

Providence City
Administrative Land Use Authority (ALUA)
Agenda – August 12, 2020 – 2:30 PM
Providence City Office Building
164 North Gateway Drive, Providence UT 84332
Members of the ALUA may be attending this meeting electronically.
This meeting will live stream on Providence City's YouTube Channel
Persons wishing to comment on agenda items may email their comments to
providencecityutah@gmail.com or text comments to 435-752-9441.

Call to Order: Skarlet Bankhead, Chair

Item No. 1 - Conditional Use – New Home: The Providence City Administrative Land Use Authority will consider for approval a request by John and Julee Sanchez and Orchid Homes for a new home located at 681 Spring Creek Pkwy., Providence, UT.

Item No. 2 - Conditional Use – Basement Finish: The Providence City Administrative Land Use Authority will consider for approval a request by Graham and Andrea Mearns and Chris Funk Construction for a basement finish in the home located at 1156 Forgotten Lane, Providence, UT.

Item No. 3 - Conditional Use – New Home: The Providence City Administrative Land Use Authority will consider for approval a request by Ascentive Homes for a new home located at 677 E 525 N, Providence, UT.

Agenda posted on August 11, 2020

Diane Campbell
Diane Campbell

If you have a disability and/or need assistance while attending the Providence City Administrative Land Use Authority meeting, please call 435-752-9441 before 1:00 pm on the day of the meeting.

PROVIDENCE CITY
Land Use Authority – Staff Report
Meeting Date: August 5, 2020

Request: Applicant is requesting approval of a conditional use and zoning approval for a new home located at 681 Spring Creek Pkwy, Providence, UT.

| | | |
|-----------------------------------|---|--|
| Item Type: Conditional Use | Applicant: Orchid Homes – John and Julee Sanchez | Address: 681 Spring Creek Pkwy., Providence |
| Parcel ID # 02-295-0329 | General Plan: SFT | Zone: SFT |

Background Information:

A complete application was received July 22, 2020 and contained:

1. Providence City Conditional Use Application and Residential Site Plan application.
2. Payment of \$100 fee, July 22, 2020

Rob Stapley, Providence City Public Works Director, inspected the current infrastructure July 29, 2020.

Aaron Walker, Deputy Fire Marshal/Fire Inspector, reviewed site; see letter dated July 29, 2020.

FINDINGS OF FACT:

1. UCA 10-9a-507. Conditional Uses allow a municipality to adopt a land use ordinance that includes conditional uses and provisions for conditional uses that require compliance with standards set for in an applicable ordinance.
2. The Cache County GIS Parcel Summary shows sensitive areas that may require further analysis.
3. Providence City Code (PCC) 10-5 Sensitive Areas, Section 1 Conditional use permit required states, all requests for permits involving a lot, parcel or site located wholly or partially within an area subject to the Hazard Flood (HF), Hazard Slope (HS), Hazard Water Table (HW) or Hazard Earthquake Primary Fault (HE), Hazard Wildfire (WF) regulations, shall be dealt with as a request for a conditional use permit under the provisions of Section 10-3-5 of this Title. All applications shall comply with the following regulations before any permit shall be issued.
4. PCC 10-3-5 Conditional Use Permits allows the City to impose reasonable conditions: to mitigate the reasonably anticipated detrimental effects of the proposed use on the health, safety, or general welfare of persons residing, working, or conducting business in the vicinity; to mitigate injury to property in the vicinity; to mitigate any risk to safety of persons or property because of vehicular traffic or parking, large gatherings of people, or other causes.

CONCLUSIONS OF LAW:

1. Providence City has adopted land use ordinances that include conditional uses and provisions for conditional uses.
2. The Cache County GIS Parcel Summary indicates this parcel is in a Hazard Landslide area.
3. Providence City has the authority to impose reasonable conditions to mitigate the reasonably anticipated detrimental effects of the proposed use.
4. The request meets the requirements of the codes listed in the Findings of Fact with the following conditions:

CONDITIONS:

1. The applicant will continue to meet all relevant federal, state, county, and Providence City rules, laws, codes, and ordinances.
2. The applicant will mitigate Landslide Area by: See mitigation statement date stamped July 28, 2020, and drawing

on site plan.

3. This conditional use is for the home only as shown on the site plan date stamped July 28, 2020.
4. Aaron Walker, Deputy Fire Marshall/Fire Inspector – Logan City Fire Department, reviewed the parcel in the interest of the fire safety provisions and regulations as adopted by the State of Utah and in accordance with the International Fire Code.
5. Approval by the City of any application submitted or paperwork does not alleviate the owners and/or their agents from their responsibility to understand and conform to local, state, and federal laws. Providence City's approval is not intended to and cannot be construed to allow any laws to be violated.





PROVIDENCE CITY APPLICATION FOR A CONDITIONAL USE

| | |
|----------------------------|--|
| FOR OFFICE USE ONLY | |
| Date | |
| Payment Form | |
| Amount | |
| Receipt # | |
| Clerk | |

Please Note: City Staff will NOT accept the application and fee payment if they are incomplete. Incomplete applications will NOT be processed or scheduled for review by the City.

Initial MP Name Matthew Payn

Date 7/14/20

SUBMITTAL REQUIREMENTS

- \$100 application fee
- An 11"x17" of the property showing the location, function and characteristics of the use, including parking and percentage of space being used
- Cache County plat map of the property
- Copy of Cache County GIS Parcel Summary
<http://66.232.67.238/Websites/Parcel%20and%20Zoning%20Viewer/>
- Mitigation Strategies for applicable sensitive areas
- Mailing addresses for the owners of adjacent properties
- Property owner consent for pursuit of conditional use (if owner is different than Applicant)
- Electronic copy of structure elevations & square footage including attached garage(s), covered porches, covered decks etc.
- Electronic copy of ALL submittals (email or flash drive is acceptable)

Staff Check

Applicant Information (all information MUST be provided)

Name Orchid Homes of Northern Utah LLC
Address 255 West 2600 South Vibley, Ut 84321
Phone 435-535-1832 Email Matthew@buildwithorchid.com

Party Responsible for Payment (if different than applicant)- the individual/firm to whom any and all professional services invoices (attorney/engineer/etc.) will be sent and who will be responsible for payment of such invoices.

Name Orchid Homes of Northern Utah LLC
Address 255 West 2600 South Vibley, Ut 84321
Phone 435-535-1832 Email Matthew@buildwithorchid.com

Property Information

Owner of record John & Julee Sanchez
Owner address 50 South 410 West Providence Utah
Owner phone 435-754-5626 Owner email SanchezFun5@gmail.com
Parcel address 601 Spring Creek Parkway Parcel Tax I.D. 02-295-0329
Zone SFT Height 22 ft Initial MP
Setbacks (front yard) 22 ft (side yard) 15 ft (rear yard) 37 ft Initial mp

Written Statement of Request (attach additional sheets if necessary)

- Briefly explain why you are seeking a conditional use and what the intended use of the property will be if the conditional use is granted.

New Home Construction in Providence Hollow Subdivision. Lot is in Landslide zone. Geotech Study Attached.



Property owner and contractor shall have responsibility to determine grades, and final placement and elevations of footings/foundations. Property owner and contractor shall be responsible for compliance with all state, national and local building codes and ordinances. Initial MP Name Matthew Payne

Approval by the city of any application submittal or paperwork does not alleviate the owners from their responsibility to understand and conform to local, state and federal laws. Providence City's approval is not intended to and cannot be construed to allow any laws to be violated. Initial MP

By signing this document, you agree that Providence City will bill you for any and all professional firm fees as they arise throughout the approval process. This is in addition to application fees. All subdivisions require engineering review throughout the approval process, such as but not limited to reviews of development agreements, construction drawings, preliminary and final plats, and inspections. These services are billed by our city engineer at an hourly rate. Some subdivision applications may also require legal review. Other applications, such as but not limited to conditional uses, may also require engineering and/or legal review at the City's discretion. You agree to reimburse the City for all such costs, whether or not you were forewarned about such costs, and that the City cannot predict all situations in which professional services may be required in order to process your application. Initial MP

I declare under penalty of perjury that I am making this application of my own free will and choice and that the statements, answers, and documents submitted in connection with this application are true and correct to the best of my knowledge.

Kye Raymond

Signature of Applicant

Kye Raymond

Printed Name

7/14/20

Date

The following is a general summary of which body reviews each land use application in Providence City. Public hearings may be required by the Planning Commission and City Council, as shown below. This matrix does not include zoning clearance/permits for new single-home construction or for business licenses, both of which are reviewed and approved by city staff.

| Application | Executive Staff | Land Use Authority | Planning Commission | Public Hearing | City Council | Public Hearing | Appeal Authority | Filing Fee ¹ |
|---|-----------------|--------------------|---------------------|----------------|----------------|----------------|------------------|-------------------------|
| Code Amendment | ✓ | --- | ✓ | ✓ ² | ✓ | --- | --- | \$100 |
| Annexation | ✓ | --- | | --- | ✓ | ✓ | --- | \$150 |
| Rezone | ✓ | --- | ✓ | ✓ | ✓ | --- | --- | \$100 |
| Conditional Use | ✓ | ✓ | | --- | --- | --- | --- | \$100 |
| Subdivision Concept Plan | ✓ | --- | --- | --- | --- | --- | --- | \$300 |
| Preliminary Subdivision Plat | ✓ | --- | ✓ | --- | --- | --- | --- | \$400 |
| Final/Amended Subdivision Plat ³ | ✓ | --- | ✓ | --- | ✓ ⁴ | --- | --- | \$600 |
| Site Plan | ✓ | ✓ | --- | --- | --- | --- | --- | \$50 |
| Lot Consolidation ⁵ | ✓ | --- | ✓ | --- | --- | --- | --- | \$50 |
| Exception to Title ⁶ | ✓ | --- | ✓ | --- | ✓ | --- | --- | \$100 |
| General Plan Amendment | ✓ | --- | ✓ | ✓ | ✓ | --- | --- | \$100 |
| Right-of-Way Vacation | ✓ | --- | ✓ | --- | ✓ | ✓ | --- | \$100 |
| Variance/ Appeal | --- | --- | --- | --- | --- | --- | ✓ | \$100 |

¹ Filing Fees do **not** include professional firm review fees. Those will be billed to the applicant separately.

² Public Hearing required at Planning Commission only when the proposed code amendment is related to land use.

³ Construction drawings are reviewed/approved by the City Engineer and Public Works Director.

⁴ The City Council does not review the final plat itself, but rather reviews and approves the development agreement associated with the final plat.

⁵ Lot consolidations are only required to have City approval when they are in a platted/recor

⁶ Developers may ask for an exception from the requirements of the Providence City Subdivision Code (Title 11) through this process. All other variance/exception requests shall be handled by the Appeal Authority.



Residential Site Plan Application

Date: 7/10/2020

FOR OFFICE USE ONLY

Date _____
Payment Form _____
Amount _____
Receipt # _____
Clerk _____

Required Submittals

Please Note: City Staff will NOT accept the application and fee payment if they are incomplete. Incomplete applications will NOT be processed or scheduled for review by the City. Application fees do not include professional firm fees, which will be billed separately. Engineered site plans may, at the City's discretion, be required. The City will contact the applicant if an engineered site plan is deemed necessary. Accessory buildings include sheds (over 200 sq ft) and all detached buildings (shop, garage, etc.)

Name Matthew Payne Initial mp

| Construction Type | Application | Filing Fee \$50- New Home \$25- all other | 11x17 Site Plan Must Include: | | | Cache County Plat Map | Stormwater NOI Permit | Stormwater Pollution Prevention Plan (SWPPP) |
|-------------------|-------------|---|---|------------------------------|--|-----------------------|-----------------------|--|
| | | | Existing & proposed buildings, dimensions, & setbacks | Existing/ proposed utilities | Dimensions of driveway cut - (35' max) | | | |
| New Home | x | | | | | | | |
| Acc. Building | | | | | | | * | * |
| Addition | | | | | | | * | * |
| Deck | | | | | | | * | * |
| Other | | | | | | | | |

*May not apply in all cases

Applicant Information

Name: Orchid Homes of Northern Utah LLC

Mailing address: 255 west 2600 south Nibley, UT 84321

Telephone: 435-535-1832

Email: matthew@buildwithorchid.com

Property Owner Information (If applicant is not the property owner, the application **must** include the property owner's information and written consent for the applicant to pursue the permit)

Name: John & Julee Sanchez

Mailing address: 50 south 410 west Provo, Utah

Telephone: 435-754-5626

Email: Sanchezfams@gmail.com

Utilities (circle, if applicable):

Septic tank

City sewer

Water

Construction Type (circle):

New home

Accessory building

Well

Addition

Other

Do the plans include an Accessory Apartment Unit (circle):

Yes

No

Is this an Accessory Dwelling Unit (circle):



Project Information

Address: 681 Spring Creek Parkway, Providence ut 84323
Subdivision: Providence Hollow Parcel Tax ID: 02-295-0329

Square footage for fire flow (includes all floors and all areas under the roof, including garages and covered porches):

5283 Initial mp
Zone SFT Height 22 ft 10 inch Initial mp

Setbacks (front yard) 22 ft (side yard) 15 ft (rear yard) 37 ft Initial mp

Contractor Information

Name: Matthew Payne - Orchid Homes

Mailing address: 255 West 2600 South Ribble ut, 84321

Telephone: 435-770-0809

Email: Matthew@buildwithorchid.com

Stormwater Notice of Intent (NOI) Information

NOI No. UTR C00851 Permit issued to: Orchid Homes

If this construction will occur in an approved subdivision, you may be able to use the NOI permit taken out by the development contractor or the developer. If you have to obtain your own NOI permit, please visit: <https://secure.utah.gov/account/log-in.html>. You will create a log in and then access the Storm Water Permit Issuance System. There is a \$150 NOI fee, paid directly to the state when you file your permit.

Property owner and contractor shall have responsibility to determine grades, and final placement and elevations of footings/foundations.

Property owner and contractor shall be responsible for compliance with all state, national and local building codes and ordinances.

Initial mp Name Matthew Payne

Approval by the city of any application submittal or paperwork does not alleviate the owners from their responsibility to understand and conform to local, state and federal laws. Providence City's approval is not intended to and cannot be construed to allow any laws to be violated.

Initial mp

By signing this document, you agree that Providence City will bill you for any and all professional firm fees as they arise throughout the approval process. This is in addition to application fees. All subdivisions require engineering review throughout the approval process, such as but not limited to reviews of development agreements, construction drawings, preliminary and final plats, and inspections. These services are billed by our city engineer at an hourly rate. Some subdivision applications may also require legal review. Other applications, such as but not limited to conditional uses, may also require engineering and/or legal review at the City's discretion. You agree to reimburse the City for all such costs, whether or not you were forewarned about such costs, and that the City cannot predict all situations in which professional services may be required in order to process your application. Initial mp

All Applicants Must Read the Following Before Signing This Application

The granting of a zoning permit does not override any federal, state, or local building code or authorize any individual to violate any local law or ordinance. Approval of this permit does not constitute a representation by the City that it will be liable for any issues arising from the construction of homes and other structures in a Sensitive or Hazard Area. It is the responsibility of the property owner to comply with all relevant local, state, and federal laws and regulations, including but not limited to Providence City Code 10-5 outlined below:

Sensitive and Hazard Areas:

1. **JURISDICTIONAL WETLANDS:** As Defined by the US Army Corps of Engineers
2. **STEEP SLOPES:** Where the rise or fall of the land is equal to or exceeds 30% over a horizontal distance of 50 feet or greater measured perpendicular to the contour lines.
3. **NATURAL WATERWAYS OR OPEN WATER:** Including but not limited to: rivers, creeks, or streams. Identified as those areas where surface waters flow sufficiently to produce a defined channel or bed.
4. **FLOODPLAINS:** See definitions in Chapter 16 Section 3 of this Title.

5. CRUCIAL WILDLIFE HABITAT AREAS: As identified by the State Division of Wildlife Resources (DWR)
6. GEOLOGICAL HAZARD AREAS: Earthquake fault lines or areas prone to debris flows, landslides, high or extreme liquefaction potential, and rock falls as identified by the US Geological Survey (USGS)
7. WILDFIRE HAZARD AREAS: Areas of the City designated as having moderate to extreme potential for wildfire hazards as identified by the City.
8. HAZARD WATER TABLE AREA: An area where potential ground water levels may occur within 12 feet of the natural grade.

By submitting this application, I affirm that I have read and understand the Title 10 Chapter 5 requirements for construction on property in the Sensitive or Hazard Area. I understand that the City is not liable for any issues which may arise because of the construction of structures in the Sensitive or Hazard Areas of the City. The property owner and their agents assume all liability for placing structures in this area of the City. I hereby certify that I am the property owner or authorized agent and I have read and examined this application and understand that the City has no liability. I accept responsibility for all soils and hazardous conditions on the site.

I declare under penalty of perjury that I am making this application of my own free will and choice and that the statements, answers, and documents submitted in connection with this application are true and correct to the best of my knowledge.



Signature of Applicant



Printed Name

7/14/20

Date



Public Works Infrastructure Inspection

Project Address: 681 Spring Creek Pkwy

Contact Name: Matthew (Orchid Homes)

Phone Number: 435-535-1832

| Inspection | Pass/Fail | Notes |
|---|-------------|---|
| Concrete | Pass | |
| Curb/Gutter | Pass | |
| Utilities | Pass | |
| ☒ Conditional Use Fire Hydrants: Location Flow | Hyd. 500 | Static = 158 psi Residual = 110 psi Flow = 1600 gpm Logarithmic = 2829 gpm |
| SWPPP Needed: Yes | No | SWPPP Completed: Yes No N/A |
| NOI Needed: Yes | No | NOI UTR: _____ NOI Issued To: _____ |
| Inspection Completed by <u></u> | | Date <u>7.29.2020</u> |

| Final Inspection | Pass/Fail | Notes |
|-------------------------------|-----------|------------|
| Concrete | | |
| Curb/Gutter | | |
| Utilities | | |
| Inspection Completed by _____ | | Date _____ |



Development Services Department

Building | GIS | Planning | CPDO | Trails

GIS PARCEL SUMMARY

Not Authoritative — For Preliminary Review Only

Parcel Number: 02-295-0329

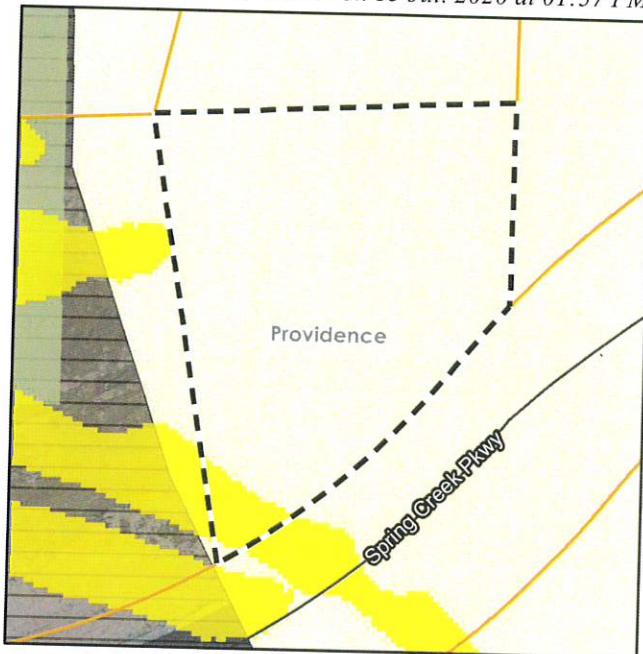
Generated on 13 Jul. 2020 at 01:57 PM

Property Address: 681 SPRING CREEK PARKWAY
PROVIDENCE

Tax Roll Acreage: 0.29

Owner Name: JOHN C & JULEE ANN
SANCHEZ

Owner Address: 50 S 410 W
PROVIDENCE, UT 84332-6104



Jurisdiction: Providence

Future

Annexation Area: n/a

Base Zone: Contact Providence for Zoning

Overlay Zone: n/a

Initial Parcel Incorporated Area

Legality Review: Contact Providence for Applicable Regulations

*Comprehensive maps can be found
at www.cache-county.org/gis*

NOTE: Parcel legality does **NOT** guarantee that a parcel or lot is buildable; it is only one step in the development process.
All other requirements must still be met. Parcel legality should be verified before submitting a land use application.

Areas That May Require Further Analysis

Moderate Slopes

Landslides

Wildfire Hazard Areas



This overview is based on the information in the Cache County GIS databases. Please verify the potential presence of areas requiring further analysis with the County's webmaps. Sections 17.10, 17.17, and 17.18 of the Cache County Land Use Ordinance contain the development standards and requirements associated with these areas. The definition of "Parcel/Lot" in Section 17.07.040 outlines parcel legality.

Cache County assumes no liability for any errors, omissions, or inaccuracies in the information provided regardless of the cause of such or for any decision made, action taken, or action not taken by the user in reliance upon any maps or information provided herein. All datasets may contain errors. The information shown here is not intended to replace evaluation by a competent, licensed professional. In particular, the parcel boundaries are representational only and are not legal definitions of real property, nor are they intended to replace a land survey by a licensed surveyor.



July 29, 2020

Providence City
164 North, Gateway Dr.
Providence, Ut 84332

RE: Conditional Use Review, Sanchez Home, 681 Spring Creek Pkwy, Providence Ut.

The above-named site plans have been submitted to the Logan Fire Department for a fire and life safety review. This review was made in the interest of the fire safety provisions and regulations as adopted by the State of Utah and in accordance with the International Fire Code. This review is not considered comprehensive nor regarded as sanctioning any code deficiencies not identified. The ultimate responsibility for compliance with the applicable codes, standards and ordinances rests with the owner.

This project was reviewed using 2018 IFC, 2006 Utah Wildland-Urban Interface Code and Providence City Code Title 10, Chapter 5 for Hazard Wildfire Area, and has been found to meet the intent of the codes.

This project is being recommended to Providence City for approval.

The following comments document the review process:

Access

(IFC 503.1.1) Fire Apparatus Access shall extend to within 150 feet of all portions of the facility as measured by an approved route around the exterior of the building.

- Access is adequate from Spring Creek Parkway.

Fire Hydrant Locations and number of Hydrants

(IFC 507.5.1) Fire Hydrants shall be located within 400 feet of the building as measured by an approved route around the exterior of the building. Exception allows for the distance to be increased to 600 feet for R-3 occupancies.

- There are several hydrants within 600 feet of the proposed residence.

Fire Water Flow

(IFC 507.1) An approved water supply capable of supplying the required fire flow for fire protection shall be provided to premises upon which facilities, building or portions of buildings are hereafter constructed or moved into or within the jurisdiction. (IFC 507.3) Fire flow requirements for buildings or portions of building and facilities shall be determine by an approved method.

- The building appears to be approx. 5,283 sq. ft. in size. According to Table B105.1 and B105.2, the fire flow for a combined fire area 5,283 sq. ft. of type V-B is 2,000 GPM at 20 PSI. Fire Flow requirements are subject to change due to separation of fire areas, type of construction, and the installation of fire suppression system.
- **There are three fire hydrants within 600 feet of the proposed site.**
- **Hydrant #500 closest to the building site has approximately 2,829 GPM at 20 PSI and is adequate for this size of construction**

2006 Utah Wildland-Urban Interface Code

SECTION 506 Class 3 - Ignition-resistant Construction:

506.1 General. Class 3 ignition-resistant construction shall be in accordance with Sections 506.

*506.2 Roof covering. Roofs shall have at least a Class A covering, Class C roof assembly or an approved noncombustible roof covering. For roof coverings where the profile allows a space between the roof covering and roof decking, the space at the eave ends shall be fire-stopped to preclude entry of flames or embers. (No wood shakes or combustible roofing used) Per phone discussion with Matt at Orchid Homes - **Builder is planning on a Class A roof covering. Approved.***

*506.3 Unenclosed under-floor protection. Buildings or structures shall have all under-floor areas enclosed to the ground with exterior walls. Exception: Complete enclosure may be omitted where the underside of all exposed floors and all exposed structural columns, beams and supporting walls are protected as required for exterior 1-hour fire-resistance-rated construction or heavy timber construction. (Per County Fire Marshal - Soffits to be installed as to close underside of combustible decks and supported structures) Per phone discussion with Matt at Orchid Homes - **Builder is planning on closing all underfloor decks and eaves with soffits. Approved.***

*506.4 Vents. Attic ventilation openings, soffit vents, foundation or under-floor vents or other ventilation openings in vertical exterior walls and vents through roofs shall not exceed 144 square inches each. Such vents shall be covered with noncombustible corrosion resistant mesh with openings not to exceed 1/8 inch. Per phone discussion with Matt at Orchid Homes - **Home Builder is planning on installing 1/8" mesh screen on all openings. Approved.***

Providence City Code Title 10, Chapter 5 for Hazard Wildfire Area

Property owners are encouraged to implement the following:

- Construct the roof with fire-resistant materials like tile or metal, asphalt or fiberglass shingles. Clean roof surfaces and gutters of pine needles, leaves, branches, etc. regularly to avoid accumulation of flammable materials.
- Inspect your property regularly, clearing dead wood and dense vegetation from at least 30' around your house. Rake piles of leaves and twigs. If on a hill, more space will be needed to protect your home. A fuel break should be maintained around all structures.
- Move firewood away from the house or attachments like fences or decks.
- Cover vents with wire mesh no larger than 1/8 of an inch to keep sparks from entering your home through vents.
- Driveways should be wide enough for firefighting equipment to maneuver.

If you have any questions, please call me.

Respectfully,

FIRE DEPARTMENT

Aaron Walker

Deputy Fire Marshal/Fire Inspector

Logan Fire Department

435-716-9516

Sanchez Home

Mitigation Strategies.

The current terrain of the lot slopes from South East to North West. Currently from back of curb on the East side of the property to the west side (back of curb) There is a 17' elevation difference. Both front and back elevations on the West side of the Property are close in elevation heights(within reason) There is approximately a 3' fall in elevation from front to back on the east side of the Property.

Given these constraints this home will have a walkout basement. With this we will also need a about a 4'-6' retaining wall on the South East corner of the lot, as well as another 3'-4' retaining wall on the South West corner of the lot. All slopes are to be graded away from the home at a minimum of 1/4" per ft. Retaining wall plans are included in a geotechnical study done by CMT Engineering. The retaining walls will be built with rock boulders This will provide balance for the site both on the uphill, and down hill side of the property.

Adjacent Property Owners

Sarah Street LLC
Parcel # 02-295-0320
Mailing address
540 West Golf Course Road
Logan, Utah 84321

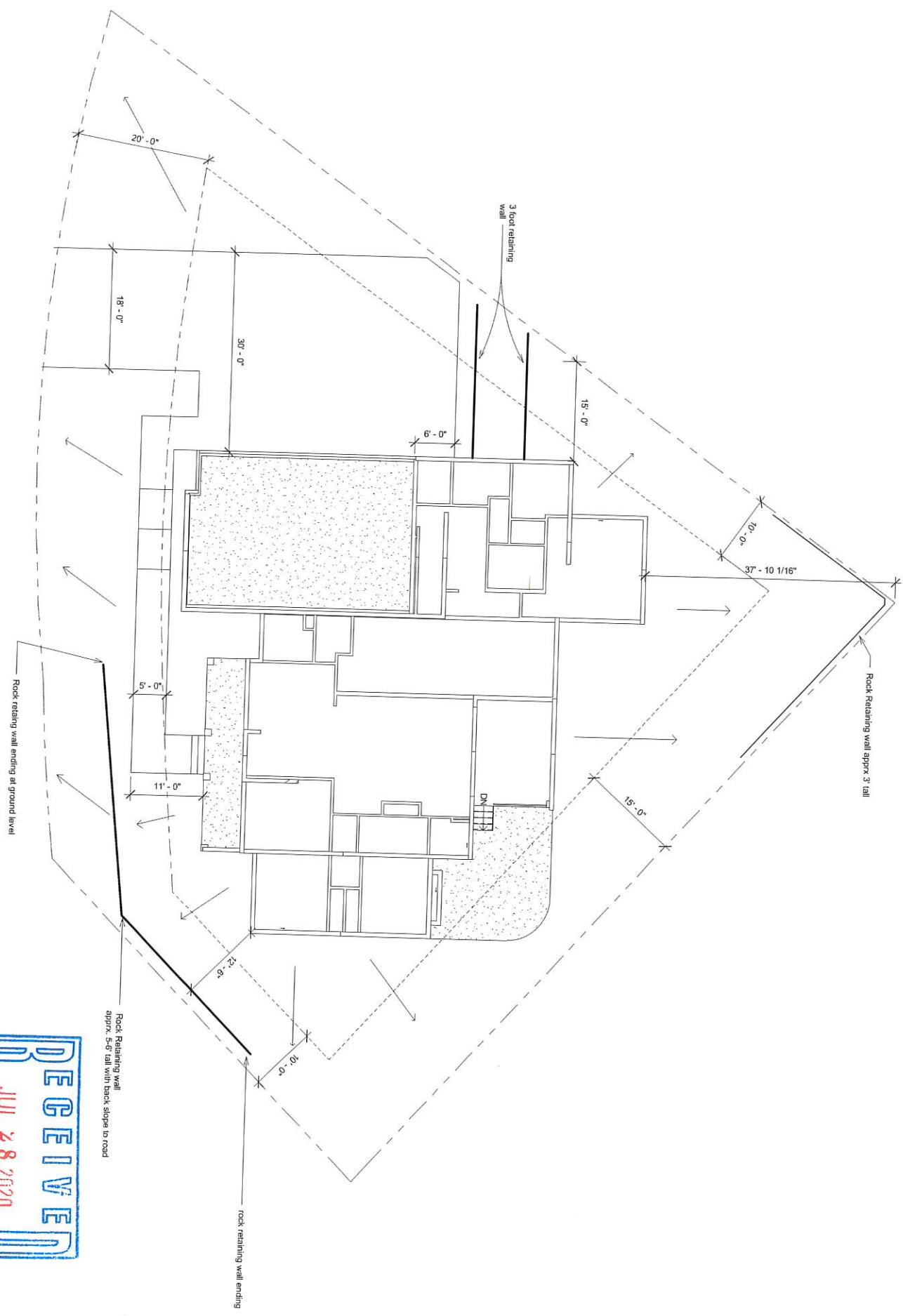
AJ Addison Inc.
Parcel # 02-295-0321
Mailing address
PO Box 282
Providence, Utah 84323

Michael and Tia Montgomery
Parcel # 02-295-0322
Mailing address
1148 West 1780 South
Logan, Utah 84321



Sanchez Home

Diana





GEOTECHNICAL ENGINEERING STUDY

Proposed Sanchez Residence

Lot 29 Providence Hollow
About 681 Spring Creek Parkway
Providence, Utah

CMT PROJECT NO. 14735

FOR:

Orchid Homes
491 North Main Street
Logan, Utah 84321

July 1, 2020

ENGINEERING • GEOTECHNICAL • ENVIRONMENTAL (ESA I & II) •
MATERIALS TESTING • SPECIAL INSPECTIONS •
ORGANIC CHEMISTRY • PAVEMENT
DESIGN • GEOLOGY

CMT ENGINEERING LABORATORIES

July 1, 2020

Mr. Matthew Payne
Orchid Homes
491 North Main Street
Logan, Utah 84321

Subject: Geotechnical Engineering Study
Proposed Sanchez Residence
Lot 29 Providence Hollow
About 681 Spring Creek Parkway
Providence, Utah
CMT Project No. 14735

Mr. Payne:

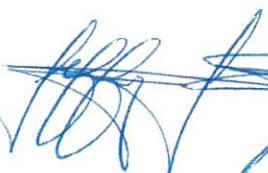
Submitted herewith is the report of our geotechnical engineering study for the subject site. This report contains the results of our findings and an engineering interpretation of the results with respect to the available project characteristics. It also contains recommendations to aid in the design and construction of the earth related phases of this project.

On June 3, 2020, a CMT Engineering Laboratories (CMT) geologist was on-site and supervised the excavation of 3 test pits extending to depths of about 12.5 to 13.5 feet below the existing ground surface. Soil samples were obtained during the field operations and subsequently transported to our laboratory for further testing and observation.

Conventional spread and/or continuous footings may be utilized to support the proposed residence, provided the recommendations in this report are followed. A detailed discussion of design and construction criteria is presented in this report.

We appreciate the opportunity to work with you at this stage of the project. CMT offers a full range of Geotechnical Engineering, Geological, Material Testing, Special Inspection services, and Phase I and II Environmental Site Assessments. With 9 offices throughout Utah, Idaho and Arizona, our staff is capable of efficiently serving your project needs. If we can be of further assistance or if you have any questions regarding this project, please do not hesitate to contact us at (801) 870-6730.

Sincerely,
CMT Engineering Laboratories



Jeffrey J. Egbert, P.E., LEED A.P., M. ASCE
Senior Geotechnical Engineer



Reviewed by:



Andrew M. Harris, P.E.
Geotechnical Division Manager

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1.0 INTRODUCTION

1.1 General

CMT Engineering Laboratories (CMT) was retained to conduct a geotechnical subsurface study for a proposed single family residence to be constructed on lot 29 of the Providence Hollow Subdivision. The lot is located at approximately 681 Spring Creek Parkway, in Providence, Utah, as shown in the **Vicinity Map** below.



1.2 Objectives, Scope and Authorization

The objectives and scope of our study were planned in discussions between Mr. Matthew Payne of Orchid Homes, and Mr. Andrew Harris of CMT Engineering Laboratories (CMT). In general, the objectives of this study were to define and evaluate the subsurface soil and groundwater conditions at the site, and provide appropriate foundation, earthwork and seismic recommendations to be utilized in the design and construction of the proposed residence.

In accomplishing these objectives, our scope of work has included performing field exploration, which consisted of the excavating/logging/sampling of 3 test pits, performing laboratory testing on representative samples of the subsurface soils collected in the test pits, and conducting an office program, which consisted of correlating available data, performing engineering analyses, and preparing this summary report. This scope of work was authorized by returning a signed copy of our proposal dated May 28, 2020 and executed on June 16, 2020.

1.3 Description of Proposed Construction

We understand that the proposed structure will be a single family residence which we project will have two levels of wood frame construction above grade and a single level of reinforced concrete below grade (basement). We project that maximum structural loads for the residence will be on the order of 4,000 pounds per lineal foot for walls and 50,000 pounds for columns. Floor slab loads are anticipated to be relatively light, with an average uniform loading not exceeding 100 pounds per square foot. If the loading conditions are different than we have projected, please notify us so that any appropriate modifications to our conclusions and recommendations contained herein can be made.

Site development will require some earthwork in the form of cutting and filling. A site grading plan was not available at the time of this report, but a site plan provided to our office indicates rockery walls up to 6 feet in height and a pair of retaining walls (which we anticipate will be landscape walls) up to three feet in height. We project that this will result in maximum cuts and fills on the order of 3 to 6 feet. If deeper cuts or fills are planned, CMT should be notified to provide additional recommendations, if needed.

1.4 Executive Summary

The proposed residence can be supported upon conventional spread and continuous wall foundations. The most significant geotechnical aspects regarding site development include the following:

1. Topsoil and fill soils extending up to 4 feet below the surface were encountered at the test pit locations, which will require removal beneath footing and floor slab areas;
2. Natural soils below the topsoil and fill consisted of near surface SILT (ML) layers followed by SAND (SM) and GRAVEL (GM) layers to the bottom of the test pits;
3. Groundwater was not encountered in the test pits;
4. The near surface SILT (ML) soils, which extended 8.5 to 9.0 feet below the surface visually contained pinholes and are slightly to moderately moisture sensitive (potentially collapsible), as confirmed by consolidation/collapse tests that indicated these soils have a collapse potential of 0.3% to 1.9%;

5. Foundations and floor slabs may be placed on suitable, undisturbed natural sand and gravel soils or entirely on a minimum of 24 inches of properly placed and compacted structural fill.

CMT must assess that topsoil, non-engineered fills, debris, disturbed or unsuitable soils have been removed and that suitable soils have been encountered prior to placing site grading fills, structural fill, footings, or slabs.

In the following sections, detailed discussions pertaining to the site and subsurface descriptions, geologic/seismic setting, earthwork, foundations, lateral resistance, lateral pressure, floor slabs, and retaining walls are provided.

2.0 FIELD EXPLORATION

In order to define and evaluate the subsurface soil and groundwater conditions 3 test pits were excavated with a backhoe at the site to depths of approximately 12.5 to 13.5 feet below the existing ground surface. Locations of the test pits are shown on **Figure 1, Site Plan**, included in the Appendix. The field exploration was performed under the supervision of an experienced member of our geotechnical staff.

Representative soil samples were collected by obtaining disturbed "grab" samples and cutting relatively undisturbed "block" samples from within each test pit. The samples were sealed in plastic bags prior to transport to the laboratory.

The subsurface soils encountered in the test pits were classified in the field based upon visual and textural examination, logged and described in general accordance with ASTM¹ D-2488. These field classifications were supplemented by subsequent examination and testing of select samples in our laboratory. Graphical representations of the subsurface conditions encountered are presented on each individual Test Pit Log, **Figures 2 through 4**, included in the Appendix. A Key to Symbols defining the terms and symbols used on the logs, is provided as **Figure 5** in the Appendix.

Upon completion of logging and sampling the test pits were backfilled with the excavated soils. When backfilling the test pits minimal to no effort was made to compact the backfill and no compaction testing was performed. Thus, the test pit backfill is considered non-engineered fill and settlement of the backfill in the test pits over time should be anticipated.

3.0 LABORATORY TESTING

Selected samples of the subsurface soils were subjected to various laboratory tests to assess pertinent engineering properties, as follows:

1. Moisture Content, ASTM D-2216, Percent moisture representative of field conditions
2. Dry Density, ASTM D-2937, Dry unit weight representing field conditions
3. Atterberg Limits, ASTM D-4318, Plasticity and workability

¹American Society for Testing and Materials

4. Gradation Analysis, ASTM D-1140/C-117, Grain Size Analysis
5. One Dimension Consolidation, ASTM D-2435, Consolidation properties
6. Direct Shear Test, ASTM D-3080, Shear strength parameters

To provide data necessary for our settlement analyses, a consolidation test was performed on each of 3 representative samples of the near surface silt soils encountered in the test pits. Based upon the data obtained from the consolidation testing, the silt soils at this site are moderately over-consolidated, moderately compressible under additional loading, and have a collapse potential of approximately 0.3% to 1.9% at a load of 1,000 psf when water was added (see the **Lab Summary Table** below). Detailed results of the consolidation tests are maintained within our files and can be transmitted to you, if so desired.

A direct shear test was completed on a relatively undisturbed sample of the onsite silt soils obtained from test pit TP-1 at a depth of 5 feet. The results of our testing indicate the silt soils have a friction angle of 26 degrees and a saturated cohesion of 158 pounds per square foot.

Laboratory test results are presented on the test pit logs (**Figures 2 through 4**) and in the following Lab Summary table:

| TEST PIT | DEPTH (feet) | SAMPLE TYPE | SOIL CLASS | MOISTURE CONTENT(%) | DRY DENSITY (pcf) | GRADATION | | | ATTERBERG LIMITS | | | COLLAPSE (-)/ EXPANSION(+) |
|-------------|-----------------|----------------|---------------|------------------------|----------------------|-----------|------|-------|------------------|----|----|-------------------------------|
| | | | | | | GRAV. | SAND | FINES | LL | PL | PI | |
| TP-2 | 2 | Block | ML | 10 | 85 | | | | | | | -1.9% |
| | 4 | Block | ML | 19 | 104 | | | | | | | -0.2% |
| | 7 | Block | ML | 14 | 92 | | | | | | NP | |
| | 9 | Bag | SM | 6 | | | | | 35 | | | |
| TP-3 | 4.5 | Block | ML | 18 | 100 | | | | | | | -0.5% |
| | 10.5 | Block | ML | 10 | 94 | | | | 58 | | | |

4.0 GEOLOGIC & SEISMIC CONDITIONS

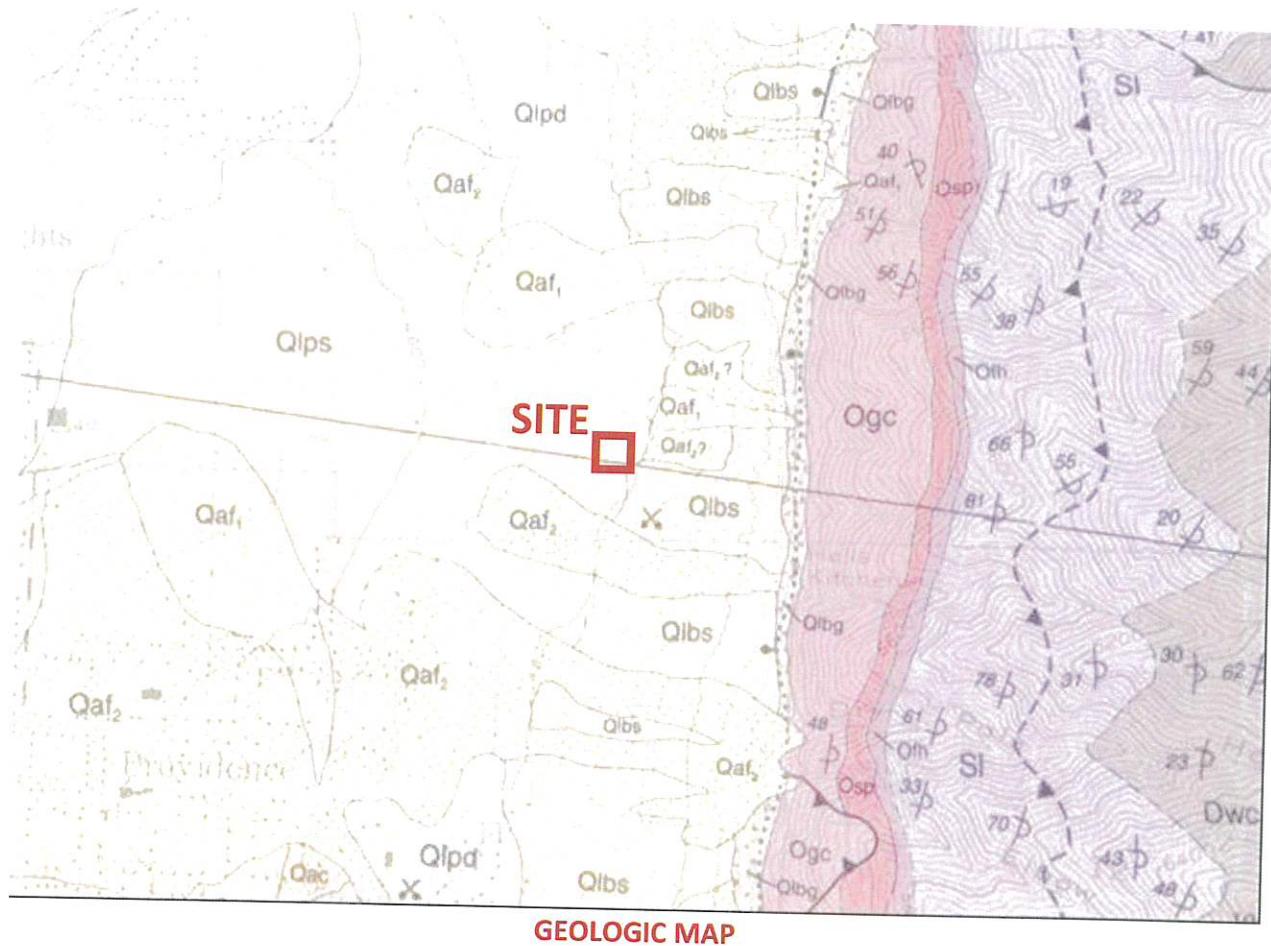
4.1 Geologic Setting

The subject site is located in the southeast portion of Cache Valley in northern Utah at an elevation of approximately 4,760 feet above sea level in the foothills of the Bear River Range. The Cache Valley is a deep, sediment-filled basin that is part of the Middle Rocky Mountain Physiographic Province. The valley is bordered by the Bear River Range on the east and the Wellsville Mountains on the west. The valley is located within the Intermountain Seismic Belt, a zone of ongoing tectonism and seismic activity extending from southwestern Montana to southwestern Utah. The Cache Valley is a fault-block valley (Graben) structurally bound on the east by the west-dipping East Cache Fault Zone and on the west by the east-dipping West Cache Fault Zone. Tectonic displacement along these faults has resulted in the relative down-drop of the valley in relation to the uplift of the bounding mountain ranges on the east and west.

Much of northwestern Utah, including the Cache Valley, was also previously covered by the Pleistocene age Lake Bonneville. The Great Salt Lake, located to the southwest of the valley, is a remnant of this ancient fresh water lake. Lake Bonneville reached a high-stand elevation of between approximately 5,160 and 5,200 feet above sea level at between 18,500 and 17,400 years ago. Approximately 17,400 years ago, the lake breached its basin in southeastern Idaho and dropped by almost 300 feet relatively fast as water drained into the Snake River. Following this catastrophic release, the lake level continued to drop slowly over time, primarily driven by drier climatic conditions, until reaching the current level of the Great Salt Lake. Shoreline terraces formed at the high-stand elevation of the lake and several subsequent lower lake levels are visible in places on the mountain slopes surrounding the valley. Much of the sediment within the Cache Valley was deposited as lacustrine sediments during both the transgressive (rise) and regressive (fall) phases of Lake Bonneville. These sediments were deposited over thick sequences of older Quaternary and Tertiary age, pre-Lake Bonneville deposits within the valley.

The geology of the USGS Logan, Utah 7.5 Minute Quadrangle, that includes the location of the subject site, has been mapped by Evans and others². The surficial geology at the location of the subject site and adjacent properties is mapped as "Lacustrine sand and silt related to Provo and younger shorelines" (Map Unit Qlps) dated to be upper Pleistocene. Unit Qlps is described on the referenced map as "Nearshore deposits of coarse to fine sand, silt, and minor clay; typically rhythmically bedded; exposed thickness less than 16 feet (<5 m)." No fill has been mapped at the location of the site on the geologic map. Refer to the **Geologic Map**, shown below.

²Evans, J.P., McCalpin, J.P., and Holmes, D.C., 1996, Geologic Map of the Logan Quadrangle, Cache County, Utah; Utah Geological Survey Miscellaneous Publication 96-1, Scale 1:24,000.



4.2 Faulting

No surface fault traces are shown on the referenced geologic map crossing, adjacent to, or projecting toward the subject site. The nearest mapped active (Holocene) fault is the central section of the East Cache Fault Zone approximately 0.3 miles to the east.

4.3 Seismicity

4.3.1 Site Class

Utah has adopted the International Building Code (IBC) 2018, which determines the seismic hazard for a site based upon 2014 mapping of bedrock accelerations prepared by the United States Geologic Survey (USGS) and the soil site class. The USGS values are presented on maps incorporated into the IBC code and are also available based on latitude and longitude coordinates (grid points). For site class definitions, IBC 2018 Section 1613.2.2 refers to Chapter 20, Site Classification Procedure for Seismic Design, of ASCE³ 7-16. Given the subsurface soils encountered at the site in our explorations, which only extended to a depth of up to about 13.5 feet, it is our

³American Society of Civil Engineers

opinion the site best fits Site Class D – Stiff Soil Profile (without data, or default), which we recommend for seismic structural design.

4.3.2 Seismic Design Category

The 2014 USGS mapping utilized by the IBC provides values of peak ground, short period and long period accelerations for the Site Class B/C boundary and the Maximum Considered Earthquake (MCE). This Site Class B boundary represents average bedrock values for the Western United States and must be corrected for local soil conditions. The Seismic Design Categories in the International Residential Code (IRC 2018 Table R301.2.2.1.1) are based upon the Site Class as addressed in the previous section. For Site Class D at site grid coordinates of 41.7168 degrees north latitude and -111.8011 degrees west longitude, S_{Ds} is 0.812 and the **Seismic Design Category** is D₁.

4.3.3 Liquefaction

Liquefaction is defined as the condition when saturated, loose, sandy soils lose their support capabilities because of excessive pore water pressure which develops during a seismic event. Clayey soils, even if saturated, will generally not liquefy during a major seismic event.

The site is located within an area designated by the Utah Geologic Survey⁴ as having “Very Low” liquefaction potential. This designation indicates there is a less than 5% probability that within a 100-year period and earthquake strong enough to cause liquefaction will occur.

A special liquefaction study was not performed for this site. We encountered unsaturated, near surface silt, and medium dense to dense (estimated) sand and gravel soils within the depths we explored. In our opinion, the soils we encountered support the mapped very low liquefaction potential designation.

4.4 Slope Stability

As previously indicated a site grading plan was not provided to our office, but we project that some cutting and filling will take place as part of the development. Site grades slope downward to the west and north at relatively gentle gradients. Based upon a preliminary stability analysis of a cross section of the site through the lot in a northeasterly direction, there does not appear to be any significant concerns for slope movements (see **Figure 6**).

If plans will require steepening of the existing slope (cutting at the toe or adding additional soil at the crest of the slope for example) we should be notified to evaluate proposed grades, re-evaluate slope stability, and provide additional recommendations as needed.

⁴ Utah Geological Survey, "Liquefaction-Potential Map for Cache Valley, Cache County, Utah," Utah Geological Survey Public Information Series 79, August 1994. https://ugspub.nr.utah.gov/publications/public_information/pi-79.pdf

4.5 Other Geologic Hazards

No landslide deposits or features, including lateral spread deposits, are mapped on or adjacent to the site. The site is not located within a known or mapped potential debris flow, stream flooding⁵, or rock fall hazard area.

5.0 SITE CONDITIONS

5.1 Surface Conditions

At the time the test pits were excavated the site consisted of an undeveloped lot with some fill soils and sparse vegetation (weeds) on the surface. Based upon aerial photos readily available online dating back to 1993, the lot appears to have been undeveloped range land. The adjacent road appears to have been constructed in 2017. The site is bounded on the north by undeveloped land, on the east and west by vacant lots, and on the south by Spring Creek Parkway (see **Vicinity Map** in **Section 1.1** above).

5.2 Subsurface Soils

At the locations of the test pits we encountered fill and/or topsoil on the surface extending to depths of approximately 1.5 to 4.0 feet. The fill soils were silty and sandy and contained some gravel and debris. The fill is considered non-engineered (not placed in a controlled manner or tested for compaction) and is therefore unsuitable for support of footings or floor slabs.

Natural soils observed beneath the topsoil/fill soils consisted generally of near surface layers of SILT (ML) with sand and thin sand layers extending about 8.5 to 9 feet below the surface. The silt was also observed to exhibit a pinhole structure, which typically indicates a moisture sensitive (potentially collapsible) soil.

The near surface silt layers were followed by Silty SAND (SM) and Silty GRAVEL (GM) layers extending to the bottom of the test pits, approximately 12.5 to 13.5 feet below existing site grades.

The silt soils were slightly moist to moist, brown in color, and estimated to be medium stiff in consistency. They also exhibited moderate over consolidation and strength characteristics, as well as a very low to slightly moderate potential for collapse when wetted.

The natural sand and gravel soils were slightly moist, brown in color, and estimated to be medium dense to dense. They are also projected to exhibit moderate strength and low compressibility characteristics.

For a more descriptive interpretation of subsurface conditions, please refer to the test pit logs, **Figures 2 through 4**, which graphically represent the subsurface conditions encountered. The lines designating the interface between soil types on the logs generally represent approximate boundaries - *in situ*, the transition between soil types may be gradual.

⁵ <https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd&extent=-111.36752238312305,40.474000783564726,-111.34675135651116,40.48216171946493>

5.3 Groundwater

Groundwater was not encountered at the time of our field explorations within the maximum depth explored of about 13.5 feet below the existing ground surface. Therefore, groundwater is not anticipated to affect proposed construction.

Groundwater levels can fluctuate seasonally as well as in response to numerous other factors such as heavy precipitation, irrigation of neighboring land, and other unforeseen factors. The detailed evaluation of these and other factors, which may be responsible for ground water fluctuations, is beyond the scope of this study.

5.4 Site Subsurface Variations

Based on the results of the subsurface explorations and our experience, variations in the continuity and nature of subsurface conditions should be anticipated. Due to the heterogeneous characteristics of natural soils, care should be taken in interpolating or extrapolating subsurface conditions between or beyond the exploratory locations.

Also, when logging and sampling of the test pits was completed, the test pits were backfilled with the excavated soils but minimal to no effort was made to compact these soils. Thus, the test pit backfill is considered non-engineered fill and settlement of the backfill in the test pits over time should be anticipated.

6.0 SITE PREPARATION AND GRADING

6.1 General

All deleterious materials should be stripped from the site prior to commencement of construction activities. This includes vegetation, topsoil, loose and disturbed soils, etc. Based upon the conditions observed in the test pits there is topsoil and non-engineered fill soils on the surface of the site which we observed to be about 1.5 to as much as 4.0 feet in thickness.

When stripping and grubbing, topsoil should be distinguished by the apparent organic content and not solely by color; thus we estimate that topsoil stripping will need to include the upper 4 inches.

All non-engineered fill shall be removed from beneath footing and floor slab areas. Below exterior flatwork the surface of the non-engineered fill (if free of organics or other deleterious material) shall be scarified to a minimum depth of 8 inches, moisture conditioned as needed, and re-compacted in place to 95% of the maximum dry density.

The site should be observed by a CMT geotechnical engineer to assess that suitable natural soils have been exposed and any deleterious materials, loose and/or disturbed soils have been removed, prior to placing site grading fills, footings, or slabs.

Fill placed over large areas to raise overall site grades can induce settlements in the underlying natural soils. If more than 4 feet of site grading fill is anticipated over the natural ground surface, we should be notified to assess potential settlements and provide additional recommendations as needed. These recommendations may include placement of the site grading fill far in advance to allow potential settlements to occur prior to construction.

6.2 Temporary Excavations

Excavations deeper than 8 feet are not anticipated at the site. Groundwater was not encountered within the maximum depth explored, about 13.5 feet, at the time of our field explorations, and thus is not anticipated to be encountered in excavations.

The natural soils encountered at this site predominantly consisted of silt. In clayey (cohesive) soils, temporary construction excavations not exceeding 4 feet in depth may be constructed with near-vertical side slopes. Temporary excavations up to 8 feet deep, above or below groundwater, may be constructed with side slopes no steeper than one-half horizontal to one vertical (0.5H:1V).

For sandy/gravelly (cohesionless) soils, temporary construction excavations not exceeding 4 feet in depth should be no steeper than one-half horizontal to one vertical (0.5H:1V). For excavations up to 8 feet and above groundwater, side slopes should be no steeper than one horizontal to one vertical (1H:1V). Excavations encountering saturated cohesionless soils will be very difficult to maintain, and will require very flat side slopes and/or shoring, bracing and dewatering.

To reduce disturbance of the natural soils during excavation, we recommend that smooth edge buckets/blades be utilized.

All excavations must be inspected periodically by qualified personnel. If any signs of instability or excessive sloughing are noted, immediate remedial action must be initiated. All excavations should be made following OSHA safety guidelines.

6.3 Fill Material

Following are our recommendations for the various fill types we anticipate will be used at this site:

| FILL MATERIAL TYPE | DESCRIPTION RECOMMENDED SPECIFICATION |
|--------------------|---|
| Structural Fill | Placed below structures, flatwork and pavement. Well-graded sand/gravel mixture, with maximum particle size of 4 inches, a minimum 70% passing 3/4-inch sieve, a maximum 20% passing the No. 200 sieve, and a maximum Plasticity Index of 10. |
| Site Grading Fill | Placed over larger areas to raise the site grade. Sandy to gravelly soil, with a maximum particle size of 6 inches, a minimum 70% passing 3/4-inch sieve, and a maximum 50% passing No. 200 sieve. |

| FILL MATERIAL TYPE | DESCRIPTION RECOMMENDED SPECIFICATION |
|---------------------|---|
| Non-Structural Fill | Placed below non-structural areas, such as landscaping. On-site soils or imported soils, with a maximum particle size of 8 inches, including silt/clay soils not containing excessive amounts of degradable/organic material (see discussion below). |
| Stabilization Fill | Placed to stabilize soft areas prior to placing structural fill and/or site grading fill. Coarse angular gravels and cobbles 1 inch to 8 inches in size. May also use 1.5-inch to 2.0-inch gravel placed on stabilization fabric, such as Mirafi RS280i, or equivalent (see Section 6.6). |

On-site sand and gravel soils may be suitable for use as structural fill, if processed to meet the requirements given above, and may also be used in site grading fill and non-structural fill situations.

On-site silt soils may be used as site grading fill and non-structural fill, but are also inherently more difficult to work with in proper moisture conditioning (they are very sensitive to changes in moisture content), requiring very close moisture control during placement and compaction. This will be very difficult, if not impossible, during wet and cold periods of the year. We also recommend the site grading fill thickness using on-site silt soils not exceed 3 feet below structures, to minimize potential settlements.

All fill material should be approved by a CMT geotechnical engineer prior to placement.

6.4 Fill Placement and Compaction

The various types of compaction equipment available have their limitations as to the maximum lift thickness that can be compacted. For example, hand operated equipment is limited to lifts of about 4 inches and most “trench compactors” have a maximum, consistent compaction depth of about 6 inches. Large rollers, depending on soil and moisture conditions, can achieve compaction at 8 to 12 inches. The full thickness of each lift should be compacted to at least the following percentages of the maximum dry density as determined by ASTM D-1557 (or AASHTO⁶ T-180) in accordance with the following recommendations:

| LOCATION | TOTAL FILL THICKNESS (FEET) | MINIMUM PERCENTAGE OF MAXIMUM DRY DENSITY |
|---|-----------------------------|---|
| Beneath an area extending at least 4 feet beyond the perimeter of structures, and below flatwork and pavement (applies to structural fill and site grading fill) extending at least 2 feet beyond the perimeter | 0 to 5 5 to 8 | 95 98 |
| Site grading fill outside area defined above | 0 to 5 5 to 8 | 92 95 |
| Utility trenches within structural areas | -- | 96 |
| Roadbase and subbase | - | 96 |
| Non-structural fill | 0 to 5 5 to 8 | 90 92 |

⁶ American Association of State Highway and Transportation Officials

Structural fills greater than 8 feet thick are not anticipated at the site. For best compaction results, we recommend that the moisture content for structural fill/backfill be within 2% of optimum. Field density tests should be performed on each lift as necessary to verify that proper compaction is being achieved.

6.5 Utility Trenches

For the bedding zone around the utility, we recommend utilizing sand bedding fill material that meets current APWA⁷ requirements.

All utility trench backfill material below structurally loaded facilities (foundations, floor slabs, flatwork, parking lots/drive areas, etc.) should be placed at the same density requirements established for structural fill in the previous section. Above the bedding zone, we recommend that utility trench backfill have a minimum 20% fines, to reduce permeability (refer to **Section 6.3** above). In addition, utilities should be installed as close to the bottom of the potentially collapsible soils as reasonably possible.

Most utility companies and local governments are requiring Type A-1a or A-1b (AASHTO Designation) soils (sand/gravel soils with limited fines) be used as backfill over utilities within public rights of way, and the backfill be compacted over the full depth above the bedding zone to at least 96% of the maximum dry density as determined by AASHTO T-180 (ASTM D-1557). The natural sand and gravel soils at this site may meet these specifications.

Where the utility does not underlie structurally loaded facilities and public rights of way, on-site fill and natural soils may be utilized as trench backfill above the bedding layer, provided they are properly moisture conditioned and compacted to the minimum requirements stated above in **Section 6.4**.

6.6 Stabilization

The natural silt soils at this site will likely be susceptible to rutting and pumping. The likelihood of disturbance or rutting and/or pumping of the existing natural soils is a function of the load applied to the surface, as well as the frequency of the load. Consequently, rutting and pumping can be minimized by avoiding concentrated traffic, minimizing the load applied to the surface by using lighter equipment and/or partial loads, by working in drier times of the year, or by providing a working surface for the equipment. Rubber-tired equipment particularly, because of high pressures, promotes instability in moist/wet, soft soils. If rutting or pumping occurs, traffic should be stopped and the disturbed soils should be removed and replaced with stabilization material. Typically, a minimum of 18 inches of the disturbed soils must be removed to be effective. However, deeper removal is sometimes required.

To stabilize soft subgrade conditions (if encountered), a mixture of coarse, clean, angular gravels and cobbles and/or 1.5- to 2.0-inch clean gravel should be utilized, as indicated above in **Section 6.3**. Often the amount of gravelly material can be reduced with the use of a geotextile fabric such as Mirafi RS280i or equivalent. Its use will also help avoid mixing of the subgrade soils with the gravelly material. After excavating the soft/disturbed

⁷ American Public Works Association

soils, the fabric should be spread across the bottom of the excavation and up the sides a minimum of 18 inches. Otherwise, it should be placed in accordance with the manufacturer's recommendation, including proper overlaps. The gravel material can then be placed over the fabric in compacted lifts as described above.

7.0 FOUNDATION RECOMMENDATIONS

The following recommendations have been developed on the basis of the previously described project characteristics, including the maximum loads discussed in **Section 1.3**, the subsurface conditions observed in the field and the laboratory test data, and standard geotechnical engineering practice.

7.1 Foundation Design

Based on our geotechnical engineering analyses, the proposed residence may be supported upon conventional spread and/or continuous wall foundations placed on suitable, undisturbed natural sand/gravel soils or on structural fill extending to suitable natural soils. Footings may be designed using a net bearing pressure of 2,000 psf if placed on suitable, undisturbed, natural sand/gravel soils or 2,500 psf if placed on a minimum 24 inches of structural fill.

The term "net bearing pressure" refers to the pressure imposed by the portion of the structure located above lowest adjacent final grade, thus the weight of the footing and backfill to lowest adjacent final grade need not be considered. The allowable bearing pressure may be increased by 1/3 for temporary loads such as wind and seismic forces.

We also recommend the following:

1. Exterior footings subject to frost should be placed at least 30 inches below final grade.
2. Interior footings not subject to frost should be placed at least 16 inches below grade.
3. Continuous footing widths should be maintained at a minimum of 18 inches.
4. Spot footings should be a minimum of 24 inches wide.

7.2 Foundation Installation

Under no circumstances shall foundations be placed directly on potentially collapsible soils, on non-engineered fill, topsoil with organics, sod, rubbish, construction debris, other deleterious materials, frozen soils, or within ponded water. Where footings would otherwise be placed on potentially collapsible soils, we recommend the collapsible soils be completely removed or over-excavated a minimum 24 inches, whichever is less, and replaced with properly compacted structural fill. If other unsuitable soils are encountered, they must be completely removed and replaced with properly compacted structural fill. Deep, large roots may be encountered where trees and larger bushes are located or were previously located at the site; such large roots should also be removed.

The base of footing excavations should be observed by a CMT geotechnical engineer to confirm that suitable bearing soils have been exposed.

All structural fill should meet the requirements for such, and should be placed and compacted in accordance with **Section 6** above. The width of structural replacement fill below footings should be equal to the width of the footing plus 1 foot for each foot of fill thickness. For instance, if the footing width is 2 feet and the structural fill depth beneath the footing is 2 feet, the fill replacement width should be 4 feet, centered beneath the footing.

The minimum thickness of structural fill below footings should be equivalent to one-third the thickness of structural fill below any other portion of the foundations. For example, if the maximum depth of structural fill is 6 feet, all footings for the new structure should be underlain by a minimum 2 feet of structural fill.

7.3 Estimated Settlement

Foundations designed and constructed in accordance with our recommendations could experience some settlement, but we anticipate that total settlements of footings founded as recommended above will not exceed 1 inch, with differential settlements on the order of 0.5 inches over a distance of 25 feet. We expect approximately 50% of the total settlement to initially take place during construction.

7.4 Lateral Resistance

Lateral loads imposed upon foundations due to wind or seismic forces may be resisted by the development of passive earth pressures and friction between the base of the footings and the supporting soils. In determining frictional resistance a coefficient of 0.40 for natural sand/gravel soils and structural fill, may be utilized for design. Passive resistance provided by properly placed and compacted structural fill above the water table may be considered equivalent to a fluid with a density of 350 pcf. A combination of passive earth resistance and friction may be utilized if the friction component of the total is divided by 1.5.

8.0 LATERAL EARTH PRESSURES

We project that basement walls up to 8 feet tall will be constructed on the residence.

The lateral earth pressure values given below are for a backfill material that will consist of drained sand/gravel soils (less than 10% passing No. 200 sieve) placed and compacted in accordance with the recommendations presented herein. If other soil types will be used as backfill, we should be notified so that appropriate modifications to these values can be provided, as needed.

The lateral pressures imposed upon subgrade facilities will depend upon the relative rigidity and movement of the backfilled structure. For rigid basement walls that are not more than 10 inches thick, sand/gravel backfill may be designed using an at-rest equivalent fluid pressure of 55 pcf (psf/ft). This value assumes that the soil surface behind the wall is horizontal and that the backfill within 3 feet of the wall will be compacted with hand-operated compacting equipment.

For seismic loading of rigid basement walls up to 8 feet tall, we recommend using a uniform (rectangular) at-rest lateral pressure of 125 psf for design.

For the short height proposed retaining walls (wall is allowed to yield, i.e. move away from the soil, with a minimum 0.001H movement/rotation at the top of the wall, where "H" is the total height of the wall) we recommend an equivalent fluid pressure of 35 psf for design, and a passive pressure of 350 psf.

9.0 FLOOR SLABS

Floor slabs may be established upon suitable, undisturbed, natural sand/gravel soils on structural fill extending to suitable natural soils (same as for foundations). Under no circumstances shall floor slabs be established directly on potentially collapsible soils, or any topsoil, non-engineered fills, loose or disturbed soils, sod, rubbish, construction debris, other deleterious materials, frozen soils, or within ponded water.

In order to facilitate curing of the concrete, we recommend that floor slabs be directly underlain by at least 4 inches of "free-draining" fill, such as "pea" gravel or 3/4-inch to 1-inch minus, clean, gap-graded gravel. To help control normal shrinkage and stress cracking, the floor slabs may have the following features:

1. Adequate reinforcement for the anticipated floor loads with the reinforcement continuous through interior floor joints;
2. Frequent crack control joints; and
3. Non-rigid attachment of the slabs to foundation walls and bearing slabs.

10.0 ROCKERY WALLS

A site plan provided to our office indicates that a rockery wall up to 6 feet in height is proposed to be constructed on the side of the lot near Spring Creek Parkway.

The soils at the site classify as SILT (ML) overlying sand and gravel layers. We project that the rockery wall will be supported on and retain the nature silt soils. To provide data for analysis of the rockery wall a direct shear test was performed on a sample of these soils. The test results indicate an internal friction angle of 26 degrees and an undrained cohesion of 158 pounds per square foot. Accordingly, we estimated the following parameters for use in the stability analyses:

| MATERIAL | INTERNAL FRICTION ANGLE (degrees) | APPARENT COHESION (psf) | SATURATED UNIT WEIGHT (pcf) |
|-------------------|-----------------------------------|-----------------------------|-----------------------------|
| On-Site SILT (ML) | 26 | 150 | 125 |
| Boulders | 0 (global) 45 (local) | 9,000 (global) 0 (local) | 150 |

For the seismic analysis, a peak horizontal ground acceleration of $0.439g$ was obtained after adjusting for Site Class D at site (grid) locations of 41.7168 degrees north latitude and -111.8011 degrees west longitude.

Approximately 50% of this value (0.215g) was used as the pseudo-static coefficient for the seismic stability analysis.

Using these input parameters, the local (rock-to-rock) stability of the proposed rockery wall was evaluated considering sliding, overturning and bearing capacity to achieve respective minimum factors of safety of 1.5, 2.0 and 2.5 for static conditions and 1.1, 1.5 and 1.5 for seismic conditions. The results of this analysis (see attached **Figure 7**) indicate that a maximum wall tier (exposed) height of 6 feet can be achieved for boulders with depths into the hillside of 3.5 feet for the bottom row grading to 2 feet for the upper row.

We also evaluated the global stability of the proposed rockery wall using the computer program *SLIDE* (version 7.0). The configuration analyzed consisted of a two-tiered rockery wall, with each tier 6 feet tall (exposed height), the tiers separated by a distance of 6 feet (face to face) and the upper tier retaining relatively level ground. The typical required minimum factors of safety are 1.5 for static conditions and 1.1 for seismic (pseudostatic) conditions. The results of our analyses indicate that the proposed rockery wall will meet both these requirements, provided our recommendations are followed. The global stability results are shown on **Figures 8 and 9**.

Based on the results of our analyses, the proposed rockery wall will be stable if constructed as follows (also see **Figure 10**, attached):

- The rockery wall may be constructed up to a maximum exposed height of 6 feet.
- The bottom row of boulders should be established on a minimum of 18 inch thick pad of compacted structural fill that is at least 4 feet in width, and be embedded a minimum 6 inches below the ground surface.
- The rockery wall facing should slope at 1H:2V (Horizontal:Vertical) or flatter. The slope above the top of the wall should be no steeper than 5.5H:1V.
- The rockery wall should be composed of boulders with nominal depths into the hillside of 42 inches for the lowest row of rocks, grading in depth to 36 inches for the top row.
- Boulders used in the rockery wall should be durable (i.e. not limestone, soft sandstone, or other rocks which have weakened planes that could cause rocks to split) and placed in a staggered manner (not creating a vertical column) that will not significantly weaken their internal integrity. There should be maximum rock-to-rock contact when placing the rock boulders and no rocks should bear on a downward-sloping face of any supporting rocks. Larger gaps may be filled with smaller rocks or sealed with a cement grout.
- Drainage behind the rockery wall is recommended, as shown on **Figure 10**. The drain should consist of a perforated 4-inch minimum diameter pipe wrapped in fabric and placed at the bottom and behind the lowest row of boulders in each tier. The pipe should daylight at one end of the wall and discharge to an appropriate drainage device or area. Clean gravel $\frac{3}{4}$ - to 2-inch in size, with less than 10% passing the No. 4 sieve and less than 5% passing the No. 200 sieve, should be placed around the drain pipes. A fabric, such as Mirafi 140N or equivalent, should be placed between the clean gravel and the adjacent soils.

- The clean gravel and separation fabric should extend up behind the back of the boulders to within 2 feet of the ground surface, with the fabric wrapped over the top of the gravel prior to placing the upper 2 feet of backfill. As an alternative to using clean gravel and fabric behind the boulders, a drain board material (such as MiraDrain or equivalent) may be used.
- Surface drainage at the bottom and top of the walls should also be directed away from the walls as much as possible.
- CMT should observe construction of the rockery wall at the following critical times: (1) when the lowest row of boulders has been placed along with the drain pipe and bottom gravel; (2) when the rockery wall is about halfway constructed; and (3) upon completion of the rockery wall construction.

It should be noted that rockery walls are constructed of natural materials and are therefore subject to natural weathering processes and environmental attacks that may, in time, compromise the stability of the rockery wall. Boulders used during construction are subject to natural weathering by seasonal changes, wind, frost action, chemical reaction, water, etc. Additionally, the stability of rockery walls can be affected by other on-site and off-site influences such as saturation of retained soils, saturation of supporting soils, root action of vegetation and trees adjacent to the wall, and animal activities including burrowing and nesting. Rockery walls and the associated slopes must be closely monitored for signs of excessive weathering, drainage characteristics, signs of movement in the boulder, obstruction of drain outlets, etc. Frequent maintenance, repair, and inspection must be performed on the wall at least monthly and more often if any signs of erosion or movement are noticed. If any signs of erosion or movement are noticed, CMT must be contacted immediately to provide appropriate recommendations.

11.0 DRAINAGE RECOMMENDATIONS

11.1 Surface Drainage

Some of the on-site near-surface silt soils are potentially collapsible when subjected to water, thus it is very important to the long-term performance of foundations and floor slabs that water not be allowed to collect near the foundation walls and infiltrate into the underlying soils. We recommend the following:

1. All areas around the residence should be sloped to provide drainage away from the foundations. We recommend a minimum slope of 6 inches in the first 10 feet away from the structure. This slope should be maintained throughout the lifetime of the structure.
2. All roof drainage should be collected in rain gutters with downspouts designed to discharge at least 10 feet from the foundation walls or well beyond the backfill limits, whichever is greater, but not near rockery walls or retaining walls.
3. Adequate compaction of the foundation backfill should be provided. We suggest a minimum of 90% of the maximum laboratory density as determined by ASTM D-1557. Water consolidation methods should not be used under any circumstances.

4. Landscape sprinklers should be aimed away, and maintained a distance of at least 4 feet, from the foundation walls. We also recommend that sprinklers not be installed within the backfill soils behind rockery walls and retaining walls. The sprinkling systems should be designed with proper drainage and be well-maintained. Over watering should be avoided.
5. Other precautions that may become evident during construction.

11.2 Foundation Subdrains

Groundwater was not encountered in our explorations, therefore we do not anticipate that groundwater will be encountered in excavations. However, the natural sand and gravel soils have the potential to transmit sub surface water from higher elevations toward subsurface walls. Consideration should be given to constructing perimeter foundation subdrains.

Foundation subdrains should consist of a 4-inch diameter perforated or slotted plastic or PVC pipe surrounded by clean gravel. The invert of the subdrain should be at least 2 feet below the top of the lowest adjacent floor slab. The gravel portion of the drain should extend a minimum 2 inches laterally and below the perforated pipe and at least 1 foot above the top of the lowest adjacent floor slab. The gravel zone must be installed immediately adjacent to the perimeter footings and the foundation walls. To reduce the possibility of plugging, the gravel must be wrapped with a geotextile, such as Mirafi 140N or equivalent. Prior to the installation of the footing subdrain, the below-grade walls should be dampproofed. The slope of the subdrain should be at least 0.5%. The gravel placed around the drain pipe should be clean 3/4-inch to 1-inch minus gap-graded gravel and/or "pea" gravel. The foundation subdrains can be discharged into the area subdrains, storm drains, or other suitable down-gradient location.

12.0 QUALITY CONTROL

We recommend that CMT be retained to as part of a comprehensive quality control testing and observation program. With CMT on-site we can help facilitate implementation of our recommendations and address, in a timely manner, any subsurface conditions encountered which vary from those described in this report. Without such a program CMT cannot be responsible for application of our recommendations to subsurface conditions which may vary from those described herein. This program may include, but not necessarily be limited to, the following:

12.1 Field Observations

Observations should be completed during all phases of construction such as site preparation, foundation excavation, structural fill placement and concrete placement.

12.2 Fill Compaction

Compaction testing by CMT is required for all structural supporting fill materials. Maximum Dry Density (Modified Proctor, ASTM D-1557) tests should be requested by the contractor immediately after delivery of any fill materials. The maximum density information should then be used for field density tests on each lift as necessary to ensure that the required compaction is being achieved.

12.3 Excavations

All excavation procedures and processes should be observed by a geotechnical engineer from CMT or their representative. In addition, for the recommendations in this report to be valid, all backfill and structural fill placed in trenches and all pavements should be density tested by CMT. We recommend that freshly mixed concrete be tested by CMT in accordance with ASTM designations.

12.4 Vibration Monitoring

Construction activities, particularly site grading and fill placement, can induce vibrations in existing structures adjacent to the site. Such vibrations can cause damage to adjacent buildings, depending on the building composition and underlying soils. It can be prudent to monitor vibrations from construction activities to maintain records that vibrations did not exceed a pre-defined threshold known to potentially cause damage. CMT can provide this monitoring if desired.

13.0 LIMITATIONS

The recommendations provided herein were developed by evaluating the information obtained from the subsurface explorations and soils encountered therein. The exploration logs reflect the subsurface conditions only at the specific location at the particular time designated on the logs. Soil and ground water conditions may differ from conditions encountered at the actual exploration locations. The nature and extent of any variation in the explorations may not become evident until during the course of construction. If variations do appear, it may become necessary to re-evaluate the recommendations of this report after we have observed the variation.

Our professional services have been performed, our findings obtained, and our recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices. This warranty is in lieu of all other warranties, either expressed or implied.

We appreciate the opportunity to be of service to you on this project. If we can be of further assistance or if you have any questions regarding this project, please do not hesitate to contact us at (801) 870-6730. To schedule materials testing, please call (801) 381-5141.

APPENDIX

SUPPORTING
DOCUMENTATION



Proposed Sanchez Residence

About 681 Spring Creek Parkway, Providence, Utah

CMT ENGINEERING
LABORATORIES

Site Map

| | |
|-------|----------|
| Date: | 8-Jun-20 |
| Job # | 14735 |

Figure:

1

Proposed Sanchez Residence

Test Pit Log

TP-1

Lot 29 Providence Hollow - About 681 Spring Creek Parkway, Providence, Utah

Equipment: Rubber Tire Backhoe

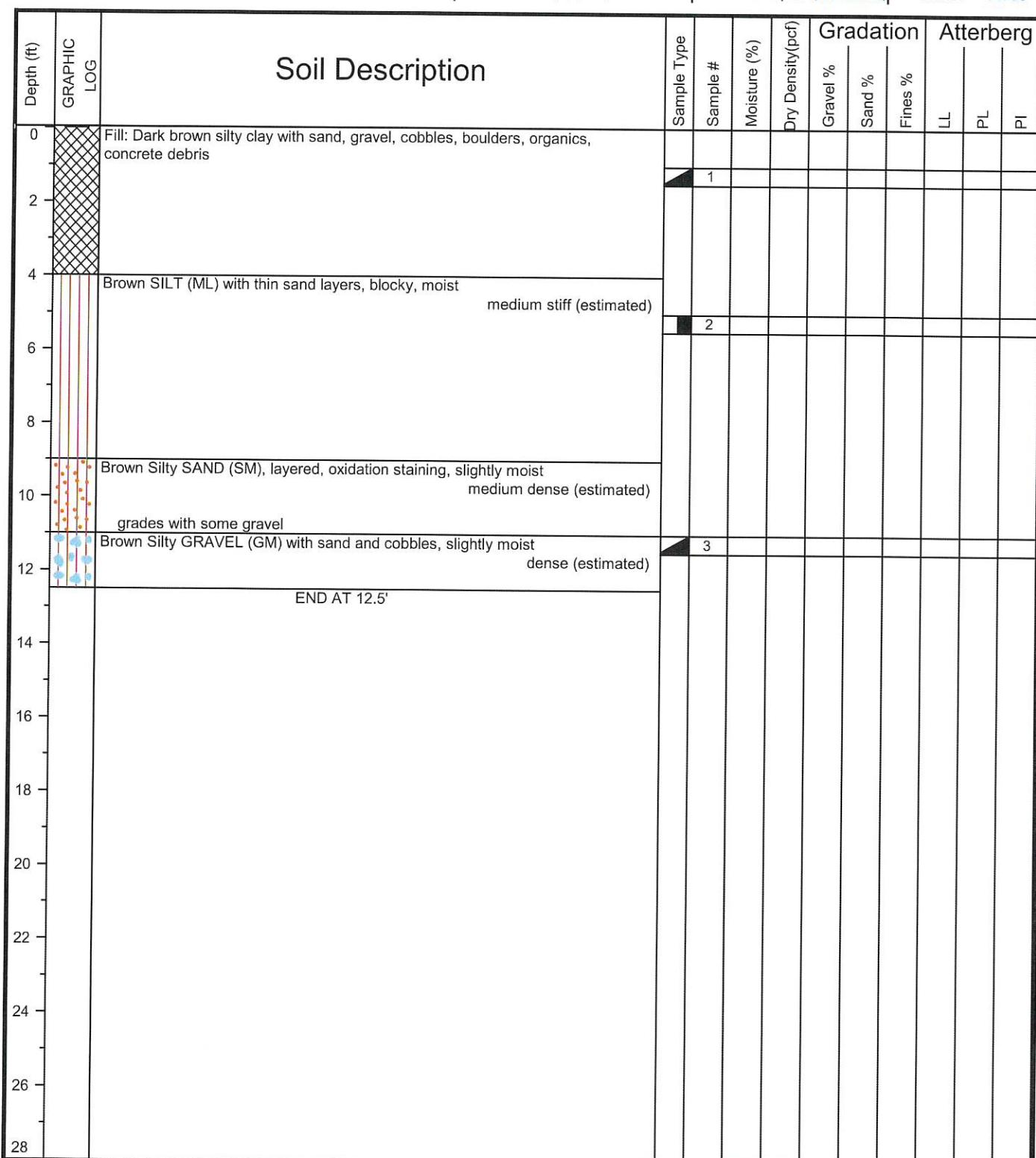
Total Depth: 12.5'

Date: 6/4/20

Surface Elev. (approx):

Water Depth: (see Remarks)

Job #: 14735



Remarks: Groundwater not encountered during excavation.

Figure:

Proposed Sanchez Residence

Lot 29 Providence Hollow - About 681 Spring Creek Parkway, Providence, Utah

Equipment: Rubber Tire Backhoe
Surface Elev. (approx):

Test Pit Log

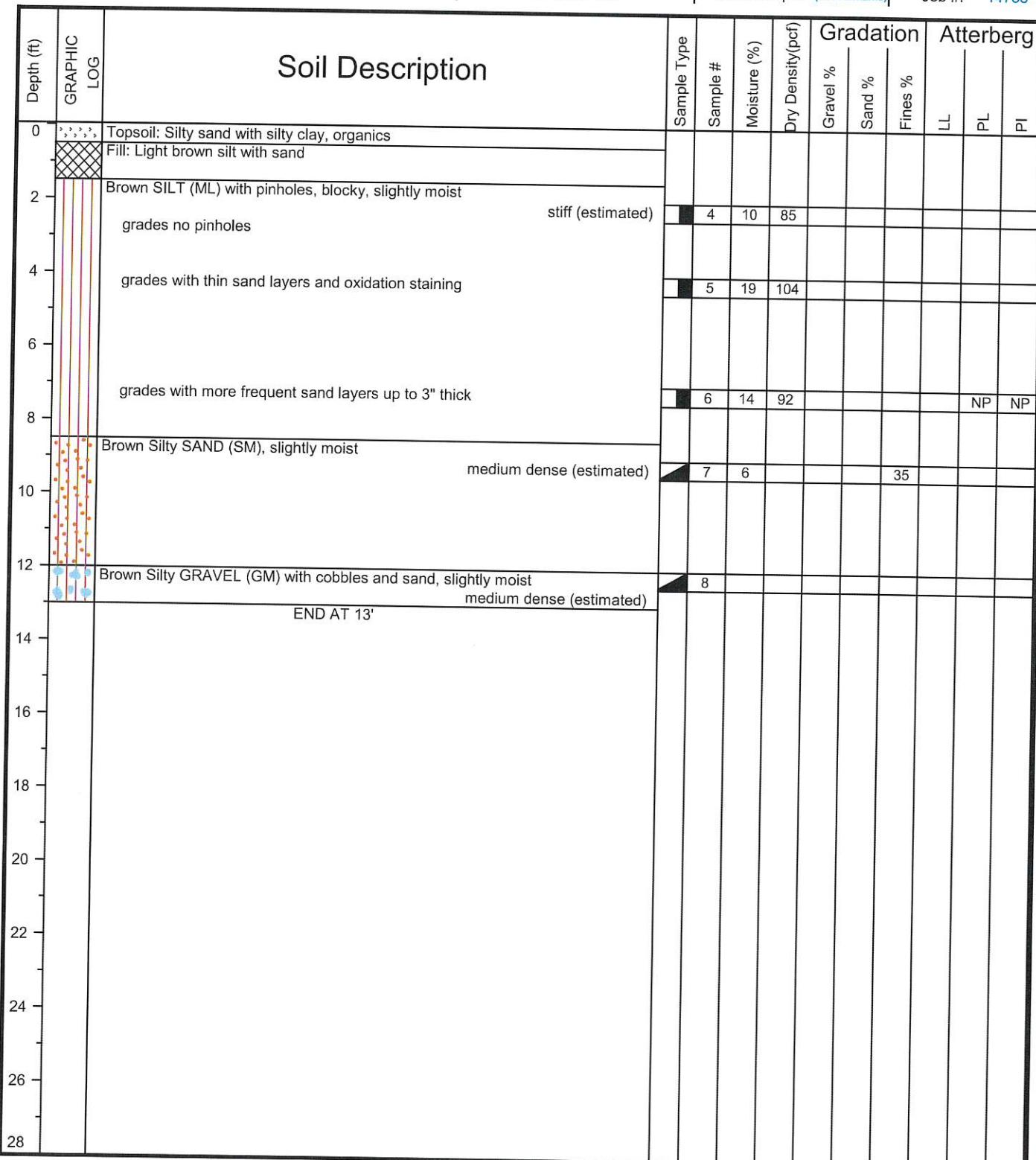
TP-2

Total Depth: 13'

Date: 6/4/20

Water Depth: (see Remarks)

Job #: 14735



Remarks: Groundwater not encountered during excavation.

Figure: 3

Proposed Sanchez Residence

Lot 29 Providence Hollow - About 681 Spring Creek Parkway, Providence, Utah

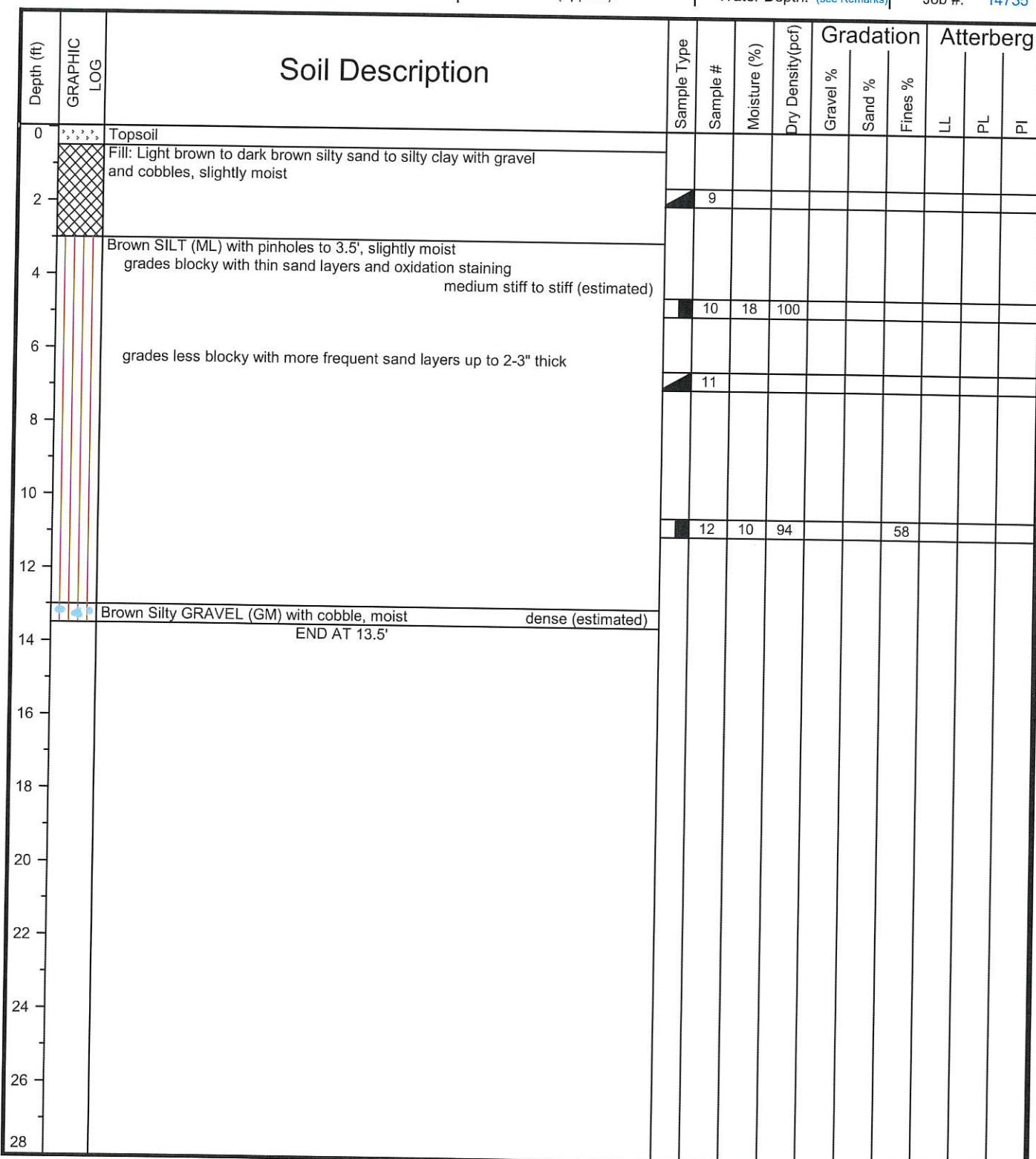
Equipment: Rubber Tire Backhoe
Surface Elev. (approx):

Test Pit Log

TP-3

Total Depth: 13.5'
Water Depth: (see Remarks)

Date: 6/4/20
Job #: 14735



Remarks: Groundwater not encountered during excavation.

Figure:

CMT ENGINEERING
LABORATORIES

Excavated By: Owner
Logged By: O. Roberts
Page: 1 of 1

4

Proposed Sanchez Residence

Lot 29 Providence Hollow - About 681 Spring Creek Parkway,
Providence, Utah

Key to Symbols

Date: Owner
Job #: 14735

| Depth (ft) | GRAPHIC LOG | Soil Description | | | Sample Type | Sample # | Moisture (%) | Dry Density(pcf) | Gravel % | Gradation | Atterberg | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|--|---|---|--|---|--------------|------------------|----------|-----------|-----------|----|----|-----------------|--|--------------|----------------------|--|-----------------|----------------------|--------------------|----------------------------|------|---|---|--|--|-----------------|---|--|-------|--|--|--|------------|---|---|----|---|----------------------|--|---|---|--|----|---------------------------------|--|---|----|----------------------------------|--|----|---|--|----|---|--|----|---|--|----|---|--|----|---|--|-----------------------------|--|--|----|--|--|--|--|--|----|--|--|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | Sand % | Fines % | LL | PL | PI | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| COLUMN DESCRIPTIONS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>(1) Depth (ft.): Depth (feet) below the ground surface (including groundwater depth - see water symbol below).</p> <p>(2) Graphic Log: Graphic depicting type of soil encountered (see (2) below).</p> <p>(3) Soil Description: Description of soils encountered, including Unified Soil Classification Symbol (see below).</p> <p>(4) Sample Type: Type of soil sample collected at depth interval shown; sampler symbols are explained below-right.</p> <p>(5) Sample #: Consecutive numbering of soil samples collected during field exploration.</p> <p>(6) Moisture (%): Water content of soil sample measured in laboratory (percentage of dry weight of sample).</p> <p>(7) Dry Density (pcf): The dry density of a soil measured in laboratory (pounds per cubic foot).</p> <p>(8) Gradation: Percentages of Gravel, Sand and Fines (Silt/Clay), obtained from lab test results of soil passing the No. 4 and No. 200 sieves.</p> <p>(9) Atterberg: Individual descriptions of Atterberg Tests are as follows:</p> <ul style="list-style-type: none"> LL = Liquid Limit (%): Water content at which a soil changes from plastic to liquid behavior. PL = Plastic Limit (%): Water content at which a soil changes from liquid to plastic behavior. PI = Plasticity Index (%): Range of water content at which a soil exhibits plastic properties (= Liquid Limit - Plastic Limit). | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;">STRATIFICATION</th> <th rowspan="2" style="text-align: center;">MODIFIERS</th> <th colspan="2" style="text-align: center;">MOISTURE CONTENT</th> </tr> <tr> <th>Description</th> <th>Thickness</th> <th>Trace</th> <th>Dry</th> </tr> </thead> <tbody> <tr> <td>Seam</td> <td>Up to 1/2 inch</td> <td><5%</td> <td>Absence of moisture, dusty, dry to the touch.</td> </tr> <tr> <td>Lense</td> <td>Up to 12 inches</td> <td>Some</td> <td>Damp / moist to the touch, but no visible water.</td> </tr> <tr> <td>Layer</td> <td>Greater than 12 in.</td> <td>5-12%</td> <td></td> </tr> <tr> <td>Occasional</td> <td>1 or less per foot</td> <td>With</td> <td></td> </tr> <tr> <td>Frequent</td> <td>More than 1 per foot</td> <td>> 12%</td> <td>Saturated: Visible water, usually soil below groundwater.</td> </tr> </tbody> </table> | | | | | | | | | | | | | | STRATIFICATION | | MODIFIERS | MOISTURE CONTENT | | Description | Thickness | Trace | Dry | Seam | Up to 1/2 inch | <5% | Absence of moisture, dusty, dry to the touch. | Lense | Up to 12 inches | Some | Damp / moist to the touch, but no visible water. | Layer | Greater than 12 in. | 5-12% | | Occasional | 1 or less per foot | With | | Frequent | More than 1 per foot | > 12% | Saturated: Visible water, usually soil below groundwater. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| STRATIFICATION | | MODIFIERS | MOISTURE CONTENT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Description | Thickness | | Trace | Dry | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Seam | Up to 1/2 inch | <5% | Absence of moisture, dusty, dry to the touch. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Layer | Greater than 12 in. | 5-12% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Occasional | 1 or less per foot | With | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Frequent | More than 1 per foot | > 12% | Saturated: Visible water, usually soil below groundwater. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| MAJOR DIVISIONS | | USCS SYMBOLS | TYPICAL DESCRIPTIONS | | SAMPLER SYMBOLS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| COARSE-GRAINED SOILS | FINE-GRAINED SOILS | | CLEAN GRAVELS (< 5% fines) | GW | | Well-Graded Gravels, Gravel-Sand Mixtures, Little or No Fines | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| COARSE-GRAINED SOILS The coarse fraction retained on No. 4 sieve. More than 50% of material is larger than No. 200 sieve size. | FINE-GRAINED SOILS The fine fraction passing through No. 4 sieve. More than 50% of material is smaller than No. 200 sieve size. | GRAVELS The coarse fraction retained on No. 4 sieve. | GP | Poorly-Graded Gravels, Gravel-Sand Mixtures, Little or No Fines |  Block Sample  Bulk/Bag Sample  Modified California Sampler  OD, 2.42" ID D&M Sampler | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | GM | Silty Gravels, Gravel-Sand-Silt Mixtures |  Rock Core  Standard  Penetration Split Spoon Sampler | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | SANDS The coarse fraction passing through No. 4 sieve. | GC | Clayey Gravels, Gravel-Sand-Clay Mixtures |  Thin Wall (Shelby Tube) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | SW | Well-Graded Sands, Gravelly Sands, Little or No Fines | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | SILTS AND CLAYS Liquid Limit less than 50% | SP | Poorly-Graded Sands, Gravelly Sands, Little or No Fines | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | SM | Silty Sands, Sand-Silt Mixtures | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | SILTS AND CLAYS Liquid Limit greater than 50% | SC | Clayey Sands, Sand-Clay Mixtures | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | ML | Inorganic Silts and Sandy Silts with No Plasticity or Clayey Silts with Slight Plasticity | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | CL | Inorganic Clays of Low to Medium Plasticity, Gravelly Clays, Sandy Clays, Silty Clays, Lean Clays | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | OL | Organic Silts and Organic Silty Clays of Low Plasticity | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | MH | Inorganic Silts, Micaceous or Diatomaceous Fine Sand or Silty Soils | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | CH | Inorganic Clays of High Plasticity, Fat Clays | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HIGHLY ORGANIC SOILS | | | OH | Organic Silts and Organic Clays of Medium to High Plasticity | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Note: Dual Symbols are used to indicate borderline soil classifications (i.e. GP-GM, SC-SM, etc.). | | | PT | Peat, Soils with High Organic Contents | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

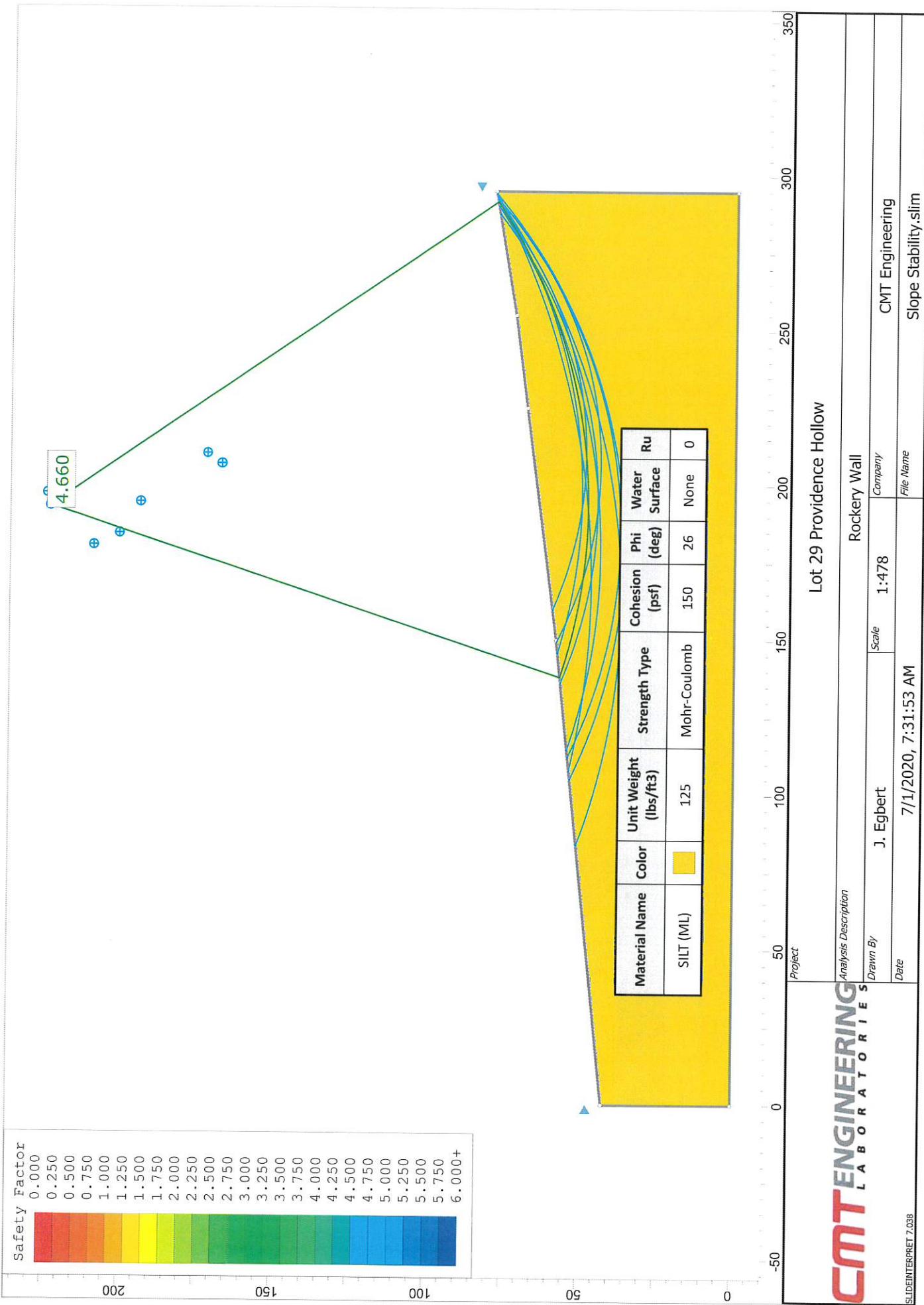
1. The results of laboratory tests on the samples collected are shown on the logs at the respective sample depths.

2. The subsurface conditions represented on the logs are for the locations specified. Caution should be exercised if interpolating between or extrapolating beyond the exploration locations.

3. The information presented on each log is subject to the limitations, conclusions, and recommendations presented in this report.

Figure:

5



Rockery Wall Local Stability Evaluation

| | | | | | |
|--|---------------|----------------------------------|---------------------------------|------------|---------|
| Backfill slope angle: | 10 | degrees (β) | Foundation soil γ : | 125 | pcf |
| Batter angle (from vertical): | 26.6 | degrees (α) | Foundation soil ϕ : | 26 | degrees |
| Soil/wall interface friction: | 0 | degrees (δ) | Found. soil cohesion: | 150 | psf |
| Surcharge pressure: | 0 | psf | Retained soil γ : | 125 | pcf |
| | static | seismic | Retained soil ϕ : | 26 | degrees |
| FS against sliding (Static & Seismic): | 1.5 | 1.1 | Retained soil cohesion: | 150 | psf |
| FS against overturning (Static & Seismic): | 2.0 | 1.5 | Rock boulder γ : | 150 | psf |
| FS for bearing (Static & Seismic): | 2.5 | 1.5 | Rock boulder ϕ : | 45 | degrees |
| Horizontal seismic coeff., k_h : | 0.215 | (typically $\frac{1}{2}$ of PGA) | Embedment depth: | 0.5 | feet |
| Vertical seismic coeff., k_v : | 0 | (typically 0) | Average rockery wall γ : | 150 | pcf |
| Rock to Rock interface factor: | 0.67 | (typically 2/3) | Min. top rock size: | 36 | inches |
| Bearing Capacity | 8480 | psf (Meyerhoff) | Min. bottom rock size: | 42 | inches |

STATIC

| Wall Ht, H (ft) | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 |
|------------------------------------|-----------------|-----------------|-----------------|-----------------|-------------|-------------|-------------|-------------|
| Back of wall, y (°) | 0.0 | 14.0 | 18.4 | 20.6 | 21.8 | 22.6 | 23.2 | 23.6 |
| Wall Wt, W (lbs/ft) | 488 | 975 | 1463 | 1950 | 2438 | 2925 | 3413 | 3900 |
| Wall x _{centroid} (ft) | 1.87 | 2.12 | 2.36 | 2.60 | 2.85 | 3.09 | 3.33 | 3.39 |
| Wall y _{centroid} (ft) | 0.487 | 0.974 | 1.462 | 1.949 | 2.436 | 2.923 | 3.410 | 3.911 |
| Coulomb K _a | 0.4431 | 0.3424 | 0.3133 | 0.2994 | 0.2912 | 0.2858 | 0.2820 | 0.2792 |
| F _a (lbs/ft) | 0 | 0 | 1 | 1 | 47 | 149 | 281 | 442 |
| F _{sliding} (lbs/ft) | 0 | 0 | 1 | 1 | 43 | 138 | 259 | 405 |
| F _{resisting} (lbs/ft) | 238 | 475 | 713 | 951 | 1180 | 1399 | 1610 | 1816 |
| FS _{base sliding} | > 100 | > 100 | > 100 | > 100 | 27.2 | 10.1 | 6.2 | 4.5 |
| FS _{interface shear} | > 100 | > 100 | > 100 | > 100 | 37.7 | 14.2 | 8.8 | 6.5 |
| M _{overturn} (ft-lbs/ft) | 0 | 0 | 1 | 1 | 72 | 276 | 603 | 1080 |
| M _{resisting} (ft-lbs/ft) | 913 | 2062 | 3449 | 5074 | 6865 | 8788 | 10876 | 12404 |
| FS _{overturn} | > 100 | > 100 | > 100 | > 100 | 95.0 | 31.8 | 18.0 | 11.5 |
| Eccentricity, e (ft) | -0.12 | -0.36 | -0.61 | -0.85 | -1.06 | -1.22 | -1.37 | -1.31 |
| Bearing Pressure | 168 | 453 | 853 | 1370 | 1946 | 2538 | 3160 | 3443 |
| FS _{bearing} | 50.4 | 18.7 | 9.9 | 6.2 | 4.4 | 3.3 | 2.7 | 2.5 |

SEISMIC

| | | | | | | | | |
|------------------------------------|-------------|-------------|-------------|-------------|-------------|------------|------------|------------|
| Mononobe-Okabe K _{ac} = | 0.7140 | 0.6100 | 0.5828 | 0.5703 | 0.5630 | 0.5583 | 0.5550 | 0.5525 |
| F _{ae} (lbs/ft) | 0 | 0 | 0 | 117 | 317 | 584 | 917 | 1318 |
| F _{sliding} (lbs/ft) | 105 | 210 | 314 | 529 | 818 | 1168 | 1577 | 2046 |
| F _{resisting} (lbs/ft) | 238 | 476 | 713 | 931 | 1131 | 1317 | 1488 | 1644 |
| FS _{base sliding} | 2.3 | 2.3 | 2.3 | 1.8 | 1.4 | 1.1 | 0.9 | 0.8 |
| FS _{interface shear} | 3.1 | 3.1 | 3.1 | 2.5 | 2.0 | 1.7 | 1.4 | 1.3 |
| M _{overturn} (ft-lbs/ft) | 51 | 204 | 459 | 1079 | 2102 | 3557 | 5561 | 8211 |
| M _{resisting} (ft-lbs/ft) | 913 | 2063 | 3450 | 4894 | 6393 | 7953 | 9548 | 10438 |
| FS _{overturn} | 17.9 | 10.1 | 7.5 | 4.5 | 3.0 | 2.2 | 1.7 | 1.3 |
| Eccentricity (ft) | -0.02 | -0.16 | -0.30 | -0.25 | -0.10 | 0.12 | 0.44 | 1.09 |
| Bearing Pressure | 135 | 204 | 206 | 313 | 549 | 933 | 1534 | 2763 |
| FS _{bearing} | 62.7 | 41.6 | 41.1 | 27.1 | 15.4 | 9.1 | 5.5 | 3.1 |

Max. Recommended Wall Height: 6 feet for 36-inch (top row) to 42-inch (bottom row) size boulders

Notes:

1. Equations from "Recommended Rockery Design & Construction Guidelines" Publication FHWA-CLF/TD-06-006, Nov. 2006.

2. Cohesion included in active pressure force by subtracting ($2 * c * \sqrt{K_a}$), but force is not allowed to be less than 0.

3. Other equations: $W = [p * (\text{average rock radius})^2 * H] * g_{\text{rock}}$; $FS_{\text{interface shear}} = (\text{Rock to Rock interface factor}) * [W * \tan(f_{\text{rock}}) / P_{\text{sliding}}]$

Proposed Sanchez Residence

681 Spring Creek Parkway, Providence, UT

| Evaluation | Date | 1-Jul-20 |
|------------|---------|----------|
| | Job No. | 14735 |

Figure

7

Rockery Wall Stability Results - Static



Proposed Sanchez Residence

681 Spring Creek Parkway, Providence, UT

CMT ENGINEERING
LABORATORIES

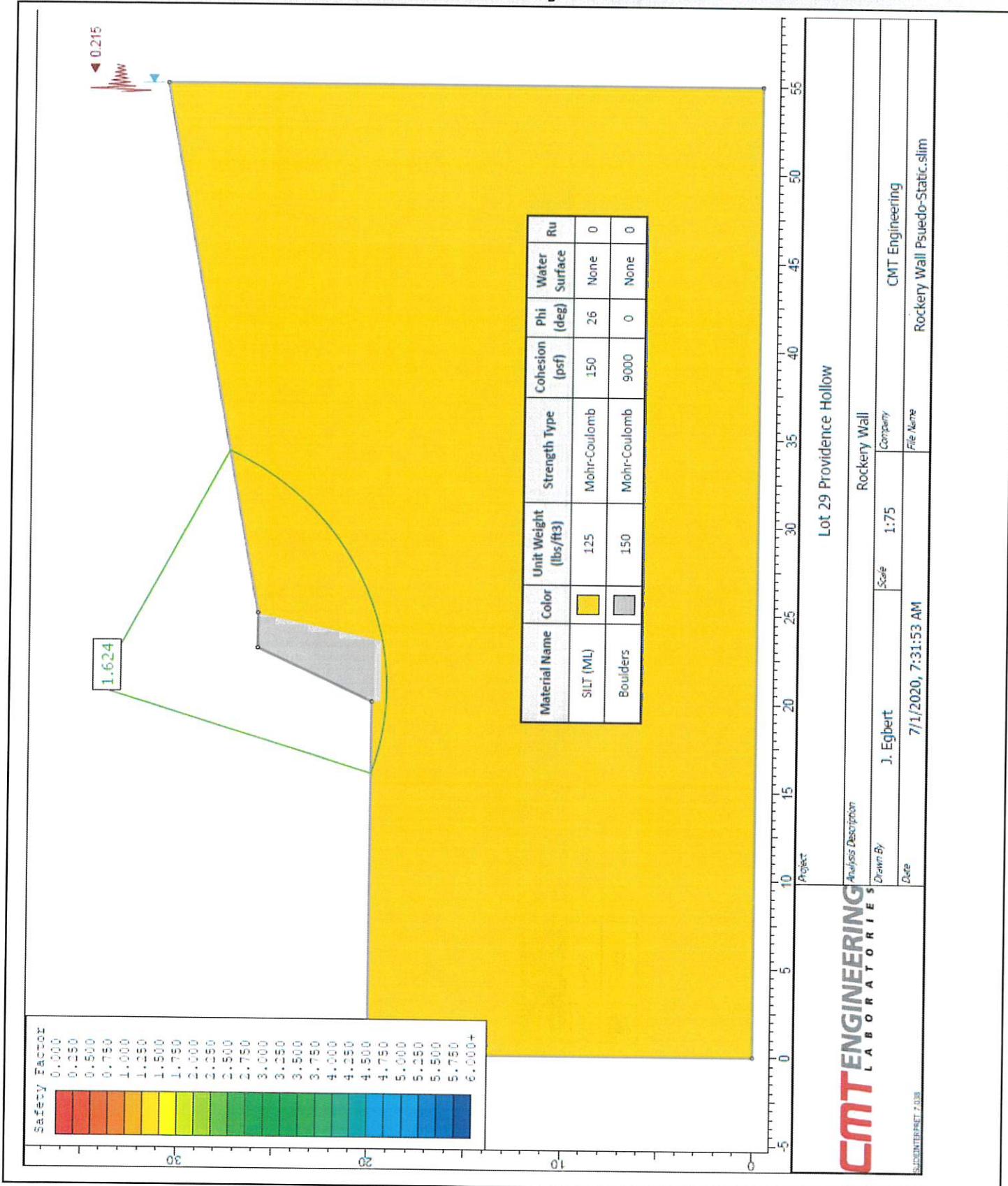
Results

| | |
|---------|----------|
| Date | 1-Jul-20 |
| Job No. | 14735 |

Figure

8

Rockery Wall Stability Results - Seismic



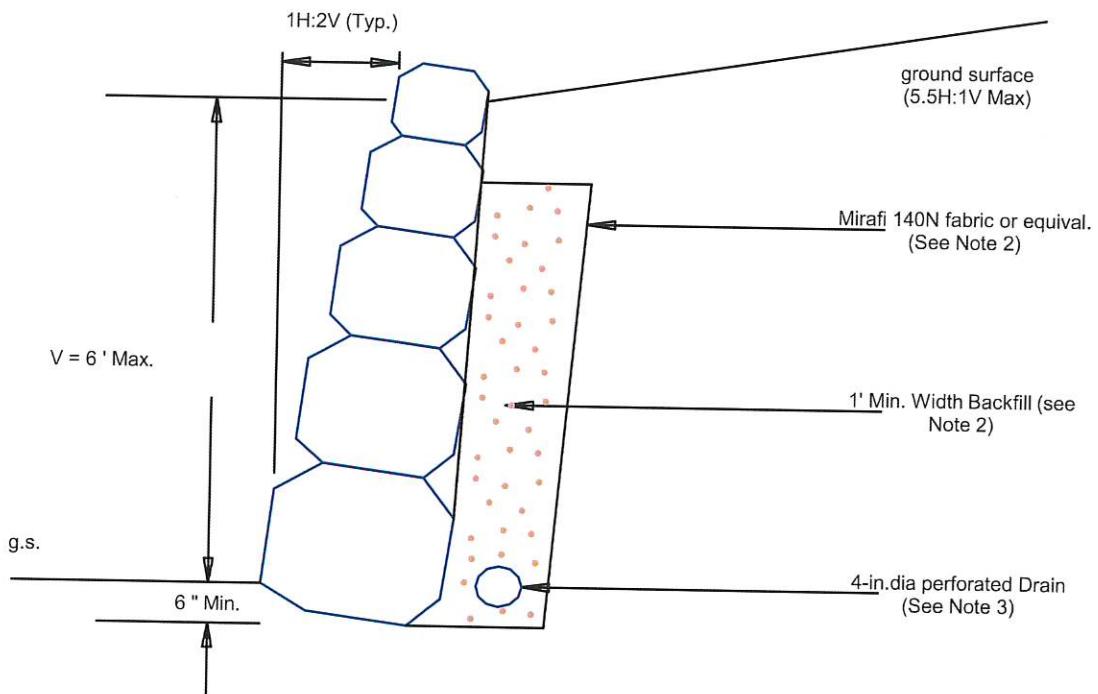
Figure

9

Rockery Wall Details

NOTES:

1. Backfill soils should be placed in loose lifts not exceeding a thickness of 12 inches, moisture conditioned to within 2% of optimum, and compacted to a minimum 95% of the maximum dry density as determined by ASTM D-1557.
2. Free-draining backfill shall consist of clean 3/4-inch to 2-inch size gravel having less than 10% passing the No. 4 sieve and less than 5% passing No. 200 sieve, or may use Miradrain (or equivalent) instead of gravel & fabric above the drain pipe.
3. Perforated drain shall be wrapped with fabric, sloped at a minimum 1%, and discharged to an appropriate drainage device.
4. Boulder depths into the hillside shall be a minimum 42 inches for the bottom row grading to a minimum 36 for the upper row for each tier.



NOT TO SCALE

Proposed Sanchez Residence

681 Spring Creek Parkway, Providence, UT

CMT ENGINEERING
LABORATORIES

Wall Details

Date
1-Jul-20

Job No.
14735

Figure

10



ORCHIDHOMES

"home building your way"

SANCHEZ HOME
PROVIDENCE HOLLOW
LOT 29
681 SPRING CREEK PARKWAY

county stamp

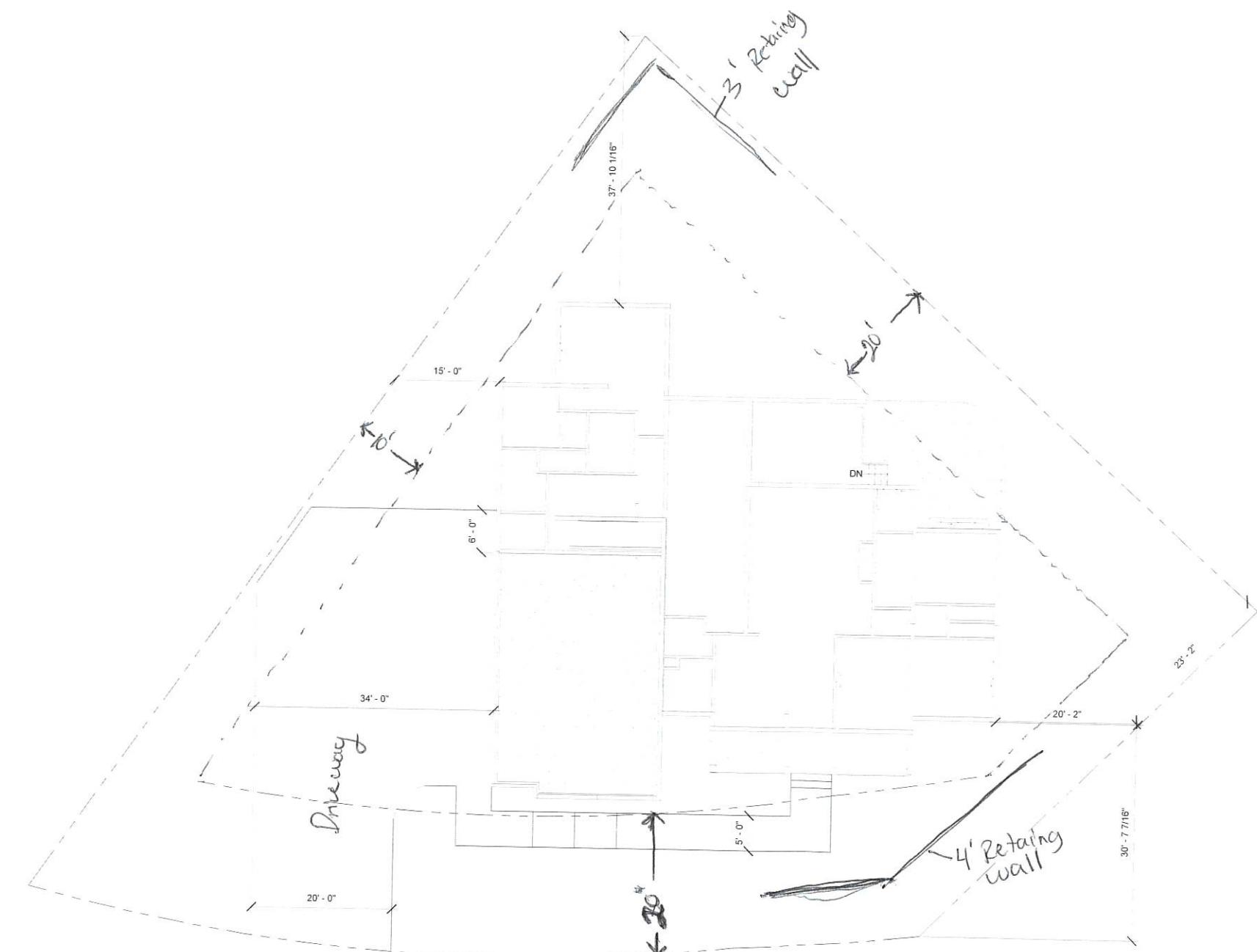
John and Julee
Sanchez

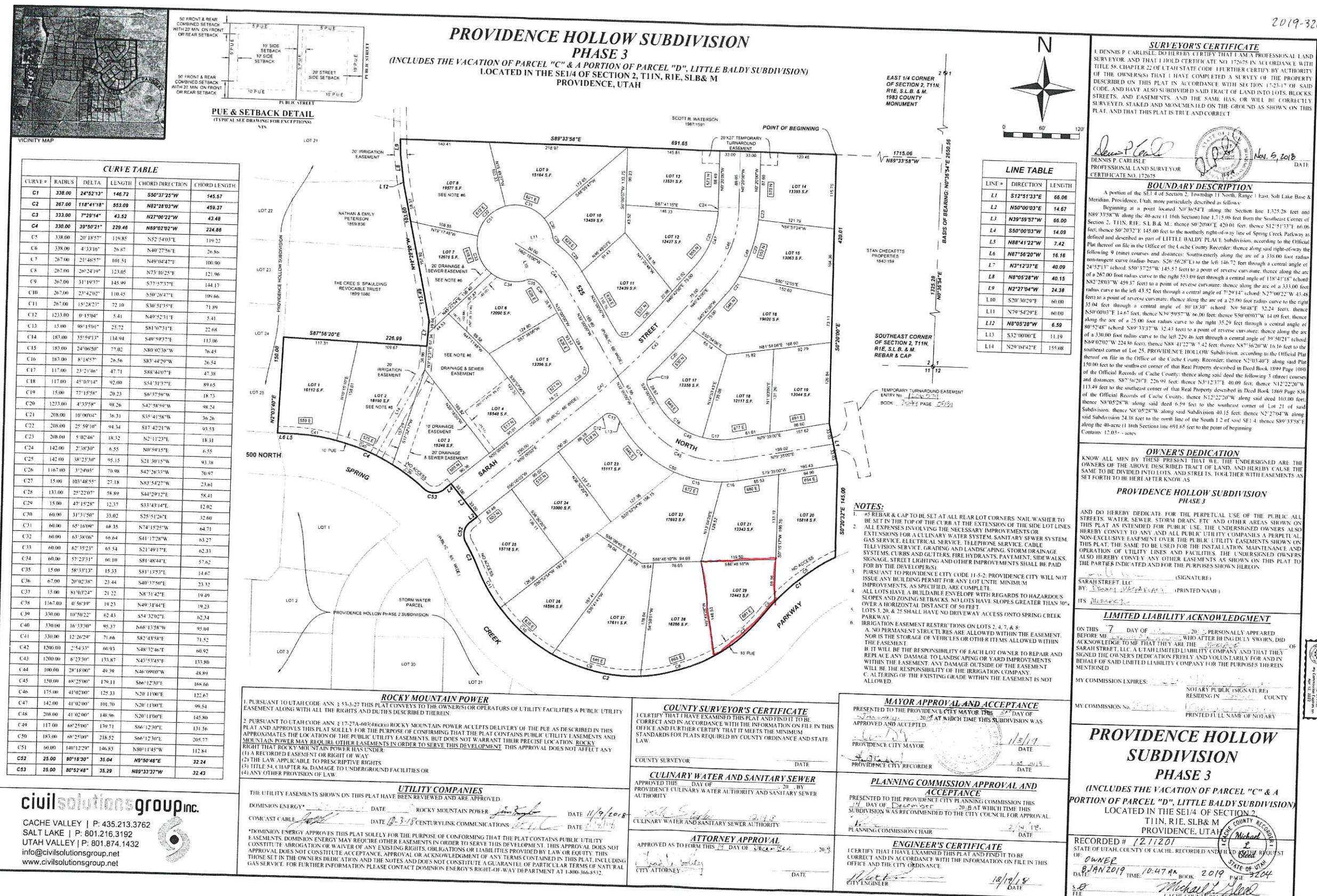
Site Plan

Project number: _____ Project Number: _____
Date: _____ Issue Date: _____
Drawn by: _____ Author: _____
Checked by: _____ Checker: _____

C1

1" = 10'-0"





civilsolutions group
CACHE VALLEY | P: 435.213.3762
SALT LAKE | P: 801.216.3192
UTAH VALLEY | P: 801.874.1432
info@civilsolutionsgroup.net
www.civilsolutionsgroup.net



John and Julee
Sanchez
Elevations

Project number
Date
Drawn by
Checked by
Project Number
Issue Date
Author
Checker

A6

Scale 1/4" = 1'-0"



ORCHIDHOMES

"home building your way"

SANCHEZ HOME
PROVIDENCE HOLLOW
LOT 29
681 SPRING CREEK PARKWAY

county stamp



ORCHIDHOMES

'home building your way'

SANCHEZ HOME
PROVIDENCE HOLLOW
LOT 29
681 SPRING CREEK PARKWAY

county stamp

John and Julee
Sanchez

Elevations

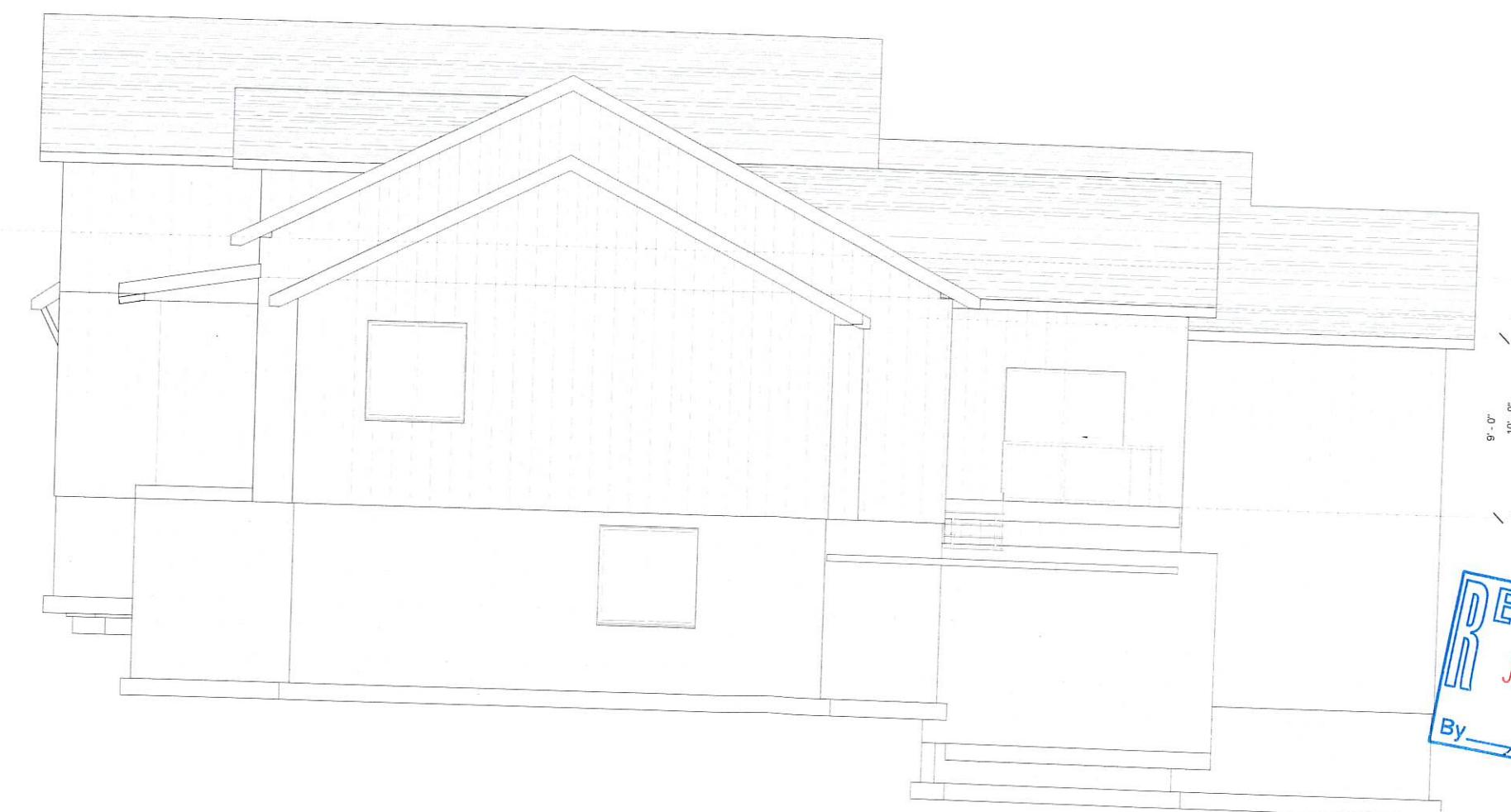
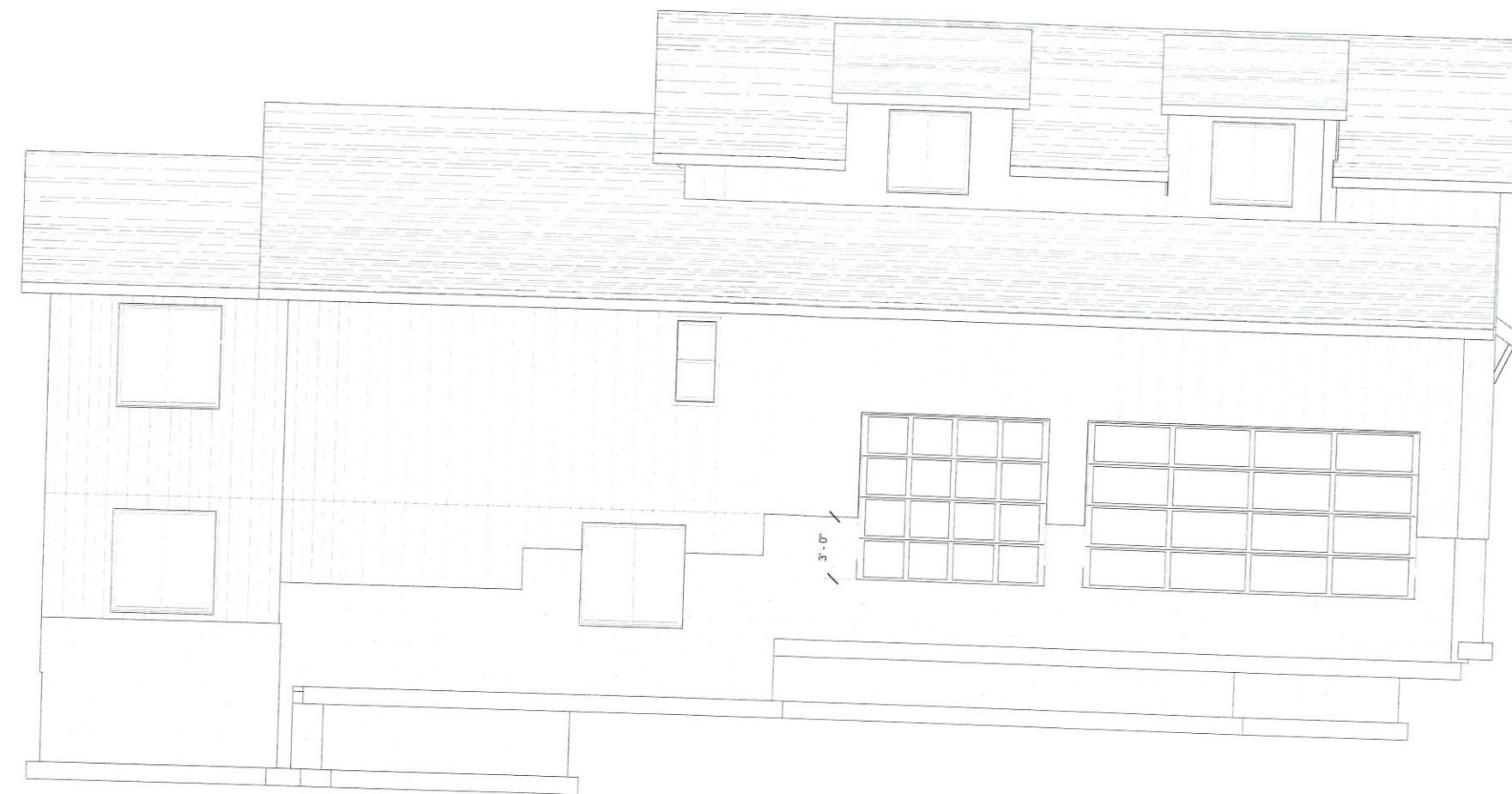
Project number
Date
Drawn by
Checked by

Project Number
Issue Date
Author
Checker

Scale

A7

2020 12 24 47 AM





ORCHIDHOMES

'home building your way'

**SANCHEZ HOME
PROVIDENCE HOLLOW
LOT 29
681 SPRING CREEK PARKWAY**

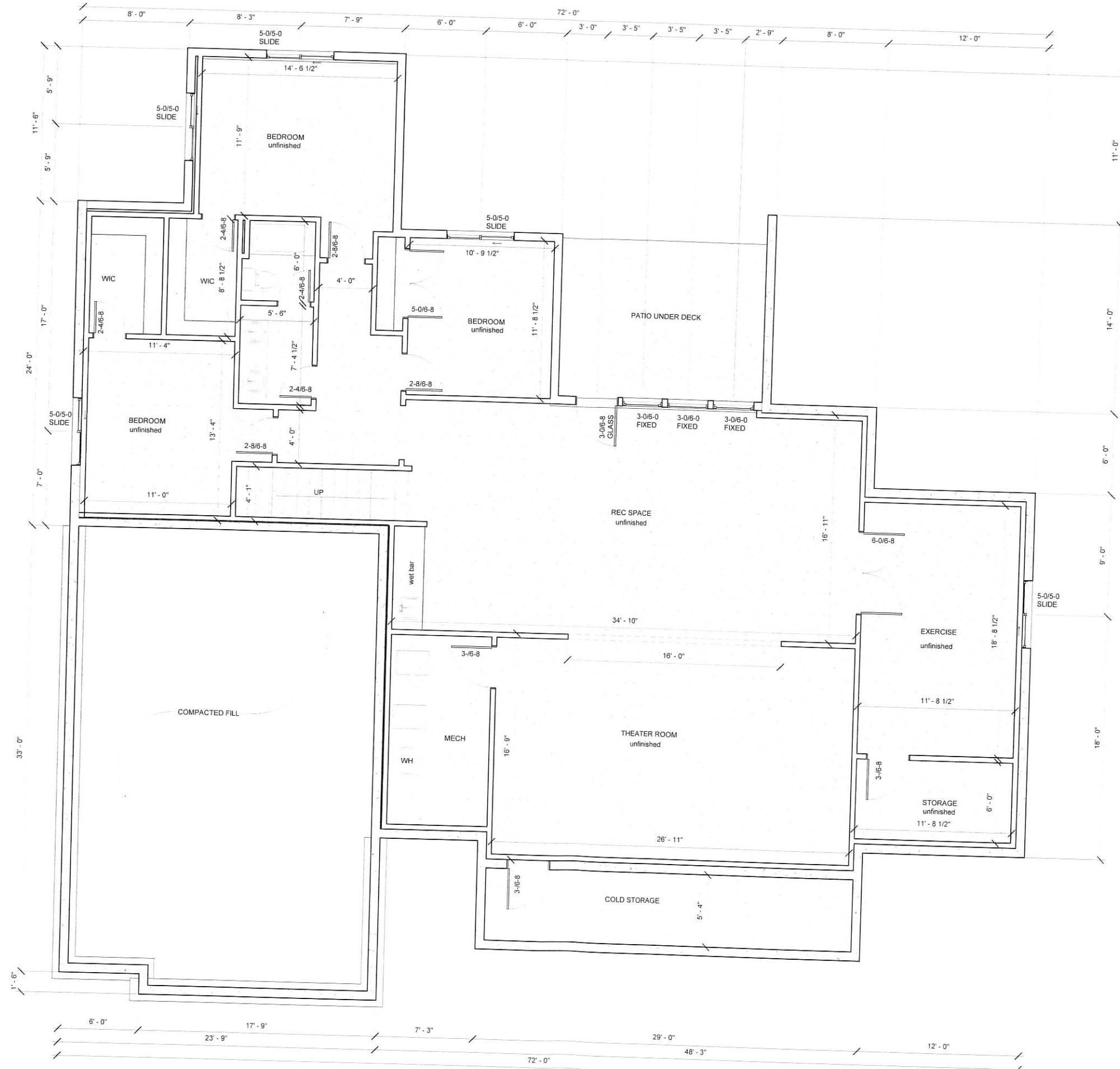
county stamp

John and Julee
Sanchez
Basement Plan

| | |
|----------------|----------------|
| Project number | Project Number |
| Date | Issue Date |
| Drawn by | Author |
| Checked by | Checker |

A0

1/4" = 1'-0"





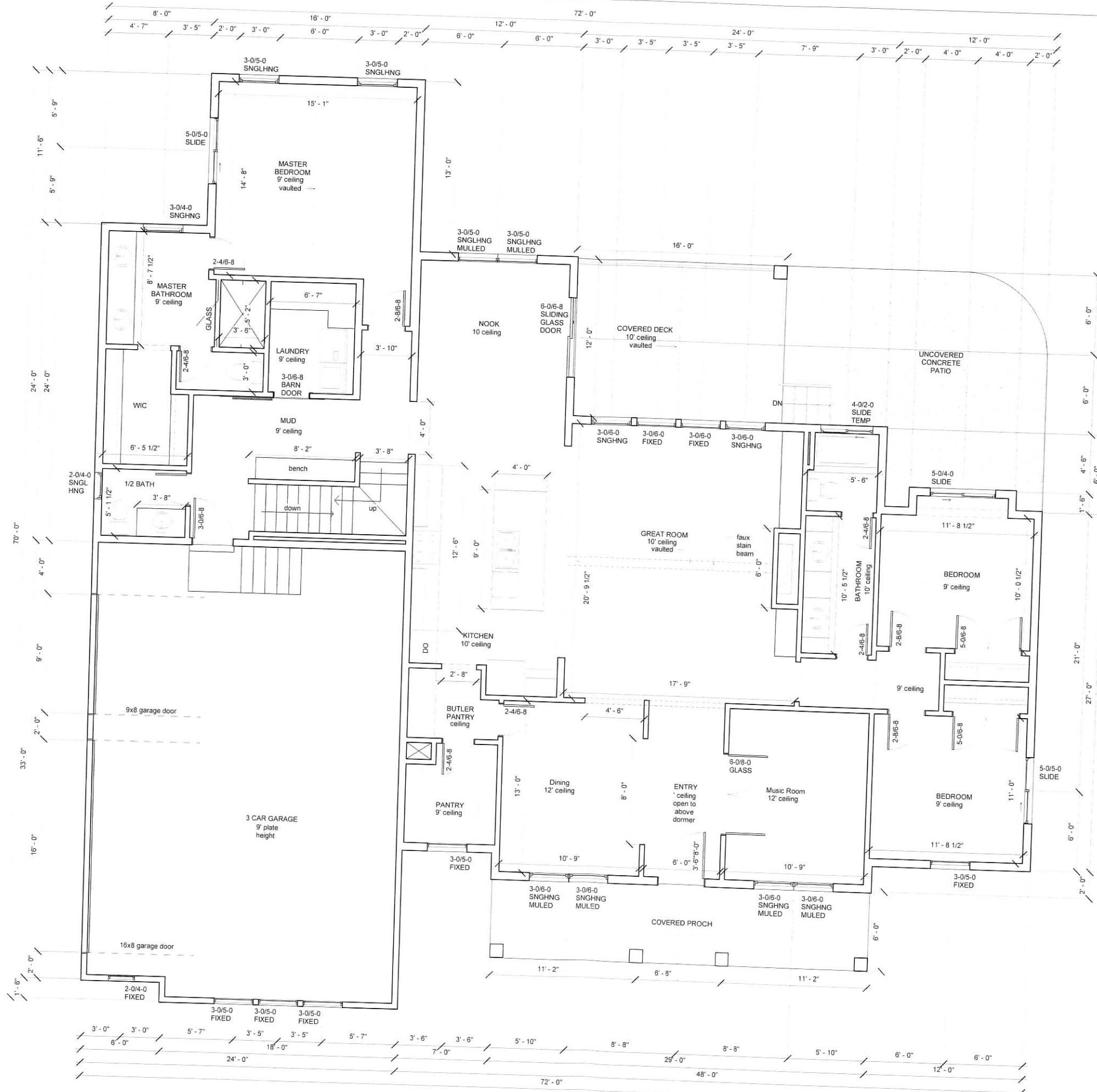
ORCHIDHOMES

'home building your way'

SANCHEZ HOME
PROVIDENCE HOLLOW
LOT 29
681 SPRING CREEK PARKWAY

county stamp

John and Julee
Sanchez
First Floor Plan



| | |
|----------------|----------------|
| Project number | Project Number |
| Date | Issue Date |
| Drawn by | Author |
| Checked by | Checker |

A1

141 142



ORCHIDHOMES

'home building your way'

SANCHEZ HOME
PROVIDENCE HOLLOW
LOT 29
681 SPRING CREEK PARKWAY

county stamp

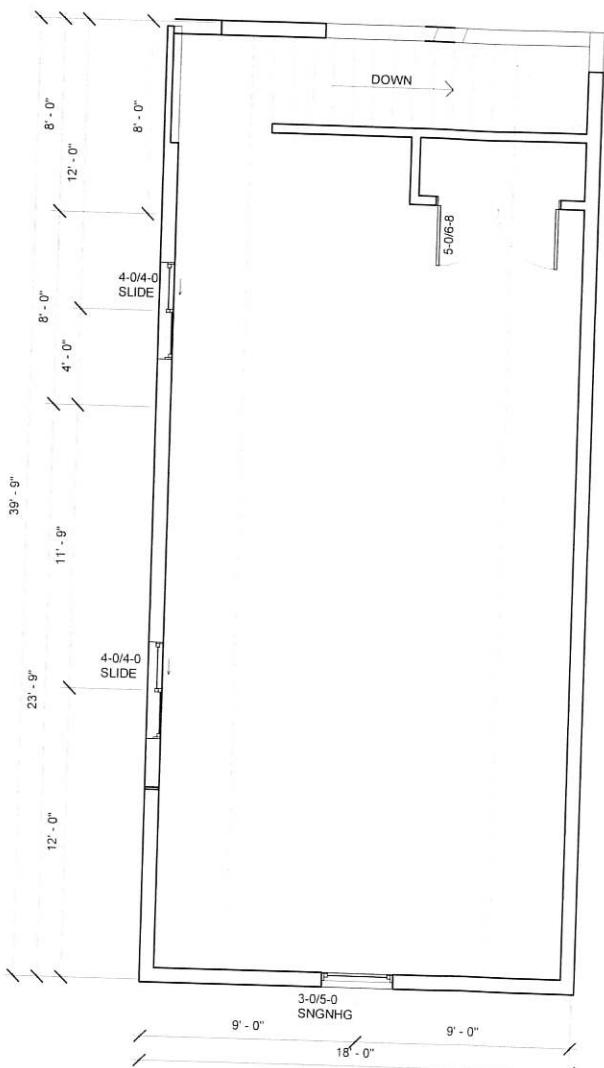
John and Julee
Sanchez

Second Floor Plan

Project number
Date
Drawn by
Checked by

Project Number
Issue Date
Author
Checker

Scale
1/4" = 1'-0"



A2



ORCHIDHOMES

'home building your way'

SANCHEZ HOME
PROVIDENCE HOLLOW
LOT 29
681 SPRING CREEK PARKWAY

county stamp

John and Julee
Sanchez

First Floor Electrical
and Lighting

Project number:
Date:
Drawn by:
Checked by:
Project Number:
Issue Date:
Author:
Checker:

A3

Scale: 1/4" = 1'-0"
Comments: 12:45:10 AM





ORCHIDHOMES

"home building your way"

SANCHEZ HOME
PROVIDENCE HOLLOW
LOT 29
681 SPRING CREEK PARKWAY

county stamp

John and Julee
Sanchez

Foundation Plan

| Project number | Project Number |
|----------------|----------------|
| | |
| Date | Issue Date |
| Drawn by | Author |
| Checked by | Checker |

S0



PROVIDENCE CITY
Land Use Authority – Staff Report
Meeting Date: August 12, 2020

Request: Applicant is requesting approval of a conditional use and zoning approval for a basement finish in the home of Graham and Andrea Mearns at 1156 Forgotten Ln., Providence, UT.

| | | |
|---------------------------------------|---|---|
| Item Type: Conditional Use App | Applicant: Chris Funk Construction | Address: 1156 Forgotten Ln. Providence |
| Parcel ID #: 02-203-0046 | General Plan: SFT | Zone: SFT |

Background Information:

A complete application was received August 12, 2020 and contained:

1. Providence City Conditional Use Application and Residential Site Plan application.
2. Payment of \$100 fee, July 29, 2020

Rob Stapley, Providence City Public Works Director, inspected the current infrastructure August 3, 2020.

Aaron Walker, Fire Inspector, reviewed site; see email dated August 5, 2020.

FINDINGS OF FACT:

1. UCA 10-9a-507. Conditional Uses allow a municipality to adopt a land use ordinance that includes conditional uses and provisions for conditional uses that require compliance with standards set for in an applicable ordinance.
2. The Cache County GIS Parcel Summary shows sensitive areas that may require further analysis.
3. Providence City Code (PCC) 10-5 Sensitive Areas, Section 1 Conditional use permit required states, all requests for permits involving a lot, parcel or site located wholly or partially within an area subject to the Hazard Flood (HF), Hazard Slope (HS), Hazard Water Table (HW) or Hazard Earthquake Primary Fault (HE), Hazard Wildfire (WF) regulations, shall be dealt with as a request for a conditional use permit under the provisions of Section 10-3-5 of this Title. All applications shall comply with the following regulations before any permit shall be issued.
4. PCC 10-3-5 Conditional Use Permits allows the City to impose reasonable conditions: to mitigate the reasonably anticipated detrimental effects of the proposed use on the health, safety, or general welfare of persons residing, working, or conducting business in the vicinity; to mitigate injury to property in the vicinity; to mitigate any risk to safety of persons or property because of vehicular traffic or parking, large gatherings of people, or other causes.

CONCLUSIONS OF LAW:

1. Providence City has adopted land use ordinances that include conditional uses and provisions for conditional uses.
2. The Cache County GIS Parcel Summary indicates this parcel is in a Wildfire Hazard area.
3. Providence City has the authority to impose reasonable conditions to mitigate the reasonably anticipated detrimental effects of the proposed use.
4. The request meets the requirements of the Codes listed in the Findings of Fact with the following conditions:

CONDITIONS:

1. The applicant will continue to meet all relevant federal, state, county, and Providence City rules,

laws, codes, and ordinances.

2. The applicant will mitigate fire hazard by: See email dated Aug. 10, 2020.
3. This conditional use is for the basement finish only as shown on the site plan date stamped August 3, 2020.
4. Payment of fees listed on the Providence City Zoning Permit.
5. Approval by the City of any application submitted or paperwork does not alleviate the owners and/or their agents from their responsibility to understand and conform to local, state, and federal laws. Providence City's approval is not intended to and cannot be construed to allow any laws to be violated.



PROVIDENCE CITY APPLICATION FOR A CONDITIONAL USE

| | | | | |
|---------------------|--|--|--|--|
| FOR OFFICE USE ONLY | | | | |
| Date | | | | |
| Payment Form | | | | |
| Amount | | | | |
| Receipt # | | | | |
| Clerk | | | | |

Please Note: City Staff will NOT accept the application and fee payment if they are incomplete. Incomplete applications will NOT be processed or scheduled for review by the City.

Date 7/29/2020

Initial BG Name RAYLEN

SUBMITTAL REQUIREMENTS

- \$100 application fee
- An 11"x17" of the property showing the location, function and characteristics of the use, including parking and percentage of space being used
- Cache County plat map of the property
- Copy of Cache County GIS Parcel Summary
<http://66.232.67.238/Websites/Parcel%20and%20Zoning%20Viewer/>
- Mitigation Strategies for applicable sensitive areas
- Mailing addresses for the owners of adjacent properties
- Property owner consent for pursuit of conditional use (if owner is different than Applicant)
- Electronic copy of structure elevations & square footage including attached garage(s), covered porches, covered decks etc.
- Electronic copy of ALL submittals (email or flash drive is acceptable)

Staff Check

Applicant Information (all information MUST be provided)

Name CHRIS FUNK CONSTRUCTION

Address 33 N. MAIN ST. LOGAN UTAH

Phone (435) 258-7775 Email baylen.gunnell@gmail.com

Party Responsible for Payment (if different than applicant)- the individual/firm to whom any and all professional services invoices (attorney/engineer/etc.) will be sent and who will be responsible for payment of such invoices.

Name _____

Address _____

Phone _____

Email _____

Property Information

Owner of record ANDREA & GRAHAM MEARNS

Owner address 1156 FORGOTTEN LN. PROVIDENCE, UT

Owner phone (801) 455-0860 Owner email andreamearns@outlook.com

Parcel address 1156 FORGOTTEN LN. PROV. Parcel Tax I.D. 02-203-6046

Zone RES. Height _____ Initial _____

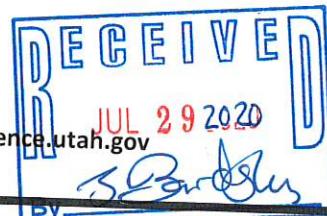
Setbacks (front yard) _____ (side yard) _____ (rear yard) _____ Initial _____

Written Statement of Request (attach additional sheets if necessary)

- Briefly explain why you are seeking a conditional use and what the intended use of the property will be if the conditional use is granted.

WE ARE FINISHING A BASEMENT AT THIS PROPERTY & IT IS IN A FIRE HAZARD AREA.

164 N. Gateway Dr * Providence UT 84332
435-752-9441 * Fax: 435-753-1586 * email: sbankhead@providence.utah.gov



Property owner and contractor shall have responsibility to determine grades, and final placement and elevations of footings/foundations. Property owner and contractor shall be responsible for compliance with all state, national and local building codes and ordinances. Initial BL Name BAYLEN

Approval by the city of any application submittal or paperwork does not alleviate the owners from their responsibility to understand and conform to local, state and federal laws. Providence City's approval is not intended to and cannot be construed to allow any laws to be violated. Initial BL

By signing this document, you agree that Providence City will bill you for any and all professional firm fees as they arise throughout the approval process. This is in addition to application fees. All subdivisions require engineering review throughout the approval process, such as but not limited to reviews of development agreements, construction drawings, preliminary and final plats, and inspections. These services are billed by our city engineer at an hourly rate. Some subdivision applications may also require legal review. Other applications, such as but not limited to conditional uses, may also require engineering and/or legal review at the City's discretion. You agree to reimburse the City for all such costs, whether or not you were forewarned about such costs, and that the City cannot predict all situations in which professional services may be required in order to process your application. Initial BL

I declare under penalty of perjury that I am making this application of my own free will and choice and that the statements, answers, and documents submitted in connection with this application are true and correct to the best of my knowledge.


Signature of Applicant

BAYLEN GUNNELL
Printed Name

7/29/2022
Date

The following is a general summary of which body reviews each land use application in Providence City. Public hearings may be required by the Planning Commission and City Council, as shown below. This matrix does not include zoning clearance/permits for new single-home construction or for business licenses, both of which are reviewed and approved by city staff.

| Application | Executive Staff | Land Use Authority | Planning Commission | Public Hearing | City Council | Public Hearing | Appeal Authority | Filing Fee ¹ |
|---|-----------------|--------------------|---------------------|----------------|----------------|----------------|------------------|-------------------------|
| Code Amendment | ✓ | --- | ✓ | ✓ ² | ✓ | --- | --- | \$100 |
| Annexation | ✓ | --- | --- | --- | ✓ | ✓ | --- | \$150 |
| Rezone | ✓ | --- | ✓ | ✓ | ✓ | --- | --- | \$100 |
| Conditional Use | ✓ | ✓ | --- | --- | --- | --- | --- | \$100 |
| Subdivision Concept Plan | ✓ | --- | --- | --- | --- | --- | --- | \$300 |
| Preliminary Subdivision Plat | ✓ | --- | ✓ | --- | --- | --- | --- | \$400 |
| Final/Amended Subdivision Plat ³ | ✓ | --- | ✓ | --- | ✓ ⁴ | --- | --- | \$600 |
| Site Plan | ✓ | ✓ | --- | --- | --- | --- | --- | \$50 |
| Lot Consolidation ⁵ | ✓ | --- | ✓ | --- | --- | --- | --- | \$50 |
| Exception to Title ⁶ | ✓ | --- | ✓ | --- | ✓ | --- | --- | \$100 |
| General Plan Amendment | ✓ | --- | ✓ | ✓ | ✓ | --- | --- | \$100 |
| Right-of-Way Vacation | ✓ | --- | ✓ | --- | ✓ | ✓ | --- | \$100 |
| Variance/ Appeal | --- | --- | --- | --- | --- | --- | ✓ | \$100 |

¹ Filing Fees do not include professional firm review fees. Those will be billed to the applicant separately.

² Public Hearing required at Planning Commission only when the proposed code amendment is related to land use.

³ Construction drawings are reviewed/approved by the City Engineer and Public Works Director.

⁴ The City Council does not review the final plat itself, but rather reviews and approves the development agreement associated with the final plat.

⁵ Lot consolidations are only required to have City approval when they are in a platted/recor

⁶ Developers may ask for an exception from the requirements of the Providence City Subdivision Code (Title 11) through this process. All other variance/exception requests shall be handled by the Appeal Authority.



Residential Site Plan Application

FOR OFFICE USE ONLY

Date _____
 Payment Form _____
 Amount _____
 Receipt # _____
 Clerk _____

Date: 7/28/2020

Required Submittals

Please Note: City Staff will NOT accept the application and fee payment if they are incomplete. Incomplete applications will NOT be processed or scheduled for review by the City. Application fees do not include professional firm fees, which will be billed separately. Engineered site plans may, at the City's discretion, be required. The City will contact the applicant if an engineered site plan is deemed necessary. Accessory buildings include sheds (over 200 sq ft) and all detached buildings (shop, garage, etc.)

Name Bayler Initial BG

| Construction Type | Application | Filing Fee \$50- New Home \$25- all other | 11x17 Site Plan Must Include: | | | Cache County Plat Map | Stormwater NOI Permit | Stormwater Pollution Prevention Plan (SWPPP) |
|-------------------|------------------|---|---|------------------------------|--|-----------------------|-----------------------|--|
| | | | Existing & proposed buildings, dimensions, & setbacks | Existing/ proposed utilities | Dimensions of driveway cut – (35' max) | | | |
| New Home | | | | | | | | |
| Acc. Building | | | | | | | * | * |
| Addition | | | | | | | * | * |
| Deck | | | | | | | * | * |
| Other | Basement Remodel | | | | | | | |

*May not apply in all cases

Applicant Information

Name: Chris Funk Construction

Mailing address: 33 N. Main Street Logan, Utah

Telephone: (435) 258-7775

Email: bayler@chrisfunkconstruction.com

Property Owner Information (If applicant is not the property owner, the application **must** include the property owner's information and written consent for the applicant to pursue the permit)

Name: Andrea and Graham Mearns

Mailing address: 1156 Forgotten Lane Providence, Utah 84332

Telephone: (801) 455-0860

Email: andreamearns@outlook.com

Utilities (circle, if applicable):

Septic tank

City sewer

Water

Well

Construction Type (circle):

New home

Accessory building

Deck

Addition

Other

Do the plans include an Accessory Apartment Unit

Yes

No

(circle):

Is this an Accessory Dwelling Unit (circle):

Yes

No

Project InformationAddress: 1156 Forgotten Lane Providence, Utah 84332Subdivision: 02-203-0046Parcel Tax ID: 02-203-0046

Square footage for fire flow (includes all floors and all areas under the roof, including garages and covered porches):

02-203-0046 Initial _____Zone Residential Height Initial _____Setbacks (front yard) _____ (side yard) _____ (rear yard) _____ Initial _____**Contractor Information**Name: Chris Funk ConstructionMailing address: 33 N Main St. Logan, Utah 84321Telephone: (435) 258-7775Email: bayler@chrisfunkconstruction.com**Stormwater Notice of Intent (NOI) Information**

NOI No. UTR _____ Permit issued to: _____

If this construction will occur in an approved subdivision, you may be able to use the NOI permit taken out by the development contractor or the developer. If you have to obtain your own NOI permit, please visit: <https://secure.utah.gov/account/log-in.html>. You will create a log in and then access the Storm Water Permit Issuance System. There is a \$150 NOI fee, paid directly to the state when you file your permit.

Property owner and contractor shall have responsibility to determine grades, and final placement and elevations of footings/foundations.

Property owner and contractor shall be responsible for compliance with all state, national and local building codes and ordinances.

Initial BG Name Bayler Gunnell

Approval by the city of any application submittal or paperwork does not alleviate the owners from their responsibility to understand and conform to local, state and federal laws. Providence City's approval is not intended to and cannot be construed to allow any laws to be violated.

Initial BG _____

By signing this document, you agree that Providence City will bill you for any and all professional firm fees as they arise throughout the approval process. This is in addition to application fees. All subdivisions require engineering review throughout the approval process, such as but not limited to reviews of development agreements, construction drawings, preliminary and final plats, and inspections. These services are billed by our city engineer at an hourly rate. Some subdivision applications may also require legal review. Other applications, such as but not limited to conditional uses, may also require engineering and/or legal review at the City's discretion. You agree to reimburse the City for all such costs, whether or not you were forewarned about such costs, and that the City cannot predict all situations in which professional services may be required in order to process your application. Initial BG _____

All Applicants Must Read the Following Before Signing This Application

The granting of a zoning permit does not override any federal, state, or local building code or authorize any individual to violate any local law or ordinance. Approval of this permit does not constitute a representation by the City that it will be liable for any issues arising from the construction of homes and other structures in a Sensitive or Hazard Area. It is the responsibility of the property owner to comply with all relevant local, state, and federal laws and regulations, including but not limited to Providence City Code 10-5 outlined below:

Sensitive and Hazard Areas:

1. **JURISDICTIONAL WETLANDS:** As Defined by the US Army Corps of Engineers
2. **STEEP SLOPES:** Where the rise or fall of the land is equal to or exceeds 30% over a horizontal distance of 50 feet or greater measured perpendicular to the contour lines.
3. **NATURAL WATERWAYS OR OPEN WATER:** Including but not limited to: rivers, creeks, or streams. Identified as those areas where surface waters flow sufficiently to produce a defined channel or bed.
4. **FLOODPLAINS:** See definitions in Chapter 16 Section 3 of this Title.

5. CRUCIAL WILDLIFE HABITAT AREAS: As identified by the State Division of Wildlife Resources (DWR)
6. GEOLOGICAL HAZARD AREAS: Earthquake fault lines or areas prone to debris flows, landslides, high or extreme liquefaction potential, and rock falls as identified by the US Geological Survey (USGS)
7. WILDFIRE HAZARD AREAS: Areas of the City designated as having moderate to extreme potential for wildfire hazards as identified by the City.
8. HAZARD WATER TABLE AREA: An area where potential ground water levels may occur within 12 feet of the natural grade.

By submitting this application, I affirm that I have read and understand the Title 10 Chapter 5 requirements for construction on property in the Sensitive or Hazard Area. I understand that the City is not liable for any issues which may arise because of the construction of structures in the Sensitive or Hazard Areas of the City. The property owner and their agents assume all liability for placing structures in this area of the City. I hereby certify that I am the property owner or authorized agent and I have read and examined this application and understand that the City has no liability. I accept responsibility for all soils and hazardous conditions on the site.

I declare under penalty of perjury that I am making this application of my own free will and choice and that the statements, answers, and documents submitted in connection with this application are true and correct to the best of my knowledge.

Bayler Gunnell

Signature of Applicant

Bayler Gunnell

Printed Name

7/28/2020

Date



PROVIDENCE CITY BUILDING DIVISION CONSTRUCTION POLICIES

(Required for all zoning permit applications)

1. Zoning requirements

- a. Site plan required to be on site at footing inspection
- b. Property corners to be marked and staked for inspection

2. Lot ID

- a. Posting of a lot ID sign is required during construction for inspections and emergency services. This sign is provided by the City and shall be posted by the first scheduled inspection and visible from the street.

3. Toilets

- a. The IPC and OSHA require a toilet on site during construction and in place prior to the first inspection. This has to be accessible to all workers in the area and requires the cooperation of all.

4. Water Meter

- a. Unauthorized use of City water will result in a fine and a stop work order on the property.
- b. Meter and sewer clean outs are not allowed to be encased or surrounded in concrete. (Contact the Public Works for the required specs.) The moving cost will be the responsibility of the owner.

5. Streets/Sidewalks

- a. No material will be allowed on public streets or sidewalks. "Material" is defined as construction products, or any size or dimension of aggregate. (See Providence City's specs.)
- b. Dirt piled over curb and sidewalk requires a minimum 4" pipe installed to allow drainage to the gutter. This temporary (180 days) blockage to the sidewalk requires safety tape or cones to divert traffic.
- c. All sidewalks, curbs, gutters, and streets associated with the property are to be kept clean during construction with a final cleaning required prior to final occupancy.
- d. Construction sites should be kept clean and all debris contained to that site.

6. Elevations

- a. I accept responsibility for all the soils and hazard conditions of the site. Approval of this permit does not constitute a representation by the City that the building at any specified elevation will solve any ground water, slope or hazard condition. The solution to this problem is the sole responsibility of the permit applicant, agent, or property owner.

7. Final Occupancy

- a. Occupying the building prior to final occupancy will result in revocation of the \$500 power bond. After the initial inspection, the Building Official will determine whether any furniture can be moved into the house or garage.

8. Temporary Occupancy

- a. Will only be issued with special permission. Temporary permits will expire after 30 days of issue and the construction bond will be forfeited if work is not completed

9. Permits

- a. Plan review and permit fees are good for 180 days. Only the permit portion will be refunded, after a written letter of request is received. No fees will be refunded after this period has expired.

By signing below, I state that I have read and agree to the above terms and understand that I am the responsible party for the information contained on this sheet.

Bayler Gunnell

Signature

Bayler Gunnell

Printed Name

On Behalf Of

7/28/2020

Date

GIS PARCEL SUMMARY

Not Authoritative — For Preliminary Review Only

Parcel Number: 02-203-0046

Property Address: 1156 FORGOTTEN LANE
PROVIDENCE

Tax Roll Acreage: 0.28

Owner Name: GRAHAM M & ANDREA
MEARNS

Owner Address: 1156 S FORGOTTEN LN
PROVIDENCE, UT 84332-9318

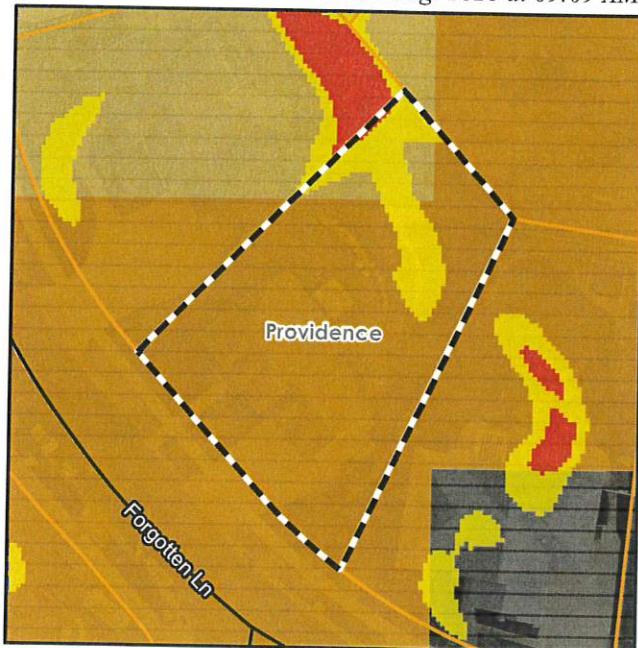
Jurisdiction: Providence
Future

Annexation Area: n/a

Base Zone: Contact Providence for Zoning

Overlay Zone: n/a

Generated on 03 Aug. 2020 at 09:09 AM



Comprehensive maps can be found
at www.cache县.org/gis

Initial Parcel Incorporated Area

Legality Review: Contact Providence for Applicable Regulations

NOTE: Parcel legality does **NOT** guarantee that a parcel or lot is buildable; it is only one step in the development process.
All other requirements must still be met. Parcel legality should be verified before submitting a land use application.

Areas That May Require Further Analysis

Source Water Protection
Zones 1 or 2
Moderate Slopes

Steep Slopes

Wildfire Hazard Areas

This overview is based on the information in the Cache County GIS databases. Please verify the potential presence of areas requiring further analysis with the County's webmaps. Sections 17.10, 17.17, and 17.18 of the Cache County Land Use Ordinance contain the development standards and requirements associated with these areas. The definition of "Parcel/Lot" in Section 17.07.040 outlines parcel legality.

Cache County assumes no liability for any errors, omissions, or inaccuracies in the information provided regardless of the cause of such or for any decision made, action taken, or action not taken by the user in reliance upon any maps or information provided herein. All datasets may contain errors. The information shown here is not intended to replace evaluation by a competent, licensed professional. In particular, the parcel boundaries are representational only and are not legal definitions of real property, nor are they intended to replace a land survey by a licensed surveyor.



Diane Campbell <dcampbell@providence.utah.gov>

Mearns Basement Finish

Aaron Walker <aaron.walker@loganutah.org>

Wed, Aug 5, 2020 at 5:25 PM

To: Diane Campbell <dcampbell@providence.utah.gov>

Cc: Skarlet Bankhead <sbankhead@providence.utah.gov>, Rob Stapley <rstapley@providence.utah.gov>, Ryan Snow <ryansnow2@providence.utah.gov>, Max Pierce <max.pierce@crsengineers.com>, April Fredrickson <aprilf@providence.utah.gov>

Hello Diane,

With no added square footage or additions to the exterior of the structure, and with hydrant 446 across the street, I have no comments for this project.

Thank you.

[Quoted text hidden]

--

Aaron Walker
Deputy Fire Marshal/Fire Inspector
Logan Fire Department
Office 435-716-9516
Mobile 435-881-8960



Diane Campbell <dcampbell@providence.utah.gov>

Mearns basement finish

Bayler Gunnell <bayler@chrisfunkconstruction.com>
To: Diane Campbell <dcampbell@providence.utah.gov>

Mon, Aug 10, 2020 at 5:34 PM

We will follow all codes concerning fire mitigation. Fire alarm in the bedroom and main living space. Ladder in the window well for the bedroom.

Thank you,
[Quoted text hidden]

--
Bayler Gunnell

(435) 258-7775

bayler.gunnell@gmail.com

CHRISFUNK
CONSTRUCTION



Diane Campbell <dcampbell@providence.utah.gov>

Re: Hazardous Area

Family Mearns <andreamearns@outlook.com>

Mon, Aug 10, 2020 at 6:00 PM

To: Bayler Gunnell <bayler@chrisfunkconstruction.com>, "dcampbell@providence.utah.gov" <dcampbell@providence.utah.gov>

As requested by Providence city I am copying them on the reply.

Thank you for the information. At the time of our purchase (May 2020) we were not advised of any reasons why we would not be able to finish the basement and so we absolutely want to start work to complete our house.

Providence city: We presume this request to proceed is also required of all the new homes being built in this area which would be at much greater risk.

Funk construction: We presume that included in the money we have paid and will pay covers qualified contractors that are able to work in such an environment.

All: I hope this email allows work to finally get started.

Thanks

Graham and Andrea Mearns

[1156 S Forgotten Lane](mailto:1156SForgottenLane)

From: Bayler Gunnell <bayler@chrisfunkconstruction.com>

Sent: Monday, August 10, 2020 5:32 PM

To: andreamearns@outlook.com

Subject: Hazardous Area

Hi Andrea,

I'm just emailing you to insure you're aware that you live in a hazardous fire area and that you are willing to continue forward with the build out of your basement.

Thank you,

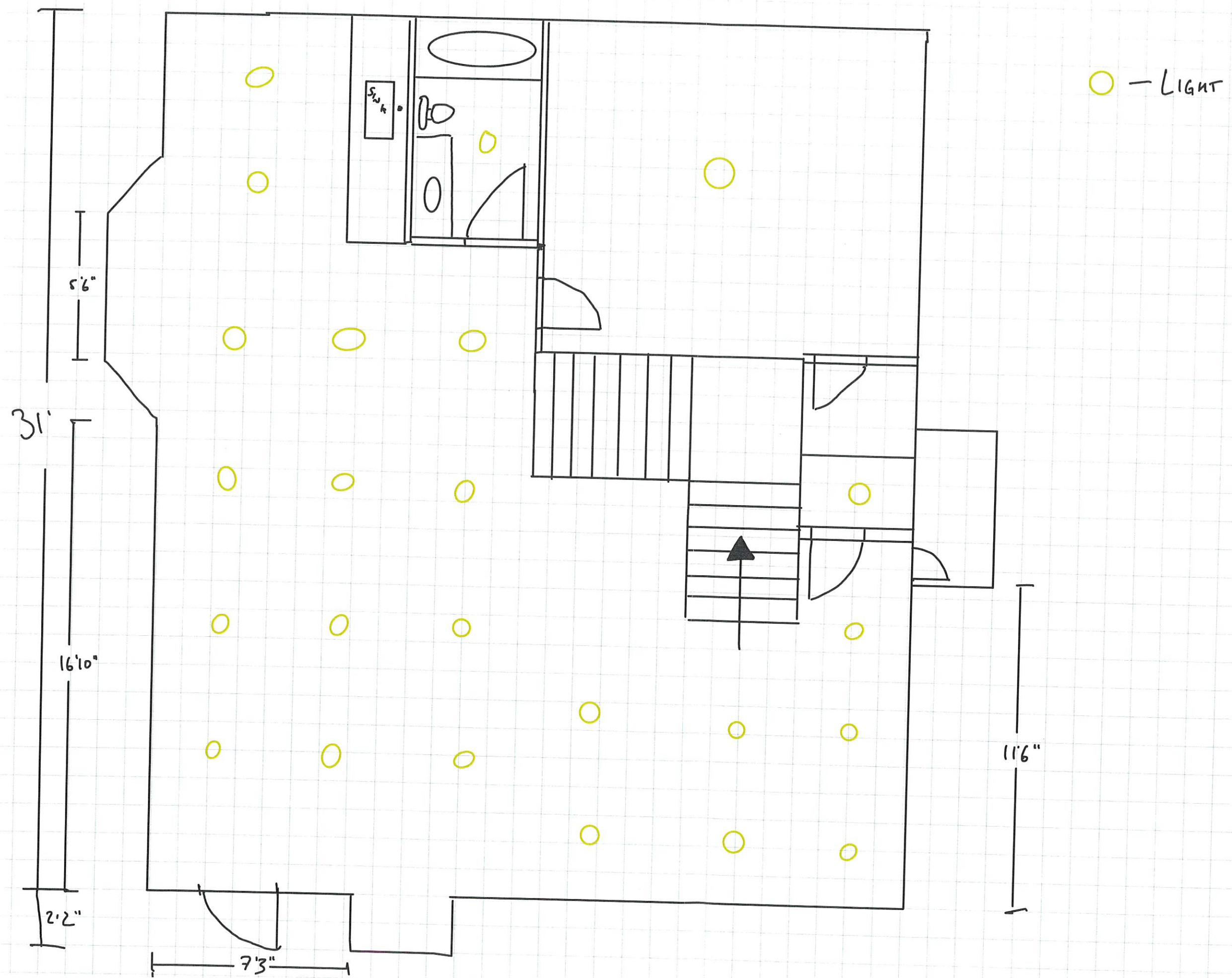
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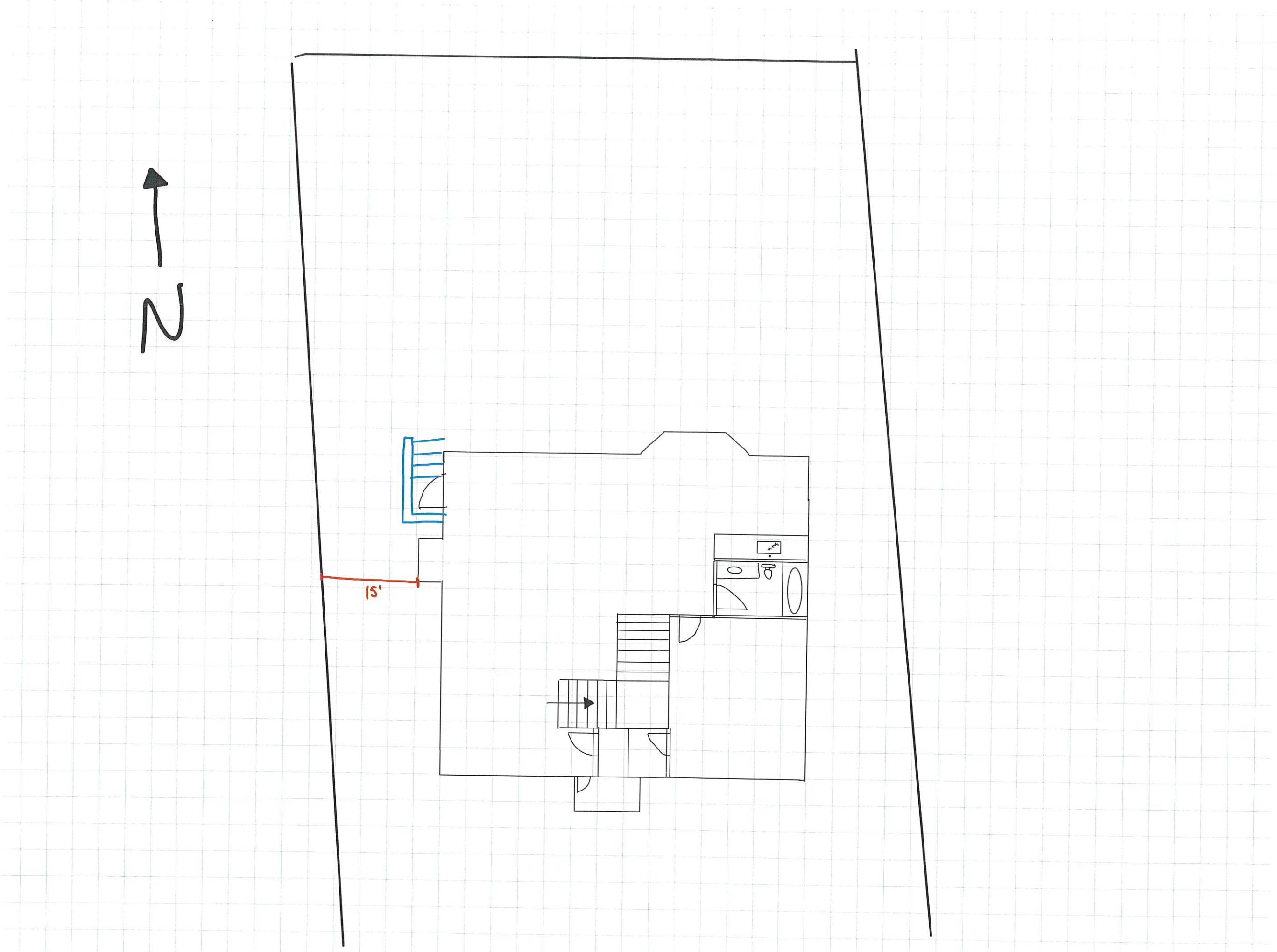
Bayler Gunnell

(435) 258-7775

bayler.gunnell@gmail.com

CHRIS FUNK
CONSTRUCTION



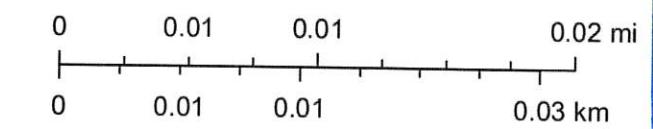


Parcel Map



8/3/2020, 9:31:33 AM

1:594



- Selected Parcel
- County Centerline
- County Boundary
- State Roads
- Municipal Boundaries
- Cache Parcels



PROVIDENCE CITY
Land Use Authority – Staff Report
Meeting Date: August 12, 2020

Request: Applicant is requesting approval of a conditional use and zoning approval for a new home located at 677 E 525 N, Providence, UT.

| | | |
|-----------------------------------|-----------------------------------|---|
| Item Type: Conditional Use | Applicant: Ascentive Homes | Address: 677 E 525 N, Providence |
| Parcel ID # 02-295-03218 | General Plan: SFT | Zone: SFT |

Background Information:

A complete application was received July 28, 2020 and contained:

1. Providence City Conditional Use Application and Residential Site Plan application.
2. Payment of \$100 fee, Aug. 10, 2020

Rob Stapley, Providence City Public Works Director, inspected the current infrastructure August 3, 2020.

Aaron Walker, Deputy Fire Marshal/Fire Inspector, reviewed site; see letter dated August 4, 2020.

FINDINGS OF FACT:

1. UCA 10-9a-507. Conditional Uses allow a municipality to adopt a land use ordinance that includes conditional uses and provisions for conditional uses that require compliance with standards set for in an applicable ordinance.
2. The Cache County GIS Parcel Summary shows sensitive areas that may require further analysis.
3. Providence City Code (PCC) 10-5 Sensitive Areas, Section 1 Conditional use permit required states, all requests for permits involving a lot, parcel or site located wholly or partially within an area subject to the Hazard Flood (HF), Hazard Slope (HS), Hazard Water Table (HW) or Hazard Earthquake Primary Fault (HE), Hazard Wildfire (WF) regulations, shall be dealt with as a request for a conditional use permit under the provisions of Section 10-3-5 of this Title. All applications shall comply with the following regulations before any permit shall be issued.
4. PCC 10-3-5 Conditional Use Permits allows the City to impose reasonable conditions: to mitigate the reasonably anticipated detrimental effects of the proposed use on the health, safety, or general welfare of persons residing, working, or conducting business in the vicinity; to mitigate injury to property in the vicinity; to mitigate any risk to safety of persons or property because of vehicular traffic or parking, large gatherings of people, or other causes.

CONCLUSIONS OF LAW:

1. Providence City has adopted land use ordinances that include conditional uses and provisions for conditional uses.
2. The Cache County GIS Parcel Summary indicates this parcel is in a Hazard Landslide area.
3. Providence City has the authority to impose reasonable conditions to mitigate the reasonably anticipated detrimental effects of the proposed use.
4. The request meets the requirements of the codes listed in the Findings of Fact with the following conditions:

CONDITIONS:

1. The applicant will continue to meet all relevant federal, state, county, and Providence City rules, laws, codes, and ordinances.
2. The applicant will mitigate Landslide Area by: See mitigation statement date stamped August 4, 2020, and drawing on site plan.

3. This conditional use is for the home only as shown on the site plan date stamped July 28, 2020.
4. Aaron Walker, Deputy Fire Marshall/Fire Inspector – Logan City Fire Department, reviewed the parcel in the interest of the fire safety provisions and regulations as adopted by the State of Utah and in accordance with the International Fire Code.
5. Approval by the City of any application submitted or paperwork does not alleviate the owners and/or their agents from their responsibility to understand and conform to local, state, and federal laws. Providence City's approval is not intended to and cannot be construed to allow any laws to be violated.





PROVIDENCE CITY APPLICATION FOR A CONDITIONAL USE

| | | | | |
|---------------------|--|--|--|--|
| FOR OFFICE USE ONLY | | | | |
| Date | | | | |
| Payment Form | | | | |
| Amount | | | | |
| Receipt # | | | | |
| Clerk | | | | |

Please Note: City Staff will NOT accept the application and fee payment if they are incomplete. Incomplete applications will NOT be processed or scheduled for review by the City.

Date 7/28/20

Initial CW Name Chris Williams

SUBMITTAL REQUIREMENTS

- \$100 application fee
- An 11"x17" of the property showing the location, function and characteristics of the use, including parking and percentage of space being used
- Cache County plat map of the property
- Copy of Cache County GIS Parcel Summary
<http://66.232.67.238/Websites/Parcel%20and%20Zoning%20Viewer/>
- Mitigation Strategies for applicable sensitive areas
- Mailing addresses for the owners of adjacent properties
- Property owner consent for pursuit of conditional use (if owner is different than Applicant)
- Electronic copy of structure elevations & square footage including attached garage(s), covered porches, covered decks etc.
- Electronic copy of ALL submittals (email or flash drive is acceptable)

Staff Check

Applicant Information (all information MUST be provided)

Name Ascentive Homes LLC
Address 4345 Corporate Center Dr, North Las Vegas, NV 89030
Phone 435-999-9686 Email chris@westerntrades.net

Party Responsible for Payment (if different than applicant)- the individual/firm to whom any and all professional services invoices (attorney/engineer/etc.) will be sent and who will be responsible for payment of such invoices.

Name Ascentive Homes LLC
Address 4345 Corporate Center Dr, North Las Vegas, NV 89030
Phone 435-999-9686 Email chris@westerntrades.net

Property Information

Owner of record Ascentive Homes LLC
Owner address 4345 Corporate Center Dr, North Las Vegas, NV 89030
Owner phone 435-999-9686 Owner email chris@westerntrades.net
Parcel address 677 E 525 N Parcel Tax I.D. 02-295-0318
Zone Height 18 ft Initial
Setbacks (front yard) 20 ft (side yard) 10 ft (rear yard) 54 ft Initial

Written Statement of Request (attach additional sheets if necessary)

- Briefly explain why you are seeking a conditional use and what the intended use of the property will be if the conditional use is granted.

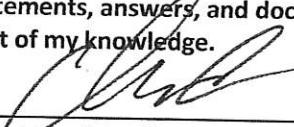
The address is in a conditional use zone. The property will be used for a single family dwelling home.

Property owner and contractor shall have responsibility to determine grades, and final placement and elevations of footings/foundations. Property owner and contractor shall be responsible for compliance with all state, national and local building codes and ordinances. Initial CL Name Chris Williams

Approval by the city of any application submittal or paperwork does not alleviate the owners from their responsibility to understand and conform to local, state and federal laws. Providence City's approval is not intended to and cannot be construed to allow any laws to be violated. Initial CL

By signing this document, you agree that Providence City will bill you for any and all professional firm fees as they arise throughout the approval process. This is in addition to application fees. All subdivisions require engineering review throughout the approval process, such as but not limited to reviews of development agreements, construction drawings, preliminary and final plats, and inspections. These services are billed by our city engineer at an hourly rate. Some subdivision applications may also require legal review. Other applications, such as but not limited to conditional uses, may also require engineering and/or legal review at the City's discretion. You agree to reimburse the City for all such costs, whether or not you were forewarned about such costs, and that the City cannot predict all situations in which professional services may be required in order to process your application. Initial CL

I declare under penalty of perjury that I am making this application of my own free will and choice and that the statements, answers, and documents submitted in connection with this application are true and correct to the best of my knowledge.


Signature of Applicant

Chris Williams
Printed Name

7/28/2020

Date

The following is a general summary of which body reviews each land use application in Providence City. Public hearings may be required by the Planning Commission and City Council, as shown below. This matrix does not include zoning clearance/permits for new single-home construction or for business licenses, both of which are reviewed and approved by city staff.

| Application | Executive Staff | Land Use Authority | Planning Commission | Public Hearing | City Council | Public Hearing | Appeal Authority | Filing Fee ¹ |
|---|-----------------|--------------------|---------------------|----------------|----------------|----------------|------------------|-------------------------|
| Code Amendment | ✓ | --- | ✓ | ✓ ² | ✓ | --- | --- | \$100 |
| Annexation | ✓ | --- | --- | --- | ✓ | ✓ | --- | \$150 |
| Rezone | ✓ | --- | ✓ | ✓ | ✓ | --- | --- | \$100 |
| Conditional Use | ✓ | ✓ | --- | --- | --- | --- | --- | \$300 |
| Subdivision Concept Plan | ✓ | --- | --- | --- | --- | --- | --- | \$400 |
| Preliminary Subdivision Plat | ✓ | --- | ✓ | --- | --- | --- | --- | \$600 |
| Final/Amended Subdivision Plat ³ | ✓ | --- | ✓ | --- | ✓ ⁴ | --- | --- | \$50 |
| Site Plan | ✓ | ✓ | --- | --- | --- | --- | --- | \$50 |
| Lot Consolidation ⁵ | ✓ | --- | ✓ | --- | --- | --- | --- | \$100 |
| Exception to Title ⁶ | ✓ | --- | ✓ | --- | ✓ | --- | --- | \$100 |
| General Plan Amendment | ✓ | --- | ✓ | ✓ | ✓ | --- | --- | \$100 |
| Right-of-Way Vacation | ✓ | --- | ✓ | --- | ✓ | ✓ | --- | \$100 |
| Variance/ Appeal | --- | --- | --- | --- | --- | --- | ✓ | \$100 |

¹ Filing Fees do not include professional firm review fees. Those will be billed to the applicant separately.

² Public Hearing required at Planning Commission only when the proposed code amendment is related to land use.

³ Construction drawings are reviewed/approved by the City Engineer and Public Works Director.

⁴ The City Council does not review the final plat itself, but rather reviews and approves the development agreement associated with the final plat.

⁵ Lot consolidations are only required to have City approval when they are in a platted/recoded subdivision.

⁶ Developers may ask for an exception from the requirements of the Providence City Subdivision Code (Title 11) through this process. All other variance/exception requests shall be handled by the Appeal Authority.



Residential Site Plan Application

Date: 7/8/20

FOR OFFICE USE ONLY

Date _____
Payment Form _____
Amount _____
Receipt # _____
Clerk _____

Required Submittals

Please Note: City Staff will NOT accept the application and fee payment if they are incomplete. Incomplete applications will NOT be processed or scheduled for review by the City. Application fees do not include professional firm fees, which will be billed separately. Engineered site plans may, at the City's discretion, be required. The City will contact the applicant if an engineered site plan is deemed necessary. Accessory buildings include sheds (over 200 sq ft) and all detached buildings (shop, garage, etc.)

Name Chris Williams Initial CW

| Construction Type | Application | Filing Fee \$50- New Home \$25- all other | 11x17 Site Plan Must Include: | | | Cache County Plat Map | Stormwater NOI Permit | Stormwater Pollution Prevention Plan (SWPPP) |
|-------------------|-------------|---|---|------------------------------|--|-----------------------|-----------------------|--|
| | | | Existing & proposed buildings, dimensions, & setbacks | Existing/ proposed utilities | Dimensions of driveway cut - (35' max) | | | |
| New Home | X | X | X | X | X | X | X | X |
| Acc. Building | | | | | | | * | * |
| Addition | | | | | | | * | * |
| Deck | | | | | | | * | * |
| Other | | | | | | | | |

*May not apply in all cases

Applicant Information

Name: Ascentive Homes LLC

Mailing address: 485 E 500 N Providence, UT 84332

Telephone: 435-999-9686

Email: Chris @ westerntrades.net

Property Owner Information (If applicant is not the property owner, the application **must** include the property owner's information and written consent for the applicant to pursue the permit)

Name: Ascentive Homes

Mailing address: 485 E 500 N Providence, UT 84332

Telephone: 435-999-9686

Email: Chris @ westerntrades.net

Utilities (circle, if applicable):

Septic tank

New home

City sewer

Accessory building

Water

Deck

Well

Addition

Other

Construction Type (circle):

Do the plans include an Accessory Apartment Unit (circle):

Is this an Accessory Dwelling Unit (circle):

Yes

No



Project Information

Address: 677 N 525 E Providence, UT 84332

Subdivision: Providence Hollow Phase 3

Parcel Tax ID: 02-295-0318

Square footage for fire flow (includes all floors and all areas under the roof, including garages and covered porches):
41282 Initial CV

Zone _____ Height 20 FT Initial CV

Setbacks (front yard) 20 FT (side yard) 10 FT (rear yard) 54 FT Initial _____

Contractor Information

Name: Western Trades Construction

Mailing address: 485 E 500 N Providence, UT 84332

Telephone: 435-999-9686

Email: Chris@westerntrades.net

Stormwater Notice of Intent (NOI) Information

NOI No. UTR UTRH00702 Permit issued to: Ascentive Homes

If this construction will occur in an approved subdivision, you may be able to use the NOI permit taken out by the development contractor or the developer. If you have to obtain your own NOI permit, please visit: <https://secure.utah.gov/account/log-in.html>. You will create a log in and then access the Storm Water Permit Issuance System. There is a \$150 NOI fee, paid directly to the state when you file your permit.

Property owner and contractor shall have responsibility to determine grades, and final placement and elevations of footings/foundations.

Property owner and contractor shall be responsible for compliance with all state, national and local building codes and ordinances.
Initial CV Name Chris

Approval by the city of any application submittal or paperwork does not alleviate the owners from their responsibility to understand and conform to local, state and federal laws. Providence City's approval is not intended to and cannot be construed to allow any laws to be violated.
Initial CV

By signing this document, you agree that Providence City will bill you for any and all professional firm fees as they arise throughout the approval process. This is in addition to application fees. All subdivisions require engineering review throughout the approval process, such as but not limited to reviews of development agreements, construction drawings, preliminary and final plats, and inspections. These services are billed by our city engineer at an hourly rate. Some subdivision applications may also require legal review. Other applications, such as but not limited to conditional uses, may also require engineering and/or legal review at the City's discretion. You agree to reimburse the City for all such costs, required in order to process your application. Initial CV

All Applicants Must Read the Following Before Signing This Application

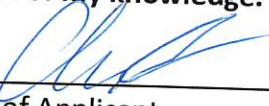
The granting of a zoning permit does not override any federal, state, or local building code or authorize any individual to violate any local law or ordinance. Approval of this permit does not constitute a representation by the City that it will be liable for any issues arising from the construction of homes and other structures in a Sensitive or Hazard Area. It is the responsibility of the property owner to comply with all relevant local, state, and federal laws and regulations, including but not limited to Providence City Code 10-5 outlined below: Sensitive and Hazard Areas:

1. **JURISDICTIONAL WETLANDS:** As Defined by the US Army Corps of Engineers
2. **STEEP SLOPES:** Where the rise or fall of the land is equal to or exceeds 30% over a horizontal distance of 50 feet or greater measured perpendicular to the contour lines.
3. **NATURAL WATERWAYS OR OPEN WATER:** Including but not limited to: rivers, creeks, or streams. Identified as those areas where surface waters flow sufficiently to produce a defined channel or bed.
4. **FLOODPLAINS:** See definitions in Chapter 16 Section 3 of this Title.

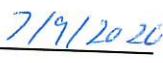
5. CRUCIAL WILDLIFE HABITAT AREAS: As identified by the State Division of Wildlife Resources (DWR)
6. GEOLOGICAL HAZARD AREAS: Earthquake fault lines or areas prone to debris flows, landslides, high or extreme liquefaction potential, and rock falls as identified by the US Geological Survey (USGS)
7. WILDFIRE HAZARD AREAS: Areas of the City designated as having moderate to extreme potential for wildfire hazards as identified by the City.
8. HAZARD WATER TABLE AREA: An area where potential ground water levels may occur within 12 feet of the natural grade.

By submitting this application, I affirm that I have read and understand the Title 10 Chapter 5 requirements for construction on property in the Sensitive or Hazard Area. I understand that the City is not liable for any issues which may arise because of the construction of structures in the Sensitive or Hazard Areas of the City. The property owner and their agents assume all liability for placing structures in this area of the City. I hereby certify that I am the property owner or authorized agent and I have read and examined this application and understand that the City has no liability. I accept responsibility for all soils and hazardous conditions on the site.

I declare under penalty of perjury that I am making this application of my own free will and choice and that the statements, answers, and documents submitted in connection with this application are true and correct to the best of my knowledge.


Signature of Applicant


Chris Williams
Printed Name


7/9/2020
Date



PROVIDENCE CITY BUILDING DIVISION CONSTRUCTION POLICIES
(Required for all zoning permit applications)

1. Zoning requirements

- a. Site plan required to be on site at footing inspection
- b. Property corners to be marked and staked for inspection

2. Lot ID

- a. Posting of a lot ID sign is required during construction for inspections and emergency services. This sign is provided by the City and shall be posted by the first scheduled inspection and visible from the street.

3. Toilets

- a. The IPC and OSHA require a toilet on site during construction and in place prior to the first inspection. This has to be accessible to all workers in the area and requires the cooperation of all.

4. Water Meter

- a. Unauthorized use of City water will result in a fine and a stop work order on the property.
- b. Meter and sewer clean outs are not allowed to be encased or surrounded in concrete. (Contact the Public Works for the required specs.) The moving cost will be the responsibility of the owner.

5. Streets/Sidewalks

- a. No material will be allowed on public streets or sidewalks. "Material" is defined as construction products, or any size or dimension of aggregate. (See Providence City's specs.)
- b. Dirt piled over curb and sidewalk requires a minimum 4" pipe installed to allow drainage to the gutter. This temporary (180 days) blockage to the sidewalk requires safety tape or cones to divert traffic.
- c. All sidewalks, curbs, gutters, and streets associated with the property are to be kept clean during construction with a final cleaning required prior to final occupancy.
- d. Construction sites should be kept clean and all debris contained to that site.

6. Elevations

- a. I accept responsibility for all the soils and hazard conditions of the site. Approval of this permit does not constitute a representation by the City that the building at any specified elevation will solve any ground water, slope or hazard condition. The solution to this problem is the sole responsibility of the permit applicant, agent, or property owner.

7. Final Occupancy

- a. Occupying the building prior to final occupancy will result in revocation of the \$500 power bond. After the initial inspection, the Building Official will determine whether any furniture can be moved into the house or garage.

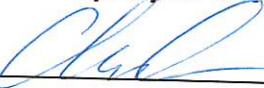
8. Temporary Occupancy

- a. Will only be issued with special permission. Temporary permits will expire after 30 days of issue and the construction bond will be forfeited if work is not completed

9. Permits

- a. Plan review and permit fees are good for 180 days. Only the permit portion will be refunded, after a written letter of request is received. No fees will be refunded after this period has expired.

By signing below, I state that I have read and agree to the above terms and understand that I am the responsible party for the information contained on this sheet.


Signature

Chris Williams
Printed Name

Associate Hayes
On Behalf Of


Date

Owner addresses of adjacent properties

Property: 530 Sarah Street, Providence, UT 84332

Owner: Sarah Street LLC

540 W Golf Course Rd STE B1

Providence, UT 84332

Property: 691 E 525 N, Providence, UT 84332

Owner: Joseph E & Tammy Jenkins

691 E 525 N

Providence, UT 84332



GIS PARCEL SUMMARY

Not Authoritative — For Preliminary Review Only

Parcel Number: 02-295-0318

Property Address: 677 E 0525 N
PROVIDENCE

Tax Roll Acreage: 0.28

Owner Name: ASCENTIVE HOMES LLC

Owner Address: 4345 CORPORATE CTR STE 200
N LAS VEGAS, NV 89030-7551

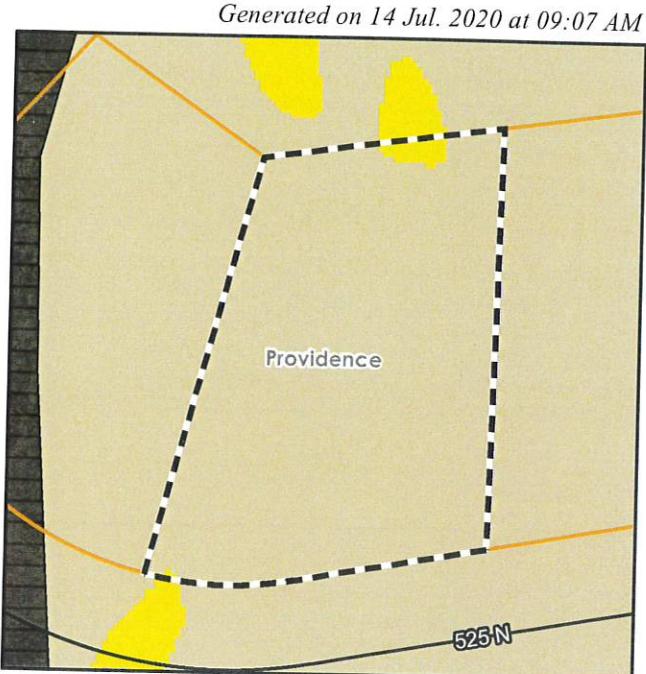
Jurisdiction: Providence

Future

Annexation Area: n/a

Base Zone: Contact Providence for Zoning

Overlay Zone: n/a



Comprehensive maps can be found
at www.cache-county.org/gis

Initial Parcel Incorporated Area

Legality Review: Contact Providence for Applicable Regulations

NOTE: Parcel legality does **NOT** guarantee that a parcel or lot is buildable; it is only one step in the development process. All other requirements must still be met. Parcel legality should be verified before submitting a land use application.

Areas That May Require Further Analysis

Moderate Slopes

Landslides

Wildfire Hazard Areas

This overview is based on the information in the Cache County GIS databases. Please verify the potential presence of areas requiring further analysis with the County's webmaps. Sections 17.10, 17.17, and 17.18 of the Cache County Land Use Ordinance contain the development standards and requirements associated with these areas. The definition of "Parcel/Lot" in Section 17.07.040 outlines parcel legality.

Cache County assumes no liability for any errors, omissions, or inaccuracies in the information provided regardless of the cause of such or for any decision made, action taken, or action not taken by the user in reliance upon any maps or information provided herein. All datasets may contain errors. The information shown here is not intended to replace evaluation by a competent, licensed professional. In particular, the parcel boundaries are representational only and are not legal definitions of real property, nor are they intended to replace a land survey by a licensed surveyor.



August 4, 2020

Providence City
164 North, Gateway Dr.
Providence, Ut 84332

RE: Conditional Use Review, Hollows lot #18, 677 East 525 North, Providence Ut.

The above-named site plans have been submitted to the Logan Fire Department for a fire and life safety review. This review was made in the interest of the fire safety provisions and regulations as adopted by the State of Utah and in accordance with the International Fire Code. This review is not considered comprehensive nor regarded as sanctioning any code deficiencies not identified. The ultimate responsibility for compliance with the applicable codes, standards and ordinances rests with the owner.

This project was reviewed using 2018 IFC, 2006 Utah Wildland-Urban Interface Code and Providence City Code Title 10, Chapter 5 for Hazard Wildfire Area, and has been found to meet the intent of the codes.

This project is being recommended to Providence City for approval.

The following comments document the review process:

Access

(IFC 503.1.1) Fire Apparatus Access shall extend to within 150 feet of all portions of the facility as measured by an approved route around the exterior of the building.

- **Access approved at subdivision review**

Fire Hydrant Locations and number of Hydrants

(IFC 507.5.1) Fire Hydrants shall be located within 400 feet of the building as measured by an approved route around the exterior of the building. Exception allows for the distance to be increased to 600 feet for R-3 occupancies.

- **Fire hydrant location approved at subdivision review**

Fire Water Flow

(IFC 507.1) An approved water supply capable of supplying the required fire flow for fire protection shall be provided to premises upon which facilities, building or portions of buildings are hereafter constructed or moved into or within the jurisdiction. (IFC 507.3) Fire flow requirements for buildings or portions of building and facilities shall be determined by an approved method.

- The building appears to be approx. 4,282 sq. ft. in size. According to Table B105.1 and B105.2, the fire flow for a combined fire area 4,282 sq. ft. of type V-B is 1,750 GPM at 20 PSI. Fire Flow requirements are subject to change due to separation of fire areas, type of construction, and the installation of fire suppression system.
- **There are two fire hydrants within 600 feet of the proposed site.**
- **Hydrant #527 closest to the building site has approximately 2,286 GPM at 20 PSI and is adequate for this size of construction**

2006 Utah Wildland-Urban Interface Code

SECTION 506 Class 3 - Ignition-resistant Construction:

506.1 General. Class 3 ignition-resistant construction shall be in accordance with Sections 506.

*506.2 Roof covering. Roofs shall have at least a Class A covering, Class C roof assembly or an approved noncombustible roof covering. For roof coverings where the profile allows a space between the roof covering and roof decking, the space at the eave ends shall be fire-stopped to preclude entry of flames or embers. (No wood shakes or combustible roofing used) Per phone discussion with Chris Williams at Western Trades, **Builder is planning on a Class A roof covering. Approved.***

*506.3 Unenclosed under-floor protection. Buildings or structures shall have all under-floor areas enclosed to the ground with exterior walls. Exception: Complete enclosure may be omitted where the underside of all exposed floors and all exposed structural columns, beams and supporting walls are protected as required for exterior 1-hour fire-resistance-rated construction or heavy timber construction. (Per County Fire Marshal - Soffits to be installed as to close underside of combustible decks and supported structures) Per phone discussion with Chris Williams at Western Trades - **Builder is planning on closing all underfloor decks and eaves with soffits. Approved.***

*506.4 Vents. Attic ventilation openings, soffit vents, foundation or under-floor vents or other ventilation openings in vertical exterior walls and vents through roofs shall not exceed 144 square inches each. Such vents shall be covered with noncombustible corrosion resistant mesh with openings not to exceed 1/8 inch. Per phone discussion with Chris Williams at Western Trades - **Home Builder is planning on installing 1/8" mesh screen on all openings. Approved.***

Providence City Code Title 10, Chapter 5 for Hazard Wildfire Area

Property owners are encouraged to implement the following:

- Construct the roof with fire-resistant materials like tile or metal, asphalt or fiberglass shingles. Clean roof surfaces and gutters of pine needles, leaves, branches, etc. regularly to avoid accumulation of flammable materials.
- Inspect your property regularly, clearing dead wood and dense vegetation from at least 30' around your house. Rake piles of leaves and twigs. If on a hill, more space will be needed to protect your home. A fuel break should be maintained around all structures.
- Move firewood away from the house or attachments like fences or decks.
- Cover vents with wire mesh no larger than 1/8 of an inch to keep sparks from entering your home through vents.
- Driveways should be wide enough for firefighting equipment to maneuver.

Hydrant information was received on 09.05.19 and report completed and turned in on the same date.

If you have any questions, please call me.

Respectfully,

FIRE DEPARTMENT

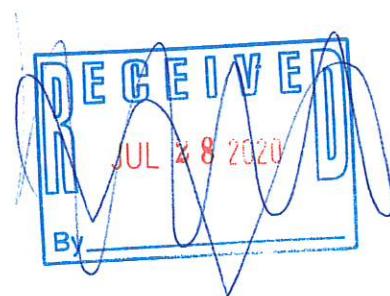
Aaron Walker
Deputy Fire Marshal/Fire Inspector
Logan Fire Department
435-716-9516

Mitigation Strategies

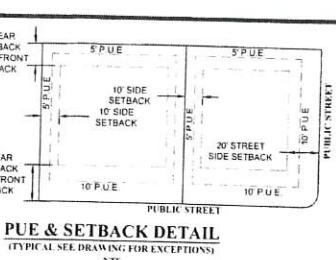
PH3-18
677 E 525 N
Providence, UT 84332

The home is designed and engineered to fit the grade of the lot and prevent landslides.

Prepared by:
-Quinton Hall(Foreman) Western Trades Construction



2019-3204



PROVIDENCE HOLLOW SUBDIVISION PHASE 3

(INCLUDES THE VACATION OF PARCEL "C" & A PORTION OF PARCEL "D", LITTLE BALDY SUBDIVISION)
LOCATED IN THE SE1/4 OF SECTION 2, T11N, R1E, SLB & M
PROVIDENCE, UTAH

VICINITY MAP

CURVE TABLE

| CURVE # | RADIUS | DELTA | LENGTH | CHORD DIRECTION | CHORD LENGTH |
|---------|--------|------------|--------|-----------------|--------------|
| C1 | 338.00 | 24°52'13" | 146.72 | S50°37'25"E | 145.57 |
| C2 | 267.00 | 118°41'18" | 553.09 | N82°28'03"W | 459.37 |
| C3 | 333.00 | 72°51'4" | 43.52 | N27°02'22"W | 43.48 |
| C4 | 330.00 | 39°50'21" | 229.46 | N69°02'02"W | 224.86 |
| C5 | 338.00 | 20°18'57" | 119.85 | N52°54'03"E | 119.32 |
| C6 | 338.00 | 4°33'16" | 26.87 | N40°27'56"E | 26.86 |
| C7 | 267.00 | 21°46'57" | 101.51 | N49°43'47"E | 100.90 |
| C8 | 267.00 | 26°24'19" | 123.05 | N77°19'25"E | 121.96 |
| C9 | 267.00 | 31°19'37" | 145.99 | S77°57'37"E | 144.17 |
| C10 | 267.00 | 23°42'02" | 110.45 | S50°26'47"E | 109.66 |
| C11 | 267.00 | 15°28'23" | 72.10 | S30°51'35"E | 71.89 |
| C12 | 123.00 | 0°15'04" | 5.41 | N49°53'31"E | 5.41 |
| C13 | 15.00 | 98°15'01" | 25.72 | S81°07'31"E | 22.68 |
| C14 | 183.00 | 3°59'13" | 114.94 | S49°59'37"E | 113.00 |
| C15 | 183.00 | 24°06'50" | 77.02 | N80°02'38"W | 76.45 |
| C16 | 183.00 | 8°18'57" | 26.56 | S83°44'29"W | 26.54 |
| C17 | 117.00 | 23°21'46" | 47.71 | S88°44'07"E | 47.38 |
| C18 | 117.00 | 45°03'14" | 92.00 | S54°31'37"E | 89.65 |
| C19 | 15.00 | 77°15'58" | 20.33 | S6°37'59"W | 18.73 |
| C20 | 123.00 | 4°33'38" | 98.26 | S42°58'59"W | 98.24 |
| C21 | 208.00 | 10°00'04" | 36.31 | S35°41'58"W | 36.26 |
| C22 | 208.00 | 25°59'10" | 94.34 | S17°42'21"W | 93.53 |
| C23 | 208.00 | 5°02'46" | 18.32 | N2°11'23"E | 18.31 |
| C24 | 142.00 | 2°38'30" | 6.55 | N0°59'15"E | 6.55 |
| C25 | 142.00 | 38°23'30" | 95.15 | S21°30'15"W | 93.38 |
| C26 | 116.70 | 3°29'05" | 70.98 | S42°26'33"W | 70.97 |
| C27 | 15.00 | 103°48'55" | 27.18 | NK3°54'27"W | 23.61 |
| C28 | 133.00 | 25°22'07" | 58.89 | S44°29'12"E | 58.41 |
| C29 | 15.00 | 47°15'28" | 12.37 | S33°34'44"E | 12.02 |
| C30 | 60.00 | 31°31'50" | 33.02 | S25°51'26"E | 32.60 |
| C31 | 60.00 | 65°16'09" | 68.35 | N74°15'25"W | 64.71 |
| C32 | 60.00 | 62°38'06" | 66.64 | S41°17'28"W | 63.27 |
| C33 | 60.00 | 62°35'23" | 65.54 | S23°49'17"E | 62.33 |
| C34 | 60.00 | 57°23'31" | 60.10 | S81°48'44"E | 57.62 |
| C35 | 15.00 | 58°33'13" | 15.33 | S81°13'53"E | 14.67 |
| C36 | 67.00 | 20°02'38" | 23.44 | S40°17'50"E | 23.32 |
| C37 | 15.00 | 81°01'24" | 21.22 | N83°14'25"E | 19.49 |
| C38 | 116.70 | 0°56'39" | 19.23 | N49°31'45"E | 19.23 |
| C39 | 33.00 | 10°50'22" | 62.43 | S54°32'02"E | 62.34 |
| C40 | 33.00 | 16°33'30" | 95.37 | N68°13'58"W | 95.04 |
| C41 | 33.00 | 12°26'29" | 71.66 | S82°45'58"E | 71.52 |
| C42 | 120.00 | 2°54'33" | 60.93 | N48°32'46"E | 60.92 |
| C43 | 120.00 | 6°23'30" | 133.87 | N43°52'45"E | 133.80 |
| C44 | 100.00 | 28°18'00" | 49.39 | N46°09'06"W | 48.89 |
| C45 | 150.00 | 68°25'00" | 179.11 | S66°12'30"E | 168.66 |
| C46 | 175.00 | 41°02'00" | 125.33 | N20°11'00"E | 122.67 |
| C47 | 142.00 | 41°02'00" | 101.70 | N20°11'00"E | 99.54 |
| C48 | 208.00 | 41°02'00" | 148.96 | N20°11'00"E | 145.80 |
| C49 | 117.00 | 68°25'00" | 139.71 | S66°12'30"E | 131.56 |
| C50 | 183.00 | 68°25'00" | 218.52 | S66°12'30"E | 205.77 |
| C51 | 60.00 | 140°12'29" | 146.83 | N80°11'45"W | 112.84 |
| C52 | 25.00 | 80°18'30" | 35.04 | N9°50'48"E | 32.24 |
| C53 | 25.00 | 80°52'46" | 35.29 | N89°33'37"W | 32.43 |

1. PURSUANT TO UTAH CODE ANN. § 53-3-27 THIS PLAT CONVEYS TO THE OWNER(S) OR OPERATORS OF UTILITY FACILITIES A PUBLIC UTILITY EASEMENT ALONG WITH ALL THE RIGHTS AND DUTIES DESCRIBED THEREIN.

2. PURSUANT TO UTAH CODE ANN. § 17-27A-003(A)(c)(ii) ROCKY MOUNTAIN POWER ACCEPTS DELIVERY OF THE PUE AS DESCRIBED IN THIS PLAT AND APPROVES THIS PLAT SOLELY FOR THE PURPOSE OF CONFIRMING THAT THE PLAT CONTAINS PUBLIC UTILITY EASEMENTS, BUT DOES NOT WARRANT THEIR PRECISE LOCATION. ROCKY MOUNTAIN POWER MAY REQUIRE OTHER EASEMENTS IN ORDER TO SERVE THIS DEVELOPMENT. THIS APPROVAL DOES NOT AFFECT ANY RIGHT THAT ROCKY MOUNTAIN POWER HAS.

(1) A RECORDED EASEMENT OR RIGHT OF WAY
(2) THE LAW APPLICABLE TO PRESCRIPTIVE RIGHTS
(3) TITLE 54, CHAPTER 8a, DAMAGE TO UNDERGROUND FACILITIES OR
(4) ANY OTHER PROVISION OF LAW.

UTILITY COMPANIES

DOMINION ENERGY* DATE 1/19/2018 ROCKY MOUNTAIN POWER DATE 1/19/2018
COMCAST CABLE DATE 1/19/2018 CENTURYLINK COMMUNICATIONS DATE 1/19/2018

*DOMINION ENERGY APPROVES THIS PLAT SOLELY FOR THE PURPOSE OF CONFIRMING THAT THE PLAT CONTAINS PUBLIC UTILITY EASEMENTS. DOMINION ENERGY MAY REQUIRE OTHER EASEMENTS IN ORDER TO SERVE THIS DEVELOPMENT. THIS APPROVAL DOES NOT CONSTITUTE AGRGATION OR WAIVER OF ANY EXISTING RIGHTS, OBLIGATIONS OR LIABILITIES PROVIDED BY LAW OR EQUITY. THIS APPROVAL DOES NOT CONSTITUTE ACCEPTANCE, APPROVAL OR ACKNOWLEDGMENT OF ANY TERMS CONTAINED IN THIS PLAT, INCLUDING GAS SERVICE. FOR FURTHER INFORMATION PLEASE CONTACT DOMINION ENERGY'S RIGHT-OF-WAY DEPARTMENT AT 1-800-366-8532.

civilsolutionsgroup inc.

CACHE VALLEY | P: 435.213.3762

UTAH VALLEY | P: 801.216.3192

info@civilsolutionsgroup.net

www.civilsolutionsgroup.net

APPROVED THIS 19 DAY OF JANUARY 2018 BY
PROVIDENCE CULINARY WATER AUTHORITY AND SANITARY SEWER AUTHORITY

R. L. Stetler, P.E. 1/19/18
CULINARY WATER AND SANITARY SEWER AUTHORITY

APPROVED AS TO FORM THIS 19 DAY OF JANUARY 2018
ATTORNEY APPROVAL

J. D. Miller, Esq. 1/19/18
CITY ATTORNEY

APPROVED THIS 19 DAY OF JANUARY 2018 BY
ENGINEER'S CERTIFICATE

M. A. M. 1/19/18
CITY ENGINEER

RECEIVED

JUL 28 2020

By

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1/20/2019 1:27 PM

RECORDED # 1/21/2019
STATE OF UTAH, COUNTY OF CACHE. RECORDED AND INDEXED AT THE REQUEST
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OF OWNER

PLAN R-2104a-015 | SITE PLAN | SHEET 1 OF 1
 WESTERN TRADES CONSTRUCTION
 677 EAST 525 NORTH
 PROVIDENCE, UTAH
 DATE: 6 MARCH 2020



SITE PLAN
 SCALE: 1"=10'

677 EAST 525 NORTH
 PROVIDENCE, UTAH

THIS SITE PLAN IS BASED ON INFORMATION PROVIDED TO HEARTHSTONE DESIGN BY OTHERS. ALTHOUGH EVERY EFFORT IS MADE TO ENSURE ACCURACY, WE ASSUME NO LIABILITY FOR THE PLACEMENT OF THE HOUSE ON THE LOT. IT IS THE RESPONSIBILITY OF THE BUILDER TO VERIFY ALL ACTUAL SITE CONDITIONS AS WELL AS COMPLIANCE WITH ALL LOCAL ORDINANCES, EASEMENTS, SETBACKS ETC.

SURFACE WATER SHALL DRAIN AWAY FROM THE HOUSE AT ALL POINTS. DIRECT THE DRAINAGE WATER TO THE STREET OR TO AN APPROVED DRAINAGE COURSE BUT NOT ONTO NEIGHBORING PROPERTIES. THE GRADE AWAY FROM FOUNDATION WALLS SHALL FALL A MINIMUM OF 6 INCHES WITHIN THE FIRST 10 FEET (5%).

ELEVATIONS (ASSUMED)
 TOP OF FTG = 90'-0"
 GARAGE = 98'-6"
 TOP OF FND. = 99'-0"
 MAIN FLOOR = 100'-0"



525 NORTH STREET



CITY SET
 THIS PLAN IS THE PROPERTY OF HEARTHSTONE DESIGN, INC. AND MAY NOT BE COPIED OR REPRODUCED WITHOUT WRITTEN PERMISSION OF HEARTHSTONE DESIGN, INC. THIS PLAN IS FOR THE USE OF THE BUILDER ONLY AND IS NOT FOR PUBLIC RELEASE. ANY OTHER USE IS PROHIBITED.

WINDOW WELLS MUST CONFORM TO
IRC R310.2.3 FOR EGRESS.
IF DEEPER THAN 44" FROM TOP OF
WELL TO TOP OF GRAVEL, INSTALL
A PERMANENT LADDER.

FOUNDATION NOTES:

1. PROVIDE (2) #4 BARS AT EACH SIDE AS WELL AS TOP AND BOTTOM OF EACH WINDOW AND DOOR OPENING IN FOUNDATION WALL, EXTEND 24" MIN. BEYOND CORNERS OF OPENING.
2. COORDINATE LOCATION OF ANCHOR BOLTS WITH MASONRY VENEER AND WALL PANEL OPENINGS AS REQUIRED.
3. HOLDOWN STRAPS TO BE CENTERED ON DIMENSION SHOWN, AND MUST BE COORDINATED WITH MASONRY VENEER.
4. TOP OF FOUNDATION TO BE 6" MIN. ABOVE FINISH GRADE.
5. REINFORCE PORCH SLAB PER DETAIL ON SHEET SI.
6. AT GARAGE DOOR OPENING PROVIDE CONTINUOUS FOOTING OR 8"x18" GRADE BEAM WITH (2) #4 BARS DOWELED INTO FOUNDATION WALL.
7. EXTERIOR DRAINS AT LANDINGS NEAR BASEMENT DOORS TO EXTEND 10' FROM FOUNDATION.
8. PROVIDE A CONCRETE ENCASED ELECTRODE, AVAILABLE FOR USE AS A GROUNDING ELECTRODE FOR THE HOUSE, WHICH MEETS THE REQUIREMENTS OF IRC E3611 (UPFC).

FOOTING NOTES:

1. ALL EXTERIOR FOOTINGS SHALL BE CONTINUOUS AND Poured MONOLITHIC.
2. MINIMUM FOOTING THICKNESS SHALL BE NOT LESS THAN 10", EXCEPT FOR FIREPLACE FOOTINGS, WHICH SHALL BE NOT LESS THAN 12".
3. ALL FOOTINGS TO BE ON UNDISTURBED, NATIVE SOIL, OR PROPERLY PREPARED STRUCTURAL FILL, WHICH MUST BE SPECIFIED BY GEOTECHNICAL ENGINEER.
4. FOOTINGS TO BE A MINIMUM OF FROST DEPTH BELOW NATURAL GRADE

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- a. VERIFY ALL DIMENSIONS
- b. REVIEW ALL STAIR REQUIREMENTS
- c. VERIFY COMPLIANCE WITH LOCAL BUILDING CODES
- d. VERIFY ACTUAL SITE CONDITIONS

ANY DISCREPANCIES ON THE PLANS MUST BE RESOLVED BY THE BUILDER PRIOR TO CONSTRUCTION.

HARTHSTONE DESIGN, INC. ASSUMES NO LIABILITY FOR ANY MODIFICATIONS MADE TO THIS PLAN BY ANY OTHER PARTY, INCLUDING BUT NOT LIMITED TO REDLINES, ADDITION OR DELETION OF NOTES AND/OR DETAILS, ETC. ANY ELECTRONIC MANIPULATION OF THESE PLANS IS PROHIBITED.

IF THE CONTRACTOR, IN THE COURSE OF HIS WORK FINDS ANY DISCREPANCIES BETWEEN THE PLANS AND THE PHYSICAL CONDITIONS OF THE SITE OR STRUCTURE, OR ANY ERRORS IN THE PLANS OR SPECIFICATIONS IT SHALL BE HIS RESPONSIBILITY TO IMMEDIATELY INFORM HARTHSTONE DESIGN, INC., WHO WILL PROMPTLY VERIFY AND, IF NECESSARY, CORRECT THE WORKING DRAWINGS.

THESE PLANS AND SPECIFICATIONS WERE DESIGNED FOR COMPLIANCE WITH STANDARD INTERPRETATION OF THE IBC/IRC 2018 CODE AS AMENDED BY THE STATE OF UTAH AND OTHER CODES HAVING JURISDICTION.

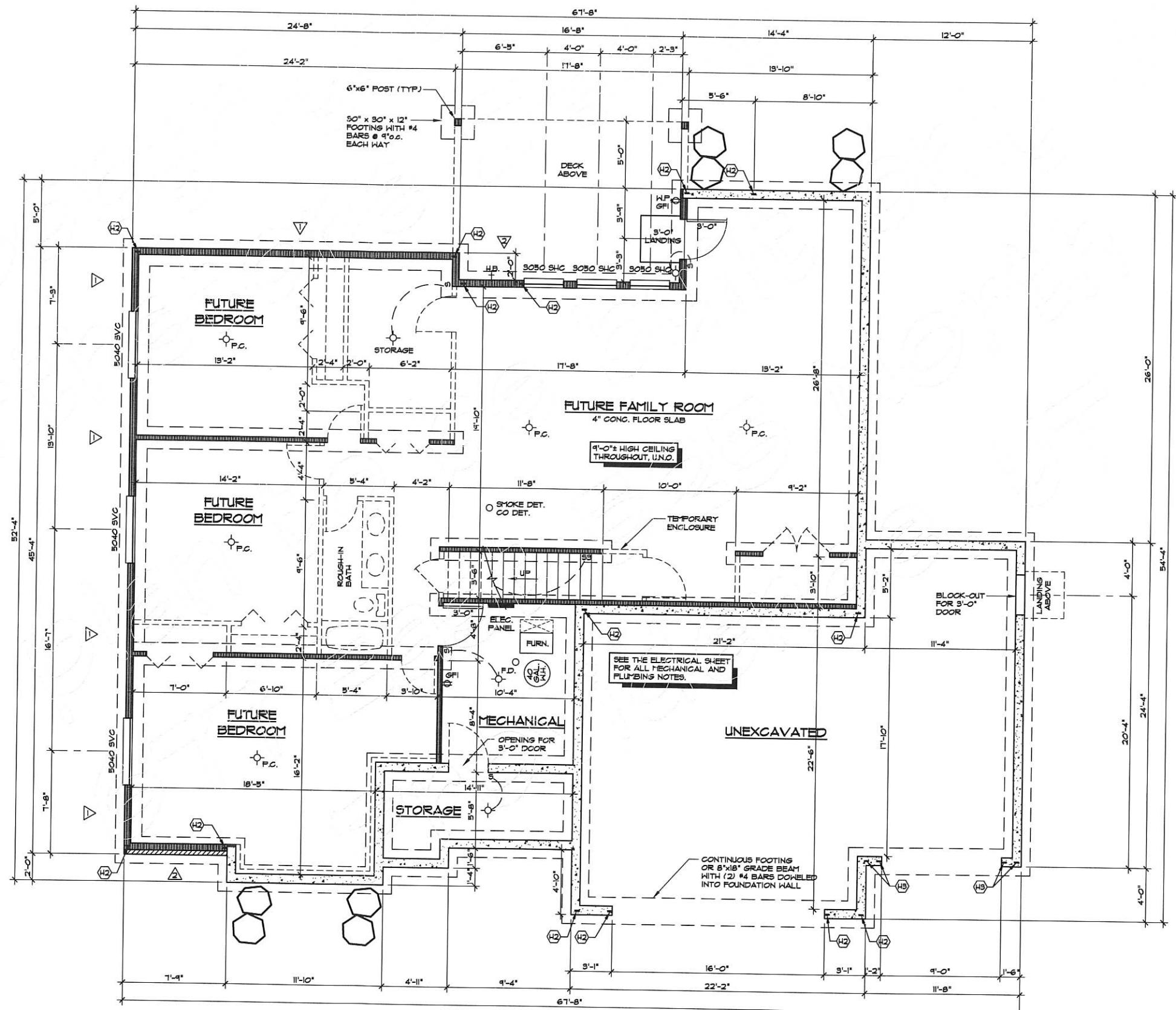
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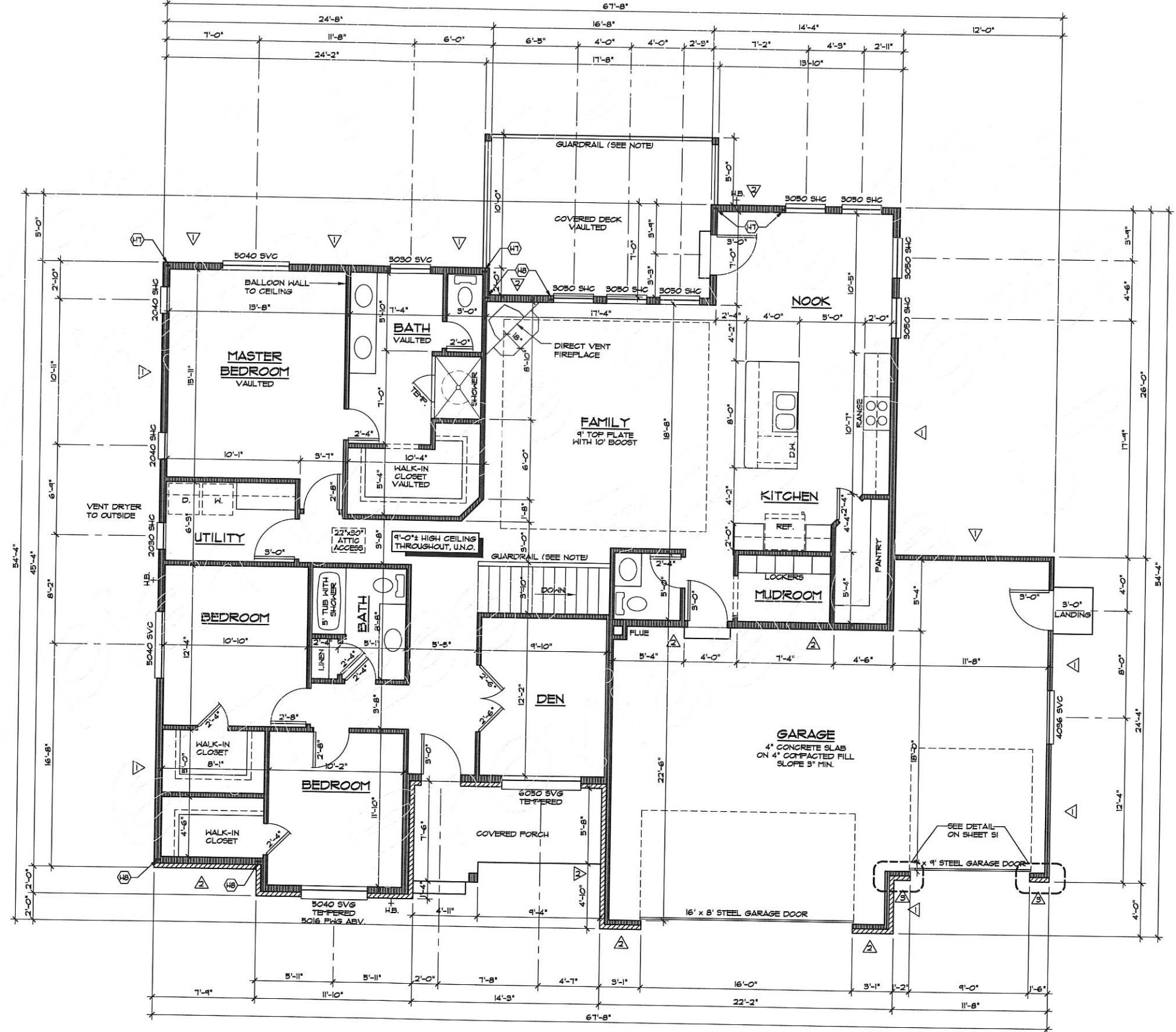
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FOOTING AND FOUNDATION PLAN

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

2189 S.F.



GUARDRAIL TO BE 36" HIGH (MIN) AND SHALL HAVE INTERMEDIATE RAILS SUCH THAT A SPHERE 4" IN DIAMETER CANNOT PASS THROUGH. HANDRAILS SHALL BE PROVIDED ON NOT LESS THAN ONE SIDE OF EACH FLIGHT OF STAIRS WITH 4 OR MORE RISERS. (R311.7.8)

MAIN FLOOR GENERAL NOTES:

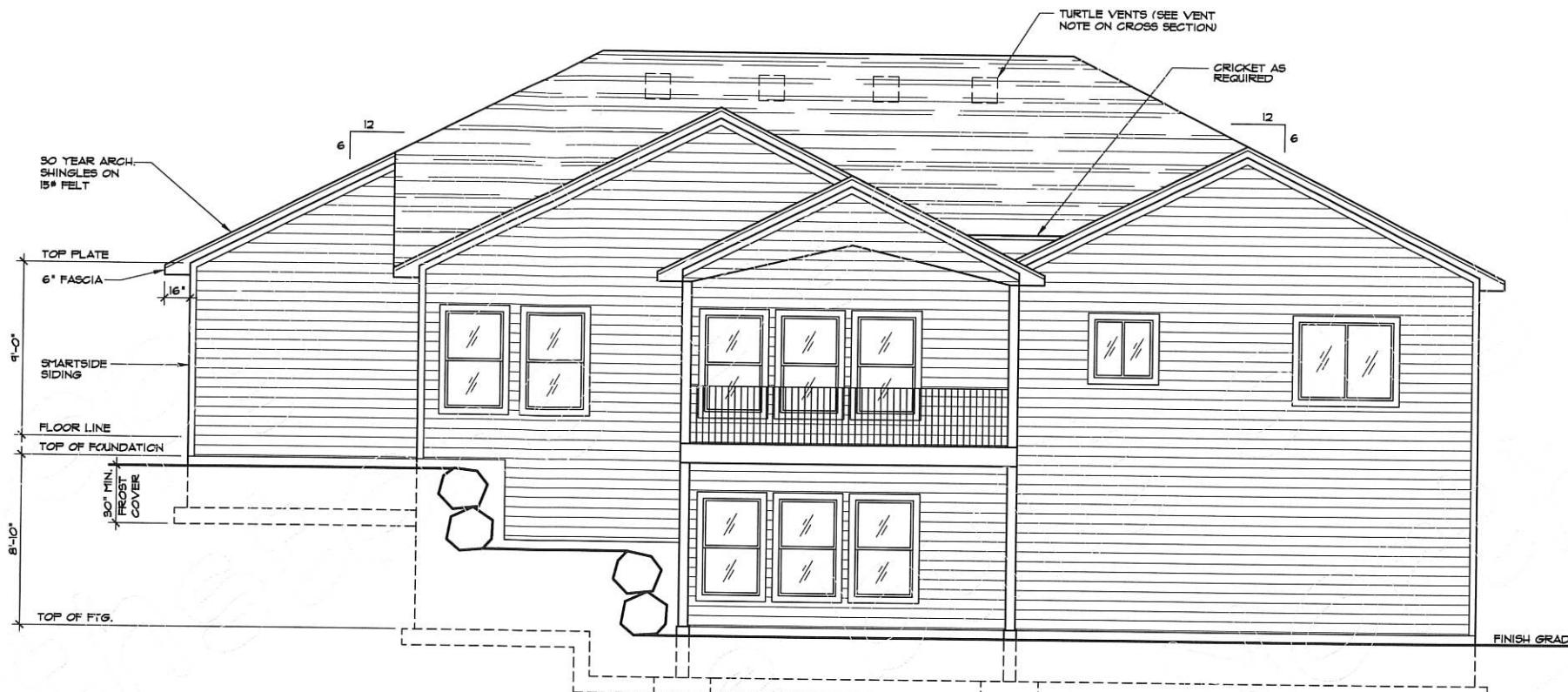
- ALL DIMENSIONS ARE TO ROUGH FRAMING. INTERIOR STUDHALLS ARE SHOWN AS 4" UNLESS NOTED OTHERWISE. EXTERIOR STUDHALLS ARE SHOWN AS 6" UNLESS NOTED OTHERWISE.
- DOOR FROM GARAGE TO HOUSE TO BE 20 MIN. LABELED, SELF-CLOSING, FIRE-RATED DOOR, WHICH MAY NOT OPEN INTO A SLEEPING ROOM.
- THE GARAGE SHALL BE SEPARATED FROM THE RESIDENCE AND ITS ATTIC AREA BY NOT LESS THAN 1/2" (12.7mm) GYPSUM BOARD APPLIED TO THE GARAGE SIDE. GARAGES BEING HABITABLE ROOMS SHALL BE SEPARATED FROM ALL HABITABLE ROOMS ABOVE BY NOT LESS THAN 5/8" (15.9mm) TYPE "X" GYPSUM BOARD FASTENED @ 6" o.c. ON CEILING (FIELD AND PERIMETER) WITH 1 1/8" 6d COATED NAILS OR EQUIVALENT DRYWALL SCREWS AND 7 1/2" o.c. ALL OTHER AREAS. (TABLE R302.6 AND TABLE R702.3.5)
- PROVIDE APPROVED ATTIC ACCESS TO ALL ATTIC AREAS THAT EXCEED 30 SQUARE FEET AND HAVE A VERTICAL HEIGHT OF 30" OR GREATER.
- SILL PLATES AND ANY OTHER LUMBER IN CONTACT WITH CONCRETE TO BE PRESSURE TREATED OR REDWOOD.
- THE UNDERSIDE OF ANY BAY OR CANTILEVER FLOOR SHALL BE SEALED AIRTIGHT WITH OSB, PLYWOOD OR SIMILAR MATERIAL. (R702.4.)
- ALL WINDOWS OVER TUBS SHALL BE TEMPERED UNLESS SILL HEIGHT IS A MINIMUM OF 5' ABOVE FLOOR OF TUB.

MISCELLANEOUS NOTES:

- A MINIMUM 4 MIL POLYETHYLENE VAPOR RETARDER IS REQ'D OVER THE INSIDE OF THE INSULATION AND UNVENTED CEILINGS. CONCRETE SLABS UNDER LIVING SPACE REQUIRE A 6 MIL POLYETHYLENE OR APPROVED VAPOR RETARDER WITH JOINTS NOT LAPPED LESS THAN 6" PLACED BETWEEN THE CONCRETE FLOOR SLAB AND THE BASE COURSE OF THE PREPARED SUB-GRADE IF NO BASE COURSE EXISTS. (R206.2.3)
- HAND GRIP PORTION OF HANDRAIL WITH A CIRCULAR CROSS SECTION SHALL HAVE AN OUTSIDE DIAMETER OF NOT LESS THAN 1 1/4" NOR MORE THAN 2", AND IF GREATER THAN 6 1/8" PERIMETER, PROVIDE GRASPABLE FINGER RECESSSES ALONG ITS LENGTH. IF A HANDRAIL IS NOT CIRCULAR, IT SHALL HAVE A PERIMETER OF NOT LESS THAN 4" AND NOT GREATER THAN 6 1/4" AND A CROSS SECTION OF NOT MORE THAN 2 1/4", WITH EDGES HAVING A RADIUS OF NOT LESS THAN 0.01". HANDRAILS REQ'D TO TERMINATE IN A SAFETY TERMINAL OR RETURN TO WALL.
- FLOOR OF GARAGE TO BE SLOPED TOWARD VEHICLE ENTRY DOOR.
- ALL CONCRETE EXPOSED TO WEATHER TO HAVE MIN. COMPRESSIVE STRENGTH OF 3000 PSI.
- SHOB CONFACTION AT ALL BACKFILLED AREAS.
- FASTENERS, INCLUDING NUTS AND WASHERS, FOR PRESSURE PRESERVATIVE AND FIRE-RETARDANT-TREATED WOOD SHALL BE OF HOT-DIPPED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER, EXCEPTION IS ONE-HALF-INCH (12.7mm) DIAMETER OR GREATER STEEL BOLTS. (R311.3)
- AUTOMATIC GARAGE DOOR OPENERS, IF PROVIDED SHALL BE TESTED IN ACCORDANCE WITH UL525. (R304.4)
- IF INSTALLED LAUNDRY CHUTE MUST BE EITHER OF APPROVED FIRE-RESISTIVE CONSTRUCTION OR HAVE A LINING OF NOT LESS THAN 26 GAUGE GALVANIZED SHEET METAL WITH ALL JOINTS LOCK-LAPPED. ALL OPENINGS INTO THE ENCLOSURE SHALL HAVE SELF-CLOSING 1 5/8" SOLID WOOD DOORS.
- OPENABLE WINDOWS TO HAVE 24" MIN. SILL HEIGHT (A.F.F.) WHEN DISTANCE FROM SILL TO FINISHED GRADE IS GREATER THAN 72", OR THE AREA BELOW 24" SHALL BE FIXED OR HAVE AN OPENING OR A GUARD WHICH DOES NOT ALLOW THE PASSAGE OF A 4" DIAMETER SPHERE. (R312.2)
- BOTTOM OF OPENING AT EGRESS WINDOWS TO BE A MAX. OF 44" A.F.F.

FRONT ELEVATION

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



REAR ELEVATION

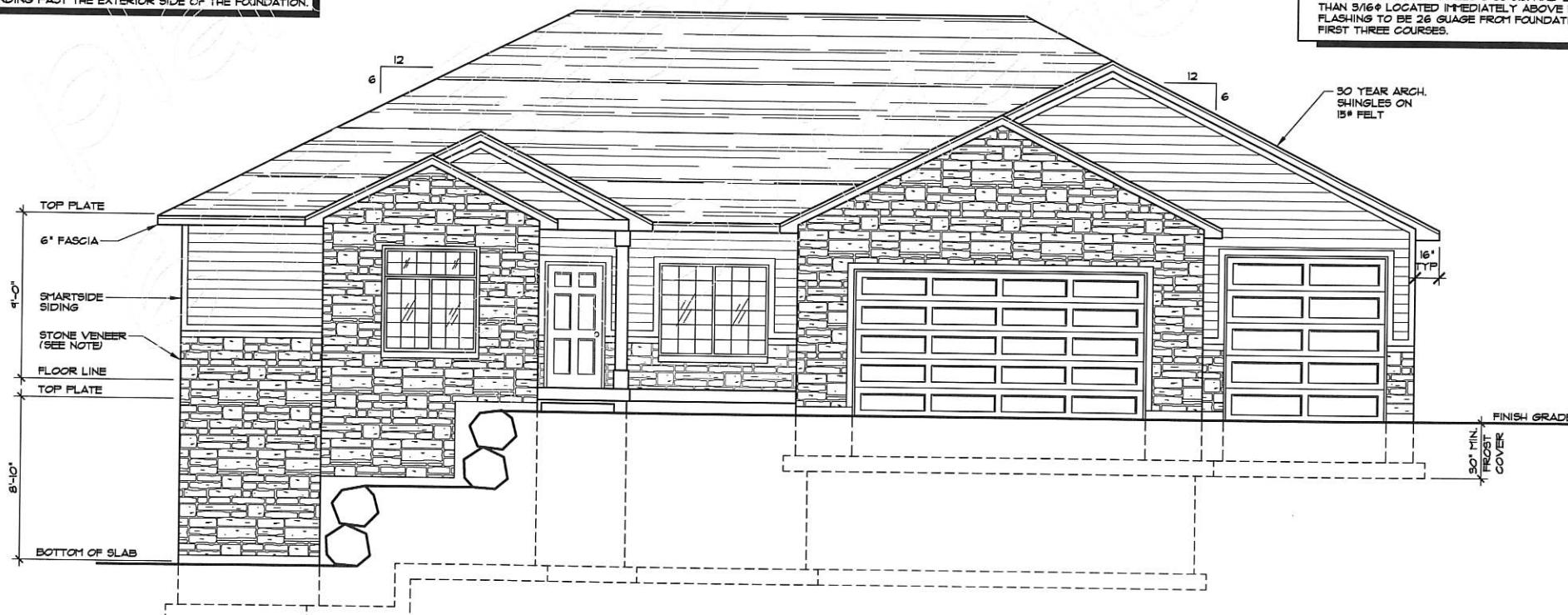
SCALE: 1/4"=1'-0"

APPROVED CORROSION RESISTANT FLASHING SHALL BE APPLIED SINGLE FASHION IN A MANNER TO PREVENT MOISTURE FROM ENTERING THE WALL OR TO REDIRECT IT TO THE EXTERIOR. FLASHING SHALL BE INSTALLED AT THE PERIMETERS OF EXTERIOR DOOR AND WINDOW ASSEMBLIES, PENETRATIONS AND TERMINATIONS OF EXTERIOR WALL ASSEMBLIES, EXTERIOR WALL INTERSECTIONS WITH ROOFS, CHIMNEYS, PORCHES, DECKS, BALCONIES AND SIMILAR PROJECTIONS AND AT BUILT-IN GUTTERS AND SIMILAR LOCATIONS WHERE MOISTURE COULD ENTER WALL. FLASHING WITH PROJECTED FLANGES SHALL BE INSTALLED ON BOTH SIDES AND THE ENDS OF COPINGS, UNDER SILLS AND CONTINUOUSLY ABOVE PROJECTED TRIM. FLASHING SHALL BE INSTALLED AT THE INTERSECTION OF THE FOUNDATION TO STONE, BRICK, VENEER, SIDING OR BRICK VENEER. THE FLASHING SHALL BE AN APPROVED CORROSION-RESISTANT FLASHING WITH A 1/2" DRIP LEG EXTENDING PAST THE EXTERIOR SIDE OF THE FOUNDATION.

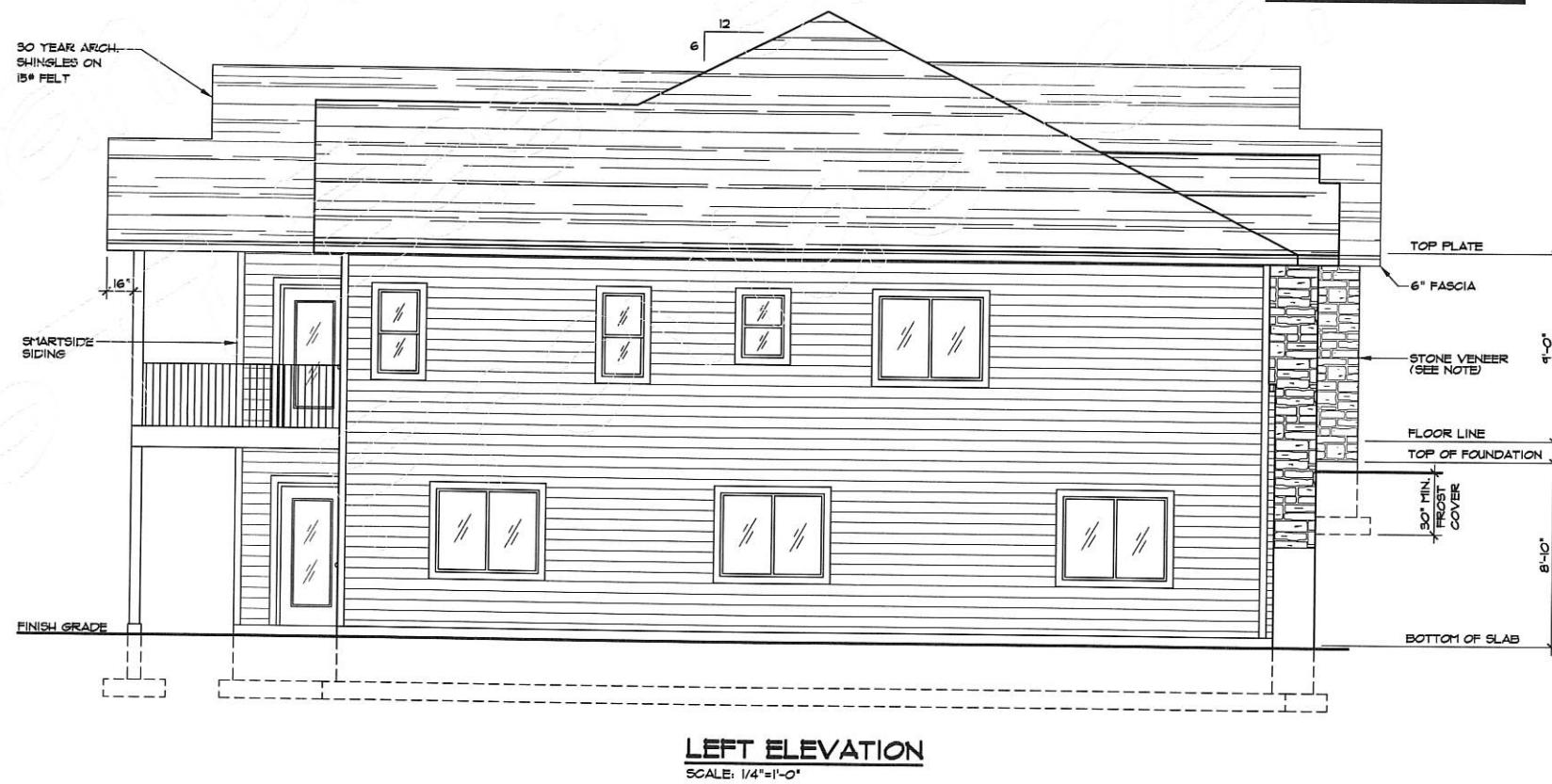
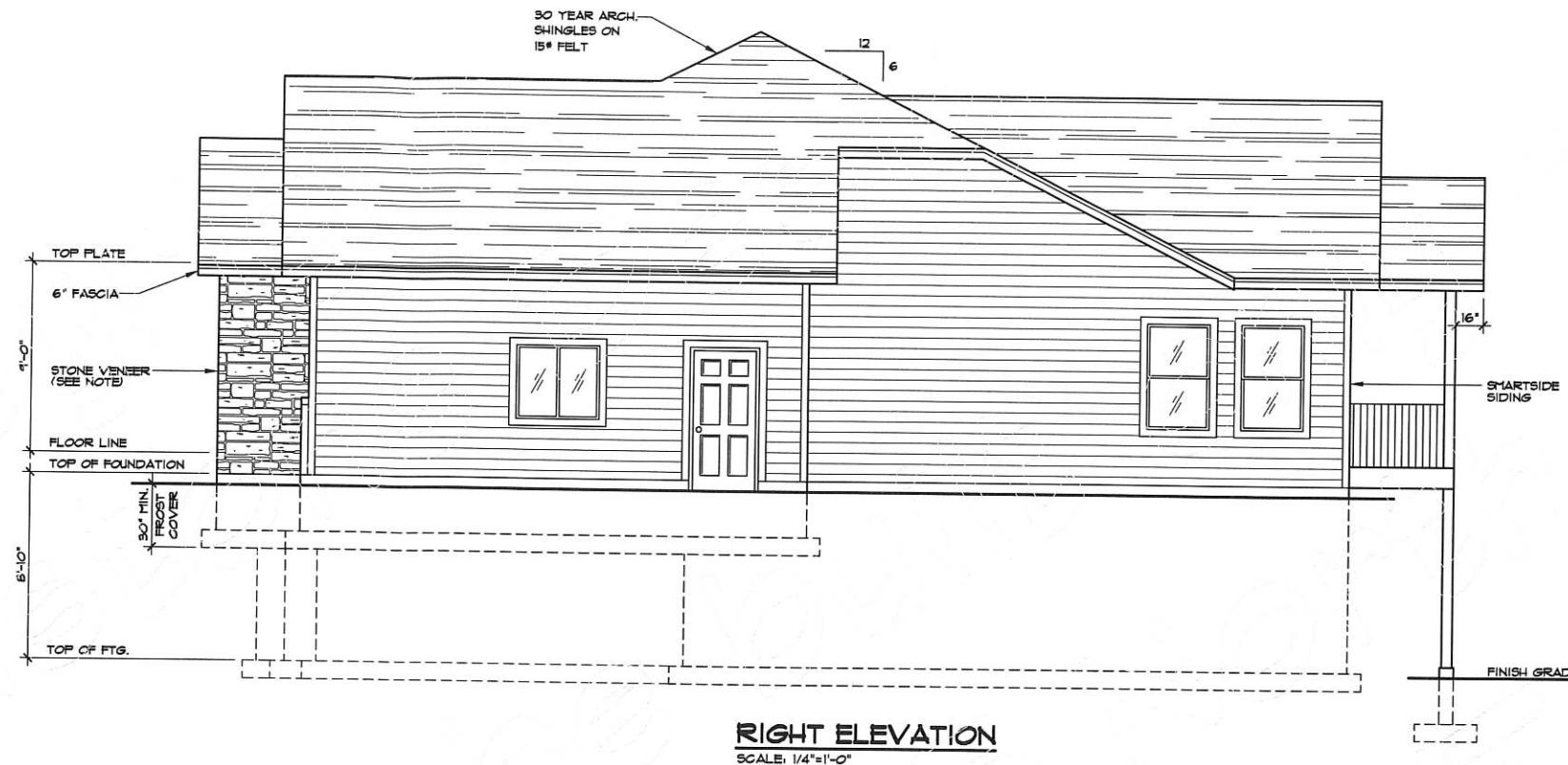
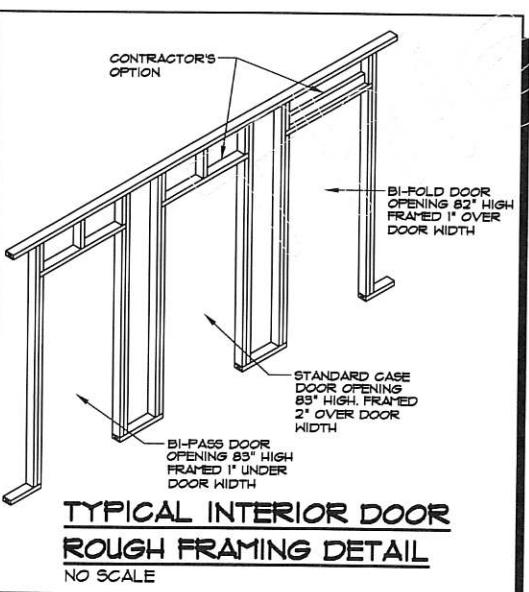
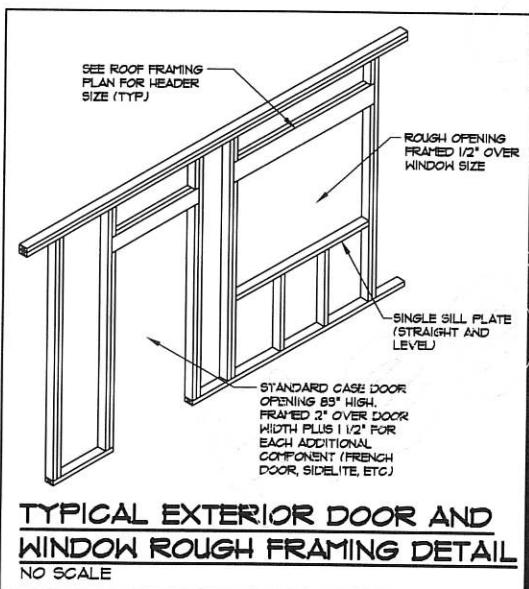
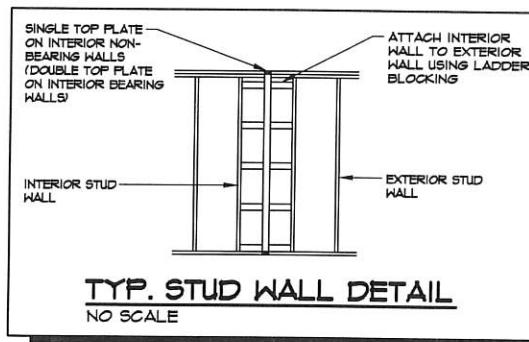
PROVIDE BULKING AND MIN. 1/4" COUNTER FLASHING AT ALL EXTERIOR DOORS/WINDOWS PER MANUFACTURER INSTALLATION REQUIREMENTS.

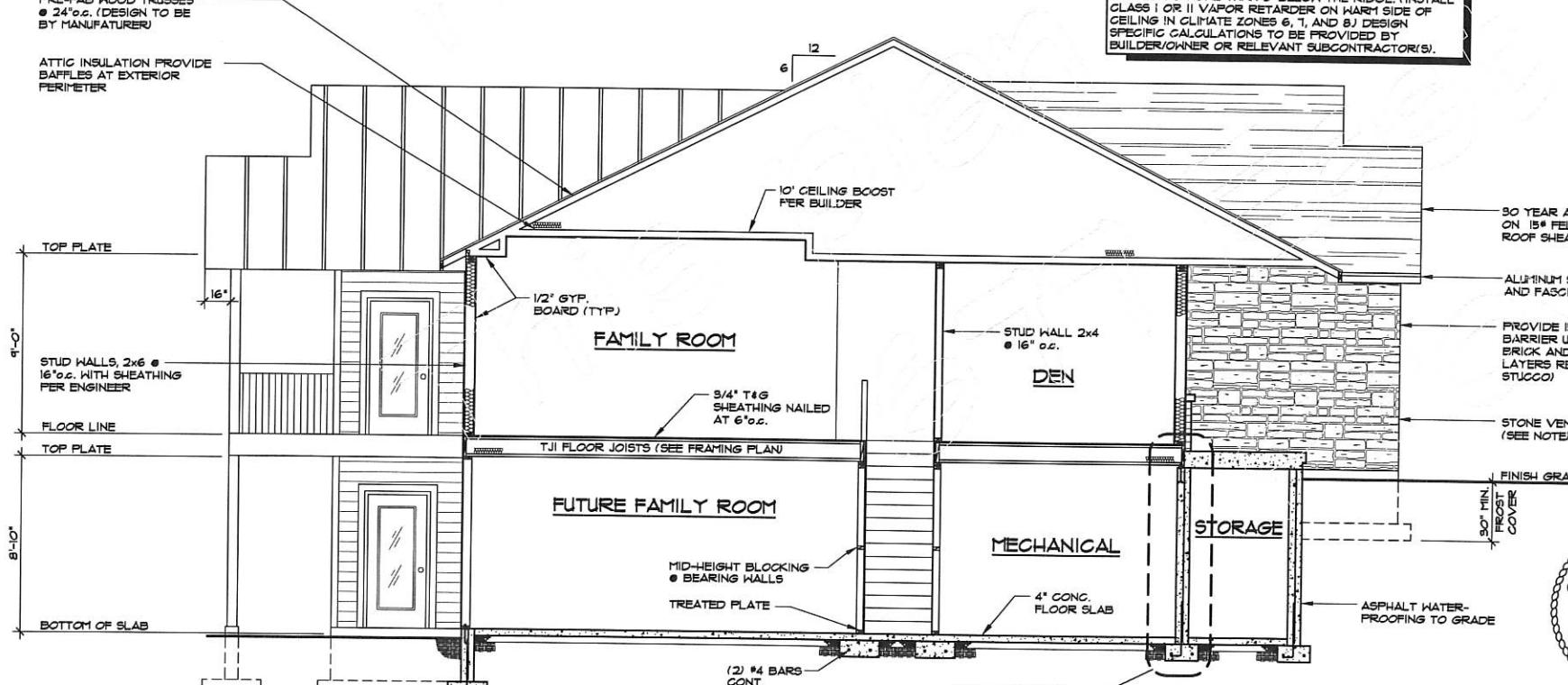
GUARDRAIL TO BE 36" HIGH (MIN) AND SHALL HAVE INTERMEDIATE RAILS SUCH THAT A SPHERE 4" IN DIAMETER CANNOT PASS THROUGH. HANDRAILS SHALL BE PROVIDED ON NOT LESS THAN ONE SIDE OF EACH FLIGHT OF STAIRS WITH 4 OR MORE RISERS. (REF 1.18)

MASONRY NOTE:
1. MASONRY VENEER SHALL BE ANCHORED TO THE SUPPORTING WALL STUDS WITH CORROSION RESISTANT METAL TIES OF NOT LESS THAN 22 GAUGE/1/8" SPACED NOT MORE THAN 24" O.C. HORIZONTAL AND SUPPORT A MAXIMUM OF 2 SQUARE FEET OF WALL AREA. AROUND WALL OPENINGS GREATER THAN 16" ADDITIONAL TIES ARE REQUIRED TO BE SPACED A MAXIMUM OF 36" O.C. AND BE WITHIN 12" OF THE OPENING. PROVIDE 26 GAUGE FLASHING FROM FOUNDATION UP FIRST 3 COURSES. CULTURED STONE TO BE INSTALLED PER MANUFACTURERS SPECIFICATIONS.
2. FOR BRICK SUPPORT OVER OPENINGS, SEE VENEER LINTEL REQUIREMENTS OFIRC R105.8.3.
3. WEEPHOLES SHALL BE PROVIDED IN THE OUTSIDE WYTHE OF MASONRY WALLS @ 55" O.C. AND BE NO LESS THAN 3/16" LOCATED IMMEDIATELY ABOVE FLASHING. FLASHING TO BE 26 GAUGE FROM FOUNDATION UP FIRST THREE COURSES.

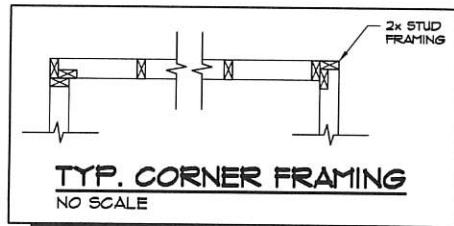


CITY SET
2020 EDITION
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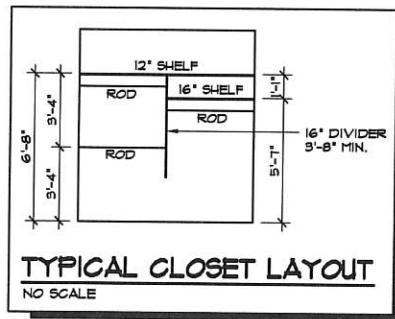




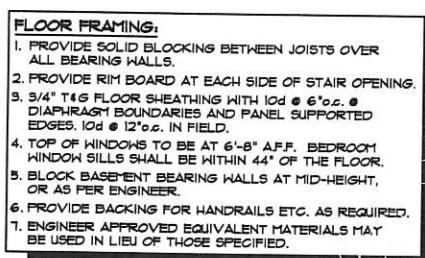
BUILDING SECTION



TYP. CORNER FRAMING

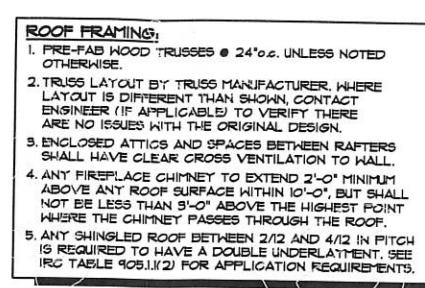


TYPICAL CLOSET LAYOUT



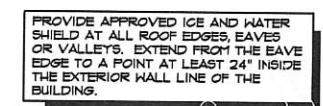
FLOOR FRAMING:

1. PROVIDE SOLID BLOCKING BETWEEN JOISTS OVER ALL BEARING WALLS.
2. PROVIDE RIM BOARD AT EACH SIDE OF STAIR OPENING.
3. 3/4" T&G FLOOR SHEATHING WITH IOD @ 6'0" C. @ DIAPHRAGM BOUNDARIES AND PANEL SUPPORTED EDGES. IOD @ 12'0" C. IN FIELD.
4. TOP OF WINDOWS TO BE AT 6'-8" AFF. BEDROOM WINDOW SILLS SHALL BE WITHIN 44" OF THE FLOOR.
5. BLOCK BASEMENT BEARING WALLS AT MID-HEIGHT, OR AS PER ENGINEER.
6. PROVIDE BACKING FOR HANDRAILS ETC. AS REQUIRED.
7. ENGINEER APPROVED EQUIVALENT MATERIALS MAY BE USED IN LIEU OF THOSE SPECIFIED.

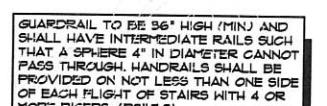


ROOF FRAMING:

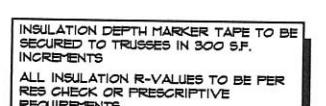
1. PRE-FAB WOOD TRUSSES @ 24°o.c. UNLESS NOTED OTHERWISE.
2. TRUSS LAYOUT BY TRUSS MANUFACTURER, WHERE LAYOUT IS DIFFERENT THAN SHOWN, CONTACT ENGINEER (IF APPLICABLE) TO VERIFY THERE ARE NO ISSUES WITH THE ORIGINAL DESIGN.
3. ENCLOSED ATTICS AND SPACES BETWEEN RAFTERS SHALL HAVE CLEAR CROSS VENTILATION TO WALL.
4. ANY FIREPLACE CHIMNEY TO EXTEND 2'-0" MINIMUM ABOVE ANY ROOF SURFACE WITHIN 10'-0", BUT SHALL NOT BE LESS THAN 3'-0" ABOVE THE HIGHEST POINT WHERE THE CHIMNEY PASSED THROUGH THE ROOF.
5. ANY SHINGLED ROOF BETWEEN 2/12 AND 4/12 IN PITCH IS REQUIRED TO HAVE A DOUBLE UNDERLAYMENT. SEEIRC TABLE 903.1(k)(2) FOR APPLICATION REQUIREMENTS.



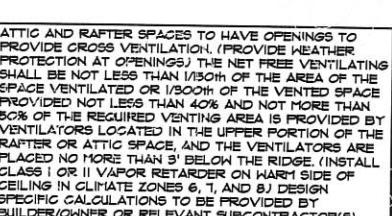
PROVIDE APPROVED ICE AND WATER SHIELD AT ALL ROOF EDGES, EAVES OR VALLEYS. EXTEND FROM THE EAVE EDGE TO A POINT AT LEAST 24" INSIDE THE EXTERIOR WALL LINE OF THE



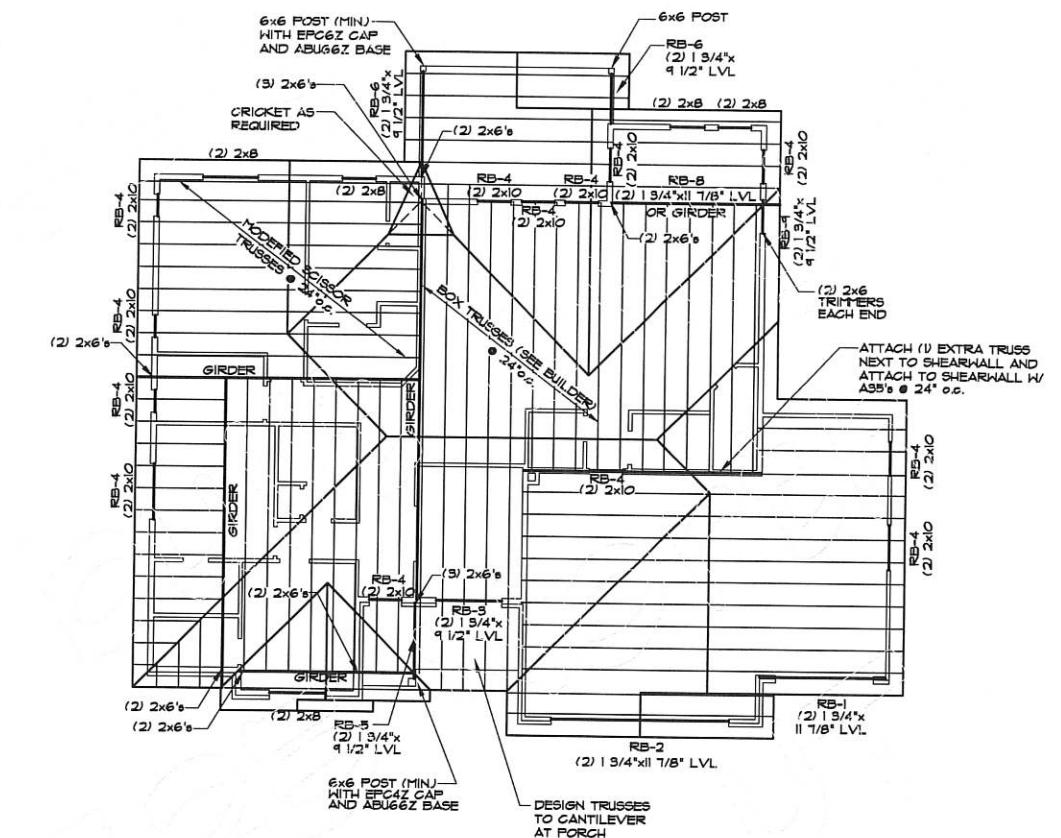
GUARDRAIL TO BE 36" HIGH (MIN) AND
SHALL HAVE INTERMEDIATE RAILS SUCH
THAT A SPHERE 4" IN DIAMETER CANNOT
PASS THROUGH. HANDRAILS SHALL BE
PROVIDED ON NOT LESS THAN ONE SIDE



INSULATION DEPTH MARKER TAPE TO BE SECURED TO TRUSSES IN 300 S.F. INCREMENTS
ALL INSULATION R-VALUES TO BE PER

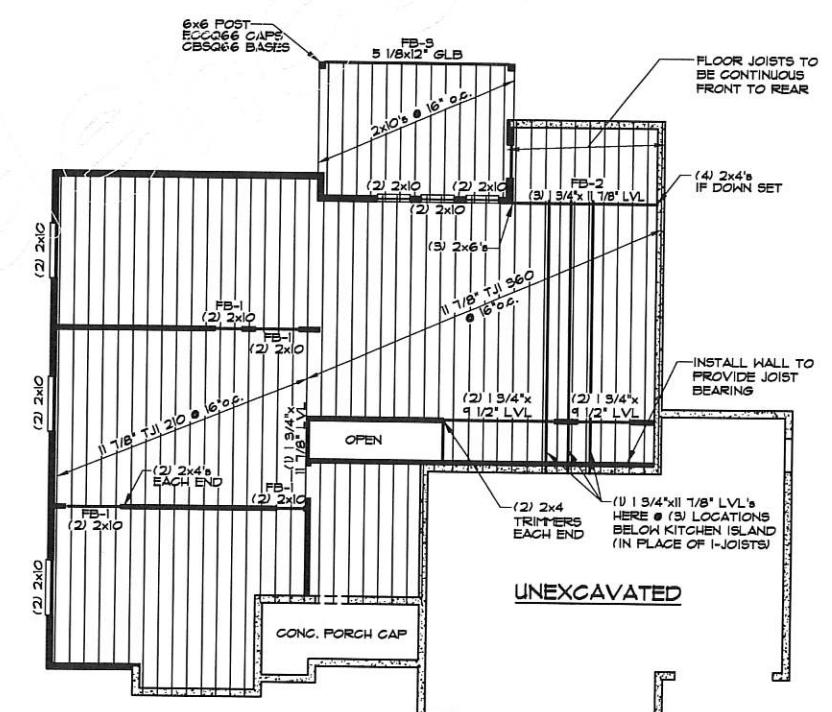


ATTIC AND RAFTER SPACES TO HAVE OPENINGS TO PROVIDE CROSS VENTILATION. (PROVIDE WEATHER PROTECTION AT OPENINGS). THE NET FREE VENTILATING SHALL BE NOT LESS THAN 1/300th OF THE AREA OF THE SPACE VENTILATED OR 1/300th OF THE VENTED SPACE PROVIDED NOT LESS THAN 40% AND NOT MORE THAN 50% OF THE REQUIRED VENTING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE RAFTER OR ATTIC SPACE, AND THE VENTILATORS ARE PLACED NO MORE THAN 3' BELOW THE RIDGE. (INSTALL CLASS I OR II VAPOR RETARDER ON WARM SIDE OF FLOORING IN CLIMATE ZONES 6, 7, AND 8) DESIGN SPECIFIC CALCULATIONS TO BE PROVIDED BY BUILDER/OWNER OR BSLR (AND SUBMITTED TO BSLR).



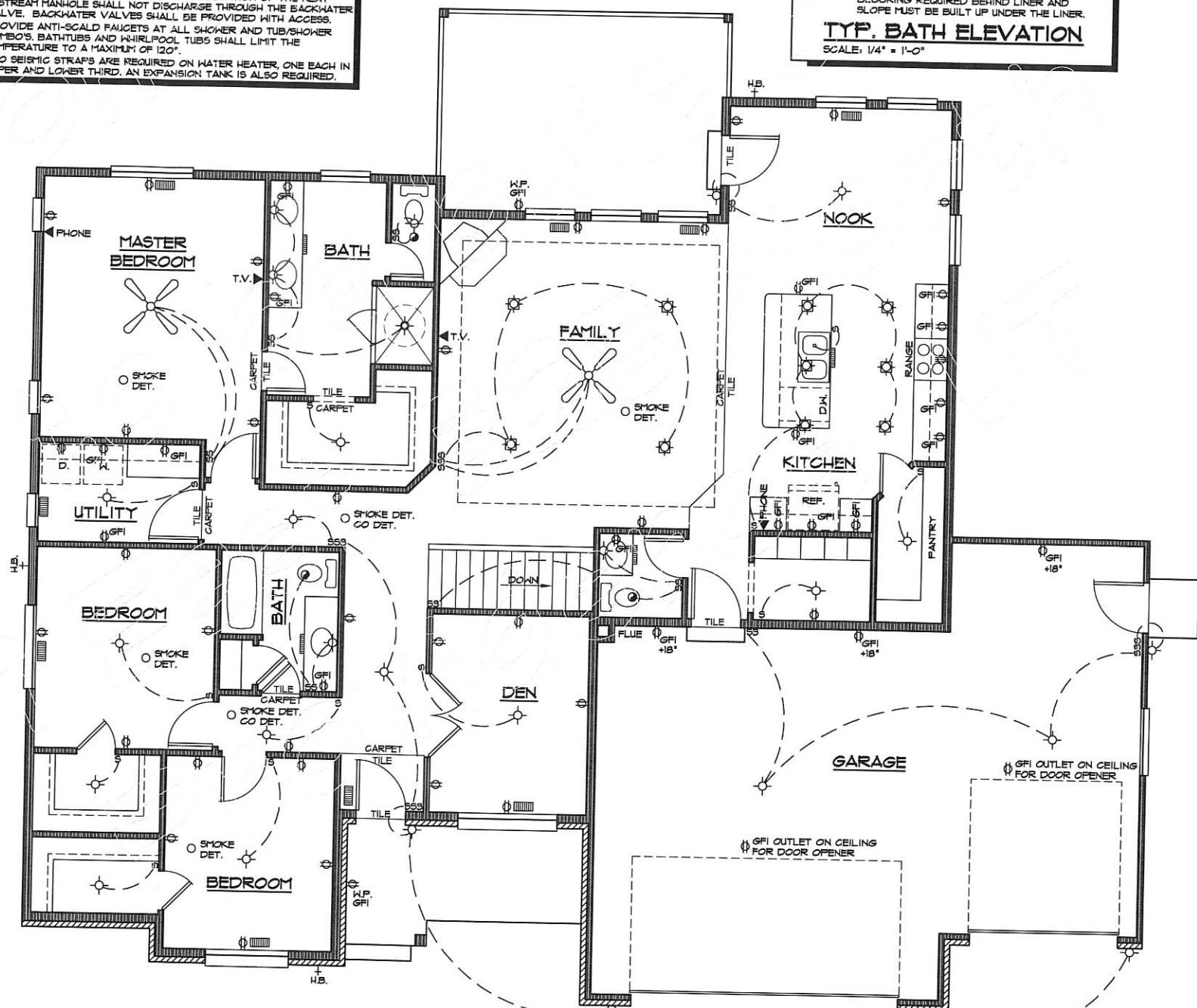
ROOF FRAMING PLAN

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



MAIN FLOOR FRAMING PLAN





MAIN FLOOR ELEC./HVAC AND FLOOR COVERING PLAN

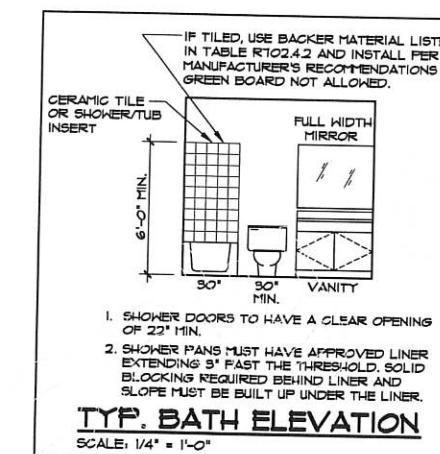
SCALE: 1/4"=1'-0"

MECHANICAL NOTES:

- IN ROOMS OR CLOSETS WHERE OPEN COMBUSTION AIR DUCTS PROVIDE COMBUSTION AIR TO OPEN COMBUSTION FUEL-BURNING APPLIANCES THE DUCT AND APPLIANCE SHALL BE LOCATED OUTSIDE THE BUILDING ENVELOPE OR COMPLY WITH THE FOLLOWING.
- THE OPEN DUCT AND APPLIANCE SHALL BE ENCLOSED IN A SEALED AND INSULATED ROOM (WALLS AND CEILING) AND ISOLATED FROM INSIDE THE THERMAL ENVELOPE PER TABLE R102.1.2. A SEALED DOOR EQUIPPED WITH GASKET AND THRESHOLD IS REQUIRED.
- COMBUSTION AIR DUCTS PASSING THROUGH CONDITIONED SPACE SHALL BE INSULATED WITH A MINIMUM R-8. ANY SUPPLY AND RETURN AIR DUCTS LOCATED WITHIN THE ROOM OR CLOSET SHALL BE INSULATED WITH R-8. WATER LINES WITH R-3.
- EXCEPTIONS: DIRECT VENT APPLIANCE, UTILIZE INSIDE INFILTRATION FOR COMBUSTION AIR.
- PROVIDE OUTSIDE COMBUSTION AIR TO FURNACE AND WATER HEATERS. ONE DUCT WITHIN 12" OF THE CEILING & SIZED 1 5/8 IN. PER 3000 TOTAL BTU INPUT OF ALL APPLIANCES. MAINTAIN 1" CLEARANCE AT SIDES AND REAR, AND 6" CLEARANCE AT FRONT OF APPLIANCES.
- PROVIDE 30"X30" UNOBSTRUCTED WORK AREA IN FRONT OF FURNACE.
- DRYER MUST VENT TO OUTSIDE. MAXIMUM DUCT LENGTH TO BE DETERMINED ACCORDING TOIRC 502.4.
- DRYER, FLUE AND EXHAUST FAN VENTS SHALL BE AT LEAST 3" ABOVE OR 10' AWAY FROM ALL OUTSIDE AIR INTAKE OPENINGS. THEY MUST ALSO BE LOCATED AT LEAST 4' FROM A PROPERTY LINE. EXHAUST AIR SHALL NOT DISCHARGE INTO SOFFIT.
- VENTS SHALL TERMINATE 4' BELOW OR 4' HORIZONTALLY, AND AT LEAST 1' ABOVE A DOOR, OPENABLE WINDOW OR A GRAVITY AIR INLET.
- ALL BATHROOMS TO HAVE 50 CFM MECHANICAL VENTILATION DUCTED TO THE EXTERIOR, UNLESS 3 SQUARE FEET OF GLAZED OPENING IS PROVIDED.
- INSULATE HEATING TRUNK AND BRANCH SUPPLY DUCTS IN UNFINISHED AREAS, CRAWL SPACES, ATTICS, UNHEATED GARAGES AND ANY OTHER "COLD" AREA (MIN. R-11 INSULATION). ALL HOT WATER LINES AT UNFINISHED BASEMENT TO BE INSULATED WITH 1/2" FOAM INSULATION.
- IF INSTALLED, GAS LOGS, AND EACH GAS APPLIANCE REQUIRES A SHUT-OFF VALVE WITHIN SIX FEET OF THE APPLIANCE.
- IF FURNACE IS INSTALLED IN ATTIC PROVIDE A 12" RAISED PLATFORM. PROVIDE CONDENSATION PAN WITH DRAIN.
- ALL DUCTING SHOWN ON PLANS, INCLUDING ANY FLUE CHASE, IS FOR INFORMATIONAL PURPOSES ONLY. IT IS THE RESPONSIBILITY OF THE OWNER/BUILDER TO VERIFY THE DESIGN OF THE HVAC SYSTEM PRIOR TO FRAMING AND TO COORDINATE DUCTING REQUIREMENTS WITH THE FRAYER.

PLUMBING NOTES:

- COMBUSTION AIR FOR WATER HEATER TO BE SUPPLIED FROM OUTSIDE.
- FREEZELESS, BACKFLOW PREVENTION HOSE BIBBS REQUIRED. PROVIDE ACCESSIBLE SHUT-OFF BALL VALVE.
- LOW-FLUSH TOILETS REQUIRED. MAX. 1.6 GALLONS PER FLUSH.
- MAX. FLOW RATE FOR SHOWER HEADS IS 2.5 GPM, SINK FAUCETS IS 5 GPM, AND LAVATORY FAUCETS IS 1.5 GPM.
- PLUMBING VENTS SHALL BE AT LEAST 3' ABOVE OR 10' AWAY FROM ALL OUTSIDE AIR INTAKE OPENINGS. ALL PLUMBING VENTS THROUGH ROOF TO BE A MINIMUM 3" PIPE.
- FLAGPOLING OF PLUMBING VENTS IS PROHIBITED EXCEPT WHERE ROOF IS OCCUPIED.
- NO SLIP-JOINT PLUMBING CONNECTIONS ALLOWED IN CONCEALED CONSTRUCTION AREAS.
- INDIVIDUALLY INSULATE ALL PLUMBING, WATER, AND DRAIN LINES IN AREAS SUBJECT TO FREEZING: EXTERIOR WALLS, ATTICS, CRAWL-SPACES, GARAGES, ETC.
- PROVIDE PRESSURE REGULATING VALVE ON MAIN WATER LINE AND SHUT-OFF VALVE FOR ALL PLUMBING FIXTURE SUPPLY LINES.
- ANT JACUZZI TUB TO HAVE GFI OUTLET AND ACCESS PANEL.
- FIXTURES THAT HAVE FLOOD LEVEL RIMS LOCATED BELOW THE ELEVATION OF THE NEXT UPSTREAM MANHOLE COVER OF THE PUBLIC SEWER SERVING SUCH FIXTURES SHALL BE PROTECTED FROM BACK FLOW OF SEWAGE WITH AN APPROVED BACKWATER VALVE. FIXTURES HAVING FLOOD LEVEL RIMS ABOVE THE ELEVATION OF THE NEXT UPSTREAM MANHOLE SHALL NOT DISCHARGE THROUGH THE BACKWATER VALVE. BACKWATER VALVES SHALL BE PROVIDED WITH ACCESS.
- PROVIDE ANTI-SCALD FAUCETS AT ALL SHOWER AND TUB/SHOWER COMBOS. BATHTUBS AND WHIRLPOOL TUBS SHALL LIMIT THE TEMPERATURE TO A MAXIMUM OF 120°.
- TWO SEISMIC STRAPS ARE REQUIRED ON WATER HEATER, ONE EACH IN UPPER AND LOWER THIRD. AN EXPANSION TANK IS ALSO REQUIRED.



- SHOWER DOORS TO HAVE A CLEAR OPENING OF 22" MIN.
- SHOWER PANS MUST HAVE APPROVED LINER EXTENDING 3" FAST THE THRESHOLD. SOLID BLOCKING REQUIRED BEHIND LINER AND SLOPE MUST BE BUILT UP UNDER THE LINER.

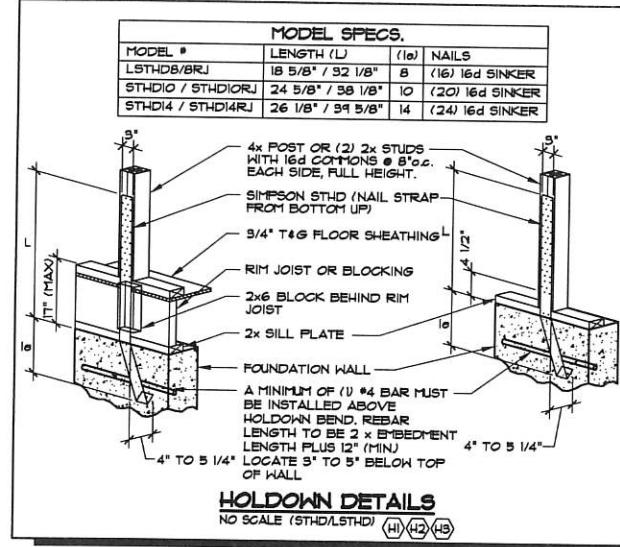
TYP. BATH ELEVATION

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



CITY SET

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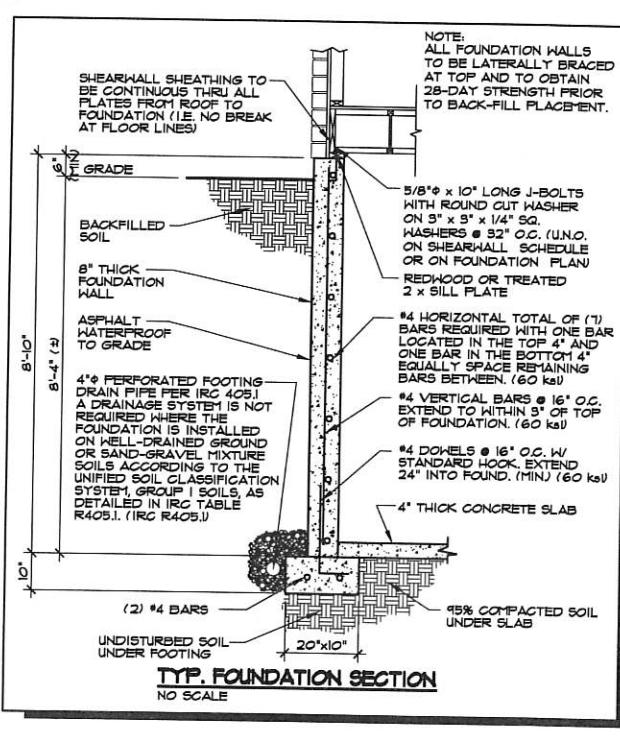
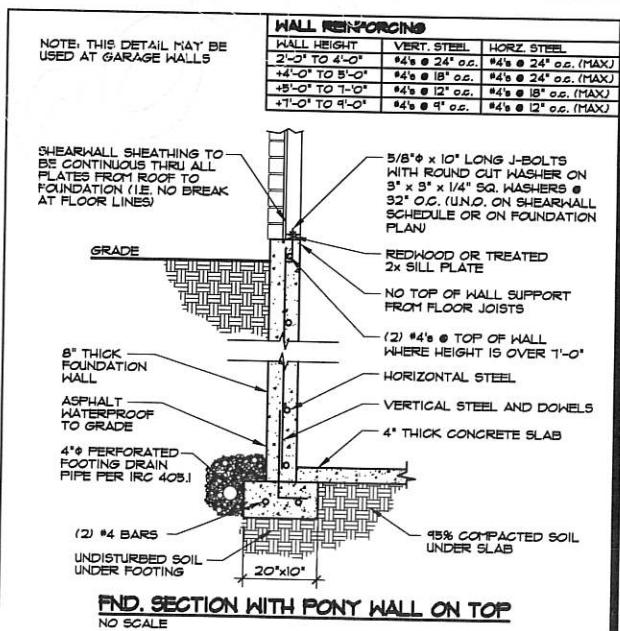
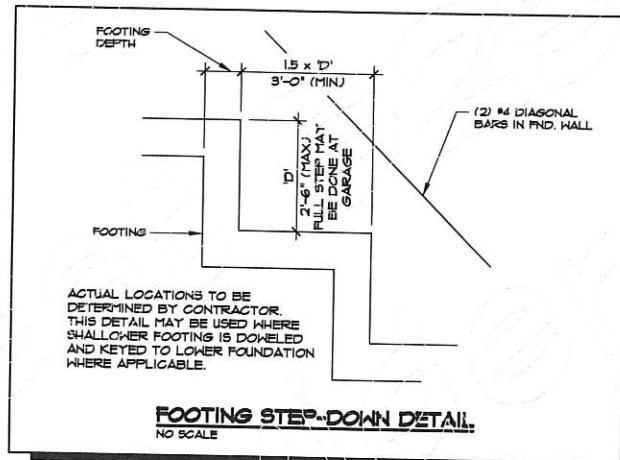
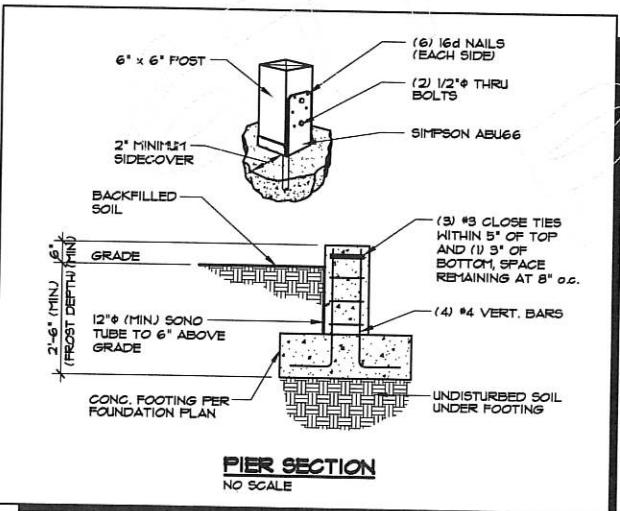
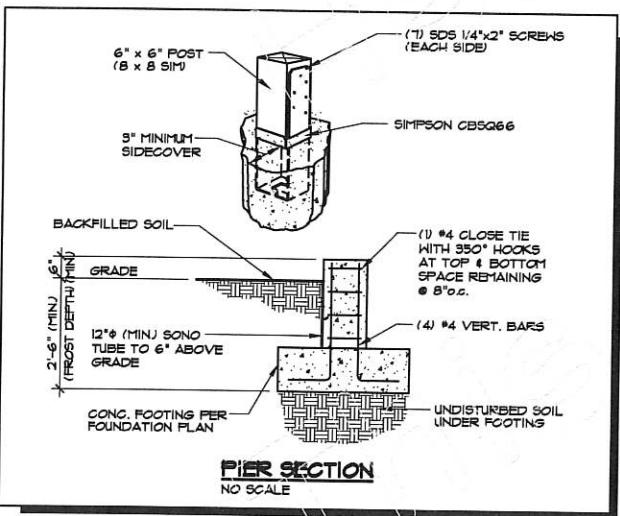
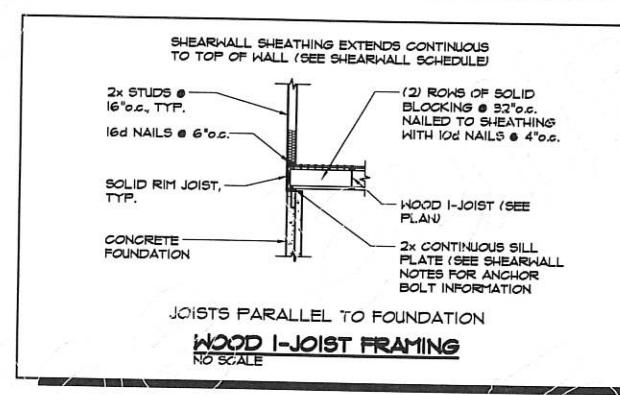
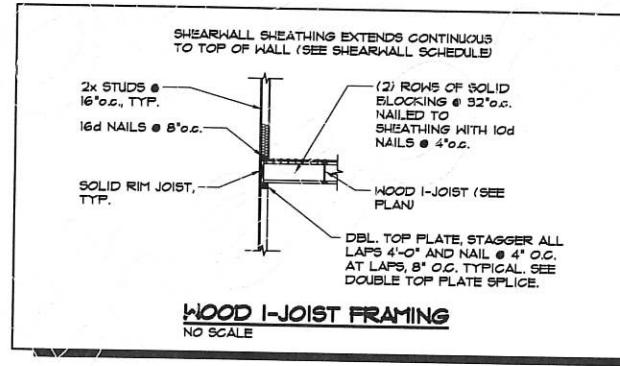
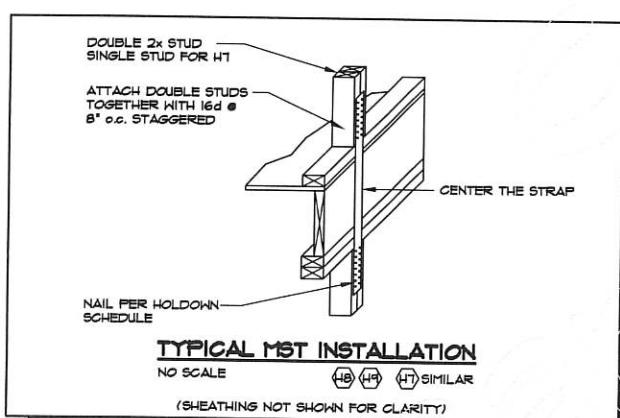


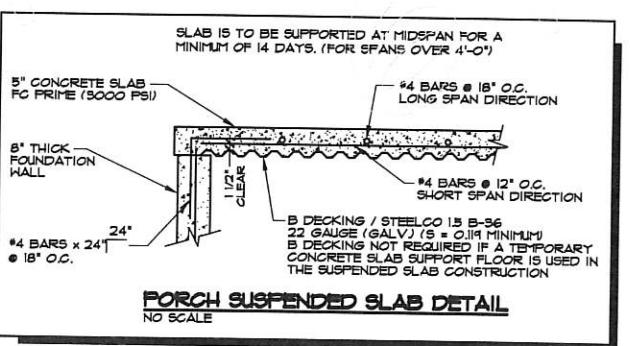
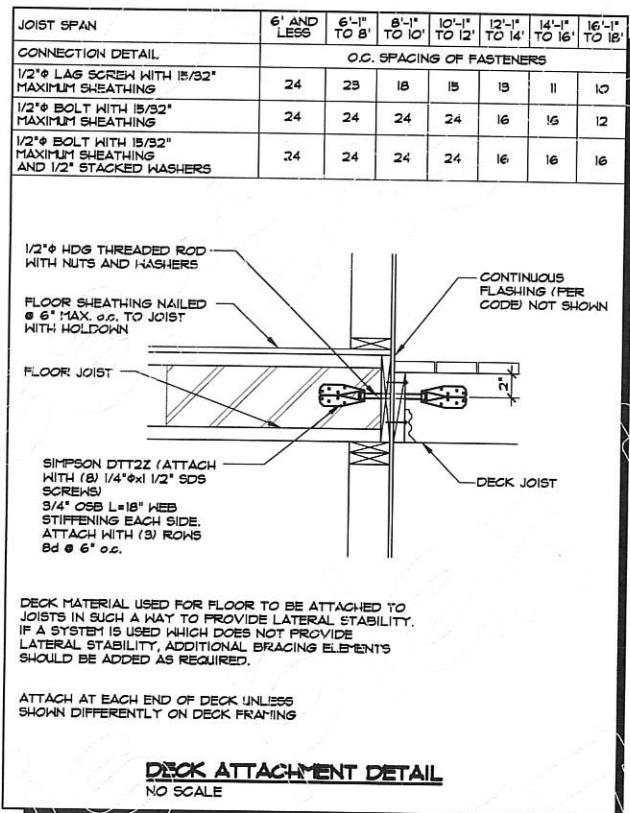
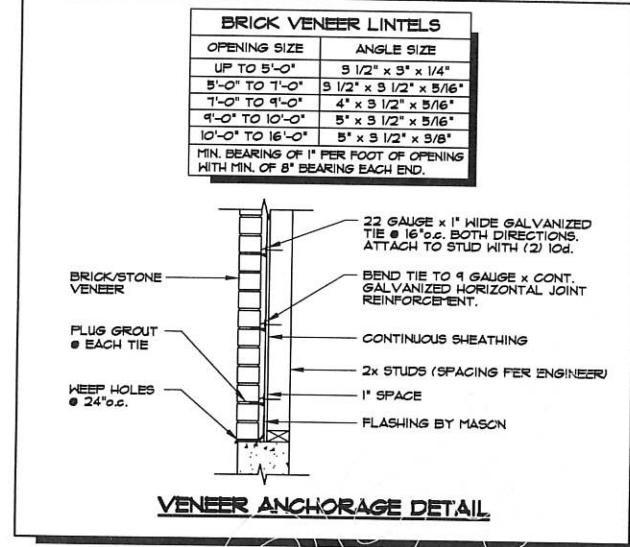
| HOLDOWN SCHEDULE | | | |
|------------------|----------------------|-----------------------------------|--|
| MARK | SIMPSON MODEL NUMBER | MINIMUM REQUIRED ATTACHMENT | REMARKS |
| (H1) | LSTHDB/BRJ | (16) 16d SINKERS | |
| (H2) | STHD10/10RJ | (20) 16d SINKERS | |
| (H3) | STHD14/14RJ | (24) 16d SINKERS | |
| (H4) | HTTB5 | (26) 16d COMMON | 5/8" THREADED ROD EPOXY INSTALLED IN A 3/4" x 12" DEEP HOLE (SET XP EPOXY) |
| (H5) | HDU11 - SDS2.5 | (30) SDS 1/4" x 2 1/2" WOOD SCREW | 1" THREADED ROD EPOXY INSTALLED IN A 1 1/8" x 18" DEEP HOLE (SET XP EPOXY) |
| (H6) | HDU14 - SDS2.5 | (36) SDS 1/4" x 2 1/2" WOOD SCREW | 1" THREADED ROD EPOXY INSTALLED IN A 1 1/8" x 24" DEEP HOLE (SET XP EPOXY) |
| (H7) | CS16 | (26) 8d SINKERS | STRAP LENGTH = 48" |
| (H8) | MST48 | (34) 16d SINKERS | CENTER STRAP SO EQUAL LENGTHS ARE ON UPPER AND LOWER WALLS |
| (H9) | MST60 | (46) 16d SINKERS | CENTER STRAP SO EQUAL LENGTHS ARE ON UPPER AND LOWER WALLS |

1. ALL FOUNDATION "HOLDDOWNS" AND BETWEEN LEVEL TIES SHALL BE ATTACHED TO A MINIMUM OF (2) 2x OR A 4x MEMBER
2. RJ AFTER MODEL INDICATES STHD's FOR RIM JOIST APPLICATIONS USE RJ MODELS AT ALL RIM JOIST APPLICATIONS
3. USE STANDARD WASHERS WHEN BOLTING H1's TO THE STUDS OPPOSITE THE "HOLDOWN". HOLE MUST BE LOCATED ON THE STUDS TO PROVIDE A MINIMUM OF 7 BOLT DIAMETERS
4. FOUNDATION CONCRETE STRENGTH SHALL BE 2500 PSI. INSTALL A MINIMUM OF (1) #4 HORIZONTAL REBAR IN SHEAR CONE ON ALL FOUNDATION "HOLDDOWNS".
5. 16d SINKERS MAY BE REPLACED WITH 16d COMMON NAILS WITH NO REDUCTIONS (16d SINKERS = 0.148" x 3 1/4" LONG, 16d COMMON = 0.148" x 5"). "GUN NAILS" MAY NOT BE USED
UNLESS SPECIFICALLY NOTED.
6. REFER TO ATTACHED CONCRETE SECTIONS AND DETAILS SHEET OR TO SIMPSON CATALOG C-C-2015 FOR APPLICABLE DETAILS AND ADDITIONAL INSTALLATION INSTRUCTIONS.
7. ALL HOLDDOWNS ON THIS SCHEDULE MAY NOT BE USED ON THIS PLAN.

| TYPE | WIDTH | LENGTH | THICK | REINFORCEMENT |
|------|-------|--------|-------|----------------------|
| F-16 | 16" | CONT. | 10" | (2) #4 BARS CONT. |
| F-18 | 18" | CONT. | 10" | (2) #4 BARS CONT. |
| F-20 | 20" | CONT. | 10" | (2) #4 BARS CONT. |
| F-24 | 24" | CONT. | 10" | (3) #4 BARS CONT. |
| F-30 | 30" | CONT. | 10" | (3) #4 BARS CONT. |
| F-36 | 36" | CONT. | 10" | (4) #4 BARS CONT. |
| S-24 | 24" | 24" | 10" | (3) #4 BARS EACH WAY |
| S-30 | 30" | 30" | 10" | (3) #4 BARS EACH WAY |
| S-36 | 36" | 36" | 10" | (4) #4 BARS EACH WAY |
| S-42 | 42" | 42" | 12" | (5) #4 BARS EACH WAY |
| S-48 | 48" | 48" | 12" | (6) #4 BARS EACH WAY |
| S-60 | 60" | 60" | 12" | (7) #4 BARS EACH WAY |

NOTE: FOOTING REINFORCEMENT IN THIS SCHEDULE AND NOTED ON PLANS IS BOTTOM REINFORCING U.N.O. AND SHALL BE PLACED IN BOTTOM 1/2 OF FOOTING THICKNESS, WITH 5" CONCRETE CLEAR COVER, MIN.





SHEARWALL SCHEDULE

| HALL NO. | SHEATHING ONE SIDE | EDGE NAILING | BOLT SPACING | REMARKS |
|----------|--------------------|--------------|--------------|--|
| ▲ | 7/16" | Bd @ 6" | 32" O.C. | |
| ▲ | 7/16" | Bd @ 4" | 32" O.C. | |
| ▲ | 1/16" | Bd @ 4" | * | DOUBLE STUDS OR 3" NOMINAL MEMBER AT ALL PANEL EDGES AND SEAMS |
| ▲ | 7/16" | Bd @ 3" | * | DOUBLE STUDS OR 3" NOMINAL MEMBER AT ALL PANEL EDGES AND SEAMS |
| ▲ | 15/32" | 1od @ 3" | * | FRAMING AT ADJOINING PANEL EDGES SHALL BE 3" NOMINAL (MIN) |
| ▲ | 15/32" | 1od @ 2" | * | FRAMING AT ADJOINING PANEL EDGES SHALL BE 3" NOMINAL (MIN) AND NAILS TO BE STAGGERED |

1. SHEATHING TO BE APA RATED OSB. OSB EDGES SHALL BE BLOCKED. (OSB SHALL EXTEND TO FOUNDATION SILL PLATE. OSB SEAMS ARE TO BE MADE IN WALL AREA, NOT AT WALL TO FLOOR INTERFACE)

2. ANCHOR BOLTS SHALL BE ASTM A307, 5/8" x 10" LONG WITH A MINIMUM EMBEDMENT OF 1" INTO CONCRETE FOUNDATION. (BOLT SPACING TO BE AT SPACING SHOWN UNLESS OTHERWISE SHOWN ON FOUNDATION DRAWING)

3. MAXIMUM STUD SPACING 16" O.C. FOR 2x4 WALLS, AND 24" O.C. FOR 2x6 WALLS

4. PROVIDE NAILS @ 12" O.C. AT INTERMEDIATE SUPPORTS. NAILS TO BE SAME SIZE AS EDGE NAILING

5. PANEL PORTIONS ABOVE AND/ OR BELOW OPENINGS IN SHEARWALLS SHOULD BE CONSTRUCTED AS SHEARWALL

6. 1 1/2" GAGE (WITH 7/16" CROWN (MIN)) STAPLES INSTALLED WITH CROWN PARALLEL TO LONG DIMENSION OF FRAMING MEMBERS MAY BE USED IN LIEU OF Bd NAILS FOR SHEARWALLS 1,2,3, SPACE STAPLES @ 4" O.C. FOR SHEARWALL 1, AT 3" O.C. FOR SHEARWALL 2, AND AT 2" O.C. FOR SHEARWALL 3. STAPLES ARE NOT PERMISSIBLE FOR SHEARWALLS 4,5,6.

7. DOUBLE STUDS TO BE NAILED TOGETHER WITH 16d NAILS @ 8" O.C. STAGGERED ONE FACE
* SEE FOOTING/FOUNDATION PLAN FOR ANCHOR BOLT REQUIREMENTS. (IF NO SPECIAL SPACING DESIGNATED, USE 32" O.C.)

