

February 1, 2023

City Council Meeting

Information Packet

AGENDA ITEM #1

Public Comments.

Public Comments will also be taken by email until 5:00 pm on February 1st, 2023. Please email comments to bbaugh@grantsvilleut.gov. Please add 'Public Comment' in the subject line.

AGENDA ITEM #2

Summary Action Items:

- a. Minutes from the Regular Meeting held on 01/18/2023
- b. Approval of Bills

MINUTES OF THE REGULAR MEETING OF THE GRANTSVILLE CITY COUNCIL, HELD ON JANUARY 18TH, 2023 AT THE GRANTSVILLE CITY HALL, 429 EAST MAIN STREET, GRANTSVILLE, UTAH AND ON ZOOM. THE MEETING BEGAN AT 7:00 P.M.

Mayor and Council Members Present:

Mayor Neil Critchlow Jolene Jenkins Scott Bevan Jeff Hutchins Darrin Rowberry Jewel Allen

Council Members Not Present:

Appointed Officers and Employees Present:

Sherrie Broadbent, Finance Director Dan England, City Engineer Jacob Enslen, Police Chief Braydee Baugh, Recorder Jesse Wilson, City Manager Brett Coombs, City Attorney

Citizens and Guests Present: Kevin Case, Derrick and Sidney Rasher, Derek Dalton, Alta Calcagno, Nic Jenkins

There were many members of the public present in person and via Zoom

Mayor Critchlow asked Councilmember Rowberry to lead the Pledge of Allegiance.

AGENDA:

1. Public Comments: Kevin Casey stood for public comment. Mr. Casey advised that out of 182 votes by the City Council, only 2% of the votes were "nay" and the only "nay" votes were for rezoning. Mr. Casey was concerned about spending public funds. Mr. Casey advised on July 6th in 2022 the council discussed the use of City Vehicles. Mr. Casey advised it was moved to a later date in 2022 and never came back for discussion. However, amending the employee handbook was brought to the Council for approval of adding a stipend for employees who live outside the county. Mr. Casey advised this was a fringe benefit tax that was required.

2. Summary Action Items.

- a. Approval of minutes from January 4th regular and work meeting
- b. Approval of Bills totaling \$312,818.58
- c. Approval of staff to pursue CLG Grant

There was discussion regarding the Action Item C. Alta Batterman stood to provide comment. Ms. Batterman explained this is for any citizen who own a historic home. Mr. Batterman explained no public money will be used, however, because using the City DUNS number, it needs to be managed by the City.

Motion: Councilmember Jenkins made a motion to approve the summary action items A and B.

Second: Councilmember Allen seconded the motion.

Vote: The vote was as follows: Councilmember Rowberry, "Aye", Councilmember Hutchins, "Abstain", Councilmember Bevan, "Aye", Councilmember Allen "Aye", and Councilmember Jenkins, "Aye". The motion carried.

Motion: Councilmember Jenkins made a motion to approve the summary action item C.

Second: Councilmember Allen seconded the motion.

Vote: The vote was as follows: Councilmember Rowberry, "Aye", Councilmember Hutchins, "Aye", Councilmember Bevan, "Aye", Councilmember Allen "Aye", and Councilmember Jenkins, "Aye". The motion carried.

3. Presentation of Grant Award by Rocky Mountain Power to Grantsville City

Nick Jenkins was present for this item. Mr. Jenkins advised this grant is for a community stage. Mr. Jenkins presented a \$5,000 check for the community stage.

4. Consideration to approve the Water Right Transfer and Banking Agreement with Arthur and Susan Higley to bank 294.56 acre-feet of water with Grantsville City

Motion: Councilmember Allen made the motion to approve Water Right Transfer and Banking Agreement with Arthur and Susan Higley to bank 294.56 acre-feet of water with Grantsville City

Second: Councilmember Bevan seconded the motion.

Vote: Vote: The vote was as follows: Councilmember Rowberry, "Aye", Councilmember Hutchins, "Aye", Councilmember Bevan, "Aye", Councilmember Allen "Aye", and Councilmember Jenkins, "Aye". The motion carried.

5. Consideration to approve the Water Right Transfer and Banking Agreement with Arthur and Susan Higley to bank 320 acre-feet of water with Grantsville City.

Motion: Councilmember Hutchins made the motion to approve the Water Right Transfer and Banking Agreement with Arthur and Susan Higley to bank 320 acre-feet of water with Grantsville City.

Second: Councilmember Rowberry seconded the motion.

Vote: The vote was as follows: Councilmember Rowberry, "Aye", Councilmember Hutchins, "Aye", Councilmember Bevan, "Aye", Councilmember Allen "Aye", and Councilmember Jenkins, "Aye". The motion carried.

6. Consideration of Resolution 2023-03 confirming the appointments of Derek Dalton and Kevin Hall as a voting member of the Planning Commission

Councilmember Allen asked who these appointments are replacing. Mayor Critchlow advised Gary Pinkham's term has expired and Brian Pattee was stepping down.

Motion: Councilmember Hutchins made the motion approve Resolution 2023-03 confirming the appointments of Derek Dalton and Kevin Hall as a voting member of the Planning Commission

Second: Councilmember Jenkins seconded the motion.

Vote: The vote was as follows: Councilmember Rowberry, "Aye", Councilmember Hutchins, "Aye", Councilmember Bevan, "Aye", Councilmember Allen "Aye", and Councilmember Jenkins, "Aye". The motion carried.

7. Consideration of Resolution 2023-04 amending the Employee Handbook to define retirement eligibility for certain elected and appointed officials and full and part-time employees

Mr. Wilson stood for this item. Mr. Wilson explained there was an audit completed by URS and it was identified the language was not strong enough to ensure the retirement expectations are clear and this was their suggestion to correct the issue.

Motion: Councilmember Allen made a motion to approve Resolution 2023-04 amending the Employee Handbook to define retirement eligibility for certain elected and appointed officials and full and part-time employees

Second: Councilmember Rowberry seconded the motion.

Vote: The vote was as follows: Councilmember Rowberry, "Aye", Councilmember Hutchins, "Aye", Councilmember Bevan, "Aye", Councilmember Allen "Aye", and Councilmember Jenkins, "Aye". The motion carried.

8. Council Reports

Councilmember Rowberry:

Councilmember Jenkins: 5 Youth Council members were present for Local Officials Day at the Capital. Town should be proud of representation. Also extended appreciation to Chief Enslen for his work with the Police Department. Councilmember Bevan: Extended appreciation to Alta for the work she's done with the Historic Preservation Committee.

Councilmember Hutchins: Extended appreciation to Chief Enslen for all the hard work he has done in the community and served during the most difficult times. Councilmember Allen: Attended Local Officials Day with Councilmember Jenkins and wanted to acknowledge how nice it was to have the Youth Council present. Mayor Critchlow: Acknowledge the youth that want to serve and the Youth impressed other Cities in the County. Acknowledged the hard work the Chief has put into this community.

Chief Enslen stood to provide a speech. Chief advised it was a pleasure to serve in Grantsville. Appreciated the way the family was welcomed and it was a tough assignment but his team made it through it. He noted how proud of his team he was.

9. Closed Session (Personnel, Real Estate, Imminent Litigation).

There was no Closed Session

10. Adjourn.

Motion: Councilmember Allen made the motion to adjourn

Second: Councilmember Rowberry seconded the motion.

Vote: The vote was as follows: Councilmember Rowberry, "Aye", Councilmember Hutchins, "Aye", Councilmember Bevan, "Aye", Councilmember Allen "Aye", and Councilmember Jenkins, "Aye". The motion carried.

AGENDA ITEM #3

Consideration of Resolution 2023-05 approving the appointment of Arlene Mair to the Library Board of Trustees

GRANTSVILLE CITY RESOLUTION 2023-05

A RESOLUTION APPOINTING ARLENE MAIR AS TRUSTEE ON THE GRANTSVILLE CITY LIBRARY BOARD OF TRUSTEESS

Be it resolved and Ordained by the City Council of Grantsville City, Utah as follows:

SECTION ONE: PURPOSE. This resolution is for the purpose of appointing Arlene Mair to the Grantsville City Library Board of Trustees as a full board members as outlined in Grantsville City Ordinances 2014-13 and 2019-21 and in City Code §8-4-1, *et seq*.

SECTION TWO: APPOINTMENT TO LIBRARY BOARD TRUSTEES FOR

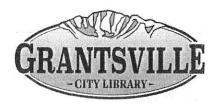
GRANTSVILLE CITY. The Grantsville City Council hereby confirms the Mayor's appointment of Trustee Arlene Mair to serve a three-year term on the Grantsville City Library Board of Trustees, which shall begin on February 1st, 2023 and expire on December 31, 2024.

SECTION THREE: EFFECTIVE DATE. This resolution shall take effect immediately upon passage and completion of all legal requirements.

ADOPTED AND PASSED BY THE CITY COUNCIL OF GRANTSVILLE CITY, THIS $1^{\rm st}$ DAY OF FEBRUARY, 2023.

ATTEST:	By Mayor Neil A. Critchlow
Braydee Baugh City Recorder	
(SEAL)	

Grantsville City Library Board Trustee Application



Thank you for your interest in becoming a member of the Grantville City Library Board of Trustees. The Grantsville City Library Board is a citizen volunteer board. The Board consists of seven members, all approved formally through the Grantsville City Council. The terms of appointment vary from (1) one to (4) four years. Trustees are eligible for re-appointment to a second consecutive term whose length varies.

The Library Board exists to responsibly manage the Library's policies with the mission of providing easily accessible services, materials and programs to people of all ages in the Library's service area to meet their recreational, cultural, informational and educational needs. The Grantsville City Library Board of Trustees meets once a month. Meeting dates and times are determined annually. Currently the Board meets on the first Thursday of the month at 4:00pm at the Library. Meetings are public and visitors are welcome.

For additional information, please contact John Ingersoll at (435) 884-1670. To apply, simply complete the attached form. Additional copies of this application are available at the Library's circulation desk or through the website at http://grantsvilleut.gov/Library/lib/

Please return the completed form to the Grantsville City Library, 42 North Bowery St., Grantsville, UT 84029 or email it to jingersoll@grantsvilleut.gov

The Board of Trustees will review applications when positions become available for appointment. Thank you for taking time to fill out this application and for your willingness to serve our community.

Name: Arlene Mair
Address: 540 E. Clark Grantsville
Phone: 435-830-3266
Email: Mary 540 @ yahoo. Com
Email: 111411 510 C garroot Corri
1) Why do you want to serve as a trustee?
Love to read
Appreciate books
Want to promote the library
The first control of the second control of the second of t
14 yrs rocko club advisor (previous) Organizational skills through religious affiliation
et etter seriografikk spakke och kritisk och kritisk etter seriografik. I seriografik seriografik som seriogra
3) Please describe any qualifications [work experience, education, attributes, and skills/training] that you feel would provide positive input to the work of the library board.
Bachelors from USU in Liberal Arts

Finance	Building and Grounds	
Strategic Planning	Technology	
Legal Issues	Marketing	
Government Relations	Fundraising	es Rig Te w2 (
Human Resources	Other	
If you answered "other", ple	ase indicate your expertise or interests:	
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3		
5) What do you see as the lil	brary's role in the community?	,
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By submitting this application, I affirm that the facts set forth in it are true and complete. I attest that I am a resident of Grantsville.

arlenemai	<i>Y</i>	1-5-2023
Signature	*	Date
Arlene Ma		1-\$75° \$25.44.
Printed Name		44. 14. 45. 45. 45. 45. 45. 45. 45. 45. 45. 4

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Thank you for completing this application form and for your interest in becoming a Trustee.

AGENDA ITEM #4

Discussion regarding the Preliminary Plat for Hollywood Corner Subdivision consisting of (30) ½ acre lots to be built at the corner of Quirk and Hollywood located in the R-1-21



MEMORANDUM

DATE: January 27, 2023

TO: Braydee Baugh, City Recorder

FROM: Cavett Eaton, Planning & Zoning Administrator

RE: ZONING ITEMS UP FOR CONSIDERATION AT COUNCIL MEETING

TO BE HELD XXXXX, 2022

City Council Agenda Items #: Consideration of Resolution 2022-__ approval of the Preliminary Plat for Hollywood Corner Subdivision

The Planning Commission recommended approval this item on January 19, 2023:

In the discussion at the Planning Commission meeting of January 5, 2023, the issue of an easement for storm water drainage was brought up. At present the storm water storage will be on the parcel to the north of the subdivision. Todd Castagno representing the developer, explained that Dean and Betty Matthews, who were present, own both parcels are willing to put in writing that the storm water from Hollywood corner can be stored on the adjacent property. Gary also brought up the issues of Nygreen and Quirk. Not completing Nygreen at this time but adding additional right-of-way for Quirk. These will all be worked out with Brett Coombs in the Development Agreement.

Commission Member Gary Pinkham made a motion to recommend approval of the Preliminary Plat for Hollywood Corner Subdivision with the condition that the applicant continue to put into place the paper work agreement for the storm water and the Nygreen and Quirk Street issues that are being incorporated into the Development Agreement. Commission Member Jaime Topham seconded the motion. All voted in favor and the motion carried unanimously. (John Limburg was not present at the meeting)

- End of Memorandum-



Planning and Zoning

336 W. Main Street • Grantsville, UT 84029 Phone: (435) 884-1674 • Fax: (435) 884-0426

CD-22-07.13

Preliminary Plan Summary and Recommendation

Parcel ID:	01-074-0-0010	Meeting Date:	January 19, 2023
Property Address:	Not at this time	Current Zone/Proposed Zone	R-1-12

Applicant Name: The Coassolo Group

Request: Consideration to recommend approval of Preliminary Plat for

Hollywood Corner Subdivision

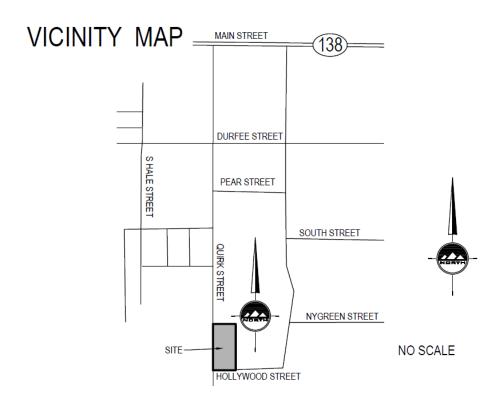
Prepared by: Cavett Eaton

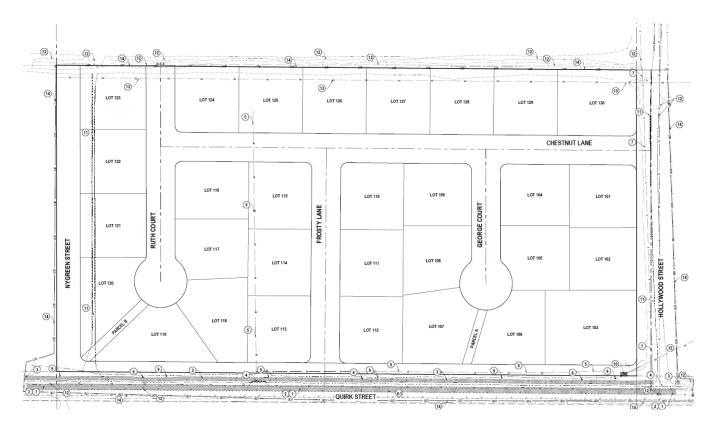
Planning Staff Recommendation: Approval with recommendation from City Engineering

PROJECT DESCRIPTION

Hollywood Corner Subdivision consisting of (30) $\frac{1}{2}$ acre lots to be built at the corner of Quirk and Hollywood, zoned R-1-12.

SITE & VICINITY DESCRIPTION





ISSUES OF CONCERN/PROPOSED MITIGATION

Storm drain. Todd is working with Brett to address this with his Development Agreement and will have updated response.

NEIGHBORHOOD RESPONSE

None at this time. Radius letters sent December 27, 2022.

PLANNING COMMISSION RESPONSE

In the previous Planning Commission Meeting – Discussions were held regarding:

- 1) Streets Nygreen and Hollywood Todd will be covering ½ (or more) of the cost of these streets on Hollywood Frontage. Todd is providing a 54' of right-of-way and may be giving more. Has given the City 10' for a walking trail.
- 2) The Development Agreement will cover the above issues.
- 3) Rocky Mountain Power is burying the power on the south frontage.
- 4) Handling of water retention for this property needs to be settled. Storm water is being collected and it is going to the neighbor's property. Something has to be put in writing to create a regional retention basin for this water drainage and a legal commitment that shows how this is going to be handled with Todd and the neighbor property owner.
- 5) Open space is either a fee in lieu of or combine to include the regional retention basin.

File #: CD-22-07.13

6) Parking and Access on Quirk was discussed. No access (driveways) on Quirk to any homes. Addresses for lots 102 and 103 need re-addressed to go on to Hollywood.

PLANNING STAFF RECOMMENDATION

Planning Staff recommends approval of the Preliminary Plan for Hollywood Corner Subdivision with stipulations that the Water Retention issues continue to be discussed and worked out in the Development Agreement as well as right0of-way concessions. Issues with Lot Addressing to be changed by Developer ASAP.



NORTH QUARTER CORNER OF SECTION 7. TOWNSHIP 3 SOUTH, RANGE 5 WEST SALT LAKE BASE AND MERIDIAN (2.5" BRASS TOOELE COUNTY SURVEY MONUMENT ON 4" PIPE, DATED 1986) ELEV = 4599.95' (USED ELEVATION) 4414.85' (TRUE ELEVATION)

BENCHMARK

HOLLYWOOD CORNER SUBDIVISION

HOLLYWOOD AND QUIRK STREET GRANTSVILLE CITY, UTAH

FOR REVIEW NOT FOR CONSTRUCTION

INDEX OF DRAWINGS

1 OF 1	PLAT		
C-001	GENERAL NOTES	PP-4	RUTH COURT PLAN AND PROFILE
C-002	PRE-CONSTRUCTION GENERAL NOTES	PP-5	FROSTY LANE PLAN AND PROFILE
C-100	DEMOLITION PLAN	PP-6	GEORGE COURT PLAN AND PROFILE
C-200	SITE PLAN	PP-7	HOLLYWOOD STREET PLAN AND PROFILE
C-201	SITE PLAN STRIPPING PLAN	PP-8	HOLLYWOOD STREET PLAN AND PROFILE
C-300	GRADING AND DRAINAGE PLAN	PP-9	CHESTNUT PLAN AND PROFILE
C-301	DRAINAGE CALCULATIONS	PP-10	CHESTNUT PLAN AND PROFILE
C-400	UTILITY PLAN	PP-11	CHESTNUT PLAN AND PROFILE
C-500	EROSION CONTROL PLAN	PP-12	SANITARY SEWER PLAN AND PROFILE
PP-0	PLAN AND PROFILE KEY MAP	PP-13	STORM DRAIN PLAN AND PROFILE
PP-1	QUIRK STREET PLAN AND PROFILE	D-600	DETAILS
PP-2	QUIRK STREET PLAN AND PROFILE	D-601	DETAILS
PP-3	QUIRK STREET PLAN AND PROFILE	D-602	DETAILS NOTICE TO DEVELOPED.
			NOTICE TO DEVELOPER/

NOTICE TO CONTRACTOR

ALL CONTRACTORS AND SUBCONTRACTORS PERFORMING WORK SHOWN ON OR RELATED TO THESE PLANS SHALL CONDUCT THEIR OPERATIONS SO THAT ALL EMPLOYEES ARE PROVIDED A SAFE PLACE TO WORK AND THE PUBLIC IS PROTECTED. ALL CONTRACTORS AND SUBCONTRACTORS SHALL COMPLY WITH THE "OCCUPATIONAL SAFETY AND HEALTH REGULATIONS OF THE U.S. DEPARTMENT OF LABOR AND THE STATE OF UTAH DEPARTMENT OF INDUSTRIAL RELATIONS CONSTRUCTION SAFETY ORDERS." THE CIVIL ENGINEER SHALL NOT BE RESPONSIBLE IN ANY WAY FOR THE CONTRACTORS AND SUBCONTRACTORS COMPLIANCE WITH SAID REGULATIONS AND ORDERS.

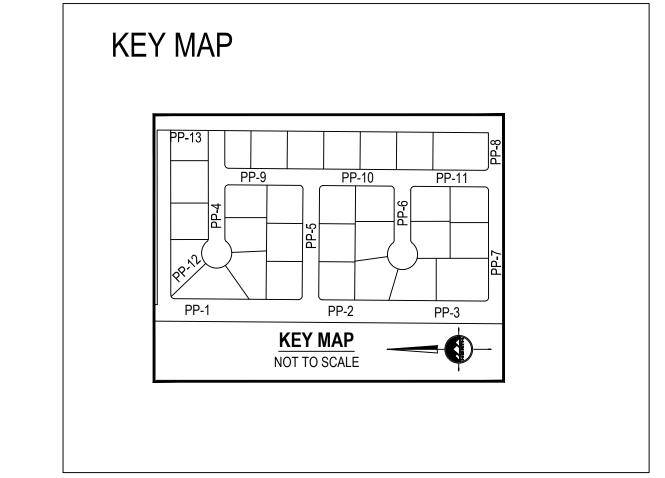
CONTRACTOR FURTHER AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB-SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE CIVIL ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.

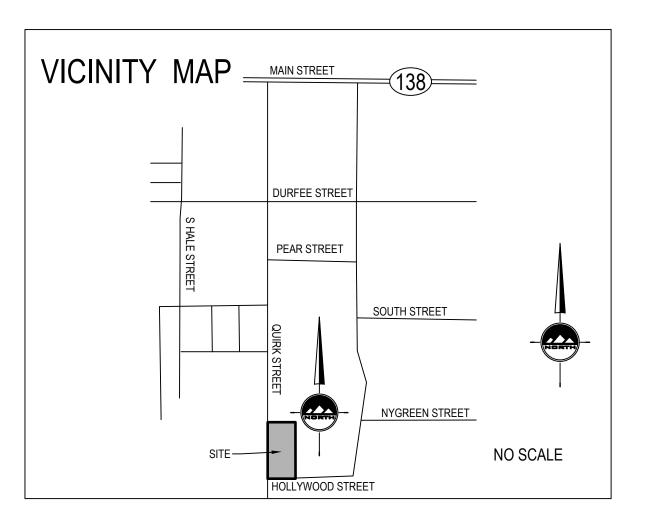
NOTICE TO DEVELOPER/ CONTRACTOR

UNAPPROVED DRAWINGS REPRESENT WORK IN PROGRESS, ARE SUBJECT TO CHANGE, AND DO NOT CONSTITUTE A FINISHED ENGINEERING PRODUCT. ANY WORK UNDERTAKEN BY DEVELOPER OR CONTRACTOR BEFORE PLANS ARE APPROVED IS UNDERTAKEN AT THE SOLE RISK OF THE DEVELOPER, INCLUDING BUT NOT LIMITED TO BIDS, ESTIMATION, FINANCING, BONDING, SITE CLEARING, GRADING, INFRASTRUCTURE CONSTRUCTION, ETC.

UTILITY DISCLAIMER

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND / OR ELEVATIONS OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.





ALL WORK SHALL CONFORM TO GRANTSVILLE CITY STANDARDS & SPECIFICATIONS. CALL BLUE STAKES AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. NORTH QUARTER CORNER OF SECTION 7, TOWNSHIP 3 SOUTH, RANGE 5 WEST SALT LAKE BASE AND MERIDIAN (2.5" BRASS TOOELE COUNTY SURVEY MONUMENT ON 4" PIPE, DATED 1986) ELEV = 4599.95' (USED ELEVATION) 4414.85' (TRUE ELEVATION)

GENERAL NOTES



TOOELE

169 N. Main Street, Unit 1 Tooele, UT. 84074 Phone: 435.843.3590

SALT LAKE CITY Phone: 801.255.0529

LAYTON

Phone: 801.547.1100

CEDAR CITY

Phone: 435.865.1453

RICHFIELD Phone: 435.896.2983

WWW.ENSIGNENG.COM

PO BOX 190 GRANTSVILLE CITY, UTAH 84029

TODD CASTAGNO PHONE: 435-849-1485

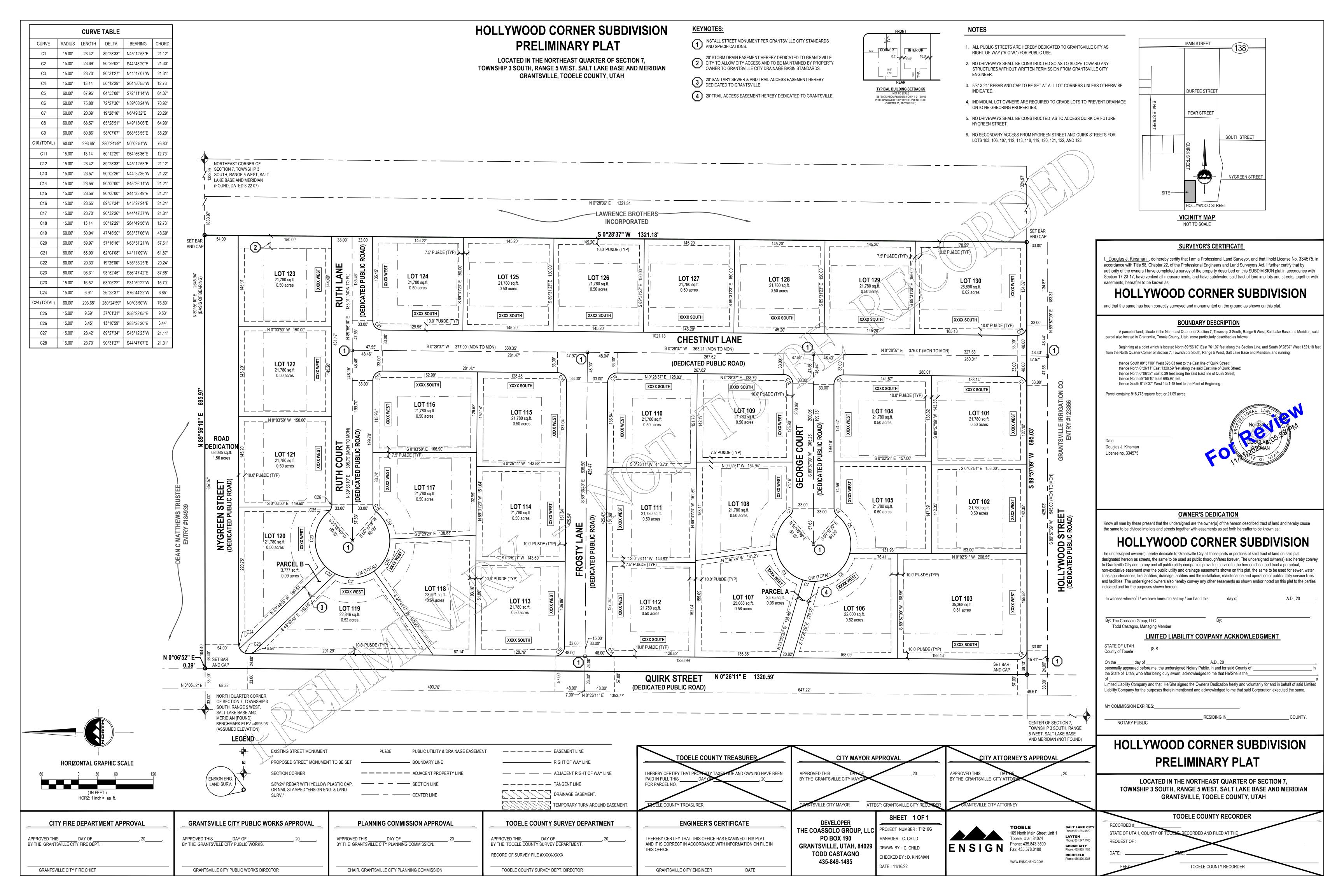
SUBDIVISION

STRE SIGN CORNER **PRELIMIN**

COVER

2022-10-12 C. CHILD J. CLEGG PROJECT MANAGER

C. CHILD



GRANTSVILLE GENERAL NOTES

- 1. ALL WORK DONE OR IMPROVEMENTS INSTALLED WITHIN GRANTSVILLE CITY INCLUDING BUT NOT LIMITED TO EXCAVATION, CONSTRUCTION, ROADWORK AND UTILITIES SHALL CONFORM TO THE GRANTSVILLE CITY CONSTRUCTION STANDARDS AND SPECIFICATIONS, CITY MUNICIPAL CODE, THE LATEST EDITION OF THE APWA MANUAL OF STANDARD SPECIFICATIONS AND MANUAL OF STANDARD PLANS, THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND ANY STATE OR FEDERAL REGULATIONS AND PERMIT REQUIREMENTS OF VARIOUS GOVERNING BODIES. THE CONTRACTOR IS RESPONSIBLE TO HAVE A COPY OF THESE SPECIFICATIONS AND TO KNOW AND CONFORM TO THE APPROPRIATE CODES, REGULATIONS, DRAWINGS, STANDARDS AND SPECIFICATIONS.
- THE EXISTENCE AND LOCATION OF ANY OVERHEAD OR UNDERGROUND UTILITY LINES, PIPES, OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A RESEARCH OF THE AVAILABLE RECORDS. EXISTING UTILITIES ARE LOCATED ON PLANS ONLY FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR SHALL BEAR FULL RESPONSIBILITY FOR THE PROTECTION OF UTILITIES AND THE ENGINEER BEARS NO RESPONSIBILITY FOR UTILITIES NOT SHOWN ON THE PLANS OR NOT IN THE LOCATION SHOWN ON THE PLANS THIS INCLUDES ALL SERVICE LATERALS OF ANY KIND. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, LOCATE ALL UNDERGROUND AND OVERHEAD INTERFERENCES, WHICH MAY AFFECT HIS OPERATION DURING CONSTRUCTION AND SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE OF THE SAME. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR OVERHEAD UTILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT, AND SHALL BE RESPONSIBLE FOR ALL COST AND LIABILITY IN CONNECTION THEREWITH.
- THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING UTILITY LINES, STRUCTURES SURVEY MONUMENTS AND STREET IMPROVEMENTS WHICH ARE TO REMAIN IN PLACE, FROM DAMAGE, AND ALL SUCH IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED SATISFACTORY TO THE CITY ENGINEER AND OWNING UTILITY COMPANY AT THE EXPENSE OF THE CONTRACTOR
- 4. ALL CONSTRUCTION SHALL BE AS SHOWN ON THESE PLANS, ANY REVISIONS SHALL HAVE THE PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER AND PUBLIC WORKS DIRECTOR.
- 5. PERMITS ARE REQUIRED FOR ANY WORK IN THE PUBLIC WAY. THE CONTRACTOR SHALL SECURE ALL PERMITS AND INSPECTIONS REQUIRED FOR THIS CONSTRUCTION.
- 6. CURB, GUTTER, AND SIDEWALK, FOUND TO BE UNACCEPTABLE PER CITY STANDARDS AND APWA SHALL BE REMOVED AND REPLACED.
- 7. CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITIONS BETWEEN NEW CONSTRUCTION AND EXISTING SURFACES TO PROVIDE FOR PROPER DRAINAGE AND FOR INGRESS AND EGRESS TO NEW CONSTRUCTION. THE EXTENT OF TRANSITIONS
- 8. ANY SURVEY MONUMENTS DISTURBED SHALL BE REPLACED AND ADJUSTED PER TOOELE COUNTY SURVEYORS REQUIREMENTS.
- 9. ALL PRIVACY WALLS, NEW OR EXISTING, ARE ONLY SHOWN ON CIVIL PLANS FOR THE PURPOSE OF REVIEWING GRADING RELATIONSHIPS; FLOOD CONTROL AND SIGHT DISTANCE AT INTERSECTIONS. ALL WALLS SHALL HAVE A MINIMUM 2 FT X 2 FT X 30 INCH DEEP SPOT FOOTINGS. BOTTOM OF ALL FOOTINGS ON ALL WALLS SHALL BE A MINIMUM OF 30 INCHES BELOW FINISHED GRADE. WALLS GREATER THAN 6 FEET REQUIRE A SEPARATE PERMIT AND INSPECTION BY THE BUILDING DEPARTMENT.
- 10. ALL CONSTRUCTION MATERIALS PER APWA MUST BE SUBMITTED AND APPROVED BY THE CITY ENGINEER PRIOR TO THE PLACEMENT OF ASPHALT WITHIN CITY RIGHT OF WAY. GRANTSVILLE PUBLIC WORKS WILL APPROVE PIPE ZONE MATERIAL TO BE PLACED.
- 11. REQUEST FOR INSPECTION BY THE GRANTSVILLE CITY ENGINEERING DEPT. SHALL BE MADE BY THE CONTRACTOR AT LEAST 48 HOURS BEFORE THE INSPECTION SERVICES WILL BE REQUIRED.
- 12. WORK IN PUBLIC WAY, ONCE BEGUN, SHALL BE PROSECUTED TO COMPLETION WITHOUT DELAY AS TO PROVIDE MINIMUM INCONVENIENCE TO ADJACENT PROPERTY OWNERS AND TO THE TRAVELING PUBLIC. PLEASE SEE CODE 17 GENERAL PROVISIONS FOR
- 13. THE CONTRACTOR SHALL TAKE ALL NECESSARY AND PROPER PRECAUTIONS TO PROTECT ADJACENT PROPERTIES FROM ANY AND ALL DAMAGE THAT MAY OCCUR FROM STORM WATER RUNOFF AND/OR DEPOSITION OF DEBRIS RESULTING FROM ANY AND ALL WORK IN
- CONNECTION WITH CONSTRUCTION 14. POWER POLES AND/OR OTHER EXISTING FACILITIES NOT IN PROPER LOCATION BASED ON PROPOSED IMPROVEMENTS SHOWN HEREON WILL BE RELOCATED AT NO EXPENSE TO THE GRANTSVILLE CITY. POWER LINES AND ALL OTHER AERIAL UTILITIES ARE TO BE BURIED
- AND POLES REMOVED AS DETERMINED BY THE CITY ENGINEER. 15. CURB AND GUTTER WITH A GRADE OF LESS THAN FOUR-TENTHS OF ONE PERCENT SHALL BE CONSTRUCTED BY FORMING. EACH JOINT
- SHALL BE CHECKED FOR A GRADE PRIOR TO CONSTRUCTION AND WATER TESTED AS SOON AS POSSIBLE AFTER CONSTRUCTION.
- 16. CONTRACTOR TO FOLLOW GRANTSVILLE CITY NOISE ORDINANCE STANDARDS CODE ORDINANCE 2018-19 17. CONTRACTORS ARE RESPONSIBLE FOR ALL OSHA REQUIREMENTS ON THE PROJECT SITE.
- 18. A UPDES (UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM) PERMIT IS REQUIRED FOR ALL CONSTRUCTION ACTIVITIES AS PER STATE LAW AS WELL AS PROVIDING A STORM WATER POLLUTION PREVENTION PLAN TO THE CITY.
- 19. ALL CITY MAINTAINED UTILITIES INCLUDING; WATERLINE, FIRE HYDRANTS, STREETLIGHT WIRING, AND STORM DRAIN MUST BE IN PUBLIC RIGHT OF WAY OR IN RECORDED EASEMENTS.
- 20. CONTRACTOR SHALL WORK GRANTSVILLE CITY REGULAR WORKING HOURS OF MONDAY THROUGH FRIDAY 7:00 AM TO 4:00 PM
- PRIOR TO 90% BOND RELEASE, A LEGIBLE AS-BUILT DRAWING MUST BE SUBMITTED TO THE GRANTSVILLE CITY STAMPED AND SIGNED BY A PROFESSIONAL ENGINEER. AS-BUILTS MUST SHOW ALL CHANGES AND ACTUAL FIELD LOCATIONS OF STORM DRAINAGE, WATERLINES. IRRIGATION, STREET LIGHTING, AND POWER, AS-BUILTS WILL BE HELD TO THE SAME STANDARD AS APPROVED DESIGN DRAWINGS, NO REDLINED PLANS" ALLOWED. IN THE ABSENCE OF CHANGES. COPIES OF THE APPROVED DRAWINGS WILL BE REQUIRED STATING "INSTALLED AS PER DRAWINGS". AS-BUILT DRAWINGS FOR NEW DEVELOPMENTS SHALL BE SUBMITTED TO THE CITY IN THE FOLLOWING FORMATS AND QUANTITIES PRIOR TO THE 90% BOND RELEASE: 1. DXF COPY, 1. PDF COPY, AND 1 GIS SHAPE FILE CONTAINING THE SAME.
- 22. FILTER FABRIC WRAPPED AROUND AN INLET GRATE IS NOT AN ACCEPTABLE INLET SEDIMENT BARRIER. SEE GRANTSVILLE CITY CONSTRUCTION STANDARDS AND SPECIFICATIONS FOR DETAILS OF APPROVED STORM WATER BMPS WHICH SPECIFICALLY STATES THE UTILIZATION OF AN OIL WATER SNOUT SEPARATOR.
- 23. ASPHALT PAVING IS NOT ALLOWED WITHOUT A WRITTEN EXCEPTION FROM THE ENGINEERING DEPARTMENT AND PUBLIC WORKS DEPARTMENT BELOW AN AMBIENT TEMPERATURE OF 50 DEGREES AND RISING.
- 24. TO ENSURE PROPER PLANTING, PROTECTION AND IRRIGATION OF TREES, MITIGATING RISK OF TREE FAILURE OR FUTURE DAMAGE TO INFRASTRUCTURE, CONTRACTORS ARE REQUIRED TO FOLLOW THE STANDARDS AND SPECIFICATIONS OF THE ISA - INTERNATIONAL
- 25. WHEN A PROPOSED DEVELOPMENT BORDERS A COLLECTOR, MINOR COLLECTOR OR ARTERIAL STREET AND IS REQUIRED TO CONSTRUCT COLLECTOR STREET FENCING ALONG THE BACK OF SIDEWALK, THE DEVELOPMENT SHALL ALSO BE REQUIRED PUT IN A CONCRETE MOW STRIP FROM THE BACK OF SIDEWALK TO UNDERNEATH THE FENCE PANELS. CONCRETE MOW STRIPS SHALL ALSO BE REQUIRED BETWEEN THE SIDEWALK AND FENCING ALONG THE REAR OF DOUBLE FRONTAGE LOTS
- 26. CONCRETE FOR ALL SURFACE IMPROVEMENTS INCLUDING BUT NOT LIMITED TO; SIDEWALK, DRIVEWAY ENTRANCES, PEDESTRIAN RAMPS, CURB AND GUTTER, WATER WAYS, MANHOLE, VAULT AND VALVE COLLARS, AND ANY OTHER CAST IN PLACE SURFACE CONCRETE FEATURES SHALL BE CONSTRUCTED WITH MINIMUM 4,500 PSI CONCRETE
- 27. CULINARY WATER AND SEWER SERVICE LATERALS SHALL BE MARKED ON THE TOP BACK OF CURB AND LIP OF CURB AT THEIR ACTUAL LOCATION OF CROSSING THE CURB AND GUTTER. PINS OR STAMPS SHALL BE USED AND MUST BE INSTALLED WHILE THE CONCRETE IS STILL WET AND WILL READILY ACCEPT THE MARKER. GRINDING MARKING DUE TO DRY CEMENT IS NOT ALLOWED.

GRANTSVILLE CITY GRADING NOTES

- 1. IN THE EVENT THAT ANY UNFORESEEN CONDITIONS NOT COVERED BY THESE NOTES ARE ENCOUNTERED DURING GRADING OPERATIONS, THE OWNER AND CITY ENGINEER SHALL BE IMMEDIATELY NOTIFIED FOR DIRECTION.
- 2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL NECESSARY CUTS AND FILLS WITHIN THE LIMITS OF THIS
- PROJECT AND THE RELATED OFF-SITE WORK, SO AS TO GENERATE THE DESIRED SUBGRADE, FINISH GRADES AND SLOPES SHOWN. 3. CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ALL EXCAVATION. ADEQUATE SHORING SHALL BE DESIGNED AND PROVIDED BY
- THE CONTRACTOR TO PREVENT UNDERMINING OF ANY ADJACENT FEATURES OR FACILITIES AND/OR CAVING OF THE EXCAVATION.
- 4. THE CONTRACTOR IS WARNED THAT AN EARTHWORK BALANCE WAS NOT NECESSARILY THE INTENT OF THIS PROJECT. ANY ADDITIONAL MATERIAL REQUIRED OR LEFTOVER MATERIAL FOLLOWING EARTHWORK OPERATIONS BECOMES THE RESPONSIBILITY OF THE CONTRACTOR
- CONTRACTOR SHALL GRADE THE PAVEMENT AREA SUBGRADE TO THE LINES (HORIZONTAL) AND ELEVATIONS (VERTICAL) SHOWN ON THE PLANS WITHIN A TOLERANCE OF 0.1 + TO 0.1 -.
- 6. ALL CUT AND FILL SLOPES SHALL BE PROTECTED UNTIL EFFECTIVE EROSION CONTROL HAS BEEN ESTABLISHED.
- THE USE OF POTABLE WATER WITHOUT A SPECIAL PERMIT FOR BUILDING OR CONSTRUCTION PURPOSES INCLUDING CONSOLIDATION OF BACKFILL OR DUST CONTROL IS PROHIBITED. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION WATER FROM GRANTSVILLE CITY ENGINEERING AND UTILITIES DEPARTMENT.
- 8. THE CONTRACTOR SHALL MAINTAIN THE STREETS, SIDEWALKS AND ALL OTHER PUBLIC RIGHT-OF WAY IN A CLEAN, SAFE AND USABLE CONDITION. ALL SPILLS OF SOIL, ROCK OR CONSTRUCTION DEBRIS SHALL BE PROMPTLY REMOVED FROM THE PUBLICLY OWNED PROPERTY DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. ALL ADJACENT PROPERTY, PRIVATE OR PUBLIC SHALL BE MAINTAINED IN A CLEAN, SAFE AND USABLE CONDITION.
- 9. IN THE EVENT THAT ANY TEMPORARY CONSTRUCTION ITEM IS REQUIRED THAT IS NOT SHOWN ON THESE DRAWINGS, THE DEVELOPER AGREES TO PROVIDE AND INSTALL SUCH ITEM AT HIS OWN EXPENSE AND AT THE DIRECTION OF THE CITY ENGINEER. TEMPORARY CONSTRUCTION INCLUDES DITCHES, BERMS, ROAD SIGNS AND BARRICADES, ETC.
- 10. ALL GRADING WORK SHALL CONFORM TO THE SOILS REPORT AS PREPARED BY THE SOILS ENGINEER AND APPROVED BY THE CITY ENGINEER, AND AS SHOWN ON THESE PLANS.
- 11. ALL QUALITY CONTROL TESTING SHALL BE PERFORMED BY AN INDEPENDENT LICENSED AND CERTIFIED THIRD-PARTY TESTING SERVICE.

GRANTSVILLE CITY TRAFFIC NOTES

- WHEN A DESIGNATED "SAFE ROUTE TO SCHOOL" IS ENCROACHED UPON BY A CONSTRUCTION WORK ZONE THE SAFE ROUTE SHALL BE MAINTAINED IN A MANNER ACCEPTABLE TO GRANTSVILLE CITY.
- 2. IF THE IMPROVEMENTS NECESSITATE THE OBLITERATION, TEMPORARY OBSTRUCTION, TEMPORARY REMOVAL OR RELOCATION OF ANY EXISTING TRAFFIC PAVEMENT MARKING, SUCH PAVEMENT MARKING SHALL BE RESTORED OR REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE CITY ENGINEER, PUBLIC WORKS DIRECTOR OR DESIGNEE.
- 3. THE STREET SIGN CONTRACTOR SHALL OBTAIN STREET NAMES AND BLOCK NUMBERING FROM THE PLANNING DEPARTMENT PRIOR TO
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL PERMANENT SIGNS SHOWN ON THE PLANS. STREET NAME SIGNS SHALL CONFORM IN THEIR ENTIRETY TO CURRENT CITY STANDARDS AND THE LATEST MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) MANUAL, ALL OTHER SIGNS SHALL BE STANDARD SIZE UNLESS OTHERWISE SPECIFIED ON THE PLANS, ALL SIGN POSTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT CITY STANDARDS AND THE LATEST MANUAL OF UNIFORM
- 5. ALL PERMANENT TRAFFIC CONTROL DEVICES CALLED FOR HEREON SHALL BE IN PLACE AND IN FINAL POSITION PRIOR TO ALLOWING ANY PUBLIC TRAFFIC ONTO THE PORTIONS OF THE ROAD(S) BEING IMPROVED HEREUNDER, REGARDLESS OF THE STATUS OF COMPLETION OF PAVING OR OTHER OFF-SITE IMPROVEMENTS CALLED FOR PER APPROVED CONSTRUCTION DRAWINGS UNLESS APPROVED BY THE CITY ENGINEER & PUBLIC WORKS DIRECTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING UTAH TRANSIT AUTHORITY (UTA) IF APPLICABLE, IF THE CONSTRUCTION INTERRUPTS OR RELOCATES A BUS STOP OR HAS AN ADVERSE EFFECT ON BUS SERVICE ON THAT STREET TO ARRANGE FOR
- 7. BEFORE ANY WORK IS STARTED IN THE RIGHT-OF-WAY, THE CONTRACTOR SHALL INSTALL ALL ADVANCE WARNING SIGNS FOR THE CONSTRUCTION ZONE. THE CONTRACTOR SHALL INSTALL TEMPORARY STOP SIGNS AT ALL NEW STREET ENCROACHMENTS INTO EXISTING PUBLIC STREETS. ALL CONSTRUCTION SIGNING, BARRICADING, AND TRAFFIC DELINEATION SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) PER THE CURRENT EDITION ADOPTED BY UDOT AND BE APPROVED BY THE GRANTSVILLE CITY BEFORE CONSTRUCTION BEGINS. TRAFFIC CONTROL PLANS SHALL BE SUBMITTED AS PART OF THE ENGINEERING CONSTRUCTION PACKAGE AND APPROVED BY THE GRANTSVILLE CITY ENGINEER AND PUBLIC WORKS DIRECTOR.
- ALL SIGNS LARGER THAN 36" X 36" OR 1296 SQUARE INCHES PER SIGN POLE SHALL BE MOUNTED ON A SLIP BASE SYSTEM PER UDOT STANDARD DRAWING SN 10B (DETAIL DRAWING ATTACHED TO STANDARD DRAWINGS) WITH A "Z" BAR BACKING. SIGNS OF THIS SIZE ARE NOT ALLOWED TO BE MOUNTED ON A YIELDING POLE.
- 9. SIGN COMPONENTS SUCH AS SHEETING, EC FILM, INKS, LETTERS AND BORDERS ARE ALL REQUIRED TO BE FROM THE SAME MANUFACTURER. ONLY EC FILM MAY BE USED TO ACHIEVE COLOR. VINYL EC FILM IS NOT ACCEPTED.
- 10. ALL NEW ROUNDABOUTS, CROSSWALKS, STOP BARS AND LEGENDS SHALL BE INSTALLED WITH PAINT AND GLASS BEAD.
- 11. PAVING ASPHALT BINDER GRADE SHALL BE PG 58-28 UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER. ASPHALT AGGREGATE SIZE SHALL BE ½ INCH FOR RESIDENTIAL AND COLLECTOR ROADS. NO MORE THAN 15% RAP (RECLAIMED ASPHALT PAVEMENT) BY WEIGHT WILL BE ALLOWED IN THE ASPHALT MIX DESIGN FOR THE PAVING OF PUBLIC AND PRIVATE STREETS. UP TO THE 15 PERCENT WILL BE ALLOWED WITH NO CHANGE IN THE SPECIFIC BINDER GRADE. THE ASPHALT MIX DESIGN SHALL HAVE NO MORE THAN 3½ % AIR
- 14. POTHOLING: ALL POTHOLES MUST BE SAW CUT SQUARE AND HAVE A MINIMUM SIZE OF 1 SQUARE FOOT. WHEN REPAIRING A POTHOLE, SAND OR PEA GRAVEL MEETING GRANTSVILLE CITY STANDARDS SHALL BE PLACED OVER THE EXPOSED UTILITY TO A DEPTH OF 6 INCHES. FOLLOWING THE PEA GRAVEL WILL BE FLOWABLE FILL UP TO 1 INCH BELOW THE BOTTOM EDGE OF THE EXISTING ASPHALT. THE REMAINING PORTION OF THE HOLE SHALL BE FILLED WITH ASPHALT, WHICH WILL HAVE AN OVERALL THICKNESS OF THE EXISTING
- 15. ALL FILL WITHIN THE PUBLIC RIGHT OF WAY SHALL BE A-1-A TO A-3, WITH THE EXCEPTION OF TOP SOIL IN THE PARK STRIP FOR LANDSCAPING AND TRENCH BACKFILL. TRENCH BACKFILL MATERIAL UNDER PAVEMENTS OR SURFACE IMPROVEMENTS SHALL BE CLEAN, NONCLUMPING, GRANULAR AND FLOWABLE, 2" MINUS, A-1-A TO A-2-7 SOILS ACCORDING TO AASHTO 145 SOIL CLASSIFICATION SYSTEM. LIME TREATED FLOWABLE FILLS, IF APPROVED, SHALL HAVE A 28-DAY STRENGTH OF 65 PSI. 16. ALL TRAFFIC ROAD CLOSURES INVOLVING 1 OR MORE LANES OF TRAFFIC MUST RECEIVE PRIOR APPROVAL FROM THE CITY ENGINEER. PUBLIC WORKS DIRECTOR OR HIS/HER REPRESENTATIVE. VMS PCMS BOARDS MUST BE PLACED A MINIMUM OF 7 DAYS IN ADVANCE OF ANY LANE CLOSURE ON COLLECTOR, MINOR COLLECTOR OR ARTERIAL STREET. VMS PCMS BOARDS MUST ALSO BE PLACED IN ADVANCE OF ANY LANE CLOSURES ON A SUBDIVISION STREET PER THE CITY ENGINEER'S DIRECTION.
- 17. ROUNDABOUTS, INCLUDING THEIR INGRESS AND EGRESS, SHALL BE CONSTRUCTED WITH CONCRETE PAVEMENT. ENGINEER SHALL DESIGN CROSS SECTION AND SUBMIT TO THE CITY FOR REVIEW AND APPROVAL.

GRANTSVILLE CITY WATER NOTES

- THE FOLLOWING GRANTSVILLE CITY WATER NOTES ARE INTENDED FOR GENERAL WATER STANDARDS ONLY AND ARE NOT ALL INCLUSIVE THE CITY HAS INCLUDED THE CULINARY WATER DESIGN AND CONSTRUCTION STANDARDS WITHIN THE CITY CONSTRUCTION
- 2. NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN RELEASED FOR CONSTRUCTION BY THE ENGINEERING DEPARTMENT. FOLLOWING WATER PLAN APPROVAL, FORTY-EIGHT (48) HOUR NOTICE SHALL BE GIVEN TO THE ENGINEERING DEPARTMENT AND THE PUBLIC WORKS DEPARTMENT PRIOR TO THE START OF CONSTRUCTION. NOTICE MUST BE GIVEN BY 2:00 P.M. THE BUSINESS DAY PRIOR
- 3. ALL WORK WITHIN GRANTSVILLE CITY SHALL CONFORM TO GRANTSVILLE CITY STANDARDS AND SPECIFICATIONS, AWWA AND APWA.
- FOR RESIDENTIAL DEVELOPMENTS THE DEVELOPER SHALL PURCHASE AND INSTALL METER BOXES AND SETTERS ACCORDING TO CITY STANDARDS ON NEWLY DEVELOPED LOTS AND REAL PROPERTY AT THE TIME OF WATER MAIN INSTALLATION. WATER METERS WILL BE SUPPLIED AND INSTALLED BY THE GRANTSVILLE UTILITIES DEPARTMENT (AT DEVELOPER'S EXPENSE). THE DEVELOPER SHALL ALSO PROVIDE THE SITE ADDRESS, LOT NUMBER, METER SIZE AND PAY METER FEES PRIOR TO BUILDING PERMIT APPROVAL. THE DEVELOPER SHOULD ALSO PAY FOR RENTAL OF A HYDRANT METER, AND/OR USE THE GRANTSVILLE CITY PUBLIC WATER STANDPIPE
- 5. FOR COMMERCIAL AND CONDOMINIUM DEVELOPMENTS THE DEVELOPER SHALL PURCHASE AND INSTALL METER BOXES AND SETTERS ACCORDING TO CITY STANDARDS. WATER METERS WILL BE SUPPLIED BY GRANTSVILLE CITY PUBLIC WORKS DEPARTMENT (AT DEVELOPER'S EXPENSE) AND INSTALLED BY DEVELOPER.
- 6. ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FILLED AND AN ACCEPTABLE WATER SAMPLE OBTAINED PRIOR TO COMMISSIONING THE NEW WATER LINE TO THE GRANTSVILLE CITY CULINARY WATER DISTRIBUTION SYSTEM.
- GRANTSVILLE CITY UTILITIES DEPARTMENT MUST APPROVE WATER SHUT DOWN WHICH MAY REQUIRE EVENING AND WEEKEND SHUT DOWN AS DEEMED NECESSARY, REQUIRING THE CONTRACTOR TO BE BILLED FOR OVERTIME. 48 HOUR NOTICE IS REQUIRED.
- 8. WATER STUB-OUT INSTALLATIONS WILL NOT BE CONSTRUED AS A COMMITMENT FOR WATER SERVICE.
- CONDITIONAL APPROVAL OF VALVED OUTLET (6" AND LARGER): IN THE EVENT THE WATER PLANS SHOW ONE OR MORE VALVED
- OUTLETS EXTENDING OUT OF PAVED AREAS, INSTALLATIONS OF THESE OUTLETS IS ACCEPTABLE, HOWEVER, IF THE OUTLETS ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON WHEN THE PROPERTY IS DEVELOPED, THE DEVELOPER SHALL ABANDON THE OUTLETS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH THE CITY STANDARDS AND AT THE DEVELOPER'S EXPENSE.
- 10. ALL LINES TO BE PRESSURE TESTED ACCORDING TO GRANTSVILLE CITY AND AWWA STANDARDS AND CHLORINATED PRIOR TO USE AND
- 11. ALL FITTINGS TO BE COATED WITH POLY FM GREASE AND WRAPPED WITH 8-MIL THICK POLYETHYLENE.
- 12. NO OTHER UTILITY LINES MAY BE PLACED IN THE SAME TRENCH WITH WATER LINE UNLESS APPROVED BY THE CITY ENGINEER.
- 13. ANY CONFLICT WITH EXISTING UTILITIES SHALL BE IMMEDIATELY CALLED TO THE ATTENTION OF THE CITY ENGINEER OR DESIGNEE
- 14. ALL WATER VAULTS WILL BE CONSTRUCTED PER GRANTSVILLE CITY STANDARD DRAWINGS AND SPECIFICATIONS. NO VAULTS ARE ALLOWED IN TRAFFIC AREAS WITHOUT PRIOR APPROVAL OF THE CITY ENGINEER.
- 15. LANDSCAPING AND IRRIGATION ADJACENT TO VAULTS SHALL DRAIN AWAY FROM VAULTS.
- 16. ONCE THE WATERLINE HAS BEEN TESTED, APPROVED AND CITY WATER IS FLOWING THROUGH THE PIPE, ONLY CITY PERSONNEL ARE AUTHORIZED TO SHUT DOWN AND CHARGE THE WATERLINE.
- 17. MEGALUG FOLLOWING RING OR AN APPROVED EQUIVALENT SHALL BE USED ON ALL FITTINGS.
- APWA PLAN 562, CITY REQUIRES STAINLESS STEEL TIE-DOWN RESTRAINTS WITH TURNBUCKLES ONLY. 5/8" REBAR IS NOT ACCEPTABLE. MEGALUG FOLLOWERS REQUIRED ON ALL FITTINGS AND ALL DIMENSIONS OF THRUST BLOCKING STILL APPLY. THRUST BLOCKS MAY BE ELIMINATED IF HORIZONTAL TIE DOWN RESTRAINTS HAVE BEEN PRE-ENGINEERED AND RECEIVE PRIOR CITY APPROVAL.
- 19. WATER MAINS WILL BE HOT TAPPED AS CALLED OUT ON THE APPROVED PLANS. UNDER SPECIAL CIRCUMSTANCES, WHEN A CONTRACTOR SUBMITS A REQUEST FOR A SHUTDOWN CONTRARY TO THE APPROVED PLANS AND THE REQUEST IS APPROVED AT THE DISCRETION OF THE CITY ENGINEER OR DESIGNEE, THE CONTRACTOR MUST PROVIDE 48-HOUR NOTICE TO NEIGHBORS AND THOSE AFFECTED. IF BUSINESSES ARE IMPACTED BY THE SHUTDOWN IT WILL BE DONE AFTER HOURS AND ALL OVERTIME FEES FOR CITY PERSONNEL, EQUIPMENT AND VEHICLES MUST BE PAID IN ADVANCE.
- 20. CONTRACTORS ARE REQUIRED TO WRITE THE LOT NUMBER WITH A BLACK PERMANENT MARKER ON THE INSIDE OF THE WATER METER BARRELS AS THEY ARE INSTALLED

GRANSTVILLE CITY FIRE DEPARTMENT NOTES

- 1. ON ANY NEW HOME OR BUILDING INSTALLATION, ACCESSIBLE FIRE HYDRANTS SHALL BE INSTALLED BEFORE COMBUSTIBLE CONSTRUCTION COMMENCES AND SAID FIRE HYDRANTS SHALL BE IN GOOD WORKING ORDER WITH AN ADEQUATE WATER SUPPLY.
- 2. CONTRACTOR SHALL CALL THE PUBLIC WORKS DEPARTMENT AND ENGINEERING DEPARTMENT FOR UNDERGROUND INSPECTION, PRESSURE AND FLUSH VERIFICATION OF ALL FIRE HYDRANTS AND FIRE LINES BEFORE BACK FILLING.
- 3. PAINTING OF THE CURBS AND HYDRANT AND ANY WORK NECESSARY FOR PROTECTION OF HYDRANTS FROM PHYSICAL DAMAGE SHALL

BE APPROVED BEFORE BEING CONSTRUCTED. HYDRA-FINDERS WILL BE INSTALLED PER GRANTSVILLE CITY STANDARDS DETAIL.

- 4. A FLOW TEST MUST BE WITNESSED BY THE FIRE DEPARTMENT PRIOR TO OCCUPANCY FOR VERIFICATION OF REQUIRED ON-SITE
- 5. ALL ON-SITE FIRE MAIN MATERIALS MUST BE U.L. LISTED AND A.W.W.A. APPROVED.
- 6. THE TURNING RADIUS FOR ANY FIRE APPARATUS ACCESS ROAD AND/OR FIRE LANE, PUBLIC OR PRIVATE, SHALL BE NOT LESS THAN FORTY-EIGHT FEET (48') OUTSIDE RADIUS EQUALING 96' OR LARGER AND TWENTY-TWO FEET (22') INSIDE RADIUS AND SHALL BE PAVED.
- 7. A FIRE APPARATUS ROAD SHALL BE REQUIRED WHEN ANY PORTION OF AN EXTERIOR WALL OF THE FIRST STORY IS LOCATED MORE THAN ONE-HUNDRED FIFTY FEET (150') FROM FIRE DEPARTMENT VEHICLE ACCESS ROADS AND/OR FIRE LANES, PUBLIC OR PRIVATE, IN EXCESS OF ONE HUNDRED FIFTY FEET (150') IN LENGTH SHALL BE PROVIDED WITH AN APPROVED TURN AROUND AREA. CONTRACTOR/ENGINEER SHALL FOLLOW LATEST INTERNATIONAL FIRE CODE REGULATIONS AT ALL TIMES IN REGARDS TO DISTANCE
- 8. ACCESS ROADS SHALL BE MARKED BY PLACING APPROVED SIGNS AT THE START OF THE DESIGNATED FIRE LANE, ONE SIGN AT THE END OF THE FIRE LANE AND WIDTH SIGNS AT INTERVALS OF ONE-HUNDRED FEET (100') ALONG ALL DESIGNATED FIRE LANES. SIGNS TO BE PLACED ON BOTH SIDES OF AN ACCESS ROADWAY IF NEEDED TO PREVENT PARKING ON EITHER SIDE. SIGNS SHALL BE INSTALLED AT LEAST 5', MEASURED FROM THE BOTTOM EDGE OF THE SIGN TO THE NEAR EDGE OF PAVEMENT. WHERE PARKING OR PEDESTRIAN MOVEMENTS OCCUR. THE CLEARANCE TO THE BOTTOM OF THE SIGN SHALL BE AT LEAST 7' THE CURB ALONG OR ON THE PAVEMENT OR CEMENT IF CURB IS NOT PRESENT, SHALL BE PAINTED WITH RED WEATHER RESISTANT PAINT IN ADDITION TO THE SIGNS.
- 9. ELECTRICALLY CONTROLLED ACCESS GATES SHALL BE PROVIDED WITH AN APPROVED EMERGENCY VEHICLE DETECTOR/RECEIVER SYSTEM. SAID SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE GRANTSVILLE CITY F.D. APPROVAL. GATES ARE ONLY ALLOWED WITH PRIOR APPROVAL.
- 10. ALL PRIVATE UNDERGROUND FIRE LINES THAT SERVICE AUTOMATIC FIRE SPRINKLER SYSTEMS SHALL BE NO SMALLER THAN EIGHT (8) INCHES IN DIAMETER AND HAVE A POST INDICATOR VALVE (PIV) BETWEEN THE WATER MAIN AND THE BUILDING. IF A PIV ISN'T FEASIBLE DUE TO SITE CONSTRAINTS, A WATER INDICATOR VALVE (WIV) MAY BE USED WITH THE APPROVAL OF THE CITY ENGINEER OR FIRE CODE OFFICIAL. FOR A WIV TO BE ALLOWED, ANOTHER VALVE MUST BE INSTALLED ON THE FIRE SERVICE LINE BACK AT THE CONNECTION TO THE WATER MAIN, WHICH WILL BE MAINTAINED BY THE CITY AS PART OF IT'S CULINARY WATER SYSTEM. ALL FIRE LINES MATERIAL SHALL BE DUCTILE IRON. (DUCTILE IRON FROM THE PIV TO THE BUILDING SHALL BE PERMITTED OR DUCTILE IRON FROM THE MAIN WATER LINE TO THE WIV).
- 11. POST INDICATOR VALVES (PIV) SHALL BE BETWEEN 6 AND 40 FEET FROM BUILDINGS NOT EXCEEDING THREE STORIES OR EQUIVALENT IN HEIGHT AND BETWEEN 30 AND 40 FEET ON BUILDINGS IN EXCESS OF THREE OR MORE STORIES IN HEIGHT OR EQUIVALENT.
- 12. ROADS AND ACCESSES SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF FIRE APPARATUS. SURFACE SHALL BE PAVED BEFORE THE APPLICATION OF COMBUSTIBLE MATERIAL.
- 13. ALL NEW BUILDINGS EQUIPPED WITH A FIRE DEPARTMENT CONNECTION (FDC) MUST HAVE INLETS SECURED WITH KNOX BRAND LOCKING FDC CAP(S) WITH A SWIVEL COLLAR. ALL NEW BUILDINGS ARE ALSO REQUIRED TO HAVE A KNOX BRAND KEY LOCK BOX MOUNTED ON THE EXTERIOR BUILDING, SUCH THAT FIRE DEPARTMENT PERSONNEL MAY GAIN ACCESS IN CASE OF AN EMERGENCY.

ABBREVIATIONS

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AMERICAN PUBLIC WORKS ASSOCIATION
               ACCESSIBLE ROUTE
               AMERICAN SOCIETY FOR TESTING AND MATERIALS
               AMERICAN WATER WORKS ASSOCIATION
               BEST MANAGEMENT PRACTICES
              BOTTOM OF STEP
               BEGIN VERTICAL CURVE
               CURVE
              CATCH BASIN
              CURB FACE
              CLEAN OUT
              COMMUNICATION
CONC
              CONCRETE
               CONTINUOUS
               DIAMETER
               DUCTILE IRON PIPE
ELEC
               ELECTRICAL
ELEV
               ELEVATION
EOA
              EDGE OF ASPHALT
EVC
              END OF VERTICAL CURVE
EW
              FACH WAY
EXIST
              EXISTING
              FINISH FLOOR
               FINISH GRADE
               FIRE HYDRANT
               FLOW LINE OR FLANGE
               GRADE BREAK
               GATE VALVE
               HANDICAP
               HIGH POINT
               IRRIGATION
              RATE OF VERTICAL CURVATURE
               LAND DRAIN
              LINEAR FEET
               LOW POINT
               MANHOLE
               MINIMUM
              MECHANICAL JOINT
               NATURAL GROUND
               NUMBER
              ON CENTER
              ON CENTER EACH WAY
               OVERHEAD POWER
               POINT OF CURVATURE OR PRESSURE CLASS
              POINT OF COMPOUND CURVATURE
               POINT OF INTERSECTION
               PLASTIC IRRIGATION PIPE
               POST INDICATOR VALVE
              POINT OF REVERSE CURVATURE
               PROPOSED
               POINT OF TANGENCY
               POINT OF VERTICAL CURVATURE
              POINT OF VERTICAL INTERSECTION
              POINT OF VERTICAL TANGENCY
              ROOF DRAIN
ROW
              RIGHT OF WAY
               SLOPE
              SANITARY SEWER
               STORM DRAIN
               SECONDARY
              SANITARY SEWER
               STATION
               SIDEWALK
               SECONDARY WATER LINE
              TOP BACK OF CURB
               TOP OF GRATE
               TOP OF ASPHALT
TOC
               TOP OF CONCRETE
               TOP OF FOUNDATION
               TOP OF WALL
              TOP OF STEP
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TYPICAL VERTICAL CURVE

WATER LINE

WALL INDICATOR VALVE

NOTE: MAY CONTAIN ABBREVIATIONS THAT ARE NOT USED IN THIS PLAN SET.

ND			
	SECTION CORNER	— – – –	EXISTING EDGE OF ASPHALT
†	EXISTING MONUMENT		PROPOSED EDGE OF ASPHALT
•	PROPOSED MONUMENT		EXISTING STRIPING
2	EXISTING REBAR AND CAP		PROPOSED STRIPING
0	SET ENSIGN REBAR AND CAP	— — x — —	EXISTING FENCE
WM O	EXISTING WATER METER	x	PROPOSED FENCE
WM O	PROPOSED WATER METER		EXISTING FLOW LINE
Ŵ	EXISTING WATER MANHOLE		PROPOSED FLOW LINE
W	PROPOSED WATER MANHOLE		GRADE BREAK
W	EXISTING WATER BOX	— — sd — —	EXISTING STORM DRAIN LINE
wv > 1	EXISTING WATER VALVE	——— SD ———	PROPOSED STORM DRAIN LINE
$\stackrel{\text{\tiny WV}}{\searrow}$	PROPOSED WATER VALVE	—— RD ——	ROOF DRAIN LINE
Ç	EXISTING FIRE HYDRANT		CATCHMENTS
X	PROPOSED FIRE HYDRANT	— — HWL — —	HIGHWATER LINE
R	PROPOSED FIRE DEPARTMENT CONNECTION	— ss — —	EXISTING SANITARY SEWER
swv	EXISTING SECONDARY WATER VALVE	—— ss ——	PROPOSED SANITARY SEWER LINE
SWV_	PROPOSED SECONDARY WATER VALVE		PROPOSED SAN. SWR. SERVICE LINE
IRR	EXISTING IRRIGATION BOX	- $-$ Id $ -$	EXISTING LAND DRAIN LINE
IRR	EXISTING IRRIGATION VALVE	—— LD ——	PROPOSED LAND DRAIN LINE
IRR	PROPOSED IRRIGATION VALVE	——————————————————————————————————————	PROPOSED LAND DRAIN SERVICE LINE
S	EXISTING SANITARY SEWER MANHOLE	— — w — —	EXISTING CULINARY WATER LINE
§	PROPOSED SANITARY SEWER MANHOLE	—— w ——	PROPOSED CULINARY WATER LINE
CO	EXISTING SANITARY CLEAN OUT	— — — w — — — w —	PROPOSED CULINARY WATER SERVICE LINE
D	EXISTING STORM DRAIN CLEAN OUT BOX	- - swl $-$ -	EXISTING SECONDARY WATER LINE
D	PROPOSED STORM DRAIN CLEAN OUT BOX		PROPOSED SECONDARY WATER LINE
	EXISTING STORM DRAIN INLET BOX		PROPOSED SEC. WATER SERVICE LINE
	EXISTING STORM DRAIN CATCH BASIN	- $-$ irr $ -$	EXISTING IRRIGATION LINE

------ IRR ------ PROPOSED IRRIGATION LINE

— — e — EXISTING ELECTRICAL LINE

— — t — EXISTING TELEPHONE LINE

—— SF — TEMPORARY SILT FENCE

LOD — LIMITS OF DISTURBANCE

EXISTING CONTOURS

PROPOSED 0.5' CONTOURS

BUILDABLE AREA WITHIN SETBACKS

EXISTING ASPHALT TO BE REMOVED

PUBLIC DRAINAGE EASEMENT

PROPOSED ASPHALT

PROPOSED REVERSE PAN CURB AND GUTTER

CONCRETE TO BE REMOVED

EXISTING CURB AND GUTTER

[[]]]

PROPOSED CURB AND GUTTER

TRANSITION TO REVERSE PAN CURB

TYPE D MOUNTABLE CURB AND GUTTER

EXISTING CONCRETE

PROPOSED CONCRETE

STAMPED CONCRETE

EXISTING BUILDING

PROPOSED BUILDING

BUILDING TO BE REMOVED

EXISTING GRAVEL

PROPOSED WALL

 $\square = \square = \square$ EXISTING WALL

— g — EXISTING GAS LINE

—— AR —— ACCESSIBLE ROUTE

· · · · · · · · SAW CUT LINE

STRAW WATTLE

----- ohp ----- EXISTING OVERHEAD POWER LINE

EXISTING STORM DRAIN CLEAN OUT EXISTING STORM DRAIN CULVERT

PROPOSED STORM DRAIN CULVERT TEMPORARY SAG INLET PROTECTION TEMPORARY IN-LINE INLET PROTECTION ROOF DRAIN EXISTING ELECTRICAL MANHOLE

PROPOSED STORM DRAIN CATCH BASIN

EXISTING STORM DRAIN COMBO BOX

PROPOSED STORM DRAIN COMBO BOX

EXISTING ELECTRICAL BOX EXISTING TRANSFORMER EXISTING UTILITY POLE

EXISTING LIGHT PROPOSED LIGHT

EXISTING GAS METER EXISTING GAS MANHOLE EXISTING GAS VALVE EXISTING TELEPHONE MANHOLE

EXISTING TELEPHONE BOX EXISTING TRAFFIC SIGNAL BOX EXISTING CABLE BOX

EXISTING BOLLARD PROPOSED BOLLARD EXISTING SIGN

> PROPOSED SIGN EXISTING SPOT ELEVATION PROPOSED SPOT ELEVATION

EXISTING FLOW DIRECTION **EXISTING TREE**

NOTE: MAY CONTAIN SYMBOLS THAT ARE NOT USED IN THIS PLAN SET.

DENSE VEGETATION

BDI

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GENERAL NOTES

2022-11-16 C. CHILD J. CLEGG

PROJECT MANAGER C. CHILD

GRANTSVILLE PRECONSTRUCTION GENERAL NOTES

CHAIN OF COMMUNICATION

- FIRST CONTACT: CODY CHRISTENSEN PUBLIC WORKS INSPECTOR
- SECOND CONTACT: GLEN MILLWARD (WATER), MARKUS SEAT (SEWER), TRAVIS DANIELS (FIRE CHIEF), JASON SMITH (ASSISTANT FIRE CHIEF).
- PLEASE COMMUNICATE THROUGH E-MAIL TO MAINTAIN A WRITTEN RECORD.

MAIN CONSTRUCTION CONTACT

PROJECT FOREMAN:

CONSTRUCTION SCHEDULE

- CONSTRUCTION STARTS:
- PLEASE PROVIDE A CONSTRUCTION SCHEDULE. HELPS CITY TO PLAN FOR WHAT IS HAPPENING. PROVIDE TO JAMES AND HE WILL DISSEMINATE TO OTHERS.

<u>PERMITTING</u>

CONSTRUCTION STAKING

- SURVEYING & STAKING:
- WE ARE HAVING SOME ALIGNMENT ISSUES ON CITY UTILITIES PLEASE MAKE SURE YOU GET ADEQUATE STAKING.

- DOES THE CONTRACTOR HAVE A COPY OF THE GEOTECHNICAL REPORT AND IS HE FAMILIAR WITH THE REQUIREMENTS?
- DOES THE CITY INSPECTOR HAVE A COPY OF THE GEOTECHNICAL REPORT AND IS HE FAMILIAR WITH THE REQUIREMENTS? THE CITY INSPECTORS WILL BE GIVEN A COPY.
- GEO-TECH SHALL MONITOR THE EXCAVATION AND DETERMINE THE LOCATIONS THAT REQUIRE ADDITIONAL GRANULAR SUB-BASE AND SPECIFY THE DEPTH REQUIRED. CITY WOULD LIKE A DRAWINGS SHOWING THE AREAS THAT REQUIRE ADDITIONAL WORK.
- WHO WILL DO SOILS, COMPACTION TESTING?

SUBMITTALS:

- THE CONTRACTOR SHALL PROVIDE SUBMITTALS FOR MATERIAL TO THE CITY FOR APPROVAL PRIOR TO PURCHASE OF MATERIALS AND INSTALLATION. THE CITY WANTS TO CHECK THAT THE MATERIALS MEET SPEC BEFORE THEY ARE ORDERED SO THEY DON'T GET REJECTED WHEN THEY HAVE BEEN INSTALLED. SUBMIT TO CHRISTY MONTIERTH IN PUBLIC WORKS.
- THE CITY IS FINE WITH THE MATERIALS THAT HAVE PREVIOUSLY BEEN USED.

<u>SEWER</u>

- PIPE MATERIAL: <u>PVC ASTM D-3034 SDR-35</u>
- FOLLOW OSHA REQUIREMENTS FOR TRENCHING (4' VERTICAL WITH 1:1 SLOPING OR STEPPING OR USE TRENCH BOXES).
- SEWER LATERALS PER CITY STANDARD. (APWA 431).
- UTAH REQUIREMENT OF 10' HORIZONTAL SEPARATION BETWEEN SEWER AND WATER LATERALS. • 18" MINIMUM VERTICAL SEPARATION BETWEEN WATER AND SEWER.
- CRUSHED ROCK 3/-INCH MINUS IN PIPE ZONE (3/8-INCH ROUNDED PEA GRAVEL IS NOT ALLOWED BY THE
- SEWER LATERALS, GRAVEL BEDDING TO BE EXTENDED TO DWELLING.
- NATIVE SOILS MAY BE USED ABOVE THE PIPE ZONE IF THEY ARE SUITABLE TO THE CITY AND CAN MEET COMPACTION REQUIREMENTS (BLENDING MAY BE REQUIRED).
- OFFSET TEES FOR SEWER LATERALS; GASKET TYPE.
- COMPACTION 95% IN ROADS, 90% OFF-ROAD (ASTM D-1557, MODIFIED PROCTOR)
- INSTALLATION AS PER ASTM D-2321
- ALL PRECAST MANHOLES TO BE PROVIDED WITH RUBBER BOOTS AND STAINLESS-STEEL BANDS AT PIPE PENETRATIONS.
- INTERIOR PIPE PENETRATIONS IN ALL SEWER MANHOLES SHALL BE GROUTED.
- TRACER WIRE EXTENDING FROM MAIN TO LATERAL STUB ON ALL LATERALS AND EXTENDED TO SURFACE AT STUB MARKER. INCLUDE AN EXTRA 30-FEET TO EXTEND ALONG THE SERVICE TO THE
- STAMP (WHEN WET) OR PIN (DO NOT GRIND) GUTTER BOTH AT THE LIP AND TOP OF CURB AN "S" AT ALL SERVICE LATERALS (TWO PLACES FOR EACH SERVICE). MAKE SURE THESE ARE LOCATED ABOVE THE
- LATERALS IN THE PROPER LOCATIONS. • EXTEND UTILITY LATERAL STUB MARKERS BEYOND THE 15-FOOT PU&DE (15-FEET BEHIND BACK OF
- END OF SEWER LATERALS SHALL BE PLUGGED.

TESTING:

- AIR TEST MANDATORY CERTIFICATION REQUIRED.
- VACUUM TEST REQUIRED FOR THE MANHOLES.
- VIDEO INSPECTION AFTER FLUSHING THE CITY DOES NOT NEED TO OBSERVE THE VIDEO INSPECTION.
- VIDEO RECORD TO BE PROVIDED FOR CITY REVIEW. • PLEASE PROVIDE THE CITY 48 HOURS' NOTICE PRIOR TO TESTING.

EMERGENCY SERVICES

- INSTALL SILT FENCE FIVE FEET OUT AROUND FIRE HYDRANTS AND ELECTRICAL TRANSFORMERS AFTER THEIR INSTALLATION. THIS HELPS MAINTAIN A CLEAR SPACE AROUND THEM AND MAKES THEM VISIBLE IF EMERGENCY SERVICES ARE NEEDING TO FIND THEM DURING CONSTRUCTION.
- INSTALL TEMPORARY SIGNAGE AT THE BEGINNING OF WORK ON THE SITE.
- PARK ONLY ON ONE SIDE OF ACCESS ROADS SO EMERGENCY ACCESS IS CLEAR.
- COORDINATE WITH FIRE CHIEF FOR HIS INSPECTIONS. ROADS: FACE OF CURB TO FACE OF CURB IS PROPER DISTANCE AND HYDRANTS ARE PROPERLY PLACED. THE HEIGHT OF THE HYDRANTS WILL ALSO BE INSPECTED. 18" ABOVE GROUND FROM THE PUMPER NOZZLE.
- PAINT RED CURB TEN FEET EITHER DIRECTION FIRE HYDRANTS.

CULINARY WATER

- PIPE MATERIAL: PVC C900 DR18
- USE BEDDING SAND FOR BACKFILL IN THE PIPE ZONE (CITY NEEDS TO PREAPPROVE SAND BEDDING.) CITY WANTS CLEANED WASHED SAND. THE CITY WANTS A BUCKET AHEAD OF TIME SO THE CITY CAN WET IT AND SEE IF IT SETS UP LIKE CONCRETE OR NOT. IT CAN'T SET UP LIKE CONCRETE. THEY CAN PULL FROM THE STAKER PIT BUT THE SAND NEEDS TO BE WASHED. THE CITY CAN PROVIDE AN EXAMPLE FOR WHAT THEY ARE LOOKING FOR.
- WATER LATERALS SAND BEDDING NEEDS TO GO TO THE DWELLING.
- NATIVE SOILS MAY BE USED ABOVE THE PIPE ZONE IF THEY ARE SUITABLE TO THE CITY AND CAN MEET COMPACTION REQUIREMENTS (BLENDING MAY BE REQUIRED)
- VALVES SHALL BE CLUSTERED IN INTERSECTIONS
- VALVES & TEMP. BLOW-OFF ARE LOCATED AT THE DEAD-END MAIN OF PHASE LINES TO ALLOW FOR FLUSHING, ISOLATION AND CONTINUED SERVICE TO EXISTING CONNECTIONS WHEN FUTURE PHASES
- ARE CONSTRUCTED. • METER AND SERVICES SHALL BE %-INCH POLYETHYLENE SDR11 IPS. INSTALL SERVICE LATERALS AND METERS WITHIN 5-FEET OF LOT LINES (AS CLOSE TO LOT LINE AS PRACTICABLE), ONE ON EACH SIDE OF COMMON LOT LINE (ALTERNATE WITH SECONDARY WATER).
- USE 150# CORP STOPS.
- 10' HORIZONTAL SEPARATION OF WATER AND SEWER LATERAL PER STATE REQUIREMENTS. WATER LATERAL TO BE LOCATED UPSLOPE OF SEWER LATERAL TO THE EXTENT PRACTICABLE.
- 18" MINIMUM VERTICAL SEPARATION BETWEEN WATER AND SEWER.
- 10' HORIZONTAL SEPARATION OF WATER AND STORMWATER METER BARRELS SHALL BE 21-INCH DIAMETER WHITE CORRUGATED POLYETHYLENE
- METER TO BE INSTALLED 18 TO 22 INCHES BELOW THE LID.
- PLACE SAND AROUND THE WATER SERVICE SETTER BASES AND ABOVE TO STABILIZE SETTER AND PROVIDE INSULATION. GRAVEL IS NOT ALLOWED.
- TAPPING SADDLES SHALL BE <u>BRASS</u> WITH DOUBLE STAINLESS STEEL OR BRASS STRAPS WRAPPED
- WITH POLYSOCK.
- USE DUAL CHECK AND HEAVY-DUTY ANGLE VALVES FOR ALL SERVICES.
- INSTALL TRACER WIRE AND LOCATING TAPE ABOVE WATER MAIN.
- INSTALL TRACER WIRE FROM MAIN CONNECTION THROUGH METER PIT TO STUB MARKER WITH 30'
- EXCESS TO EXTEND TO THE DWELLING. • STAMP (WHEN WET) OR PIN (DO NOT GRIND) GUTTER BOTH AT THE LIP AND TOP OF CURB WITH A "W" AT ALL SERVICE LATERALS (2 PLACES EACH SERVICE). MAKE SURE THESE ARE LOCATED ABOVE THE
- LATERALS IN THE PROPER LOCATIONS. • THRUST BLOCKS NEED TO BE INSPECTED BY THE CITY PRIOR TO BACKFILL. SIZE BASED ON TEST
- MAKE SURE FIRE HYDRANTS NEED TO BE INSTALLED TO THE PROPER HEIGHT TO HELP THE BREAK A
- WAY FUNCTION WORKS. HYDRO FINDERS MUST BE INSTALLED.

• HYDROSTATIC PRESSURE TEST: 200 PSI FOR A MINIMUM OF 2 HOURS FOR MAIN ONLY AND 150 PSI IF TESTING WITH TAPPING SADDLES AND CORPORATIONS IN PLACE - INSPECTOR (GLEN MILLWARD OR ASSIGNED CITY INSPECTOR) MUST BE PRESENT FOR THE ENTIRE DURATION OF THE TEST.

- HYPOCHLORITE POWDER
- CHLORINE RESIDUALS WILL BE TESTED ONCE BY THE CITY, BUT ANY RETESTS WILL BE PERFORMED BY
- THE CONTRACTOR/DEVELOPER ONLY ONE SERIES OF BAC-T TESTING WILL BE PERFORMED BY THE CITY TO ACCEPT WATER LINES AND ANY RETESTS WILL BE PERFORMED BY THE CONTRACTOR/DEVELOPER (PRELIMINARY INVESTIGATIVE TESTS BY THE CONTRACTOR/DEVELOPER ARE ENCOURAGED) THE CITY NEEDS TO DO THE GRAB ON
- ANY SAMPLES. O PER AWWA C651, BAC-T TESTING SHALL BE COMPLETED FOR EVERY 1,200 FEET OF NEW WATER MAIN, AT THE END OF THE LINE, AND AT EACH BRANCH. TWO CONSECUTIVE SAMPLE SETS SHALL BE COLLECTED AT THE AFOREMENTIONED LOCATIONS AT LEAST 24 HOURS APART.

THE CITY WILL NOT SWING METER BOXES TO ACCOMMODATE THE DRIVEWAY. THINK ABOUT THE LATERAL LOCATIONS BEFORE LOCATING THE DWELLING.

STORM WATER

PIPE MATERIAL

- REINFORCED CONCRETE (RCP) AND/OR ADS N-12-WT
- INSTALLATION AND COMPACTION TO FOLLOW MANUFACTURERS RECOMMENDATIONS.
- ALL CATCH BASIN BOXES INCLUDE A SUMP. FOR BOXES WITH SNOUTS THE SUMP DEPTH IS BASED UPON THE SNOUT MODEL MANUFACTURES RECOMMENDATION. FOR ALL OTHER BOXES THE DEPTH IS 12" BELOW THE FLOW LINE OF THE PIPES.

FRANCHISE UTILITIES

- GAS: DOMINION
- POWER: ROCKY MOUNTAIN POWER
- CABLE: COMCAST PHONE: CENTURY LINK
- PLEASE INSTALL STUBS FOR FUTURE PHASES FOR FRANCHISED UTILITIES SO THAT NEW STREETS AND
- CONCRETE DON'T HAVE TO BE CUT TO EXTEND TO A FUTURE PHASE.

SURFACE IMPROVEMENTS

PAVEMENT

- ½" OR ¾-INCH ASPHALT AGGREGATE (1/2" IS THE CITY PREFERENCE). THE CITY STANDARD PAVEMENT SECTION IS 3-INCH ASPHALT ON 6-INCH UBC ON 8-INCH GRANULAR BORROW. (FABRIC) MARSHALL MIX REQUIRED PRIOR TO PAVING
- ROAD BASE AND CROSS-SECTION PER APPROVED DRAWINGS.
- PROVIDE PROPER SIGNAGE PER UTAH MUTCD.
- PROVIDE STOPS BARS AT STOP SIGNS.
- ADA TRUNCATED DOME INSERTS NEED TO BE YELLOW IN PED RAMPS. THE SPACING IS REQUIRED TO BE 2" TO FRONT OF RAMP AND NO MORE THAN 2" OFF THE SIDES OF THE WALKING PATH.
- INSTALL "NO PARKING" SIGNS IN TEMPORARY TURNAROUNDS. HOMEOWNERS ARE PARKING VEHICLES

CONCRETE:

- AIR TEST EVERY 50 YARDS UNLESS RESULTS ARE OUT OF SPEC (5% 7%) 3 CYLINDERS EVERY 50 YARDS
- 4,500 PSI CONCRETE FOR ALL SURFACE IMPROVEMENTS.
- SIDEWALK SECTION IS 6" PCC ON 6" UBC.

EARTHWORK:

- PROVIDE COMPACTION AND SIEVE ANALYSIS ON ALL INITIAL PROCTORS AND NEW MATERIAL. • COMPACTION TESTS EVERY 100 FEET OF PIPE TRENCH. VARY DEPTHS TO PROVIDE RESULTS THROUGHOUT STRATA.
- ROAD WORK AND BASE BOTH SHOULDERS AND CENTERLINE WITH A MAXIMUM OF 200' BETWEEN

- PROOF ROLL TRENCHES, SUBGRADE, AND BASE
- MINIMUM OF FOUR COMPACTION TESTS AROUND EACH MANHOLE AND CLEANOUT.
- USE APWA DETAIL 255 FOR PIPE TRENCH PATCHING.

TESTING AND QA/QC

- 48-HOUR NOTICE IS REQUIRED PRIOR TO ANY TESTING. MAKE SURE THE TEST IS SCHEDULED. • INSPECTOR(S) REPRESENTING THE CITY MUST BE PRESENT FOR ALL TESTING INCLUDING THOSE
- PERFORMED BY AN INDEPENDENT AGENCY.
- PUBLIC WORKS HOURS ARE 7 AM TO 3:30 PM MONDAY THROUGH FRIDAY. HOWEVER, THE CITY WILL WORK WITH CONTRACTOR IF CONTRACTOR IS WORKING OUTSIDE THESE HOURS. • COMPACT FILL IN 8" LIFT'S.
- **CONSTRUCTION WATER**
- CONTRACTOR SHALL OBTAIN WATER FOR CONSTRUCTION FROM A CITY APPROVED FIRE HYDRANT USING A HYDRANT METER RENTED FROM THE CITY. THERE IS A \$1600 REFUNDABLE DEPOSIT FOR HYDRANT METERS AND A CHARGE OF \$6 PER 1000 GALLONS FOR ALL WATER USED. \$75 A MONTH
- RENTAL CHARGE • PLEASE DON'T DAMAGE THE METERS AND DON'T TAKE ANYTHING OFF THE METER.

EROSION CONTROL / STORM WATER SYSTEM PROTECTION

- MINIMIZE DISTURBED AREAS.

MINIMIZE POTENTIAL FOR OFF-SITE RUN-OFF

- KEEP WORKING AREA WETTED TO MINIMIZE DUST
- PROVIDE SILT FENCE TO PREVENT SEDIMENT TRANSPORT DOWNSTREAM.
- CONTAIN ALL SEDIMENT ON SITE. • MAINTAIN BMPS AS PER SWPPP.
- SWPPP TO BE ON-SITE AT ALL TIMES. • PROOF OF COVERAGE UNDER UPDES REQUIRED
- O CITY WILL NEED A COPY OF THE NOI. • THE CITY IS ON COMPLIANCE GO. MAKE SURE UPDATES ARE LOADED IN COMPLIANCE GO. ADD THE
- CITY PUBLIC WORKS E-MAIL CONTACT. HAVE A RSI AND PTOE ON SITE.
- THE CITY WILL CHECK WITH THE CONTRACTOR AFTER AN EVENT.
- THE CITY WILL SHARE INSPECTION REPORTS WITH THE CONTRACTOR. • INSPECT AFTER RAINFALL AND OTHER EVENTS (WEATHER, AND CONSTRUCTION AROUND BMPS) THAT MAY AFFECT BMPS.
- MAKE SURE TO FOLLOW THE SWPPP AS SHOWN ON THE PLANS.
- PROVIDE VEGETATIVE COVER ON COMPLETED OR LONG-TERM TEMPORARY GRADING WITHIN 14 DAYS.
- PUT THE SWPPP SIGN ON SITE AND VISIBLE SO THE STATE CAN SEE IT ON A DRIVE BY.

CONSTRUCTION DEBRIS DISPOSAL

- MAINTAIN A WORK SITE THAT IS CLEAN AS POSSIBLE AND PROPERLY DISPOSE OF DEBRIS AND TRASH. NO GARBAGE PITS ALLOWED
- NO ON-SITE CONCRETE WASHOUT ALLOWED UNLESS HAULED FROM SITE AT END OF PROJECT OR OTHER PROVISIONS ARE MADE.

SITE SAFETY

- CONFORM TO OSHA STANDARDS.
- CLOSE TRENCHES AT NIGHT.
- SECURE OPEN TRENCHES AND PLUG LINES.

SECURITY SECURE CONSTRUCTION EQUIPMENT WHEN NOT IN USE.

SANITATION

• CLEAN AND PROPERLY MAINTAINED PORT-A-JOHN(S) ON SITE AT ALL TIMES.

HAZARDOUS MATERIAL STORAGE ON SITE

• IF THERE ARE HAZARDOUS MATERIALS ON SITE, MAKE SURE THE CITY HAS APPROVED IT AND THAT IT HAS SECONDARY CONTAINMENT. THE FIRE CHIEF NEEDS TO KNOW WHAT IS ON SITE, HOW IT IS SECURED AND WERE IT IS LOCATED.

SITE ACCESS

AS SHOWN ON THE SWPPP DON'T DEVIATE FROM IT.

CONSTRUCTION OBSERVATION

• CITY PERSONNEL WILL INSPECT REGULARLY AS NEEDED.

CONSTRUCTION DRAWINGS

- KEEP AN ACCURATE SET OF AS-BUILTS. • PROVIDE COPIES OF AS-BUILTS AT COMPLETION OF PROJECT PRIOR TO OCCUPANCY.
- MAKE SURE CHANGES IN AS-BUILTS ARE BUBBLED AND CLEAR AS WHAT CHANGES HAVE OCCURRED.
- CITY HAS STORM BASIN PLAN CERTIFICATION THE DESIGNING ENGINEER NEEDS TO SIGN AND STAMP. • PROVIDE DIGITAL SET OF AS-BUILTS (PDF, DWG AND SHAPE FILES ARE REQUIRED.) FOR CITY PRIOR TO
- OCCUPANCY.
- CITY WILL PROVIDE A LIST OF ITEMS REQUIRED IN THE SHAPE FILE. • BRAYDEE WILL PROVIDE REQUIREMENTS FOR THE CONSTRUCTION DRAWINGS.
- IF THERE ARE QUESTIONS ABOUT THE PLANS AND CONDITIONS ON THE GROUND FIRST REQUEST THE DESIGN ENGINEER'S INTERPRETATION AND BRING THAT INTERPRETATION TO THE CITY WHEN QUESTIONS COME UP. THE ONSITE INSPECTORS CANNOT MAKE APPROVALS TO CHANGES. DOCUMENT CHANGES.

CONSTRUCTION DRAWINGS:

DON'T PRINT ANY PLANS UNTIL ALL OF THE CHANGES HAVE BEEN MADE AND YOU HAVE RECEIVED A COPY

OF THE SIGNED PLANS FROM GRANTSVILLE CITY. PROVIDE DAN ENGLAND WITH ONE 24X36 AND FOUR 11X17'S.

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PRECONSTRUCTION **GENERAL NOTES**

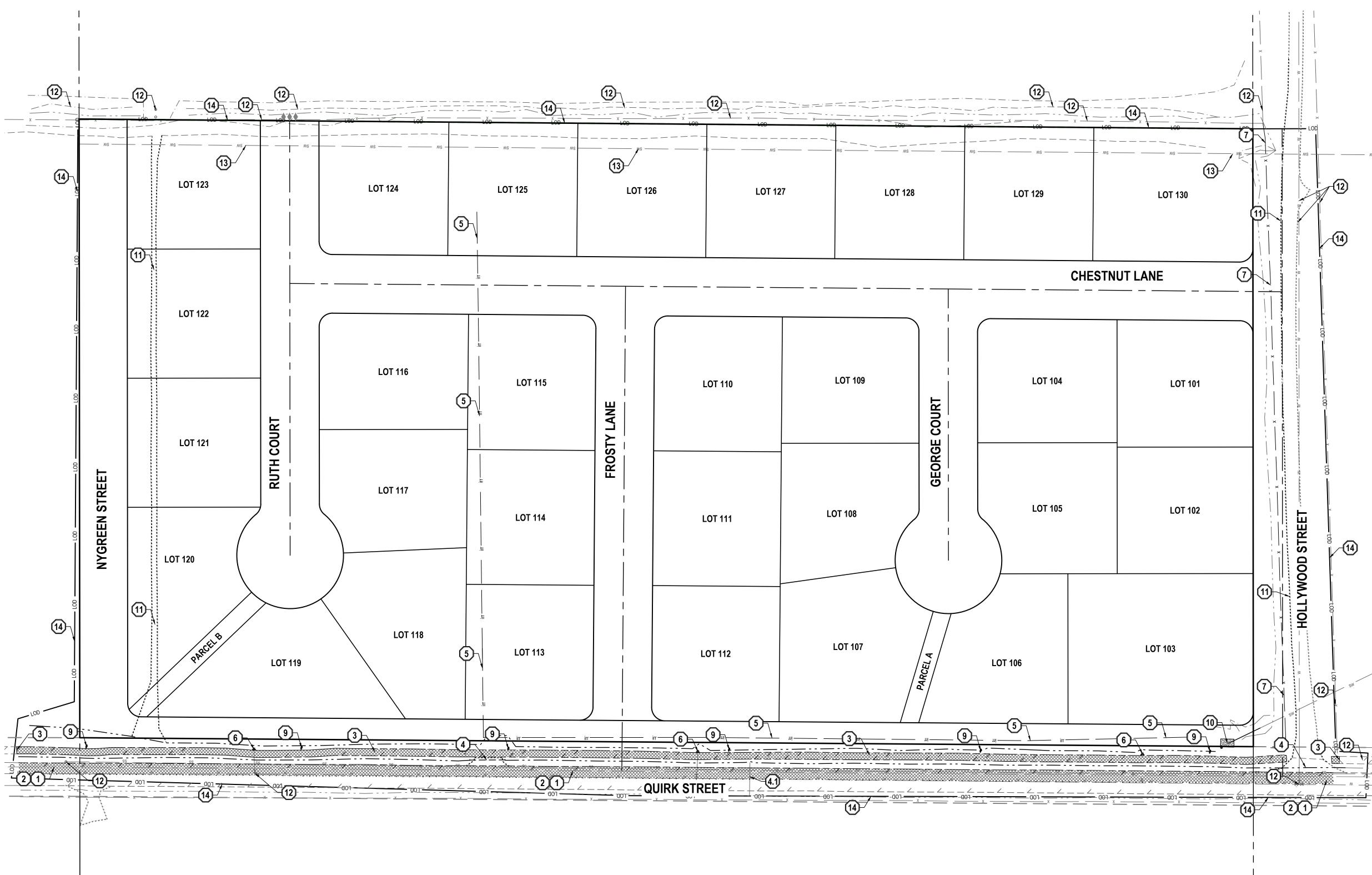
2022-11-16 T1216G C. CHILD J. CLEGG

PROJECT MANAGER C. CHILD



BENCHMARK

NORTH QUARTER CORNER OF SECTION 7, TOWNSHIP 3 SOUTH, RANGE 5 WEST SALT LAKE BASE AND MERIDIAN (2.5" BRASS TOOELE COUNTY SURVEY MONUMENT ON 4" PIPE, DATED 1986) ELEV = 4599.95' (USED ELEVATION) 4414.85' (TRUE ELEVATION)



GENERAL NOTES

- 1. ALL WORK TO COMPLY WITH THE GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
- 2. EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS BASED UPON RECORD INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. LOCATIONS MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND LOCATION OF THE UTILITIES SHOWN ON THESE PLANS OR INDICATED IN THE FIELD BY LOCATING SERVICES. ANY ADDITIONAL COSTS INCURRED AS A RESULT OF THE CONTRACTOR'S THEIR VICINITY SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED IN THE CONTRACT. THE RESPONSIBLE FOR ANY DAMAGE CAUSED TO THE EXISTING UTILITIES AND UTILITY STRUCTURES THAT ARE TO REMAIN. IF CONFLICTS WITH EXISTING UTILITIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONSTRUCTION TO DETERMINE IF ANY FIELD ADJUSTMENTS SHOULD BE MADE.
- ALL SURFACE IMPROVEMENTS DISTURBED BY CONSTRUCTION SHALL BE RESTORED OR REPLACED, INCLUDING TREES AND DECORATIVE SHRUBS, SOD, FENCES, WALLS AND STRUCTURES, WHETHER OR NOT THEY ARE SPECIFICALLY SHOWN ON THE CONTRACT DOCUMENTS.
- ALL CONSTRUCTION SIGNAGE, BARRICADES, TRAFFIC CONTROL DEVICES, ETC. SHALL CONFORM TO THE LATEST EDITION OF THE M.U.T.C.D. THE CONTRACTOR WILL MAINTAIN SUCH SO THAT THEY ARE PROPERLY PLACED AND VISIBLE AT ALL TIMES.
- SIDEWALKS AND CURBS DESIGNATED TO BE DEMOLISHED SHALL BE DEMOLISHED TO THE NEAREST EXPANSION JOINT, MATCHING THESE PLANS AS CLOSELY AS POSSIBLE.
- 6. THE CONTRACTOR IS TO PROTECT AND PRESERVE ALL EXISTING IMPROVEMENTS, UTILITIES, AND SIGNS, ETC. UNLESS OTHERWISE NOTED ON THESE PLANS.

SCOPE OF WORK:

PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:

- SAWCUT EXISTING ASPHALT PAVEMENT TO PROVIDE A CLEAN EDGE FOR THE TRANSITION BETWEEN EXISTING AND PROPOSED ASPHALT PAVEMENT.
- REMOVE AND PROPERLY DISPOSE OF EXISTING ASPHALT PAVEMENT.
- 3 SAWCUT, REMOVE, AND PROPERLY DISPOSE OF EXISTING ASPHALT PATH. CONTRACTOR TO PROVIDE TRAIL ACCESS THROUGH CONSTRUCTION SITE.
- REMOVE AND PROPERLY DISPOSE OF EXISTING STORM DRAIN PIPE.
- (4.1) REMOVE AND PROPERLY DISPOSE OF EXISTING GRAVEL FILLED STORM DRAIN PIPE.
- (5) REMOVE AND PROPERLY DISPOSE OF EXISTING PRIVATE IRRIGATION LINE.
- **6** REMOVE AND RELOCATE EXISTING FIRE HYDRANT.
- 7 REMOVE AND PROPERLY DISPOSE OF EXISTING FENCE.
- 8 REMOVE AND PROPERLY DISPOSE OF EXISTING SIGN.
- 9 REMOVE EXISTING POWER POLES AND OVERHEAD POWER LINES TO UNDERGROUND UTILITY LINES. COORDINATE WITH LOCAL POWER COMPANY.

REMOVE AND PROPERLY DISPOSE OF EXISTING STRUCTURES, CONCRETE SLABS, STAIRS, ETC., INCLUDING ALL ELECTRICAL APPURTENANCES, IN THIS AREA WHETHER OR NOT IDENTIFIED ON PLANS. WELL ABANDONMENT WILL BE PERMITTED THROUGH THE STATE. CONTRACTOR TO FILL IN ALL HOLES CREATED DURING DEMOLITION WITH STRUCTURAL FILL TO PROPER SUBGRADE ELEVATION.

- REMOVE AND PROPERLY DISPOSE OF EXISTING GRAVEL ROAD.
- PROTECT AND PRESERVE ALL EXISTING IMPROVEMENTS, UTILITIES, SIGNS, ETC. (TYPICAL UNLESS OTHERWISE NOTED).
- EXISTING 8" IRRIGATION LINE TO BE REMOVED AND REROUTED THROUGH SUBDIVISION SEE UTILITY PLAN FOR LAYOUT OF NEW IRRIGATION LINE.
- LIMIT OF DISTURBANCE.



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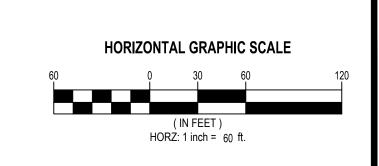
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DEMOLITION PLAN

PRINT DATE 2022-11-04 CHECKED BY
J. CLEGG DRAWN BY C. CHILD

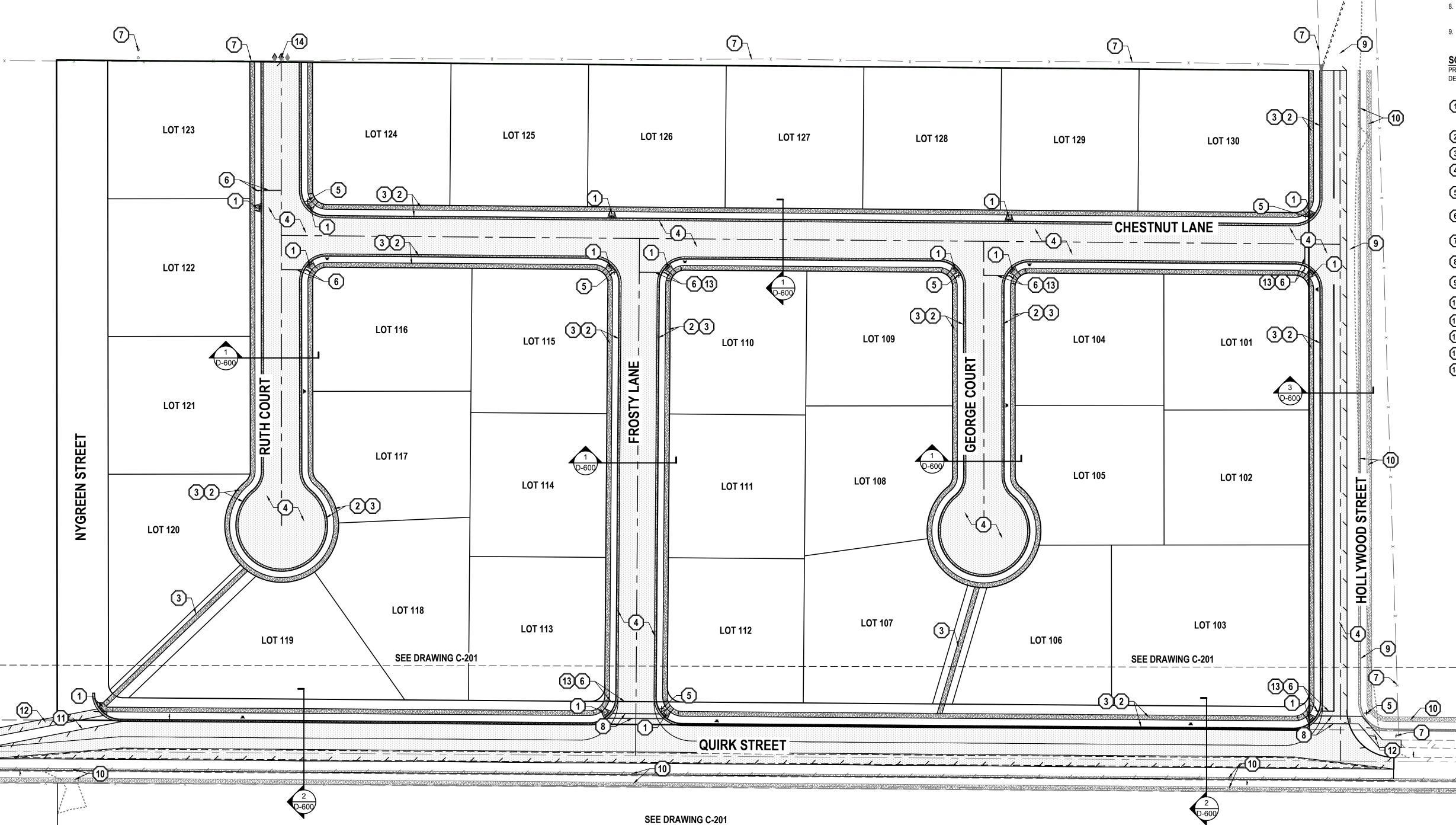
PROJECT MANAGER
C. CHILD **C-100**





BENCHMARK

NORTH QUARTER CORNER OF SECTION 7. TOWNSHIP 3 SOUTH, RANGE 5 WEST SALT LAKE BASE AND MERIDIAN (2.5" BRASS TOOELE COUNTY SURVEY MONUMENT ON 4" PIPE, DATED 1986) ELEV = 4599.95' (USED ELEVATION) 4414.85' (TRUE ELEVATION)



GENERAL NOTES

- 1. ALL WORK TO COMPLY WITH THE GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
- 2. ALL IMPROVEMENTS MUST COMPLY WITH ADA STANDARDS AND RECOMMENDATIONS.
- 3. SEE LANDSCAPE/ARCHITECTURAL PLANS FOR CONCRETE MATERIAL, COLOR, FINISH, AND SCORE PATTERNS
- 4. ALL PAVEMENT MARKINGS SHALL CONFORM TO THE LATEST EDITION OF THE M.U.T.C.D. (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES).
- 5. ALL SURFACE IMPROVEMENTS DISTURBED BY CONSTRUCTION SHALL BE RESTORED OR REPLACED, INCLUDING TREES AND DECORATIVE SHRUBS, SOD, FENCES, WALLS AND STRUCTURES, WHETHER OR NOT THEY ARE SPECIFICALLY SHOWN ON THE CONTRACT DOCUMENTS.
- 6. NOTIFY ENGINEER OF ANY DISCREPANCIES IN DESIGN OR STAKING BEFORE PLACING CONCRETE OR ASPHALT
- 7. THE CONTRACTOR IS TO PROTECT AND PRESERVE ALL EXISTING IMPROVEMENTS, UTILITIES, AND SIGNS, ETC. UNLESS OTHERWISE NOTED ON THESE PLANS.
- 8. GRADING PERMIT MUST BE OBTAINED FROM GRANTSVILLE CITY PRIOR TO DISTURBING ANY VEGETATION OR MOVING ANY SOIL. CONTACT THE CITY ENGINEER AT 435-884-1661.
- RIGHT-OF-WAY ENCROACHMENT PERMIT MUST BE OBTAINED FROM GRANTSVILLE CITY PRIOR TO DOING ANY WORK IN THE EXISTING RIGHT-OF-WAY, OR ON ANY STATE ROADS.

SCOPE OF WORK:

PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:

- HANDICAP ACCESS RAMP TO BE CONSTRUCTED SIMILAR TO APWA STANDARD PLAN NO. 235. CONTRACTOR TO FIELD FIT AND SHALL CONSTRUCT IN A WAY NOT EXCEED MAXIMUM SLOPES. INSTALL WITH DETECTABLE WARNING SURFACE PER GRANTSVILLE CITY STANDARDS AND APWA PLAN NO. 238 AND SPECIFICATIONS. COLOR PER GRANTSVILLE CITY STANDARDS.
- CONSTRUCT 2.5' TYPE A CURB AND GUTTER PER APWA PLAN No. 205 AND SPECIFICATIONS. (TYP.)
- (3) CONSTRUCT 6" THICK, 5.0' SIDEWALK PER APWA PLAN No. 231 AND SPECIFICATIONS. (TYP.)
- ASPHALT PAVEMENT: 3" THICK ASPHALTIC CONCRETE WITH 6" AGGREGATE BASE ON 8" OF SUBGRADE.
- INSTALL STREET INTERSECTION IDENTIFICATION PER GRANTSVILLE CITY STANDARDS AND SPECIFICATIONS AND MUTCD R1-1.
- INSTALL "STOP" SIGN PER MUTCD R1-1 AND 12" WIDE SOLID WHITE STOP BAR PER M.U.T.C.D. STANDARD PLANS.
- PROTECT AND PRESERVE ALL EXISTING IMPROVEMENTS, UTILITIES, SIGNS, ETC. (TYPICAL UNLESS OTHERWISE NOTED).
- (8) 12" WIDE SOLID CROSS WALK BAR PER M.U.T.C.D. STANDARD PLANS.
- TRANSITION BETWEEN PROPOSED ASPHALT AND EXISTING GRAVEL ROAD WITH NEW GRAVEL SECTION PER DETAIL 10/D-600.
- 10 FUTURE ROAD IMPROVEMENTS.
- TAPER TEMPORARY ASPHALT TIE-IN PER GRANTSVILLE CITY STANDARDS AND SPECIFICATIONS.
- 13) INSTALL "CROSS TRAFFIC DOES NOT STOP" SIGN PER MUTCD W4-4P.
- (14) INSTALL END OF ROADWAY MARKERS PER MUTCD OM4-1.



TOOELE 169 N. Main Street, Unit 1

Tooele, UT. 84074 Phone: 435.843.3590

SALT LAKE CITY

Phone: 801.255.0529 LAYTON

Phone: 801.547.1100

CEDAR CITY Phone: 435.865.1453

RICHFIELD

Phone: 435.896.2983

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THE COASSOLO GROUP, LLC

PO BOX 190 GRANTSVILLE CITY, UTAH 84029 CONTACT:

TODD CASTAGNO

PHONE: 435-849-1485

SUBDIVISIO

10' WIDE, 3" THICK ASPHALT TRAIL WITH 8" SUBBASE.

NOTE: MAY CONTAIN KEYNOTES THAT ARE NOT USED ON THIS SHEET.

HOLL

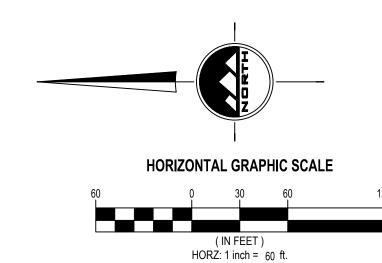


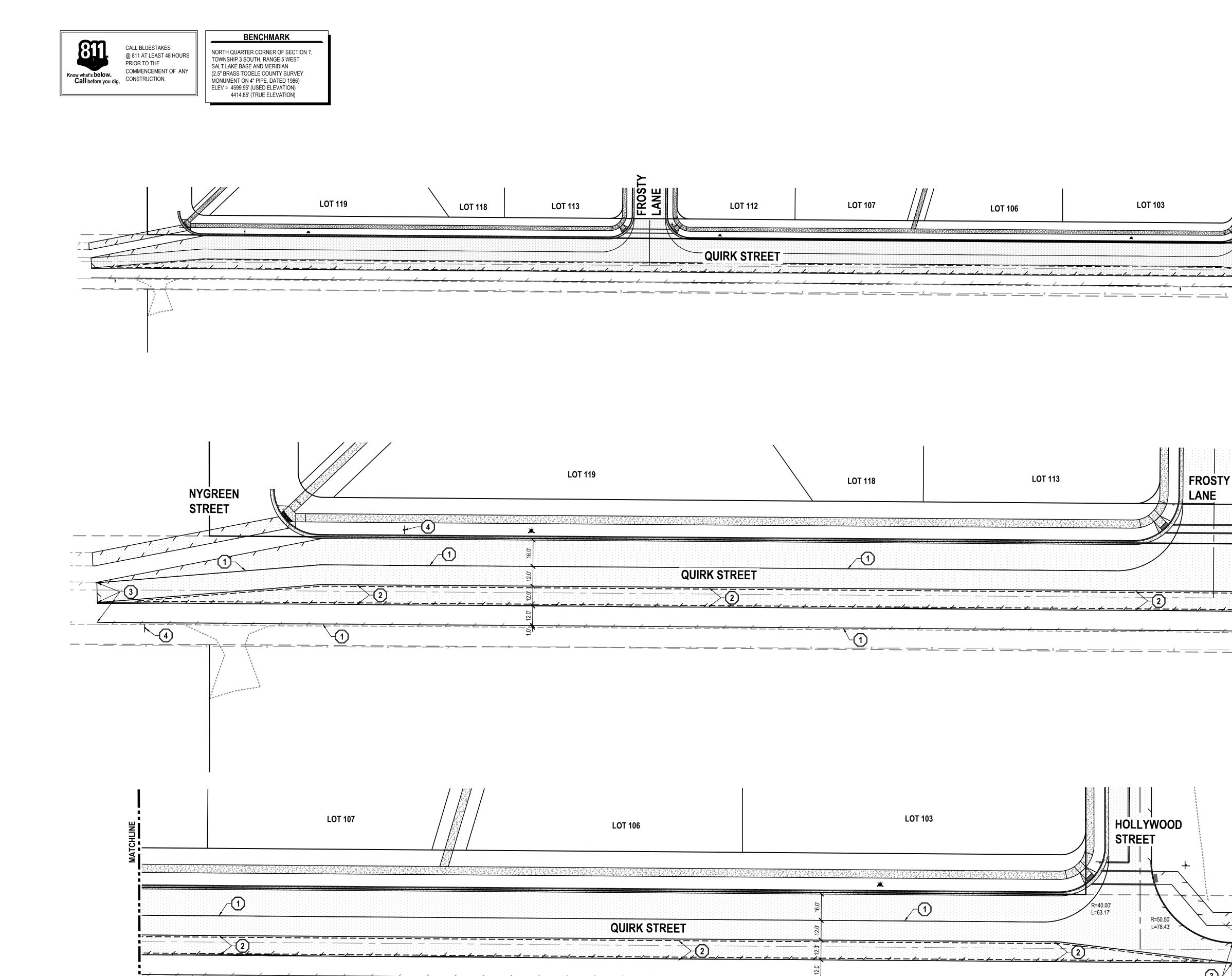
SITE PLAN

PRINT DATE 2022-11-09

CHECKED BY
J. CLEGG DRAWN BY C. CHILD PROJECT MANAGER C. CHILD

C-200





SCOPE OF WORK:

PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS: 1 4" SOLID WHITE STRIPING ENSIGN (2) 4" SOLID AND DASHED YELLOW STRIPING 3 END OF STRIPING 4 INSTALL HORIZONTAL ALIGNMENT SIGNS, MUTCD W4-1 AND W1-4R. **TOOELE** MAY CONTAIN KEYNOTES THAT ARE NOT USED ON THIS SHEET. 169 N. Main Street, Unit 1 Tooele, UT. 84074 Phone: 435.843.3590 **SALT LAKE CITY** Phone: 801.255.0529 LAYTON Phone: 801.547.1100 **CEDAR CITY** Phone: 435.865.1453 RICHFIELD Phone: 435.896.2983 WWW.ENSIGNENG.COM HORIZONTAL GRAPHIC SCALE THE COASSOLO GROUP, LLC PO BOX 190 GRANTSVILLE CITY, UTAH 84029 CONTACT: (IN FEET) HORZ: 1 inch = 60 ft. TODD CASTAGNO PHONE: 435-849-1485 **SUBDIVISION** LOT 112 YWOOD CORNER PRELIMIN HOLL SITE STRIPPING PLAN

> PRINT DATE 2022-11-09

CHECKED BY

J. CLEGG

DRAWN BY C. CHILD

PROJECT MANAGER C. CHILD

HORIZONTAL GRAPHIC SCALE

(IN FEET) HORZ: 1 inch = 30 ft.

R=40.00' L=62.83' Know what's below.

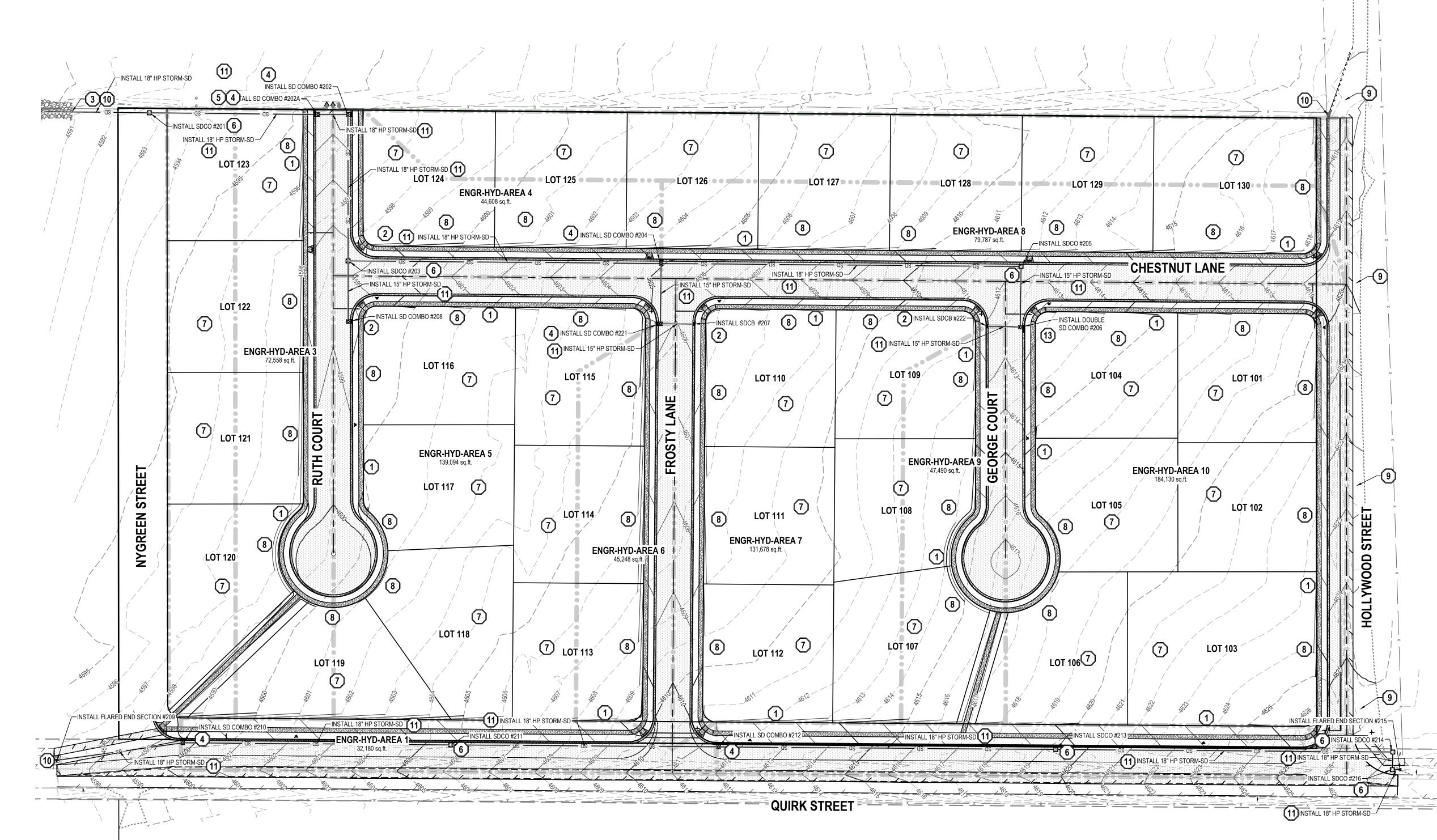
Call before you dig.

CALL BLUESTAKES @ 811 AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

BENCHMARK NORTH QUARTER CORNER OF SECTION 7, TOWNSHIP 3 SOUTH, RANGE 5 WEST SALT LAKE BASE AND MERIDIAN (2.5" BRASS TOOELE COUNTY SURVEY MONUMENT ON 4" PIPE, DATED 1986)

4414.85' (TRUE ELEVATION)

ELEV = 4599.95' (USED ELEVATION)



GENERAL NOTES

- 1. ALL WORK TO COMPLY WITH THE GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
- 2. ALL IMPROVEMENTS MUST COMPLY WITH ADA STANDARDS AND RECOMMENDATIONS.
- 3. ALL WORK SHALL COMPLY WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER POSSIBLY INCLUDING, BUT NOT LIMITED TO, REMOVAL OF UNCONSOLIDATED FILL, ORGANICS, AND DEBRIS, PLACEMENT OF SUBSURFACE DRAIN LINES AND GEOTEXTILE, AND OVEREXCAVATION OF UNSUITABLE BEARING MATERIALS AND PLACEMENT OF ACCEPTABLE FILL MATERIAL.
- 4. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE EXISTING SOIL CONDITIONS.
- EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RESPONSIBLE FOR ANY DAMAGE CAUSED TO THE EXISTING UTILITIES AND UTILITY STRUCTURES THAT ARE TO REMAIN. IF CONFLICTS WITH EXISTING UTILITIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONSTRUCTION TO DETERMINE IF ANY FIELD ADJUSTMENTS SHOULD BE MADE.
- ALL STORM DRAIN INFRASTRUCTURE TO BE INSTALLED PER GOVERNING AGENCY OR APWA STANDARD PLANS AND SPECIFICATIONS.
- ENSURE MINIMUM COVER OVER ALL STORM DRAIN PIPES PER MANUFACTURER'S RECOMMENDATIONS. NOTIFY ENGINEER IF MINIMUM COVER CANNOT BE ATTAINED.
- 8. THE CONTRACTOR SHALL ADJUST TO GRADE ALL EXISTING UTILITIES AS NEEDED PER LOCAL GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
- 9. NOTIFY ENGINEER OF ANY DISCREPANCIES IN DESIGN OR STAKING BEFORE PLACING CONCRETE, ASPHALT, OR STORM DRAIN STRUCTURES OR PIPES.
- 10. THE CONTRACTOR IS TO PROTECT AND PRESERVE ALL EXISTING IMPROVEMENTS, UTILITIES, AND SIGNS, ETC UNLESS OTHERWISE NOTED ON THESE PLANS.
- 11. GRADING PERMIT MUST BE OBTAINED FROM GRANTSVILLE CITY PRIOR TO DISTURBING ANY VEGETATION OR
- MOVING ANY SOIL. CONTACT THE CITY ENGINEER AT 435-884-1661.
- 12. RIGHT-OF-WAY ENCROACHMENT PERMIT MUST BE OBTAINED FROM GRANTSVILLE CITY PRIOR TO DOING ANY WORK IN THE EXISTING RIGHT-OF-WAY, OR ON ANY STATE ROADS.

SCOPE OF WORK:

PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:

- 1) SLOPE TO EXISTING GROUND MAXIMUM 3:1 SLOPE.
- (2) CATCH BASIN PER CITY STANDARDS AND SPECIFICATIONS.
- 3 DAYLIGHT TO EXISTING GROUND.
- (4) COMBINATION INLET/CLEANOUT BOX PER CITY STANDARDS AND SPECIFICATIONS.
- SNOUT 18F OR APPROVED EQUAL. CUT PIPE FLUSH WITH STRUCTURAL WALL. ENSURE PIPE/STRUCTURE
- (5) INTERFACE IS SMOOTH AND FREE OF DEBRIS. INSTALL PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS. INSTALL ON NORTH SIDE OF STORM DRAIN BOX.
- 6 CLEANOUT BOX PER APWA STANDARD PLAN NO. 330 AND SPECIFICATIONS.
- INDIVIDUAL LOT OWNERS ARE REQUIRED TO GRADE LOTS TO PREVENT DRAINAGE ONTO NEIGHBORING PROPERTIES.
- 8 DRIVE WAY AND APPROACH TO BE INSTALLED BY LOT OWNER PER GRANTSVILLE CITY STANDARDS.
- 9 TRANSITION BETWEEN PROPOSED ASPHALT AND EXISTING GRAVEL ROAD WITH NEW GRAVEL SECTION PER DETAIL 10/D-600.
- 00 OUTLET RIPRAP PER SHEET D-602.
- INSTALLATION AND TRENCHING PER CITY STANDARDS AND SPECIFICATIONS. LENGTH AND SLOPE PER PLAN.
- DUE TO THE ANGLE AT WHICH THE PIPES COME INTO THE STORM DRAIN BOXES AND SOFTWARE CONSTRAINTS, PIPES APPEAR TO BE COMING OUT CORNER. THIS IS NOT TRULY HOW THE PIPES ARE TO BE INSTALLED, THEY ARE TO BE INSTALLED IN THE SIDE OF STORM DRAIN BOXES.
- DOUBLE COMBINATION INLET/CLEANOUT BOX PER CITY STANDARDS AND SPECIFICATIONS.

NOTE: MAY CONTAIN KEYNOTES THAT ARE NOT USED ON THIS SHEET.



TOOELE

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THE COASSOLO GROUP, LLC PO BOX 190

GRANTSVILLE CITY, UTAH 84029 CONTACT:

TODD CASTAGNO PHONE: 435-849-1485

SUBDIVISIO SIGN CORNE

PRELIMIN

YWOOD

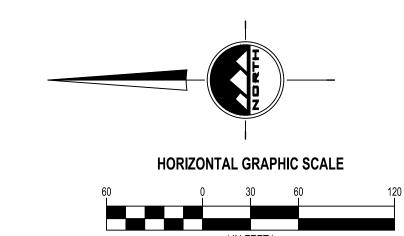
HOLL

GRADING PLAN

PRINT DATE 2022-11-16 DRAWN BY C. CHILD CHECKED BY

J. CLEGG

PROJECT MANAGER
C. CHILD C-300



HORZ: 1 inch = 60 ft.

Study Summary Statistics No. of Lots Roof SF/lot Drive SF/lot Total Lots Hardscape, SF 105000 Total Road Hardscape SF 159017 264017 Total Hardscape, SF 874483 Total Area, SF 610466 Landscaped Area, SF 0.36 Weighted Average C

Retention Calculations (100-year storm)

Basin Tributary Area 874,483 SF
Runoff coefficient C: 0.361

Total Discharge - cfs

Infiltration Rate per GSH Job No. 3218-002-21
Rate = 45 minutes per inch = 1.33 in/hr

0.67

Allowable Discharge Rate

Basin Area

30,000 SF

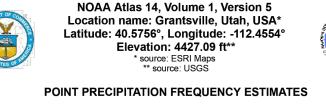
cfs/acre

		Cumulative Runoff to Basin	Infiltration	Required
Time (min)	i (in/hr)	(cf)	(cf)	Storage (cf)
5	6.07	13,324	139	13,185
10	4.62	20,276	277	19,999
15	3.82	25,147	416	24,731
30	2.58	33,968	831	33,137
60	1.59	41,868	1,663	40,205
120	0.84	44,238	3,325	40,913
180	0.56	44,501	4,988	39,514
360	0.30	46,608	9,975	36,633
720	0.17	53,191	19,950	33,241
1440	0.10	61,354	39,900	21,454
			ed Detention:	40,913
		Provid	ed Detention:	1,540,000

Catchment Calculations (10-year storm)
Time of Concentration: 3

R	ainfall Intensity I: Mannings N	1.34 0.013		
Catchment	Area (SF)	С	Flow (CFS)	Destination
1	32,180	0.361	0.361	210
2	38,986	0.361	0.437	212
3	72,558	0.361	0.813	202A
4	44,608	0.361	0.500	202
5	139,094	0.361	1.559	208
6	45,248	0.361	0.507	221
7	131,678	0.361	1.476	207
8	79,787	0.361	0.894	205
9	47,490	0.361	0.532	222
10	184,130	0.361	2.064	206

		Surface Flow	Upstream	Pipe Flow	Total Flow	D. O.	5	Full Flow	% of Full-
Pipe	Tributary Basins	(CFS)	Pipes	(CFS)	(CFS)	Pipe Slope	Diameter (IN)	Capacity (CFS)	Flow Capacity
222-206	9	0.532	None	0.000	0.532	0.55%	15	4.80	11.1%
205-206	10	2.064	222-206	0.532	2.596	0.66%	15	5.26	49.3%
204-205	-	0.000	205-206	2.596	2.596	1.74%	18	13.89	18.7%
207-221	7	1.476	None	0.000	1.476	0.52%	15	4.67	31.6%
204-221	6	0.507	207-221	1.476	1.983	1.23%	15	7.18	27.6%
203-204	8	0.894	204-205, 204-221	4.579	5.473	1.94%	18	14.67	37.3%
203-208	5	1.559	None	0.000	1.559	0.50%	15	4.58	34.0%
202-203	4	0.500	203-204, 203-208	7.032	7.532	1.85%	18	14.33	52.6%
202A-202	3	0.813	202-203	7.532	8.346	1.00%	18	10.53	79.2%
201-202A	-	0.000	202A-202	8.346	8.346	1.29%	18	11.96	69.8%
215-216		6.000	None	0.000	6.000	36.14%	18	63.32	9.5%
214-216	-	0.00	215-216	6.000	6.000	0.50%	18	7.45	80.6%
213-214	-	0.000	214-216	6.000	6.000	2.12%	18	15.34	39.1%
212-213	-	0.000	213-214	6.000	6.000	2.10%	18	15.26	39.3%
211-212	2	0.437	212-213	6.000	6.437	2.00%	18	14.90	43.2%
210-211	-	0.000	211-212	6.437	6.437	1.98%	18	14.82	43.4%
209-210	1 1	0.361	210-211	6.437	6.798	1.07%	18	10.90	62.4%



Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

PF tabular | PF graphical | Maps & aerials

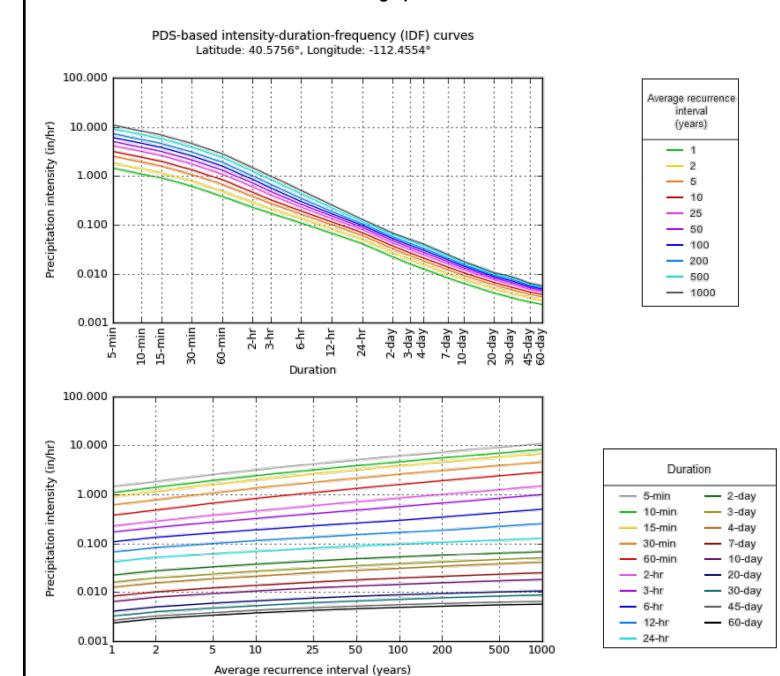
PF tabular

Durotion	Average recurrence interval (years)									
Duration	1	2	5	10	25	50	100	200	500	1000
5-min	1.44 (1.26-1.63)	1.82 (1.63-2.09)	2.53 (2.24-2.88)	3.17 (2.78-3.59)	4.15 (3.58-4.74)	5.03 (4.22-5.78)	6.07 (4.98-7.07)	7.26 (5.76-8.59)	9.14 (6.91-11.0)	10.8 (7.88-13
10-min	1.09 (0.960-1.24)	1.39 (1.24-1.59)	1.92 (1.70-2.19)	2.41 (2.12-2.73)	3.16 (2.72-3.61)	3.83 (3.22-4.40)	4.62 (3.79-5.38)	5.53 (4.38-6.54)	6.95 (5.26-8.38)	8.25 (6.00-10
15-min	0.904 (0.796-1.02)	1.15 (1.02-1.32)	1.59 (1.41-1.81)	1.99 (1.75-2.26)	2.61 (2.25-2.98)	3.16 (2.66-3.64)	3.82 (3.13-4.44)	4.57 (3.62-5.40)	5.75 (4.34-6.92)	6.82 (4.96-8.3
30-min	0.608 (0.534-0.690)	0.774 (0.690-0.886)	1.07 (0.950-1.22)	1.34 (1.18-1.52)	1.76 (1.52-2.00)	2.13 (1.79-2.45)	2.57 (2.11-2.99)	3.08 (2.44-3.64)	3.87 (2.92-4.66)	4.59 (3.34-5.6
60-min	0.376 (0.331-0.427)	0.479 (0.427-0.548)	0.662 (0.588-0.754)	0.829 (0.729-0.941)	1.09 (0.938-1.24)	1.32 (1.11-1.52)	1.59 (1.30-1.85)	1.90 (1.51-2.25)	2.40 (1.81-2.89)	2.84 (2.07-3.4
2-hr	0.225 (0.205-0.251)	0.285 (0.258-0.320)	0.375 (0.341-0.420)	0.456 (0.410-0.510)	0.588 (0.517-0.658)	0.706 (0.606-0.796)	0.840 (0.702-0.960)	0.998 (0.808-1.16)	1.25 (0.959-1.49)	1.47 (1.09-1.
3-hr	0.171 (0.158-0.189)	0.212 (0.194-0.235)	0.271 (0.250-0.299)	0.322 (0.293-0.355)	0.405 (0.361-0.445)	0.476 (0.416-0.536)	0.563 (0.481-0.646)	0.666 (0.554-0.781)	0.836 (0.662-1.00)	0.991 (0.751-1.
6-hr	0.108 (0.100-0.117)	0.134 (0.124-0.144)	0.163 (0.152-0.176)	0.190 (0.176-0.205)	0.229 (0.209-0.246)	0.260 (0.234-0.282)	0.296 (0.263-0.325)	0.344 (0.298-0.395)	0.426 (0.358-0.507)	0.499 (0.408-0.0
12-hr	0.067 (0.063-0.072)	0.082 (0.077-0.089)	0.100 (0.094-0.108)	0.114 (0.106-0.123)	0.134 (0.124-0.146)	0.150 (0.138-0.164)	0.167 (0.151-0.184)	0.186 (0.165-0.207)	0.222 (0.192-0.253)	0.253 (0.214-0.3
24-hr	0.041 (0.038-0.044)	0.051 (0.047-0.055)	0.061 (0.056-0.066)	0.069 (0.064-0.075)	0.080 (0.074-0.087)	0.088 (0.081-0.096)	0.097 (0.089-0.105)	0.105 (0.096-0.114)	0.117 (0.106-0.128)	0.128 (0.112-0.
2-day	0.022 (0.021-0.024)	0.027 (0.025-0.029)	0.033 (0.030-0.035)	0.037 (0.034-0.040)	0.043 (0.040-0.046)	0.047 (0.044-0.051)	0.052 (0.048-0.056)	0.057 (0.052-0.061)	0.063 (0.057-0.068)	0.068 (0.061-0.0
3-day	0.016 (0.015-0.017)	0.019 (0.018-0.021)	0.023 (0.022-0.025)	0.026 (0.025-0.028)	0.031 (0.029-0.033)	0.034 (0.032-0.037)	0.038 (0.035-0.041)	0.041 (0.038-0.045)	0.046 (0.042-0.050)	0.050
4-day	0.013 (0.012-0.014)	0.015 (0.014-0.017)	0.018 (0.017-0.020)	0.021 (0.020-0.023)	0.025 (0.023-0.027)	0.028 (0.025-0.030)	0.030 (0.028-0.033)	0.033 (0.031-0.036)	0.037 (0.034-0.041)	0.041 (0.036-0.0
7-day	0.008 (0.008-0.009)	0.010 (0.009-0.011)	0.012 (0.011-0.013)	0.014 (0.013-0.015)	0.016 (0.015-0.017)	0.018 (0.016-0.019)	0.019 (0.018-0.021)	0.021 (0.019-0.022)	0.023 (0.021-0.025)	0.025
10-day	0.006 (0.006-0.007)	0.008 (0.007-0.008)	0.009 (0.009-0.010)	0.011 (0.010-0.011)	0.012 (0.011-0.013)	0.013 (0.012-0.014)	0.014 (0.013-0.015)	0.015 (0.014-0.017)	0.017 (0.016-0.018)	0.018 (0.016-0.0
20-day	0.004 (0.004-0.004)	0.005 (0.005-0.005)	0.006 (0.006-0.006)	0.007 (0.006-0.007)	0.008 (0.007-0.008)	0.008 (0.008-0.009)	0.009 (0.008-0.009)	0.009 (0.009-0.010)	0.010 (0.009-0.011)	0.01 1 (0.010-0.
30-day	0.003 (0.003-0.003)	0.004 (0.004-0.004)	0.005 (0.004-0.005)	0.005 (0.005-0.006)	0.006 (0.006-0.006)	0.007 (0.006-0.007)	0.007 (0.007-0.008)	0.008 (0.007-0.008)	0.008 (0.008-0.009)	0.009 (0.008-0.
45-day	0.003 (0.002-0.003)	0.003 (0.003-0.003)	0.004 (0.004-0.004)	0.004 (0.004-0.005)	0.005 (0.005-0.005)	0.005 (0.005-0.005)	0.006 (0.005-0.006)	0.006 (0.006-0.006)	0.006 (0.006-0.007)	0.006
60-day	0.002 (0.002-0.003)	0.003 (0.003-0.003)	0.003	0.004	0.004	0.005	0.005 (0.005-0.005)	0.005 (0.005-0.005)	0.005 (0.005-0.006)	0.000

¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS)

Back to Top

PF graphical



NOAA Atlas 14, Volume 1, Version 5 Created (GMT): Thu Jun 16 18:53:41 2022

Back to Top

Maps & aerials

Small scale terrain

©GSE

The groundwater measurements presented are conditions at the time of the field exploration and may not be representative of other times or locations. Groundwater levels may vary seasonally and with precipitation, as well as other factors including irrigation. Evaluation of these factors is beyond the scope of this study. Groundwater levels may, therefore, be at shallower or deeper depths than those measured during this study, including during construction and over the life of

The extent and nature of any dewatering required during construction will be dependent on the actual groundwater conditions prevalent at the time of construction and the effectiveness of construction drainage to prevent run-off into open excavations.

5.3.1 Stormwater Percolation Test

Geotechnical Study - Proposed Hollywood Corner Subdivision

A stormwater percolation test was performed at a depth of approximately 5 feet in the representative natural sandy clay soils at Test Pit TP-6. The measured percolation rate was 45 minutes per inch. This design percolation rate should be considered typical for the soils at the site

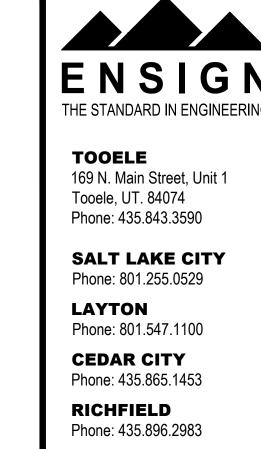
5.3.2 Subdrain

the structure.

The Coassolo Group, LLC Job No. 3511-001-22

The residential structures may have full or partial depth basements. Structures with subgrade levels will require subdrains. A subdrain system, if utilized, shall consist of a perimeter foundation/chimney subdrain and an under-slab subdrain. The perimeter subdrain would consist of a 4-inch diameter slotted or perforated PVC or other durable material pipe installed with an invert at least 18 inches below the top of the lowest adjacent slab. The drain pipe shall slope at least 0.25 percent to a suitable point of gravity discharge, such as an inside or outside sump. The 4-inch diameter slotted PVC pipe shall be encased in a one-half to three-quarter-inch clean gap-graded gravel extending 2 inches below laterally and continuously up at least 12 inches above the top of the lowest adjacent slab. The gravels must be separated from the adjacent soils with a geotextile fabric, such as Mirafi 140N or equivalent. Extending up from the top of the foundation subdrain to within 1 foot of final grade shall be a synthetic drain board or a zone of "free-draining" permeable fill, also separated from all adjacent soils with a geotextile fabric. Prior to the placement of the perimeter foundation subdrain, the outside subgrade walls shall be appropriately waterproofed.

In addition to the perimeter foundation/chimney subdrain, an under-slab drain is recommended. This shall consist of a minimum of 8 inches of "free-draining" one-half to three-quarter inch minus clean gap-graded gravel placed over properly prepared suitable natural subgrade soils and/or structural fill extending to suitable natural soil. The "free-draining" gravel shall be hydraulically connected to the perimeter drain. In addition, we recommend 4-inch diameter slotted PVC pipes be installed laterally and spaced approximately 50 feet apart beneath the below-grade level slab of the structure with an invert elevation of at least 12 inches below the top of the lowest adjacent slab. This subdrain would be similarly encased in the one-half- to three-quarter-inch clean gap-graded gravel, separated from the natural soils with a geotextile fabric, extending up to the 6-inch layer of gravel underneath the at-grade slab. This subdrain line would discharge to the perimeter subdrain.



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FOR:
THE COASSOLO GROUP, LLC
PO BOX 190
GRANTSVILLE CITY, UTAH 84029
CONTACT:
TODD CASTAGNO

CONTACT:
TODD CASTAGNO
PHONE: 435-849-1485

LYWOOD CORNER SUBDIVISIO
PRELIMINARY DESIGN
HOLLYWOOD STREET AND QUIRK STREET

HOLL

CITY

22 4:05:59 PM

DRAINAGE CALCULATIONS

PROJECT NUMBER T1216G 2022-11-09

DRAWN BY CHECKED BY C. CHILD J. CLEGG

PROJECT MANAGER C. CHILD

C-301

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

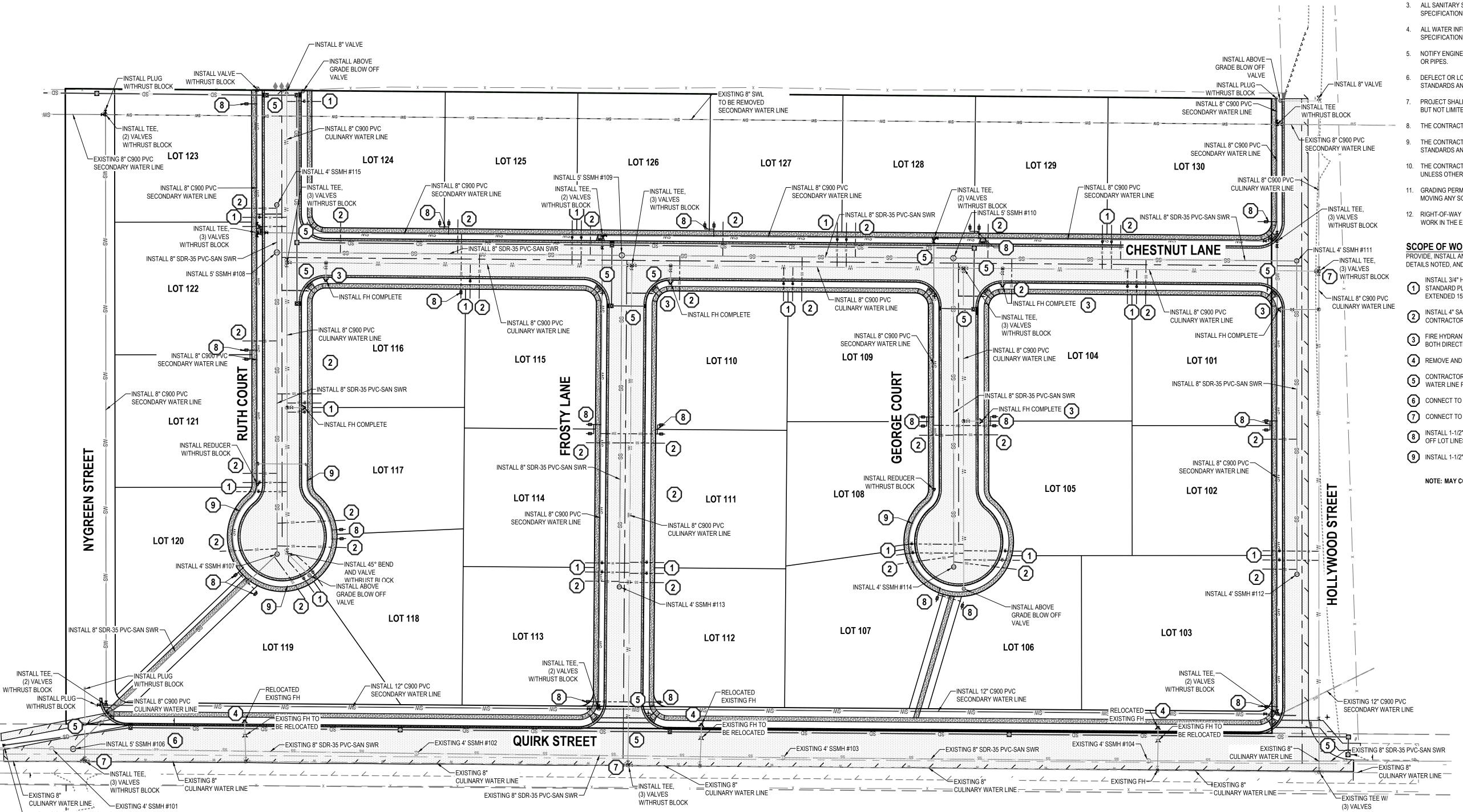
CALL BLUESTAKES @ 811 AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY Know what's below.

Call before you dig. CONSTRUCTION.

EXISTING 8" SDR-35 PVC-SAN SWR

BENCHMARK

NORTH QUARTER CORNER OF SECTION 7, TOWNSHIP 3 SOUTH, RANGE 5 WEST SALT LAKE BASE AND MERIDIAN (2.5" BRASS TOOELE COUNTY SURVEY MONUMENT ON 4" PIPE, DATED 1986) ELEV = 4599.95' (USED ELEVATION) 4414.85' (TRUE ELEVATION)



- MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD BY LOCATING SERVICES. ANY ADDITIONAL COSTS INCURRED AS A RESULT OF THE CONTRACTOR'S THEIR VICINITY SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED IN THE CONTRACT. THE REMAIN. IF CONFLICTS WITH EXISTING UTILITIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONSTRUCTION TO DETERMINE IF ANY FIELD ADJUSTMENTS SHOULD BE MADE
- SPECIFICATIONS.
- 4. ALL WATER INFRASTRUCTURE TO BE INSTALLED PER GRANTSVILLE CITY OR APWA STANDARD PLANS AND

- THE CONTRACTOR SHALL ADJUST TO GRADE ALL EXISTING UTILITIES AS NEEDED PER GRANTSVILLE CITY'S STANDARDS AND SPECIFICATIONS.
- 10. THE CONTRACTOR IS TO PROTECT AND PRESERVE ALL EXISTING IMPROVEMENTS, UTILITIES, AND SIGNS, ETC UNLESS OTHERWISE NOTED ON THESE PLANS.
- 11. GRADING PERMIT MUST BE OBTAINED FROM GRANTSVILLE CITY PRIOR TO DISTURBING ANY VEGETATION OR
- 12. RIGHT-OF-WAY ENCROACHMENT PERMIT MUST BE OBTAINED FROM GRANTSVILLE CITY PRIOR TO DOING ANY

PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:

- INSTALL 3/4" HDPE SDR 9 CULINARY WATER SERVICE LATERAL AND 3/4" METER SET PER GRANTSVILLE CITY (1) STANDARD PLAN, OUTSIDE OF METER LOCATED NO MORE THEN 5' FROM LOT CORNER, LATERAL TO BE EXTENDED 15' FROM BACKSIDE OF SIDEWALK.
- INSTALL 4" SANITARY SEWER SERVICE LATERAL @ 2.0% MINIMUM SLOPE PER APWA PLAN #431, CONTRACTOR TO MAINTAIN 18" OF SEPARATION BETWEEN INTERSECTING PIPE LINES. TYPICAL.
- FIRE HYDRANT ASSEMBLY COMPLETE PER CITY STANDARDS AND SPECIFICATIONS, PAINT CURB RED 15' BOTH DIRECTIONS FROM HYDRANT.
- (4) REMOVE AND RELOCATE EXISTING FIRE HYDRANT.
- (7) CONNECT TO EXISTING WATER MAIN PER GRANTSVILLE CITY'S STANDARDS AND SPECIFICATIONS.
- 8 INSTALL 1-1/2" SECONDARY WATER LATERAL, WITH 1 SECONDARY WATER SERVICE LATERAL, TYPICAL OFF LOT LINES, AND LOCATED AT OPPOSITE LOT CORNER AS CULINARY WATER SERVICE LATERAL, TYPICAL
- (9) INSTALL 1-1/2" SECONDARY WATER LATERAL, TYPICAL.

GENERAL NOTES

- 1. ALL WORK TO COMPLY WITH THE GRANTSVILLE CITY'S STANDARDS AND SPECIFICATIONS.
- EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS BASED UPON RECORD INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. LOCATIONS RESPONSIBLE FOR ANY DAMAGE CAUSED TO THE EXISTING UTILITIES AND UTILITY STRUCTURES THAT ARE TO
- ALL SANITARY SEWER INFRASTRUCTURE TO BE INSTALLED PER GRANTSVILLE CITY STANDARD PLANS AND
- 5. NOTIFY ENGINEER OF ANY DISCREPANCIES IN DESIGN OR STAKING BEFORE PLACING UTILITY STRUCTURES
- 6. DEFLECT OR LOOP ALL WATERLINES TO AVOID CONFLICTS WITH OTHER UTILITIES PER GRANTSVILLE CITY'S
- PROJECT SHALL COMPLY WITH ALL UTAH DIVISION OF DRINKING WATER RULES AND REGULATIONS INCLUDING BUT NOT LIMITED TO, THOSE PERTAINING TO BACKFLOW PROTECTION AND CROSS CONNECTION PREVENTION.
- 8. THE CONTRACTOR IS TO COORDINATE ALL UTILITIES WITH MECHANICAL/PLUMBING PLANS.

 - MOVING ANY SOIL. CONTACT THE CITY ENGINEER AT 435-884-1661.
 - WORK IN THE EXISTING RIGHT-OF-WAY, OR ON ANY STATE ROADS.

SCOPE OF WORK:

(3) VALVES

- CONTRACTOR TO MAINTAIN 18" OF SEPARATION BETWEEN INTERSECTING PIPE LINES. LOOP CULINARY WATER LINE PER GRANTSVILLE CITY AND APWA PLAN #543.1, #543.2, #562 STANDARDS AND SPECIFICATIONS.
- (6) CONNECT TO EXISTING SEWER MAIN PER GRANTSVILLE CITY'S STANDARDS AND SPECIFICATIONS.
- INSTALL 1-1/2" SECONDARY WATER LATERAL, WITH 1" SECONDARY WATER SERVICE LATERAL, APPROX. 3'

NOTE: MAY CONTAIN KEYNOTES THAT ARE NOT USED ON THIS SHEET.



TOOELE

169 N. Main Street, Unit 1 Tooele, UT. 84074 Phone: 435.843.3590

SALT LAKE CITY Phone: 801.255.0529

LAYTON

Phone: 801.547.1100

CEDAR CITY Phone: 435.865.1453

RICHFIELD Phone: 435.896.2983

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THE COASSOLO GROUP, LLC

PO BOX 190 GRANTSVILLE CITY, UTAH 84029 CONTACT:

TODD CASTAGNO PHONE: 435-849-1485

UBDINISIO SIGN

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YWOOD

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PRELIMIN LYWOOD STRE

UTILITY PLAN

PRINT DATE 2022-11-09 PROJECT NUMBER T1216G

DRAWN BY C. CHILD CHECKED BY
J. CLEGG PROJECT MANAGER
C. CHILD

HORIZONTAL GRAPHIC SCALE

HORZ: 1 inch = 60 ft.

Know what's below.
Call before you dig.

CALL BLUESTAKES @ 811 AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

BENCHMARK

NORTH QUARTER CORNER OF SECTION 7. TOWNSHIP 3 SOUTH, RANGE 5 WEST SALT LAKE BASE AND MERIDIAN (2.5" BRASS TOOELE COUNTY SURVEY MONUMENT ON 4" PIPE, DATED 1986) ELEV = 4599.95' (USED ELEVATION) 4414.85' (TRUE ELEVATION)

LOT 123 LOT 125 **LOT 127 LOT 128 LOT 130** CHESTNUT LANE **LOT 101** LOT 110, COÚRT RUTH COURT ORGE STREET LOT 117 LOT 114 LOT 111 Z W NYGRE /LOT 118 LOT 113 LOT 106

QUIRK STREET

GENERAL NOTES

- 1. THIS PLAN IS DESIGNED AS A FIRST APPRAISAL OF NECESSARY MEANS TO PROTECT THE WATERS OF THE STATE FROM POTENTIAL POLLUTION. IT IS THE RESPONSIBILITY OF THE OWNER/OPERATOR TO ADD WARRANTED BEST MANAGEMENT PRACTICES (BMP'S) AS NECESSARY, MODIFY THOSE SHOWN AS APPROPRIATE, AND DELETE FROM THE PROJECT THOSE FOUND TO BE UNNECESSARY. FEDERAL AND STATE LAW ALLOWS THESE UPDATES TO BE MADE BY THE OWNER/OPERATOR ONSITE AND RECORDED BY THE OWNER/OPERATOR ON THE COPY OF THE SWPPP KEPT ONSITE.
- DISTURBED LAND SHALL BE KEPT TO A MINIMUM. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. HOWEVER, WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 21 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.
- RESEED DISTURBED LAND WITH NATIVE GRASS MIXTURE WITHIN 14 CALENDAR DAYS OF ACHIEVEMENT OF FINISH GRADE TO STABILIZE SOILS IF LAND IS NOT TO BE RE-WORKED WITHIN 14 CALENDAR DAYS OF THE CESSATION OF CONSTRUCTION ACTIVITIES AT THAT LOCATION.
- DETAILS SHOWN ARE TO BE EMPLOYED TO PROTECT RUNOFF AS APPROPRIATE DURING CONSTRUCTION. NOT ALL DETAILS ARE NECESSARY AT ALL PHASES OF THE PROJECT. IT SHALL BE THE RESPONSIBILITY OF THE OWNER/OPERATOR TO USE APPROPRIATE BEST MANAGEMENT PRACTICES AT THE APPROPRIATE PHASE OF CONSTRUCTION. SEE SWPPP FOR BMP IMPLEMENTATION SCHEDULE.
- VARIOUS BEST MANAGEMENT PRACTICES HAVE BEEN SHOWN ON THE PLANS AT SUGGESTED LOCATIONS. THE CONTRACTOR MAY MOVE AND RECONFIGURE THESE BMP'S TO OTHER LOCATIONS IF PREFERRED, PROVIDED THE INTENT OF THE DESIGN IS PRESERVED.
- 6. NOT ALL POSSIBLE BMP'S HAVE BEEN SHOWN. THE CONTRACTOR IS RESPONSIBLE TO APPLY CORRECT MEASURES TO PREVENT THE POLLUTION OF STORM WATER PER PROJECT SWPPP.
- 7. A UPDES (UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM) PERMIT IS REQUIRED FOR ALL CONSTRUCTION ACTIVITIES 1 ACRE OR MORE.

SCOPE OF WORK:

PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:

1) INLET PROTECTION PER DETAIL 4/D-600.

(2) SILT FENCE PER DETAIL 5/D-600.

3 PORTABLE TOILET PER DETAIL 7/D-600.

4 VEHICLE WASHDOWN AND STABILIZED CONSTRUCTION ENTRANCE PER DETAIL 6/D-600.

SUGGESTED TEMPORARY CONSTRUCTION SITE PARKING, STAGING, DUMPSTER, AND MATERIAL STORAGE AREA.

6 SUGGESTED STOCKPILE AREA.

7 STRAW WATTLE PER DETAIL 9/D-600

NOTE: MAY CONTAIN KEYNOTES THAT ARE NOT USED ON THIS SHEET.

REVISION SCHEDULE				
NUMBER	DATE	AUTHOR	COMPANY REPRESENTATIVE SIGNATURE	
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				



TOOELE

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THE COASSOLO GROUP, LLC PO BOX 190

GRANTSVILLE CITY, UTAH 84029 CONTACT:

TODD CASTAGNO

PHONE: 435-849-1485

SUBDIVISION SIGN **PRELIMIN** YWOOD HOLL

EROSION CONTROL PLAN

PRINT DATE 2022-11-09 CHECKED BY
J. CLEGG DRAWN BY
C. CHILD

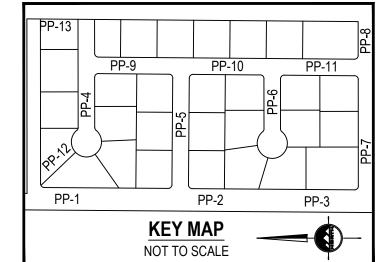
PROJECT MANAGER
C. CHILD

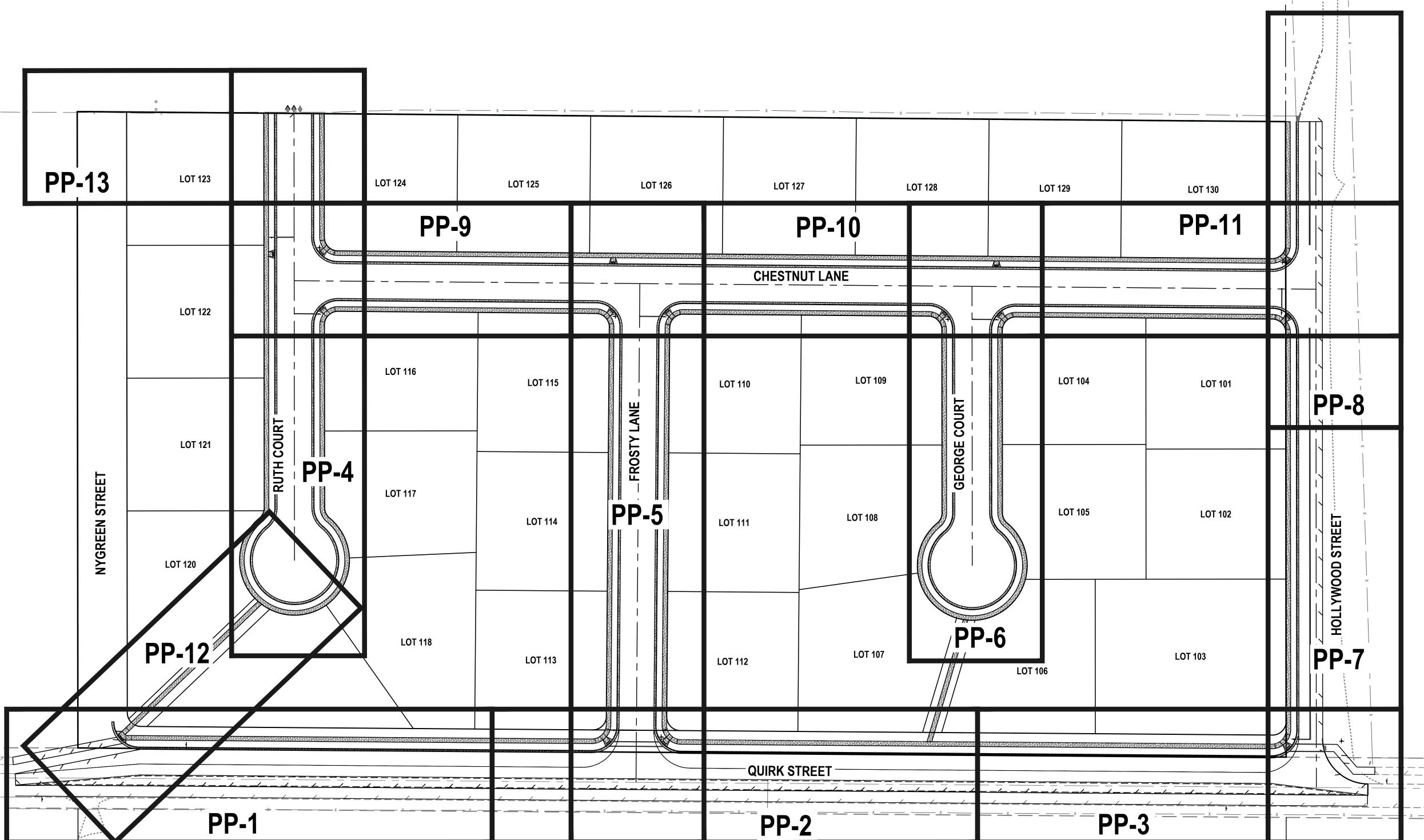
(IN FEET) HORZ: 1 inch = 60 ft.

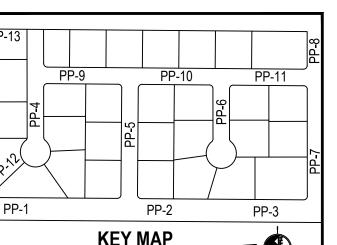
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BENCHMARK NORTH QUARTER CORNER OF SECTION 7, TOWNSHIP 3 SOUTH, RANGE 5 WEST SALT LAKE BASE AND MERIDIAN
(2.5" BRASS TOOELE COUNTY SURVEY MONUMENT ON 4" PIPE, DATED 1986) ELEV = 4599.95' (USED ELEVATION) 4414.85' (TRUE ELEVATION)







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SUBDIVISION DESIGN HOLLYWOOD CORNER

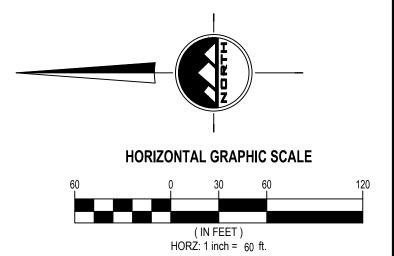
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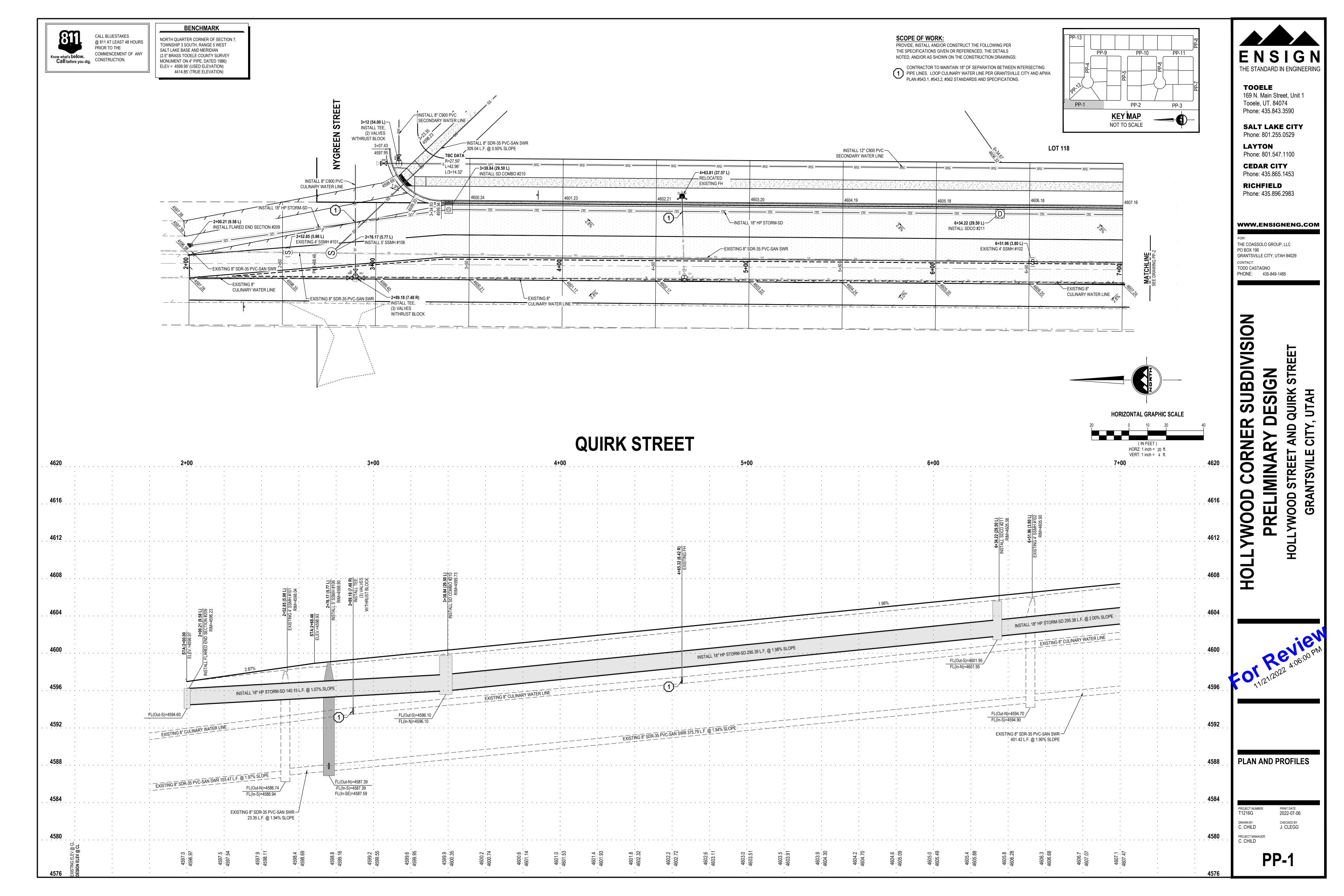
PLAN AND PROFILES

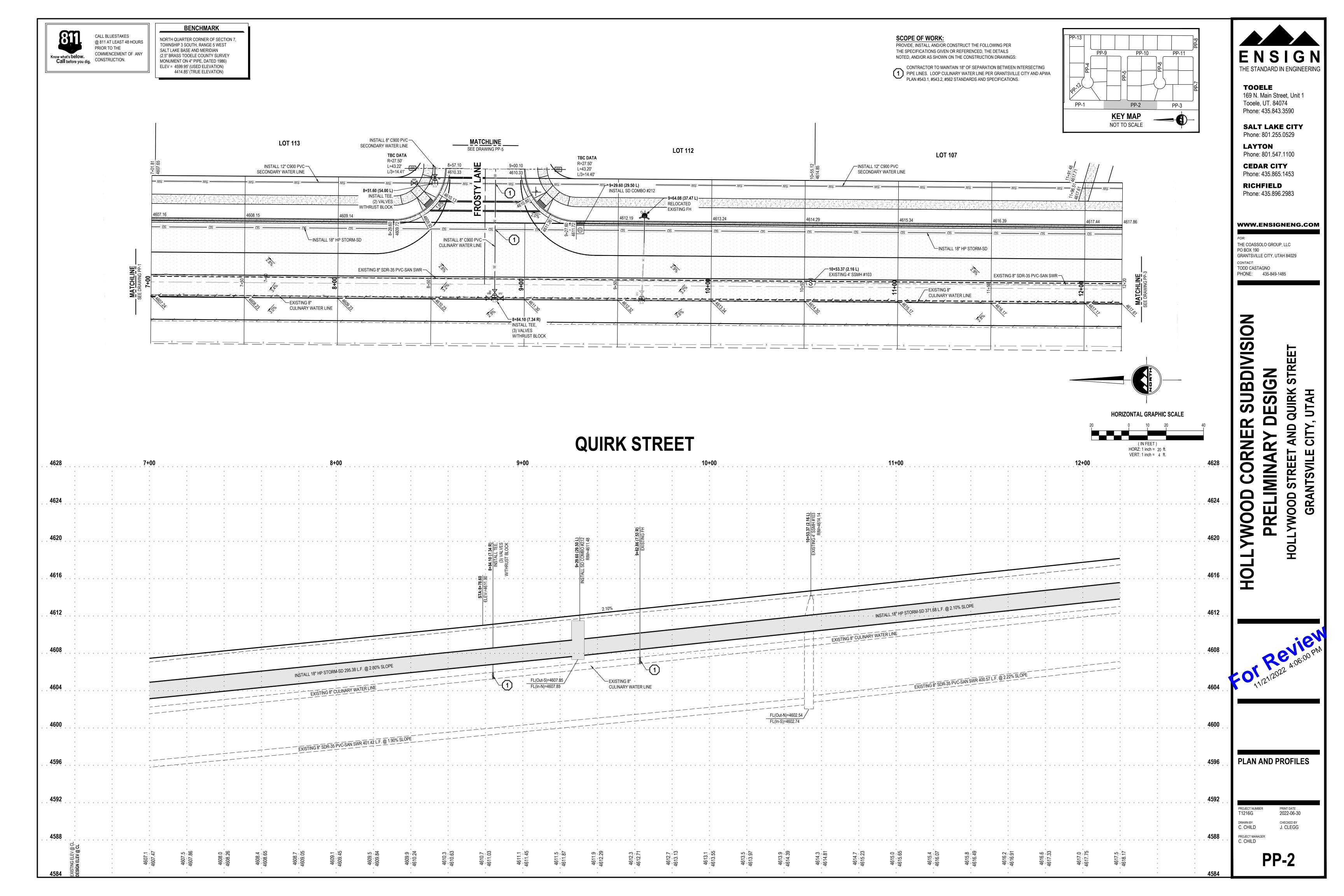
PRINT DATE 2022-07-06 CHECKED BY

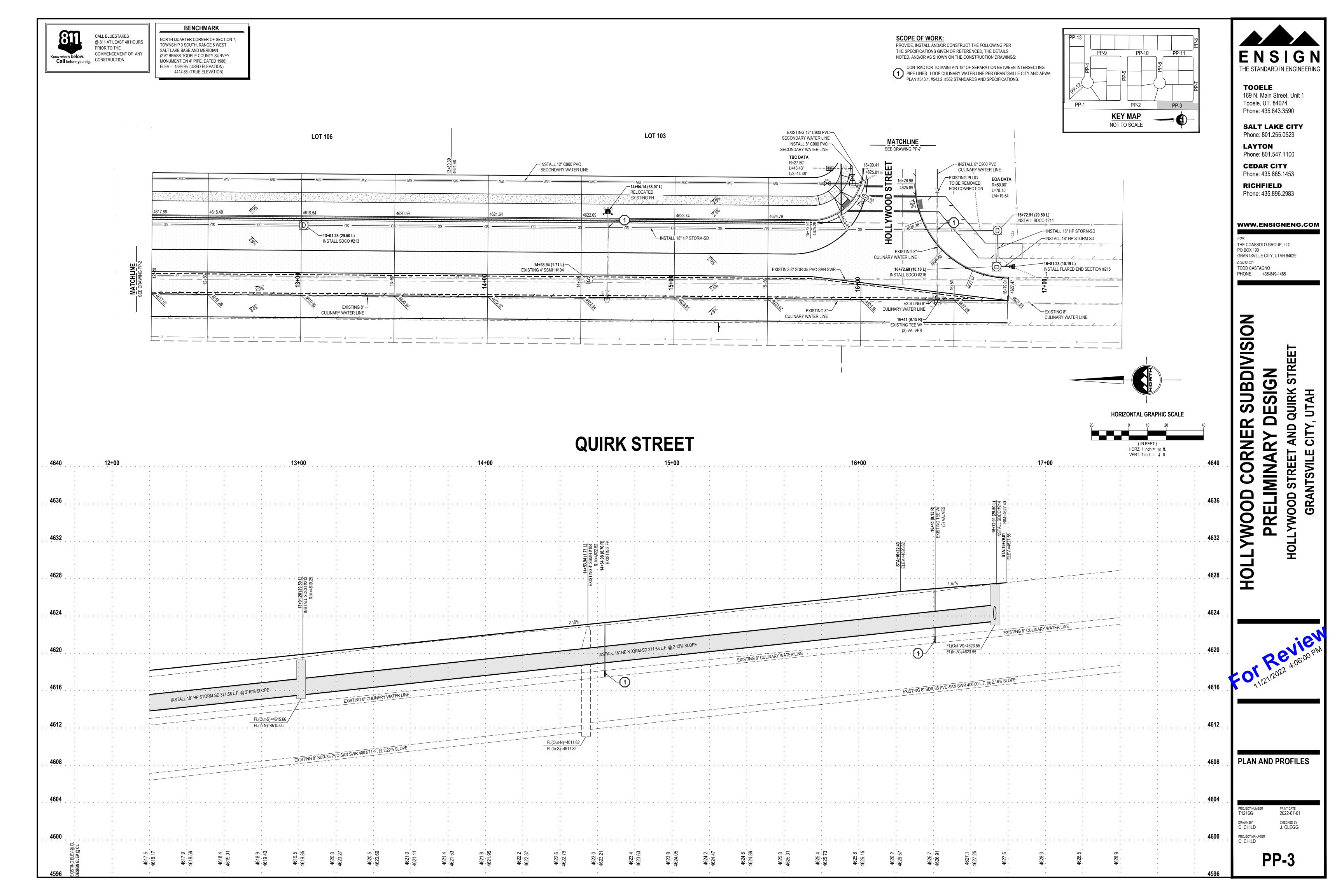
J. CLEGG DRAWN BY C. CHILD PROJECT MANAGER
C. CHILD

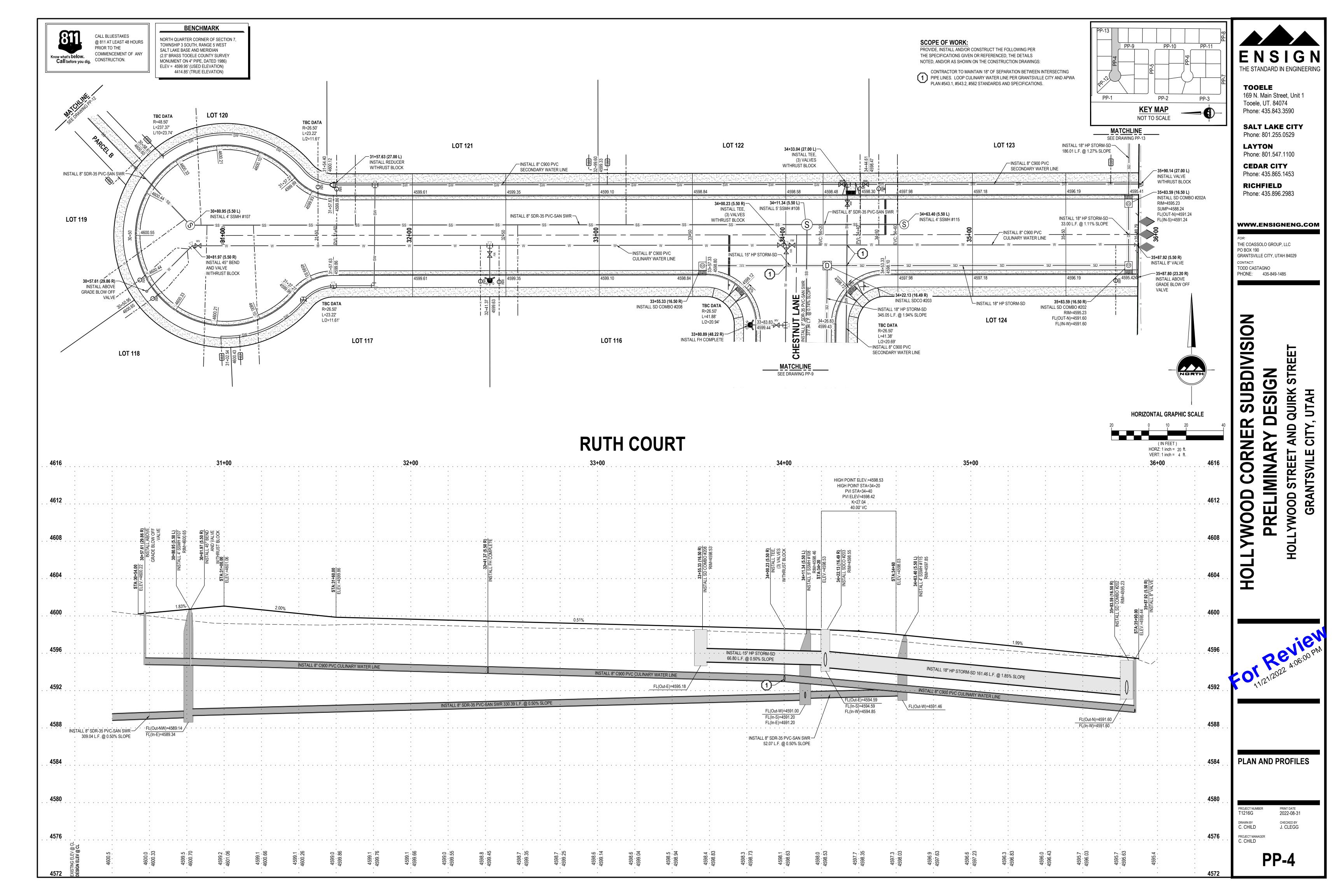
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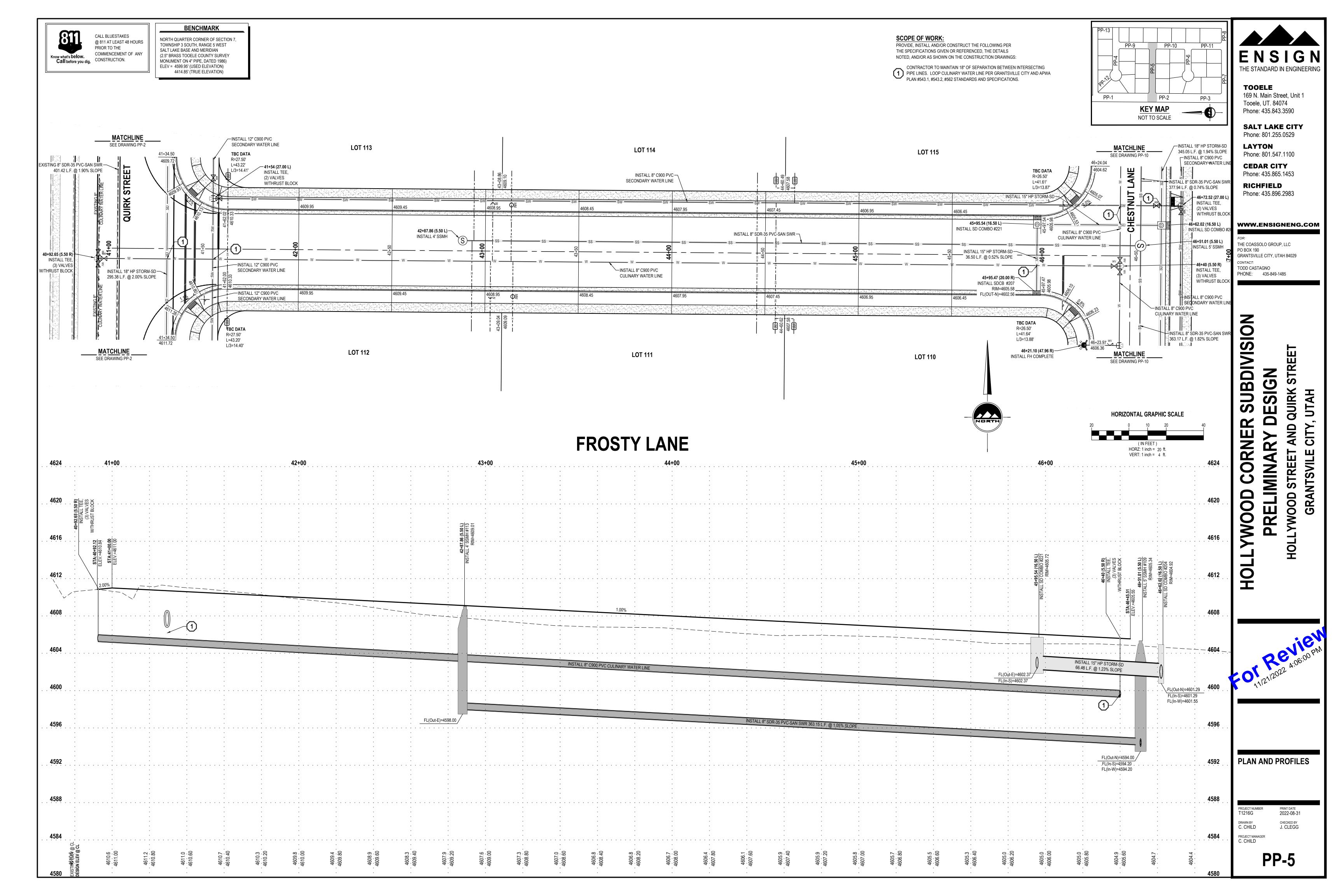


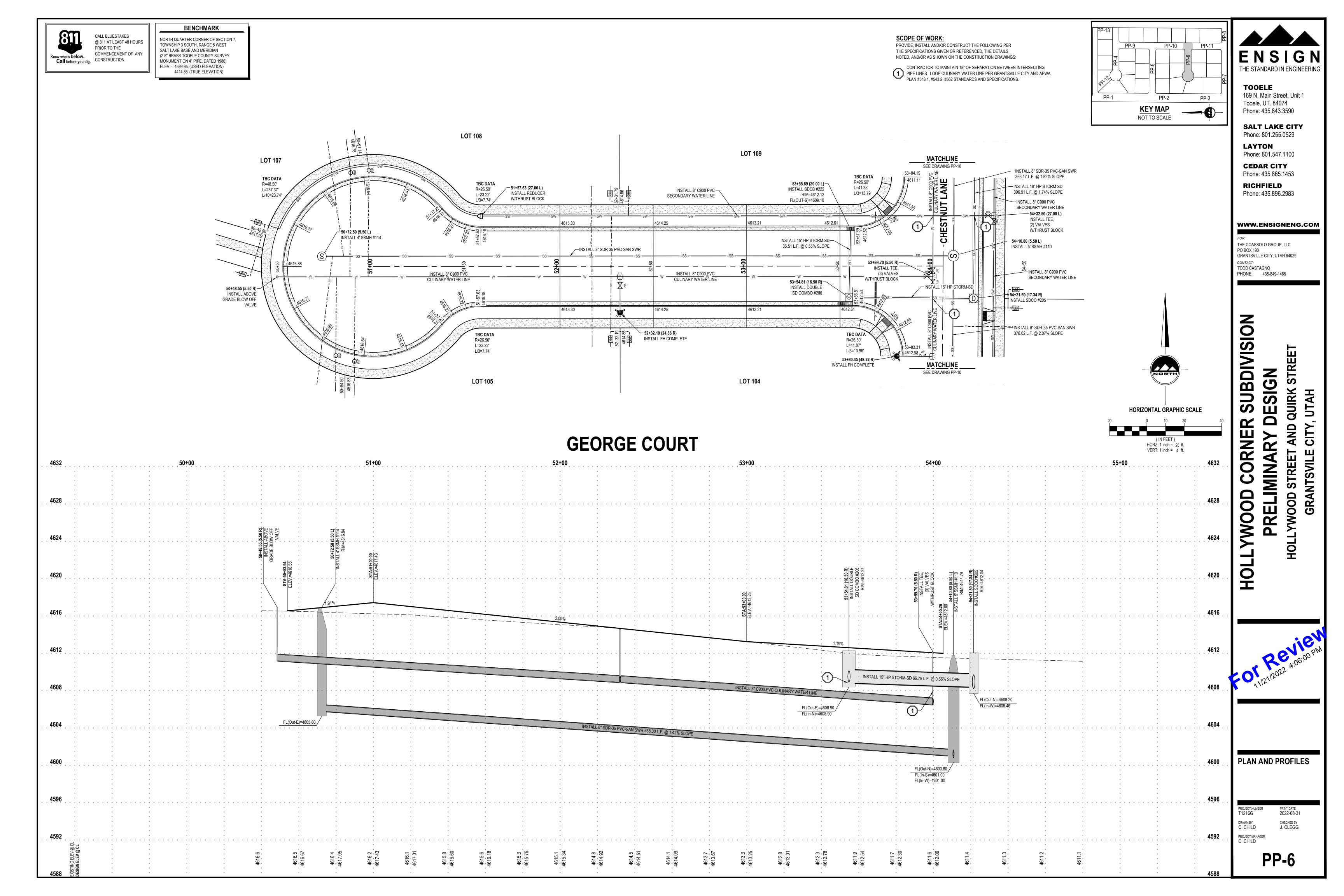


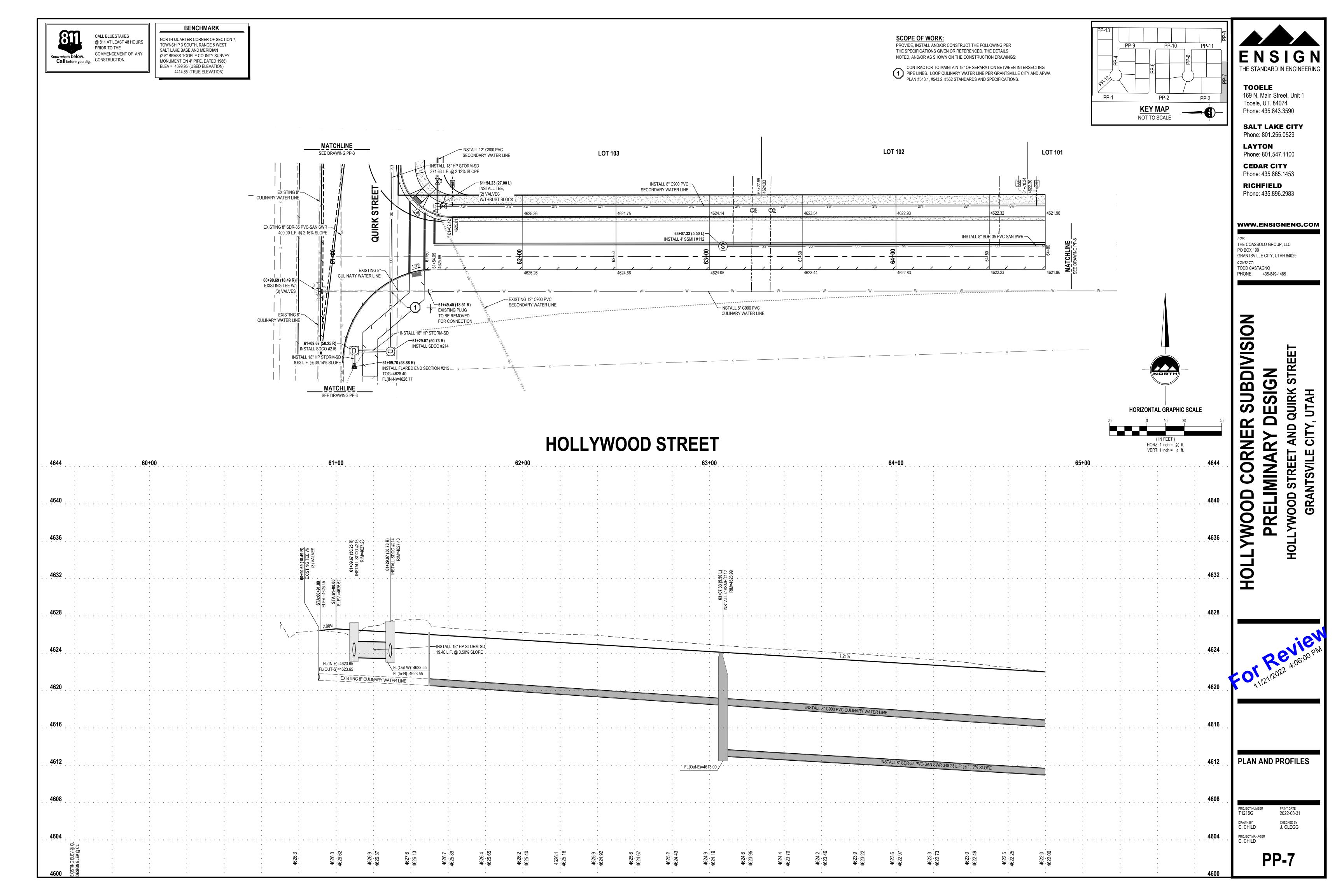


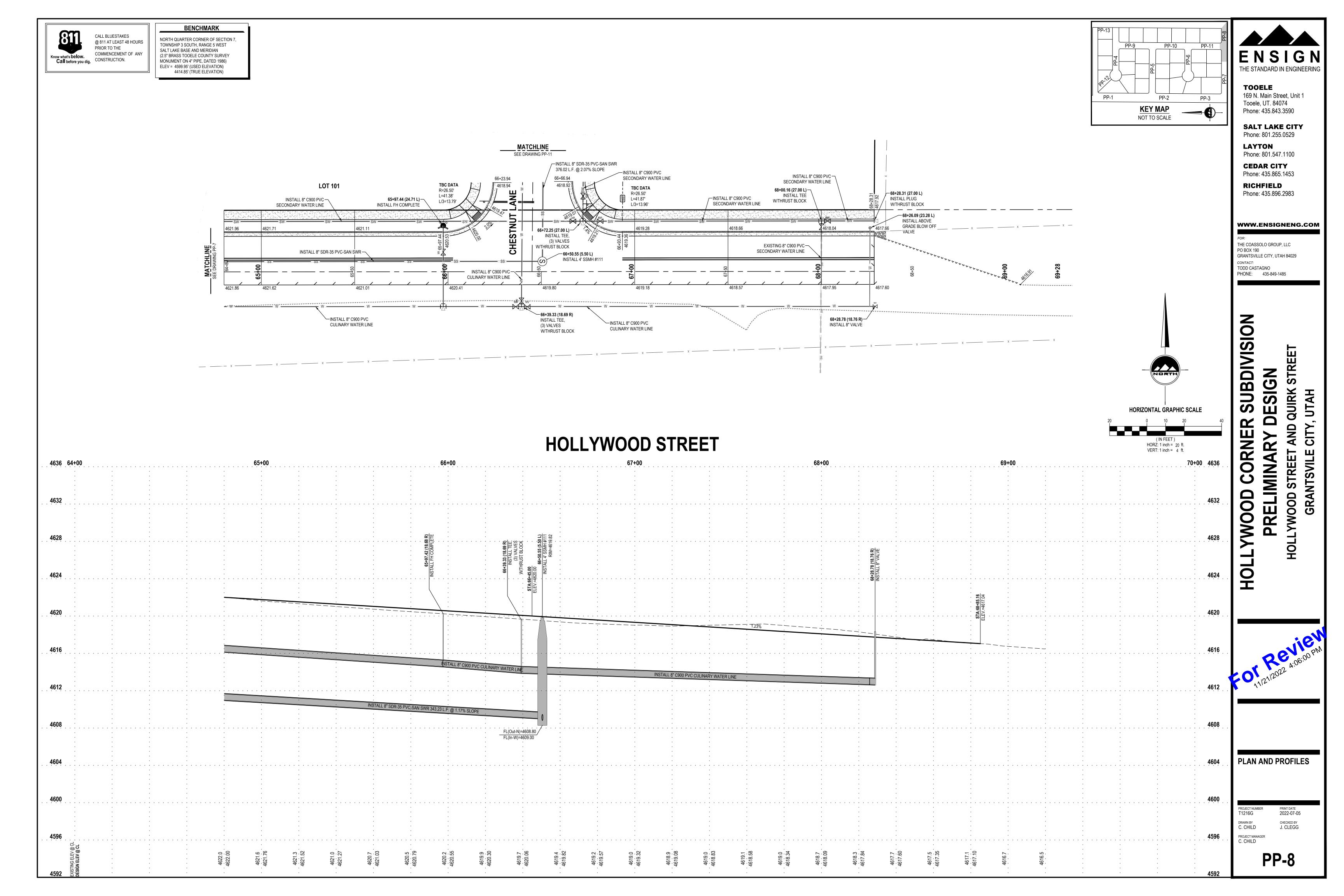


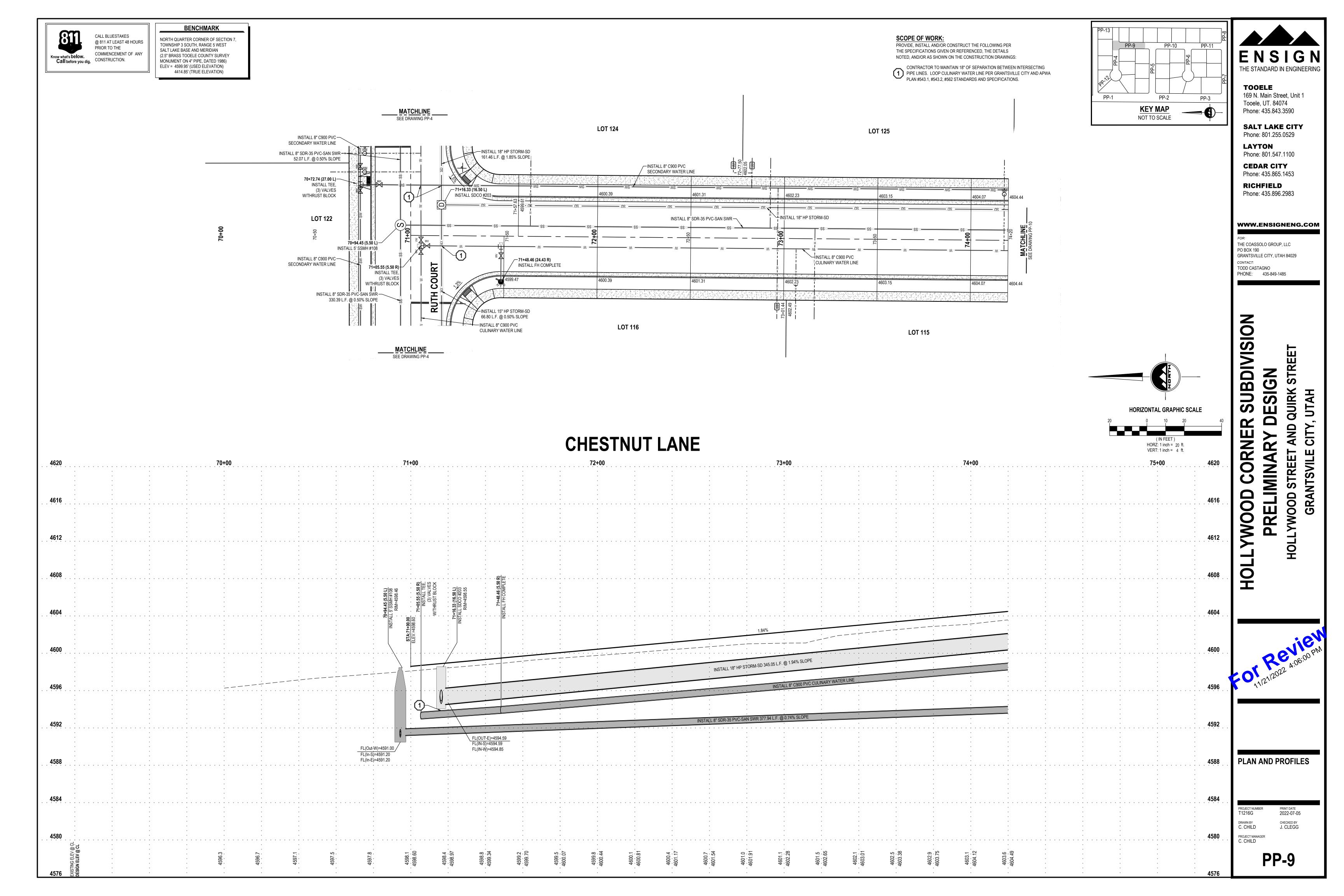


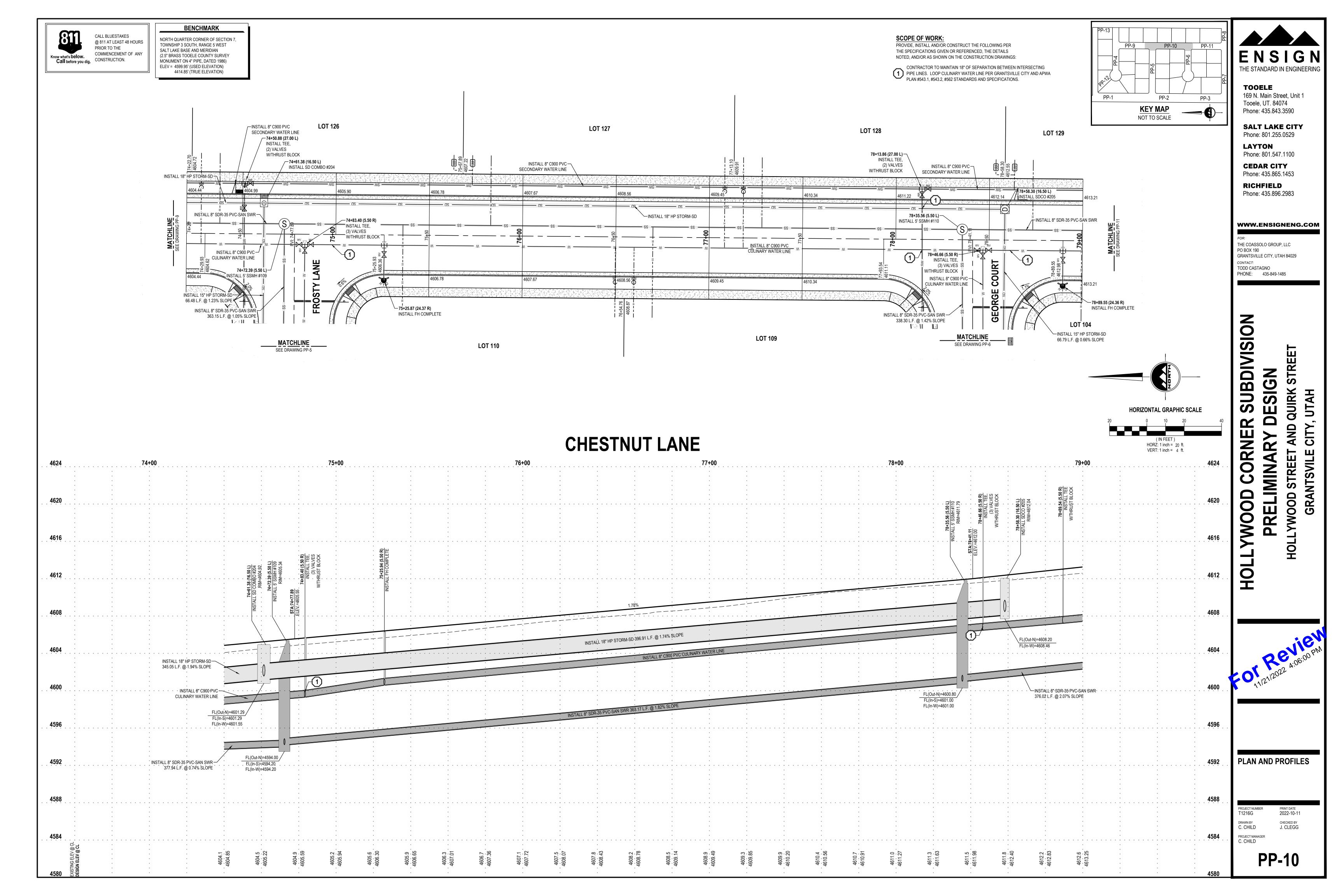


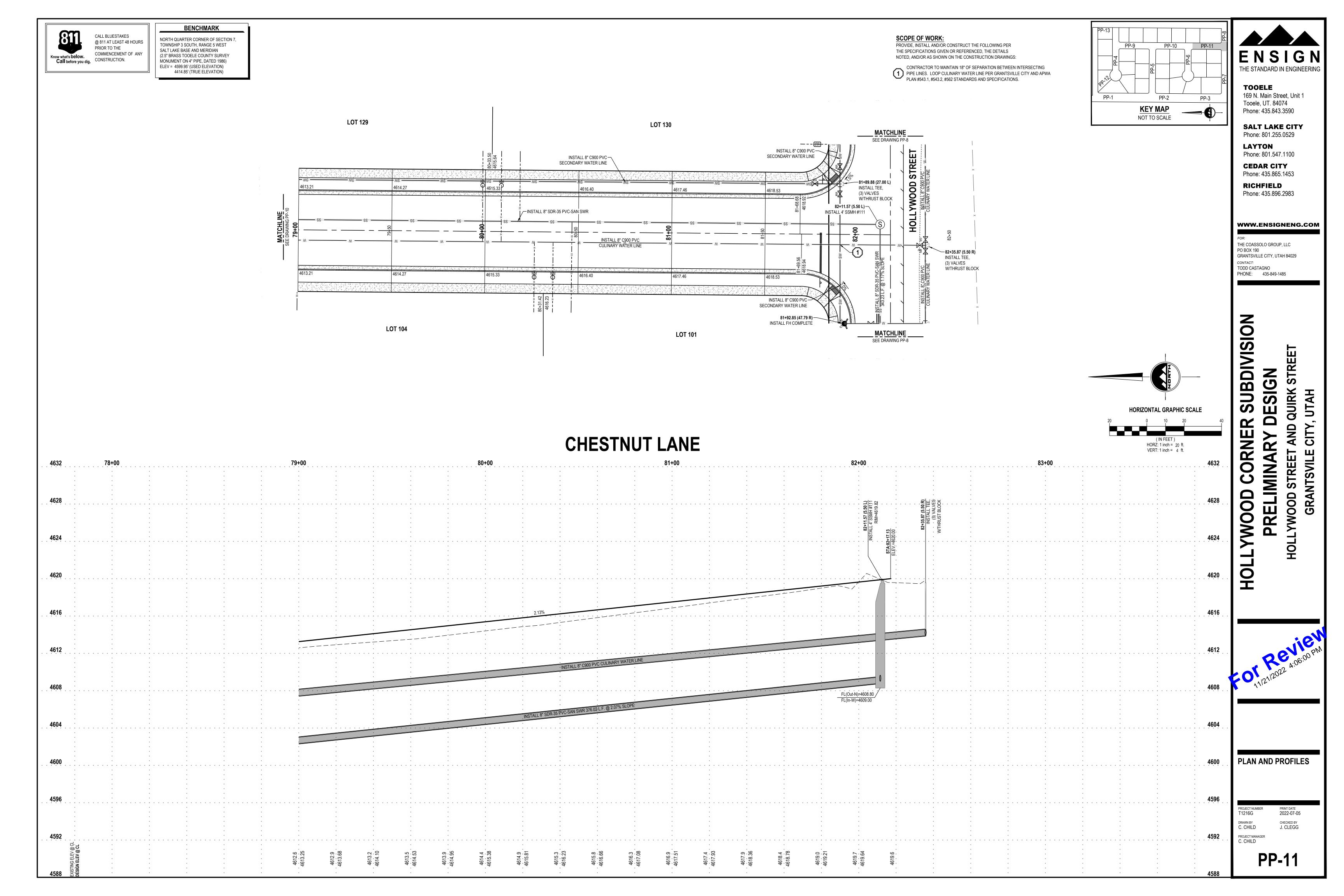


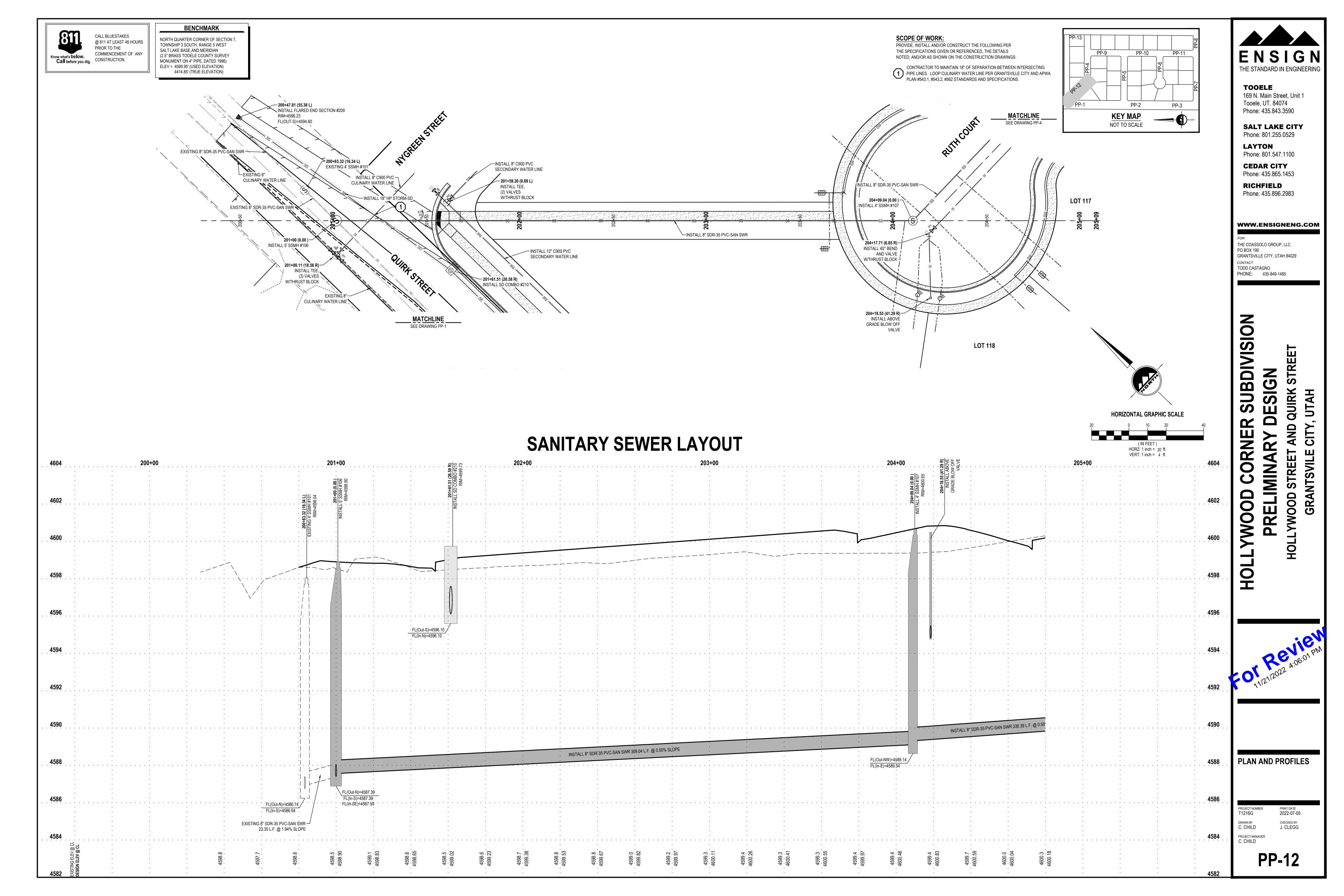


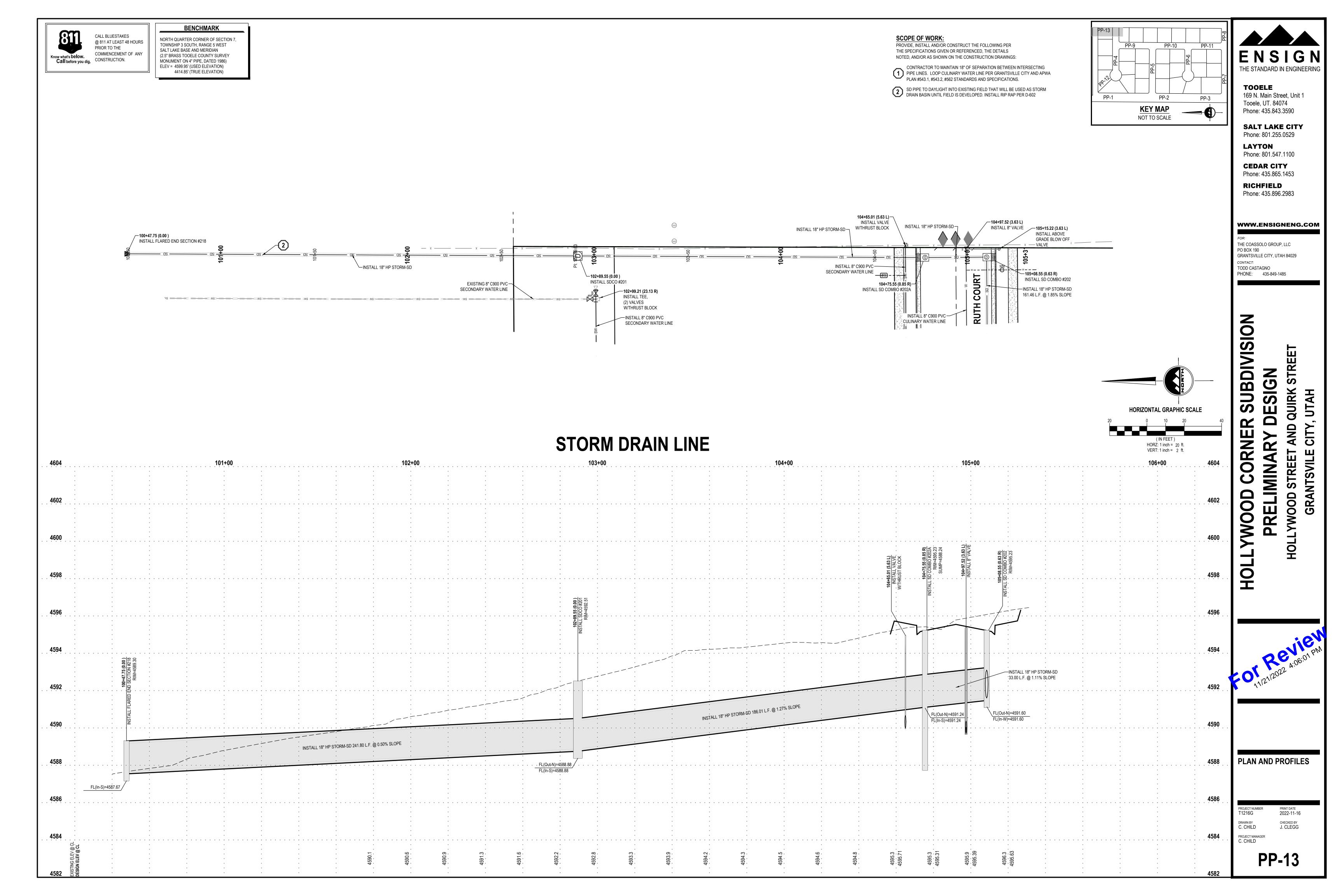


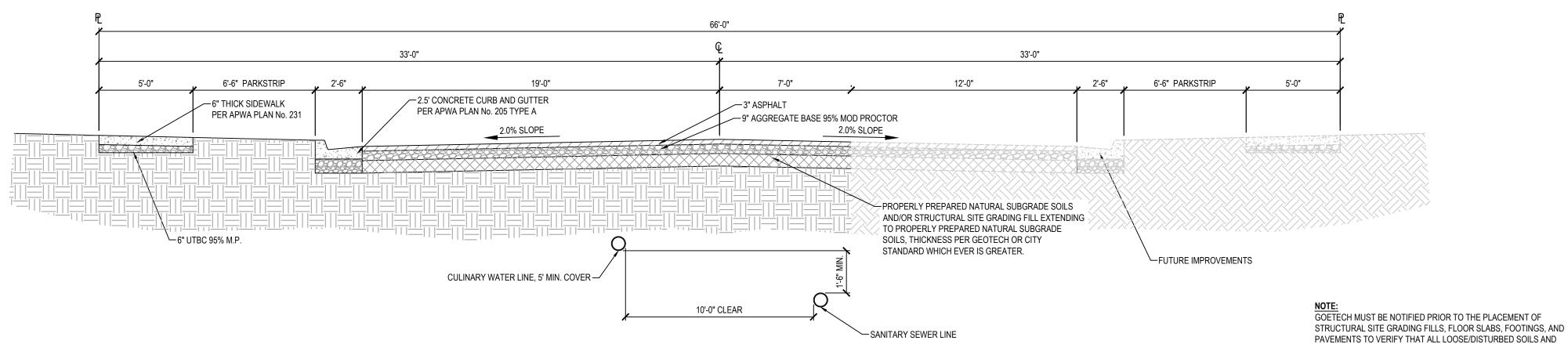






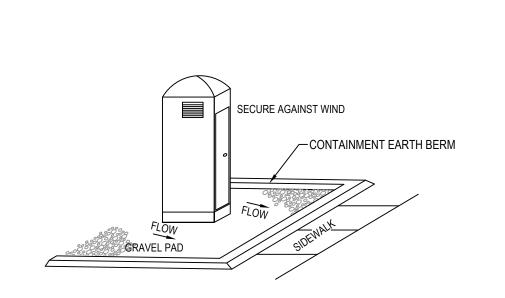






3 HOLLYWOOD ROAD CROSS SECTION

PORTABLE TOILET



SCALE: NONE

SCALE: NONE

SILT FENCE-10'MIN. OR AS NOTED. OVERFLOW TO NATURAL-DRAINAGE PATH OVERFLOW TO NATURAL DRAINAGE PROTECT OVERFLOW WITH RIP -RAP AND/OR EROSION CONTROL **PLAN VIEW** MATS TO STABLE GROUND.

1. CLEAN OUT BASIN WHEN CAPACITY IS REDUCED BY HALF. 2. SIZE BASIN PER MINIMUM DIMENSIONS SHOWN, AND PER DIMENSIONS IN PLAN, WHICHEVER IS GREATER. 3. SAFETY FENCING IS REQUIRED FOR DEPTH GREATER THAN THREE FEET.

4. WHERE 2:1 RATIO OF LENGTH TO WIDTH IS NOT AVAILABLE, CONSTRUCT BERM(S) FOR BAFFLE(S) BETWEEN INLET AND OUTLET TO ACHIEVE 5. WHERE TEMPORARY SEDIMENTATION WILL BE CONVERTED TO A PERMANENT DETENTION POND, PROTECT OUTLET PER DTL. L, TEMPORARY

SCALE: NONE

TEMPORARY SEDIMENTATION BASIN

STRAW WATTLE

-TYPICAL CONSTRUCTION

STAKE MAX 4' SPACING

SCALE: NONE

NON-ENGINEERED FILLS HAVE BEEN COMPLETELY REMOVED.

-8" DIA. EARTH SAVER

WEIGHTED WATTLE

OR EQUAL

NOTES:

WATTLE/BAG.

CENTERLINE.

1. PLACE WATTLES OR GRAVEL BAGS TIGHT

AGAINST SWELL TO PREVENT SEDIMENT-LADEN WATER FROM GETTING BETWEEN SWELL AND

2. PLACE WATTLES OR GRAVEL BAGS SUCH THAT FLOW DOES NOT OVERTOP SWALL OR ROAD

INSPECT WATTLES AFTER EVERY LARGE STORM

EVENT AND AT LEAST BI-WEEKLY, OR PER SWPPP REQUIREMENTS, WHICHEVER IS MORE

STRINGENT, TO ENSURE THAT SEDIMENT

CONTROL IS MEETING ITS DESIGN INTENT.

MAINTAIN AND/OR REPLACE AS NEEDED.

4. REMOVE SEDIMENT ACCUMULATED WHEN IT

5. CONTRACTOR MAY SUBMIT AN ALTERNATIVE

METHOD OF SWELL PROTECTION. THE

ALTERNATIVE METHOD SHALL BE APPROVED BY

THE CITY INSPECTOR AND THE ENGINEER OF

REACHES 50% OF GRAVEL BAG OR WATTLE

NOTES: SILT FENCE REQUIRED-FILTER FABRIC -BEHIND CURB AT BOX WRAPPED UNTIL LAND BEHIND COMPLETELY **CURB IS STABILIZED** AROUND GATE CENTERLINE. 8" DIA. EARTH SAVER -WEIGHTED WATTLE OR EQUAL CONTROL IS MEETING ITS DESIGN INTENT.

WATTLE OPTION

SILT FENCE REQUIRED BEHIND-CURB AT BOX UNTIL LAND BEHIND CURB IS STABILIZED -EARTH SAVER SEDIMENT SAVER OR EQUAL, FILLED WITH 1/2 CF 3/4" GRAVEL, ZIPPER SIDE FACING AWAY FROM INLET

SANDBAG OPTION SAG INLET PROTECTION 1. PLACE WATTLES OR GRAVEL BAGS TIGHT AGAINST CURB TO PREVENT SEDIMENT-LADEN WATER FROM GETTING BETWEEN CURB AND

2. PLACE WATTLES OR GRAVEL BAGS SUCH THAT FLOW DOES NOT OVERTOP CURB OR ROAD

MAINTAIN AND/OR REPLACE AS NEEDED.

3. INSPECT INLET PROTECTION AFTER EVERY LARGE STORM EVENT AND AT LEAST BI-WEEKLY. OR PER SWPPP REQUIREMENTS, WHICHEVER IS MORE STRINGENT, TO ENSURE THAT SEDIMENT

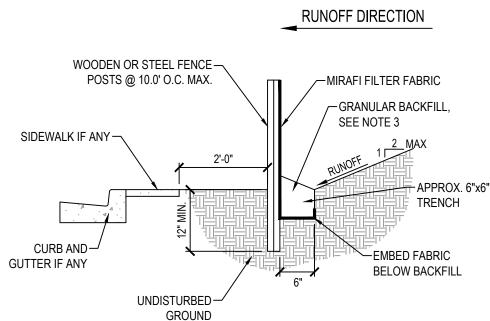
4. REMOVE SEDIMENT ACCUMULATED WHEN IT REACHES 50% OF GRAVEL BAG OR WATTLE

Phone: 801.547.1100 5. CONTRACTOR MAY SUBMIT AN ALTERNATIVE METHOD OF INLET PROTECTION. THE ALTERNATIVE METHOD SHALL BE APPROVED BY THE CITY INSPECTOR AND THE ENGINEER OF

6. BEFORE PLACEMENT OF CURB, STABILIZATION OF LAND BEHIND CURB, AND/OR PAVING, MAINTAIN TOP OF INLET AT 6" ABOVE GRADE, AND SURROUND WITH SILT FENCE FOR SEDIMENTATION AROUND BOX. MAINTAIN SILT FENCE BEHIND BOX UNTIL LAND BEHIND CURB IS STABILIZED.

SCALE: NONE

RECORD.



 EXCAVATE 6"x6" TRENCH ALONG LIMITS OF DISTURBANCE AS SHOWN

ON CONSTRUCTION DRAWINGS. 2. POSTS SHALL BE POSITIONED ON DOWNSTREAM SIDE OF FENCE. 3. LAY TOE-IN FABRIC FLAP IN BOTTOM FREE DRAINING GRANULAR

OF TRENCH. BACKFILL TRENCH WITH MATERIAL. COMPACT TRENCH TO SATISFACTION OF THE ENGINEER OF SILT FENCE GEOTEXTILE SHALL

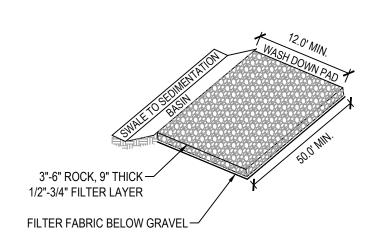
EXPOSED FENCE HEIGHT. 10' MAX. SPACING BETWEEN STAKES. SILT FENCES SHALL BE INSTALLED ALONG CONTOURS, NOT UP AND DOWN SLOPES, WITH 10' OVERLAP

TEMPORARY SILT FENCE

SCALE: NONE

SCALE: NONE

SCALE: NONE



1. PLACE SIGN ADJACENT TO ENTRANCE " CONSTRUCTION TRAFFIC ONLY - ALL CONSTRUCTION TRAFFIC SHALL ENTER AND EXIT SITE AT THIS LOCATION"

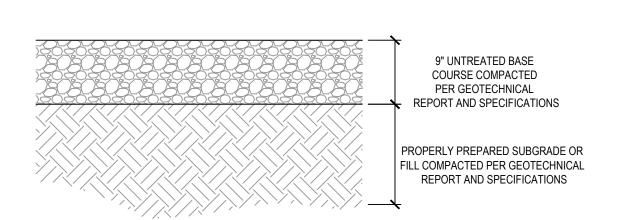
STABILIZED CONSTRUCTION ENTRANCE

GRAVEL NOTES

1. ALL PAVING TO BE PLACED OVER PROPERLY PREPARED NATURAL SOILS AND/OR PROPERLY PREPARED EXISTING FILL SOILS AND PROPERLY COMPACTED STRUCTURAL FILL WHERE SPECIFIED.

2. ALL STRUCTURAL FILL TO BE COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE AASHTO T-180 (D-1557) METHOD OF COMPACTION. LIFTS SHOULD NOT EXCEED 8" IN LOOSE THICKNESS.

3. REMOVE SURFACE VEGETATION AND OTHER DELETERIOUS MATERIALS OVER THE ENTIRE SITE IN PREPARATION OF PROPOSED



STANDARD ON-SITE GRAVEL SECTION

THE STANDARD IN ENGINEERIN

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THE COASSOLO GROUP, LLC PO BOX 190

GRANTSVILLE CITY, UTAH 84029 CONTACT: TODD CASTAGNO PHONE: 435-849-1485

SUBDIVISIO

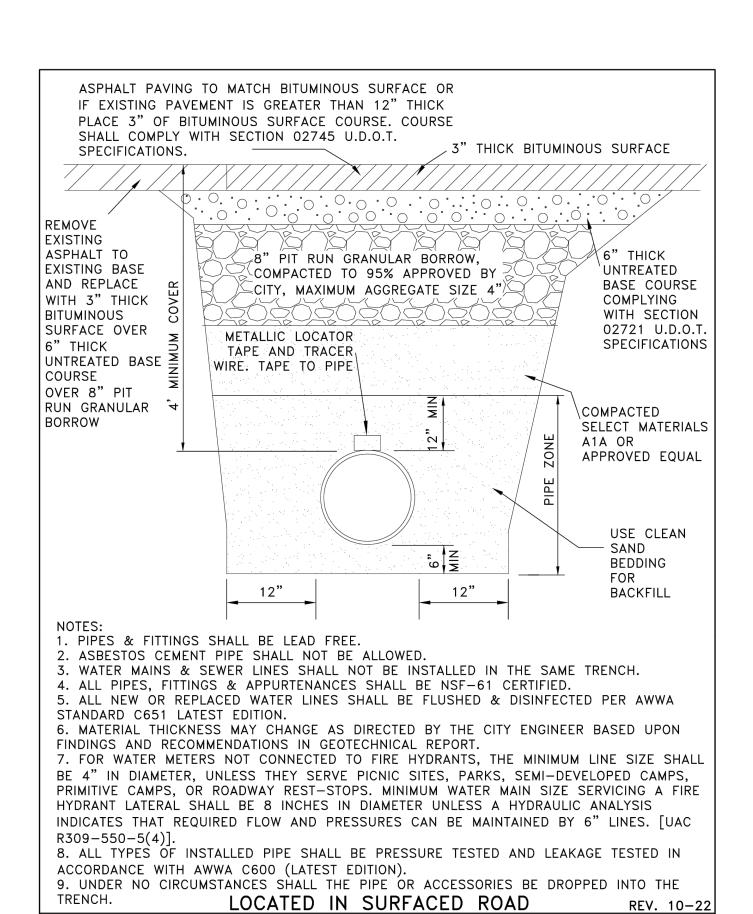
MEET AASHTO M288-92 REQUIREMENTS. REMOVE & DISPOSE OF SEDIMENT WHEN ACCUMULATION IS 50% OF

AT BREAKS.

YWOOD CORNE HOLL

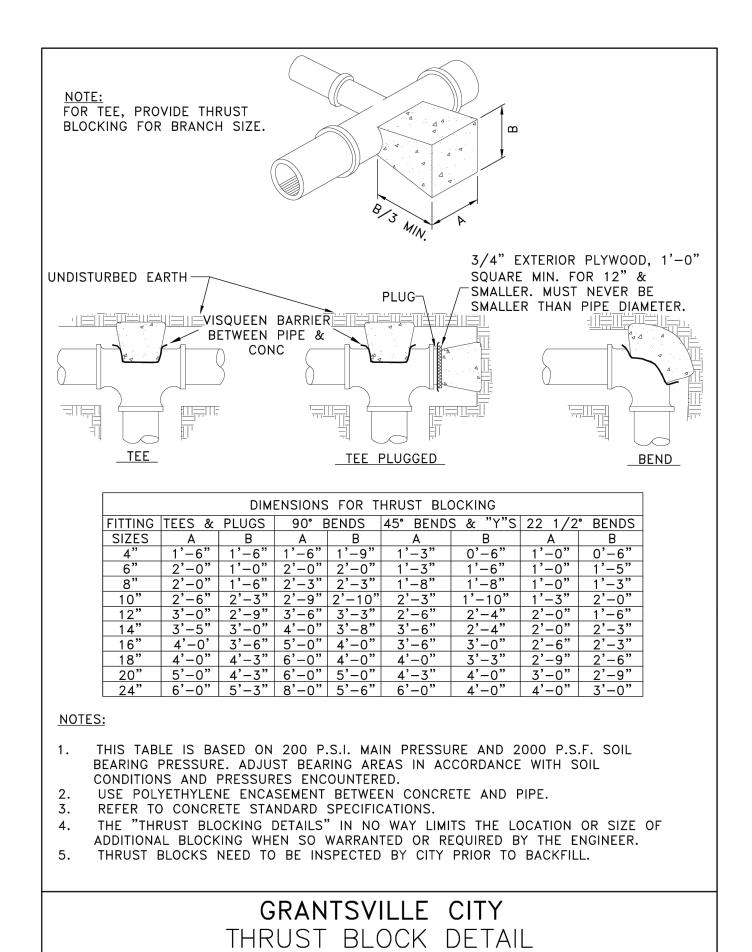
DETAILS

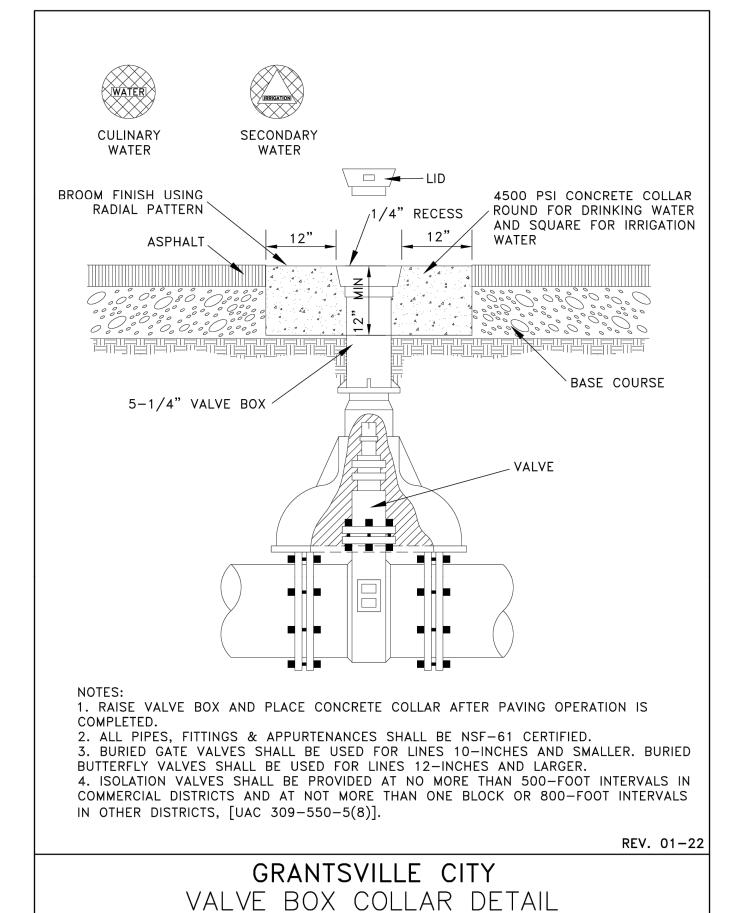
11/16/22 C. CHILD J. CLEGG PROJECT MANAGER C. CHILD

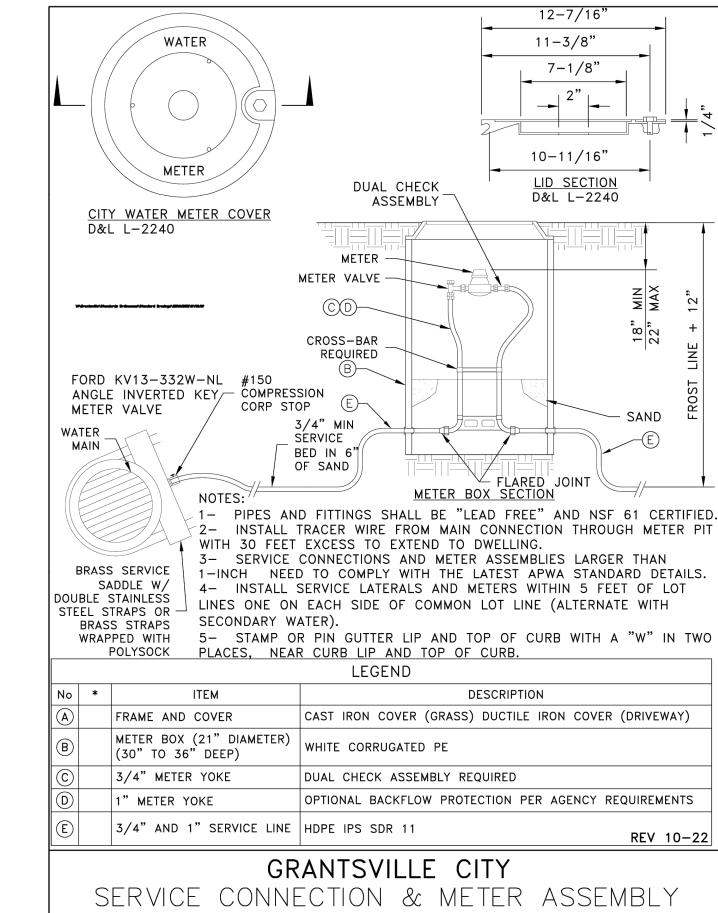


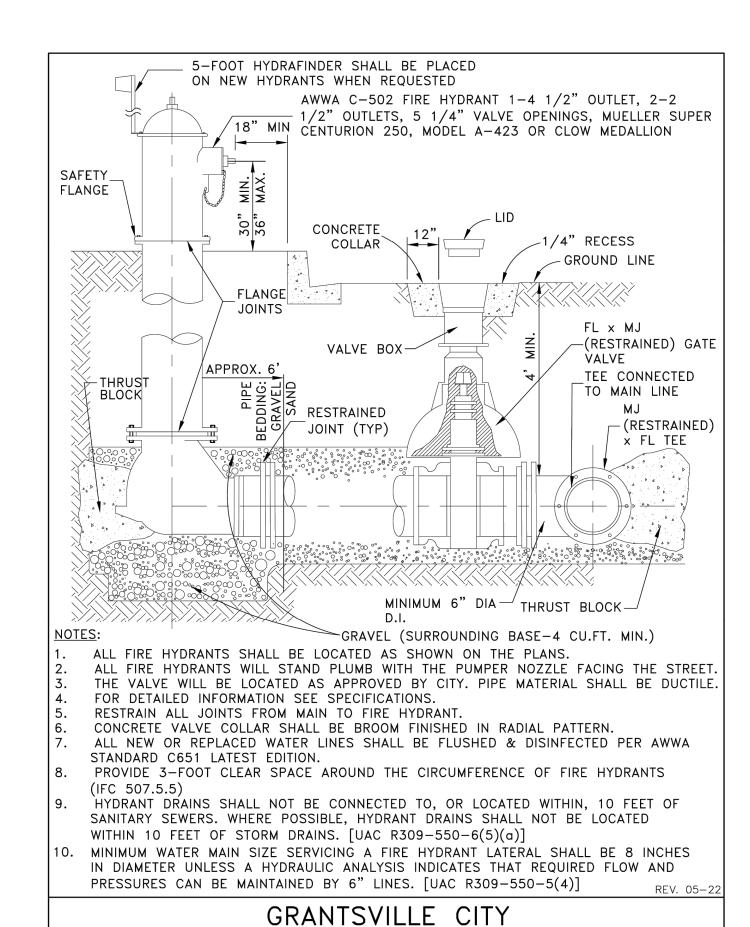
GRANTSVILLE CITY

UTILITY TRENCH FOR WATER MAIN

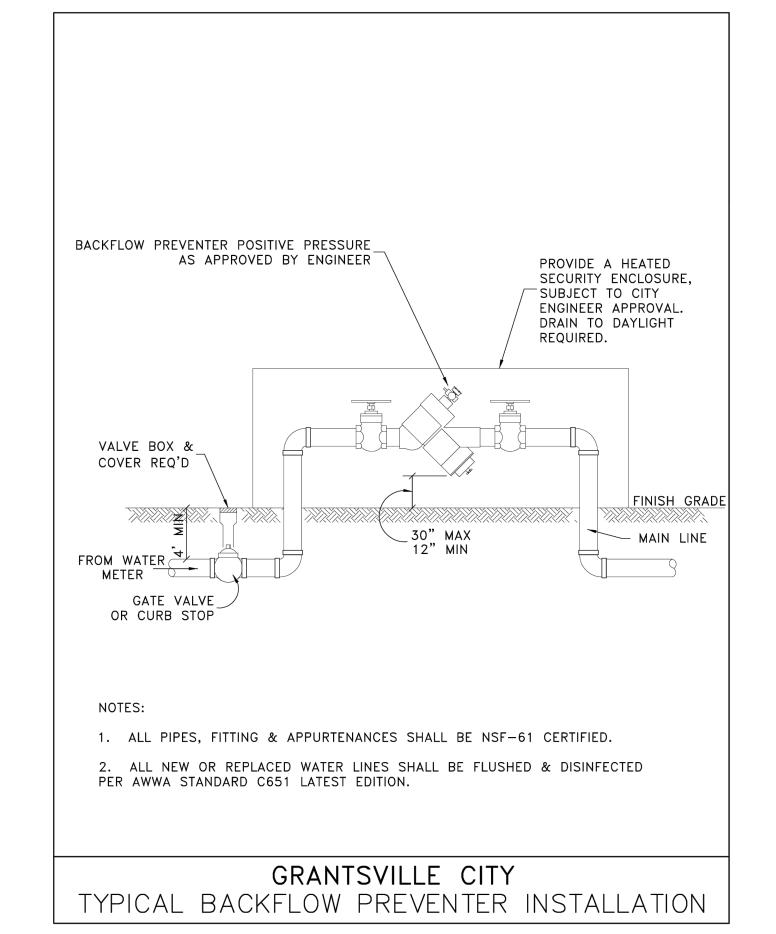


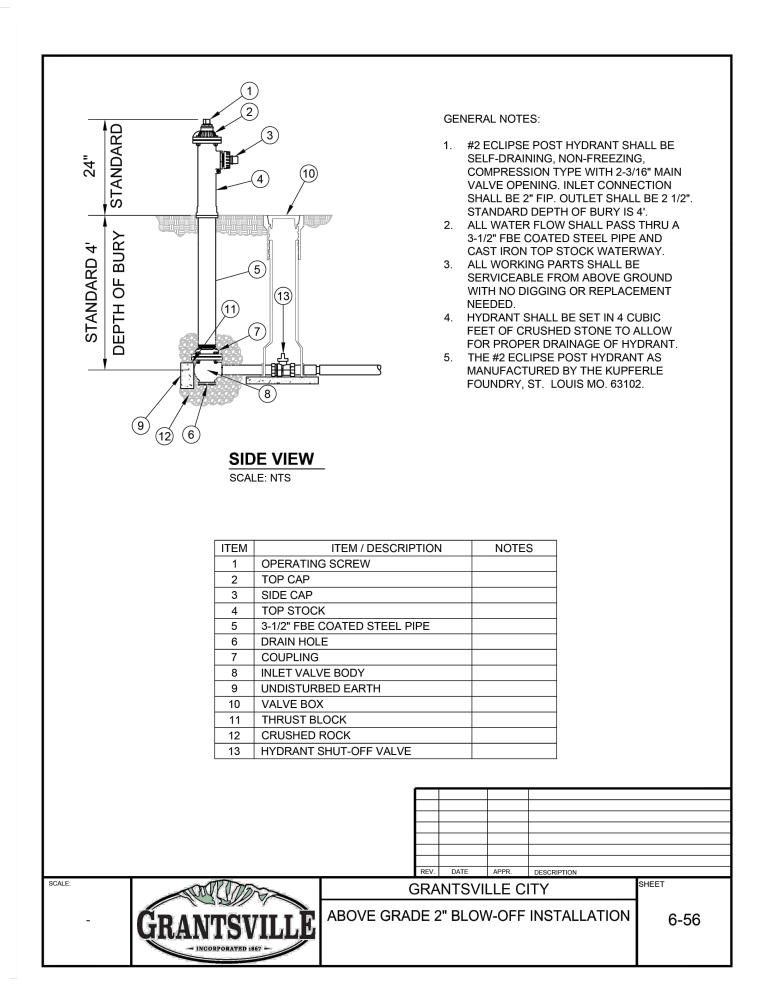






FIRE HYDRANT ASSEMBLY









PROJECT MANAGER C. CHILD

THE STANDARD IN ENGINEERING

169 N. Main Street, Unit 1

SALT LAKE CITY

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PO BOX 190

CONTACT:

UBDINISION

S

TODD CASTAGNO

TOOELE

LAYTON

Inspect rock outlet structures after heavy rains to see if any erosion around or below the riprap has taken place or if stones have been dislodged. Immediately make all needed repairs to prevent further damage. Remove any debris that has collected on the outlet pad.

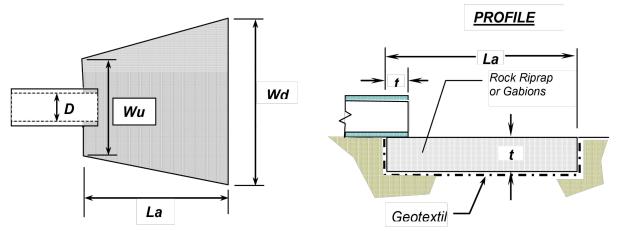


Figure 1 - Typical detail for rock outlet protection below a culvert

Culvert Size D, (inches)	Rock Size d _{so} (inches)	Apron Legnth La, (feet)	Upstream Width Wu, (feet)	Downstream Width Wd, (feet)	Thickness t, (inches)	Quantity (tons)
12	6	12	3	13	18	15
18	9	16	4.5	18	24	20
21	9	18	5	20	24	35
24	9	20	6	22	24	60
30	9	22	7.5	24	24	75
36	12	24	9	27	30	120
42	18	26	10.5	30	36	180
48	18	28	12	32	36	215

TABLE 1 - Rock outlet protection apron dimensions

Smallest Dimension in Inches				% of rocks small than		
Gadion Rock	6"d ₅₀	9"d ₅₀	12"d ₅₀	18"d ₅₀	size shown	
8	12	15	21	30	100	
6	9	12	18	24	50-70	
4	6	9	12	18	35-50	
3	2	3	4	6	2-10	

TABLE 2 - Required rock gradation

NOTE: After a fire many trees are weakened from burning around the base of the trunk. The trees can fall over or blow down without warning. Shallow rooted trees can also fall. Therefore be extremely alert when around burned trees.

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Natural Resources Conservation Service

Rock

USDA NRCS 2012 Fact Sheet

Denver Federal Center Building 56, Room 2604 PO Box 25426 Denver, Co 80225-0426

720-544-2810 - office

www.co.nrcs.usda.gov



What is rock outlet protection? A pad or apron of heavy rock placed at the outlet end of culverts or chutes.

When is rock outlet protection used?

Rock outlet protection is installed where the energy at the outlets of culverts or chutes are sufficient to erode the receiving channel or area. This fact sheet does not apply to continuous rock linings of channels or streams. Pipes that dump water at the top of a slope, or down slopes steeper than 10 percent, or flow at rates greater than 10 feet per second require a site specific design that is beyond the scope of this fact sheet.

How is rock outlet protection installed? Apron length: Apron length (La) shall be determined from Table 1. Apron width: The apron width is based on the diameter of the discharge pipe, (D). The apron width will be 3D at the upstream end (Wu), and the downstream width (Wd) will be equal to (D + La). The apron shall extend across the channel bottom and up side slopes for a minimum height equal to the diameter of the pipe, (D).

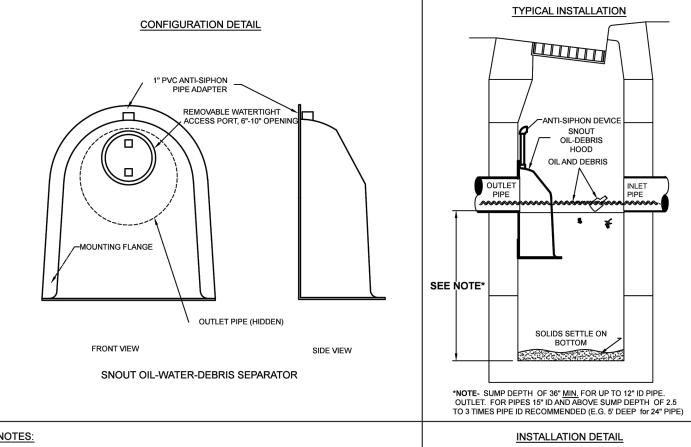
Alignment: The apron shall be located so that there are no bends in the horizontal alignment. The apron should be level over its length, and the elevation of the downstream end of the apron must be the same as the elevation of the receiving channel or adjacent

Thickness: The required apron thickness is shown in Table 1.

Gabions: When a gabion mattress is used it shall be made of double twisted galvanized steel wire. Gabions shall be fabricated in such a manner that the sides, ends, and lid can be assembled at the construction site into mats a minimum of 12 inches thick.

<u>Materials</u>: Outlet protection may be done using rock riprap or gabion mattresses to construct the apron. The rock shall consist of field stone or rough unhewn quarry stone. The stone shall be hard and angular and of a quality that will not disintegrate on exposure to water or weathering. Broken concrete may be used provided it does not have any exposed steel or reinforcing bars, and that it is broken into blocky pieces such that the largest dimension of each piece is no more than 3 times the smallest dimension. The required rock size is shown in Tables 1 and 2. In all cases a geotextile (filter fabric) shall be placed between the apron and the underlying soil to prevent soil movement into and through the riprap.

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INSTALLATION NOTE:

POSITION HOOD SUCH THAT

BOTTOM FLANGE IS A DISTANCE OF 1/2 OUTLET PIPE DIAMETER (MIN.) BELOW THE PIPE INVERT.

MINUMUM DISTANCE FOR PIPES < 12" I.D. IS 6".

SP-SN

DETAIL A

HOOD SPECIFICATION FOR

CATCH BASINS AND

WATER QUALITY STRUCTURES

GASKET
COMPRESSED
BETWEEN HOOD
AND STRUCTURE
(SEE DETAIL B)

OIL- DEBRIS HOOD

SPECIFICATION AND

INSTALLATION

(TYPICAL)

ALL HOODS AND TRAPS FOR CATCH BASINS AND WATER QUALITY STRUCTURES SHALL BE AS MANUFACTURED BY:
BEST MANAGEMENT PRODUCTS, INC. 9 MATHEWS DRIVE, UNIT A1-A2. EAST HADDAM, CT 06423

TOLL FREE: (800) 504-8008 OR (888) 434-0277, FAX: (877) 434-3197 WEB SITE: www.bmpinc.con 2. ALL HOODS SHALL BE CONSTRUCTED OF A GLASS REINFORCED RESIN COMPOSITE WITH

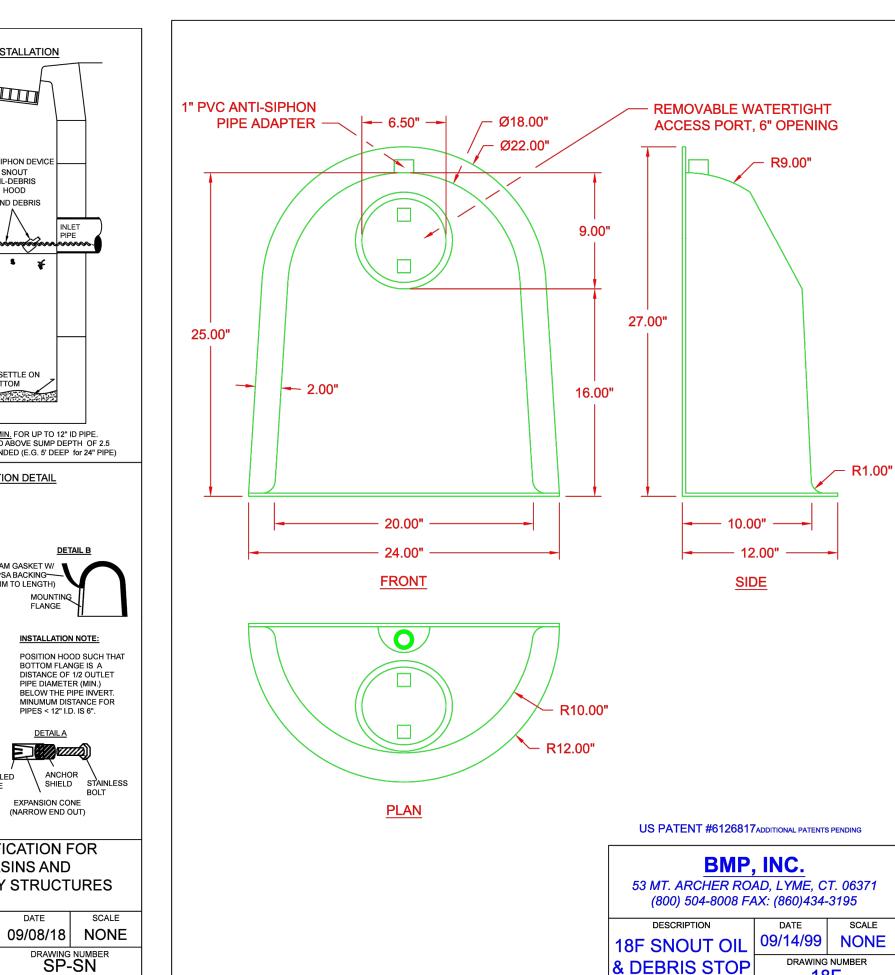
ALL HOODS SHALL BE EQUIPPED WITH A WATERTIGHT ACCESS PORT, A MOUNTING FLANGE, AND AN ANTI-SIPHON VENT PIPE AND ELBOW AS DRAWN. (SEE CONFIGURATION DETAIL) THE SIZE AND POSITION OF THE HOOD SHALL BE DETERMINED BY OUTLET PIPE SIZE AS PER MANUFACTURER'S RECOMMENDATION (SNOUT SIZE ALWAYS LARGER THAN PIPE SIZE). . THE BOTTOM OF THE HOOD SHALL EXTEND DOWNWARD A MINIMUM DISTANCE EQUAL TO 1/2 THE OUTLET PIPE DIAMETER WITH A MINIMUM DISTANCE OF 6" FOR PIPES <12" I.D. 3. THE ANTI-SIPHON VENT SHALL EXTEND ABOVE HOOD BY MINIMUM OF 3" AND A MAXIMUM OF 12" ACCORDING TO STRUCTURE CONFIGURATION.

THE SURFACE OF THE STRUCTURE WHERE THE HOOD IS MOUNTED SHALL BE FINISHED SMOOTH AND FREE OF LOOSE MATERIAL AND PIPE SHALL BE FINISHED FLUSH TO WALL . ALL STRUCTURE JOINTS SHALL BE WATERTIGHT.

. THE HOOD SHALL BE SECURELY ATTACHED TO STRUCTURE WALL WITH 3" STAINLESS STEEL BOLTS AND OIL-RESISTANT GASKET AS SUPPLIED BY MANUFACTURER. (SEE INSTALLATION DETAIL) 10. INSTALLATION INSTRUCTIONS SHALL BE FURNISHED WITH MANUFACTURER SUPPLIED INSTALLATION KIT.
INSTALLATION KIT SHALL INCLUDE:

A. INSTALLATION INSTRUCTIONS
B. PVC ANTI-SIPHON VENT PIPE AND ADAPTER C. OIL-RESISTANT CRUSHED CELL FOAM GASKET WITH PSA BACKING
D. 3/8" STAINLESS STEEL BOLTS

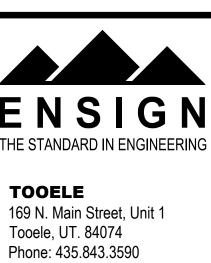
US Patent # 6126817, 7951294, 7857966, 8512556 Canada Patent # 2285146, 2690156, 2690156 others pending





GRANTSVILLE CITY STANDARDS			
APWA PLAN #	GRANTSVILLE CITY CHANGES		
205.1 - CURB AND GUTTER	TYPE "A" ONLY		
224 CIDEWALK	6" MIN CONCRETE THICKNESS		
231 - SIDEWALK	6" MIN BASE COURSE		
235.2 - CORNER CURB CUT ASSEMBLY	6" PPC ON 6" UBC		
238 -DETECTABLE WARNING SURFACE	STYLE "T" ONLY		
	YELLOW COLOR TILE		
255 - BITUMINOUS PAVEMENT T-PATCH	TRENCH BACKFILL TO BE A1A MATERIAL		
292 - STREET NAME SIGNPOST	USE NEW CITY LOGO W/ STREET NAME & GRID NUMBER ON SIGN		
315.1 - CATCH BASIN	24" BASE COURSE UNLESS GEOTECH SAY DIFFERENT		
316 - COMBINATION CATCH BASIN AND CLEANOUT BOX	24" BASE COURSE UNLESS GEOTECH SAY DIFFERENT		
341.1 - PRECAST MANHOLE	24" BASE COURSE UNLESS GEOTECH SAY DIFFERENT		
341.2 - PRECAST MANHOLE	24" BASE COURSE UNLESS GEOTECH SAY DIFFERENT		
381 - TRENCH BACKFILL	TRENCH BACKFILL TO BE A1A MATERIAL		
382 - PIPE ZONE BACKFILL	WATER DESIGN - REFER TO GRANTSVILLE UTILITY TRENCH FOR WATER DETAIL SEWER DESIGN - SHOULD BE 3/4" MINUS BEDDING CRUSHED DRAIN ROCK PER UTAH CODE R309-550-8(2)		
411 - SANITARY SEWER MANHOLE	24" BASE COURSE UNLESS GEOTECH SAY DIFFERENT		

NOTE: ALL CONCRETE SURFACE IMPROVEMENTS SHALL BE CONSTRUCTED USING 4,500 PSI CONCRETE



SALT LAKE CITY Phone: 801.255.0529

LAYTON Phone: 801.547.1100 **CEDAR CITY**

Phone: 435.865.1453 **RICHFIELD** Phone: 435.896.2983

WWW.ENSIGNENG.COM

THE COASSOLO GROUP, LLC PO BOX 190 GRANTSVILLE CITY, UTAH 84029

TODD CASTAGNO PHONE: 435-849-1485

UBDINISIO STR SIGN QUIRK RNE YWOOD CO **PRELIMIN** HOLL

CITY

DETAILS

DRAWN BY C. CHILD

PROJECT MANAGER C. CHILD

D-602

AGENDA ITEM #5

Council Reports

AGENDA ITEM #6

Closed Session (Imminent Litigation, Personnel, Property)

AGENDA ITEM #7

Adjourn