EAGLE MOUNTAIN
PLANNING COMMISSION MEETING

January 9, 2024, 5:30 PM
Eagle Mountain City Council Chambers
1650 East Stagecoach Run, Eagle Mountain, Utah 84005

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

1. Discussion Items

1.A WORKSESSION ITEM: RULES OF PROCEDURE
Review of Planning Commission's adopted meeting(s) rules of procedure

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 December 12, 2023 Planning Commission Minutes
12.12.2023 PC DRAFT Minutes

5. Status Report

6. Action and Advisory Items

6.A ACTION ITEM -- ELECTION OF TEMPORARY PLANNING COMMISSION CHAIR

6.B ACTION ITEM/PUBLIC HEARING - Lakeview Church Site Plan
Site plan approval to construct a church on Lot 208 of Arrival Subdivision Phase B, Plat 2, at 9634 N. Duggan Drive.
Lakeview LDS Site
Lakeview LDS Lighting

6.C ORDINANCE/PUBLIC HEARING - Approval Process for Preliminary Plats - An Ordinance of Eagle Mountain City, Utah, Amending the Eagle Mountain Municipal Code Section 16.20.050.
The proposed ordinance amends EMMC 16.20.050, modifying the approval process of single-family, two-family, or townhome preliminary plats to ensure compliance with SB174 (2023).

EMMC 16.20.050 Approval Process

6.D ORDINANCE/PUBLIC HEARING - CODE AMENDMENTS TO TITLE 16 RESIDENTIAL WATER RIGHT REQUIREMENTS

Planning Commission review and recommendation to the City Council on proposed EMMC amendments to Table 16.35.130(a) Residential Water Right Requirements.

Table 16.35 Residential Water Right Requirements.rtf

6.E ORDINANCE/PUBLIC HEARINGÂ -- CODE AMENDMENTS TO EMMC TITLE 15 CONSTRUCTION STANDARDS

Planning Commission review and recommendations regarding code amendments to sewer system standards. A public hearing on this item was held at the October 24, 2023, Planning Commission meeting.

Eagle Mountain Construction Standards 2023_PC Comments.pdf

6.F ORDINANCE/PUBLIC HEARING - Accessory Dwelling Unit Standards - An Ordinance of Eagle Mountain City, Utah, Amending the Eagle Mountain Municipal Code Section 17.70.030.

BACKGROUND: *(Presented by Brandon Larsen)* The proposed ordinance amends EMMC 17.70.030, modifying the standards for accessory dwelling units relative to garages and parking. This is brought forward to ensure compliance with SB174 (2023).

Accessory Dwelling Units, Garages and Parking.pdf

10-9a-530, UCA.pdf

6.G ORDINANCE/PUBLIC HEARING - An Ordinance of Eagle Mountain City, Utah, Amending the Eagle Mountain Municipal Code Chapter 17.49 Wildlife Corridor Overlay Zone.

Please continue this item indefinitely.

ORD--EMMC 17.49 Wildlife Corridor Overlay Zone

7. Discussion Items

8. Next scheduled meeting

9. Adjournment

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

In accordance with the Americans with Disabilities Act, Eagle Mountain City will make reasonable 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.

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	EAGLE MOUNTAIN CITY **PLANNING COMMISSION MEETING** **JANUARY 9, 2024**

TITLE:	WORKSESSION ITEM: RULES OF PROCEDURE
ITEM TYPE:	Presentation
FISCAL IMPACT:	N/A
APPLICANT:	

GENERAL PLAN DESIGNATION	CURRENT ZONE	ACREAGE	COMMUNITY

PUBLIC HEARING:
No

PREPARED BY:
Brandon Larsen, Planning

PRESENTED BY:

RECOMMENDATION:

BACKGROUND:

ITEMS FOR CONSIDERATION:

REQUIRED FINDINGS:

PLANNING COMMISSION ACTION/RECOMMENDATION:

ATTACHMENTS:

EAGLE MOUNTAIN
Planning Commission MEETING MINUTES

December 12, 2023, 5:30 p.m.
Eagle Mountain City Council Chambers
1650 East Stagecoach Run, Eagle Mountain, Utah 84005

COMMISSION MEMBERS PRESENT: Commissioners Jason Allen, Jeremy Bergener, Matthew Everett, Robert Fox, and Brent Strong. Alternate Commissioner Jimmy Eaton was excused.

CITY STAFF PRESENT: Steve Mumford, Deputy City Administrator/Community Development Director; Brandon Larsen; Planning Director; Marcus Draper, City Attorney; Todd Black, Wildlife Biologist/Environmental Planner; Robert Hobbs, Senior Planner; David Stroud, Senior Planner; Steven Lehmitz, Planner; Caden Lyon, Planner; and Elizabeth Fewkes, Recording Secretary.

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

Commissioner Everett called the meeting to order at 5:30 p.m.

1. Discussion Items

1.A. CONCEPT PLAN/DISCUSSION – Gardner Farms

Senior Planner David Stroud presented the concept plan for Gardner Farms. The subject property is along the west side of Eagle Mountain Boulevard and contains 160 acres. The applicant proposes Employment Center/Campus (42.21 acres), Neighborhood Residential Three (54.27 acres), Neighborhood Residential Two (54.58 acres), and Regional Commercial (10.02 acres) land uses developed over ten phases. To the south, west, and north is Utah County land, and to the east across Eagle Mountain Boulevard is unencumbered agriculture property in the City with a future land use of Employment Center/Campus or Regional Commercial.

Applicant representative, Chase Bryan, said the land was annexed into the City a little over a year ago. Their primary focus is the medical campus which they feel will be beneficial to Eagle Mountain City. Originally the plan had one large park. The Development Review Committee suggested distributing the open space into two parks, one located near the medical center and one closer to the residential areas to improve accessibility for a greater number of individuals. The plan includes townhomes, apartment-style product, and assisted living facilities. One apartment building has 40 units and another has 45 units. They hope the City will be willing to consider the proposed density due to the economic feasibility of the project, to buffer between this site and the nonresidential uses to the north, and to provide housing for manufacturing workers.

The Planning Commission provided feedback supporting the development of a medical campus in the City and the plan's proposed layout, transitioning, and buffering. Commissioners expressed concern about the plan failing to meet Municipal Code standards including the maximum unit count of 12 units per apartment building, sequential phasing, and multifamily amenity requirements for pools.

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Discussion ensued regarding the density of other multifamily units in developments in the City, the desire of the Commission to respond to State affordable housing initiatives in ways appropriate to Eagle Mountain, and traffic and infrastructure needs to accommodate growth in this area of the City.

Commissioner Everett adjourned the work session at 6:06 p.m.

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

Commissioner Everett called the policy session to order at 6:31 p.m.

2. Pledge of Allegiance

Commissioner Everett led the Pledge of Allegiance.

3. Declaration of Conflicts of Interest

None.

4. Approval of Meeting Minutes

4.A. November 28, 2023 Planning Commission Minutes

MOTION: ***Commissioner Allen moved to approve the November 28, 2023 minutes. Commissioner Bergener seconded the motion.***

Those Voting Yes	*Those Voting No*	*Those Abstaining*	*Those Absent*
☒ *Jason Allen*	☐ *Jason Allen*	☐ *Jason Allen*	☐ *Jason Allen*
☒ *Jeremy Bergener*	☐ *Jeremy Bergener*	☐ *Jeremy Bergener*	☐ *Jeremy Bergener*
☒ *Matthew Everett*	☐ *Matthew Everett*	☐ *Matthew Everett*	☐ *Matthew Everett*
☒ *Robert Fox*	☐ *Robert Fox*	☐ *Robert Fox*	☐ *Robert Fox*
☒ *Brent Strong*	☐ *Brent Strong*	☐ *Brent Strong*	☐ *Brent Strong*

The motion passed with a unanimous vote.

5. Status Report

Planning Director Brandon Larsen recognized Commissioner Matthew Everett for his ten-year tenure on the Planning Commission. He presented the Commissioners with gifts of appreciation for their service to the City.

Mr. Larsen reviewed the planning items discussed and voted upon during the December 5, 2023 City Council meeting.

6. Action and Advisory Items

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6.A. ACTION ITEM – Quailhill Stake Temporary Site Plan

Senior Planner David Stroud presented the request to locate a temporary trailer in the parking lot of the meeting house at 7995 N. Silver Lake Parkway to house Quailhill Stake offices to accommodate the needs of a local Church of Jesus Christ of Latter-day Saints congregation. The structure will not have plumbing or bathroom facilities. The Planning Commission can set an expiration for the approval and the applicant can request an extension if necessary. The applicant has indicated that the trailer is anticipated to be needed for approximately two years.

Staff recommends the Planning Commission forward a positive recommendation to the City Council regarding the Quailhill Stake Temporary Site plan request, with the following condition:

1. Elevations of the temporary structure shall be submitted to the City.

Commissioner Fox said that as he assumes that a more permanent solution is in the works, he is unconcerned due to the temporary nature of the request.

Commissioner Everett agreed that it would be preferable to see the elevations prior to making a recommendation. However, he assumes the unit will look like a construction or school trailer. He is familiar with the area and the parking lot has enough stalls to accommodate the congregation's parking needs and the trailer. He is in favor of granting a two-year waiver.

Applicant representative, Chad Spencer, confirmed that the unit will be a construction-style trailer. Multiple church buildings are undergoing the site plan submission process. The trailer will be removed once new facilities are completed in approximately a year and a half.

MOTION: ***Commissioner Bergener moved to recommend approval to the City Council of the temporary site plan for Quailhill Stake with the following conditions:***

1. ***The applicant shall submit elevations of the temporary structure and***
2. ***The approval shall expire in two years.***

Commissioner Allen seconded the motion.

Those Voting Yes	*Those Voting No*	*Those Abstaining*	*Those Absent*
☒ *Jason Allen*	☐ *Jason Allen*	☐ *Jason Allen*	☐ *Jason Allen*
☒ *Jeremy Bergener*	☐ *Jeremy Bergener*	☐ *Jeremy Bergener*	☐ *Jeremy Bergener*
☒ *Matthew Everett*	☐ *Matthew Everett*	☐ *Matthew Everett*	☐ *Matthew Everett*
☒ *Robert Fox*	☐ *Robert Fox*	☐ *Robert Fox*	☐ *Robert Fox*
☒ *Brent Strong*	☐ *Brent Strong*	☐ *Brent Strong*	☐ *Brent Strong*

The motion passed with a unanimous vote.

6.B. ACTION ITEM – CODE AMENDMENTS TO EMMC TITLE 15 CONSTRUCTION STANDARDS

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Commissioner Everett noted that the language for the amendment had not been included in the packet materials. As the Planning Commission was unable to review the proposed amendments prior to the meeting, he recommended tabling the item.

MOTION: ***Commissioner Everett moved to table amendments to Eagle Mountain Municipal Code Title 15 Construction Standards to a future meeting. Commissioner Fox seconded the motion.***

Those Voting Yes	*Those Voting No*	*Those Abstaining*	*Those Absent*
☒ *Jason Allen*	☐ *Jason Allen*	☐ *Jason Allen*	☐ *Jason Allen*
☒ *Jeremy Bergener*	☐ *Jeremy Bergener*	☐ *Jeremy Bergener*	☐ *Jeremy Bergener*
☒ *Matthew Everett*	☐ *Matthew Everett*	☐ *Matthew Everett*	☐ *Matthew Everett*
☒ *Robert Fox*	☐ *Robert Fox*	☐ *Robert Fox*	☐ *Robert Fox*
☒ *Brent Strong*	☐ *Brent Strong*	☐ *Brent Strong*	☐ *Brent Strong*

The motion passed with a unanimous vote.

6.C. 2024 Planning Commission Meeting Schedule

The Planning Commission reviewed the following proposed meeting dates for 2024:

January 9, 23
February 13, 27
March 12, 26
April 9, 23
May 14, 28
June 11, 25
July 9, 23
August 13, 27
September 10, 24
October 8, 22
November 12, 26
December 10

Mr. Larsen noted that two meetings are proposed for November. As the Planning Commission did not foresee conflict with the November 26th meeting, they elected to retain it on the schedule.

MOTION: ***Commissioner Allen moved to approve the 2024 Planning Commission Meeting Schedule. Commissioner Strong seconded the motion.***

Those Voting Yes	*Those Voting No*	*Those Abstaining*	*Those Absent*
☒ *Jason Allen*	☐ *Jason Allen*	☐ *Jason Allen*	☐ *Jason Allen*
☒ *Jeremy Bergener*	☐ *Jeremy Bergener*	☐ *Jeremy Bergener*	☐ *Jeremy Bergener*
☐ *Matthew Everett*	☐ *Matthew Everett*	☒ *Matthew Everett*	☐ *Matthew Everett*
☒ *Robert Fox*	☐ *Robert Fox*	☐ *Robert Fox*	☐ *Robert Fox*

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☒ ***Brent Strong*** ☐ ***Brent Strong*** ☐ ***Brent Strong*** ☐ ***Brent Strong***

The motion passed with a vote of 4:1 with one abstention.

6.D. ACTION ITEM – City Center Commercial Phase A Plat 6 – Rezone

6.E. ACTION ITEM – City Center Commercial Phase A Plat 6 – Recorded Plat Amendment

Items 6.D. and 6.E. were presented and discussed concurrently.

Mr. Lehmitz presented the item. City Center Commercial Phase A Plat 1 was recorded in 2017. Lot 2 of that plat has been subdivided a couple of times to create smaller commercial lots that have since been developed. The owners of Lot 1 are seeking to do the same and divide the lot, creating another commercial lot. Along with this application, there is a rezone request to change the newly created lot to a current commercial zone.

The Eagle Mountain Properties Master Development Agreement (MDA) initially zoned this property Commercial C-1 in 1997. It has since been platted and a portion of City Center Commercial Phase A Plat 1 Lot 1 has been developed. The owners of Lot 1 are seeking to subdivide the lot, creating an additional lot for commercial use. The rezone request is for the proposed lot being created, changing it to Commercial Community, one of our current commercial zones. The partial screening wall between the commercial site and the homes would need to be completed.

Applicant representative, Ben Nielsen, explained that a rezone is necessary for the property. The property can be accessed via Eagle Mountain Boulevard, through the Pony Express Dental parking lot, or the roundabout west of the Chevron gas station.

Commissioner Everett opened the public hearing at 6:53 p.m. As there were no comments, he closed the hearing.

Discussion ensued regarding zone transitioning compatibility in relation to previous zoning approvals and historical zoning.

Commissioner Everett said he is not opposed to the application because the property had previously been zoned for commercial uses.

Commissioner Allen noted granting the rezone allows the City to enforce current setbacks and use controls excluded from the historical zoning.

MOTION: ***Commissioner Bergener moved to recommend approval to the City Council of the rezone for City Center Commercial Phase A Plat 6 to Commercial Community. Commissioner Fox seconded the motion.***

Those Voting Yes ***Those Voting No*** ***Those Abstaining*** ***Those Absent***

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☒ *Jason Allen*	☐ *Jason Allen*	☐ *Jason Allen*	☐ *Jason Allen*
☒ *Jeremy Bergener*	☐ *Jeremy Bergener*	☐ *Jeremy Bergener*	☐ *Jeremy Bergener*
☒ *Matthew Everett*	☐ *Matthew Everett*	☐ *Matthew Everett*	☐ *Matthew Everett*
☒ *Robert Fox*	☐ *Robert Fox*	☐ *Robert Fox*	☐ *Robert Fox*
☒ *Brent Strong*	☐ *Brent Strong*	☐ *Brent Strong*	☐ *Brent Strong*

The motion passed with a unanimous vote.

MOTION: ***Commissioner Bergener moved to recommend approval to the City Council of the recorded plat amendment for City Center Commercial Phase A Plat 6. Commissioner Strong seconded the motion.***

Those Voting Yes	*Those Voting No*	*Those Abstaining*	*Those Absent*
☒ *Jason Allen*	☐ *Jason Allen*	☐ *Jason Allen*	☐ *Jason Allen*
☒ *Jeremy Bergener*	☐ *Jeremy Bergener*	☐ *Jeremy Bergener*	☐ *Jeremy Bergener*
☒ *Matthew Everett*	☐ *Matthew Everett*	☐ *Matthew Everett*	☐ *Matthew Everett*
☒ *Robert Fox*	☐ *Robert Fox*	☐ *Robert Fox*	☐ *Robert Fox*
☒ *Brent Strong*	☐ *Brent Strong*	☐ *Brent Strong*	☐ *Brent Strong*

The motion passed with a unanimous vote.

6.F. ACTION ITEM – Alpine School District Middle School Site Plan

Mr. Stroud presented the item. Alpine School District (ASD) is in need of a middle school to educate the projected future student population of the north Eagle Mountain area. The site location is in the northwest area of the City and immediately adjacent to Arrival, to the north. Per recent State requirements, Camp Williams was notified of the request and approved the proposal.

Staff recommends the Planning Commission forward a positive recommendation to the City Council regarding the site plan of Alpine School District Middle School with the following condition:

1. Lighting shall comply with Eagle Mountain Municipal Code.

Commissioner Everett expressed support for the traffic configuration and patterns. He thanked ASD for being good partners with the City and for their willingness to comply with the dark sky ordinance.

Applicant representative, Frank Pulley, said he appreciates staff and the Commission working in partnership with them.

Commissioner Everett opened the public hearing at 7:09 p.m. As there were no comments, he closed the hearing.

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MOTION: ***Commissioner Allen moved to recommend approval to the City Council of the site plan for the Alpine School District middle school with the condition that the lighting shall comply with Eagle Mountain Municipal Code. Commissioner Strong seconded the motion.***

Those Voting Yes	*Those Voting No*	*Those Abstaining*	*Those Absent*
☒ ***Jason Allen***	☐ ***Jason Allen***	☐ ***Jason Allen***	☐ ***Jason Allen***
☒ ***Jeremy Bergener***	☐ ***Jeremy Bergener***	☐ ***Jeremy Bergener***	☐ ***Jeremy Bergener***
☒ ***Matthew Everett***	☐ ***Matthew Everett***	☐ ***Matthew Everett***	☐ ***Matthew Everett***
☒ ***Robert Fox***	☐ ***Robert Fox***	☐ ***Robert Fox***	☐ ***Robert Fox***
☒ ***Brent Strong***	☐ ***Brent Strong***	☐ ***Brent Strong***	☐ ***Brent Strong***

The motion passed with a unanimous vote.

6.G. ACTION ITEM – Marketplace at Eagle Mountain Town Center Medical Site Plan

Mr. Stroud presented the item. This request is for a site plan approval of a two-story commercial building for medical office use. The subject property is platted as Lot 1 of The Marketplace at Eagle Mountain Phase 2 Amended Subdivision. The building is accessed via an internal roadway, Raven Way. The zoning of the property is Commercial Community (CC) and follows the standards of the CC zone unless otherwise permitted in the development agreement of the Marketplace at Eagle Mountain Town Center. The use as office (medical, health care, or professional) is classified as a permitted use in the CC zone. This application was reviewed under the recently amended and approved landscape island standards.

Commissioner Everett opened the public hearing at 7:14 p.m. As there were no comments, he closed the hearing.

Commissioner Bergener noted that the proposed elevations slightly differ from other buildings in the area.

Mr. Stroud stated that the design is meant to be compatible with the variety of designs in the Marketplace development.

Commissioner Everett said he has no objection to the proposed elevations considering changes in architectural trends, the use of the building, and design features that harmonize with other buildings in the area.

Commissioner Allen stated that although the design differs from other buildings, the natural light provided by the abundance of windows fits and works well with a medical facility.

Commissioner Strong agreed with the comments about the windows and the design being suitable for a medical building. He feels it will fit in with the surrounding businesses.

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MOTION: ***Commissioner Fox moved to recommend approval to the City Council of the site plan for Marketplace at Eagle Mountain Town Center Medical. Commissioner Allen seconded the motion.***

Those Voting Yes	*Those Voting No*	*Those Abstaining*	*Those Absent*
☒ *Jason Allen*	☐ *Jason Allen*	☐ *Jason Allen*	☐ *Jason Allen*
☒ *Jeremy Bergener*	☐ *Jeremy Bergener*	☐ *Jeremy Bergener*	☐ *Jeremy Bergener*
☒ *Matthew Everett*	☐ *Matthew Everett*	☐ *Matthew Everett*	☐ *Matthew Everett*
☒ *Robert Fox*	☐ *Robert Fox*	☐ *Robert Fox*	☐ *Robert Fox*
☒ *Brent Strong*	☐ *Brent Strong*	☐ *Brent Strong*	☐ *Brent Strong*

The motion passed with a unanimous vote.

6.H. ACTION ITEM /PUBLIC HEARING – Official Zoning Map Adoption – Ordinance

Deputy City Administrator/Community Development Director Steve Mumford presented the item. A huge research and GIS mapping project has been in process by City staff to update the City's Zoning Map, with the goal of producing a user-friendly, online map. This has been a much more difficult project than anticipated, as each approved master development plan was approved with unique zoning districts, leading to nearly 100 unique zoning districts that need to be properly displayed on a map. Due to the nearly 100 unique zoning districts in the City, the zoning map was set up with the general zoning categories.

Mr. Mumford explained the features, layers, and information provided on the map. Some neighborhood parks, churches, and even schools are technically located within a residential zone and have not been rezoned to a more specific zone. These uses are allowed within residential zones, so that is not uncommon. Some master development plans designate parks and open spaces specifically as zones, while others just rezone the entire area to a zone, and the parks are approved as part of the development, but not zoned separately, which is perfectly legal. Some roadways are zoned as Agriculture (Roads). This is simply because we do not have a zone for roads, so the City Attorney's opinion was that the roads are still zoned Agriculture if they were not shown as being rezoned to a specific zone. A code amendment is being drafted to add historical zones into the City Code, so it is clear that there are standards in place for each of the zones listed on the map, whether they are part of an active master development plan (MDP)/master development agreement (MDA), an expired one, or simply a historical zone that is no longer in the Municipal Code.

Staff are continuing research into any properties or zones that may have some uncertainty surrounding them. This may require the item to return at a future meeting with a revised map. This is not an official rezone, as no property is being rezoned at this time. The map simply is being created and updated to accurately reflect the current zoning on the properties. The City has chosen, for clarity and transparency, to have this map be adopted by the Commission and Council as the official City Zoning Map.

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Staff recommends that the Planning Commission send the zoning map to the City Council with a recommendation of approval allowing staff to make edits to colors, labels, links to MDPs and MDAs, links to Code, and to fix any identified minor mistakes to zoning boundaries or zoning names. Alternatively, the Commission could table the proposed zoning map in order to make the changes identified as necessary in the meeting.

Commissioner Strong expressed the desire for a mechanism to allow residents to have recourse to address zoning disagreements and disputes.

Mr. Mumford explained that staff reviewed ordinances dating back to the incorporation of the City to determine the approved zoning for the properties. However, some information could be missing and the map will include a notice informing residents of a process that allows residents to petition the City and make corrections if merited. In the future, staff will update the impacted land on the map immediately after the Mayor signs the ordinance approving updated zoning. The higher view of the map has generalized zoning for an area. Selecting a property will list the individualized approved zoning on the parcel.

Discussion ensued regarding the disputed zoning of Cedar Pass Ranch; how the zoning indicated on the map was researched and designated; and methods to publicly notice the map, solicit documentation, and collect resident feedback.

Commissioner Everett opened the public hearing at 7:58 p.m. As there were no comments, he closed the hearing.

Commissioner Allen verified with staff that this map is a tool and a resource to help the public understand what the City understands to be the approved zoning of properties. How the information is presented and communicated to the public can impact residents' reactions to and reception of the map. Staff can request assistance with making corrections to mitigate the false perception that the City is attempting to rezone properties via the map.

Commissioner Fox said that the map can be viewed as a benchmark and starting point for the City to utilize in assessing zoning in the City and a reference to assist staff and elected officials. He advocated for the document not to be presented as the Official Zoning Map until zoning disputes have been identified and resolved.

Staff explained the difference between the General Plan Future Land Use map, which indicates general land use plans for the City without setting zoning, and the Official Zoning Map which indicates approved and adopted zoning of land within the City.

Mr. Larsen supported Commissioner Allen's assessment that the map is a baseline and starting point for zoning. He elaborated on the challenges of working with the public without a zoning map. The sooner the resource is available the sooner staff can help the residents in a more efficient way. The map will be amended as needed beginning with a zoning amendment for roads. He reiterated that the City is not trying to rezone any property. He read a disclaimer that is included on other cities' zoning maps indicating that the accuracy of the information is not guaranteed. A

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similar statement can be added to the documentation to clarify the City's purpose is to use the map as a general resource.

Mr. Draper confirmed that approval of this map will not rezone properties as it is not the intent of adopting and using the map. The intent is to adopt a zoning map that accurately reflects what zoning and rezoning have occurred in the City. The map can be updated to accurately reflect approved zoning as needed. He is not concerned with successful litigation against the City as a result of adopting the zoning map. In response to concerns that the zoning map could impact tax rates, he explained that zoning-based tax increases are the purview of the County Assessor and not controlled by the City. Ordinances control taxing not the approval of this map.

Commissioner Everett agreed with the benefits of having a zoning map to use as a tool. He is in favor of making a recommendation to the City Council recognizing that additional refinement of the map will occur during Council review prior to adoption.

Commissioner Bergener concurred with Commissioner Everett regarding moving the map forward and supported allowing a public feedback period to resolve zoning disputes.

MOTION: ***Commissioner Everett moved to recommend approval to the City Council of the adoption of the Official Zoning Map allowing staff to make edits to colors, labels, links to master development plans and master development agreements, links to Municipal Code, and to fix any identified minor mistakes to zoning boundaries or zoning names. Commissioner Allen seconded the motion.***

Those Voting Yes	*Those Voting No*	*Those Abstaining*	*Those Absent*
☒ *Jason Allen*	☐ *Jason Allen*	☐ *Jason Allen*	☐ *Jason Allen*
☒ *Jeremy Bergener*	☐ *Jeremy Bergener*	☐ *Jeremy Bergener*	☐ *Jeremy Bergener*
☒ *Matthew Everett*	☐ *Matthew Everett*	☐ *Matthew Everett*	☐ *Matthew Everett*
☒ *Robert Fox*	☐ *Robert Fox*	☐ *Robert Fox*	☐ *Robert Fox*
☐ *Brent Strong*	☒ *Brent Strong*	☐ *Brent Strong*	☐ *Brent Strong*

The motion passed with a vote of 4:1.

7. Discussion Items

8. Next Scheduled Meeting

The next Planning Commission meeting is scheduled for January 9, 2024.

Commissioner Everett expressed gratitude to the staff members, Commissioners, and Councilmembers he served with during his time on the Planning Commission and thanked his family for their support. He advocated for diversity on the Planning Commission and encouraged future Commissioners to be valiant in their service.

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Commissioner Bergener said that as he is at the end of his appointment and is unsure if he will be reappointed, he desires to thank the City and staff for the opportunity to serve. He appreciates the positive changes he has seen during his tenure. He expressed appreciation to Commissioner Everett for his mentorship.

9. Adjournment

MOTION: ***Commissioner Everett moved to adjourn at 8:34 p.m. Commissioner Bergener seconded the motion.***

Those Voting Yes	*Those Voting No*	*Those Abstaining*	*Those Absent*
☒ ***Jason Allen***	☐ ***Jason Allen***	☐ ***Jason Allen***	☐ ***Jason Allen***
☒ ***Jeremy Bergener***	☐ ***Jeremy Bergener***	☐ ***Jeremy Bergener***	☐ ***Jeremy Bergener***
☒ ***Matthew Everett***	☐ ***Matthew Everett***	☐ ***Matthew Everett***	☐ ***Matthew Everett***
☒ ***Robert Fox***	☐ ***Robert Fox***	☐ ***Robert Fox***	☐ ***Robert Fox***
☒ ***Brent Strong***	☐ ***Brent Strong***	☐ ***Brent Strong***	☐ ***Brent Strong***

The motion passed with a unanimous vote.

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

Approved by the Planning Commission on January 9, 2024.

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Brandon Larsen
Planning Director

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	EAGLE MOUNTAIN CITY **PLANNING COMMISSION MEETING** **JANUARY 9, 2024**
TITLE:	ACTION ITEM -- ELECTION OF TEMPORARY PLANNING COMMISSION CHAIR
ITEM TYPE:	Appointment
APPLICANT:	City-initiated

ACTION ITEM:
Yes

PUBLIC HEARING:
No

PREPARED BY:
Brandon Larsen, Planning

BACKGROUND:

ITEMS FOR CONSIDERATION:

REQUIRED FINDINGS:

RECOMMENDATION:

ATTACHMENTS:

	EAGLE MOUNTAIN CITY **PLANNING COMMISSION MEETING** **JANUARY 9, 2024**
TITLE:	ACTION ITEM/PUBLIC HEARING - Lakeview Church Site Plan
ITEM TYPE:	Site Plan
APPLICANT:	Chad Spencer, EA Architecture

ACTION ITEM:
Yes

PUBLIC HEARING:
Yes

PREPARED BY:
David Stroud, Planning

BACKGROUND:

Chad Spencer with EA Architects requests the Planning Commission review and forward a positive recommendation to the City Council regarding the Lakeview LDS Church site plan. The lot is platted as Lot 208 of Arrival Plat 2, Phase B, containing 4.78 acres. The Church has owned the property since 2019. Surrounding uses are single-family residences, and *Religious or Cultural Meeting Halls* are Special Uses in a residential zone. The site plan contains the main building, a storage building, and a pavilion.

ITEMS FOR CONSIDERATION:

A point of discussion needs to be lighting underneath the pavilion. EMMC requires lighting to be fully shielded and cutoff while being directed downward. Drop down lenses are "unacceptable/discouraged". Eight lights are to be mounted underneath and follow the angle of the roof pitch with control by a 30-minute timer. Use will be limited as such that the lights will be off a considerably longer time than in use. The two closest homes to the pavilion are 150-250 feet away. The pavilion will also sit at a higher elevation than the homes.

REQUIRED FINDINGS:

As a Special Use, *Religious or Cultural Meeting Halls* are to meet the following use-specific standards in addition to the general standards regarding lighting, parking, landscaping, etc.:

17.75.052 Religious or Cultural Meeting Hall.

1. Main structure height shall not exceed 35 feet.

2. Non-habitable ancillary structures such as steeples or other similar structures that are generally located on the roof of a religious or cultural meeting hall may extend to a maximum overall height of 70 feet.

The proposed site plan meets all EMMC site development standards with exception to the pavilion lighting as discussed below.

RECOMMENDATION:

Staff recommends the Planning Commission discuss and then forward a positive recommendation to the City Council regarding the Lakeview LDS Church site plan, subject to the following condition:

1. Correction of any outstanding redlines.

ATTACHMENTS:

Lakeview LDS Site

Lakeview LDS Lighting

RBallif 12/19/23 no comment
DDeVoogd/UFA 12/20/2023 - No Comments
D Stroud 12.20.23 comments
M BAHR 12-21-23
COMMENTS

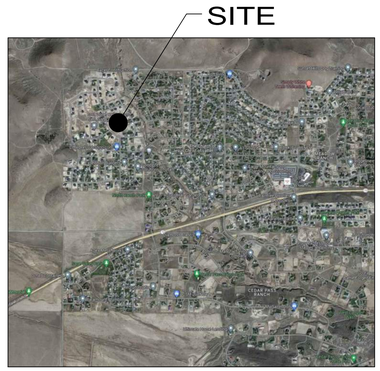
Planning, David Stroud, 801-789-6615 dstroud@emcity.org
Engineering, Chris Trusty, 801-789-6671, ctrusty@emcity.org
Public Works, Mack Straw, 801-789-6678, mstraw@emcity.org
Parks, Brad Hickman, 801-789-6664 bhickman@emcity.org
Fire, Dan DeVoogd, 801-743-7232 ddevoogd@unifiedfire.org
Streets, Zac Hilton, 801-789-6684 zhilton@emcity.org

A New Meetinghouse for:

Lakeview & Eagle Mountain UT Cedar Pass Stake

Consultant	Consultant Name	Address		Contact	Phone	Fax	E-mail
ARCHITECT:	Evans & Associates Architecture	11576 South State Street #103B	Draper, Utah 84020	Chad Spencer	(801) 553-8272	(801) 553-8273	chad@studio-ea.com
CIVIL ENGINEER:	Excel Engineering, Inc.	12 West 100 North #201	American Fork, Utah 84003	David Peterson	(801) 756-4504	(801) 756-4511	david@excelcivil.com
LANDSCAPE ARCHITECT:	In Site Design Group	17 North 470 West	American Fork, Utah 84003	Darren Wilson	(801) 756-5043	(801) 756-5279	darren@isdgllc.com
ELECTRICAL ENGINEER:	Envision Engineering	240 East Morris Avenue, Suite 200	Salt Lake City, Utah 84115	Scott Kingery	(801) 534-1130	(801) 534-1080	skingery@envisioneng.com

Vicinity Map



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Site Development		LS102	Landscape Legends
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C101	Context Site Plan	LS202	Irrigation Legend and Notes
C201	Grading and Drainage Plan	LS301	Landscape Details
C202	Utility Plan	LS401	Irrigation Details
C203	Erosion Control Plan	LS402	Irrigation Details
C204	Cultec Details	Architectural	
C205	General Notes	A201	Building Elevations
C206	On-Site Wastewater System Design	A202	Building Elevations
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C813	Pavilion Section and Detail Views		
C814	Pavilion Roof Views and Details		
ST101	Storage Building		

evans + associates architecture
11576 south state street, suite 103b, draper, utah, 84020
phone 801-553-8272 fax 801-553-8273

Stamp

LICENSED ARCHITECT
PAUL ANTHONY EVANS
273770
STATE OF UTAH

A New Meetinghouse for:
Lakeview & Eagle Mountain UT Cedar Pass Stake
Parcel: 34-620:0208
634 North Duggan Drive
Eagle Mountain, Utah

Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

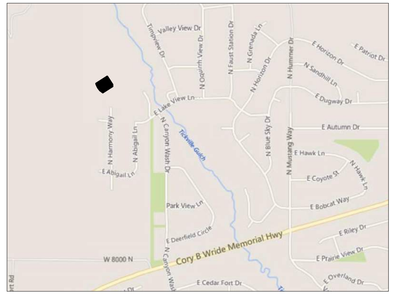
Revisions			
Mark	Date	Description	
1	10/18/23	City Comments	

Project Number
23-76
Plan Series
Heritage 23-2
Property Number
501-2693-22010101
Date
September 4, 2023

Sheet Title
COVER SHEET

Sheet
G101

ALTA / NSPS LAND TITLE SURVEY
9634 NORTH DUGGAN DRIVE
EAGLE MOUNTAIN, UTAH 84005



VICINITY MAP
NO SCALE

12|12
13|13 NORTH QUARTER CORNER SECTION 13, T5S, R2W, SLB&M (CALCULATED MONUMENT POSITION)

File Number: 95071-KP
Effective Date: April 24, 2018 at 7:30AM

To: Cottonwood Title Insurance Agency, Inc.
First American Title Insurance Company
Corporation of the Presiding Bishop of the Church of Jesus Christ of Latter-day Saints, and a Utah corporation sole
Belle Street Investments, LLC

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes items 1, 2, 4, 5, 8, 11, and 13 of the Table A thereof. The field work was completed on August 29, 2017.

Legal Description

Lot 208 in the ARRIVAL PHASE "B", PLAT 2 SUBDIVISION, being more particularly described as follows:

A parcel of land located in the Northwest quarter of Section 13, Township 5 South, Range 2 West, Salt Lake Base and Meridian, more particularly described as follows:

Beginning at a point North 00°11'34" East along the section line, 3455.99 feet and North 89°48'26" West 550.44 feet from the South quarter corner of said Section 13 and running thence South 57°30'27" West 435.38 feet to a point of curvature; thence 120.93 feet along the arc of a 475.00 foot radius curve to the right through a central angle of 14°35'13" (long chord bears North 52°36'11" West 120.60 feet); thence North 45°18'34" West 21.55 feet to a point of curvature; thence 227.66 feet along the arc of a 475.00 foot radius curve to the right through a central angle of 27°27'39" (long chord bears North 31°34'45" West 225.49 feet); thence North 17°50'55" West 53.41 feet; thence North 57°30'27" East 495.43 feet; thence South 32°29'33" East 354.17 feet; thence South 04°07'45" East 65.03 feet to the point of beginning.

SCHEDULE B – SECTION 2

13. Easement in favor of J.D. Hindley for a right of way and incidental purposes, by instrument recorded September 18, 1922, as Entry No. 6070, in Book 220, at Page 72.

Survey Findings: Said Easement does not effect the property.

14. Right-of-Way as contained in that certain "Correction" Quit-Claim Deed, dated February 9, 1982 and recorded March 10, 1982 as Entry No. 5917 in Book 1968 at Page 858.

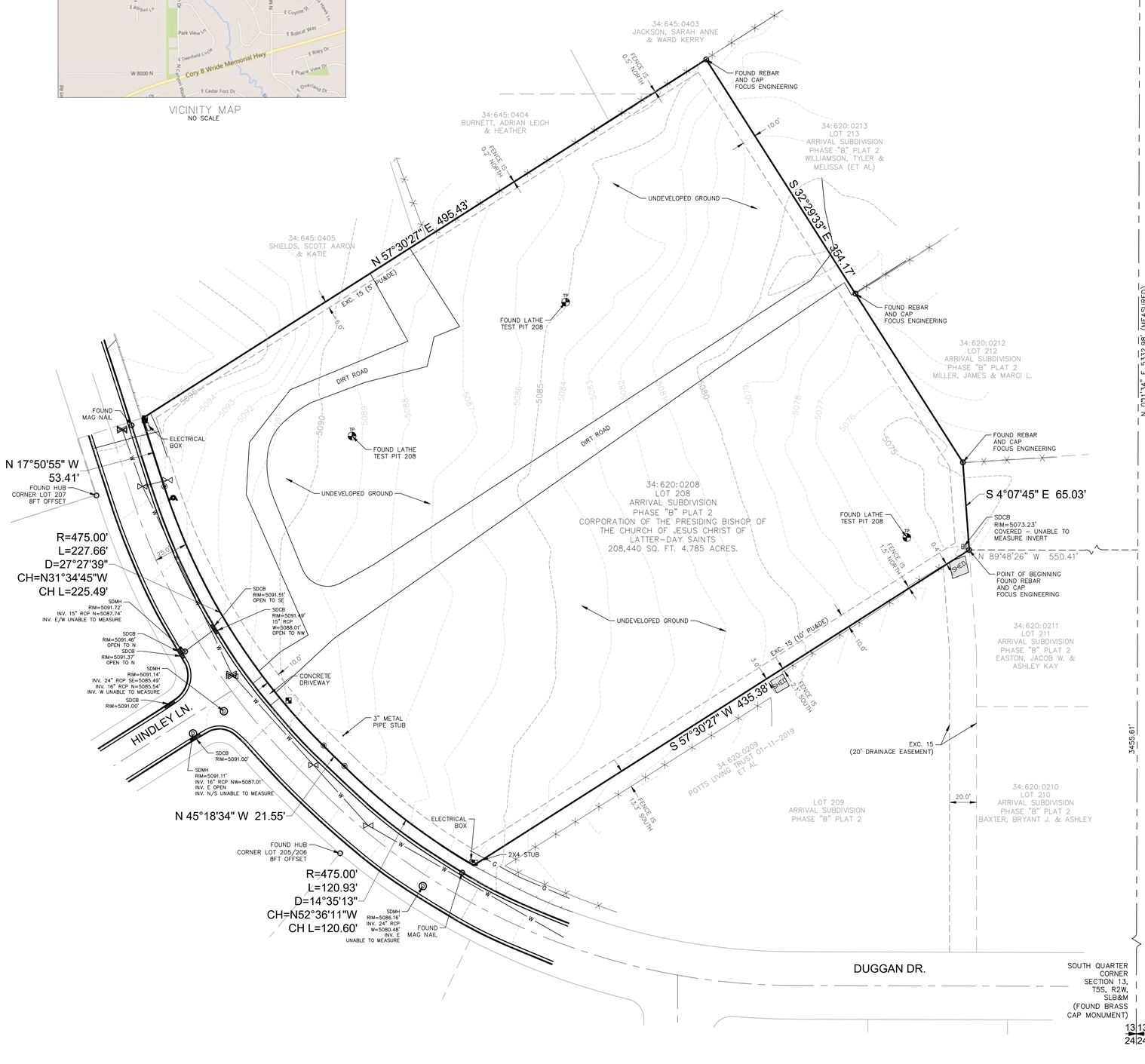
Survey Findings: Said Right-of-way does not effect the property.

15. Easements, notes and restrictions as shown on the proposed plat for Arrival Subdivision Phase "B", Plat 2.

Survey Findings: A 5 foot public utility and drainage easement runs along the northwest side and a 10 foot public utility and drainage easement runs along the northeast, southeast and southwest side from the plat. A 20' Drainage easement located south of the property from the plat are shown. These items effect the property.

Notes:

1. The basis of bearing is South 89°17'12" East between the found brass cap monuments at the South Quarter Corner and the Southeast Corner of Section 13, Township 5 South, Range 2 West, Salt Lake Base and Meridian. The survey control was established with GPS from the Utah State Plane Central USF NAD83 system and was then projected to a local ground system for this survey.
2. The purpose of this survey is to retrace and monument the boundary of the described property according to the official records and the location of pertinent existing improvements located on the ground.
3. This does not represent a title search by the surveyor. Title information was provided by others for the subject property.
4. The location of underground utilities as shown hereon are base on above ground structures and blue stake locations. Additional maps were acquired from utility GIS and mapping departments for verification. Locations of underground utilities/structures may vary from locations shown hereon. Additional buried utilities/structures may be encountered. No excavations were made during the progress of this survey to locate buried utilities/structures. Before excavations are begun, please contact blue stakes and appropriate agencies.
5. The property contains 208,440 square feet or 4.785 acres.
6. The purported address for the site is 9634 North Duggan Drive, Eagle Mountain, UT 84005.
7. The property has access to Duggan Drive.



LEGEND

- Boundary Line
- Public Utility Easement
- Adjoiner Line
- Dirt Road
- Section Line
- Test Pit
- Property Corner
- Found Property Corner
- Section Corner
- Quarter Section Corner

GRAPHIC SCALE
40 0 20 40 80
1" (INCH) = 40 ' (FEET)

No.	DATE	REVISIONS	BY

DRAWN BY: JRF
SURVEY DATE: 5/05/23

PROFESSIONAL LAND SURVEYOR
No. 5152762
5/10/23
NATHAN B. WEBER
STATE OF UTAH

DIAMOND
LAND SURVEYING
Boundary Surveys
Topography Surveys
Subdivisions
Construction Staking
A.L.T.A. & A.C.S.M. Surveys
6981 South 700 West Ste. 150
Midvale, Utah 84047
Phone (801) 266-5008 Fax (801) 266-5032
office@diamondlandsurveying.com
www.diamondlandsurveying.com

ALTA/NSPS LAND TITLE SURVEY
9634 NORTH DUGGAN DRIVE
EAGLE MOUNTAIN, UTAH 84005

BHD

COPYRIGHT
ALL REPORTS, DESIGNS, FIELD DATA, FIELD NOTES, DRAWINGS, SPECIFICATIONS, CALCULATIONS, ESTIMATES OR ANY REPRESENTATION CONTAINED HEREON ARE THE SOLE PROPERTY OF DIAMOND DESIGN AND LAND SURVEYING UNLESS PREVIOUSLY ESTABLISHED BY PRECEDENCE OR WRITTEN AGREEMENT

DATE PLOTTED 5/10/23
JOB No. 17-146
SHEET 1 OF 1

LOCATED IN THE NORTHWEST QUARTER OF SECTION 13, TOWNSHIP 5 SOUTH, RANGE 2 WEST, SALT LAKE BASE AND MERIDIAN

CONTEXT SITE PLAN

SCALE: 1" = 40'-0"

NORTH

evans + associates architecture
11576 south state street, suite 103b, draper, utah 84020
phone 801-553-8272
fax 801-553-8273

Stamp

LICENSED ARCHITECT
PAUL ANTHONY EVANS
273770
STATE OF UTAH

A New Meetinghouse for:

Lakeview & Eagle Mountain UT Cedar Pass Stake

Parcel: 34-620-0208
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THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

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Project Number
23-76

Plan Series
Heritage 23-2

Property Number
501-2693-22010101

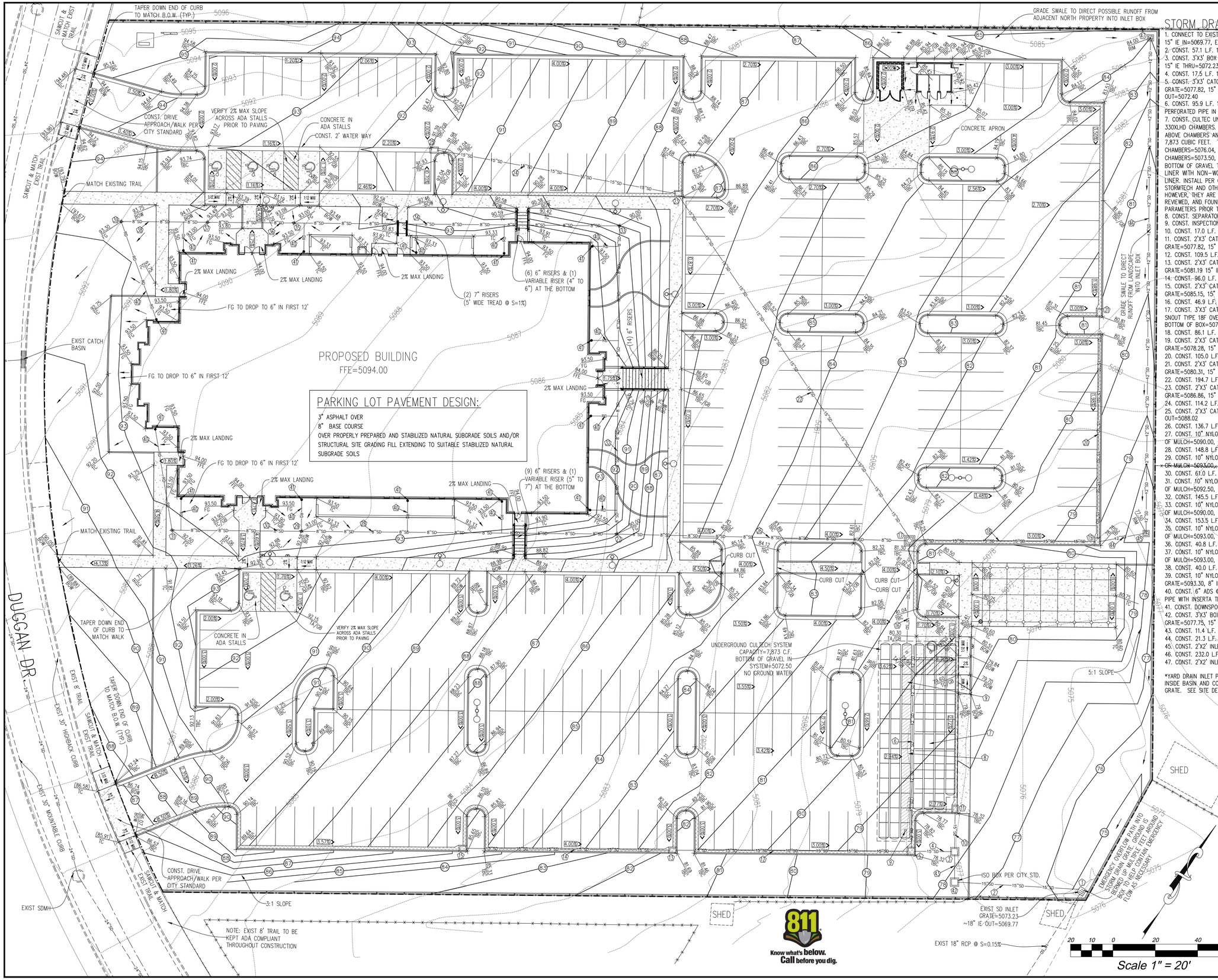
Date
September 4, 2023

Sheet Title

CONTEXT SITE PLAN

Sheet

C101



STORM DRAIN KEYED NOTES

1. CONNECT TO EXIST STORM DRAIN BOX, EXIST RIM=5073.23, PROPOSED 15" IE IN=5069.77, EXIST 18" IE OUT=5069.77
2. CONST. 57.1 L.F. 15" ADS HP STORM PIPE @ S=3.6%
3. CONST. 3'X3' BOX W/ SNOUT TYPE 18F OVER OUTLET, GRATE=5078.10, 15" IE THRU=5072.23, BOTTOM OF BOX=5069.10
4. CONST. 17.5 L.F. 15" ADS HP STORM PIPE @ S=1.0%
5. CONST. 3'X3' CATCH BASIN (NO FACE INLET), TBC=5078.32, GRATE=5077.82, 15" IE IN(SW)=5074.32, 12" IE IN=5072.40, 15" IE OUT=5072.40
6. CONST. 95.9 L.F. 12" PERFORATED ADS PIPE @ S=0.1%, WRAP PERFORATED PIPE IN FABRIC, CAP 12" PIPE, FL=4572.50
7. CONST. CULTEC UNDERGROUND STORAGE SYSTEM WITH (82) RECHARGER 330XLHD CHAMBERS. INSTALL 9" OF STONE BETWEEN CHAMBERS, 6" ABOVE CHAMBERS AND 12" OF STONE UNDER SYSTEM. SYSTEM STORES 7,873 CUBIC FEET. TOP OF GRAVEL=5076.54, TOP OF CHAMBERS=5076.04, 15" IE INTO CHAMBERS=5073.54, BOTTOM OF CHAMBERS=5073.50, BOTTOM OF GRAVEL=5072.50 TO 5072.40 (SLOPE BOTTOM OF GRAVEL TOWARD PERFORATED PIPE), INSTALL 30 MIL PVC LINER WITH NON-WOVEN GEOTEXTILE FABRIC ON BOTH SIDES OF LINER. INSTALL PER CULTEC STANDARD DETAILS AND SPECIFICATIONS. STORMTECH AND OTHER STORM WATER CHAMBERS ARE ALLOWED; HOWEVER, THEY ARE TO BE SUBMITTED TO EXCEL ENGINEERING TO BE REVIEWED, AND FOUND TO COMPLY WITH ALL PERTINENT DESIGN PARAMETERS PRIOR TO APPROVAL AND INSTALLATION.
8. CONST. SEPARATOR ROW
9. CONST. INSPECTION PORT
10. CONST. 17.0 L.F. 15" ADS HP STORM PIPE @ S=13.8%
11. CONST. 2'X3' CATCH BASIN (NO FACE INLET), TBC=5078.32, GRATE=5077.82, 15" IE OUT=5074.57
12. CONST. 109.5 L.F. 15" ADS HP STORM PIPE @ S=3.3%
13. CONST. 2'X3' CATCH BASIN (NO FACE INLET), TBC=5081.69, GRATE=5081.19 15" IE THRU=5077.94
14. CONST. 96.0 L.F. 15" ADS HP STORM PIPE @ S=4.1%
15. CONST. 2'X3' CATCH BASIN (NO FACE INLET), TBC=5085.65, GRATE=5085.15, 15" IE OUT=5081.90
16. CONST. 46.9 L.F. 15" ADS HP STORM PIPE @ S=2.3%
17. CONST. 3'X3' CATCH BASIN W/2' DIAMETER SOLID ACCESS LID AND W/ SNOUT TYPE 18F OVER OUTLET, RIM=5081.13, 15" IE THRU=5074.60, BOTTOM OF BOX=5071.48
18. CONST. 86.1 L.F. 15" ADS HP STORM PIPE @ S=0.5%
19. CONST. 2'X3' CATCH BASIN (NO FACE INLET), TBC=5078.78, GRATE=5078.28, 15" IE THRU=5075.03, 12" IE IN=5075.03
20. CONST. 105.0 L.F. 15" ADS HP STORM PIPE @ S=1.9%
21. CONST. 2'X3' CATCH BASIN (NO FACE INLET), TBC=5080.81, GRATE=5080.31, 15" IE OUT=5077.06
22. CONST. 194.7 L.F. 15" ADS HP STORM PIPE @ S=6.2%
23. CONST. 2'X3' CATCH BASIN (NO FACE INLET), TBC=5087.36, GRATE=5086.86, 15" IE OUT=5083.61
24. CONST. 114.2 L.F. 15" ADS HP STORM PIPE @ S=3.9%
25. CONST. 2'X3' CATCH BASIN (NO FACE INLET), GRATE=5091.27, 15" IE OUT=5088.02
26. CONST. 136.7 L.F. 8" ADS N-12 PIPE @ S=5.6%
27. CONST. 10" NYLOPLAST DRAIN BASIN WITH BLACK DOMED GRATE*, TOP OF MULCH=5090.00, BASE OF GRATE=5089.75, 8" IE THRU=5085.75.
28. CONST. 148.8 L.F. 8" ADS N-12 PIPE @ S=1.8%
29. CONST. 10" NYLOPLAST DRAIN BASIN WITH BLACK DOMED GRATE*, TOP OF MULCH=5093.00, BASE OF GRATE=5092.75, 8" IE THRU=5089.47.
30. CONST. 61.0 L.F. 8" ADS N-12 PIPE @ S=1.0%
31. CONST. 10" NYLOPLAST DRAIN BASIN WITH BLACK DOMED GRATE*, TOP OF MULCH=5092.50, BASE OF GRATE=5092.25, 8" IE OUT=5090.08.
32. CONST. 145.5 L.F. 8" ADS N-12 PIPE @ S=1.0%
33. CONST. 10" NYLOPLAST DRAIN BASIN WITH BLACK DOMED GRATE*, TOP OF MULCH=5090.00, BASE OF GRATE=5089.75, 8" IE THRU=5087.21.
34. CONST. 153.5 L.F. 8" ADS N-12 PIPE @ S=1.9%
35. CONST. 10" NYLOPLAST DRAIN BASIN WITH BLACK DOMED GRATE*, TOP OF MULCH=5093.00, BASE OF GRATE=5092.75, 8" IE THRU=5090.19.
36. CONST. 40.8 L.F. 8" ADS N-12 PIPE @ S=1.0%
37. CONST. 10" NYLOPLAST DRAIN BASIN WITH BLACK DOMED GRATE*, TOP OF MULCH=5093.00, BASE OF GRATE=5092.75, 8" IE THRU=5090.60.
38. CONST. 40.0 L.F. 8" ADS N-12 PIPE @ S=1.0%
39. CONST. 10" NYLOPLAST DRAIN BASIN WITH STD. GRATE, GRATE=5093.30, 8" IE OUT=5091.00.
40. CONST. 6" ADS @ S=1% MIN. CONNECT TO DRAIN BASIN OR INTO PIPE WITH INSERTA TEE (SEE PLAN VIEW)
41. CONST. DOWNSPOUT COLLECTION BOX, SEE DETAIL K/C513
42. CONST. 3'X3' BOX W/ 8.5" ORIFICE PLATE OVER NORTHEAST OUTLET, GRATE=5077.75, 15" IE THRU=5071.82, BOTTOM OF BOX=5070.82
43. CONST. 11.4 L.F. 15" ADS HP STORM PIPE @ S=3.6%
44. CONST. 21.3 L.F. 12" ADS @ S=1.0%
45. CONST. 2'X2' INLET BOX, GRATE=5077.50, 12" IE THRU=5075.24
46. CONST. 232.0 L.F. 12" ADS @ S=2.5%
47. CONST. 2'X2' INLET BOX, GRATE=5084.00, 12" IE OUT=5081.00

*YARD DRAIN INLET PROTECTION NOTE: INSTALL FLEXSTORM INSERT INSIDE BASIN AND COVER BASIN WITH LANDSCAPE FABRIC PLACED UNDER GRATE. SEE SITE DETAILS.

GRADING LEGEND

FFE	FINISHED FLOOR ELEV.
BOW	BACK OF WALK
GB	GRADE BREAK
TC	TOP OF CONCRETE
TBC	TOP BACK OF CURB
TA	TOP OF ASPHALT
RIM	RIM ELEVATION
FL	FLOWLINE
EG	EXIST GROUND
LIP	LIP OF CURB
FG	FINISHED GRADE
TW	TOP OF WALL
BW	BOTTOM OF WALL
IE	INVERT ELEVATION
0.00%	DIRECTION OF DRAINAGE
(00.00) TBC	EXISTING ELEVATION
00.00 TBC	PROPOSED ELEVATION
4808	EXISTING CONTOUR
90	PROPOSED CONTOUR
90	STORM DRAIN KEYED NOTE
	CARRY CURB (HATCHED)

BENCH MARK

SOUTH 1/4 CORNER OF SECTION 13, T5S, R2W, SLB&M (TOP OF BRASS CAP)
BENCHMARK ELEV=5004.42

evans + associates architecture
11576 south state street, suite 103b, draper, utah 84020
phone 801-553-8272
fax 801-553-8273

Stamp

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Parcel: 34-620:0208
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THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

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Project Number	23-76
Plan Series	Heritage 23-2
Property Number	501-2693-22010101
Date	September 4, 2023

Sheet Title
GRADING & DRAINAGE PLAN

Sheet
C201

NOTE: EXISTING UTILITIES MUST BE USED OR ABANDONED

NOTE: TRAIL TO BE KEPT ADA COMPLIANT THROUGHOUT CONSTRUCTION

EXIST SDMH
EXIST COMM BOX
PROPOSED TRANSFORMER LOCATION
EXIST 6" CUL. STUB
EXIST POWER BOX
EXIST GAS LINE
EXIST 6' HIGH VINYL FENCE
EXIST 6' HIGH BRICK FENCE
EXIST 5' P.U.E.
EXIST 8" CUL. STUB
CONST. 2" WATER METER VAULT
INSTALL 22.5° BEND
STUB 1.5" SERVICE FOR LANDSCAPE
EXIST FIRE HYDRANT
CONST. 8" FIRE LINE (BLUE-BRUTE C-900 PVC)
CONST. 2" WATER SERVICE (POLY PIPE)
INSTALL 6" GATE VALVE
INSTALL 90° BEND
INSTALL FIRE HYDRANT & VALVE
CONST. 6" FIRE LINE (BLUE-BRUTE C-900 PVC)
FIRE TRUCK RADII (28'/48')
EXIST 10' P.U.E.
CULINARY TO CROSS UNDER STORM DRAIN
EXIST COMBO BOX
EXIST CATCH BASIN
EXIST CATCH BASIN
PROPOSED BUILDING
FFE=5094.00
INSTALL ALARM PANEL AT ENTRANCE NEXT TO LOCKBOX
FDC
INSTALL KNOX BOX BY RISER ROOM DOOR (SEE ARCHITECT PLANS)
CONST. FIRE LINE CONNECTION TO FLOOR FLANGE BY UTILITIES CONTRACTOR. INSTALL (1) PIECE RISER IN BUILDING (SEE FIRE SPRINKLER PLANS)

STORM DRAIN NOTE:
SEE SHEET C201 FOR STORM DRAIN KEY NOTES & DESIGN

SEE GSH "ON-SITE WASTEWATER SYSTEM DESIGN" FOR SEWER DESIGN
COTG
PROPOSED GAS LINE
FIELD LOCATE & CONNECT TO EXIST GAS LINE
EXIST SDMH
EXIST COMBO BOX
EXIST 8" CUL. STUB W/ BLOW OFF
DUGGAN DR.
CONST. 6" FIRE LINE (BLUE-BRUTE C-900 PVC)
FIRE TRUCK RADII (28'/48')
SEWER 18" BELOW WATER (MIN)
INSTALL FIRE HYDRANT & VALVE
UNDERGROUND CULTECH SYSTEM CAPACITY=7,873 C.F. BOTTOM OF GRAVEL IN SYSTEM=5072.50 NO GROUND WATER
FIRE TRUCK RADII (28'/48')
SEE GSH "ON-SITE WASTEWATER SYSTEM DESIGN" FOR SEWER DESIGN
FIRE TRUCK RADII (28'/48')
EXIST 10' P.U.E.
REPLACEMENT DEEP WALL TRENCH
EXIST 6' HIGH VINYL FENCE
PRIMARY DEEP WALL TRENCH
DETENTION SYSTEM HAS LINER TO PROTECT SOIL. GROUNDWATER DOES NOT AFFECT SEPTIC FIELD
PRIMARY DEEP WALL TRENCH
SHED
EXIST ELEC BOX
EXIST COMM BOX
EXIST GAS LINE
EXIST 6' HIGH WOOD RAIL FENCE
EXIST 6' HIGH METAL RAIL FENCE
SHED
EXIST 10' P.U.E.
STORM DRAIN CROSSES UNDER SEWER, CLEARANCE=~21"
EXIST 4' HIGH METAL RAIL FENCE
ISO BOX PER CITY STD.
EXIST SD INLET GRATE=5073.23 ~18" IE OUT=5069.77
SHED
EXIST 20' DRAINAGE EASEMENT
EXIST 18" RCP @ S=0.15%
EXIST SDMH
EXIST FIRE HYDRANT

20 10 0 20 40 60
Scale 1" = 20'

811 Know what's below. Call before you dig.

BENCH MARK
SOUTH 1/4 CORNER OF SECTION 13, T5S, R2W, SLB&M (TOP OF BRASS CAP) BENCHMARK ELEV=5004.42

evans + associates architecture
11576 south state street, suite 103b, draper, utah 84020
phone 801-553-8272 fax 801-553-8273

Stamp

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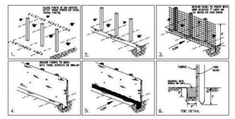
Plan Series Heritage 23-2
Property Number 501-2693-22010101
Date September 4, 2023

Sheet Title
UTILITY PLAN

Sheet
C202

BMP: Silt Fence — SF



Description:
A temporary sediment barrier consisting of entrenched filter fabric stretched across and secured to supporting posts.

Application:
- Perimeter control: place barrier at downgradient limits of disturbance
- Sediment barrier: place barrier at toe of slope or soil stockpile
- Protection of existing waterways: place barrier near top of stream bank
- Inlet protection: place fence surrounding catchbasins

Installation/Application Criteria:
- Place posts 6 feet apart on center along contour (or use preassembled unit) and drive 2 feet minimum into ground. Excavate an anchor trench immediately upgradient of posts.
- Secure wire mesh (14 gage min. With 6 inch openings) to upslope side of posts. Attach with heavy duty 1 inch long wire staples, tie wires or hog rings.
- Cut fabric to required width, unroll along length of barrier and drape over barrier. Secure fabric to mesh with twine, staples, or similar, with trailing edge extending into anchor trench.
- Backfill trench over filter fabric to anchor.

Limitations:
- Recommended maximum drainage area of 0.5 acre per 100 feet of fence
- Recommended maximum upgradient slope length of 150 feet
- Recommended maximum uphill grade of 2:1 (50%)
- Recommended maximum flow rate of 0.5 cfs
- Ponding should not be allowed behind fence

Maintenance:
- Inspect immediately after any rainfall and at least daily during prolonged rainfall.
- Look for runoff bypassing ends of barriers or undercutting barriers.
- Repair or replace damaged areas of the barrier and remove accumulated sediment.
- Reanchor fence as necessary to prevent shortcutting.
- Remove accumulated sediment when it reaches ½ the height of the fence.

Objectives
- ☐ Housekeeping Practices
- ☐ Contain Waste
- ☐ Minimize Disturbed Areas
- ☒ Stabilize Disturbed Areas
- ☒ Protect Slopes/Channels
- ☒ Control Site Perimeter
- ☒ Control Internal Erosion

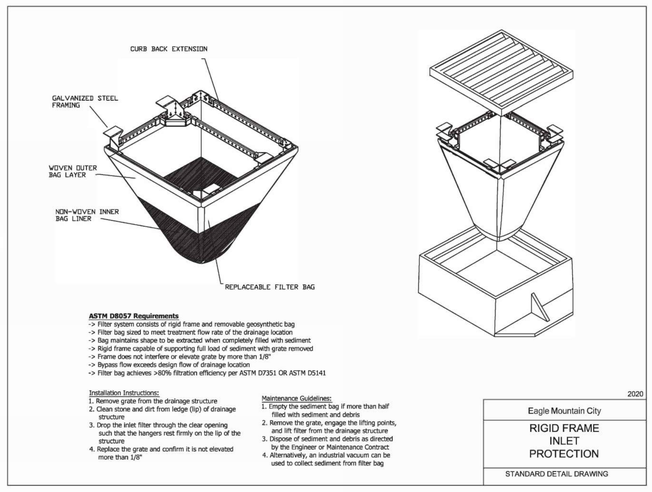
Adapted from Salt Lake County BMP Fact Sheet

Targeted Pollutants
- ■ Sediment
- ☐ Nutrients
- ☐ Toxic Materials
- ☐ Oil & Grease
- ☐ Floatable Materials
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

Implementation Requirements
- ☒ Capital Costs
- ☒ O&M Costs
- ☒ Maintenance
- ☐ Training

■ High ☒ Medium ☐ Low



ASTM D8057 Requirements
-> Filter system consists of rigid frame and removable geosynthetic bag
-> Filter bag sized to meet treatment flow rate of the drainage location
-> Bag maintains shape to be extracted when completely filled with sediment
-> Rigid frame capable of supporting full load of sediment with grate removed
-> Frame does not interfere or elevate grate by more than 1/8"
-> Bypass flow exceeds design flow of drainage location
-> Filter bag achieves >80% filtration efficiency per ASTM D7351 OR ASTM D5141

Installation Instructions:
1. Remove grate from the drainage structure
2. Clean stone and dirt from ledge (lip) of drainage structure
3. Drop the inlet filter through the clear opening such that the hangers rest firmly on the lip of the structure
4. Replace the grate and confirm it is not elevated more than 1/8"

Maintenance Guidelines:
1. Empty the sediment bag if more than half filled with sediment and debris
2. Remove the grate, engage the lifting points, and lift filter from the drainage structure
3. Dispose of sediment and debris as directed by the Engineer or Maintenance Contract
4. Alternatively, an industrial vacuum can be used to collect sediment from filter bag

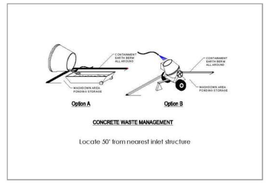
2020

Eagle Mountain City

RIGID FRAME INLET PROTECTION

STANDARD DETAIL DRAWING

BMP: Concrete Waste Management — CWM (Construction)



Description:
Prevent or reduce the discharge of pollutants to storm water from concrete waste by conducting washout off-site, performing on-site washout in a designated area, and training employees and subcontractors.

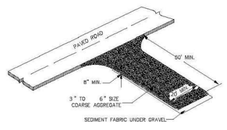
Application:
This technique is applicable to all types of sites.

Installation/Application Criteria:
- Store dry materials under cover, away from drainage areas.
- Minimize excess mixing of fresh concrete, mortar or cement on-site.
- Perform washout of concrete trucks off-site or in designated areas only.
- Do not wash out concrete trucks into storm drains, open ditches, streets, or streams.
- Do not allow excess concrete to be dumped on-site, except in designated areas.
- When washing concrete to remove fine particles and expose the aggregate, avoid creating runoff by draining the water within a bermed or level area. (6" tall by 6" wide).
- Train employees and subcontractors in proper concrete waste management.

Limitations:
- Off-site washout of concrete wastes may not always be possible.

Maintenance:
- Inspect subcontractors to ensure that concrete wastes are being properly managed.
- If using a temporary pit, dispose hardened concrete on a regular basis.

BMP: Stabilized Construction Entrance and Wash Area — SCEWA



Description:
A stabilized pad of crushed stone located where construction traffic enters or leaves the site from or to paved surface. The area can be used to spray off vehicles before they leave the site.

Applications:
At any point of ingress or egress at a construction site where adjacent traveled way is paved. Generally applies to sites over 2 acres unless special conditions exist.

Installation/Application Criteria:
- Clear and grub area and grade to provide maximum slope of 2%.
- Compact subgrade and place filter fabric if desired (recommended for entrances to remain for more than 3 months).
- Place coarse aggregate, 1 to 2-1/2 inches in size, to a minimum depth of 8 inches.
- Provide water to the area that can be used to spray off vehicles as needed to prevent the tracking of mud off of the construction site. This may not be needed during dry periods of work, but is needed when construction is proceeding under wet conditions.
- Provide berming as needed to prevent sediment laden wash water from entering storm water facilities or other water bodies, or leaving the site.

Limitations:
- Requires periodic top dressing with additional stones.
- Should be used in conjunction with street sweeping on adjacent public right-of-way.
- Must be situated such that waste water does not run off site.

Maintenance:
- Inspect daily for loss of gravel or sediment buildup.
- Inspect adjacent roadway for sediment deposit and clean by shoveling and sweeping.
- Repair entrance and replace gravel as required to maintain control in good working condition.
- Expand stabilized area as required to accommodate traffic and prevent erosion at driveways.

Objectives
- ☐ Housekeeping Practices
- ☐ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☒ Control Site Perimeter
- ☐ Control Internal Erosion

Adapted from Salt Lake County BMP Fact Sheet

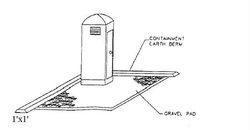
Targeted Pollutants
- ■ Sediment
- ☐ Nutrients
- ☐ Toxic Materials
- ☐ Oil & Grease
- ☐ Floatable Materials
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

Implementation Requirements
- ☒ Capital Costs
- ☒ O&M Costs
- ☒ Maintenance
- ☐ Training

■ High ☒ Medium ☐ Low

BMP: Portable Toilets — PT



Description:
Temporary on-site sanitary facilities for construction personnel.

Application:
All sites with no permanent sanitary facilities or where permanent facility is too far from activities.

Installation/Application Criteria:
- Locate portable toilets in convenient locations throughout the site.
- Prepare level, gravel surface and provide clear access to the toilets for servicing and for on-site personnel.
- Construct earth berm perimeter (See Earth Berm Barrier Information Sheet), control for spill/protection leak.
- Stake toilets to prevent them from tipping.

Limitations:
No limitations.

Maintenance:
- Portable toilets should be maintained in good working order by licensed service with daily observation for leak detection.
- Regular waste collection should be arranged with licensed service.
- All waste should be deposited in sanitary sewer system for treatment with appropriate agency approval.

Objectives
- ☒ Housekeeping Practices
- ☒ Contain Waste
- ☐ Minimize Disturbed Areas
- ☒ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☐ Control Site Perimeter
- ☐ Control Internal Erosion

Adapted from Salt Lake County BMP Fact Sheet

Targeted Pollutants
- ☐ Sediment
- ☐ Nutrients
- ☐ Toxic Materials
- ☐ Oil & Grease
- ☐ Floatable Materials
- ■ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

Implementation Requirements
- ☒ Capital Costs
- ☒ O&M Costs
- ☒ Maintenance
- ☐ Training

■ High ☒ Medium ☐ Low

INSTALL CONSTRUCTION ENTRANCE PER BMP SCEWA

INSTALL LINED CONCRETE WASHOUT AREA PER BMP CWM. CONTRACTOR TO ENSURE THAT ALL EXCESS CONCRETE HAS BEEN REMOVED FROM THE SITE & NOT BURIED IN THE SOIL.

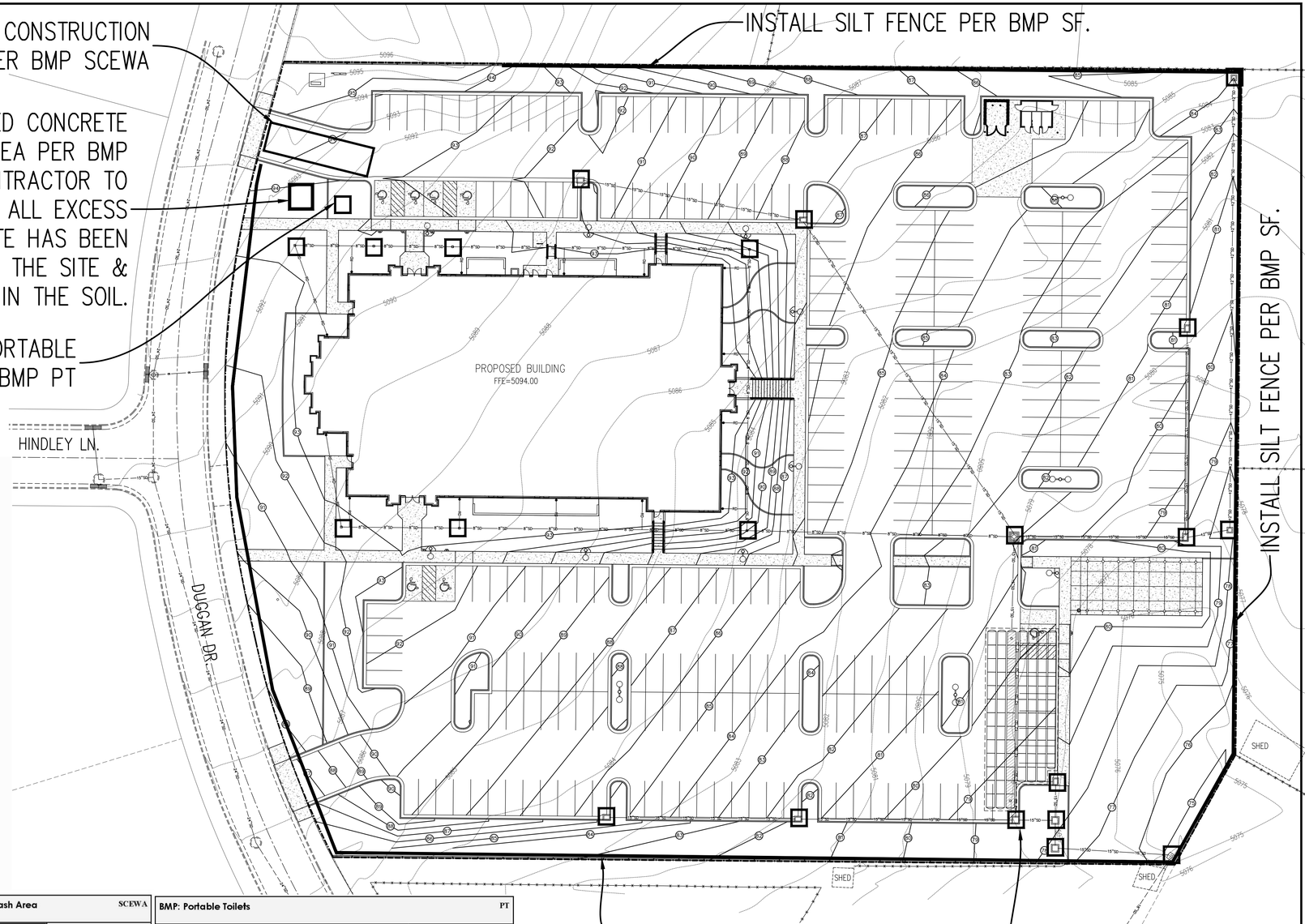
INSTALL PORTABLE TOILET PER BMP PT

INSTALL SILT FENCE PER BMP SF.

INSTALL SILT FENCE PER BMP SF.

INSTALL SILT FENCE PER BMP SF.

INSTALL INLET PROTECTION PER RIGID FRAME INLET PROTECTION BMP (TYP. ALL INLETS)



30 15 0 30 60 90

Scale 1" = 30'

EROSION CONTROL NOTES:

1. CONTRACTOR IS TO READ AND UNDERSTAND ALL BMP PRACTICES PRIOR TO ANY CONSTRUCTION ON THIS SITE. CONTRACTOR IS TO FOLLOW ALL BMP PRACTICES CONTAINED IN THESE PLANS.
2. CONSTRUCT A SILT FENCE AS SHOWN ON PLAN. SEE BMP SF.
3. INSTALL A CONSTRUCTION ENTRANCE AS SHOWN ON THE PLAN PRIOR TO ANY GRADING ON THE SITE. SEE BMP SCEWA.
4. INSTALL CONCRETE WASHOUT AREA AS PER BMP CWM.
5. INSTALL INLET PROTECTION ON INLETS ON-SITE. SEE RIGID FRAME INLET PROTECTION DETAIL.
6. THE SITE IS TO BE WATERED AT LEAST TWICE A WEEK TO CONTROL DUST OR MORE FREQUENT AS DETERMINED BY THE CONTRACTOR.
7. CONTRACTOR IS TO REMOVE INLET PROTECTION FROM CATCH BASINS AND CLEAN-OUT ALL CATCH BASINS BEFORE LEAVING THE SITE.
8. CONTRACTOR WILL BE RESPONSIBLE FOR THE IMPLEMENTATION AND MAINTENANCE OF BMP'S DURING CONSTRUCTION.
9. ALL CONSTRUCTION PERIOD BEST MANAGEMENT PRACTICES ARE TO BE INSPECTED & MAINTAINED AT LEAST WEEKLY, ALSO BEFORE AND AFTER EACH STORM EVENT.
10. CONTRACTOR SHALL BE REQUIRED TO KEEP A RECORD OF ALL INSPECTIONS AND MAINTENANCE ON SITE WITH THE STORM WATER POLLUTION PREVENTION PLAN.

Know what's below. Call before you dig. 811

BENCH MARK

SOUTH 1/4 CORNER OF SECTION 13, T5S, R2W, SLB&M (TOP OF BRASS CAP) BENCHMARK ELEV=5004.42

evans + associates architecture
11576 south state street, suite 103b, draper, utah 84020
phone 801-553-8272 fax 801-553-8273

Stamp

A New Meetinghouse for:
Lakeview &
Eagle Mountain UT Cedar Pass Stake
Parcel: 34-820:0208
634 North Duggan Drive
Eagle Mountain, Utah

Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

Revisions			
Mark	Date	Description	
1	10/18/23	City Comments	

Project Number
23-76
Plan Series
Heritage 23-2
Property Number
501-2693-22010101
Date
September 4, 2023

Sheet Title
EROSION CONTROL PLAN

Sheet
C203

CULTEC RECHARGER® 330XLHD PRODUCT SPECIFICATIONS

GENERAL

CULTEC RECHARGER 330XLHD CHAMBERS ARE DESIGNED FOR UNDERGROUND STORMWATER MANAGEMENT. THE CHAMBERS MAY BE USED FOR RETENTION, RECHARGING, DETENTION OR CONTROLLING THE FLOW OF ON-SITE STORMWATER RUNOFF.

CHAMBER PARAMETERS

1. THE CHAMBERS SHALL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT, USA. (203-775-4416 OR 1-800-428-5832)
2. THE CHAMBER SHALL BE VACUUM THERMOFORMED OF HIGH MOLECULAR WEIGHT HIGH DENSITY POLYETHYLENE (HMWHDPE) WITH A BLACK INTERIOR AND BLUE EXTERIOR.
3. THE CHAMBER SHALL BE ARCHED IN SHAPE.
4. THE CHAMBER SHALL BE OPEN-BOTTOMED.
5. THE CHAMBER SHALL BE JOINED USING AN INTERLOCKING OVERLAPPING RIB METHOD. CONNECTIONS MUST BE FULLY SHOULDERED OVERLAPPING RIBS, HAVING NO SEPARATE COUPLINGS OR SEPARATE END WALLS
6. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC RECHARGER 330XLHD SHALL BE 30.5 INCHES (775 mm) TALL, 52 INCHES (1321 mm) WIDE AND 8.5 FEET (2.59 m) LONG. THE INSTALLED LENGTH OF A JOINED RECHARGER 330XLHD SHALL BE 7 FEET (2.13 m).
7. MAXIMUM INLET OPENING ON THE CHAMBER ENDWALL IS 24 INCHES (600 mm) HDPE.
8. THE CHAMBER SHALL HAVE TWO SIDE PORTALS TO ACCEPT CULTEC HVLV® FC-24 FEED CONNECTORS TO CREATE AN INTERNAL MANIFOLD. THE NOMINAL DIMENSIONS OF EACH SIDE PORTAL SHALL BE 10.5 INCHES (267 mm) HIGH BY 11.5 INCHES (292 mm) WIDE. MAXIMUM ALLOWABLE OUTER DIAMETER (O.D.) PIPE SIZE IN THE SIDE PORTAL IS 11.75 INCHES (298 mm).
9. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC HVLV FC-24 FEED CONNECTOR SHALL BE 12 INCHES (305 mm) TALL, 16 INCHES (406 mm) WIDE AND 24.2 INCHES (614 mm) LONG.
10. THE NOMINAL STORAGE VOLUME OF THE RECHARGER 330XLHD CHAMBER SHALL BE 7.459 FT³/ FT (0.693 m³ / m) - WITHOUT STONE. THE NOMINAL STORAGE VOLUME OF A JOINED RECHARGER 330XLHD SHALL BE 52.213 FT³ / UNIT (1.478 m³ / UNIT) - WITHOUT STONE.
11. THE NOMINAL STORAGE VOLUME OF THE HVLV FC-24 FEED CONNECTOR SHALL BE 0.913 FT³ / FT (0.085 m³ / m) - WITHOUT STONE.
12. THE RECHARGER 330XLHD CHAMBER SHALL HAVE FIFTY-SIX DISCHARGE HOLES BORED INTO THE SIDEWALLS OF THE UNITS CORE TO PROMOTE LATERAL CONVEYANCE OF WATER.
13. THE RECHARGER 330XLHD CHAMBER SHALL HAVE 16 CORRUGATIONS.
14. THE ENDWALL OF THE CHAMBER, WHEN PRESENT, SHALL BE AN INTEGRAL PART OF THE CONTINUOUSLY FORMED UNIT. SEPARATE END PLATES CANNOT BE USED WITH THIS UNIT.
15. THE RECHARGER 330XLRHD STAND ALONE UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO FULLY FORMED INTEGRAL ENDWALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS.
16. THE RECHARGER 330XLSHD STARTER UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY FORMED INTEGRAL ENDWALL AND ONE PARTIALLY FORMED INTEGRAL ENDWALL WITH A LOWER TRANSFER OPENING OF 14 INCHES (356 mm) HIGH X 34.5 INCHES (876 mm) WIDE.
17. THE RECHARGER 330XLIHD INTERMEDIATE UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY OPEN ENDWALL AND ONE PARTIALLY FORMED INTEGRAL ENDWALL WITH A LOWER TRANSFER OPENING OF 14 INCHES (356 mm) HIGH X 34.5 INCHES (876 mm) WIDE.
18. THE RECHARGER 330XLEHD END UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY FORMED INTEGRAL ENDWALL AND ONE FULLY OPEN END WALL AND HAVING NO SEPARATE END PLATES OR END WALLS.
19. THE HVLV FC-24 FEED CONNECTOR MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO OPEN END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS. THE UNIT SHALL FIT INTO THE SIDE PORTALS OF THE RECHARGER 330XLHD AND ACT AS CROSS FEED CONNECTIONS.
20. CHAMBERS MUST HAVE HORIZONTAL STIFFENING FLEX REDUCTION STEPS BETWEEN THE RIBS.
21. THE CHAMBER SHALL HAVE A 6 INCH (152 mm) DIAMETER RAISED INTEGRAL CAP AT THE TOP OF THE ARCH IN THE CENTER OF EACH UNIT TO BE USED AS AN OPTIONAL INSPECTION PORT OR CLEAN-OUT.
22. THE UNITS MAY BE TRIMMED TO CUSTOM LENGTHS BY CUTTING BACK TO ANY CORRUGATION.
23. THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2015 CERTIFIED FACILITY.
24. THE CHAMBER SHALL BE DESIGNED AND MANUFACTURED TO MEET THE MATERIAL AND STRUCTURAL REQUIREMENTS OF IAPMO PS 63-2019, INCLUDING RESISTANCE TO AASHTO H-10 AND H-20 HIGHWAY LIVE LOADS, WHEN INSTALLED IN ACCORDANCE WITH CULTEC'S INSTALLATION INSTRUCTIONS.
25. THE CHAMBER SHALL BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH THE SPECIFICATIONS OF NSA/ IRISH AGREEMENT BOARD CERTIFICATE FOR CULTEC ATTENUATION AND INFILTRATION.
26. MAXIMUM ALLOWED COVER OVER TOP OF UNIT SHALL BE 12 FEET (3.66 m)
27. THE CHAMBER SHALL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.

CULTEC HVLV FC-24 FEED CONNECTOR PRODUCT SPECIFICATIONS

GENERAL

CULTEC HVLV FC-24 FEED CONNECTORS ARE DESIGNED TO CREATE AN INTERNAL MANIFOLD FOR CULTEC RECHARGER MODEL 330XLHD STORMWATER CHAMBERS.

CHAMBER PARAMETERS

1. THE CHAMBERS SHALL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)
2. THE CHAMBER SHALL BE VACUUM THERMOFORMED OF HIGH MOLECULAR WEIGHT HIGH DENSITY POLYETHYLENE (HMWHDPE) WITH A BLACK INTERIOR AND BLUE EXTERIOR.
3. THE CHAMBER SHALL BE ARCHED IN SHAPE.
4. THE CHAMBER SHALL BE OPEN-BOTTOMED.
5. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC HVLV FC-24 FEED CONNECTOR SHALL BE 12 INCHES (305 mm) TALL, 16 INCHES (406 mm) WIDE AND 24.2 INCHES (614 mm) LONG.
6. THE NOMINAL STORAGE VOLUME OF THE HVLV FC-24 FEED CONNECTOR SHALL BE 0.913 FT³/ FT (0.085 m³/ m) - WITHOUT STONE.
7. THE HVLV FC-24 FEED CONNECTOR CHAMBER SHALL HAVE 2 CORRUGATIONS.
8. THE HVLV FC-24 FEED CONNECTOR MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO OPEN END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS. THE UNIT SHALL FIT INTO THE SIDE PORTALS OF THE CULTEC RECHARGER STORMWATER CHAMBER AND ACT AS CROSS FEED CONNECTIONS CREATING AN INTERNAL MANIFOLD.
9. THE CHAMBER SHALL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.
10. THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2015 CERTIFIED FACILITY.

CULTEC NO. 410™ NON-WOVEN GEOTEXTILE

CULTEC NO. 410™ NON-WOVEN GEOTEXTILE MAY BE USED WITH CULTEC CONTACTOR® AND RECHARGER® STORMWATER INSTALLATIONS TO PROVIDE A BARRIER THAT PREVENTS SOIL INTRUSION INTO THE STONE.

GEOTEXTILE PARAMETERS

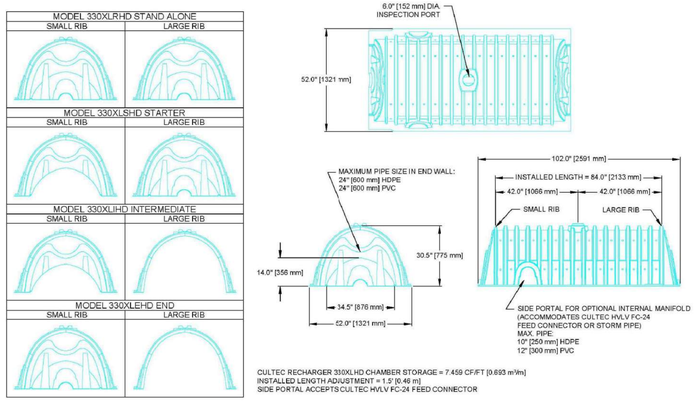
1. THE GEOTEXTILE SHALL BE PROVIDED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)
2. THE GEOTEXTILE SHALL BE BLACK IN APPEARANCE.
3. THE GEOTEXTILE SHALL HAVE A TYPICAL WEIGHT OF 4.5 OZ/SY (142 G/M).
4. THE GEOTEXTILE SHALL HAVE A TENSILE STRENGTH VALUE OF 120 LBS (533 N) PER ASTM D4632 TESTING METHOD.
5. THE GEOTEXTILE SHALL HAVE AN ELONGATION @ BREAK VALUE OF 50% PER ASTM D4632 TESTING METHOD.
6. THE GEOTEXTILE SHALL HAVE A MULLEN BURST VALUE OF 225 PSI (1551 KPA) PER ASTM D3786 TESTING METHOD.
7. THE GEOTEXTILE SHALL HAVE A PUNCTURE STRENGTH VALUE OF 65 LBS (289 N) PER ASTM D4833 TESTING METHOD.
8. THE GEOTEXTILE SHALL HAVE A CBR PUNCTURE VALUE OF 340 LBS (1513 N) PER ASTM D6241 TESTING METHOD.
9. THE GEOTEXTILE SHALL HAVE A TRAPEZOID TEAR VALUE OF 50 LBS (222 N) PER ASTM D4533 TESTING METHOD.
10. THE GEOTEXTILE SHALL HAVE A AOS VALUE OF 70 U.S. SIEVE (0.212 MM) PER ASTM D4751 TESTING METHOD.
11. THE GEOTEXTILE SHALL HAVE A PERMITTIVITY VALUE OF 1.7 SEC-1 PER ASTM D4491 TESTING METHOD.
12. THE GEOTEXTILE SHALL HAVE A WATER FLOW RATE VALUE OF 135 GAL/MIN/SF (5500 L/MIN/SM) PER ASTM D4491 TESTING METHOD.
13. THE GEOTEXTILE SHALL HAVE A UV STABILITY @ 500 HOURS VALUE OF 70% PER ASTM D4355 TESTING METHOD.

CULTEC NO. 4800™ WOVEN GEOTEXTILE

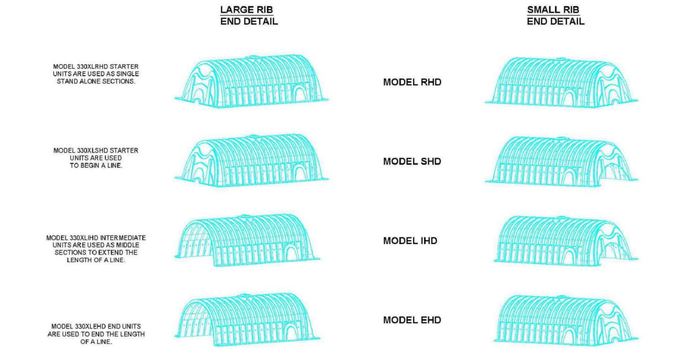
CULTEC NO. 4800 WOVEN GEOTEXTILE IS DESIGNED AS A UNDERLAYMENT TO PREVENT SCOURING CAUSED BY WATER MOVEMENT WITHIN THE CULTEC CHAMBERS AND FEED CONNECTORS UTILIZING THE CULTEC MANIFOLD FEATURE. IT MAY ALSO BE USED AS A COMPONENT OF THE CULTEC SEPARATOR ROW TO ACT AS A BARRIER TO PREVENT SOIL/CONTAMINANT INTRUSION INTO THE STONE WHILE ALLOWING FOR MAINTENANCE.

GEOTEXTILE PARAMETERS

1. THE GEOTEXTILE SHALL BE PROVIDED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)
2. THE GEOTEXTILE SHALL BE BLACK IN APPEARANCE.
3. THE GEOTEXTILE SHALL HAVE A TENSILE STRENGTH OF 550 X 550 LBS (2,448 X 2,448 N) PER ASTM D4632 TESTING METHOD.
4. THE GEOTEXTILE SHALL HAVE A ELONGATION @ BREAK RESISTANCE OF 20 X 20% PER ASTM D4632 TESTING METHOD.
5. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE OF 5,070 X 5,070 LBS/FT (74 X 74 KN/M) PER ASTM D4595 TESTING METHOD.
6. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 2% STRAIN OF 960 X 1,096 LBS/FT (14 X 16 KN/M) PER ASTM D4595 TESTING METHOD.
7. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 5% STRAIN OF 2,740 X 2,740 LBS/FT (40 X 40 KN/M) PER ASTM D4595 TESTING METHOD.
8. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 10% STRAIN OF 4,800 X 4,800 LBS/FT (70 X 70 KN/M) PER ASTM D4595 TESTING METHOD.
9. THE GEOTEXTILE SHALL HAVE A CBR PUNCTURE RESISTANCE OF 1,700 LBS (7,560 N) PER ASTM D6241 TESTING METHOD.
10. THE GEOTEXTILE SHALL HAVE A TRAPEZOIDAL TEAR RESISTANCE OF 180 X 180 LBS (801 X 801 N) PER ASTM D4533 TESTING METHOD.
11. THE GEOTEXTILE SHALL HAVE AN APPARENT OPENING SIZE OF 40 US STD. SIEVE (0.425 MM) PER ASTM D4751 TESTING METHOD.
12. THE GEOTEXTILE SHALL HAVE A PERMITTIVITY RATING OF 0.15 SEC-1 PER ASTM D4491 TESTING METHOD.
13. THE GEOTEXTILE SHALL HAVE A WATER FLOW RATING OF 11.5 GPM/FT2 (470 LPM/M2) PER ASTM D4491 TESTING METHOD.
14. THE GEOTEXTILE SHALL HAVE A UV RESISTANCE OF 80% @ 500 HRS. PER ASTM D4355 TESTING METHOD.

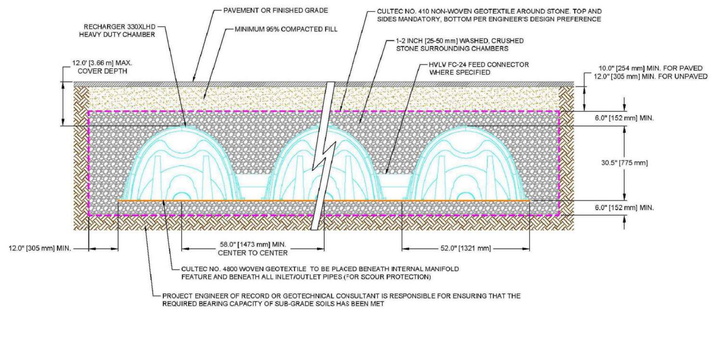


CULTEC RECHARGER 330XLHD CHAMBER STORAGE = 7.459 CF/FT [0.693 m³/m]
INSTALLED LENGTH ADJUSTMENT = 1.5' [0.46 m]
SIDE PORTAL ACCEPTS CULTEC HVLV FC-24 FEED CONNECTOR



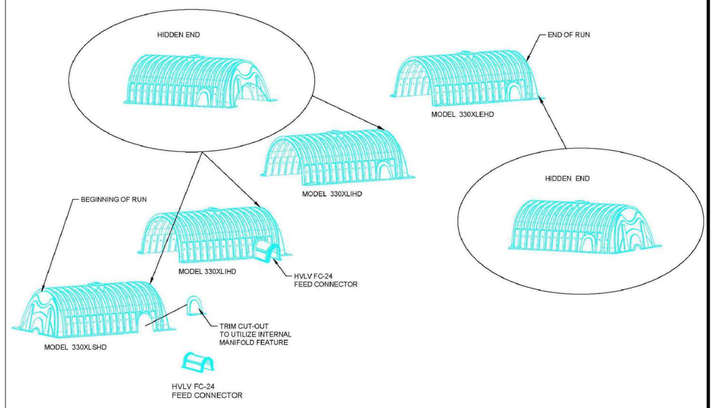
330XLHD 2.0

CULTEC RECHARGER 330XLHD HEAVY DUTY THREE VIEW



330XLHD 3.0

CULTEC RECHARGER 330XLHD HEAVY DUTY END DETAIL INFORMATION

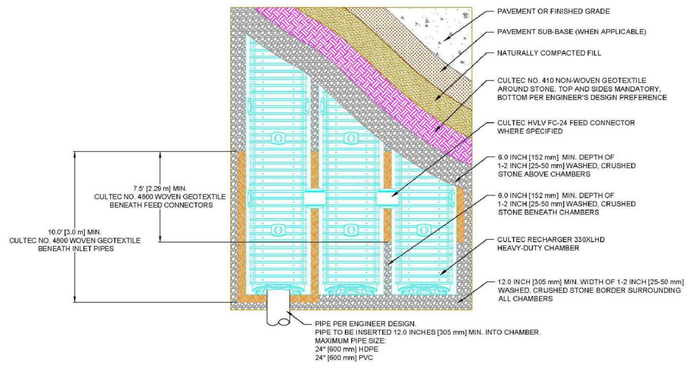


330XLHD 1.0

GENERAL NOTES

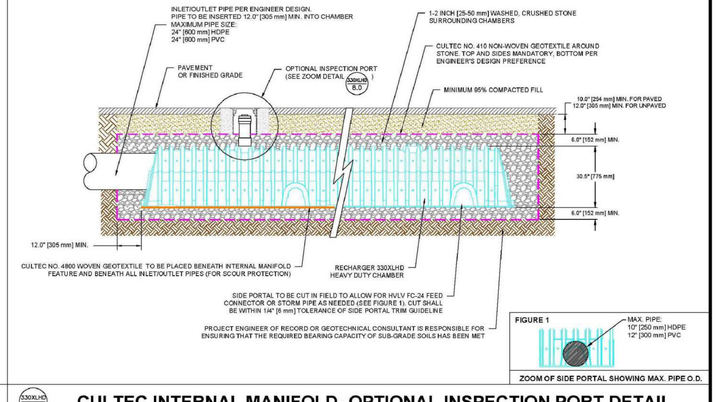
330XLHD 4.0

CULTEC RECHARGER 330XLHD HEAVY DUTY CROSS SECTION



330XLHD 5.0

CULTEC RECHARGER 330XLHD HEAVY DUTY TYPICAL INTERLOCK

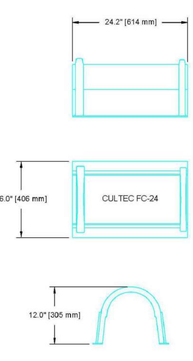


330XLHD 6.0

CULTEC RECHARGER 330XLHD HEAVY DUTY PLAN VIEW

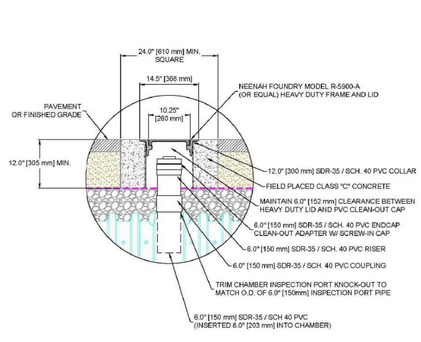
330XLHD 7.0

CULTEC HVLV FC-24 FEED CONNECTOR THREE VIEW



330XLHD 8.0

OPTIONAL INSPECTION PORT- ZOOM DETAIL



330XLHD 9.0

CULTEC INTERNAL MANIFOLD- OPTIONAL INSPECTION PORT DETAIL

CULTEC, Inc.
Subsurface Stormwater Management Systems
P.O. Box 280 PH: (203) 775-4416
878 Federal Road PH: (800) 4-CULTEC
Brookfield, CT 06804 FX: (203) 775-1462
www.cultec.com tech@cultec.com

THIS DRAWING WAS PREPARED TO SUPPORT THE PROJECT ENGINEER OF RECORD FOR THE PROPOSED SYSTEM. IT IS THE ULTIMATE RESPONSIBILITY OF THE PROJECT ENGINEER OF RECORD TO ENSURE THAT THE CULTEC SYSTEM'S DESIGN IS IN FULL COMPLIANCE WITH ALL APPLICABLE LAWS AND REGULATIONS. IT IS THE PROJECT ENGINEER OF RECORD'S RESPONSIBILITY TO ENSURE THAT THE CULTEC PRODUCTS ARE DESIGNED IN ACCORDANCE WITH CULTEC'S MINIMUM REQUIREMENTS. CULTEC DOES NOT APPROVE PLANS, SIZING, OR SYSTEM DESIGNS.

RECHARGER 330XLHD
DETAIL SHEET
TRAFFIC APPLICATION

CULTEC STORMWATER CHAMBER

PROJECT NO:		DATE:	2019
DESIGNED BY:	CULTEC, INC	CHECKED BY:	TECH
SCALE:	N.T.S.	SHEET NO:	1 OF 1

* LINE BOTTOM & SIDES OF GRAVEL BED W/ NON-REINFORCED 30 mil PVC LINER.
* FOR ALL SEALING OF OVERLAPS OF PVC LINER, ALLOW 24-HR FOR LINER TO CURE PRIOR TO PLACING ANY ROCK OVER LINER PER MANUFACTURERS SPECIFICATIONS.

* SEE KEYED NOTES ON C201 FOR CULTEC SYSTEM DESIGN.

evans + associates architecture
11576 south state street, suite 103b, draper, utah 84020
phone 801-553-8272 fax 801-553-8273

Stamp

A New Meetinghouse for:
Lakeview &
Eagle Mountain UT Cedar Pass Stake
Parcel: 34-620:0208
634 North Duggan Drive
Eagle Mountain, Utah

Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

Revisions			
Mark	Date	Description	
1	10/18/23	City Comments	

Project Number
23-76
Plan Series
Heritage 23-2
Property Number
501-2693-22010101
Date
September 4, 2023

Sheet Title
CULTEC DETAILS

Sheet
C204

Eagle Mountain City General Notes for construction drawings:

SEWER–

- Pipe bedding: 3/4" gravel required 6" below, on the sides & 12" above the pipe (minimum).
- Depth: Sewer main/laterals to maintain 4' of cover (minimum) from finished grade, 3' minimum from top of pipe at time of installation.
- Separation: sewer mains & laterals to maintain 10' separation (minimum) from culinary water mains & laterals.
- Sewer Y's: 3' minimum separation between sewer Y's.
- Lateral stubs: A) stubs must extend 15' into property and be marked with 2x4 painted green. B) All laterals must be GIS (shot in) at the Y's and stubs. Also slopes (2% min. on 4" pipe) to be checked before backfill.
- Manholes: manholes to be within 1' of finished grade. 12" of whirly gig form (max) and no flat rings allowed. 12" of 3/4" gravel required under manholes/boxes.

WATER–

- Valves: 1. Valves must be flanged to tee's (fittings). 2. Valves 12" and larger to be butterfly valves.
- Bedding: sand must meet AASHTO (A–3) gradation with 100% passing the #4 sieve. 6" below pipe on the sides 12" above pipe (minimum).
- Depth: water main & laterals must maintain 4' cover from finished grade (minimum), 3' minimum from top of pipe at time of installation. Max depth 72" from finished grade.
- Services & fittings: services & fittings to maintain 3' minimum separation from pipe joints and other fittings.
- Setters: all setters to be 21" tall (minimum), have unions at the base and be dual check model, also 3/4" setters to have double braces. Setters to be set at: 18" to 22" from the top of setter to top of lid.
- Water can lid: all lids to say "Eagle Mountain" on them recessed with a hole for the ERT and to be set at level to 1" above the plane of the curb & sidewalk.
- Water Can: the water can for 3/4" & 1" services will need to be a 36" tall minimum and 21" inside diameter. Water can for 1–1/2" to 2" service will need to follow APWA specification.
- Hydrants: hydrants to be 5' bury (minimum).
- Laterals: all laterals need to be GIS (shot in) at the corp. stop & setter, and also visual inspection on poly inserts before backfill. Water laterals to extend 15' into property and be marked with a 2x4 painted blue. All poly lines to have visual poly insert inspection.
- Tracer wire: run tracer wire along main & extend up setters and hydrants, do not run up valve boxes.
- Water fittings: all water fittings to be checked for thrust blocks (pre & post) and GIS (shot in) before backfill.
- Vertical separation: water main to maintain 18" minimum separation from storm drain or other obstacles/utilities.
- Water line fittings: all fittings to have mega lug followers.
- Water Main Line: NO DEFLECTION or bending of pipe will be allowed in the water lines and bend fittings will be required. All fittings to be Mega–lug fittings.

STORM DRAIN–

- Bedding: 3/4" gravel 6" below and on sides of pipe & 12" above pipe (minimum).
- ADS: all ADS pipe to be "HP" brand.
- Collars: collars to be 1'x1' around pipe, 4000 psi concrete, inspection is needed pre & post collar pour.
- Manholes: manholes to be within 1' of finished grade. 12" of whirly gig form (max) and no flat rings allowed. 12" of 3/4" gravel required under manholes/boxes.

ROAD SECTION–

- Proof rolls: proof roll required on all sections of road: i.e. sub–grade, sub–base, and curb base and road base
- Curb stakes required for sub–grade inspection and string line required for sub–base and road base inspection.
- UTBC: state spec. road base required for all roads, commercial base acceptable for the sidewalks & trails.
- Collars: all collars to be 1' wide by 1' deep with a 6000 psi concrete with 1.5# fiber mesh per cubic yard (3/4" monofilament) required for all street collars. Manhole covers and water valve towers to be 1/2" down from asphalt edge and concrete to be ¼" to 3/8" down from asphalt edge.

811 Know what's below. Call before you dig.

BENCH MARK

SOUTH 1/4 CORNER OF SECTION 13, T5S, R2W, SLB&M (TOP OF BRASS CAP) BENCHMARK ELEV=5004.42

evans + associates architecture
11576 south state street, suite 103b, draper, utah 84020
phone 801-553-8272 fax 801-553-9273

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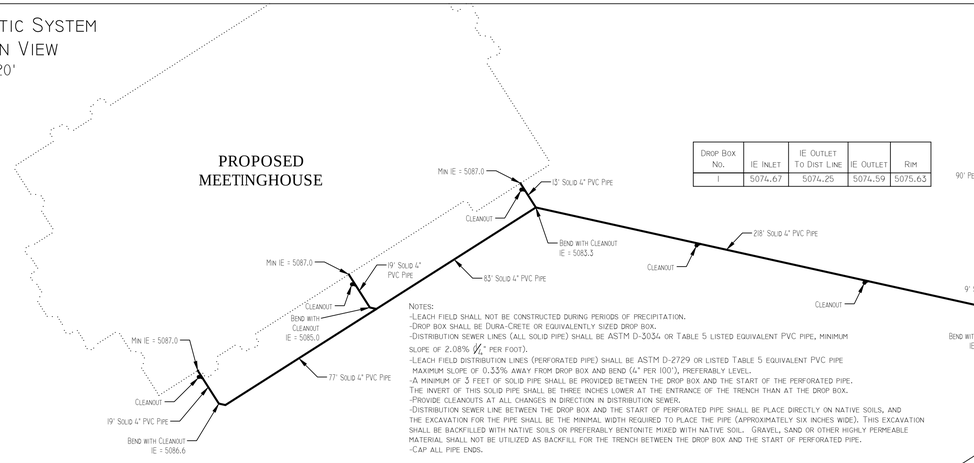
Sheet Title
GENERAL NOTES

Sheet
C205

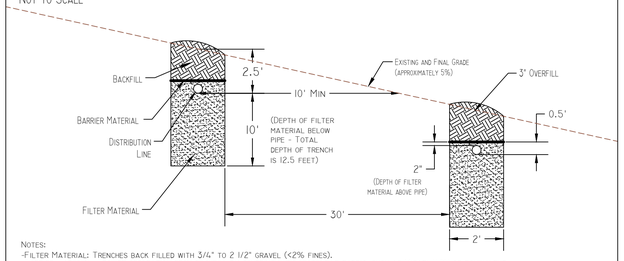
Septic System Plan View
1" = 20'



Drop Box No.	IE Inlet	IE Outlet To Dist Line	IE Outlet	Rim
1	5074.67	5074.25	5074.59	5075.63

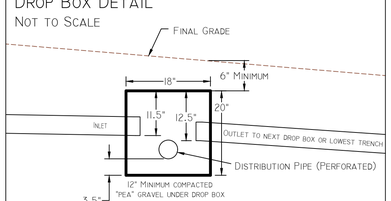
Notes:
- Leach field shall not be constructed during periods of precipitation.
- Drop box shall be Dura-Crete or equivalently sized drop box.
- Distribution sewer lines (all solid pipe) shall be ASTM D-3034 or Table 5 listed equivalent PVC pipe, minimum slope of 2.08% (¼" per foot).
- Leach field distribution lines (perforated pipe) shall be ASTM D-2729 or listed Table 5 equivalent PVC pipe maximum slope of 0.33% away from drop box and bend (4" per 100'), preferably level.
- A minimum of 5 feet of solid pipe shall be provided between the drop box and the start of the perforated pipe. The invert of this solid pipe shall be three inches lower at the entrance of the trench than at the drop box.
- Provide cleanouts at all changes in direction in distribution sewer.
- Distribution sewer line between the drop box and the start of perforated pipe shall be place directly on native soils, and the excavation for the pipe shall be the minimal width required to place the pipe (approximately six inches wide). This excavation shall be backfilled with native soils or preferably bentonite mixed with native soil. Gravel, sand or other highly permeable material shall not be utilized as backfill for the trench between the drop box and the start of perforated pipe.
- Cap all pipe ends.

Primary Deep Wall Trench Detail
Not to Scale



Notes:
- Filter Materials: Trenches back filled with 3/4" to 2 1/2" gravel (<2% fines).
- Barrier Material: Provide separation from backfill by covering with geotextile fabric, such as Mirafi 140N or equivalent.
- Distribution Line: 4" diameter PVC (ASTM D-2729 or Table 5 listed equivalent) with 1/4"-1/2" holes every 6" @ 5 and 7 o'clock placed with maximum slope of 0.33% away from drop box and bend (4" per 100'), preferably level.
- Backfill: Any material not containing significant amounts of deleterious material and with maximum particle size of 2".
- The Health Department requires that all trenches to be entered for inspection that are greater than five feet deep must be appropriately benched, braced, etc. according to OSHA regulations.

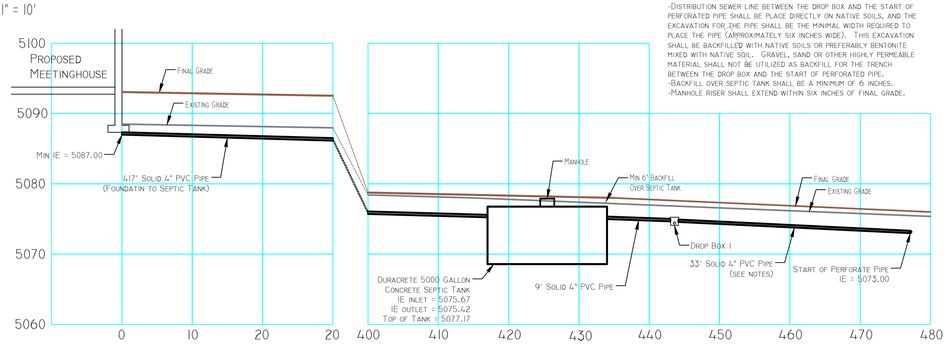
Drop Box Detail
Not to Scale



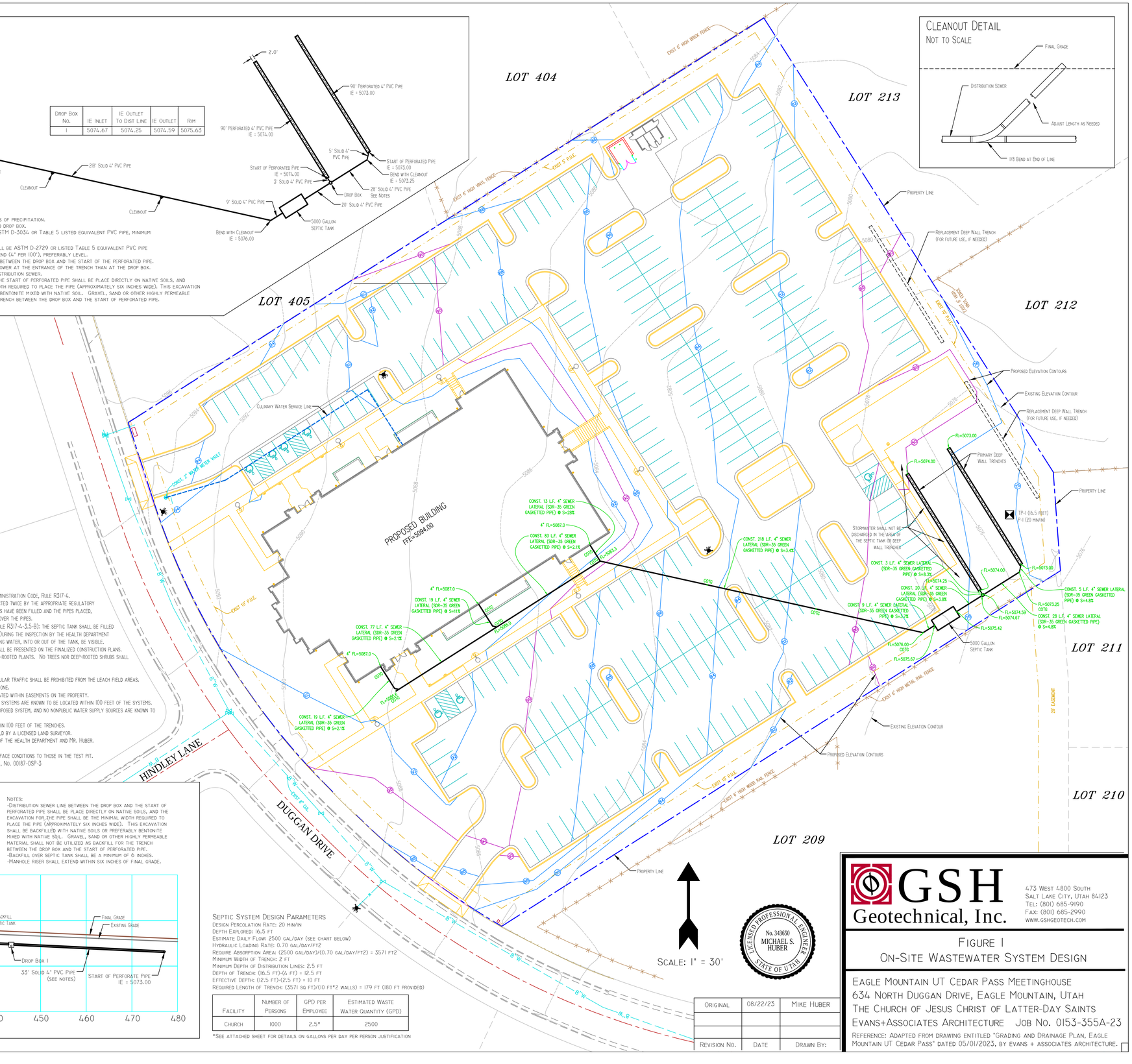
Drop Box Notes:
- The inlet and outlet of the drop box shall be sealed weather tight to the sidewalls.
- The drop box shall be provided with a means of access.
- The top shall be adequate to prevent entrance of water, dirt or other foreign material.
- Any unused holes shall be completely sealed.
- Backfill over drop box shall be a minimum of six inches.

Notes:
- All system components must comply and be installed according to Utah Administration Code, Rule R317-4.
- After installation and before backfilling, the entire system must be inspected twice by the appropriate regulatory authority: the first following excavation and the second after the trenches have been filled and the pipes placed, but prior to any backfill, filter material or barrier material being placed over the pipes.
- The septic tank shall be tested for water tightness before backfilling (Rule R317-4-3.5-B): the septic tank shall be filled 24 hours before the inspection to allow stabilization of the water level. During the inspection by the Health Department there shall be no change in the water level for 30 minutes. Nor shall moving water, into or out of the tank, be visible.
- The location of the septic tank, distribution sewer, deep-wall trenches shall be presented on the finalized construction plans.
- The leach field areas shall be landscaped with grasses and other shallow-rooted plants. No trees nor deep-rooted shrubs shall be placed within five feet of the trenches.
- Runoff shall be diverted away from the leach field and septic tank areas.
- No structures or pavements shall be placed over the leach field and vehicular traffic shall be prohibited from the leach field areas.
- The lot is not located within a Zone 2 Drinking Water Source Protection Zone.
- Information provided by the survey indicates that the systems are not located within easements on the property.
- No streams, ditches, wells or other water features that would affect the systems are known to be located within 100 feet of the systems.
- No public water supply sources are known to be within 1500 feet of the proposed system, and no nonpublic water supply sources are known to be within 200 feet of the proposed system.
- No known new or existing foundation or subsurface drains are located within 100 feet of the trenches.
- The location of the septic system as presented shall be located in the field by a licensed land surveyor.
- No changes shall be made to the septic design without the prior approval of the health department and Mr. Huber.
- Test pit locations are approximate.
- The soils in the area of the trenches are projected to have similar subsurface conditions to those in the test pit.
- Design by Michael S. Huber, P.E., Onsite Wastewater Certification Level III, No. 00187-OSP-3

Septic System Profile
1" = 10'



Notes:
- Distribution sewer line between the drop box and the start of perforated pipe shall be place directly on native soils, and the excavation for the pipe shall be the minimal width required to place the pipe (approximately six inches wide). This excavation shall be backfilled with native soils or preferably bentonite mixed with native soil. Gravel, sand or other highly permeable material shall not be utilized as backfill for the trench between the drop box and the start of perforated pipe.
- Backfill over septic tank shall be a minimum of 6 inches.
- Manhole riser shall extend within six inches of final grade.



Septic System Design Parameters
Design Percolation Rate: 20 min/in
Depth Explored: 16.5 ft
Estimate Daily Flow: 2500 gal/day (see chart below)
Hydraulic Loading Rate: 0.70 gal/day/ft2
Require Absorption Area: (2500 gal/day)/(0.70 gal/day/ft2) = 3571 ft2
Minimum Width of Trench: 2 ft
Minimum Depth of Distribution Lines: 2.5 ft
Depth of Trench: (16.5 ft)-(4 ft) = 12.5 ft
Effective Depths: (12.5 ft)-(2.5 ft) = 10 ft
Required Length of Trench: (3571 sq ft)/(10 ft*2 walls) = 179 ft (180 ft provided)

Facility	Number of Persons	GPD per Employee	Estimated Waste Water Quantity (GPD)
Church	1000	2.5*	2500

*See attached sheet for details on gallons per day per person justification

Cleanout Detail
Not to Scale

Revision No.	Date	Drawn By:
Original	08/22/23	Mike Huber

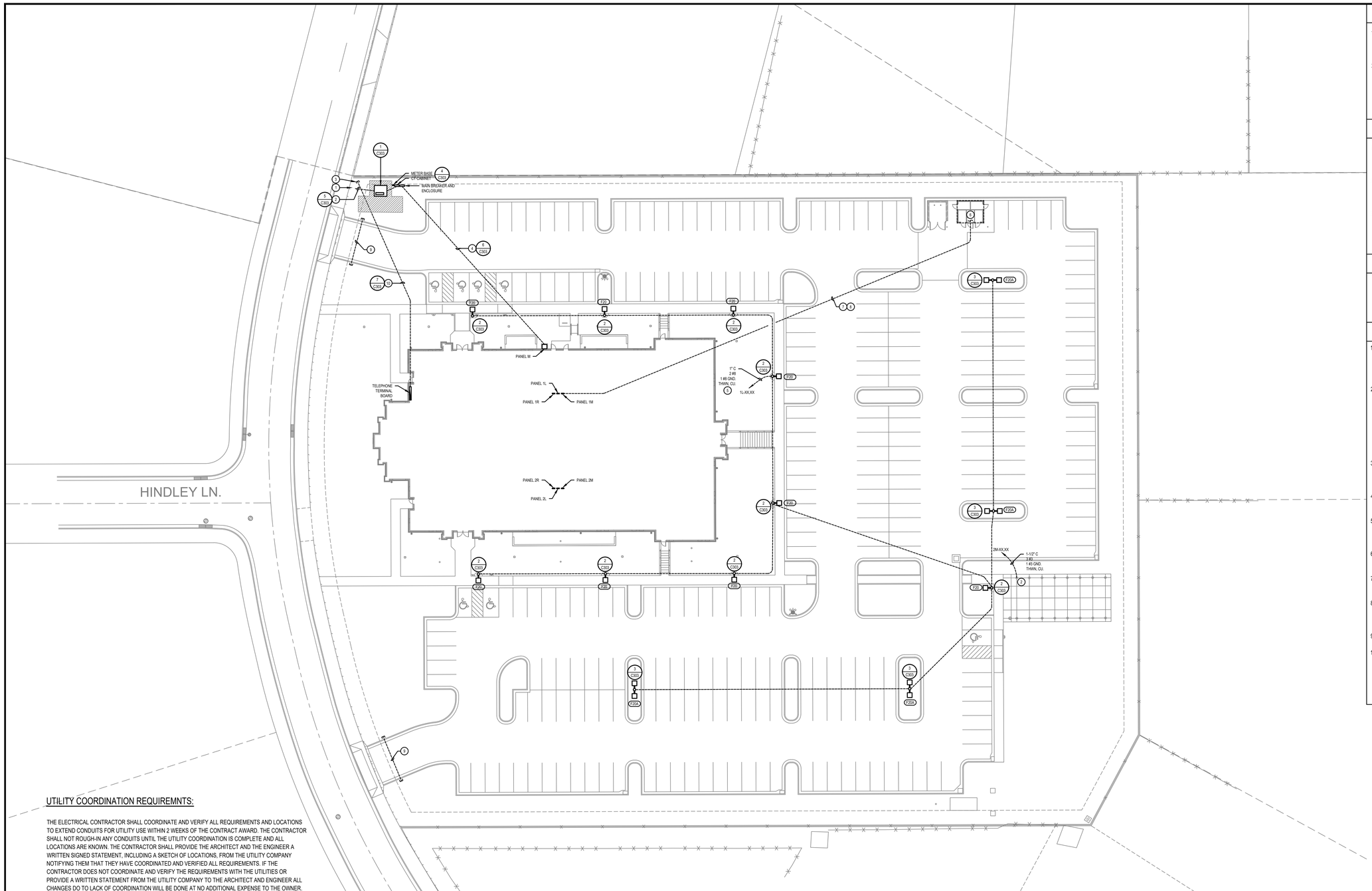
GSH Geotechnical, Inc.
473 West 4800 South
Salt Lake City, Utah 84123
Tel: (801) 685-9190
Fax: (801) 685-2990
www.gshgeotech.com

Licensed Professional Engineer — No. 343650 — Michael S. Huber — State of Utah

Figure 1
On-Site Wastewater System Design

Eagle Mountain UT Cedar Pass Meetinghouse
634 North Duggan Drive, Eagle Mountain, Utah
The Church of Jesus Christ of Latter-Day Saints
Evans+Associates Architecture Job No. 0153-355A-23

Reference: Adapted from drawing entitled "Grading and Drainage Plan, Eagle Mountain UT Cedar Pass" dated 05/01/2023, by Evans + Associates Architecture.



UTILITY COORDINATION REQUIREMNTS:

THE ELECTRICAL CONTRACTOR SHALL COORDINATE AND VERIFY ALL REQUIREMENTS AND LOCATIONS TO EXTEND CONDUITS FOR UTILITY USE WITHIN 2 WEEKS OF THE CONTRACT AWARD. THE CONTRACTOR SHALL NOT ROUGH-IN ANY CONDUITS UNTIL THE UTILITY COORDINATION IS COMPLETE AND ALL LOCATIONS ARE KNOWN. THE CONTRACTOR SHALL PROVIDE THE ARCHITECT AND THE ENGINEER A WRITTEN SIGNED STATEMENT, INCLUDING A SKETCH OF LOCATIONS, FROM THE UTILITY COMPANY NOTIFYING THEM THAT THEY HAVE COORDINATED AND VERIFIED ALL REQUIREMENTS. IF THE CONTRACTOR DOES NOT COORDINATE AND VERIFY THE REQUIREMENTS WITH THE UTILITIES OR PROVIDE A WRITTEN STATEMENT FROM THE UTILITY COMPANY TO THE ARCHITECT AND ENGINEER ALL CHANGES DO TO LACK OF COORDINATION WILL BE DONE AT NO ADDITIONAL EXPENSE TO THE OWNER.

THE ELECTRICAL CONTRACTOR SHALL ORGANIZE A PRE-CONSTRUCTION MEETING INCLUDING THE UTILITY AND GENERAL CONTRACTOR TO COORDINATE AND VERIFY ALL REQUIREMENTS. WITHIN 2 WEEKS OF THE CONTRACT AWARD. COORDINATION ITEMS INCLUDE BUT ARE NOT LIMITED TO:

- GENERAL UTILITY REQUIREMENTS AND DIVISION OF SCOPE OF WORK
- CONDUIT AND TRENCHING REQUIREMENTS
- CONDUIT ROUTING
- UTILITY EQUIPMENT PADS AND SUB-BASE REQUIREMENTS
- UTILITY CLEARANCE REQUIREMENTS
- EQUIPMENT SCREEN WALLS, EQUIPMENT ENCLOSURES, AND EQUIPMENT YARDS
- COORDINATION WITH OTHER UTILITIES OR EXISTING CONDITIONS
- AVAILABLE FAULT CURRENT CALCULATIONS (POWER UTILITY ONLY)
- UTILITY REQUIRED SITE OBSERVATIONS
- SCHEDULING OF UTILITY INSTALLATIONS

THE CONTRACTOR SHALL NOT ROUGH-IN ANY CONDUITS, EQUIPMENT PADS, OR SIMILAR ITEMS UNTIL THE UTILITY COORDINATION IS COMPLETE AND ALL THE LOCATIONS ARE KNOWN. THE CONTRACTOR SHALL PROVIDE THE ARCHITECT AND ENGINEER A WRITTEN, SIGNED STATEMENT, INCLUDING A SKETCH OF EQUIPMENT AND CONDUIT LOCATIONS, FROM THE UTILITY COMPANY NOTIFYING THEM THAT THEY HAVE COORDINATED AND VERIFIED ALL REQUIREMENTS WITH THE UTILITIES AND PROVIDE A WRITTEN STATEMENT FROM THE UTILITY COMPANY TO THE ARCHITECT AND ENGINEER, ALL CHANGES DUE TO LACK OF COORDINATION WILL BE PROVIDED AT NO ADDITIONAL EXPENSE TO THE OWNER.

Know what's below. 811
Call 811 before you dig.
BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC.
www.bluestakes.org
1-800-662-4111

ROCKY MOUNTAIN POWER REPRESENTATIVE:
DEL EDWARDS
801.331.6568

DIRECT COMMUNICATIONS REPRESENTATIVE:
JEREMY NIELSON
801.789.2833

ELECTRICAL SITE PLAN

SCALE: 1" = 20'-0"

NORTH

GENERAL NOTES

1. ALL CONDUITS THAT ARE ROUGHED-IN UNDER THE SLAB SHALL BE PLACED UNDER THE VAPOR BARRIER.
2. ALL BELOW GRADE CONDUITS AND LIGHT POLE CONDUITS SHALL BE PLACED BELOW THE GRAVEL BASE. DO NOT INSTALL CONDUIT ON TOP OF GRAVEL, DIRECTLY BELOW THE SIDEWALK / BUILDING SLAB OR WITHIN THE GRAVEL BASE.

UTILITY REQUIREMENTS

1. BURY CONDUITS PER UTILITY REQUIREMENTS. REFER TO SHEET C303 FOR TYPICAL TRENCHING REQUIREMENTS.
2. VERIFY AND COMPLY WITH ALL ROCKY MOUNTAIN POWER, AND DIRECT COMMUNICATIONS REQUIREMENTS.
3. INCLUDE IN BID ALL LINE EXTENSION FEES, UNDERGROUND FEES, AND ALL MISC. FEES CHARGED BY ROCKY MOUNTAIN POWER AND DIRECT COMMUNICATIONS.

EXTERIOR LIGHITNG CONTROLS

ALL NONESSENTIAL EXTERIOR LIGHTING SHALL ONLY CONTINUE IN OPERATION UNTIL 11:00 P.M. OR FOR AS LONG AS OPEN OR AREA IS IN ACTIVE USE AND SHALL REMAIN OFF UNTIL DAYLIGHT THE FOLLOWING DAY.

KEYED NOTES (#)

1. EXISTING ROCKY MOUNTAIN POWER GROUND SLEEVE. COORDINATE ALL REQUIREMENTS WITH ROCKY MOUNTAIN POWER PRIOR TO ANY WORK BEING DONE.
2. PROVIDE ALL REQUIRED CONDUIT, BRANCH CIRCUITS, LIGHT FIXTURES, RECEPTACLES, LOCKABLE NON-FUSED, NEMA 3R, 30A, 2 POLE DISCONNECT AND LIGHTING CONTROLS FOR PAVILION. REFER TO THE PAVILION DRAWINGS FOR LOCATIONS, QUANTITIES AND OTHER REQUIREMENTS. SEE E604 FOR FIXTURE REQUIREMENTS.
3. EXISTING CENTURYLINK PEDESTAL. COORDINATE ALL WORK WITH CENTURYLINK PRIOR TO ANY WORK BEING DONE.
4. REFER TO SINGLE LINE DIAGRAM FOR CONDUIT AND CONDUCTOR REQUIREMENTS.
5. ROUTE THROUGH LIGHTING CONTROL PANEL. SEE DIAGRAM ON SHEET E607 FOR ADDITIONAL INFORMATION.
6. REFER TO ELECTRICAL DRAWINGS FOR STORAGE BUILDING ELECTRICAL REQUIREMENTS.
7. EXTEND ONE (1) 1-1/2" CONDUIT WITH BRANCH CIRCUIT C1-XX.XX TO FEED STORAGE BUILDING.
8. SEAL CONDUITS AS REQUIRED SO WATER DOES NOT RUN BACK INTO THE BUILDING FROM THE STORAGE BUILDING.
9. TWO (2) 4" CONDUIT SLEEVES.
10. EXTEND ONE (1) 4" CONDUITS WITH TRUE TAPES FROM THE TELEPHONE TERMINAL BOARD TO THE LOCATION SHOWN. UTILIZE LONG SWEEP ELBOWS. COORDINATE EXACT STUB LOCATION AND ALL REQUIREMENTS WITH DIRECT COMMUNICATIONS PRIOR TO ANY ROUGH-IN.

ENVISION ENGINEERING
240 East Morris Ave. Suite 200
South Salt Lake City, UT 84115
P (801) 534-1130
P (801) 534-1080
www.envisioneng.com
ENV: 2023-107.00

evans + associates architecture
11576 south state street, suite 103b, draper, utah 84020
fax 801-553-8273
phone 801-553-8272

Stamp

REGISTERED PROFESSIONAL ENGINEER
DAVID P. WHITTON
No.264307
STATE OF UTAH

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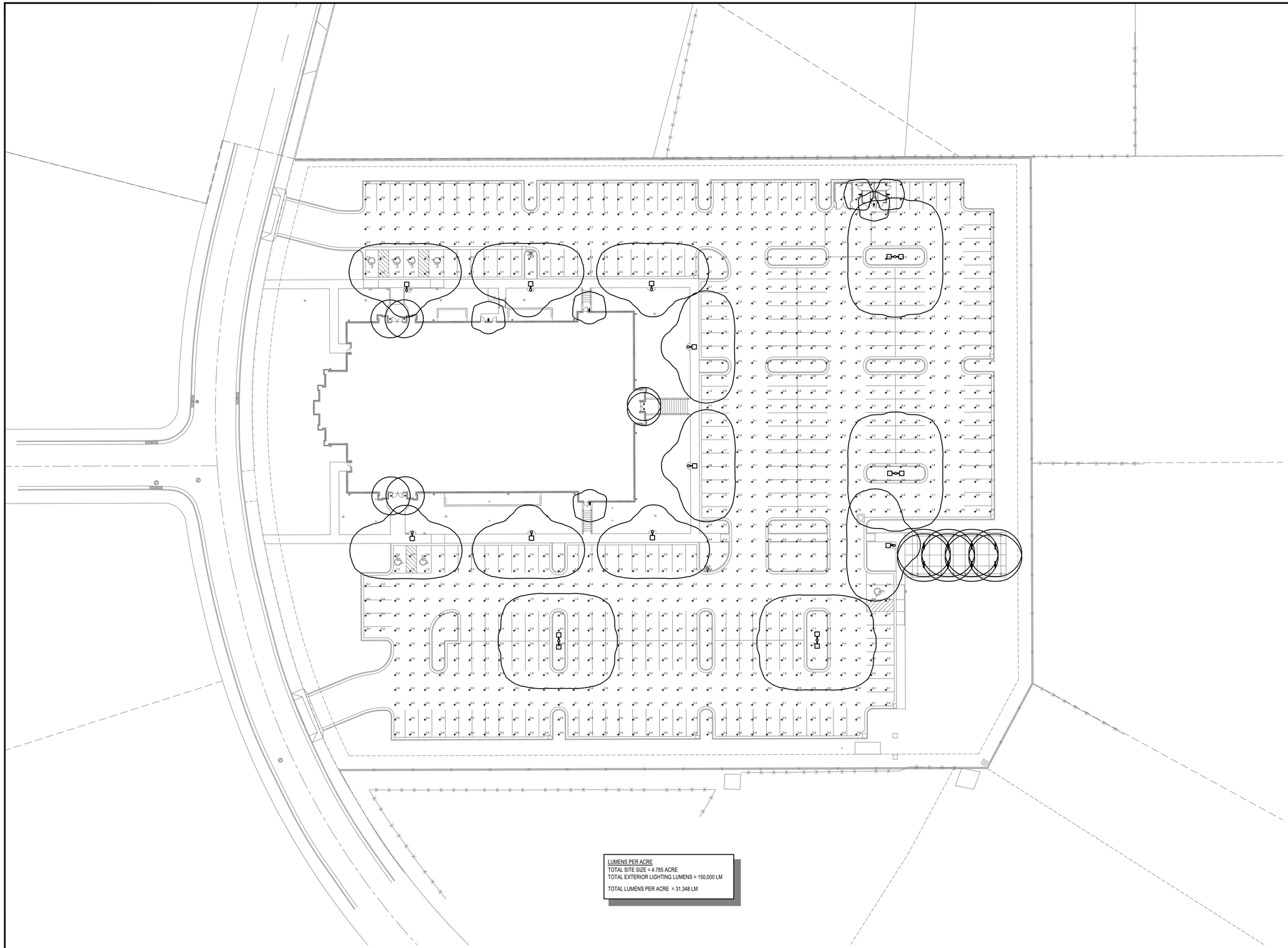
Sheet Title
ELECTRICAL SITE PLAN

Sheet
C301



LUMENS PER ACRE
TOTAL SITE SIZE = 4.785 ACRE
TOTAL EXTERIOR LIGHTING LUMENS = 150,000 LM

TOTAL LUMENS PER ACRE = 31,348 LM

ELECTRICAL SITE ILLUMINATION PLAN

SCALE: 1" = 20'-0"

NORTH

ENVISION ENGINEERING
240 East Morris Ave. Suite 200
South Salt Lake City, UT 84115

p (801) 534-1130
f (801) 534-1080

www.envisioneng.com

ENV: 2023-107.00

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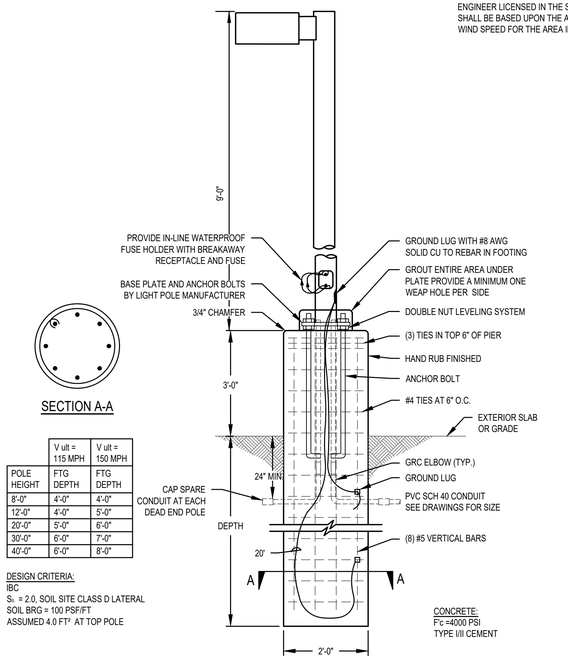
Sheet Title
ELECTRICAL SITE ILLUMINATION PLAN

Sheet
C302

NOTE:
DESIGN SHOWN FOR CONCRETE POLE BASES IS FOR INFORMATIONAL PURPOSES ONLY TO CONVEY THE NECESSARY REQUIREMENTS. ELECTRICAL CONTRACTOR SHALL BE REQUIRED TO PROVIDE A POLE BASE DESIGN AND ASSOCIATED STRUCTURAL CALCULATIONS AND SUBMIT THEM TO THE ENGINEER AS A DEFERRED SUBMITTAL FOR REVIEW. THE POLE BASE DESIGN SHALL BE STAMPED AND SIGNED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF UTAH. THE POLE BASE DESIGN SHALL BE BASED UPON THE ACTUAL POLE, FIXTURE, SOIL CONDITIONS, WIND SPEED FOR THE AREA INSTALLED, ETC.



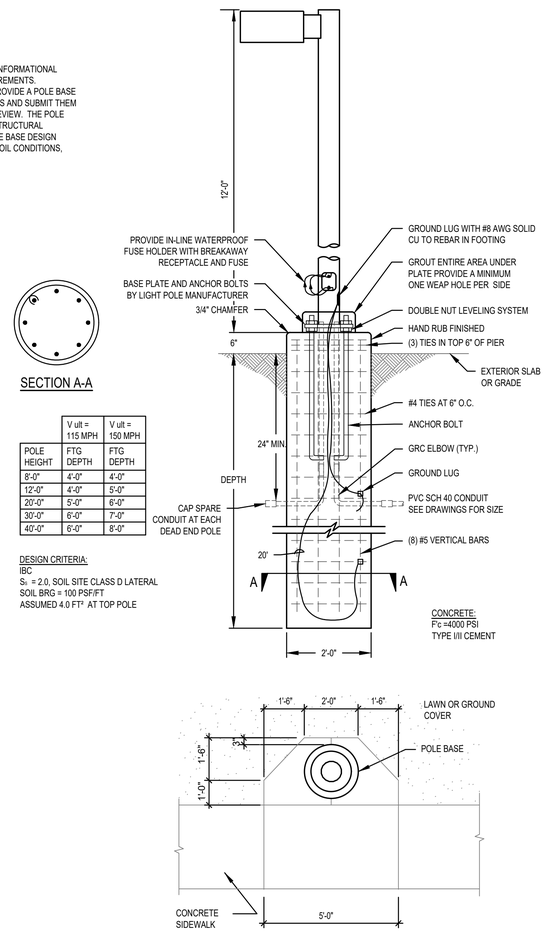
SECTION A-A

POLE HEIGHT	FTG DEPTH (V ult = 115 MPH)	FTG DEPTH (V ult = 150 MPH)
8'-0"	4'-0"	4'-0"
12'-0"	4'-0"	5'-0"
20'-0"	5'-0"	6'-0"
30'-0"	6'-0"	7'-0"
40'-0"	6'-0"	8'-0"

DESIGN CRITERIA:
IBC
S_s = 2.0, SOIL SITE CLASS D LATERAL
SOIL BRG = 100 PSF/FT
ASSUMED 4.0 FT² AT TOP POLE

CONCRETE:
F'c =4000 PSI
TYPE I/II CEMENT

3 BOLTED LIGHT POLE BASE DETAIL - PARKING AREA
SCALE: NONE



SECTION A-A

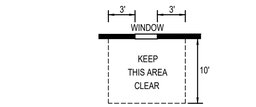
POLE HEIGHT	FTG DEPTH (V ult = 115 MPH)	FTG DEPTH (V ult = 150 MPH)
8'-0"	4'-0"	4'-0"
12'-0"	4'-0"	5'-0"
20'-0"	5'-0"	6'-0"
30'-0"	6'-0"	7'-0"
40'-0"	6'-0"	8'-0"

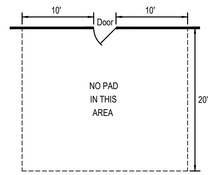
DESIGN CRITERIA:
IBC
S_s = 2.0, SOIL SITE CLASS D LATERAL
SOIL BRG = 100 PSF/FT
ASSUMED 4.0 FT² AT TOP POLE

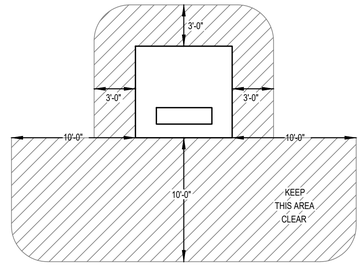
CONCRETE:
F'c =4000 PSI
TYPE I/II CEMENT

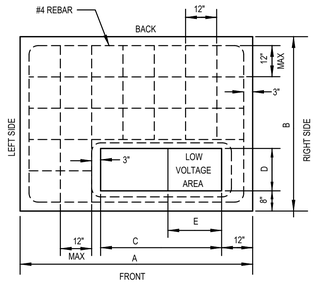
PLAN VIEW
REFER TO ARCHITECTURAL SITE PLAN FOR EXACT LOCATIONS

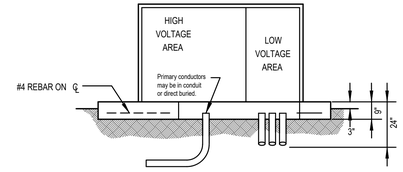
2 TYPICAL POLE BASE DETAIL
SCALE: NONE











TRANSFORMER RATING	DIMENSIONS A	B	C	D	E
75-500 KVA	84"	78"	48"	15"	20"
750-2500 KVA	96"	82"	60"	16"	30"

TRANSFORMER PAD DIMENSION CHART

COORDINATE ALL REQUIREMENTS WITH ROCKY MOUNTAIN POWER. REFER TO THE CURRENT ESR MANUAL FOR ALL PAD AND CLEARANCE REQUIREMENTS.

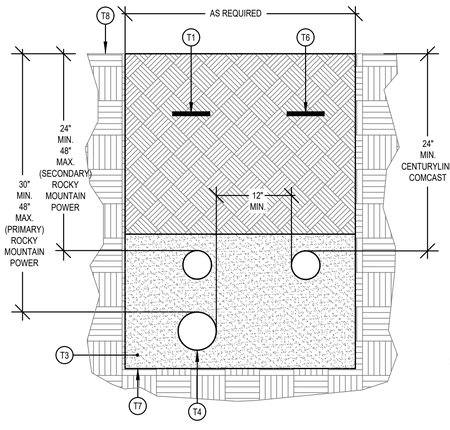
1 ROCKY MOUNTAIN POWER TRANSFORMER PAD DETAIL
SCALE: NONE

TRENCHING KEYED NOTES: (T8)

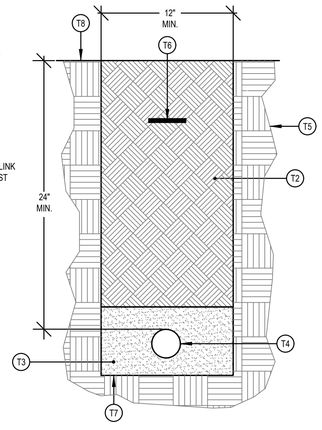
1. MARKER TAPE WITH TRACER WIRE LABELED, "CAUTION BURIED ELECTRIC CONDUITS BELOW" DIRECTLY OVER POWER CONDUITS 6" MINIMUM BELOW GRADE.
2. CLEAN BACKFILL CONTAINING NO ROCKS LARGER THAN 4" DIA.
3. BACKFILL MATERIAL WITHIN 4" TO 6" OF CONDUIT SHALL PASS THROUGH A 3/4" SIEVE FRAME OR SAND WITHOUT ANY SHARP OR FOREIGN OBJECTS.
4. ALL CONDUITS SHOWN SHALL BE SCHEDULE 40 PVC.
5. UNDISTURBED EARTH.
6. MARKER TAPE WITH TRACER WIRE LABELED, "CAUTION BURIED DATA/COMMUNICATION CONDUIT BELOW" DIRECTLY OVER DATA/COMM CONDUITS.
7. TRENCHES SHALL BE A UNIFORM DEPTH FOR ENTIRE LENGTH OF TRENCH SO CONDUITS CAN SIT FLAT (HORIZONTAL) WITH THE GROUND.
8. FINISHED GRADE.

TRENCHING GENERAL NOTES:

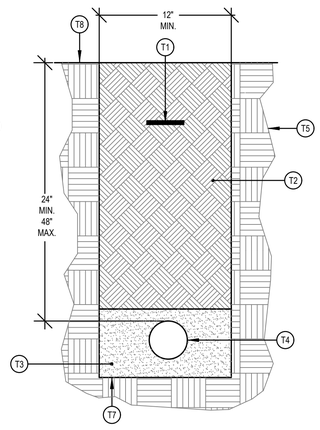
1. PROVIDE PULL 1/4" NYLON ROPES IN ALL CONDUITS.
2. HORIZONTAL AND VERTICAL SEPARATION BETWEEN CONDUIT SHALL BE MAINTAINED BY INSTALLING HIGH IMPACT SPACERS WITH HORIZONTAL INTERVALS OF EIGHT FEET.
3. ALL MARKER TAPE SHALL CONTAIN #10 TRACER WIRE.
4. REFER TO THE ROCKY MOUNTAIN POWER SIX STATE ESR MANUAL FOR ADDITIONAL INFORMATION.
5. VERIFY ALL REQUIREMENTS WITH DIRECT COMMUNICATIONS PRIOR TO TRENCHING.



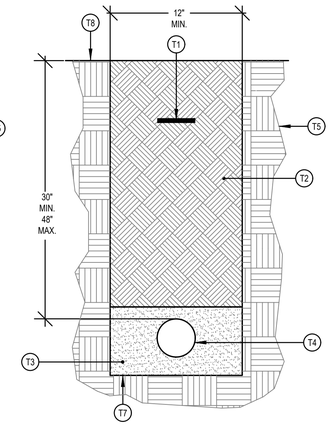
8 TRENCH DETAIL - JOINT USE
SCALE: NONE ROCKY MOUNTAIN POWER / DIRECT COMMUNICATIONS (JOINT USE)



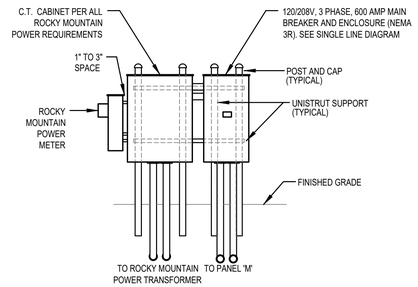
7 TRENCH DETAIL
SCALE: NONE DIRECT COMMUNICATIONS



6 TRENCH DETAIL
SCALE: NONE ROCKY MOUNTAIN POWER (SECONDARY POWER)



5 TRENCH DETAIL
SCALE: NONE ROCKY MOUNTAIN POWER (PRIMARY POWER)



4 CT CABINET/METER AND MAIN BREAKER MOUNTING DETAIL
SCALE: none

ENVISION ENGINEERING
240 East Morris Ave. Suite 200
South Salt Lake City, UT 84115
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ENV: 2023-107.00

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11576 south state street, suite 103b, draper, utah 84020
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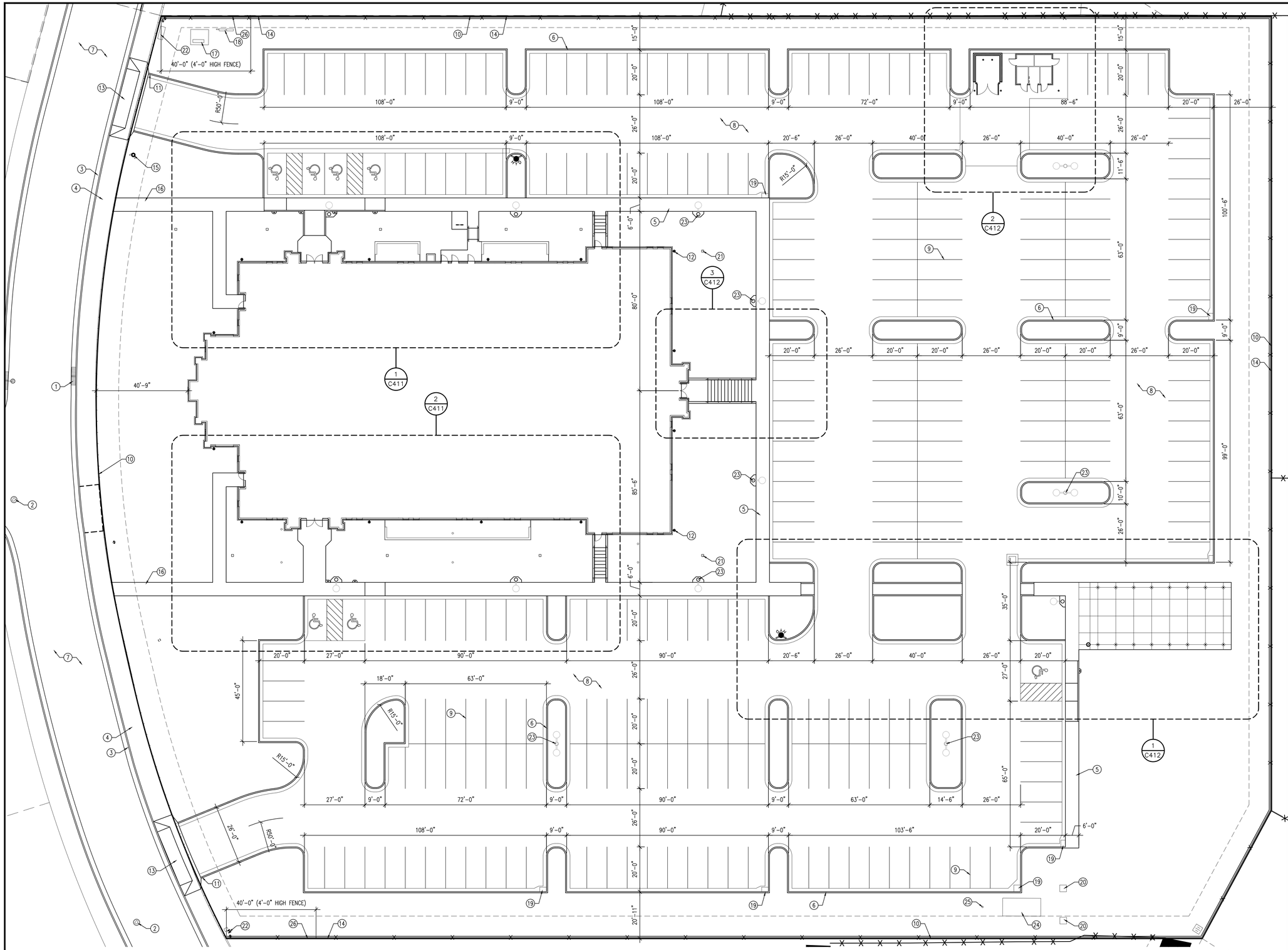
Revisions	Mark	Date	Description
	1	10/18/23	City Comments

Project Number 23-76
Plan Series Heritage 23-2
Property Number 501-2693-22010101
Date September 4, 2023

Sheet Title
ELECTRICAL SITE PLAN DETAILS

Sheet
C303



ARCHITECTURAL SITE PLAN

SCALE: 1" = 20'-0"

GENERAL NOTES

1. CONCRETE RADII ARE 4'-0" UNLESS NOTED OTHERWISE.
2. COORDINATE ALL SITE WORK WITH ALL OTHER CONTRACT DOCUMENTS.
3. ALL APPLICABLE ELEMENTS OF THE AMERICAN'S WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES WILL BE ADHERED TO.
4. ALL NOTED ITEMS ARE NEW UNLESS NOTED OTHERWISE.
5. ALL CONSTRUCTION IS TO BE DONE PER THE LATEST EDITION OF THE EAGLE MOUNTAIN CITY DESIGN STANDARDS AND PUBLIC IMPROVEMENTS SPECIFICATIONS.
6. PRIOR TO CONSTRUCTION, AN EROSION AND SEDIMENTATION CONTROL PLAN WILL BE SUBMITTED TO THE PUBLIC WORKS DIRECTOR FOR APPROVAL.
7. ALL ADA ACCESSIBLE SIDEWALK RAMPS WILL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE EAGLE MOUNTAIN CITY DESIGN STANDARDS AND PUBLIC IMPROVEMENTS SPECIFICATIONS.
8. ANY DISTURBED AREA OUTSIDE OF CONSTRUCTION LIMITS/PROPERTY LINE ON ADJACENT LANDOWNERS IN UNDEVELOPED LOTS, WILL NEED TO BE RE-VEGETATED WITH EAGLE MOUNTAIN CITY SEED MIX.

KEYED NOTES

1. EXISTING STORM DRAIN CATCH BASIN TO REMAIN; PROTECT DURING CONSTRUCTION
2. EXISTING STORM DRAIN MANHOLE TO REMAIN; PROTECT DURING CONSTRUCTION
3. EXISTING CONCRETE CURB AND GUTTER TO REMAIN; PROTECT DURING CONSTRUCTION
4. EXISTING ASPHALT TRAIL TO REMAIN; PROTECT DURING CONSTRUCTION; TRAIL MUST REMAIN ACCESSIBLE DURING DURATION OF PROJECT
5. COMBINATION CONCRETE SIDEWALK-CURB AND GUTTER; SEE B/C501
6. CONCRETE CURB AND GUTTER; SEE C/C501 AND D/C501
7. EXISTING ASPHALT ROAD TO REMAIN; PROTECT DURING CONSTRUCTION
8. ASPHALT PAVEMENT; SEE A/CS02
9. 4" WIDE PAINTED PARKING STRIPS; TYPICAL
10. PROPERTY LINE
11. TAPER CONCRETE CURB TO SIDEWALK LEVEL AT DRIVE ENTRANCES; TYPICAL BOTH SIDES; SEE G/C501
12. DOWNSPOUT CATCH BASIN; SEE C201 AND A/C503
13. DRIVE APPROACH PER EAGLE MOUNTAIN CITY STANDARDS
14. 6'-0" TALL SOLID VINYL FENCE WITH CONCRETE MOW STRIP; SEE J/C504
15. EXISTING FIRE HYDRANT TO REMAIN; PROTECT DURING CONSTRUCTION
16. CONCRETE WALK; SEE A/C501
17. TRANSFORMER; SEE ELECTRICAL
18. METER BASE, MAIN BREAKER AND CT CABINET; SEE ELECTRICAL
19. STORM DRAIN CATCH BASIN; SEE C201 AND C503
20. STORM DRAIN BOX; SEE C201
21. STORM DRAIN NYLOPLAST YARD DRAIN WITH DOMED GRATE; SEE C201 AND C503
22. EXISTING COMMUNICATIONS EQUIPMENT; PROTECT DURING CONSTRUCTION
23. LIGHT POLE WITH CONCRETE APRON; SEE ELECTRICAL
24. SEPTIC TANK, SEE UTILITY PLAN
25. CLEAN OUT TO GRADE; SEE C203 AND K/C502
26. 4'-0" TALL SOLID VINYL FENCE WITH CONCRETE MOW STRIP; SEE J/C504 SIMILAR

SITE INFORMATION

TOTAL PARCEL AREA: 208,440 sf / 4.785 AC

BUILDING AREAS
- CHAPEL: 24,076 sf
- PAVILION: 1,462 sf
- STORAGE BUILDING: 236 sf

IMPERVIOUS AREAS (ON-SITE)
- WALKS, PADS, APRONS: 12,573 sf
- CURB AND GUTTER (LF): 3,718 lf
- ASPHALT: 92,175 sf

LANDSCAPE AREA: 70,616 sf

TOTAL PARKING SPACES REQUIRED
1 STALL PER 20 S.F CHAPEL
- 3,067 sf / 20 sf = 154 REQUIRED SPACES

TOTAL PARKING SPACES PROVIDED
- REGULAR: 272
- ACCESSIBLE: 4
- VAN ACCESSIBLE: 3
- TOTAL SPACES PROVIDED: 279

evans + associates architecture
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fax 801-553-8273

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LICENSED ARCHITECT
PAUL ANTHONY EVANS
273770
STATE OF UTAH

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Project Number
23-76

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Heritage 23-2

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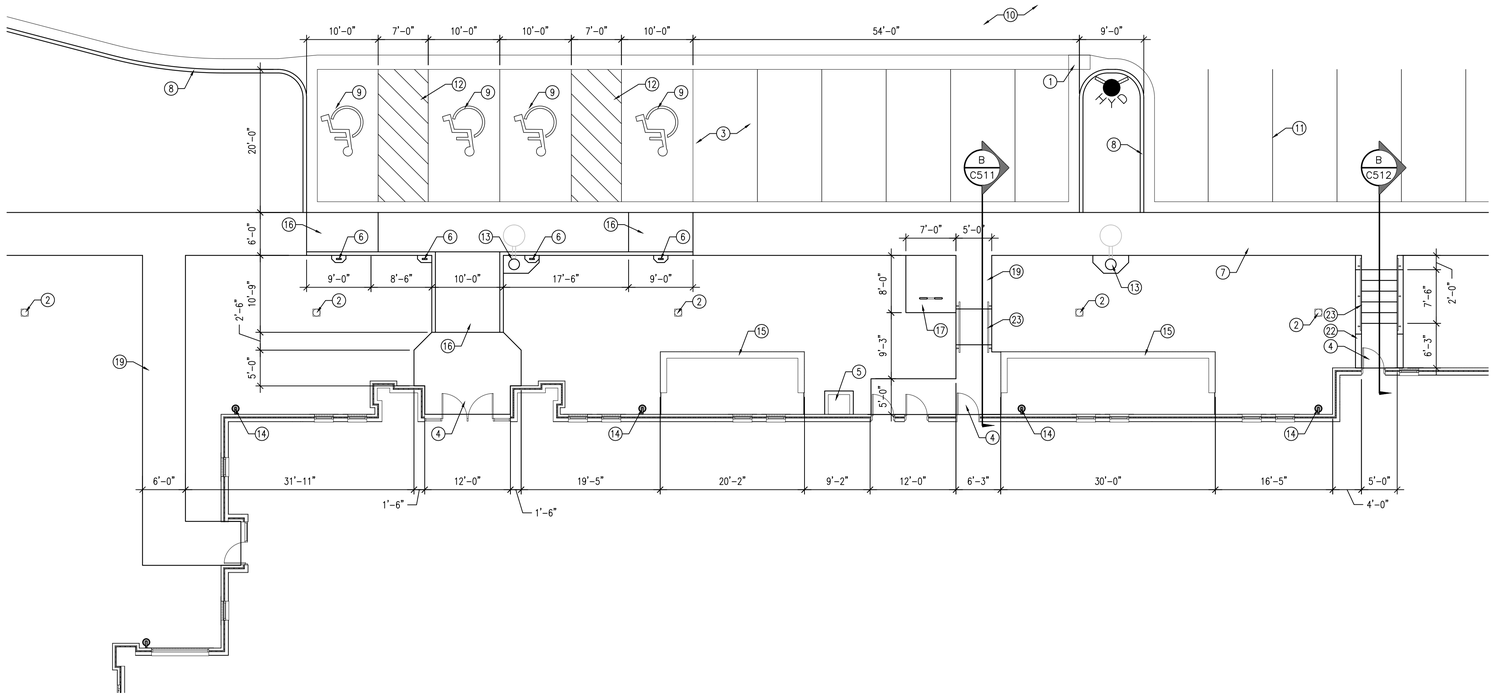
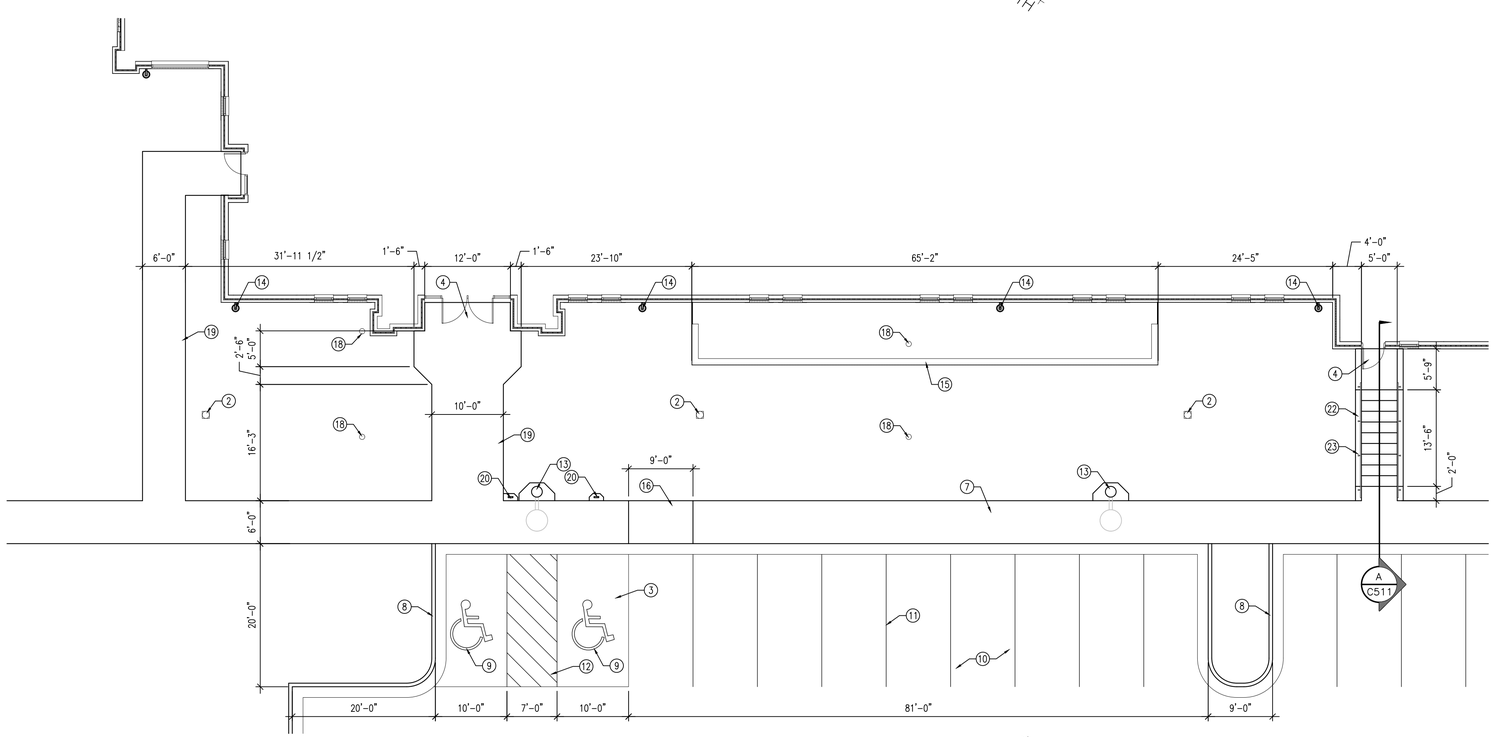
Sheet Title
ARCHITECTURAL SITE PLAN

Sheet
C401



1 ENLARGED SITE PLAN

SCALE: 1" = 10'-0"



2 ENLARGED SITE PLAN

SCALE: 1" = 10'-0"

GENERAL NOTES

1. CONCRETE RADII ARE 4'-0" UNLESS NOTED OTHERWISE
2. COORDINATE ALL SITE WORK WITH ALL OTHER CONTRACT DOCUMENTS
3. ALL APPLICABLE ELEMENTS OF THE AMERICAN'S WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES WILL BE ADHERED TO
4. ALL NOTED ITEMS ARE NEW UNLESS NOTED OTHERWISE.

KEYED NOTES

1. STORM DRAIN CATCH BASIN; SEE C201 AND C503
2. STORM DRAIN NYLOPLAST YARD DRAIN WITH DOMED GRATE; SEE C201 AND C503
3. CONCRETE PAVEMENT; SEE D/C502
4. CONCRETE ENTRY; TYPICAL; SEE H/C501
5. MAIN ELECTRICAL PANEL WITH CONCRETE PAD; SEE ELECTRICAL
6. ACCESSIBLE STALL SIGNAGE; SEE B/C502
7. COMBINATION CONCRETE SIDEWALK-CURB AND GUTTER; SEE B/C501
8. CONCRETE CURB AND GUTTER; SEE C/C501 AND D/C501
9. PAINTED ACCESSIBLE SIGN
10. ASPHALT PAVEMENT; SEE A/C502
11. 4" WIDE PAINTED PARKING STRIPS; TYPICAL
12. PAINTED ACCESSIBLE AISLE
13. LIGHT POLE WITH CONCRETE APRON; SEE ELECTRICAL
14. DOWNSPOUT CATCH BASIN; SEE C201 AND A/C503
15. MECHANICAL ENCLOSURE; SEE E/C504 AND F/C504
16. CONCRETE ACCESSIBLE RAMP; K/C501
17. BIKE RACK WITH CONCRETE PAD; SEE J/C502
18. CLEAN OUT TO GRADE; SEE C203 AND K/C502
19. CONCRETE WALK; SEE A/C501
20. VAN ACCESSIBLE STALL SIGNAGE; SEE B/C502
21. OMITTED
22. 10" CONCRETE MOW STRIP; TYPICAL BOTH SIDES
23. 1 1/2" STAINLESS STEEL HANDRAIL; TYPICAL BOTH SIDES

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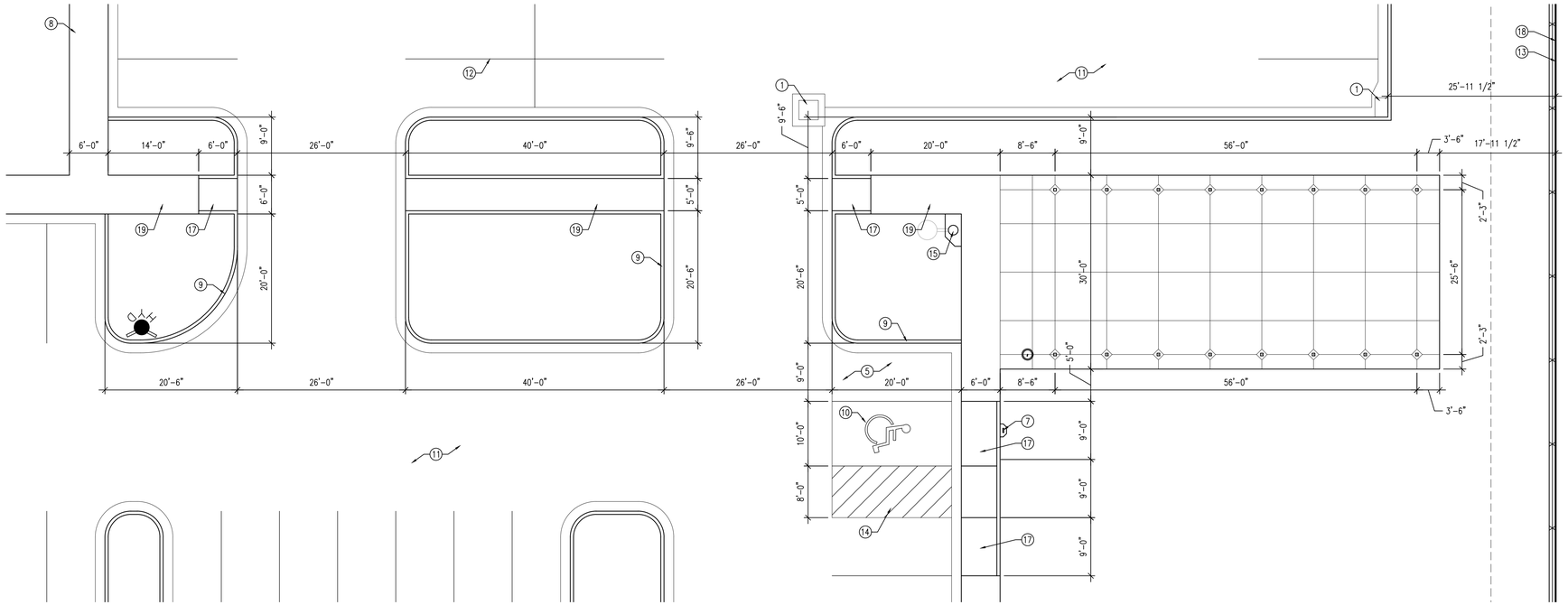
Sheet Title
ENLARGED ARCHITECTURAL SITE PLANS

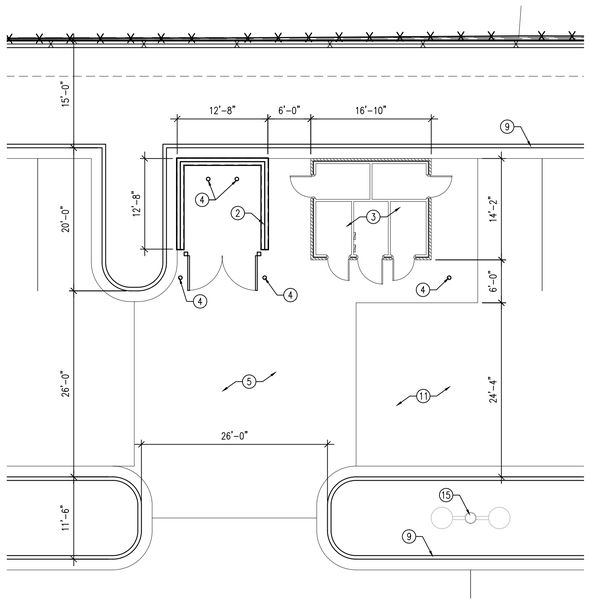
Sheet
C411



1 ENLARGED SITE PLAN

SCALE: 1" = 10'-0"

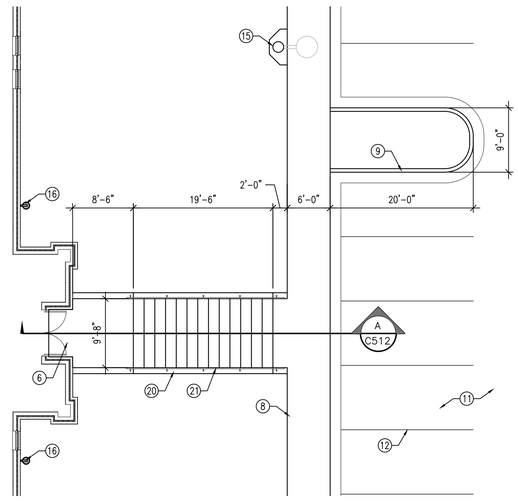
NORTH



2 ENLARGED SITE PLAN

SCALE: 1" = 10'-0"

NORTH



3 ENLARGED SITE PLAN

SCALE: 1" = 10'-0"

NORTH

GENERAL NOTES

1. CONCRETE RADII ARE 4'-0" UNLESS NOTED OTHERWISE
2. COORDINATE ALL SITE WORK WITH ALL OTHER CONTRACT DOCUMENTS
3. ALL APPLICABLE ELEMENTS OF THE AMERICAN'S WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES WILL BE ADHERED TO
4. ALL NOTED ITEMS ARE NEW UNLESS NOTED OTHERWISE.

KEYED NOTES

1. STORM DRAIN CATCH BASIN; SEE C201 AND C503
2. DUMPSTER ENCLOSURE; SEE A/C504, B/C504 AND C/C504
3. STORAGE BUILDING; SEE C811
4. BOLLARD; SEE C/C502
5. CONCRETE PAVEMENT; SEE D/C502
6. CONCRETE ENTRY; TYPICAL; SEE H/C501
7. ACCESSIBLE STALL SIGNAGE; SEE B/C502
8. COMBINATION CONCRETE SIDEWALK-CURB AND GUTTER; SEE B/C501
9. CONCRETE CURB AND GUTTER; SEE C/C501 AND D/C501
10. PAINTED ACCESSIBLE SIGN
11. ASPHALT PAVEMENT; SEE A/C502
12. 4" WIDE PAINTED PARKING STRIPS; TYPICAL
13. PROPERTY LINE
14. PAINTED ACCESSIBLE AISLE
15. LIGHT POLE WITH CONCRETE APRON; SEE ELECTRICAL
16. DOWNSPOUT CATCH BASIN; SEE C201 AND A/C503
17. CONCRETE ACCESSIBLE RAMP; K/C501
18. 6'-0" TALL SOLID VINYL FENCE WITH CONCRETE MOW STRIP; SEE G/C502
19. CONCRETE WALK; SEE A/C501
20. 10" CONCRETE MOW STRIP; TYPICAL BOTH SIDES
21. 1 1/2" STAINLESS STEEL HANDRAIL; TYPICAL BOTH SIDES

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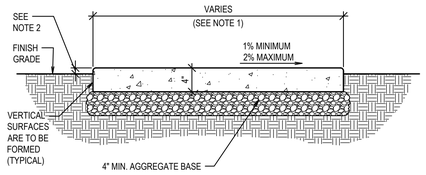
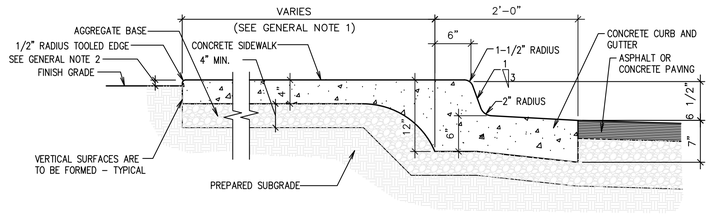
Sheet Title
ENLARGED ARCHITECTURAL SITE PLANS

Sheet
C412

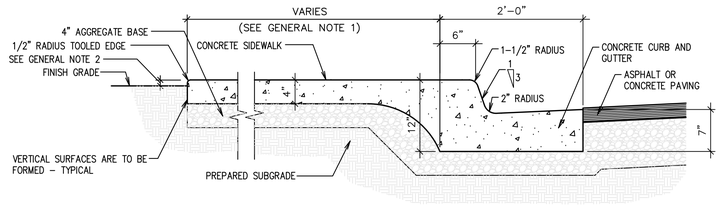


A SIDEWALK DETAIL

SCALE: N.T.S.



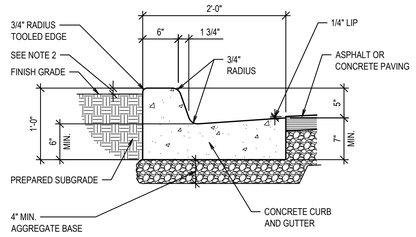
ON SITE WHEN WATER DRAINS AWAY FROM CURB



ON SITE WHEN WATER DRAINS TOWARD CURB

B INTEGRAL SIDEWALK, CURB AND GUTTER

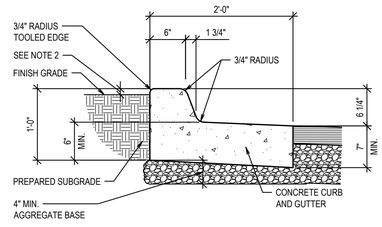
SCALE: N.T.S.



FOR USE WHERE WATER DRAINS TOWARD CURB

C CURB AND GUTTER - IN FLOW

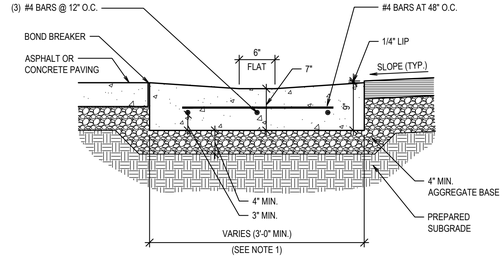
SCALE: N.T.S.



FOR USE WHERE WATER DRAINS AWAY FROM CURB

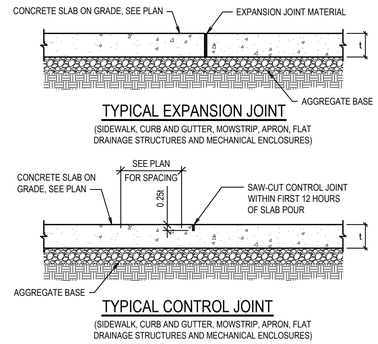
D CURB AND GUTTER - OUT FLOW

SCALE: N.T.S.



E CONCRETE WATERWAY - FLAT DRAINAGE STRUCTURE

SCALE: N.T.S.



TYPICAL EXPANSION JOINT

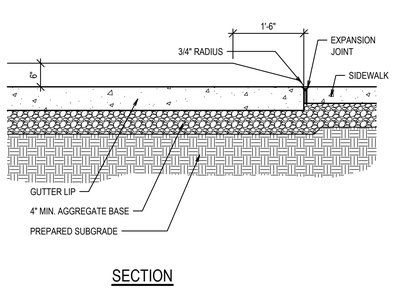
(SIDEWALK, CURB AND GUTTER, MOWSTRIP, APRON, FLAT DRAINAGE STRUCTURES AND MECHANICAL ENCLOSURES)

TYPICAL CONTROL JOINT

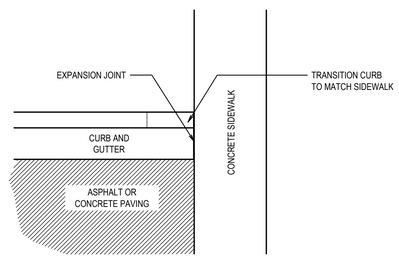
(SIDEWALK, CURB AND GUTTER, MOWSTRIP, APRON, FLAT DRAINAGE STRUCTURES AND MECHANICAL ENCLOSURES)

F EXPANSION AND CONTROL JOINT

SCALE: N.T.S.



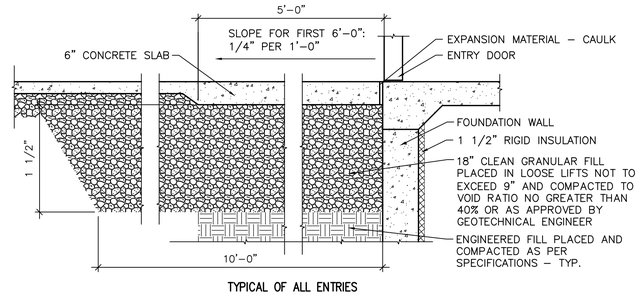
SECTION



PLAN

G CURB TRANSITION

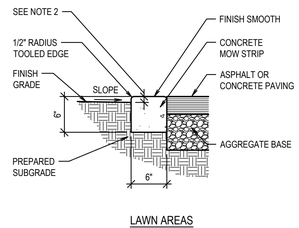
SCALE: N.T.S.



TYPICAL OF ALL ENTRIES

H ENTRY DETAIL

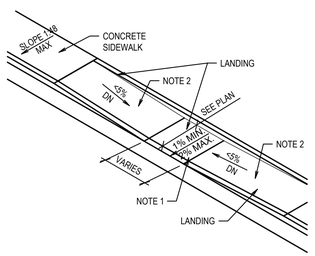
SCALE: N.T.S.



LAWN AREAS

J MOW STRIP

SCALE: N.T.S.



NOTES:

1. UNLESS REQUIRED OTHERWISE BY THE AUTHORITY HAVING JURISDICTION, USE A LIGHT BROOM FINISH ON RAMPS AND LANDINGS TO MATCH THE FINISHES ON THE SIDEWALKS.
2. 5% (MAXIMUM) IN DIRECTION OF TRAVEL. LIMIT CROSS SLOPE ON SIDEWALKS 2%.
3. ALL LANDINGS MUST HAVE 1:48 CROSS SLOPE AND RUNNING SLOPE. LANDING MUST BE AS WIDE AS THE RAMP.
4. CROSS SLOPE ON RAMP MUST BE 1:48 OR LESS.
5. COUNTER SLOPES OF ADJOINING GUTTERS AND PAVING ADJACENT TO THE CURB RAMP SHALL NOT BE STEEPER THAN 1:20 (5%), ALTHOUGH CODE ALLOWS A 1V/12H (8.33%) SLOPE.

K ACCESSIBLE SLOPED WALK DETAILS

SCALE: N.T.S.

GENERAL NOTES

1. SEE SITE PLAN FOR APRON, MOW STRIP AND SIDEWALK LOCATIONS AND WIDTHS.
2. 1" PRIOR TO SEEDING, 2" PRIOR TO SODDING AND 4" IN PROPERTY AREAS.
3. EXPANSION JOINT MATERIAL SHALL BE RECESSED 1/4" WHERE SEALANT IS NOT APPLIED, AND 1/2" WHERE SEALANT IS APPLIED.
4. EXTERIOR CONCRETE : USE 4,500 PSI. MIN. IF EXPOSED TO FREEZE-THAW CYCLES AND/OR DE-ICER SALTS. USE 3,000 PSI MIN. OTHERWISE EXCEPT USE 4000 PSI AT CONCRETE PAVING.
5. CONTRACTOR TO INSTALL EXPANSION AND CONTROL JOINTS AS REQUIRED PER THE SPECIFICATIONS.
6. ALL AGGREGATES SHALL SATISFY ASTM AND DEPARTMENT OF TRANSPORTATION STRENGTH AND DURABILITY REQUIREMENTS. GRANITE AGGREGATES ARE PREFERRED BUT HIGH QUALITY LIMESTONE AGGREGATES ARE ACCEPTABLE. SEE SPECIFICATION.
7. ALL REINFORCING BARS ARE TO BE EPOXY COATED, IN CONCRETE CURBS, GUTTERS, SIDEWALKS, PAVING, BASINS.

evans + associates architecture
11576 south state street, suite 103b, draper, utah 84020
phone 801-553-8272 fax 801-553-8273

Stamp

LICENSED ARCHITECT
PAUL ANTHONY EVANS
273770
STATE OF UTAH

A New Meetinghouse for:
Lakeview &
Eagle Mountain UT Cedar Pass Stake
Parcel: 34-620:0208
634 North Duggan Drive
Eagle Mountain, Utah

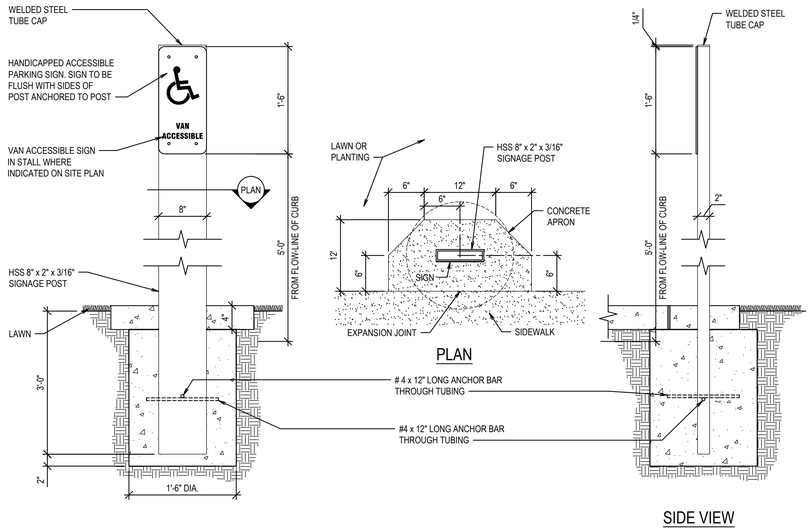
Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

Revisions		
Mark	Date	Description
1	10/18/23	City Comments

Project Number 23-76
Plan Series Heritage 23-2
Property Number 501-2693-22010101
Date September 4, 2023

Sheet Title
SITE DETAILS

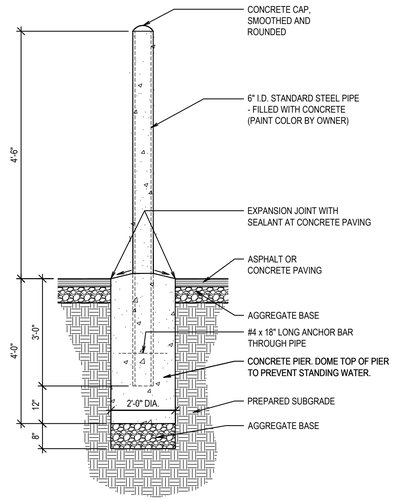
Sheet
C501



B ACCESSIBLE STALL SIGN (TRAFFIC SIGNAGE)

SCALE: N.T.S.

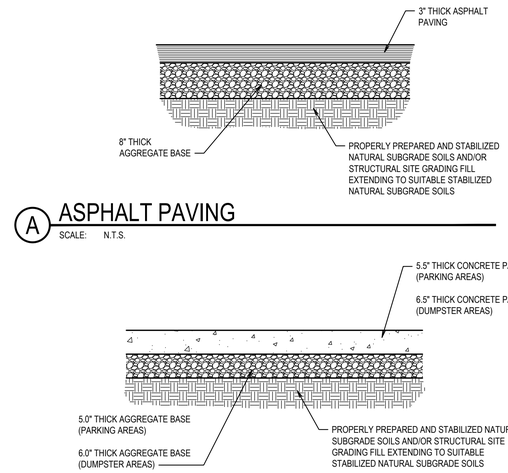
STEEL PER DIVISION 05
INSTALL PER DIVISION 03



C CONCRETE BOLLARD

SCALE: N.T.S.

STEEL PER DIVISION 05
INSTALL PER DIVISION 03

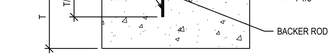


A ASPHALT PAVING

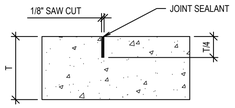
SCALE: N.T.S.

D CONCRETE PAVING

SCALE: N.T.S.



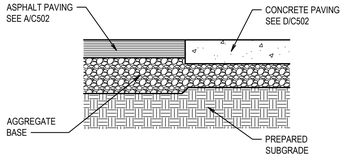
TYPE A CONTROL JOINT IN CONCRETE PAVING



TYPE B CONTROL JOINT IN CONCRETE PAVING

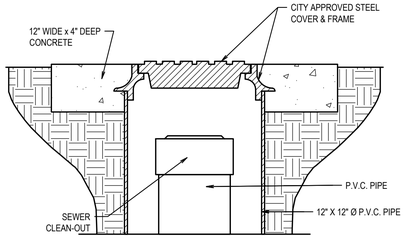
E CONCRETE PAVING JOINT DETAILS

SCALE: N.T.S.



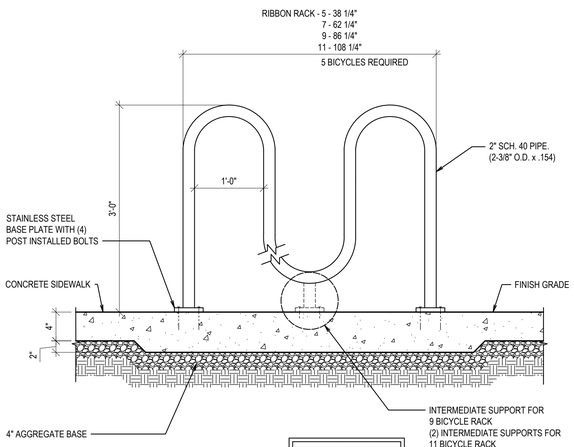
JOIN BETWEEN ASPHALT AND CONCRETE PAVING

SCALE: N.T.S.



H SEWER CLEAN-OUT

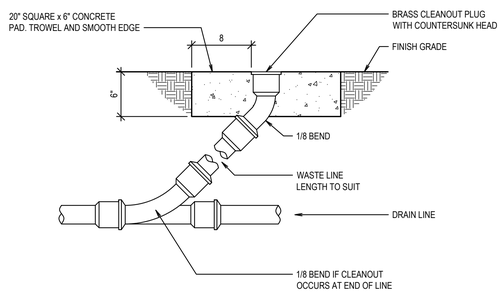
SCALE: N.T.S.



BID PER DIVISION 05
INSTALL PER DIVISION 03

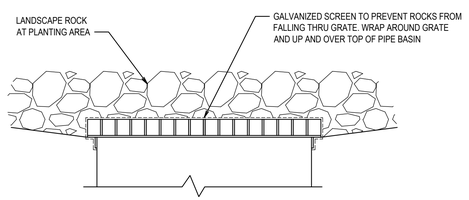
J BICYCLE RACK DETAIL

SCALE: N.T.S.



K CLEAN-OUT

SCALE: N.T.S.



L AREA DRAIN SCREEN AT ROCK MULCH

SCALE: N.T.S. NOTE : (DIAMETER OF BASIN DETERMINED BY NUMBER OF PIPES IN AND OUT)

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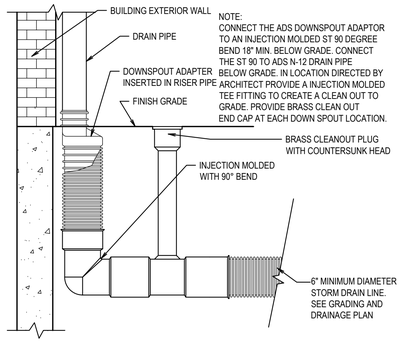
SITE DETAILS

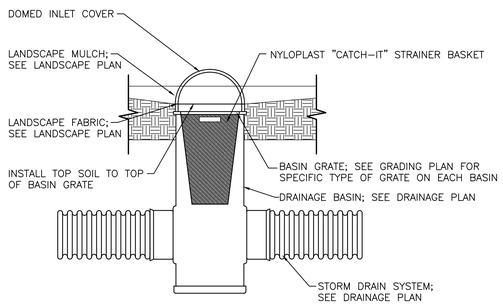
Sheet
C502



NOTE:
CONNECT THE ADS DOWNSPOUT ADAPTOR TO AN INJECTION MOLDED ST 90 DEGREE BEND 18" MIN. BELOW GRADE. CONNECT THE ST 90 TO ADS N-12 DRAIN PIPE BELOW GRADE. IN LOCATION DIRECTED BY ARCHITECT PROVIDE A INJECTION MOLDED TEE FITTING TO CREATE A CLEAN OUT TO GRADE. PROVIDE BRASS CLEAN OUT END CAP AT EACH DOWN SPOUT LOCATION.

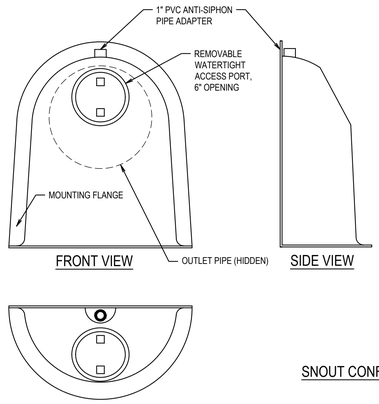
A ROOF DRAIN CONNECTION

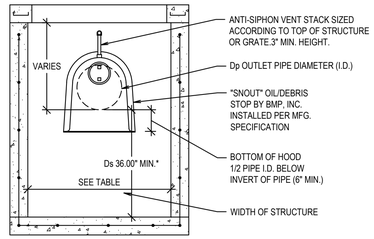
SCALE: N.T.S.



B AREA NYLOPLAST DRAIN BOX

SCALE: N.T.S.





SNOUT CONFIGURATION

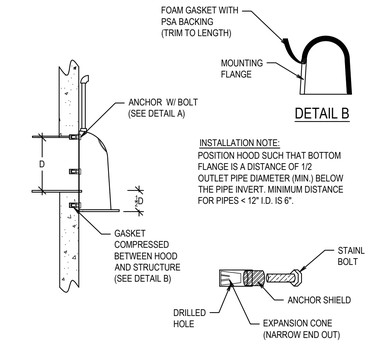
SIZING EXAMPLES:

OUTLET HOLE SIZE	SNOUT SIZE	STRUCTURE SIZE
11.9" O.D. OR LESS	12 F or R	R FITS 36"-48" DIAM STRUCTURE
12.0"-17.9" O.D.	18 F or R	R FITS 48"-60" DIAM STRUCTURE
18.0"-23.9" O.D.	24 F or R	R FITS 48"-60" DIAM STRUCTURE
24.0"-29.9" O.D.	30 F or R	R FITS 60"-72" DIAM STRUCTURE
30.0"-47.9" O.D.	48 F	
30.0"-53.9" O.D.	54R/72	FITS 72" DIAM STRUCTURE ONLY
48.0"-95.9" O.D.	96 F	

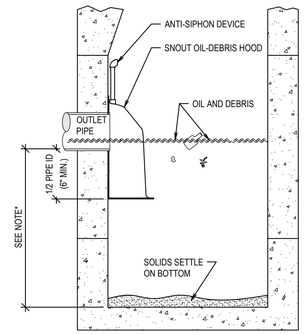
NOTE: USE ONLY "F" SERIES SNOUTS FOR RECTANGULAR OR SQUARE STRUCTURES, AVAILABLE IN 12", 18", 24", 30", 48", AND 96" SIZES. USE ONLY "R" SERIES SNOUTS FOR ROUND STRUCTURES, AVAILABLE IN 12", 18", 24", 30", AND 54" SIZES.

SPECIFICATIONS:

1. ALL HOODS AND TRAPS FOR CATCH BASINS AND WATER QUALITY STRUCTURES SHALL BE AS MANUFACTURED BY:
   BEST MANAGEMENT PRODUCTS, INC.
   53 MT. ARCHER RD.
   LYME, CT 06371
   (860) 434-0277, (860) 434-3195 FAX
   TOLL FREE: (800) 504-8008 OR (888) 354-7585
   WEB SITE: www.bmpinc.com
   OR PRE-APPROVED EQUAL
2. ALL HOODS SHALL BE CONSTRUCTED OF A GLASS REINFORCED RESIN COMPOSITE WITH ISO GEL COAT EXTERIOR FINISH WITH A MINIMUM 0.125" LAMINATE THICKNESS.
3. ALL HOODS SHALL BE EQUIPPED WITH A WATERTIGHT ACCESS PORT, A MOUNTING FLANGE, AND AN ANTI-SIPHON VENT AS DRAWN. (SEE CONFIGURATION DETAIL)
4. THE SIZE AND POSITION OF THE HOOD SHALL BE DETERMINED BY OUTLET PIPE SIZE AS PER MANUFACTURER'S RECOMMENDATION.
5. THE BOTTOM OF THE HOOD SHALL EXTEND DOWNWARD A DISTANCE EQUAL TO 1/2 THE OUTLET PIPE DIAMETER WITH A MINIMUM DISTANCE OF 6" FOR PIPES <12" I.D.
6. THE ANTI-SIPHON VENT SHALL EXTEND ABOVE HOOD BY MINIMUM OF 3" AND A MAXIMUM OF 24" ACCORDING TO STRUCTURE CONFIGURATION.
7. THE SURFACE OF THE STRUCTURE WHERE THE HOOD IS MOUNTED SHALL BE FINISHED
   SMOOTH AND FREE OF LOOSE MATERIAL.
8. THE HOOD SHALL BE SECURELY ATTACHED TO STRUCTURE WALL WITH 3/8" STAINLESS STEEL BOLTS AND OIL-RESISTANT GASKET AS SUPPLIED BY MANUFACTURER. (SEE INSTALLATION DETAIL)
9. INSTALLATION INSTRUCTIONS SHALL BE FURNISHED WITH MANUFACTURER SUPPLIED INSTALLATION KIT.
   INSTALLATION KIT SHALL INCLUDE:
   A. INSTALLATION INSTRUCTIONS
   B. PVC ANTI-SIPHON VENT PIPE AND ADAPTER
   C. OIL-RESISTANT CRUSHED CELL FOAM GASKET WITH PSA BACKING
   D. 3/8" STAINLESS STEEL BOLTS
   E. ANCHOR SHIELDS



INSTALLATION NOTE:
POSITION HOOD SUCH THAT BOTTOM FLANGE IS A DISTANCE OF 1/2 OUTLET PIPE DIAMETER (MIN.) BELOW THE PIPE INVERT. MINIMUM DISTANCE FOR PIPES < 12" I.D. IS 6".

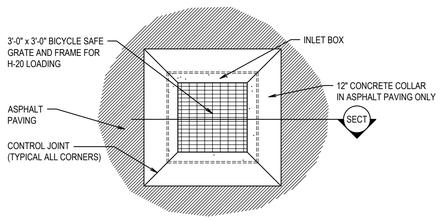


NOTE:
SUMP DEPTH OF 36" MIN. FOR < OR= 12" DIA. OUTLET.
FOR OUTLETS >OR= 15", DEPTH = 2.5 TO 3 X's DIAM.

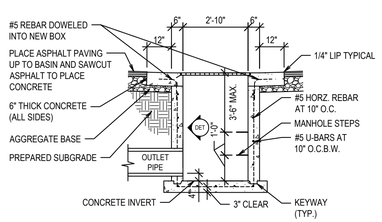
TYPICAL INSTALLATION

US Patent # 6126817

HOOD SPECIFICATION FOR CATCH BASINS AND WATER QUALITY STRUCTURES		
DESCRIPTION	DATE	SCALE
OIL- DEBRIS HOOD SPECIFICATION AND INSTALLATION (TYPICAL)	09/08/00	NONE
	DRAWING NUMBER	
	SP-SN	



PLAN

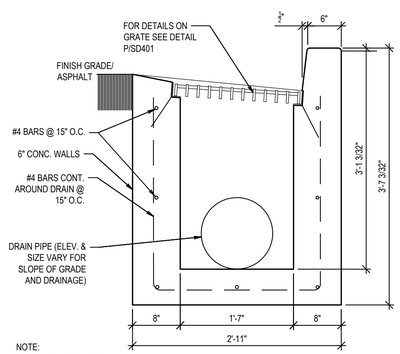


SECTION

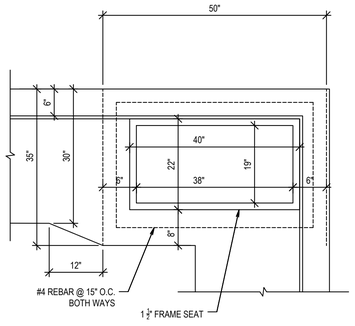
NOTES:
1. GRATE AND FRAMES SHALL BE HOT-DIPPED GALVANIZED.
2. DOWEL LAPS SHALL BE 24".
3. COAT ALL METAL PARTS WITH ASPHALTUM PAINT.

C INLET BOX IN ASPHALT WITH 12" CONCRETE COLLAR

SCALE: N.T.S.



NOTE:
PRECAST CURB INLET BOXES MAY BE USED INSTEAD OF CAST IN PLACE



D SNOUT OIL-WATER DEBRIS SEPARATOR

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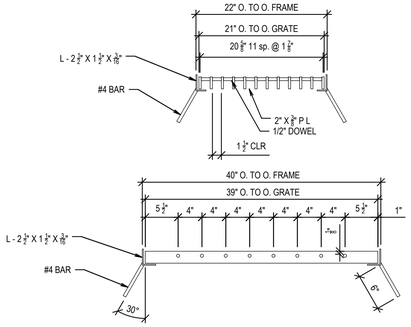

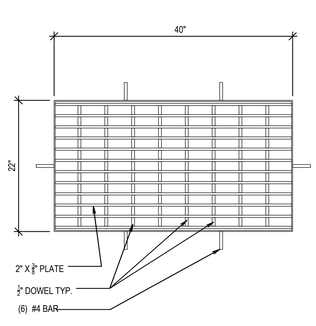

E STORM GRATE AND DRAIN DETAILS

SCALE: N.T.S.

evans + associates architecture
1 1576 south state street, suite 103b, draper, utah 84020
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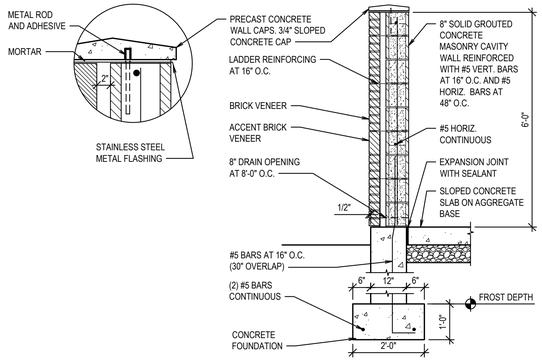
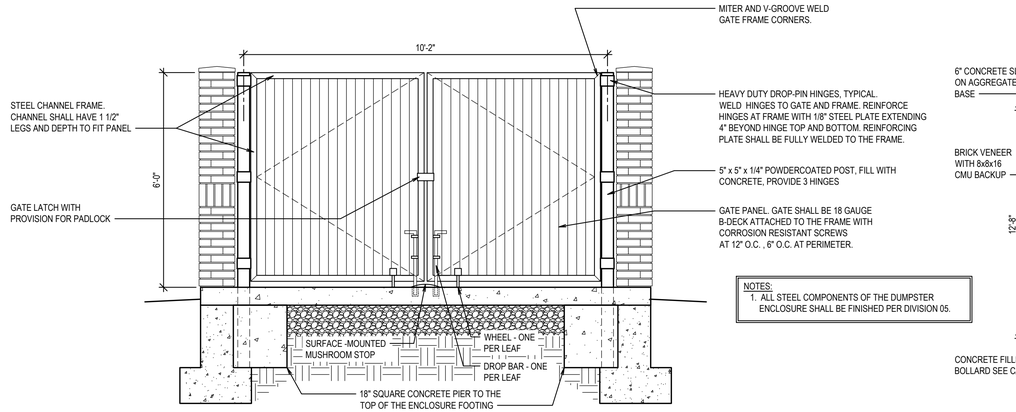


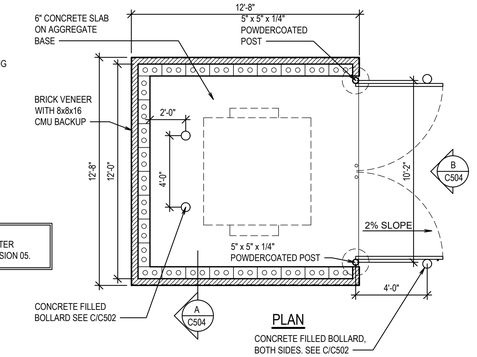
A MASONRY WALL DUMPSTER ENCLOSURE

SCALE: N.T.S.



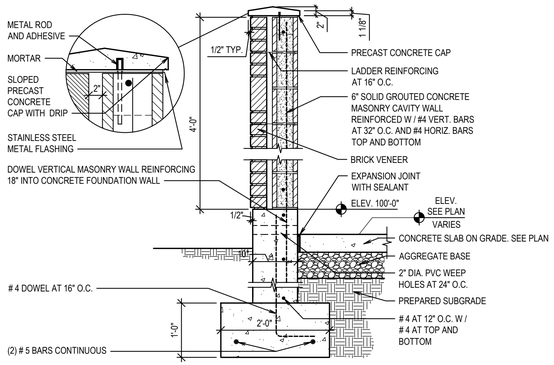
B MASONRY WALL DUMPSTER GATE

SCALE: N.T.S.



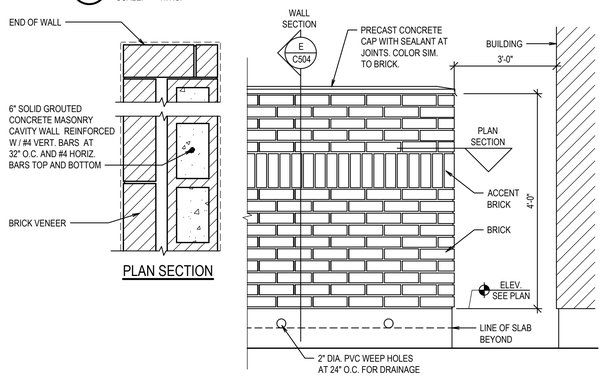
C MASONRY WALL DUMPSTER ENCLOSURE

SCALE: N.T.S.



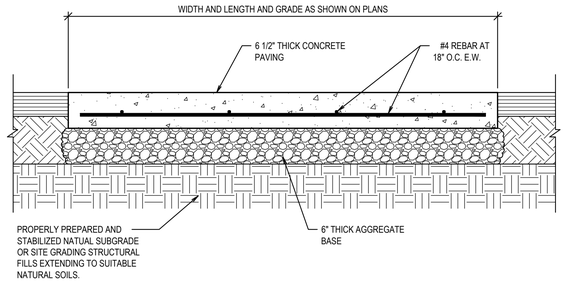
E MASONRY WALL MECHANICAL ENCLOSURE

SCALE: N.T.S.



F MASONRY WALL MECH. ENCLOSURE ELEV.

SCALE: N.T.S.



G DUMPSTER PAD SECTION

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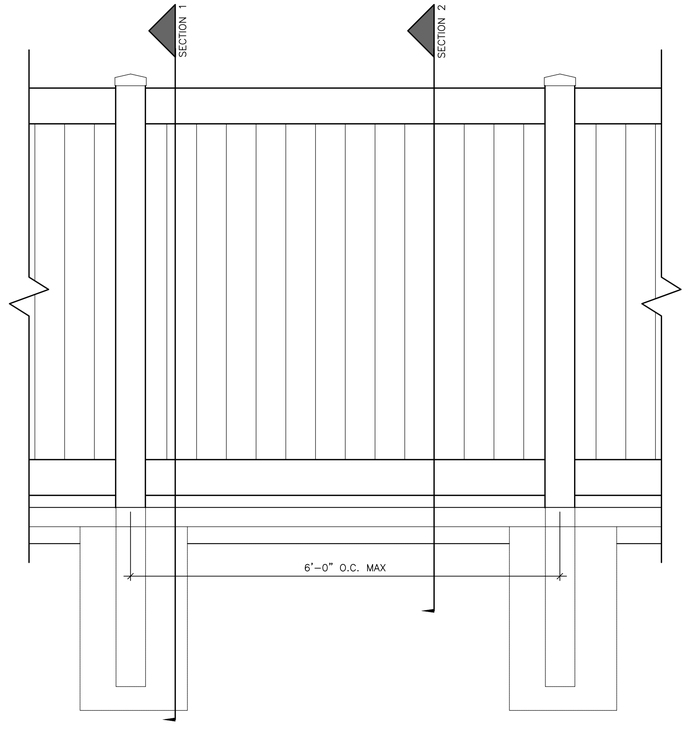
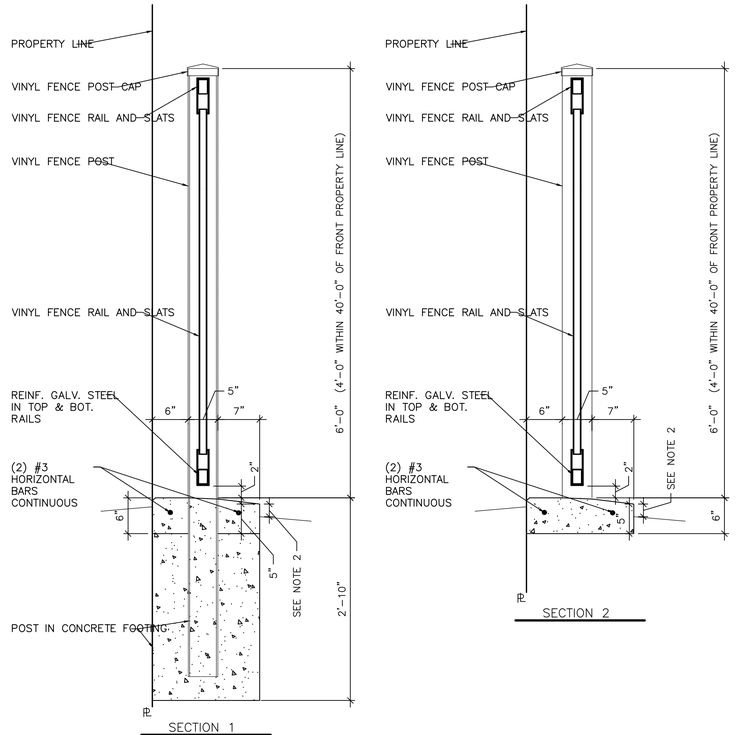


J FENCE

1" = 1'-0"



evans + associates architecture
1 1576 south state street, suite 103b, draper, utah 84020
phone 801-353-8272
fax 801-353-8273

Stamp

LICENSED ARCHITECT
PAUL ANTHONY EVANS
273770
STATE OF UTAH

A New Meetinghouse for:
Lakeview &
Eagle Mountain UT Cedar Pass Stake
Parcel: 34-620:0208
634 North Duggan Drive
Eagle Mountain, Utah

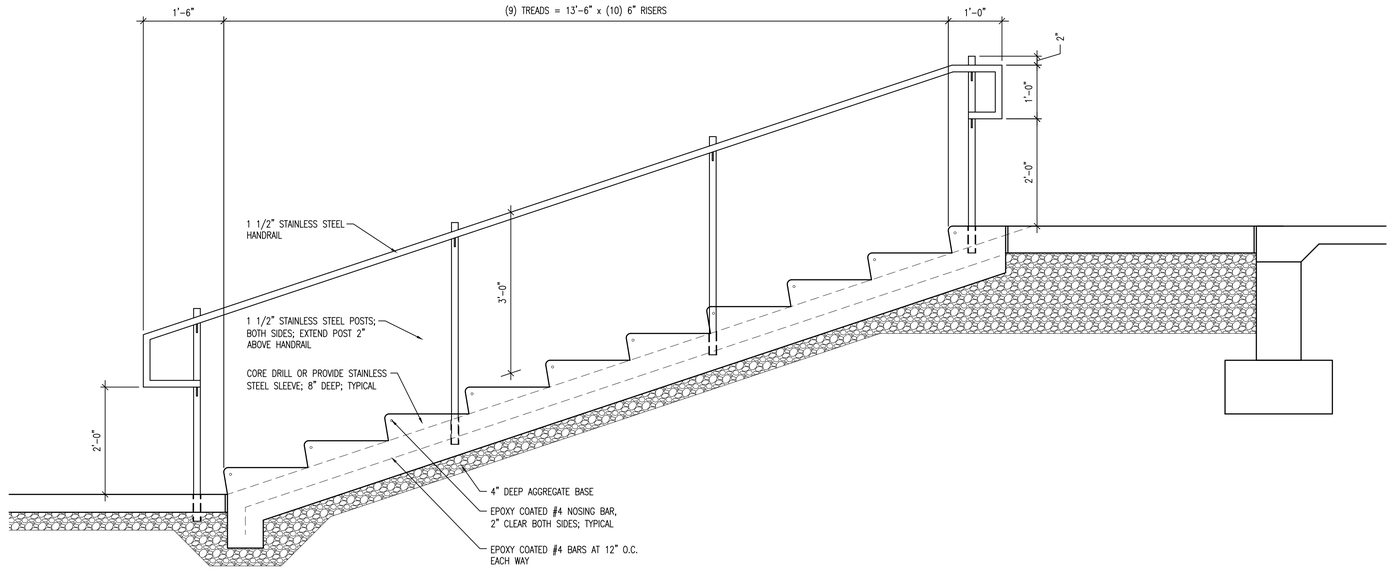
Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

Revisions			
Mark	Date	Description	
1	10/18/23	City Comments	

Project Number
23-76
Plan Series
Heritage 23-2
Property Number
501-2693-22010101
Date
September 4, 2023

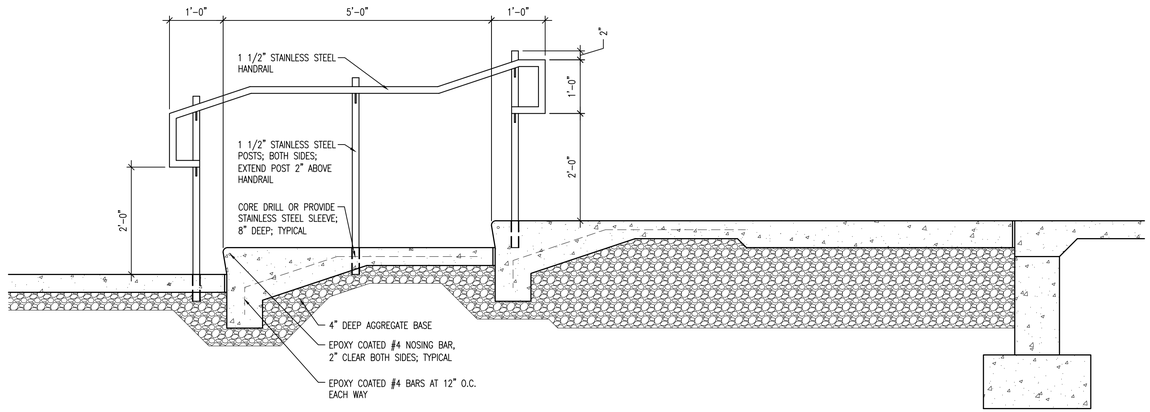
Sheet Title
SITE DETAILS

Sheet
C504



A STAIR SECTION

SCALE: 3/4" = 1'-0"



B STAIR SECTION

SCALE: 3/4" = 1'-0"

evans + associates architecture
11576 south state street, suite 103b, draper, utah 84020
phone 801-553-8272
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Plan Series
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Date
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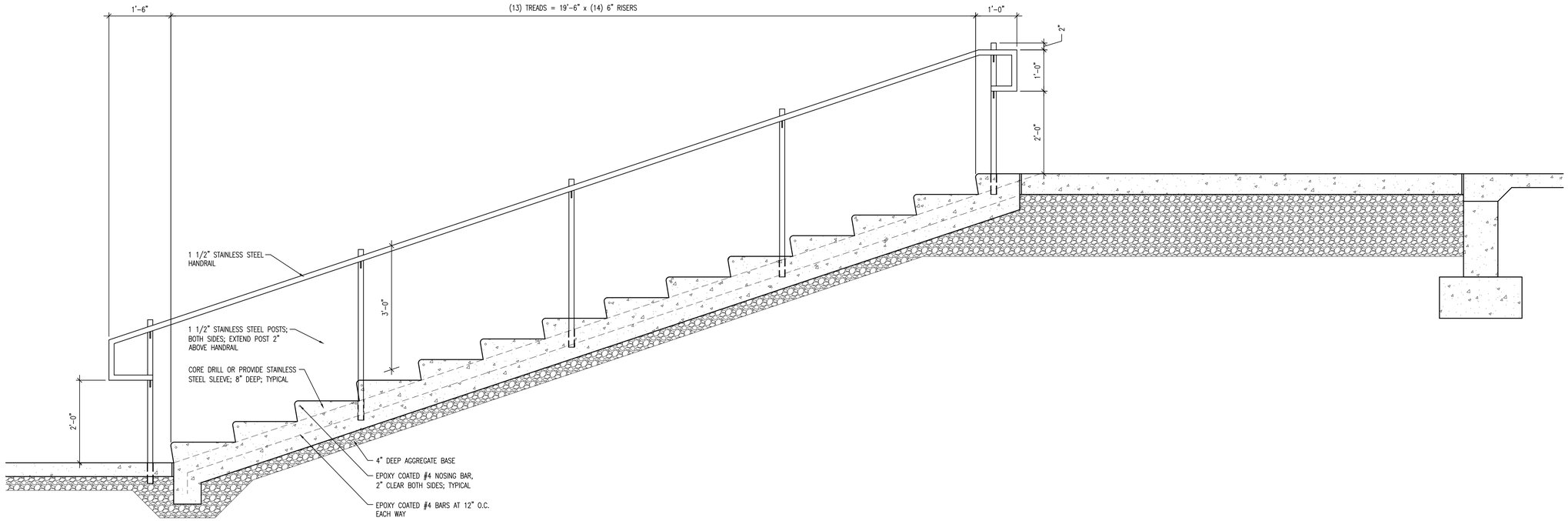
Sheet Title
STAIR SECTIONS

Sheet
C511



A STAIR SECTION

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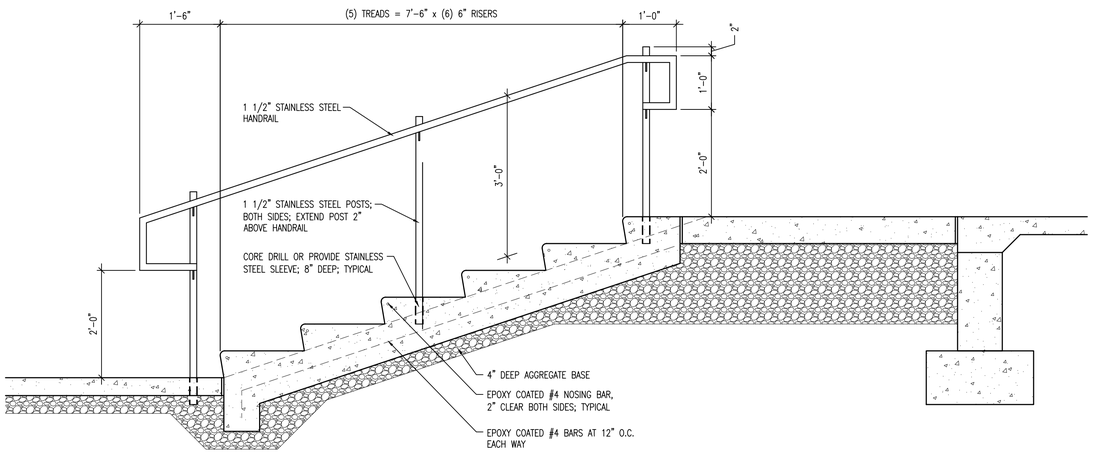

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Revisions			
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Project Number
23-76

Plan Series
Heritage 23-2

Property Number
501-2693-22010101

Date
September 4, 2023

Sheet Title

STAIR SECTIONS

Sheet

C512

DESIGN CRITERIA:

1. 2021 INTERNATIONAL BUILDING CODE WITH STATEWIDE AMENDMENTS
2. TYPE OF CONSTRUCTION: TYPE V–B.
3. BUILDING USE: ASSEMBLY A–3
4. BUILDING OCCUPANCY CATEGORY: II
5. BUILDING HEIGHT: PER PLANS
6. BUILDING VOLUME: 19,800 CU. FT.
7. NO. OF OCCUPANTS: 120
8. ROOF DEAD LOAD – 11 PSF PLUS FRAMING WEIGHT
   a. SHINGLES AND FELT: 3.5 PSF
   a. DIAPHRAGM SHEATHING: 2.3 PSF
   b. WOOD DECK: 4.0 PSF
   c. MISCELLANEOUS: 1.2 PSF
9. ROOF LIVE LOAD – 20 PSF
10. SNOW LOAD
    a. Pg: 41 PSF (GROUND SNOW LOAD)
    b. Pf = 0.7 * Pg * Ce * Ct * Is = 31 PSF (ROOF SNOW LOAD)
       1) Ce: 0.9
       2) Ct: 1.2
       3) Is: 1.0
       4) BUILDING ELEVATION: 5114 3FT
    c. Ps = Pf Cs
       1) Cs: 1.0 FOR A 4:12 PITCH
       2) Ps: 31 PSF
11. WIND LOAD (ULTIMATE)
    a. V3s: 102 MPH
    b. EXPOSURE: C
    c. W: 1.00
12. SEISMIC LOAD (ULTIMATE)
    a. Ie: 1.00
    b. Ss: 0.94
    c. S1: 0.3
    d. Sds: 0.76
    e. Sd1: 0.63
    f. Ωo: 1.25
    g. Cd: 2.5
    h. SITE CLASS: D
    i. SEISMIC DESIGN CATEGORY: DE (D-DEFAULT)
    j. R: 1.25 (CANTILEVERED STEEL COLUMNS)
    k. EQUIVALENT LATERAL FORCE PROCEDURE
    l. Cs = 0.61
13. ALLOWABLE SOIL BEARING PRESSURE:
    a. 2500 PSF
    b. ALLOWABLE FOUNDATION AND LATERAL PRESSURE = 100 PSF/FT BELOW NATURAL GRADE (TABLE 1806.2 OF 2021 IBC). SEE SOILS REPORT
    c. USE CONSTRAINED CONDITIONS FOR CONCRETE PIERS

THE PAVILION, PICNIC TABLES, BIKE RACKS, TRASH RECEPTACLES AND DRINKING FOUNTAINS, ARE ORDERED THROUGH THE CHURCH PURCHASING DEPARTMENT. PLEASE CONTACT THE PROJECT MANAGER TO RESOLVE AND COORDINATE ORDERING DETAILS AND MATERIAL RESPONSIBILITIES. KITS #1 AND #3 USE ASPHALT SHINGLES. KITS #2 AND #4 USE METAL PANELS.

PAVILION CONSTRUCTION SEQUENCE NOTES:

1. VERIFY PERMIT REQUIREMENTS BEFORE SIGNING CONTRACTS.
   a. BUILDING PERMIT
   b. PLANNING OR CONDITIONAL USE PERMIT
   c. OBTAIN REQUIRED USE PERMIT
2. REMOVE ALL VEGETATION, ROCKS, OUTCROPPINGS, AND TREES FROM LOCATION OF PAVILION SLAB. STRIP 6" OF TOP SOIL.
3. LEVEL PAVILION BUILDING AREA. AVOID GRADING THAT ALLOWS WATER TO DRAIN TOWARD PAVILION.
4. DIG COLUMN CAISSONS.
5. PLACE COLUMN CAISSON FORMS AND SET REINFORCING STEEL.
6. SET COLUMN ANCHOR BOLTS USING PLYWOOD TEMPLATE OF APPROXIMATELY THE SAME SIZE AS COLUMN BASE PLATE TO INSURE BOLT LOCATION ACCURACY.
7. PLACE CONCRETE IN CAISSON FORMS FROM BOTTOM OF PIER UP TO A LEVEL 1–1/2" BELOW BOTTOM OF COLUMN BASE PLATE. LET CONCRETE CURE 7 DAYS.
8. SET HSS COLUMNS OVER PRE–SET ANCHOR BOLTS ALLOWING COLUMNS TO REST ON LEVELING NUTS AND 1/4"x 3" PLATE WASHERS. LEVELING NUTS ARE TO BE USED TO SET COLUMNS PLUMB AND TRUE AND AT CORRECT BEARING HEIGHT TO RECEIVE GLU–LAM BEAMS.
9. AFTER COLUMNS ARE SET PLUMB AND TRUE, VERIFY ACCURACY OF DIMENSIONS BETWEEN COLUMNS AND SECURE COLUMNS IN PLACE USING 1/4"x 3" PLATE WASHERS UNDER NUTS. TIGHTEN NUTS WITH ADDITIONAL 1/4 TURN PAST SNUG.
10. THE WEIGHT OF GLU–LAM BEAMS IS APPROXIMATELY 500 POUNDS EACH. SOME FORM OF MECHANICAL HOIST IS RECOMMENDED FOR SETTING BEAMS ON TOP OF STEEL TUBE COLUMNS.
11. NOTCH A 1"x 1" HOLE AT TOP OF BEAMS NEAR CENTER PEAK FOR ELECTRICAL CONDUIT TO PASS THROUGH.
12. LIFT GLU–LAM BEAMS AND SET EACH END IN THE COLUMN SADDLE PLATES.
13. ANCHOR BEAMS IN SADDLES WITH (8) SIMPSON SDS25112 WOOD SCREWS.
14. ONCE GLU–LAM BEAMS ARE SET AND SECURELY BOLTED, ADEQUATELY BRACE EACH BEAM USING 2x LUMBER TO PREVENT BEAMS FROM OVERTURNING UNTIL ROOF DECK AND ROOF SHEATHING ARE SECURELY ANCHORED IN PLACE.
15. SET 2x8 TONGUE AND GROOVE ROOF DECK WITH COMMON OR RING SHANK NAILS IN ACCORDANCE WITH SUPPLIERS' RECOMMENDATIONS.
16. INSTALL 2x6 FASCIA BOARD AROUND ENTIRE ROOF PERIMETER. ALIGN TOP OF FASCIA BOARD WITH TOP OF ROOF DECKING.
17. INSTALL WOOD ROOF SHEATHING OVER 2x8 TONGUE AND GROOVE ROOF DECK AT 45 DEGREES AS SHOWN IN ROOF DIAPHRAGM DETAIL.
18. LAY 30 POUND FELT UNDERLAYMENT OVER ENTIRE ROOF STARTING AT FASCIA DRIP EDGE, OVERLAP EACH ROLL 6" AS FELTS ARE LAID UP TO RIDGE.
19. INSTALL PRE–FINISHED METAL DRIP EDGING ON ALL PERIMETER EDGES OF ROOF.
20. INSTALL FIBERGLASS SHINGLES OVER ROOF UNDERLAYMENT AND PRE–FINISHED METAL DRIP EDGING. FOLLOW MANUFACTURER'S INSTRUCTIONS.
21. PLACE NON–SHRINK GROUT UNDER COLUMN BASE PLATES. FINISH NON–SHRINK GROUT EDGES TO 45 DEGREES.
22. PLACE REMAINDER OF CONCRETE SLAB ANY TIME AFTER GLU–LAM BEAMS, ROOF DECKING, AND PLYWOOD ROOF SHEATHING ARE SECURELY IN PLACE.
23. FINISH TOP SURFACE OF CONCRETE SLAB WITH A LIGHT BROOM FINISH.
24. AS SOON AS CONCRETE HAS CURED ENOUGH TO SUPPORT AN EARLY ENTRY SAW (4–6 HOURS AFTER PLACEMENT), CUT CONTROL JOINTS IN SLAB TOP SURFACE. DEPTH OF CONTROL JOINTS IS TO BE 1" DEEP.
25. INSTALL MEMBRANE CURING ON CONCRETE SLAB.
26. ALLOW CONCRETE SLAB TO CURE A MINIMUM OF 7 DAYS BEFORE PROCEEDING WITH REMAINDER OF PAVILION WORK.
27. ALL STEEL COLUMNS, SADDLES, BOLTS, AND BASE PLATES TO BE POWDER COATED TOUCH–UP FINISH PAINTING BY OTHERS.
28. STAIN ALL EXPOSED WOOD.

SITE PREPARATION:

1. REMOVE ALL ORGANIC MATERIAL AND TOPSOIL FROM PAVILION AREA. VERIFY SUITABILITY OF SUBGRADE. FOUNDATIONS ARE TO BE ON UNDISTURBED, NATURAL SOIL OR ENGINEERED FILL EXTENDING TO SUITABLE UNDISTURBED NATURAL SOILS
2. PLACE FOOTINGS/CAISSONS IN FIRM UNDISTURBED NATURAL SUBGRADE (UNLESS NOTED OTHERWISE BY GEOTECHNICAL REPORT).
3. COMPACT SUBGRADE AND FILL UNDER CONCRETE FLOOR SLAB TO 95 PERCENT OF ASTM D–1557 (UNLESS NOTED OTHERWISE BY GEOTECHNICAL REPORT).
4. INSTALL AND COMPACT 6 INCH GRANULAR BASE BENEATH CONCRETE FLOOR SLAB TO 95 PERCENT OF ASTM D–1557.

UTILITIES: (BY OTHERS)

1. INSTALL PLUMBING LINE FOR COLD WATER.
2. INSTALL ELECTRICAL LIGHTS, BOXES, CONDUITS, AND SWITCHES.

SPECIFICATIONS:

SCOPE– ONE EACH 30 FOOT BY 60 FOOT PAVILION WITH MINIMUM 4 INCH THICK CONCRETE SLAB. PROVIDE SHINGLES, ROOFING FELTS, FASCIA, SHEATHING, ROOF FRAMING, BEAMS, SOFFIT, CONNECTION HARDWARE, COLUMNS, CONCRETE SLAB, CONCRETE CAISSONS AND FINISHES TO CONSTRUCT COMPLETE PAVILION.

PAVILION HAS BEEN DESIGNED AS A FREE STANDING, OPEN STRUCTURE. RE–ENGINEER PAVILION IF WALLS ARE ADDED, IF STRUCTURE IS TO ADJOIN ANOTHER STRUCTURE, OR IF OTHER SUCH MODIFICATIONS ARE MADE. PROPERLY BRACE WOOD BEAMS AND MEMBERS UNTIL COMPLETE STRUCTURAL SYSTEM HAS BEEN CONSTRUCTED.

CONCRETE:

1. CONCRETE SLAB ON GRADE IS TO BE REINFORCED AND BE 4" MINIMUM THICK. INSTALL WITH CRACK CONTROL JOINTS AS SHOWN. SURFACE IS TO HAVE A BULL FLOAT FINISH AND BE LIGHTLY BROOMED.
2. EDGE OF SLAB IS TO BE THICKENED TO 8" WIDE AND BE REINFORCED WITH (2) #4 CONTINUOUS BARS. LAP SPLICES 24".
3. PROVIDE DEFORMED REINFORCING STEEL BARS CONFORMING TO ASTM A615 WITH A MINIMUM YIELD STRENGTH OF 60,000 PSI. SECURELY ANCHOR REINFORCING STEEL, AND PROVIDE CLEARANCES, IN ACCORDANCE WITH THE LATEST EDITION OF ACI 318.
4. MINIMUM CONCRETE MIX DESIGN REQUIREMENTS:
   a. COMPRESSIVE STRENGTH OF CONCRETE TO BE 4,500 PSI AT 28 DAYS.
   b. MAX W/C: 0.45
   c. 6% (+/–1.5%) AIR ENTRAINMENT.
   d. CEMENT TYPE II/V
   e. DESIGNED FOR THE FOLLOWING EXPOSURE CATEGORIES AND CLASSES:
   e.a. F2, S1 (PER ACI 318 TABLEL 4.2.1)
   f. LIMIT SLUMP TO 4" (+/–1")
5. VERIFY STRENGTH REQUIREMENTS AND CEMENT TYPE REQUIREMENTS WITH THE GEOTECHNICAL EVALUATION REPORT.
6. ALL CONCRETE WORK TO BE IN ACCORDANCE WITH THE LATEST EDITION OF ACI 318.
7. SLAB TO BE SEALED WITH WEATHERWORKER J–29A CONCRETE SEALER, BY DAYTON SUPERIOR CORPORATION. INSTALL AS PER MANUFACTURERS INSTRUCTIONS.
8. MEMBRANE CONCRETE CURING: USE CLEAR CURE J7wb BY DAYTON SUPERIOR CORPORATION. FOLLOW MANUFACTURERS INSTALLATION INSTRUCTIONS.

STRUCTURAL STEEL:

1. ALL STEEL PLATES TO BE ASTM A36
2. STEEL TUBES TO BE ASTM A500, GRADE B, Fy = 46,000 PSI
3. ALL WELDING IS TO BE DONE IN ACCORDANCE WITH LATEST AWS STANDARDS. IF WELDS ARE NOT SPECIFIED, ALL WELDS ARE TO DEVELOP THE FULL STRENGTH OF ALL COMPONENT PARTS.
4. ALL BOLTS ARE TO BE ASTM A325 EXCEPT THAT ANCHOR BOLTS ARE TO BE ASTM F1554 GRADE 55.
5. ALL EXPOSED BOLTS ARE TO BE PAINTED TO MATCH STRUCTURE.
6. ALL HOLES IN STEEL TO BE 1/16" LARGER THAN THE DIAMETER OF THE CONNECTING BOLT UNLESS NOTED OTHERWISE.
7. ALL FABRICATED STEEL IS TO BE PRIMED AND FINISH POWDER COATED.

WOOD:

1. GLU–LAM BEAMS:
   c. SOUTHERN YELLOW PINE
   d. 24F–V3 STRESS COMBINATION
   e. 2–INCH NOMINAL THICK LAMINATIONS
   f. 5" MINIMUM WIDTHS
   g. RESORCINOL ADHESIVE
   h. DOUBLE PITCHED AND TAPERED
   i. ARCHITECTURAL APPEARANCE GRADE
   j. STAIN AND SEAL FINISH
   k. ROOF PITCH IS TO BE 4 VERTICAL TO 12 HORIZONTAL (4:12)
   l. MATERIALS, MANUFACTURE AND QUALITY CONTROL OF GLUE LAMINATED BEAMS SHALL BE IN CONFORMANCE WITH "AMERICAN NATIONAL STANDARD FOR WOOD PRODUCTS – STRUCTURAL GLUED LAMINATED TIMBER" ANSI/AITC A190.1.
   m. MEMBERS SHALL BE MARKED WITH AN AITC OR APA/EWS QUALITY MARK AND, IN ADDITION, AN AITC OR APA/EWS CERTIFICATE OF CONFORMANCE SHALL BE PROVIDED TO INDICATE CONFORMANCE WITH ANSI/AITC A190.1.
   n. FACTORY SEAL BEAMS AND INDIVIDUALLY WRAP FOR PROTECTION IN TRANSIT, STORAGE, AND ERECTION.
   o. TEMPORARY STORAGE SHALL CONSIST OF LEVELED BLOCKS, WELL OFF GROUND, SEPARATION WITH WOOD STRIPS FOR AIR CIRCULATION AROUND EACH MEMBER, COVER TOP AND SIDES WITH MOISTURE RESISTANT PAPER.
   p. USE NON–MARRING SLINGS WHEN HANDLING, DRY–IN ROOF AS SOON AS ERECTED.
   q. PROTECTIVE WRAPPING SHALL REMAIN ON BEAMS UNTIL DECK HAS BEEN INSTALLED AND SHINGLES APPLIED.
2. ROOF FRAMING
   a. USE GALVANIZED NAILS.
   b. 2x6 FASCIA: NO. 1 SOUTHERN YELLOW PINE, KILN DRIED, CHROMATED COPPER ARSENATE PRESSURE TREATED (0.4 PCF), SURFACED ON FOUR SIDES, AND STAINED. FASCIA IS TO BE FREE OF ANY GROOVES OR INCISIONS.
      1) MITER ENDS OF FASCIA AT CORNERS
      2) BUTT FASCIA ONLY AT BEAM ENDS
      3) FASTEN FASCIA TO BEAM WITH NOT LESS THAN THREE 16d COMMON, GALVANIZED NAILS AT EACH BEAM JUNCTION AT EAVE AND TO OUTLOOKERS WITH TWO 16d COMMON, GALVANIZED NAILS AT EACH RAKE.
   c. 2x8 ROOF DECK:
      1) DOUGLAS FIR LARCH, SINGLE TONGUED AND GROOVED, SPECIFIED LENGTH, CENTER MATCHED, EDGE VEED TWO SIDES, KILN DRIED, AND STAINED – NO. 2 GRADE.
      2) DECK FURNISHED IN SPECIFIED LENGTHS SO ALL JOINTS OCCUR OVER BEAMS – RANDOM LENGTH DECK IS UNACCEPTABLE. DECK SHALL BE INSTALLED WITH A 2 SPAN CONDITION, MINIMUM.
      3) INSTALL IN ACCORDANCE WITH SUPPLIER'S SPECIFICATIONS USING 16d COMMON OR RING SHANK NAILS. MINIMUM. NAILING SHALL BE FACE NAILED USING THREE NAILS AT EACH BEARING POINT WITH A FOURTH NAIL DIAGONALLY THROUGH THE TONGUE OF THE DECKING MEMBER. NAILS MUST PENETRATE 1–1/2 INCHES INTO SOLID WOOD.
      4) INSTALL WITH TONGUES UP ON SLOPED ROOFS.
3. ROOF SHEATHING:
   a. 7/16" THICK PLYWOOD OR ORIENTED STRAND BOARD COMPLYING WITH STANDARD PS–1 OF THE AMERICAN PLYWOOD ASSOCIATION APA/ANSI A199.1. APPROPRIATE APA STAMP IDENTIFYING FOLLOWING REQUIREMENTS: 24/0 SPAN INDEX RATING, EXTERIOR EXPOSURE, 18 PERCENT MAXIMUM MOISTURE CONTENT WHEN FABRICATED.
   b. INSTALL DIRECTLY OVER WOOD TONGUE AND GROOVE ROOF DECKING IN 4'x8' PANELS AT 45 DEGREES TO DECKING. STAGGER PANEL JOINTS APPROXIMATELY 4'–0" AND GAP JOINTS 1/4 INCH. STAPLE AROUND PERIMETER OF EACH PANEL WITH 3 STAPLES PER LINEAR FOOT. STAPLE WITHIN FIELD OF EACH PANEL WITH (2) ROWS OF STAPLES AT 8" O.C.
   c. PROTECT SHEATHING WITH 30 POUND FELT IMMEDIATELY AFTER INSTALLATION

ROOF SYSTEM

1. 50 YEAR ASPHALT SHINGLE by OWENS CORNING WITH A LIFETIME WARRANTY
2. PROFILE NOMINAL SIZE: 13"x 39 3/8"
3. EXPOSURE: 5 5/8"
4. COLOR AS PER OWNER FROM MANUFACTURERS STANDARD COLOR SELECTION.
5. INSTALL PER MANUFACTURER'S INSTRUCTIONS
6. PROVIDE EDGE AND TERMINATION DETAIL COMPONENTS AS REQUIRED TO OBTAIN MANUFACTURER'S WARRANTY.

STAIN:

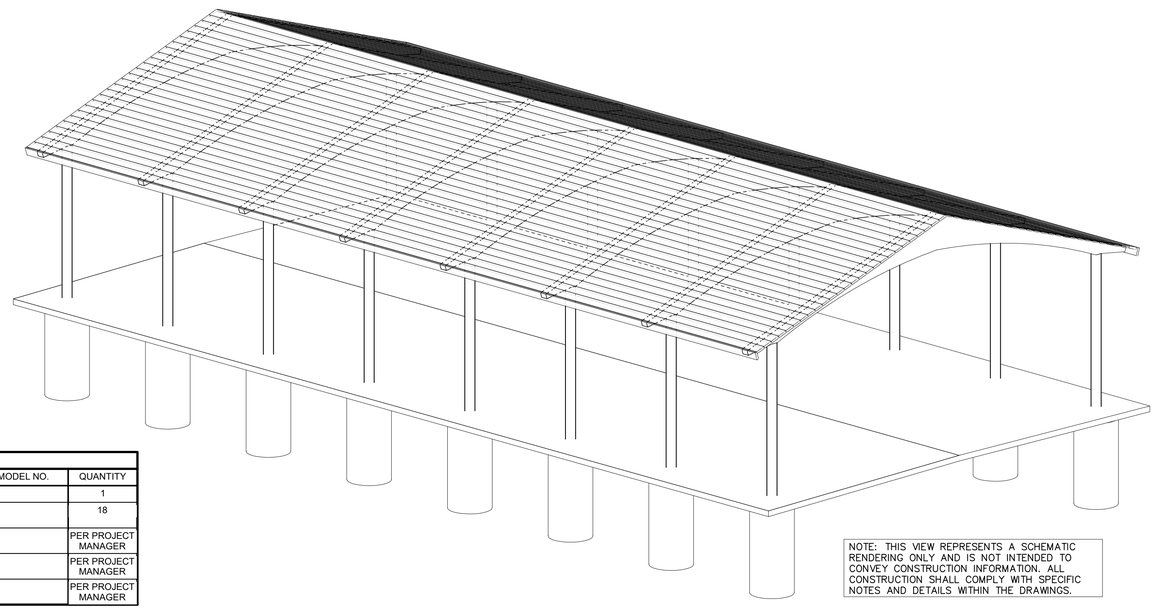
1. BEAMS, DECK, AND FASCIA SHALL BE FACTORY STAINED WITH "OLYMPIC" SEMI–TRANSPARENT STAIN. BEAMS AND FASCIA TO BE STAINED NO. 708 WALNUT, DECK TO BE STAINED NO. 911 CAPE COD GRAY OR AS SELECTED BY OWNER.

ELASTOMERIC JOINT SEALANTS:

1. PROVIDE SIKASIL–728 NS NON–SAG SILICONE SEALANT AT SAW CUT JOINTS AND COLD JOINTS.
2. PROVIDE DOW CORNING 791 SILICONE WEATHERPROOFING SEALANT AT COLUMN/CONCRETE JOINT.
3. CLEAN AND PREPARE SURFACES.
4. USE PROPER PRIMER AND BACKING MATERIALS AS REQUIRED TO INSTALL SEALANTS.
5. PROVIDE MASKING AND TEST STRIPS AS NEEDED.
6. INSTALL ALL RELATED SEALANTS AND MATERIALS AS PER THE MANUFACTURER'S RECOMMENDATIONS AND INSTRUCTIONS.

PLUMBING AND ELECTRICAL: (BY OTHERS)

1. COORDINATE PLUMBING AND ELECTRICAL REQUIREMENTS WITH ARCHITECTURAL AND CITE PLANS, BY OTHERS.



NOTE: THIS VIEW REPRESENTS A SCHEMATIC RENDERING ONLY AND IS NOT INTENDED TO CONVEY CONSTRUCTION INFORMATION. ALL CONSTRUCTION SHALL COMPLY WITH SPECIFIC NOTES AND DETAILS WITHIN THE DRAWINGS.

OWNER PROVIDED EQUIPMENT LIST			
ITEM	MANUFACTURER	MODEL NO.	QUANTITY
PAVILION KIT			1
8' WELDED FRAME PICNIC TABLE			18
DRINKING FOUNTAIN			PER PROJECT MANAGER
BIKE RACK			PER PROJECT MANAGER
TRASH RECEPTACLES			PER PROJECT MANAGER

Supplier:

SMITH STEELWORKS

PROFESSIONAL ENGINEER
DOUGLAS M. FARLEY
No.318831
09/22/2023
STATE OF UTAH

30'x60' Glulam Pavilian
Kit 1 Option A

Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

Mark	Date (m/d/y)	Description

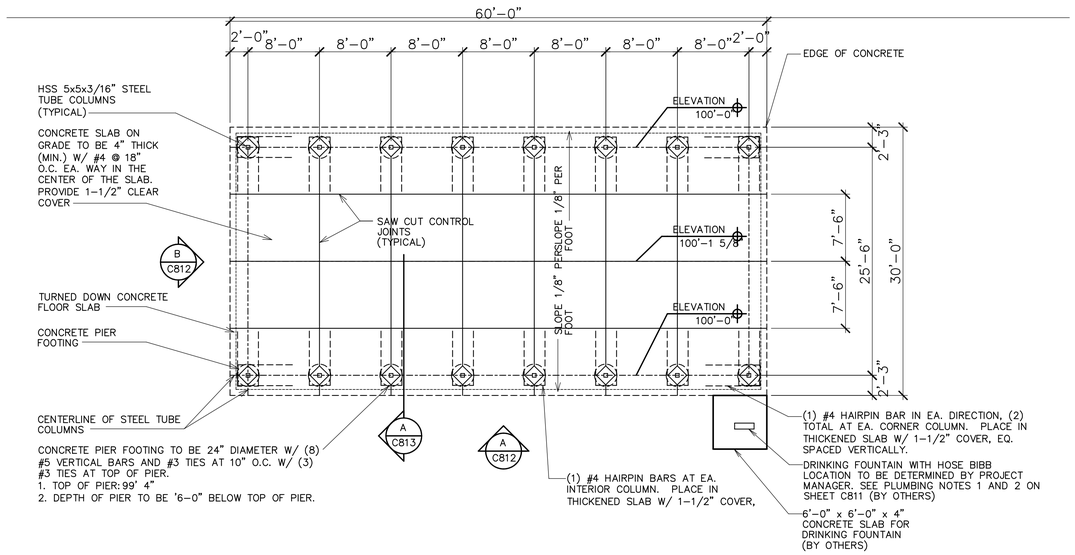
Project Number:

Plan Series:

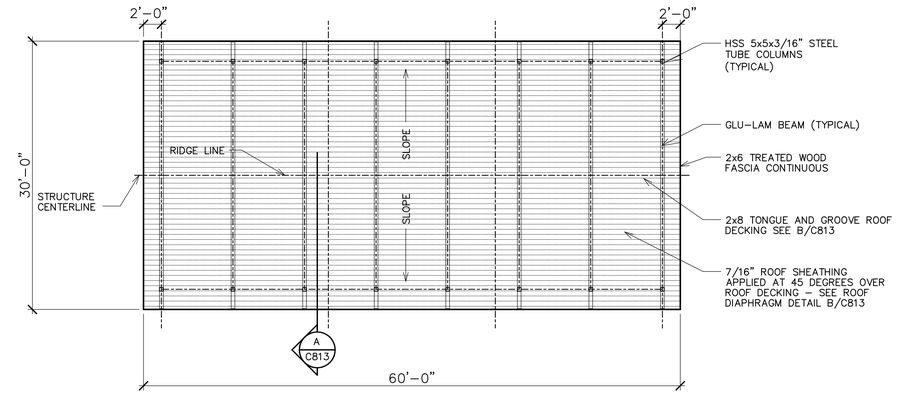
Property Number:

Sheet Title:
PLAN VIEWS

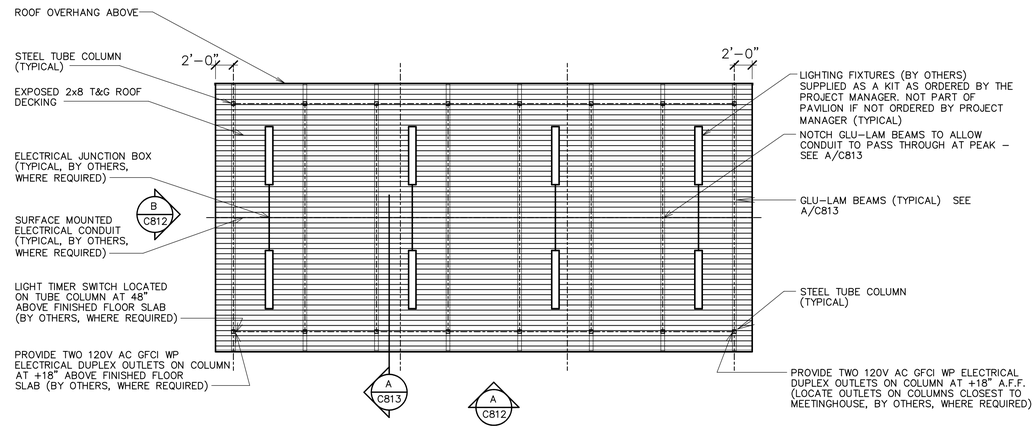
Sheet:
C811



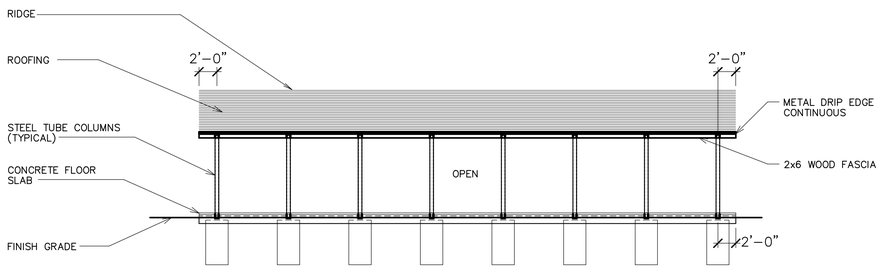
1 FLOOR PLAN
SCALE: 1/8" = 1'-0"



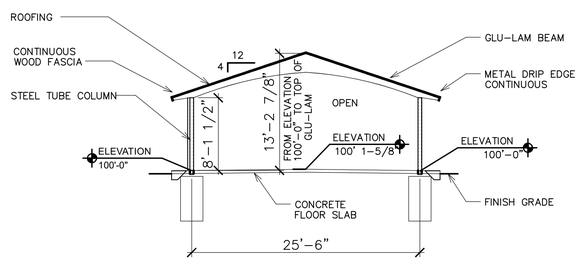
2 ROOF FRAMING PLAN
SCALE: 1/8" = 1'-0"



3 REFLECTED CEILING PLAN
SCALE: 1/8" = 1'-0"



A SIDE ELEVATION
SCALE: 1/8" = 1'-0"



B END ELEVATION
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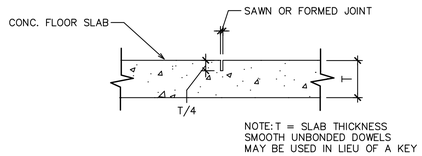


NOTE: T = SLAB THICKNESS
SMOOTH UNBONDED DOWELS MAY BE USED IN LIEU OF A KEY

4 CONTROL JOINT DETAIL
SCALE: 1 1/2" = 1'-0"

Supplier:
SMITH STEELWORKS

Signature of Professional Engineer
DOUGLAS M. FARLEY
No.318831
09/22/2023
STATE OF UTAH

30'x60' Glulam Pavilion
Kit 1 Option A

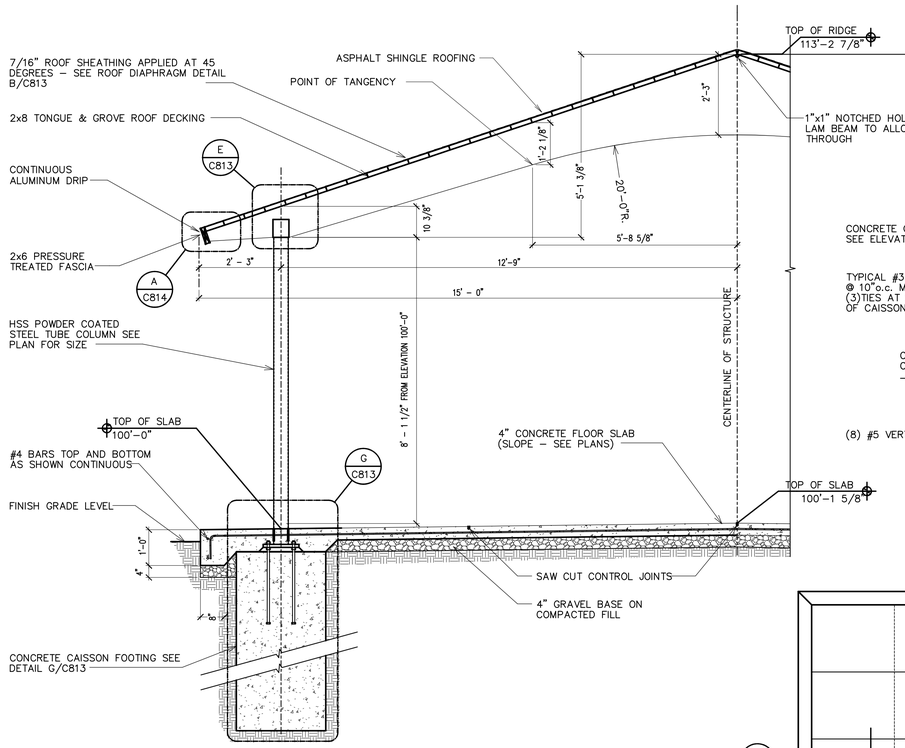
Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

Mark	Date (GMT)	Description

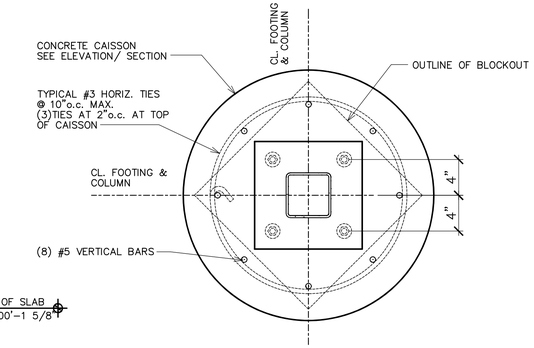
Project Number:
Plan Series:
Property Number:

Sheet Title:
PLAN VIEWS

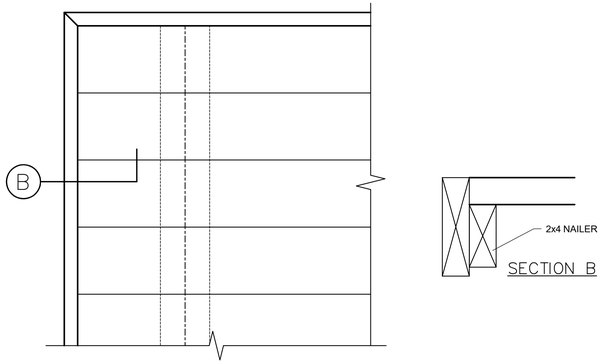
Sheet:
C812



A SECTION
SCALE: 1/2" = 1'-0"



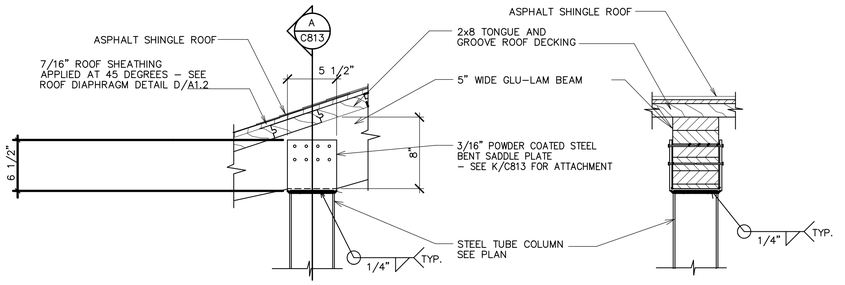
C COLUMN DETAIL
SCALE: 1/2" = 1'-0"



SECTION B

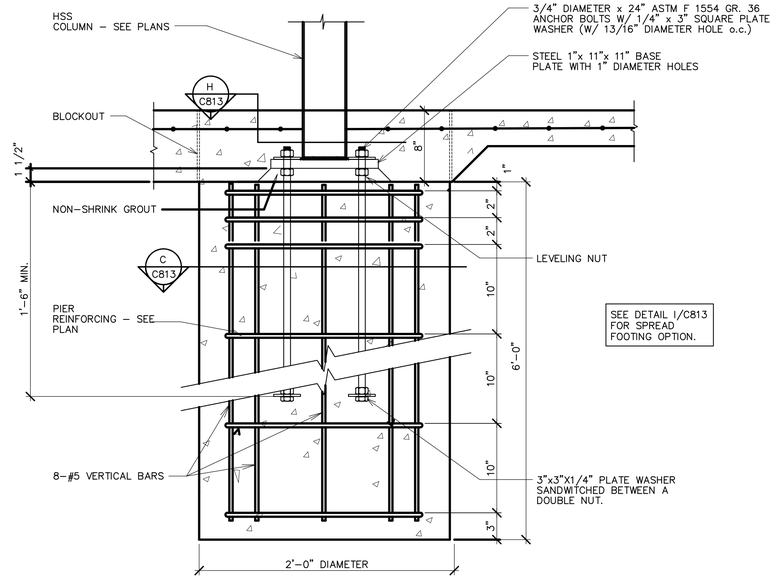
MITER ENDS OF FASCIA AT CORNERS. BUTT FASCIA ONLY AT BEAM ENDS. FASTEN FASCIA TO BEAMS W/ (3) 10d NAILS AT EACH JUNCTION AND TO DECK @ 12"o.c. (SIDES) AND 6 3/4" o.c. (ENDS)

D DECK PLAN AT CORNERS
SCALE: 1 1/2" = 1'-0"

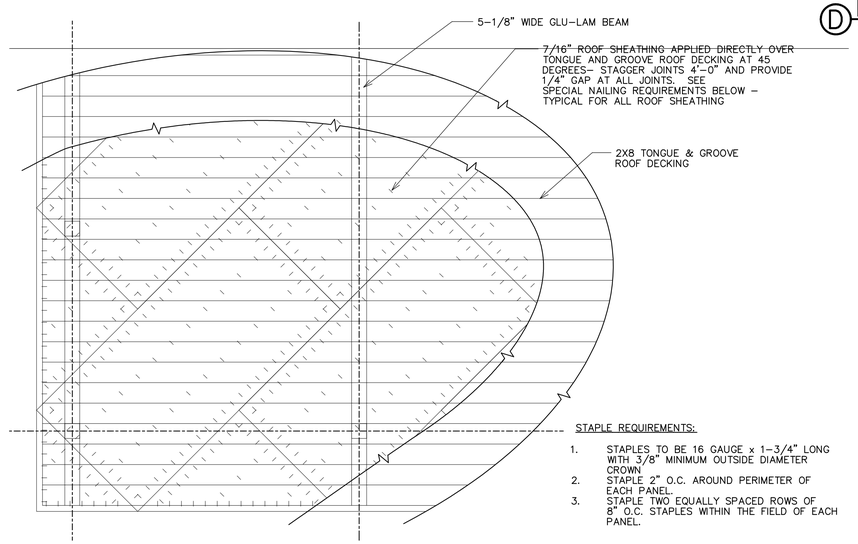


E CONNECTION
SCALE: 1 1/2" = 1'-0"

F CONNECTION
SCALE: 1 1/2" = 1'-0"



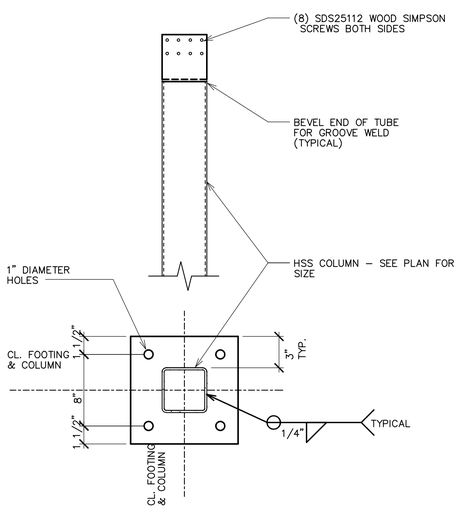
G CAISON FOOTING
SCALE: 1/2" = 1'-0"



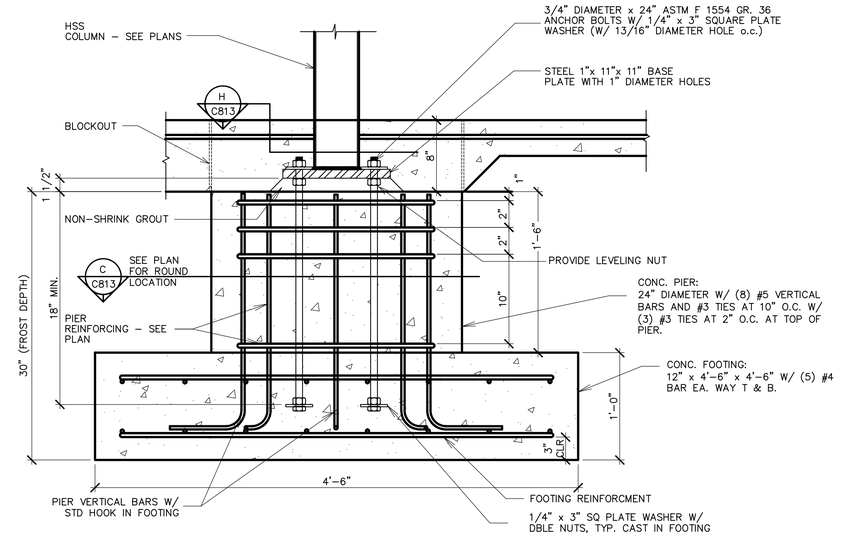
STAPLE REQUIREMENTS:

1. STAPLES TO BE 16 GAUGE x 1-3/4" LONG WITH 3/8" MINIMUM OUTSIDE DIAMETER CROWN
2. STAPLE 2" O.C. AROUND PERIMETER OF EACH PANEL.
3. STAPLE TWO EQUALLY SPACED ROWS OF 8" O.C. STAPLES WITHIN THE FIELD OF EACH PANEL.

B ROOF DIAPHRAGM DETAIL
SCALE: NONE



H COLUMN DETAIL
SCALE: 1/2" = 1'-0"



I COLUMN DETAIL
SCALE: 1 1/2" = 1'-0"

Supplier:
SMITH STEELWORKS

Stamp:
PROFESSIONAL STRUCTURAL ENGINEER
DOUGLAS M. FARLEY
No.318831
09/22/2023
STATE OF UTAH

30'x60' Glulam Pavilian
Kit 1 Option A

Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

Mark	Date (DMY)	Description

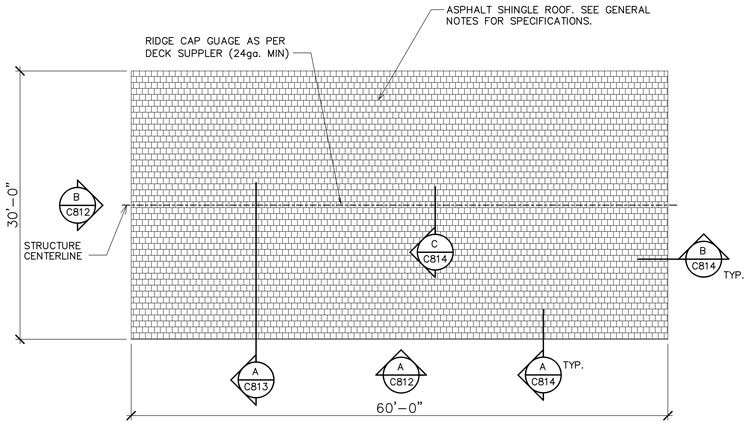
Project Number:

Plan Series:

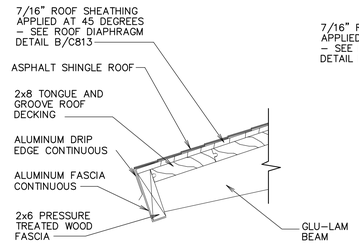
Property Number:

Sheet Title:
SECTION AND DETAIL VIEWS

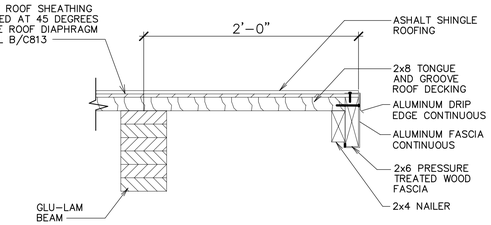
Sheet:
C813



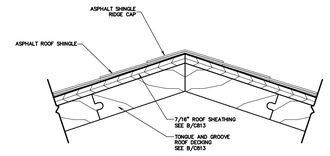
1 ROOF PLAN
SCALE: 1/8" = 1'-0"



A FASCIA DETAIL
SCALE: 1 1/2" = 1'-0"



B RAKE DETAIL
SCALE: 1 1/2" = 1'-0"



C RIDGE CAP DETAIL
SCALE: 3" = 1'-0"

Supplier:

SMITH STEELWORKS

Stamp:

PROFESSIONAL ENGINEER
DOUGLAS M. FARLEY
No.318831
09/22/2023
STATE OF UTAH

30'x60' Glulam Pavilian
Kit 1 Option A

Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

Mark	Date (DD/MM/YY)	Description

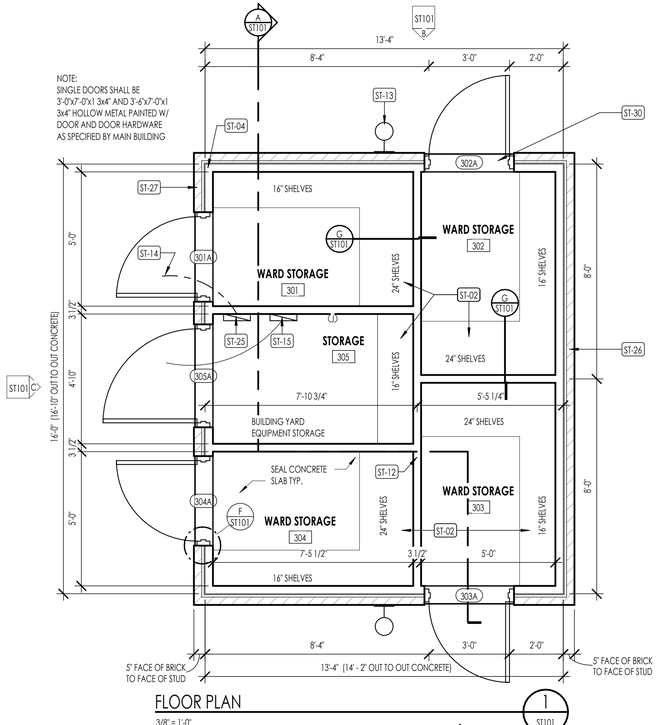
Project Number:

Plan Series:

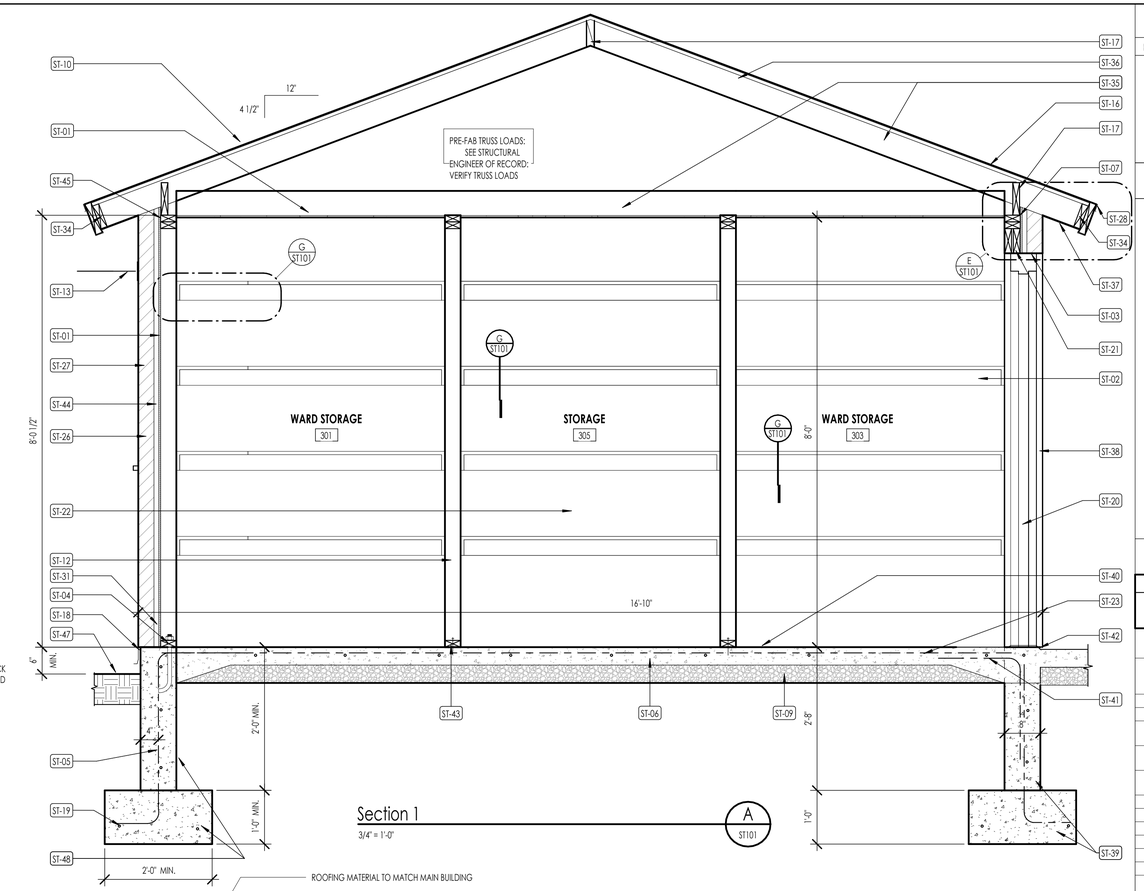
Property Number:

Sheet Title:
ROOF VIEWS AND DETAILS

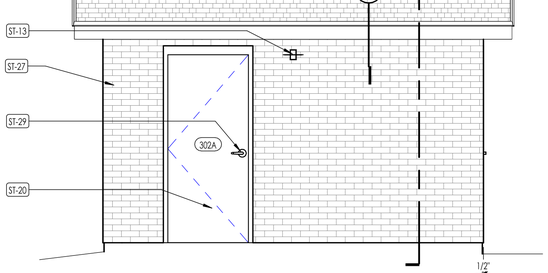
Sheet:
C814



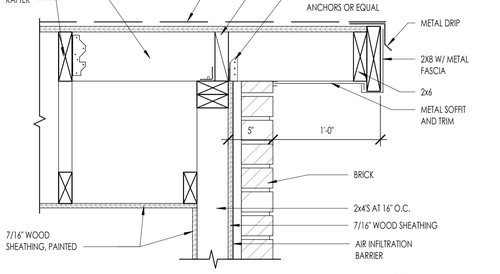
FLOOR PLAN
3/8" = 1'-0"



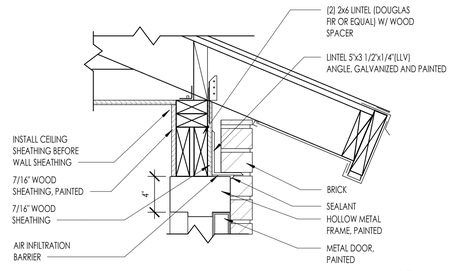
Section 1
3/4" = 1'-0"



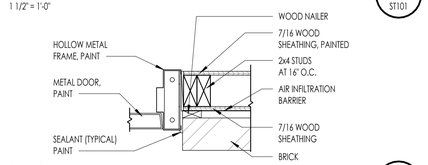
NORTH ELEVATION
3/8" = 1'-0"



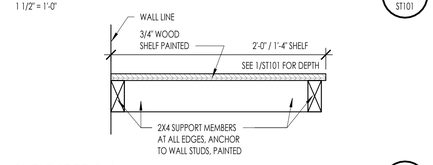
EAVE
1 1/2" = 1'-0"



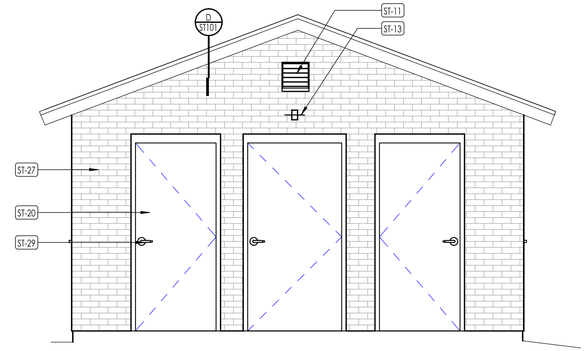
HEAD
1 1/2" = 1'-0"



JAMB
1 1/2" = 1'-0"



SHELF SECTION
1 1/2" = 1'-0"



WEST ELEVATION
3/8" = 1'-0"

DOOR SCHEDULE

MARK	ROOM NUMBER	SINGLE/PAIR	TYPE	WIDTH	HEIGHT	THICKNESS	FRAME TYPE	DETAIL HEAD	DETAIL JAMB	DETAIL THRESHOLD	FIRE RATING	HARDWARE GROUP	KEYING	REMARKS
301A	301	S	M	3'-0"	7'-0"	1 3/4"	4	E/ST101	F/ST101			1	AA8	BUILDING YARD EQUIPMENT STORAGE
302A	302	S	M	3'-0"	7'-0"	1 3/4"	4	E/ST101	F/ST101			1	AA9	WARD STORAGE
303A	303	S	M	3'-0"	7'-0"	1 3/4"	4	E/ST101	F/ST101			1	AA10	WARD STORAGE
304A	304	S	M	3'-0"	7'-0"	1 3/4"	4	E/ST101	F/ST101			1	AA11	WARD STORAGE
305A	305	S	M	3'-6"	7'-0"	1 3/4"	4	E/ST101	F/ST101			1	AA12	WARD STORAGE

FLOOR PLAN LEGEND

HATCH PATTERN	DESCRIPTION
	POURED IN PLACE CONCRETE
	WOOD STUD WALL
	ASPHALT ROOFING, SEE SPECIFICATIONS
	MASONRY VENEER, SEE SPECIFICATIONS

FLOOR PLAN GENERAL NOTES

1. ALL DIMENSIONS ARE TO INTERIOR FACE-OF-STUD (F.O.S.) UNLESS NOTED OTHERWISE.
2. CEILING HEIGHTS MEASURED FROM PLYWOOD OR CONCRETE - SEE SECTIONS
3. REFER TO ENLARGED PLANS FOR ALL UNIT DIMENSIONS, WINDOW TYPES, DOORS AND WALLS.
4. REFER TO ENLARGED PLANS FOR ALL DECKS/PATIOS.
5. COORDINATE WITH ALL ENLARGED PLANS FOR ADDITIONAL INFORMATION AND DETAILS.
6. ALL TOPPING SLABS MUST BE POURED AFTER ROOF IS COMPLETE AND BUILDING IS DRIED IN.
7. SEE SHEET A002 FOR PROJECT GENERAL NOTES AND SHEET A003 FOR PROJECT KEYNOTES. REVIEW ALL NOTES PRIOR TO CONSTRUCTION.
8. COORDINATE WITH STRUCTURAL FRAMING PLANS AND SHEAR WALL PLANS FOR LOCATIONS OF COLUMNS, BEAMS, SHEAR WALLS, ETC.
9. COORDINATE WITH BUILDER/OWNER FOR ALL INTERIOR FINISHES
10. COORDINATE WITH ELECTRICAL DRAWINGS FOR ALL LIGHTING, POWER AND DATA REQUIREMENTS.
11. ALL EXTERIOR WALLS ARE ASSUMED TO BE 2X4 STUD WALLS UNLESS SHOWN/NOTED OTHERWISE.
12. ALL INTERIOR WALLS ARE ASSUMED TO BE 2X4 STUD WALLS UNLESS SHOWN/NOTED OTHERWISE.
13. ALL ROOF TRUSSES TO HAVE RAISED ENERGY HEEL CONSTRUCTION TO ALLOW FOR FULL DEPTH INSULATION OVER EXTERIOR WALLS (COORDINATE INSULATION REQUIREMENTS WITH RESCHECKS).

FLOOR PLAN KEY NOTES

Specification Keynote	Instructional Keynote
# Key Note Info	# Key Note Info

KEYNOTE INSTRUCTIONAL

ST-01	7/16" WOOD SHEATHING W/ APA SPAN RATING OF 24/0 MINIMUM, NAIL W/ 8d NAILS AT 6" O.C. AT PANEL EDGES AND 8d NAILS AT 6" O.C. AT INTERMEDIATE SUPPORTS TYPICAL.
ST-02	FIXED SHELVING (4 SHELVES EQUAL SPACING)
ST-03	LINTEL 5"X3 1/2"X1/4"(LLV) ANGLE, GALVANIZED AND PAINTED
ST-04	2x4 SILL PLATE W/ 1/2" DIA. x 6" EMBEDMENT ANCHOR BOLTS AT 32" O.C. MAX. (MAXIMUM 12" FROM CORNER)
ST-05	#4 AT 16" O.C. EACH WAY HORZ. AND VERTICAL. CONCRETE SHALL BE 4500 PSI STRENGTH AT 28 DAYS
ST-06	4" CONCRETE SLAB WITH #4 BARS AT 18" O.C. EACH WAY WITH 1" CLEAR TO TOP OF SLAB. CONCRETE SHALL BE 3000 PSI AT 28 DAYS
ST-07	SIMPSON H1 FRAMING ANCHORS OR EQUAL AT EACH TRUSS END TYPICAL
ST-09	4" THICK GRAVEL BASE COMPACTED TO 95% OF STANDARD PROCTOR
ST-10	ROOFING MATERIAL TO MATCH MAIN BUILDING
ST-11	METAL WALL LOUVER L5 W/ INSECT SCREEN (BOTH ENDS OF BUILDING)
ST-12	2x4 STUD WALLS AT 16" O.C. (TYP.)
ST-13	LOW-PROFILE LED LIGHT - ONE CENTERED ON 3 ELEVATIONS WITH DOORS
ST-14	INSTALL CONDUIT FOR SPRINKLING SYSTEM CONTROLS. COORDINATE WITH INSTALLER FOR LOCATION. REFER TO IRRIGATION PLANS FOR REQUIREMENTS.
ST-15	30 AMP-1P SERVICE RATED DISCONNECT.
ST-16	19/32" ROOF SHEATHING W/ APA SPAN RATING OF 40/20 MINIMUM, NAIL W/ 8d NAILS AT 6" O.C. ATPANEL EDGES, AND 8d NAILS AT 12" O.C. AT INTERMEDIATE SUPPORTS. NAIL SHEATHING TO BLOCKING W/ 8d NAILS AT 6" O.C.
ST-17	2x SOLID FULL HEIGHT BLOCKING, SHAPE TOP TO MATCH ROOF SLOPE. ATTACH TO TOP PLATE WITH A35 FRAMING ANCHORS AT 24" O.C.
ST-18	PRE-FINISHED METAL DRIP EDGE WITH HEMMED EDGE- PROVIDE WEEP VENTS AT 32" O.C. AT BASE OF MASONRY FINISH GRADE
ST-19	(2) #4 CONTINUOUS. CONCRETE SHALL BE 3000 PSI STRENGTH AT 28 DAYS
ST-20	METAL DOOR AND FRAME PAINTED
ST-21	(2) 2x6 HEADER (DOUGLAS FIR OR EQUAL) W/ WOOD SPACER
ST-22	PAINTED WALL AND CEILING SHEATHING
ST-23	CONCRETE FLOOR SLAB SEALED (TYP.)
ST-25	AUTOMATIC IRRIGATION CONTROLLER
ST-26	BRICK W/ METAL TIES AT 16" O.C. EA. WAY
ST-27	BRICK TO MATCH MAIN BUILDING
ST-28	METAL DRIP AND FASCIA
ST-29	DEAD BOLT AND LOCK SET. (TYP.)
ST-30	METAL THRESHOLD
ST-31	MORTAR GUARD IN WALL CAVITY
ST-34	2x6 CONTINUOUS
ST-35	2x6 MIN. TOP AND BOTTOM CHORDS
ST-36	TRUSSED RAFTERS AT 24" O.C. - SEE STRUCTURAL FOR TRUSS LOADING
ST-37	METAL SOFFIT AND TRIM
ST-38	BRICK BEYOND
ST-39	VERIFY FOOTING AND FOUNDATION CONFIGURATION AND DEPTH WITH SOILS REPORT
ST-40	CONCRETE FLOOR SLAB SEALED (TYP.)
ST-41	#4 DOWEL 12"/16" @ 18" O.C. AT ALL OPENINGS
ST-42	SLOPE CONCRETE SLAB AT DOOR AS SHOWN
ST-43	POWDER-ACTUATED FASTENERS AT 16" O.C.
ST-44	AIR INFILTRATION BARRIER
ST-45	(2) 2x4 TOP PLATE
ST-47	FINISH GRADE
ST-48	WHERE POSSIBLE, CHANGE THE STRIP FOOTING AND FOUNDATION WALL TO A DOWNTURNED SLAB IF IT WOULD RESULT IN FOUNDATION COST SAVINGS

CODE REVIEW

Allowable height, stories, and area (Table 504.3, 504.4, 506.2) - VB, Not Sprinklered

Occupancy	Height (ft)	Story	Area (sf)
S-1	40	1	9,000

Actual height, stories and area

Occupancy	Height (ft)	Story	Area (sf)
S-1	11'- 9"	1	214

Table 1004.1.2 Maximum Floor Area Allowances Per Occupant

Occupant Load: 214/300 = 0.71 = 1 occupant

Building is unconditioned - no heating or cooling

Revision Schedule

#	Description	Date

ea architecture
11576 South State Street, Suite 103b
Draper, Utah 84020

Project for:

THE CHURCH OF
JESUS CHRIST
OF LATTER-DAY SAINTS

Lakeview &

634 North Duggan Drive
Eagle Mountain, Utah

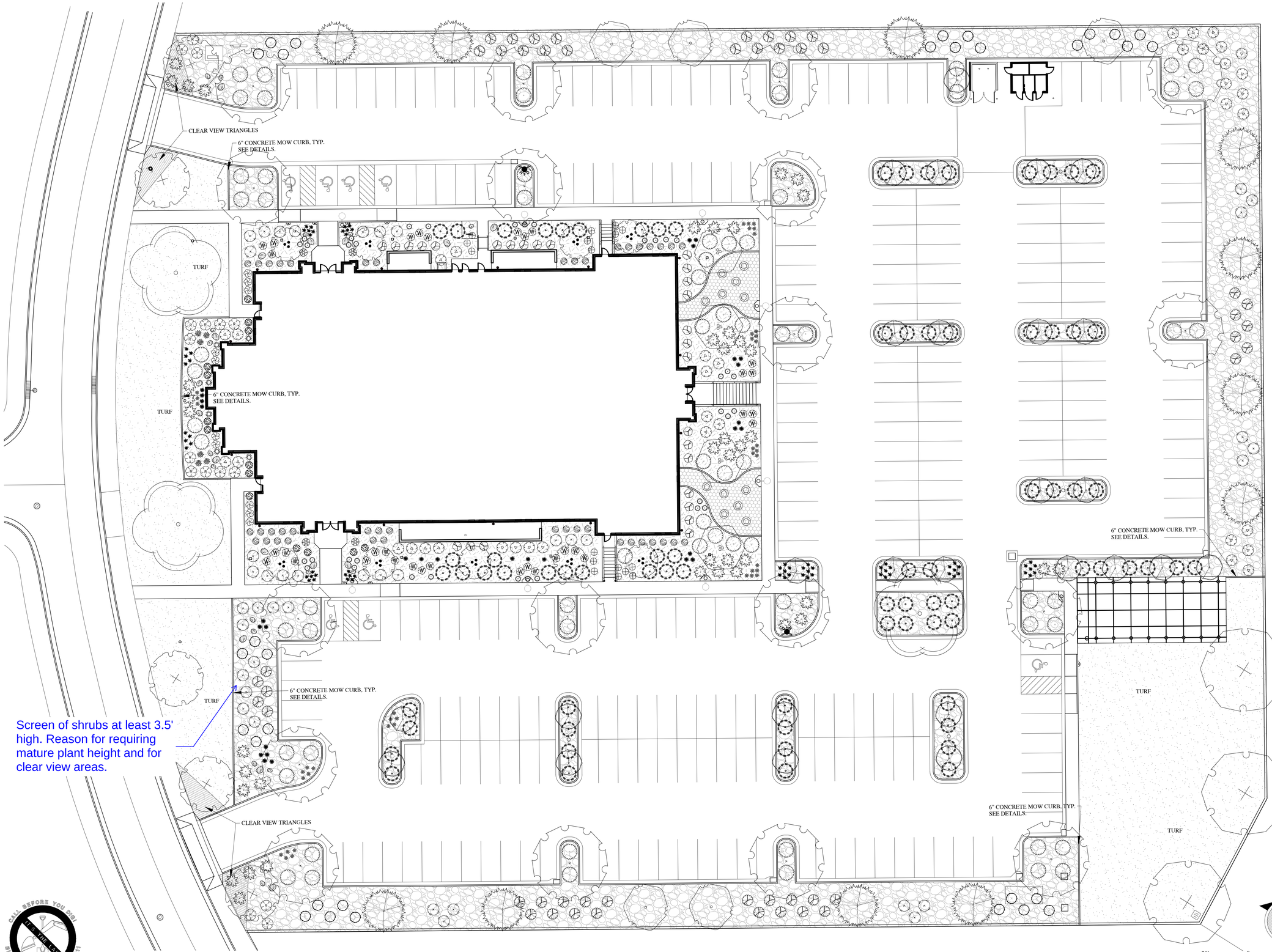
Project Number: 23-76

Property Number: 501-2693-22010101

September 4, 2023

Storage Building

ST101



SCALE: 1"=20'-0" ON 24X36 SHEET

CALL BEFORE YOU DIG!
IT'S THE LAW!
BLUE STAKES 1 800 662 4111

evans + associates architecture
11576 south state street, suite 103b, draper, utah 84020
phone 801-553-8272 fax 801-553-8273

Stamp

STATE OF UTAH
DARREN G. WILSON
NO. 356187
LICENSED LANDSCAPE ARCHITECT

A New Meetinghouse for:
Lakeview &
Eagle Mountain UT Cedar Pass Stake

Parcel: 34:620:0208
654 North Diagan Drive
Eagle Mountain, Utah

Project for:
THE CHURCH OF
JESUS CHRIST
OF LATTER-DAY SAINTS

Revisions

Mark	Date	Description

Project Number
23-76
Plan Series
Heritage 23-2
Property Number
501-2693-22010101
Date
August 4, 2023

Sheet Title
LANDSCAPE PLAN

Sheet
LS101

tblack--thank you for choosing, selecting more drought tolerant shrubs/trees grasses and perennials, I'm excited to see what they look like it two to three years.

DESIGN CRITERIA

ECO-REGION	10.1 NORTHERN COLD DESERT
CLIMATE	U.S. HARDINESS ZONE 5
ZONING ORDINANCE	EAGLE MOUNTAIN CITY
WATER AVAILABILITY	CULINARY WATER
SOIL TYPE	NA
SLOPES	SEE GRADING PLAN
WIND	SOUTH PREVAILING
SETBACKS/EASEMENTS	NA
MICROCLIMATES	NA
SOIL PH	NA
LAWN AREA	30.6% OF TOTAL LANDSCAPE (21,602 SQ. FT.)*
UNDEVELOPED	NA
PROPERTY IRRIGATION SYSTEM	AUTOMATED SYSTEM

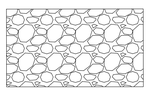
LANDSCAPE DATA

TOTAL SITE AREA	208,805 SQ.FT.		4.79 ACRES
TOTAL LANDSCAPE AREA	70,616 SQ.FT.		33.8%
SHRUBS/GROUNDCOVER	49,014 SQ.FT.		69.4%
LAWN AREA	21,602 SQ.FT		30.6%
TREES ON SITE	84	TOTAL REQ'D = 10	PROVIDED = 84
		DECIDUOUS REQ'D = NA	PROVIDED = 73
		EVERGREEN REQ'D = NA	PROVIDED = 11
		SHRUBS REQ'D = NA	PROVIDED = 706
		DROUGHT TOLERANT REQ'D = 50%	
		DROUGHT TOLERANT PROVIDED = (88%)	
ADDITIONAL INFO	NA		

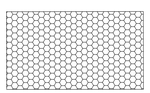
NOTES:

1. IMPORTED, SCREENED TOP SOIL TO BE IMPLEMENTED IN ALL NEW PLANTING AREAS AT THE FOLLOWING DEPTHS: 12" IN ALL SHRUB BEDS, 5" IN ALL LAWN AREAS.
2. ALL PLANT MATERIAL TO BE IRRIGATED BY AN AUTOMATIC SPRINKLER SYSTEM WITH A SMART CONTROLLER AND A RAIN/FREEZE SENSOR.
3. LAWN TO BE A KENTUCKY BLUEGRASS BLEND (MIN. 3 VARIETIES) AND BE IMPLEMENTED AS SOD.
4. 6" DEEP x 6" WIDE POURED-IN-PLACE FLAT CONCRETE CURBING TO BE IMPLEMENTED BETWEEN ALL SHRUB BED AND LAWN AREAS AS SHOWN ON PLAN.
5. ROCK MULCH 'A' TO BE A $\frac{3}{4}$"-1" SIZE 'SOUTHTOWN' CRUSHED STONE FROM UTAH LANDSCAPE ROCK IN NEPHI, UTAH. IMPLEMENT AT A 3" DEPTH OVER WEED BARRIER FABRIC.
6. ROCK MULCH 'B' TO BE A 3"-6" SIZE 'SOUTHTOWN' COBBLE FROM UTAH LANDSCAPE ROCK IN NEPHI, UTAH. IMPLEMENT ON SLOPES WHERE SHOWN AT AN 8" AVERAGE DEPTH OVER WEED BARRIER FABRIC.
7. BARK MULCH TO BE SHREDDED PINE OR FIR AND BE IMPLEMENTED AT A 3" DEPTH IN AREAS INDICATED ON PLANS. PLACE WEED BARRIER UNDER BARK MULCH (IN BARK MULCH AREAS).
8. ROCKAND BARK MULCH TO BE CLEAN AND FREE OF DIRT AND DEBRIS, PLACED AT A UNIFORM DEPTH, AND RAKED SMOOTH.
9. DEWITT 5.0 OZ. LANDSCAPE FABRIC TO BE IMPLEMENTED IN ALL BEDS TO RECEIVE RAK MULCHES PRIOR TO MULCH INSTALLATION. FOLLOW MANUFACTURER'S INSTALLATION INSTRUCTIONS.
10. TREES IN LAWN AREAS TO HAVE A 36" DIAMETER GRASS FREE RING AROUND THE TRUNK AND A 2" DEPTH OF SHREDDED BARK MULCH IMPLEMENTED.
11. NO LANDSCAPING OR OTHER OBSTRUCTION IN EXCESS OF 3' ABOVE FINISHED GRADE SHALL BE IMPLEMENTED IN CLEAR VIEW TRIANGLES.
12. MATERIAL QUANTITIES AND COUNTS ON LEGENDS AND NOTES ARE FOR CONVENIENCE ONLY. LANDSCAPE CONTRACTOR RESPONSIBLE TO VERIFY ALL COUNTS AND QUANTITIES ON PLANS.

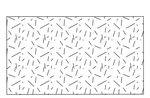
INERT MATERIAL



ROCK MULCH 'A' - $\frac{3}{4}$"-1" 'SOUTHTOWN' CRUSHED STONE



ROCK MULCH 'B' - 3"-6" 'SOUTHTOWN' COBBLE ROCK



SHREDDED BARK MULCH

DECORATIVE BOULDERS - 2'-4' "MCGUIRE" BOULDERS

TURF MATERIAL

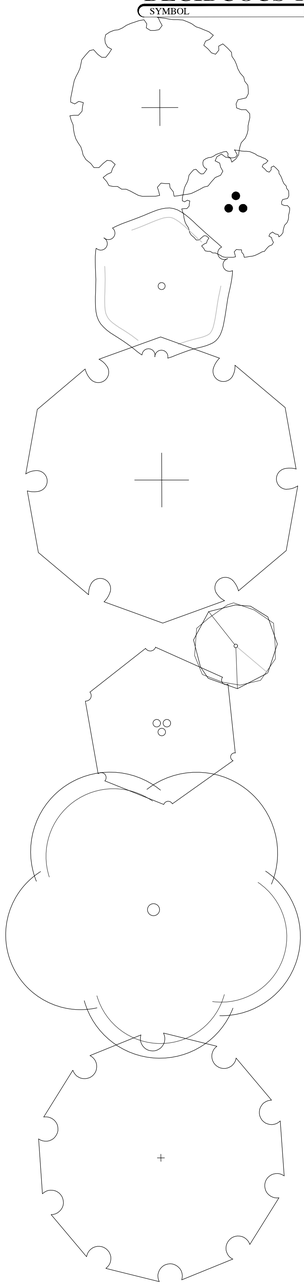
KENTUCKY BLUEGRASS, 3 VARIETY MINIMUM.
INSTALL PER SOD LAYING NOTES

SOD LAYING NOTES

1. LAY SOD WITHIN 24 HOURS OF BEING LIFTED.
2. LAY SOD IN ROWS WITH JOINTS STAGGERED. BUTT SECTIONS CLOSELY WITHOUT OVERLAPPING OR LEAVING GAPS BETWEEN SECTIONS. CUT OUT IRREGULAR OR THIN SECTIONS WITH A SHARP KNIFE.
3. LAY SOD FLUSH WITH ADJOINING EXISTING SODDED OR PAVED SURFACES.
4. AFTER SODDING HAS BEEN COMPLETED, ROLL HORIZONTAL SURFACE AREAS IN TWO DIRECTIONS PERPENDICULAR TO EACH OTHER WITH A 150 POUND SOD ROLLER. REPAIR AND RE-ROLL AREAS WITH DEPRESSIONS, LUMPS OR OTHER IRREGULARITIES. HEAVY

Text obscured

DECIDUOUS TREE LEGEND

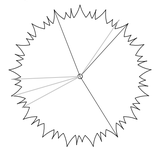


SYMBOL	BOTANICAL NAME/COMMON NAME	QTY	SIZE
	ACER PLAT. X TRUNCATUM 'KEITHSFORM'* NORWEIGAN SUNSET MAPLE	5	2" CAL.
	ACER TATARICUM 'GARANN'* HOT WINGS TATARIAN MAPLE	9	2" CAL.
	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE'* AUTUMN BRILLIANCE SERVICEBERRY TREE	5	2" CAL.
	CELTIS OCCIDENTALIS 'CHICAGOLAND'* CHICAGOLAND COMMON HACKBERRY	3	2" CAL.
	CELTIS OCCIDENTALIS 'JFS-KSUT'* PRAIRIE SENTINEL HACKBERRY	26	2" CAL.
	MAACKIA AMURENSIS 'JFS-SCHIECTEL1'* MAACNIFICENT MAACKIA	4	2" CAL.
	SOPHORA JAPONICA 'REGENT'* REGENT JAPANESE PAGODA TREE	3	2" CAL.
	ZELKOVA SERRATA 'GREEN VASE'* GREEN VASE ZELKOVA	18	2" CAL.

Show mature plant size. Code requirement.

Previous comment on first and second review.

CONIFER EVERGREEN LEGEND



SYMBOL	BOTANICAL NAME/COMMON NAME	QTY	SIZE
	PINUS NIGRA * AUSTRIAN PINE	12	8' TALL

PERENNIAL LEGEND

SYMBOL	BOTANICAL NAME/COMMON NAME	QTY	SIZE
	HEMEROCALLIS X 'ROSY RETURNS'* ROSY RETURNS DAYLILY	69	1 GAL.
	HEMEROCALLIS X 'BUTTERED POPCORN'* BUTTERED POPCORN DAYLILY	40	1 GAL.

GRASS LEGEND

SYMBOL	BOTANICAL NAME/COMMON NAME	QTY	SIZE
	CALAMAGROSTIS ACUTIFLORA 'KARL FOERSTER'* FEATHER REED GRASS	6	1 GAL.
	HELICTOTRICHON SEMPERVIRENS 'SAPPHIRE'* SAPPHIRE BLUE OAT GRASS	35	1 GAL.

SHRUB LEGEND

SYMBOL	BOTANICAL NAME/COMMON NAME	QTY	SIZE
	BUDDLEIA DAVIDII 'TOBUD1212' TM * BUZZ HOT RASPBERRY BUTTERFLY BUSH	4	2 GAL.
	BUDDLEIA X 'BLUE KNIGHT' * BLUE KNIGHT BUTTERFLY BUSH	38	2 GAL.
	CERCOCARPUS INTRICATUS* LITTLELEAF MOUNTAIN MAHOGANY	31	5 GAL.
	CORNUS ALBA 'JEFRED' LITTLE REBEL TATARIAN DOGWOOD	27	5 GAL.
	HESPERALOE PARVIFLORA 'MSWNPERMA'* DESERT DUSK RED YUCCA	6	5 GAL.
	HIBISCUS SYRIACUS 'ANTONG TWO' LIL' KIM ROSE OF SHARON	10	5 GAL.
	JUNIPERUS COMMUNIS 'GREEN CARPET'* GREEN CARPET JUNIPER	42	5 GAL.
	PHYSOCARPUS OPULIFOLIUS 'HOOG1016'* LITTLE ANGEL NINEBARK	30	5 GAL.
	PINUS MUGO 'SLOWMOUND'* SLOWMOUND DWARF MUGO PINE	14	5 GAL.
	PRUNUS BESSEYI 'PAWNEE BUTTES'* PAWNEE BUTTES SAND CHERRY	41	5 GAL.
	RHUS AROMATICA 'GROW LOW'* GROW LOW SUMAC'	70	5 GAL.
	RIBES ALPINUM 'GREEN MOUND' GREEN MOUND CURRANT	42	5 GAL.
	RIBES AUREUM* GOLDEN CURRANT	55	5 GAL.
R	ROSA 'MEIDILAND RED' MEIDILAND RED ROSE	16	5 GAL.
W	ROSA 'CHEW DELIGHT'* RINGO DOUBLE PINK BICOLOR SHRUB ROSE	33	5 GAL.
	POTENTILLA FRUTICOSA 'HACHDON'* BELLA SOL POTENTILLA	17	5 GAL.
	SORBARIA SORBIFOLIA 'SEM'* DWARF ASHLEAF SPIREA	12	5 GAL.
	SYMPHORICARPOS X CHENAULTII 'HANCOCK'* HANCOCK CORALBERRY (LOW-SPREADING)	75	5 GAL.

* INDICATES WATER-WISE PLANTS

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STATE OF UTAH
DARREN G. WILSON
NO. 356187
LICENSED LANDSCAPE ARCHITECT

A New Meetinghouse for:
Lakeview &
Eagle Mountain UT Cedar Pass Stake
Parcel: 34:620:0208
654 N. Pony Express Parkway
Eagle Mountain, Utah

Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

Revisions

Mark	Date	Description

Project Number
23-76
Plan Series
Heritage 23-2
Property Number
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Date
August 4, 2023

Sheet Title
LANDSCAPE LEGEND

Sheet
LS102

2" CULINARY WATER STOP AND WASTE VALVE BY GENERAL CONTRACTOR. ALL OTHER COMPONENTS DOWNSTREAM BY LANDSCAPE CONTRACTOR.

SEE DETAILS & ENLARGEMENT

MAINLINE COMPONENTS SHOWN HERE FOR CLARITY.

SLEEVE FOR IRRIGATION CONTROL WIRING AND GROUNDING WIRE

IRRIGATION CONTROLLER. POWER BY OTHERS.

VALVE FOR ROTORS/SPRAYS FOR LAWN AREAS, TYP.

INSTALL SLEEVES FOR UNDER ALL HARDSCAPE SURFACES, TYP.

INSTALL SEPARATE SLEEVE FPR CONTROL WIRING UNDER ALL HARDSCAPE SURFACES, TYP.

DRIP VALVE FOR TREES, TYP.

DRIP VALVE FOR SHRUBS, TYP.

CALL BEFORE YOU DIG! IT'S THE LAW! BLUE STAKES 1 800 662 4111

N

20' 0 20' 40' 60'

SCALE: 1"=20'-0" ON 24X36 SHEET

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Sheet Title

IRRIGATION PLAN

Sheet

LS201

IRRIGATION LEGEND

SYMBOL	MANUFACTURER-MODEL NUMBER	PAT.	RD.	PSI	GPM Q	GPM T	GPM H	GPM T-T	GPM TQ	GPM F	DRIP GPH	DETAILS	REMARKS
	RAINBIRD XB-20PC	FULL	--	30	--	--	--	--	--	--	2.0	20, 21	SEE DRIP EMITTER LEGEND BELOW FOR ADDITIONAL INFORMATION.
(20)	DRIPLINE: NETAFIM TLCV-09-12	FULL	--	30	--	--	--	--	--	--	.9/12"	18, 19	
	RAINBIRD 1804-8 SERIES POP-UP	Q,H,F	8'	30	.26	--	.52	--	--	1.05	--		ADJUST ARC AS NEEDED VAN OR HE-VAN NOZZLES AS NEEDED TO KEEP WATER OFF SIDEWALK, ASPHALT AND BUILDING.
	RAINBIRD 1804-10 SERIES POP-UP	Q,H,F	10'	30	.39	--	.79	--	--	1.58	--	14, 15	
	RAINBIRD 1804-12 SERIES POP-UP	Q,H,F	12'	30	.65	--	1.3	--	--	2.6	--		
	RAINBIRD 1804-15 SERIES POP-UP	F	15'	30	.92	1.23	1.85	--	--	3.7	--		
	RAINBIRD 1804-ADJ (HE-VAN)	V	8,10,12,15	30	--	--	--	--	--	--	--		
	RAINBIRD 1804-ADJ (VAN)	V	18'	30	--	--	--	--	--	--	--		
	RAINBIRD RD-1804-R17-24	Q,H,T,T	24'	45	.84	--	1.68	1.93			--		
(25)	RAIN BIRD 5004-PL-R-SS W/25 SERIES NOZZLES	Q,T,H,F	25'	45	1.00	1.38	1.98	--	--	3.82	--		
(30)	RAIN BIRD 5004-PL-R-SS W/30 SERIES NOZZLES	Q,T,H,F	30'	45	1.40	1.85	2.96	--	--	5.78	--		
(35)	RAIN BIRD 5004-PL-R-SS W/35 SERIES NOZZLES	Q,T,H,F	35'	45	1.92	2.46	3.81	--	--	7.58	--		
A	CONTROLLER: WEATHERTRAK ET PRO3 (WTPRO3-C-18-CWM)												COORDINATE LOCATION WITH OWNER
	1" RAINBIRD QUICK COUPLER VALVE, MODEL 44-LRC												IN 10" RND. VALVE BOX
B	2" WILKINS 375B RPZ BACKFLOW PREVENTER (IN GUARDSHACK ENCLOSURE)												CONNECT TO POWER & DRAIN
	REMOTE CONTROL VALVE: RAINBIRD PEB AUTOMATIC CONTROL VALVE; SIZE PER PLAN												JUMBO VALVE BOX
	DRIP CONTROL ZONE KIT: RAINBIRD XCZ-100-PRB-COM PER PLANS (FOR SHRUBS)												JUMBO VALVE BOX
	DRIP CONTROL ZONE KIT: RAINBIRD XCZ-100-PRB-COM PER PLANS (FOR TREES)												JUMBO VALVE BOX
	2" STOP AND WASTE TO BE INSTALLED BY GENERAL CONTRACTOR. SEE CIVIL DRAWINGS.												BY GENERAL CONTRACTOR
	2" ISOLATION VALVE/SHUT-OFF VALVE.												REFERENCE DETAILS
H	2" HYDROMETER: NETAFIM LHM2TG1-MEL (WITH PE-393 FLOW SENSOR CABLE)												REFERENCE DETAILS
	DRAIN VALVE: GRACO WELD TOP												REFERENCE DETAILS
	MAINLINE: 2" SCH 40 PVC OR OTHERWISE NOTED.												REFERENCE DETAILS
	LATERAL LINE FOR ROTORS AND/OR SPRAYS: SCHEDULE 40 PVC												REFERENCE DETAILS
	DRIP LATERAL LINE FOR TREES (SIZE AS REQUIRED)												REFERENCE DETAILS
	DRIP LATERAL LINE FOR SHRUBS (SIZE AS REQUIRED)												REFERENCE DETAILS
	SCH. 40 PVC SLEEVE (SIZE TO MIN. 2X DIA. OF PIPE WITHIN THE SLEEVE). ADD ADDITIONAL SLEEVES AS REQ.												REFERENCE DETAILS
NOT SHOWN	WIRE CHASE, SIZE TO BE TWICE THE DIA. OF THE WIRE BUNDLE WITHIN DOWN TO 1" DIA. MIN.												REFERENCE DETAILS
NOT SHOWN	14 GAUGE SOLID COPPER SINGLE STRAND WIRE.												REFERENCE DETAILS

DRIP EMITTER LEGEND

PLANT TYPE	EMITTER QTY	EMITTER TYPE
PERENNIALS/GRASSES	1	XB-20 (2 GPH)
SHRUBS	1	XB-20 (2 GPH)
TREES (PLUS NETAFIM AS REQ)	1	XB-10 (1 GPH)

NOTE:
1. EMITTERS LISTED ARE AVAILABLE FROM RAINBIRD.
2. EMITTERS ARE NOT NECESSARY FOR TREES IN LAWN AREAS.

VALVE ID TAG

CONTROLLER NUMBER, VALVE NUMBER
VALVE SIZE
GALLONS PER MINUTE
PSI AT LAST HEAD IN ZONE

IRRIGATION NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE CITY AND/OR COUNTY CODES. THE CONTRACTOR SHALL APPLY AND PAY FOR ALL NECESSARY PERMITS.
2. CONTRACTOR SHALL HAVE ALL UTILITIES BLUE STAKED BEFORE DIGGING. ANY DAMAGE TO THE UTILITIES SHALL BE REPAIRED AT THE EXPENSE OF CONTRACTOR WITH NO EXTRA COST TO THE OWNER.
3. PROVIDE AN AS-BUILT, REPRODUCIBLE DRAWING TO OWNER SHOWING ALL DRAINS, HEADS, VALVES, AND PIPES. PROVIDE INSTRUCTIONS TO MAINTENANCE PERSONNEL FOR WINTERIZATION. SPRINKLER SYSTEM TO BE BLOWN OUT WITH AN AIR COMPRESSOR EACH FALL.
4. CONTRACTOR IS RESPONSIBLE TO ENSURE SYSTEM DRAINS PROPERLY. INSTALL MANUAL DRAINS AS NECESSARY. NO AUTO DRAINS WILL BE ALLOWED. SEE DETAILS AND SPECS FOR SPECIFICS.
5. CONTRACTOR SHALL ONLY USE COMMERCIAL GRADE PRODUCTS AND IS RESPONSIBLE FOR ENSURING ACCURATE COUNTS AND QUANTITIES OF ALL IRRIGATION MATERIALS FOR BIDDING AND INSTALLATION PURPOSES.
6. INSTALL RAINBIRD QUICK COUPLERS PER PLAN.
7. CONTRACTOR SHALL BUILD IRRIGATION SYSTEM WITH 110% HEAD TO HEAD COVERAGE FOR ALL LAWN AREAS. VAN AND/OR U-SERIES NOZZLES SHALL BE USED WHERE NECESSARY TO PROVIDED HEAD TO HEAD COVERAGE AND/OR TO MINIMIZE OVER SPRAY ONTO STREETS, SIDEWALKS AND/OR BUILDINGS.
8. LANDSCAPE CONTRACTOR (L.C.) SHALL PROVIDE AND INSTALL SLEEVES FOR ALL PIPES AND WIRES UNDER PAVEMENT AND SIDEWALKS. SLEEVES SHALL BE 2 SIZES LARGER THAN PIPE INSIDE. ALL WIRE SHALL BE IN SEPARATE SLEEVES (NOT SHOWN). ALL CONTROL WIRE SHALL BE INSTALLED IN CLASS 200 PIPE. PLACE JUNCTION BOXES WHERE NECESSARY TO MINIMIZE LONG RUNS OR AT DIRECTIONAL CHANGES AS NECESSARY.
9. ALL SLEEVES INSTALLED SHALL BE DUCT TAPED TO PREVENT DIRT OR OTHER DEBRIS ENTERING PIPE. ALL SLEEVES SHALL BE IDENTIFIED BY WOOD OR PVC STAKES AND BE SPRAY PAINTED WITH MARKING PAINT. REMOVE STAKES ONCE IRRIGATION SYSTEM IS COMPLETE.
10. MAIN LINE SHALL BE 2" (UNLESS OTHERWISE DIRECTED). MAINLINE AROUND PROPERTY PERIMTER (BETWEEN VALVES 10 & 22) SHALL BE 1-1/2". LATERAL LINES SHALL BE NO SMALLER THAN 1" UNLESS NOTED ON PLAN. PIPES SHALL CARRY NO MORE THAN THE FOLLOWING: 1" PIPE MAX. 13GPM, 1-1/2" PIPE MAX. 30GPM, 2" PIPE MAX. 50 GPM. DO NOT USE $\frac{3}{4}$" OR 1-1/4" PVC PIPE. ADJUST LOCATION OF MAINLINE AND LATERAL LINES AS NECESSARY IN ORDER TO AVOID PLACING BOULDERS, TREES AND SHRUBS DIRECTLY OVER MAINLINE AND LATERAL LINES.
11. MAIN LINES SHALL BE 18" DEEP MIN. AND LATERAL LINES 12" DEEP MIN. NO ROCK GREATER THAN 3/4" DIAMETER SHALL BE ALLOWED IN TRENCHES. ALL MAINLINES AND LATERAL LINES TO BE SCH. 40 PVC.
12. PLACE PIPES, VALVE BOXES AND ALL OTHER SPRINKLER CONSTRUCTION IN LANDSCAPE AREAS. ALL PIPES SHALL BE ON PROPERTY OF OWNER. MODIFY LOCATION OF VALVE BOXES AS NECESSARY IN ORDER TO AVOID TREES AND SHRUBS PER PLANTING PLAN. VALVE BOXES IN PLANTER AREAS SHALL BE TAN OR BROWN IN COLOR. VALVE BOXES IN LAWN AREAS SHALL BE GREEN IN COLOR. VALVE BOXES SHALL BE CAPABLE OF BEING BOLTED CLOSED AFTER INSTALLATION.
13. LANDSCAPE ARCHITECT SHALL VISUALLY INSPECT ALL TRENCHES PRIOR TO BACKFILLING. CONTRACTOR SHALL GIVE LANDSCAPE ARCHITECT MIN. 72 HR. NOTICE BEFORE INSPECTION IS TO BE MADE. CONTRACTOR SHALL PRESSURE TEST MAINLINE AND VALVES AT 100 PSI FOR LEAKS PRIOR TO BACKFILLING.
14. ALL SPRINKLERS SHALL BE ADJUSTED ON-SITE AS NECESSARY TO AVOID ANY WATER SPRAYING ONTO STREETS, SIDEWALKS AND/OR BUILDINGS.
15. ACTUAL INSTALLATION OF IRRIGATION SYSTEM MAY VARY SOMEWHAT FROM PLANS. CONTRACTOR IS RESPONSIBLE TO MAKE NECESSARY ADJUSTMENTS TO ENSURE PROPER COVERAGE OF ALL LANDSCAPED AREAS.
16. LANDSCAPE CONTRACTOR SHALL MATCH PRECIPITATION RATES AS MUCH AS POSSIBLE FOR ALL LANDSCAPED AREAS.
17. INSTALL ALL HEADS 1" AWAY FROM ALL WALKS AND WALLS. VALVE BOXES SHALL BE INSTALLED SQUARED TO AND 6" MIN. AWAY FROM WALKS AND WALLS.
18. DRIP LINES SHALL BE FLEXIBLE AR PVC TUBING BY GPH. FOR DRIP AREAS REQUIRING 0-4 GPM USE 1/2" TUBING. FOR DRIP AREAS REQUIRING 4-8GPM USE 3/4" TUBING AND FOR DRIP AREAS REQUIRING 8-13 GPM USE 1" TUBING. CONTRACTOR TO VERIFY PLANT QUANTITIES ON EACH DRIP LINE AND SIZE PIPE ACCORDINGLY.
19. CONTRACTOR TO INSTALL NETAFIM CV TECHLINE (TLCV6-1201) AS DRIP LOOPS AROUND TREES. MODIFY DRIP ZONES AS NECESSARY TO PROVIDE ADEQUATE COVERAGE TO ALL LANDSCAPED AREAS.
20. POWER TO CONTROLLER AND AUTO-FILTER TO BE PROVIDED BY ELECTRICAL CONTRACTOR. OWNER TO SPECIFY EXACT LOCATION OF CONTROLLER. IF MOUNTED OUTSIDE, CONTROLLER TO BE MOUNTED IN WEATHERPROOF LOCKING WALL MOUNTED CABINET PER MANUFACTURERS INSTRUCTIONS. LANDSCAPE CONTRACTOR SHALL ENSURE THE CONTROLLER IS GROUNDED PER LOCAL CODE AND PER MANUFACTURER SPEC.
21. IF THE STATIC PRESSURE AT THE POINT OF CONNECTION EXCEEDS 100 PSI, INSTALL A BRASS PRESSURE REDUCER IN-LINE WITH THE FILTER PER MANUFACTURER SPECS. ADJUST PRESSURE AS REQUIRED FOR NORMAL OPERATION OF THE IRRIGATION SYSTEM.
22. INSTALL AUTOMATIC FILTER IN LOCKING STRONGBOX METAL CABINET.
23. 2" IRRIGATION STUB AND STOP & WASTE VALVE SHALL BE INSTALLED BY GENERAL CONTRACTOR.
24. INSTALL THE PRS-D OPTION FOR SPRAY VALVES IF THE STATIC PRESSURE AT SPRAY HEADS EXCEEDS 70 PSI.
25. NO BLUE GLUE ALLOWED FOR ANY PVC WELD CONNECTIONS. CONNECTIONS TO BE GLUED WITH GREY CEMENT AND PURPLE PRIMER PER MANUFACTURERS SPECIFICATIONS.
26. IRRIGATION CONTROL WIRE SHALL BE AS FOLLOWS: WHITE WIRE FOR COMMON, RED WIRE FOR HOT AND BLUE WIRE FOR SPARE. PROVIDE A MINIMUM OF (1) SPARE WIRE FOR EVERY (5) REMOTE CONTROL VALVES IN THE SYSTEM. SPARE WIRES SHALL BE "HOME RUN" TO THE IRRIGATION CONTROLLER AND LABELED AS "SPARE WIRE" ON BOTH ENDS. ALL CONTROL WIRES SHALL BE SOLID COPPER 14 GAUGE, SINGLE STRAND WIRE. DO NOT USE MULTI-STRAND WIRE.
27. ASSUME FLOW RATE OF SPRINKLER SYSTEM TO NOT EXCEED 50 GPM.

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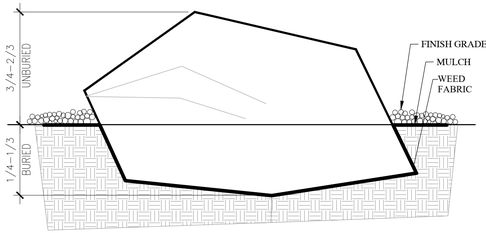
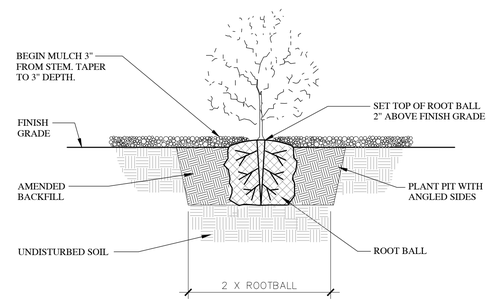
Sheet Title
IRRIGATION LEGEND AND NOTES

Sheet
LS202



1 BOULDER PLACEMENT DETAIL

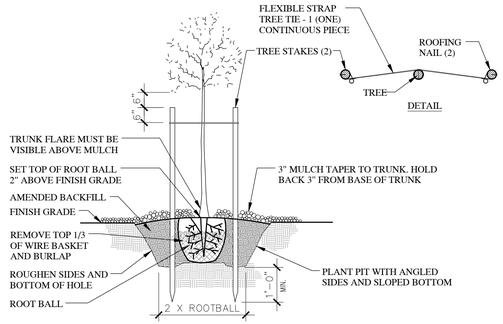
SCALE: NTS



2 SHRUB PLANTING

SCALE: NTS

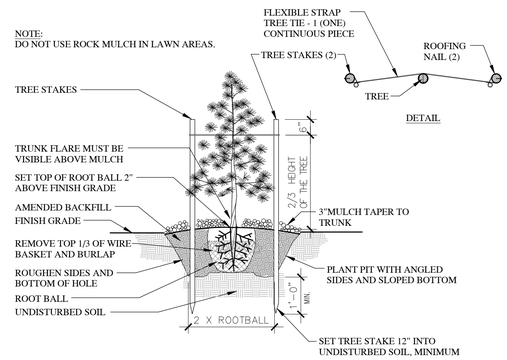
NOTE:
DO NOT USE ROCK MULCH IN LAWN AREAS.



3 TREE PLANTING AND STAKING

SCALE: NTS

NOTE:
DO NOT USE ROCK MULCH IN LAWN AREAS.



4 CONIFER PLANTING AND STAKING

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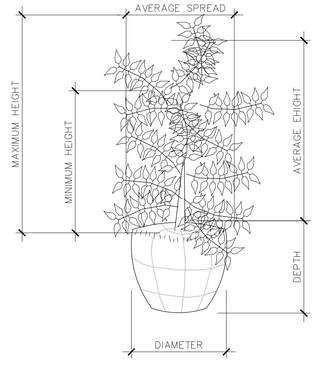
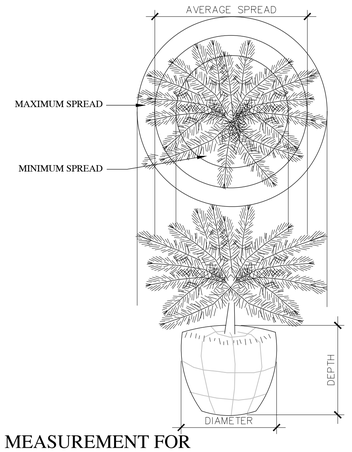


5 TYPICAL MEASUREMENT FOR BROAD UPRIGHT TYPE PLANTS

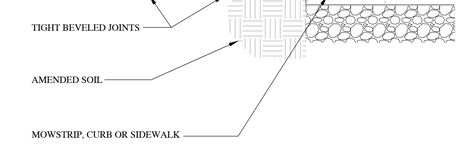
SCALE: NTS



6 TYPICAL MEASUREMENT FOR PROSTRATE TYPE PLANTS

SCALE: NTS

NOTES:
1. MOWSTRIP TO BE CAST-IN-PLACE AND POURED USING TYPICAL WEIGHT STRUCTURAL CONCRETE.
2. CONTRACTOR TO ENSURE POSITIVE DRAINAGE AROUND MOWSTRIPS-DO NOT CREATE A DAM EFFECT WITH PLACEMENT OF MOWSTRIP.
3. MAXIMUM 1/2" WIDTH VARIATION.
4. PRECISELY FOLLOW LAYOUT AS SHOWN ON MOWSTRIP/EDGING DIMENSION PLAN.
5. RAISE THE LAWN GRADE 1" WHEN SEEDING.



7 SOD INSTALLATION

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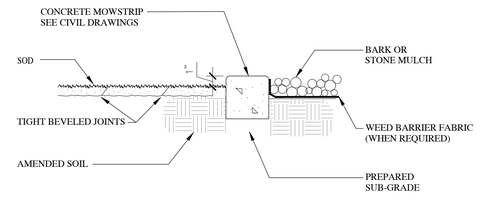

8 CONCRETE MOWSTRIP

SCALE: NTS

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phone 801-553-8272 fax 801-553-8273

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STATE OF UTAH
DARREN G. WILSON
LICENSED LANDSCAPE ARCHITECT
NO. 356187

A New Meetinghouse for:

Lakeview & Eagle Mountain UT Cedar Pass Stake

Parcel: 34:620:0208
624 North Duggan Drive
Eagle Mountain, Utah

Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

Revisions

Mark	Date	Description

Project Number
23-76

Plan Series
Heritage 23-2

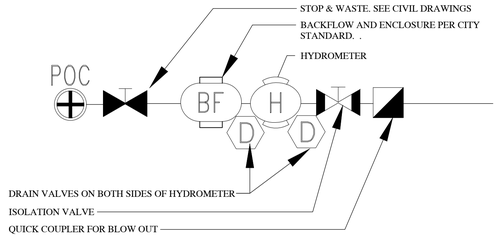
Property Number
501-2693-22010101

Date
August 4, 2023

Sheet Title
LANDSCAPE DETAILS

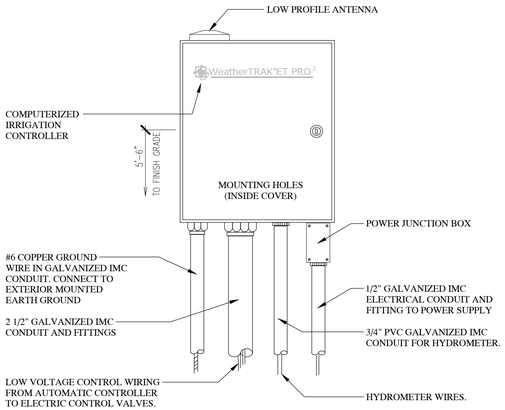
Sheet
LS301

NOTE:
INSTALL ISOLATION VALVE AFTER THE HYDROMETER AND BEFORE THE QUICK COUPLER. THE HYDROMETER IS TO BE DRAINED MANUALLY.



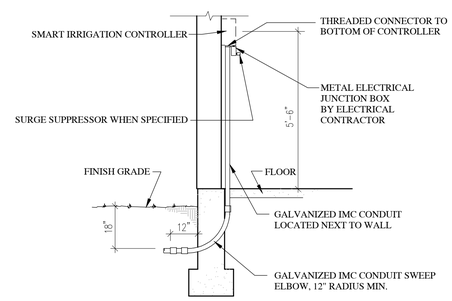
1 POC W/ BACKFLOW PREV. SCHEMATIC LAYOUT

SCALE: NTS



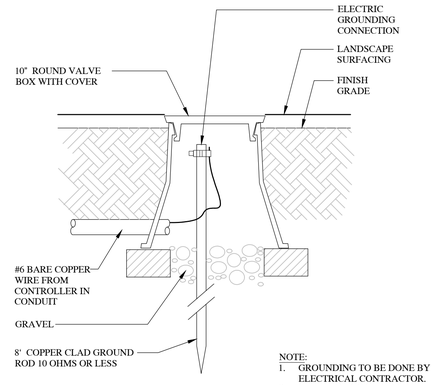
2 SMART CONTROLLER - WEATHER TRAK

SCALE: NTS



3 IRRIGATION CONTROLLER - INTERIOR MOUNT

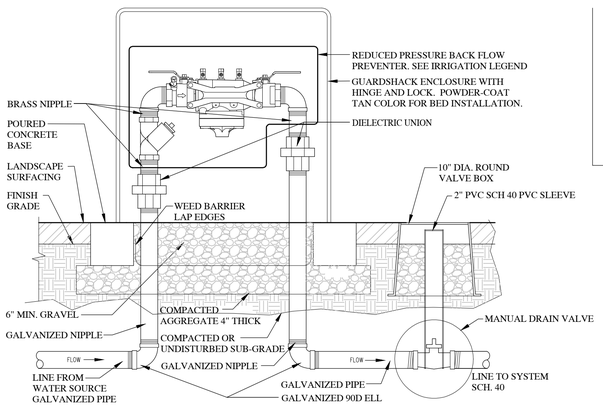
SCALE: NTS



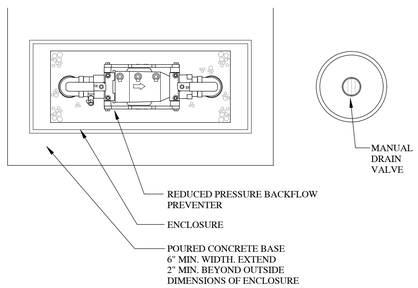
NOTE:
1. GROUNDING TO BE DONE BY ELECTRICAL CONTRACTOR.
2. SEE ELECTRICAL PLANS.

4 LIGHTNING GROUNDING ROD

SCALE: NTS



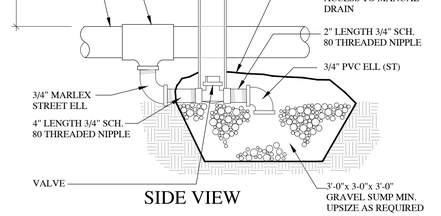
SIDE VIEW



TOP VIEW

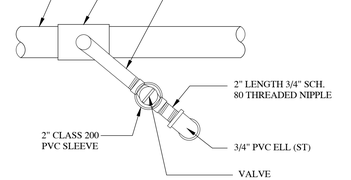
5 REDUCED PRESSURE BACKFLOW PREVENTER

SCALE: NTS



SIDE VIEW

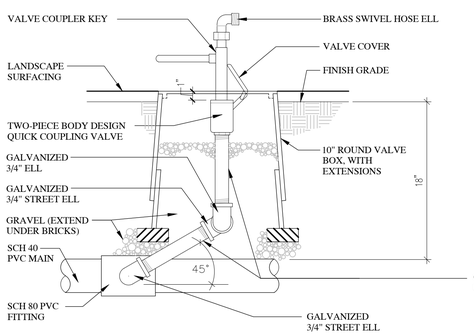
NOTE:
- DRAIN INTO CENTER OF GRAVEL SUMP
- USE AT EVERY LOW SPOT ON MAINLINE



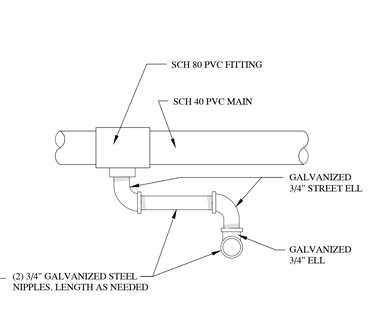
TOP VIEW

6 MAINLINE MANUAL DRAIN VALVE

SCALE: NTS



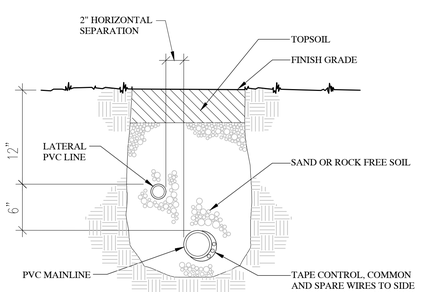
SIDE VIEW



TOP VIEW

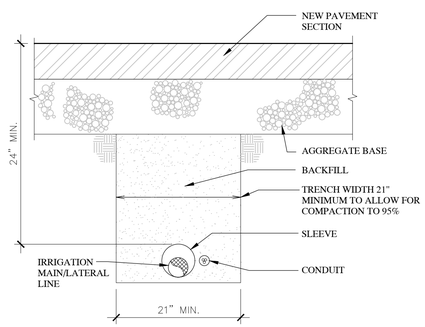
7 QUICK COUPLING VALVE

SCALE: NTS



8 TRENCH SECTION - CONVENTIONAL WIRE SYS.

SCALE: NTS



9 MISC. PIPE TRENCH: NEW PAVEMENT AREAS

SCALE: NTS

evans + associates architecture
11578 south state street, suite 103b, draper, utah 84020
phone 801-553-8272 fax 801-553-8273

Stamp

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Revisions

Mark	Date	Description

Project Number
23-76

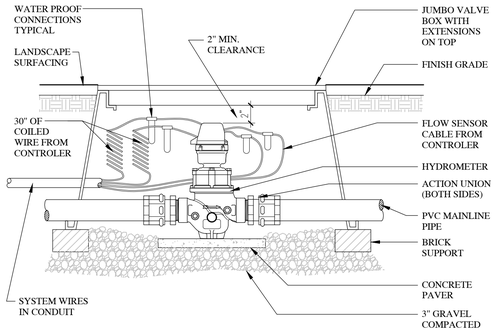
Plan Series
Heritage 23-2

Property Number
501-2693-22010101

Date
August 4, 2023

Sheet Title
IRRIGATION DETAILS

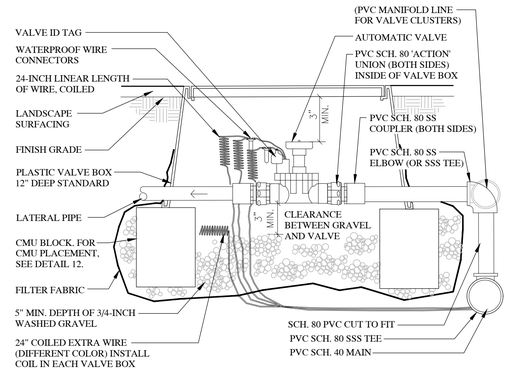
Sheet
LS401



10 HYDROMETER

SCALE: NTS

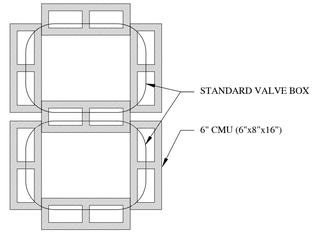
NOTES:
1. LIMIT 1 VALVE PER BOX.
2. 10" MIN. LATERAL LINE DEPTH AT VALVE BOX, 12" MIN. LATERAL LINE DEPTH EVERYWHERE ELSE.
3. PROVIDE MIN. 2" CLEARANCE BETWEEN WIRE AND CMU BLOCK.



11 AUTOMATIC VALVE - CONVENTIONAL WIRE

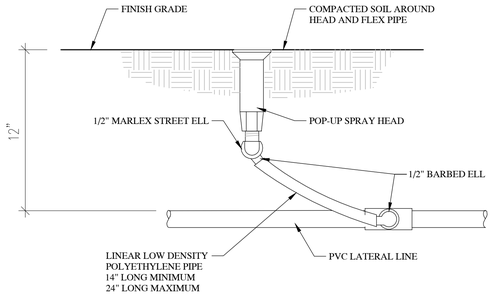
SCALE: NTS

NOTES:
1. VALVE BOX TO REST ON (4) CMU BLOCKS (ONE FOR EACH SIDE).
2. CLUSTERED VALVE BOXES MAY SHARE A CMU BLOCK.



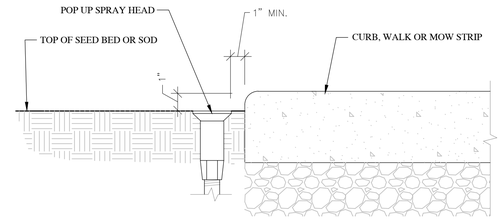
12 CMU PLACEMENT

SCALE: NTS



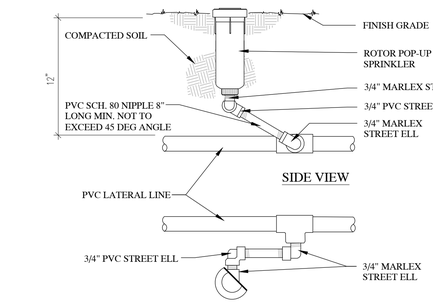
13 SPRAY AND ROTARY HEAD ASSEMBLY

SCALE: NTS



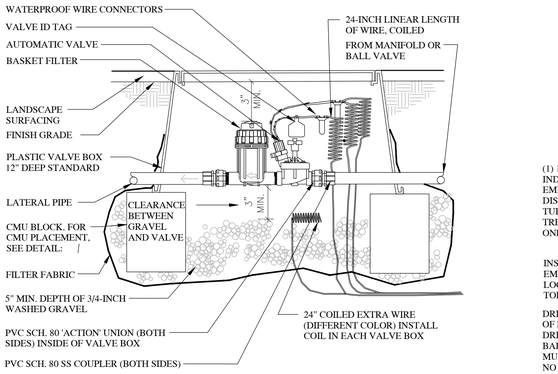
14 SPRAY HEAD OR ROTOR NEXT TO CURB / WALK

SCALE: NTS



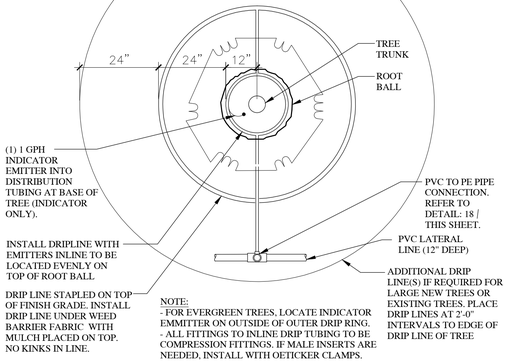
15 ROTOR POP-UP HEAD

SCALE: NTS



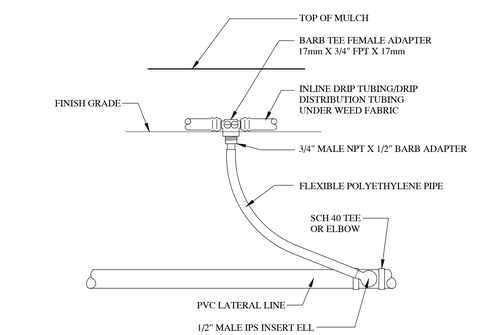
16 DRIP VALVE SECTION - CONVENTIONAL WIRE

SCALE: NTS



17 TREE DRIP - PLAN VIEW (PLANTER AREAS)

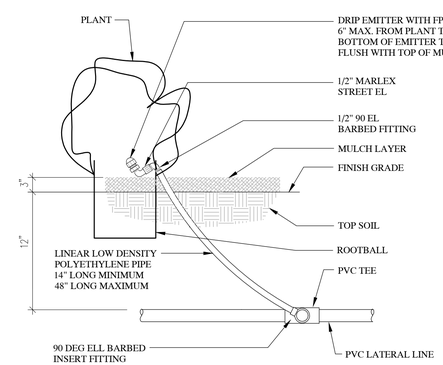
SCALE: NTS



NOTES:
1. USE AT TREE RINGS ONLY.
2. LIMIT 1 VALVE PER BOX.
3. 10" MIN. LATERAL LINE DEPTH AT VALVE BOX, 12" MIN. LATERAL LINE DEPTH EVERYWHERE ELSE.
4. PROVIDE MIN. 2" CLEARANCE BETWEEN CONDUIT AND CMU BLOCK.

18 PVC TO BE PIPE CONNECTION

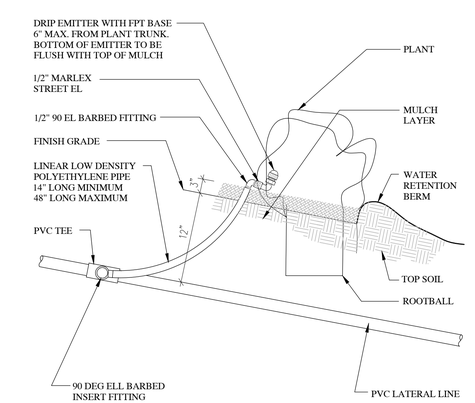
SCALE: NTS



NOTE: LOCATE EMITTER ON BLDG OR FENCE SIDE OF PLANT.

19 DRIP EMITTER INSTALLATION

SCALE: NTS



NOTE: ON SLOPES,LOCATE EMITTER ON THE UPHILL SIDE OF PLANT OR TREE.

20 DRIP EMITTER - INSTALLATION ON SLOPE

SCALE: NTS

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11576 south state street, suite 103b, draper, utah 84020
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Revisions			
Mark	Date	Description	

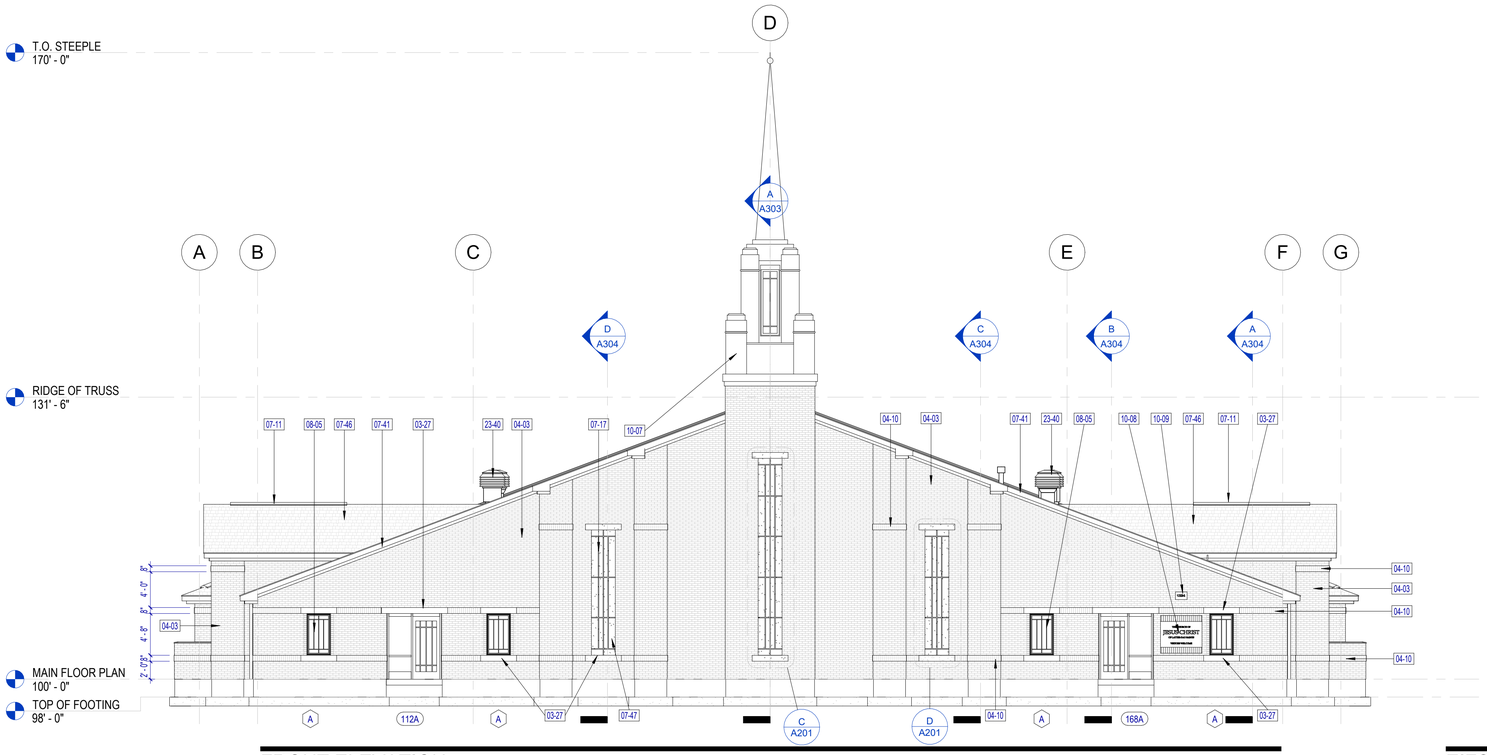
Project Number	23-76
Plan Series	Heritage 23-2
Property Number	501-2693-22010101
Date	August 4, 2023

Sheet Title

IRRIGATION DETAILS

Sheet

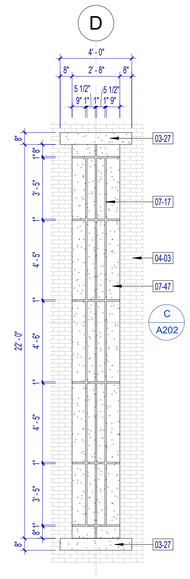
LS402



FRONT ELEVATION

SCALE: 1/8" = 1'-0"

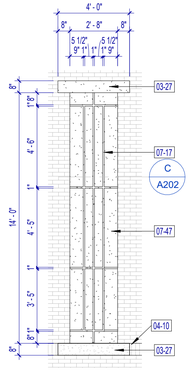
A



EIFS DETAIL

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

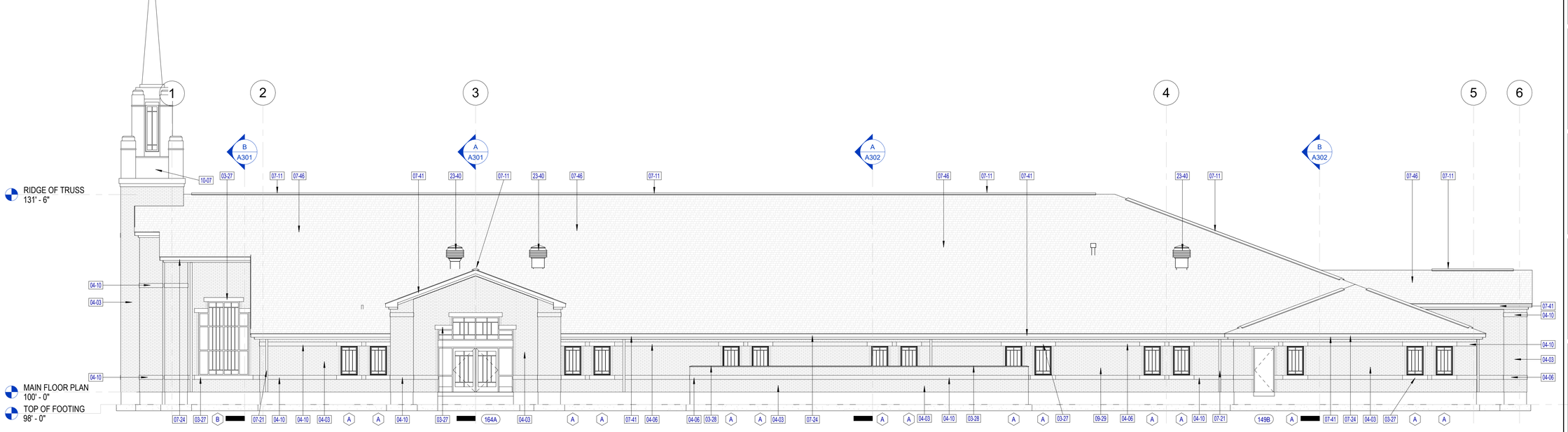
C



EIFS DETAIL

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

D



RIGHT ELEVATION

SCALE: 1/8" = 1'-0"

B

General Notes

1. SEE A601 FOR DOOR SCHEDULE.
2. SEE A603 FOR WINDOW TYPES.
3. INSTALL SECONDARY UNDERLAYMENT OVER THE ENTIRE ROOF.

Keyed Notes

03-27	PRECAST ARCHITECTURAL CONCRETE; SEE DETAILS
03-28	PRECAST ARCHITECTURAL CONCRETE CAP; SEE DETAILS
04-03	BRICK VENEER MASONRY; RUNNING BOND; SEE DETAILS
04-06	ACCENT BRICK VENEER MASONRY
04-10	ACCENT BRICK VENEER MASONRY; SOLDIER COURSE; SEE DETAILS
07-11	ALUMINUM RIDGE VENT; SEE B,E,F/A122
07-17	WATER-MANAGED EIFS ARCHITECTURAL SCORING JOINT; SEE DETAILS
07-21	ALUMINUM ROOF DOWNSPOUT; SEE DETAILS
07-24	ALUMINUM GUTTERS AND DOWNSOPUTS; SEE DETAILS
07-41	ALUMINUM SHEET METAL FASCIA, FLASHING & TRIM, SEE A&D/A122
07-46	COMPOSITE ASPHALT SHINGLES, SEE DETAILS & SPECIFICATIONS
07-47	WATER-MANAGED EIFS EXTERIOR WALL FINISH SYSTEM, SEE DETAILS & SPECIFICATIONS
08-05	VINYL FRAMED FIXED WINDOW, SEE DOOR AND WINDOW SCHEDULES AND DETAILS
09-29	5/8" GYPSUM BOARD
10-07	ALUMINUM STEEPLE; SEE ELEVATIONS, ENLARGED PLANS, SECTIONS AND DETAILS
10-08	STONE MEETINGHOUSE SIGN; SEE D&E/A203
10-09	BUILDING ADDRESS SIGN; SEE F&G/A203
23-40	HVAC PENTHOUSE; SEE MECHANICAL

ea architecture
11576 South State Street, Suite 103b
Draper, Utah 84020

Project for:

THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

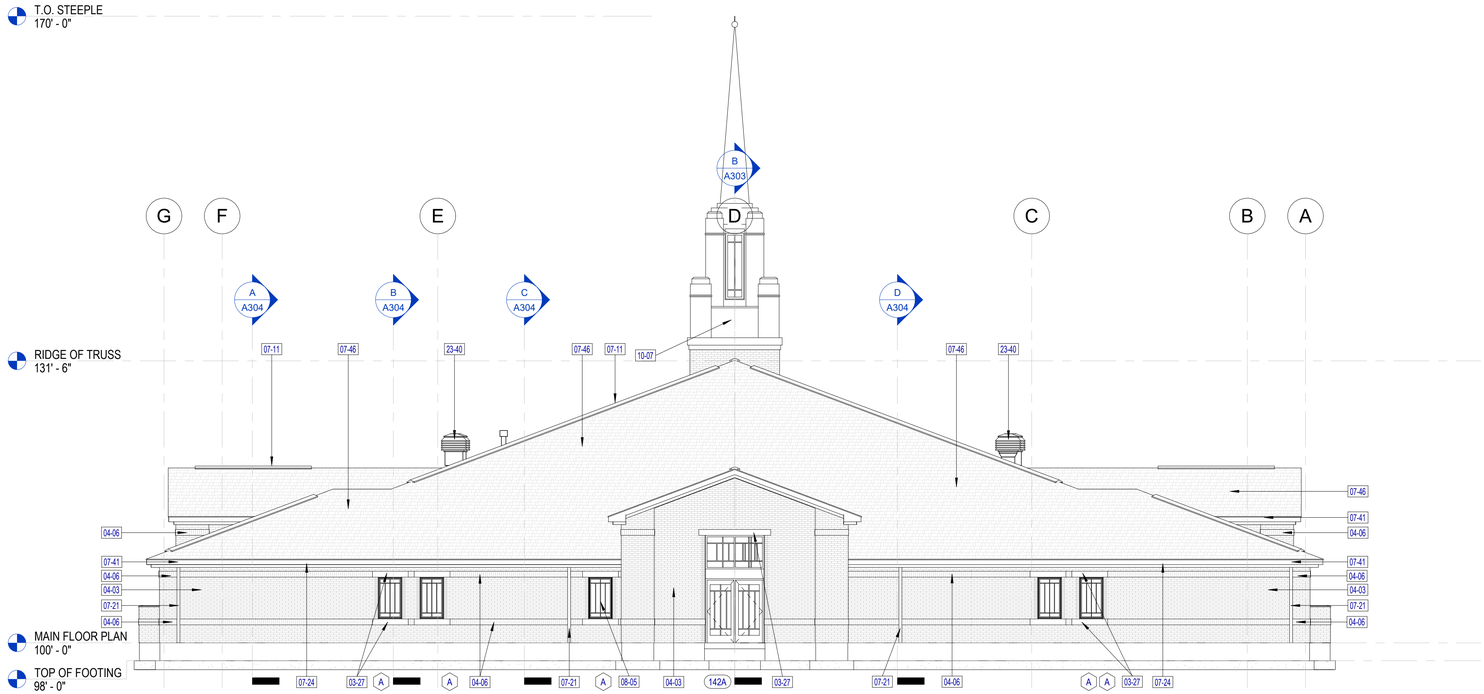
A New Meetinghouse for

Lakeview &
Eagle Mountain UT
Cedar Pass Stake

Parcel: 34:620:0208
634 North Duggan Drive
Eagle Mountain, Utah

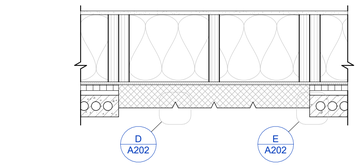
Project Number:	23-76
Property Number:	501-2693-22010101
November 22, 2023	
Exterior Elevations	

A201



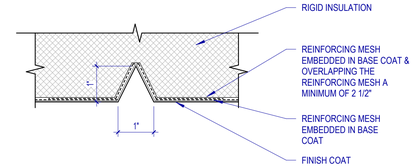
REAR ELEVATION

SCALE: 1/8" = 1'-0" **A**



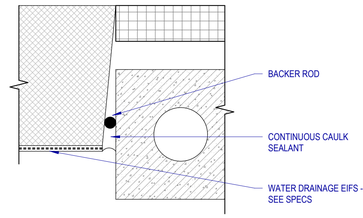
EIFS - SECTION

SCALE: 1" = 1'-0" **C**



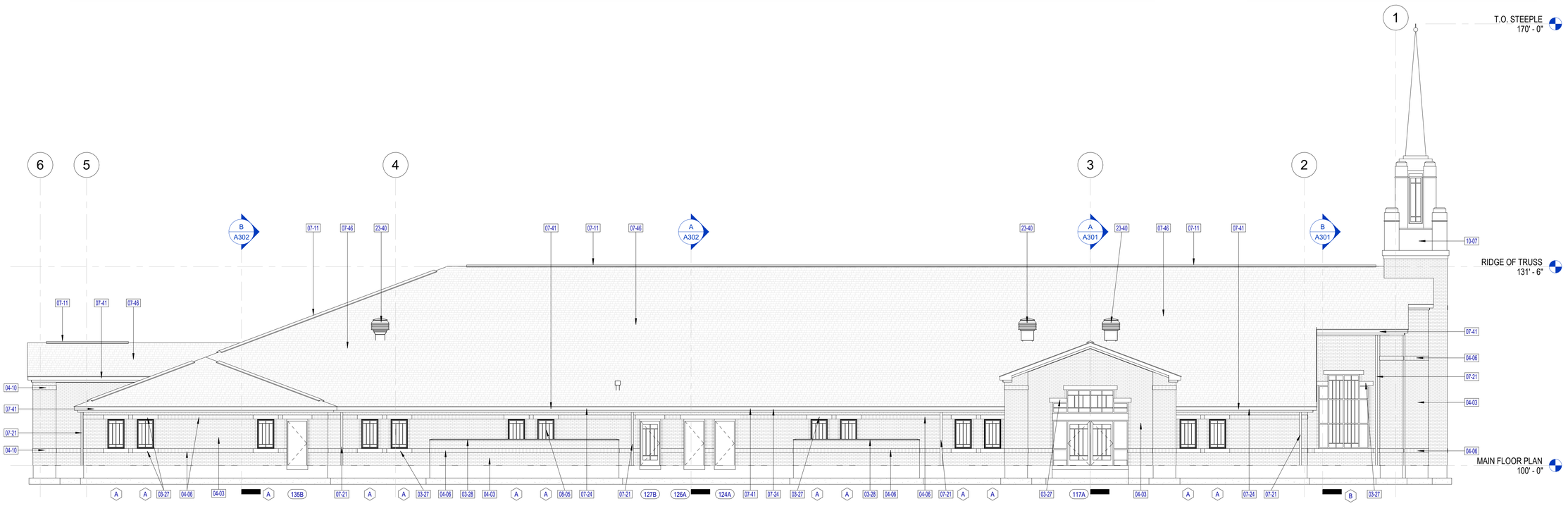
EIFS - ENLARGED REVEAL DETAIL

SCALE: 6" = 1'-0" **D**



EIFS - ENLARGED EDGE DETAIL

SCALE: 6" = 1'-0" **E**



LEFT ELEVATION

SCALE: 1/8" = 1'-0" **B**

General Notes

1. SEE A601 FOR DOOR SCHEDULE.
2. SEE A603 FOR WINDOW TYPES.
3. INSTALL SECONDARY UNDERLAYMENT OVER THE ENTIRE ROOF.

Keyed Notes

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10-07	ALUMINUM STEEPLE; SEE ELEVATIONS, ENLARGED PLANS, SECTIONS AND DETAILS
23-40	HVAC PENTHOUSE; SEE MECHANICAL

ea architecture
11576 South State Street, Suite 103b
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Eagle Mountain UT Cedar Pass Stake

Parcel: 34:620:0208
634 North Duggan Drive
Eagle Mountain, Utah

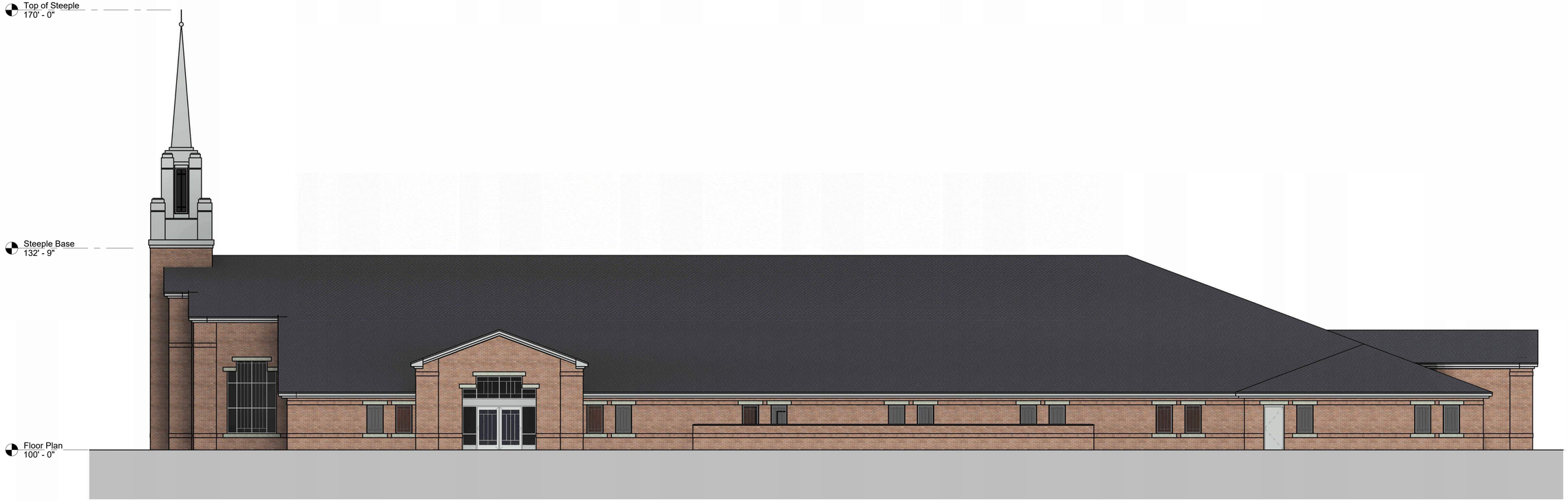
Project Number:	23-76
Property Number:	501-2693-22010101
November 22, 2023	
Exterior Elevations	

A202

West Elevation

SCALE: 1/8" = 1'-0"

1



South Elevation

SCALE: 1/8" = 1'-0"

2

Exterior Materials

North Elevation

Brick Veneer:	1,911 sf / 76.7%
Precast Concrete:	99 sf / 4.0%
Openings:	483 sf / 19.4%

East Elevation

Brick Veneer:	1,104 sf / 86.5%
Precast Concrete:	32 sf / 2.5%
Openings:	140 sf / 11.0%

South Elevation

Brick Veneer:	1,957 sf / 78.5%
Precast Concrete:	101 sf / 4.1%
Openings:	435 sf / 17.4%

West Elevation

Brick Veneer:	2,277 sf / 92.5%
Precast Concrete:	47 sf / 1.9%
Openings:	138 sf / 5.6%

Total

Brick Veneer:	7,250 sf / 83.1%
Precast Concrete:	279 sf / 3.2%
Openings:	1,196 sf / 13.7%

Revision Schedule

#	Description	Date

ea architecture
11576 South State Street, Suite 103b
Draper, Utah 84020

Project for:

THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

A New Building for

Eagle Mountain
UT Cedar Pass

9634 North Duggan Drive
Eagle Mountain, Utah

Project Number:	23-76
Property Number:	501-2393-22010101
May 1, 2023	
Exterior Elevations	

A201

East Elevation

SCALE: 1/8" = 1'-0"

1

North Elevation

SCALE: 1/8" = 1'-0"

2

Exterior Materials

North Elevation	
Brick Veneer:	1,911 sf / 76.7%
Precast Concrete:	99 sf / 4.0%
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Brick Veneer:	1,957 sf / 78.5%
Precast Concrete:	101 sf / 4.1%
Openings:	435 sf / 17.4%
West Elevation	
Brick Veneer:	2,277 sf / 92.5%
Precast Concrete:	47 sf / 1.9%
Openings:	138 sf / 5.6%
Total	
Brick Veneer:	7,250 sf / 83.1%
Precast Concrete:	279 sf / 3.2%
Openings:	1,196 sf / 13.7%

Revision Schedule

#	Description	Date

ea architecture
11576 South State Street, Suite 103b
Draper, Utah 84020

Project for:

THE CHURCH OF
JESUS CHRIST
OF LATTER-DAY SAINTS

A New Building for

Eagle Mountain
UT Cedar Pass

9634 North Duggan Drive
Eagle Mountain, Utah

Project Number:	23-76
Property Number:	501-2393-22010101

May 1, 2023

Exterior Elevations

A202

tblack--i like these, it will be good to see what they look like once it. 12/20/23

RSX1 LED
Area Luminaire

Catalog Number

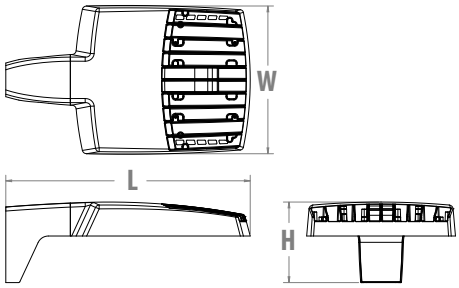
Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

EPA (ft²@0°):	0.57 ft² (0.05 m²)
Length:	21.8" (55.4 cm) (SPA mount)
Width:	13.3" (33.8 cm)
Height:	3.0" (7.6 cm) Main Body 7.2" (18.4 cm) Arm
Weight: (SPA mount):	22.0 lbs (10.0 kg)



Introduction

The new RSX LED Area family delivers maximum value by providing significant energy savings, long life and outstanding photometric performance at an affordable price. The RSX1 delivers 7,000 to 17,000 lumens allowing it to replace 70W to 400W HID luminaires.

The RSX features an integral universal mounting mechanism that allows the luminaire to be mounted on most existing drill hole patterns. This "no-drill" solution provides significant labor savings. An easy-access door on the bottom of mounting arm allows for wiring without opening the electrical compartment. A mast arm adaptor, adjustable integral slipfitter and other mounting configurations are available.

design select

Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect.
*See ordering tree for details

Design Select options indicated by this color background.

Ordering Information

EXAMPLE: RSX1 LED P4 40K R3 MVOLT SPA DDBXD

RSX1 LED

Series	Performance Package	Color Temperature	Distribution	Voltage	Mounting
RSX1 LED	P1	30K 3000K	R2 Type 2 Wide	MVOLT (120V-277V) [2]	SPA Square pole mounting (3.0" min. SQ pole for 1 at 90°, 3.5" min. SQ pole for 2, 3, 4 at 90°)
	P2	40K 4000K	R3 Type 3 Wide	HVOLT (347V-480V) [3]	RPA Round pole mounting (3.2" min. dia. RND pole for 2, 3, 4 at 90°, 3.0" min. dia. RND pole for 1 at 90°, 2 at 180°, 3 at 120°)
	P3	50K 5000K	R3S Type 3 Short	XVOLT (277V-480V) [4]	MA Mast arm adaptor (fits 2-3/8" OD horizontal tenon)
	P4		R4 Type 4 Wide	(use specific voltage for options as noted)	IS Adjustable slipfitter (fits 2-3/8" OD tenon) [6]
			R4S Type 4 Short	120 [3] 277 [5]	WBA Wall bracket [1]
			R5 Type 5 Wide [1]	208 [3] 347 [5]	WBASC Wall bracket with surface conduit box
			R5S Type 5 Short [1]	240 [3] 480 [5]	AASP Adjustable tilt arm square pole mounting [6]
			AFR Automotive Front Row		AARP Adjustable tilt arm round pole mounting [6]
			AFRR90 Automotive Front Row Right Rotated		AAWB Adjustable tilt arm with wall bracket [6]
			AFRL90 Automotive Front Row Left Rotated		AAWSC Adjustable tilt arm wall bracket and surface conduit box [6]

Options

Shipped Installed

HS	House-side shield [7]
PE	Photocontrol, button style [8,9]
PER7	Seven-wire twist-lock receptacle only (no controls) [9,10,11]
SF	Single fuse (120, 277, 347) [5]
DF	Double fuse (208, 240, 480) [5]
SPD20KV	20KV Surge pack (10KV standard)
FAO	Field adjustable output [9]
DMG	0-10V dimming extend out back of housing for external control (control ordered separate) [9]

Shipped Installed

***Standalone and Networked Sensors/Controls (factory default settings, see table page 9)**

NLTAIR2 PIRHN	nLight AIR generation 2, with Networked, Bi-Level motion/ambient sensor [9, 12, 13, 14]
BAA	Buy America(n) Act Compliant
CCE	Coastal Construction [15]

*Note: NLTAIR2 PIRHN with nLight Air can be used as a standalone or networked solution. Sensor coverage pattern is affected when luminaire is tilted.

Shipped Separately (requires some field assembly)

EGS	External glare shield [7]
EGFV	External glare full visor (360° around light aperture) [7]
BS	Bird spikes [16]

Finish

DDBXD	Dark Bronze
DBLXD	Black
DNAXD	Natural Aluminum
DWHXD	White
DDBTXD	Textured Dark Bronze
DBLBXD	Textured Black
DNATXD	Textured Natural Aluminum
DWHGXD	Textured White

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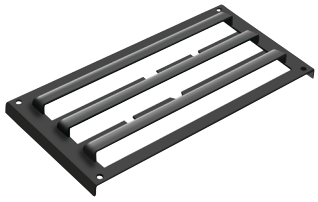
Ordering Information

Accessories
Ordered and shipped separately.

RSX1HS	RSX1 House side shield (includes 1 shield)
RSX1HSAFRR U	RSX1 House side shield for AFR rotated optics (includes 1 shield)
RSX1EGS (FINISH) U	External glares hield (specify finish)
RSX1EGFV (FINISH) U	External glare full visor (specify finish)
RSXRPA (FINISH) U	RSX Universal round pole adaptor plate (specify finish)
RSXWBA (FINISH) U	RSX WBA wall bracket (specify finish) [1]
RSXSCB (FINISH) U	RSX Surface conduit box (specify finish, for use with WBA, WBA not included)
DLL127F 1.5 JU	Photocell -SSL twist-lock (120-277V) [17]
DLL347F 1.5 CUL JU	Photocell -SSL twist-lock (347V) [17]
DLL480F 1.5 CUL JU	Photocell -SSL twist-lock (480V) [17]
DSHORT SBK U	Shorting cap [17]

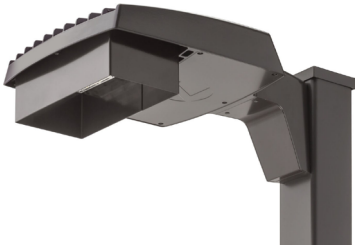
NOTES
1. Any Type 5 distribution, is not available with WBA.
2. MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
3. HVOLT driver operates on any line voltage from 347-480V (50/60 Hz).
4. XVOLT driver not available with P1 or P2. XVOLT driver operates on any line voltage from 277V-480V (50/60 Hz). XVOLT not available with fusing (SF or DF) and not available with PE.
5. Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
6. Maximum tilt is 90° above horizontal.
7. It may be ordered as an accessory.
8. Requires MVOLT or 347V.
9. Two or more of the following options cannot be combined including PE, DMG, PER7, FAO and NLTAIR2 PIRHN. (Exception: PE and FAO can be combined; also PE and DMG can be combined.)
10. Compatible with standard twist-lock photocells for dusk to dawn operation or advanced control nodes that provide 0-10V dimming signals. Wire 4/Wire 5 wired to dimming leads on driver. Wire6/Wire7 capped inside luminaire. Twistlock photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included.
11. For units with option PER7, the mounting must be restricted to +/- 45° from horizontal aim per ANSI C136.10-2010.
12. Must be ordered with PIRHN.
13. Requires MVOLT or HVOLT.
14. Must be ordered with NLTAIR2. For additional information on PIRHN visit here.
15. CCE option not available with WBA, WBASC, AASP, AARP, AAWB, AAWBSC, EGS, EGFV and BS.
16. Must be ordered with fixture for factory pre-drilling.
17. Requires luminaire to be specified with PER7 option. Ordered and shipped as a separate line item from Acuity Brands Controls.

External Shields



House Side Shield

External Glare Shield

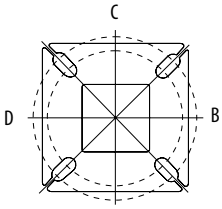


External 360 Full Visor

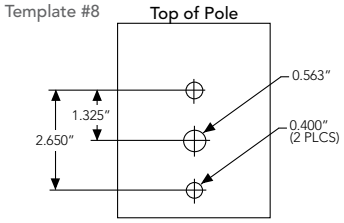
Pole/Mounting Informatiion

Accessories including bullhorns, cross arms and other adpaters are available under the accessories tab at Lithonia's Outdoor Poles and Arms product page. Click here to visit Accessories.

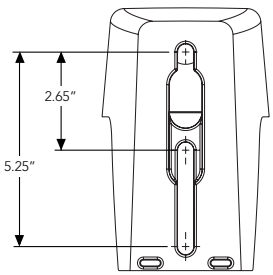
HANDHOLE ORIENTATION



RSX POLE DRILLING



RSX STANDARD ARM & ADJUSTABLE ARM



Round Tenon Mount - Pole Top Slipfitters

Tenon O.D.	RSX Mounting	Single	2 at 180°	2 at 90°	3 at 120°	3 at 90°	4 at 90°
2 - 3/8"	RPA, AARP	AS3-5 190	AS3-5 280	AS3-5 290	AS3-5 320	AS3-5 390	AS3-5 490
2 - 7/8"	RPA, AARP	AST25-190	AST25-280	AST25-290	AST25-320	AST25-390	AST25-490
4"	RPA, AARP	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490

Drill/Side Location by Configuration Type

Drilling Template	Mounting Option	Single	2 @ 180	2 @ 90	3 @ 120	3 @ 90	4 @ 90
	Head Location	Side B	Side B & D	Side B & C	Round Pole Only	Side B, C & D	Side A, B, C & D
#8	**Drill Nomenclature**	DM19AS	DM28AS	DM29AS	DM32AS	DM39AS	DM49AS

RSX1 - Luminaire EPA

*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

Fixture Quantity & Mounting Configuration		Single	2 @ 90	2 @ 180	3 @ 90	3 @ 120	4 @ 90	2 Side by Side	3 Side by Side	4 Side by Side
Mounting Type	**Tilt**									
SPA - Square Pole Adaptor	0°	0.57	1.03	1.05	1.52	1.36	2.03	1.31	1.7	2.26
RPA - Round Pole Adaptor		0.62	1.08	1.15	1.62	1.46	2.13	1.36	1.8	2.36
MA - Mast Arm Adaptor		0.49	0.95	0.89	1.36	1.2	1.87	1.23	1.54	2.1
IS - Integral Slipfitter AASP/AARP - Adjustable Arm Square/Round Pole	0°	0.57	1.03	1.05	1.52	1.36	2.03	1.31	1.7	2.26
	10°	0.68	1.34	1.33	2	1.74	2.64	1.35	2.03	2.71
	20°	0.87	1.71	1.73	2.56	2.26	3.42	1.75	2.62	3.49
	30°	1.24	2.19	2.3	3.21	2.87	4.36	2.49	3.73	4.97
	40°	1.81	2.68	2.98	3.85	3.68	5.30	3.62	5.43	7.24
	45°	2.11	2.92	3.44	4.2	4.08	5.77	4.22	6.33	8.44
	50°	2.31	3.17	3.72	4.52	4.44	6.26	4.62	6.94	9.25
	60°	2.71	3.66	4.38	5.21	5.15	7.24	5.43	8.14	10.86
	70°	2.78	3.98	4.54	5.67	5.47	7.91	5.52	8.27	11.03
	80°	2.76	4.18	4.62	5.97	5.76	8.31	5.51	8.27	11.03
	90°	2.73	4.25	4.64	6.11	5.91	8.47	5.45	8.18	10.97

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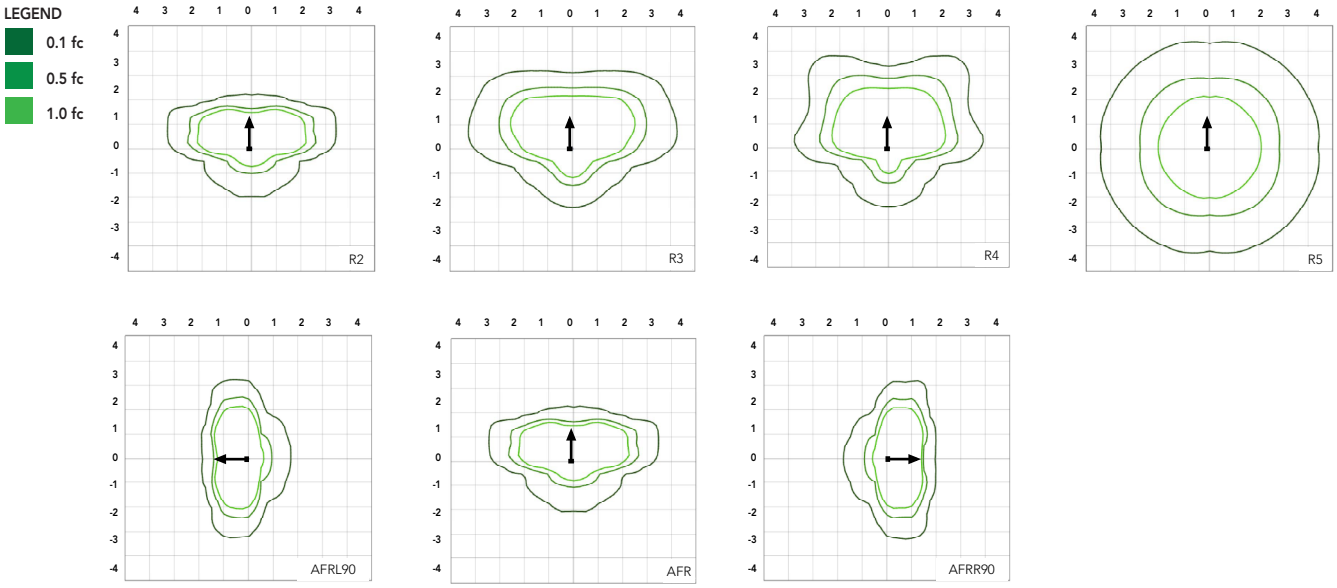
Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's RSX Area homepage.

Isofootcandle plots for the RSX1 LED P4 40K. Distances are in units of mounting height (20').



Performance Data

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-50°C (32-122°F).

Ambient	Ambient	Lumen Multiplier
0°C	32°F	1.05
5°C	41°F	1.04
10°C	50°F	1.03
15°C	59°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97
45°C	113°F	0.96
50°C	122°F	0.95

Electrical Load

		Current (A)					
Performance Package	System Watts (W)	120V	208V	240V	277V	347V	480V
P1	51W	0.42	0.25	0.21	0.19	0.14	0.11
P2	72W	0.60	0.35	0.30	0.26	0.21	0.15
P3	109W	0.91	0.52	0.45	0.39	0.31	0.23
P4	133W	1.11	0.64	0.55	0.48	0.38	0.27

Projected LED Lumen Maintenance

Operating Hours	50,000	75,000	100,000
Lumen Maintenance Factor	>0.97	>0.95	>0.92

Values calculated according to IESNA TM-21-11 methodology and valid up to 40°C.

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Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Performance Package	System Watts	Distribution. Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
			Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P1	51W	R2	6,482	1	0	1	126	7,121	1	0	1	139	7,121	1	0	1	139
		R3	6,459	1	0	2	127	7,096	1	0	2	139	7,096	1	0	2	139
		R3S	6,631	1	0	1	129	7,286	1	0	2	142	7,286	1	0	2	142
		R4	6,543	1	0	2	128	7,189	1	0	2	141	7,189	1	0	2	141
		R4S	6,313	1	0	1	124	6,936	1	0	1	136	6,936	1	0	1	136
		R5	6,631	3	0	2	130	7,286	3	0	2	143	7,286	3	0	2	143
		R5S	6,807	3	0	1	133	7,479	3	0	1	147	7,479	3	0	1	147
		AFR	6,473	1	0	1	127	7,112	1	0	1	139	7,112	1	0	1	139
		AFRR90	6,535	2	0	2	127	7,179	2	0	2	140	7,179	2	0	2	140
		AFRL90	6,562	2	0	1	128	7,210	2	0	2	140	7,210	2	0	2	140
P2	72W	R2	8,991	2	0	1	123	9,878	2	0	1	135	9,878	2	0	1	135
		R3	8,959	2	0	2	124	9,843	2	0	2	137	9,843	2	0	2	137
		R3S	9,198	2	0	2	126	10,106	2	0	2	139	10,106	2	0	2	139
		R4	9,077	2	0	2	126	9,972	2	0	2	139	9,972	2	0	2	139
		R4S	8,757	1	0	2	122	9,622	2	0	2	134	9,622	2	0	2	134
		R5	9,198	4	0	2	128	10,106	4	0	2	140	10,106	4	0	2	140
		R5S	9,443	3	0	1	131	10,374	3	0	1	144	10,374	3	0	1	144
		AFR	8,979	2	0	1	125	9,865	2	0	1	137	9,865	2	0	1	137
		AFRR90	9,064	3	0	2	124	9,959	3	0	2	137	9,959	3	0	2	137
		AFRL90	9,102	3	0	2	125	10,001	3	0	2	137	10,001	3	0	2	137
P3	109W	R2	12,808	2	0	1	117	14,072	2	0	2	129	14,072	2	0	2	129
		R3	12,763	2	0	2	117	14,023	2	0	2	129	14,023	2	0	2	129
		R3S	13,104	2	0	2	120	14,397	2	0	2	132	14,397	2	0	2	132
		R4	12,930	2	0	2	119	14,206	2	0	2	130	14,206	2	0	2	130
		R4S	12,475	2	0	2	114	13,707	2	0	2	126	13,707	2	0	2	126
		R5	13,104	4	0	2	120	14,397	4	0	2	132	14,397	4	0	2	132
		R5S	13,452	3	0	2	123	14,779	3	0	2	136	14,779	3	0	2	136
		AFR	12,791	2	0	1	117	14,053	2	0	2	129	14,053	2	0	2	129
		AFRR90	12,913	3	0	3	118	14,187	3	0	3	130	14,187	3	0	3	130
		AFRL90	12,967	3	0	2	118	14,247	3	0	3	130	14,247	3	0	3	130
P4	133W	R2	14,943	2	0	2	112	16,417	2	0	2	123	16,417	2	0	2	123
		R3	14,890	2	0	3	112	16,360	2	0	3	123	16,360	2	0	3	123
		R3S	15,287	2	0	2	115	16,796	2	0	2	126	16,796	2	0	2	126
		R4	15,085	2	0	3	113	16,574	2	0	3	125	16,574	2	0	3	125
		R4S	14,554	2	0	2	109	15,991	2	0	2	120	15,991	2	0	2	120
		R5	15,287	4	0	2	115	16,796	4	0	2	126	16,796	4	0	2	126
		R5S	15,693	4	0	2	118	17,242	4	0	2	130	17,242	4	0	2	130
		AFR	14,923	2	0	2	112	16,395	2	0	2	123	16,395	2	0	2	123
		AFRR90	15,065	3	0	3	113	16,551	3	0	3	124	16,551	3	0	3	124
		AFRL90	15,128	3	0	3	114	16,621	3	0	3	125	16,621	3	0	3	125

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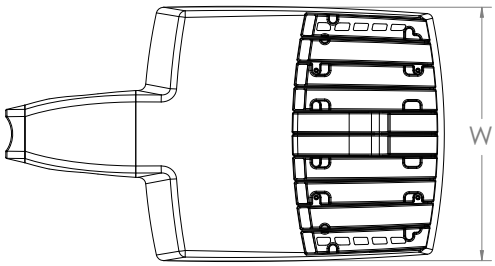
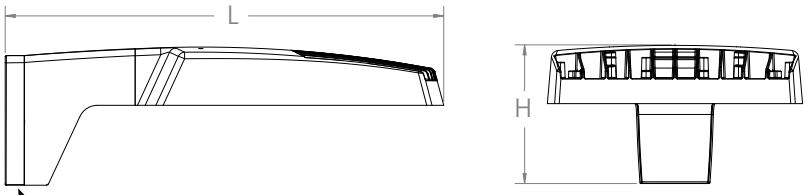
Luminaire Weight by Mounting Type

Mounting Configuration	Total Luminaire Weight
SPA	22 lbs
RPA	24 lbs
MA	22 lbs
WBA	25 lbs
WBASC	28 lbs
IS	25 lbs
AASP	25 lbs
AARP	27 lbs
AAWB	28 lbs
AAWSC	31 lbs

RSX1 with Round Pole Adapter (RPA)

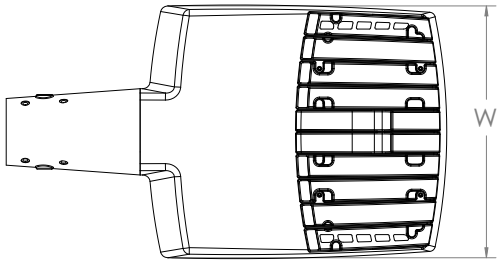


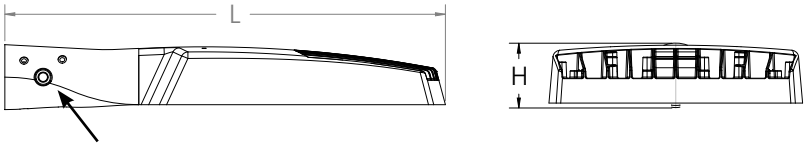


Note: RPA — Round Pole mount can also be used to mount on square poles by omitting the round pole adapter plate shown here.

Length: 22.8" (57.9 cm)
Width: 13.3" (33.8 cm)
Height: 3.0" (7.6 cm) Main Body
7.2" (18.4 cm) Arm

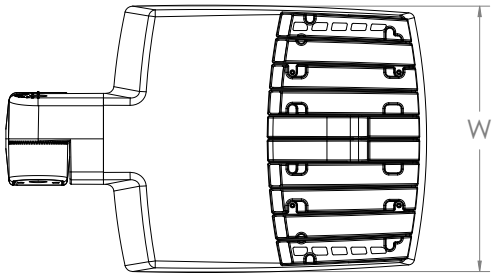
RSX1 with Mast Arm Adapter (MA)

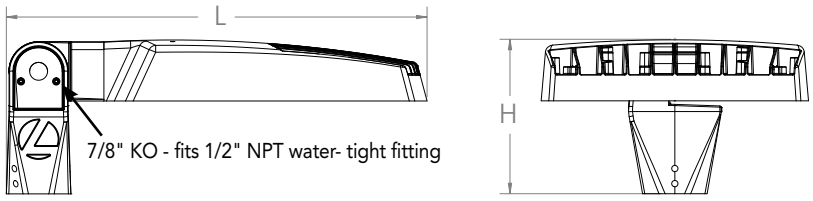




Length: 23.2" (59.1 cm)
Width: 13.3" (33.8 cm)
Height: 3.0" (7.6 cm) Main Body
3.5" (8.9 cm) Arm

RSX1 with Adjustable Slipfitter (IS)





Length: 20.7" (52.7 cm)
Width: 13.3" (33.8 cm)
Height: 3.0" (7.6 cm) Main Body
7.6" (19.3 cm) Arm

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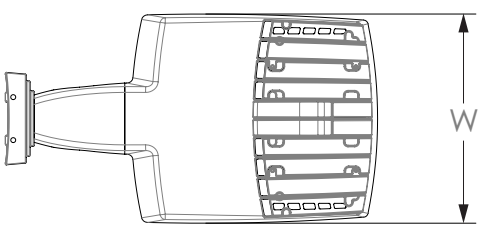
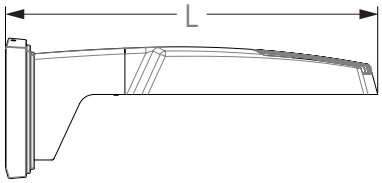
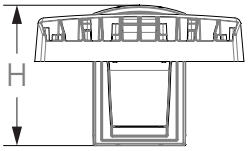
Dimensions

RSX1 with Wall Bracket (WBA)

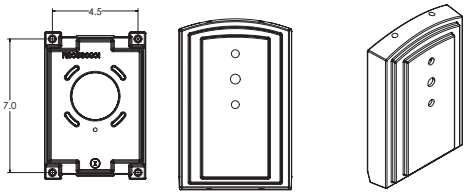




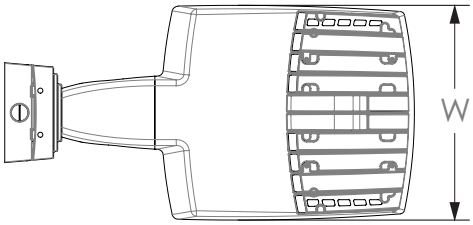


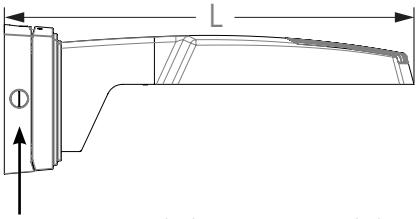
Length: 23.6" (59.9 cm)
Width: 13.3" (33.8 cm)
Height: 3.0" (7.6 cm) Main Body
8.9" (22.6 cm) Arm

Wall Bracket (WBA) Mounting Detail

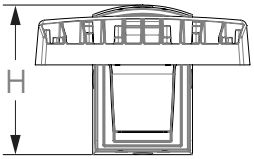


RSX1 with Wall Bracket with Surface Conduit Box (WBASC)



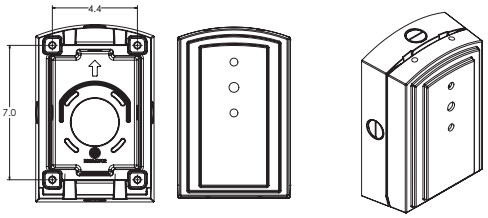


3/4" NPT taps with plugs - Qty (4) provided



Length: 25.3" (64.3 cm)
Width: 13.3" (33.8 cm)
Height: 3.0" (7.6 cm) Main Body
9.2" (23.4 cm) Arm

Surface Conduit Box (SCB) Mounting Detail



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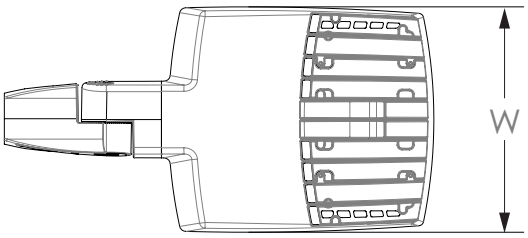
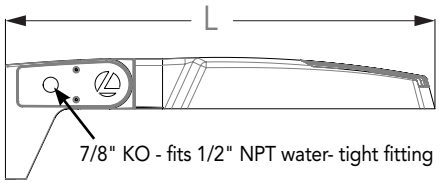
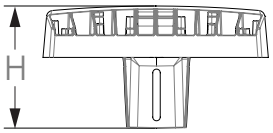
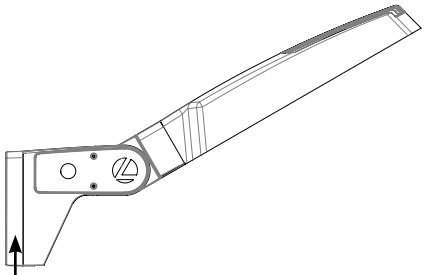
Dimensions

RSX1 with Adjustable Tilt Arm - Square or Round Pole (AASP or AARP)









Length: 25.3" (65.3 cm) **AASP**
26.3" (66.8 cm) **AARP**
Width: 13.3" (33.8 cm)
Height: 3.0" (7.6 cm) Main Body
7.2" (18.2 cm) Arm

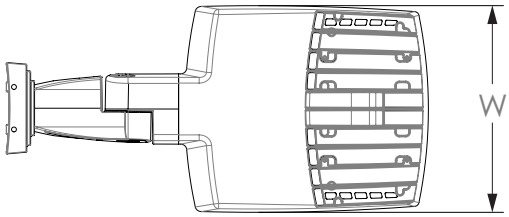
NOTE:
RPA - Round Pole mount can also be used to mount on square poles by omitting the round pole adapter plate shown here.

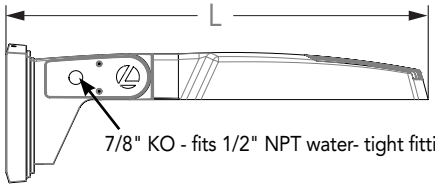
Notes

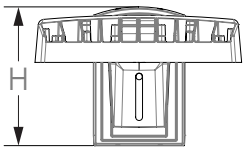
AASP: Requires 3.0" min. square pole for 1 at 90°. Requires 3.5" min. square pole for mounting 2, 3, 4 at 90°.

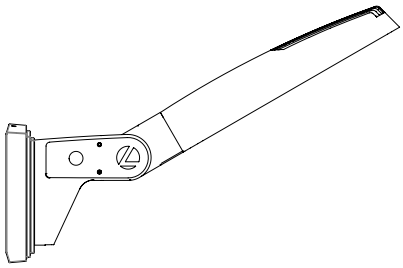
AARP: Requires 3.2" min. dia. round pole for 2, 3, 4 at 90°. Requires 3.0" min. dia. round pole for mounting 1 at 90°, 2 at 180°, 3 at 120°.

RSX1 with Adjustable Tilt Arm with Wall Bracket (AAWB)



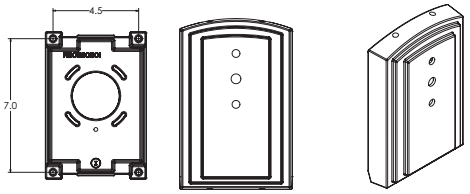






Length: 27.1" (68.8 cm)
Width: 13.3" (33.8 cm)
Height: 3.0" (7.6 cm) Main Body
8.9" (22.6 cm) Arm

Wall Bracket (WBA) Mounting Detail



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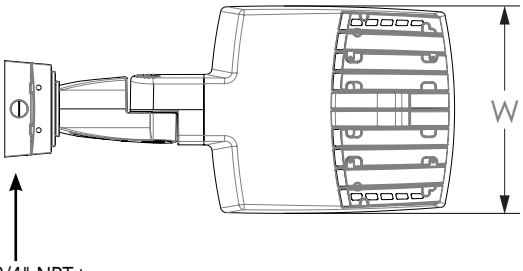
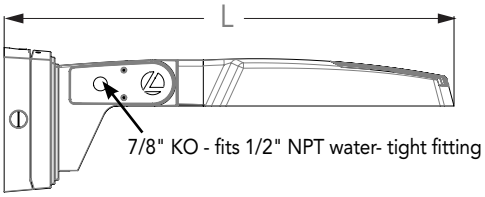
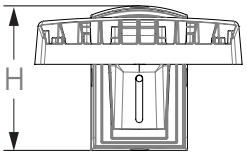
Dimensions

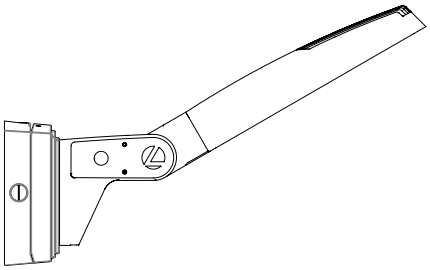
RSX1 with Adjustable Tilt Arm with Wall Bracket and Surface Conduit Box (AAWSC)



3/4" NPT taps
with plugs - Qty (4)
provided

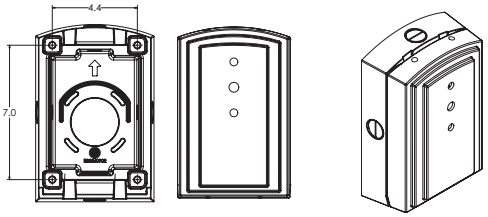




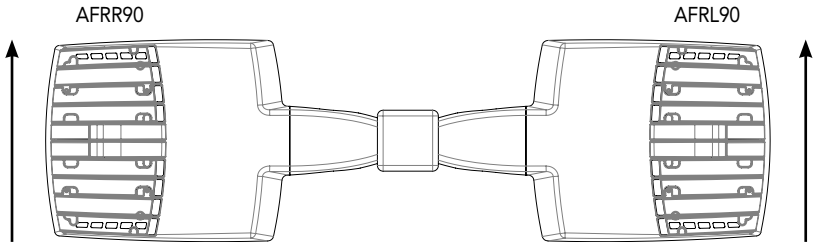


Length: 28.8" (73.2 cm)
Width: 13.3" (33.8 cm)
Height: 3.0" (7.6 cm) Main Body
9.2" (23.4 cm) Arm

Surface Conduit Box (SCB) Mounting Detail



Automotive Front Row - Rotated Optics (AFRL90/R90)



(Example: 2@180 - arrows indicate direction of light exiting the luminaire)

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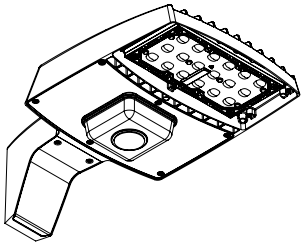
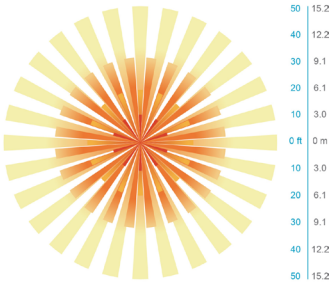
nLight Control - Sensor Coverage and Settings

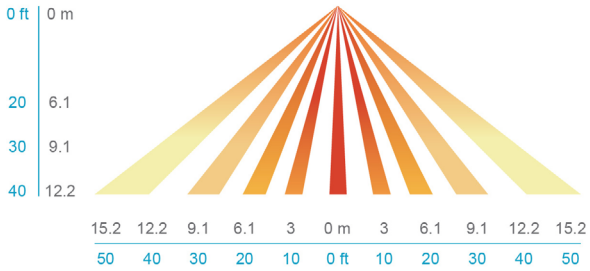
nLight Sensor Coverage Pattern

NLTAIR2 PIRHN





Top



Side

Motion Sensor Default Settings - Option PIRHN						
Option	Dimmed State (unoccupied)	High Level (when occupied)	Photocell Operation	Dwell Time (occupancy time delay)	Ramp-up Time (from unoccupied to occupied)	Ramp-down Time (from occupied to unoccupied)
NLTAIR2 PIRHN	Approx. 30% Output	100% Output	Enabled @ 1.5FC	7.5 minutes	3 seconds	5 minutes

*Note: NLTAIR2 PIRHN default settings including photocell set-point, high/low dim rates, and occupancy sensor time delay are all configurable using the Clairity Pro App.
Sensor coverage pattern shown with luminaire at 0°. Sensor coverage pattern is affected when luminaire is titled.

FEATURES & SPECIFICATIONS

INTENDED USE
The RSX LED area family is designed to provide a long-lasting, energy-efficient solution for the one-for-one replacement of existing metal halide or high pressure sodium lighting. The RSX1 delivers 7,000 to 17,000 lumens and is ideal for replacing 70W to 400W HID pole-mounted luminaires in parking lots and other area lighting applications.

CONSTRUCTION
The RSX LED area luminaire features a rugged die-cast aluminum main body that uses heat-dissipating fins and flow-through venting to provide optimal thermal management that both enhances LED performance and extends component life. Integral "no drill" mounting arm allows the luminaire to be mounted on existing pole drillings, greatly reducing installation labor. The light engines and housing are sealed against moisture and environmental contaminants to IP66. The low-profile design results in a low EPA, allowing pole optimization. All mountings are rated for minimum 1.5 G vibration load per ANSI C136.31. 3G Mountings: Include SPA, RPA, MA, IS, AASP, and AARP rated for 3G vibration. 1.5G Mountings: Include WBA, WBASC, AAWB and AAWSC rated for 1.5G vibration.

FINISH
Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures superior adhesion as well as a minimum finish thickness of 3 mils. The result is a high-quality finish that is warrantied not to crack or peel.

COASTAL CONSTRUCTION (CCE)
ptional corrosion resistant construction is engineered with added corrosion rotection in materials and/or pre-treatment of base material under superŸurable paint. Provides additional corrosion protection for applications nearÜoastal areas. Finish is salt spray tested to over 5,000 hours per ASTM B117 with cribe rating of 10. Additional lead-times apply.

OPTICS
Precision acrylic refractive lenses are engineered for superior application efficiency, distributing the light to where it is needed most. Available in short and wide pattern distributions including Type 2, Type 3, Type 3S, Type 4, Type 4S, Type 5, Type 5S, AFR (Automotive Front Row), and AFR rotated AFRR90 and ARFL90.

ELECTRICAL
Light engine(s) configurations consist of high-efficacy LEDs mounted on metal-core circuit boards and aluminum heat sinks to maximize heat dissipation. Light engines are IP66 rated. LED lumen maintenance is >L92/100,000 hours. CCT's of 3000K, 4000K and 5000K (minimum 70 CRI) are available. Fixtures ship standard with 0-10v dimming driver. Class 1 electronic drivers ensure system power factor >90% and THD <20%. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

STANDARD CONTROLS
The RSX LED area luminaire has a wide assortment of control options. Dusk to dawn controls include MVOLT and 347V button-type photocells and NEMA twist-lock photocell receptacles.

nLIGHT AIR CONTROLS
The RSX LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing with photocontrol functionality and is suitable for mounting heights up to 40 feet. No commissioning is required when using factory default settings that provide basic stand-alone motion occupancy dimming that is switched on and off with a built-in photocell. See chart above for motion sensor default out-of-box settings. For more advanced wireless functionality, such as group dimming, nLight AIR can be commissioned using a smartphone and the easy-to-use CLAIRITY app. nLight AIR equipped luminaries can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclypse. Additional information about nLight Air can be found here.

INSTALLATION
Integral "no-drill" mounting arm allows for fast, easy mounting using existing pole drillings. Select the "SPA" option for square poles and the "RPA" option to mount to round poles. Note, the RPA mount can also be used for mounting to square poles by omitting the RPA adapter plate. Select the "MA" option to attach the luminaire to a 2 3/8" horizontal mast arm or the "IS" option for an adjustable slipfitter that mounts on a 2 3/8" OD tenon. The adjustable slipfitter has an integral junction box and offers easy installation. Can be tilted up to 90° above horizontal. Additional mountings are available including a wall bracket, adjustable tilt arm for direct-to-pole and wall and a surface conduit box for wall mount applications.

LISTINGS
CSA Certified to meet U.S. and Canadian standards. Suitable for wet locations. Rated for -40°C minimum ambient. DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.
International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only. U.S. Patent No. D882, 146S

BUY AMERICAN ACT
Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT regulations. Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY
5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at:
www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

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Inverted available with WLU option only.

WSQ LED

Architectural Wall Sconce

Catalog Number

Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

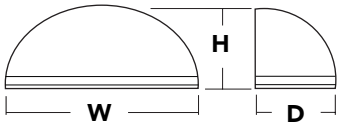
Luminaire

Height: 9-3/8" *(23.8 cm)*

Width: 18" *(45.7 cm)*

Depth: 9" *(22.8 cm)*

Weight: 17 lbs *(7.7 kg)*

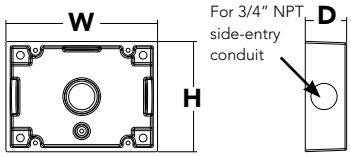


Optional Back Box (BBW)

Height: 4" *(10.2 cm)*

Width: 5-1/2" *(14.0 cm)*

Depth: 1-1/2" *(3.8 cm)*



Introduction

Classic Architectural Wall Sconce with the LED technology. Long-life, maintenance-free product with typical energy savings of 80% compared to metal halide versions. The integral battery backup option provides emergency egress lighting, without the use of a back-box or remote gear, so installations maintain their aesthetic integrity. The WSQ LED is ideal for replacing existing 50 – 250W metal halide wall-mounted products. The expected service life is 20+ years of nighttime use.

Ordering Information

EXAMPLE: WSQ LED P2 40K SR3 MVOLT DDBTXD

WSQ LED

Series	Performance Package	Color Temperature	Distribution	Voltage	Mounting	Options	Finish *(required)*
WSQ LED	P1 P2 P3 P4	30K 40K 50K	SR2 Type II SR3 Type III SR4 Type IV	MVOLT [1] 120 208 240 277 347 480	**Shipped included** (blank) Surface mount **Shipped separately** [2] BBW Surface-mounted back box	**Shipped installed** PE Photoelectric cell, button type [2,3] SF Single fuse (120, 277, 347V) [4] DF Double fuse (208, 240, 480V) [4] DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately) E20WC Emergency battery backup, Certified in CA Title 20 MAEDBS (18W, -20°C) [5] E10WH Emergency battery backup, Certified in CA Title 20 MAEDBS (10W, 5°C) [5] WLU Wet location door for up orientation [6] PIR Motion/ambient light sensor [7] DS Dual switching [8] SPD Separate Surge Protection [9] **Shipped separately** VG Vandal guard WG Wire guard	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DSSXD Sandstone DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white DSSTXD Textured sandstone

Emergency Battery Operation

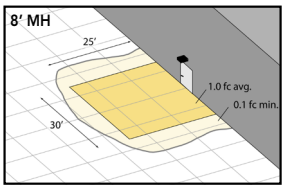
The emergency battery backup (E20WC & E10WH options) is integral to the luminaire - no external housing required! This design provides reliable emergency operation while maintaining the aesthetics of the product.

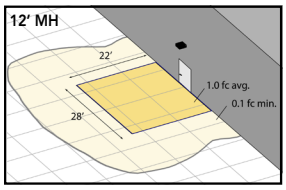
All E20WC & E10WH configurations include an independent secondary driver with an integral relay to immediately detect AC power loss.

The emergency battery will power the luminaire for a minimum duration of 90 minutes (maximum duration of three hours) from the time supply power is lost, per International Building Code Section 1006 and NFPA 101 Life Safety Code Section 7.9, provided luminaires are mounted at an appropriate height and illuminate an open space with no major obstructions.

The examples below show illuminance of 1 fc average and 0.1 fc minimum of the P1 power package Type IV product in emergency mode.

WSR P1 LED 40K SR4 MVOLT E20WC
10' x 10' Gridlines
8' and 12' Mounting Height





NOTES
1. MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
2. Not available with 480V option.
3. PE option is voltage specific.
4. Single fuse (SF) requires 120V, 277V or 347V options. Double fuse (DF) requires 208V, 240V or 480V options,
5. Not available with 347V or 480V. Not available with WLU.
6. WLU not available with PIR, E20WC or E10WH.
7. When ordering PIR, "PE" will be automatically added to the order line for "dim to off" capability. See PIR Table for default settings.
8. Only available with P3 & P4 packages. Provides 50/50 luminaire operation via two independent drivers and light engines on two separate circuits. Not available with E20WC, E10WH, WLU, SF, or DF. When ordered with photocell (PE) or motion sensor (PIR), only the primary power source leads will be controlled.
9. See electrical section on page 2 for more details.

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Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts.

Performance Package	System Watts (MVOLT[1])	Dist. Type	30K (3000K, 70CRI)		40K (4000K, 70CRI)		50K (5000K, 70CRI)	
			Lumens	LPW	Lumens	LPW	Lumens	LPW
P1	20W	SR2	2,111	108	2,251	115	2,305	118
		SR3	2,104	108	2,244	115	2,298	117
		SR4	2,053	105	2,189	112	2,242	115
P2	29W	SR2	2,943	101	3,139	108	3,214	110
		SR3	2,934	101	3,129	107	3,204	110
		SR4	2,863	98	3,053	105	3,126	107
P3	40W	SR2	4,500	114	4,799	122	4,913	125
		SR3	4,486	114	4,784	122	4,898	125
		SR4	4,377	111	4,667	119	4,779	122
P4	61W	SR2	6,159	102	6,567	108	6,724	111
		SR3	6,139	101	6,547	108	6,703	110
		SR4	5,991	99	6,388	105	6,541	108

Motion/Ambient Sensor Default Settings						
	Dimmed State	High Level (when triggered)	Photocell Operation	Ramp-up Time	Dwell Time	Ramp-down Time
*PIR	3V (37%) Output	10V (100%) Output	Enabled @ 5FC	3 sec	5 min	5 min
*PIR USES SFOD 7						

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Normalized Lumen Multiplier
0°C	32°F	1.05
10°C	50°F	1.03
20°C	68°F	1.01
25°C	**77°F**	**1.00**
30°C	86°F	0.99
40°C	104°F	0.97

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the **MRW LED P4** platform in a **25°C ambient**, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25000	50000	100000	L90
Lumen Maintenance Factor	1	0.96	0.95	0.92	>60000

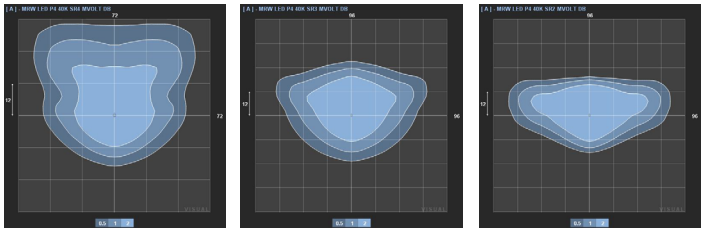
Electrical Load

Power Package	System Watts	Current (A)					
		120V	208V	240V	277V	347V	480V
P1	20W	0.17	0.10	0.09	0.08	0.06	0.05
P2	29W	0.26	0.15	0.13	0.12	0.09	0.07
P3	40W	0.37	0.21	0.18	0.16	0.13	0.09
P4	61W	0.59	0.33	0.18	0.25	0.19	0.14

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's WSQ LED homepage.

Isofootcandle plots for the WSQ LED P4 40K SR2, SR3, and SR4. Distances are in units of mounting height (12').



FEATURES & SPECIFICATIONS

INTENDED USE

The classic architectural shape of the WSQ LED was designed for applications such as hospitals, schools, malls, restaurants, and commercial buildings. The long life LEDs and driver make this luminaire nearly maintenance-free.

CONSTRUCTION

The die-cast aluminum housing integrates secondary heat sinks to optimize thermal transfer from the internal light engine heat sinks and promote long life. The driver is mounted in direct contact with the casting for a low operating temperature and long life. The die-cast door frame is fully gasketed with a one-piece solid silicone gasket to keep out moisture and dust, providing an IP65 rating for the luminaire.

FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Standard Super Durable colors include dark bronze, black, natural aluminum, sandstone and white. Available in textured and non-textured finishes.

OPTICS

Precision-molded acrylic lenses are engineered for superior distribution, uniformity, and spacing in wall-mount applications. Light engines are 4000K (70 CRI). The WSQ LED has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL

Light engine(s) consist of 8 high-efficacy LEDs mounted to a metal core circuit board and integral aluminum heat sinks to maximize heat dissipation and promote long life (100,000 hrs at 25°C, L77). Class 2 electronic driver has a power factor >90%, THD <20%. and a minimum 6 KV surge protection.When ordering the SPD option, a separate surge protection device is installed within the luminaire which meets a minimum Category C low operation (per ANSI/IEEE C62.41.2).

INSTALLATION

A universal mounting plate with integral mounting support arms allows the fixture to hinge down for easy access while making wiring connections.

LISTINGS

CSA certified to U.S. and Canadian standards. Light engines are IP66 rated; luminaire is IP65 rated and suitable for wet locations when mounted with the lenses down. WLU option offers wet location listing in "up" orientation. Rated for -30°C minimum ambient. DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

BUY AMERICAN ACT

This product is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT regulations.
Please refer to www.acuitybrands.com/resources/buy-american for additional information.

WARRANTY

5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at:
www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx.

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

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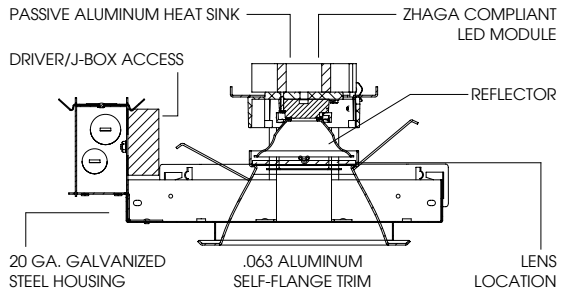
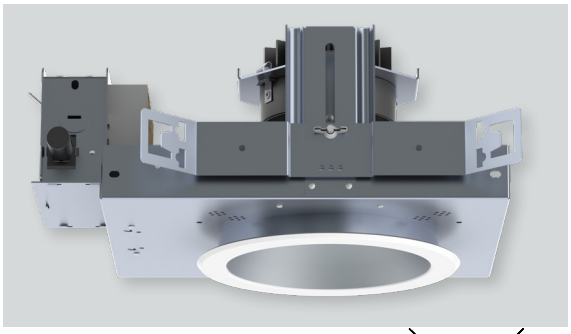
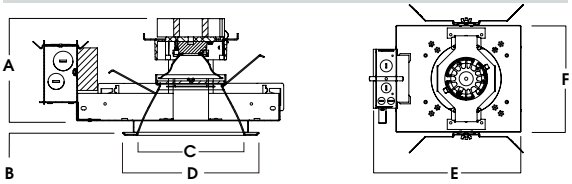
8" ROUND DOWNLIGHT
XT SERIES / 5000 LUMENS MAX

recessed fixtures







A	B	C	D	E	F
10L-20L: 6.2 30L-50L: 7.2	.625 15.2 mm	8.0 203.2 mm	9.5 241.3 mm	14.0 355.6 mm	12.0 304.8 mm

RDFO8XT - TRIM FLANGE / NON-IC RATED

APPLICATION

Versatile 8" Round aperture recessed LED downlight with a wide range of lumens and optical controls.

FEATURES

Two-stage optical system for smooth light distribution and focus control. Quick change LED module with interchangeable optics for job site adjustment and fixture maintenance. Shallow plenum design. Tool-less driver and j-box access. Posi-lock trim retention torsion springs.

TRIM FINISH

A variety of architectural powdercoat and anodized finishes are available. Matte White flange is standard.

ELECTRONICS

LED system features Xicato LED module with proprietary phosphor technology that provides consistent, stable color with CCT control of +/- 100K over life of the light engine. Base CRI is 83 with 2-step MacAdam Ellipse binning. High CRI is 98 with 1x2-step MacAdam Ellipse binning. Variety of electronic 120V/277V and dimming drivers.

CONSTRUCTION

Housing/frame constructed of #20 ga. galvanized steel to resist corrosion. Self-Flanged one piece trim spun from 0.063" thick high purity aluminum and finished to specification.

CODE COMPLIANCE

BAA Compliant. Non-IC rated. ETL certified to meet US and Canadian standards. Suitable for dry or damp locations. Optional Wet location. Manufactured and tested to UL standards No. 1598/8750.

WATTAGE / LUMENS DATA

PART NUMBER	SOURCE LUMENS[1]	SYSTEM WATTS
RDFO8XT10L	1000	11.1
RDFO8XT13L	1300	15.0
RDFO8XT20L	2000	23.7
RDFO8XT30L	3000	34.6
RDFO8XT40L	4000	39.9
RDFO8XT50L	5000	54.0

SERIES	LUMENS[1]	CCT	OPTICS	DRIVER / DIMMING / VOLTAGE[3]	OPTIONS[6]
RDFO8XT	83 CRI **10L** 1000 Lm **13L** 1300 Lm **20L** 2000 Lm **30L** 3000 Lm **40L** 4000 Lm **50L** 5000 Lm 98 CRI **10L** 1000 Lm **13L** 1300 Lm **20L** 2000 Lm **30L** 3000 Lm	**27K** 2700K **30K** 3000K **35K** 3500K **40K** 4000K **27HK** 2700K **30HK** 3000K **35HK** 3500K **40HK** 4000K	**XN**[2] 10° **ND** 27° **MD** 45° **WD** 50° **XW** 55°	**E_** Electronic Driver **DS10_** 10% 0-10V **DO10_** 1% 0-10V **DS2W1** 1%, ELV/MLV, 120V **DLTE1**[4] 1% Lutron® 2-Wire Forward Phase, 120V **DL3E_**[4] 1% Lutron® EcoSystem®, Fade **EL10_** 1%, eldoLED **ED01_** 0.1%, eldoLED **DALI_** DALI Control **DMXS_**[5] DMX Standard Configuration **DMXC_**[5] DMX Non-Standard Custom **1** 120V **2** 277V	**BH27**[7] 27" Solid Bars **H12** 12" - 24" Expandable Bars **H06** 6" - 12" Expandable Bars **CB24** 24" C-Channel Bars **EM** Integral Emergency Battery **FS** Fusing **EB** Black Housing **CR** Corrosion Resistant **PR**[8] Deep Ceiling Extension **GR** Goof Ring **AMB** Anti Microbial Finish

TRIM	FINISH	TRIM OPTIONS[12]
RD8FXT[9]	**SG**[10] Semi-Diffuse **HZ** Haze Full Diffuse **MW** Matte White **MB** Matte Black **PT** Platinum Silver **OB** Oil Rubbed Bronze **CH** Charcoal **AC** Anodic Champagne **AS** Anodic Sapphire **AM** Anodic Malachite **SN** Sun Gold **CO** Copper Metallic **GH** Graphite **AMB** Anti Microbial Finish **CC**[11] Custom Color	**SOX**[13] Micro Prism Solite™ Lens **GLX**[14] Clear Glass Lens **PGX** Prismatic Glass Lens **FGX** Frosted Glass Lens **SOW** Micro Prism Solite™ Lens Wet Location **GLW** Clear Glass Lens Wet Location **PGW** Prismatic Glass Lens Wet Location **FGW** Frosted Glass Lens Wet Location **PF**[15] Polished Flange

EXAMPLE: RDFO8XT13L35KMDE1BH27/RD8FXTSGSOX

NOTES:
1 Nominal Source Lumens at any CCT **2** XN 13L Max at 83 and 98 CRI **3** Contact Factory for Additional Options **4** 50L Not Available with Lutron Drivers **5** Contact Factory **6** See Product Options Page for Details **7** Standard Bar Hangers **8** Contact Factory **9** "F" Indicates Self-Flange Trim, Matte White Standard **10** Standard Finish **11** Contact Factory for Special Finishes **12** Contact factory for Special Lens/Louvers **13** Standard Lens for MD, WD, XW **14** Standard Lens for XN and ND **15** Flange and Reflector Same Finish

SPECTRUM LIGHTING INC.

PROJECT:

TYPE:

5 YEAR WARRANTY

MADE IN THE USA

Dimensions and values shown are nominal. Spectrum Lighting continually works to improve products and reserves the right to make changes which may alter the performance or appearance of products.

LITHONIA LIGHTING®

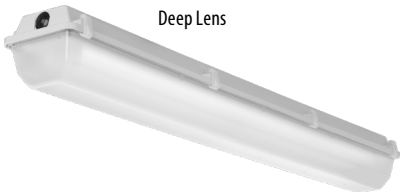
Catalog Number	
Notes	
Type	

Low-Profile Enclosed and Gasketed Industrial

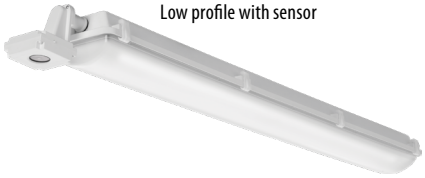
FEM LED

SURFACE/ SUSPENDED/WALL MOUNT

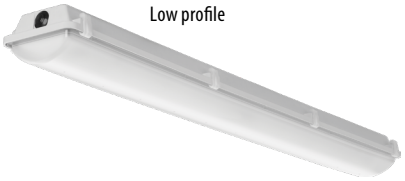
Deep Lens



Low profile with sensor



Low profile



FEATURES & SPECIFICATIONS

INTENDED USE — A general purpose and energy-efficient surface-mounted or suspended LED fixture, suitable for wet, damp and/or cold locations. For vapor-tight demanding environments where moisture or dust is a concern and where relatively low fixture mounting heights and wide fixture spacing are common. Not for use or installation in direct outdoor sunlight. Must be installed under canopy or covered ceiling. For direct sunlight installations, please refer to the FEX product family. Typical applications include industrial facilities, parking garages, retail malls, multi-purpose rooms, garden centers, and food processing. **Certain airborne contaminants can diminish the integrity of acrylic and/or polycarbonate. Click here for Acrylic-Polycarbonate Compatibility table for suitable use.**

Certain airborne contaminants may adversely affect the functioning of LEDs and other electronic components, depending on various factors such as concentrations of the contaminants, ventilation, and temperature at the end-user location. Click here for a list of substances that may not be suitable for interaction with LEDs and other electronic components.

CONSTRUCTION — One-piece 5VA fiberglass housing with integral perimeter channel utilizing continuous poured-in-place NEMA 4X gasket. Approved for through wiring. Captive polymeric latches are standard. Stainless steel latches (#316) available as an option for food processing or more demanding applications.

Power connection is easily accomplished through pre-drilled holes.

OPTICS — Injection molded, acrylic lens (.080" thick) provides high impact-resistance comparable to 100% DR. A UV stabilized polycarbonate diffuser is available (.080" thick) in clear or frosted for additional impact strength where vandal protection is desired.

Expected service life of 60,000 hours at 80% lumen maintenance (L80); predicted life of more than 100,000 hours.

ELECTRICAL — Utilizes high-efficiency LEDs mounted to core circuit boards. High-efficiency drivers operate 120-277 (MVOLT) and 347-480 (HVOLT) offered with 0-10 volt dimming, dims to 10%. Standard Luminaire Surge Protection Level: 6kV/3kA Surge Rated per ANSI C82.77-5-2015.

INSTALLATION — A pair of stainless steel surface mount brackets (SMB) are included (unless another mounting option is chosen) allowing for surface (ceiling) or suspension mount applications using included bail with aircraft cable or chain. Optional pair of dual pendant mount brackets (DPMB) are available for surface (ceiling) or suspension mount applications using either 3/8" threaded rod or included bail with aircraft cable or chain. Optional pair of angle mounting brackets (ANGBKT) for horizontal wall mount applications.

LISTINGS — CSA Certified to UL and C-UL Standards. Suitable for wet location. IP65, IP66, IP67 rated. NSF Splash Zone 2 and Non-Food Zone rated. NEMA 4X rated. Sensors maintain IP65 and IP66 only. See chart on page 5 for Ambient Temperatures.

DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

BUY AMERICAN ACT — Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT regulations.
Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY — 5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

NOTE: Actual performance may differ as a result of end-user environment and application.
All values are design or typical values, measured under laboratory conditions at 25 °C.
Specifications subject to change without notice.

Stock configurations are offered for shorter lead times:

Standard Part Number	Stock Part Number
FEM L48 4000LM LPAFL MD MVOLT GZ10 40K 80CRI	**FEM L48 4L MVOLT**
FEM L48 4000LM LPAFL MD MVOLT GZ10 50K 80CRI	**FEM L48 4L MVOLT 5K**

A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight® control networks marked by a shaded background*

To learn more about A+, visit www.acuitybrands.com/aplus.

*See ordering tree for details

A+ Capable options indicated by this color background.

ORDERING INFORMATION

Lead times will vary depending on options selected. Consult with your sales representative.

Example: FEM L48 4000LM IMAFL WD MVOLT GZ10 40K 80CRI

Series	Length	Nominal Lumens	Diffuser	Distribution	Voltage	Driver	Color temperature	CRI
FEM	L24 24" ‡	2000LM 2,000 lumens 3000LM 3,000 lumens 4000LM 4,000 lumens 6000LM 6,000 lumens	IMAFL Acrylic, lineal ribbed frosted lens IMACD Acrylic, clear deep lens IMAFD Acrylic, deep frosted lens LPAFL Acrylic, low profile frosted lens LPACL Acrylic, low profile clear lens LPPCL Polycarbonate, low profile clear lens LPPFL Polycarbonate, low profile frosted lens	MD Medium WD Wide PGD Parking garage	MVOLT 120-277V HVOLT 347-480V ‡ 120 120V 277 277V 347 347V 480 480V	GZ10 0 - 10V dimming	30K 3000K 35K 3500K 40K 4000K 50K 5000K	80CRI 80 CRI 90CRI 90 CRI
	L48 48" ‡	3000LM 3,000 lumens 4000LM 4,000 lumens 6000LM 6,000 lumens 8000LM 8,000 lumens 10000LM 10,000 lumens 12000LM 12,000 lumens						
	L96 96" ‡	9000LM 9,000 lumens 12000LM 12,000 lumens 15000LM 15,000 lumens 18000LM 18,000 lumens 20000LM 20,000 lumens 24000LM 24,000 lumens						

Options

Emergency:

E10WMCP	EM Self-diagnostics battery pack, MVOLT, 10W, Constant Power Certified in the California Title 20 Modernized Appliance Efficiency Database (MAEDBS) ‡
BE6WCP	Cold Weather EM battery pack, 120/277V, 6W, Constant Power Certified in the California Title 20 Modernized Appliance Efficiency Database (MAEDBS) ‡
BGTD	Generator transfer device

Other Options:

ANGBKT	Angle bracket shipped with fixture ‡
BAA	Buy America(n) Act Compliant
DPMB	Dual pendant mounting bracket ‡
SPD	Surge protection device, additional 10kV/6kA
STSL	Stainless steel latches
TRS	Tamper Resistant Torx® T10 screws
WLF	Wet location fitting (two outboard, top (L24 - 20 inches off-center, L48 - 48 inches off-center, L96 - 95.7 inches off-center) ‡
WLFEND	Wet location fitting (one end) ‡
WLFEND2	Wet location fitting (both ends) ‡
WLFPMP	Wet location pendant monopoint ‡

Cord Sets: ‡

CPSB16YWLBH	Brad Harrsion Mini-Change® cordset with straight blade plug, 16 gauge, 3 conductors, 6ft, yellow ‡
CPSB16YWL12FTBH	Brad Harrsion Mini-Change® cordset with straight blade plug, 16 gauge, 3 conductors, 12ft, yellow ‡
CRSB16YWLBH	Brad Harrison Mini-Change® receptacle ‡
CNP16WWL	Cord only (no plug), 16 gauge, 3 conductors, white, 6ft, wet location ‡
CNP16WWL12FT	Cord only (no plug), 16 gauge, 3 conductors, white, 6ft, wet location ‡
CNP164CWWL	Cord only (no plug), 16 gauge, 4 conductors, white, 6ft, wet location (for use when unswitched circuit is required for battery pack) ‡

Individual Controls: ‡

SBOR10	360° Low mount sensor, (8-15' mounting heights), outdoor PIR, ON/OFF occupancy (LINK) (formerly MSI10NWL)
SBOR10 HL 3V	360° Low mount sensor, (8-15' mounting heights), outdoor PIR, occupancy controlled dimming (bi-level) (LINK) (formerly MSI102L3VWL)
SBOR10 P	360° Low mount sensor, (8-15' mounting heights), outdoor PIR, ON/OFF photocell (LINK) (formerly MSI10NWL DSCNWL)

nLight Wireless: ‡

NLTAIR2 RSBOR10	nLight® Air Generation 2 enabled, 360° low mount sensor, (8-15' heights) (LINK)
NLTAIR2 RIO	nLight® Air Generation 2 enabled, fixture embedded network interface, 0-10V dimming output (LINK)

NOTE: ‡ indicates option chosen has ordering restrictions. Please reference ordering restrictions chart, page 3. Options are sorted alphanumerically.

Accessories: *Order as separate catalog number.*

MHCH 36	3 foot (36 inches) jack chain (pair)
MHHK120	10 foot (120 inches) single leg air craft cable (ships as pair)
MHHK120SS	10 foot (120 inches) single leg air craft cable, stainless steel (ships as pair)
RK1 T10BIT W/PIN U	Hex-base driver bit, Torx TX10, for tamper resistant screws with center reject pin
FEMDPMB	Dual pendant mounting bracket (ships as a pair) ‡
FEMANGBKT	Angle bracket (ships as pair) ‡
FEMSMB	Surface mount bracket (ships as pair) ‡

See Accessories and ordering restrictions on next page.

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‡ Option Value Ordering Restrictions	
Option value	**Restriction**
ANGBKT, FEMANGBKT	For horizontal wall mount applications. If mounted in an upward orientation, fixture will be damp location listed only.
BE6WCP	Utilizes Bodine BSL36 Cold-Pak emergency driver. Not available with L24 length. Order with CNP164CWWL when unswitched hot is required for battery. Not available with 347V, 480V, HVOLT.
CNP16WWL, CNP16WWL12FT	Not available with BE6WCP or E10WMCP.
CNP164CWWL	Available with BE6WCP or E10WMCP only. **Not NEMA4X rated**.
Cord Sets	**Not NEMA4X rated**.
CPSB16YWLBH, CPSB16YWL12FTBH	Not available with BE6WCP or E10WMCP.
CRSB16YWLBH	Not available with BE6WCP or E10WMCP.
E10WMCP	Utilizes Power Sentry, PS1055MCP battery pack. Order with CNP164CWWL when unswitched hot is required for battery. Not available with 347V,480V,HVOLT.
DPMB, FEMDPMB	For surface (ceiling) or suspension mount applications using either 3/8" threaded rod or included bail with aircraft cable or chain.
FEMSMB	Ships standard with fixture (unless another mounting option is chosen). For surface (ceiling) or suspension mount applications using included bail with aircraft cable or chain.
HVOLT	When ordered with L24, available with 6000LM only. When ordered with L48, not available with 3000LM or 4000LM.
Individual Controls	**Not NEMA4X rated. IP65 and IP66 rated.**
L24	Not available with BE6WCP.
L48	Not available with WLFPMP.
L96	Not available with WLFPMP
nLight® Wireless	**Not NEMA4X rated. IP65 and IP66 rated.**
WLF	If cord is ordered, cord will exit from the end of the fixture. **Not NEMA4X rated**.
WLFEND	If cord is ordered, cord will exit from the end of the fixture. **Not NEMA4X rated**. Available with cord or sensor option. Choose only one.
WLFEND2	Not available with sensor or cord options. **Not NEMA4X rated**.
WLFPMP	Available only with L24. **Not NEMA4X rated.**

MOUNTING OPTIONS

DPMB Option or FEMDPMB Accessory

Material: 304 Stainless Steel

pictured less bail wire

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OPERATIONAL DATA (80 CRI*, MD**, MVOLT***)

Length	Package	Input Wattage	CCT	Frosted Lens' Lumens (LPW)				Clear Lens' Lumens (LPW)		
				IMAFL	IMAFD	LPAFL	LPPFL	IMACD	LPACL	LPPCL
L24	2000LM	13.4	30K	1962 (147)	2083 (156)	2076 (155)	1861 (139)	2112 (158)	2105 (158)	1890 (142)
			35K	2002 (150)	2126 (159)	2118 (159)	1899 (142)	2155 (161)	2147 (161)	1929 (144)
			40K	2099 (157)	2228 (167)	2220 (166)	1991 (149)	2259 (169)	2251 (169)	2022 (151)
			50K	2122 (159)	2252 (169)	2244 (168)	2013 (151)	2284 (171)	2276 (170)	2044 (153)
	3000LM	19.9	30K	2869 (144)	3046 (153)	3035 (153)	2721 (137)	3088 (155)	3077 (155)	2764 (139)
			35K	2927 (147)	3108 (156)	3096 (156)	2777 (140)	3151 (158)	3139 (158)	2820 (142)
			40K	3069 (154)	3258 (164)	3246 (163)	2911 (146)	3303 (166)	3291 (166)	2956 (149)
			50K	3102 (156)	3293 (166)	3281 (165)	2942 (148)	3339 (168)	3327 (167)	2988 (150)
	4000LM	26.0	30K	3676 (142)	3903 (150)	3889 (150)	3487 (134)	3957 (152)	3943 (152)	3541 (136)
			35K	3751 (145)	3982 (153)	3968 (153)	3558 (137)	4037 (156)	4023 (155)	3613 (139)
			40K	3932 (152)	4174 (161)	4159 (160)	3730 (144)	4232 (163)	4217 (162)	3788 (146)
			50K	3975 (153)	4219 (163)	4204 (162)	3770 (145)	4278 (165)	4263 (164)	3829 (148)
	6000LM	39.2	30K	5287 (135)	5613 (143)	5593 (143)	5015 (128)	5691 (145)	5671 (145)	5093 (130)
			35K	5395 (138)	5727 (146)	5707 (145)	5117 (130)	5806 (148)	5786 (147)	5196 (132)
			40K	5655 (144)	6004 (153)	5982 (153)	5364 (137)	6087 (155)	6065 (155)	5447 (139)
			50K	5717 (146)	6069 (155)	6047 (154)	5422 (138)	6153 (157)	6131 (156)	5506 (140)
L48	3000LM	18.0	30K	2689 (149)	2855 (158)	2844 (158)	2551 (141)	2894 (160)	2884 (160)	2590 (144)
			35K	2743 (152)	2912 (161)	2902 (161)	2602 (144)	2953 (164)	2942 (163)	2643 (146)
			40K	2876 (159)	3053 (169)	3042 (169)	2728 (151)	3095 (172)	3084 (171)	2770 (154)
			50K	2907 (161)	3086 (171)	3075 (170)	2758 (153)	3129 (173)	3118 (173)	2800 (155)
	4000LM	23.8	30K	3543 (149)	3762 (158)	3748 (157)	3361 (141)	3814 (160)	3800 (160)	3413 (143)
			35K	3615 (152)	3838 (161)	3824 (161)	3429 (144)	3891 (163)	3877 (163)	3482 (146)
			40K	3790 (159)	4023 (169)	4009 (168)	3595 (151)	4079 (171)	4064 (171)	3650 (153)
			50K	3831 (161)	4067 (171)	4052 (170)	3634 (153)	4123 (173)	4109 (173)	3690 (155)
	6000LM	37.8	30K	5284 (140)	5609 (149)	5589 (148)	5012 (133)	5687 (151)	5667 (150)	5090 (135)
			35K	5391 (143)	5723 (152)	5703 (151)	5114 (135)	5802 (154)	5782 (153)	5193 (138)
			40K	5651 (150)	6000 (159)	5978 (158)	5361 (142)	6083 (161)	6061 (161)	5444 (144)
			50K	5713 (151)	6065 (161)	6043 (160)	5419 (144)	6149 (163)	6127 (162)	5503 (146)
	8000LM	50.5	30K	6952 (138)	7380 (146)	7354 (146)	6594 (131)	7482 (148)	7456 (148)	6696 (133)
			35K	7093 (141)	7530 (149)	7503 (149)	6728 (133)	7634 (151)	7607 (151)	6832 (135)
			40K	7435 (147)	7894 (156)	7865 (156)	7053 (140)	8003 (159)	7975 (158)	7162 (142)
			50K	7516 (149)	7979 (158)	7950 (158)	7129 (141)	8090 (160)	8061 (160)	7240 (144)
	10000LM	62.0	30K	8646 (140)	9179 (148)	9146 (148)	8201 (132)	9306 (150)	9273 (150)	8328 (134)
			35K	8822 (142)	9365 (151)	9332 (151)	8368 (135)	9495 (153)	9461 (153)	8497 (137)
			40K	9248 (149)	9817 (158)	9782 (158)	8772 (142)	9953 (161)	9918 (160)	8908 (144)
			50K	9348 (151)	9924 (160)	9888 (160)	8867 (143)	10061 (162)	10026 (162)	9004 (145)
	12000LM	75.0	30K	10406 (139)	11047 (147)	11007 (147)	9871 (132)	11200 (149)	11160 (149)	10024 (134)
			35K	10617 (141)	11271 (150)	11231 (150)	10071 (134)	11427 (152)	11387 (152)	10227 (136)
			40K	11130 (148)	11816 (157)	11773 (157)	10557 (141)	11979 (160)	11937 (159)	10721 (143)
			50K	11251 (150)	11944 (159)	11901 (159)	10672 (142)	12109 (161)	12066 (161)	10837 (144)
L96	9000LM	53.4	30K	7962 (149)	8452 (158)	8422 (158)	7552 (141)	8570 (160)	8539 (160)	7669 (144)
			35K	8124 (152)	8624 (161)	8593 (161)	7706 (144)	8743 (164)	8713 (163)	7825 (146)
			40K	8516 (159)	9040 (169)	9008 (169)	8078 (151)	9166 (172)	9133 (171)	8203 (154)
			50K	8608 (161)	9138 (171)	9106 (170)	8165 (153)	9265 (173)	9232 (173)	8292 (155)
	12000LM	75.5	30K	10570 (140)	11221 (149)	11181 (148)	10026 (133)	11377 (151)	11337 (150)	10182 (135)
			35K	10785 (143)	11449 (152)	11408 (151)	10230 (135)	11608 (154)	11567 (153)	10388 (138)
			40K	11306 (150)	12002 (159)	11959 (158)	10724 (142)	12168 (161)	12125 (161)	10890 (144)
			50K	11428 (151)	12132 (161)	12089 (160)	10840 (144)	12300 (163)	12257 (162)	11008 (146)
	15000LM	94.3	30K	13399 (142)	14225 (151)	14174 (150)	12710 (135)	14422 (153)	14371 (152)	12907 (137)
			35K	13671 (145)	14513 (154)	14461 (153)	12968 (138)	14714 (156)	14662 (156)	13169 (140)
			40K	14331 (152)	15214 (161)	15160 (161)	13594 (144)	15425 (164)	15370 (163)	13805 (146)
			50K	14487 (154)	15379 (163)	15324 (163)	13741 (146)	15592 (165)	15537 (165)	13954 (148)
	18000LM	103.4	30K	15901 (154)	16881 (163)	16820 (163)	15083 (146)	17114 (165)	17054 (165)	15317 (148)
			35K	16224 (157)	17223 (167)	17161 (166)	15389 (149)	17462 (169)	17400 (168)	15627 (151)
			40K	17007 (164)	18055 (175)	17990 (174)	16132 (156)	18305 (177)	18240 (176)	16382 (158)
			50K	17192 (166)	18251 (176)	18185 (176)	16307 (158)	18503 (179)	18438 (178)	16560 (160)
	20000LM	125.5	30K	17549 (140)	18630 (148)	18564 (148)	16646 (133)	18888 (150)	18822 (150)	16904 (135)
			35K	17906 (143)	19008 (151)	18940 (151)	16984 (135)	19272 (154)	19204 (153)	17247 (137)
			40K	18770 (150)	19927 (159)	19855 (158)	17804 (142)	20202 (161)	20131 (160)	18080 (144)
			50K	18974 (151)	20143 (160)	20070 (160)	17997 (143)	20421 (163)	20349 (162)	18276 (146)
	24000LM	149.5	30K	21142 (141)	22445 (150)	22364 (150)	20055 (134)	22756 (152)	22675 (152)	20365 (136)
			35K	21571 (144)	22900 (153)	22818 (153)	20461 (137)	23217 (155)	23135 (155)	20779 (139)
			40K	22613 (151)	24006 (161)	23920 (160)	21450 (143)	24339 (163)	24253 (162)	21782 (146)
			50K	22858 (153)	24266 (162)	24179 (162)	21682 (145)	24602 (165)	24516 (164)	22018 (147)

* For 90CRI, reduce lumen output by 17.1%
** For WD reduce output by 4.7%, PGD reduce output by 5.4%
*** For HVOLT use scale factor in HVOLT SCALE FACTOR TABLE

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CSA LISTED AMBIENT RATING*

		Standard** (surface)"	Standard** (suspended)"	E10WMCP (surface)	E10WMCP (suspended)	BE6WCP (surface)	BE6WCP (suspended)
L24	2000LM	35°C	50°C	5°C - 25°C	5°C - 35°C	-20°C - 25°C	-20°C - 35°C
	3000LM	35°C	50°C	5°C - 25°C	5°C - 35°C	-20°C - 25°C	-20°C - 35°C
	4000LM	35°C	50°C	5°C - 25°C	5°C - 35°C	-20°C - 25°C	-20°C - 35°C
	6000LM	35°C	50°C	5°C - 25°C	5°C - 35°C	-20°C - 25°C	-20°C - 35°C
L48	3000LM	35°C	50°C	5°C - 25°C	5°C - 35°C	-20°C - 25°C	-20°C - 35°C
	4000LM	35°C	50°C	5°C - 25°C	5°C - 35°C	-20°C - 25°C	-20°C - 35°C
	6000LM	35°C	50°C	5°C - 25°C	5°C - 35°C	-20°C - 25°C	-20°C - 35°C
	8000LM	35°C	50°C	5°C - 25°C	5°C - 35°C	-20°C - 25°C	-20°C - 35°C
	10000LM	35°C	50°C	5°C - 25°C	5°C - 35°C	-20°C - 25°C	-20°C - 35°C
	12000LM	35°C	50°C	5°C - 25°C	5°C - 35°C	-20°C - 25°C	-20°C - 35°C
L96	9000LM	35°C	50°C	5°C - 25°C	5°C - 35°C	-20°C - 25°C	-20°C - 35°C
	12000LM	35°C	50°C	5°C - 25°C	5°C - 35°C	-20°C - 25°C	-20°C - 35°C
	15000LM	35°C	50°C	5°C - 25°C	5°C - 35°C	-20°C - 25°C	-20°C - 35°C
	18000LM	35°C	50°C	5°C - 25°C	5°C - 35°C	-20°C - 25°C	-20°C - 35°C
	20000LM	35°C	50°C	5°C - 25°C	5°C - 35°C	-20°C - 25°C	-20°C - 35°C
	24000LM	35°C	50°C	5°C - 25°C	5°C - 35°C	-20°C - 25°C	-20°C - 35°C

*Minimum Ambient is -30°C unless noted.
**All options not specifically listed in this table are considered standard

HVOLT SCALE FACTOR

	Factor
2000LM	0.814
3000LM	0.814
4000LM	0.814
6000LM	0.835
8000LM	0.845
9000LM	0.850
10000LM	0.850
12000LM	0.845
15000LM	0.860
18000LM	0.880
20000LM	0.845
24000LM	0.865

CONFIGURATION WEIGHTS

	Standard	w/ Sensor	w/ Battery
L24	8	9	9
L48	11	12	12
L96	23	24	24

NUMBER OF BOARDS AND DRIVERS

Lumen package	Fixture length	Number of boards	Number of drivers
2000LM	L24	1	1
3000LM		1	1
4000LM		1	1
6000LM		1	1
3000LM	L48	2	1
4000LM		2	1
6000LM		2	1
8000LM		2	1
10000LM		2	1
12000LM		2	1
9000LM	L96	4	1
12000LM		4	2
15000LM		4	2
18000LM		4	2
20000LM		4	2
24000LM		4	2

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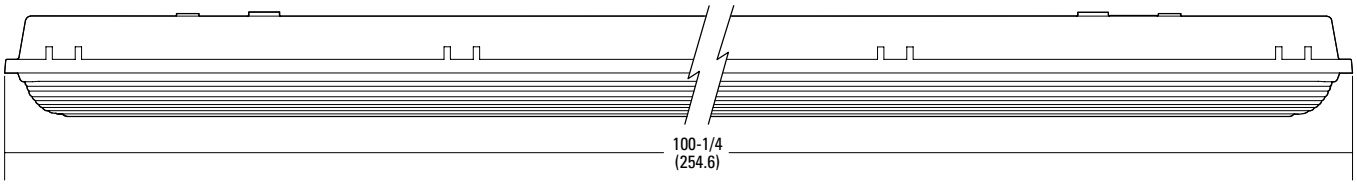
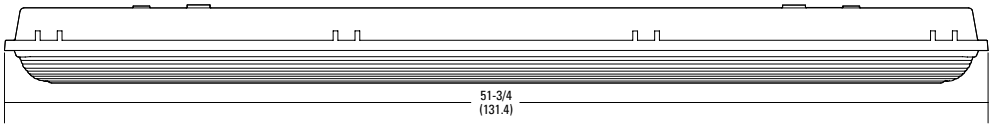
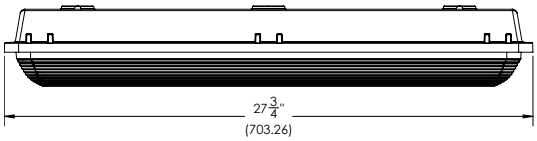
DIMENSIONS

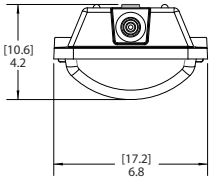
Specifications subject to change without notice.
All dimensions are inches (centimeters) unless otherwise indicated.

Weight (may vary with options or accessories)
FEM L48: 11.9 lbs (5.397kg)
FEM L96: 24.3 lbs (11.022kg)

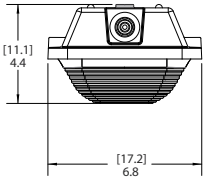




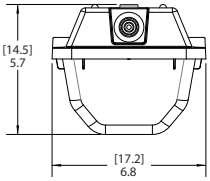




Diffuser Type:
LPAFL
LPACL
LPPFL
LPPCL



Diffuser Type:
IMAFL



Diffuser Type:
IMAFD
IMACD

PHOTOMETRICS

See www.lithonia.com for photometry reports.

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	EAGLE MOUNTAIN CITY **PLANNING COMMISSION MEETING** **JANUARY 9, 2024**
TITLE:	ORDINANCE/PUBLIC HEARING - Approval Process for Preliminary Plats - An Ordinance of Eagle Mountain City, Utah, Amending the Eagle Mountain Municipal Code Section 16.20.050.
ITEM TYPE:	Ordinance
APPLICANT:	City-initiated

ACTION ITEM:
Yes

PUBLIC HEARING:
Yes

PREPARED BY:
David Stroud, Planning

BACKGROUND:
Recent state code changes require time limits regarding review of certain subdivision preliminary plats. State code requires a 15-day turnaround for the initial review of single-family, two-family, or townhome preliminary plats. EMC policy is more stringent than state code and staff complete the initial review within 10 days.

ITEMS FOR CONSIDERATION:

REQUIRED FINDINGS:

RECOMMENDATION:
Staff recommends the Planning Commission forward a positive recommendation to the City Council regarding the amendment to EMMC 16.20.050.

ATTACHMENTS:

EMMC 16.20.050 Approval Process

16.20.050 Approval Process

Upon completion of the master development plan or rezoning of property, the developer shall file a completed preliminary plat application, which includes a proposed preliminary plat, all required supporting materials and the required application fee at least 28 calendar days before the planning commission meeting at which a hearing on the application is requested.

A. Complete Application. The planning director shall determine whether the application is complete within seven calendar days after its filing. The planning director shall notify the developer of additional materials that are required within one week of the submittal date.

B. Development Review Committee (DRC) Review. The application shall be scheduled for the next available development review committee (DRC) meeting, and the submitted materials provided to city staff, consultants, or agencies for their review. Review time shall comply with the requirements of state code §10-9a, as amended. Once the DRC recommends that the project is ready for the planning commission's review, the planning director shall schedule the project for the next available meeting. The DRC includes the department head or assigned representative from each of the following departments or groups: attorney, building, energy, engineering, fire, parks, planning, public works.

C. Staff Report. The planning director shall prepare, or contract with appropriate professionals for the preparation of, a written report that explains how, in the professional opinion of the planning director or the contractors, the proposed development complies, or fails to comply, with state statutes, this title or other city ordinances. Upon completion, but not less than four working days before the scheduled hearing, a draft report shall be transmitted to the developer and to the planning commission. These reports will also be placed on file for public review with the application materials. In the event that the city contracts with professionals for assistance, the costs of report preparation shall be added to the application fee required for preliminary plats.

D. Public Hearing. The planning director shall cause all property owners within 600 feet of the boundaries of the proposed application area (including a minimum of at least 25 adjacent property owners and affected entities, if there be any) to be notified by first class mail of the time and place of the public hearing at least 10 days prior to the planning commission meeting. A copy of the public notice of the hearing shall also be posted in three public places (including the city offices) within the city at least 10 days prior to the hearing.

E. Planning Commission Approval. If the proposed development complies with all applicable development requirements and utility standards for the site, is in the public interest and is fully consistent with any applicable master development plan and development agreement previously approved by the city, and the submission is complete in all respects, the planning commission shall take action on the proposed development application as allowed by this title. The planning commission may recommend approval, approval with conditions, disapproval based upon findings of facts, or table the application and request further information to resolve any issues or questions prior to approval.

F. City Council Approval. The city council shall review the application, consider the planning commission's recommendations, and take action on the proposed development application. The council may approve, approve with conditions, disapprove based upon findings of facts, or table the application and request further information to resolve any issues or questions prior to approval.

G. Additional Development Processes. Granting of preliminary plat approval by the planning commission (or city council, as applicable) shall not constitute final acceptance of the subdivision by the planning commission or city council, nor shall approval of the preliminary plat relieve the subdivider of the responsibility to comply with all required conditions, ordinances, requirements or policies in order to meet all city standards. [Ord. O-07-2014 (Exh. A); Ord. O-16-2010 § 2 (Exh. A); Ord. O-23-2005 § 3 (Exh. 1(2) § 4.5)].

	EAGLE MOUNTAIN CITY **PLANNING COMMISSION MEETING** **JANUARY 9, 2024**
TITLE:	ORDINANCE/PUBLIC HEARING - CODE AMENDMENTS TO TITLE 16 RESIDENTIAL WATER RIGHT REQUIREMENTS
ITEM TYPE:	Ordinance
FISCAL IMPACT:	N/A
APPLICANT:	City-initiated

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

PUBLIC HEARING:
Yes

PREPARED BY:
Chris Trusty, Engineering

PRESENTED BY:
Chris Trusty

RECOMMENDATION:
Staff recommends the City Council approve an ordinance amending EMMC Table 16.35.130(a) Residential Water Right Requirements.

BACKGROUND:
With recently adopted changes to City code that include reduced landscape requirements for front and side yards, this subsequent City code amendment is proposed to reduce water required for development to reflect the decreased landscape requirements. The recommended water right requirements are based on 70% of the total landscaped portion of the lot being planted with sod with the remaining 30% being planted with xeriscape or other drought tolerant landscaping that conforms to city code. An adjustment is also being made to the per acre water requirement for outdoor use to account for watering inefficiencies. The per acre water requirement will go from 2.5 acre-feet per irrigable acre to 3.2 acre-feet per irrigable acre.

Based on recent evaluations of a random sampling of existing city residents, the indoor requirements will be reduced from 0.53 to 0.34 acre-feet to reflect a more accurate use that the city has seen on the system. Many cities including Saratoga Springs, Payson, Springville and Salem currently require 0.3 acre-feet for indoor use; however, City staff recommendation is to still require slightly more to ensure adequate water rights are provided to the City.

These changes will reduce the per lot water required to be dedicated

to the city at plat recordation.

ITEMS FOR CONSIDERATION:

REQUIRED FINDINGS:

Ordinances pertaining to zoning code amendments, and processing of the same, may be found in EMMC 17.05.120 & USC 10-9a-501. Ordinance enactment is a legislative process and left to the discretion of the City Council.

PLANNING COMMISSION ACTION/RECOMMENDATION:

ATTACHMENTS:

Table 16.35 Residential Water Right Requirements.rtf

16.35.130 Tables.

Table 16.35.130(a) Residential Water Right Requirements

Lot Sizes in Square Feet	Per Lot Irrigable Acreage	Outdoor Water Requirements	Indoor Water Requirements	Total Water Right Per Lot Requirements
Less than 5,000	0.05	~~0.12~~ 0.14	~~0.53~~ 0.34	~~0.65~~ 0.48
5,001 to 7,000	0.08	~~0.20~~ 0.23	~~0.53~~ 0.34	~~0.73~~ 0.57
7,001 to 9,000	0.13	~~0.33~~ 0.36	~~0.53~~ 0.34	~~0.86~~ 0.70
9,001 to 11,000	~~0.17~~ 0.18	~~0.43~~ ~~0.48~~	~~0.53~~ 0.34	~~0.96~~ 0.82
11,001 to 14,500	~~0.25~~ 0.23	~~0.63~~ 0.62	~~0.53~~ 0.34	~~1.16~~ 0.96
Multifamily/PUD		~~2.5~~ 3.2 acre-feet per irrigable acre of turf; 0.75 acre feet per irrigable acre of xeriscape	~~0.383~~ 0.272	

Residential lots which exceed 14,501 square feet are required to dedicate water rights calculated on a case-by-case basis after a review of the proposed use by the city engineer.

	EAGLE MOUNTAIN CITY **PLANNING COMMISSION MEETING** **JANUARY 9, 2024**
TITLE:	ORDINANCE/PUBLIC HEARING -- CODE AMENDMENTS TO EMMC TITLE 15 CONSTRUCTION STANDARDS
ITEM TYPE:	Ordinance
FISCAL IMPACT:	N/A
APPLICANT:	Eagle Mountain City -- Chris Trusty representing

GENERAL PLAN DESIGNATION	CURRENT ZONE	ACREAGE	COMMUNITY
n/a	n/a	n/a	n/a

PUBLIC HEARING:
Yes

PREPARED BY:
Chris Trusty, Engineering

PRESENTED BY:
Chris Trusty

RECOMMENDATION:
Staff recommends that the Planning Commission advance a positive recommendation to the City Council respecting the proposed code changes.

BACKGROUND:
Periodically city staff will review construction standards to ensure that they are up to date and reflect typical standards. After a recent review, modifications have been made to the standards to help clarify portions of the code that may have been vague or misunderstood. The changes are included in the attachment.

Because these changes would be considered a land use regulation these are being brought before the Planning Commission for a public hearing and recommendation to the City Council.

Below is a response from the Trust regarding insurance viability for sewer laterals:

"Hello Finn,

Thank you for the question. I am glad to see the City making efforts in this area.

The Trust insures many cities, towns and districts across the state that provide sewer services. Most of those entities only claim ownership

of the sewer mains leaving the property owners to be responsible for the laterals. There are good reasons for that. Chief among them is the fact that with ownership comes maintenance responsibilities.

If you own a portion of a sewer lateral, and that lateral sinks, breaks or simply gets clogged then the responsibility for the repairs and subsequent damages falls to the City. Hence, just like the main line, the City needs to have an inspection and clean out program for all of its laterals, at least to the point of the property line. That raises the questions of whether the City has such a program? And, does the City have the capability of inspecting and maintaining those laterals with sufficient frequency to avoid problems? These questions could also carry responsibility back to the installation of the lateral. If the City owns the portion of a lateral that is in the right of way, does it require specific installation procedures and materials for its portion of the line, and do you inspect the installation to ensure compliance? Also, who bears the cost of the installation of the lateral? If it is the City's line, shouldn't the City bear those costs?

Considering the above, it is interesting to note that for main lines that get clogged, it is most often impossible to identify the source of a clog and therefore there is nobody for the City/Trust to go after for reimbursement should a clog cause a claim. That is not the case for a lateral. A clog in a lateral, unless it is caused by roots, is generally from waste that is dumped into the line by the homeowner. So, when a lateral gets clogged beyond the property line, who is responsible, is it the City as the owner, or is it the homeowner? This scenario has a real potential for creating discord.

You asked if there are coverage concerns that arise out of the City' s current ordinance. In general, there are not. Where the City is responsible/liable, we provide coverage. However, if ownership of the laterals increases the claims frequency and/or severity then it will have an impact on the City' s premium. Also, if the City does not maintain the laterals and losses occur, it could jeopardize the insurability of that risk. "

The City does not currently conduct routine inspections on sewer laterals.

A public hearing on this item was held at the October 24, 2023, Planning Commission meeting.

ITEMS FOR CONSIDERATION:

REQUIRED FINDINGS:
Ordinances pertaining to zoning code amendments, and processing of the same, may be found in EMMC 17.05.120 & USC 10-9a-501. Ordinance enactment is a legislative process and left to the discretion of the City Council.

PLANNING COMMISSION ACTION/RECOMMENDATION:
n/a

ATTACHMENTS:
Eagle Mountain Construction Standards 2023_PC Comments.pdf

Chapter 15.10
IMPROVEMENT AND DESIGN STANDARDS

Sections:

15.10.010 Utility connection.

15.10.020 Utility extension.

15.10.030 Water supply.

15.10.040 Flush hydrants.

15.10.050 Sewers and sewage facilities.

15.10.060 Water and sewer laterals.

15.10.070 Storm drainage.

15.10.080 Pressurized irrigation system.

15.10.090 Streets.

15.10.100 Street widths, intersecting driveways, maximum street grades.

15.10.110 Intersection grades.

15.10.120 Vertical curves.

15.10.130 Cul-de-sacs.

15.10.140 Temporary turnarounds.

15.10.150 Offsetting intersections.

15.10.160 Clear vision area.

15.10.170 Curbs, gutters and sidewalks.

15.10.180 Parking lots and driveways.

15.10.190 Ground water.

15.10.200 Underground utilities.

15.10.205 Abandoning Underground utilities.

15.10.210 Licensed contractor.

15.10.220 Time limitation for completion.

15.10.230 Building permits.

15.10.240 Security for improvements required.

15.10.250 Standards for construction drawings.

15.10.260 Landscape improvement standards.

15.10.270 Half-street width.

15.10.280 Traffic control.

15.10.290 Construction safety.

15.10.300 Excavation permit.

15.10.310 Survey.

15.10.320 Construction entrance.
15.10.330 Site cleanup.
15.10.340 Noncompliance.
15.10.350 Hours of work.
15.10.360 Defensible space.
15.10.370 Reimbursement agreements.
15.10.380 Improvements warranty.
15.10.390 Street Lighting.

15.10.010 Utility connection.

It shall be the responsibility of the developer to connect to any utilities or improvements wherever they are located and extend those improvements to and through the development as shown on the approved construction drawings. [Ord. O-03-2010 § 1 (Exh. A § 2.010)].

15.10.020 Utility extension.

It may be the responsibility of the developer to extend all utilities or improvements to the end of their property for future connection of adjacent property. Reimbursements may be made for these extensions based on the excess capacity, provided these expenses meet the requirements as set forth by the city or as stated in the master development agreement. The excess capacity, if any, formula and terms for any reimbursement agreement will be identified prior to the beginning of construction. Utilities that connect onto Eagle Mountain public utilities will maintain Eagle Mountain City standards for material, workmanship, and trench back fill/pipe bedding. [Ord. O-03-2010 § 1 (Exh. A § 2.011)].

15.10.030 Water supply.

The developer shall connect the subdivision with the city water system with all appurtenances and shall make such water available to each lot within the subdivided area. Adequacy of supply and sizes of water mains shall be established by the city engineer or his/her designee. The minimum water line size shall be eight inches in diameter.

Workmanship and details of construction shall be in accordance with the APWA Standard Specifications as amended by the city. All work in connection with water services shall be done as directed and under the supervision of the city engineer or his/her designee.

The design of all subdivisions shall be such that a minimum water pressure of 50 psi and a maximum of 115 psi will be maintained at street level. [Ord. O-03-2010 § 1 (Exh. A § 2.020)].

15.10.040 Flush hydrants.

Flush hydrants, blow-offs, or some other adequate mechanism shall be installed at the end of all water lines to adequately flush all water lines. [Ord. O-03-2010 § 1 (Exh. A § 2.021)].

15.10.050 Sewers and sewage facilities.

The developer shall provide each lot with a sanitary sewer system in accordance with the ordinances of the city and pursuant to the APWA Standard Specifications as amended by the city. All work shall be completed by the developer as directed and under the supervision of the city engineer or his/her designee. The minimum sewer pipe size shall be 8 inches in diameter. [Ord. O-03-2010 § 1 (Exh. A § 2.030)].

15.10.060 Water and sewer laterals.

All sewer services and water services need to be marked with a two-inch by four-inch stake at the end of each service a minimum of 36 inches above grade and a two-inch “S” for sewer or two-inch “W” for water needs to be stamped in the top of the curb at the service locations. Curb markings may also be made on a brass cap hammered into the curb. Water and sewer lateral must extend a minimum of 15 feet behind the property line. The minimum sewer lateral pipe size shall be 4 inches in diameter. The minimum water lateral size shall be ¾ inch in diameter. [Ord. O-03-2010 § 1 (Exh. A § 2.031)].

15.10.070 Storm drainage.

The developer shall provide on-site facilities for a 100-year storm event and piping and appurtenances to convey the highest intensity 10-year storm to the on-site retention facilities. Additional piping and appurtenances shall be required to convey the 10-year historical discharge from the on-site retention facility to the city’s existing storm water facility. The minimum storm drain pipe size shall be 15 inches in diameter.

All improvements shall be constructed in accordance with city ordinances and pursuant to the APWA Standard Specifications as amended by the city and/or other codes adopted by the city. All said work shall be done as directed and under the supervision of the city engineer or his/her designee. [Ord. O-03-2010 § 1 (Exh. A § 2.040)].

15.10.080 Pressurized irrigation system.

The developer may be required to connect the subdivision to the city secondary pressurized irrigation system, as designated by the city’s master secondary irrigation plan, as outlined in the development agreement, if such facilities are expected to be available for use within three years of the installation of such improvements. The use of treated re-use water may allow a credit of banked water rights consistent with the amount of culinary water which should have been used for irrigation to be offset with secondary irrigation.

The minimum pressurized irrigation size shall be ~~four~~ six inches in diameter. The adequacy of supply lines and sizes of mains shall be established by the city engineer or his/her designee. Workmanship and construction shall comply with the Eagle

Mountain City Construction Standards and Specifications. Installation shall conform to Chapter 15.40 EMMC.

Pressurized irrigation systems to be installed in existing city roads and rights-of-way shall conform to all relevant chapters of this title. [Ord. O-03-2010 § 1 (Exh. A § 2.050)].

15.10.090 Streets.

The developer shall construct all streets required by the subdivision as specified by the city council in accordance with the APWA Standard Specifications as amended by the city. All streets shall be constructed pursuant to standards recommended by the city engineer or his/her designee based on soil conditions and required structural engineered materials to be used in the construction of the road.

The developer shall be responsible to construct all streets required in the final plat and as a condition of the final plat approval to the standard required by the city engineer or his/her designee. The developer shall be required to provide an engineered design for the street subgrade construction. [Ord. O-03-2010 § 1 (Exh. A § 2.060)].

15.10.100 Street widths, intersecting driveways, maximum street grades.

Street widths, intersecting driveways and maximum street grades shall conform to EMMC Titles 16 and 17. [Ord. O-03-2010 § 1 (Exh. A § 2.070)].

15.10.110 Intersection grades.

The maximum grade at intersections shall not exceed four percent for 100 feet measured from the edge of asphalt on the intersecting street.

The grade may be increased to a maximum of six percent on a collector road if there is no signalization or traffic control. In addition, detailed designs are required for the intersection design along with storm drain inlet boxes at each of the intersecting curb returns. [Ord. O-03-2010 § 1 (Exh. A § 2.080)].

15.10.120 Vertical curves.

Vertical curves shall be designed to meet the maximum sight distance and stopping sight distances required by AASHTO. [Ord. O-03-2010 § 1 (Exh. A § 2.081)].

15.10.130 Cul-de-sacs.

The maximum length of a cul-de-sac is 500 feet measured from the nearest right-of-way line of the adjoining street to the center of the cul-de-sac, and the minimum radius as defined by EMMC Titles 16 and 17 and the International Fire Code, unless otherwise approved by the city engineer and the fire chief. No reversed grade cul-de-sacs shall be allowed unless adequate storm and sewer facilities are designed and approved by the city engineer or his/her designee. Cul-de-sacs shall have a maximum of 15 lots unless stated otherwise in EMMC Titles 16 and 17. [Ord. O-03-2010 § 1 (Exh. A § 2.090)].

15.10.140 Temporary turnarounds.

Temporary turnarounds are to be provided on all streets which are more than one lot from intersections unless approved otherwise by the ~~Eagle Mountain~~ Unified fire chief or his/her designee. These are to be recorded on the plat as easements; 60-foot diameter, four-inch-thick compacted road base and two inches of asphalt. If it is not anticipated that the temporary turnaround will be in place longer than a year, the developer may, at their discretion, forego installation of the asphalt in favor of bonding these improvements. If the temporary turnaround is still required at the end of the warranty period, and if asphalt has not been installed, the asphalt will be installed by the developer at his/her expense, or the city will make a claim against the bond. All temporary turnarounds must be approved by the ~~Eagle Mountain City~~ Unified fire chief or his/her designee. [Ord. O-03-2010 § 1 (Exh. A § 2.100)].

15.10.150 Offsetting intersections.

All intersections shall be at right angles, or within 10 degrees, extending a minimum of 150 feet along the centerlines from the center of the intersection to the point of tangency. Offset intersections will have a minimum offset of 100 feet between centerlines. [Ord. O-03-2010 § 1 (Exh. A § 2.120)].

15.10.160 Clear vision area.

A. The clear vision area is that triangular area of a corner lot or parcel formed by the street property lines and the line connecting them at points 30 feet from the intersecting right-of-way lines of the two streets. Fencing and planting is restricted within this area as follows:

1. No fence shall exceed a height of three feet.

2. Shrubs shall be pruned to a height not to exceed three feet.

3. Trees shall be pruned to maintain a clear area below eight feet.

B. A second clear vision area with 20-foot sides is also required where the rear of a corner lot adjoins an interior lot. The same restrictions for landscaping and fencing apply in this area unless the interior lot is already developed and has no existing driveway within 10 feet of the property line adjoining the corner lot. [Ord. O-03-2010 § 1 (Exh. A § 2.130)].

15.10.170 Curbs, gutters and sidewalks.

When required on Table 16.35.130(b), Right-of-Way Classifications, all curbs, gutters and sidewalks shall be built on all existing and proposed streets required by the subdivision in accordance with the APWA Standard Specifications as amended by the city. All curbs, gutters and sidewalks shall connect to existing curbs, gutters and sidewalks within a reasonable area as determined by the city engineer or his/her designee. [Ord. O-03-2010 § 1 (Exh. A § 2.140)].

15.10.180 Parking lots and driveways.

Parking shall meet the size and configuration requirements as shown in the standard drawings. Parking lots and drives shall be designed to meet appropriate engineering standards, including drainage and load capacity. All drive and parking lot drainage, asphalt, and base designs shall be reviewed by the city engineer or his/her designee prior to approval. Any trenches for installation of public utilities shall be backfilled and compacted using engineered fill (A1,A2) and be tested in accordance with Eagle Mountain City standards [Ord. O-03-2010 § 1 (Exh. A § 2.150)].

15.10.190 Ground water.

Potential ground water or subsurface drainage problems may have additional requirements; further requirements will be reviewed and approved by the city engineer or his/her designee. Pumping of ground water across sidewalks or into the gutters or the sewer system will not be allowed. [Ord. O-03-2010 § 1 (Exh. A § 2.160)].

15.10.200 Underground utilities.

Utilities, including electrical and gas lines, shall be underground, except when the city feels that such underground lines are not in the best interest of the city. [Ord. O-03-2010 § 1 (Exh. A § 2.170)].

15.10.205 Abandoning Underground utilities.

All disconnection and abandonment of existing utilities must be done at the mainline, per the city engineer or his/her designee. All existing utilities (stubs into job sites) must be used or abandoned.

15.10.210 Licensed contractor.

All work performed in accordance with this title shall be performed by a contractor licensed to perform such work by the state of Utah. [Ord. O-03-2010 § 1 (Exh. A § 2.180)].

15.10.220 Time limitation for completion.

All improvements within subdivisions listed herein must be completed within one year of the date of recording of the final plat, except for required corrections to defective work as found in the final walkthrough and itemized in a punch list generated by Eagle Mountain City, which shall be completed at the end of the warranty period after asphalt installation. Improvements that are not completed within the

time limitation imposed herein may be required to work a forfeiture of any bond or surety that shall have been posted by the owner or developer, or may be allowed to post an additional bond for an additional amount reflective of increased construction costs. At no time will an unimproved recorded plat be allowed to constitute a risk or hazard to the public.

Approved construction drawings will only be valid for three years from the date of approval. After three years from the time of approval, drawings must be resubmitted prior to construction for a staff review to ensure adequate construction standards are reflected in said plans. [Ord. O-03-2010 § 1 (Exh. A § 2.190)].

15.10.230 Building permits.

See EMMC 16.60.050 for the building permit approval process. [Ord. O-04-2015 § 2 (Exh. A); Ord. O-03-2010 § 1 (Exh. A § 2.200)].

15.10.240 Security for improvements required.

In order to insure the proper installation of the improvements required by this chapter and in order to insure prompt payment of all persons supplying labor or materials to the subdividers or their contractors or subcontractors installing said improvements, the owners of property or the principal subdividers shall, prior to subdivision recordation or issuance of a building permit, deposit with the city, or a depository acceptable to the city, a cash escrow bond, or an improvement surety bond, furnished by a surety authorized to do business in the state of Utah and operating in good standing, conditioned on the requirements that installation of all required improvements are constructed within the required time and in accordance with the plans, specifications, time limitations and conditions relating thereto as approved by the city engineer or his/her designee.

The bond or cash escrow shall be established in a form acceptable to counsel for the city and shall be in an amount to be determined by the city engineer or his/her designee, and shall be filed in the office of the city recorder and shall amount to 110 percent of the estimated cost of improvements. The developer shall sign a development agreement agreeing to install and warrant the improvements required for approval of the subdivision or other project. [Ord. O-03-2010 § 1 (Exh. A § 2.210)].

15.10.250 Standards for construction drawings.

The following instructions are for the purpose of standardizing the preparation of drawings to obtain uniformity in appearance, clarity, size and style.

Following approval of the city council, ~~five~~ four copies of the construction plans shall be submitted with three copies to be retained by the city engineer or his/her designee and ~~two copies~~ one copy returned to the subdivider with the approval mark and signature of the city engineer or his/her designee. One approved copy shall be kept available at the construction site.

These plans and designs shall meet the standards defined in the specifications and drawings of the city described herein. The minimum information required on drawings for improvements are as follows:

All drawings and/or prints shall be clear and legible and conform to good engineering and drafting room practice. Size of drawings shall be 24-inch by 36-inch (trim line) with minimum borders of one-half inch on top, bottom and right sides, left side one and one-half inch.

A. Include the following with the construction drawings:

1. A copy of the proposed final plat.

2. A plan view of the entire project.

3. Plan and profiles of all curbs, gutters, storm drains, water, pressurized irrigation and sewer systems.

4. Detail drawings only for items not found in the APWA manual. Detail drawings shall be to scale and completely dimensioned and described. All structures shall be designed in accordance with minimum requirements established by this title or the APWA manual.

5. Complete plans for all off-site work to be done in conjunction with the project.

6. A SWPPP page with maps showing:

   a. Storm drain system.

   b. Topographical lines and flow arrows.

   c. UPDES permit number with contact information.

   d. Locations of BMP's and good housekeeping measures.

   e. Permanent BMPs and High Priority Sites

B. Include the following on each drawing sheet:

1. North arrow.

2. Scale. Use a standard engineering scale between one inch equals 10 feet and 60 feet. Use a scale of one inch equals 100 feet on the plan view of the entire project if necessary to fit the project on one sheet.

3. Title block along right side of sheet with title of drawing in lower right corner. Include in title block:

a. Name of subdivision and plat and lot number.

b. Name of city.

c. Specific type of drawing (construction drawings, plan view, plan and profiles, off-site construction, detail drawings).

d. Space provided for approval signature of city engineer or his/her designee and date.

e. Name of engineer, surveyor or firm preparing drawings.

f. Drawing number of total number of drawings.

4. Also include the following with profile drawings:

a. Vertical scale of one inch equals one, two, three or four feet.

b. Reference to the vertical datum. The 1929 North American Vertical Datum (NAVD29) shall be used for all elevation data.

c. Benchmark location and elevation for checking construction.

d. Stationing aligned from plan view with the profile view.

e. Existing ground, ditch and utility lines.

C. Include the following for curbs, gutters, storm drains, drainage structures, sidewalks and street surfacing plans:

1. Plan and profile for top back of curb for each side of the street. Label profile line as top back of curb for both sides of street if it is the same.

2. Stationing and top back of curb elevations with curve data for curb returns.

3. Flow direction and type of cross drainage structures at intersections with adequate flow line elevations.

4. Type of curb and gutter if other than the standard 30-inch modified curb and gutter in the standard drawings.

5. Plan and profile of all new and existing storm drains and storm manholes and boxes.

6. Storm box and manhole size, location, and elevations of flow lines and rim.

7. Location, size, grade and type of pipe of new and existing storm drains.

8. Storm water calculations for a 25-year and 100-year storm.

9. Detail of ADA Ramps with detectable warning pads.

D. Include the following for sewer plans:

1. Plan and profile of all new and existing sewer mains and manholes.

2. Manhole size, location, and elevations of flow lines and rim.

3. Location, size, grade and type of pipe of new and existing sewer mains.

4. Location of each lateral with distance stubbed back into property clearly drawn and dimensioned.

E. Include the following for culinary water plans:

1. Location, size and type of pipe of new and existing water mains.

2. Profile or detail showing separation at each conflicting utility crossing.

3. Location of valves, fittings, hydrants, boxes, meters and appurtenances.

4. Minimum cover.

5. Location of each lateral with distance stubbed back into property clearly drawn and dimensioned.

F. Include the following for the pressurized irrigation plans:

1. Location, size and type of pipe of new and existing irrigation mains.

2. Profile or detail showing separation at each conflicting utility crossing.

3. Location of valves, fittings, boxes, meters and appurtenances.

4. Minimum cover.

5. Location of each lateral with distance stubbed back into property clearly drawn and dimensioned.

15.10.260 Landscape improvement standards.

Landscape improvements shall conform to APWA Construction Standards and Eagle Mountain City landscape construction standards. All landscape plans are to be approved by the Eagle Mountain City planning department and parks division prior to construction. [Ord. O-03-2010 § 1 (Exh. A § 2.230)].

15.10.270 Half-street width.

In certain conditions, and when special approval is given, half-road widths may be allowed. Half-road width requires all improvements to the centerline plus an additional 10 feet of asphalt. Adequate storm water control should be constructed for non-curbed roadside. All improvements must be made on subdivider's property. [Ord. O-03-2010 § 1 (Exh. A § 2.240)].

15.10.280 Traffic control.

Traffic control shall be submitted to the city prior to any work in accordance with Utah MUTCD. Any road or lane closures or lane shifts must be approved, and fees paid, ~~notify public safety~~ at a minimum of 48 ~~24~~ hours in advance of the road closure. [Ord. O-03-2010 § 1 (Exh. A § 2.250)].

15.10.290 Construction safety.

Open pits and trenches left for an overnight period or longer shall be clearly marked with flashing barricades. All national and state standards must be maintained for open trenches. The city engineer or his/her designee may require additional barricades or road plates as determined in the field. Trenches may not be left open for an extended period of time.

If any subdivision is located such that there is no available construction access other than through existing subdivisions, an additional monetary amount to be determined by the city engineer or his/her designee shall be placed in the subdivision improvement bond to protect the city from damaged infrastructure. [Ord. O-03-2010 § 1 (Exh. A § 2.251)].

15.10.300 Excavation permit.

In order for a street excavation permit to be approved, Eagle Mountain City needs the following information: (A) copy of contractor's license; (B) certificate of insurance; (C) performance bond of $5,000; and (D) detailed drawing of proposed work and traffic control (four copies).

The contractor is given a copy of the signed permit and the signed/approved plan after the city engineer or his/her designee has approved and signed the application. Time limits may be set, and the permit can be suspended for noncompliance.

Trenches left open for more than 24 hours may be required to be either covered or backfilled at the discretion of the city engineer or his/her designee. [Ord. O-03-2010 § 1 (Exh. A § 2.260)].

15.10.310 Survey.

All property corners shall be marked with a 30-inch rebar and licensed land surveyor's cap before acceptance of subdivision improvements by Eagle Mountain City.. These rebars must be offset one foot by a steel tee post four feet out of the ground. All property corners shall be in place at the time of final acceptance. Any survey in roadways that require collars (monuments), shall maintain city standards for street collars. [Ord. O-03-2010 § 1 (Exh. A § 2.270)].

15.10.320 Construction entrance.

All subdivisions shall include a separate entrance for construction traffic, which is not in a city right-of-way. If no such access is available, an alternate cross-section designed specifically for the use of construction vehicles during the building phase of the project must be constructed within the city right-of-way and all construction must access the site from this point of access. The purpose of this requirement is to reduce damage caused by heavier vehicular traffic to new surfaces, and the existing adjacent roadways. Compliance with this requirement shall be overseen by the city engineer or his/her designee.

Construction entrances shall not disturb any pedestrian access routes. All construction entrances/ exits must be kept ADA compliant throughout construction. New road entrances must have an approved detour route that is also ADA compliant before removal of any pedestrian access routes (sidewalks/ trails).

If any subdivision is located such that there is no available construction access other than through existing subdivisions, an additional monetary amount to be determined by the city engineer or his/her designee shall be placed in the subdivision improvement bond to protect the city from damaged infrastructure. A truck route must be approved through the construction drawing approval before construction begins. [Ord. O-03-2010 § 1 (Exh. A § 2.280)].

15.10.330 Site cleanup.

The contractor is responsible to maintain a clean work environment within the limits of the city. A cobble track out pad consisting of 3” to 6” cobble 8” thick minimum with width of 20 feet and extending 50 feet past existing asphalt road way or an approved equivalent alternative shall be placed at all locations where construction traffic enters paved roadways to prevent dirt and mud from being tracked onto city streets. Additionally, vehicles may have to be hosed down prior to leaving the site. Dirt and debris tracked onto city roads must be cleaned by contractor each work day or be subject to fines as determined in the city fee schedule. Proper dust control measures must be exercised at all times. Noncompliance can result in all construction activities being shut down until corrective measures are taken. [Ord. O-03-2010 § 1 (Exh. A § 2.290)].

15.10.340 Noncompliance.

Noncompliance with this title can result in a stop work order issued by the city engineer or his/her designee, a forfeiture of bonds, or a hold on building permits until all improvements meet compliance. [Ord. O-03-2010 § 1 (Exh. A § 2.300)].

15.10.350 Hours of work.

Unless limited through city ordinance otherwise, construction activities shall be restricted to between the hours of 7:00 a.m. and 9:00 p.m., Monday through Friday, and 9:00 a.m. and 9:00 p.m. on Saturdays and Sundays in residential and commercial areas. [Ord. O-03-2010 § 1 (Exh. A § 2.310)].

15.10.360 Defensible space.

Property owners, including Eagle Mountain City and individual residential homeowners and/or homeowners’ associations, shall be responsible to maintain an adequate defensible space to act as a fire break as detailed in the applicable state fire ordinances. All construction and staging areas shall also maintain a defensible space of at least 30 feet throughout the construction process. [Ord. O-03-2010 § 1 (Exh. A § 2.320)].

15.10.370 Reimbursement agreements.

In instances when subdivisions are required to install improvements which may provide capacity in excess of the requirements of the subdivision, to meet conditions established as part of a master plan, or for the benefit of a third party, such increases in capacity may be eligible for reimbursement. Reimbursements may be in the reduction of impact fees collected by the city for the particular type of improvement installed, a reduction in connection fees, or may be negotiated as a cash reimbursement collected by third parties at building permit and remitted to the original developer annually.

All reimbursement agreements are to be approved by the city council, and the city will not consider verbal agreements made by the city or staff to be valid. Requests for reimbursement must be made to the City

prior to installation of the utilities for which reimbursement is sought. [Ord. O-03-2010 § 1 (Exh. A § 2.330)].

15.10.380 Improvements warranty.

All required improvements shall be placed into a warranty period following acceptance by the city for a minimum of one year. Should the completion of the one-year period occur during winter months, the warranty period may be extended for up to six months to allow the completion of any corrective requirements to be completed during reasonable weather.

A warranty bond for 10 percent of the estimated construction costs shall be maintained for the duration of the warranty period.

Prior to the expiration of the warranty period, Eagle Mountain City shall notify the developer that a warranty walkthrough is to be performed on the subdivision. Said walkthrough shall take place and all corrective actions as determined by this walkthrough and as outlined in a punch list to be generated by Eagle Mountain City shall be completed prior to release from the warranty period. If items on the punch list are not completed within a 30 day time line another walk through may be required. [Ord. O-03-2010 § 1 (Exh. A § 2.340)].

15.10.390 Street Lighting.

Eagle Mountain City shall contract with an independent consultant for street lighting design. Unless approved otherwise by the City's consultant street lighting will be installed throughout all developments using the following criteria:

1. Street lights will be installed at all intersections with the only exception being where a four way intersection has an offset of less than 100 feet.

2. Streetlights will be installed at a minimum spacing of 300 feet and a maximum spacing of 600 feet. They will be installed at the closest property line to the mid-point between the lights on either side. Streetlights placed between corners will be shown on the electrical construction drawing, and will indicate the direction that the street light will be aimed. Streetlights at intersections may aim to the center of the intersection or may be set at a 90-degree angle along collector and larger roads.

3. Any street that extends more than 600 feet without an intersection will have a street light at approximately the mid-point.

4. Each street light will be installed so that the street light pole is located 24" from the top

back of the curb to the center of the pole in a public utility easement or public right of way.

5. A ground wire shall be connected to the street light pole using N.E.C. approved methods and a separate ground wire shall be run from the pole base to the closest secondary pedestal or transformer. If the street light is fed from a secondary pedestal, an 8' X 5/8" copper clad ground rod must be installed at the pedestal, and street light ground will be attached to the ground rod using the N.E.C. approved connector.

6. A ground wire shall be connected to the street light pole using N.E.C. approved methods and a separate ground wire shall be run from the pole base to the closest secondary pedestal or transformer. If the street light is fed from a secondary pedestal, an 8' X 5/8" copper clad ground rod must be installed at the pedestal, and street light ground will be attached to the ground rod using the N.E.C. approved connector.

7. Pole-14 'Aluminum street light pole shall be used. The pole shall be manufactured by holophane and shall be green with base. All bases must be embedded in concrete with a 20" diameter hole and 4'.

8. Luminaire – A luminaire that reduces all sky ward light shall be 50-watt high pressure sodium light and shall have a shield to keep light off of houses.

Chapter 15.15
INSPECTION

Sections:

15.15.010 All work subject to inspection.

15.15.020 Inspection fees.

15.15.030 Acceptance of improvements.

15.15.040 Requests for inspection.

15.15.050 Construction completion inspection.

15.15.060 Work without inspection.

15.15.070 As-built drawings.

15.15.010 All work subject to inspection.

A. All construction work involving the installation of improvements in subdivisions shall be subject to inspection by the city. The developer shall be responsible to ensure inspection and certified reports are obtained and maintained on record and are provided in the as-built subdivision packet. All utilities shall be completely backfilled and compaction tested prior to camera and air testing. The records shall include the following inspections:

1. Compaction of all trenches; Passing test for every lift or 1' maximum vertically and every 100' laterally along trench line every lift or 1' maximum vertically and every 1000 sq. ft. laterally on embankment.

2. Pressure tests on water system mains; 2 sets of bacteria samples

3. Pressure tests, television inspection of sewer and storm drain system mains, and mandrel deflection tests for sewer and storm drain mains; Vacuum test all manholes/boxes on sewer and storm drain ~~Air pressure test and televise storm drain~~ per APWA Standards.

4. Slump, ~~tests and~~ compression, ~~tests~~ and air entrainment testing required on all concrete work; test (air, slump) and set of cylinders per 50 yards of concrete.

5. Proof rolls on native, subbase and base (curb and pavement); (4 proof rolls)

6. Red heading is required on native, subbase and base; and TBC stakes required for all proof rolls. Curb machine string line is acceptable for all proofrolls and will be required for sub base and curb base proof rolls.

7. Compaction test on all subbase, untreated base course, and bituminous surface course.

B. Certain types of construction shall have continuous inspection while others may have only periodic inspections. It is the responsibility of the developer/subdivider to ensure that all contractors give the city appropriate notice to allow scheduling of said inspections.

1. Inspection shall be required on the following types of work:

a. Laying of street surfacing.

b. Placing of concrete for curbs and gutters, sidewalks and other structures.

c. Laying of sewer pipe, drainage pipe, water pipe, lateral connections, pressurized irrigation, valves, hydrants and testing.

d. Subgrade.

e. Street grading and gravel base.

f. Excavations for curbs and gutters and sidewalks.

g. Excavations for structures.

h. Trenches for laying pipe.

i. Forms for curbs and gutters, sidewalks and structures. No work shall be started except in the presence of, or with the prior approval of, the city engineer or his/her designee.

j. Collars around storm drain inlet boxes/manholes. Thrust blocks for water, collars for storm drain and collars for man hole. ~~Value~~ Valve boxes in asphalt.

k. Collars around sewer manholes & water valve boxes.

2. Inspectors must be notified and must approve all catchbasin elevations and locations prior to final tie-ins.

3. Inspectors may require survey stakes with elevations to ensure depths and slopes meet the approved construction drawings. Specifically, requirements may be made on fire hydrants, cleanouts, and sewer manholes.

4. See individual chapters for specific inspection and testing requirements. [Ord. O-03-2010 § 1 (Exh. A § 3.010)].

15.15.020 Inspection fees.

Inspection fees and/or connection fees required by ordinance shall be paid and permits required shall be obtained prior to the recording of the final plat.

The developer or contractor shall be responsible for all sampling, delivery of samples to a qualified testing agency, testing, and delivery of test results or materials certifications to the city at no charge to the city. Testing and certifications reports shall be approved by the city as to conformance to city standard specifications prior to final inspection and/or acceptance by the city of any materials or workmanship. All samples must be taken in presence of an EMC representative.

Inspection requests made for weekend or off-hours of regular city business hours shall be subject to overtime inspection fees. If such inspections are scheduled at these times due to an inability of the city to provide inspections during normal business hours, no additional inspection fees shall be required. [Ord. O-03-2010 § 1 (Exh. A § 3.020)].

15.15.030 Acceptance of improvements.

A. Inspection made by the city to determine compliance with the specifications does not imply acceptance of the work. The city requires completion of all facilities before any are finally accepted to start the warranty period established by this code or otherwise by development agreement. Final acceptance of improvements will be made at an inspection by the city at the completion of all improvements. All improvements shall be free from defects or damage at the time of inspection. Specifically, the following are required:

1. All asphalt, sidewalks and curbs and gutters shall be free of cracks greater than one-eighth inch vertically and horizontally and construction damage and shall be true to line and grade.

2. All sewer manholes and water valve boxes shall be raised to pavement level.

3. All water valves and hydrants shall be operative.

4. All storm drainage improvements shall be completed.

5. All street lights shall be operable.

6. All open space improvements shall be planted and all irrigation improvements installed, unless a separate landscape bond is provided to the city, in which case landscaped improvements shall be warranted separately from the infrastructure improvements.

7. All trail improvements in open space areas shall be completed.

8. All recreational equipment shall be installed in the trails and open space areas, or a separate landscape bond may be posted. All landscape improvements are required to be installed prior to one year from the date of recordation, or prior to the second half building permit being issued.

9. Cleanup. Where excavations are made in city streets, the rock, etc., shall be removed and gravel base placed in the excavation the same day as backfill is placed. All debris leaving a job site shall be the responsibility of the contractor to clean up each day.

10. All lot corner stakes installed.

B. A final walkthrough to inspect the improvements shall be arranged by the developer with the city when said improvements are completed. The improvements will be accepted when the punch list from the final walkthrough is completed and accepted by the city. [Ord. O-03-2010 § 1 (Exh. A § 3.025)].

15.15.040 Requests for inspection.

Requests for inspection shall be made to the city by the person responsible for the construction. Requests for inspection on work requiring continuous inspection shall be made three working days prior to the commencing of the work. Notice shall also be given one working day in advance of the starting of work requiring periodic inspection. The city shall provide ~~written~~ confirmation either through verbal, text, fax or e-mail for all scheduled inspection appointments. [Ord. O-03-2010 § 1 (Exh. A § 3.030)].

15.15.050 Construction completion inspection.

An inspection shall be made by the city engineer or his/her designee before and after the warranty period. Specifically, the city engineer or his/her designee will determine if any installed infrastructure displays signs of failure, such as concrete cracks greater than one-eighth inch, rutting or settled asphalt. When such defects are minimal, patching or sealing will be allowed by the city, provided the defect is not a structural defect. The city engineer or his/her designee will generate a punch list of all items to be corrected by the developer prior to final acceptance by the city.

Any punch list generated by the city engineer or his/her designee shall only be valid for a period of 30 days. Subdivisions with outstanding items past 30 days may be subject to an additional walkthrough prior to acceptance by the city to address any additional faulty or defective work.

It is further agreed and understood that the determination for necessity of repairs of the work rests with the city engineer or his/her designee. His/her project review shall include, but shall not be limited to, the entire street base, and all pipes, utilities, joints, valves, backfill and compaction as well as the working surface, curbs, gutters, sidewalks, and other accessories that are, or may be, affected by the construction

operations, and whenever, in the judgment of the city engineer or his/her designee, work is not complete, shall cause a written notice to be served to the developer and thereupon the developer shall undertake and complete such repairs or rebuilding prior to the final city acceptance and release of the warranty bond. The city engineer and his/her designee shall make every effort to distinguish between failures which result from poor design or workmanship from those caused by third parties such as builders, and shall not knowingly require developers to correct failures caused by third parties. Specific examples shall include: cracked concrete which likely would have resulted from builders placing heavy equipment on concrete shall not require replacement. However, excessive spalling of concrete which is likely caused by workmanship issues will be required to be replaced. Contractors and subcontractors hired for the completion of the required improvements are not considered third parties, and damage found to be from such individuals will be obligated to be repaired by the developer. Failure to complete repairs in a timely manner may result in a forfeiture of the warranty bond, at which time the city will complete the improvements. Appeals to items included in the project review must be made in writing to the public works director within five days of being notified of the deficient items. Additional appeals may be made to the Eagle Mountain City mayor or city council. [Ord. O-03-2010 § 1 (Exh. A § 3.040)].

15.15.060 Work without inspection.

Any work performed without proper inspections, as required in this chapter, will give the city the option to hold the bond covering that portion of the improvements in violation or require removal and replacement of the uninspected work. The city shall have the option of retaining part or all of the bond for five years after installation of improvements in violation of this chapter. It is the responsibility of the developer to ensure his/her contractors request all necessary inspections.

Inspection services provided by outside inspection services will be allowed; provided, that the city approves of any inspection companies in writing prior to inspection services, and the city is notified of what services will be provided by said outside inspection services prior to the inspection services taking place. [Ord. O-03-2010 § 1 (Exh. A § 3.050)].

15.15.070 As-built drawings.

As-built drawings shall be submitted to the city engineer or his/her designee before final inspection and acceptance by the city. As-built drawings shall be prepared by a licensed land surveyor and submitted on a hard copy and a computer aided design (CAD) file. As-built drawings shall show all utilities and boundary lines as shown in the Eagle Mountain standard drawings for as-builts. CAD files shall be submitted on a CD or by e-mail in an AutoCAD or .dxf format. The CAD file of the as-built drawings must be in the NAD27 State Plane Coordinate System with a tie to a section corner. If anything is submitted by e-mail, the engineering division must be contacted for the proper e-mail address and for confirmation the

e-mail was received. The portion of the bond generally released at final inspection will not be released until the as-builts are submitted and approved. [Ord. O-03-2010 § 1 (Exh. A § 3.055)].

Chapter 15.25
EARTHWORK

Sections:

15.25.010 General.

15.25.020 Subgrade soil under structures and Public Rights of Way.

15.25.030 Backfill around structures.

15.25.040 Construction of embankments and fills.

15.25.050 Compacting earth materials.

15.25.060 Road subgrade preparation.

15.25.070 Slope safety.

15.25.080 Water settling.

15.25.090 Removal and replacement of defective fill.

15.25.100 Permit required for earth products processing and storage.

15.25.110 Native Fill Use for Trenches and Road Sections.

15.25.010 General.

This chapter defines the requirements for excavation and backfill for structures, construction requirements for embankments and fills and subgrade preparation for pavements and other surface improvements. All earthwork shall conform to the APWA Standard Specifications unless noted otherwise in this chapter. [Ord. O-09-2014 (Exh. A); Ord. O-03-2010 § 1 (Exh. A § 5.010)].

15.25.020 Subgrade soil under structures and Public Rights of Way.

Subgrade soil for all concrete structures, regardless of type or location, shall be firm, dense, thoroughly compacted and consolidated; shall be free from mud, ~~and~~ muck and all organics; and shall be sufficiently stable to remain firm and intact under the feet of the workmen engaged in subgrade surfacing, laying reinforcing steel, and depositing concrete. Coarse gravel or crushed stone may be used for subsoil reinforcement if results are satisfactory to the city engineer or his/her designee. Such material shall be applied in layers, not exceeding eight inches in thickness, each layer being embedded in the subsoil by thorough tamping. All excess soil shall be removed to compensate for the displacement of the gravel or crushed stone and the finished elevation of any subsoil reinforced in this manner and shall not be above the specified subgrade. The city engineer may require a soil analysis and design for any area. A proof roll will be required at existing ground before placing any e-fill. [Ord. O-09-2014 (Exh. A); Ord. O-03-2010 § 1 (Exh. A § 5.020)].

15.25.030 Backfill around structures.

Backfill around structures shall be placed to the lines shown on the approved drawings, or as directed by the city engineer or his/her designee. After completion of foundation, footings and walls and other construction below the elevation of the final grades, and prior to backfilling, all forms shall be removed and the excavation shall be cleaned of all trash and debris. Material for backfilling shall consist of suitable materials as defined in EMMC 15.30.040 and shall be placed in layers not exceeding eight inches in uncompacted thickness. Each layer shall be compacted by hand or machine tampers or by other suitable equipment to a density equal to 95 percent of maximum dry density as measured by AASHTO T180 method C. No frozen material is allowed in the backfill. [Ord. O-09-2014 (Exh. A); Ord. O-03-2010 § 1 (Exh. A § 5.030)].

15.25.040 Construction of embankments and fills.

Unsuitable materials that occur in the foundation for embankments and fills shall be removed by clearing, stripping and/or grubbing. Where suitable materials occur, after stripping, the foundation shall be scarified to a depth of not less than eight inches, and the loosened material shall be moistened and compacted as hereinafter specified for each layer. All materials in embankments and fills shall be placed, moistened, and compacted as provided in this chapter.

When the embankment or fill exceeds the amount of excavation, sufficient additional material shall be obtained from borrow pits provided by the contractor. All material proposed to be imported shall be subject to the review and approval of the city engineer or his/her designee prior to starting of hauling operations.

The materials used for embankment and fill construction shall be free from sod, grass, trash, rocks larger than six inches in diameter and all other material unsuitable for construction of compacted fills. Grading of completed embankments and fills shall bring the surfaces to a smooth, uniform condition with final grades being within 0.1 foot of the design grade. Within a City right of way, materials must meet AASHTO A1 or A2 soil classification, be 3 inch minus and be tested every lift (1,000 sq.ft. max per test). Embankments built without material supporting the sides must be overbuilt to ensure compaction of the edges. [Ord. O-09-2014 (Exh. A); Ord. O-03-2010 § 1 (Exh. A § 5.040)].

15.25.050 Compacting earth materials.

The material shall be deposited in horizontal layers having a thickness of not more than eight inches after being compacted as hereinafter specified; provided, that when mechanical equipment is used for placing and compacting the material on a sloping foundation, the layers may be placed parallel to the

foundations. The distribution of materials shall be such that the compacted material will be homogeneous and free from lenses, pockets, or other imperfections. No frozen material may be used. Prior to and during compaction operations the material shall have the optimum moisture content required for the purpose of compaction and the moisture content shall be uniform throughout the layers, insofar as practical. Moistening of the material shall be performed at the site of construction, but such moistening shall be supplemented, as required by sprinkling at the site of excavation. If the moisture content is more than optimum for compaction, the compaction operations shall be delayed until such time as the material has dried to the optimum moisture content. When the material has been conditioned as hereinbefore specified, the backfill or embankment shall be compacted as follows:

A. Under roadways and extending one foot beyond the proposed curb line, the fill or embankment material shall be AASHTO A1 or A2 and be three (3) inch minus that is compacted to a density equal to not less than 95 percent of maximum dry density as measured by AASHTO T180 method C or the modified proctor test ASTM D1557.

B. Under sidewalks and driveways, the fill or embankment material (to at least one foot each side of the edge of the slab) shall be compacted to a density equal to not less than 95 percent of maximum dry density as measured by AASHTO T180 method C or the modified proctor test ASTM D1557. Sidewalk in the public right of way will need to be sub graded below original native soil with all organics removed. A proof roll will be required before A1 or A2 fill can be placed to the bottom of the base.

C. Other fills and embankments not listed above shall be compacted to a density equal to not less than 90 percent of maximum dry density as measured by AASHTO T180 method C or the modified proctor test ASTM D1557. [Ord. O-09-2014 (Exh. A); Ord. O-03-2010 § 1 (Exh. A § 5.050)].

15.25.060 Road subgrade preparation.

In both cut and fill areas the paving subgrade shall be scarified to a depth of eight (8) inches below original native ground and compacted to the equivalent of 95 percent of maximum dry density as measured by AASHTO T180 method C or the modified proctor test ASTM D1557. No rocks larger than ~~two~~ three (3) inches in diameter, organic material, soft clay, spongy material or other deleterious material will be permitted in this scarified subgrade layer. Rough subgrades shall be shaped and graded to within a tolerance of 0.15 foot of design grade and drainage shall be maintained at all times. The developer shall provide to the city engineer or his/her designee the results of a subsurface investigation performed by the developer’s engineer and the recommendation as to whether existing material is adequate for road construction.

During the rolling operation, moisture content of the subgrade layer shall be maintained at no less than 97 or more than 105 percent of optimum moisture content. Rolling shall be continued until the entire road bed (to one foot back of curb) is compacted to the specified density to a minimum depth of eight inches. A proof roll will be required before placement of three (3) inch minus A1 or A2 is allowed. [Ord. O-09-2014 (Exh. A); Ord. O-03-2010 § 1 (Exh. A § 5.060)].

15.25.070 Slope safety.

All slope construction shall be in accordance with all city, state and federal regulations. Plans and specifications for structures must be approved by the city if the excavation is greater than five feet. No permanent slopes steeper than 3:1 shall be allowed without a retaining structure unless otherwise approved in writing by the city engineer or his/her designee. Cut slopes greater than 3:1 slope in bedrock may be allowed, provided the geotechnical report demonstrates that the bedrock is of sufficient depth and strength to support such cuts. The width of the excavation shall be increased if necessary to provide space for sheeting, bracing, shoring and/or other supporting installations. Unsafe slopes will be the cause for immediate shutdown of the project. [Ord. O-09-2014 (Exh. A); Ord. O-03-2010 § 1 (Exh. A § 5.070)].

15.25.080 Water settling.

Water settling may be permitted with pre-approval by the city engineer or his/her designee, depending upon the type of soil and location. When water settling is approved, a city representative shall be at the job site during the compaction. When the material has dried sufficient to allow compaction tests, the contractor shall dig test holes for compaction tests at locations and depths required by the city engineer or his/her designee. [Ord. O-09-2014 (Exh. A); Ord. O-03-2010 § 1 (Exh. A § 5.080)].

15.25.090 Removal and replacement of defective fill.

Fill not conforming to the requirements of this chapter shall be reworked to the requirements or removed and replaced with acceptable fill. [Ord. O-09-2014 (Exh. A); Ord. O-03-2010 § 1 (Exh. A § 5.090)].

15.25.100 Permit required for earth products processing and storage.

A. Any person desiring to perform any crushing, screening, storage, stockpiling or processing of sand, gravel, dirt, rock or other earth products for use on the property or within the approved project area where the materials are being extracted shall obtain a permit from the city engineer. The city engineer may deny the permit if the city engineer determines extraction, processing or storage will negatively impact neighboring properties, or include conditions in the permit, including, but not limited to, noise restrictions, types of equipment and machinery, dust and pollution control measures, geographic restrictions, berming, duration of project, and hours of operation. Application for a permit shall be filed with the city engineer on a form or forms to be furnished by the city.

B. No crushing, screening, storage, stockpiling or processing of sand, gravel, dirt or rock earth products shall be allowed for sale or use of such material outside the project area unless otherwise permitted under Chapter 17.54 EMMC (Extractive Industries Overlay Zone).

C. It shall be unlawful for any person to commence work until the city engineer has approved the application and until a permit has been issued for such work. Violations of the provisions of this section shall result in civil penalties of $100.00 per day for the first seven days of violation and $250.00 per day for all subsequent days of violation. The city engineer may also issue a stop work order for any project or property in violation of this section. [Ord. O-09-2014 (Exh. A)].

15.25.110 Native Fill Used for Trenches and Road Sections.

Native fill will meet AASHTO A-1 or A-2 classifications ~~with a 20% maximum on fines passing 200 sieve~~ and be 3" minus. Native fill used in roadways/trenches will be completely free of organics and rocks larger than 3" diameter. Also native fill will be ~~screwed~~ screened and mixed to maintain consistency. All soil samples will need to be taken in the presence of an Eagle Mountain City Representative.

15.25.120 Permit required for general earthwork

A. Excavation permits are not required on individual residential lots for normal landscape, installation of topsoil, irrigation installation, or projects that do not require a building permit. An excavation permit is required for general earthwork on projects not part of an approved construction project if such work consists of mass grading of a site if fill materials are being imported, exported, and relocated within a single lot. Materials being processed and removed from site must comply with section 15.25.100. The permit shall identify the limits of disturbance, the quantity of cuts and fills, quantities of any materials being removed from site, duration of the project, implementation of safety measures intended to protect the surrounding residents, restrictions of noise and work hours, and implementation of SWPPP BMP's if needed. Application for a permit shall be filed with the city engineer on a form or forms to be furnished by the city.

B. It shall be unlawful for any person to commence work until the city engineer has approved the application and until a permit has been issued for such work. Violations of the provisions of this section shall result in civil penalties of $100.00 per day for the first seven days of violation and $250.00 per day for all subsequent days of violation. The city engineer may also issue a stop work order for any project or property in violation of this section. [Ord. O-09-2014 (Exh. A)].

Chapter 15.35
WATER LINES

Sections:

15.35.010 General.

15.35.020 Culinary water pipe.

15.35.030 Water main bedding materials.

15.35.040 Water main type and locations.

15.35.050 Water meters and service lines.

15.35.060 Water meter standards.

15.35.070 Tapping of water lines.

15.35.080 Testing and flushing.

15.35.090 Disinfection of water lines.

15.35.100 Backflow prevention and cross-connection control rules and regulations.

15.35.110 Water system extensions.

15.35.120 Water Fittings

15.35.010 General.

The installation specifications for water systems shall conform to the APWA Standard Specifications unless noted otherwise in this chapter.

A. Inspection. All pipe used shall be carefully inspected prior to installation. Any or all defective pipe shall be rejected.

B. Minimum Cover. All water mains and service laterals shall have a minimum cover of four feet to the top of the pipe and a minimum of 3’ at installation. Maximum cover shall be 6 feet.

C. 12 ga locator wire along water main to setters & fire hydrants.

D. Metallic caution tape place 2’ above water main.

E. All valves to be flanged to tees.

F. Valves 12” and above to be butterfly valves.

G. Bolts at the top of fire hydrant barrel to be no lower than 1” above finished grade & no higher than 6” above finished grade.

H. Water services (setters) to be installed prior to bacteria & pressure tests. [Ord. O-03-2010 § 1 (Exh. A § 7.010)].

J. Six (6) inch thick concrete pad around fire hydrants. See detail FH-1.

15.35.020 Culinary water pipe.

PVC or ductile iron pipe is allowed to be used within subdivisions. Pressures, water hammer, surges, and other dynamic water characteristics shall be taken into consideration during the design and construction of the water system. The required pipe class shall be determined based upon characteristics. [Ord. O-03-2010 § 1 (Exh. A § 7.020)]. No deflections are allowed in pipes. For curvilinear roadways, the design engineer shall incorporate fittings as appropriate to avoid deflections and maintain adequate separation from sewer and storm drain utilities.

15.35.030 Water main bedding materials.

Water main lines must be bedded using sand or similar materials. No gravel of any kind will be allowed. All bedding material must meet AASHTO A3 soil classification with 100% passing the #4 sieve. [Ord. O-03-2010 § 1 (Exh. A § 7.025)]. Bedding shall be placed six (6) inches minimum to the sides and bottom of pipe zone and twelve (12) inches minimum above or equivalent to pipe diameter whichever is greater.

15.35.040 Water main type and locations.

Water mains shall be located on either the north or east side of a roadway and eight feet from the centerline.

Water mains shall be minimum ~~one foot~~ 18 inches vertical above the sewer. Separation between water and sewer mains shall be 10 feet (horizontally) minimum unless authorized in writing by the city engineer or his/her designee.

Water mains shall be either polyvinyl chloride (C-900 PVC, ~~for pipes eight inches to 12 inches~~ that is higher pressure rated) or Ductile Iron Pipe (DIP) (poly wrapped) if design or as determined by city engineer with minimum pressure class of 250 psi for pipes greater than 12 inches. PVC pipe shall meet the requirements and specification of APWA 15014 and AWWA C900, C905, and C909. Ductile iron pipe shall meet the standards and specifications of APWA 15011. HDPE may be used for borings upon the approval of the city engineer or his/her designee. No bends will be allowed in water lines and fittings will be required. All fitting to be Mega-lug fittings. [Ord. O-03-2010 § 1 (Exh. A § 7.030)].

15.35.050 Water meters and service lines.

Prior to the installation of the water service line, the engineer retained by the developer shall stake out the water meter location and provide the grade at which the lid is to be set.

Minimum service line size is three-quarter inch. All water service lines shall start with a corporation stop at the main and shall be of poly pipe with stiffeners or type “K” copper and meter setters of 21-inch or taller and ~~are~~ braced, with dual unions at bottom of setter and meet height specs in a 21-inch can for water meters. A four-inch ring and lid shall be used and installed with the top of the setter at a depth of not less than 18 inches and not more than 22 inches from the lid of the meter box. Meters ~~two~~ one and a half (1.5)

inches and larger shall be placed in vaults (see Eagle Mountain standard drawing). All meter setters shall have dual check valves. Meter boxes shall be placed ~~between~~ behind the sidewalk when there is no park strip shall be placed 3 feet behind walk to center of can +/- 3 inches ~~line and property line with combination curb, gutter, and sidewalk~~ or in the planter if available so that a fence may be placed on property without interfering with the maintenance and reading of said meter. No meters shall be set in sidewalks or driveways. Meter boxes shall be in good repair and relatively free from obstruction to ensure ease in maintenance and reading (not full of dirt past the base of the meter, having trash present and being badly bent to create a hazard). Damaged boxes shall be replaced. Meter boxes shall be from level to one inch high from the final grade of sidewalk. See detail.

Lids shall have a one-inch hole in the top for the touch-read sensor and read Eagle Mountain Water Meter on lid.

Water service lines shall be minimum ~~one foot~~ 18 inches vertical above the sewer. Water meters shall be located at the centerline of single-family lots unless authorized by the city engineer or his/her designee. On narrow lot subdivisions (lot width less than 50 feet), water laterals are to be located on alternating lot lines, although in no instances shall connections be made to the water main closer than three-foot intervals. Separation between water and sewer mains shall be 10 feet (horizontally) minimum unless authorized in writing by the city engineer or his/her designee.

A separate and independent service lateral for water service shall be provided for every building used as a dwelling, except in cases of undue hardship where the city council deems it necessary to make an exception. The water user shall bear full responsibility for the upkeep and maintenance of all water system lines and fixtures beyond the water meter.

From and after the effective date of the ordinance codified in this chapter, all dwelling units and premises under separate ownership shall be served by individual water meters, except in cases of undue hardship or in planned unit developments when approved by the city council. [Ord. O-03-2010 § 1 (Exh. A § 7.040)].

15.35.060 Water meter standards.

All water meters shall be purchased from the city. All structures, dwelling units, and establishments using water from the city culinary water system must have such number and size of water meters connected to their system as are necessary to meet the requirements of the Utah Plumbing Code. Meters will be furnished by the city at the expense of the property holder, at the city's cost for said meter. Meter readings shall be taken at regular intervals as determined by the superintendent of the division and shall be submitted to the city treasurer for the purpose of making necessary billings for water service.

Water meters will not be placed in driveways or under sidewalks. If a water meter must be moved out of a driveway, the maximum lateral movement is 24 inches. If a fitting is required to allow the meter to be relocated, the contractor must notify the public utilities department so that an inspector can be present to verify the fitting is installed in accordance with city standards. Backfill and bedding on the relocated service lateral must conform to city standards and the engineered backfill (A1 or A2) requirement of the city. [Ord. O-03-2010 § 1 (Exh. A § 7.050)].

15.35.070 Tapping of water lines.

Tapping valves may only be used when previously approved by the city engineer or his/her designee. Tapping saddles with an "O" ring may be used if the water main line to be tapped is larger than the new water main line. Where the tap is the same size as the existing main, cast iron or stainless steel tapping sleeves shall be used, which encase the full perimeter of the pipe. The valve shall be a tapping valve with a guide lip on the flanged side. The opposite side of the valve shall have a mechanical joint connection.

Service taps shall be a minimum of 36 inches apart. No taps will be allowed within 36 inches of the end of the pipe joints and fitting, not including the joints in the measurement. [Ord. O-03-2010 § 1 (Exh. A § 7.060)].

15.35.080 Testing and flushing.

A. A minimum pressure 50 percent in excess of the maximum line operation pressure (or 200 pounds, whichever is greater) shall be maintained on the portion being tested for a minimum period of two hours, using either pneumatic or hydraulic means to maintain the pressure. After installation, fire hydrants must be covered with a black garbage bag taped down until all testing has been completed.

B. After pressure testing, all pipelines shall be flushed. Flushing shall be accomplished through hydrants or, if a hydrant does not exist at the end of the line, the contractor shall install a tap sufficient in size to provide for two-and-one-half-foot-per-second flushing velocity in the line.

C. A leakage test shall be conducted concurrently with the pressure test.

1. "Leakage" shall be defined as the quantity of water that must be supplied into the newly laid pipe, or any valved section thereof, to maintain pressure within five psi of the specified test pressure after the air in the pipeline has been expelled and the pipe has been filled with water.

2. Allowable Leakage. No pipe installation will be accepted if the leakage is greater than that determined by the following formula:

$$\mathrm{L} = \frac{SD(P)^{0.5}}{133{,}200}$$

in which L is the allowable leakage, in gallons per hour; S is the length of pipeline tested, in feet; D is the nominal diameter of the pipe, in inches; and P is the average test pressure during the leakage test, in pounds per square inch gauge.

a. Allowable leakage at various pressures will be provided by inspectors.

b. When testing against closed metal-seated valves, an additional leakage per closed valve of 0.0078 gallon/hour/inch of nominal valve size shall be allowed.

c. When hydrants are in the test section, the test shall be made against the closed hydrant.

3. Acceptance of Installation. Acceptance shall be determined on the basis of allowable leakage. If any test of pipe laid discloses leakage greater than specified, the contractor shall, at its own expense, locate and repair the defective material until the leakage is within the specified allowance.

D. All visible leaks are to be repaired regardless of the amount of leakage.

E. All new water systems or extensions to existing systems shall be thoroughly flushed before being placed in service. Flushing shall be accomplished through hydrants, or end-of-line blowoff assemblies at a minimum flushing velocity of two and one-half feet per second.

F. The following is the flow quantity required to provide a two-and-one-half-foot-per-second flushing velocity:

PIPE SIZE (IN.)	**FLOW (G.P.M.)**
4	100
6	220
8	390
10	610
12	880
16	1,567
18	1,980

20	2,450
24	3,525
30	5,507

[Ord. O-03-2010 § 1 (Exh. A § 7.070)].

15.35.090 Disinfection of water lines.

A. Disinfection of water mains shall be done in accordance with the latest edition of AWWA C651.

B. The pipe shall be clean prior to disinfection. If, in the opinion of the city, contamination is such that it cannot be removed by flushing, the pipe shall be cleaned by mechanical means and then swabbed with a one percent hypochlorite disinfection solution.

C. The pipeline shall be disinfected as outlined in AWWA C651. Chemicals to be used shall conform to one of the following: AWWA B300, hypochlorite; AWWA B301, liquid chlorine; AWWA B302, ammonium; and AWWA B303, sodium chlorite.

The tablet method shall consist of placing calcium hypochlorite tablets at the specified rate in the main during construction at the upstream end of each section of pipe. The tablet shall be attached with an adhesive, such as Permatex No. 1 or equal. The line shall then be filled slowly (velocities less than one foot/second), expelling all air pockets and maintaining the disinfection solution in the line for at least 24 hours, or 48 hours if the water temperature is less than 41 degrees Fahrenheit. The disinfection solution shall have a concentration of at least 25 mg/L of available chlorine. The continuous feed shall be done exactly as outlined in AWWA C651 and shall have 25 mg/L available chlorine after 24 hours. Under both methods the contractor shall not be allowed to flush the line until the chlorine residual test has been passed by the city.

D. After the chlorination, the line shall be thoroughly flushed with velocities greater than two and one-half feet/second with clean water and if necessary re-chlorinated until satisfactory bacteriological testing is obtained. If any of the tests fail, the contractor shall be responsible for the fees of additional tests. All new lines shall be isolated from existing lines when tested.

E. Following the approval of the testing and installation of a water main, the entire water line will be flushed through the end of the main via an approved outlet.

F. The ~~developer~~ contractor shall take bacteria samples at the sites designated by the public works director or his/her designee for each job, based on the following formula:

1. a. Minimum of one sample up to 200 feet.

   b. Minimum of two samples up to 600 feet. (One in the middle and one on the end.)

   c. Minimum of one sample every 600 feet.

   d. Sampling points to be established during the preconstruction meeting for each project.

2. If any sample point fails on the first test, the line will be flushed and retested at all sample points.

3. If any sample point fails a second time, the complete line will be re-disinfected and retested at all sample points.

4. If any samples come back marked "~~presence~~ "present or unsatisfactory" which means coliform bacteria is present, the line will be re-disinfected and retested at all sample sites.

5. After passing test let system "relax" 24 hours then take subsequent test.

6. After second test of samples is acceptable system is ready for use.

G. Bacteriological reports shall consist of the following:

1. Date issued, project name, and the name, address, and telephone number of the testing laboratory.

2. Date and time of water sample.

3. Name of person collecting samples.

4. Test locations.

5. Initial and 24-hour disinfection residuals in ppm for each outlet tested.

6. Coliform bacteria test results for each outlet tested.

7. Certification that water conforms, or fails to conform, to bacterial standards of the state.

Water services will not be installed until bacteria sample results have been approved by the city engineer or his/her designee. [Ord. O-03-2010 § 1 (Exh. A § 7.080)].

15.35.100 Backflow prevention and cross-connection control rules and regulations.

This section enacts the cross-connection control and backflow prevention requirements applicable to the water system which is owned and operated by Eagle Mountain City.

A. Definitions.

1. “City” means Eagle Mountain City.

2. The city engineer, the water division director and the public works director are vested with the authority and responsibility for the implementation of the city’s cross-connection control program.

3. “Approved backflow assembly” means a backflow assembly accepted by the Utah State Drinking Water Division as meeting an applicable specification or as suitable for the proposed use.

4. “Auxiliary water supply” means any water supply on or available to the premises other than the city’s public water supply. These auxiliary waters may include water from another public potable water supply or any natural source, such as a well, spring, river, stream, harbor, irrigation water, used-water storage tanks or reservoirs which may or may not originate within the city. These waters may be contaminated or polluted or they may be objectionable and constitute an unacceptable water source over which the city does not have authority for sanitary control.

5. “Backflow” means the reversal of the normal flow of water caused by either back-pressure or back-siphonage.

6. “Back-pressure” means the flow of water or other liquids, mixtures, or substances under pressure into the distribution pipes of a potable water supply system from any source or sources other than the intended source.

7. “Back-siphonage” means the flow of water or other liquids, mixtures, or substances into the distribution pipes of a potable water supply system from any source other than the intended source, caused by the reduction of pressure in the potable water supply system.

8. “Backflow prevention assembly” means an assembly or means designed to prevent backflow. Specifications for backflow prevention assemblies are contained within the Utah Plumbing Code, Chapter 10 (Appendix J), and the Cross-Connection Control Program of Utah. All backflow prevention assemblies must be approved by the Utah State Drinking Water Division prior to installation. A listing of these approved backflow prevention assemblies may be found in the Cross-Connection Control Program for Utah.

9. “Contamination” means an impairment of the quality of the potable water supply by sewage, industrial fluids or waste liquids, irrigation or other nonpotable water, compounds or other materials to a degree which creates an actual or potential hazard to the public health through poisoning or through the spread of disease.

10. “Cross-connection” means any physical connection or arrangement of piping or fixtures between two otherwise separate piping systems, one of which contains potable water and the other water from a non-city source or nonpotable water or storage tanks or reservoirs of questionable safety, through which, or because of which, backflow may occur into the potable water system; including any temporary connections, such as swing connections, removable sections, four-way plug valves, spools, dummy sections of pipe, swivel or change-over devices or sliding multiport tubes.

11. “Cross-connection – controlled” means a connection between a potable water system and water from a non-city source or a nonpotable water system with an approved backflow prevention assembly properly installed and maintained so that it will continuously afford the protection commensurate with the degree of hazard.

12. “Cross-connection – containment” means the installation of an approved backflow assembly at the water service connection to any user’s premises where it is physically and economically infeasible to find and permanently eliminate or control all actual or potential cross-connections within the user’s water system, or the installation of an approved backflow prevention assembly on the service line leading to and supplying a portion of a user’s water system where there are actual or potential cross-connections which cannot be effectively eliminated or controlled at the point of the cross-connection (isolation).

13. “User” means a dwelling or other service connected to the city water system regardless of the location within or outside the boundary of the city.

B. 1. An approved backflow prevention assembly shall be installed on each service line to a user’s water system, at or near the property line, or immediately inside the building being served, but in all cases before the first branch line leading off the service line, whenever the city determines that such is necessary for protection of the water supply or in the best interest of the users of the city’s water supply system.

2. The type of protective assembly required under this subsection shall depend upon the degree of hazard which exists at the point of cross-connection, i.e., whether direct or indirect, as defined in the Utah Plumbing Code.

3. All presently installed backflow prevention assemblies which do not meet the requirements of this section but were approved assemblies for the purposes described herein at the time of installation and which have been properly maintained shall, except for the inspection and maintenance requirements listed in subsection F of this section, be excluded from the requirements of these rules so long as the city believes that they will satisfactorily protect the public water system. Whenever the existing assembly is moved from the present location or requires more than minimum maintenance or when the city finds that the maintenance of this assembly constitutes a hazard to health, the unit shall be replaced by the user with an approved backflow prevention assembly meeting the requirements of this chapter.

4. No water service connection to any premises shall be installed by any user of the city's potable water system or maintained by the user unless the water supply is protected as required by state laws, regulations and codes, and the provisions of this chapter. Service of water to any premises shall be discontinued by the user if a backflow prevention assembly required for control of backflow and cross-connections is not installed, tested and maintained, or if it is found that a backflow prevention assembly has been removed or bypassed, or if an unprotected cross-connection exists on the premises. Service will not be resumed by any user until such conditions or defects are corrected, and the city shall not furnish potable water to the premises of any user known by the city to be lacking suitable backflow prevention assemblies.

5. The user's system shall be open for inspection at all reasonable times to authorized representatives of the city to determine whether cross-connections or other structural or sanitary hazards, including violations of this chapter, exist. When such a condition becomes known, the city shall deny or immediately discontinue service to the premises by providing a physical break in the service line until the customer has corrected the condition in conformance with the state statutes and city regulations.

C. If, in the judgment of the director, an approved backflow prevention assembly is required at the user's private water system for the protection of the public potable water distribution system from contamination or pollution due to the backflow of contaminants through water service connections, the city or its designated agent shall give notice in writing to such user to install an approved backflow prevention assembly at a specific location or locations on his/her premises. Within 10 days after receipt of written notice, the user shall install such approved assembly at the user's own expense, and failure, refusal or inability on the part of the user to install, have tested, and/or maintain said assembly shall constitute grounds for discontinuing water service to the premises until such requirements are met.

D. The building official shall have the responsibility to review building plans and inspect plumbing as it is installed and to prevent cross-connections from being designed and built into structures which will connect to the water system. Where the review of building plans suggests or indicates potential for a cross-connection being made an integral part of the plumbing system, the building inspector shall require such cross-connections to either be eliminated or provided with an approved backflow prevention assembly in accordance with the plumbing code.

E. When employed by the user or the city to test, repair, overhaul and/or maintain backflow prevention assemblies, a backflow assembly technician shall have the responsibility and obligation:

1. To ensure that acceptable testing equipment and procedures are used for testing, repairing, or overhauling backflow prevention assemblies.

2. To make reports of such testing and/or repair to the user and the city, such reports to include the list of materials or replacement parts used.

3. To ensure that replacement parts are equal in quality to parts originally supplied by the manufacturer of the assembly being repaired.

4. To not change the design, material, or operational characteristics of the assembly during repair or maintenance.

5. To perform the work and be responsible for the competence and accuracy of all tests and reports.

6. To ensure that his license is current, and that the testing equipment being used is acceptable to the state of Utah and the city and is in proper operating condition.

7. To report a failing assembly to the city within five working days from the date the failure was detected. Failure to do so may be grounds for revocation of the technician’s certification.

8. To be equipped with and be competent in the use of all necessary tools, gauges, and other equipment necessary to properly test, repair, and maintain backflow prevention assemblies.

9. To tag each double check valve, pressure vacuum breaker, reduced pressure backflow assembly and air gaps, showing the serial number, date tested and by whom. The technician’s license number must also be on such tag.

10. In the case of a user requiring a commercially available technician, any certified technician is authorized to make the test and report the results of the same to the user and the city. If such a commercially tested assembly is in need of repair, the same shall be performed by a plumber licensed pursuant to Utah statutes.

F. 1. It is the duty and responsibility of the user at any premises where backflow prevention assemblies are installed to have certified inspections and operational tests made at least once per year at the user's expense. In those instances where the city deems the hazard to be great, it may require certified inspections and tests at more frequent intervals. All inspections and tests shall be performed by a certified backflow assembly technician, licensed through the state of Utah, and shall be made in accordance with the standards set forth by the Utah State Drinking Water Division.

2. Backflow prevention assemblies shall be installed in water supply lines to provide at least the degree of protection provided in the Utah Plumbing Code, Chapter 10 (Appendix J). All backflow prevention assemblies shall be exposed for easy observation and be readily accessible.

3. All backflow prevention assemblies installed in a potable water supply system for protection against backflow shall be maintained in good working condition by the user or other person or persons having control of such assemblies. The Utah State Drinking Water Division and the city may inspect such assemblies and, if found to be defective or inoperative, shall require the replacement thereof. No assembly shall be removed from use, relocated, or another assembly substituted without the approval of the city.

4. Each user shall cause all backflow prevention assemblies to be tested within 10 working days of installation.

5. No backflow prevention assembly shall be installed so as to create a safety hazard, e.g., installed over an electrical panel, steam pipes, boilers, pits, or above ceiling level. [Ord. O-03-2010 § 1 (Exh. A § 7.090)].

15.35.110 Water system extensions.

All extensions to the existing water system which are not covered by regulations in the approval of subdivisions and large-scale developments shall comply with the provisions of this section.

A. Any person desiring to extend the water system may make application to the city council. Such application shall be considered by the city council on a case-by-case basis and the council shall approve such applications if (1) the proposed extension is to be constructed consistent with the city's

extension standards, (2) there is adequate reserve water available to supply said need, and (3) the existing distribution system is adequate to supply the needed water to the point of beginning of the extension.

B. The application shall contain a description of the proposed extension accompanied by a map showing the location thereof. Detailed engineering drawings showing the location and size of all lines, mains, service laterals, appurtenant facilities, anticipated water pressures and fire flows shall be included. The application shall also include an extension agreement signed by the applicant in a form approved by the city council by which the applicant agrees to construct the facilities, both on-site and off-site, and accepts the conditions agreeing to reimbursement as outlined in subsection F of this section.

C. Before any such application is approved, the city council shall refer it to the water division superintendent for his review and comment. The application may also be referred to the planning commission and the city engineer for similar review and recommendation.

D. The design, location, materials and methods and standards of construction of water line extension shall be in accordance with city standards and specifications as approved by the city council.

E. The city council may require the construction of oversized and off-site facilities as a condition of the approval of any application governed by this section.

F. Upon completion of an extension, the applicant's share of the actual cost of making such extension shall be determined by the city engineer from as-built drawings to be provided by the applicant. Whenever an extension of a water main benefits property which is adjacent to the extension or extended from the end of an existing extension, other than that which is owned by the applicant, the city will enter a deferred credit on its books and records in the amount of the actual prorated cost of extension across the front of said benefited property and shall reimburse the applicant, his assignees or successors, upon collection by the city of charges assessed against such benefited property as service connections are made. All such reimbursements shall extend for a period determined by the city council from the date of the completion of the extension and acceptance by the city, or until the initial prorated cost of the extension along the frontage not owned by the applicant shall have been refunded.

A water main extension charge for each and every subsequent service connection to an extension under the provisions of this section shall be paid before such service connection is made, except for frontage owned by the applicant at the time of the application. The water main extension charge is separate and is in addition to any service connection charge required by the city. Extension of an existing water service main shall require a construction valve to isolate the new construction for testing and flushing purposes. A

blow off at the terminus of the water main shall be required unless a suitable alternative such as proximity to a fire hydrant is approved by the city engineer or his/her designee.

The amount of an extension charge to benefited property shall be determined by the city council. All necessary fire hydrants and appurtenances that are provided in making the extension shall be included in determining reimbursement.

All extension charges levied for purposes of reimbursement shall be determined using the costs for installing water mains of eight inches in diameter. Where the city requires that the extension be made using larger lines, the difference between the cost of installing an eight-inch water line and the size required by the city may be subject to reimbursement by the property owners which are served by said extension in accordance with the city's reimbursement policy. All cost for the line size over eight inches shall be borne by the city upon approval of the city council. All main water line extensions become the property of the city upon acceptance by the city. [Ord. O-03-2010 § 1 (Exh. A § 7.100)].

15.35.120 Water Fittings.

All water line fittings to have mega lug followers or approved fittings. All fittings, valves, saddles and other parts that have a likelihood to corrode shall be completely greased (food grade) and wrapped (8 mil min.) Anti-corrosion (anode) pits may be required in highly corrosive soils (based on soils report or on site testing).

All water main crosses and tees shall have a valve on all legs of the cross or tee. Valves shall be flanged directly to the cross or tee. Water mains of 10 inches or smaller shall require a gate valve. Mains 12 inches or larger shall require a butterfly valve unless authorized in writing by the city engineer or his/her designee.

Use ductile iron fittings that conform to the provisions of ANSI/ AWWA C110/ A21.10 or C153/A21.53 unless otherwise recommended by the manufacturer and authorized by the city engineer or his/ her designee. All PVC pipes being inserted into fittings shall have the bevel end removed.

Chapter 15.40

PRESSURIZED IRRIGATION

Sections:

15.40.010 General.

15.40.020 Installation.

15.40.030 Pipe and fittings.

15.40.040 Valves and couplings.

15.40.050 Meters, boxes and services.

15.40.060 Flushing.

15.40.010 General.

A. Specifications. This chapter covers the installation of pressurized irrigation lines. See standard drawings related to pressurized irrigation.

B. Pipe. Polyvinyl chloride (PVC) pipe shall be used for all pressurized irrigation mains unless authorized by the city engineer or his/her designee.

C. Size. The city must approve the sizes of all proposed pressurized irrigation lines. The minimum size of pressurized irrigation pipe is ~~four~~ six inches in diameter for main lines and one inch in diameter for services.

D. Location. Pressurized irrigation mains shall be located along centerline. Pressurized irrigation may not be placed in same trench as waterline. ~~on either the north or east side of a street, five feet from the centerline (three feet off water line). See standard drawings for utility locations. [Ord. O-03-2010 § 1 (Exh. A § 8.010)].~~

15.40.020 Installation.

A. General. Pressurized irrigation distribution and transmission systems shall be installed according to the requirements and specifications of APWA 02510. PVC pipe shall also be installed according to the requirements and specifications of AWWA C605.

B. Pipe Cleanliness. All foreign matter or dirt shall be removed from the inside of the pipe before it is placed and it shall be kept clean during and after laying. No debris, tools, or other materials shall be placed in the pipe during laying operations. When laying of pipe is not in progress, the pipe shall be closed by a watertight plug.

C. Minimum Cover. All pressurized irrigation mains shall have a minimum cover of ~~two~~ three feet to the top of the pipe.

D. Identification Tape. All pressurized irrigation mains shall be installed with identification tape that meets the requirements and specifications of APWA 02320. Tape shall be buried 12 inches below grade.

E. Lateral Displacement. All pipes shall be protected from lateral displacement resulting from impact or unbalanced loading during backfilling operations.

F. Restraining. Either thrust blocks or mechanical retaining devices shall be used for all tees, valves, plugs, caps, and bends. Restraining shall be accomplished according to the standard drawings.

G. Connection to Existing Pressurized Irrigation Lines. The contractor will be responsible to verify actual size, type of material, and location of existing utilities in the field. The fittings and materials required for construction must be approved by the city engineer or his/her designee. Where fitting sizes, such as tees and crosses, are shown on the plans, those sizes will be used. However, no attempt has been made to show all needed fittings or materials. [Ord. O-03-2010 § 1 (Exh. A § 8.020)].

H. Drains shall be installed at all low points on pressurized irrigation and connected to storm drain inlets. Pipes shall be sloped to low points to allow drainage.

15.40.030 Pipe and fittings.

A. General. Polyvinyl chloride (PVC) pipe shall be used for all pressurized irrigation mains 12 inches in diameter and smaller unless otherwise authorized by the city engineer or his/her designee. Ductile iron or polyethylene pipe shall be used for pressurized irrigation mains larger than two inches in diameter. Only PVC or polyethylene pipe may be used in corrosive soils.

B. Polyvinyl Chloride (PVC) Pipe. PVC pipe shall meet the requirements and specifications of APWA 15014 and AWWA C900, C905, and C909. Only purple, pressure class 150 psi pipe may be used for pressurized irrigation mains.

C. Ductile Iron Pipe. Ductile iron pipe shall meet the standards and specifications of APWA 15011. Only a pressure class of 150 psi or larger may be used. A tubular purple polyethylene encasement must be installed according to AWWA C105 over all ductile iron pipe and fittings. Flanges, when required, shall meet the requirements and specifications of AWWA C115.

D. Polyethylene Pipe. Polyethylene pipe shall meet the standards and specifications of APWA 15013.

E. Steel Pipe – Lined and Coated. Steel pipe shall meet the standards and specifications of APWA 15010.

F. Fittings. Use ductile iron fittings that conform to the provisions of ANSI/AWWA C110/A21.10 or C153/A21.53 unless otherwise recommended by the manufacturer and authorized by the city engineer or his/her designee. All PVC pipes being inserted into fittings shall have the bevel end removed. All the bolts

and nuts of all the fittings shall be greased. All fittings shall have an eight mil vinyl wrap plastic cover. [Ord. O-03-2010 § 1 (Exh. A § 8.030)].

G. Pipe zone

15.40.040 Valves and couplings.

A. General. All valves shall meet the requirements of APWA 02510 and 15030.

B. Resilient Seated Gate Valve. All valves on ~~four~~ six-inch to 10-inch water mains shall be resilient seated gate valves. Valves shall also be of iron body, have nonrising bronze stems and meet the following specifications:

1. Mechanical Joint. When valves are mechanical joint, they shall be furnished with all necessary glands, followers, and bolts and nuts to complete installation.

2. Valve Stems. Bronze valve stems shall be interchangeable with stems of the double disc valves of the same size, direction of opening and manufacture.

C. Butterfly Valve. All valves 12 inches and larger shall be butterfly valves which meet the requirements and specifications of APWA 02510, 15030 and the following specifications:

1. General. Valve bodies shall be cast iron, ASTM A126, Class B. Body ends shall be flanged with facing and drilling in accordance with ANSI B16.1, Class 125; or mechanical joint in accordance with AWWA C111. All mechanical joint end valves shall be furnished complete with joint accessories (bolts, nuts, gasket, and glands). All valves shall conform with AWWA Standard C504, Table 3, Laying Lengths for Flanged Valves and Minimum Body Shell Thickness for All Body Types.

2. Disc. Valve disc shall be ductile iron ASTM A536, Grade 65-45-12. Valve disc shall be of the offset design providing 360-degree uninterrupted seating.

3. Shaft Bearings. Shaft bearings shall be contained in the integral hubs of the valve body and shall be self-lubricated sleeve type.

4. Coating. All valves shall be coated with epoxy in conformance to AWWA Standard C550, latest revision.

Interior wetted ferrous surfaces shall be coated a nominal 10 mils thick for long life, and body exterior shall have a minimum of three to four mils coating thickness in order to provide superior base for filed-applied finish coats.

D. Valve Boxes. All buried valves shall be installed complete with two-piece, cast iron, slip-type, five-and-one-quarter-inch shaft valve box with drop lid. The lid shall have the word “IRRIGATION” or “DRAIN” according to the standard drawing cast in the metal.

Valves and valve boxes shall be installed where shown on the drawings. Valves and valve boxes shall be set plumb. Valve boxes shall be centered directly over the valve. Valves shall be aligned with property lines where possible. Earth fill shall be carefully tamped around the valve box to a distance of four feet on all sides of the box, or to the undisturbed trench face if less than four feet. Valves shall have the interiors cleaned of all foreign matter before installation.

All tops of valve boxes located in streets shall be installed one-quarter inch below grade. When a one-inch overlay is required a year after the road construction, the pavement surrounding the valve box shall be neatly cut to form a 30-inch round opening with the valve box centered, and a concrete collar shall be cast around the box. Valve boxes in off-road areas shall extend six inches above grade. Lid detail shall be similar to Comco C6517.

E. Couplings. Couplings shall be equal to the product of Smith-Blair or Dresser with cast iron couplings being used on all cast iron and PVC pipe. Couplings shall be straight, transition, or reducing style as required by the specific installation. All steel fittings and bolts shall be coated with a nonoxide coating and wrapped with polyethylene.

F. Pressure Regulation Valves. Pressure regulation valves (PRV) which are required in a development shall be designed by the developer’s engineer and the design shall be submitted to the city engineer or his/her designee for review and approval prior to starting construction. All PRVs shall be Cla-Val with bypass, be placed in a concrete vault and have telemetry included.

G. Tapping Valves. Tapping valves may only be used when previously approved by the city engineer or his/her designee. Tapping saddles with an “O” ring may be used if the water main line to be tapped is larger than the new water main line. Where the tap is the same size as the existing main, cast iron or stainless steel tapping sleeves shall be used which encase the full perimeter of the pipe. The valve shall be a tapping valve with a guide lip on the flanged side. The opposite side of the valve shall have a mechanical joint connection.

H. Air Vacuum and Release Valves. Combination air, vacuum and release valves shall be installed according to the standard drawings at high points in the system as required by the city. [Ord. O-03-2010 § 1 (Exh. A § 8.040)].

15.40.050 Meters, boxes and services.

A. General. See the standard drawings for pressurized irrigation services. The minimum size of new pressurized irrigation service lines is one inch IP. Pressurized irrigation services shall be installed after

electrical services. Every lot, including both sides of a twin home lot, shall have its own pressurized irrigation service.

B. Placement and Location. All meters and boxes shall have their location and grade staked prior to installation. No meters or boxes shall be set in sidewalks or driveways. Service taps shall be a minimum of 36 inches apart. No taps will be allowed within 36 inches of the end of the pipe. Service laterals shall extend perpendicular from the main to the meter box. For dual pressurized irrigation services, laterals shall extend perpendicular from the main to the tee. If a meter must be moved it may only be displaced a maximum of 24 inches to either side. If it must be moved more than 24 inches, a new service line must be installed. When a new service line is installed, the old corporation stop shall be shut off at the main and the old service line cut two feet from the main.

C. Meters and Boxes. All meters shall be paid for by the developer and purchased by the city. Meter boxes and pressurized irrigation boxes shall be in good repair. They shall not set at an angle or in a crushed or dented condition. The inside of boxes must be free of obstructions such as dirt, rocks or debris. Meters shall be installed by the developer or contractor.

D. Polyethylene Pipe. Only CTS SDR9 200 psi purple polyethylene pipe shall be used for pressurized irrigation service lines. Pipe damaged by scratches, cuts, kinks or buckled areas shall not be installed. The bottom of the trench shall be flat with no hollows, no lumps and no rock. If these conditions do not occur, pipe must be bedded in coarse sand. No rocks shall be allowed within six inches of pipe. Pipe shall be cut with either a wheel- or scissor-type tubing cutter with a blade specifically designed for plastic. Cuts shall be square and clean. Cutter manufacturer instructions shall be followed when cutting pipe. All connections shall have stainless steel stiffeners. There shall be no unnecessary bending of pipe. Taps shall be exactly horizontal to the pressurized irrigation main. If bending cannot be avoided, maximum bending radius shall be 25 times the pipe diameter. There shall be no bending within three feet of a fixed point and no “S” shape curves. [Ord. O-03-2010 § 1 (Exh. A § 8.050)].

15.40.060 Flushing.

A. General. All pressurized irrigation lines shall be flushed before being placed in service. Flushing shall be accomplished through the end of each line.

B. Velocity. The contractor shall install a tap sufficient in size to provide for two-and-one-half-foot-per-second flushing velocity in the line. The following is the flow quantity required to provide a two-and-one-half-foot-per-second flushing velocity:

FOR FLUSHING (pipe diameter)	FLOW REQUIREMENTS (flow in gallons per minute)
4 inches	100

6 inches	220
8 inches	390
10 inches	610
12 inches	880
16 inches	1,567
18 inches	1,980
20 inches	2,450
24 inches	3,525
30 inches	5,507

[Ord. O-03-2010 § 1 (Exh. A § 8.060)].

Chapter 15.45
SEWER LINES

Sections:

15.45.010 General.

15.45.020 Sewer pipe.

15.45.030 Sewer main bedding materials.

15.45.040 Sewer connection fees.

15.45.050 Manhole bases.

15.45.060 Connecting to existing sewers.

15.45.070 Sewer laterals.

15.45.080 Minimum slopes.

15.45.090 Cleaning.

15.45.100 Sewer lift stations.

15.45.110 Discharging waste from cesspools and septic tanks at sewage treatment plant.

15.45.120 Septic systems.

15.45.010 General.

The installation specifications for sewer systems shall conform to the APWA Standard Specifications unless noted otherwise in this chapter. [Ord. O-03-2010 § 1 (Exh. A § 9.010)].

15.45.020 Sewer pipe.

Nonreinforced concrete, reinforced concrete, and PVC piping shall be used with Eagle Mountain City under the specifications and conditions in the respective pipe sections. Sanitary sewer shall be located on the south or west side of the street, five feet from the centerline. Water mains shall be minimum one foot vertical above the sewer. Separation between water and sewer mains shall be 10 feet (horizontally) minimum unless authorized in writing by the city engineer or his/her designee. [Ord. O-03-2010 § 1 (Exh. A § 9.020)].

Sewer mains shall be owned and maintained by the City and includes all mainlines and manholes. Laterals extending from the home and connecting to the mainline are private and are the responsibility of the homeowner to maintain or correct failures should they occur regardless of the location relative to the right of way.

15.45.030 Sewer main bedding materials.

Pipe bedding for sewer mains shall consist of three-quarter-inch or pea gravel, and shall extend six inches below and to the sides of the sewer main, and 12 inches above crown of pipe, or one pipe diameter, whichever is larger. [Ord. O-03-2010 § 1 (Exh. A § 9.025)].

15.45.040 Sewer connection fees.

A. Sewer Connection Fee. The schedule of charges to be imposed for sewer connections shall be set by the city council from time to time by resolution.

B. Reimbursement of Sewer Main Line Assessment Charges. When a main line or trunk line has been installed at the expense of some third party other than the owner of adjacent property to the street or easement in which a main or trunk line has been extended, is connected to by the adjacent property developer and an assessment is made against the property benefited by the main line, the third party who advanced the cost of installing the main or trunk line shall be entitled to reimbursement for that portion of the expenses incurred by him which is actual cost of extension with a maximum reimbursement not to exceed the actual cost incurred by the developer in making the main line extension go past the property of the developer who subsequently connects on the main or trunk line. Extension reimbursements shall not be paid after the expiration of 10 years from the original date of installation of the main or trunk line.

Third party other than owner of adjacent property to the street or easement, in which a main or trunk line has been extended, shall file a report of actual cost of such main line extension with Eagle Mountain City. The report shall be the basis for assessment made against the property benefited by main line extension.

Before any sewer connection request by adjacent property is approved, such assessment made against the property shall be paid to Eagle Mountain City. Such payment shall be made to the party entitled to such payment by Eagle Mountain City. A fee in the amount established by the city will be collected by Eagle Mountain City for the administration of the fund transfer.

In no event shall the right of reimbursement exceed the amount of actual cost of extension. [Ord. O-03-2010 § 1 (Exh. A § 9.030)].

15.45.050 Manhole bases.

Manhole bases shall be constructed of concrete to the dimensions shown on the drawings. Main line sewer pipe and projecting ends of the sewer and pipe stubs shall be adequately supported to prevent displacement from line or grade during installation of the base. All manholes shall have the invert shape as indicated on the standard details to provide an adequate channel between the inlet and outlet pipes. The entire surface of the manhole invert, including channels and shelves, shall be steel-toweled to a smooth dense surface. All inverts of junction manholes shall be shaped while the bases of the manholes are under construction. All inverts shall follow the grades of the pipe entering the manholes. Manholes shall have a 0.20 foot fall through manhole. Rubber boots shall be provided to connect the inlet and outlet pipes and provide watertight joints. Manholes with more than two pipes entering/ leaving or where the flow-through angle of the two is less than 90 degrees shall require a 60 inch manhole. In no circumstance

shall more than 5 pipes be allowed to enter/ leave a manhole including lateral lines. [Ord. O-03-2010 § 1 (Exh. A § 9.050)].

15.45.060 Connecting to existing sewers.

Manholes used to connect the sewer to the existing sewer shall be plumb and centered on the existing sewer. The new pipe shall be placed against the existing pipe at the elevation designated by the engineer and the base poured as specified above. Care shall be taken not to disturb the alignment of the existing sewer during the excavation procedure. Any damage to the existing sewer shall be repaired. When connecting to existing manhole or stub pipe a test ball shall remain inflated in the downstream pipe to prevent contamination of existing mains. [Ord. O-03-2010 § 1 (Exh. A § 9.060)].

15.45.070 Sewer laterals.

Service lines shall be constructed of substantial materials approved by the Utah Plumbing Code for the particular application. Minimum pipe size shall be four-inch diameter. Sewer lateral cleanouts may not be placed under any permanent structures, including porches or bay windows. Any cleanouts exposed to vehicular traffic shall have traffic rated triangular covers.

All sewer laterals shall be connected to concrete sewer mains by use of the tapping tee (cast iron), a wax bowl ring and then secured with plumber's tape and concrete or a wye connection. Connections to PVC shall use tapping tees. Sewer laterals to extend 12 feet beyond property line and marked with a two-inch by ~~two~~ four-inch board at the end and a two-inch "S" stamped on the face of the curb and gutter. Any bend in a service line between the main line and the property line greater than 22.5 degrees needs to have a cleanout. No 90-degree bends are allowed. No laterals will be allowed to connect to manholes. The minimum cover of sewer laterals is three feet six inches at the property line. [Ord. O-03-2010 § 1 (Exh. A § 9.070)].

15.45.080 Minimum slopes.

Slopes shall be designed to have a two-foot-per-second velocity unless otherwise approved by the city engineer. Slope shown on construction drawings shall be calculated based on the length of pipe from the edge of manhole to the edge of the next manhole. Minimum slopes for different size pipes are as follows:

Minimum Sewer Main Slopes

Pipe Diameter	Minimum Slope
4 inches	2%

Minimum Sewer Main Slopes

Pipe Diameter	Minimum Slope
6 inches	1%
8 inches	0.334%
10 inches	0.248%
12 inches	0.194%
14 inches	0.158%
15 inches	0.144%
16 inches	0.132%
18 inches	0.113%
21 inches	0.092%
24 inches	0.077%
27 inches	0.066%
30 inches	0.057%
36 inches	0.045%

[Ord. O-03-2010 § 1 (Exh. A § 9.080)].

15.45.090 Cleaning.

After the sewer lines have been laid and the trench backfilled, they shall be thoroughly cleaned and tested for leakage and alignment in the presence of the city engineer or his/her designee before acceptance by the owner. Cleaning shall be done using a high pressure jet cleaning machine, producing a minimum of 800 psi. Wastewater and debris shall not be permitted to enter sewer lines in service, but shall be removed by a “sucker truck” at the lowest manhole of the extension. Such cleaning shall be done by private crews at the expense of the owner.

A. Displacement Test. The displacement test shall be conducted by the developer and inspector in the presence of the engineer and shall consist of the following: all sewer mains shall be washed and inspected using a television inspection unit. The televised inspection of any mains which reveals broken, misaligned or displaced pipe, or other defects, as designated by the city engineer or his/her designee, shall be remedied by the contractor. The televised inspection shall have the slope of pipe shown on tape

throughout the inspection. After cleaning and inspection have been completed, the line shall be tested for leakage as specified in subsection B of this section.

B. Leakage Tests. The low pressure air test shall be conducted by the following method under the direction of the city engineer or his/her designee with equipment equal to Cherne Industrial, Inc.

All wyes, tees, or ends of lateral stubs shall be suitably capped and braced to withstand the internal test pressures. Caps shall be easily removable for future lateral connections or extensions. After a manhole to manhole section of line has been backfilled and cleaned, it shall be plugged at each manhole with pneumatic plugs.

Low pressure air shall be introduced into the sealed line until the internal air pressure reaches four psig greater than the average back-pressure of any ground water that may be over the pipe. At least two minutes shall be allowed for the air pressure to stabilize.

The portion of line being tested shall be accepted if the portion under test does not lose air at a rate greater than 0.003 cubic feet per minute per square foot of internal pipe surface or two cubic feet per minute minimum when tested at an average three psig greater than any back-pressure exerted by ground water that may be over the pipe at the time of the test.

The pipe and joints shall also be considered acceptable when the time required in minutes for pressure to decrease from three and one-half to two and one-half psig (greater than the average back-pressure of any ground water that may be over the pipe) shall not be less than the time shown for the given diameters in the following table:

Pipe Diameter in Inches	Minutes
4	2.0
6	3.0
8	4.0
10	5.0
12	5.5
15	7.5
18	8.5
21	10.0

Pipe Diameter in Inches	Minutes
24	11.5

If the installation fails to meet this requirement, the contractor shall determine at his/her own expense the source of leakage. He/she shall repair or replace all defective materials and/or workmanship. All sewer mains shall be tested, cleaned and accepted by Eagle Mountain City before laying the street surface. [Ord. O-03-2010 § 1 (Exh. A § 9.090)].

15.45.100 Sewer lift stations.

Sewer lift stations that are required in a development shall be designed by the developer's engineer according to city standards and the design shall be submitted to the city engineer or his/her designee for review prior to starting construction. Lift stations will be the screw-type design, will have standby power, telemetry, and will be designed for regional areas, not individual subdivisions. Where applicable, a dry well/wet well design may be used as approved by the city engineer. Sewer lift stations will not be allowed if gravity flow can be accommodated. [Ord. O-03-2010 § 1 (Exh. A § 9.100)].

15.45.110 Discharging waste from cesspools and septic tanks at sewage treatment plant.

It shall be unlawful for any person, firm or corporation to discharge the waste material collected and gathered in cleaning cesspools or septic tanks at any place within the corporate limits of the city, except at the designated site created for such purposes at the sewage disposal treatment plant of Eagle Mountain City. Illegal discharges may result in fines up to $2,480. [Ord. O-03-2010 § 1 (Exh. A § 9.110)].

15.45.120 Septic systems.

It is unlawful to construct a septic system within the city boundaries except in accordance with Chapter 13.20 EMMC. Septic systems approved in accordance with Chapter 13.20 EMMC must also be approved in writing by the Utah County health department prior to issuance of a building permit. Notwithstanding approval of a septic system in accordance with Chapter 13.20 EMMC, the city may require a property owner to connect to the sewer system at the property owner's cost and expense if the city determines, in the city's sole and absolute discretion, that the individual septic system, or the combination of multiple septic systems, is polluting the stormwater or groundwater within the city, impairing any culinary or municipal wells located within the city, or violating any existing or future water source protection overlay zones. [Ord. O-07-2015 § 2 (Exh. A); Ord. O-03-2010 § 1 (Exh. A § 9.110)].

Chapter 15.50
STORM DRAINS

Sections:

15.50.010 General.

15.50.020 Pipe.

15.50.030 Minimum slopes.

15.50.040 Cleaning and testing. (APWA 33 08 00)

15.50.050 Sumps.

15.50.060 Retention/detention basins.

15.50.070 Storm Water Pollution Prevention Plan.

15.50.010 General.

The installation specifications for storm drain systems shall conform to the APWA Standard Specifications unless noted otherwise in this chapter.

All development projects which will increase the storm runoff above what would be expected for an undisturbed site shall be required to provide onsite retention or detention. Such runoff shall be accommodated onsite to match the intensity for a 80th percentile storm event or as otherwise directed by the City's UPDES permit or by state code. Storm events larger than that are allowed to release at a rate consistent with the predeveloped conditions of the site. On site retention may be provided throughout the development or in 1 specific location. All storm drain pipes shall have a minimum cover of two feet. Minimum size of storm drains is 12-inch diameter for tie-ins and 15-inch diameter for main lines.

No person shall discharge or cause to be discharged any storm water, surface water, ground water, roof runoff, subsurface drainage, cooling water, or unpolluted industrial process waters to any sanitary sewer. Storm water and all other unpolluted drainage shall be discharged to such sewers as are specifically designated as combined sewers or storm sewers, or to a natural outlet approved by the director. Industrial cooling water or unpolluted process waters may be discharged, on approval of the director, to a storm sewer, combined sewer or natural outlet.

Storm drain manholes and sumps shall meet confined space requirements, and shall be equipped with ladder rungs and other such devices as required to ensure public safety. [Ord. O-03-2010 § 1 (Exh. A § 10.010)].

15.50.020 Pipe.

Piping used for storm water conveyance includes concrete and HP ADS piping. All pipe shall conform to the material and installation specifications included in this chapter. Storm drain bedding materials shall consist of ¾" gravel and extend 6 inches below and to the sides of the pipe and twelve (12) inches above the crown of the pipe. [Ord. O-03-2010 § 1 (Exh. A § 10.020)].

15.50.030 Minimum slopes.

Minimum slopes for different size pipes are as follows:

Minimum Storm Drain Main Slopes

Pipe Diameter	Minimum Slope
12 inches	0.194%
14 inches	0.158%
15 inches	0.144%
16 inches	0.132%
18 inches	0.113%
21 inches	0.092%
24 inches	0.077%
27 inches	0.066%
30 inches	0.057%
36 inches	0.045%

[Ord. O-03-2010 § 1 (Exh. A § 10.030)].

15.50.040 Cleaning and testing.

After the storm drain lines have been laid and the trench backfilled, they shall be thoroughly cleaned and tested for leakage and alignment in the presence of the city engineer or his/her designee before acceptance by the owner. Cleaning shall be done using a high pressure jet cleaning machine, producing a minimum of 800 psi. Wastewater and debris shall not be permitted to enter storm drain lines in service, but shall be removed at the lowest manhole of the extension. Such cleaning shall be done by private crews at the expense of the owner.

Storm drain lines will be required to have a mandrel or TV test prior to acceptance and prior to the release of the warranty bond. Storm drain boxes or manholes shall be air tested under the general

observation of the City inspector. No reverse slope will be allowed. No deflection from line or grade will be allowed.

[Ord. O-03-2010 § 1 (Exh. A § 10.040)].

15.50.050 Sumps.

Sumps shall not be used in Eagle Mountain City unless approved by the city engineer. If approved, all sumps must be constructed with a grease trap.

Additionally, sumps shall only be located as staked in the field and indicated on the plans. They shall be to the grade indicated by the cutsheets and as staked in the field. Excavation and backfill shall conform to Chapter 15.30 EMMC. If the sump is located in an area where the earth is stratified with gravel layers, care shall be taken during backfill to be sure that these layers are not sealed off from the sump beginning three feet below the bottom of the sump up to the top of the subgrade. One- to three-inch diameter drain rock shall be used. The original material shall be removed and the total backfill done with imported drain rock. After backfilling is completed, the entire excavation shall be thoroughly flooded to ensure that settlement is complete. Grates shall be set in place and adjusted for final elevation and alignment. The city requires a fabric barrier between the drain rock and road base (or other backfill).

Sumps may only be constructed of reinforced concrete, precast sections, and shall meet the requirements of ASTM C478-73 in accordance with standard detail drawings S-15, S-16, and S-17. Sumps shall have eccentric lids to ensure adjustments in alignment. [Ord. O-03-2010 § 1 (Exh. A § 10.050)].

15.50.060 Retention/detention basins.

A. Retention Basins. All retention basins shall be constructed with a maximum water depth of four feet. All retention basins shall have a series of interconnected sumps connected to curb inlet boxes or storm drain main lines. All retention basins shall be landscaped in accordance with city standards. All retention basins shall be constructed with a minimum slope of 5:1.

All retention basins shall be constructed for drainage areas designated in the general plan. Basins for smaller areas may be allowed only with prior written approval of the city engineer or his/her designee.

B. Detention Basins. All detention basins shall be constructed with a maximum water depth of 18 inches, with that depth remaining for no longer than a six-hour period. Detention basins must be landscaped and they may be located in park and recreational areas. Each detention basin shall have a manually controlled outlet to a storm drain main line. Detention ponds greater than 18 inches must have a minimum

side slope of 5:1. Fencing around detention ponds may be required as determined by the city engineer or his/her designee.

C. All ponds must be certified prior to acceptance

Ponds must be constructed as they are required for the detention of the proposed improvements. If the ultimate design of a subdivision has located the detention basin in a future phase of the subdivision, either a temporary detention basin must be constructed, or an easement for the approved detention must be given to the city and the detention basin must be constructed with the required phase. [Ord. O-03-2010 § 1 (Exh. A § 10.060)].

15.50.070 Storm Water Pollution Prevention Plan.

A storm water pollution prevention plan meeting all requirements as mandated by the state of Utah Department of Environmental Quality shall be required and maintained for all construction within a subdivision. Elements of this SWPPP shall include BMPs to protect the existing and natural storm drainage systems from incurring increased sedimentation. BMPs will include at a minimum silt fences, inlet protection, and stabilized construction entrance. All inlet protection to meet or exceed ASTM D8057 inlet protection standard. Additional BMPs may be required as needed and determined by a certified storm water plans reviewer. The SWPPP is to be approved by the city engineer or his/her designee. The approved SWPPP plan is to be maintained while any construction activities are occurring within a subdivision. Modifications may be made to the SWPPP during the construction process if it becomes evident that additional modifications are needed to protect storm drainage structures or adjacent properties. The SWPPP and all accompanying documentation are to be available electronically at the project site at the time of an on-site inspection or upon request by the DWQ, EPA, or the MS4. The Storm Water Phase II Final Rule, Construction Rainfall Erosivity Waiver, is not offered.

On sites disturbing greater than one acre of land and all commercial sites, the SWPPP sign must be a minimum of four feet wide and three feet tall, bottom of sign placed two feet minimum off the ground, white background with red and black lettering. Pertinent information shall be located at the bottom of the SWPPP sign and shall include the following: authorization to discharge letter/notice of intent (NOI), electronic SWPPP access link, site notice, and the public notice sheet.

Redevelopment projects disturbing greater than one acre, including projects part of a common plan of development or sale which disturbed an acre or greater must provide a site-specific plan for net gain to onsite storm water retention or a reduction to impervious surfaces. Redevelopment projects increasing impervious surfaces by greater than 10% must prevent off-site discharge of the net increase in storm

water volume associated with precipitation from all rainfall events less than or equal to the 80th percentile rainfall event.

Single-lot residential home SWPPP signs to be 24 inches wide and 18 inches tall (realtor size) with the bottom of the sign placed a minimum of 12 inches off the ground, front of sign to face toward street and have white background with “SWPPP” in black or red lettering, along with UPDES number. Back of sign to have authorization to discharge letter/NOI and electronic SWPPP access link.

An appeals process shall allow a construction operator to appeal an enforcement option. The appeal process will be included as part of the city’s procedures and will be posted in a publicly available location. [Ord. O-21-2022 § 2 (Exh. A); Ord. O-02-2020 § 2 (Exh. A); Ord. O-21-2016 § 2 (Exh. A); Ord. O-13-2015 § 1 (Exh. A)].

Chapter 15.55
RESTORATION OF SURFACE IMPROVEMENTS

Sections:

15.55.010 General.

15.55.020 Gravel surface.

15.55.030 Bituminous surface.

15.55.040 Cold weather patching.

15.55.050 Concrete surfaces.

15.55.010 General.

The contractor shall be responsible for the protection and the restoration or replacement of any improvements existing on public or private property at the start of work or placed there during the progress of the work. All work shall comply with APWA standards unless otherwise stated in this section.

Existing improvements shall include but are not limited to permanent surfacing, curbs, ditches, driveways, culverts, fences, walls and landscaping. All improvements including landscaping shall be reconstructed to equal or better, in all respects, in a timely manner. The contractor shall be responsible for maintaining a road surface suitable for travel by the public. He/she shall be responsible for all dust and mud control and all claims and damages resulting from his/her failure to maintain the construction area.

All road cuts shall be repaired within two working days. All asphalt to be removed must be sawcut in a smooth straight line. [Ord. O-03-2010 § 1 (Exh. A § 11.010)].

15.55.020 Gravel surface.

Where trenches are excavated through gravel surfaced areas such as roads and driveways, etc., the gravel surface shall be restored and maintained as follows:

A. All trenching backfill shall conform to the backfill requirements in EMMC 15.30.040.

B. The gravel shall be placed deep enough to provide a minimum of six inches of material.

C. The gravel shall be placed in the trench at the time it is backfilled. The surface shall be maintained by blading, sprinkling, rolling, adding gravel, etc., to maintain a safe uniform surface satisfactory to the engineer. Excess material shall be removed from the premises immediately.

D. Material for use on gravel surfaces shall be obtained from sound, tough, durable gravel or rock meeting AASHTO T27 requirements. The following requirements for grading shall be met:

Passing 1-inch sieve	100%
Passing 3/4-inch sieve	85% – 100%
Passing No. 4 sieve	45% – 65%
Passing No. 10 sieve	10% – 30%
Passing No. 200 sieve	5% – 10%

[Ord. O-03-2010 § 1 (Exh. A § 11.020)].

15.55.030 Bituminous surface.

Where trenches are excavated through bituminous surfaced roads, driveways or parking areas, the surface shall be restored and maintained as follows:

A. A temporary gravel surface shall be placed and maintained as required in EMMC 15.55.020 after the required backfill and compaction of the trench has been accomplished.

B. The trench shall be backfilled in accordance with EMMC 15.30.040.

C. The area over trenches to be resurfaced shall be graded and rolled with a roller weighing not less than 12 tons, or with the rear wheels of a five-yard truck loaded to capacity, until the subgrade is firm and unyielding. Mud or other soft or spongy material shall be removed and the space filled with gravel and rolled and tamped thoroughly in layers not exceeding six inches in thickness. The edges of trenches that are broken down during the making of subgrade shall be removed and trimmed neatly before resurfacing.

D. Before any permanent resurfacing is placed, the contractor shall cut the existing paving to clean, straight lines as nearly parallel to the centerline of the trench as practicable and 24 inches wider on each side of the trench than initial excavation. Said straight lines have no deviations from such lines, except as specifically permitted by the engineer.

E. Existing bituminous paving shall be cut back a minimum of 24 inches beyond the limits of any excavation or cave-in along the trench so that the edges of the new paving will rest on at least 20 inches of undisturbed soil. See also APWA Standard Detail 255, Asphalt Concrete T Patch.

F. Within two working days and weather permitting, the bituminous surface shall be restored by standard paving practices to a minimum thickness of four inches for local streets and six inches for collector, industrial, and commercial streets to match existing pavement height.

G. Pavement restoration shall include priming of pavement edges and subbase with an asphalt tack coat and placing and rolling plant mix bituminous material to the level of the adjacent pavement surfaces.

H. All pavement restoration shall conform to Chapter 15.60 EMMC. [Ord. O-03-2010 § 1 (Exh. A § 11.030)].

15.55.040 Cold weather patching.

Trenches cut during winter months or when asphalt plants are not operating shall be patched the same day of the cut with a good quality cold mix and maintained until asphalt plants open. When asphalt plants open, the cold patch shall be removed and a new patch of hot mix asphalt shall be placed within 20 days of plant opening. [Ord. O-03-2010 § 1 (Exh. A § 11.040)].

15.55.050 Concrete surfaces.

All concrete curbs, gutters, sidewalks and driveways shall be removed and replaced to the next joint or scoring lines beyond the damaged or broken sections; or, in the event that joints or scoring lines do not exist or are three or more feet from the removed or damaged section, the damaged portions shall be removed and reconstructed to neat, plane faces. On all new concrete improvements lamp black or other pigments shall be added to the new concrete to obtain the desired results.

All concrete work shall conform to the requirements of the APWA Standard Specifications. [Ord. O-03-2010 § 1 (Exh. A § 11.050)].

Chapter 15.60
STREET IMPROVEMENTS

Sections:

15.60.010 General.

15.60.020 Pavement Design

15.60.025 Bituminous Concrete Mix Design

15.60.030 Quality Assurance and Materials Acceptance

15.60.035 Quality Control

15.60.040 Asphalt seam location.

15.60.050 Warranty repairs.

15.60.060 Manholes and valve boxes.

15.60.070 Street Lighting.

15.60.070 Street Signs.

15.60.010 General.

All street surfacing shall comply with the APWA Standard Specifications, unless noted otherwise in this chapter.

Prior to placing asphalt surfaces, temperatures shall be a minimum of 50 degrees Fahrenheit and rising, and be expected to maintain a temperature of greater than 50 degrees for a length sufficient to complete a reasonable quantity of paving. In no instance will asphalt be allowed to be placed in temperatures less than 47 degrees. No asphalt may be placed on frozen ground, or when overnight temperatures of less than 42 degrees are expected.

A soils investigation shall be performed for all new roads and those roads for which work will be performed. The results of this investigation and a design of the road cross-section shall be submitted to and accepted by the city engineer or his/her designee. This chapter covers the preparation of subgrade, the placing of base gravel, and the placing of asphalt surface on any city street. [Ord. O-03-2010 § 1 (Exh. A § 12.010)].

15.60.020 Pavement Design

Unless approved otherwise by the city engineer or his/her designee, the public works director, or as directed by the city council pavement sections will be constructed, at minimum, in accordance with the

table below. The contractor shall submit a pavement design for each roadway to be constructed based on AASHTO 1993 or AASHTO ME practices. The pavement design should accommodate project specific traffic projections and geotechnical conditions, including expected construction traffic. ***If soils exhibit pumping or other instability, additional preparations (such as soil treatment, geotextile placement or over-excavation and placement of additional subbase layers) may also be required.*** Remediation requirements to be detailed by geotechnical report. Methods or remediation must be approved by the City Engineer or their designee. All asphalt will be placed in a maximum three inch lifts and base with a maximum of 5 inch lifts and subbase in 9 inch lifts.

Minimum Pavement Sections

Street	Arterial	Collector	Local Street* / Parking Lot
Asphalt	5”	4”	3”
Untreated Base	9”	9”	6”
Subbase**	18”	12”	9” ***
Total	32”	25”	18”

**Spline (Main Access) roads for new subdivisions must meet Collector minimum section.*

***Subbase to consist of engineered fill, meeting type A1 or A2 classifications as set forth by AASHTO, placed over scarified and compacted native earth material unless modified by the geotechnical report.*

****May be waived for placements over subgrade with a CBR of 10% or greater, tested at 95% compaction of AASHTO T-99 and with a 10lb surcharge.*

15.60.025. Bituminous Concrete Mix Design

Unless approved otherwise by the City Engineer or their designee, the Public Works Director, or as directed by the City Council, the following bituminous mixes will be used, as per APWA 32 12 05 Bituminous Concrete and as modified below:

Street	**Bituminous Mix**

Arterial	PG 64-28, SP-1/2, 75 Nd
Collector	PG 58-28, DM-3/4, 50 Blow or SP-1/2, 75 Nd

All mixes must meet the following additional requirements:

- Maximum recycled pavement allowed is 15% by weight of RAP or 15% of RAP Binder, whichever is lesser.
- PG Binders that exceed minimum requirements are acceptable.

15.60.030 Quality Assurance and Materials Acceptance.

A. Asphalt Pavement Material Tests. Material tests will be conducted by the City when the City Engineer or his/her designee considers it necessary.

B. Compaction Tests. The City will test all bituminous pavement for compaction and asphalt cement content. Test locations shall be determined by the City but will generally be taken 3 per 200 lineal foot of street or 1 per 2,000 square foot of paved area. Use core density to determine compaction acceptance. Use the following actions for compaction acceptance or correction.

COMPACTION ACCEPTANCE

Density, in Percent*		**Action**
Average	**Lowest Test**	
93.0 to 97.0	90.0 or greater	Placement Accepted
93.0 to 97.0	Less than 90.0	Evaluate and Remediate Low Tests**
Less than 93.0	90.0 or greater	Evaluate and Remediate Full Pavement***
Less than 93.0	Less than 90.0	Placement Rejected

**Carry all calculations to minimum 1 decimal point.*

***Evaluate to determine extent of low-density areas. Remediation to include localized removal and replacement with acceptable placement.*

****Provide evaluation by Pavement Engineer addressing structural performance and remediation recommendations for approval by City Engineer.*

C. Grading Inspection. The subgrade, sub-base, and road base shall all be graded to an engineered red-head and accepted by Eagle Mountain City. Red-heads shall be placed every 50 feet at the crown of the road. If the distance between redheads and edge of pavement exceeds 25 feet additional redheads shall be installed halfway between the crown and edge of pavement. Red-heads shall also be placed every 50 feet at the edge of pavement where there is no curb and gutter.

D. Thickness Test. Material depth tests will be conducted by the City when the City Engineer or his/her designee considers it necessary. Depth analysis shall be made on at least four test holes for each section, excavated and filled by the contractor. Base thickness shall be accepted if 75% of the test holes are less than 1/4" below the specified thickness and no individual hole shall be more than 3/4" below the specified thickness. ~~Work with sub-standard thickness may be accepted at reduced price if the appropriate pay factor for the lowest tested thickness is applied to all of the substandard work.~~

E. Bituminous Concrete Surface: Unless otherwise directed, the Contractor will be responsible for determining the depth of the bituminous surfacing in accordance with APWA 32 12 13.16, using cores, with the following modifications.

1. At the discretion of the City, the City may allow the contractor to verify surfacing thickness through use of Ground Penetrating Radar (GPR). Thickness determined by GPR will be based on the depth on the trace where 95% of the trace meets or exceeds. The City may allow thickness determined by GPR to supersede coring results.

2. The following table outlines the pay factors for sub-standard asphalt pavement thickness:

THICKNESS ACCEPTANCE

Thickness Deficiency, In Inches*		
Average	**Lowest Sublot**	**Action**

0.00 to 0.25	0.00 to 0.375	Placement Accepted
0.00 to 0.25	Greater than 0.375	Evaluate and Remediate Sublot**
Greater than 0.25	NA	Remediate Full Pavement***

**Carry all calculations to minimum 2 decimal points.*

***Evaluate to determine extent of low-density areas. Remediation to include localized removal and replacement with acceptable placement or mill/overlay with sufficient additional thickness to meet design requirements. Minimum overlay thickness must meet specification minimums based on aggregate gradation.*

****Remediate Entire Lot. Remediation to include localized removal and replacement with acceptable placement or mill/overlay with sufficient additional thickness to meet design requirements. Minimum overlay thickness must meet specification minimums based on aggregate gradation.*

F. Profile Tolerance Inspection. Profile tolerance inspections may be required by the City any time within a year of paving. Collector and arterial streets shall meet the requirements of APWA 32 12 16 (Plant-Mix Asphalt Paving). For local streets profiling, the maximum vertical distance from the pavement surface to a straight edge is:

a. 1/4-inch in 10 feet parallel to centerline.

b. 3/8-inch in 10 feet perpendicular to centerline except at cross section grade breaks.

G. Longitudinal Joints. Construct all longitudinal and transverse joints such that the upslope edge of the joint is level or slightly above downslope edge and within 10 foot straight-edge requirements. Remediate all joints that do not conform to this requirement.

H. Asphalt Concrete Temperature Test. This test shall be conducted on the first three loads of asphalt concrete installed, and on one in four of all future loads as required by the City. Testing shall be conducted according to the requirements and specifications of APWA 32 12 16 (Plant-Mix Asphalt Concrete Paving). Temperature gauge shall be allowed to stabilize for 1 minute before taking reading if using probe type. If using infrared “gun” type, reading shall consist of an average of a minimum of 3

readings, where reading is taken immediately after displacing a minimum of 2 inches of material from the surface being tested and the “gun” is within 18” of the surface being tested.

I. Asphalt Paving Limitations. Pave according to Section 02741 Part 3.8 of the current Standard Specifications for Road and Bridge Construction published by the Utah Department of Transportation (UDOT) unless otherwise approved by the City Engineer or his/her designee. Place HMA between April 15 and October 15, and when the air temperature in the shade and the roadway surface temperature are above 50 degrees Fahrenheit. In the event the City Engineer approves paving between October 15th and April 15th, an overlay in the spring will be required as outlined in the table below. Do not place HMA on frozen base or during adverse climatic conditions such as precipitation or when roadway surface is icy or wet. Use a release agent that does not dissolve asphalt and is acceptable to the City Engineer or his/her designee for all equipment and hand tools used to mix, haul, and place the HMA.

The City Engineer may, at his/her discretion, waive this date restriction requirement if outside temperatures are at least 60°F and the base material condition is approved.

15.60.035 Contractor Quality Control.

The contractor will provide the following for all paving operations:

A. HMA Mixing Plant: Use a UDOT 514 QMP certified Asphalt Mix Plant.

1. Submit plant certification documentation with mix design.

B. Perform Quality Control efforts sufficient to demonstrate material produced meets requirements of this specification. For each asphalt production day, the contractor will provide the following:

1. Testing Report: Submit Quality Control data to the Engineer within 3 working days after completion of each day of paving or prior to the start of the next paving day, whichever is sooner.

2. Plant Production Report: Submit daily plant production records to the Engineer within 3 working day after completion of each day of paving or prior to the start of the next paving day, whichever is sooner.

15.60.040 Asphalt seam location.

The contact point of two adjacent asphalt placements shall be located such that the seam is at a minimum five feet from the projected edge of the lip of gutter on the higher volume roadway. Cross gutters may be required for all roadways intersecting off a roadway classified as a collector road as directed by the city engineer or his/her designee. [Ord. O-03-2010 § 1 (Exh. A § 12.040)].

15.60.050 Warranty repairs.

The city engineer or his/her designee shall determine at the time of the walkthrough the minimum type of surface maintenance that will be required for the subdivision or portions thereof. Crack sealing of seams will be required at a minimum for seams with horizontal gaps greater than one-fourth inch, or in instances which exhibit vertical separation. Slurry seals may be required in instances when asphalt patching occurs on more than 40 percent of any portion of the roadway. All slurry seals will be a Type II slurry.

All streets shall be swept clean prior to placement of slurry seal. All manholes and valves, including concrete collars, shall be protected from slurry seal. Any slurry seal in gutters or on other concrete shall be removed. A leveling course shall be applied where needed before the final slurry seal is laid. [Ord. O-03-2010 § 1 (Exh. A § 12.050)].

15.60.060 Manholes and valve boxes.

All manhole covers and valve boxes shall be raised to the proper grade after the placement of pavement. The cover shall be removed and raised to the proper elevation with concrete setting the frame one-quarter inch below the pavement grade. The following types of rings can be used:

A. Four thousand psi concrete can be used with epoxy coated rebar with 2 rings ~~maximum~~ minimum each collar.

B. Six thousand psi concrete will be used with fiber mesh 1.5 pounds per yard ¾ inch monofilament.

All adjustments in the elevation from the manhole cone/ lid to be made with whirly gig, manhole riser collar system or equivalent. All adjustments in elevation to water valve boxes are to be made in the top "sliding" riser. If grade cannot be reached with existing top another base section cut to grade must be used. [Ord. O-03-2010 § 1 (Exh. A § 12.060)].

15.60.060 Street Signs.

All signs, post, and hardware shall be installed in accordance to the MUTCD Standards.

Sign post shall be 2-3/8" round post, galvanized inside and out, powder coated with 8017 brown, 16 gage with no holes, crash tested and NCHRP 350 approved.

All post shall have a galvanized dome rain cap and powder coated with 8017 brown.

Signage shall be installed to post with a sign clamp assembly, center bolt and U-bolt to be ½" diameter.

Post shall be anchored to a V-loc 23VRN anchor for 2-3/8" round post with a 24" leg, with stabilizer bolt, and wedge.

All anchors shall be driven into soil, no digging and burying shall be allowed.

All signage shall be marked in the bottom corner (1/4” tall, 1” wide) with date and year sign was made.

15.60.080 Seal Coat

A seal coat fee shall be required for all new roads for the purpose of installing a seal coat on all new asphalt pavement approximately one year after final acceptance of development and/or minimum of 80 percent construction completion, to be determined by the city. The seal coat fee shall be a cash payment at the time of plat recording. The seal coat fee shall be paid by developer based on the total cost for seal coat at the current contract rates for the city for the anticipated date of the installation of the seal coat. The installation of seal coat shall be the responsibility of the city unless, at the time of payment of the seal coat fee, developer requests that the city allow developer to install the seal coat. If developer requests that city allow developer to install the seal coat, the city shall notify the developer at the time the city requires installation of the seal coat and provide developer 90 days to complete installation of the seal coat. The seal coat must meet all standards, specifications and warranties of the seal coat that would be installed by the city. Upon completion of the seal coat by the developer, the city shall refund the seal coat fee to the developer. [Ord. O-31-2021 § 2 (Exh. A); Ord. O-14-2021 § 2 (Exh. A)].

Chapter 15.65
CONCRETE CURB, GUTTER, SIDEWALKS, AND TRAILS

Sections:

15.65.010 General.

15.65.020 ADA requirements.

15.65.030 Base material.

15.65.040 Testing and inspection.

15.65.050 Cold weather concrete.

15.65.060 Clean gutter.

15.65.070 Drive approaches.

15.65.080 Asphalt Trails.

15.65.010 General.

All concrete work shall comply with the APWA Standard Specifications, unless noted otherwise in this chapter. The work shall consist of curb and gutter, sidewalk, combination curb, gutter and sidewalk, cross gutters, and curb return constructed where indicated on the plans or as directed by the engineer and conforming in all respects to the specified lines, grades, and dimensions. A minimum slope along any curb and gutter shall be 0.7 percent and on cross gutter shall be one-half percent. Maximum grades on curb and gutter and streets shall be 10 percent. [Ord. O-03-2010 § 1 (Exh. A § 13.010)].

15.65.020 ADA requirements.

All pedestrian facilities will conform to the current federal ADA standards. Plastic inserts required per ADA mandate shall be yellow in color. [Ord. O-03-2010 § 1 (Exh. A § 13.020)].

15.65.030 Base material.

There shall be a minimum of six inches compacted crushed gravel road base under all concrete for public use on both sides. [Ord. O-03-2010 § 1 (Exh. A § 13.030)].

15.65.040 Testing and inspection.

A. Scope. All materials and processes involved in the construction shall be subject to testing and inspection as detailed in the various subsections of this section and in general compliance with ASTM E105-54T. Results of tests performed by recognized laboratories to the satisfaction of the engineer shall be accepted by the supplier as a basis for acceptance or rejection of any and all materials. Standard methods of sampling and testing shall be used. The latest appropriate ASTM tests and methods shall be considered to be standard, and will include but not be limited to concrete, cement, aggregates, additives, curing compounds, parting compounds and jointing materials.

B. Concrete. Where required by the engineer, samples of concrete will be tested to ensure quality concrete. The city engineer or his/her designee will take at least one of these tests for every 50 cubic yards of concrete poured or as required.

1. Samples of wet concrete may be tested for air content. Failure to indicate the entrained air specified in this section shall be a basis for rejection of all concrete represented by the test.

2. Samples of wet concrete may be tested for slump. Failure to indicate the required slump shall be a basis for rejection of all concrete represented by the test. Slump to be 5 inches maximum, air to be 6% +/- 1%.

3. Concrete compression specimens shall be taken for each pour of section as required by the engineer. Such specimens shall attain the specified strength of 28 days with the provision that no specimen may indicate a compressive strength of less than 90 percent of the strengths nominated and with further provision that results from specimens which, in the opinion of the testing authority and the engineer, are obviously faulty or defective may be rejected in determining the requirements. Should any specimens fail to satisfy these requirements, the concrete represented thereby shall be removed and replaced, except that the contractor may submit evidence based on ASTM designation C42-49 which shall be considered by the engineer in relation to this requirement.

C. Flow Tests. All curbs and gutters and cross gutters will have a flow test prior to final inspection to determine any low or high spots. (The city will be present.)

D. All forms or string lines must be inspected by Eagle Mountain City before concrete may be poured. [Ord. O-03-2010 § 1 (Exh. A § 13.040)].

15.65.050 Cold weather concrete.

Concrete shall not be placed when a descending air temperature in the shade and away from artificial heat falls below 35 degrees Fahrenheit. Concrete shall not be poured on frozen ground. Where high temperatures are likely to descend below 32 degrees Fahrenheit, concrete shall be covered or otherwise protected against freezing. The city engineer must approve the method by which the concrete is covered or protected. Admixtures other than calcium chloride may be added upon approval of the city engineer. [Ord. O-03-2010 § 1 (Exh. A § 13.050)].

15.65.060 Clean gutter.

Once curb and gutter and surface course is in place it shall be kept as clean as possible. When equipment is required to cross over sidewalk, bridging will be provided to protect concrete. Dirt and gravel

will not be placed in gutter or on street. Gutter will flow freely at all times. [Ord. O-03-2010 § 1 (Exh. A § 13.060)].

15.65.070 Drive approaches.

All concrete for a drive approach shall be six inches thick in the public right-of-way with six inches of gravel base compacted to 95 percent density. [Ord. O-03-2010 § 1 (Exh. A § 13.070)].

15.65.080 Asphalt Trails.

Asphalt trails shall be 10 feet wide along pedestrian corridors or unless otherwise approved by the City Council. Asphalt trails shall consist of 6 inches of base and 3 inches of asphalt and shall be placed on undisturbed native material or documented fill material properly compacted. Base shall extend past trail edges 6” both sides.

	EAGLE MOUNTAIN CITY **PLANNING COMMISSION MEETING** **JANUARY 9, 2024**
TITLE:	ORDINANCE/PUBLIC HEARING - Accessory Dwelling Unit Standards - An Ordinance of Eagle Mountain City, Utah, Amending the Eagle Mountain Municipal Code Section 17.70.030.
ITEM TYPE:	Ordinance
FISCAL IMPACT:	N/A
APPLICANT:	City-initiated

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

PUBLIC HEARING:
Yes

PREPARED BY:
Brandon Larsen, Planning

PRESENTED BY:
Brandon Larsen

RECOMMENDATION:
Staff recommends the City Council approve an ordinance amending EMMC Section 17.70.030, modifying the standards for accessory dwelling units relative to location and parking.

BACKGROUND:
This amendment is proposed to address Utah Code changes as per Senate Bill (SB) 174 (2023) related to circumstances under which a garage may be included in the definition of an internal accessory dwelling unit. As per SB 174, Section 10-9a-530, Utah Code Annotated, has been amended to more explicitly allow for an internal accessory dwelling unit (ADU) in a garage of a detached, single-family dwelling (SFD). This amendment is proposed to eliminate uncertainty in the Eagle Mountain Municipal Code (EMMC), particularly Section 17.70.30, as to what portions of a SFD may be used for an ADU. Language that could be interrupted to suggest ADUs are only allowed in the basement or addition of a SFD is proposed to be stricken. Further, this amendment also ensures two (2) two enclosed parking spaces for SFDs with an ADU in a garage.

ITEMS FOR CONSIDERATION:

REQUIRED FINDINGS:

Ordinances pertaining to zoning code amendments, and processing of the same, may be found in EMMC 17.05.120 & USC 10-9a-501. Ordinance enactment is a legislative process and left to the discretion of the City Council.

PLANNING COMMISSION ACTION/RECOMMENDATION:

ATTACHMENTS:

Accessory Dwelling Units, Garages and Parking.pdf

10-9a-530, UCA.pdf

17.70.030 Accessory dwelling unit standards.

Proposed accessory dwelling units must be in compliance with the following criteria to ensure that health and safety considerations are addressed and that the residential characteristics of neighborhoods are preserved. Accessory dwelling units are to be clearly incidental and secondary to the primary residential use of the property. The approval criteria include:

A. Number of Accessory Dwelling Units. A maximum of one accessory dwelling unit is allowed on a residential lot, whether it is in an owner-occupied single-family dwelling, or in a detached accessory structure associated with a single-family dwelling.

B. Occupancy and Owner Occupation. The owner(s) of the residence shall live in the dwelling in which the ADU was created (either in the primary unit or in the ADU), except for bona fide temporary absences. The occupants of the ADU shall be related to each other by blood, marriage, or adoption; or consist of no more than two unrelated individuals living as a single housekeeping unit. The occupants of the ADU shall not sublease a portion of the unit to other individuals. The following are not considered accessory dwelling unit uses and do not fall under the regulation of this chapter: occupation by a live-in maid, in-home nurse, nanny or any other person or persons who are provided a place to live as part of their employment with, or services they provide to, the owner/resident of the dwelling; or while a family member is called up for military service, etc.; and any occupation by individuals related by blood or marriage.

C. Code Compliance. The accessory dwelling unit shall conform to all applicable standards in the International Fire Code and International Residential Code.

D. Location and Type. Accessory dwelling units may be allowed within or attached to the main single-family residential dwelling ~~(basement or addition)~~, over the garage (attached or detached), or in a detached accessory structure (cottage home, casita, guest house), where permitted by EMMC 17.25.030.

1. ADU – Basement. An accessory dwelling unit in a basement must have a separate exterior entrance located on either the side or the rear of the building. An internal connection to the primary dwelling is not required.

2. ADU – Attached. Accessory dwelling units attached to the primary dwelling as an addition shall meet all minimum setback standards required for the primary dwelling, as found in EMMC 17.25.040. Attached ADUs must have a separate entrance located on the side or in the rear of the building. An internal connection to the primary dwelling is not required.

3. ADU – Detached.

a. Maximum Height. Maximum height of accessory dwelling units located above a garage is 35 feet. Standalone units may not exceed two stories and 35 feet in height.

b. Size. The living space of a detached accessory dwelling unit must be a minimum of 400 square feet, up to a maximum of 1,200 square feet. Detached accessory dwelling units may not have more than two bedrooms and must be permanently connected to utilities, attached to a site-built permanent foundation which complies with building code, and must comply with all other applicable standards of this chapter. A building permit and inspections are required for construction of the foundation and installation of the structure and connection to utilities.

c. Setbacks. Detached accessory dwelling units must meet the same front, side, and rear yard setbacks as the primary dwelling and be located at least six feet from the primary dwelling.

d. Street Frontage. The lot must have a minimum street frontage of 70 feet to receive approval for a detached accessory dwelling unit. A smaller-frontage lot may be approved if, at the discretion of the approval authority, the lot configuration is unique and/or the primary dwelling unit is unique in size or location on the lot, and the impacts to neighbors and the street are substantially similar to those on a 70-foot-wide lot.

E. Exterior Appearance. The accessory dwelling unit shall be incorporated into the residence so that, to the degree reasonably feasible, the appearance of the building remains that of a single-family residence. All entrances to accessory dwelling units shall be located on the side or in the rear of the building. The architectural style, building materials, and colors of detached ADUs shall be compatible and consistent with the architectural style, materials, and color of the primary dwelling unit. If the ADU is above a detached garage, the architectural style, building materials, and colors of the ADU must match those of the garage.

F. Utilities. Detached accessory dwelling units may have separate utility meters, and all municipal utilities shall be in the property owner's name and the property owner shall be responsible for payment of all municipal utilities.

G. Parking. Off-street parking for one vehicle~~, in addition to parking for two vehicles otherwise required for a residence in this title,~~ shall be available for use by the tenants of the accessory dwelling unit~~s~~. Driveway ~~(tandem)~~ parking in front of a garage does not qualify, unless the accessory dwelling unit is located within such garage, in which case the required parking for the primary dwelling within an enclosed garage, as required within Chapter 17.55, shall be provided elsewhere on the property. All parking shall be on a hard surface (concrete, asphalt, etc.). Occupants may not park on the street along the frontage of a neighboring property.

H. Address. The principal dwelling and the accessory dwelling unit shall have the same address number but shall refer to the accessory dwelling unit as unit “B.” The address must be located in a visible location on the street frontage side of the home.

I. Short-Term Rental Prohibited. Accessory dwelling units may not be rented for a period of less than 30 consecutive days. [Ord. O-33-2023 § 2 (Exh. A); Ord. O-17-2023 § 2 (Exh. A); Ord. O-41-2021 § 1 (Exh. A)].

Effective 5/3/2023

10-9a-530 Internal accessory dwelling units.

(1) As used in this section:

(a) "Internal accessory dwelling unit" means an accessory dwelling unit created:

(i) within a primary dwelling;

(ii) within the footprint of the primary dwelling described in Subsection (1)(a)(i) at the time the internal accessory dwelling unit is created; and

(iii) for the purpose of offering a long-term rental of 30 consecutive days or longer.

(b)

(i) "Primary dwelling" means a single-family dwelling that:

(A) is detached; and

(B) is occupied as the primary residence of the owner of record.

(ii) "Primary dwelling" includes a garage if the garage:

(A) is a habitable space; and

(B) is connected to the primary dwelling by a common wall.

(2) In any area zoned primarily for residential use:

(a) the use of an internal accessory dwelling unit is a permitted use;

(b) except as provided in Subsections (3) and (4), a municipality may not establish any restrictions or requirements for the construction or use of one internal accessory dwelling unit within a primary dwelling, including a restriction or requirement governing:

(i) the size of the internal accessory dwelling unit in relation to the primary dwelling;

(ii) total lot size;

(iii) street frontage; or

(iv) internal connectivity; and

(c) a municipality's regulation of architectural elements for internal accessory dwelling units shall be consistent with the regulation of single-family units, including single-family units located in historic districts.

(3) An internal accessory dwelling unit shall comply with all applicable building, health, and fire codes.

(4) A municipality may:

(a) prohibit the installation of a separate utility meter for an internal accessory dwelling unit;

(b) require that an internal accessory dwelling unit be designed in a manner that does not change the appearance of the primary dwelling as a single-family dwelling;

(c) require a primary dwelling:

(i) regardless of whether the primary dwelling is existing or new construction, to include one additional on-site parking space for an internal accessory dwelling unit, in addition to the parking spaces required under the municipality's land use regulation, except that if the municipality's land use ordinance requires four off-street parking spaces, the municipality may not require the additional space contemplated under this Subsection (4)(c)(i); and

(ii) to replace any parking spaces contained within a garage or carport if an internal accessory dwelling unit is created within the garage or carport and is a habitable space;

(d) prohibit the creation of an internal accessory dwelling unit within a mobile home as defined in Section 57-16-3;

(e) require the owner of a primary dwelling to obtain a permit or license for renting an internal accessory dwelling unit;

(f) prohibit the creation of an internal accessory dwelling unit within a zoning district covering an area that is equivalent to:

(i) 25% or less of the total area in the municipality that is zoned primarily for residential use, except that the municipality may not prohibit newly constructed internal accessory dwelling units that:
(A) have a final plat approval dated on or after October 1, 2021; and
(B) comply with applicable land use regulations; or
(ii) 67% or less of the total area in the municipality that is zoned primarily for residential use, if the main campus of a state or private university with a student population of 10,000 or more is located within the municipality;
(g) prohibit the creation of an internal accessory dwelling unit if the primary dwelling is served by a failing septic tank;
(h) prohibit the creation of an internal accessory dwelling unit if the lot containing the primary dwelling is 6,000 square feet or less in size;
(i) prohibit the rental or offering the rental of an internal accessory dwelling unit for a period of less than 30 consecutive days;
(j) prohibit the rental of an internal accessory dwelling unit if the internal accessory dwelling unit is located in a dwelling that is not occupied as the owner's primary residence;
(k) hold a lien against a property that contains an internal accessory dwelling unit in accordance with Subsection (5); and
(l) record a notice for an internal accessory dwelling unit in accordance with Subsection (6).
(5)
(a) In addition to any other legal or equitable remedies available to a municipality, a municipality may hold a lien against a property that contains an internal accessory dwelling unit if:
(i) the owner of the property violates any of the provisions of this section or any ordinance adopted under Subsection (4);
(ii) the municipality provides a written notice of violation in accordance with Subsection (5)(b);
(iii) the municipality holds a hearing and determines that the violation has occurred in accordance with Subsection (5)(d), if the owner files a written objection in accordance with Subsection (5)(b)(iv);
(iv) the owner fails to cure the violation within the time period prescribed in the written notice of violation under Subsection (5)(b);
(v) the municipality provides a written notice of lien in accordance with Subsection (5)(c); and
(vi) the municipality records a copy of the written notice of lien described in Subsection (5)(a)(v) with the county recorder of the county in which the property is located.
(b) The written notice of violation shall:
(i) describe the specific violation;
(ii) provide the owner of the internal accessory dwelling unit a reasonable opportunity to cure the violation that is:
(A) no less than 14 days after the day on which the municipality sends the written notice of violation, if the violation results from the owner renting or offering to rent the internal accessory dwelling unit for a period of less than 30 consecutive days; or
(B) no less than 30 days after the day on which the municipality sends the written notice of violation, for any other violation;
(iii) state that if the owner of the property fails to cure the violation within the time period described in Subsection (5)(b)(ii), the municipality may hold a lien against the property in an amount of up to $100 for each day of violation after the day on which the opportunity to cure the violation expires;
(iv) notify the owner of the property:

(A) that the owner may file a written objection to the violation within 14 days after the day on which the written notice of violation is post-marked or posted on the property; and
(B) of the name and address of the municipal office where the owner may file the written objection;
(v) be mailed to:
(A) the property's owner of record; and
(B) any other individual designated to receive notice in the owner's license or permit records; and
(vi) be posted on the property.
(c) The written notice of lien shall:
(i) comply with the requirements of Section 38-12-102;
(ii) state that the property is subject to a lien;
(iii) specify the lien amount, in an amount of up to $100 for each day of violation after the day on which the opportunity to cure the violation expires;
(iv) be mailed to:
(A) the property's owner of record; and
(B) any other individual designated to receive notice in the owner's license or permit records; and
(v) be posted on the property.
(d)
(i) If an owner of property files a written objection in accordance with Subsection (5)(b)(iv), the municipality shall:
(A) hold a hearing in accordance with Title 52, Chapter 4, Open and Public Meetings Act, to conduct a review and determine whether the specific violation described in the written notice of violation under Subsection (5)(b) has occurred; and
(B) notify the owner in writing of the date, time, and location of the hearing described in Subsection (5)(d)(i)(A) no less than 14 days before the day on which the hearing is held.
(ii) If an owner of property files a written objection under Subsection (5)(b)(iv), a municipality may not record a lien under this Subsection (5) until the municipality holds a hearing and determines that the specific violation has occurred.
(iii) If the municipality determines at the hearing that the specific violation has occurred, the municipality may impose a lien in an amount of up to $100 for each day of violation after the day on which the opportunity to cure the violation expires, regardless of whether the hearing is held after the day on which the opportunity to cure the violation has expired.
(e) If an owner cures a violation within the time period prescribed in the written notice of violation under Subsection (5)(b), the municipality may not hold a lien against the property, or impose any penalty or fee on the owner, in relation to the specific violation described in the written notice of violation under Subsection (5)(b).
(6)
(a) A municipality that issues, on or after October 1, 2021, a permit or license to an owner of a primary dwelling to rent an internal accessory dwelling unit, or a building permit to an owner of a primary dwelling to create an internal accessory dwelling unit, may record a notice in the office of the recorder of the county in which the primary dwelling is located.
(b) The notice described in Subsection (6)(a) shall include:
(i) a description of the primary dwelling;
(ii) a statement that the primary dwelling contains an internal accessory dwelling unit; and
(iii) a statement that the internal accessory dwelling unit may only be used in accordance with the municipality's land use regulations.

(c) The municipality shall, upon recording the notice described in Subsection (6)(a), deliver a copy of the notice to the owner of the internal accessory dwelling unit.

Amended by Chapter 501, 2023 General Session

	EAGLE MOUNTAIN CITY **PLANNING COMMISSION MEETING** **JANUARY 9, 2024**
TITLE:	ORDINANCE/PUBLIC HEARING - An Ordinance of Eagle Mountain City, Utah, Amending the Eagle Mountain Municipal Code Chapter 17.49 Wildlife Corridor Overlay Zone.
ITEM TYPE:	Ordinance
FISCAL IMPACT:	N/A
APPLICANT:	City-intitiated

GENERAL PLAN DESIGNATION	**CURRENT ZONE**	**ACREAGE**	**COMMUNITY**
N/A	N/A	N/A	N/A

PUBLIC HEARING:
Yes

PREPARED BY:
Todd Black, Planning

PRESENTED BY:
Todd Black

RECOMMENDATION:
Staff recommends the City Council approve an ordinance of Eagle Mountain City, Utah, Amending the Eagle Mountain Municipal Code Chapter 17.49 Wildlife Corridor Overlay Zone.

BACKGROUND:
Code amendment changes to 17.49 were presented as a discussion item to Planning Commission last year in October. This section has gone through multiple staff revisions and is now ready to present to PC and CC. While not changing the intent of the wildlife overlay zone code, several additions have been made to add clarity and definitions.

ITEMS FOR CONSIDERATION:

REQUIRED FINDINGS:
Ordinances pertaining to development Code amendments, and processing of the same, may be found in EMMC 17.05.120 & UCA 10-9a-501.

PLANNING COMMISSION ACTION/RECOMMENDATION:

ATTACHMENTS:

ORD--EMMC 17.49 Wildlife Corridor Overlay Zone

ORDINANCE NO. O- -2023

AN ORDINANCE OF EAGLE MOUNTAIN CITY, UTAH, AMENDING THE EAGLE MOUNTAIN MUNICIPAL CODE CHAPTER 17.49 WILDLIFE CORRIDOR OVERLAY ZONE.

PREAMBLE

WHEREAS the City Council of Eagle Mountain City finds that it is in the public interest to amend the Eagle Mountain Municipal Code, Chapter 17.49 Wildlife Corridor Overlay Zone, as described in Exhibit A.

BE IT ORDAINED by the City Council of Eagle Mountain City, Utah:

1. The City Council finds that all required notices, public hearings, and other requirements have been completed for the City Council to consider an amendment to the Eagle Mountain Municipal Code Chapter 17.49 Wildlife Corridor Overlay Zone.

2. The amendment described in Exhibit A is hereby approved.

3. This Ordinance shall take effect upon its first posting or publication.

ADOPTED by the City Council of Eagle Mountain City on the 5th day of December 2023.

EAGLE MOUNTAIN CITY, UTAH

_____
Tom Westmoreland, Mayor

ATTEST:

_____
Fionnuala B. Kofoed, MMC
City Recorder

CERTIFICATION

The above Ordinance was adopted by the City Council of Eagle Mountain City, Utah on this 5th day of December 2023.

Those voting yes:	Those voting no:	Those excused:	Those abstaining:
☐ Donna Burnham	☐ Donna Burnham	☐ Donna Burnham	☐ Donna Burnham
☐ Colby Curtis	☐ Colby Curtis	☐ Colby Curtis	☐ Colby Curtis
☐ Jared Gray	☐ Jared Gray	☐ Jared Gray	☐ Jared Gray
☐ Carolyn Love	☐ Carolyn Love	☐ Carolyn Love	☐ Carolyn Love
☐ Brett Wright	☐ Brett Wright	☐ Brett Wright	☐ Brett Wright

_____

Fionnuala B. Kofoed, MMC
City Recorder

Posted on _____ by _____ .

Exhibit A