



HIGHLANDS BLUFF ESTATES

PHASE 2

2225 EAST 6225 SOUTH
OGDEN, UTAH

FOR REVIEW
NOT FOR CONSTRUCTION

DATE PRINTED
January 7, 2021

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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.

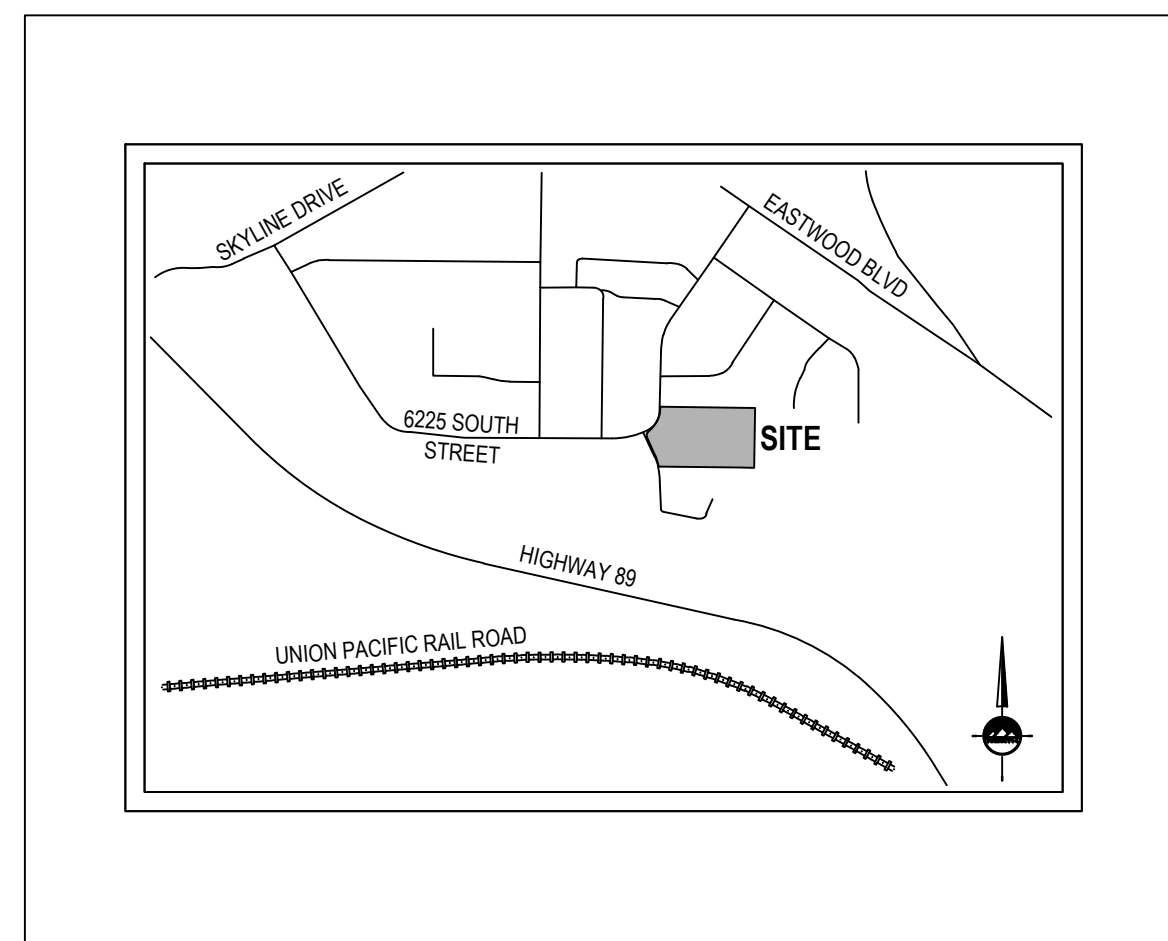
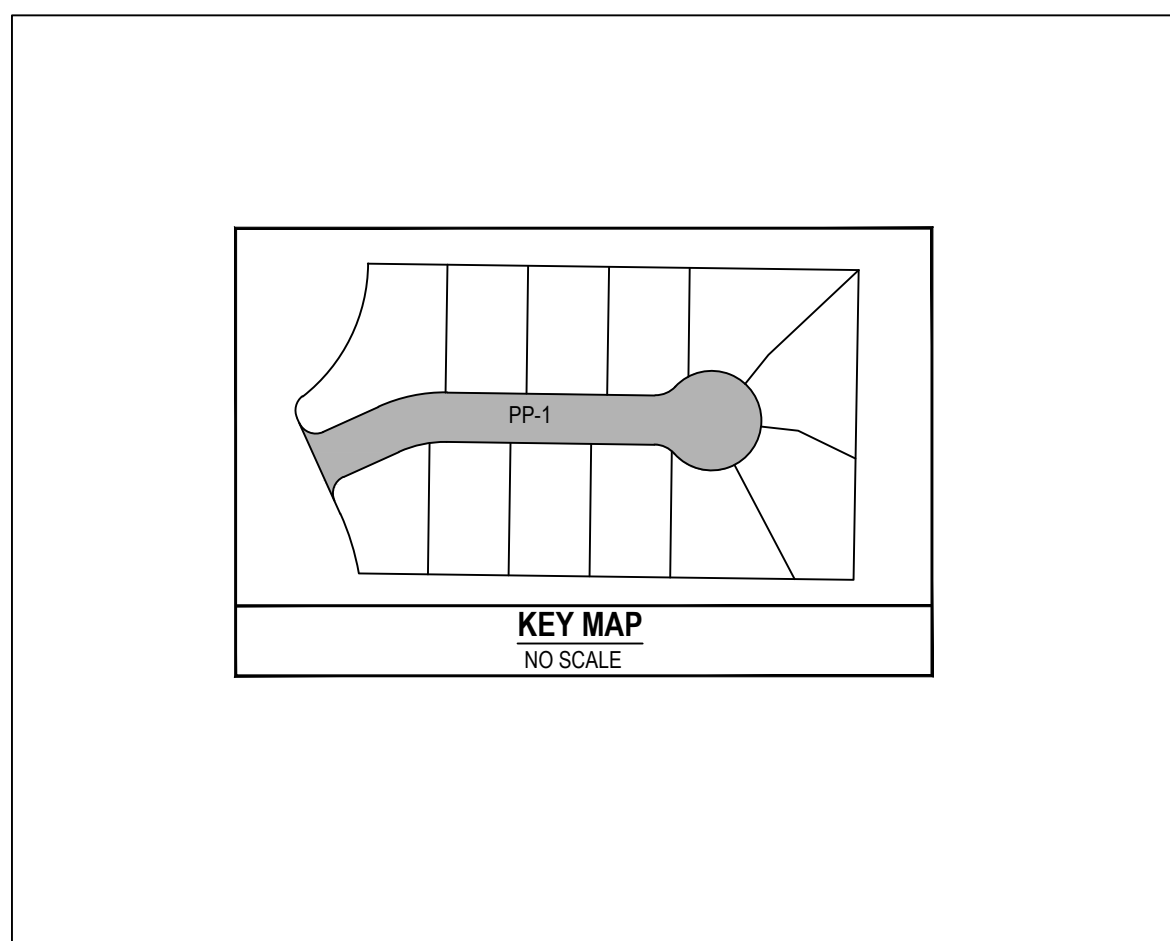
CONTRACTOR FURTHER AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB-SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTOR 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.



GENERAL NOTES

- ALL WORK SHALL CONFORM TO OGDEN CITY STANDARDS & SPECIFICATIONS.
- CALL BLUE STAKES AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES.
- BENCHMARK ELEVATION = WEST QUARTER CORNER OF SECTION 23, TOWNSHIP 5 NORTH RANGE 1 WEST SALT LAKE BASE AND MERIDIAN. ELEVATION = 4971.186'



LAYTON
919 North 400 West
Layton, UT 84041
Phone: 801.547.1100

SALT LAKE CITY
Phone: 801.255.0529

TOOELE
Phone: 435.843.3590

CEDAR CITY
Phone: 435.865.1453

RICHFIELD
Phone: 435.896.2983

WWW.ENSIGNENG.COM

FOR:
MOORE HOMES
9691 S GRANITE WOODS CIRCLE
SANDY, UTAH 84092

CONTACT:
CLIENT CONTACT
PHONE: 801-000-0000

HIGHLANDS BLUFF ESTATES
PHASE 2
2225 EAST 6225 SOUTH
OGDEN, UTAH



NO.	DATE	REVISION	BY
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COVER

PROJECT NUMBER
9455

PRINT DATE
1/7/21

DRAWN BY
J.MOSS

CHECKED BY
C.PRESTON

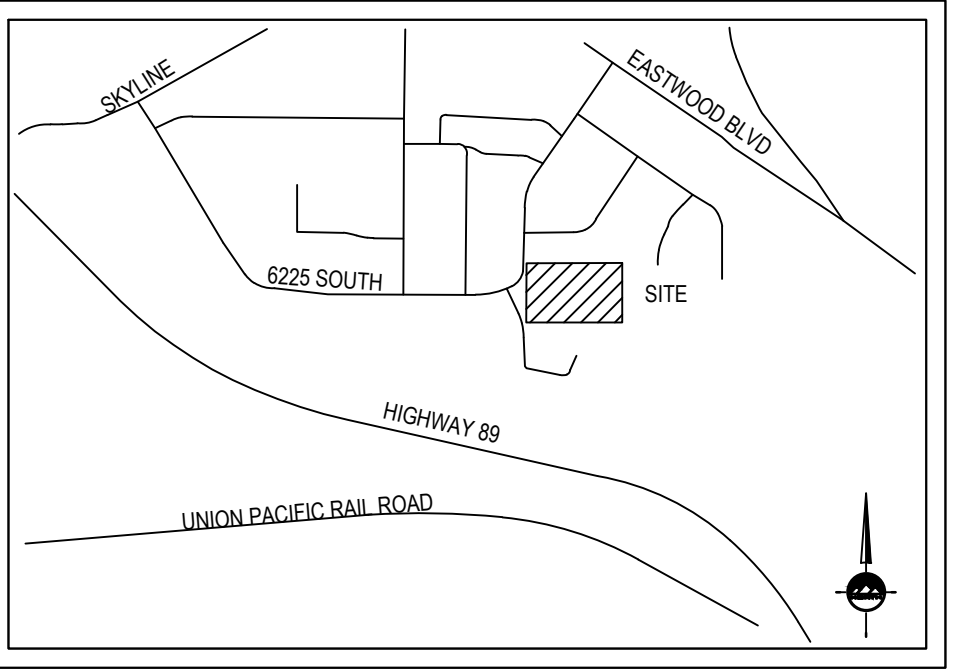
PROJECT MANAGER
C.PRESTON

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

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

BENCHMARK

WEST 1/4 CORNER OF SECTION 23,
TOWNSHIP 5 NORTH RANGE 1 WEST
SALT LAKE BASE AND MERIDIAN
ELEV = 4971.186'



ENSIGN
THE STANDARD IN ENGINEERING

LAYTON
1485 W. Hill Field Rd., Ste. 204
Layton, UT 84041
Phone: 801.547.1100

SALT LAKE CITY
Phone: 801.255.0529

TOOELE
Phone: 435.843.3590

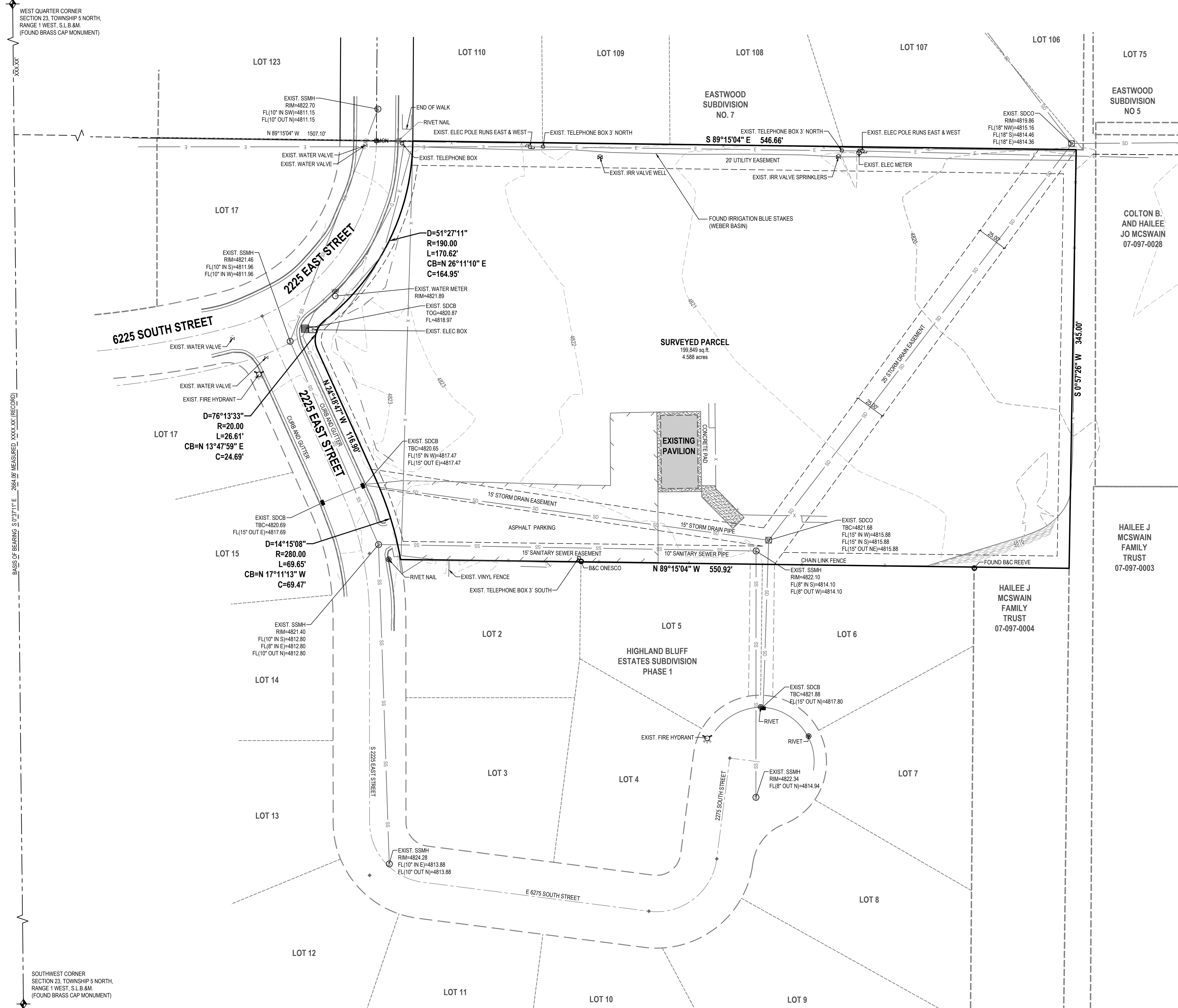
CEDAR CITY
Phone: 435.865.1453

RICHFIELD
Phone: 435.896.2983

WWW.ENSIGNENG.COM

FOR:
MOORE HOMES
9691 S GRANITE WOODS CIRCLE
SANDY, UT 84092

CONTACT:
CLIENT CONTACT
PHONE: 801-000-0000



PROPERTY DESCRIPTION
ALL OF LOT 1 OF HIGHLAND BLUFF ESTATES SUBDIVISION, PART OF THE SOUTHWEST QUARTER CORNER OF SECTION 23, T.5N., R.1W., S.L.B. & M. WEBER COUNTY, UTAH

DATE _____ NAME _____
License No. _____

LEGEND

	SECTION CORNER		ADJACENT RIGHT OF WAY
	MONUMENT		RIGHT OF WAY
	EXIST REBAR AND CAP		CENTERLINE
	SET ENSIGN REBAR AND CAP		PROPERTY LINE
	WATER METER		ADJACENT PROPERTY LINE
	WATER MANHOLE		DEED LINE
	WATER VALVE		TANGENT LINE
	FIRE HYDRANT		EXIST DITCH FLOW LINE
	SECONDARY WATER VALVE		FENCE
	IRRIGATION VALVE		EDGE OF ASPHALT
	SANITARY SEWER MANHOLE		SANITARY SEWER LINE
	STORM DRAIN CLEAN OUT		STORM DRAIN LINE
	STORM DRAIN CATCH BASIN		LAND DRAIN LINE
	STORM DRAIN COMBO BOX		CULINARY WATER LINE
	STORM DRAIN CULVERT		SECONDARY WATER LINE
	SIGN		IRRIGATION LINE
	ELECTRICAL BOX		OVERHEAD POWER LINE
	UTILITY MANHOLE		ELECTRICAL LINE
	UTILITY POLE		GAS LINE
	LIGHT		EXISTING CONTOURS
	CABLE BOX		CONCRETE
	TELEPHONE BOX		BUILDING
	GAS METER		PUBLIC DRAINAGE EASEMENT
	TREE		DENSE VEGETATION PREVENTING ACCESS FOR ACCURATE SURVEY
	SHRUB		

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

HORIZONTAL GRAPHIC SCALE

(IN FEET)
0 20 40 80
HORZ: 1 inch = 40 ft.

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 23 TOWNSHIP 5 NORTH, RANGE 1 WEST SALT LAKE BASE AND MERIDIAN

SOUTH OGDEN PROPERTY
6224 S 2225 EAST
OGDEN, UTAH

BOUNDARY/ TOPOGRAPHY SURVEY

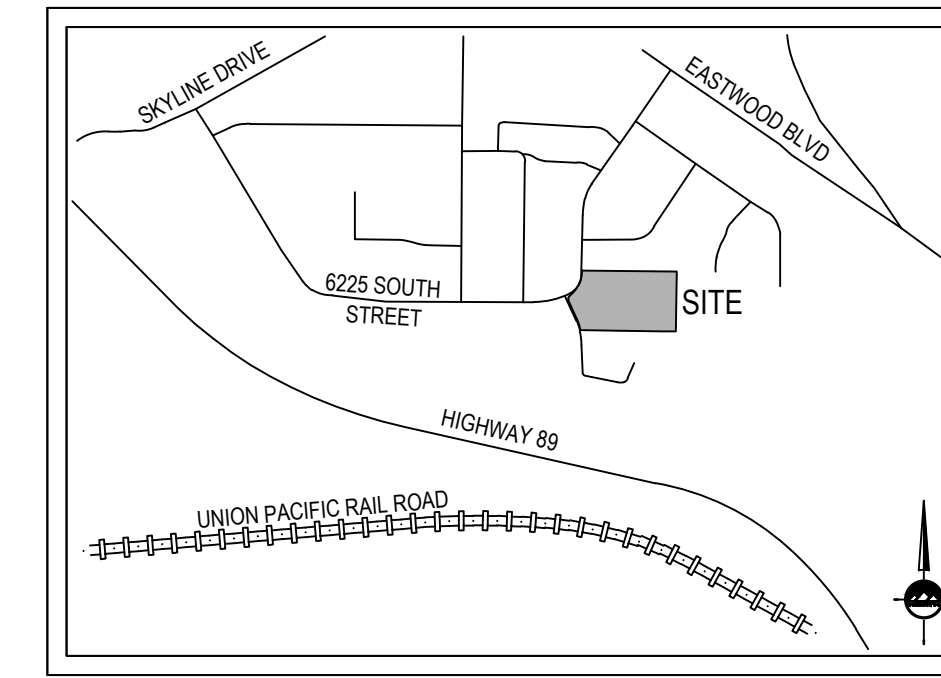
PROJECT NUMBER 9455 PRINT DATE 12/10/19
DRAWN BY R.HERBST CHECKED BY T.WILLIAMS
PROJECT MANAGER T.WILLIAMS

1 OF 1

HIGHLANDS BLUFF ESTATES SUBDIVISION PHASE 2

AMENDING PORTION OF LOT 1

LOCATED IN THE SOUTHWEST CORNER OF SECTION 23
TOWNSHIP 5 NORTH, RANGE 1 WEST
SALT LAKE BASE AND MERIDIAN
WEBER COUNTY, UTAH
DECEMBER 2020



GENERAL NOTES:

- PROPERTY IS ZONED R-1-12.
 - FRONT YARD SETBACK IS 30'
 - REAR YARD SETBACK IS 30'
 - SIDE YARD SETBACK IS 10' MINIMUM, TOTAL 24'
 - CORNER LOT SIDE YARD SETBACK IS 20'
- ALL PUBLIC UTILITY AND DRAINAGE EASEMENTS (PU&DE) ARE 10' FRONT AND 10' REAR UNLESS OTHERWISE NOTED HERON.

GENERAL NOTES:

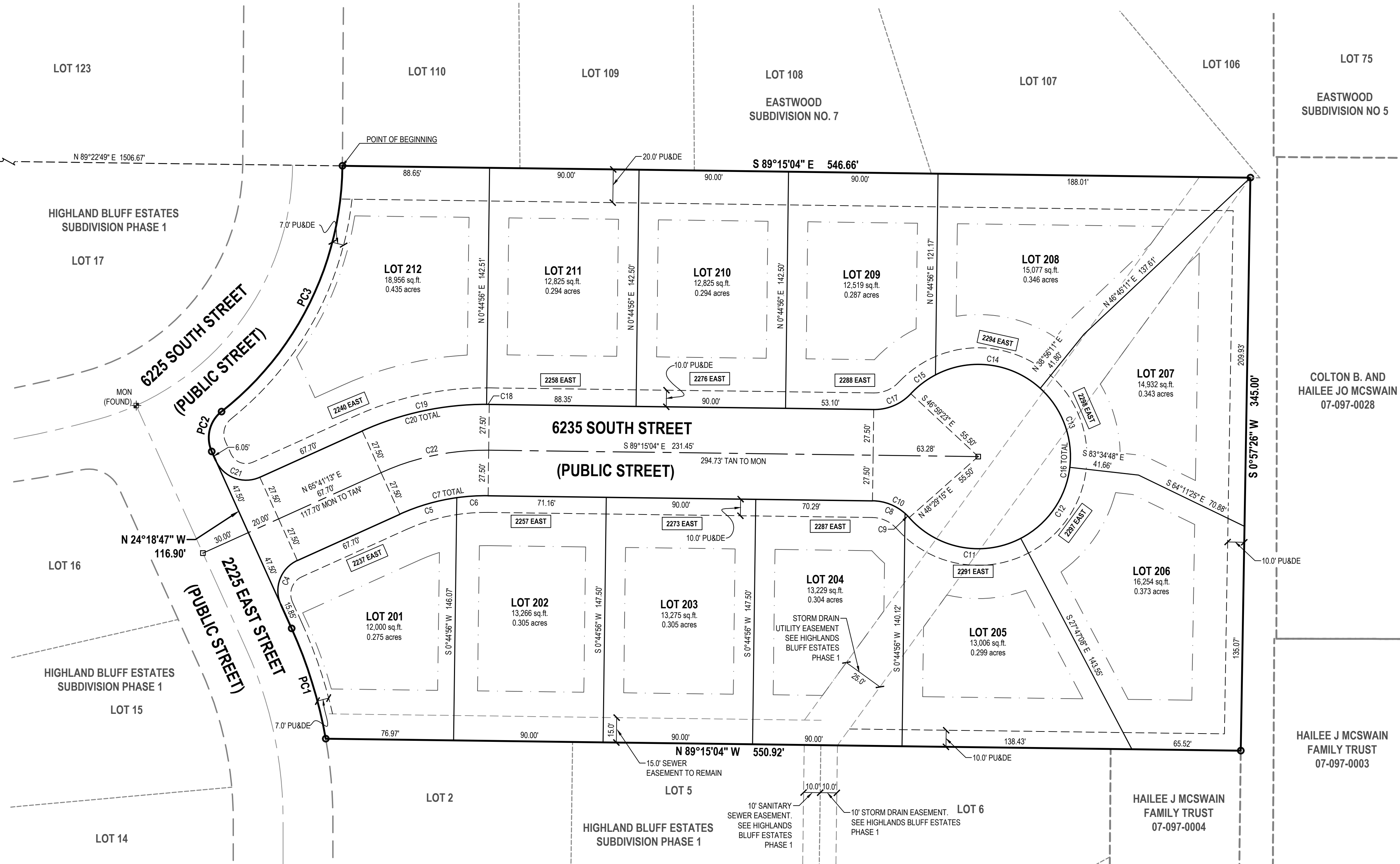
- UTILITIES SHALL HAVE THE RIGHT TO INSTALL, MAINTAIN, AND OPERATE THEIR EQUIPMENT ABOVE AND BELOW GROUND AND ALL OTHER RELATED FACILITIES WITHIN THE PUBLIC UTILITY EASEMENTS IDENTIFIED ON THIS PLAT MAP AS MAY BE NECESSARY OR DESIRABLE IN PROVIDING UTILITY SERVICES WITHIN AND WITHOUT THE LOTS IDENTIFIED HEREIN, INCLUDING THE RIGHT OF ACCESS TO SUCH FACILITIES AND THE RIGHT TO REQUIRE REMOVAL OF ANY OBSTRUCTIONS INCLUDING STRUCTURES, TREES AND VEGETATION THAT MAY BE PLACED WITHIN THE P.U.E. THE UTILITY MAY REQUIRE THE LOT OWNER TO REMOVE ALL STRUCTURES WITHIN THE P.U.E. AT THE LOT OWNER'S EXPENSE, OR THE UTILITY MAY REMOVE SUCH STRUCTURES AT THE LOT OWNER'S EXPENSE. AT NO TIME MAY ANY PERMANENT STRUCTURES BE PLACED WITHIN THE P.U.E. OR ANY OTHER OBSTRUCTION WHICH INTERFERES WITH THE USE OF THE P.U.E. WITHOUT THE PRIOR WRITTEN APPROVAL OF THE UTILITIES WITH FACILITIES IN THE P.U.E.
- 5/8" x 24" REBAR AND CAP WILL BE PLACED AT ALL REAR LOT CORNERS AND FRONT CORNERS WILL BE MARKED WITH A NAIL OR RIVET AT THE EXTENSION IN THE CURB.
- PROTECT ALL EXISTING SECTION CORNERS AND STREET MONUMENTS. COORDINATE ALL SURVEY STREET MONUMENT INSTALLATION, GRADE ADJUSTMENT, AND ALL REQUIRED FEES AND PERMITS WITH THE COUNTY SURVEYOR PRIOR TO DISRUPTION OF ANY EXISTING MONUMENTS.

WEST QUARTER CORNER
SECTION 23, TOWNSHIP 5 NORTH,
RANGE 1 WEST, S.L.B.&M.
(FOUND BRASS CAP MONUMENT)

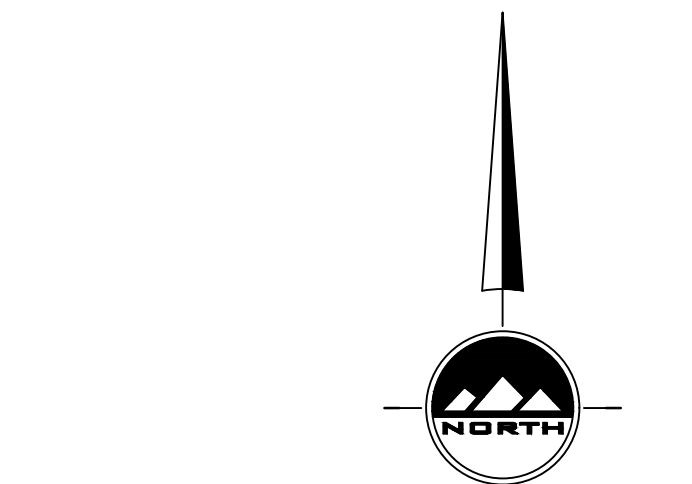
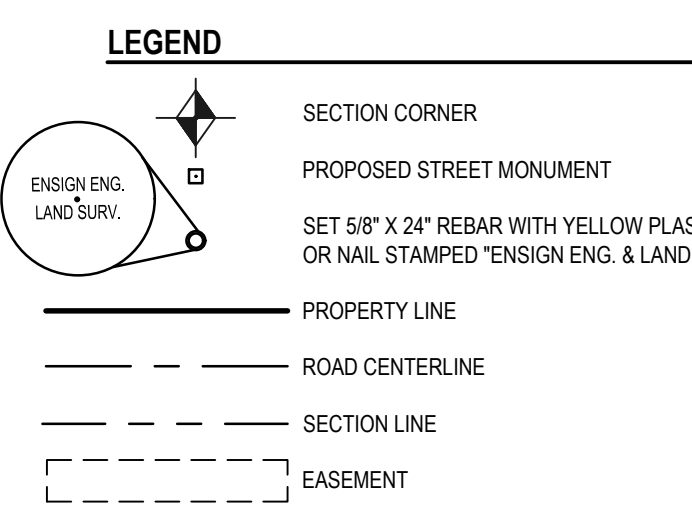
1385.37'

BASES OF BEARING: S 0°37'11" E 2664.06' MEASURED XXXXX.YY (RECORDED)

SOUTHWEST CORNER
SECTION 23, TOWNSHIP 5 NORTH,
RANGE 1 WEST, S.L.B.&M.
(FOUND BRASS CAP MONUMENT)



CURVE TABLE					
CURVE	RADIUS	LENGTH	DELTA	BEARING	CHORD
PC1	280.00'	69.65'	14°15'07"	N17°11'33"W	69.47'
PC2	20.00'	26.61'	76°13'33"	S13°48'00"W	24.69'
PC3	190.00'	170.63'	51°27'11"	N26°11'11"E	164.95'
C4	20.00'	31.42'	90°00'00"	S20°41'13"W	28.28'
C5	125.00'	35.76'	16°23'32"	S73°52'59"W	35.64'
C6	125.00'	18.91'	8°40'11"	S86°24'50"W	18.90'
C7	125.00'	54.67'	25°03'43"	S78°13'05"W	54.24'
C8	30.00'	21.50'	41°03'38"	N68°43'15"W	21.04'
C9	30.00'	3.50'	6°40'41"	N44°51'06"W	3.49'
C10	30.00'	25.00'	47°44'19"	N65°22'55"W	24.28'
C11	55.50'	73.62'	78°00'08"	S79°30'49"E	68.34'
C12	55.50'	54.00'	55°45'03"	N34°36'35"E	51.90'
C13	55.50'	52.76'	54°28'09"	N20°30'01"W	50.80'
C14	55.50'	67.71'	69°53'48"	N82°41'00"W	63.58'
C15	55.50'	18.75'	19°21'29"	S52°41'22"W	18.66'
C16	55.50'	266.84'	275°28'38"	N0°44'59"E	74.65'
C17	30.00'	25.00'	47°44'19"	N66°52'47"E	24.28'
C18	180.00'	1.65'	0°31'32"	N89°30'50"W	1.65'
C19	180.00'	77.98'	24°32'11"	S77°57'18"W	76.50'
C20	180.00'	78.73'	25°03'43"	S78°13'05"W	78.11'
C21	20.00'	31.42'	90°00'00"	S69°18'47"E	28.28'
C22	152.50'	66.71'	25°03'43"	S78°13'05"W	66.18'



DEVELOPER
MOORE HOMES
9691 S GRANITE WOODS CIRCLE
SANDY, UTAH

SURVEYOR'S CERTIFICATE

I, TRENT R. WILLIAMS, do hereby certify that I am a Licensed Land Surveyor, and that I hold certificate No. 8034679 as prescribed under laws of the State of Utah. I further certify that by authority of the Owners, I have made a survey of the tract of land shown on this plat and described below, and have subdivided said tract of land into lots and streets, hereafter to be known as HIGHLANDS BLUFF ESTATES PHASE 2 and that the same has been correctly surveyed and staked on the ground as shown on this plat. I further certify that all lots meet frontage width and area requirements of the applicable zoning ordinances.

BOUNDARY DESCRIPTION

A parcel of land, situate in the Southwest Quarter of Section 23, Township 5 North, Range 1 West, Salt Lake Base and Meridian, said parcel also located in Weber County, Utah. Being more particularly described as follows:
Beginning at the Southwest corner of Lot 110, Eastwood Subdivision No. 7, said point being South 00°37'11" East 1355.37 feet along the section line and North 89°22'49" East 1506.67 feet from the West Quarter Corner of said Section 23 and running thence:
South 89°15'04" East 546.66 feet along the South line of said Eastwood Subdivision No. 7;
thence South 00°57'25" West 345.00 feet;
thence North 89°15'04" West 550.92 feet to the easterly right-of-way line of 2225 East Street;
thence along said right-of-way the following three (3) courses and distances:
1) Northerly 69.65 feet along the arc of a 280.00-foot radius non-tangent curve to the left (center bears South 79°56'22" West and the long chord bears North 17°11'33" West 69.47 feet with a central angle of 14°15'07");
2) North 24°18'47" West 116.90 feet;
3) Northerly 26.61 feet along the arc of a 20.00-foot radius tangent curve to the right (center bears North 65°41'13" East and the long chord bears North 13°48'00" East 24.69 feet with a central angle of 76°13'33") to the southerly right-of-way line of 6225 South Street;
thence Northeasterly 170.63 feet along the arc of a 190.00-foot radius curve to the left (center bears North 38°05'06" West and the long chord bears North 26°11'11" East 164.95 feet with a central angle of 51°27'11") along said southerly right-of-way to the Point of Beginning.

Contains: 199,850 square feet or 4.588 acres and 12 lots.

Date: _____
Trent R. Williams, PLS
License no. 8034679

OWNER'S DEDICATION

We(I) the undersigned owners of the above described tract of land, do hereby set apart and subdivide the same into lots and streets (private streets/private right-of-way's) as shown hereon and name said tract:

HIGHLANDS BLUFF ESTATES SUBDIVISION PHASE 2

Dedicate to public use all those parts or portions of said tract of land designated as streets, the same to be used as public thoroughfares.

Grant and convey to the subdivision home owners association, all those part or portions of said tract of land designated as common areas to be used for recreational and open space purposes for the benefit of each home owners association member in common with all others in the subdivision and grant and dedicate to the city a perpetual open space right and easement on and over the common areas to guarantee to Plain City that the common areas remain open and undeveloped except for approved recreational, parking and open space purposes.

Grant and dedicate a perpetual right and easement over, upon and under the lands designated hereon as public utility and drainage easements and storm water detention ponds with no buildings or structures being erected within such easements.

Grant and dedicate unto all owners of lots upon which private land drains are constructed or which are otherwise dependent upon such land drains, an easement over such land drains for the purpose of perpetual maintenance and operation.

In witness whereof We(I) have hereto set our hands(s) this _____ day of _____ A.D., 20____.

By: _____

LIMITED LIABILITY COMPANY ACKNOWLEDGMENT

STATE OF UTAH
County of Davis J.S.S.

On _____ day of _____ A.D., 20____, _____ personally appeared before me, the undersigned Notary Public, in and for said County of _____ in the State of Utah, who after being duly sworn, acknowledged to me that He is the _____ of _____ a Limited Liability Company and that He signed the Owner's Dedication freely and voluntarily for and in behalf of said Limited Liability Company for the purposes therein mentioned and acknowledged to me that said Limited Liability Company executed the same.

MY COMMISSION EXPIRES: _____

NOTARY PUBLIC _____ RESIDING IN _____ COUNTY.

HIGHLANDS BLUFF ESTATES SUBDIVISION PHASE 2

LOCATED IN THE SOUTHWEST CORNER OF SECTION 23
TOWNSHIP 5 NORTH RANGE 1 WEST
SALT LAKE BASE & MERIDIAN
WEBER COUNTY, UTAH

WEBER COUNTY RECORDER

ENTRY NO. _____ FEE _____
PAID _____ FILED FOR RECORD AND
RECORDED THIS _____ DAY OF _____ 20____
AT _____ IN BOOK _____ OF OFFICIAL RECORDS
PAGE _____

PROJECT NUMBER : 9455
MANAGER : C.PRESTON
DRAWN BY : J.MOSS
CHECKED BY : T.WILLIAMS
DATE : 12/23/2020

WEBER COUNTY RECORDER
BY _____ DEPUTY RECORDER

<p>LAYTON 919 North 400 West Layton UT 84041 Phone: 801.547.1100 Fax: 801.593.6315 WWW.ENSIGNENG.COM</p> <p>SALT LAKE CITY Phone: 801.955.9299 TOOELE Phone: 801.843.3299 CEDAR CITY Phone: 435.865.1453 RICHFIELD Phone: 435.896.2983</p> <p>WEBER COUNTY SURVEYOR WCO 106-1-8(c)(1)h.10, WCO 45-4-2(c)</p>	<p>THEREBY CERTIFY THAT THE WEBER COUNTY SURVEYOR'S OFFICE HAS REVIEWED THIS PLAT AND ALL CONDITIONS FOR APPROVAL BY THIS OFFICE HAVE BEEN SATISFIED. THE APPROVAL OF THIS PLAT BY THE WEBER COUNTY SURVEYOR DOES NOT RELIEVE THE LICENSED LAND SURVEYOR WHO EXECUTED THIS PLAT FROM THE RESPONSIBILITIES AND/OR LIABILITIES ASSOCIATED THEREWITH.</p> <p>SIGNED THIS _____ DAY OF _____, 20____.</p>	<p>COUNTY ATTORNEY'S APPROVAL</p> <p>APPROVED THIS _____ DAY OF _____, 20____.</p> <p>BY THE WEBER COUNTY ATTORNEY.</p> <p>WEBER COUNTY ATTORNEY</p>	<p>PLANNING COMMISSION APPROVAL</p> <p>APPROVED THIS _____ DAY OF _____, 20____.</p> <p>BY THE COUNTY PLANNING COMMISSION APPROVAL.</p> <p>CHAIRMAN, WEBER COUNTY PLANNING COMMISSION</p>	<p>COUNTY ENGINEER'S APPROVAL</p> <p>APPROVED THIS _____ DAY OF _____, 20____.</p> <p>BY THE WEBER COUNTY ENGINEER.</p> <p>WEBER COUNTY ENGINEER</p>	<p>COUNTY COUNCIL APPROVAL</p> <p>APPROVED THIS _____ DAY OF _____, 20____.</p> <p>BY THE WEBER COUNTY COUNCIL.</p> <p>COUNTY RECORDER CITY MAYOR</p>	<p>SHEET 1 OF 1</p>
	<p>WEBER COUNTY SURVEYOR</p>	<p>COUNTY ATTORNEY</p>	<p>CHAIRMAN, WEBER COUNTY PLANNING COMMISSION</p>	<p>WEBER COUNTY ENGINEER</p>	<p>COUNTY RECORDER CITY MAYOR</p>	<p>DEPUTY RECORDER</p>



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GENERAL NOTES

PROJECT NUMBER 9455	PRINT DATE 1/7/21
DRAWN BY J.MOSS	CHECKED BY C.PRESTON
PROJECT MANAGER C.PRESTON	

GENERAL NOTES

- ALL CONSTRUCTION MUST STRICTLY FOLLOW THE STANDARDS AND SPECIFICATIONS SET FORTH BY: THE DESIGN ENGINEER, LOCAL AGENCY JURISDICTION, APWA (CURRENT EDITION), AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.). THE ORDER LISTED ABOVE IS ARRANGED BY SENIORITY. THE LATEST EDITION OF ALL STANDARDS AND SPECIFICATIONS MUST BE ADHERED TO. IF A CONSTRUCTION PRACTICE IS NOT SPECIFIED BY ANY OF THE LISTED SOURCES, CONTRACTOR MUST CONTACT DESIGN ENGINEER FOR DIRECTION.
- CONTRACTOR TO STRICTLY FOLLOW THE MOST CURRENT COPY OF THE SOILS REPORT FOR THIS PROJECT. ALL GRADING INCLUDING BUT NOT LIMITED TO CUT, FILL, COMPACTED ASPHALT SECTION, SUBBASE, TRENCH EXCAVATION BACKFILL, SITE GRUBBING, AND FOOTINGS MUST BE COORDINATED DIRECTLY WITH SOILS REPORT.
- CONTRACTOR MUST VERIFY ALL EXISTING CONDITIONS BEFORE BIDDING, AND BRING UP ANY QUESTIONS BEFORE SUBMITTING BID.
- CONTRACTOR SHALL PROVIDE A CONSTRUCTION SCHEDULE IN ACCORDANCE WITH THE CITY, STATE, OR COUNTY REGULATIONS FOR WORKING IN THE PUBLIC WAY.
- CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL ACCORDING TO GOVERNING AGENCY STANDARDS. WET DOWN DRY MATERIALS AND RUBBISH TO PREVENT BLOWING.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ADJACENT SURFACE IMPROVEMENTS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY SETTLEMENT OF OR DAMAGE TO EXISTING UTILITIES.
- THE CONTRACTOR IS RESPONSIBLE TO FURNISH ALL MATERIALS TO COMPLETE THE PROJECT.
- ALL EXPOSED SURFACES WILL HAVE A TEXTURED FINISH, RUBBED, OR BROOMED. ANY "PLASTERING" OF NEW CONCRETE WILL BE DONE WHILE IT IS STILL "GREEN".
- PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES.
- THE LOCATIONS OF UNDERGROUND FACILITIES SHOWN ON THESE PLANS ARE BASED ON FIELD SURVEYS AND LOCAL UTILITY COMPANY RECORDS. IT SHALL BE THE CONTRACTOR'S FULL RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES TO LOCATE THEIR FACILITIES PRIOR TO PROCEEDING WITH CONSTRUCTION. NO ADDITIONAL COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR DAMAGE AND REPAIR TO THESE FACILITIES CAUSED BY HIS WORK FORCE. CONTRACTOR SHALL START INSTALLATION AT LOW POINT OF ALL NEW GRAVITY UTILITY LINES.
- ALL DIMENSIONS, GRADES, AND UTILITY DESIGN SHOWN ON THE PLANS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY DISCREPANCIES EXIST, PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN OR GRADE CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO THE DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS, IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
- NO CHANGE IN DESIGN LOCATION OR GRADE WILL BE MADE BY THE CONTRACTOR WITHOUT THE WRITTEN APPROVAL OF THE PROJECT ENGINEER.
- NATURAL VEGETATION AND SOIL COVER SHALL NOT BE DISTURBED PRIOR TO ACTUAL CONSTRUCTION OF A REQUIRED FACILITY OR IMPROVEMENT. MASS CLEARING OF THE SITE IN ANTICIPATION OF CONSTRUCTION SHALL BE AVOIDED.
- CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, MAINTAINING, OR RESTORING ALL MONUMENTS AND MONUMENT REFERENCE MARKS WITHIN THE PROJECT SITE. CONTACT THE CITY OR COUNTY SURVEYOR FOR MONUMENT LOCATIONS AND CONSTRUCTION DETAILS.
- EXISTING UTILITY INFORMATION SHOWN IS FOR INFORMATIONAL PURPOSES ONLY. IT IS DERIVED FROM ON-SITE SURVEY AND/OR UTILITY MAPPING PROVIDED TO THE ENGINEER, AND THEREFORE UTILITIES MAY NOT BE LOCATED CORRECTLY, EITHER HORIZONTALLY OR VERTICALLY, AND MAY NOT BE ALL INCLUSIVE. CONTRACTOR IS REQUIRED TO FOLLOW THE PROCEDURE OUTLINED BELOW:
 - CONTRACTOR IS REQUIRED TO LOCATE AND POTHOLE ALL EXISTING UTILITY LINES (BOTH HORIZONTALLY AND VERTICALLY) THAT AFFECT THE PROJECT CONSTRUCTION, EITHER ON-SITE OR OFF-SITE, AND DETERMINE IF THERE ARE ANY CONFLICTS WITH THE DESIGN OF THE SITE AS SHOWN ON THE APPROVED PLANS PRIOR TO ANY CONSTRUCTION. IF IT IS DETERMINED THAT CONFLICTS EXIST BETWEEN EXISTING UTILITIES AND DESIGN UTILITIES (OR ANOTHER ASPECT OF PROPOSED CONSTRUCTION) THE ENGINEER MUST BE NOTIFIED IMMEDIATELY TO CORRECT THE CONFLICTS BEFORE ANY WORK CAN BEGIN. IF THE CONTRACTOR FAILS TO FOLLOW THIS ABSOLUTE REQUIREMENT AND CONFLICTS ARISE DURING CONSTRUCTION THE CONTRACTOR WILL BEAR THE SOLE RESPONSIBILITY TO FIX THE CONFLICTS.
 - CONTRACTOR IS REQUIRED TO VERIFY THAT PROPER COVER AND PROTECTION OF EXISTING UTILITY LINES IS MAINTAINED OR ATTAINED WITHIN THE DESIGN ONCE VERIFICATION OF THE EXISTING UTILITIES IS COMPLETED AS OUTLINED IN 16.1 ABOVE.
 - IN ADDITION TO 16.1 AND 16.2 ABOVE THE CONTRACTOR WILL VERIFY DEPTHS OF UTILITIES IN THE FIELD BY "POTHOLES" A MINIMUM OF 300 FEET AHEAD OF PROPOSED PIPELINE CONSTRUCTION TO AVOID POTENTIAL CONFLICTS WITH DESIGNED PIPELINE ALIGNMENT AND GRADE AND EXISTING UTILITIES.
 - IF A CONFLICT ARISES BETWEEN EXISTING UTILITIES AND DESIGN UTILITIES (OR ANOTHER ASPECT OF PROPOSED CONSTRUCTION) AS DETERMINED UNDER 16.1, 16.2 OR 16.3 THE CONTRACTOR WILL NOTIFY THE ENGINEER IMMEDIATELY TO RESOLVE THE CONFLICT.
 - IF A CONFLICT ARISES BETWEEN EXISTING UTILITIES AND DESIGN UTILITIES (OR ANOTHER ASPECT OF PROPOSED CONSTRUCTION) RESULTING FROM THE CONTRACTOR'S NEGLIGENCE TO IDENTIFY AND/OR "POTHOLE" EXISTING UTILITIES AS REQUIRED IN 16.1, 16.2 AND 16.3 ABOVE, THE CONTRACTOR WILL BE REQUIRED TO RESOLVE THE CONFLICT WITHOUT ADDITIONAL COST OR CLAIM TO THE OWNER OR ENGINEER.
- ANY AREA OUTSIDE THE LIMIT OF WORK THAT IS DISTURBED SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT NO COST TO OWNER.
- CONSULT ALL OF THE DRAWINGS AND SPECIFICATIONS FOR COORDINATION REQUIREMENTS BEFORE COMMENCING CONSTRUCTION.
- AT ALL LOCATIONS WHERE EXISTING PAVEMENT ABUTS NEW CONSTRUCTION, THE EDGE OF THE EXISTING PAVEMENT SHALL BE SAWCUT TO A CLEAN, SMOOTH EDGE.
- ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE MOST RECENT, ADOPTED EDITION OF ADA ACCESSIBILITY GUIDELINES.
- CONTRACTOR SHALL, AT THE TIME OF BIDDING AND THROUGHOUT THE PERIOD OF THE CONTRACT, BE LICENSED IN THE STATE OF UTAH AND SHALL BE BONDABLE FOR AN AMOUNT REQUIRED BY THE OWNER.
- CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL WATER, POWER, SANITARY FACILITIES AND TELEPHONE SERVICES AS REQUIRED FOR THE CONTRACTOR'S USE DURING CONSTRUCTION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY SCHEDULING INSPECTION AND TESTING OF ALL FACILITIES CONSTRUCTED UNDER THIS CONTRACT. ALL TESTING SHALL CONFORM TO THE REGULATORY AGENCY'S STANDARD SPECIFICATIONS. ALL RE-TESTING AND/OR RE-INSPECTION SHALL BE PAID FOR BY THE CONTRACTOR.
- IF EXISTING IMPROVEMENTS NEED TO BE DISTURBED AND/OR REMOVED FOR THE PROPER PLACEMENT OF IMPROVEMENTS TO BE CONSTRUCTED BY THESE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING IMPROVEMENTS FROM DAMAGE. COST OF REPLACING OR REPAIRING EXISTING IMPROVEMENTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEMS REQUIRING REMOVAL AND/OR REPLACEMENT. THERE WILL BE NO EXTRA COST DUE TO THE CONTRACTOR FOR REPLACING OR REPAIRING EXISTING IMPROVEMENTS.
- WHENEVER EXISTING FACILITIES ARE REMOVED, DAMAGED, BROKEN, OR CUT IN THE INSTALLATION OF THE WORK COVERED BY THESE PLANS OR SPECIFICATIONS, SAID FACILITIES SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE WITH MATERIALS EQUAL TO OR BETTER THAN THE MATERIALS USED IN THE ORIGINAL EXISTING FACILITIES. THE FINISHED PRODUCT SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER, THE ENGINEER, AND THE RESPECTIVE REGULATORY AGENCY.
- CONTRACTOR SHALL MAINTAIN A NEATLY MARKED SET OF FULL-SIZE RECORD DRAWINGS SHOWING THE FINAL LOCATION AND LAYOUT OF ALL STRUCTURES AND OTHER FACILITIES. RECORD DRAWINGS SHALL REFLECT CHANGE ORDERS, ACCOMMODATIONS, AND ADJUSTMENTS TO ALL IMPROVEMENTS CONSTRUCTED. WHERE NECESSARY, SUPPLEMENTAL DRAWINGS SHALL BE PREPARED AND SUBMITTED BY THE CONTRACTOR. PRIOR TO ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL DELIVER TO THE ENGINEER ONE SET OF NEATLY MARKED RECORD DRAWINGS SHOWING THE INFORMATION REQUIRED ABOVE. RECORD DRAWINGS SHALL BE REVIEWED AND THE COMPLETE RECORD DRAWING SET SHALL BE CURRENT WITH ALL CHANGES AND DEVIATIONS REQUINED AS A PRECONDITION TO THE FINAL PROGRESS PAYMENT APPROVAL AND/OR FINAL ACCEPTANCE.
- WHERE THE PLANS OR SPECIFICATIONS DESCRIBE PORTIONS OF THE WORK IN GENERAL TERMS BUT NOT IN COMPLETE DETAIL, IT IS UNDERSTOOD THAT ONLY THE BEST GENERAL PRACTICE IS TO PREVAIL AND THAT ONLY MATERIALS AND WORKMANSHIP OF THE FIRST QUALITY ARE TO BE USED.
- ALL EXISTING GATES AND FENCES TO REMAIN UNLESS OTHERWISE NOTED ON PLANS. PROTECT ALL GATES AND FENCES FROM DAMAGE.
- ALL EXISTING TREES ARE TO REMAIN UNLESS OTHERWISE NOTED ON PLANS. PROTECT ALL TREES FROM DAMAGE.
- ASPHALT MIX DESIGN MUST BE SUBMITTED AND APPROVED BY THE GOVERNING AGENCY PRIOR TO THE PLACEMENT.
- CONTRACTORS ARE RESPONSIBLE FOR ALL OSHA REQUIREMENTS ON THE PROJECT SITE.
- A UPDES (UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM) PERMIT IS REQUIRED FOR ALL CONSTRUCTION ACTIVITIES 1 ACRE OR MORE AS WELL AS A STORM WATER POLLUTION PREVENTION PLAN.

UTILITY NOTES

- ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THESE CONTRACT DOCUMENTS, CITY AND STATE REQUIREMENTS AND THE MOST RECENT EDITIONS OF THE FOLLOWING: THE INTERNATIONAL PLUMBING CODE, UTAH DRINKING WATER REGULATIONS, APWA MANUAL OF STANDARD PLANS AND SPECIFICATIONS. THE CONTRACTOR IS REQUIRED TO ADHERE TO ALL OF THE ABOVE-MENTIONED DOCUMENTS UNLESS OTHERWISE NOTED AND APPROVED BY THE ENGINEER.
- CONTRACTOR SHALL COORDINATE LOCATION OF NEW 'DRY UTILITIES' WITH THE APPROPRIATE UTILITY COMPANY, INCLUDING BUT NOT LIMITED TO: TELEPHONE & INTERNET SERVICE, GAS SERVICE, CABLE, AND POWER.
- EXISTING UTILITIES HAVE BEEN SHOWN ON THE PLANS BASED ON ON-SITE SURVEY. PRIOR TO COMMENCING ANY WORK, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE EACH UTILITY COMPANY LOCATE, IN THE FIELD, THEIR MAIN AND SERVICE LINES. THE CONTRACTOR SHALL NOTIFY BLUE STAKES AT 1-800-662-4111 48 HOURS IN ADVANCE OF PERFORMING ANY EXCAVATION WORK. THE CONTRACTOR SHALL RECORD THE BLUE STAKES ORDER NUMBER AND FURNISH ORDER NUMBER TO OWNER AND ENGINEER PRIOR TO ANY EXCAVATION. IT WILL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO DIRECTLY CONTACT ANY OTHER UTILITY COMPANIES THAT ARE NOT MEMBERS OF BLUE STAKES. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROTECT ALL EXISTING UTILITIES SO THAT NO DAMAGE RESULTS TO THEM DURING THE PERFORMANCE OF THIS CONTRACT. ANY REPAIRS NECESSARY TO DAMAGED UTILITIES SHALL BE PAID FOR BY THE CONTRACTOR. THE CONTRACTOR SHALL BE REQUIRED TO COOPERATE WITH OTHER CONTRACTORS AND UTILITY COMPANIES INSTALLING NEW STRUCTURES, UTILITIES AND SERVICE TO THE PROJECT.
- CARE SHOULD BE TAKEN IN ALL EXCAVATIONS DUE TO POSSIBLE EXISTENCE OF UNRECORDED UTILITY LINES. EXCAVATION REQUIRED WITHIN PROXIMITY OF EXISTING UTILITY LINES SHALL BE DONE BY HAND. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT CONTRACTOR'S EXPENSE.
- TRENCH BACKFILL MATERIAL AND COMPACTION TESTS ARE TO BE TAKEN PER APWA STANDARD SPECIFICATIONS (CURRENT EDITION), SECTION 0230 - BACKFILLING TRENCHES, OR AS REQUIRED BY THE GEOTECHNICAL REPORT IF NATIVE MATERIALS ARE USED. NO NATIVE MATERIALS ARE ALLOWED IN THE PIPE ZONE. THE MAXIMUM LIFT FOR BACKFILLING EXCAVATIONS IS DETERMINED BY THE GEOTECHNICAL RECOMMENDATIONS.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONFORMING TO LOCAL AND FEDERAL CODES GOVERNING SHORING AND BRACING OF EXCAVATIONS AND TRENCHES AND FOR THE PROTECTION OF WORKERS.
- THE CONTRACTOR IS REQUIRED TO KEEP ALL CONSTRUCTION ACTIVITIES WITHIN THE APPROVED PROJECT LIMITS. THIS INCLUDES, BUT IS NOT LIMITED TO VEHICLE AND EQUIPMENT STAGING, MATERIAL STORAGE AND LIMITS OF TRENCH EXCAVATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN PERMISSION AND/OR EASEMENTS FROM THE APPROPRIATE GOVERNING ENTITY AND/OR INDIVIDUAL PROPERTY OWNER(S) FOR WORK OR STAGING OUTSIDE OF THE PROJECT LIMITS.
- THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE, CAUSED BY ANY CONDITION INCLUDING SETTLEMENT, TO EXISTING UTILITIES FROM WORK PERFORMED AT OR NEAR EXISTING UTILITIES. THE CONTRACTOR SHALL TAKE ALL MEASURES NECESSARY TO PROTECT ALL EXISTING PUBLIC AND PRIVATE ROADWAY AND UTILITY FACILITIES. DAMAGE TO EXISTING FACILITIES CAUSED BY THE CONTRACTOR MUST BE REPAIRED BY THE CONTRACTOR AT HIS/HER EXPENSE TO THE SATISFACTION OF THE OWNER OF SAID FACILITIES.
- ALL WATER LINE AND SEWER LINE INSTALLATION AND TESTING TO BE IN ACCORDANCE WITH LOCAL GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
- ALL MANHOLES, HYDRANTS, VALVES, CLEANOUT BOXES, CATCH BASINS, METERS, ETC. MUST BE RAISED OR LOWERED TO FINAL GRADE PER APWA (CURRENT EDITION) STANDARDS AND INSPECTOR REQUIREMENTS. CONCRETE COLLARS MUST BE CONSTRUCTED ON ALL MANHOLES, CLEANOUT BOXES, CATCH BASINS, AND VALVES PER APWA STANDARDS. ALL MANHOLE, CATCH BASIN, OR CLEANOUT BOX CONNECTIONS MUST BE MADE WITH THE PIPE OUT FLUSH WITH THE INSIDE OF THE BOX AND GROUTED OR SEALED.
- CONTRACTOR SHALL NOT ALLOW ANY GROUNDWATER OR DEBRIS TO ENTER THE NEW OR EXISTING PIPE DURING CONSTRUCTION.
- SLIT AND DEBRIS ARE TO BE CLEANED OUT OF ALL STORM DRAIN BOXES. CATCH BASINS ARE TO BE MAINTAINED IN A CLEANED CONDITION AS NEEDED UNTIL AFTER THE FINAL BOND RELEASE INSPECTION.
- CONTRACTOR SHALL CLEAN ASPHALT, TAR OR OTHER ADHESIVES OFF OF ALL MANHOLE LIDS AND INLET GRATES TO ALLOW ACCESS.
- EACH TRENCH SHALL BE EXCAVATED SO THAT THE PIPE CAN BE LAID TO THE ALIGNMENT AND GRADE AS REQUIRED. THE TRENCH WALL SHALL BE SO BRACED THAT THE WORKMEN MAY WORK SAFELY AND EFFICIENTLY. ALL TRENCHES SHALL BE DRAINED SO THE PIPE LAYING MAY TAKE PLACE IN DEWATERED CONDITIONS.
- CONTRACTOR SHALL PROVIDE AND MAINTAIN AT ALL TIMES AMPLE MEANS AND DEVICES WITH WHICH TO REMOVE PROMPTLY AND TO PROPERLY DISPOSE OF ALL WATER ENTERING THE TRENCH EXCAVATION.
- ALL SEWER LINES AND SEWER SERVICES SHALL HAVE A MINIMUM SEPARATION OF 10 FEET, EDGE TO EDGE, FROM THE WATER LINES. IF A 10 FOOT SEPARATION CAN NOT BE MAINTAINED, CONSTRUCT PER GOVERNING AGENCY'S MINIMUM SEPARATION STANDARDS.
- CONTRACTOR SHALL INSTALL THRUST BLOCKING AT ALL WATERLINE ANGLE POINTS AND TEES.
- ALL UNDERGROUND UTILITIES SHALL BE IN PLACE PRIOR TO INSTALLATION OF CURB, GUTTER, SIDEWALK AND STREET PAVING.
- CONTRACTOR SHALL INSTALL MAGNETIC LOCATING TAPE CONTINUOUSLY OVER ALL NONMETALLIC PIPE.

TRAFFIC CONTROL AND SAFETY NOTES

- TRAFFIC CONTROL AND STRIPING TO CONFORM TO THE CURRENT MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.).
- BARRICADING AND DETOURING SHALL BE IN CONFORMANCE WITH THE REQUIREMENTS OF THE CURRENT M.U.T.C.D.
- NO STREET SHALL BE CLOSED TO TRAFFIC WITHOUT WRITTEN PERMISSION FROM THE APPROPRIATE AGENCY, EXCEPT WHEN DIRECTED BY LAW ENFORCEMENT OR FIRE OFFICIALS.
- THE CONTRACTOR SHALL MAKE EVERY EFFORT TO PROVIDE FOR SMOOTH TRAFFIC FLOW AND SAFETY. ACCESS SHALL BE MAINTAINED FOR ALL PROPERTIES ADJACENT TO THE WORK.
- DETOURING OPERATIONS FOR A PERIOD OF SIX CONSECUTIVE CALENDAR DAYS, OR MORE, REQUIRE THE INSTALLATION OF TEMPORARY STREET STRIPING AND REMOVAL OF INTERFERING STRIPING BY SANDBLASTING. THE DETOURING STRIPING PLAN OR CONSTRUCTION TRAFFIC CONTROL PLAN MUST BE SUBMITTED TO THE GOVERNING AGENCY FOR REVIEW AND APPROVAL.
- ALL TRAFFIC CONTROL DEVICES SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT THE END OF THE WORK TO THE SATISFACTION OF THE GOVERNING AGENCY.
- TRAFFIC CONTROL DEVICES (TCDs) SHALL REMAIN VISIBLE AND OPERATIONAL AT ALL TIMES.
- 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 BY THESE PLANS.
- THE CONTRACTOR SHALL PROVIDE BARRICADES, SIGNS, FLASHERS, OTHER EQUIPMENT AND FLAG PERSONS NECESSARY TO INSURE THE SAFETY OF WORKERS AND VISITORS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING UTAH TRANSIT AUTHORITY (UTA) IF THE CONSTRUCTION INTERRUPTS OR RELOCATES A BUS STOP OR HAS AN ADVERSE EFFECT ON BUS SERVICE ON THAT STREET TO ARRANGE FOR TEMPORARY RELOCATION OF STOP.

DEMOLITION NOTES

- EXISTING UTILITY INFORMATION SHOWN IS FOR INFORMATIONAL PURPOSES ONLY. IT IS DERIVED FROM ON-SITE SURVEY AND MAY NOT BE LOCATED CORRECTLY AND IS NOT ALL INCLUSIVE. CONTRACTOR SHALL FIELD LOCATE ALL UTILITIES WITHIN THE PROJECT LIMITS BEFORE BEGINNING DEMOLITION/CONSTRUCTION.
- THERE MAY BE BURIED UTILITIES WITHIN THE LIMITS OF DISTURBANCE THAT ARE NOT SHOWN ON THE PLANS DUE TO LACK OF MAPPING OR RECORD INFORMATION. CONTRACTOR SHALL NOTIFY THE ENGINEER WHEN UNEXPECTED UTILITIES ARE DISCOVERED.
- THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR LOCATING AND PROTECTING FROM DAMAGE ALL EXISTING UTILITIES AND IMPROVEMENTS WHETHER OR NOT SHOWN ON THESE PLANS. THE FACILITIES AND IMPROVEMENTS ARE BELIEVED TO BE CORRECTLY SHOWN BUT THE CONTRACTOR IS REQUIRED TO SATISFY HIMSELF AS TO THE COMPLETENESS AND ACCURACY OF THE LOCATIONS. ANY CONTRACTOR PERFORMING WORK ON THIS PROJECT SHALL FAMILIARIZE HIMSELF WITH THE SITE AND SHALL BE HELD SOLELY RESPONSIBLE FOR ANY DAMAGE TO EXISTING FACILITIES RESULTING DIRECTLY, OR INDIRECTLY, FROM HIS OPERATIONS, WHETHER OR NOT SAID FACILITIES ARE SHOWN ON THESE PLANS.

GRADING AND DRAINAGE NOTES

- SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT AND ALL RELATED ADDENDUMS.
- THE CONTRACTOR SHALL STRIP AND CLEAR THE TOPSOIL, MAJOR ROOTS AND ORGANIC MATERIAL FROM ALL PROPOSED BUILDING AND PAVEMENT AREAS PRIOR TO SITE GRADING. (THE TOPSOIL MAY BE STOCKPILED FOR LATER USE IN LANDSCAPED AREAS.)
- THE CONTRACTOR SHALL REMOVE ALL ORGANIC MATERIAL AND OTHER DELETERIOUS MATERIALS PRIOR TO PLACING GRADING FILL OR BASE COURSE. THE AREA SHOULD BE PROOF-ROLLED TO IDENTIFY ANY SOFT AREAS. WHERE SOFT AREAS ARE ENCOUNTERED, THE CONTRACTOR SHALL REMOVE THE SOIL AND REPLACE WITH COMPACTED FILL.
- ALL DEBRIS PILES AND BERMS SHOULD BE REMOVED AND HAULED AWAY FROM SITE OR USED AS GENERAL FILL IN LANDSCAPED AREAS.
- THE CONTRACTOR SHALL CONSTRUCT THE BUILDING PAD TO THESE DESIGN PLANS AS PART OF THE SITE GRADING CONTRACT, AND STRICTLY ADHERE TO THE SITE PREPARATION AND GRADING REQUIREMENTS OUTLINED IN THE GEOTECHNICAL REPORT.
- THE CONTRACTOR SHALL GRADE THE PROJECT SITE TO PROVIDE A SMOOTH TRANSITION BETWEEN NEW AND EXISTING ASPHALT, CURB AND GUTTER, AND ADJOINING SITE IMPROVEMENTS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE AND DEBRIS ON ADJACENT STREETS WHEN EQUIPMENT IS TRAVELING THOSE STREETS.
- THE CONTRACTOR SHALL BE FAMILIAR WITH ALL CONDITIONS AND RECOMMENDATIONS OUTLINED IN THE GEOTECHNICAL REPORT AND TAKE ALL NECESSARY PRECAUTIONS AND RECOMMENDED PROCEDURES TO ASSURE SOUND GRADING PRACTICES.
- THE CONTRACTOR SHALL TAKE APPROPRIATE GRADING MEASURES TO DIRECT STORM SURFACE RUNOFF TOWARDS CATCH BASINS.
- THE LOCATIONS OF UNDERGROUND FACILITIES SHOWN ON THESE PLANS ARE BASED ON ON-SITE SURVEY. IT SHALL BE THE CONTRACTOR'S FULL RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES TO LOCATE THEIR FACILITIES PRIOR TO PROCEEDING WITH CONSTRUCTION. NO ADDITIONAL COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR DAMAGE AND REPAIR TO THESE FACILITIES CAUSED BY HIS WORK FORCE.
- 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.
- THE CONTRACTOR IS WARNED THAT AN EARTHWORK BALANCE WAS NOT NECESSARILY THE INTENT OF THIS PROJECT. ANY ADDITIONAL MATERIALS REQUIRED OR LEFTOVER MATERIAL FOLLOWING EARTHWORK OPERATIONS BECOMES THE RESPONSIBILITY OF THE CONTRACTOR.
- THE GRADING CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH THE OWNER TO PROVIDE FOR THE REQUIREMENTS OF THE PROJECT STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND ASSOCIATED PERMIT. ALL CONTRACTOR ACTIVITIES 1 ACRE OR MORE IN SIZE ARE REQUIRED TO PROVIDE A STORM WATER POLLUTION PREVENTION PLAN.
- 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 GOVERNING AGENCY.
- THE CONTRACTOR SHALL MAINTAIN THE STREETS, SIDEWALKS, AND ALL OTHER PUBLIC RIGHT-OF-WAYS IN A CLEAN, SAFE AND USABLE CONDITION. ALL SPILL SOILS 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.

ABBREVIATIONS

APWA	AMERICAN PUBLIC WORKS ASSOCIATION
AR	ACCESSIBLE ROUTE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AWWA	AMERICAN WATER WORKS ASSOCIATION
BOS	BOTTOM OF STEP
BVC	BEGIN VERTICAL CURVE
CB	CURB
CF	CATCH BASIN
CL	CURB FACE OR CURB FEET
CL	CENTER LINE
CO	CLEAN OUT
COMM	COMMUNICATION
CONC	CONCRETE
CONT	CONTINUOUS
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
ELEC	ELECTRICAL
ELEV	ELEVATION
EOA	EDGE OF ASPHALT
EVC	END OF VERTICAL CURVE
EW	EACH WAY
EXIST	EXISTING
FF	FINISH FLOOR
FG	FINISH GRADE
FH	FIRE HYDRANT
FL	FLOW LINE OR FLANGE
GB	GRADE BREAK
GF	GARAGE FLOOR
GV	GATE VALVE
HC	HANDICAP
HP	HIGH POINT
IRR	IRRIGATION
K	RATE OF VERTICAL CURVATURE
LD	LAND DRAIN
LF	LINEAR FEET
LP	LOW POINT
MEX	MATCH EXISTING
MH	MANHOLE
MJ	MECHANICAL JOINT
NG	NATURAL GROUND
NIC	NOT IN CONTRACT
NO	NUMBER
OC	ON CENTER
OCEW	ON CENTER EACH WAY
OHP	OVERHEAD POWER
PC	POINT OF CURVATURE OR PRESSURE CLASS
PCC	POINT OF COMPOUND CURVATURE
PI	POINT OF INTERSECTION
PIV	POST INDICATOR VALVE
PL	PROPERTY LINE
PRC	POINT OF REVERSE CURVATURE
PRO	PROPOSED
PT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
R	RADIUS
RD	ROOF DRAIN
ROW	RIGHT OF WAY
S	SLOPE
SAN SWR	SANITARY SEWER
SD	STORM DRAIN
SEC	SECONDARY
SS	SANITARY SEWER
STA	STATION
SW	SECONDARY WATER LINE
TBC	TOP BACK OF CURB
TOG	TOP OF GRATE
TOA	TOP OF ASPHALT
TOC	TOP OF CONCRETE
TOF	TOP OF FOUNDATION
TOW	TOP OF WALL
TOS	TOP OF STEP
TYP	TYPICAL
VC	VERTICAL CURVE
WV	WALL INDICATOR VALVE
W	WATER LINE

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

LEGEND

	SECTION CORNER		EXISTING EDGE OF ASPHALT
	EXISTING MONUMENT		PROPOSED EDGE OF ASPHALT
	PROPOSED MONUMENT		EXISTING STRIPING
	EXISTING REBAR AND CAP		PROPOSED STRIPING
	SET ENSIGN REBAR AND CAP		EXISTING FENCE
	EXISTING WATER METER		PROPOSED FENCE
	PROPOSED WATER METER		EXISTING FLOW LINE
	EXISTING WATER MANHOLE		PROPOSED FLOW LINE
	PROPOSED WATER MANHOLE		GRADE BREAK
	EXISTING WATER BOX		EXISTING STORM DRAIN LINE
	EXISTING WATER VALVE		PROPOSED STORM DRAIN LINE
	PROPOSED WATER VALVE		ROOF DRAIN LINE
	EXISTING FIRE HYDRANT		CATCHMENTS
	PROPOSED FIRE HYDRANT		HIGHWATER LINE
	PROPOSED FIRE DEPARTMENT CONNECTION		EXISTING SANITARY SEWER
	EXISTING SECONDARY WATER VALVE		PROPOSED SANITARY SEWER LINE
	PROPOSED SECONDARY WATER VALVE		PROPOSED SAN SWR SERVICE LINE
	EXISTING IRRIGATION BOX		EXISTING LAND DRAIN LINE
	EXISTING IRRIGATION VALVE		PROPOSED LAND DRAIN LINE
	PROPOSED IRRIGATION VALVE		PROPOSED LAND DRAIN SERVICE LINE
	EXISTING SANITARY SEWER MANHOLE		EXISTING CULINARY WATER LINE
	PROPOSED SANITARY SEWER MANHOLE		PROPOSED CULINARY WATER LINE
	EXISTING SANITARY CLEAN OUT		PROPOSED CULINARY WATER SERVICE LINE
	EXISTING STORM DRAIN CLEAN OUT BOX		EXISTING SECONDARY WATER LINE
	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		EXISTING IRRIGATION LINE
	PROPOSED STORM DRAIN CATCH BASIN		PROPOSED IRRIGATION LINE
	EXISTING STORM DRAIN COMBO BOX		EXISTING OVERHEAD POWER LINE
	PROPOSED STORM DRAIN COMBO BOX		EXISTING ELECTRICAL LINE
	EXISTING STORM DRAIN CLEAN OUT		EXISTING GAS LINE
	EXISTING STORM DRAIN CULVERT		EXISTING TELEPHONE LINE
	PROPOSED STORM DRAIN CULVERT		ACCESSIBLE ROUTE
	TEMPORARY SAG INLET PROTECTION		SAW CUT LINE
	TEMPORARY IN-LINE INLET PROTECTION		STRAW WATTLE
	ROOF DRAIN		TEMPORARY BERM
	EXISTING ELECTRICAL MANHOLE		TEMPORARY SILT FENCE
	EXISTING ELECTRICAL BOX		LIMITS OF DISTURBANCE
	EXISTING TRANSFORMER		EXISTING WALL
	EXISTING UTILITY POLE		PROPOSED WALL
	EXISTING LIGHT		EXISTING CONTOURS
	PROPOSED LIGHT		PROPOSED CONTOURS
	EXISTING GAS METER		BUILDABLE AREA WITHIN SETBACKS
	EXISTING GAS MANHOLE		PUBLIC DRAINAGE EASEMENT
	EXISTING GAS VALVE		EXISTING ASPHALT TO BE REMOVED
	EXISTING TELEPHONE MANHOLE		PROPOSED ASPHALT
	EXISTING TELEPHONE BOX		EXISTING CURB AND GUTTER
	EXISTING TRAFFIC SIGNAL BOX		PROPOSED CURB AND GUTTER
	EXISTING CABLE BOX		PROPOSED REVERSE PAN CURB AND GUTTER
	EXISTING BOLLARD		TRANSITION TO REVERSE PAN CURB
	PROPOSED BOLLARD		CONCRETE TO BE REMOVED
	EXISTING SIGN		EXISTING CONCRETE
	PROPOSED SIGN		PROPOSED CONCRETE
	EXISTING SPOT ELEVATION		BUILDING TO BE REMOVED
	PROPOSED SPOT ELEVATION		EXISTING BUILDING
	EXISTING FLOW DIRECTION		PROPOSED BUILDING
	EXISTING TREE		
	DENSE VEGETATION		

NOTE: MAY CONTAIN SYMBOLS THAT ARE NOT USED

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

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

BENCHMARK

WEST QUARTER CORNER OF SECTION 23
TOWNSHIP 5 NORTH RANGE 1 WEST
SALT LAKE BASE AND MERIDIAN

ELEV = 4971.186'

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 30" CURB AND GUTTER
- ② 4.0' SIDEWALK
- ③ MATCH EXISTING IMPROVEMENTS
- ④ SAWCUT, REMOVE AND REPLACE ASPHALT AND CONCRETE

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 THROUGHOUT SITE.
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, SOIL, 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.



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FOR:
MOORE HOMES
9691 S GRANITE WOODS CIRCLE
SANDY, UTAH 84092

CONTACT:
CLIENT CONTACT
PHONE: 801-000-0000

HIGHLANDS BLUFF ESTATES
PHASE 2
2225 EAST 6225 SOUTH
OGDEN, UTAH



NO.	DATE	REVISION	BY
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SITE PLAN

PROJECT NUMBER
9455

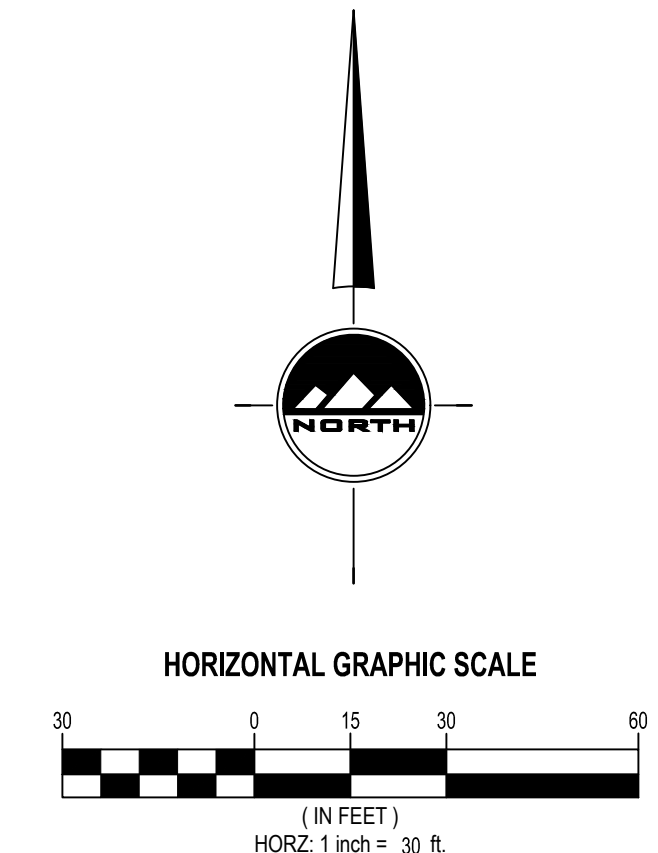
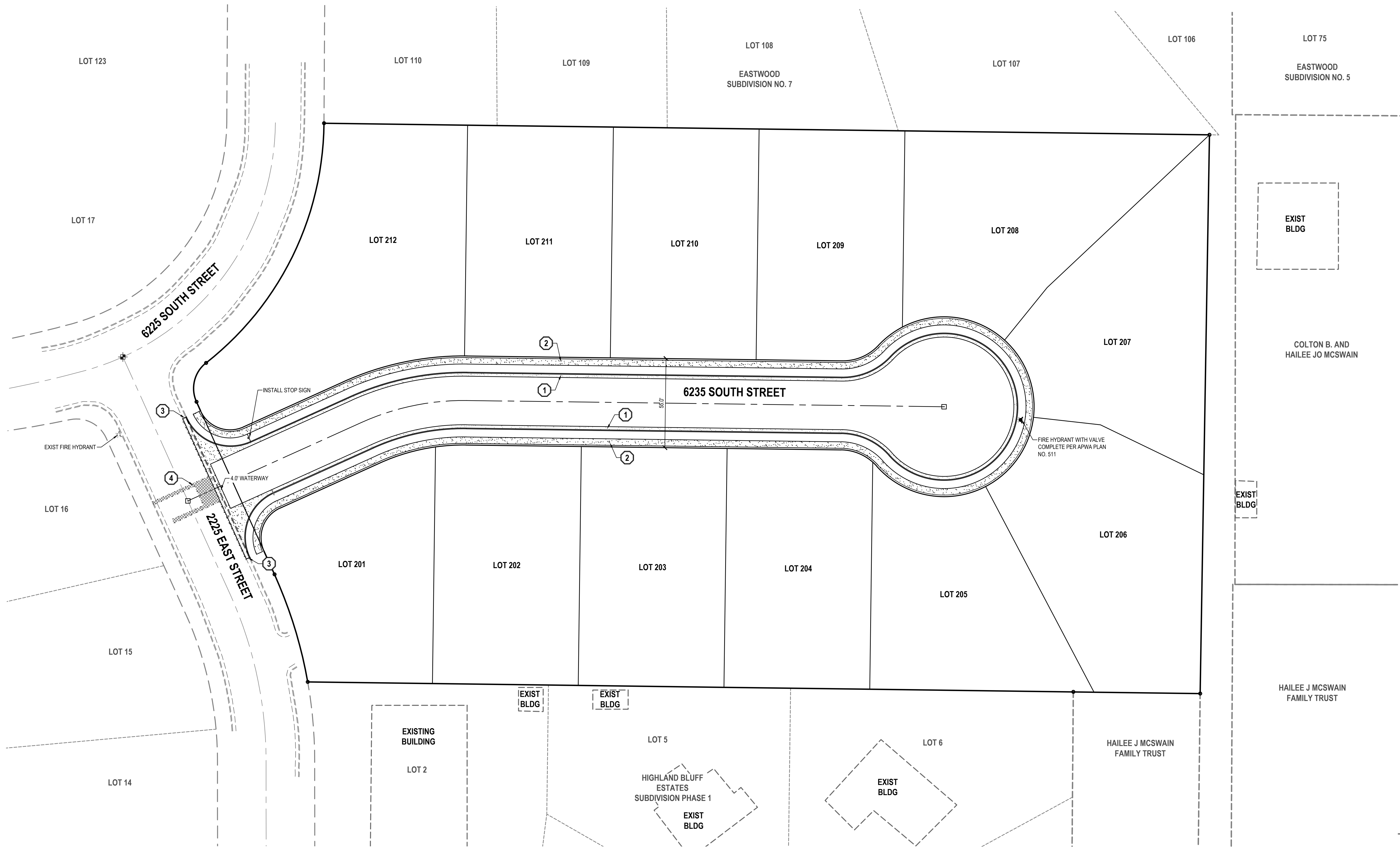
PRINT DATE
1/7/21

DRAWN BY
J.MOSS

CHECKED BY
C.PRESTON

PROJECT MANAGER
C.PRESTON

C-100



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BENCHMARK
WEST QUARTER CORNER OF SECTION 23
TOWNSHIP 5 NORTH RANGE 1 WEST
SALT LAKE BASE AND MERIDIAN
ELEV = 4971.86'

Pipe Design (10-year storm)

Mannings N (ADS)	0.011									
Mannings N (RCP)	0.013									
Pipe	Tributary	Surface	Upstream	Pipe Flow	Total	Pipe	Diameter	Pipe Type	Full Flow	% of Full-
SD-1	2,3	2,781	SD-2	0.331	3,111	0.35%	15	RCP	3,832	81.2%
SD-2	5	0.331	none	0.000	0.331	0.35%	15	RCP	3,832	8.8%

Offsite Existing Detention Calculations (10-year storm)

Basin Tributary Area	507,238 SF
Runoff coefficient C	0.350
Release Rate	0.20 cfs/acre
Peak Release*	2,329 cfs

Without Bypass Flow

Orifice Calculations: $Q = C_d A_o (2gh)^{1/2}$

High Water Elevation: 4,817.58 FT
Box Invert: 4,814.55 FT
Allowed Basin Discharge*: 3,973 CFS
 C_d : 0.62
Orifice Area: 66.06 IN²
Orifice Diameter: 9.2 IN

*2,329 cfs offsite peak release added to flow in basin discharge

Detention Calculations (100-year storm)

Basin Tributary Area	199,859 SF
Runoff coefficient C	0.350
Release Rate	0.36 cfs/acre
Peak Release*	1,644 cfs
Net Allowed Basin** Discharge (c.f.)	493
Required Storage (c.f.)	3,057

Time (min)	i (in/hr)	Cumulative Runoff to Basin (c.f.)	Net Allowed Basin** Discharge (c.f.)	Required Storage (c.f.)
5	7.37	3,551	493	3,057
10	5.60	5,396	986	4,409
15	4.63	6,692	1,480	5,212
30	3.12	9,018	2,959	6,049
60	1.93	11,157	5,918	5,239
120	1.12	12,950	11,837	1,113
180	0.77	13,337	17,755	(4,418)
360	0.43	14,915	35,510	(20,595)
720	0.27	18,661	71,021	(52,360)
1440	0.15	21,367	142,042	(120,675)
2880	0.09	25,529	284,083	(258,554)

Required Detention: 6,059
Provided Detention: 6,202

*Peak release based on existing flow

Study Summary Statistics

Phase 1:

Building Area	Area	C Value
Total	27,661	0.9
Landscaped Area	172,198	0.15
Total Area	199,859	0.254

Weighted Average C 0.254

Total Area: 199,859 SF
Total Area: 4.59 Acres
Composite C: 0.254

Catchment Calculations (10-year storm)

Time of Concentration: 15 min
Rainfall Intensity I: 2.37 in/hr
Mannings N: 0.013

Catchment	Area (SF)	C	Flow (CFS)	Destination
1	18,282	0.350	0.351	Offsite
2	76,334	0.350	1.466	SD-1
3	68,484	0.350	1.315	SD-1
4	19,532	0.350	0.375	Offsite
5	17,227	0.350	0.331	SD-2

GENERAL NOTES

- ALL WORK TO COMPLY WITH THE GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
- ALL IMPROVEMENTS MUST COMPLY WITH ADA STANDARDS AND RECOMMENDATIONS.
- 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.
- THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE EXISTING SOIL CONDITIONS.
- LANDSCAPED AREAS REQUIRE SUBGRADE TO BE MAINTAINED AT A SPECIFIC ELEVATION BELOW FINISHED GRADE AND REQUIRE SUBGRADE TO BE PROPERLY PREPARED AND SCARRIFIED. SEE LANDSCAPE PLANS FOR ADDITIONAL INFORMATION.
- SLOPE ALL LANDSCAPED AREAS AWAY FROM BUILDING FOUNDATIONS TOWARD CURB AND GUTTER OR STORM DRAIN INLETS.
- 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 FAILURE TO VERIFY THE LOCATIONS OF EXISTING UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION IN THEIR VICINITY SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED IN THE CONTRACT. THE CONTRACTOR IS TO VERIFY ALL CONNECTION POINTS WITH THE EXISTING UTILITIES. THE CONTRACTOR IS 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.
- ALL FACILITIES WITH DOWNSPOUTS/ROOF DRAINS SHALL BE CONNECTED TO THE STORM DRAIN SYSTEM. SEE PLUMBING PLANS FOR DOWNSPOUT/ROOF DRAIN LOCATIONS AND SIZES. ALL ROOF DRAINS TO HAVE MINIMUM 1% SLOPE.
- THE CONTRACTOR SHALL ADJUST TO GRADE ALL EXISTING UTILITIES AS NEEDED PER LOCAL GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
- NOTIFY ENGINEER OF ANY DISCREPANCIES IN DESIGN OR STAKING BEFORE PLACING CONCRETE, ASPHALT, OR STORM DRAIN STRUCTURES OR PIPES.
- THE CONTRACTOR IS TO PROTECT AND PRESERVE ALL EXISTING IMPROVEMENTS, UTILITIES, AND SIGNS, ETC. UNLESS OTHERWISE NOTED ON THESE PLANS.
- THE DETENTION SYSTEM IS A LAYOUT AND DOES NOT SHOW ALL PARTS. CONTRACTOR/OWNER IS RESPONSIBLE TO GET AN ESTIMATE FROM THE DETENTION MANUFACTURER FOR AN ACCURATE ESTIMATE.

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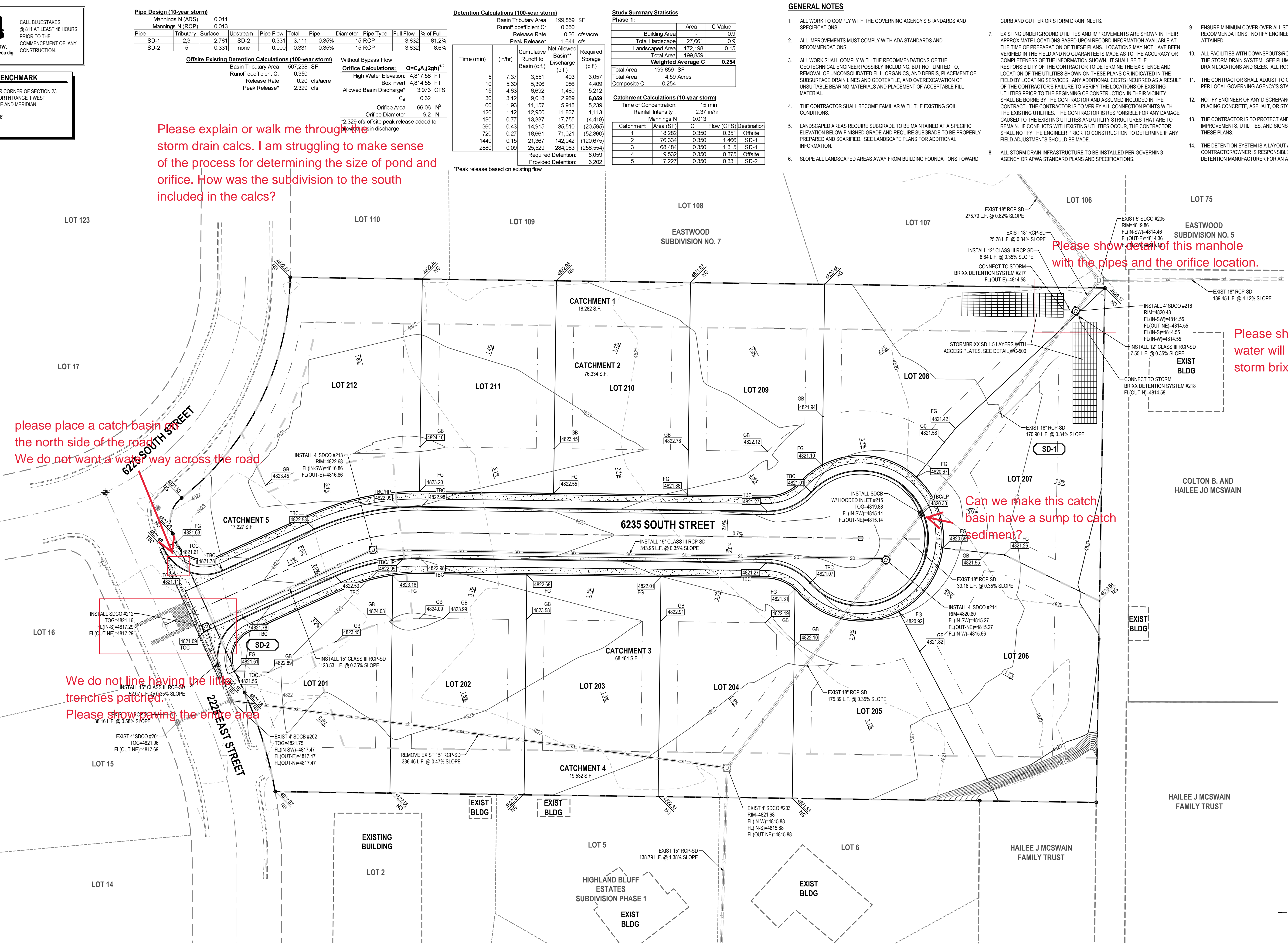


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GRADING/DRAINAGE PLAN

PROJECT NUMBER: 9455
PRINT DATE: 1/7/21
DRAWN BY: J.MOSS
CHECKED BY: C.PRESTON
PROJECT MANAGER: C.PRESTON

C-200



Please explain or walk me through the storm drain calcs. I am struggling to make sense of the process for determining the size of pond and orifice. How was the subdivision to the south included in the calcs?

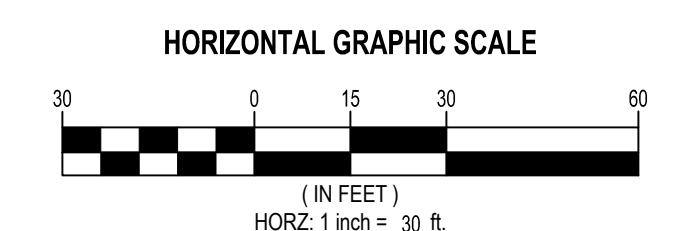
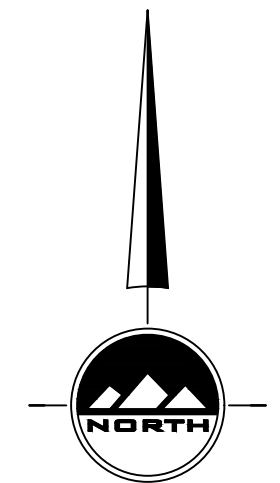
Please show detail of this manhole with the pipes and the orifice location.

Please show how the water will get in and out of the storm brix detention system.

please place a catch basin on the north side of the road. We do not want a water way across the road.

Can we make this catch basin have a sump to catch sediment?

We do not line having the little trenches patched. Please show paving the entire area.



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BENCHMARK

WEST QUARTER CORNER OF SECTION 23
TOWNSHIP 5 NORTH RANGE 1 WEST
SALT LAKE BASE AND MERIDIAN

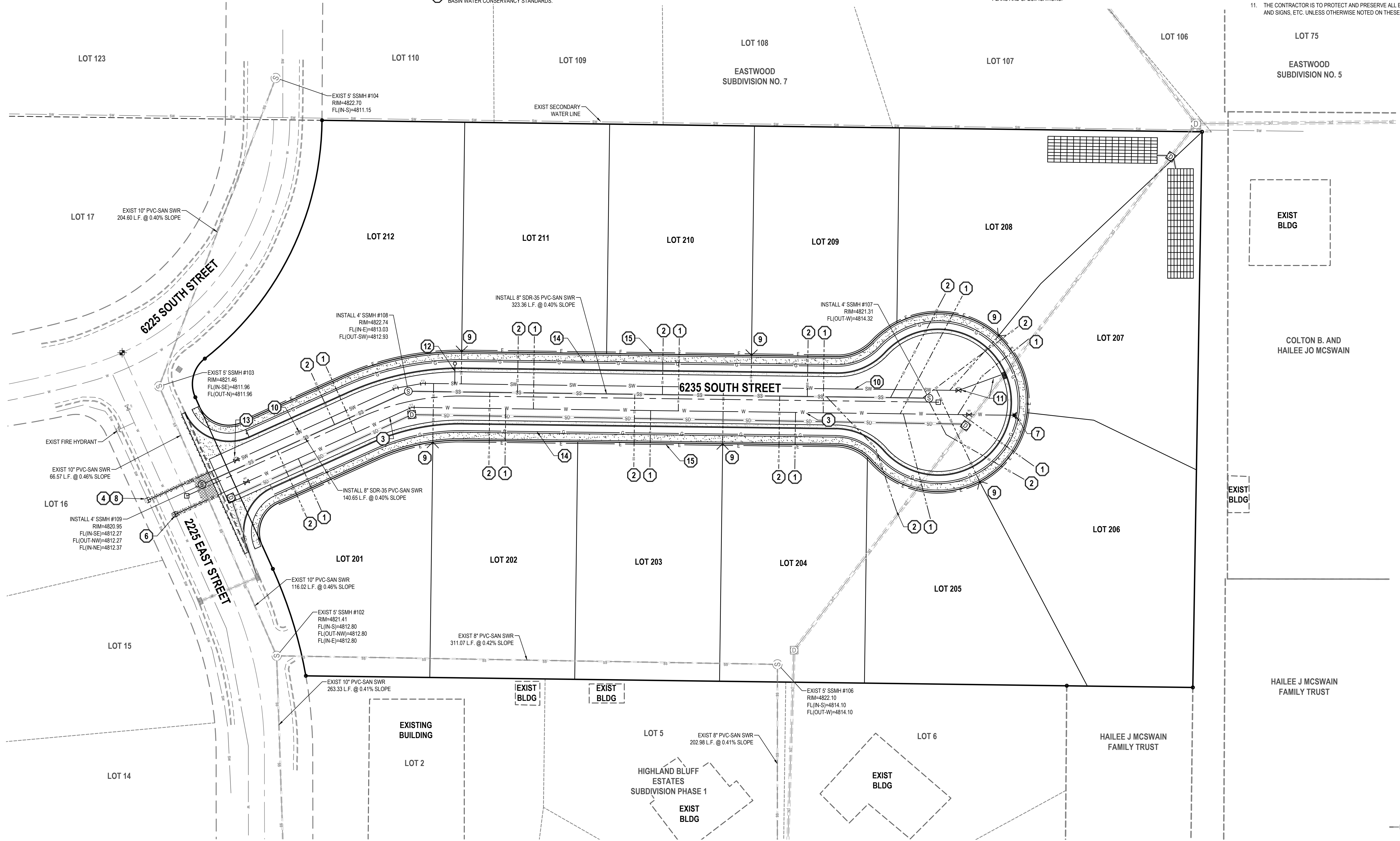
ELEV = 4971.186'

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 3/4" CULINARY WATER SERVICE WITH 3/4" WATER METER PER WEBER COUNTY STANDARDS
 - 2 INSTALL 4" SANITARY SEWER LATERAL @ 2.00% MINIMUM SLOPE
 - 3 8" C900 PVC DR18 CULINARY WATERLINE
 - 4 6"x6"x6" TEE AND THRUST BLOCK.
 - 5 8" GATE VALVE.
 - 6 FIELD LOCATE AND "HOT TAP" EXISTING CULINARY WATERLINE
 - 7 INSTALL FIRE HYDRANT AND VALVE PER APWA PLAN NO. 511
 - 8 FIELD LOCATE AND CONNECT TO EXISTING SECONDARY WATERLINE PER WEBER BASIN WATER CONSERVANCY STANDARDS.
 - 9 INSTALL 1-1/2" PVC DUAL TURNOUT SECONDARY WATER SERVICE LINE WITH (2) 1" METERS PER WEBER BASIN WATER CONSERVANCY DISTRICT STANDARDS AND SPECIFICATIONS.
 - 10 6" C900 PVC DR14 SECONDARY WATERLINE PER WEBER BASIN WATER CONSERVANCY DISTRICT STANDARDS.
 - 11 PLUG AND BLOCK END OF SWL WITH DRAIN TO EXISTING STORM DRAIN PER WEBER BASIN WATER CONSERVANCY DISTRICT STANDARDS.
 - 12 AIR - VACUUM BREAKER PER WEBER BASIN WATER CONSERVANCY DISTRICT STANDARDS.
 - 13 6" GATE VALVE PER WEBER BASIN WATER CONSERVANCY DISTRICT STANDARDS.
 - 14 PROPOSED GAS LINE LOCATION. GAS COMPANY TO DETERMINE FINAL LOCATION
 - 15 PROPOSED POWER LINE LOCATION. POWER COMPANY TO DETERMINE FINAL LOCATION.

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 FAILURE TO VERIFY THE LOCATIONS OF EXISTING UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION IN THEIR VICINITY SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED IN THE CONTRACT. THE CONTRACTOR IS TO VERIFY ALL CONNECTION POINTS WITH THE EXISTING UTILITIES. THE CONTRACTOR IS 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.
3. ALL SANITARY SEWER INFRASTRUCTURE TO BE INSTALLED PER GOVERNING AGENCY STANDARD PLANS AND SPECIFICATIONS.
4. ALL WATER INFRASTRUCTURE TO BE INSTALLED PER GOVERNING AGENCY OR APWA STANDARD PLANS AND SPECIFICATIONS.
5. DEFLECT OR LOOP ALL WATERLINES TO AVOID CONFLICTS WITH OTHER UTILITIES PER GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
6. 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.
7. THE CONTRACTOR IS TO COORDINATE ALL UTILITIES WITH MECHANICAL/PLUMBING PLANS.
8. NOTIFY ENGINEER OF ANY DISCREPANCIES IN DESIGN OR STAKING BEFORE PLACING UTILITY STRUCTURES OR PIPES.
9. THE CONTRACTOR SHALL ADJUST TO GRADE ALL EXISTING UTILITIES AS NEEDED PER LOCAL GOVERNING AGENCY'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.



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**HIGHLANDS BLUFF ESTATES
PHASE 2
2225 EAST 6225 SOUTH
OGDEN, UTAH**



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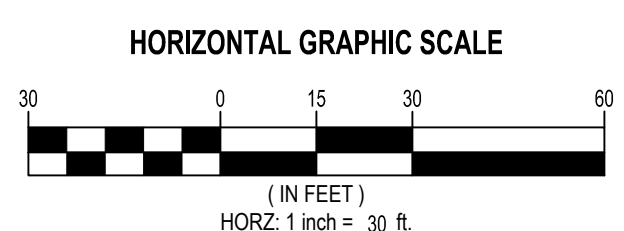
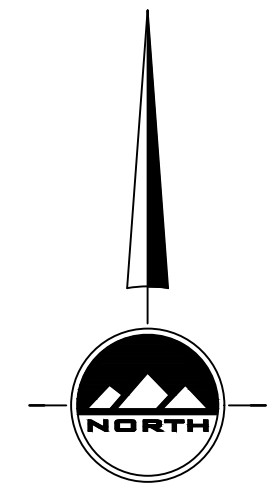
UTILITY PLAN

PROJECT NUMBER: 9455
PRINT DATE: 1/7/21

DRAWN BY: J.MOSS
CHECKED BY: C.PRESTON

PROJECT MANAGER:
C.PRESTON

C-300



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TOWNSHIP 5 NORTH RANGE 1 WEST
SALT LAKE BASE AND MERIDIAN
ELEV = 4971.186'

REVISION SCHEDULE			
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GENERAL NOTES

- 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.
- 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.
- A UPDES (UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM) PERMIT IS REQUIRED FOR ALL CONSTRUCTION ACTIVITIES 1 ACRE OR MORE.

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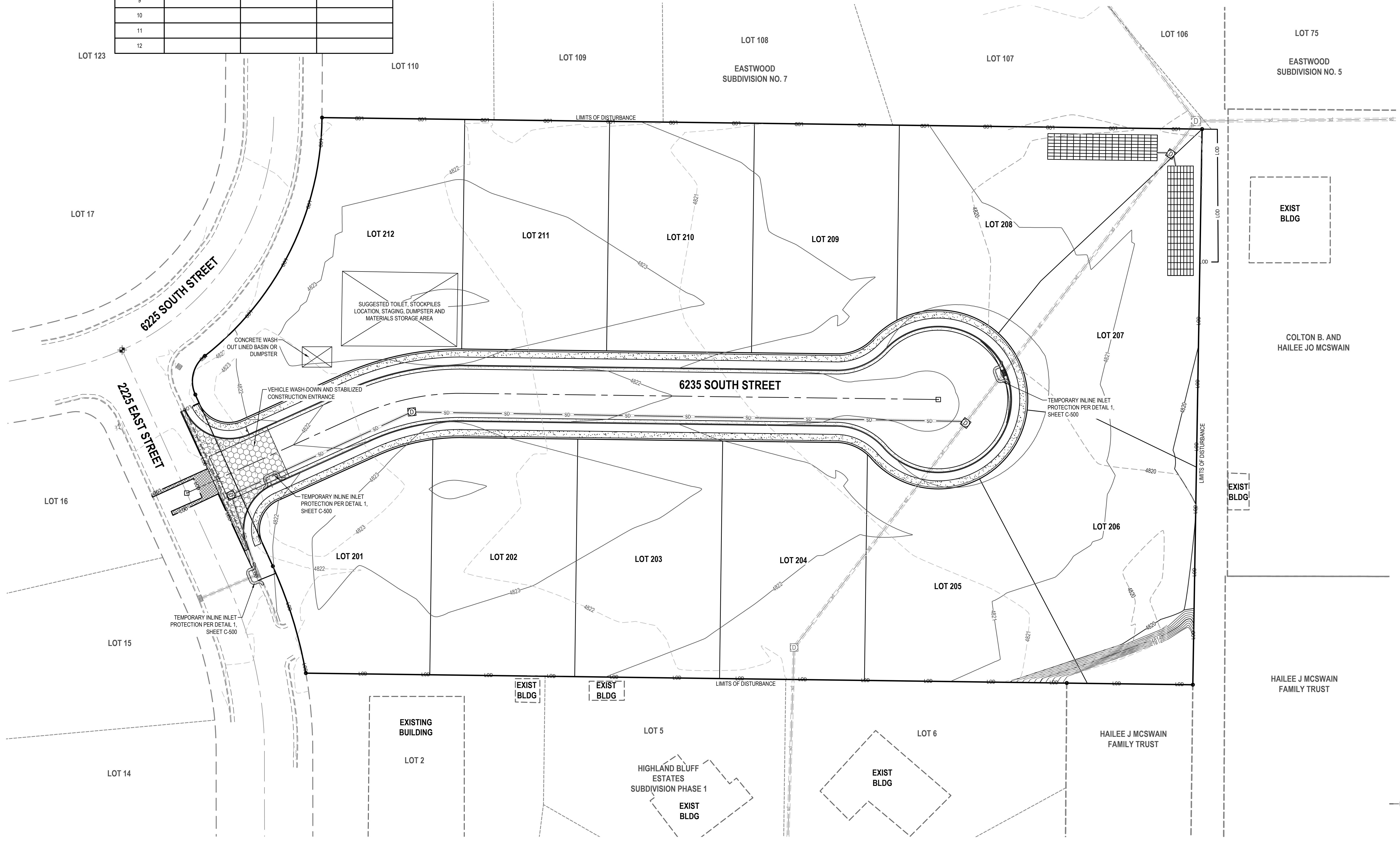
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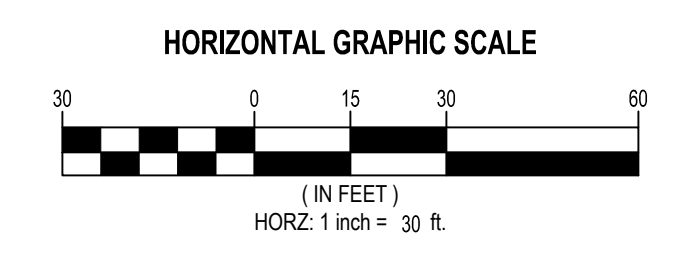
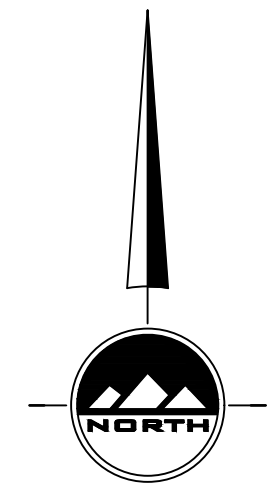


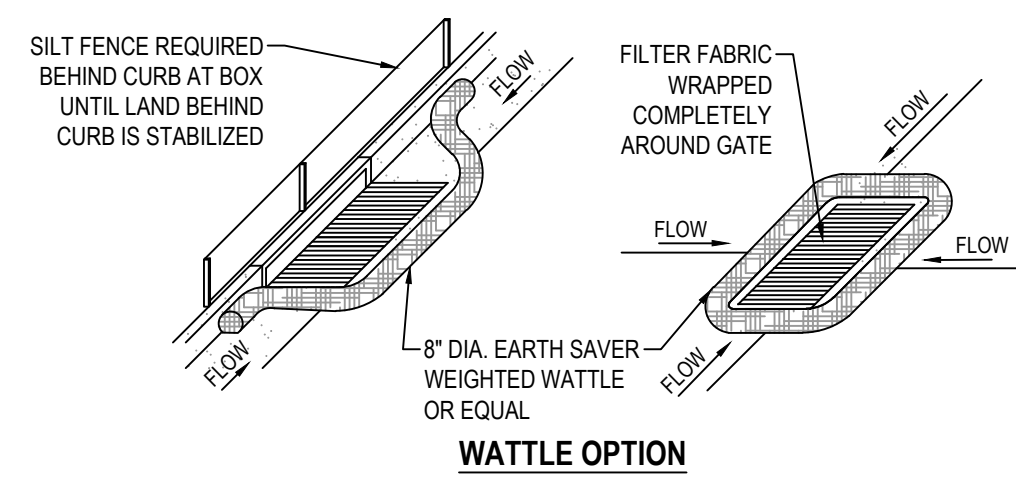
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EROSION CONTROL PLAN

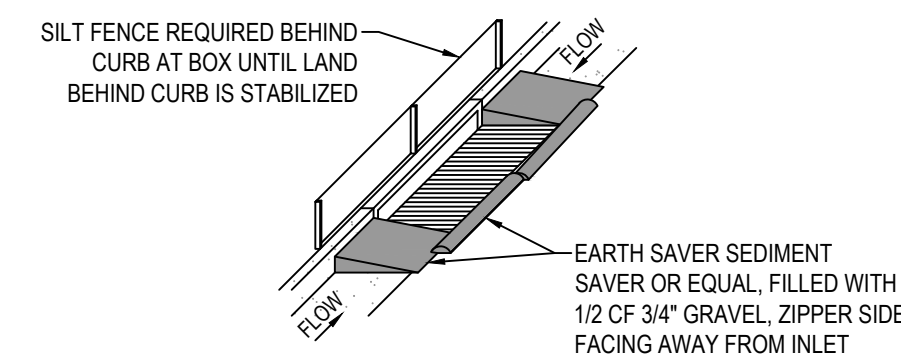
PROJECT NUMBER: 9455
PRINT DATE: 1/7/21
DRAWN BY: J. MOSS
CHECKED BY: C. PRESTON
PROJECT MANAGER: C. PRESTON

C-400





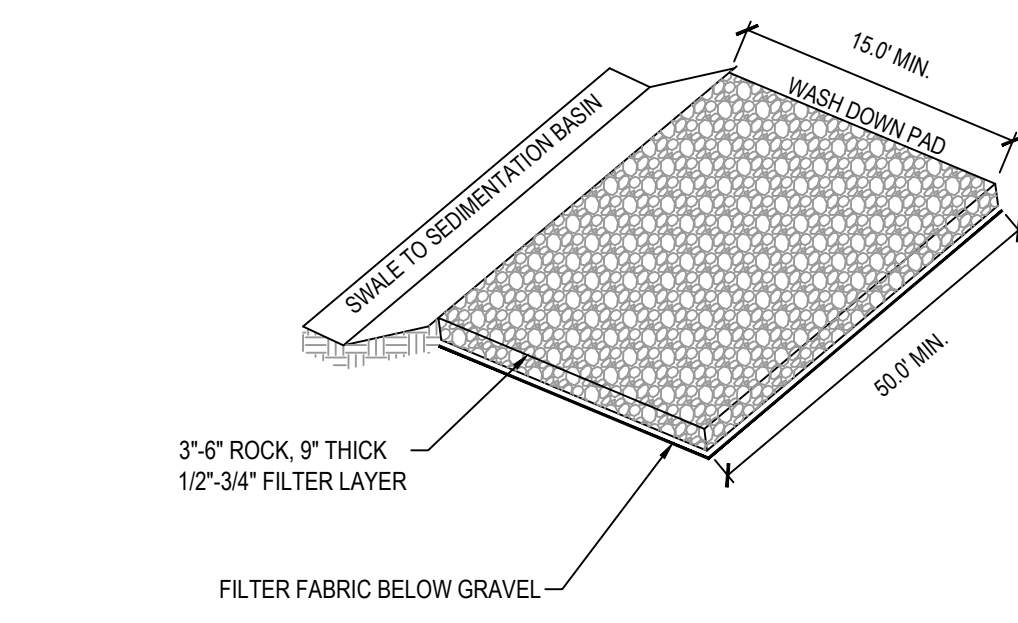
WATTLE OPTION



SANDBAG OPTION

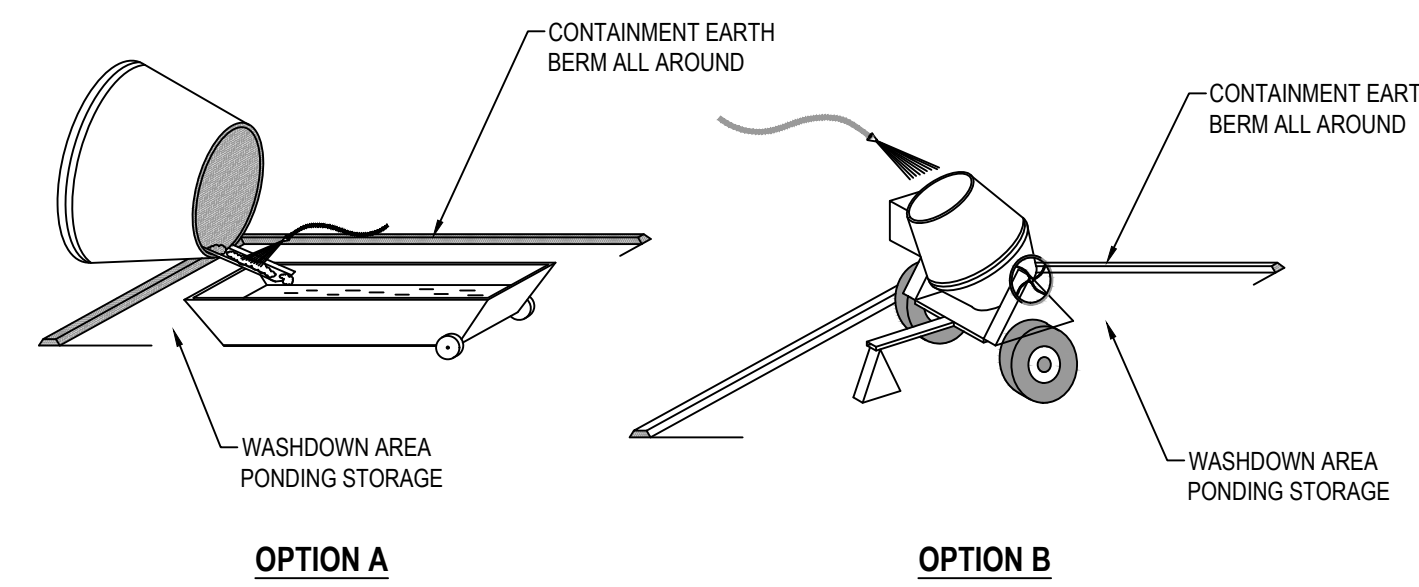
NOTES:

1. PLACE WATTLES OR GRAVEL BAGS TIGHT AGAINST CURB TO PREVENT SEDIMENT-LADEN WATER FROM GETTING BETWEEN CURB AND WATTLEBAG.
2. PLACE WATTLES OR GRAVEL BAGS SUCH THAT FLOW DOES NOT OVERTOP CURB OR ROAD CENTERLINE.
3. INSPECT INLET PROTECTION AFTER EVERY LARGE STORM EVENT AND AT LEAST BIWEEKLY, 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 REACHES 50% OF GRAVEL BAG OR WATTLE HEIGHT.
5. CONTRACTOR MAY SUBMIT AN ALTERNATIVE METHOD OF INLET PROTECTION. THE ALTERNATIVE METHOD SHALL BE APPROVED BY THE CITY INSPECTOR AND THE ENGINEER OF RECORD.
6. BEFORE PLACEMENT OF CURB, STABILIZATION OF LAND BEHIND CURB, AND/OR PAVING, MAINTAIN TOP OF INLET AT 6\"/>

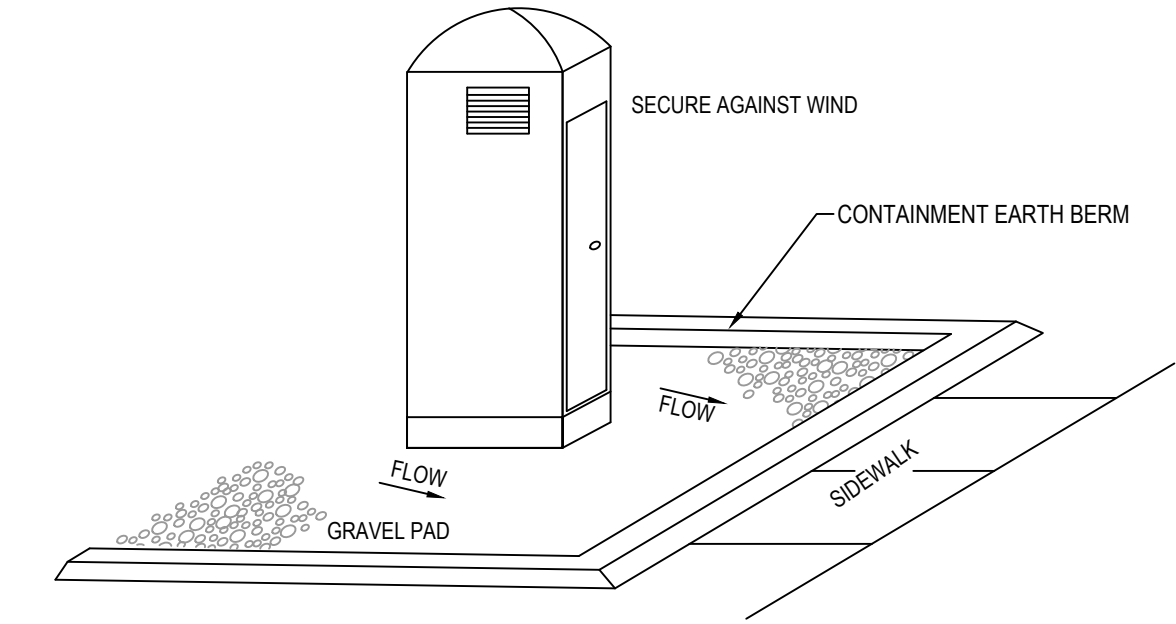


NOTE:

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



3 CONCRETE WASTE MANAGEMENT



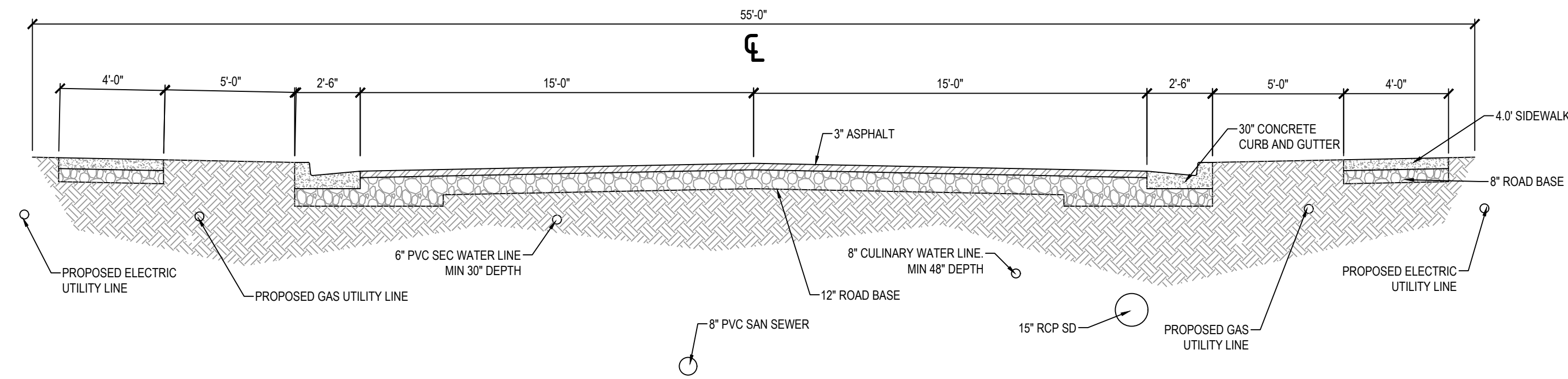
4 PORTABLE TOILET

1 SAG INLET PROTECTION SCALE: NONE

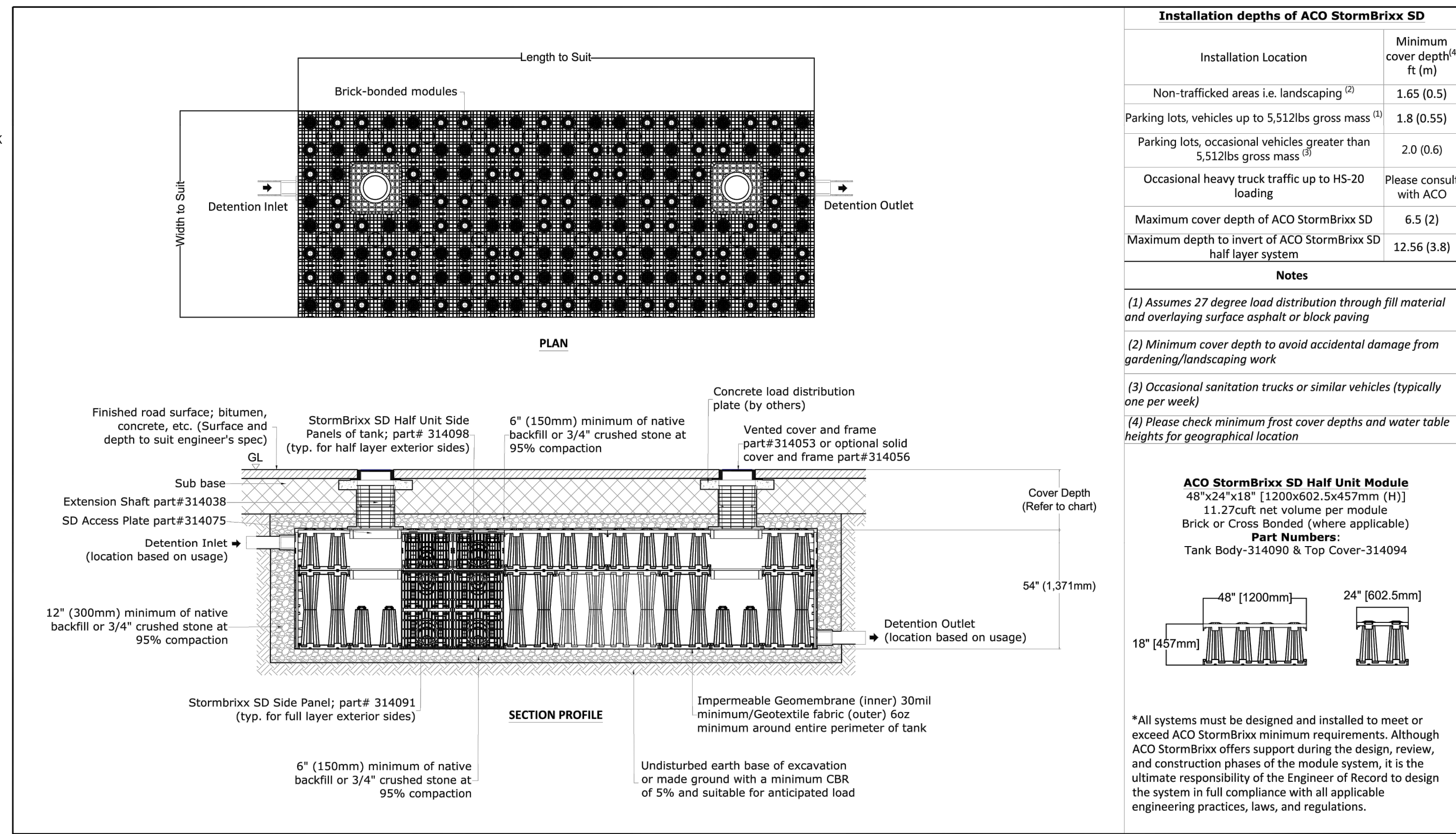
2 STABILIZED CONSTRUCTION ENTRANCE SCALE: NONE

3 CONCRETE WASTE MANAGEMENT SCALE: NONE

4 PORTABLE TOILET SCALE: NONE



5 55.0' ROAD CROSS SECTION SCALE: NONE



Installation depths of ACO StormBrixx SD	
Installation Location	Minimum cover depth ⁽¹⁾ ft (m)
Non-trafficked areas i.e. landscaping ⁽²⁾	1.65 (0.5)
Parking lots, vehicles up to 5,512lbs gross mass ⁽³⁾	1.8 (0.55)
Parking lots, occasional vehicles greater than 5,512lbs gross mass ⁽⁴⁾	2.0 (0.6)
Occasional heavy truck traffic up to HS-20 loading	Please consult with ACO
Maximum cover depth of ACO StormBrixx SD	6.5 (2)
Maximum depth to invert of ACO StormBrixx SD half layer system	12.56 (3.8)

Notes

- (1) Assumes 27 degree load distribution through fill material and overlying surface asphalt or block paving
- (2) Minimum cover depth to avoid accidental damage from gardening/landscaping work
- (3) Occasional sanitation trucks or similar vehicles (typically one per week)
- (4) Please check minimum frost cover depths and water table heights for geographical location

ACO StormBrixx SD Half Unit Module
 48" x 24" x 18" [1200 x 602.5 x 457 mm (H)]
 11.27 cu ft net volume per module
 Brick or Cross Bonded (where applicable)
Part Numbers:
 Tank Body-314090 & Top Cover-314094

ACO, Inc.
 825 W. Beechcraft St. Casa Grande, AZ 85122
 9470 Pinecone Drive Mentor, OH 44060
 4211 Pleasant Rd. Fort Mill, SC 29708
 Tel: 520-421-9898 Tel: 440-639-7230 Tel: 440-639-7230
 Fax: 520-421-9899 Fax: 440-639-7235 Fax: 803-802-1063

6 STORM BRIXX DETAIL SCALE: NONE



LAYTON
 919 North 400 West
 Layton, UT 84041
 Phone: 801.547.1100

SALT LAKE CITY
 Phone: 801.255.0529

TOOELE
 Phone: 435.843.3590

CEDAR CITY
 Phone: 435.865.1453

RICHFIELD
 Phone: 435.896.2983

WWW.ENSIGNENG.COM

FOR:
 MOORE HOMES
 9691 S GRANITE WOODS CIRCLE
 SANDY, UTAH 84092

CONTACT:
 CLIENT CONTACT
 PHONE: 801-000-0000

HIGHLANDS BLUFF ESTATES
PHASE 2
 2225 EAST 6225 SOUTH
 OGDEN, UTAH



NO.	DATE	REVISION	BY
1		FOR REVIEW	
2			
3			
4			
5			
6			
7			
8			

DETAILS

PROJECT NUMBER: 9455
 PRINT DATE: 1/15/20
 DRAWN BY: J.MOSS
 CHECKED BY: C.PRESTON
 PROJECT MANAGER: C.PRESTON

C-500



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

BENCHMARK

WEST QUARTER CORNER OF SECTION 23
TOWNSHIP 5 NORTH RANGE 1 WEST
SALT LAKE BASE AND MERIDIAN
ELEV = 4971.186'

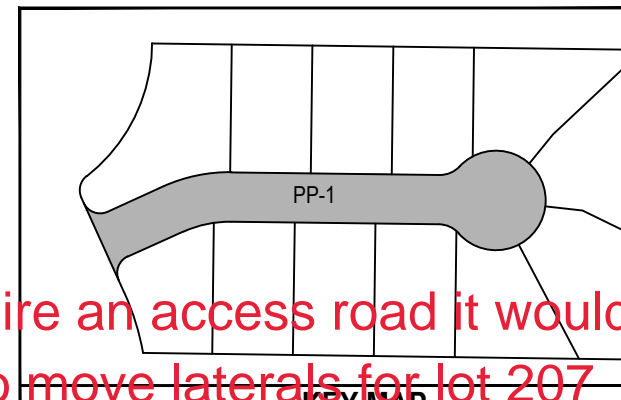
SCOPE OF WORK:
PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS
GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE
CONSTRUCTION DRAWINGS:

- 3/4" CULINARY WATER SERVICE W/ 3/4" WATER METER PER WEBSER CONSERVANCY DISTRICT STANDARDS.
- INSTALL 4" SANITARY SEWER LATERAL @ 2.00' MINIMUM COVER.
- 8" CS90 PVC DR18 CULINARY WATERLINE PER WEBSER CONSERVANCY DISTRICT STANDARDS.
- 6"X6"X6" TEE AND THRUST BLOCK.
- 8" GATE VALVE.
- FIELD LOCATE AND "HOT TAP" EXISTING CULINARY WATERLINE.

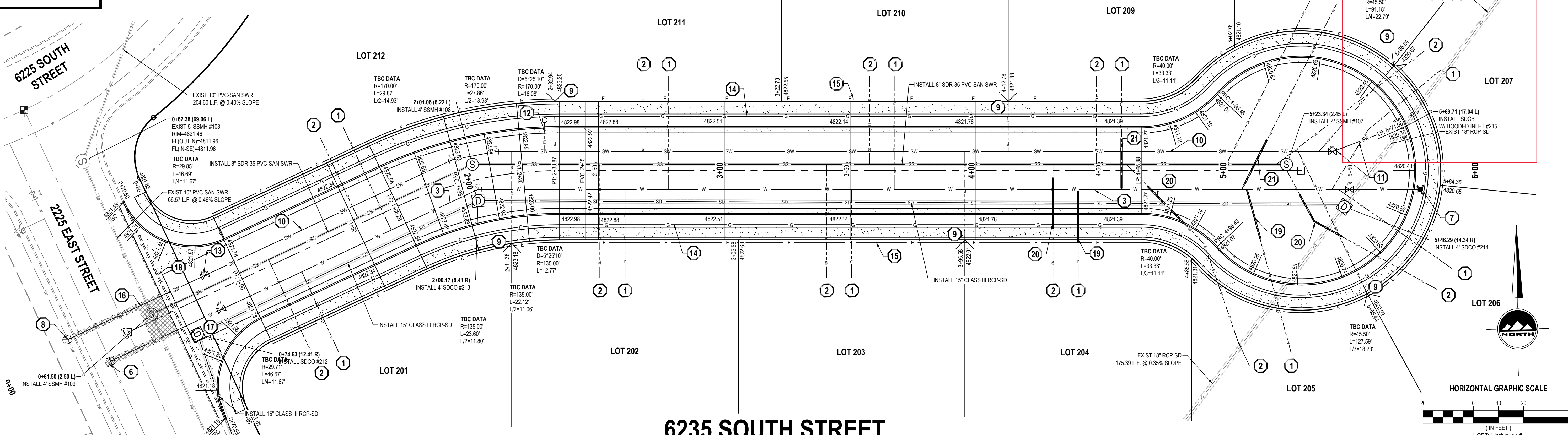
- FIRE HYDRANT W/ VALVE COMPLETE PER APWA PLAN No. 511.
- FIELD LOCATE AND CONNECT TO EXISTING SECONDARY WATERLINE PER WEBER BASIN WATER CONSERVANCY DISTRICT STANDARDS.
- INSTALL 1-1/2" PVC DUAL TURNOUT SECONDARY WATER SERVICE LINE WITH (2) 1" METERS PER WEBER BASIN WATER CONSERVANCY DISTRICT STANDARDS AND SPECIFICATIONS.
- 6" CS90 PVC DR14 SECONDARY WATERLINE PER WEBER BASIN WATER CONSERVANCY DISTRICT STANDARDS.
- PLUG AND BLOCK END OF SWL WITH DRAIN TO EXISTING STORM DRAIN PER WEBER BASIN WATER CONSERVANCY DISTRICT STANDARDS.
- AIR - VACUUM BREAKER PER WEBER BASIN WATER CONSERVANCY DISTRICT STANDARDS.

- 6" GATE VALVE PER WEBER BASIN WATER CONSERVANCY DISTRICT STANDARDS.
- PROPOSED GAS LINE LOCATION. GAS COMPANY TO DETERMINE FINAL LOCATION.
- PROPOSED POWER LINE LOCATION. POWER COMPANY TO DETERMINE FINAL LOCATION.
- SAWCUT, REMOVE AND REPLACE ASPHALT AND CONCRETE.
- 4.0' CONCRETE WATERWAY.
- REMOVE EXISTING CURB AND GUTTER.
- 20" OF STEEL OR DR 21 (OR THICKER) WELDED HDPE PIPE CASING AROUND NEW WATER LATERAL, WITH SPACER AND WRAP-AROUND END SEALS, CENTERED OVER STORM DRAIN CROSSING.

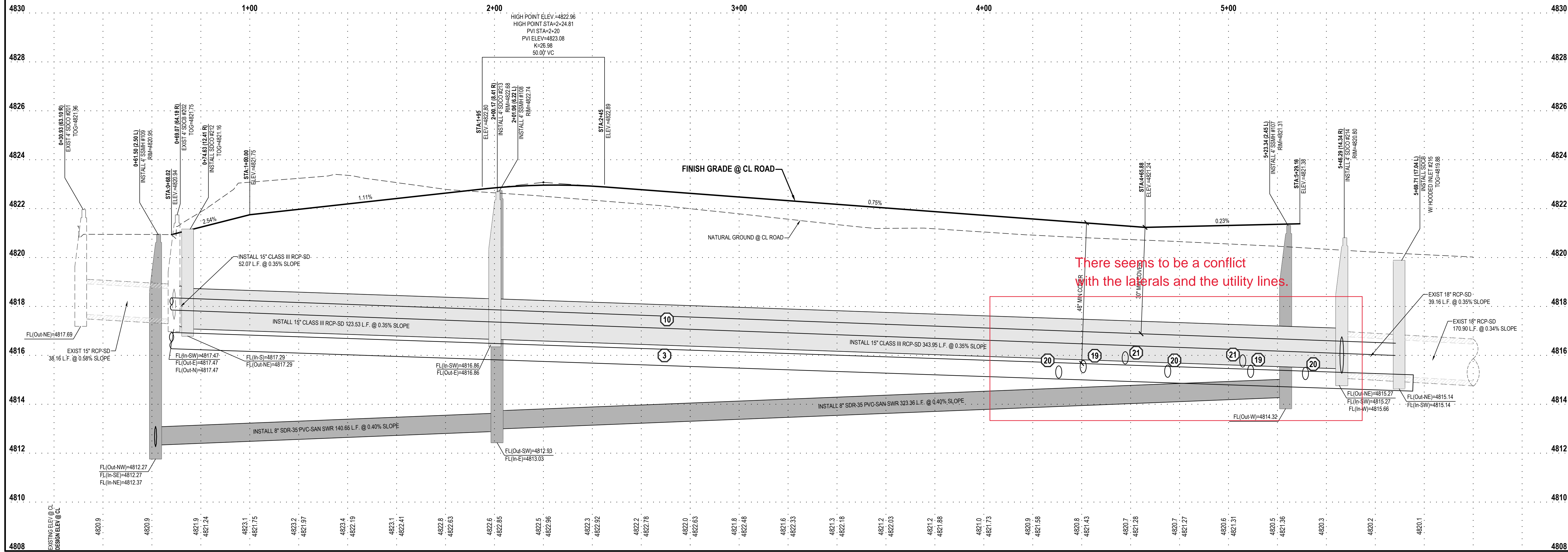
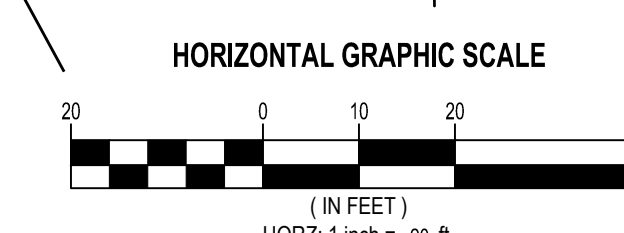
- 20" OF STEEL OR DR 21 (OR THICKER) WELDED HDPE PIPE CASING AROUND NEW STORM DRAIN CROSSING.
- 20" OF STEEL OR DR 21 (OR THICKER) WELDED HDPE PIPE CASING AROUND NEW WATER LATERAL, WITH SPACER AND WRAP-AROUND END SEALS, CENTERED OVER SEWER CROSSING.



If require an access road it would be best to move laterals for lot 207



6235 SOUTH STREET



There seems to be a conflict with the laterals and the utility lines.

ENSIGN
THE STANDARD IN ENGINEERING

LAYTON
919 North 400 West
Layton, UT 84041
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OGDEN, UTAH



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**6235 SOUTH STREET
PLAN AND PROFILE**

PROJECT NUMBER: 9455
PRINT DATE: 1/7/21
DRAWN BY: J.MOSS
CHECKED BY: C.PRESTON
PROJECT MANAGER: C.PRESTON