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OWNER  
XXXX  
XXXX

XXXX  
San Antonio, TX 782XX

PROJECT  
Dick's Sporting Goods  
House of Sports

IKEA / RFBCU Pkwy.  
Live Oak TX 78233

REVISIONS  
1. Site Update 02/09/24

PROJECT NUMBER  
2023-149

Drawn By: jr  
Checked By: jr

Sheet Title:  
OVERALL TREE  
PRESERVATION  
PLAN

Sheet Number:

TP1.0

Issue Date:

November 1, 2023



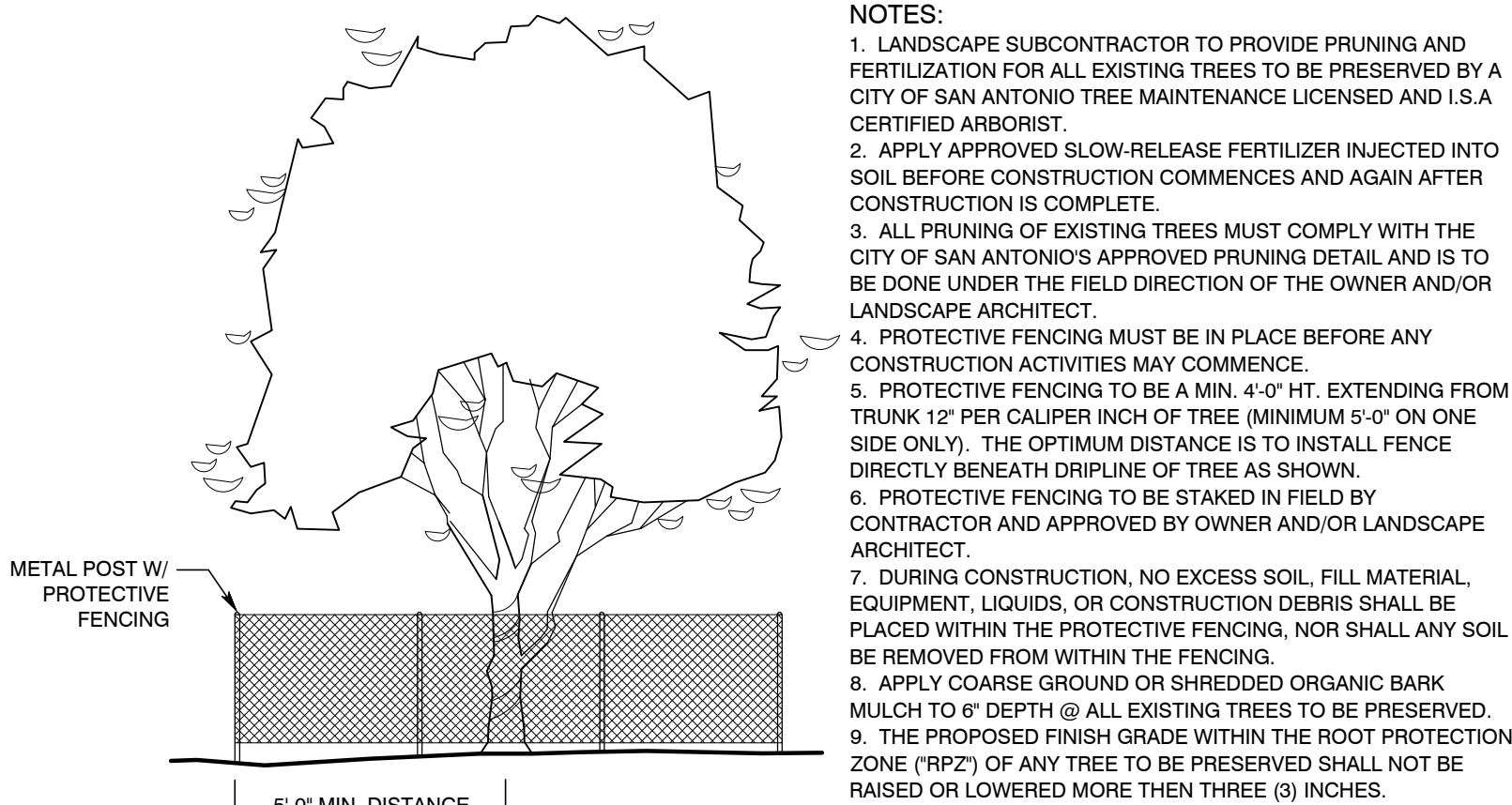
VICINITY MAP (N.T.S.)

EXISTING TREE LEGEND

- 007 = EXISTING TREE TO BE PRESERVED
- 007 = EXISTING TREE TO BE REMOVED

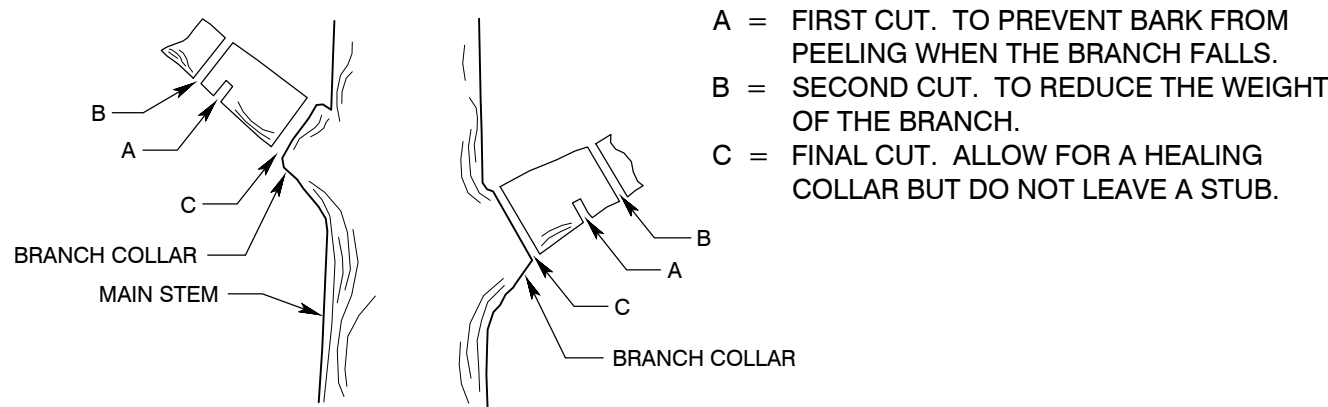
EXISTING TREE PRESERVATION AND REMOVAL NOTES:

- UNLESS OTHERWISE SPECIFICALLY INDICATED, THIS DOCUMENT SHOWS ONLY EXISTING PROTECTED-SIZE TREES AS DEFINED BY THE CITY OF LIVE OAK UNIFIED DEVELOPMENT CODE (THE "UDC") IN EFFECT ON THE DATE HEREOF. CONTRACTOR IS SOLELY RESPONSIBLE FOR INSPECTING THE PROJECT SITE AND DETERMINING FOR HIMSELF IF OTHER EXISTING TREES, SHRUBS, OR VEGETATION ARE PRESENT WHICH MUST BE REMOVED IN ORDER TO CONSTRUCT THE IMPROVEMENTS PROPOSED HEREBY.
- BY ACT OF SUBMITTING A BID TO REMOVE THE EXISTING TREES SHOWN ON THIS PLAN, CONTRACTOR WARRANTS THAT HE (A) HAS PERSONALLY VISITED THE PROJECT SITE, (B) HAS INVESTIGATED THE EXISTING CONDITIONS SUFFICIENTLY TO DETERMINE WHAT, IF ANY, ADDITIONAL EXISTING TREES, SHRUBS, AND VEGETATION MUST BE REMOVED IN ORDER TO CONSTRUCT THE IMPROVEMENTS PROPOSED HEREBY, AND (C) HAS A CLEAR UNDERSTANDING OF THE TERMS "PROTECTED TREE, SIGNIFICANT TREE, HERITAGE TREE, AND FLOOD PLAIN, AND OF ANY OTHER CITY GUIDELINES, STANDARDS, AND REQUIREMENTS WHICH MAY IMPACT REMOVAL OF THE EXISTING TREES DEPICTED ON THIS PLAN.
- IN THE EVENT CONTRACTOR ENCOUNTERS ADDITIONAL EXISTING TREES, SHRUBS, AND VEGETATION NOT SHOWN ON THIS PLAN, BUT WHICH MUST REASONABLY BE REMOVED IN ORDER TO CONSTRUCT THE IMPROVEMENTS PROPOSED HEREBY, CONTRACTOR SHALL REMOVE THE ADDITIONAL EXISTING TREES, SHRUBS, AND VEGETATION AT NO ADDITIONAL COST TO THE OWNER, SUBJECT TO ANY APPLICABLE REQUIREMENTS, GUIDELINES, STIPULATIONS, OR APPROVALS ENFORCED BY THE CITY OF LIVE OAK.

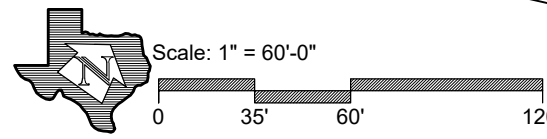
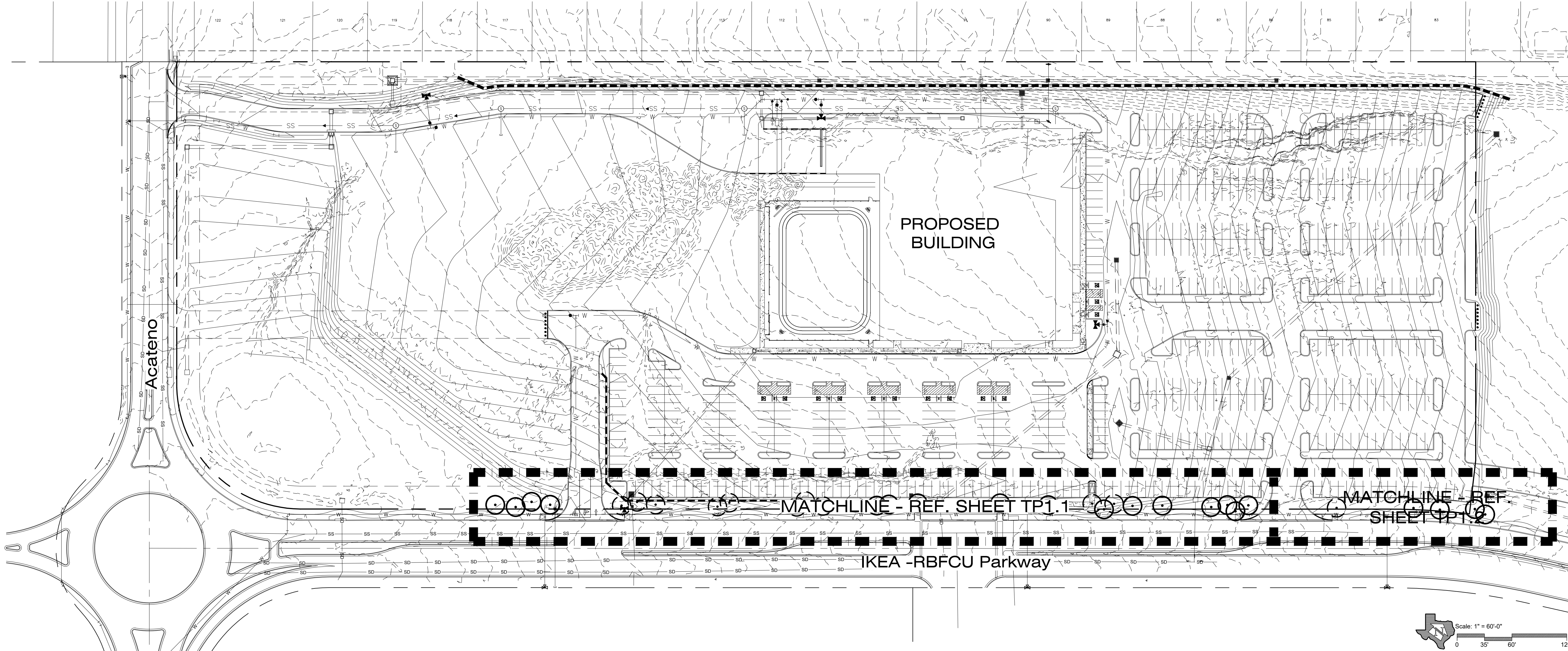


TREE PROTECTION DETAIL  
NOT TO SCALE

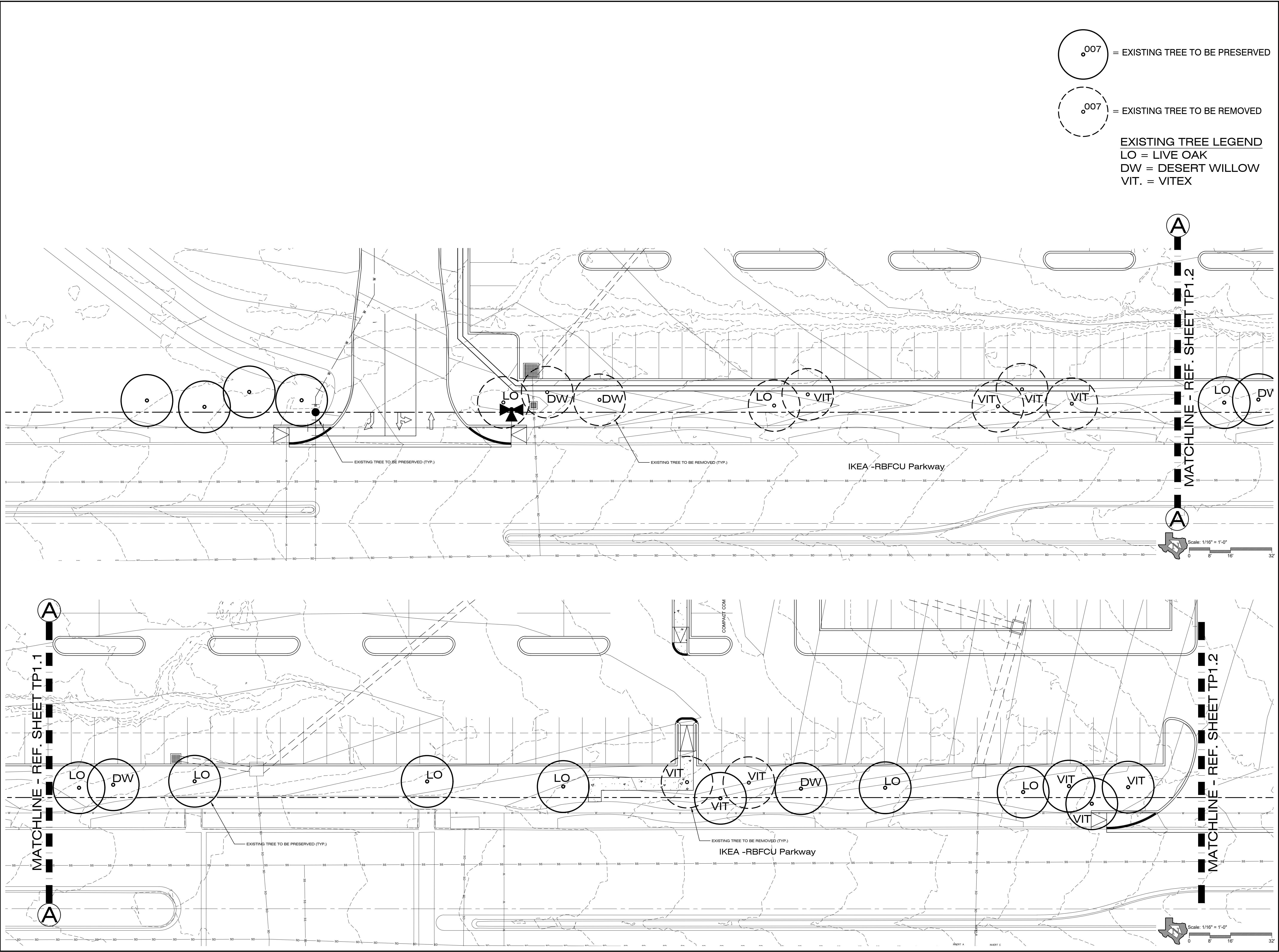
PRUNING NOTES:  
1. ALL PRUNING IS TO BE DONE BY A LICENSED ARBORIST UNDER THE FIELD DIRECTION OF THE OWNER AND/OR LANDSCAPE ARCHITECT.  
2. WHERE FEASIBLE, PRUNE TREES BEFORE COMMENCEMENT OF CONSTRUCTION.  
3. PAINT ALL WOUNDS ON OAK TREES WITHIN 30 MINUTES OF PRUNING.



TREE PRUNING DETAIL  
NOT TO SCALE







007 = EXISTING TREE TO BE PRESERVED

007 = EXISTING TREE TO BE REMOVED

**EXISTING TREE LEGEND**  
LO = LIVE OAK  
DW = DESERT WILLOW  
VIT. = VITEX

H O R I Z O N  
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02.09.24

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REVISIONS  
1. Site Update 02/09/24

PROJECT NUMBER  
2023-149

Drawn By: cd  
Checked By: jr

Sheet Title:  
**ENLARGED TREE  
PRESERVATION  
PLAN**

Sheet Number:

**TP1.1**

Issue Date:  
**November 1, 2023**



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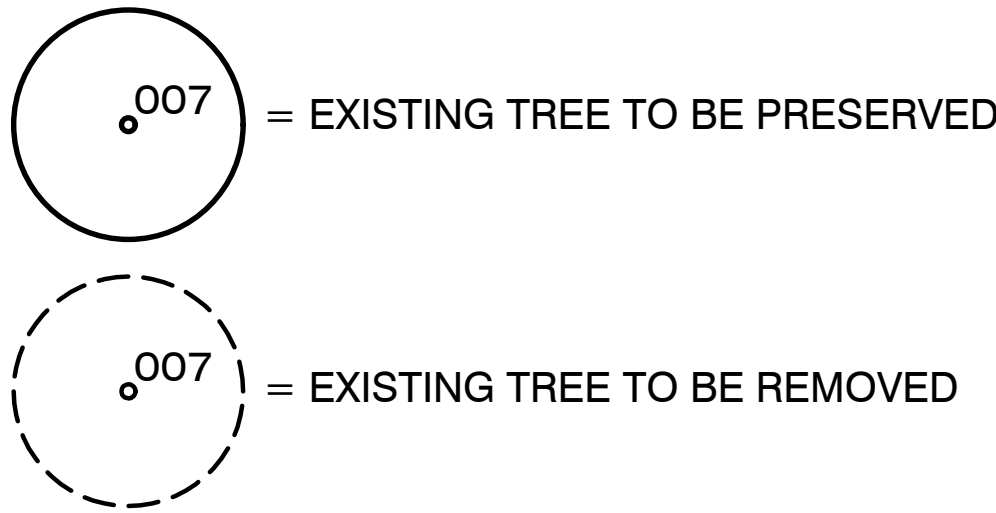
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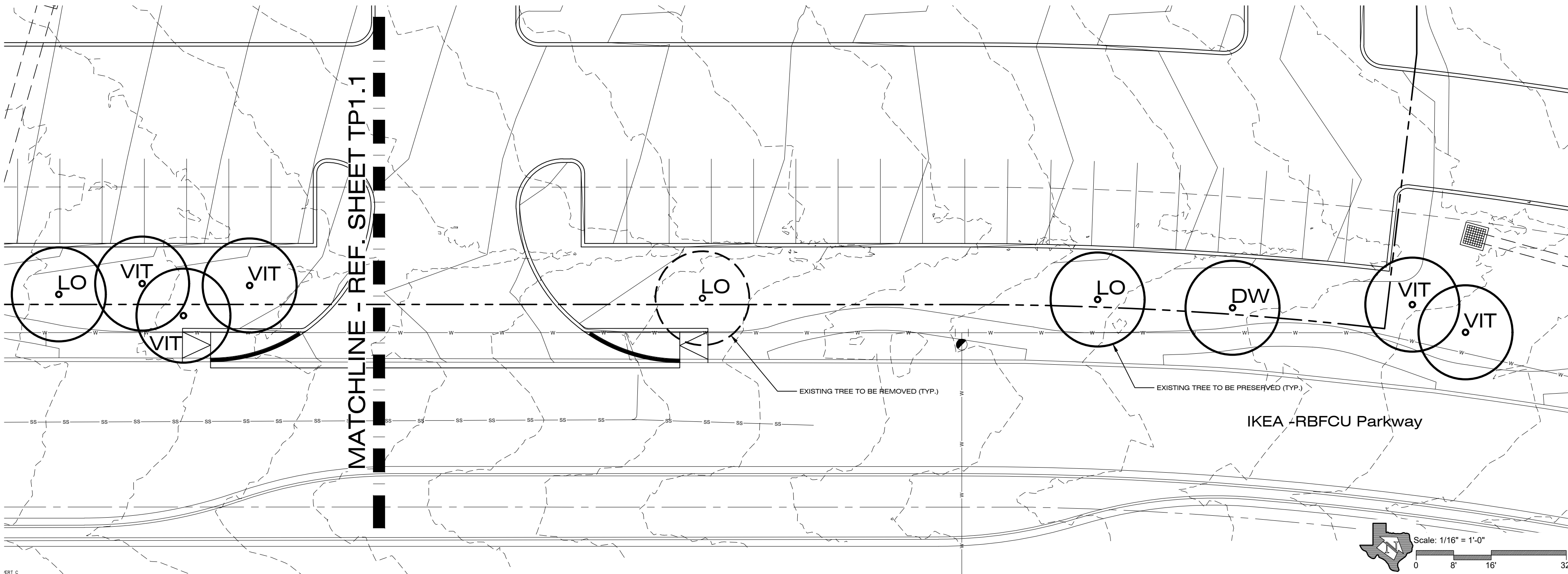
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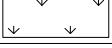


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PLAN

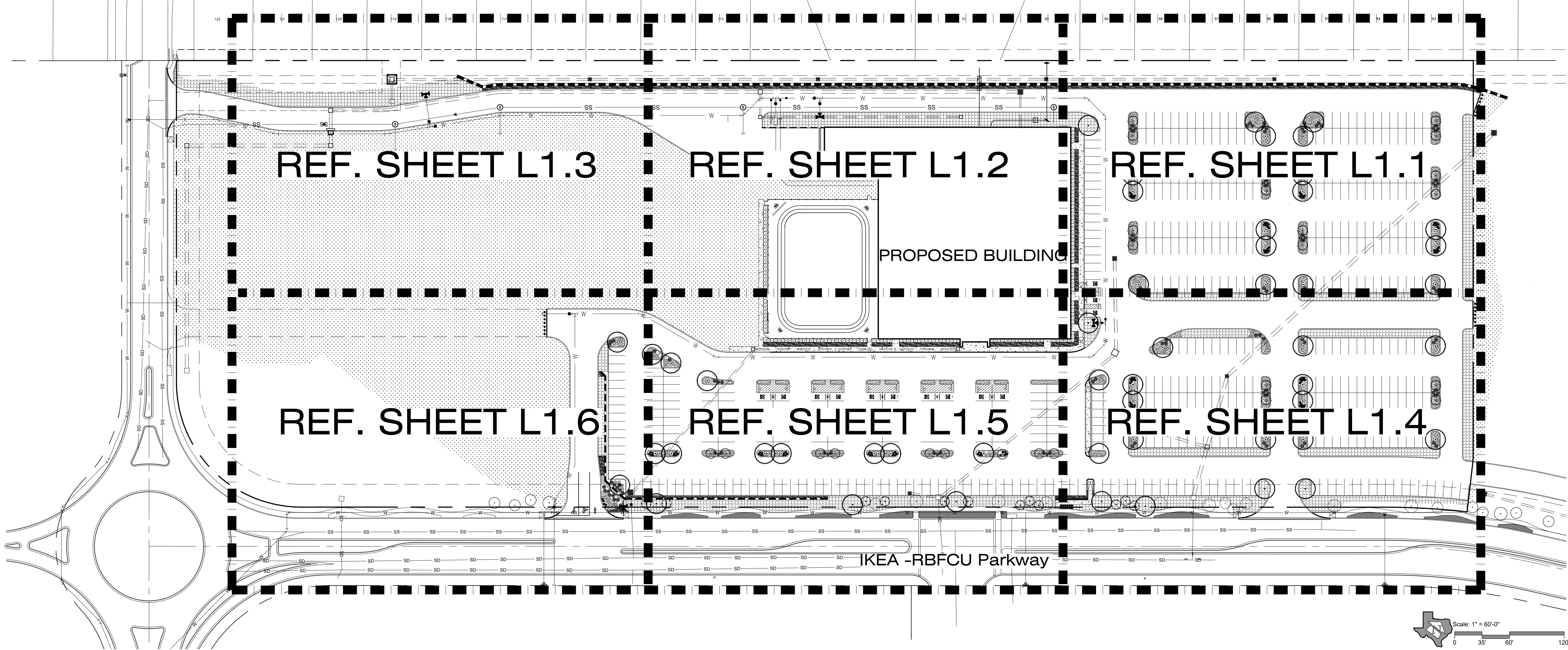
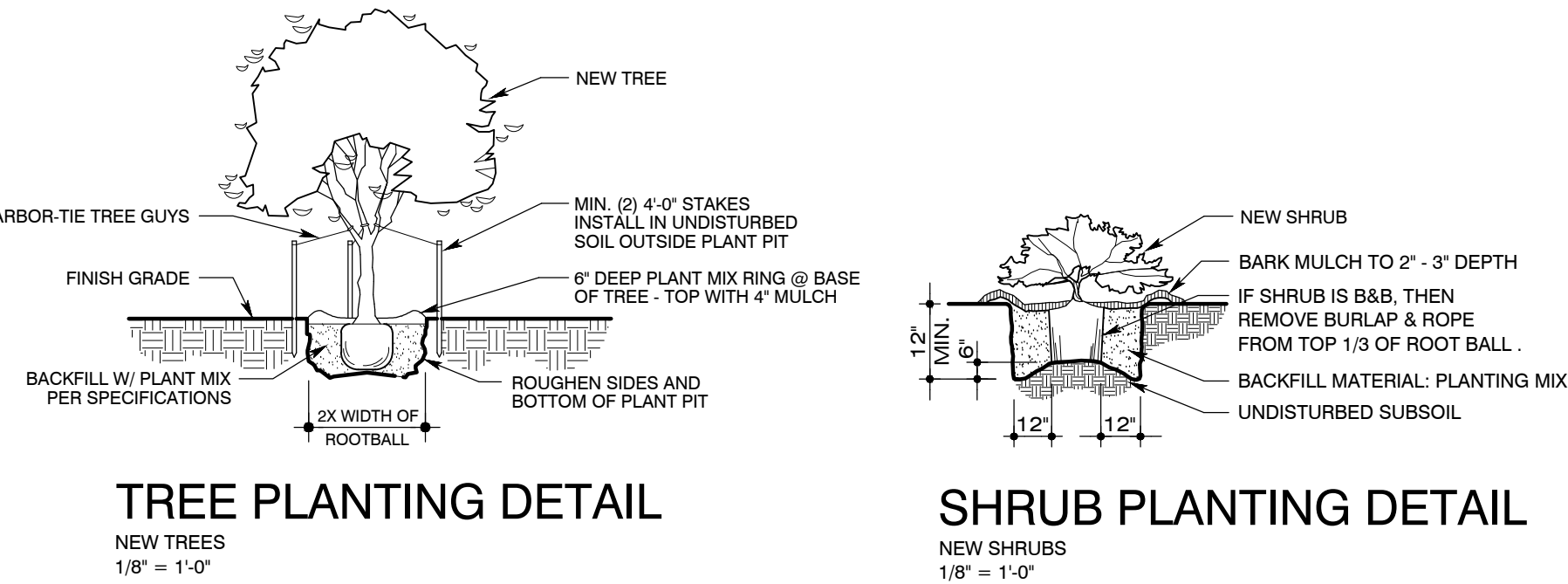
Sheet Number:

TP1.2

Issue Date:  
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PLANT SCHEDULE						SIZE = CALIPER OR SPREAD
SYM.	SCIENTIFIC NAME	COMMON NAME	HGT.	SIZE	CONDITION	REMARKS
TREES						
PM	Platanus mexicana	MEXICAN SYCAMORE	-	3" CAL.	B and B	DECIDUOUS / SINGLE STEM
QV	Quercus virginiana	LIVE OAK	-	3" CAL.	B and B	EVERGREEN / SINGLE STEM
SS	Sophora secundiflora	MOUNTAIN LAUREL	-	2" CAL.	B and B	EVERGREEN / MULTI-TRUNKED
UC	Ulmus crassifolia	CEDAR ELM	-	3" CAL.	B and B	DECIDUOUS / SINGLE STEM
VA	Vitex angus-castus	CHASTE TREE	-	2" CAL.	B and B	DECIDUOUS / MULTI-TRUNKED
SHRUBS						
LGC	Leucophyllum frutescens 'Gn. Cloud'	'GREEN CLOUD' CENIZO		5 GAL.		EVERGREEN / PLANT AT 4'-0" O.C.
LMY	Lantana montevidensis 'New Gold'	'NEW GOLD' LANTANA	-	1 GAL.		PERENNIAL / PLANT AT 30" O.C.
MS	Miscanthus gracillimus	SILVER GRASS		5 GAL.		ACCENT / PLANT AS SHOWN
NT	Nassella tenuissima	INDIAN FEATHER GRASS	-	1 GAL.		ACCENT / PLANT AS SHOWN
RRZ	Rosa 'Radrazz'	'RADRAZZ' KNOCK-OUT ROSE	-	5 GAL.		EVERGREEN / PLANT AT 3'-0" O.C.
SG	Salvia greggii	RED SALVIA	-	3 GAL.		EVERGREEN / PLANT AT 30" O.C.
SL	Salvia leucantha	MEXICAN BUSH SAGE	-	5 GAL.		EVERGREEN / PLANT AT 3'-0" O.C.
GROUNDCOVERS AND GRASSES						
	Cynodon dactylon '419'	'419' HYBRID BERMUDAGRASS	-		SOLID SOD	SEE SPECIFICATIONS
	Cynodon dactylon 'Blackjack'	'BLACKJACK' BERMUDAGRASS	-		HYDROMULCH	SEE SPECIFICATIONS
		DECOMPOSED GRANITE	-			APPLY TO 3" COMPACTED DEPTH OVER SUBGRADE W/ GEO-TEXTILE WEED BARRIER AND PRE-EMERGENT HERBICIDE. FILL UNDER ADJACENT SHRUBS.
		3" - 4" 'TEXAS BLEND' RIVER ROCK	-			APPLY TO 4" DEPTH OVER COMPACTED SUBGRADE W/ GEO-TEXTILE WEED BARRIER AND PRE-EMERGENT HERBICIDE. FILL UNDER ADJACENT SHRUBS.

- GENERAL NOTES:
- REFER TO SPECIFICATIONS FOR ALL CONTRACT PLANTING.
  - INSTALL APPROVED IMPORTED PLANTING MIX TO MIN. DEPTH OF 6" IN ALL AREAS SCHEDULED AS LANDSCAPE PLANTING AREAS.
  - INSTALL APPROVED IMPORTED TOPSOIL TO 4" DEPTH IN ALL TURFGRASS AREAS.
  - CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES IN THE FIELD PRIOR TO INSTALLATION AND MUST REPORT ANY DEVIATION IN SITE CONDITIONS TO THE LANDSCAPE ARCHITECT BEFORE PROCEEDING WITH WORK IN THE AFFECTED AREA.
  - WHERE SHOWN ON THESE PLANS, UTILITY INFORMATION IS PROVIDED FOR REFERENCE ONLY. REF. CIVIL AND MEP PLANS FOR ALL UTILITY INFORMATION.
  - VERIFY LOCATION AND DEPTH OF ALL EXISTING AND PROPOSED UTILITIES PRIOR TO ANY EXCAVATION. IN THE EVENT POTENTIAL CONFLICT(S) OCCUR BETWEEN UTILITIES AND LANDSCAPE IMPROVEMENTS, IMMEDIATELY CEASE WORK IN THE AFFECTED AREA, REPORT THE CONFLICT(S) TO THE OWNER'S REPRESENTATIVE, AND DO NOT PROCEED UNTIL RECEIPT OF SPECIFIC WRITTEN DIRECTION.
- URBAN DEER NOTES:
- AT THE TIME THESE DOCUMENTS WERE PREPARED THE LANDSCAPE ARCHITECT WAS NOT AWARE OF A LOCAL URBAN DEER POPULATION.
  - IN THE EVENT AN URBAN DEER POPULATION IS DISCOVERED, CONTRACTOR IS SOLELY RESPONSIBLE FOR PROTECTING ALL NEWLY-INSTALLED PLANTS THROUGH THE 30-DAY MAINTENANCE PERIOD.
  - APPLY "LIQUID FENCE" (OR APPROVED EQUAL) TO ALL PLANTS AS NEEDED TO DISCOURAGE BROWSING BY DEER.
  - ANY NEWLY-INSTALLED PLANTS EATEN OR BROWSED BY DEER PRIOR TO THE EXPIRATION OF THE 30-DAY MAINTENANCE PERIOD SHALL BE REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER.
- OVERHEAD ELECTRIC NOTES:
- ALL PROPOSED LARGE SPECIES TREES (AS DEFINED BY THE UNIFIED DEVELOPMENT CODE IN EFFECT HEREOF) SHALL BE PLANTED NO CLOSER THAN 20' TO ALL OVERHEAD ELECTRIC UTILITY LINES.
  - CONTRACTOR IS SOLELY RESPONSIBLE FOR FIELD LOCATING ALL OVERHEAD ELECTRIC UTILITY LINES AND ENSURING THAT NO LARGE SPECIES TREES ARE PLANTED WITHIN 20' OF ANY OVERHEAD ELECTRIC UTILITY LINES.
  - WHERE CITY INSPECTORS FIND ANY PROPOSED LARGE SPECIES TREES TO BE IN VIOLATION OF PROXIMITY TO OVERHEAD ELECTRIC UTILITY LINES, THE CONTRACTOR SHALL RELOCATE TREES AT NO ADDITIONAL COST TO THE OWNER.
- TEMPORARY IRRIGATION NOTES:
- PROVIDE TEMPORARY IRRIGATION TO SODDED OR SEEDED AREAS WHERE SHOWN ON PLAN AND NOT SCHEDULED TO RECEIVE PERMANENT IRRIGATION.
  - WHERE TEMPORARY IRRIGATION IS REQUIRED, PROVIDE TEMPORARY IRRIGATION FOR A MIN. PERIOD OF 60 DAYS OR UNTIL A GRASS STAND IS FULLY ESTABLISHED (AS DETERMINED SOLELY BY THE OWNER'S REPRESENTATIVE).



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REGISTERED LANDSCAPE ARCHITECT  
STATE OF TEXAS  
2015  
02.09.24

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Dick's Sporting Goods House of Sports

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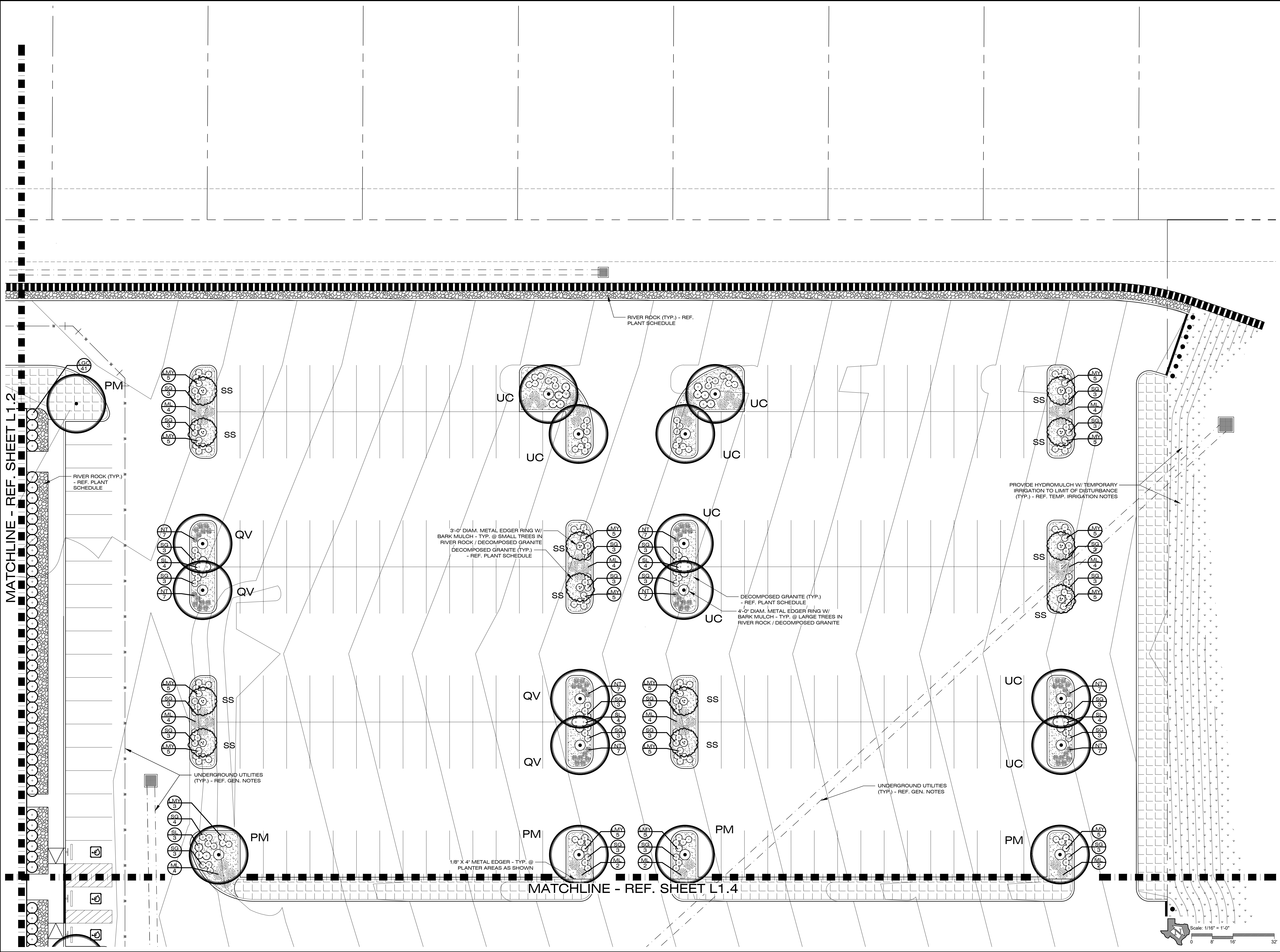
Drawn By: jr  
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Sheet Title:  
OVERALL LANDSCAPE PLANTING PLAN

Sheet Number:  
L1.0

Issue Date:  
November 1, 2023





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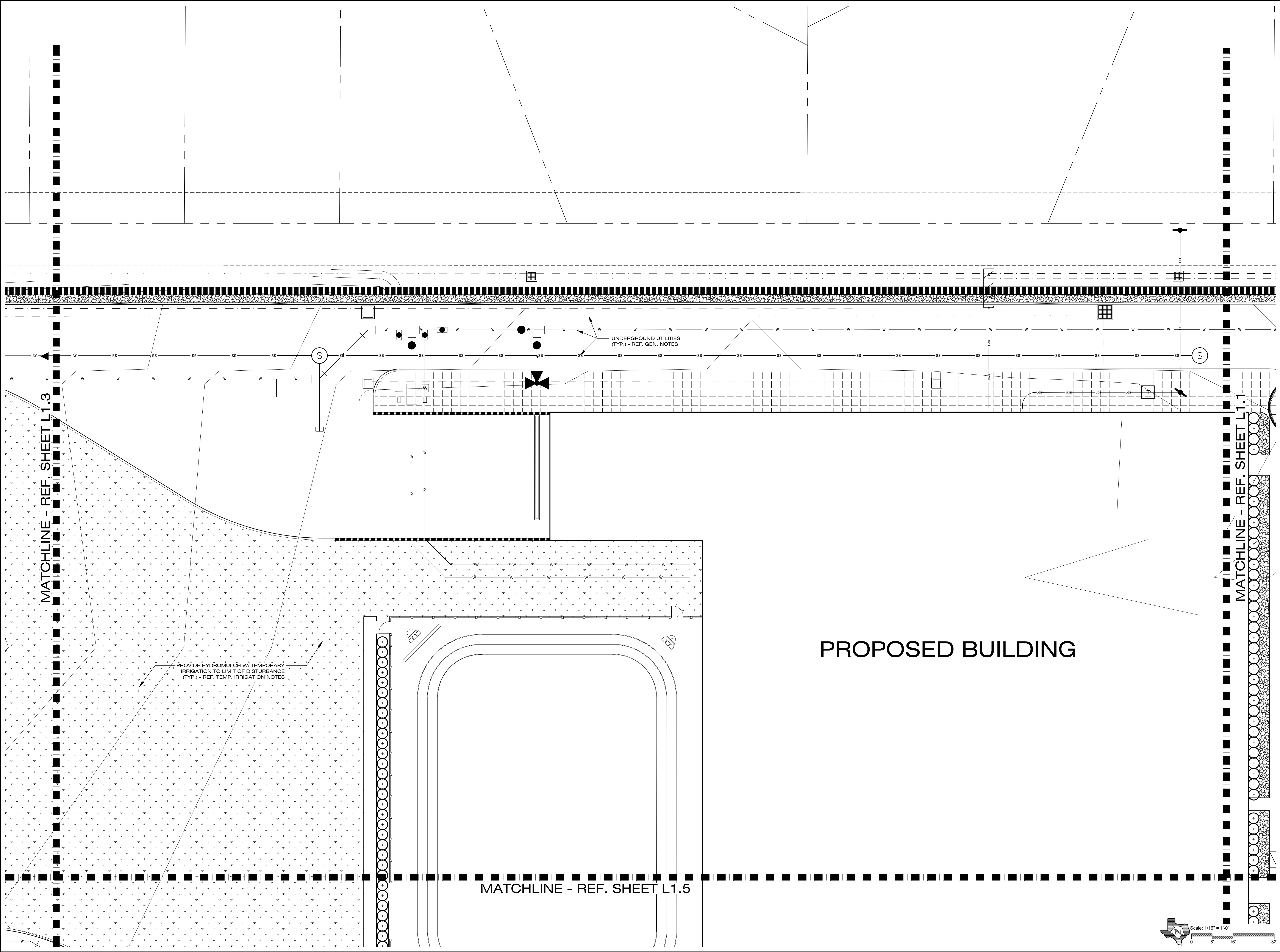
Sheet Title:  
ENLARGED  
LANDSCAPE  
PLANTING PLAN

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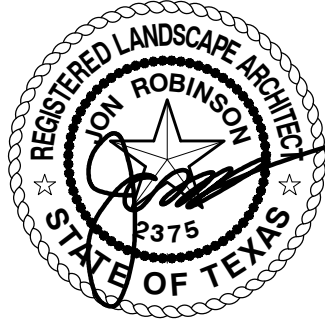
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Sheet Title:  
ENLARGED  
LANDSCAPE  
PLANTING PLAN

Sheet Number:

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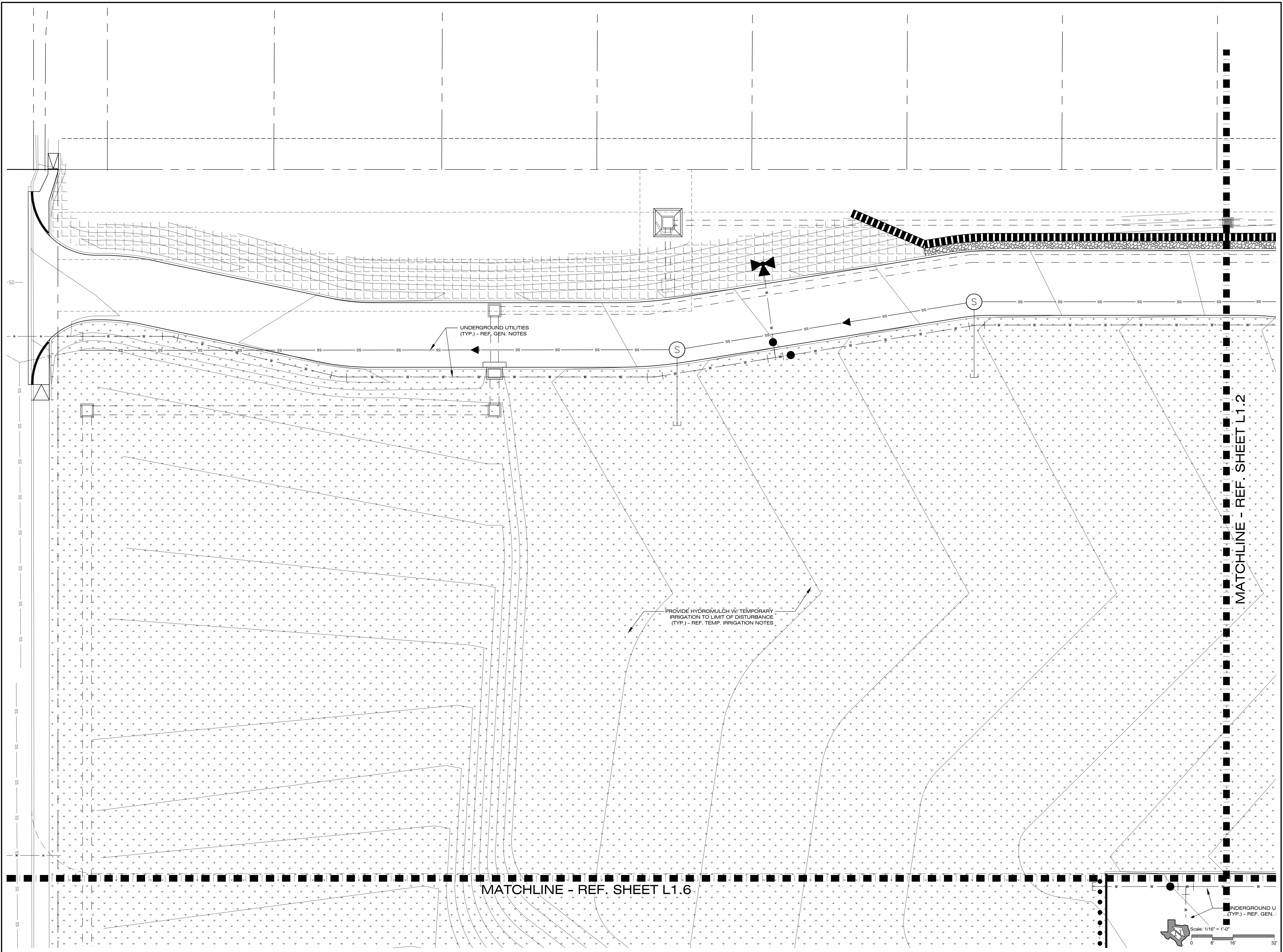
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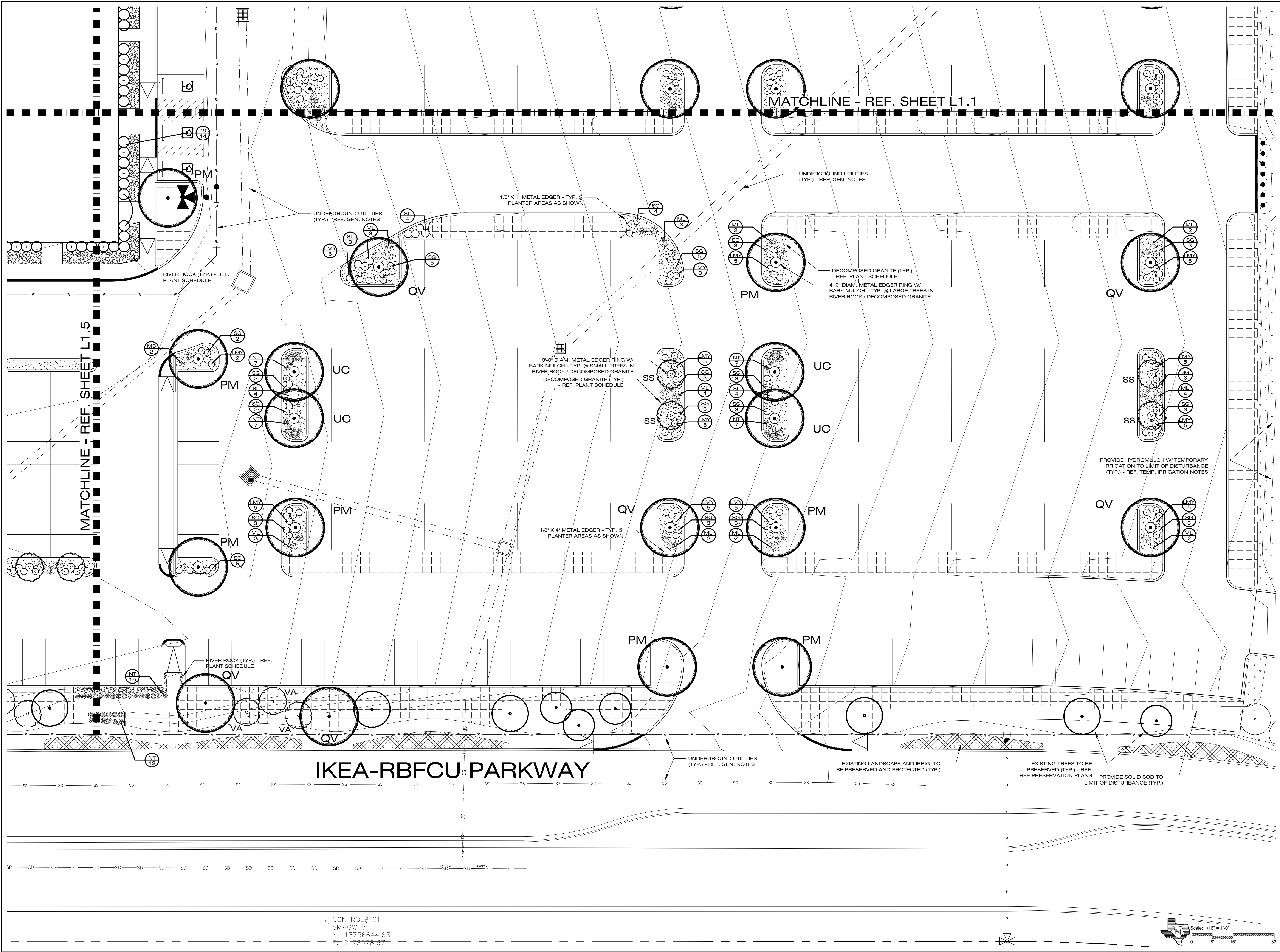
# ENLARGED LANDSCAPE PLANTING PLAN

# L1.3

November 1, 2023







CONTROL# 61  
SMAGWTV  
N: 13756644.63  
E: 2178578.67

HORIZON  
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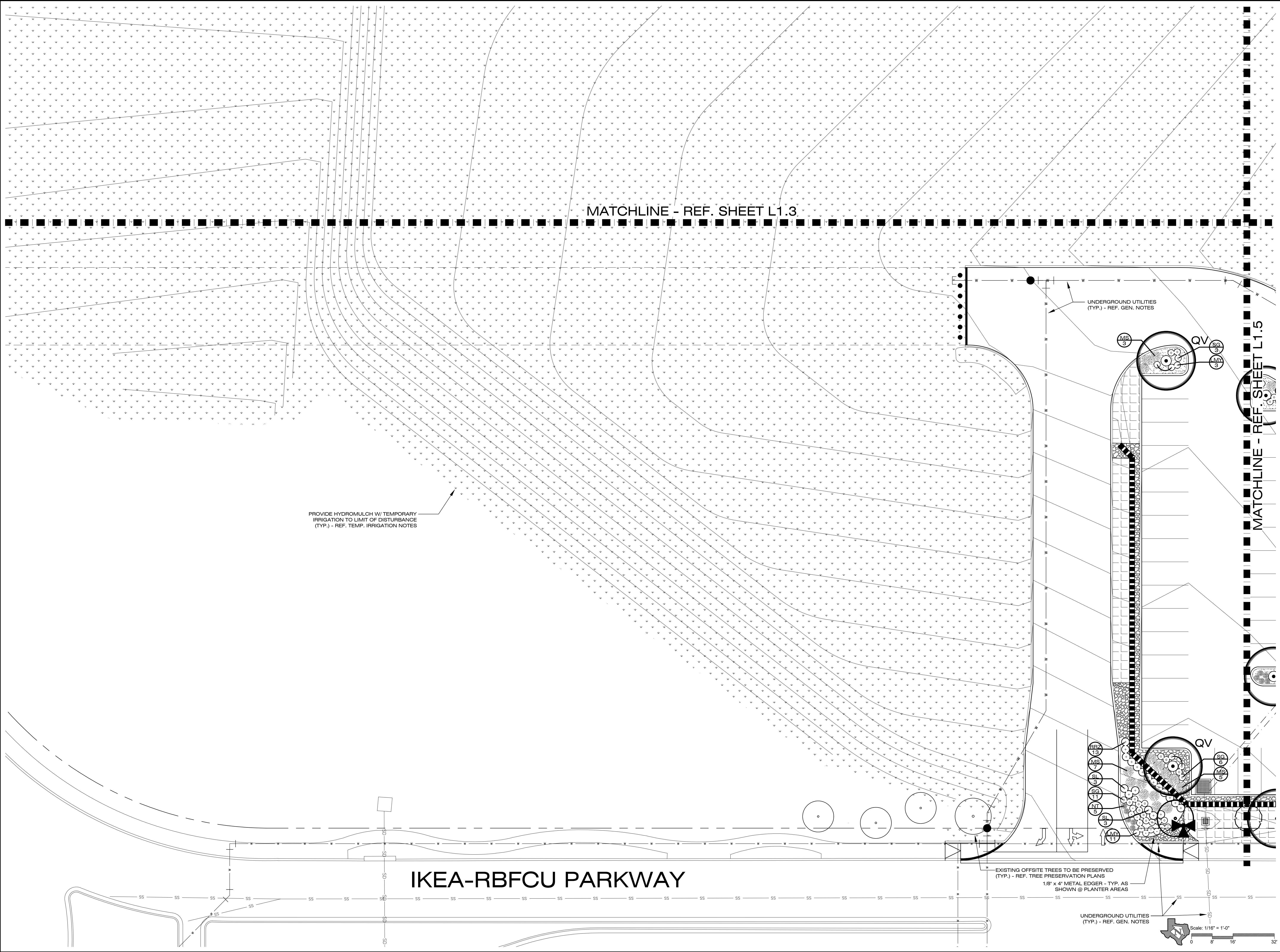
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## November 1, 2023

PRESSURE REQUIREMENT CALCULATIONS @ ZONE No. 14	
DESIGN STATISTICS FOR CALCULATIONS	
Total Zone Flow:	42.3 g.p.m.
Electric Valve Size:	1.5"
Static Pressure Less 10% (static @ 65 psi):	58.5 p.s.i.
ACCUMULATIVE LOSSES FROM CITY MAIN TO FURTHEST HEAD	
Sprinkler head requirement:	30 p.s.i.
Zone Pipe/Fitting Loss:	2.25 p.s.i.
1.5" Electric Valve Loss:	2.2 p.s.i.
Elevation Net Loss (+7 FT.):	3.03 p.s.i.
System Mainline Loss (2.5" Sch-40 Loop Main):	2.06 p.s.i.
Backflow Preventer Loss ( 2" ):	10.5 p.s.i.
Water Meter Loss ( 1.5" ):	3.9 p.s.i.
Master Electric Valve Loss ( 2" ):	0.8 p.s.i.
Type K Copper Service Loss:	
Total Net Loss:	24.74 p.s.i.
Design Pressure:	54.74 p.s.i.
Notes: System requires a minimum of 55 psi static pressure for system to operate properly. Irrigation Contractor shall conduct on site pressure test to verify site pressure prior to starting work. Contractor shall notify Owner's Representative of pressure deficiencies or any other on site problems that may alter the effectiveness of the system. Pipe has been size to insure that velocity does not exceed 5 FPS. do not change pipe size in the field without consulting system designer.	

## 5 CRITICAL LOSS CHART

FARTHEST ZONE

PRESSURE REQUIREMENT CALCULATIONS @ ZONE No. 22	
DESIGN STATISTICS FOR CALCULATIONS	
Total Zone Flow:	44.0 g.p.m.
Electric Valve Size:	1.5"
Static Pressure Less 10% (static @ 65 psi):	58.5 p.s.i.
ACCUMULATIVE LOSSES FROM CITY MAIN TO FURTHEST HEAD	
Sprinkler head requirement:	30 p.s.i.
Zone Pipe/Fitting Loss:	3.38 p.s.i.
1.5" Electric Valve Loss:	2.2 p.s.i.
Elevation Net Loss (+8 FT.):	3.46 p.s.i.
System Mainline Loss (2.5" Sch-40 Loop Main):	2.06 p.s.i.
Backflow Preventer Loss ( 2" ):	10.5 p.s.i.
Water Meter Loss ( 1.5" ):	3.9 p.s.i.
Master Electric Valve Loss ( 2" ):	0.8 p.s.i.
Type K Copper Service Loss:	
Total Net Loss:	26.31 p.s.i.
Design Pressure:	56.31 p.s.i.
Notes: System requires a minimum of 57 psi static pressure for system to operate properly. Irrigation Contractor shall conduct on site pressure test to verify site pressure prior to starting work. Contractor shall notify Owner's Representative of pressure deficiencies or any other on site problems that may alter the effectiveness of the system. Pipe has been size to insure that velocity does not exceed 5 FPS. do not change pipe size in the field without consulting system designer.	

## 4 CRITICAL LOSS CHART

LARGEST ZONE

TYPICAL WEEKLY SCHEDULE BASED ON PRECIPITATION RATE				
Precipitation Rate (in/hr)	Water Desired (in/wk)	Time/Cycle (min)	No. of Zones	Total Time * Min. Hrs.
Turf Rotor Zone .64	80	107.0	9	963 16.05
MP Rotator Spray .44	80			
Turf Drip Zones .85	80	88.0	5	440 7.35
Drip Zones .55	80			
Tree Bubblers 3.87	80	12.0	5	60 1.0
Total System Hours of Operation Per Week				24.4

\* IT WILL BE NECESSARY TO WATER MULTIPLE ZONES AT ONE TIME TO MEET WATERING WINDOW. A TYPICAL SCHEDULE WOULD ALLOW WATERING TO OCCUR TWO TIMES PER WEEK. TOTAL WATERING TIME WOULD BE DIVIDED BY THE NUMBER OF WATERING DAYS. THIS SCHEDULE IS DESIGNED FOR SUMMER WATER USAGE AND ESTABLISHMENT OF NEW PLANTING.

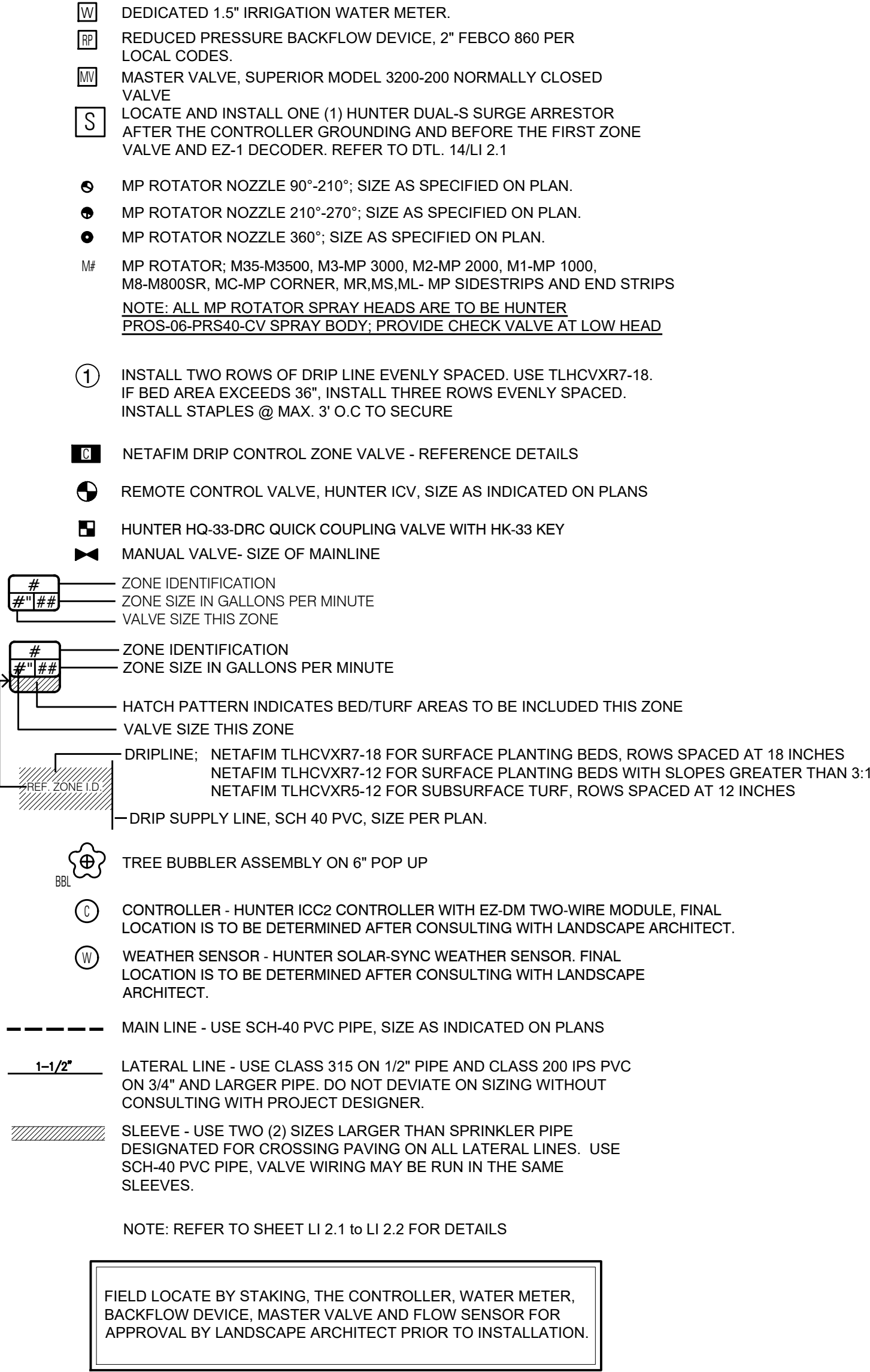
## 3 VALVE SCHEDULE

- CONSTRUCTION NOTES:
- IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING HIMSELF FAMILIAR WITH THE SPECIFICATIONS AND ALL SUBMITTAL REQUIREMENTS. IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO NOTIFY THE OWNERS REPRESENTATIVE FOR SITE INSPECTIONS AS SPECIFIED IN THE SPECIFICATIONS. FAILURE TO NOTIFY THE OWNER'S REPRESENTATIVE DOES NOT RELIEVE THE CONTRACTOR FROM INSPECTION APPROVAL AND WILL REQUIRE THE CONTRACTOR TO UNCOVER WORK AS REQUIRED FOR APPROVAL AT THE COST OF THE CONTRACTOR. IRRIGATION CONTRACTOR IS TO INFORM OWNER'S REPRESENTATIVE OF THE START DATE OF WORK.
  - THE IRRIGATION CONTRACTOR IS REQUIRED BY LAW TO NOTIFY TEXAS ONE CALL (800-245-4545) 72 HOURS PRIOR TO ANY EXCAVATION. IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING HIMSELF FAMILIAR WITH ALL UNDERGROUND UTILITIES, PIPES AND STRUCTURES. IRRIGATION CONTRACTOR SHALL TAKE SOLE RESPONSIBILITY FOR ANY COST INCURRED DUE TO DAMAGE OF SAID UTILITIES WHETHER OR NOT TEXAS ONE CALL IS NOTIFIED.
  - DO NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WITHOUT VERIFYING ACTUAL ON-SITE WATER PRESSURE FROM THE SOURCE. DO NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WHEN IT IS OBVIOUS THAT UNKNOWN OBSTRUCTIONS AND/OR GRADE DIFFERENCES EXIST THAT MAY NOT HAVE BEEN KNOWN DURING DESIGN. SUCH CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE. THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATION.
  - IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COORDINATION WITH OTHER CONTRACTORS AS REQUIRED TO ACCOMPLISH IRRIGATION INSTALLATION.
  - DUE TO SCALE OF DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS SLEEVES, ETC., WHICH MAY BE REQUIRED. IRRIGATION CONTRACTOR SHALL CAREFULLY INVESTIGATE THE STRUCTURAL AND FINISHED CONDITIONS AFFECTING ALL OF HIS WORK AND PLAN HIS WORK ACCORDINGLY, FURNISHING SUCH FITTINGS, ETC., AS MAY BE REQUIRED TO MEET SUCH CONDITIONS. DRAWINGS ARE GENERALLY DIAGRAMMATIC AND INDICATIVE OF THE WORK TO BE INSTALLED. THE WORK SHALL BE INSTALLED IN SUCH A MANNER AS TO AVOID CONFLICTS BETWEEN IRRIGATION SYSTEM, PLANTING AND ARCHITECTURAL FEATURES. THIS DESIGN IS DIAGRAMMATIC. ALL PIPING, VALVES, ETC., SHOWN WITHIN PAVED AREAS IS FOR DESIGN CLARIFICATION ONLY AND SHALL BE INSTALLED IN PLANTING AREAS AND WITHIN PROPERTY LINES.
  - DURING INSTALLATION IT IS THE IRRIGATION CONTRACTOR'S RESPONSIBILITY TO COORDINATE PIPING WITH THE LANDSCAPE SUBCONTRACTOR TO AVOID CONFLICT WITH PROPOSED PLANTING. IT WILL BE THE RESPONSIBILITY OF THE IRRIGATION SUBCONTRACTOR TO MOVE PIPING TO ALLOW PROPER PLACEMENT OF PLANT MATERIAL. THE IRRIGATION CONTRACTOR SHALL MAKE MINOR ADJUSTMENTS TO ENSURE PROPER COVERAGE AT NO ADDITIONAL COST TO THE OWNER.
  - NO MACHINE TRENCHING IS TO BE DONE WITHIN THE DRIPLINE OF EXISTING TREES. TRENCHING IS TO BE DONE BY HAND, AIR-SPADE OR BY TUNNELING UNDER ROOT SYSTEM BY METHOD APPROVED BY LANDSCAPE ARCHITECT. PIPING LAYOUT IS DIAGRAMMATIC AND PIPING SHALL BE ROUTED AROUND EXISTING TREES AS POSSIBLE TO AVOID DAMAGE TO THE ROOT SYSTEMS. DO NOT CUT ANY ROOT OVER 3/4" DIAMETER UNLESS APPROVAL FROM THE LANDSCAPE ARCHITECT IS FIRST OBTAINED. ANY CUTS MADE SHALL BE CLEAN AND WITHOUT FRAYED ENDS.
  - IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR SLEEVES AND CHASES WHEREVER PIPING OR CONDUIT PASSES, UNDER ALL PAVING, THROUGH WALLS, ETC. ALL SLEEVE LOCATIONS MAY NOT BE SHOWN ON PLAN. COORDINATE WITH ARCHITECTURAL AND CIVIL DRAWINGS, GENERAL CONTRACTOR AND OTHER SUBCONTRACTORS AS REQUIRED. ALL SLEEVE AND CHASE LOCATIONS ARE NOT NOTED ON PLAN. ALL SLEEVES 4" OR LESS SHALL BE SCH-40 PVC. ALL SLEEVES 6" OR GREATER SHALL BE CLASS-200 PVC. ALL SLEEVES TO BE SIZED TWICE THE DIAMETER OF PIPE OR COMBINATION OF PIPES ENCLOSED WITHIN THE SLEEVE.
  - CONFIRM STATIC WATER PRESSURE AT LEAST 7 DAYS BEFORE BEGINNING WORK. IF STATIC WATER PRESSURE IS LESS THAN STATED IN PRESSURE CALCULATIONS DO NOT PROCEED UNTIL DIRECTED SO BY THE LANDSCAPE ARCHITECT. IF ACTUAL SITE STATIC PRESSURE EXCEEDS DESIGN PRESSURE BY 15 P.S.I. IN ANY ZONE, A PRESSURE REDUCING VALVE SHALL BE INSTALLED. REFER TO DETAILS FOR MODEL.
  - ADJUSTABLE FLOW CONTROLS SHALL BE REQUIRED ON CIRCUIT REMOTE CONTROL VALVE. PRESSURE AT ANY POINT WITHIN A ZONE SHALL NOT VARY BY MORE THAN 10% FROM THE DESIGN SPRINKLER OPERATING PRESSURE. SEE SPECIFICATIONS FOR TESTING.
  - THE CONTRACTOR SHALL BE A REGISTERED LICENSED IRRIGATOR IN THE STATE OF TEXAS. CONTRACTOR MUST CONFORM TO ALL CODES AS STATED IN SECTION 344 OF THE TEXAS WATER CODE AS OUTLINED BY TCEQ.
  - OBTAIN COVERAGE TEST APPROVAL FROM OWNER'S REPRESENTATIVE PRIOR TO PLANTING, SODDING OR SEEDING.
  - ALL UNDESIGNATED END LATERAL PIPING SHALL BE 1/2" IN SPRAY ZONES AND 3/4" IN ROTOR ZONES.
  - SPRINKLER HEAD SPACING SHALL NOT EXCEED 50% OF SPRAY DIAMETER BASED ON MANUFACTURERS OPERATING SPECIFICATIONS. SPRINKLER HEAD SPACING SHALL BE DESIGNED FOR HEAD-TO-HEAD COVERAGE OR HEADS SHALL BE SPACED AS PER MANUFACTURERS RECOMMENDATIONS AND ADJUSTED FOR PREVAILING WINDS. THE SYSTEM SHALL BE DESIGNED SO THAT IRRIGATION IS NOT APPLIED TO VEHICULAR TRAFFIC LANES, OTHER PAVEMENT OR STRUCTURES.
  - ALL ROTORS SHALL BE LOCATED 12" FROM PAVEMENT, CURBS OR EDGE OF STRUCTURE. ALL SPRAY HEADS SHALL BE LOCATED 6" FROM PAVEMENT, CURBS OR EDGE OF STRUCTURE.
  - VALVE AND CIRCUITS SHALL BE SEPARATED BASED ON WATER USE, SO THAT TURF AREAS ARE WATERED SEPARATELY FROM SHRUB AND GROUND COVER AREAS. IRRIGATION HEADS IN THE TURF AREAS WILL BE VALVED SEPARATELY FROM SHRUB AND/OR GROUND COVER AREAS. IT IS RECOMMENDED THAT SEASONAL COLOR AREAS BE WATERED SEPARATELY. UNDER NO CIRCUMSTANCES ARE ZONE TYPES TO BE COMBINED I.E. ROTARY HEADS WITH SPRAYS, TURF AREAS WITH PLANTING BEDS.
  - IT IS THE CONTRACTORS RESPONSIBILITY TO CONFIRM STATIC PRESSURE ON SITE PRIOR TO STARTING WORK. REFER TO NOTES #9 AND #10.
  - IT IS THE IRRIGATION CONTRACTOR'S RESPONSIBILITY TO SECURE ALL REQUIRED PERMITS AND PAY ALL ASSOCIATED FEES UNLESS OTHERWISE NOTED. ALL LOCAL CODES SHALL PREVAIL OVER ANY DISCREPANCIES CONTAINED IN THESE DOCUMENTS.
  - UNSLEEVED PIPES MAY BE SHOWN UNDER PAVEMENT FOR GRAPHIC CLARITY. INSTALL PIPES IN ADJACENT SLEEVES WITHIN LANDSCAPE AREAS.
  - 120 VAC ELECTRICAL POWER SOURCE AT CONTROLLER LOCATION SHALL BE PROVIDED BY OTHERS. THE IRRIGATION CONTRACTOR SHALL MAKE THE FINAL CONNECTION FROM THE ELECTRICAL SOURCE TO THE CONTROLLER WITH A HARDWIRE CONNECTION APPROVED AND INSTALLED BY A LICENSED ELECTRICIAN.
  - SPRINKLER HEADS SHALL HAVE MATCHED PRECIPITATION RATES WITHIN EACH CONTROL VALVE CIRCUIT.
  - SERVICEABLE CHECK VALVES SHALL BE REQUIRED ADJACENT TO PAVED AREAS WHERE ELEVATION DIFFERENCES MAY CAUSE LOW HEAD DRAINAGE.
  - ALL AUTOMATIC IRRIGATION SYSTEMS SHALL BE EQUIPPED WITH A CONTROLLER CAPABLE OF DUAL OR MULTIPLE PROGRAMMING. CONTROLLERS SHALL HAVE MULTIPLE CYCLE START CAPACITY AND A FLEXIBLE CALENDAR PROGRAM, INCLUDING THE CAPABILITY OF BEING SET TO WATER EVERY FIVE DAYS. ALL AUTOMATIC IRRIGATION SYSTEMS SHALL BE EQUIPPED WITH A RAIN SENSOR SHUT-OFF DEVICE.
  - ALL IRRIGATION WIRES SHALL BE UL LISTED FOR DIRECT UNDERGROUND BURIAL AND SHALL BE SIZED PER THE MANUFACTURER'S RECOMMENDATIONS. 3M-DBY WATERPROOF CONNECTORS TO BE USED ON ALL WIRE CONNECTIONS. SUBMIT SAMPLE TO LANDSCAPE ARCHITECT.
  - ALL IRRIGATION HEADS SHALL BE ADJUSTED TO MINIMIZE OVER-SPRAY ONTO ALL IMPERVIOUS SURFACES.
  - ALL PIPE CONNECTIONS SHALL BE PRIMED WITH AN APPROVED COLOR PRIMER BEFORE BEING CHEMICAL WELDED.
  - AFTER AWARD OF CONTRACT AND BEFORE ANY IRRIGATION SYSTEM MATERIALS ARE ORDERED FROM SUPPLIERS OR DELIVERED TO THE JOB SITE, SUBMIT TO THE OWNER A COMPLETE LIST OF ALL IRRIGATION SYSTEM MATERIALS, OR PROCESSES PROPOSED TO BE FURNISHED AND INSTALLED AS PART OF THIS CONTRACT. THE LANDSCAPE ARCHITECT OR OWNER'S AUTHORIZED REPRESENTATIVE WILL ALLOW NO SUBSTITUTIONS WITHOUT PRIOR WRITTEN ACCEPTANCE. MANUFACTURER'S WARRANTIES SHALL NOT RELIEVE THE CONTRACTOR OF HIS LIABILITY UNDER THE GUARANTEE. SUCH WARRANTIES SHALL ONLY SUPPLEMENT THE GUARANTEE.
  - ALL TEMPORARY IRRIGATION SHALL BE DESIGNED PRIOR TO INSTALLATION BY A STATE OF TEXAS LICENSED IRRIGATOR. THE DESIGN IS TO BE SUBMITTED FOR APPROVAL PRIOR TO COMMENCING INSTALLATION OF THE TEMPORARY SYSTEM.
  - IRRIGATION CLOSEOUT DOCUMENTS SHALL INCLUDE A WATER BUDGET. A LAMINATED COPY OF THE WATER BUDGET SHALL BE PERMANENTLY INSTALLED INSIDE THE IRRIGATION CONTROLLER DOOR.

A. CHART CONTAINING ZONE NUMBER, PRECIPITATION RATE AND GPM.

B. LOCATION OF EMERGENCY IRRIGATION SYSTEM SHUT-OFF VALVE.

## 2 NOTES



STATEMENT OF IRRIGATION DESIGN STANDARDS CONFORMITY:  
This plan is complete and conforms to the design and installation parameters of the irrigation design and equipment standards set out by the City of Live Oak, TX and TCEQ (Texas Commission on Environmental Quality).

*Wade O. Radlett*  
Wade O. Radlett TX LI # 22397

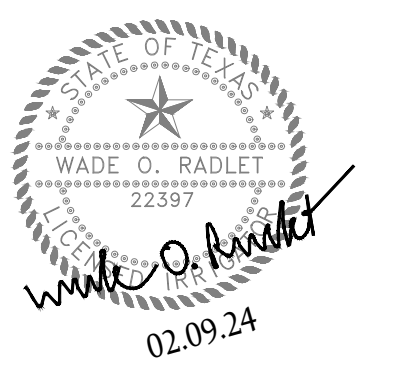
- SPECIAL NOTES:
- THE IRRIGATION CONTRACTOR SHALL COMPLY WITH ALL LOCAL AND STATE MANDATED IRRIGATION ORDINANCES AND CODES AND WILL SECURE ALL REQUIRED PERMITS.
  - ALL WIRES, CONTROL VALVES, AND PRESSURIZED WATER SUPPLY LINES SHALL NOT BE LOCATED WITHIN THE EXISTING ROW OR OUTSIDE PROPERTY BOUNDARIES.

"Irrigation in Texas is regulated by the Texas Commission on Environmental Quality (TCEQ),  
MC-178, PO Box 13087, Austin, Texas 78711-3087  
TCEQ's website is: [www.tceq.state.tx.us](http://www.tceq.state.tx.us)"

## HORIZON

DESIGN AND DEVELOPMENT

PLANNING, LANDSCAPE ARCHITECTURE  
DEVELOPMENT CONSULTING  
16414 San Pedro Ave., Suite 630  
San Antonio, Texas 78232  
210.831.8564 jrobinson@horizondesign-tx.com



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PROJECT  
Dick's Sporting Goods  
House of Sports

IKEA / RFBCU Pkwy.  
Live Oak TX 78233

REVISIONS

PROJECT NUMBER  
2023-149

Drawn By: ah  
Checked By: wr

Sheet Title:  
IRRIGATION  
NOTES AND  
LEGEND

Sheet Number:

L1.0

Issue Date:

November 1, 2023







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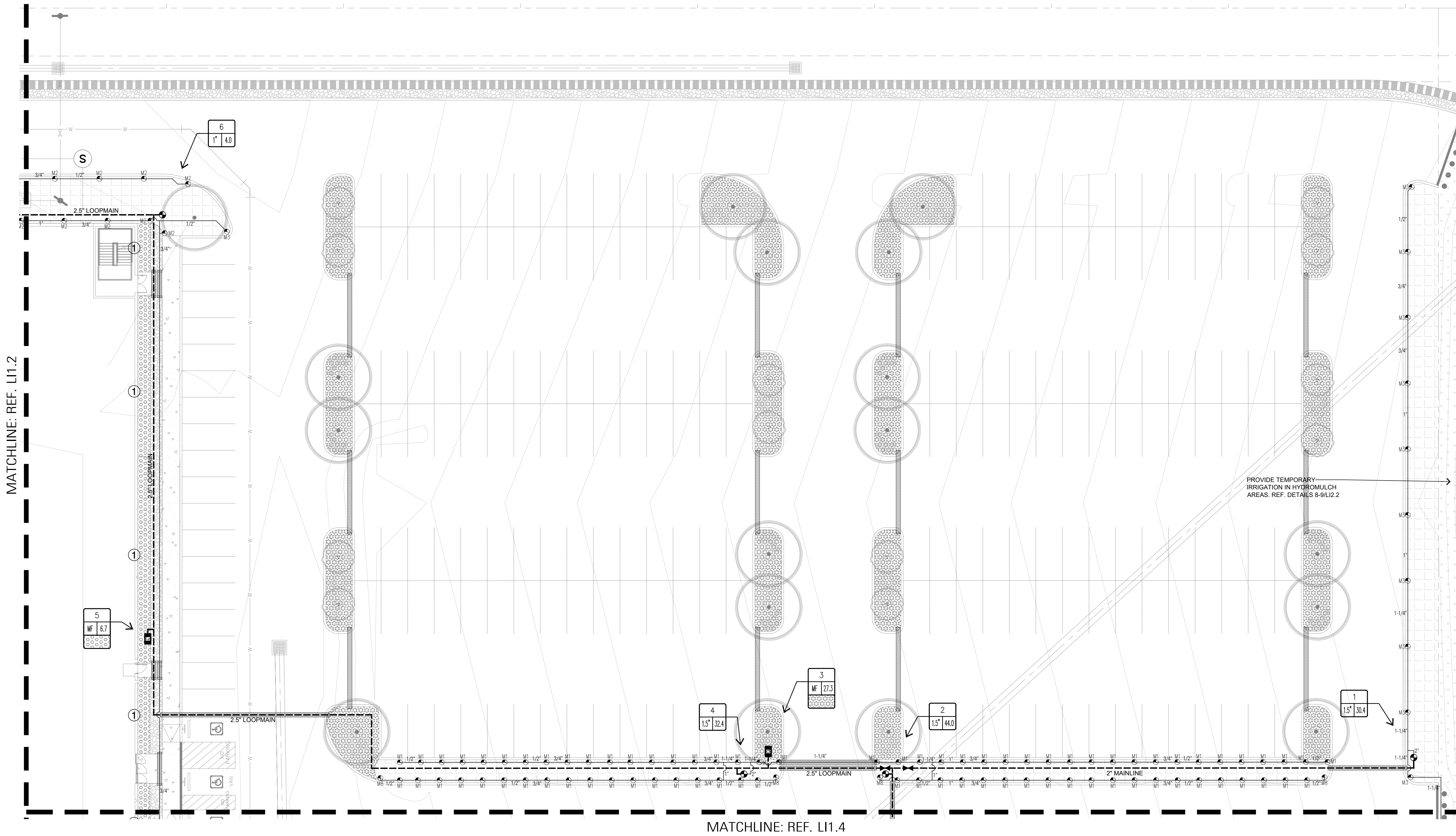
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IRRIGATION  
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Sheet Number:

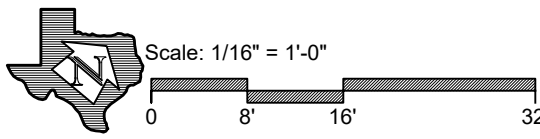
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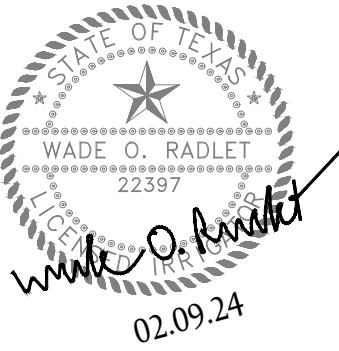
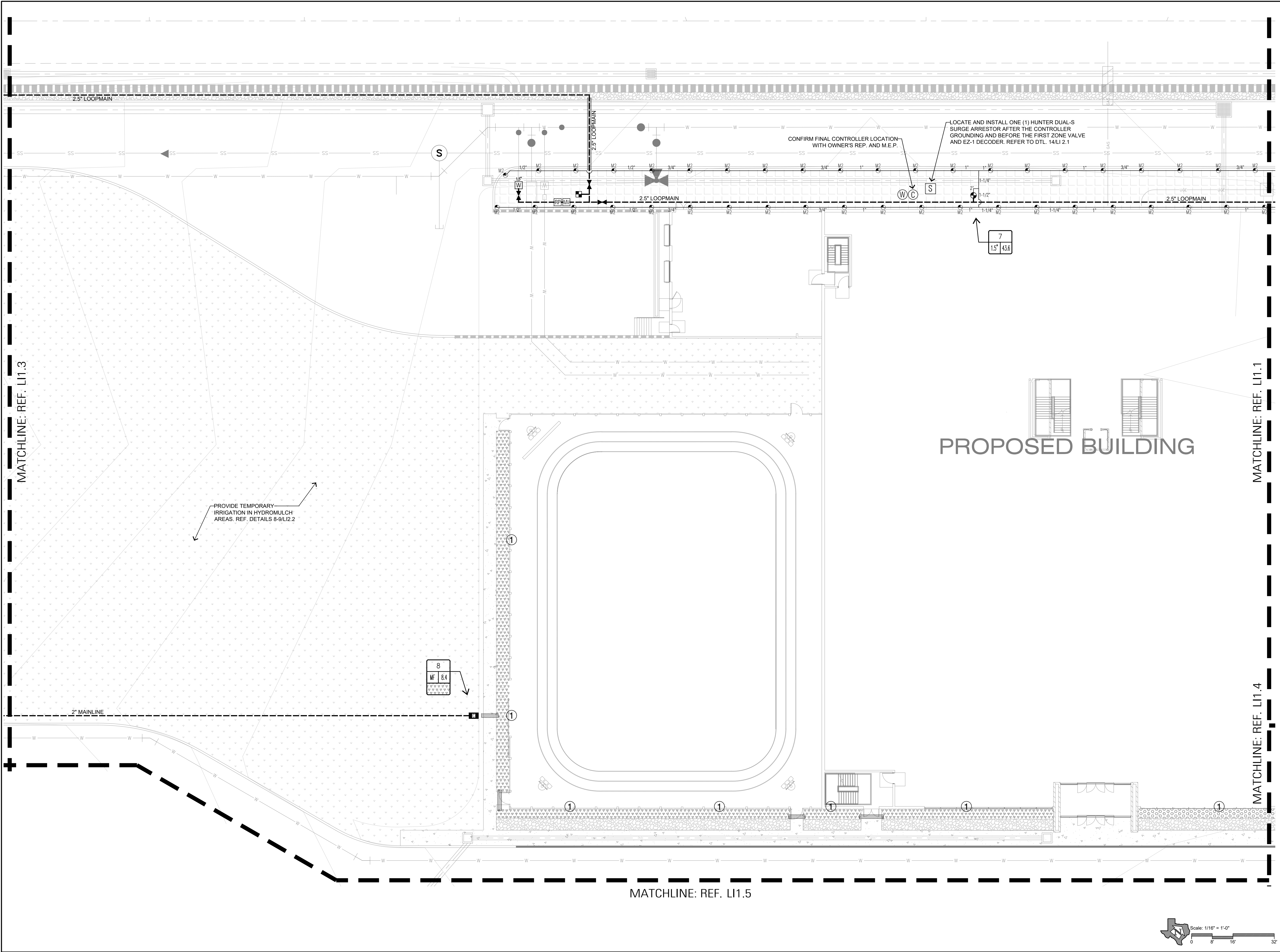
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MATCHLINE: REF. L11.4





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Sheet Title:  
IRRIGATION  
PLAN

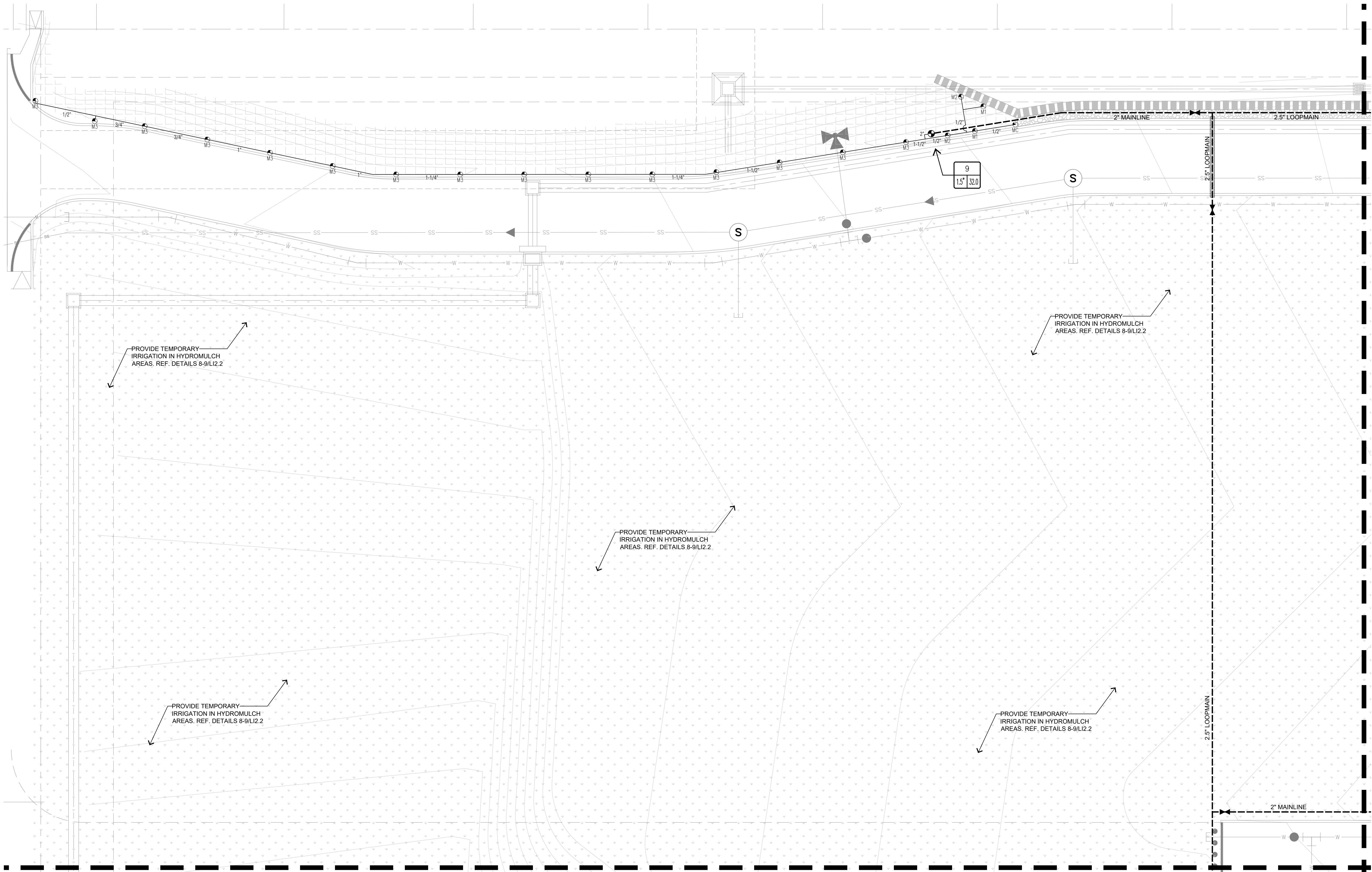
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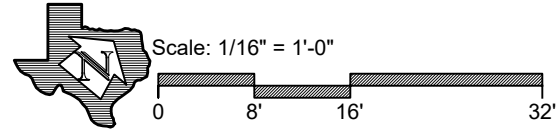
November 1, 2023





MATCHLINE: REF. LI1.6

MATCHLINE: REF. LI1.2



**H O R I Z O N**  
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**2023-149**

Drawn By: ah  
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Sheet Title:  
**IRRIGATION  
PLAN**

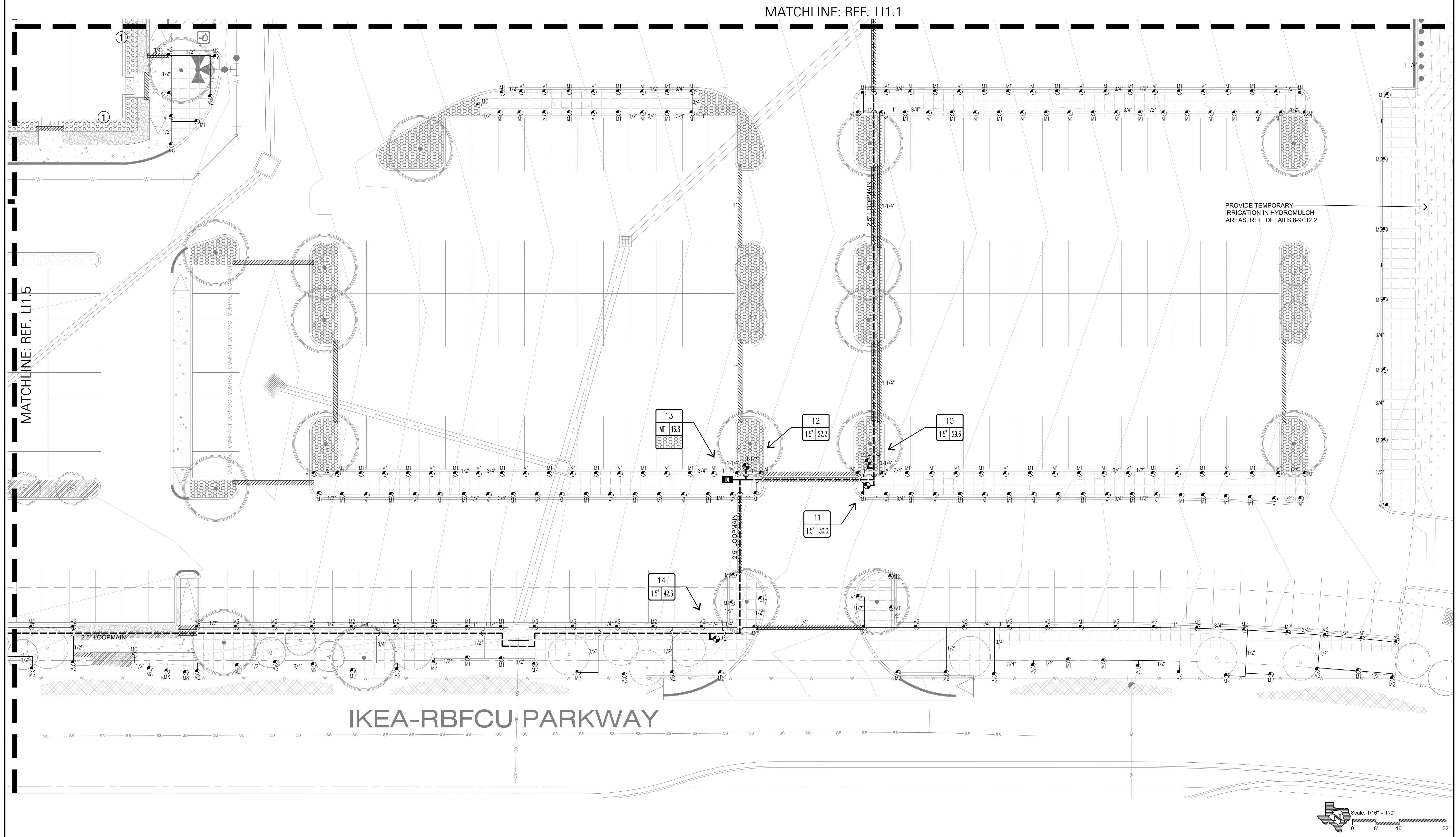
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**LI1.3**

Issue Date:

**November 1, 2023**

November 1, 2023







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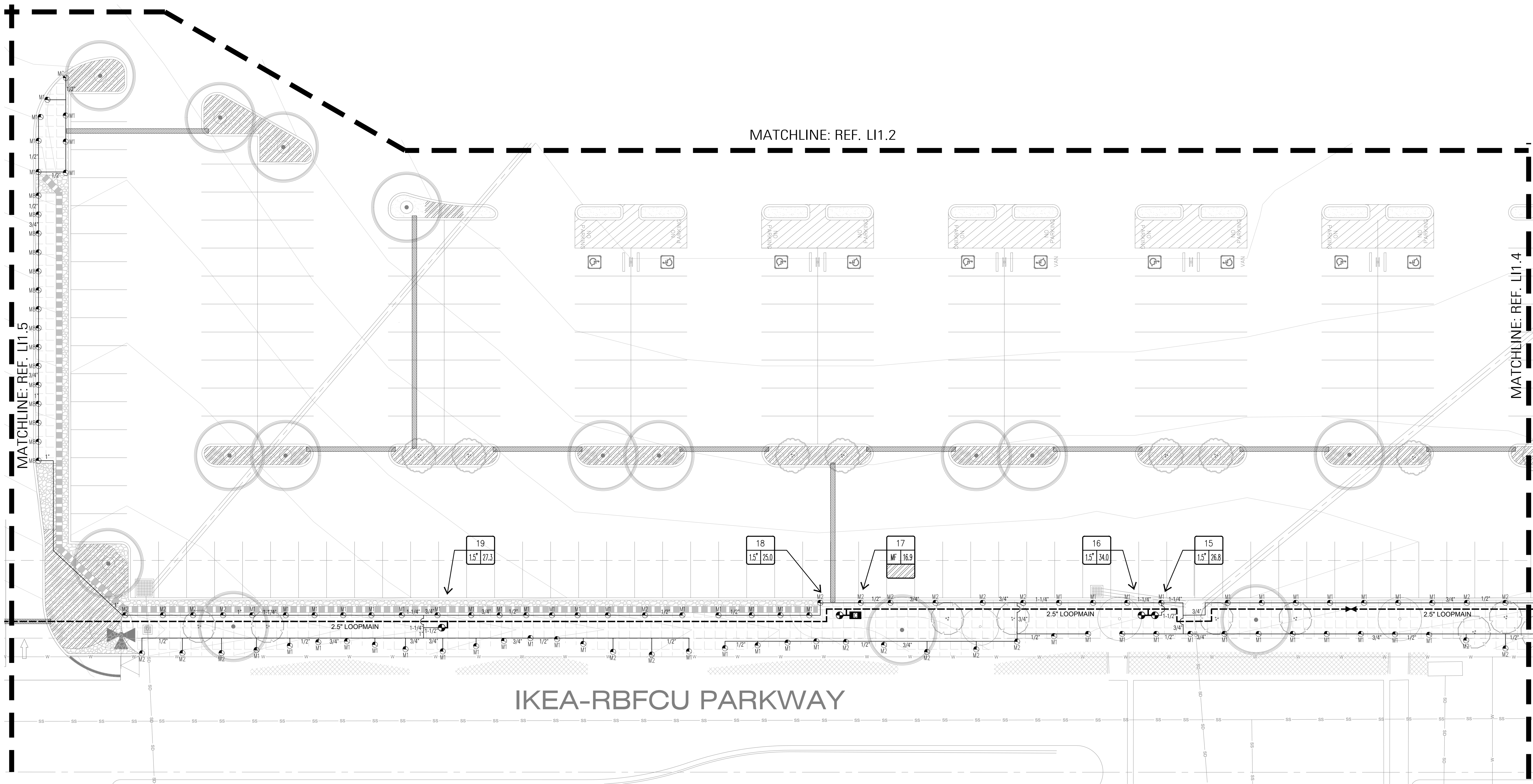
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L11.6

Issue Date:

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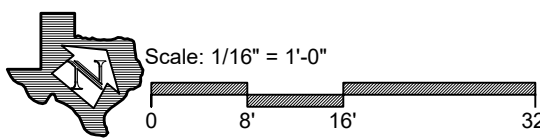
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PROVIDE TEMPORARY  
IRRIGATION IN HYDROMULCH  
AREAS. REF. DETAILS 8-9/L12.2

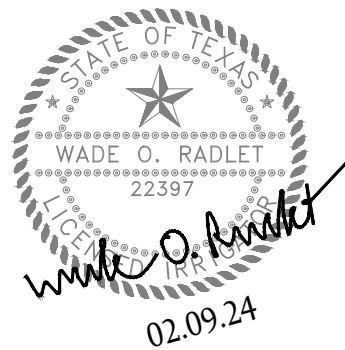
2.5" LOOPMAIN

2.5" LOOPMAIN

IKEA-RBFCU PARKWAY







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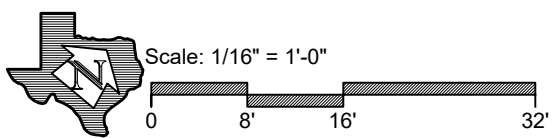
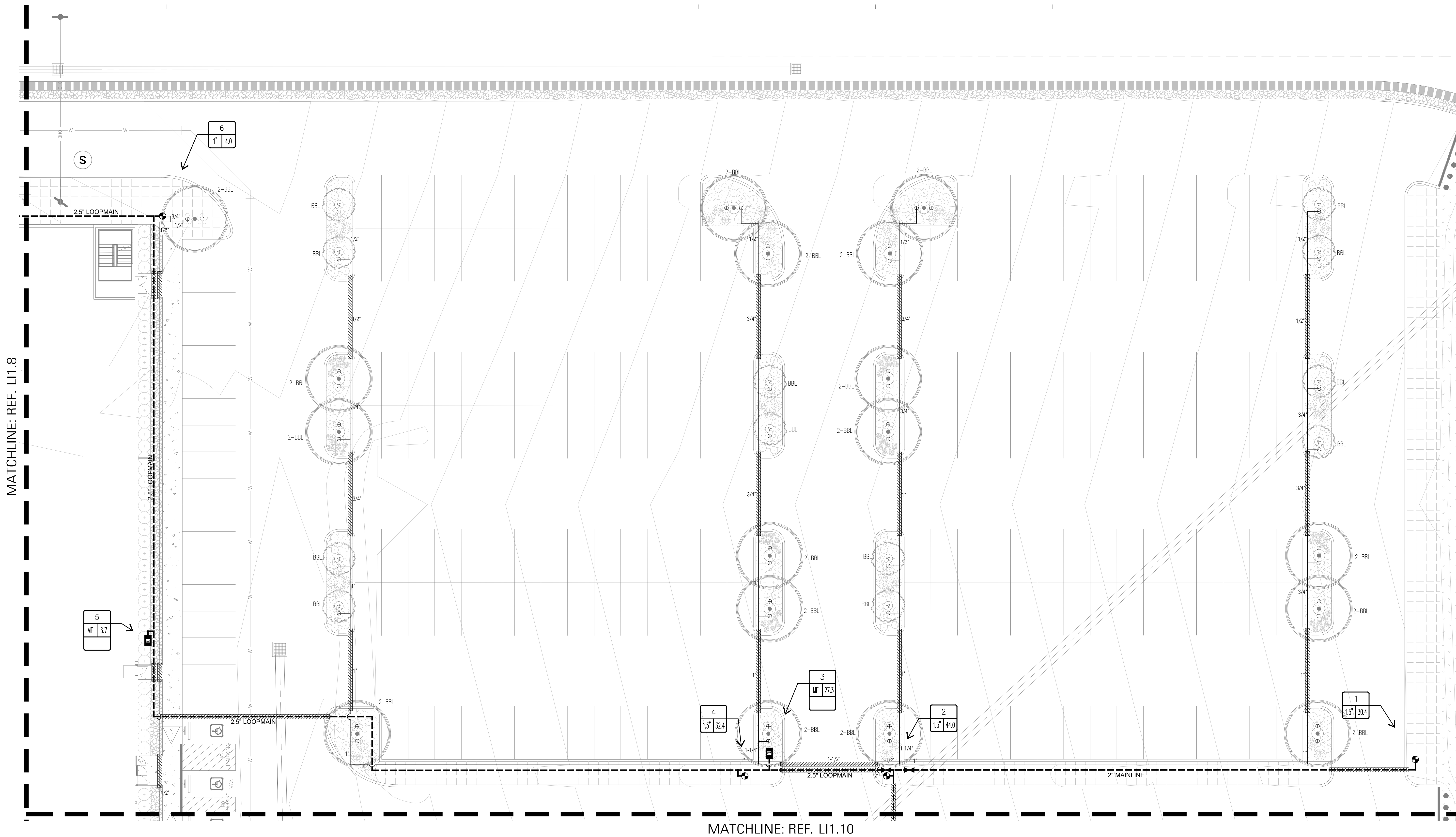
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BUBBLERS

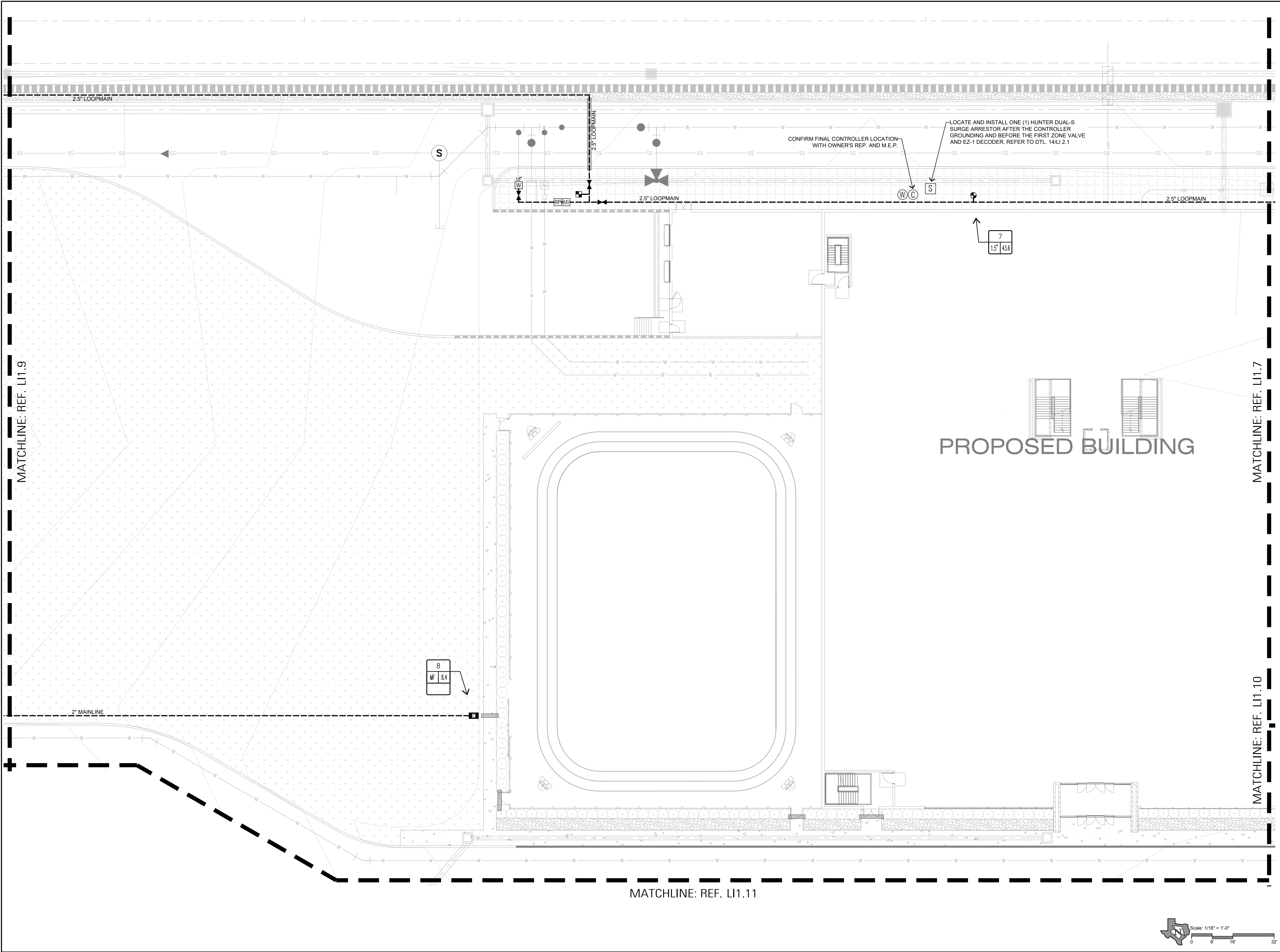
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Issue Date:

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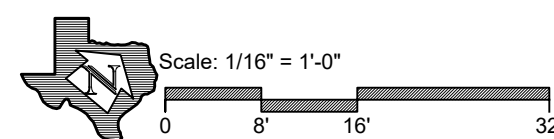
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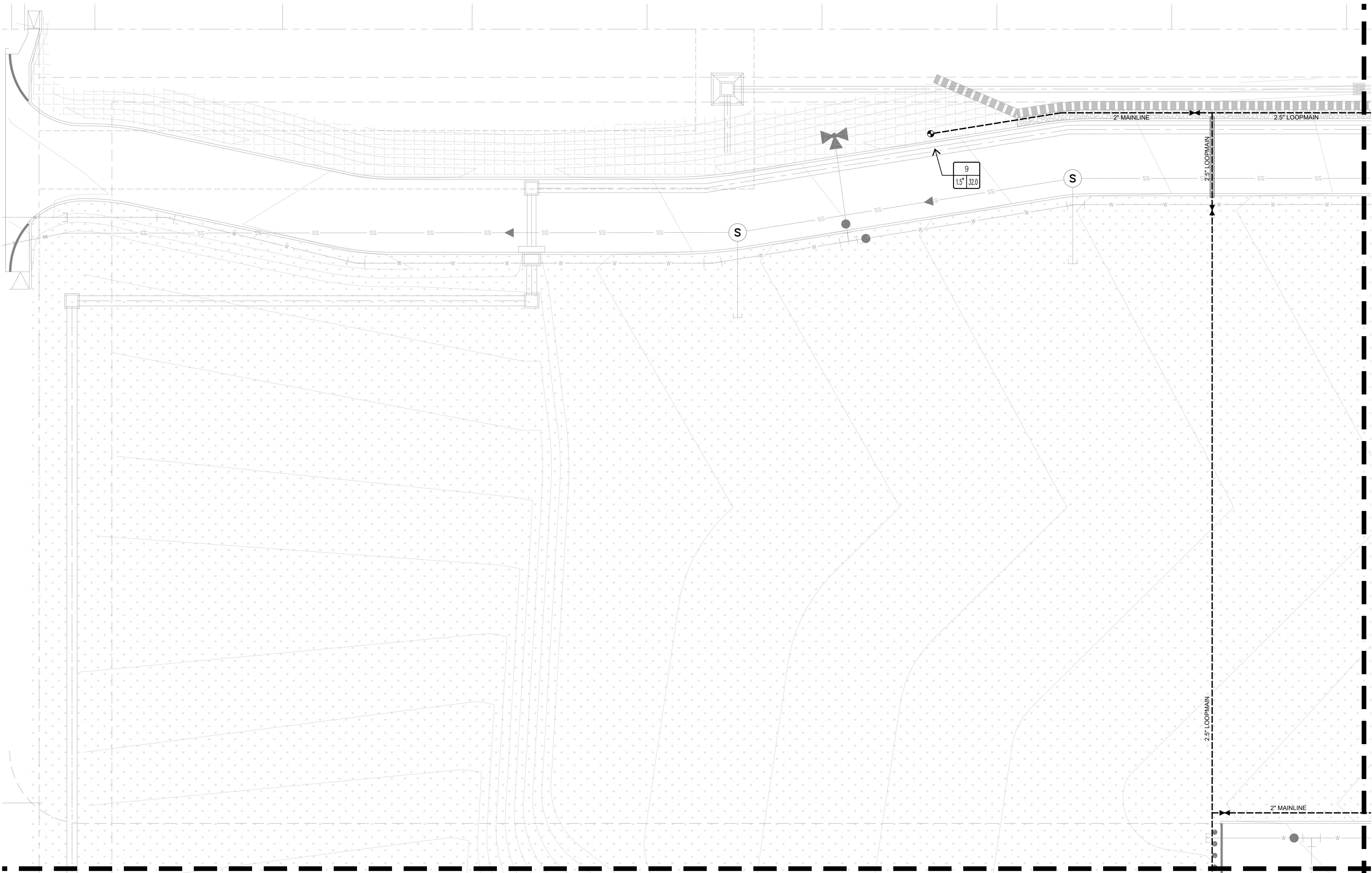
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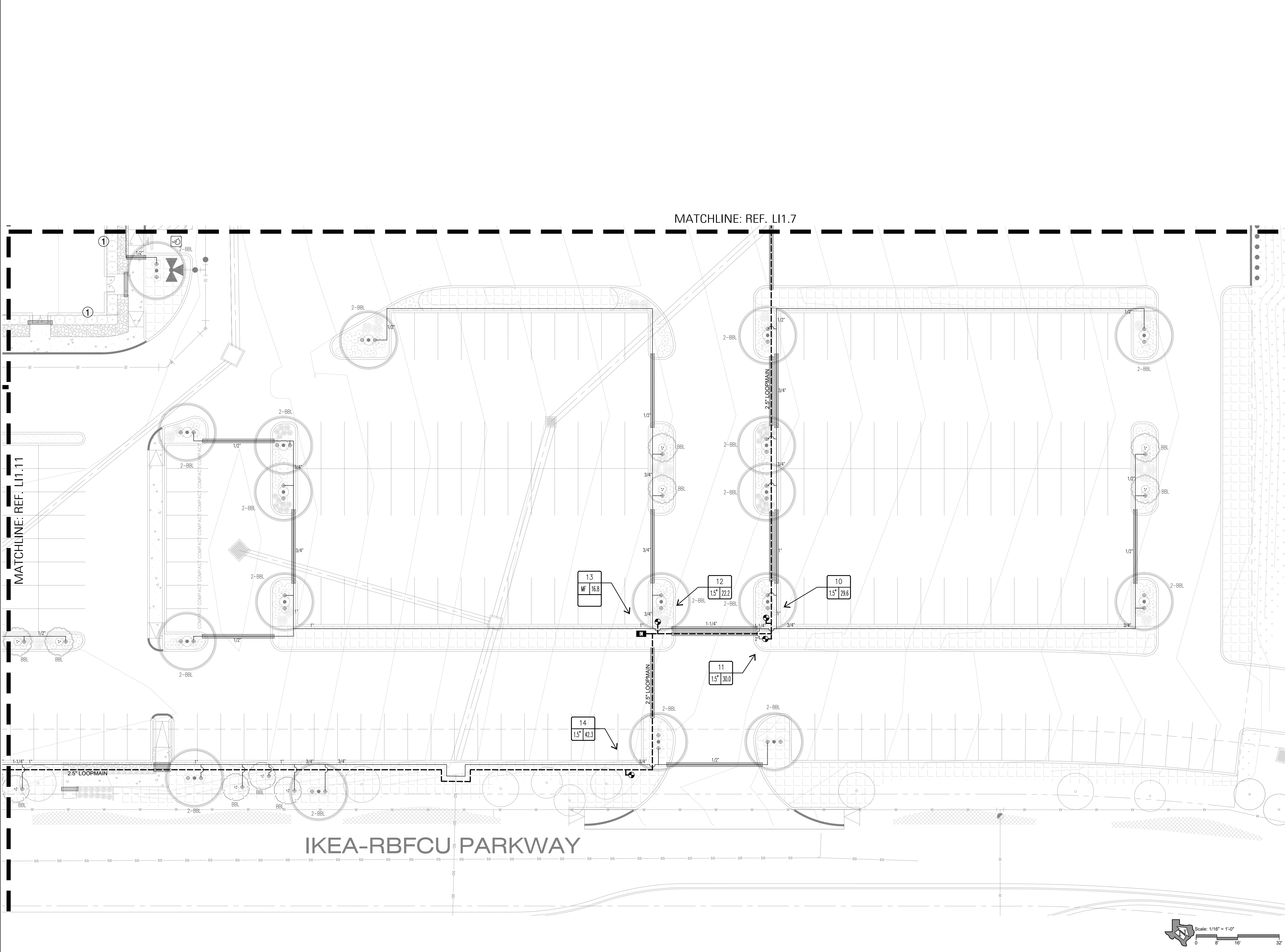
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PLAN - TREE  
BUBBLERS

Sheet Number:

L11.9

Issue Date:

November 1, 2023



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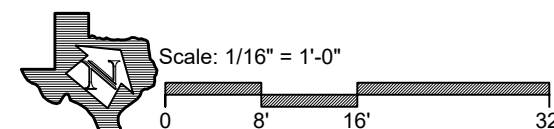
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PLAN - TREE  
BUBBLERS

Sheet Number:

L11.10

Issue Date:

November 1, 2023







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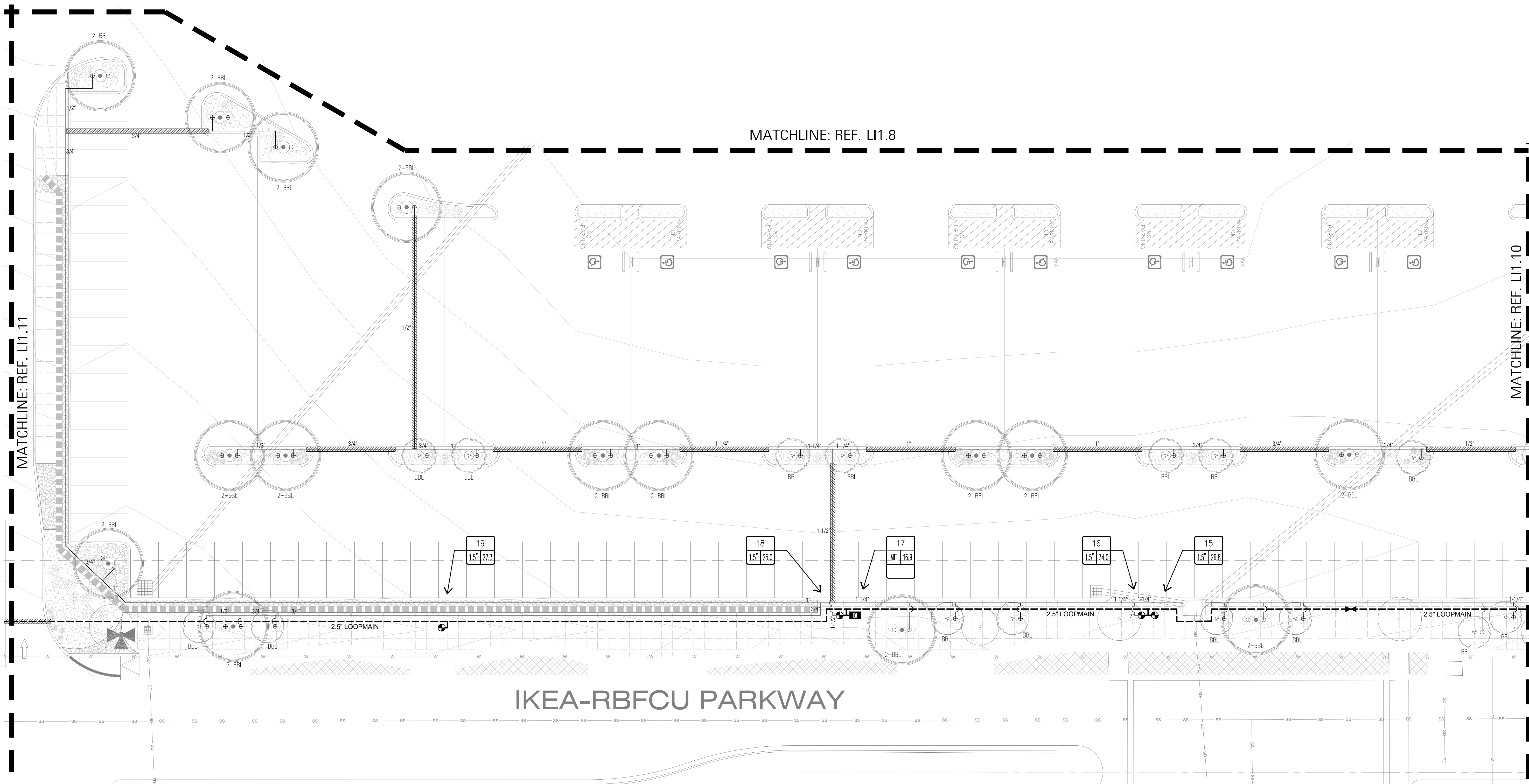
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PLAN - TREE  
BUBBLERS

Sheet Number:

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Issue Date:

November 1, 2023





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IRRIGATION  
PLAN - TREE  
BUBBLERS

Sheet Number:

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Issue Date:

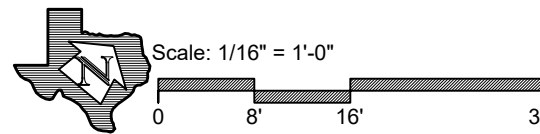
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MATCHLINE: REF. LI1.9

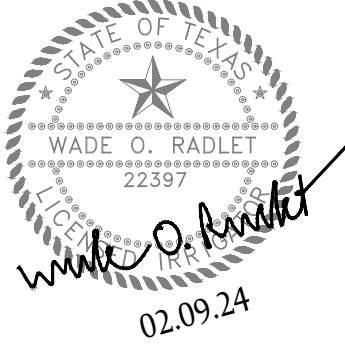
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PROVIDE TEMPORARY  
IRRIGATION IN HYDROMULCH  
AREAS. REF. DETAILS 8-9/L12.2

2.5" LOOPMAIN







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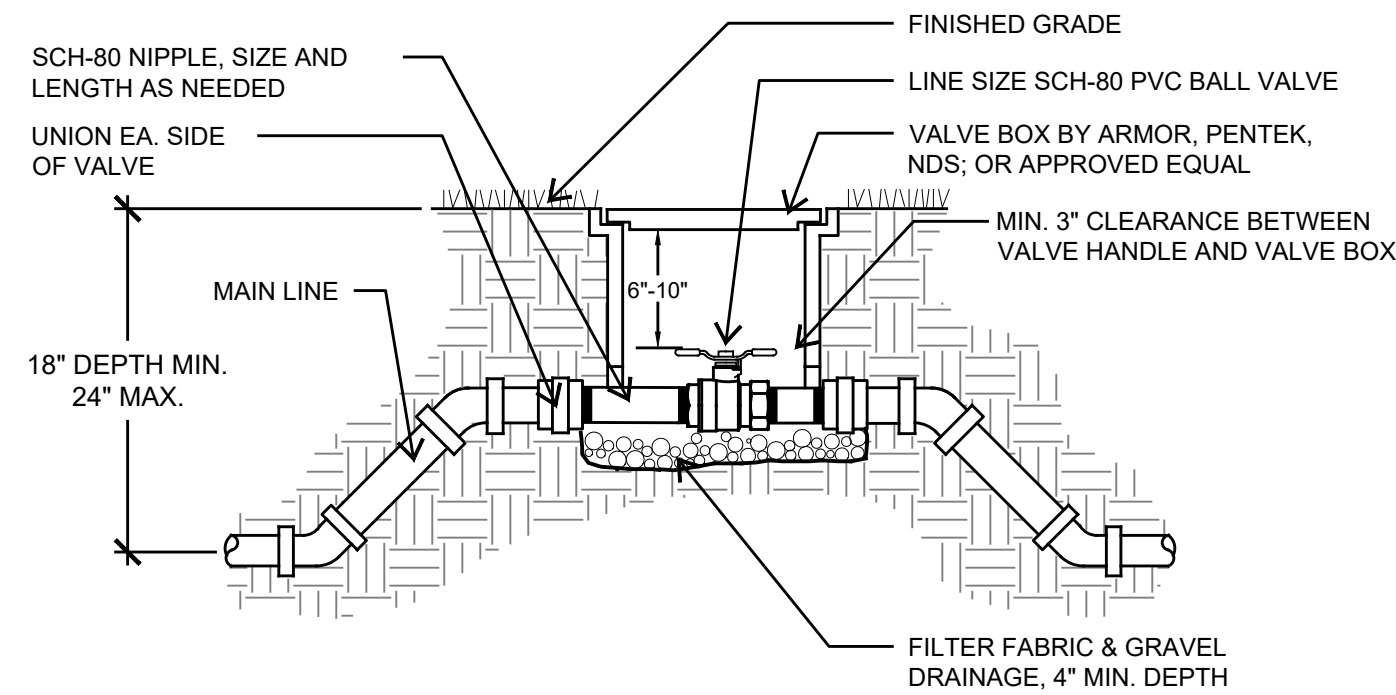
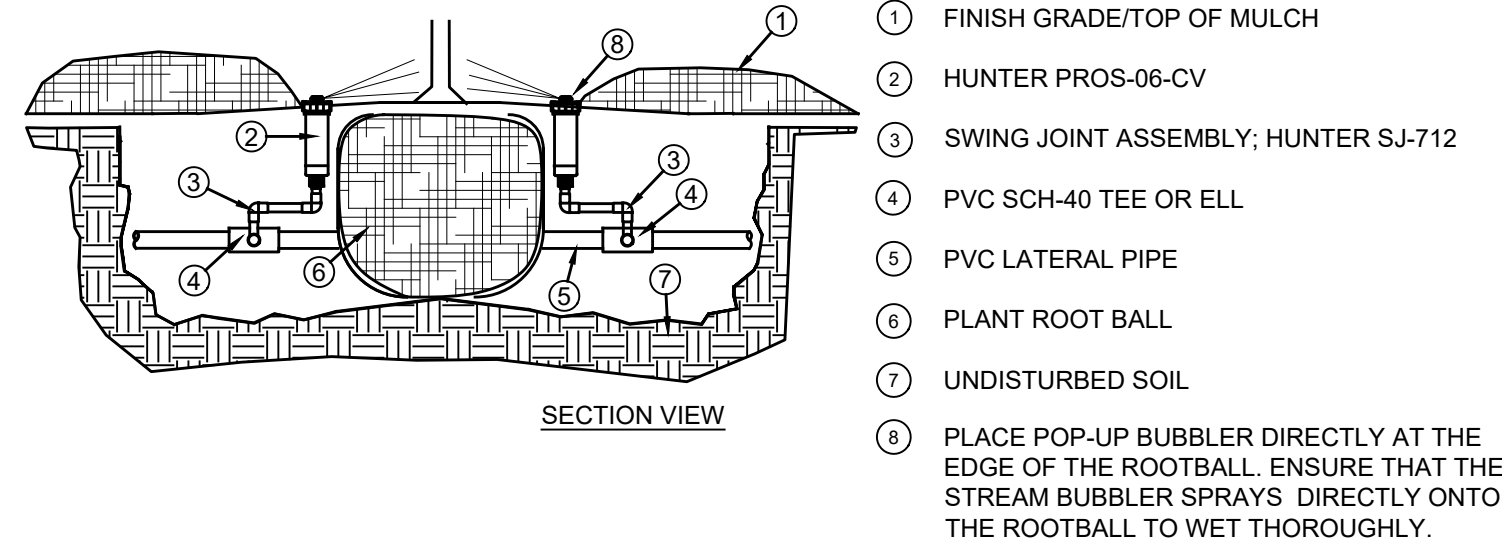
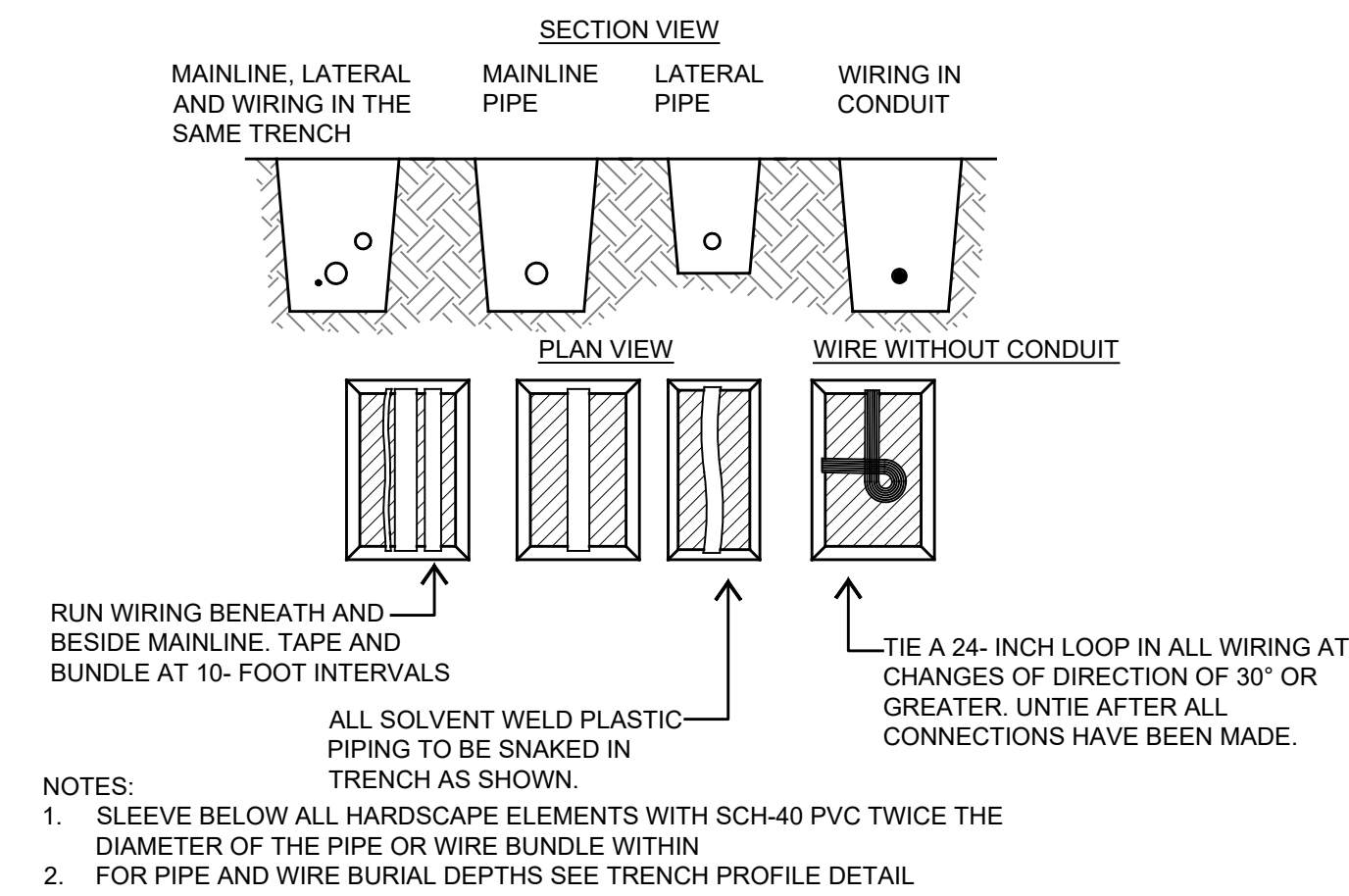
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IRRIGATION  
DETAILS

Sheet Number:

L12.1

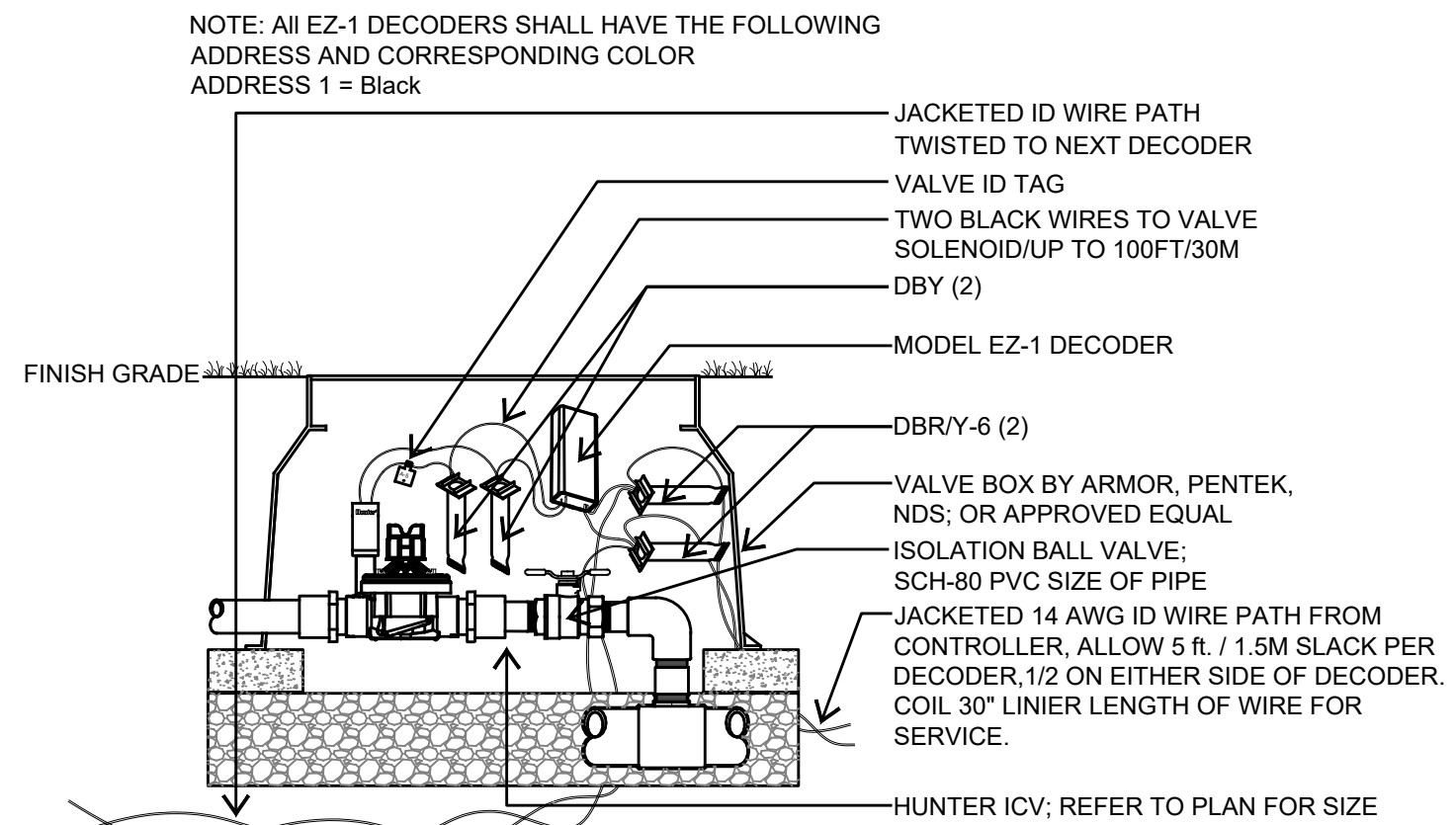
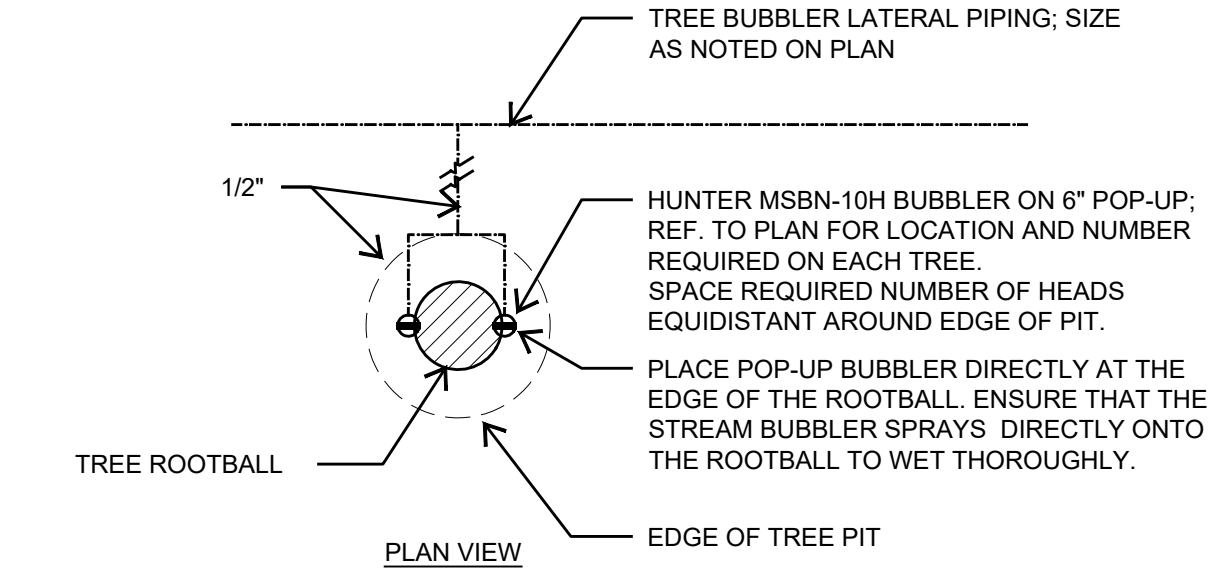
Issue Date:

November 1, 2023

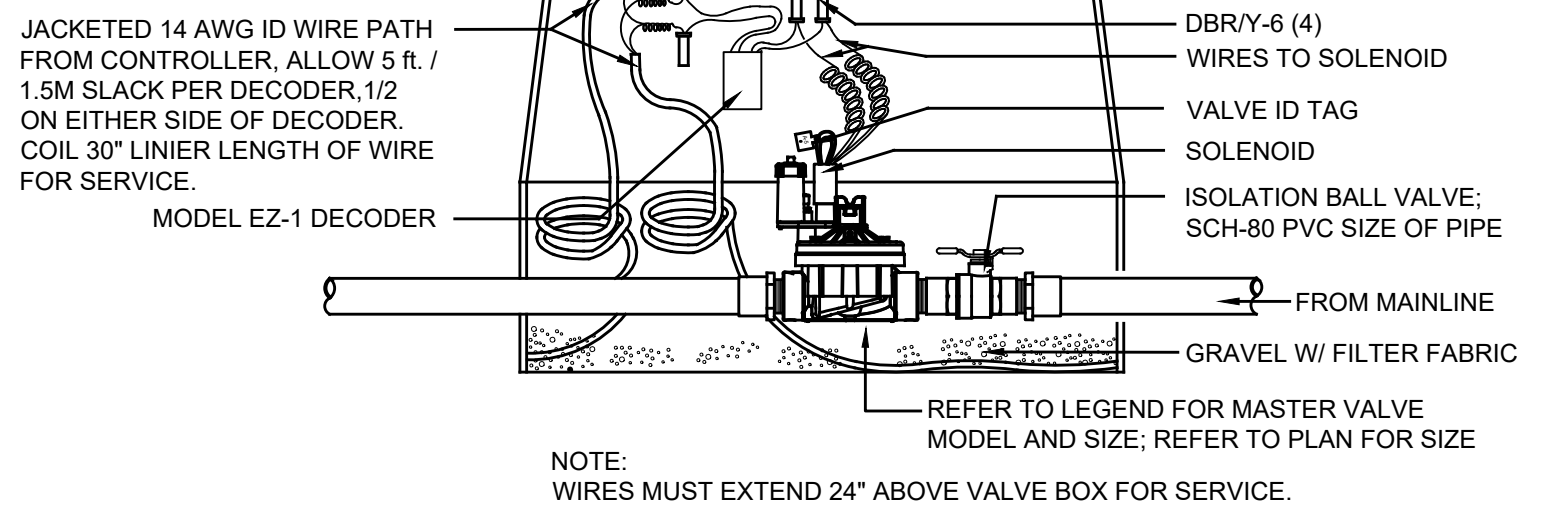
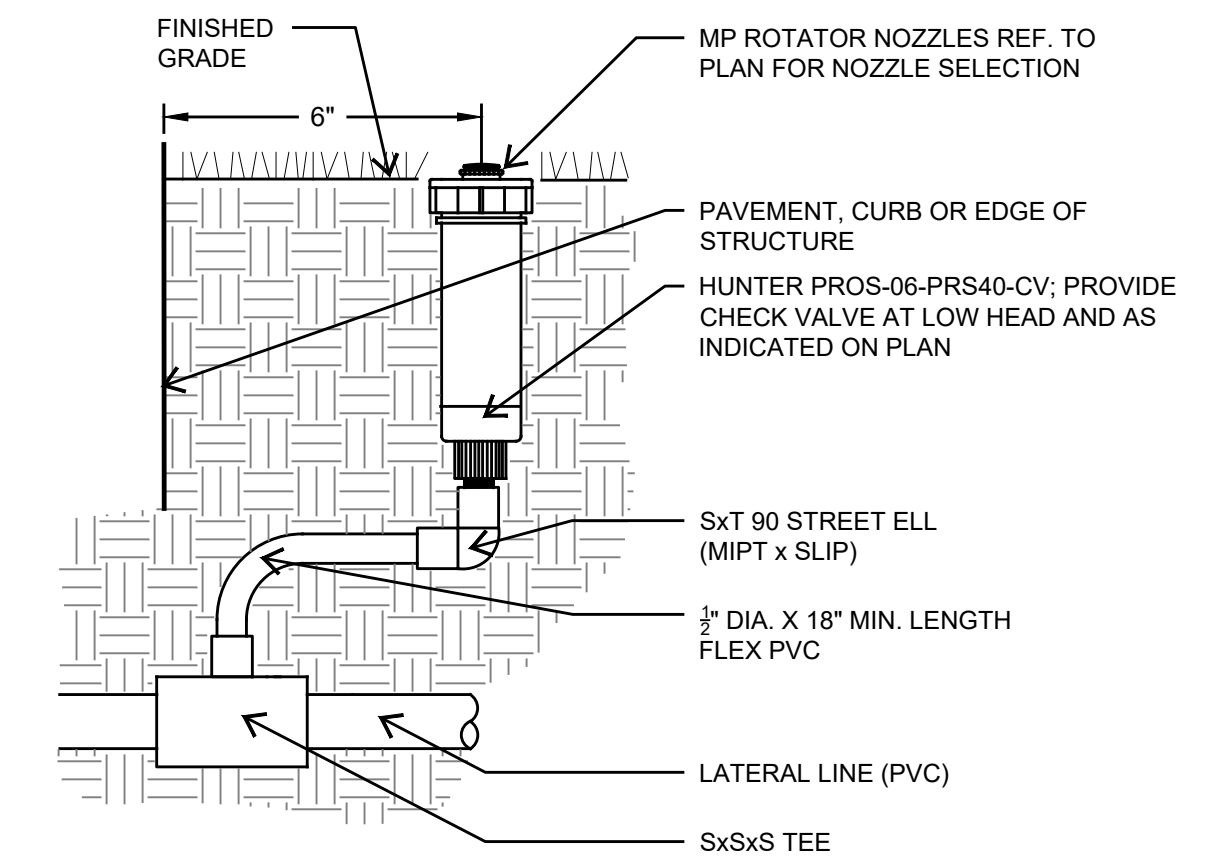


## 8 TREE BUBBLER ASSEMBLY- SECTION

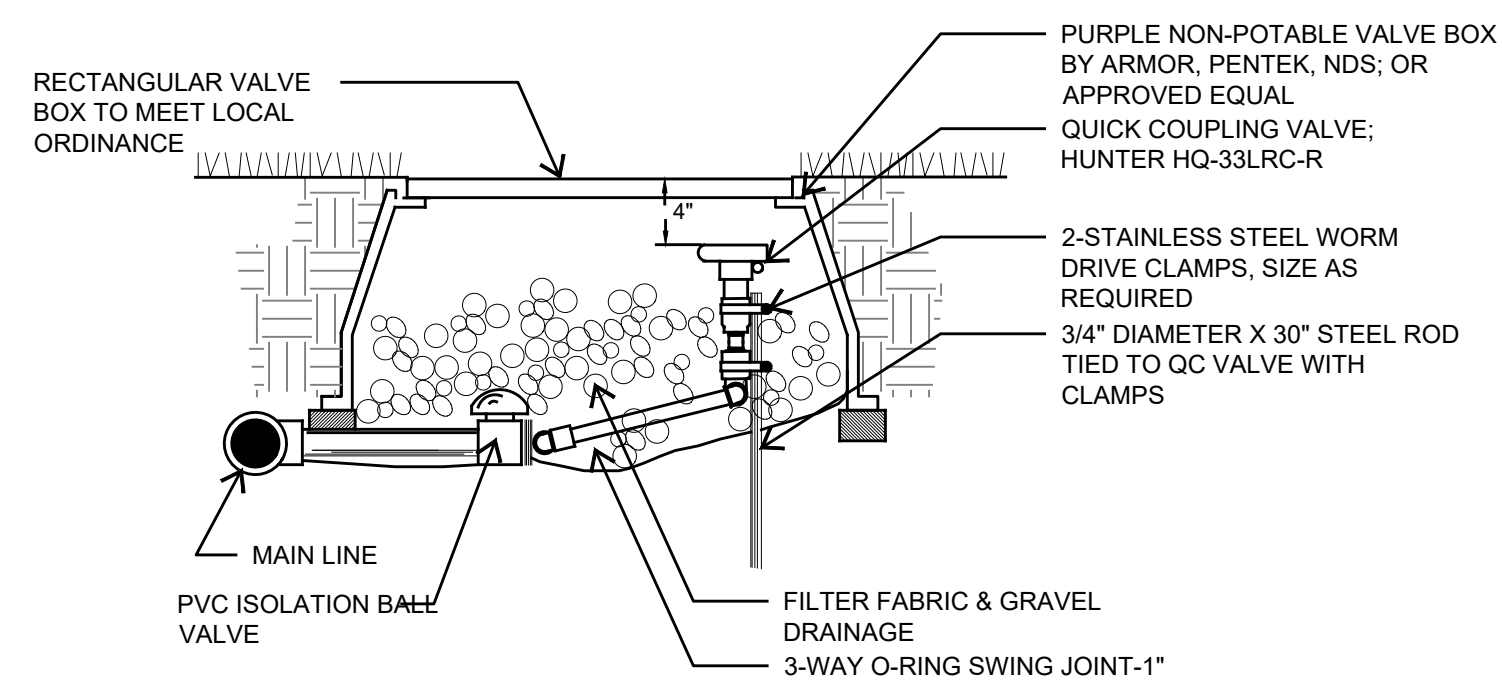
## 4 MANUAL ISOLATION VALVE



## 7 TREE BUBBLER ASSEMBLY- PLAN

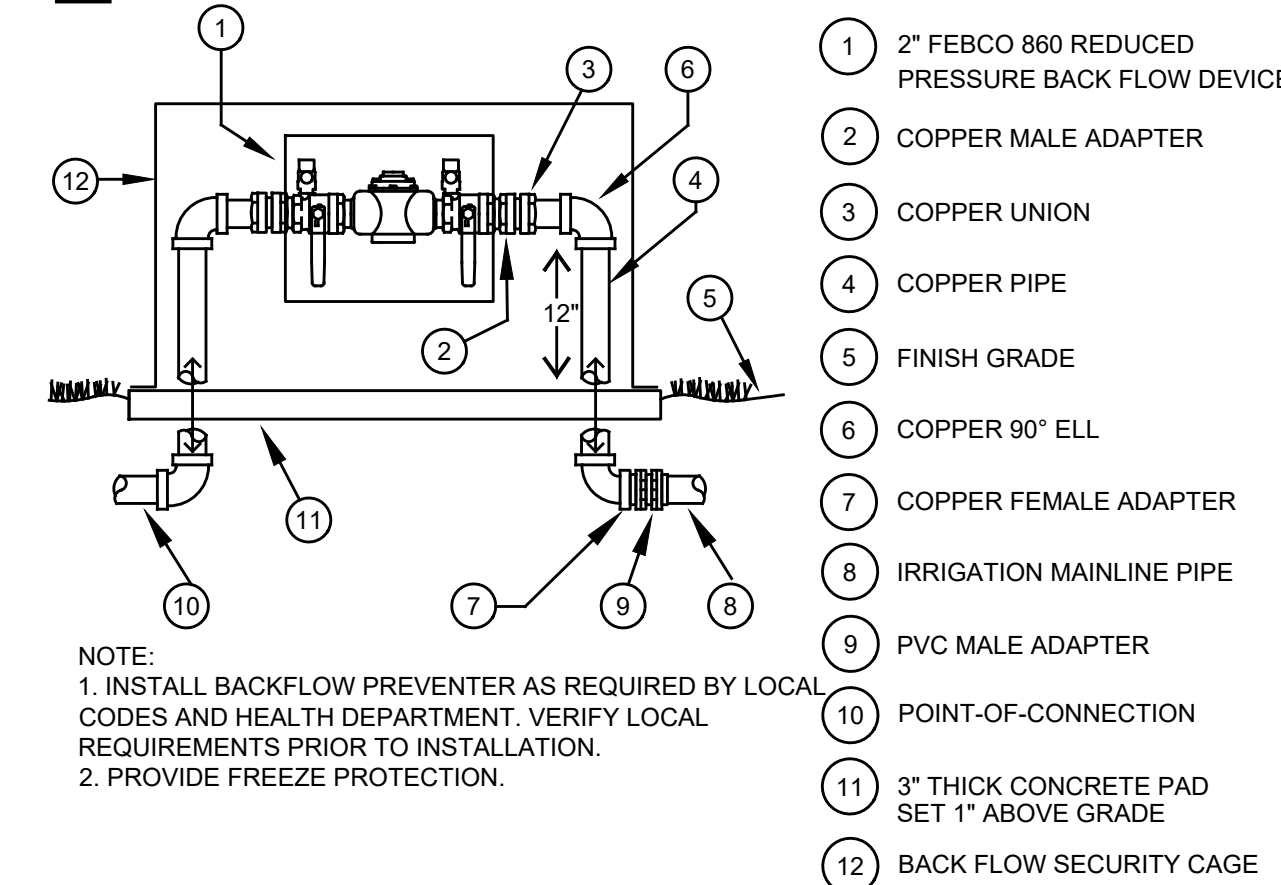


## 6 MP ROTATOR

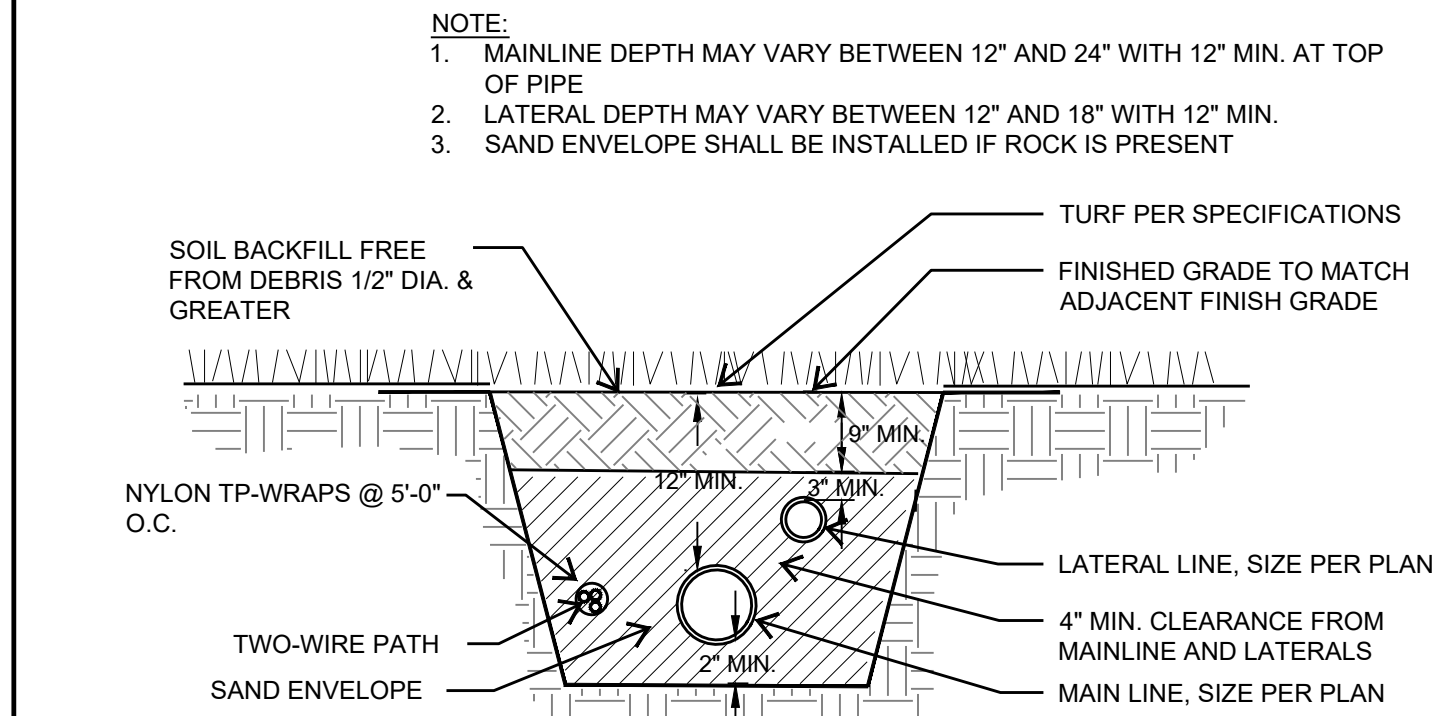


## 5 QUICK COUPLER VALVE

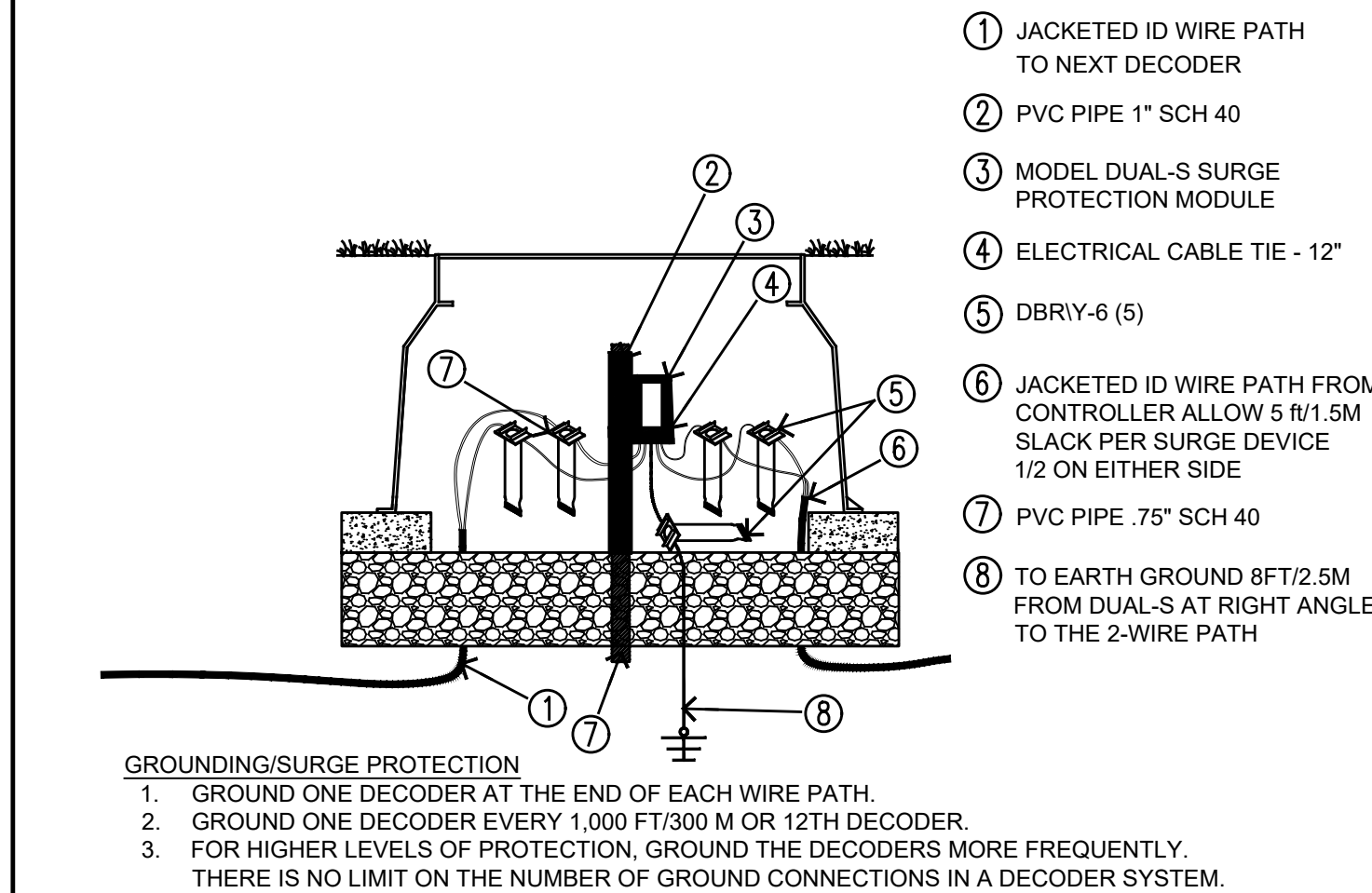
## 2 MASTER VALVE



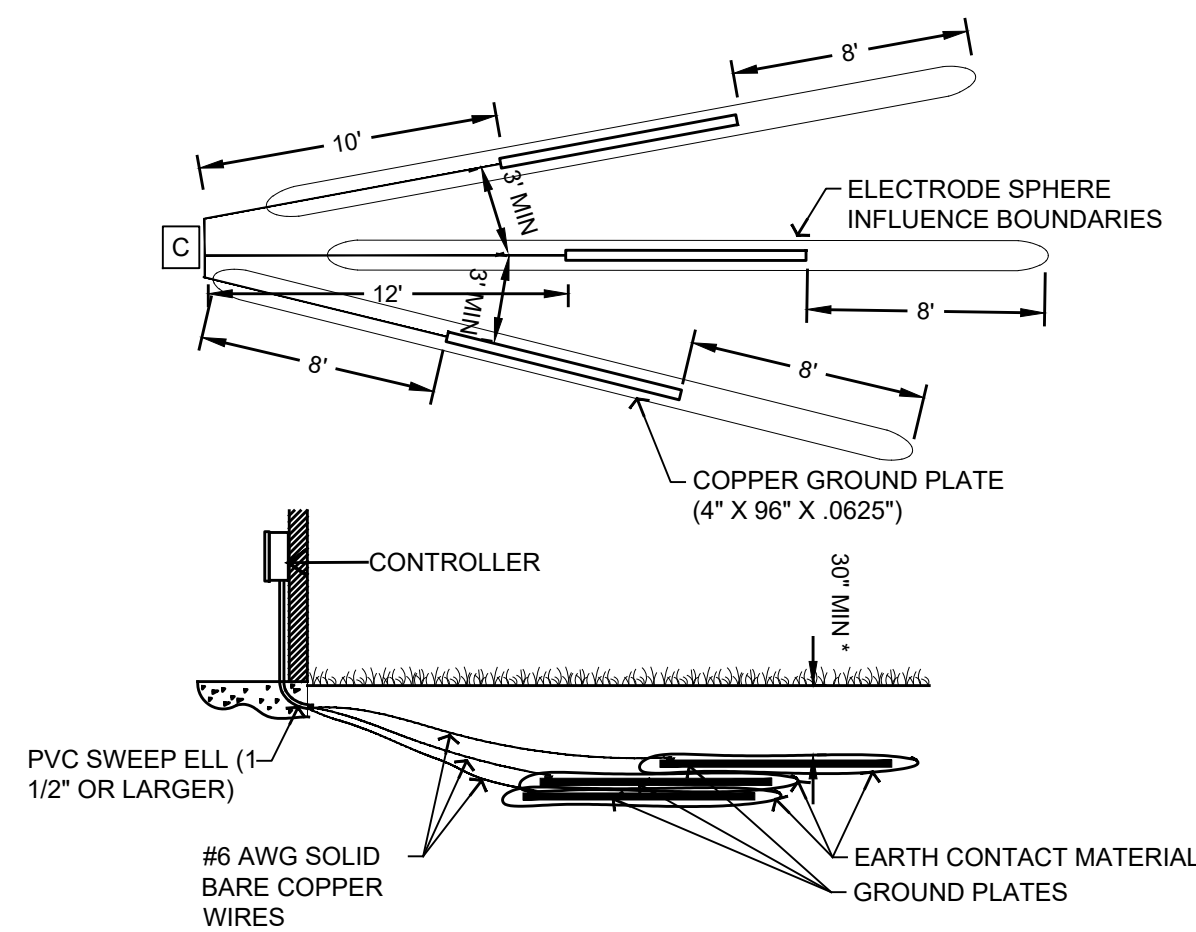
## 1 BACKFLOW DEVICE



## 16 TRENCH PROFILE

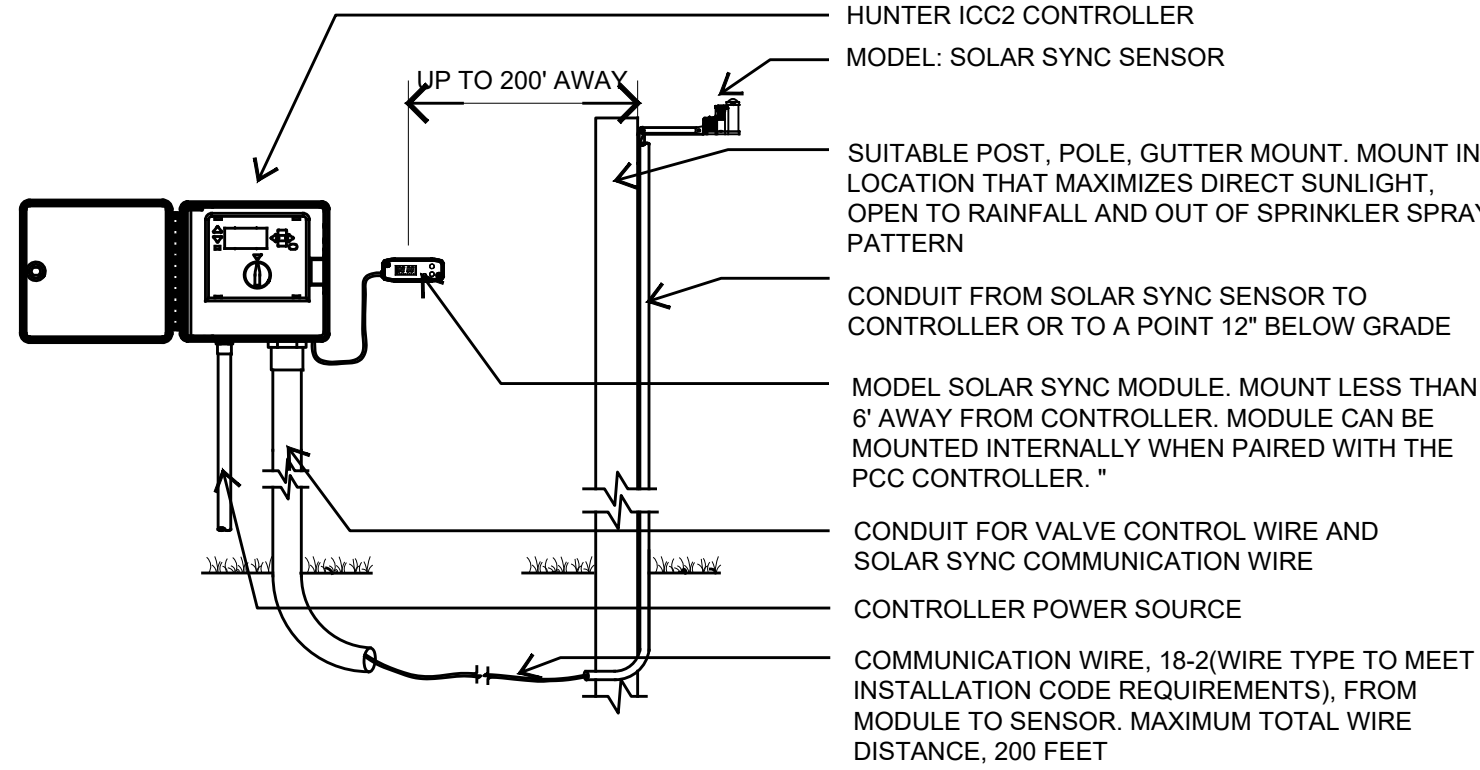


## 14 SURGE ARRESTER

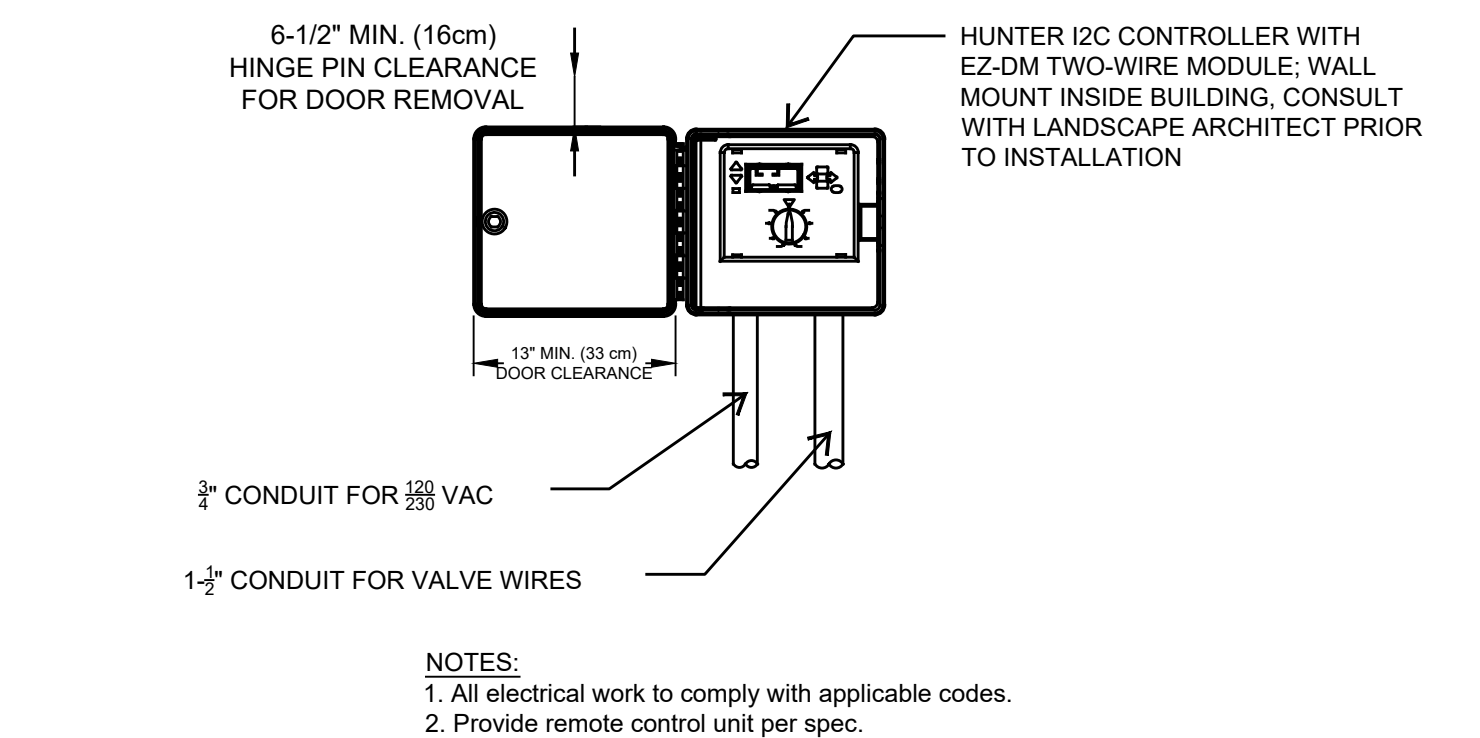


## 13 LIGHTNING PROTECTION

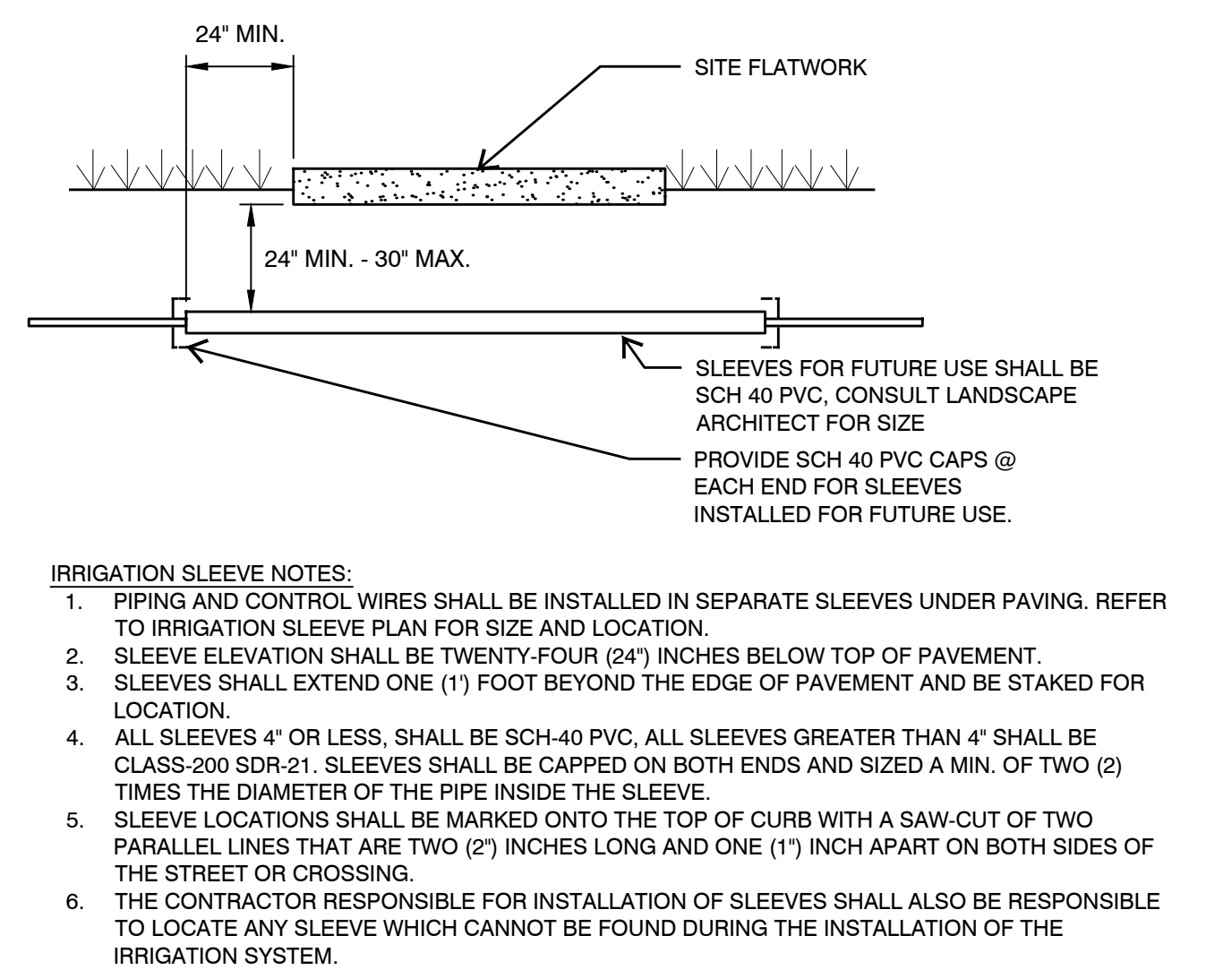
## 12 IRRIGATION TRENCH



## 11 WEATHER SENSOR



## 10 IRRIGATION CONTROLLER



## 9 IRRIGATION SLEEVE

