108	128	148	24	156	144	44
Input Volume	146	232	202	20	108	113	126	152	24	170	142	38
% of Volume	96	95	97	100	100	96	102	97	100	92	101	116

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #2 5:00

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.3
Total Delay (hr)	0.9
Total Del/Veh (s)	8.8
Vehicles Entered	362
Vehicles Exited	359
Hourly Exit Rate	1436
Input Volume	1473
% of Volume	97

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #3 5:15

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.6	0.6	0.6	0.1	0.1	0.1	0.4	0.3	0.4	0.3	0.3	0.4
Total Delay (hr)	0.7	1.1	1.0	0.0	0.1	0.1	0.1	0.2	0.0	0.1	0.1	0.0
Total Del/Veh (s)	51.5	50.4	50.8	9.5	9.5	8.5	11.2	12.1	11.5	7.2	8.4	6.8
Vehicles Entered	46	71	65	6	33	36	37	48	7	52	45	14
Vehicles Exited	41	63	57	6	32	34	38	47	7	53	45	13
Hourly Exit Rate	164	252	228	24	128	136	152	188	28	212	180	52
Input Volume	182	289	253	25	135	141	158	191	31	213	178	47
% of Volume	90	87	90	96	95	96	96	98	90	100	101	111

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #3 5:15

Movement	All
Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.4
Total Delay (hr)	3.5
Total Del/Veh (s)	25.8
Vehicles Entered	460
Vehicles Exited	436
Hourly Exit Rate	1744
Input Volume	1843
% of Volume	95

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #4 5:30

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.4	0.4	0.4	0.0	0.1	0.1	0.3	0.3	0.3	0.3	0.3	0.2
Total Delay (hr)	0.6	1.2	1.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0
Total Del/Veh (s)	56.4	59.6	58.3	6.8	8.1	7.1	7.6	10.2	8.7	5.6	7.1	5.1
Vehicles Entered	34	58	55	5	26	25	31	40	5	44	34	9
Vehicles Exited	38	65	62	4	26	26	31	41	5	44	35	9
Hourly Exit Rate	152	260	248	16	104	104	124	164	20	176	140	36
Input Volume	146	232	202	20	108	113	126	152	24	170	142	38
% of Volume	104	112	123	80	96	92	98	108	83	104	99	95

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #4 5:30

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.3
Total Delay (hr)	3.4
Total Del/Veh (s)	29.3
Vehicles Entered	366
Vehicles Exited	386
Hourly Exit Rate	1544
Input Volume	1473
% of Volume	105

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Entire Run

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.5	0.5	0.5	0.1	0.1	0.1	0.3	0.3	0.3	0.3	0.3	0.3
Total Delay (hr)	1.6	2.7	2.4	0.0	0.3	0.3	0.3	0.5	0.1	0.3	0.3	0.1
Total Del/Veh (s)	37.6	39.3	39.0	8.4	9.5	7.8	8.4	10.1	9.0	6.4	8.0	6.0
Vehicles Entered	150	242	216	21	113	115	132	163	25	179	152	43
Vehicles Exited	150	241	215	21	112	115	132	164	25	178	152	43
Hourly Exit Rate	150	241	215	21	112	115	132	164	25	178	152	43
Input Volume	155	246	215	21	115	120	134	162	26	181	151	40
% of Volume	97	98	100	99	98	96	99	101	97	98	101	107

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Entire Run

Movement	All
Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.3
Total Delay (hr)	8.9
Total Del/Veh (s)	20.2
Vehicles Entered	1551
Vehicles Exited	1548
Hourly Exit Rate	1548
Input Volume	1566
% of Volume	99

2: Lake Mountain Road & Eagle Mountain Boulevard Performance by movement Interval #1 4:45

Movement	EBL	EBT	EBR	WBT	NBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0	0.1	0.0
Total Delay (hr)	0.0	0.1	0.0	0.0	0.0	0.0	0.2
Total Del/Veh (s)	6.7	3.2	4.8	0.2	5.2	3.1	4.3
Vehicles Entered	21	58	28	2	17	12	138
Vehicles Exited	22	58	28	3	17	12	140
Hourly Exit Rate	88	232	112	12	68	48	560
Input Volume	79	234	113	14	67	48	555
% of Volume	111	99	99	86	101	100	101

2: Lake Mountain Road & Eagle Mountain Boulevard Performance by movement Interval #2 5:00

Movement	EBL	EBT	EBR	WBT	NBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Total Del/Veh (s)	5.1	2.7	4.7	0.3	5.9	3.2	3.9
Vehicles Entered	18	56	27	3	18	11	133
Vehicles Exited	17	55	27	3	18	11	131
Hourly Exit Rate	68	220	108	12	72	44	524
Input Volume	79	234	113	14	67	48	555
% of Volume	86	94	96	86	107	92	94

2: Lake Mountain Road & Eagle Mountain Boulevard Performance by movement Interval #3 5:15

Movement	EBL	EBT	EBR	WBT	NBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0	0.1	0.0
Total Delay (hr)	0.0	0.1	0.1	0.0	0.0	0.0	0.2
Total Del/Veh (s)	7.1	3.7	6.0	0.1	5.8	3.5	4.8
Vehicles Entered	20	69	33	5	23	16	166
Vehicles Exited	20	68	33	5	23	16	165
Hourly Exit Rate	80	272	132	20	92	64	660
Input Volume	99	293	141	18	84	60	695
% of Volume	81	93	94	111	110	107	95

2: Lake Mountain Road & Eagle Mountain Boulevard Performance by movement Interval #4 5:30

Movement	EBL	EBT	EBR	WBT	NBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0	0.1	0.0
Total Delay (hr)	0.0	0.1	0.1	0.0	0.0	0.0	0.2
Total Del/Veh (s)	7.2	3.7	5.4	0.3	5.1	3.0	4.6
Vehicles Entered	20	61	32	3	15	10	141
Vehicles Exited	22	63	33	3	16	10	147
Hourly Exit Rate	88	252	132	12	64	40	588
Input Volume	79	234	113	14	67	48	555
% of Volume	111	108	117	86	96	83	106

2: Lake Mountain Road & Eagle Mountain Boulevard Performance by movement Entire Run

Movement	EBL	EBT	EBR	WBT	NBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0	0.1	0.0
Total Delay (hr)	0.2	0.2	0.2	0.0	0.1	0.0	0.8
Total Del/Veh (s)	7.3	3.6	5.9	0.2	5.6	3.3	4.7
Vehicles Entered	80	244	122	13	74	48	581
Vehicles Exited	80	243	121	14	74	48	580
Hourly Exit Rate	80	243	121	14	74	48	580
Input Volume	84	249	120	15	71	51	590
% of Volume	95	98	101	93	104	94	98

3: Lake Mountain Road & Access 1 Performance by movement Interval #1 4:45

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	5.2	0.5	0.3	0.1	1.0
Vehicles Entered	6	10	20	9	45
Vehicles Exited	6	11	20	9	46
Hourly Exit Rate	24	44	80	36	184
Input Volume	24	45	76	38	183
% of Volume	100	98	105	95	101

3: Lake Mountain Road & Access 1 Performance by movement Interval #2 5:00

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.3	0.4	0.3	0.2	1.0
Vehicles Entered	7	12	16	11	46
Vehicles Exited	8	12	16	11	47
Hourly Exit Rate	32	48	64	44	188
Input Volume	24	45	76	38	183
% of Volume	133	107	84	116	103

3: Lake Mountain Road & Access 1 Performance by movement Interval #3 5:15

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	5.2	0.5	0.3	0.2	1.2
Vehicles Entered	10	13	22	11	56
Vehicles Exited	10	13	22	11	56
Hourly Exit Rate	40	52	88	44	224
Input Volume	29	55	94	47	225
% of Volume	138	95	94	94	100

3: Lake Mountain Road & Access 1 Performance by movement Interval #4 5:30

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.5	0.4	0.3	0.1	0.8
Vehicles Entered	6	10	22	11	49
Vehicles Exited	6	10	22	11	49
Hourly Exit Rate	24	40	88	44	196
Input Volume	24	45	76	38	183
% of Volume	100	89	116	116	107

3: Lake Mountain Road & Access 1 Performance by movement Entire Run

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	5.0	0.5	0.3	0.2	1.0
Vehicles Entered	29	46	80	42	197
Vehicles Exited	29	46	80	42	197
Hourly Exit Rate	29	46	80	42	197
Input Volume	25	48	80	40	194
% of Volume	115	97	99	104	102

4: Lake Mountain Road & Access 2 Performance by movement Interval #1 4:45

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.5	0.5	0.5	0.7	1.2
Vehicles Entered	5	5	11	8	29
Vehicles Exited	5	5	11	9	30
Hourly Exit Rate	20	20	44	36	120
Input Volume	21	23	42	33	119
% of Volume	95	87	105	109	101

4: Lake Mountain Road & Access 2 Performance by movement Interval #2 5:00

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.1	0.3	0.5	0.8	1.2
Vehicles Entered	5	7	8	8	28
Vehicles Exited	5	7	8	8	28
Hourly Exit Rate	20	28	32	32	112
Input Volume	21	23	42	33	119
% of Volume	95	122	76	97	94

4: Lake Mountain Road & Access 2 Performance by movement Interval #3 5:15

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.6	0.3	0.8	0.6	1.3
Vehicles Entered	6	6	12	10	34
Vehicles Exited	6	7	12	10	35
Hourly Exit Rate	24	28	48	40	140
Input Volume	26	29	53	41	149
% of Volume	92	97	91	98	94

4: Lake Mountain Road & Access 2 Performance by movement Interval #4 5:30

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.0	0.5	1.1	0.6	1.4
Vehicles Entered	6	4	12	11	33
Vehicles Exited	6	4	11	11	32
Hourly Exit Rate	24	16	44	44	128
Input Volume	21	23	42	33	119
% of Volume	114	70	105	133	108

4: Lake Mountain Road & Access 2 Performance by movement Entire Run

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.3	0.4	0.8	0.7	1.3
Vehicles Entered	22	23	42	36	123
Vehicles Exited	22	23	42	36	123
Hourly Exit Rate	22	23	42	36	123
Input Volume	22	24	45	35	126
% of Volume	99	94	94	103	97

5: Lake Mountain Road & Access 3 Performance by movement Interval #1 4:45

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	3.7	0.0	0.8	0.4	1.1
Vehicles Entered	3	2	4	8	17
Vehicles Exited	3	2	4	7	16
Hourly Exit Rate	12	8	16	28	64
Input Volume	13	9	14	28	64
% of Volume	92	89	114	100	100

5: Lake Mountain Road & Access 3 Performance by movement Interval #2 5:00

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	3.6	0.0	0.4	0.4	1.2
Vehicles Entered	4	3	2	5	14
Vehicles Exited	4	3	2	6	15
Hourly Exit Rate	16	12	8	24	60
Input Volume	13	9	14	28	64
% of Volume	123	133	57	86	94

5: Lake Mountain Road & Access 3 Performance by movement Interval #3 5:15

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.6	0.1	1.2	0.4	1.3
Vehicles Entered	3	3	3	8	17
Vehicles Exited	3	3	3	8	17
Hourly Exit Rate	12	12	12	32	68
Input Volume	16	12	18	35	81
% of Volume	75	100	67	91	84

5: Lake Mountain Road & Access 3 Performance by movement Interval #4 5:30

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	3.9	0.0	0.6	0.6	1.2
Vehicles Entered	3	1	4	7	15
Vehicles Exited	3	1	4	8	16
Hourly Exit Rate	12	4	16	32	64
Input Volume	13	9	14	28	64
% of Volume	92	44	114	114	100

5: Lake Mountain Road & Access 3 Performance by movement Entire Run

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	3.9	0.0	0.7	0.5	1.2
Vehicles Entered	13	9	14	28	64
Vehicles Exited	13	9	14	28	64
Hourly Exit Rate	13	9	14	28	64
Input Volume	14	10	15	30	68
% of Volume	95	92	93	94	94

Total Network Performance By Interval

Interval Start	4:45	5:00	5:15	5:30	All
Denied Delay (hr)	0.0	0.0	0.1	0.0	0.1
Denied Del/Veh (s)	0.3	0.3	0.4	0.3	0.3
Total Delay (hr)	1.4	1.2	4.0	3.8	10.4
Total Del/Veh (s)	12.4	10.9	27.9	29.8	23.3
Vehicles Entered	362	362	459	366	1554
Vehicles Exited	366	362	426	397	1553
Hourly Exit Rate	1464	1448	1704	1588	1553
Input Volume	3647	3647	4561	3647	3876
% of Volume	40	40	37	44	40

Intersection: 1: Pony Express Parkway & Eagle Mountain Boulevard, Interval #1

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	202	78	96	86
Average Queue (ft)	114	45	57	45
95th Queue (ft)	228	80	106	99
Link Distance (ft)	2390	5855	1672	2225
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 1: Pony Express Parkway & Eagle Mountain Boulevard, Interval #2

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	157	85	83	81
Average Queue (ft)	92	47	50	46
95th Queue (ft)	183	86	88	82
Link Distance (ft)	2390	5855	1672	2225
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 1: Pony Express Parkway & Eagle Mountain Boulevard, Interval #3

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	655	99	137	96
Average Queue (ft)	339	56	80	59
95th Queue (ft)	763	100	146	104
Link Distance (ft)	2390	5855	1672	2225
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 1: Pony Express Parkway & Eagle Mountain Boulevard, Interval #4

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	633	92	103	78
Average Queue (ft)	389	46	63	41
95th Queue (ft)	929	94	109	83
Link Distance (ft)	2390	5855	1672	2225
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 1: Pony Express Parkway & Eagle Mountain Boulevard, All Intervals

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	695	110	153	111
Average Queue (ft)	234	48	62	48
95th Queue (ft)	646	91	116	94
Link Distance (ft)	2390	5855	1672	2225
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Lake Mountain Road & Eagle Mountain Boulevard, Interval #1

Movement	EB	NB	SB
Directions Served	L	LTR	LTR
Maximum Queue (ft)	11	47	37
Average Queue (ft)	1	28	24
95th Queue (ft)	13	51	44
Link Distance (ft)		113	1292
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	200		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Lake Mountain Road & Eagle Mountain Boulevard, Interval #2

Movement	EB	NB	SB
Directions Served	L	LTR	LTR
Maximum Queue (ft)	9	52	43
Average Queue (ft)	2	31	24
95th Queue (ft)	13	57	48
Link Distance (ft)		113	1292
Upstream Blk Time (%)		0	
Queuing Penalty (veh)		0	
Storage Bay Dist (ft)	200		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Lake Mountain Road & Eagle Mountain Boulevard, Interval #3

Movement	EB	NB	SB
Directions Served	L	LTR	LTR
Maximum Queue (ft)	13	56	48
Average Queue (ft)	2	33	28
95th Queue (ft)	19	56	50
Link Distance (ft)		113	1292
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	200		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Lake Mountain Road & Eagle Mountain Boulevard, Interval #4

Movement	EB	NB	SB
Directions Served	L	LTR	LTR
Maximum Queue (ft)	9	46	33
Average Queue (ft)	1	29	21
95th Queue (ft)	11	49	44
Link Distance (ft)		113	1292
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	200		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Lake Mountain Road & Eagle Mountain Boulevard, All Intervals

Movement	EB	NB	SB
Directions Served	L	LTR	LTR
Maximum Queue (ft)	30	76	57
Average Queue (ft)	2	30	24
95th Queue (ft)	14	54	47
Link Distance (ft)		113	1292
Upstream Blk Time (%)		0	
Queuing Penalty (veh)		0	
Storage Bay Dist (ft)	200		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Lake Mountain Road & Access 1, Interval #1

Movement	EB
Directions Served	LR
Maximum Queue (ft)	36
Average Queue (ft)	18
95th Queue (ft)	45
Link Distance (ft)	504
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 3: Lake Mountain Road & Access 1, Interval #2

Movement	EB
Directions Served	LR
Maximum Queue (ft)	34
Average Queue (ft)	19
95th Queue (ft)	45
Link Distance (ft)	504
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 3: Lake Mountain Road & Access 1, Interval #3

Movement	EB
Directions Served	LR
Maximum Queue (ft)	48
Average Queue (ft)	29
95th Queue (ft)	54
Link Distance (ft)	504
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 3: Lake Mountain Road & Access 1, Interval #4

Movement	EB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	15
95th Queue (ft)	41
Link Distance (ft)	504
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 3: Lake Mountain Road & Access 1, All Intervals

Movement	EB
Directions Served	LR
Maximum Queue (ft)	49
Average Queue (ft)	20
95th Queue (ft)	47
Link Distance (ft)	504
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Lake Mountain Road & Access 2, Interval #1

Movement	EB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	13
95th Queue (ft)	38
Link Distance (ft)	420
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Lake Mountain Road & Access 2, Interval #2

Movement	EB
Directions Served	LR
Maximum Queue (ft)	33
Average Queue (ft)	16
95th Queue (ft)	42
Link Distance (ft)	420
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Lake Mountain Road & Access 2, Interval #3

Movement	EB
Directions Served	LR
Maximum Queue (ft)	42
Average Queue (ft)	21
95th Queue (ft)	50
Link Distance (ft)	420
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Lake Mountain Road & Access 2, Interval #4

Movement	EB
Directions Served	LR
Maximum Queue (ft)	33
Average Queue (ft)	17
95th Queue (ft)	42
Link Distance (ft)	420
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Lake Mountain Road & Access 2, All Intervals

Movement	EB
Directions Served	LR
Maximum Queue (ft)	44
Average Queue (ft)	17
95th Queue (ft)	43
Link Distance (ft)	420
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Lake Mountain Road & Access 3, Interval #1

Movement	EB
Directions Served	LR
Maximum Queue (ft)	28
Average Queue (ft)	9
95th Queue (ft)	31
Link Distance (ft)	492
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Lake Mountain Road & Access 3, Interval #2

Movement	EB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	11
95th Queue (ft)	35
Link Distance (ft)	492
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Lake Mountain Road & Access 3, Interval #3

Movement	EB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	10
95th Queue (ft)	33
Link Distance (ft)	492
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Lake Mountain Road & Access 3, Interval #4

Movement	EB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	10
95th Queue (ft)	34
Link Distance (ft)	492
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Lake Mountain Road & Access 3, All Intervals

Movement	EB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	10
95th Queue (ft)	34
Link Distance (ft)	492
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty, Interval #1: 0
Network wide Queuing Penalty, Interval #2: 0
Network wide Queuing Penalty, Interval #3: 0
Network wide Queuing Penalty, Interval #4: 0
Network wide Queuing Penalty, All Intervals: 0

SimTraffic LOS Report

Project: Eagle Mountain Eagle Heights Village TIS
Analysis Period: Future (2024) Plus Project Mitigated
Time Period: Evening Peak Hour **Project #:** UT19-1417

Intersection: Pony Express Parkway & Eagle Mountain Boulevard
Type: Roundabout

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	134	132	99	10.4	B
	T	162	164	101	11.8	B
	R	26	25	97	9.5	A
	Subtotal	322	321	100	11.0	B
SB	L	181	178	98	6.3	A
	T	151	152	101	7.9	A
	R	40	43	107	5.2	A
	Subtotal	372	373	100	6.8	A
EB	L	155	151	97	11.8	B
	T	246	242	98	13.3	B
	R	215	216	101	4.7	A
	Subtotal	616	609	99	9.9	A
WB	L	21	20	94	8.0	A
	T	115	112	98	8.8	A
	R	120	115	96	5.9	A
	Subtotal	256	247	96	7.4	A
Total		1,566	1,550	99	9.0	A

Intersection: Lake Mountain Road & Eagle Mountain Boulevard
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	71	74	104	5.7	A
	Subtotal	71	74	104	5.7	A
SB	R	51	48	94	3.4	A
	Subtotal	51	48	94	3.4	A
EB	L	84	81	96	7.1	A
	T	249	244	98	3.7	A
	R	120	121	101	5.8	A
	Subtotal	453	446	98	4.9	A
WB	T	15	14	93	0.2	A
	Subtotal	15	14	93	0.2	A
Total		590	582	99	4.8	A

SimTraffic LOS Report

Project: Eagle Mountain Eagle Heights Village TIS
Analysis Period: Future (2024) Plus Project Mitigated
Time Period: Evening Peak Hour **Project #:** UT19-1417

Intersection: Lake Mountain Road & Access 1
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	T	48	46	97	0.5	A
	Subtotal	48	46	96	0.5	A
SB	T	80	80	99	0.3	A
	R	40	42	104	0.1	A
	Subtotal	120	122	102	0.2	A
EB	L	25	29	115	5.0	A
	Subtotal	25	29	116	5.0	A
Total		194	197	102	1.0	A

Intersection: Lake Mountain Road & Access 2
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	T	24	23	94	0.4	A
	Subtotal	24	23	96	0.4	A
SB	T	45	42	94	0.8	A
	R	35	36	103	0.7	A
	Subtotal	80	78	98	0.8	A
EB	L	22	22	99	4.1	A
	Subtotal	22	22	100	4.1	A
Total		126	123	97	1.3	A

SimTraffic LOS Report

Project: Eagle Mountain Eagle Heights Village TIS
Analysis Period: Future (2024) Plus Project Mitigated
Time Period: Evening Peak Hour **Project #:** UT19-1417

Intersection: Lake Mountain Road & Access 3
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	T	10	9	92	0.0	A
	Subtotal	10	9	90	0.0	A
SB	T	15	14	93	0.9	A
	R	30	29	97	0.5	A
	Subtotal	45	43	96	0.6	A
EB	L	14	13	95	3.9	A
	Subtotal	14	13	93	3.9	A
Total		68	65	95	1.2	A

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #1 4:45

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	1.2	1.1	0.6	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.2
Total Delay (hr)	0.1	0.2	0.1	0.0	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.0
Total Del/Veh (s)	9.5	11.6	4.0	6.3	8.4	5.0	7.0	8.6	6.4	5.6	7.4	4.4
Vehicles Entered	35	59	46	5	28	28	31	38	6	42	37	9
Vehicles Exited	36	59	46	4	27	27	31	39	6	42	36	9
Hourly Exit Rate	144	236	184	16	108	108	124	156	24	168	144	36
Input Volume	146	232	202	20	108	113	126	152	24	170	142	38
% of Volume	99	102	91	80	100	96	98	103	100	99	101	95

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #1 4:45

Movement	All
Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.5
Total Delay (hr)	0.8
Total Del/Veh (s)	7.5
Vehicles Entered	364
Vehicles Exited	362
Hourly Exit Rate	1448
Input Volume	1473
% of Volume	98

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #2 5:00

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.9	1.1	0.5	0.1	0.1	0.1	0.3	0.2	0.3	0.3	0.3	0.3
Total Delay (hr)	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.0
Total Del/Veh (s)	7.9	9.0	4.3	8.9	8.2	5.3	7.0	8.1	5.2	5.4	7.2	4.4
Vehicles Entered	36	55	50	5	27	26	33	37	6	40	36	11
Vehicles Exited	35	54	50	5	27	27	33	37	6	39	36	11
Hourly Exit Rate	140	216	200	20	108	108	132	148	24	156	144	44
Input Volume	146	232	202	20	108	113	126	152	24	170	142	38
% of Volume	96	93	99	100	100	96	105	97	100	92	101	116

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #2 5:00

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.5
Total Delay (hr)	0.7
Total Del/Veh (s)	6.9
Vehicles Entered	362
Vehicles Exited	360
Hourly Exit Rate	1440
Input Volume	1473
% of Volume	98

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #3 5:15

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	1.3	1.3	0.7	0.2	0.1	0.1	0.4	0.3	0.4	0.3	0.3	0.4
Total Delay (hr)	0.2	0.4	0.1	0.0	0.1	0.1	0.2	0.2	0.0	0.1	0.1	0.0
Total Del/Veh (s)	16.5	17.3	5.0	8.5	8.2	6.2	16.8	17.0	15.2	6.9	8.3	6.2
Vehicles Entered	46	71	65	6	33	36	37	48	7	52	45	14
Vehicles Exited	45	70	65	6	32	34	37	47	7	53	45	13
Hourly Exit Rate	180	280	260	24	128	136	148	188	28	212	180	52
Input Volume	182	289	253	25	135	141	158	191	31	213	178	47
% of Volume	99	97	103	96	95	96	94	98	90	100	101	111

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #3 5:15

Movement	All
Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.6
Total Delay (hr)	1.5
Total Del/Veh (s)	11.3
Vehicles Entered	460
Vehicles Exited	454
Hourly Exit Rate	1816
Input Volume	1843
% of Volume	99

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #4 5:30

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	1.0	1.0	0.5	0.1	0.1	0.1	0.3	0.3	0.3	0.3	0.3	0.2
Total Delay (hr)	0.1	0.2	0.1	0.0	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.0
Total Del/Veh (s)	9.4	11.1	4.3	6.5	7.8	5.4	9.0	10.7	9.4	5.8	7.2	4.3
Vehicles Entered	34	58	55	5	26	25	31	40	5	44	34	9
Vehicles Exited	35	60	55	4	27	26	31	41	6	44	35	9
Hourly Exit Rate	140	240	220	16	108	104	124	164	24	176	140	36
Input Volume	146	232	202	20	108	113	126	152	24	170	142	38
% of Volume	96	103	109	80	100	92	98	108	100	104	99	95

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Interval #4 5:30

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.5
Total Delay (hr)	0.9
Total Del/Veh (s)	7.8
Vehicles Entered	366
Vehicles Exited	373
Hourly Exit Rate	1492
Input Volume	1473
% of Volume	101

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Entire Run

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	1.1	1.1	0.6	0.1	0.1	0.1	0.3	0.3	0.3	0.3	0.3	0.3
Total Delay (hr)	0.5	0.9	0.3	0.0	0.3	0.2	0.4	0.5	0.1	0.3	0.3	0.1
Total Del/Veh (s)	11.8	13.3	4.7	8.0	8.8	5.9	10.4	11.8	9.5	6.3	7.9	5.2
Vehicles Entered	150	242	216	21	113	115	132	163	25	179	152	43
Vehicles Exited	151	242	216	20	112	115	132	164	25	178	152	43
Hourly Exit Rate	151	242	216	20	112	115	132	164	25	178	152	43
Input Volume	155	246	215	21	115	120	134	162	26	181	151	40
% of Volume	97	98	101	94	98	96	99	101	97	98	101	107

1: Pony Express Parkway & Eagle Mountain Boulevard Performance by movement Entire Run

Movement	All
Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.5
Total Delay (hr)	3.9
Total Del/Veh (s)	9.0
Vehicles Entered	1551
Vehicles Exited	1550
Hourly Exit Rate	1550
Input Volume	1566
% of Volume	99

2: Lake Mountain Road & Eagle Mountain Boulevard Performance by movement Interval #1 4:45

Movement	EBL	EBT	EBR	WBT	NBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0	0.1	0.0
Total Delay (hr)	0.0	0.1	0.0	0.0	0.0	0.0	0.2
Total Del/Veh (s)	6.3	3.2	4.6	0.1	5.1	3.1	4.2
Vehicles Entered	21	58	28	2	17	12	138
Vehicles Exited	22	57	28	3	17	12	139
Hourly Exit Rate	88	228	112	12	68	48	556
Input Volume	79	234	113	14	67	48	555
% of Volume	111	97	99	86	101	100	100

2: Lake Mountain Road & Eagle Mountain Boulevard Performance by movement Interval #2 5:00

Movement	EBL	EBT	EBR	WBT	NBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Total Del/Veh (s)	5.4	2.9	4.6	0.3	6.1	3.3	4.0
Vehicles Entered	18	56	27	3	18	11	133
Vehicles Exited	17	55	27	3	18	11	131
Hourly Exit Rate	68	220	108	12	72	44	524
Input Volume	79	234	113	14	67	48	555
% of Volume	86	94	96	86	107	92	94

2: Lake Mountain Road & Eagle Mountain Boulevard Performance by movement Interval #3 5:15

Movement	EBL	EBT	EBR	WBT	NBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0	0.1	0.0
Total Delay (hr)	0.0	0.1	0.1	0.0	0.0	0.0	0.3
Total Del/Veh (s)	7.1	4.1	5.9	0.3	5.7	3.4	4.9
Vehicles Entered	21	72	35	5	23	16	172
Vehicles Exited	20	71	34	5	23	16	169
Hourly Exit Rate	80	284	136	20	92	64	676
Input Volume	99	293	141	18	84	60	695
% of Volume	81	97	96	111	110	107	97

2: Lake Mountain Road & Eagle Mountain Boulevard Performance by movement Interval #4 5:30

Movement	EBL	EBT	EBR	WBT	NBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0	0.1	0.0
Total Delay (hr)	0.0	0.1	0.1	0.0	0.0	0.0	0.2
Total Del/Veh (s)	6.8	3.5	5.3	0.2	5.6	3.1	4.6
Vehicles Entered	20	59	31	3	15	10	138
Vehicles Exited	21	60	31	3	16	10	141
Hourly Exit Rate	84	240	124	12	64	40	564
Input Volume	79	234	113	14	67	48	555
% of Volume	106	103	110	86	96	83	102

2: Lake Mountain Road & Eagle Mountain Boulevard Performance by movement Entire Run

Movement	EBL	EBT	EBR	WBT	NBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0	0.1	0.0
Total Delay (hr)	0.2	0.3	0.2	0.0	0.1	0.0	0.8
Total Del/Veh (s)	7.1	3.7	5.8	0.2	5.7	3.4	4.8
Vehicles Entered	80	244	122	13	74	48	581
Vehicles Exited	81	244	121	14	74	48	582
Hourly Exit Rate	81	244	121	14	74	48	582
Input Volume	84	249	120	15	71	51	590
% of Volume	96	98	101	93	104	94	99

3: Lake Mountain Road & Access 1 Performance by movement Interval #1 4:45

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.6	0.5	0.3	0.1	0.9
Vehicles Entered	6	10	19	9	44
Vehicles Exited	6	11	20	9	46
Hourly Exit Rate	24	44	80	36	184
Input Volume	24	45	76	38	183
% of Volume	100	98	105	95	101

3: Lake Mountain Road & Access 1 Performance by movement Interval #2 5:00

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.5	0.4	0.3	0.1	1.0
Vehicles Entered	7	12	17	11	47
Vehicles Exited	8	12	16	11	47
Hourly Exit Rate	32	48	64	44	188
Input Volume	24	45	76	38	183
% of Volume	133	107	84	116	103

3: Lake Mountain Road & Access 1 Performance by movement Interval #3 5:15

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	5.3	0.5	0.3	0.2	1.2
Vehicles Entered	10	13	23	12	58
Vehicles Exited	10	13	23	12	58
Hourly Exit Rate	40	52	92	48	232
Input Volume	29	55	94	47	225
% of Volume	138	95	98	102	103

3: Lake Mountain Road & Access 1 Performance by movement Interval #4 5:30

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.7	0.4	0.3	0.1	0.8
Vehicles Entered	6	10	21	10	47
Vehicles Exited	6	10	21	10	47
Hourly Exit Rate	24	40	84	40	188
Input Volume	24	45	76	38	183
% of Volume	100	89	111	105	103

3: Lake Mountain Road & Access 1 Performance by movement Entire Run

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	5.0	0.5	0.3	0.1	1.0
Vehicles Entered	29	46	80	42	197
Vehicles Exited	29	46	80	42	197
Hourly Exit Rate	29	46	80	42	197
Input Volume	25	48	80	40	194
% of Volume	115	97	99	104	102

4: Lake Mountain Road & Access 2 Performance by movement Interval #1 4:45

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.2	0.5	0.7	0.9	1.3
Vehicles Entered	5	5	11	8	29
Vehicles Exited	5	5	11	9	30
Hourly Exit Rate	20	20	44	36	120
Input Volume	21	23	42	33	119
% of Volume	95	87	105	109	101

4: Lake Mountain Road & Access 2 Performance by movement Interval #2 5:00

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.0	0.3	0.6	0.9	1.2
Vehicles Entered	5	7	8	8	28
Vehicles Exited	5	7	8	8	28
Hourly Exit Rate	20	28	32	32	112
Input Volume	21	23	42	33	119
% of Volume	95	122	76	97	94

4: Lake Mountain Road & Access 2 Performance by movement Interval #3 5:15

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.3	0.4	0.8	0.6	1.2
Vehicles Entered	6	6	12	10	34
Vehicles Exited	6	7	12	10	35
Hourly Exit Rate	24	28	48	40	140
Input Volume	26	29	53	41	149
% of Volume	92	97	91	98	94

4: Lake Mountain Road & Access 2 Performance by movement Interval #4 5:30

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	3.9	0.5	1.0	0.6	1.3
Vehicles Entered	6	4	11	11	32
Vehicles Exited	6	4	11	10	31
Hourly Exit Rate	24	16	44	40	124
Input Volume	21	23	42	33	119
% of Volume	114	70	105	121	104

4: Lake Mountain Road & Access 2 Performance by movement Entire Run

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.1	0.4	0.8	0.7	1.3
Vehicles Entered	22	23	42	37	124
Vehicles Exited	22	23	42	36	123
Hourly Exit Rate	22	23	42	36	123
Input Volume	22	24	45	35	126
% of Volume	99	94	94	103	97

5: Lake Mountain Road & Access 3 Performance by movement Interval #1 4:45

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	3.7	0.0	0.9	0.5	1.2
Vehicles Entered	3	2	4	8	17
Vehicles Exited	3	2	4	7	16
Hourly Exit Rate	12	8	16	28	64
Input Volume	13	9	14	28	64
% of Volume	92	89	114	100	100

5: Lake Mountain Road & Access 3 Performance by movement Interval #2 5:00

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	3.6	0.0	0.4	0.5	1.2
Vehicles Entered	4	3	2	5	14
Vehicles Exited	4	3	2	6	15
Hourly Exit Rate	16	12	8	24	60
Input Volume	13	9	14	28	64
% of Volume	123	133	57	86	94

5: Lake Mountain Road & Access 3 Performance by movement Interval #3 5:15

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.8	0.1	1.3	0.6	1.4
Vehicles Entered	3	3	4	9	19
Vehicles Exited	3	3	3	9	18
Hourly Exit Rate	12	12	12	36	72
Input Volume	16	12	18	35	81
% of Volume	75	100	67	103	89

5: Lake Mountain Road & Access 3 Performance by movement Interval #4 5:30

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	3.7	0.0	0.7	0.5	1.2
Vehicles Entered	3	1	4	7	15
Vehicles Exited	3	1	4	7	15
Hourly Exit Rate	12	4	16	28	60
Input Volume	13	9	14	28	64
% of Volume	92	44	114	100	94

5: Lake Mountain Road & Access 3 Performance by movement Entire Run

Movement	EBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	3.9	0.0	0.9	0.5	1.2
Vehicles Entered	13	9	14	29	65
Vehicles Exited	13	9	14	29	65
Hourly Exit Rate	13	9	14	29	65
Input Volume	14	10	15	30	68
% of Volume	95	92	93	97	95

Total Network Performance By Interval

Interval Start	4:45	5:00	5:15	5:30	All
Denied Delay (hr)	0.1	0.0	0.1	0.0	0.2
Denied Del/Veh (s)	0.5	0.5	0.6	0.5	0.5
Total Delay (hr)	1.2	1.1	2.0	1.2	5.5
Total Del/Veh (s)	9.9	9.2	14.3	10.2	12.2
Vehicles Entered	362	362	459	366	1554
Vehicles Exited	367	362	445	382	1558
Hourly Exit Rate	1468	1448	1780	1528	1558
Input Volume	3647	3647	4561	3647	3876
% of Volume	40	40	39	42	40

Intersection: 1: Pony Express Parkway & Eagle Mountain Boulevard, Interval #1

Movement	EB	EB	WB	NB	SB
Directions Served	LT	R	LTR	LTR	LTR
Maximum Queue (ft)	136	26	71	103	81
Average Queue (ft)	74	5	37	59	40
95th Queue (ft)	150	24	77	109	97
Link Distance (ft)		2390	5855	1672	2225
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	400				
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 1: Pony Express Parkway & Eagle Mountain Boulevard, Interval #2

Movement	EB	EB	WB	NB	SB
Directions Served	LT	R	LTR	LTR	LTR
Maximum Queue (ft)	101	32	67	85	87
Average Queue (ft)	56	6	36	50	42
95th Queue (ft)	108	27	76	92	87
Link Distance (ft)		2390	5855	1672	2225
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	400				
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 1: Pony Express Parkway & Eagle Mountain Boulevard, Interval #3

Movement	EB	EB	WB	NB	SB
Directions Served	LT	R	LTR	LTR	LTR
Maximum Queue (ft)	192	37	75	168	99
Average Queue (ft)	114	10	41	96	60
95th Queue (ft)	215	38	78	200	107
Link Distance (ft)		2390	5855	1672	2225
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	400				
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 1: Pony Express Parkway & Eagle Mountain Boulevard, Interval #4

Movement	EB	EB	WB	NB	SB
Directions Served	LT	R	LTR	LTR	LTR
Maximum Queue (ft)	121	23	74	133	88
Average Queue (ft)	67	6	37	63	44
95th Queue (ft)	123	27	79	139	89
Link Distance (ft)		2390	5855	1672	2225
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	400				
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 1: Pony Express Parkway & Eagle Mountain Boulevard, All Intervals

Movement	EB	EB	WB	NB	SB
Directions Served	LT	R	LTR	LTR	LTR
Maximum Queue (ft)	198	43	91	192	116
Average Queue (ft)	78	7	38	67	47
95th Queue (ft)	160	29	78	145	97
Link Distance (ft)		2390	5855	1672	2225
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	400				
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 2: Lake Mountain Road & Eagle Mountain Boulevard, Interval #1

Movement	EB	NB	SB
Directions Served	L	LTR	LTR
Maximum Queue (ft)	9	44	37
Average Queue (ft)	1	27	24
95th Queue (ft)	11	48	44
Link Distance (ft)		113	1292
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	200		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Lake Mountain Road & Eagle Mountain Boulevard, Interval #2

Movement	EB	NB	SB
Directions Served	L	LTR	LTR
Maximum Queue (ft)	14	48	43
Average Queue (ft)	2	30	24
95th Queue (ft)	16	55	49
Link Distance (ft)		113	1292
Upstream Blk Time (%)		0	
Queuing Penalty (veh)		0	
Storage Bay Dist (ft)	200		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Lake Mountain Road & Eagle Mountain Boulevard, Interval #3

Movement	EB	NB	SB
Directions Served	L	LTR	LTR
Maximum Queue (ft)	6	55	48
Average Queue (ft)	1	33	28
95th Queue (ft)	11	57	49
Link Distance (ft)		113	1292
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	200		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Lake Mountain Road & Eagle Mountain Boulevard, Interval #4

Movement	EB	NB	SB
Directions Served	L	LTR	LTR
Maximum Queue (ft)	9	47	33
Average Queue (ft)	1	29	21
95th Queue (ft)	12	50	44
Link Distance (ft)		113	1292
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	200		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Lake Mountain Road & Eagle Mountain Boulevard, All Intervals

Movement	EB	NB	SB
Directions Served	L	LTR	LTR
Maximum Queue (ft)	21	73	57
Average Queue (ft)	2	30	24
95th Queue (ft)	13	53	47
Link Distance (ft)		113	1292
Upstream Blk Time (%)		0	
Queuing Penalty (veh)		0	
Storage Bay Dist (ft)	200		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Lake Mountain Road & Access 1, Interval #1

Movement	EB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	18
95th Queue (ft)	43
Link Distance (ft)	504
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 3: Lake Mountain Road & Access 1, Interval #2

Movement	EB
Directions Served	LR
Maximum Queue (ft)	34
Average Queue (ft)	19
95th Queue (ft)	45
Link Distance (ft)	504
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 3: Lake Mountain Road & Access 1, Interval #3

Movement	EB	SB
Directions Served	LR	TR
Maximum Queue (ft)	50	2
Average Queue (ft)	29	0
95th Queue (ft)	54	4
Link Distance (ft)	504	113
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: Lake Mountain Road & Access 1, Interval #4

Movement	EB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	15
95th Queue (ft)	41
Link Distance (ft)	504
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 3: Lake Mountain Road & Access 1, All Intervals

Movement	EB	SB
Directions Served	LR	TR
Maximum Queue (ft)	51	2
Average Queue (ft)	20	0
95th Queue (ft)	47	2
Link Distance (ft)	504	113
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: Lake Mountain Road & Access 2, Interval #1

Movement	EB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	13
95th Queue (ft)	38
Link Distance (ft)	420
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Lake Mountain Road & Access 2, Interval #2

Movement	EB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	15
95th Queue (ft)	41
Link Distance (ft)	420
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Lake Mountain Road & Access 2, Interval #3

Movement	EB
Directions Served	LR
Maximum Queue (ft)	42
Average Queue (ft)	21
95th Queue (ft)	50
Link Distance (ft)	420
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Lake Mountain Road & Access 2, Interval #4

Movement	EB
Directions Served	LR
Maximum Queue (ft)	33
Average Queue (ft)	17
95th Queue (ft)	42
Link Distance (ft)	420
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Lake Mountain Road & Access 2, All Intervals

Movement	EB
Directions Served	LR
Maximum Queue (ft)	44
Average Queue (ft)	17
95th Queue (ft)	43
Link Distance (ft)	420
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Lake Mountain Road & Access 3, Interval #1

Movement	EB
Directions Served	LR
Maximum Queue (ft)	28
Average Queue (ft)	9
95th Queue (ft)	31
Link Distance (ft)	492
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Lake Mountain Road & Access 3, Interval #2

Movement	EB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	11
95th Queue (ft)	35
Link Distance (ft)	492
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Lake Mountain Road & Access 3, Interval #3

Movement	EB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	10
95th Queue (ft)	33
Link Distance (ft)	492
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Lake Mountain Road & Access 3, Interval #4

Movement	EB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	10
95th Queue (ft)	34
Link Distance (ft)	492
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Lake Mountain Road & Access 3, All Intervals

Movement	EB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	10
95th Queue (ft)	34
Link Distance (ft)	492
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty, Interval #1: 0
Network wide Queuing Penalty, Interval #2: 0
Network wide Queuing Penalty, Interval #3: 0
Network wide Queuing Penalty, Interval #4: 0
Network wide Queuing Penalty, All Intervals: 0

APPENDIX C

Site Plan

PARK AMENITIES

PARK #1

COMMUNITY CENTER
GAZEBO
PLAYGROUND
SPORT COURT
PARKING
SHADE TREES
GRASS PLAY AREA
SITE SECURITY CAMERAS

PARK #2

GARDEN BOXES
BENCH

PARK #3

PLAYGROUND
BENCH
SHADE TREES
LAWN PLAY AREA

PARK #4

PLAYGROUND
BENCH
SHADE TREES
LAWN PLAY AREA

PARK #5

PLAYGROUND
BENCH
SHADE TREES
LAWN PLAY AREA

PARK #6

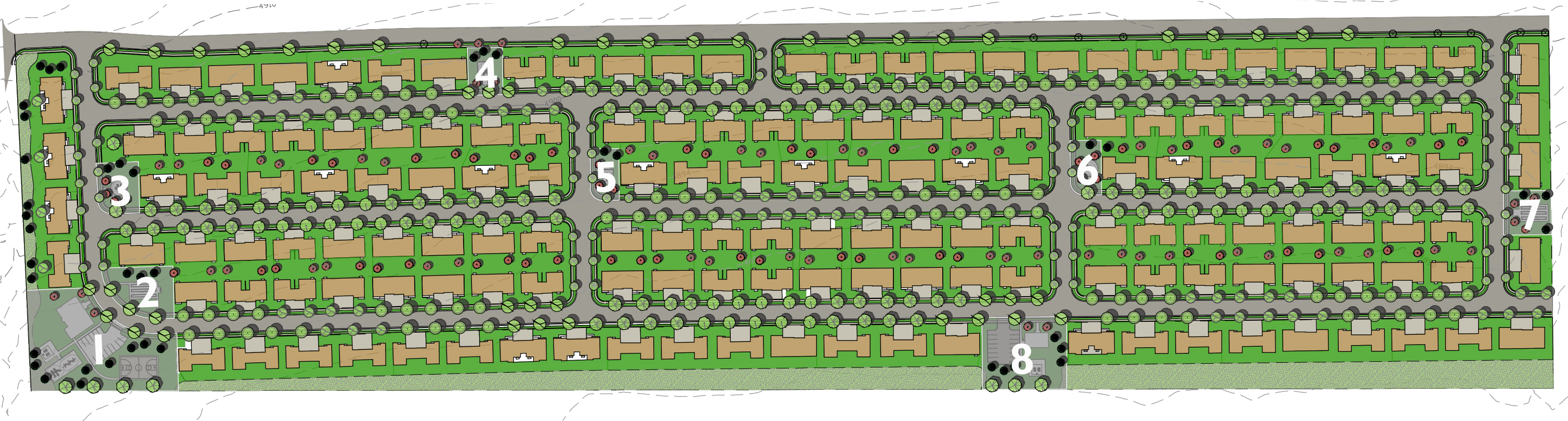
PLAYGROUND
BENCH
SHADE TREES
LAWN PLAY AREA

PARK #7

GARDEN BOXES
BENCH

PARK #8

COMMUNITY CENTER
GAZEBO
PARKING
SHADE TREES
GRASS PLAY AREA
SITE SECURITY CAMERAS



APPENDIX D

95th Percentile Queue Length Reports

SimTraffic Queueing Report

Project: Eagle Mountain Eagle Heights Village TIS

Analysis: Existing (2019) Background

Time Period: Evening Peak Hour

95th Percentile Queue Length (feet)



Project #: UT19-1417

Intersection	NB	SB	EB		W B
	LTR	LTR	L	LTR	LTR
Lake Mountain Road & Eagle Mountain Boulevard	25	31	6	--	--
Pony Express Parkway & Eagle Mountain Boulevard	67	56	--	88	50

SimTraffic Queueing Report

Project: Eagle Mountain Eagle Heights Village TIS

Analysis: Existing (2019) Plus Project

Time Period: Evening Peak Hour

95th Percentile Queue Length (feet)

HALES  **ENGINEERING**
innovative transportation solutions

Project #: UT19-1417

Intersection	NB	SB	EB			W B
	LTR	LTR	L	LR	LTR	LTR
Lake Mountain Road & Access 1	--	--	--	45	--	--
Lake Mountain Road & Access 2	--	--	--	43	--	--
Lake Mountain Road & Access 3	--	--	--	35	--	--
Lake Mountain Road & Eagle Mountain Boulevard	49	32	8	--	--	--
Pony Express Parkway & Eagle Mountain Boulevard	75	63	--	--	121	66

SimTraffic Queueing Report

Project: Eagle Mountain Eagle Heights Village TIS

Analysis: Future(2024) Background

Time Period: Evening Peak Hour

95th Percentile Queue Length (feet)



Project #: UT19-1417

Intersection	NB	SB	EB		W B
	LTR	LTR	L	LTR	LTR
Lake Mountain Road & Eagle Mountain Boulevard	30	44	19	--	--
Pony Express Parkway & Eagle Mountain Boulevard	109	82	--	269	74

SimTraffic Queueing Report

Project: Eagle Mountain Eagle Heights Village TIS

Analysis: Future (2024) Plus Project

Time Period: Evening Peak Hour

95th Percentile Queue Length (feet)



HALES ENGINEERING

innovative transportation solutions

Project #: UT19-1417

Intersection	NB	SB	EB			W B
	LTR	LTR	L	LR	LTR	LTR
Lake Mountain Road & Access 1	--	--	--	47	--	--
Lake Mountain Road & Access 2	--	--	--	43	--	--
Lake Mountain Road & Access 3	--	--	--	34	--	--
Lake Mountain Road & Eagle Mountain Boulevard	54	47	14	--	--	--
Pony Express Parkway & Eagle Mountain Boulevard	116	94	--	--	646	91

SimTraffic Queueing Report

Project: Eagle Mountain Eagle Heights Village TIS

Analysis: Future (2024) Plus Project Mitigated

Time Period: Evening Peak Hour

95th Percentile Queue Length (feet)



Project #: UT19-1417

Intersection	NB	SB		EB				W B
	LTR	LTR	TR	L	LR	LT	R	LTR
Lake Mountain Road & Access 1	--	--	2	--	47	--	--	--
Lake Mountain Road & Access 2	--	--	--	--	43	--	--	--
Lake Mountain Road & Access 3	--	--	--	--	34	--	--	--
Lake Mountain Road & Eagle Mountain Boulevard	53	47	--	13	--	--	--	--
Pony Express Parkway & Eagle Mountain Boulevard	145	97	--	--	--	160	29	78



February 28, 2019

Tayler Jensen
Planner
Eagle Mountain City
1650 East Stagecoach Run
Eagle Mountain, Utah

RE: Eagle Heights Village

At the request of Mr. Peterson I am providing you with this letter. Enterprise Housing Credit Investments, LLC has a long-standing relationship with Mr. Peterson and Horizon Development in which we have financed well over \$100,000,000.00 in real estate transactions. We have a signed commitment with Mr. Peterson for the financing of this project and are excited to be a part of helping to bring this excellent community to Eagle Mountain.

Sincerely,

A handwritten signature in blue ink, appearing to read "Katie Porter", with a large, stylized flourish extending to the right.

Katie Porter



EAGLE MOUNTAIN CITY
PLANNING COMMISSION MEETING
MARCH 12, 2019

TITLE:	Lone Tree F Preliminary Plat - Public Hearing
ITEM TYPE:	Preliminary Plat
APPLICANT:	Brian Haskell/Eagle 12, LLC

ACTION ITEM:

Yes

PUBLIC HEARING:

Yes

REQUIRED FINDINGS:

Open Space: An applicant is required to provide 1,000 SF of improved open space per unit, in addition to improved open space an applicant is required to provide 100 amenity points per acre. All parks are required to provide a mixture of amenities, and no more than 33% of the required amenity points may be met by a combination of trails and parking (16.35.105.13). The applicant is required a 1.31 acre park with a required 131 amenity points. The applicant is proposing a 1.31 acre park with 131 amenity points. This proposal complies with requirements.

Slopes: The project is within 200' feet of a 25% slope or greater. The applicant has completed a slope stability study that shows slopes throughout the project.

Traffic Study: The applicant has completed a traffic study. The traffic study shows that the intersection of Lone Tree Pkwy and Pony Express Pkwy is rated an F with the addition of this development; however, the City is currently widening Pony Express Pkwy to a 5 lane facility in that area, then that intersection would rate between a D and C at peak times. The addition of a traffic signal at Hidden Valley Parkway will also help create larger gaps in

BACKGROUND:

The Lone Tree II preliminary plat was approved on March 12, 2006. The preliminary plat consisted of 50.35 acres with a total of 163 single family lots. Of those 163 lots 106 have been platted. This application is for the remaining 57 single family lots on 22.02 acres for a density of 2.59 units per acre. This is a Tier II development. The applicant is proposing this new preliminary plat to redesign the remaining lots to create a better built development.

ITEMS FOR CONSIDERATION:

Parks/Amenities: Staff has discussed some recommended changes to the park plan with the applicant, including (1) removing a section of trail and attaching the new trail to the existing trail to the northwest, (2) shifting the trail that is between lots 107 and 108 further south to provide more visibility to the workout station in a more secluded area of the park, and (3) shifting the 4th workout station to a new location. The applicant agreed with our recommendations and is making the changes to the plans.

RECOMMENDATION:

Recommendation

The following options are provided for the benefit of the Planning Commission and may be read or referenced when making a motion:

Approval

I move that the Eagle Mountain Planning Commission recommend approval of the proposed Lone Tree Plat F preliminary plat to the City Council with the following conditions:

1. If any retaining walls are required the maximum height of retaining wall is 6 feet with a maximum of 3 tiers. Retaining walls shall not be located any closer than 10 ft. from a home.
2. An updated landscape/park plan shall be provided, addressing the changes discussed in the meeting.
3. A bench drain on the top of any retaining wall area and above steep lots shall be installed.
4. The average slope for each lot shall be calculated and submitted.

traffic.

Streetlights: Streetlights are required at a minimum of every 250' along a public road and at a maximum of 350'. Streetlight estimates must be paid prior to recording a plat. Streetlights must be installed prior to the issuing of the first Certificate of Occupancy.

Dark Sky: All lights shall meet the City's Dark Sky Ordinance.

Setbacks: The setbacks for these final plats are 20' foot rear yard; 15' foot front yard; total of 15' feet side yard, with the garage side of the house having a 10' foot setback. The minimum driveway length is 22' feet.

Lot Frontage: The minimum lot frontage for a Tier II development is fifty-five feet (55') and a minimum of twenty percent (20%) of lots shall have a minimum lot frontage of sixty feet (60'). Lots with 60 or more feet of frontage shall be distributed throughout a development. This development is proposing 57 lots, with 20 lots having frontages of at least 60' ft. this project complies with the requirement.

Connectivity Code: This application complies with the requirements of the connectivity code.

PREPARED BY:
Michael Hadley, Planning

5. Any other conditions from the Planning Commission.

Denial

I move that the Eagle Mountain Planning Commission recommend denial of the proposed preliminary plat for Lone Tree Plat 4 based on findings of fact (detail specific code-related findings).

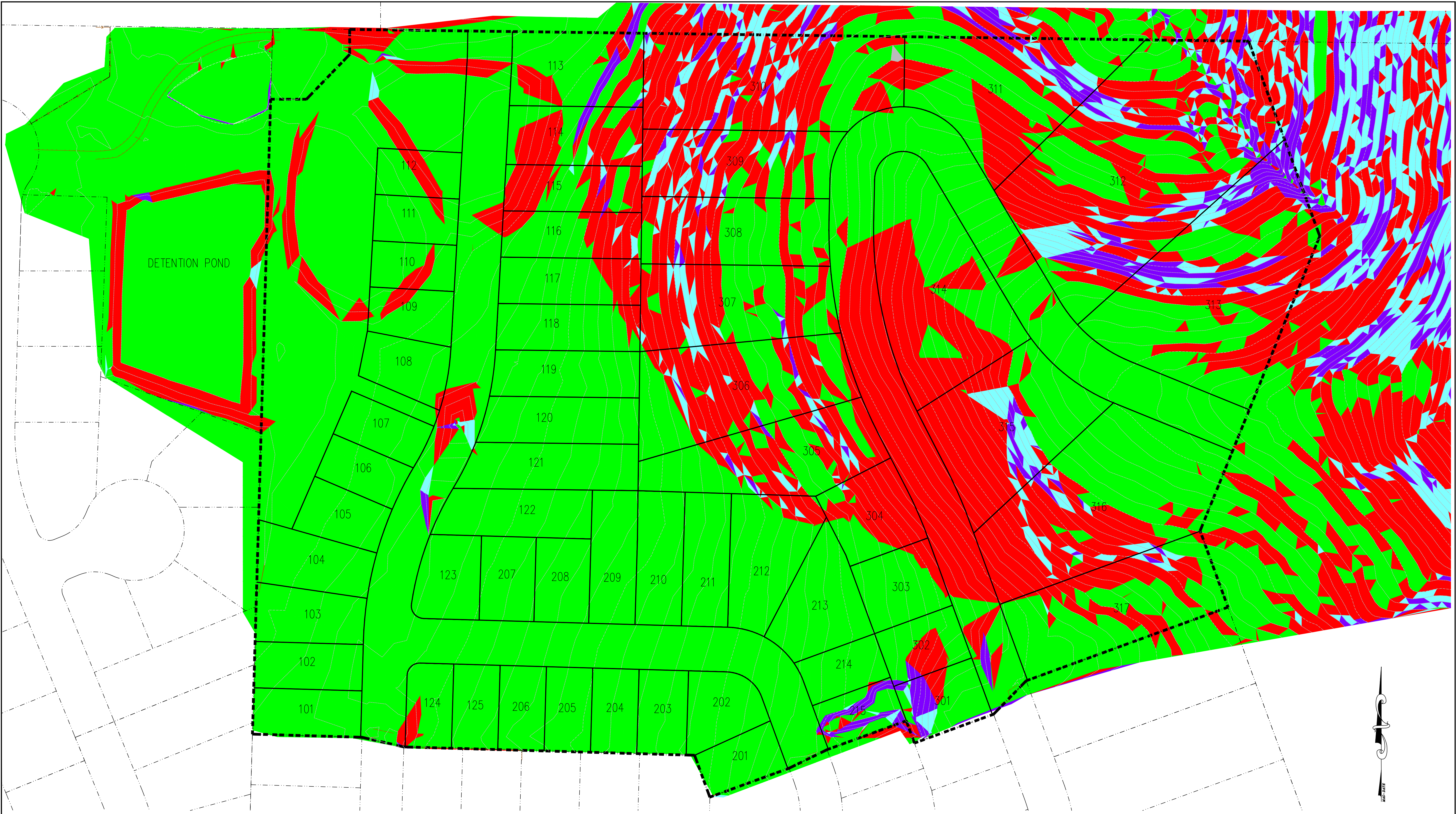
Attachments:

[Lone Tree F Preliminary slope analysis.pdf](#)

[Lone Tree II Preliminary Plat \(3-8-06\).pdf](#)

[Park Plan.pdf](#)

[Preliminary Plat.pdf](#)



SURFACE SLOPE DATA			
NUMBER	MINIMUM SLOPE	MAXIMUM SLOPE	COLOR
1	0%	15%	Green
2	15%	25%	Red
3	25%	30%	Light Blue
4	30%	100%	Purple

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

LONE TREE

EAGLE MOUNTAIN		UTAH
Drawn by: D.W.P.	SLOPE ANALYSIS PLAN	Scale: NTS
Designed by: D.W.P.		Date: 01/18/19
Checked by: D.W.P.		1 OF 1

LONE TREE II

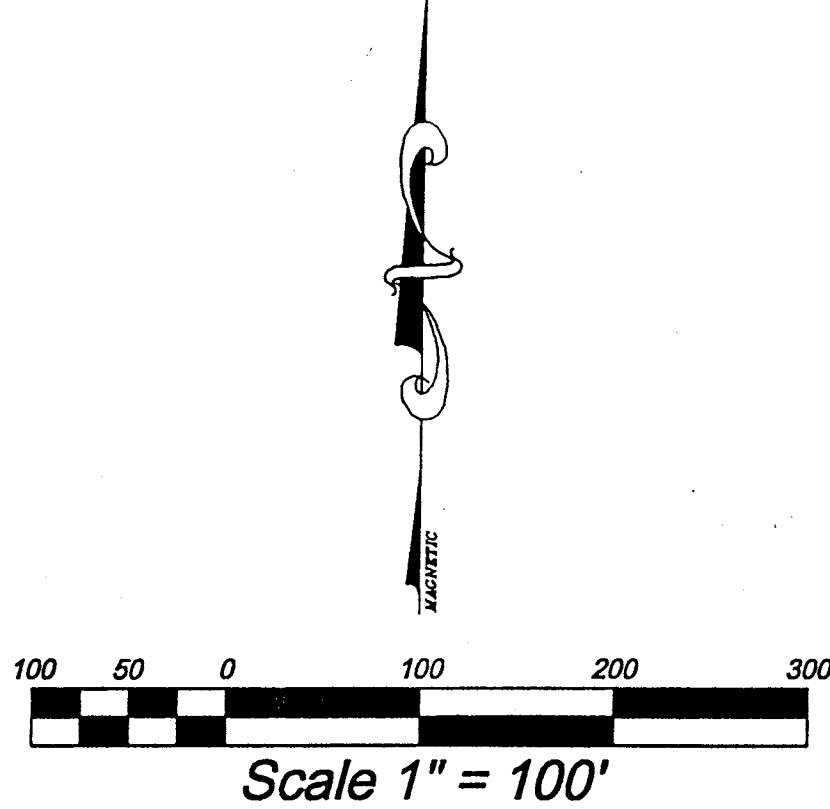
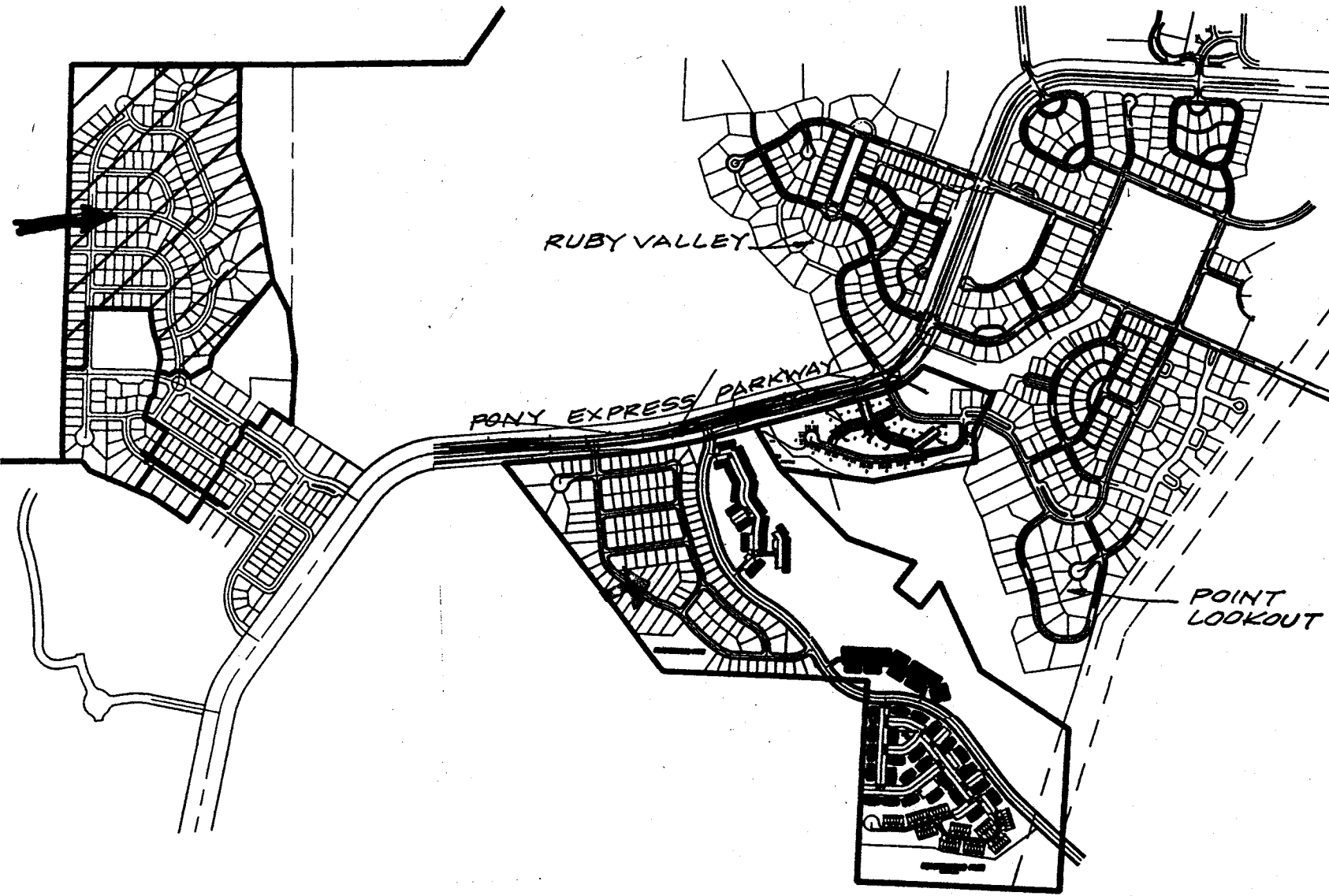
LOCATED IN THE NORTHEAST QUARTER OF SECTION 25, TOWNSHIP 5 SOUTH,
RANGE 2 EAST, SALT LAKE BASE AND MERIDIAN, EAGLE MOUNTAIN, UTAH

NOTES:

- 1. ALL LOTS HAVE A 5.00' UTILITY EASEMENT (P.U.E.) ALONG ALL SINGLE FAMILY LOT LINES EXCEPT THE FRONT WHICH IS 10.00'
- 2. ALL PUBLIC OPEN SPACE IS TO BE DEDICATED TO EAGLE MOUNTAIN CITY AND MAINTAINED BY THE HOMEOWNER'S ASSOCIATION.
- 3. SIDEYARD SINGLE FAMILY LOT SETBACKS ARE 10' AND 5' OR 7.5' AND 7.5'.
- 4. RETAINING WALLS TO BE BUILT BY DEVELOPER OR HOME OWNER'S CONTRACTOR. NOT TO BE BONDED FOR UNLESS DEVELOPER IMPROVEMENT.

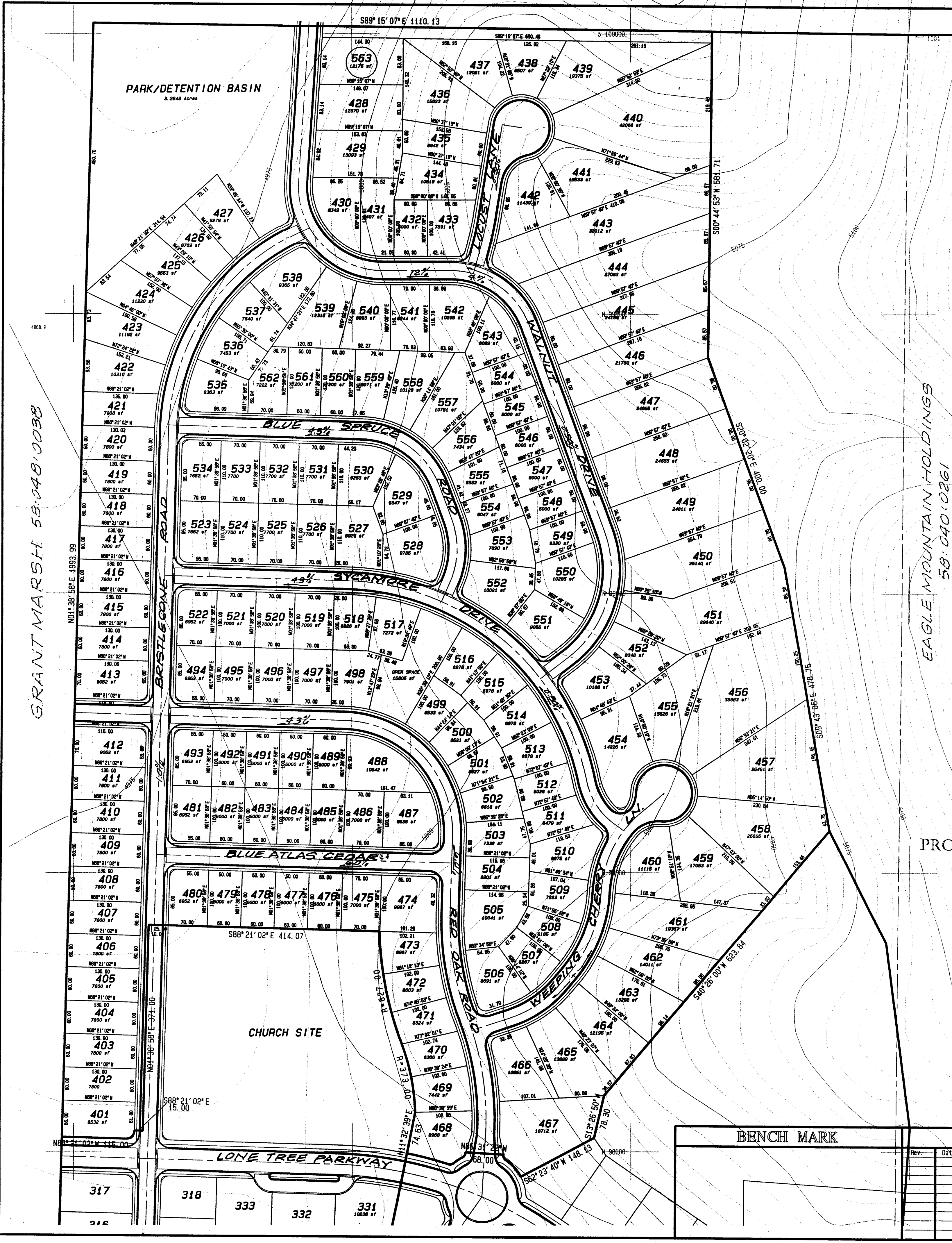
TABULATIONS:

- 1. TOTAL PLAT ACREAGE-----50.3555 ACRES
- 2. TOTAL LOT ACREAGE -----38.0895 ACRES
- 3. TOTAL ACREAGE IN STREETS-----8.6384 ACRES
- 4. TOTAL ACREAGE IN OPEN SPACE-----3.6276 ACRES
- 5. TOTAL ACREAGE IN NEIGHBORHOOD PARK-----2.2848 ACRES
- 6. AVERAGE LOT SIZE (Single Family) -----10179 S.F.
- 7. TOTAL NUMBER OF LOTS-----163 LOTS



VICINITY MAP

BENCH MARK			REVISIONS			F.J. Clark & Associates			LONE TREE II		
						6654 West 9680 North Highland, Utah 84003 (801) 492-1307			EAGLE MOUNTAIN, UTAH		
						Plans prepared under the direction of:			PRELIMINARY PLAT		
						Fred J. Clark P.E. 155153 Date			Drawn by: F.J.C.		
									Designed by: F.J.C.		
									Checked by:		
									Approved by:		
									Scale: 1"=100'		
									Date: 2/4/06		
									Sheet No. 1 OF 3		

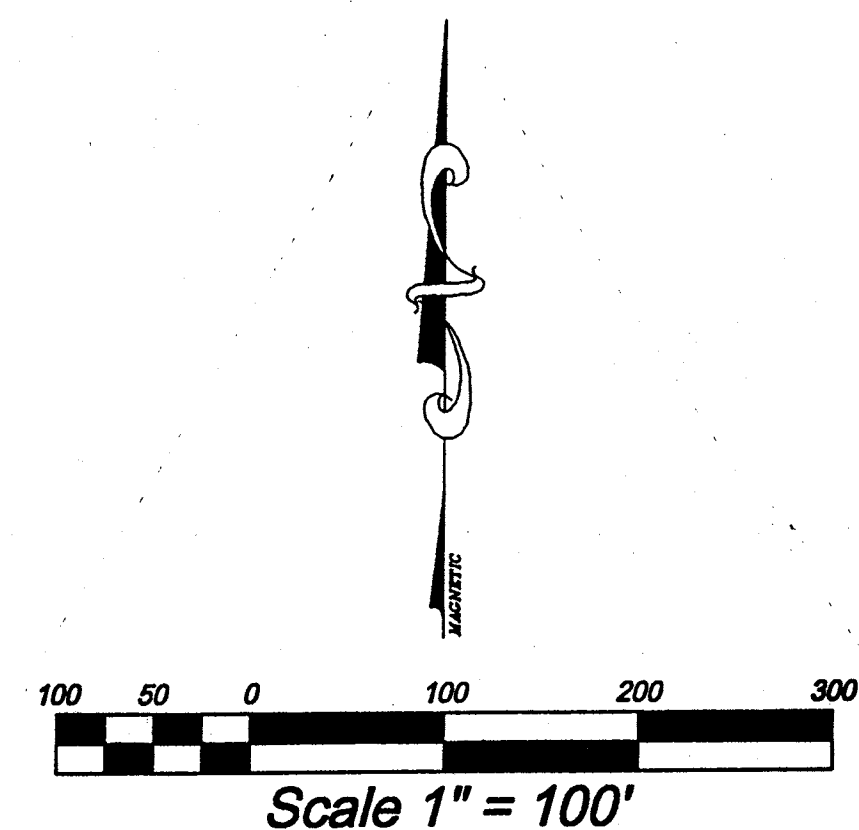


GRANT MARSH 58:048:0038

EAGLE MOUNTAIN HOLDINGS 58:040:0261



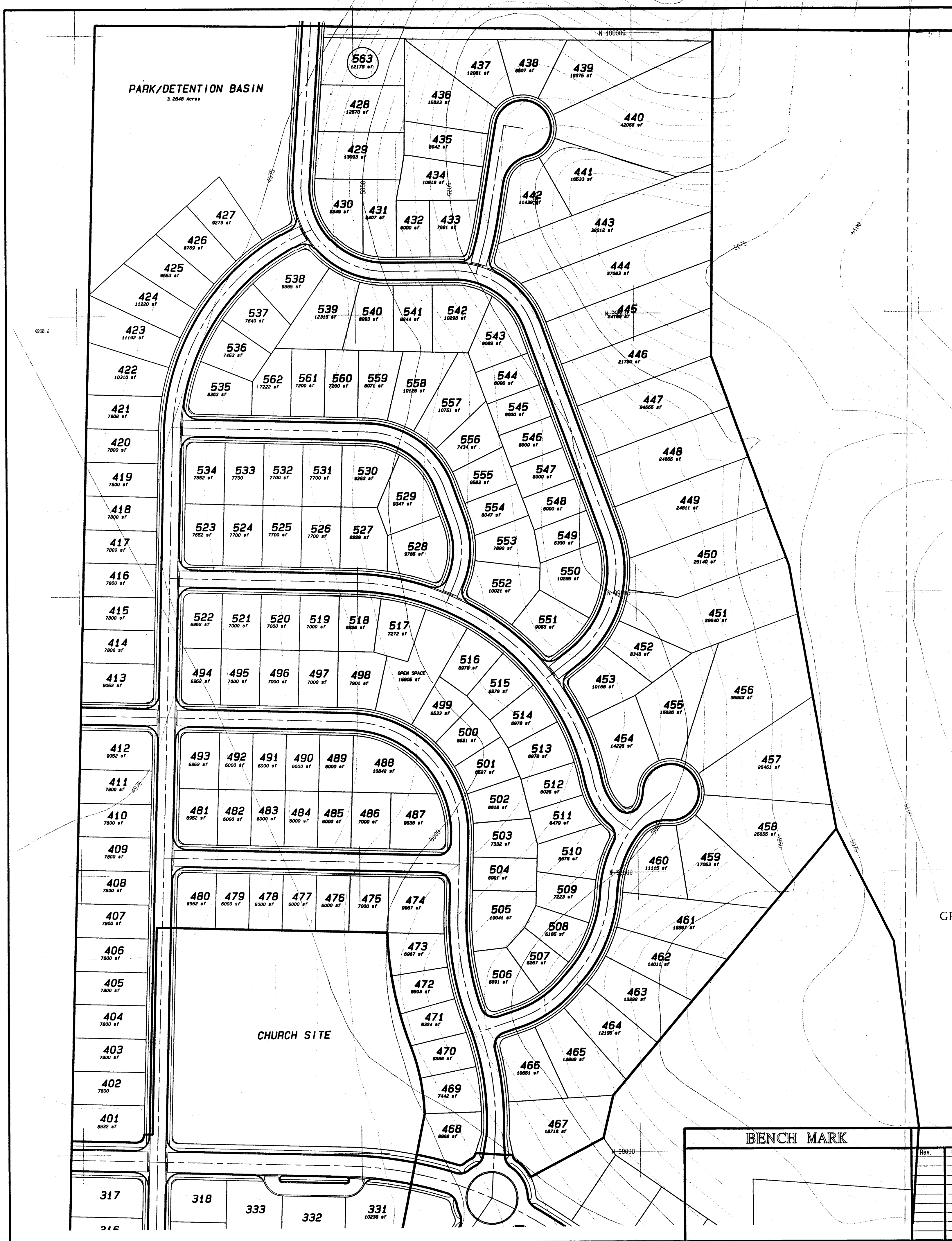
APPROVED
MAR 04 2005
REGISTERED



1. ALL WATER LINES, EXCEPT WHERE NOTED, ARE 8" LINES.
2. ALL SEWER LINES, EXCEPT WHERE NOTED, ARE 8" LINES.

RECEIVED
MAR 02 2005

BENCH MARK		REVISIONS		F.J.Clark & Associates		LONE TREE II		
		Rev.	Date	Description	App'd	EAGLE MOUNTAIN, UTAH		
						6654 West 9680 North Highland, Utah 84003 (801) 492-1307	Drawn by: FJC	Scale: 1"=100'
Plans prepared under the direction of:					Fred J. Clark P.E. 155153 Date _____	Designed by: FJC	Date: 2/4/06	
					Checked by:	Approved by:	Sheet No. 2 OF 3	



Lone Tree

Preliminary Storm Drainage Calculations

February 7, 2006

Introduction:

The purpose of this study is to determine the required detention storage to handle the 100-year 24-hour storm event.

Detention Pond Calculations:

The Lone Tree area drains to the Northwest corner of the site into an existing drainage channel which eventually drains to Tickville Wash. The Hillside areas that drain to this area where included in the calculations.

A Subarea map is attached showing the hillside areas. The C values for the detention calculations were averaged for each area.

A church site is located within this subdivision and it will be included in the detention calculations so that it will not need to detain storm water on the church site.

Using the rational method, a spreadsheet was prepared to determine the required detention storage. The spreadsheet is attached in the appendix and the required volume = 185,525 cubic feet or 4.2591 acre-feet.

The water from this detention basin will be released into the natural drainage channel via multiple outlet pipes as a way to evenly distribute the flow.

Conclusions:

The proposed area on the plans for the detention basin is adequate for the construction of the detention basin to handle the 100-year storm event.

**Lone Tree Subdivision
100-Year Storm Water Calculations
Detention Calculations
7-Feb-06**

The storm drain calculations were performed using the rational method.

Hydrologic Calculations

CA CALCULATION

	C	Area (sf)	C * A
Residential Area	0.45	3896937	1755622
Church Site	0.70	170878	119615
Pervious-Hillside	0.30	2215420	664626
Total CA		6283235	2557862

Total Acres: 144.24
Qallow (0.2 cfs/acre) = 28.85

Detention calculations

Lapsed Time (min.)	Rainfall intensity (in/hr)	Total Rainfall (in)	Rainfall Volume (cu.ft.)	Release Volume (cu.ft.)	Required Storage (cu.ft.)
A	B	C	D	E	F
5	5.16	0.43	90940	8655	82285
10	4.50	0.75	158616	17309	141307
15	4.00	1.00	211489	25964	185525
30	2.20	1.10	232637	51928	180710
60	1.30	1.30	274935	103855	171080
120	0.70	1.40	296084	207710	88374
180	0.50	1.50	317233	311565	5667
360	0.27	1.60	338382	623131	-284749
720	0.14	1.66	351071	1246261	-895191
1440	0.09	2.26	477964	2492523	-2014559

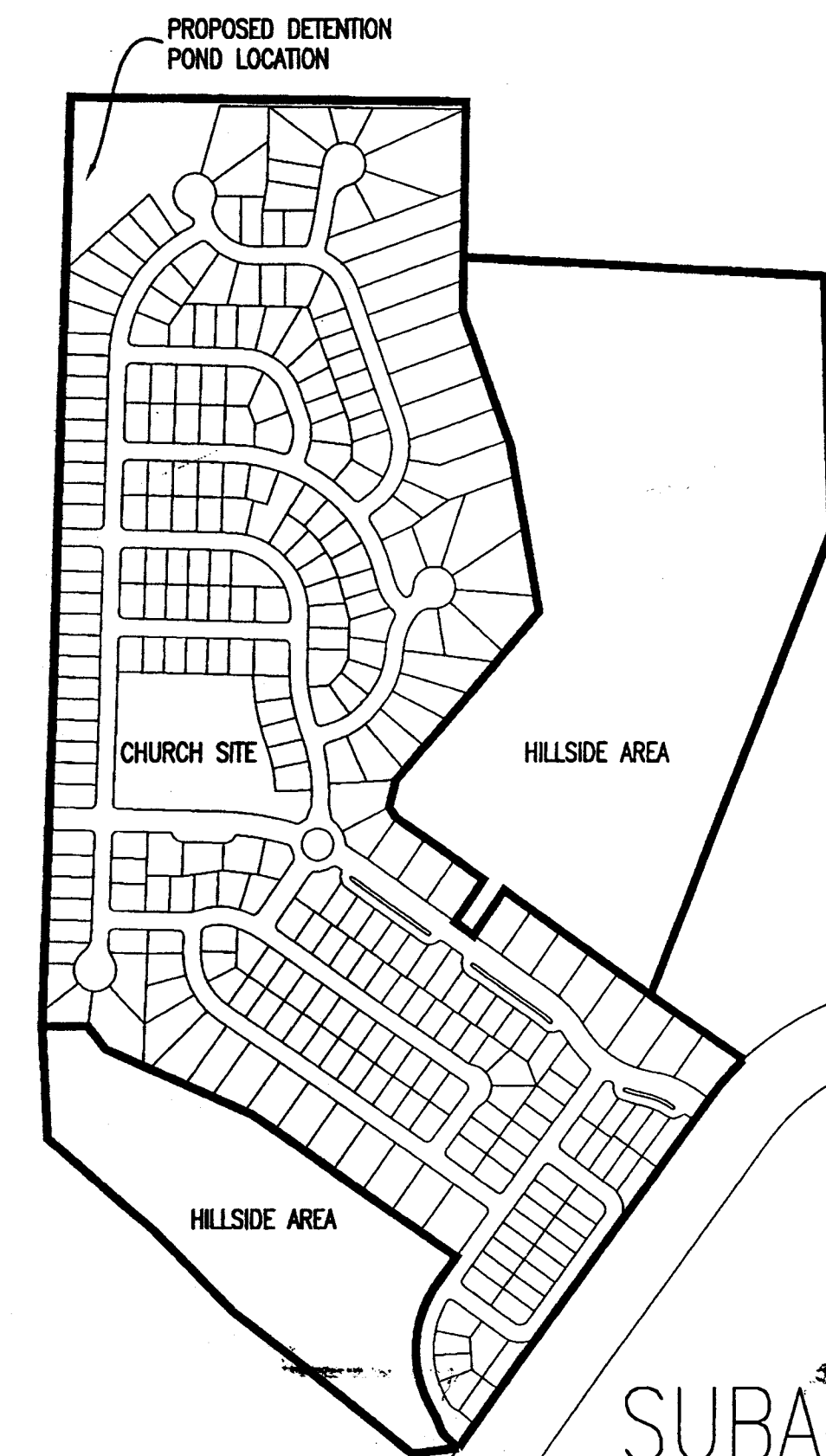
Required Detention Storage 185,525 cf

Notes:

A, B, & C are based upon Eagle Mountain 100-year rainfall data
D = C / (12 inches/foot) x total acreage of site x 43,560 sf/acre x run-off coefficient, where Q=CIA and V=CIA
E = an allowable release rate (0.2 cfs/acre) x A x 60 sec.
F = D - E to determine storage volume

GRADING, DRAINAGE, AND EROSION PLAN NOTES:

- ALL EXISTING AND FUTURE ROADWAYS ARE SHOWN WITH DESERT TYPES OF VEGETATION COVERING MOST OF THE GROUND.
- THE PROJECT HAS VALLEYS AND HILLS WITH THE VALLEYS CONTAINING MOSTLY FINES SILTS, SOME CLAYS, AND SANDS WITH THE POTENTIAL OF COLLAPSIBLE SOIL CHARACTERISTICS. APPROACHING THE HILLS, THE SOILS BECOME MORE GRAVELLY WITH BEDROCK PROTRUDING MORE PREDOMINATELY.
- WITH THE AFOREMENTIONED CHARACTERISTICS, GRADING WILL BE MINIMIZED AS MUCH AS POSSIBLE TO AVOID MAJOR CUT AND HILL SLOPES. REMOVAL OF ROCK AND DISTURBANCE OF DRAINAGE PATTERNS.
- THE STORM DRAIN SYSTEM WILL BE SOMEWHAT EXTENSIVE TO INSURE THAT GRADING WILL BE MINIMAL.
- A COMPLETE GEOTECHNICAL AND SOILS REPORT WILL BE FORTHCOMING WHEN REQUIRED.



BENCH MARK		REVISIONS		F.J.Clark & Associates		LONE TREE II	
Rev.	Date	Description	App'd	6654 West 9680 North Highland, Utah 84003 (801) 492-1307		EAGLE MOUNTAIN, UTAH	
				Plans prepared under the direction of:		Scale: 1"=100'	
				Fred J. Clark P.E. 155153 Date		Date: 2/4/06	
				Drawn by: F.J.C.		Sheet No. 3 of 3	
				Designed by: F.J.C.		332	
				Checked by:			
				Approved by:			



N 1/4 SEC 25
T5S, R2W, SLB&M

LDS CHURCH
58:047:0010

BELLE STREET INVEST. LLC
58:047:0017

NE COR SEC 25
T5S, R2W, SLB&M
ELEV = 5101.09

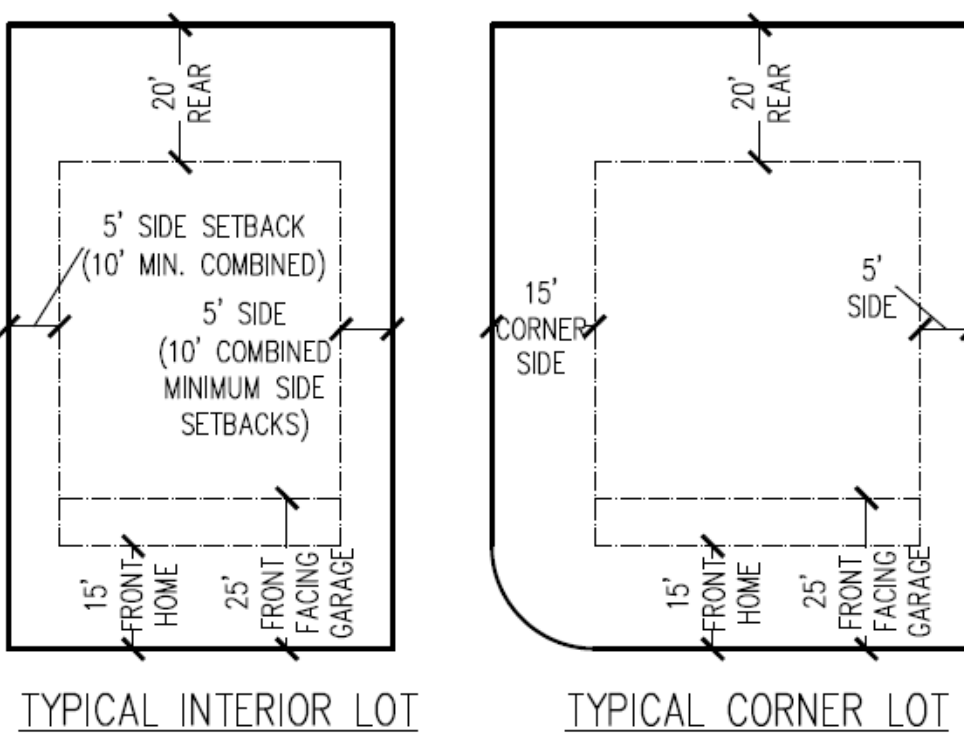
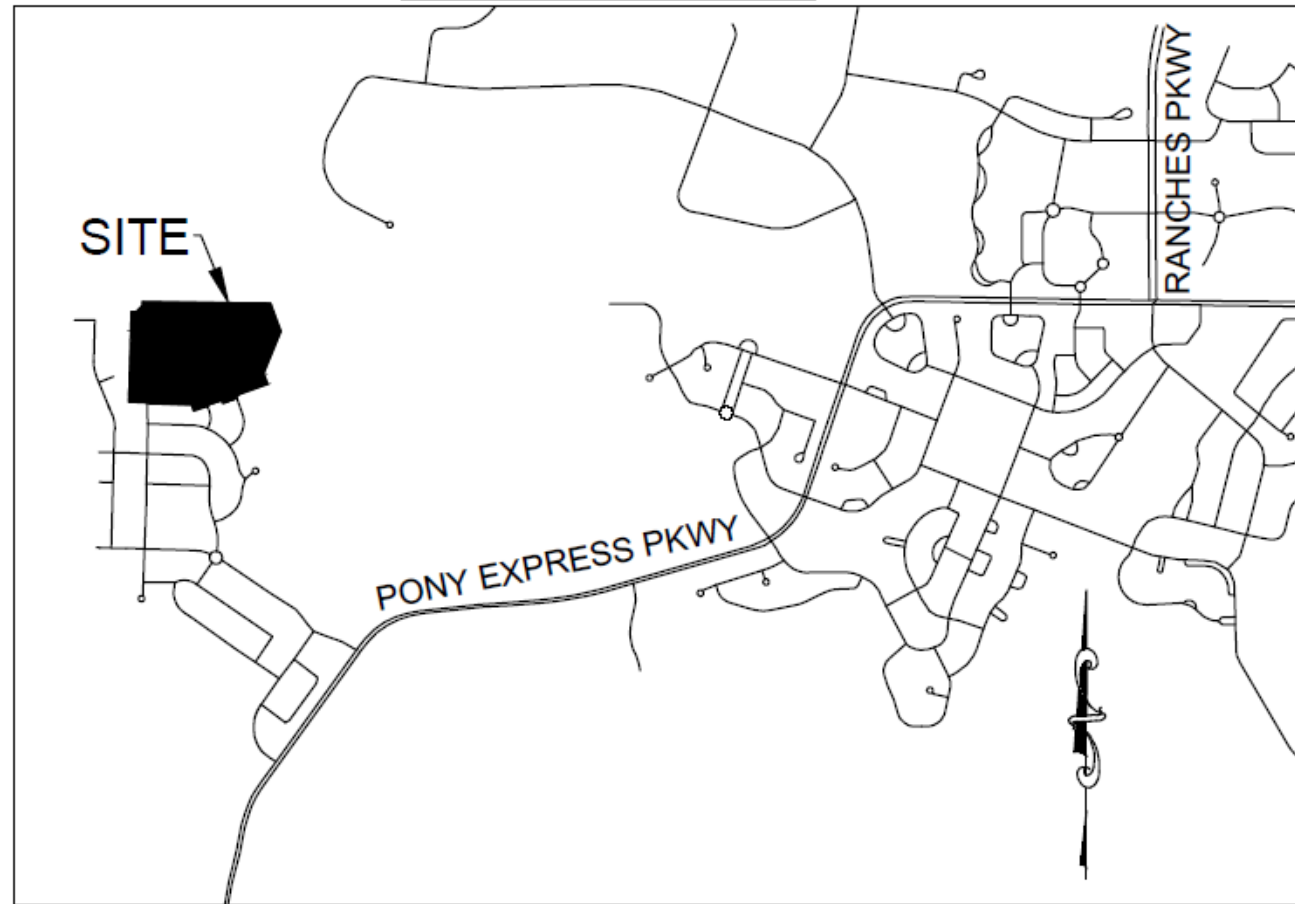
LEGAL DESCRIPTION

Beginning at a point located North 89°15'07" West along section line 303.58 feet from the Northeast Corner of Section 25, Township 5 South, Range 2 West, Salt Lake Base and Meridian; thence South 20°02'00" East 246.26 feet; thence South 22°05'49" West 377.38 feet; thence South 20°02'20" East 96.44 feet; thence along the northerly boundary of Lone Tree at Circle Five Ranch Plat "E" the following eleven courses and distances: 1) South 69°57'48" West 254.78 feet, 2) South 44°19'12" West 55.46 feet, 3) South 69°57'40" West 100.00 feet, 4) North 20°02'20" West 28.16 feet, 5) South 69°57'40" West 100.00 feet, 6) South 63°59'40" West 50.27 feet, 7) South 69°57'40" West 100.00 feet, 8) North 20°02'20" West 52.85 feet, 9) North 88°21'02" West 345.17 feet, 10) North 77°02'27" West 50.99 feet, and 11) North 88°21'02" West 129.94 feet; thence North 1°38'23" East along the easterly boundary of Sunset Ridge Phase A Plots 1 and 2 a distance of 753.61 feet; thence East 42.46 feet; thence North 43°58'06" East 73.94 feet; thence North 29.62 feet; thence South 89°15'07" East along section line 1066.76 feet to the point of beginning. Area = 22.019 Acres

GENERAL NOTES

- SEE SHEET 3 FOR EXISTING CONTOURS.
- THERE ARE SOME AREAS IN THIS SUBDIVISION WITH A NATURAL GRADE THAT EXCEEDS 15% IN RELATION TO THE PROPOSED LOT LAYOUT. THEREFORE, A SLOPE ANALYSIS PLAN HAS BEEN PROVIDED FOR THIS SITE.
- BUILDING SETBACKS ARE SHOWN ON THIS PLAN AND INCLUDE 15' FRONT, 25' DRIVEWAY, 20' REAR, 15' CORNER LOT, AND SIDE TOTAL OF 10' WITH 5' MIN. ON ONE SIDE.
- ALL ROADS WILL BE PUBLIC AND MEET CITY STANDARDS.
- A FIRE FLOW ANALYSIS IS REQUIRED AFTER INSTALLATION OF FIRE HYDRANTS AND PRIOR TO BUILDING PERMITS.
- ALL OUTDOOR LIGHTING MUST BE FULL CUT-OFF, DARK SKY COMPLIANT IN ACCORDANCE WITH CITY CODE.
- HOMES CONSTRUCTED WITHIN THIS SUBDIVISION MUST COMPLY WITH CITY CODE ARCHITECTURAL DESIGN REVIEW.
- CITY WILL OWN AND MAINTAIN THE PROPOSED OPEN SPACE AREAS SHOWN ON THIS PRELIMINARY PLAT.
- NO TURNAROUNDS WILL BE NEEDED WITH THE CURRENT PROPOSED PHASING.
- EXISTING ZONE = TOWN CORE
- THERE ARE NO IRRIGATION DITCHES OR STRUCTURES, CANALS, WELLS, STREAMS, SIGNIFICANT ROCK OUTCROPPINGS, WETLANDS, FLOOD PLAINS, OR OTHER NATURAL FEATURES ON SITE.
- PUBLIC UTILITY EASEMENTS ARE 10' FRONT, AND 5' REAR AND SIDES ON EACH LOT.

VICINITY MAP

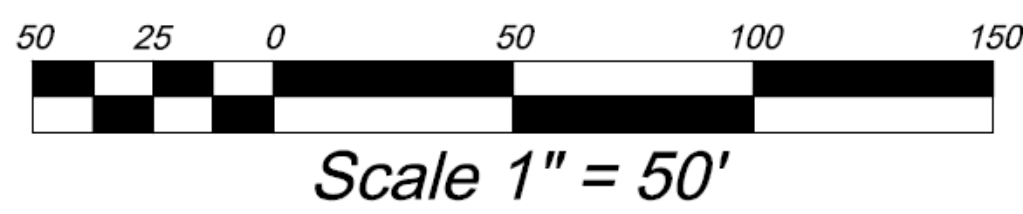


SHEET INDEX

- PRELIMINARY PLAT
- UTILITY PLAN
- GRADING, DRAINAGE & EROSION PLAN

PLAT CALCULATIONS

TOTAL ACREAGE:	22.02 ACRES
BUILDABLE ACREAGE:	22.02 ACRES
TOTAL ACREAGE IN LOTS:	18.70 ACRES
TOTAL ROADWAY AREA:	3.31 ACRES
TOTAL OPEN SPACE (INCLUDES PONDS):	1.74 ACRES
TOTAL DEVELOPED OPEN SPACE*:	1.41 ACRES
AVERAGE LOT SIZE:	14,294 SF/0.33 ACRES
LARGEST LOT SIZE:	63,206 SF/1.45 ACRES
SMALLEST LOT SIZE:	5,452 SF/0.13 ACRES
OVERALL DENSITY:	2.59 LOTS/ACRE
TOTAL # OF LOTS:	57 LOTS
*INCLUDES 75% OF POND	



LAND SURVEYOR:
AZTEC ENGINEERING INC.
491 N. 450 W.
OREM, UT. 84057
(801) 224-7308

BENCH MARK

NORTHEAST CORNER, SECTION 25,
TOWNSHIP 5 SOUTH, RANGE 2
WEST, SALT LAKE BASE AND
MERIDIAN
ELEVATION = 5101.09

REVISIONS

Rev.	Date	Description	App'd

Developer/Property Owner:

Brian Huckell
Phone: (801) 592-3972

EXCE ENGINEERING
David W. Peterson, P.E., License #203093
12 West 100 North, Suite 201, American Fork, UT 84003
P: (801) 736-4504; F: (801) 736-4511

LONE TREE - PLAT F

EAGLE MOUNTAIN

UTAH

Drawn by:
D.W.P.
Designed by:
D.W.P.
Checked by:
D.W.P.

PRELIMINARY PLAT

LOCATED IN THE NORTHEAST QUARTER OF SECTION 25,
TOWNSHIP 5 SOUTH, RANGE 2 WEST, SLB&M

Scale:
1"=50'
Date:
01/18/19
334
C1