#### Description of Proposed Use

The proposed development is part of a larger contingency of parcels totaling more than 40 acres owned by the Scott and Annette Turville Family Trust.

The proposed development encompasses roughly seven acres upon which is proposed three single family residential lots and a private cul-de-sac. These seven acres are currently zoned FR-2 / Foothill Estates Residential.

The proposed single-family residential lots, as well as the private road and cul-de-sac will be maintained in perpetuity by a homeowner's association yet to be formed. Please see an attached exhibit for an infrastructure maintenance plan and estimates, including capital improvements estimates.

An adjoining area consisting of more than two acres zoned FR-2 and almost ten acres zoned OS are planned to be sold to Utah Open Lands in partnership with Salt Lake City Public Lands for conservation, trails preservation, and trailhead development.

A plan has not been finalized for the more than 20 additional acres owned by the Scott and Annette Turville Family Trust, which are contiguous to the proposed development and contiguous to the land to be sold to Utah Open Lands and Salt Lake City Public Lands.

#### **Planned Development Information**

Demonstrate how your project meets the purpose and at least one objective of a planned development as stated in 21A.55.010 of the planned development ordinance.

#### Meets Purpose and Objectives of Planned Development

This project has been conceived with the goal of both preserving substantial land for recreation, conservation, and trailhead development, as well as providing for a well-designed residential development. By clustering the residential development in its own area west of the main trailhead area and south of the current Bonneville Shoreline Trail the plan accomplished an efficient use of land and minimizes the residential impact on the foothill landscape and trail use.

Additionally, this project has been redesigned from past proposals to preserve substantial open space and natural lands, as well as to optimize access to those lands. This fulfills *Objective A* found in *21A.55.010* of the Planned Development Ordinance. This proposed development is configured in such a way that will preserve existing trail systems but disentangle them from adjacent residential use and ensure in perpetuity that those trails are accessible to the public while also being properly improved and maintained by public entities. This will also leave much of the natural beauty of this particular foothill area undisturbed for conservation and preservation purposes.

#### Master Plan: Implements Adopted Master Plan

Additionally, Objective F of 21A.55.010 of the Planned Development Ordinance calls for projects that, "implement portions of an adopted Master Plan in instances where the Master Plan provides specific guidance on the character of the immediate vicinity of the proposal."

The East Bench Master Plan (2017, p. 108) calls for the city to "Negotiate property acquisition or easements with private property owners along the eastern City boundary to complete the trail in the foothill open space area." This project is in perfect harmony with the completion and preservation of the Bonneville Shoreline Trail in perpetuity. Additionally, the same plan calls for "connections to trails that penetrate the eastern foothills." This project and adjacent land accommodate and enable improved access to popular trails such as Jack's Peak. Additionally, this ensures a vital connection to the newly constructed Bonneville Shoreline Trail connection to Parley's Trail.

This proposal also accommodates and enables the implementation of the Arcadia Heights Plan (1998) calling for a foothill access point and a recommended park site adjacent to the proposed development.

Finally, the East Bench Master Plan Conditions Report (2014, p. 130) reiterates that the city should accommodate properties with development potential or acquire these properties for public open pace. This proposed development meets and fulfills both

objectives by developing a portion into residential use where high development potential exists, while also conveying other properties to the city for use by the public as open space. The same report (p. 131) reiterates that this specific subject property should be prioritized as the first preference location for a foothill park. The current proposal enables planning for such a public use to move forward on public lands.

#### Meets Purpose of Zoning

The three proposed lots and the proposed road are all situated on land that is zoned FR-2 / Foothill Estates Residential. Each lot is roughly two acres in size, exceeding the minimum lot size requirement of 21,780 square feet.

The Salt Lake City Zoning Code states that the "purpose of the FR-2/21,780 Foothills Residential District is to promote environmentally sensitive and visually compatible development of lots not less than twenty one thousand seven hundred eighty (21,780) square feet in size, suitable for foothills locations as indicated in the applicable community Master Plan. The district is intended to minimize flooding, erosion, and other environmental hazards; to protect the natural scenic character of foothill areas by limiting development; to promote the safety and well being of present and future residents of foothill areas; to protect wildlife habitat; and to ensure the efficient expenditure of public funds."

The lots in the proposed development are positioned south and lie downhill from the current Bonneville Shoreline Trail. This Trail will be relocated slightly to the north to accommodate construction of the proposed cul-de-sac. By positioning the lots on the downhill slope from the trail and from the proposed road, future homes built on these lots will mitigate any potential visual impacts to those recreating in surrounding lands.

Additionally, all the proposed lots avoid intrusion into sensitive and irreplaceable tree groves on the property. This layout fulfills the zoning purpose of FR-2 to "promote environmentally sensitive and visually compatible development."

Exhibits enclosed

# 1820 S Lakeline Dr. Salt Lake City, UT

## TOTAL AREA UNDER OWNERSHIP

Approx. 40 acres

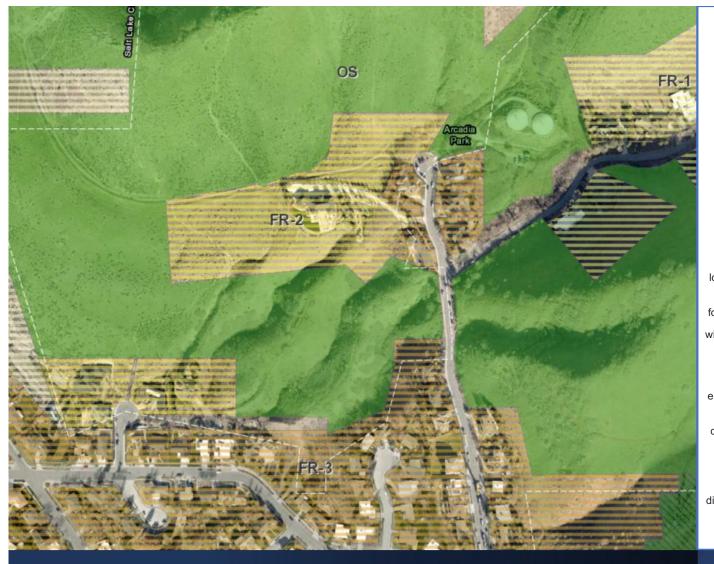
#### **IMPACTED TRAILS**

Bonneville Shoreline Trail Jack's Peak Other connecting trails

#### **ZONING**

FR-2 / Foothill Residential and OS / Open Space





# SALT LAKE CITY ZONING

## FR-2 / 21,780 FOOTHILLS RESIDENTIAL DISTRICT

The purpose of the FR-2/21,780 Foothills Residential District is to promote environmentally sensitive and visually compatible development of lots not less than twenty one thousand seven hundred eighty (21,780) square feet in size, suitable for foothills locations as indicated in the applicable community Master Plan. The district is intended to minimize flooding, erosion, and other environmental hazards; to protect the natural scenic character of foothill areas by limiting development; to promote the safety and well being of present and future residents of foothill areas; to protect wildlife habitat; and to ensure the efficient expenditure of public funds.

#### OS / OPEN SPACE

The purpose of the OS Open Space District is to preserve and enhance public and private open space, natural areas, and improved park and recreational areas. These areas serve to provide opportunities for active and passive outdoor recreation; provide contrasts to the built environment; preserve scenic qualities; protect sensitive or fragile environmental areas such as wetlands, steep slopes, ridge lines, meadows, and stream corridors; preserve the capacity and water quality of the stormwater drainage system; encourage sustainability, conservation and renewable energy and provide pedestrian and bicycle transportation connections. This district is appropriate in areas of the City where the applicable master plans support this type of land use.

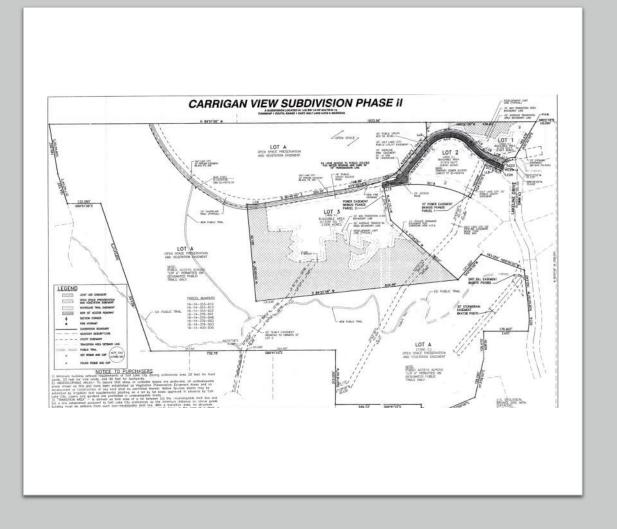


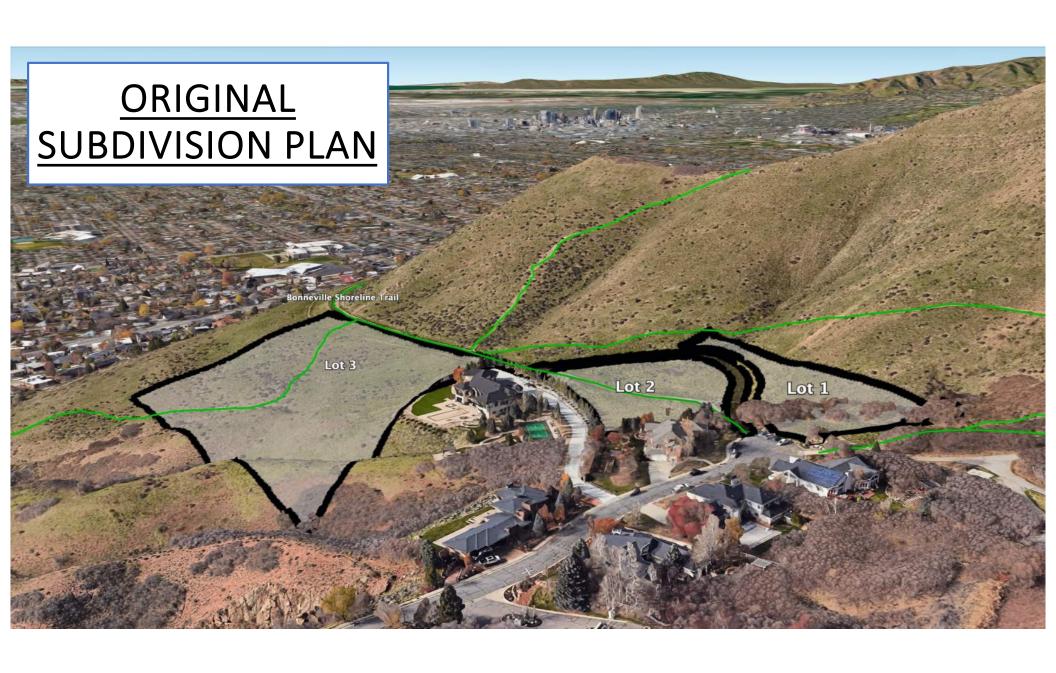


## ORIGINAL SUBDIVISION PLAN

#### 3 Lots

- Lot 1 0.76 acre
- Lot 2 1.0 acre
- Lot 3 5.6 acres



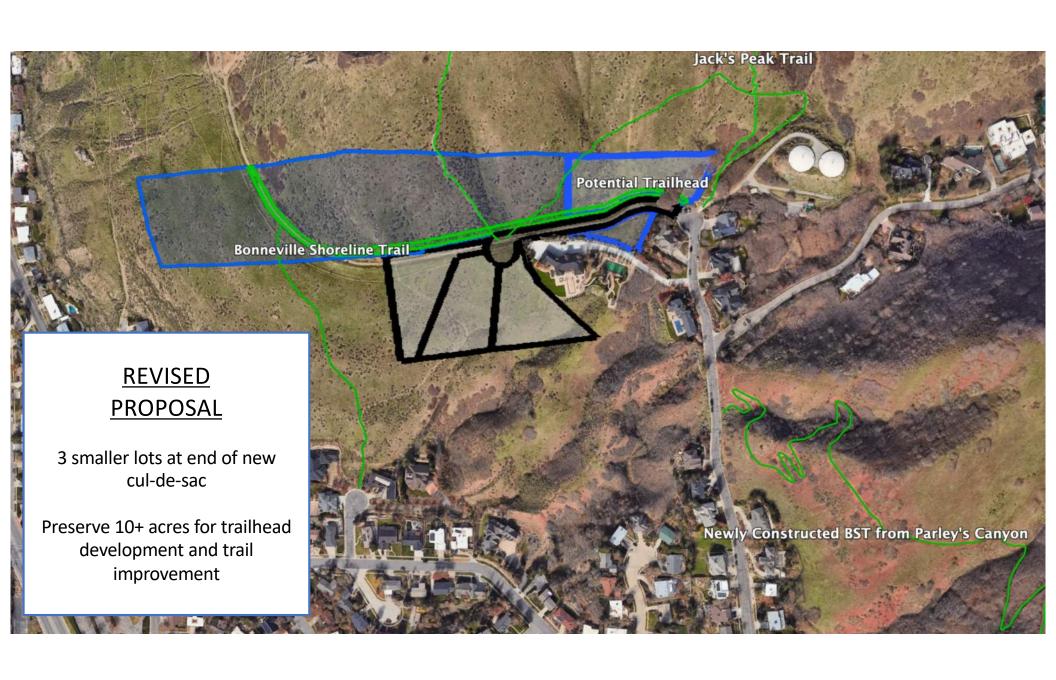


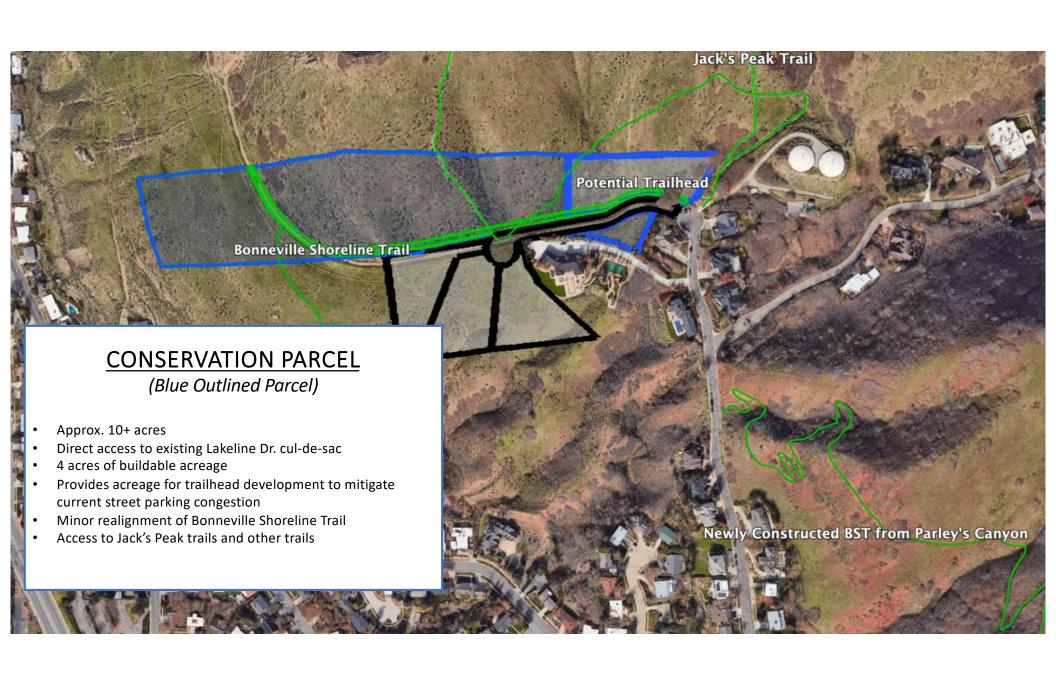
## **REVISED PROPOSAL**

Set aside blue parcel (10+ acres) for conservation and trailhead development to mitigate street parking congestion and provide off-street parking trailhead

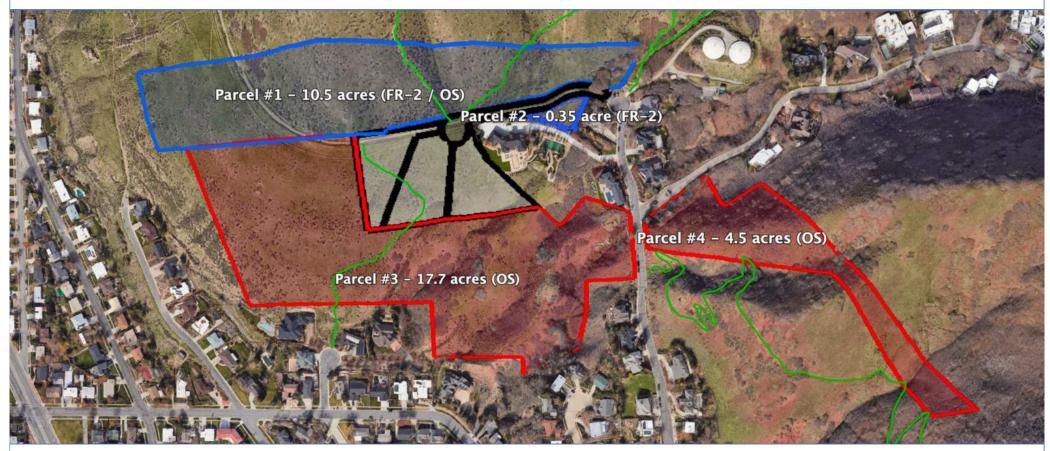
Develop three smaller lots at the end of new cul-de-sac south of BST in new planned development







## ADDITIONAL CONSERVATION PARCELS



Note: Additional Open Space parcels (red) to be appraised at open space values



# CARRIGAN VIEW PHASE II P.U.D.

# **1820 SOUTH LAKELINE DRIVE** SALT LAKE CITY, UTAH

## INDEX OF DRAWINGS

SUBDIVISION PLAT C-001 **GENERAL NOTES** 

C-200 GRADING AND DRAINAGE PLAN

C-300 **UTILITY PLAN** 

C-500 **EROSION CONTROL PLAN** 

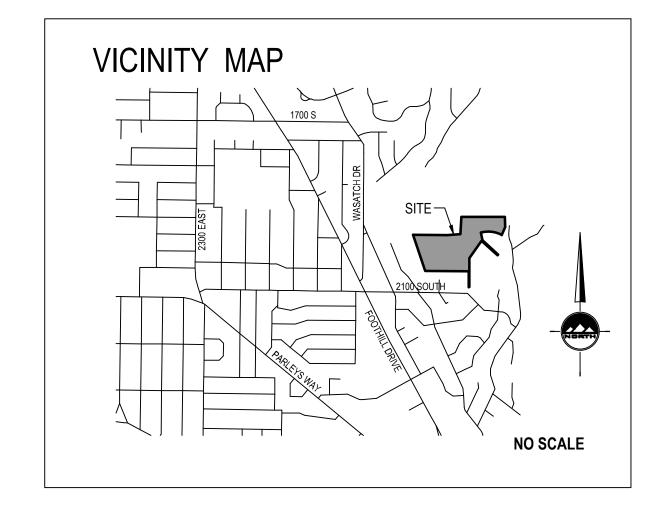
PLAN AND PROFILE CARRIGAN RIM COURT PP-1 PP-2 PLAN AND PROFILE CARRIGAN RIM COURT FOR REVIEW
NOT FOR CONSTRUCTION

DATE PRINTED September 28, 2023

## 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.



# **GENERAL NOTES**

- ALL WORK SHALL CONFORM TO SALT LAKE CITY STANDARDS & SPECIFICATIONS.
- CALL BLUE STAKES AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES.
- BENCHMARK ELEVATION = SOUTHWEST CORNER SECTION 14, T1N, R1E SALT LAKE BASE & MERIDIAN ELEV. =

### 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.



45 W 10000 S, Suite 500 Sandy, UT 84070 Phone: 801.255.0529

Phone: 801.547.1100

Phone: 435.843.3590

**CEDAR CITY** 

Phone: 435.865.1453

RICHFIELD Phone: 435.896.2983

WWW.ENSIGNENG.COM

FOR: TURVILLE 1820 SOUTH LAKELINE DRIVE SALT LAKE CITY, UT

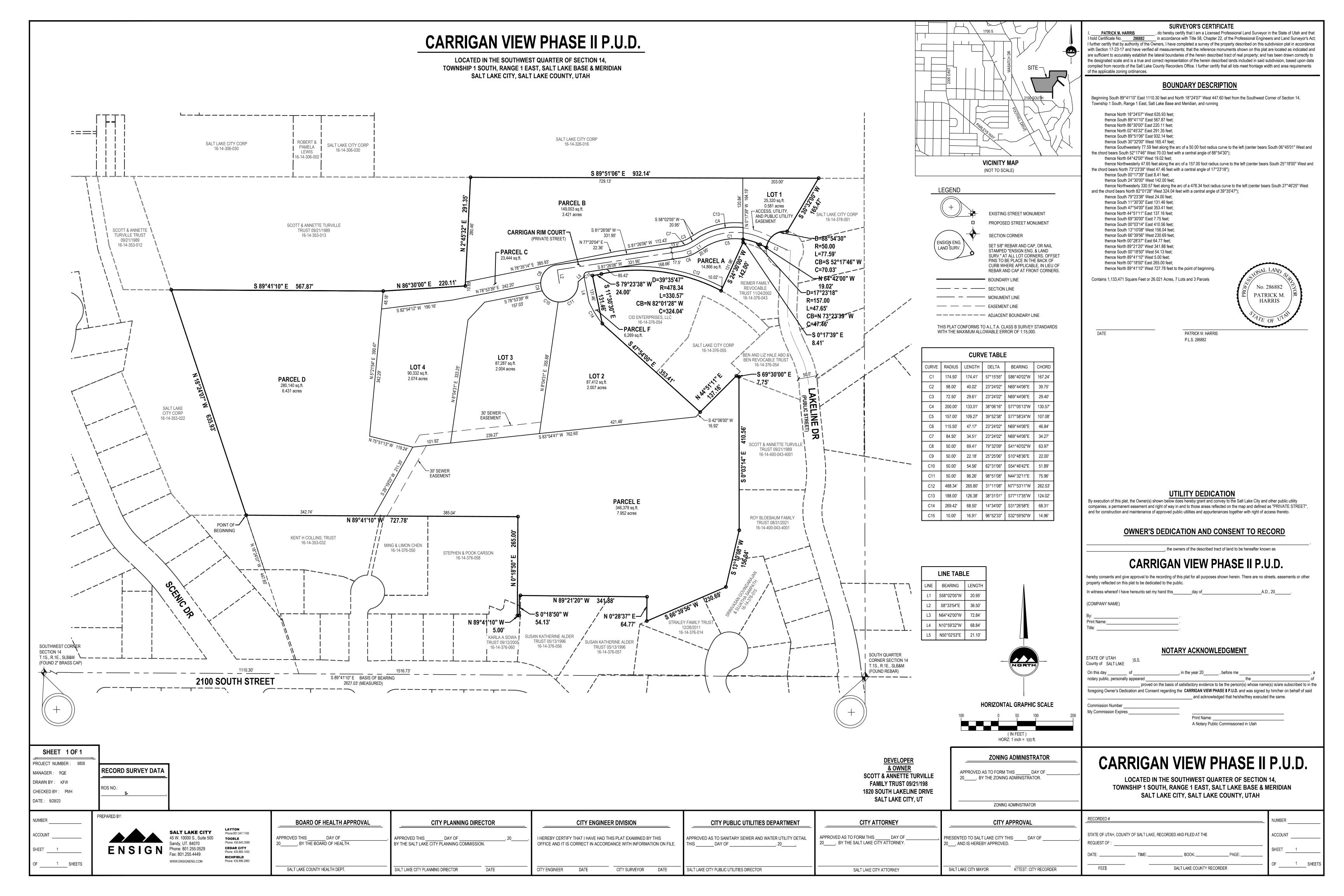
CONTACT: TURVILLE PHONE:

LAKELINE DRIVE CITY, UTAH **PHAS** 

**GAN VIEW** 

CARRI

2023-09-28



#### SALT LAKE CITY PUBLIC UTILITIES GENERAL NOTES

ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THESE CONTRACT DOCUMENTS AND THE MOST RECENT EDITIONS OF THE FOLLOWING: THE INTERNATIONAL PLUMBING CODE, UTAH DRINKING WATER REGULATIONS, APWA MANUAL OF STANDARD PLANS AND SPECIFICATIONS, AND SLC PUBLIC UTILITIES MODIFICATIONS TO APWA STANDARD PLANS AND APPROVED MATERIALS AND SLC PUBLIC UTILITIES APWA SPECIFICATIONS MODIFICATIONS. THE CONTRACTOR IS REQUIRED TO ADHERE TO ALL OF THE ABOVE-MENTIONED DOCUMENTS UNLESS OTHERWISE NOTED AND APPROVED IN WRITING BY THE SALT LAKE CITY DIRECTOR OF PUBLIC UTILITIES.

THE CONTRACTOR IS RESPONSIBLE TO NOTIFY ALL APPROPRIATE GOVERNMENT AND PRIVATE ENTITIES ASSOCIATED WITH THE PROJECT. THE FOLLOWING MUST BE CONTACTED 48-HOURS PRIOR TO CONSTRUCTION AS APPLICABLE TO THE PROJECT:

#### PUBLIC UTILITIES:

BACKFLOW PREVENTION - 483-6795 DEVELOPMENT REVIEW ENGINEERING - 483-6781 INSPECTIONS, PERMITS, CONTRACTS & AGREEMENTS - 483-6727 PRETREATMENT - 799-4002 STORM WATER - 483-6751

#### SLC DEPARTMENTS:

ENGINEERING - PUBLIC WAY PERMITS AND ISSUES - 535-6248 ENGINEERING - SUBDIVISIONS - 535-6159 FIRE DEPARTMENT - 535-6636 PERMITS AND LICENSING (BLDG SERVICES) - 535-7752 PLANNING AND ZONING - 535-7700

- ALL OTHER POTENTIALLY IMPACTED GOVERNING AGENCIES OR ENTITIES

- ALL WATER USERS INVOLVED IN WATER MAIN SHUTDOWNS - APPLICABLE SEWER, WATER AND DRAINAGE DISTRICTS

- BLUESTAKES LOCATING SERVICES - 532-5000 - COUNTY FIRE DEPARTMENT - 743-7231

TRANSPORTATION - 535-6630

- COUNTY FLOOD CONTROL - 468-2779

- UTAH STATE ENGINEER - 538-7240

- COUNTY HEALTH DEPARTMENT - 385-468-3913 - COUNTY PUBLIC WAY PERMITS - 468-2241

- HOLLADAY CITY - 272-9450 - SALT LAKE COUNTY HIGHWAY DEPARTMENT - 468-3705 OR 468-2156

- THE UTAH TRANSIT AUTHORITY FOR RE-ROUTING SERVICE - 262-5626 - UNION PACIFIC RAILROAD CO., SUPERINTENDENTS OFFICE - 595-3405 - UTAH DEPARTMENT OF TRANSPORTATION, REGION #2 - 975-4800

#### 3. SCHEDULE

PRIOR TO CONSTRUCTION THE CONTRACTOR WILL PROVIDE, AND WILL UPDATE AS CHANGES OCCUR, A CONSTRUCTION SCHEDULE IN ACCORDANCE WITH THE SPECIFICATIONS AND SALT LAKE CITY ENGINEERING OR SALT LAKE COUNTY REGULATIONS AS APPLICABLE FOR WORKING WITHIN THE PUBLIC WAY.

#### 4. PERMITS, FEES AND AGREEMENTS

CONTRACTOR MUST OBTAIN ALL THE NECESSARY PERMITS AND AGREEMENTS AND PAY ALL APPLICABLE FEES PRIOR TO ANY CONSTRUCTION ACTIVITIES. CONTACT SALT LAKE CITY ENGINEERING (535-6248) FOR PERMITS AND INSPECTIONS REQUIRED FOR ANY WORK CONDUCTED WITHIN SALT LAKE CITY'S PUBLIC RIGHT-OF-WAY. APPLICABLE UTILITY PERMITS MAY INCLUDE MAINLINE EXTENSION AGREEMENTS AND SERVICE CONNECTION PERMITS. ALL UTILITY WORK MUST BE BONDED. ALL CONTRACTORS MUST BE LICENSED TO WORK ON CITY UTILITY MAINS.

CONSTRUCTION SITES MUST BE IN COMPLIANCE WITH THE UTAH POLLUTION DISCHARGE ELIMINATION SYSTEM (UPDES) STORM WATER PERMIT FOR CONSTRUCTION ACTIVITIES (538-6396). A COPY OF THE PERMIT'S STORM WATER POLLUTION PREVENTION PLAN MUST BE SUBMITTED TO PUBLIC UTILITIES FOR REVIEW AND APPROVAL. ADDITIONAL WATER QUALITY AND EROSION CONTROL MEASURES MAY BE REQUIRED. THE CONTRACTOR MUST ALSO COMPLY WITH SALT LAKE CITY'S CLEAN WHEEL ORDINANCE.

#### ASPHALT AND SOIL TESTING

THE CONTRACTOR IS TO PROVIDE MARSHALL AND PROCTOR TEST DATA 24-HOURS PRIOR TO USE. CONTRACTOR IS TO PROVIDE COMPACTION AND DENSITY TESTING AS REQUIRED BY SALT LAKE CITY ENGINEERING, UDOT, SALT LAKE COUNTY OR OTHER GOVERNING ENTITY. TRENCH BACKFILL MATERIAL AND COMPACTION TESTS ARE TO BE TAKEN PER APWA STANDARD SPECIFICATIONS, SECTION 330520 - BACKFILLING TRENCHES, OR AS REQUIRED BY THE SLC PROJECT ENGINEER IF NATIVE MATERIALS ARE USED. NO NATIVE MATERIALS ARE ALLOWED WITHIN THE PIPE ZONE. THE MAXIMUM LIFTS FOR BACKFILLING EXCAVATIONS IS 8-INCHES. ALL MATERIALS AND COMPACTION TESTING IS TO BE PERFORMED BY A LAB RECOGNIZED AND ACCEPTED BY SALT LAKE COUNTY PUBLIC WORKS AND/OR SALT LAKE CITY ENGINEERING.

### 6. TRAFFIC CONTROL AND HAUL ROUTES

TRAFFIC CONTROL MUST CONFORM TO THE MOST CURRENT EDITION OF SALT LAKE CITY TRAFFIC COUNTY AND STATE ROADS. SLC TRANSPORTATION MUST APPROVE ALL PROJECT HAUL ROUTES (535-7129). THE CONTRACTOR MUST ALSO CONFORM TO UDOT, SALT LAKE COUNTY OR OTHER APPLICABLE GOVERNING ENTITIES REQUIREMENTS FOR TRAFFIC CONTROL.

### SURVEY CONTROL

CONTRACTOR MUST PROVDE A REGISTERED LAND SURVEYOR OR PERSONS UNDER SUPERVISION OF A REGISTERED LAND SURVEYOR TO SET STAKES FOR ALIGNMENT AND GRADE OF EACH MAIN AND/OR FACILITY AS APPROVED. THE STAKES SHALL BE MARKED WITH THE HORIZONTAL LOCATION (STATION) AND VERTICAL LOCATION (GRADE) WITH CUTS AND/OR FILLS TO THE GRADE OF THE MAIN AND/OR FACILITY AS APPROVED. IN ADDITION, THE CONTRACTOR AND/OR SURVEYOR SHALL PROVIDE TO SALT LAKE CITY PUBLIC UTILITIES CUT SHEETS FILLED OUT COMPLETELY AND CLEARLY SHOWING THE PERTINENT GRADES, ELEVATIONS AND CUT/FILLS ASSOCIATED WITH THE FIELD STAKING OF THE MAIN AND/OR FACILITY. THE CUT SHEET FORM IS AVAILABLE AT THE CONTRACTS AND AGREEMENTS OFFICE AT PUBLIC UTILITIES. ALL MAINS AND LATERALS NOT MEETING MINIMUM GRADE REQUIREMENTS AS SPECIFIED BY ORDINANCE OR AS REQUIRED TO MEET THE MINIMUM REQUIRED FLOWS OR AS APPROVED MUST BE REMOVED AND RECONSTRUCTED TO MEET DESIGN GRADE. THE CONTRACTOR SHALL PROTECT ALL STAKES AND MARKERS UNTIL PUBLIC UTILITY SURVEYORS COMPLETE FINAL MEASUREMENTS. THE CONTRACTOR WILL BE RESPONSIBLE FOR FURNISHING, MAINTAINING, OR RESTORING ALL MONUMENTS AND REFERENCE MARKS WITHIN THE PROJECT SITE. CONTACT THE COUNTY SURVEYOR (468-2028) FOR MONUMENT LOCATIONS AND CONSTRUCTION REQUIREMENTS. ALL ELEVATIONS SHALL BE REFERENCED TO SALT LAKE CITY DATUM UNLESS NOTED OTHERWISE ON THE PLANS.

## 8. ASPHALT GUARANTEE

THE CONTRACTOR SHALL REMOVE, DISPOSE OF, FURNISH AND PLACE PERMANENT ASPHALT PER SALT LAKE CITY ENGINEERING, UDOT, COUNTY, OR OTHER GOVERNMENT STANDARDS AS APPLICABLE TO THE PROJECT. THE CONTRACTOR SHALL GUARANTEE THE ASPHALT RESTORATION FOR A PERIOD AS REQUIRED BY THE GOVERNING ENTITY.

### TEMPORARY ASPHALT

IF THE CONTRACTOR CHOOSES TO WORK WITHIN THE PUBLIC WAY WHEN HOT MIX ASPHALT IS NOT AVAILABLE, THE CONTRACTOR MUST OBTAIN APPROVAL FROM THE APPROPRIATE GOVERNING ENTITY PRIOR TO INSTALLING TEMPORARY ASPHALT SURFACING MATERIAL. WITHIN SALT LAKE CITY, WHEN PERMANENT ASPHALT BECOMES AVAILABLE, THE CONTRACTOR SHALL REMOVE THE TEMPORARY ASPHALT, FURNISH AND INSTALL THE PERMANENT ASPHALT. THE CONTRACTOR SHALL GUARANTEE THE ASPHALT RESTORATION FOR A PERIOD AS REQUIRED BY THE GOVERNING ENTITY FROM THE DATE OF COMPLETION.

10. SAFETY THE CONTRACTOR IS RESPONSIBLE FOR ALL ASPECTS OF SAFETY OF THE PROJECT AND SHALL MEET ALL OSHA, STATE, COUNTY AND OTHER GOVERNING ENTITY REQUIREMENTS.

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 RESPONSIBLE FOR DUST CONTROL ACCORDING TO THE GOVERNING ENTITY STANDARDS. USE OF HYDRANT WATER OR PUMPING FROM CITY-OWNED CANALS OR STORM DRAINAGE FACILITIES IS NOT ALLOWED FOR DUST CONTROL ACTIVITIES WITHOUT WRITTEN APPROVAL OF THE PUBLIC UTILITIES DIRECTOR.

### 12. DEWATERING

ALL ON-SITE DEWATERING ACTIVITIES MUST BE APPROVED IN WRITING BY PUBLIC UTILITIES. PROPOSED OUTFALL LOCATIONS AND ESTIMATED FLOW VOLUME CALCULATIONS MUST BE SUBMITTED TO PUBLIC UTILITIES FOR REVIEW AND APPROVAL. ADEQUATE MEASURES MUST BE TAKEN TO REMOVE ALL SEDIMENT PRIOR TO DISCHARGE. PUBLIC UTILITIES MAY REQUIRE ADDITIONAL MEASURES FOR SEDIMENT CONTROL AND REMOVAL.

#### 13. PROJECT LIMITS

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 CONTRACTORS 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.

#### 14. WATER, FIRE, SANITARY SEWER AND STORM DRAINAGE UTILITIES

A. INSPECTIONS -IT IS THE CONTRACTOR'S RESPONSIBILITY TO SCHEDULE ANY WATER, SEWER, BACKFLOW AND DRAINAGE INSPECTION 48-HOURS IN ADVANCE TO WHEN NEEDED. CONTACT 483-6727 TO SCHEDULE

#### B. DAMAGE TO EXISTING UTILITIES -

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.

C. UTILITY LOCATIONS -CONTRACTOR WILL BE RESPONSIBLE FOR LOCATING AND AVOIDING ALL UTILITIES AND SERVICE LATERALS, AND FOR REPAIRING ALL DAMAGE THAT OCCURS TO THE UTILTIES DUE TO THE CONTRACTOR'S ACTIVITIES. CONTRACTOR IS TO VERIFY LOCATION, DEPTH, SIZE, MATERIAL AND OUTSIDE DIAMETERS OF UTILITIES IN THE FIELD BY POTHOLING A MINIMUM OF 300-FEET AHEAD OF SCHEDULED CONSTRUCTION IN ORDER TO IDENTIFY POTENTIAL CONFLICTS AND PROBLEMS WITH FUTURE CONSTRUCTION ACTIVITIES. EXISTING UTILITY INFORMATION OBTAINED FROM SLC PUBLIC UTILITIES' MAPS MUST BE ASSUMED AS APPROXIMATE AND REQUIRING FIELD VERIFICATION. CONTACT BLUE STAKES OR APPROPRIATE OWNER FOR COMMUNICATION LINE LOCATIONS.

#### D. UTILITY RELOCATIONS -

FOR UTILITY CONFLICTS REQUIRING MAINLINE RELOCATIONS, THE CONTRACTOR MUST NOTIFY THE APPLICABLE UTILITY COMPANY OR USER A MINIMUM OF 2-WEEKS IN ADVANCE. A ONE-WEEK MINIMUM NOTIFICATION IS REQUIRED FOR CONFLICTS REQUIRING THE RELOCATION OF SERVICE LATERALS. ALL RELOCATIONS ARE SUBJECT TO APPROVAL FROM THE APPLICABLE UTILITY COMPANY AND/OR

#### E. FIELD CHANGES -

NO ROADWAY, UTILITY ALIGNMENT OR GRADE CHANGES ARE ALLOWED FROM THE APPROVED CONSTRUCTION PLANS/DOCUMENTS WITHOUT WRITTEN APPROVAL FROM THE SLC PUBLIC UTILITIES DIRECTOR. CHANGES TO HYDRANT LOCATIONS AND/OR FIRE LINES MUST BE REVIEWED AND APPROVED BY THE SALT LAKE CITY OR SALT LAKE COUNTY FIRE DEPARTMENT (AS APPLICABLE TO THE PROJECT) AND PUBLIC UTILITIES.

#### F. PUBLIC NOTICE TO PROJECTS IN THE PUBLIC WAY-

FOR APPROVED PROJECTS THE CONTRACTOR IS RESPONSIBLE TO PROVIDE AND DISTRIBUTE WRITTEN NOTICE TO ALL RESIDENTS LOCATED WITHIN THE PROJECT AREA AT LEAST 72-HOURS PRIOR TO CONSTRUCTION. WORK TO BE CONDUCTED WITHIN COMMERCIAL OR INDUSTRIAL AREAS MAY REQUIRE A LONGER NOTIFICATION PERIOD AND ADDITIONAL CONTRACTOR COORDINATION WITH PROPERTY OWNERS. THE WRITTEN NOTICE IS TO BE APPROVED BY THE SLC PUBLIC UTILITIES PROJECT ENGINEER.

#### G. PUBLIC NOTICE FOR WATER MAIN SHUT DOWNS -

THROUGH THE SLC PUBLIC UTILITIES INSPECTOR AND WITH THE PUBLIC UTILITIES PROJECT ENGINEER APPROVAL, SLC PUBLIC UTILITIES MUST BE CONTACTED AND APPROVE ALL WATER MAIN SHUTDOWNS. ONCE APPROVED THE CONTRACTOR MUST NOTIFY ALL EFFECTED USERS BY WRITTEN NOTICE A MINIMUM OF 48-HOURS (RESIDENTIAL) AND 72-HOURS (COMMERCIAL/INDUSTRIAL) PRIOR TO THE WATER MAIN SHUT DOWN. PUBLIC UTILITIES MAY REQUIRE LONGER NOTICE PERIODS.

#### H. WATER AND SEWER SEPARATION -

IN ACCORDANCE WITH UTAH'S DEPARTMENT OF HEALTH REGULATIONS, A MINIMUM TEN-FOOT HORIZONTAL AND 1.5-FOOT VERTICAL (WITH WATER ON TOP) SEPARATION IS REQUIRED. IF THESE CONDITIONS CANNOT BE MET, STATE AND SLC PUBLIC UTILITIES APPROVAL IS REQUIRED. ADDITIONAL CONSTRUCTION MEASURES WILL BE REQUIRED FOR THESE CONDITIONS

#### I. SALVAGE -

ALL METERS MUST BE RETURNED TO PUBLIC UTILITIES, AND AT PUBLIC UTILITIES REQUEST ALL SALVAGED PIPE AND/OR FITTINGS MUST BE RETURNED TO SLC PUBLIC UTILTIES (483-6727) LOCATED AT 1530 SOUTH WEST TEMPLE.

### J. SEWER MAIN AND LATERAL CONSTRUCTION REQUIREMENTS -

SLC PUBLIC UTILITIES MUST APPROVE ALL SEWER CONNECTIONS. ALL SEWER LATERALS 6-INCHES AND SMALLER MUST WYE INTO THE MAINS PER SLC PUBLIC UTILITIES REQUIREMENTS. ALL 8-INCH AND LARGER SEWER CONNECTIONS MUST BE PETITIONED FOR AT PUBLIC UTILTIES (483-6762) AND CONNECTED AT A MANHOLE. INSIDE DROPS IN MANHOLES ARE NOT ALLOWED. A MINIMUM 4-FOOT BURY DEPTH IS REQUIRED ON ALL SEWER MAINS AND LATERALS. CONTRACTOR SHALL INSTALL INVERT COVERS IN ALL SEWER MANHOLES WITHIN THE PROJECT AREA.

CONTRACTOR TO PROVIDE AIR PRESSURE TESTING OF SEWER MAINS IN ACCORDANCE WITH PIPE MANUFACTURERS RECOMMENDATIONS AND SALT LAKE CITY PUBLIC UTILITIES REQUIREMENTS. ALL PVC SEWER MAIN AND LATERAL TESTING SHALL BE IN ACCORDANCE WITH UNI-BELL UN-B-6-98 RECOMMENDED PRACTICE FOR LOW PRESSURE AIR TESTING OF INSTALLED SEWER PIPE. CONTRACTOR SHALL PROVIDE SEWER LATERAL WATER TESTING AS REQUIRED BY THE SALT LAKE CITY PUBLIC UTILITIES PROJECT ENGINEER OR INSPECTOR. A MINIMUM OF 9-FEET OF HEAD PRESSURE IS REQUIRED AS MEASURED VERTICALLY FROM THE HIGH POINT OF THE PIPELINE AND AT OTHER LOCATIONS ALONG THE PIPELINE AS DETERMINED BY THE SLC PUBLIC UTILITIES PROJECT ENGINEER OR INSPECTOR. TESTING TIME WILL BE NO LESS THAN AS SPECIFIED FOR THE AIR TEST DURATION IN TABLE I ON PAGE 12 OF UNI-B-6-98. ALL PIPES SUBJECT TO WATER TESTING SHALL BE FULLY VISIBLE TO THE INSPECTOR DURING TESTING. TESTING MUST BE PERFORMED IN THE PRESENCE OF A SLC PUBLIC UTILITIES REPRESENTATIVE. ALL VISIBLE LEAKAGE MUST BE REPAIRED TO THE SATISFACTION OF THE SLC PUBLIC UTILITIES ENGINEER OR INSPECTOR.

### K. WATER AND FIRE MAIN AND SERVICE CONSTRUCTION REQUIREMENTS -

SLC PUBLIC UTILITIES MUST APPROVE ALL FIRE AND WATER SERVICE CONNECTIONS. A MINIMUM 3-FOOT SEPARATION IS REQUIRED BETWEEN ALL WATER AND FIRE SERVICE TAPS INTO THE MAIN. ALL CONNECTIONS MUST BE MADE MEETING SLC PUBLIC UTILITIES REQUIREMENTS. A 5-FOOT MINIMUM BURY DEPTH (FINAL GRADE TO TOP OF PIPE) IS REQUIRED ON ALL WATER/FIRE LINES UNLESS OTHERWISE APPROVED BY PUBLIC UTILITIES. WATER LINE THRUST BLOCK AND RESTRAINTS ARE AS PER SLC APPROVED DETAIL DRAWINGS AND SPECIFICATIONS. ALL EXPOSED NUTS AND BOLTS WILL BE COATED WITH CHEVRON FM1 GREASE PLUS MINIMUM 8 MIL THICKNESS PLASTIC. PROVIDE STAINLESS STEEL NUTS, BOLTS AND WASHERS FOR HIGH GROUNDWATER/ SATURATED CONDITIONS

ALL WATERLINES INSTALLATIONS AND TESTING TO BE IN ACCORDANCE WITH AWWA SECTIONS C600, C601, C651, C206, C200, C900, C303 AWWA MANUAL M11 AND ALL OTHER APPLICABLE AWWA, UPWS, ASTM AND ANSI SPECIFICATIONS RELEVANT TO THE INSTALLATION AND COMPLETION OF THE PROJECT. AMENDMENT TO SECTION C600 SECTION 4.1.1; DOCUMENT TO READ MINIMUM TEST PRESSURE SHALL NOT BE LESS THAN 200 P.S.I. GAUGED TO A HIGH POINT OF THE PIPELINE BEING TESTED. ALL MATERIALS USED FOR WATERWORKS PROJECTS TO BE RATED FOR 150 P.S.I. MINIMUM OPERATING PRESSURE.

CONTRACTOR IS TO INSTALL WATER SERVICE LINES, METER YOKES AND/OR ASSEMBLIES AND METER BOXS WITH LIDS LOCATED AS APPROVED ON THE PLANS PER APPLICABLE PUBLIC UTILITIES DETAIL DRAWINGS. METER BOXES ARE TO BE PLACED IN THE PARK STRIPS PERPENDICULAR TO THE WATERMAIN SERVICE TAP CONNECTION. ALL WATER METERS. CATCH BASINS, CLEANOUT BOXES. MANHOLES, DOUBLE CHECK VALVE DETECTOR ASSEMBLIES, REDUCED PRESSURE DETECTOR ASSEMBLIES AND BACKFLOW PREVENTION DEVICES MUST BE LOCATED OUTSIDE OF ALL APPROACHES, DRIVEWAYS, PEDESTRIAN WALKWAYS AND OTHER TRAVELED WAYS UNLESS OTHERWISE APPROVED ON PLANS.

BACKFLOW PREVENTORS ARE REQUIRED ON ALL IRRIGATION AND FIRE SPRINKLING TAPS PER PUBLIC UTILITIES AND SLC FIRE DEPARTMENT REQUIREMENTS. CONTRACTORS SHALL INSTALL BACKFLOW PREVENTION DEVICES ON FIRE SPRINKLER CONNECTIONS. DOUBLE CHECK VALVE ASSEMBLIES SHALL BE INSTALLED ON CLASS 1, 2 AND 3 SYSTEMS. REDUCED PRESSURE PRINCIPLE VALVES SHALL BE INSTALLED ON CLASS 4 SYSTEMS. ALL FIRE SPRINKLING BACKFLOW ASSEMBLIES SHALL CONFORM TO ASSE STANDARD 1048, 1013, 1047 AND 1015. THE CONTRACTOR SHALL BE RESPONSIBLE TO PERFORM BACKFLOW PREVENTION TESTS PER SALT LAKE CITY STANDARDS AND SUBMIT RESULTS TO PUBLIC UTILITIES. ALL TESTS MUST BE PERFORMED AND SUBMITTED TO PUBLIC UTILITIES WITHIN 10 DAYS OF INSTALLATION OR WATER TURN-ON. BACKFLOW TEST FORMS ARE AVAILABLE AT PUBLIC UTILITIES' CONTRACTS AND AGREEMENTS OFFICE.

#### L. GENERAL WATER, SEWER AND STORM DRAIN REQUIREMENTS -

ALL WATER, FIRE AND SEWER SERVICES STUBBED TO A PROPERTY MUST BE USED OR WATER AND FIRE SERVICES MUST BE KILLED AT THE MAIN AND SEWER LATERALS CAPPED AT PROPERTY LINE PER PUBLIC UTILITIES REQUIREMENTS. ALLOWABLE SERVICES TO BE KEPT WILL BE AS DETERMINED BY THE PUBLIC UTILITIES PROJECT ENGINEER. ALL WATER AND FIRE SERVICE KILLS AND SEWER LATERAL CAPS ARE TO BE KILLED AND CAPPED AS DETERMINED AND VISUALLY VERIFIED BY THE ON-SITE PUBLIC UTILITIES INSPECTOR.

ALL MANHOLES, HYDRANTS, VALVES, CLEAN-OUT BOXES, CATCH BASINS, METERS, ETC, MUST BE RAISED OR LOWERED TO FINAL GRADE PER PUBLIC UTILITIES STANDARDS AND INSPECTOR REQUIREMENTS. CONCRETE COLLARS MUST BE CONSTRUCTED ON ALL MANHOLES, CLEANOUT BOXES, CATCH BASINS AND VALVES PER PUBLIC UTILITIES STANDARDS. ALL MANHOLE, CATCH BASIN, OR CLEANOUT BOX CONNECTIONS MUST BE MADE WITH THE PIPE CUT FLUSH WITH THE INSIDE OF THE BOX AND GROUTED OR SEALED AS REQUIRED BY THE PUBLIC UTILITIES INSPECTOR. ALL MANHOLE, CLEANOUT BOX OR CATCH BASIN DISCONNECTIONS MUST BE REPAIRED AND GROUTED AS REQUIRED BY THE ON-SITE PUBLIC UTILITIES INSPECTOR.

CONTRACTOR SHALL NOT ALLOW ANY GROUNDWATER OR DEBRIS TO ENTER THE NEW OR EXISTING PIPE DURING CONSTRUCTION. UTILITY TRENCHING, BACKFILL, AND PIPE ZONE AS PER SLC PUBLIC 

#### ABBREVIATIONS

APWA	AMEDICAN DUDI IO MODIZO ACCOCIATION
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
С	CURVE
СВ	CATCH BASIN
CF	CURB FACE OR CUBIC FEET
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	
<del>=</del> -	LOW POINT
MH	MANHOLE
MIN	MINIMUM
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
PC	POINT OF CURVATURE OR PRESSURE CLASS
PC PCC PI	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION
PC PCC PI PIP	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE
PC PCC PI	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION
PC PCC PI PIP PIV	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE
PC PCC PI PIP PIV PL	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE
PC PCC PI PIP PIV PL PRC	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE POINT OF REVERSE CURVATURE
PC PCC PI PIP PIV PL	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE
PC PCC PI PIP PIV PL PRC	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE POINT OF REVERSE CURVATURE PROPOSED
PC PCC PI PIP PIV PL PRC PRO PT	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE POINT OF REVERSE CURVATURE PROPOSED POINT OF TANGENCY
PC PCC PI PIP PIV PL PRC PRO PT PVC	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE POINT OF REVERSE CURVATURE PROPOSED POINT OF TANGENCY POINT OF VERTICAL CURVATURE
PC PCC PI PIP PIV PL PRC PRO PT	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE POINT OF REVERSE CURVATURE PROPOSED POINT OF TANGENCY
PC PCC PI PIP PIV PL PRC PRO PT PVC	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE POINT OF REVERSE CURVATURE PROPOSED POINT OF TANGENCY POINT OF VERTICAL CURVATURE
PC PCC PI PIP PIV PL PRC PRO PT PVC PVI PVT	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE POINT OF REVERSE CURVATURE PROPOSED POINT OF TANGENCY POINT OF VERTICAL CURVATURE POINT OF VERTICAL INTERSECTION POINT OF VERTICAL TANGENCY
PC PCC PI PIP PIV PL PRC PRO PT PVC PVI PVT R	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE POINT OF REVERSE CURVATURE PROPOSED POINT OF TANGENCY POINT OF VERTICAL CURVATURE POINT OF VERTICAL INTERSECTION POINT OF VERTICAL TANGENCY RADIUS
PC PCC PI PIP PIV PL PRC PRO PT PVC PVI PVT	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE POINT OF REVERSE CURVATURE PROPOSED POINT OF TANGENCY POINT OF VERTICAL CURVATURE POINT OF VERTICAL INTERSECTION POINT OF VERTICAL TANGENCY
PC PCC PI PIP PIV PL PRC PRO PT PVC PVI PVT R RD	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE POINT OF REVERSE CURVATURE PROPOSED POINT OF TANGENCY POINT OF VERTICAL CURVATURE POINT OF VERTICAL INTERSECTION POINT OF VERTICAL TANGENCY RADIUS ROOF DRAIN
PC PCC PI PIP PIV PL PRC PRO PT PVC PVI PVT R RD ROW	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE POINT OF REVERSE CURVATURE PROPOSED POINT OF TANGENCY POINT OF VERTICAL CURVATURE POINT OF VERTICAL INTERSECTION POINT OF VERTICAL TANGENCY RADIUS ROOF DRAIN RIGHT OF WAY
PC PCC PI PIP PIV PL PRC PRO PT PVC PVI PVT R RD ROW S	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE POINT OF REVERSE CURVATURE PROPOSED POINT OF TANGENCY POINT OF VERTICAL CURVATURE POINT OF VERTICAL INTERSECTION POINT OF VERTICAL TANGENCY RADIUS ROOF DRAIN RIGHT OF WAY SLOPE
PC PCC PI PIP PIV PL PRC PRO PT PVC PVI PVT R RD ROW	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE POINT OF REVERSE CURVATURE PROPOSED POINT OF TANGENCY POINT OF VERTICAL CURVATURE POINT OF VERTICAL INTERSECTION POINT OF VERTICAL TANGENCY RADIUS ROOF DRAIN RIGHT OF WAY
PC PCC PI PIP PIV PL PRC PRO PT PVC PVI PVT R RD ROW S SAN SWR	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE POINT OF REVERSE CURVATURE PROPOSED POINT OF TANGENCY POINT OF VERTICAL CURVATURE POINT OF VERTICAL INTERSECTION POINT OF VERTICAL TANGENCY RADIUS ROOF DRAIN RIGHT OF WAY SLOPE SANITARY SEWER
PC PCC PI PIP PIV PL PRC PRO PT PVC PVI PVT R RD ROW S SAN SWR SD	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE POINT OF REVERSE CURVATURE PROPOSED POINT OF TANGENCY POINT OF VERTICAL CURVATURE POINT OF VERTICAL INTERSECTION POINT OF VERTICAL TANGENCY RADIUS ROOF DRAIN RIGHT OF WAY SLOPE SANITARY SEWER STORM DRAIN
PC PCC PI PIP PIV PL PRC PRO PT PVC PVI PVT R RD ROW S SAN SWR SD SEC	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE POINT OF REVERSE CURVATURE PROPOSED POINT OF TANGENCY POINT OF VERTICAL CURVATURE POINT OF VERTICAL INTERSECTION POINT OF VERTICAL TANGENCY RADIUS ROOF DRAIN RIGHT OF WAY SLOPE SANITARY SEWER STORM DRAIN SECONDARY
PC PCC PI PIP PIV PL PRC PRO PT PVC PVI PVT R RD ROW S SAN SWR SD	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE POINT OF REVERSE CURVATURE PROPOSED POINT OF TANGENCY POINT OF VERTICAL CURVATURE POINT OF VERTICAL INTERSECTION POINT OF VERTICAL TANGENCY RADIUS ROOF DRAIN RIGHT OF WAY SLOPE SANITARY SEWER STORM DRAIN
PC PCC PI PIP PIV PL PRC PRO PT PVC PVI PVT R RD ROW S SAN SWR SD SEC SS	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE POINT OF REVERSE CURVATURE PROPOSED POINT OF TANGENCY POINT OF VERTICAL CURVATURE POINT OF VERTICAL INTERSECTION POINT OF VERTICAL TANGENCY RADIUS ROOF DRAIN RIGHT OF WAY SLOPE SANITARY SEWER STORM DRAIN SECONDARY SANITARY SEWER
PC PCC PI PIP PIV PL PRC PRO PT PVC PVI PVT R RD ROW S SAN SWR SD SEC SS STA	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE POINT OF REVERSE CURVATURE PROPOSED POINT OF TANGENCY POINT OF VERTICAL CURVATURE POINT OF VERTICAL INTERSECTION POINT OF VERTICAL TANGENCY RADIUS ROOF DRAIN RIGHT OF WAY SLOPE SANITARY SEWER STORM DRAIN SECONDARY SANITARY SEWER STATION
PC PCC PI PIP PIV PL PRC PRO PT PVC PVI R RD ROW S SAN SWR SD SEC SS STA SW	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE POINT OF REVERSE CURVATURE PROPOSED POINT OF TANGENCY POINT OF VERTICAL CURVATURE POINT OF VERTICAL INTERSECTION POINT OF VERTICAL TANGENCY RADIUS ROOF DRAIN RIGHT OF WAY SLOPE SANITARY SEWER STORM DRAIN SECONDARY SANITARY SEWER STATION SIDEWALK
PC PCC PI PIP PIV PL PRC PRO PT PVC PVI PVT R RD ROW S SAN SWR SD SEC SS STA	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE POINT OF REVERSE CURVATURE PROPOSED POINT OF TANGENCY POINT OF VERTICAL CURVATURE POINT OF VERTICAL INTERSECTION POINT OF VERTICAL TANGENCY RADIUS ROOF DRAIN RIGHT OF WAY SLOPE SANITARY SEWER STORM DRAIN SECONDARY SANITARY SEWER STATION
PC PCC PI PIP PIV PL PRC PRO PT PVC PVI R RD ROW S SAN SWR SD SEC SS STA SW SWL	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE POINT OF REVERSE CURVATURE PROPOSED POINT OF TANGENCY POINT OF VERTICAL CURVATURE POINT OF VERTICAL INTERSECTION POINT OF VERTICAL TANGENCY RADIUS ROOF DRAIN RIGHT OF WAY SLOPE SANITARY SEWER STORM DRAIN SECONDARY SANITARY SEWER STATION SIDEWALK SECONDARY WATER LINE
PC PCC PI PIP PIV PL PRC PRO PT PVC PVI R RD ROW S SAN SWR SD SEC SS STA SW SWL TBC	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE POINT OF REVERSE CURVATURE PROPOSED POINT OF TANGENCY POINT OF VERTICAL CURVATURE POINT OF VERTICAL INTERSECTION POINT OF VERTICAL TANGENCY RADIUS ROOF DRAIN RIGHT OF WAY SLOPE SANITARY SEWER STORM DRAIN SECONDARY SANITARY SEWER STATION SIDEWALK SECONDARY WATER LINE TOP BACK OF CURB
PC PCC PI PIP PIV PL PRC PRO PT PVC PVI R RD ROW S SAN SWR SD SEC SS STA SW SWL	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE POINT OF REVERSE CURVATURE PROPOSED POINT OF TANGENCY POINT OF VERTICAL CURVATURE POINT OF VERTICAL INTERSECTION POINT OF VERTICAL TANGENCY RADIUS ROOF DRAIN RIGHT OF WAY SLOPE SANITARY SEWER STORM DRAIN SECONDARY SANITARY SEWER STATION SIDEWALK SECONDARY WATER LINE
PC PCC PI PIP PIV PL PRC PRO PT PVC PVI R RD ROW S SAN SWR SD SEC SS STA SW SWL TBC TOG	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE POINT OF REVERSE CURVATURE PROPOSED POINT OF TANGENCY POINT OF VERTICAL CURVATURE POINT OF VERTICAL INTERSECTION POINT OF VERTICAL TANGENCY RADIUS ROOF DRAIN RIGHT OF WAY SLOPE SANITARY SEWER STORM DRAIN SECONDARY SANITARY SEWER STATION SIDEWALK SECONDARY WATER LINE TOP BACK OF CURB TOP OF GRATE
PC PCC PI PIP PIV PL PRC PRO PT PVC PVI PVT R RD ROW S SAN SWR SD SEC SS STA SW SWL TBC TOG TOA	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE POINT OF REVERSE CURVATURE PROPOSED POINT OF TANGENCY POINT OF VERTICAL CURVATURE POINT OF VERTICAL INTERSECTION POINT OF VERTICAL TANGENCY RADIUS ROOF DRAIN 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
PC PCC PI PIP PIV PL PRC PRO PT PVC PVI PVT R RD ROW S SAN SWR SD SEC SS STA SW SWL TBC TOG TOA TOC	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE POINT OF REVERSE CURVATURE PROPOSED POINT OF TANGENCY POINT OF VERTICAL CURVATURE POINT OF VERTICAL INTERSECTION POINT OF VERTICAL TANGENCY RADIUS ROOF DRAIN 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 CONCRETE
PC PCC PI PIP PIV PL PRC PRO PT PVC PVI PVT R RD ROW S SAN SWR SD SEC SS STA SW SWL TBC TOG TOA	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE POINT OF REVERSE CURVATURE PROPOSED POINT OF TANGENCY POINT OF VERTICAL CURVATURE POINT OF VERTICAL INTERSECTION POINT OF VERTICAL TANGENCY RADIUS ROOF DRAIN 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
PC PCC PI PIP PIV PL PRC PRO PT PVC PVI PVT R RD ROW S SAN SWR SD SEC SS STA SW SWL TBC TOG TOA TOC TOF	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE POINT OF REVERSE CURVATURE PROPOSED POINT OF TANGENCY POINT OF VERTICAL CURVATURE POINT OF VERTICAL INTERSECTION POINT OF VERTICAL TANGENCY RADIUS ROOF DRAIN 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 CONCRETE TOP OF FOUNDATION
PC PCC PI PIP PIV PL PRC PRO PT PVC PVI PVT R RD ROW S SAN SWR SD SEC SS STA SW SWL TBC TOG TOA TOC TOF TOW	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE POINT OF REVERSE CURVATURE PROPOSED POINT OF TANGENCY POINT OF VERTICAL CURVATURE POINT OF VERTICAL INTERSECTION POINT OF VERTICAL TANGENCY RADIUS ROOF DRAIN 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 CONCRETE TOP OF FOUNDATION TOP OF WALL
PC PCC PI PIP PIV PL PRC PRO PT PVC PVI PVT R RD ROW S SAN SWR SD SEC SS STA SW SWL TBC TOG TOA TOC TOF TOW TOS	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE POINT OF REVERSE CURVATURE PROPOSED POINT OF TANGENCY POINT OF VERTICAL CURVATURE POINT OF VERTICAL INTERSECTION POINT OF VERTICAL TANGENCY RADIUS ROOF DRAIN 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 CONCRETE TOP OF FOUNDATION
PC PCC PI PIP PIV PL PRC PRO PT PVC PVI PVT R RD ROW S SAN SWR SD SEC SS STA SW SWL TBC TOG TOA TOC TOF TOW	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE POINT OF REVERSE CURVATURE PROPOSED POINT OF TANGENCY POINT OF VERTICAL CURVATURE POINT OF VERTICAL INTERSECTION POINT OF VERTICAL TANGENCY RADIUS ROOF DRAIN 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 CONCRETE TOP OF FOUNDATION TOP OF WALL
PC PCC PI PIP PIV PL PRC PRO PT PVC PVI PVT R RD ROW S SAN SWR SD SEC SS STA SW SWL TBC TOG TOA TOC TOF TOW TOS TYP	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE POINT OF REVERSE CURVATURE PROPOSED POINT OF TANGENCY POINT OF VERTICAL CURVATURE POINT OF VERTICAL INTERSECTION POINT OF VERTICAL TANGENCY RADIUS ROOF DRAIN 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 CONCRETE TOP OF FOUNDATION TOP OF STEP TYPICAL
PC PCC PI PIP PIV PL PRC PRO PT PVC PVI PVT R RD ROW S SAN SWR SD SEC SS STA SW SWL TBC TOG TOA TOC TOF TOW TOS TYP VC	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE POINT OF REVERSE CURVATURE PROPOSED POINT OF TANGENCY POINT OF VERTICAL CURVATURE POINT OF VERTICAL INTERSECTION POINT OF VERTICAL TANGENCY RADIUS ROOF DRAIN 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 CONCRETE TOP OF FOUNDATION TOP OF STEP TYPICAL VERTICAL CURVE
PC PCC PI PIP PIV PL PRC PRO PT PVC PVI PVT R RD ROW S SAN SWR SD SEC SS STA SW SWL TBC TOG TOA TOC TOF TOW TOS TYP	POINT OF CURVATURE OR PRESSURE CLASS POINT OF COMPOUND CURVATURE POINT OF INTERSECTION PLASTIC IRRIGATION PIPE POST INDICATOR VALVE PROPERTY LINE POINT OF REVERSE CURVATURE PROPOSED POINT OF TANGENCY POINT OF VERTICAL CURVATURE POINT OF VERTICAL INTERSECTION POINT OF VERTICAL TANGENCY RADIUS ROOF DRAIN 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 CONCRETE TOP OF FOUNDATION TOP OF STEP TYPICAL

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

#### LEGEND

LEGEND			
<b></b>	SECTION CORNER	— – – –	EXISTING EDGE OF ASPHALT
+	EXISTING MONUMENT		PROPOSED EDGE OF ASPHALT
⊡	PROPOSED MONUMENT		EXISTING STRIPING
0	EXISTING REBAR AND CAP		PROPOSED STRIPING
0	SET ENSIGN REBAR AND CAP	x	EXISTING FENCE
WM O	EXISTING WATER METER	x	PROPOSED FENCE
O O	PROPOSED WATER METER		EXISTING FLOW LINE
(W)	EXISTING WATER MANHOLE		PROPOSED FLOW LINE
<b>(</b>	PROPOSED WATER MANHOLE		GRADE BREAK
W	EXISTING WATER BOX	— — sd — —	EXISTING STORM DRAIN LINE
wv wv	EXISTING WATER VALVE	——— SD ———	PROPOSED STORM DRAIN LINE
$\bowtie$	PROPOSED WATER VALVE		ROOF DRAIN LINE
X	EXISTING FIRE HYDRANT		CATCHMENTS
***	PROPOSED FIRE HYDRANT	— HWL — —	HIGHWATER LINE
<b>₽</b> R	PROPOSED FIRE DEPARTMENT CONNECTION	— — ss — —	EXISTING SANITARY SEWER
SWV	EXISTING SECONDARY WATER VALVE	ss	PROPOSED SANITARY SEWER LINE
Swv Swv	PROPOSED SECONDARY WATER VALVE	——————————————————————————————————————	PROPOSED SAN. SWR. SERVICE LINE
(IRR)	EXISTING IRRIGATION BOX	— — Id — —	EXISTING LAND DRAIN LINE
JRR.	EXISTING IRRIGATION VALVE	——— LD ———	PROPOSED LAND DRAIN LINE
IRR →	PROPOSED IRRIGATION VALVE	——————————————————————————————————————	PROPOSED LAND DRAIN SERVICE LINE
(\$)	EXISTING SANITARY SEWER MANHOLE	— w — —	EXISTING CULINARY WATER LINE
©	PROPOSED SANITARY SEWER MANHOLE	—— w ——	PROPOSED CULINARY WATER LINE
CO	EXISTING SANITARY CLEAN OUT		PROPOSED CULINARY WATER SERVICE LINE
	EXISTING STORM DRAIN CLEAN OUT BOX	— — sw — —	EXISTING SECONDARY WATER LINE
<b>D</b>	PROPOSED STORM DRAIN CLEAN OUT BOX	—— SW ——	PROPOSED SECONDARY WATER LINE
	EXISTING STORM DRAIN INLET BOX	— — sw	PROPOSED SEC. WATER SERVICE LINE
	EXISTING STORM DRAIN CATCH BASIN	— irr — —	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
CO	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	$\sim$	STRAW WATTLE
Δ	ROOF DRAIN		TEMPORARY BERM
©	EXISTING ELECTRICAL MANHOLE	•	TEMPORARY SILT FENCE
E	EXISTING ELECTRICAL BOX	-02	LIMITS OF DISTURBANCE
	EXISTING TRANSFORMER  EXISTING UTILITY POLE		EXISTING WALL PROPOSED WALL
₽ ×	EXISTING LIGHT		EXISTING CONTOURS
	PROPOSED LIGHT		PROPOSED CONTOURS
*	EXISTING GAS METER		BUILDABLE AREA WITHIN SETBACKS
<u>•</u>	EXISTING GAS MANHOLE		PUBLIC DRAINAGE EASEMENT
GV ⊠	EXISTING GAS VALVE	\\_\_\\_\_\\	EXISTING ASPHALT TO BE REMOVED
(T)	EXISTING TELEPHONE MANHOLE		PROPOSED ASPHALT
	EXISTING TELEPHONE BOX		EXISTING CURB AND GUTTER
(TRAFFIC)	EXISTING TRAFFIC SIGNAL BOX		PROPOSED CURB AND GUTTER
(CABLE)	EXISTING CABLE BOX		PROPOSED REVERSE PAN CURB AND GUTTER
(CABLE)	EXISTING BOLLARD		TRANSITION TO REVERSE PAN CURB
0	PROPOSED BOLLARD		CONCRETE TO BE REMOVED
<del></del>	EXISTING SIGN		EXISTING CONCRETE
<del></del>	PROPOSED SIGN		PROPOSED CONCRETE
XXXXXX	EXISTING SPOT ELEVATION	<u> </u>	BUILDING TO BE REMOVED
TBC	PROPOSED SPOT ELEVATION	77.77.77	EXISTING BUILDING
<b>✓</b>	EVICTING ELOW DIDECTION		DDODOSED DIJII DINO

PROPOSED BUILDING

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

EXISTING FLOW DIRECTION

EXISTING TREE

DENSE VEGETATION

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**GENERAL NOTES** 

PROJECT NUMBER 2023-09-28 PROJECT MANAGER DESIGNED BY

