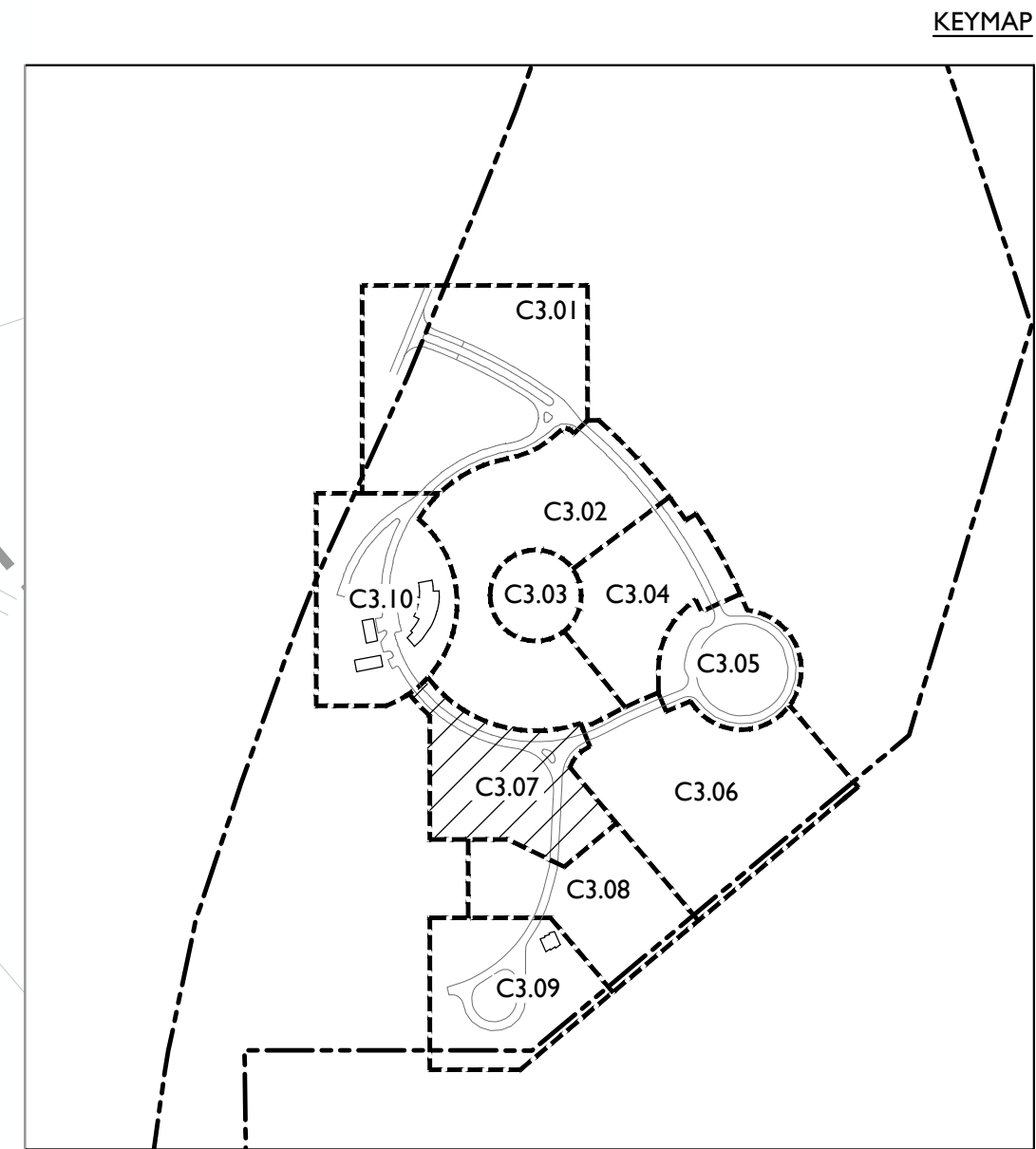




- PROPOSED LEGEND**
- JUNCTION BOX
 - NYLOPLAST CATCH BASIN - SEE PLAN FOR SIZE AND SHAPE
 - CLEANOUT - SEE PLAN FOR SIZE AND SHAPE
 - FLARED END SECTION
 - STORM PIPE - SEE PLAN FOR SIZE AND LOCATION
 - PROPOSED 1 FT. CONTOUR ELEVATION
 - PROPOSED 5 FT. CONTOUR ELEVATION
 - EXISTING 1 FT. CONTOUR ELEVATION
 - EXISTING 5 FT. CONTOUR ELEVATION
 - SPOT ELEVATIONS



1 GRADING & DRAINAGE PLAN
SCALE: 1" = 20'-0"

10' 40' 80'
0' 20'

NORTH

E D G
Ecological Design Group, Inc.
www.ecologicaldg.com
phone: 501 378 0200
LITTLE ROCK | ROGERS | WYNNE

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
NO. 19108
DAVID HAZEN
06-18-23

STATE OF ARKANSAS
Ecological Design Group, Inc.
No. 25111
06-18-23

811
Know what's below.
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Birdeye, Arkansas
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501 Woodlane Drive, Suite 401N
Little Rock, Arkansas 72201

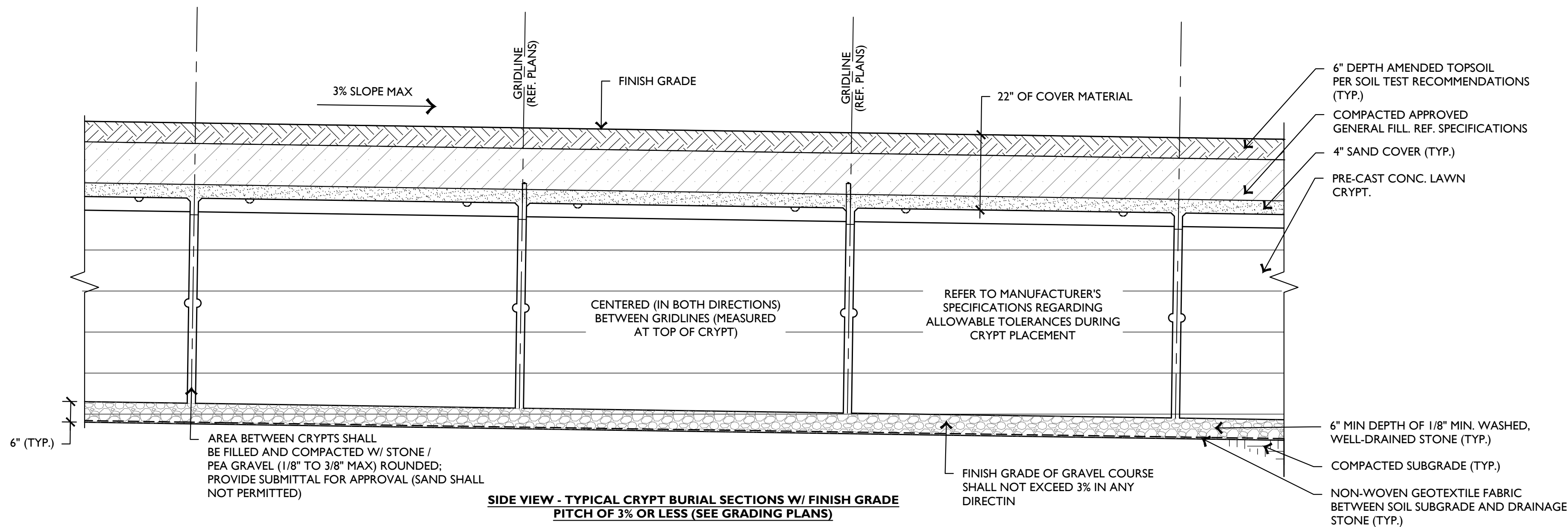
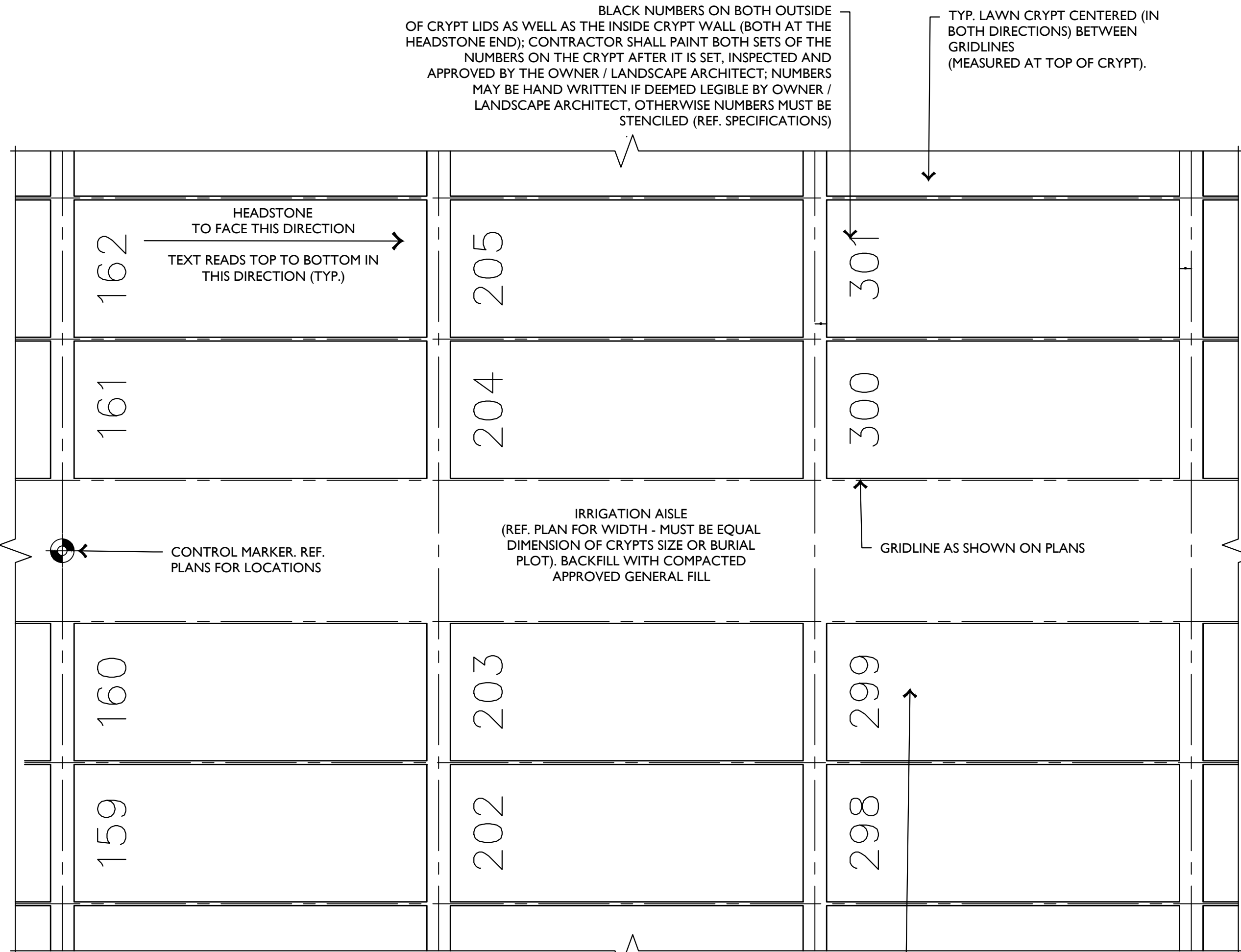
EDG PROJECT NO.	21-047
DATE	2023.06.18
REVISIONS	
Number	Date
1	2023.07.26
PHASE	100% Construction Documents
TITLE	Grading & Drainage Plan
SHEET NO.	C3.07
DBA PROJECT #	3892301

CRYPT / MONUMENT LAYOUT GENERAL NOTE:

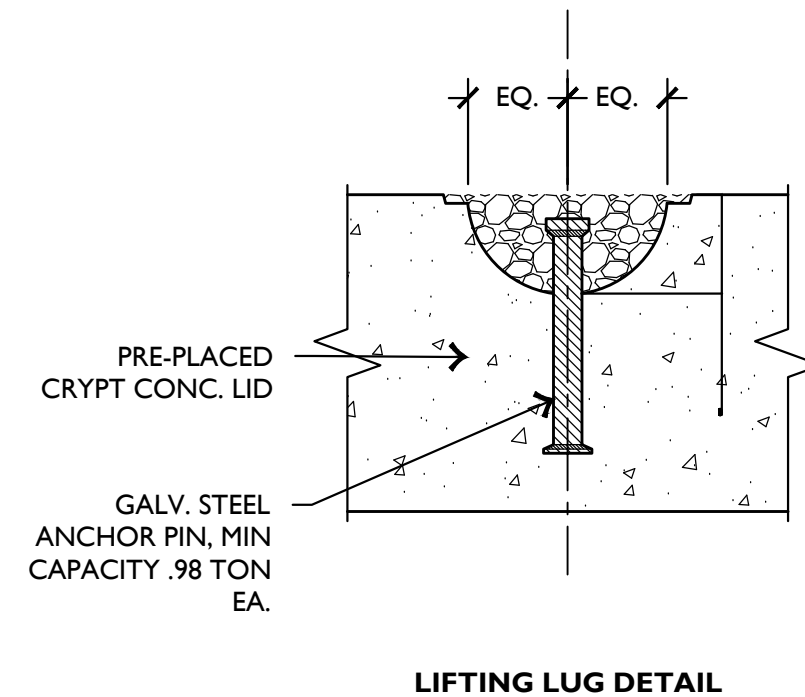
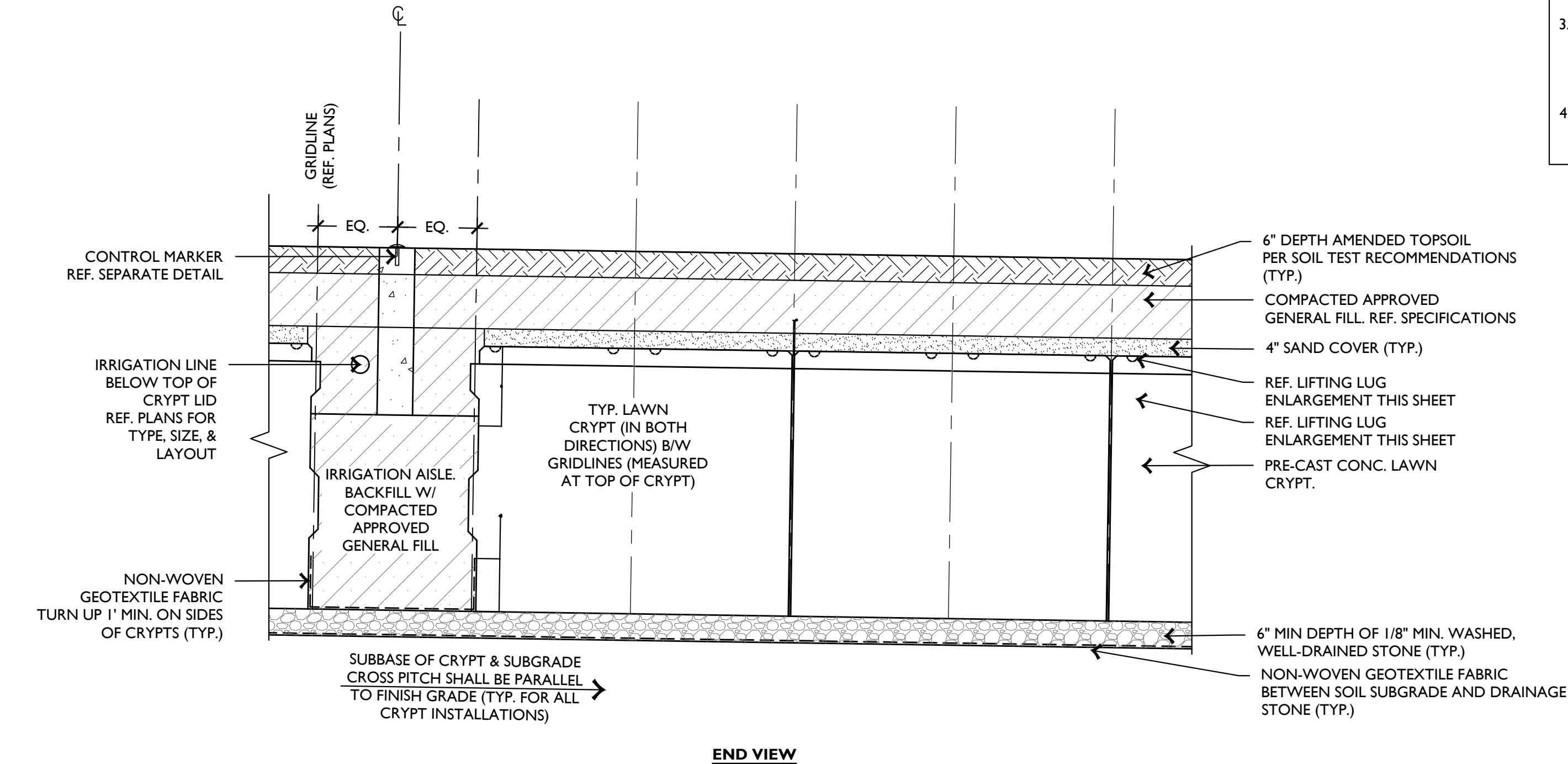
LAYOUT OF DOUBLE-DEPTH CRYPTS SHALL BE BASED UPON THE LOCATIONAL DATA FOR THE CONTROL MARKERS PROVIDED ON THE SITE PLANS. REFER TO THE PLANS FOR ADDITIONAL CRYPT LAYOUT INFORMATION. THE ACTUAL PLACEMENT OF THE CONTROL MARKERS SHALL OCCUR AFTER THE PLACEMENT OF ALL CRYPTS. TO ENSURE ACCURATE MARKER PLACEMENT, CONTRACTOR SHALL HAND-EXCAVATE SUFFICIENT MATERIAL (IN THE PROXIMITY OF EACH MARKER) TO EXPOSE THE CRYPT LIDS. REPLACE ALL EXCAVATED MATERIAL AFTER PLACEMENT OF MARKERS. MARKER PLACEMENT MUST BE BASED UPON THE ACTUAL INSTALLED CRYPT LOCATIONS. ANY DEVIATIONS FROM THE PLANS MUST BE RECORDED ON THE AS-BUILT DRAWINGS.

CONTRACTOR TO PROVIDE THE VA STANDARD LIFTING DEVICE FOR CRYPT LID REMOVAL TO THE VA. FURTHERMORE, CONTRACTOR SHALL ONLY USE THIS DEVICE FOR REMOVING LIDS DURING CONSTRUCTION.

MAINTAINING DEPTH OF COVER OVER ALL CRYPT LIDS IS CRITICAL. CONTRACTOR SHALL PROVIDE THE MEANS AND METHODS (AS APPROVED BY THE RESIDENT ENGINEER) TO VERIFY DEPTH OF COVER. DEFICIENCIES IN DEPTH (OR EXCESSES) SHALL BE REMEDIED (TO THE SATISFACTION OF THE RESIDENT INSPECTOR) PRIOR TO ACCEPTANCE OF CRYPT INSTALLATION.



- NOTES:
1. CONCRETE CRYPTS SHALL BE INSTALLED BY THE CONTRACTOR. CRYPTS SHALL BE PROVIDED AND DELIVERED ON SITE BY OTHERS. CONTRACTOR SHALL COORDINATE WITH CRYPT PROVIDER ON DELIVERY. CONTRACTOR SHALL COORDINATE WITH ARKANSAS DEPARTMENT OF VETERANS AFFAIRS ON CRYPT MANUFACTURING AND TESTING.
 2. GAPS BETWEEN CRYPTS CENTERED IN THE BURIAL PLOTS SHALL BE FILLED WITH STONE OR PEA GRAVEL, REF. SPECIFICATIONS.
 3. CRYPT / VAULT DETAILS ARE SHOWN FOR REFERENCE ONLY. REFER TO MANUFACTURER SHOP DRAWINGS FOR DIMENSIONS OF CRYPTS / VAULTS. THE CRYPT MANUFACTURER WILL BE WEISER CONCRETE. CONTACT TONY NELSON, PROJECT MANAGER, FOR ADDITIONAL INFORMATION. OFFICE: (800) 325-8456 FAX: (715) 647-5181.
 4. FINAL GAP SPACING AND FILL MATERIAL WILL BE DETERMINED AFTER SHOP DRAWINGS FROM THE CRYPT MANUFACTURER ARE REVIEWED AND APPROVED BY THE A/E AND ARKANSAS DEPARTMENT OF VETERANS AFFAIRS.



1 DOUBLE DEPTH CRYPT INSTALLATION

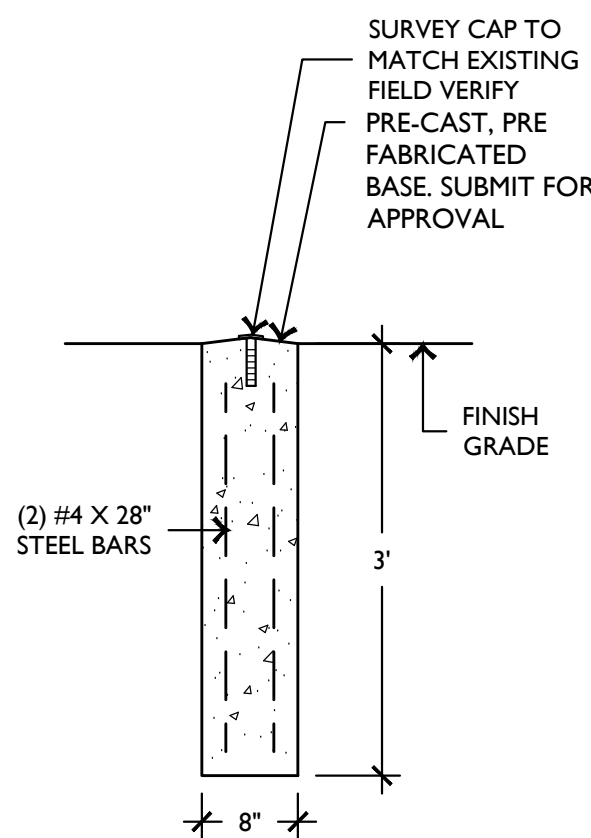
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2 NOT USED

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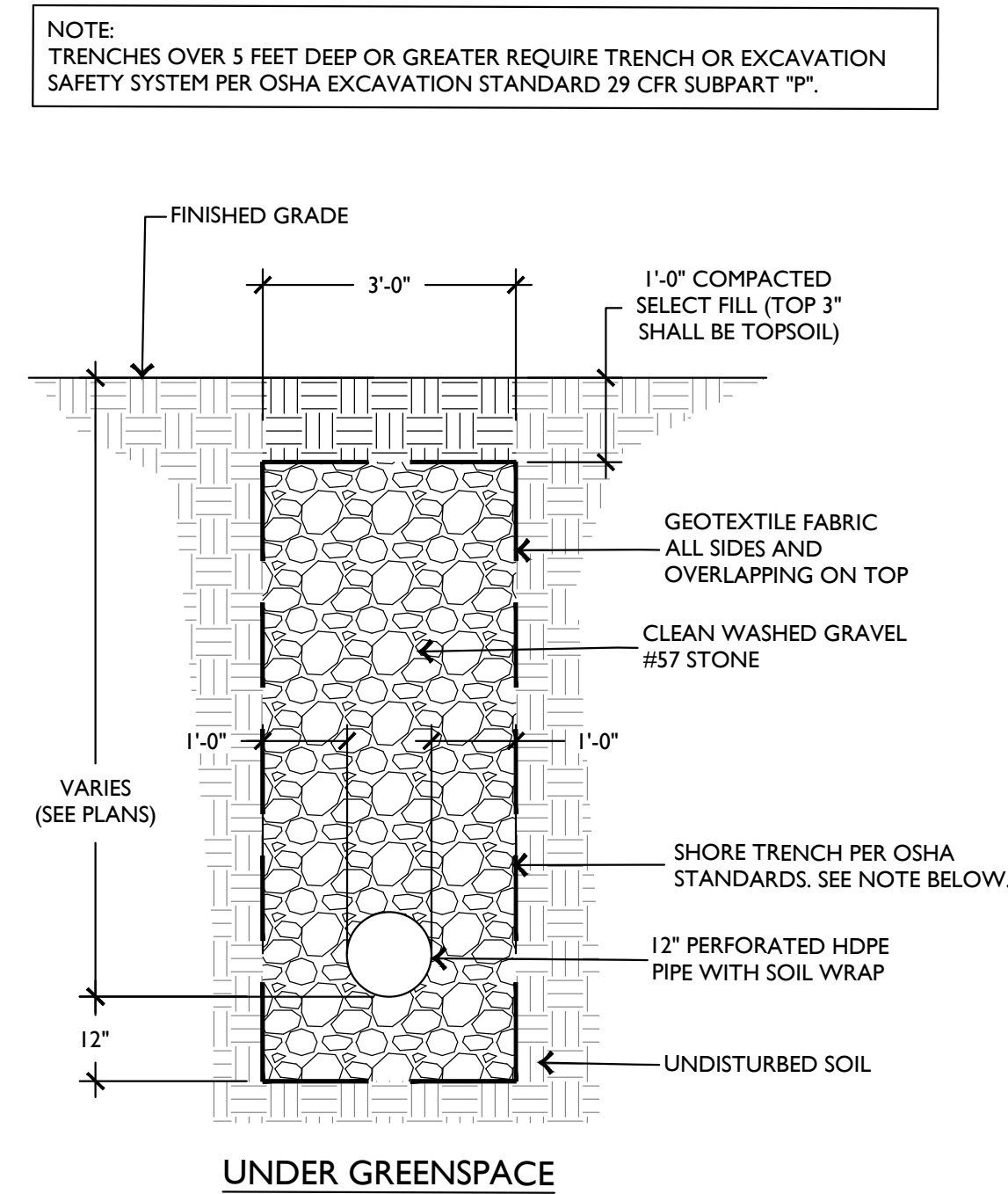
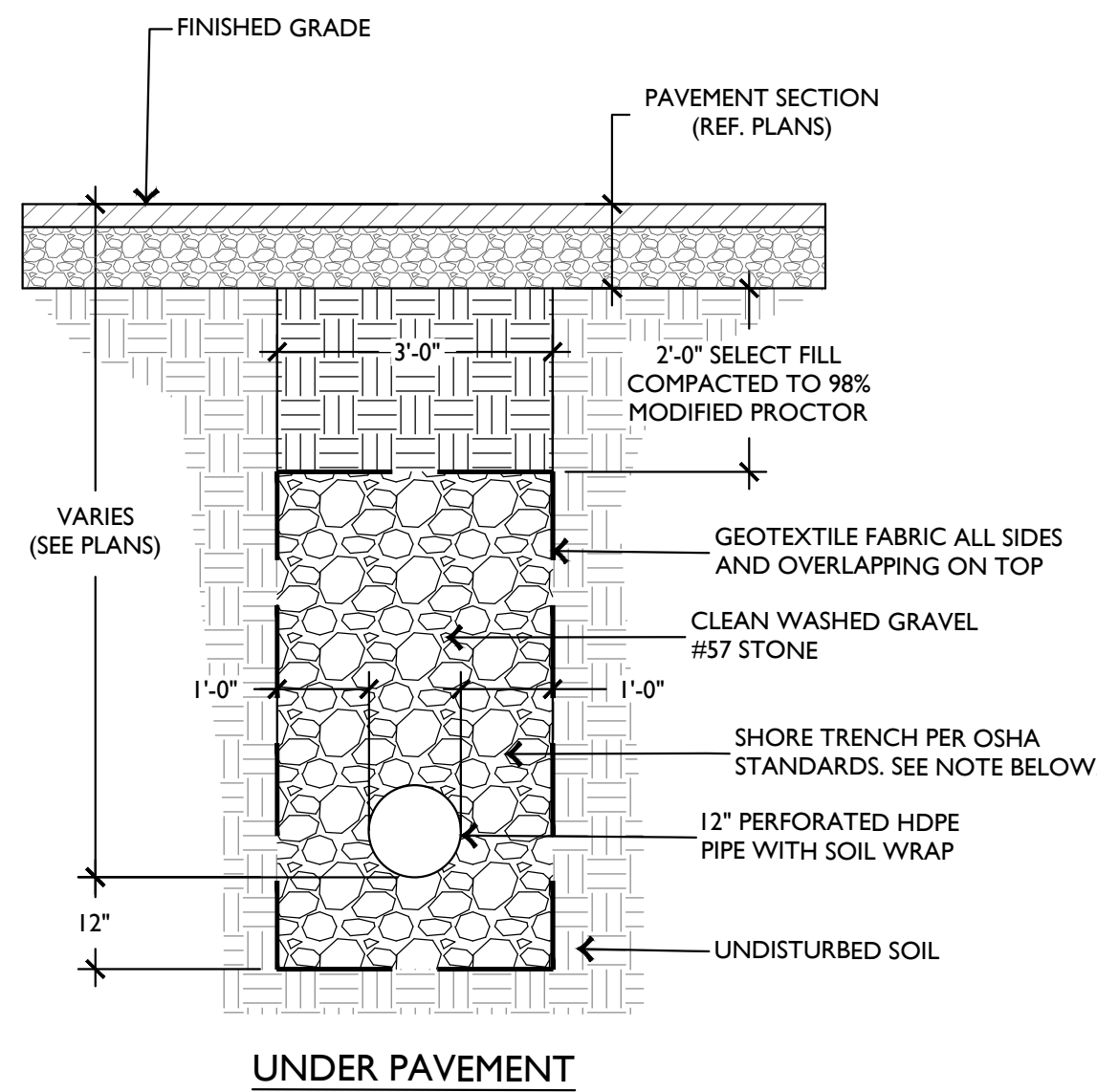
3 CONTROL MARKER

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4 TYPICAL UNDERDRAIN TRENCH

SCALE: N.T.S.

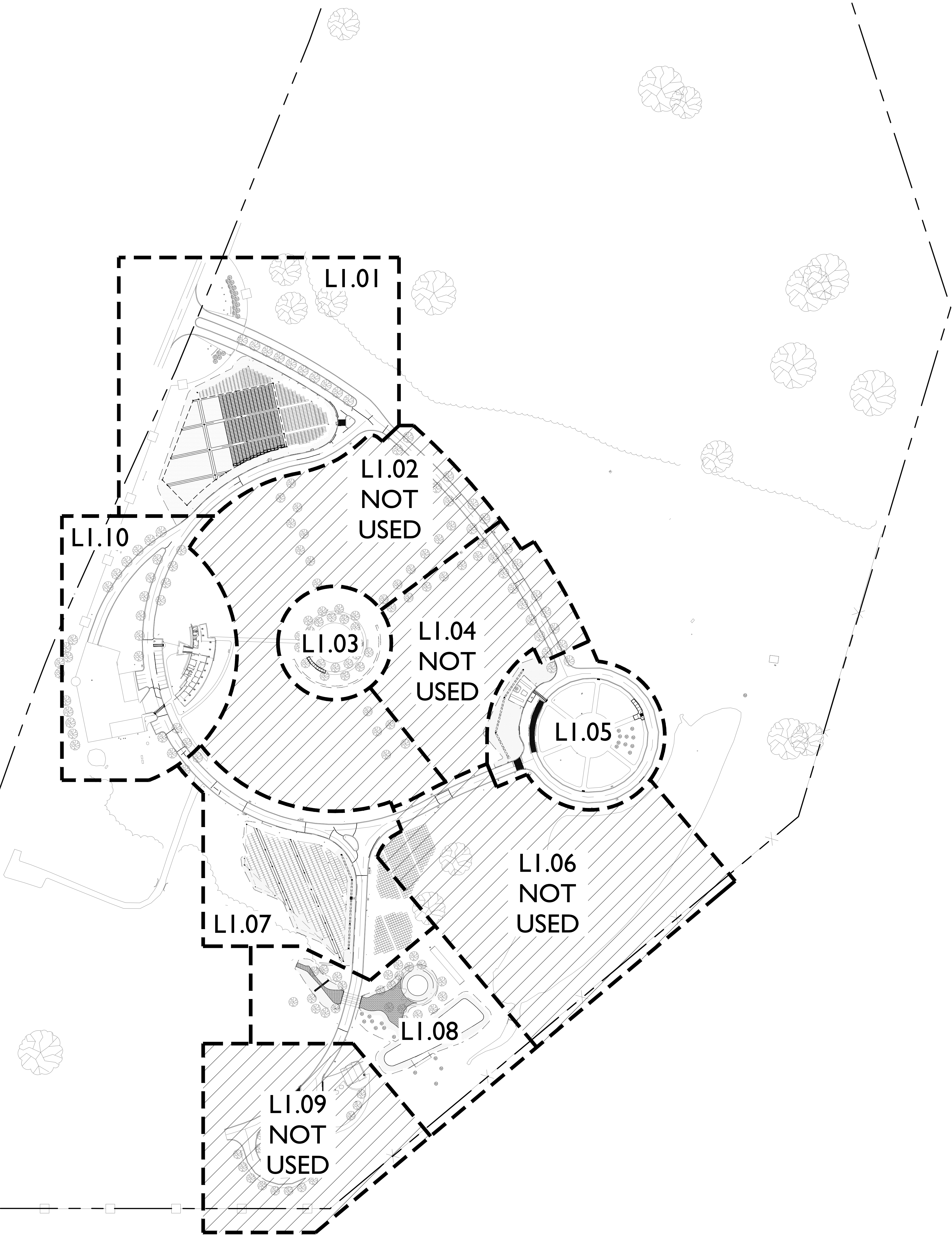


LANDSCAPE NOTES

1. CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL UTILITIES PRIOR TO STARTING ANY WORK. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ARKANSAS ONE-CALL TO CONFIRM ALL UTILITIES.
2. ALL PLANTS MUST BE HEALTHY, VIGOROUS AND FREE OF PESTS AND DISEASE.
3. STANDARDS SET FORTH IN "AMERICAN STANDARD FOR NURSERY STOCK" REPRESENT GUIDELINE SPECIFICATIONS ONLY AND SHALL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIAL.
4. ALL PLANTS MUST BE CONTAINER GROWN OR BALLED AND BURLAPPED AS INDICATED ON THE PLANT LIST.
5. ALL PLANTS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT BEFORE, DURING, AND AFTER CONSTRUCTION.
6. ALL PLANTING AREAS MUST BE COMPLETELY MULCHED WITH A 3" LAYER OF ORGANIC HARDWOOD MULCH. MULCH SHALL NOT BE PLACED IMMEDIATELY ADJACENT TO TREE TRUNKS, BUT SHALL BE KEPT AT LEAST 4" FROM ROOT COLLAR AT THE SOIL LINE.
7. ALL PLANTING BEDS SHALL BE CONTAINED BY EDGING MATERIAL OTHER THAN VEGETATION.
8. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING THE COURSE OF THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC. WHICH OCCURS AS A RESULT OF THE LANDSCAPE CONSTRUCTION AT NO COST TO THE OWNER.
9. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS BEFORE PRICING THE WORK.
10. THE CONTRACTOR IS RESPONSIBLE FOR FULLY MAINTAINING ALL PLANTING MATERIAL (INCLUDING BUT NOT LIMITED TO: WATERING, SPRAYING, MULCHING, FERTILIZING, ETC.) IN ALL PLANTING AREAS AND LAWN AREAS UNTIL THE WORK IS ACCEPTED IN TOTAL BY THE OWNER.
11. THE CONTRACTOR SHALL COMPLETELY GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE (1) YEAR BEGINNING ON THE DATE OF TOTAL ACCEPTANCE. THE CONTRACTOR SHALL PROMPTLY MAKE ALL REPLACEMENTS BEFORE OR AT THE END OF THE GUARANTEE PERIOD.
12. ANY PLANT MATERIAL WHICH DIES, TURNS BROWN, OR DEFOLIATES (PRIOR TO TOTAL ACCEPTANCE OF THE WORK SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE AND MEETING ALL PLANT LIST SPECIFICATIONS.
13. ONCE INSTALLED, LANDSCAPING SHALL BE MAINTAINED IN HEALTHY LIVING CONDITION AND ALL PLANT MATERIAL THAT DIES SHALL BE REPLACED.
14. NOTIFY LANDSCAPE ARCHITECT OR DESIGNATED REPRESENTATIVE OF ANY LAYOUT DISCREPANCIES PRIOR TO ANY PLANTING. LOCATE ALL UTILITIES AND SITE LIGHTING CONDUITS BEFORE CONSTRUCTION BEGINS.
15. MAINTENANCE: THE CURRENT OWNER OF THE PROPERTY SHALL BE RESPONSIBLE FOR THE ONGOING MAINTENANCE OF REQUIRED LANDSCAPING.

IRRIGATION NOTE

THE CONTRACTOR SHALL BE REQUIRED TO REPLACE ANY IRRIGATION INFRASTRUCTURE THAT IS REMOVED DUE TO THIS PROJECT'S CONSTRUCTION ACTIVITIES BUT NO NEW IRRIGATION IS PROPOSED.



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Birdeye, Arkansas

STATE OF ARKANSAS - Department of Veterans Affairs

501 Woodlane Drive, Suite 401N

Little Rock, Arkansas 72201

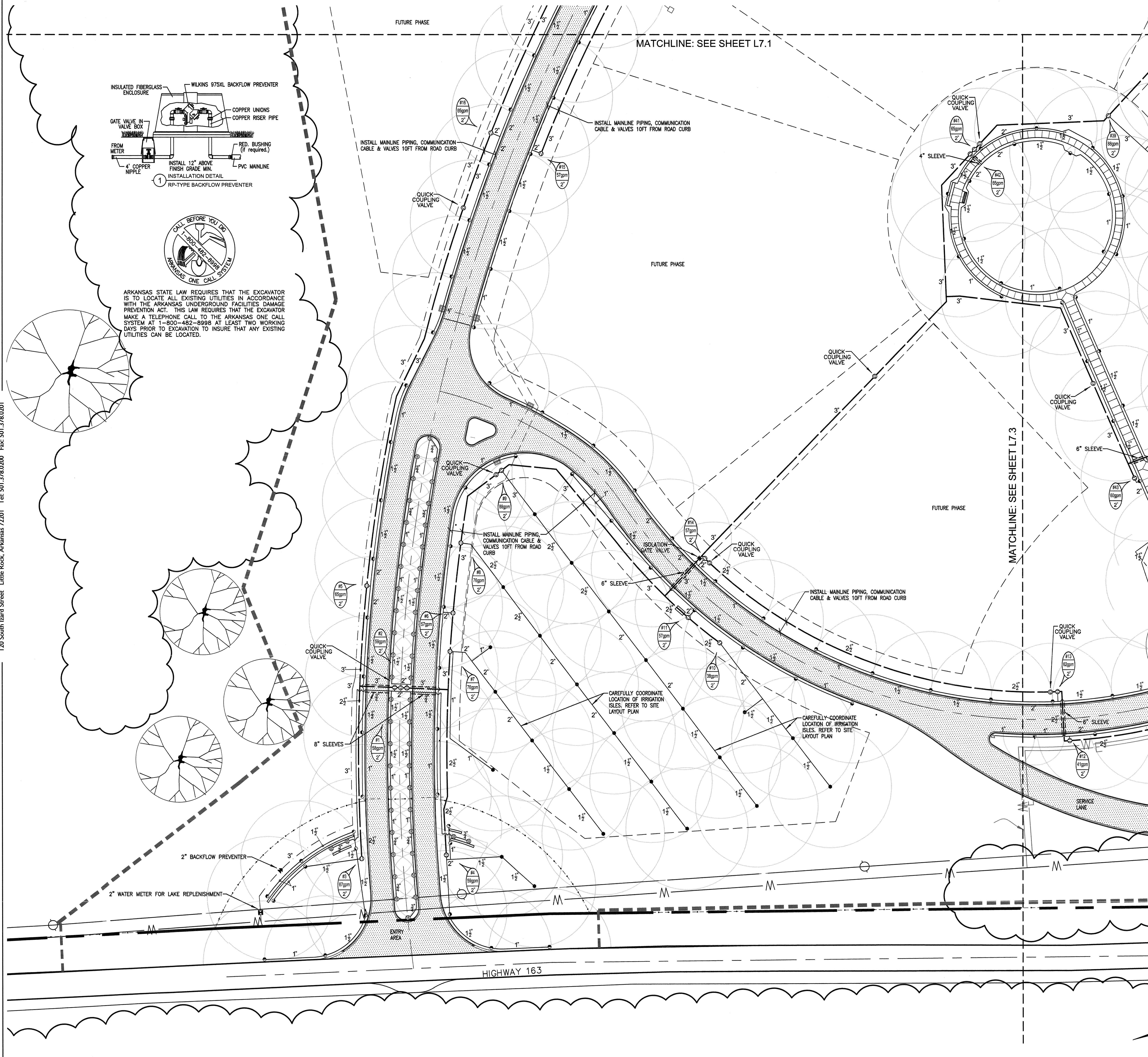
EDG PROJECT NO.	21-047
DATE	2023.06.18
REVISIONS	
Number	Date
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OVERALL LANDSCAPE PLAN

SCALE: 1" = 100'-0"

0' 50' 100' 200' 400'

NORTH



QUANTITIES ARE SHOWN FOR CONVENIENCE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CALCULATE ALL MATERIALS NECESSARY FOR A COMPLETE IRRIGATION SYSTEM.

IRRIGATION LEGEND

- 1 [] RAINBIRD VFD PUMP STATION MODEL VS12000460 (200gpm @80psi)
- 1 [] BERMAD 3" #410 MASTER VALVE (NORMALLY OPEN)
- 1 [] RAINBIRD FS300P 3" FLOW SENSOR
- 22 [] RAINBIRD 3RC QUICK COUPLING VALVE (PROVIDE 3 KEYS)
- 5 [] PUSH-ON ISOLATION GATE VALVE (SAME SIZE AS LINE)
- 48 [] RAINBIRD 200PGA ZONE VALVE w/FLO CONTROL
- 1 [] RAINBIRD WDC2-100 2-WIRE DECODER TYPE IRRIGATION CONTROLLER INCLUDE THE FOLLOWING OPTIONS:
RAINBIRD ETMI ET MANAGER SYSTEM (WITH EXTERNAL ANTENNA)
FIRST YEAR SUBSCRIPTION FOR WEATHER DATA SIGNAL
RAINBIRD FREERADNSP UHF RADIO-BASED REMOTE CONTROL SYSTEM
- 1 [] RAINBIRD WR2 RAIN/FREEZE SHUTOFF SENSOR
- 18 [] RAINBIRD 1804-PRS w/ 12VAN POP-UP TURF SPRAY
- 6 [] RAINBIRD 1804-PRS w/ 15VAN POP-UP TURF SPRAY
- 75 [] RAINBIRD 1804-PRS w/ 18VAN POP-UP TURF SPRAY
- 8 [] RAINBIRD 1804-PRS w/ 15SST POP-UP TURF SPRAY
- 1 [] RAINBIRD 5004 w/ 1.0LA POP-UP TURF ROTOR
- 21 [] RAINBIRD 5004 w/ 2.0LA POP-UP TURF ROTOR
- 8 [] RAINBIRD 5004 w/ 3.0LA POP-UP TURF ROTOR
- 35 [] RAINBIRD 5004 w/ 1.5 POP-UP TURF ROTOR
- 48 [] RAINBIRD 5004 w/ 3.0 POP-UP TURF ROTOR
- 22 [] RAINBIRD 6504 POP-UP TURF ROTOR w/#6 NOZZLE
- 156 [] RAINBIRD 6504 POP-UP TURF ROTOR w/#8 NOZZLE
- 87 [] RAINBIRD 6504 POP-UP TURF ROTOR w/#14 NOZZLE

- CL200 PVC SOLVENT WELD LATERAL PIPING
- CL200 PVC G.J. MAINLINE PIPING & 14/2 DECODER CABLE
- SCH40 PVC SLEEVES

- 1 [] 2" WATER METER FOR LAKE REPLENISHMENT
- 1 [] RP-TYPE BACKFLOW PREVENTER ASSY.
- CL200 PVC G.J. MAINLINE TO LAKE LEVEL CONTROL VALVE

GENERAL NOTES

1. A DESIGN LAYOUT BASED ON THE EQUIPMENT OF RAINBIRD SPRINKLER CORPORATION HAS BEEN PROVIDED FOR BIDDING PURPOSES. SUBSTITUTIONS OF EQUIPMENT WITH EQUAL QUALITY AND PERFORMANCE MAY BE SUBMITTED FOR APPROVAL FROM HUNTER INDUSTRIES AND THE TORO COMPANY.
2. CONTRACTOR SHALL INSTALL ALL EQUIPMENT AS PER MANUFACTURER'S CURRENT SPECIFICATIONS AND RECOMMENDATIONS.
3. PUMP STATION SHALL BE PRE-FAB VFD SUBMERSIBLE TYPE CAPABLE OF PRODUCING 200gpm @80psi. SEE WRITTEN SPECIFICATIONS FOR OPTIONS & FEATURES. 480VAC; 3PHASE POWER REQUIRED.
4. COORDINATE EXACT LOCATIONS OF WET WELL, PUMP STATION, CONTROL SYSTEM AND RAIN/FREEZE SENSOR WITH THE ARCHITECT AND GENERAL CONTRACTOR.
5. WHEN TRENCHING UNDER THE DRIPLINE OF EXISTING TREES EXTREME CARE MUST BE GIVEN TO AVOID ROOT DAMAGE. IF AT ALL POSSIBLE AVOID TRENCHING INSIDE THE DRIPLINE BY GOING AROUND THE TREE RATHER THAN UNDER IT. IF TRENCHING MUST OCCUR UNDER THE DRIPLINE, USE EITHER TUNNELING OR HAND-DIGGING METHODS RATHER THAN A MECHANICAL TRENCHER. MINIMIZE THE IMPACTS OF ROOT SEVERING BY AVOIDING CONSTRUCTION DURING HOT, DRY WEATHER, KEEPING TREES WELL WATERED BEFORE AND AFTER DIGGING AND COVERING ROOTS WITH SOIL OR MULCH AS SOON AS POSSIBLE.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES CAUSED TO ALL UTILITIES (BOTH OVERHEAD AND BELOW GROUND) DURING THE IRRIGATION INSTALLATION. CONTRACTOR SHALL SEEK THE ASSISTANCE AT LOCAL UTILITIES AND THE OWNER IN THE LOCATION OF THE UTILITIES PRIOR TO PERFORMING TRENCHING OPERATIONS IN THE WORKING AREA.
7. THE IRRIGATION DESIGN IS DIAGRAMMATIC. THE INTENT OF THE DRAWINGS IS TO SHOW THE GENERAL LAYOUT AND LOGIC OF THE SYSTEM. SCALED MEASUREMENTS MAY NOT BE ACCURATE. ACTUAL LOCATIONS AND QUANTITIES OF PIPE AND FITTINGS MAY VARY DUE TO FIELD ADJUSTMENTS FOR EXISTING CONDITIONS AND OTHER OBSTRUCTIONS TO PROVIDE THE PROPER AND INTENDED COVERAGE.
8. WINTERIZATION SHALL BE DONE BY "AIR BLOW OUT" METHOD.
9. CONTRACTOR SHALL INSTALL 2" DRAIN VALVES AT THE LOWEST POINT ON THE MAIN LINE BETWEEN THE ISOLATION VALVES FOR DRAINING THAT PORTION OF THE SYSTEM TO MAKE REPAIRS. DRAIN VALVES SHALL BE INSTALLED IN 10" VALVE BOXES.
10. CONTRACTOR SHALL INSTALL 2 AIR RELIEF VALVES IN THE PVC MAINLINE AT LOCATIONS SHOWN ON PLAN. AIR RELIEF VALVES SHALL BE INSTALLED IN 10" VALVE BOXES.
11. ALL PVC MAINLINE TO BE GASKET JOINT CLASS 200 PVC AND LATERAL PIPING SHALL BE SOLVENT WELD CL200 PVC.
12. ALL MAIN LINE FITTINGS (BENDS AND TEES) AND SERVICE TEES BELOW GROUND SHALL BE HARCO DUCTILE IRON. PROTECT THE JOINT AND PIPE CONNECTION FROM THE POURED CONCRETE THRUST BLOCK BY WRAPPING WITH 4 MIL VISQUEEN PLASTIC WRAP.
13. ALL LATERAL LINE FITTINGS SHALL BE SCH40 PVC TYPE 1 AND MUST BE OF DOMESTIC MANUFACTURE. PVC SOLVENT CEMENT AND PRIMER SHALL BE AS RECOMMENDED / APPROVED BY THE MANUFACTURER OF THE PIPE.
14. CONTRACTOR SHALL INSTALL A TRACER WIRE ABOVE ALL MAINLINE PIPING. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

SLEEVING NOTES

1. GENERAL CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF SCHEDULE 40 PVC SLEEVES AS INDICATED ON THE DRAWING. INSTALL FLOWLINE OF SLEEVES 18" BELOW TOP OF PAVEMENT. EXTEND SLEEVES 18" BEYOND BACK OF CURB AND CAP UNTIL CONTRACTOR IS READY TO BEGIN THE INSTALLATION OF SPRINKLER SYSTEM. STAKE LOCATION OF SLEEVE ENDS WITH PAINTED BLUE T-POSTS 6" FROM ENDS OF SLEEVE AND EXTENDING 36" ABOVE FINISH GRADE.

**Haywood, Kenward, Bare
AND ASSOCIATES, INC.**
Civil Engineering, Surveying & Planning Services
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REVISIONS

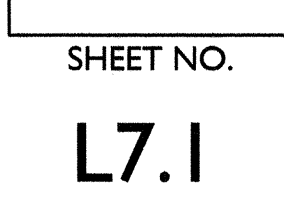
SHEET TITLE
IRRIGATION
PLAN

ISSUE DATE
June 1, 2010

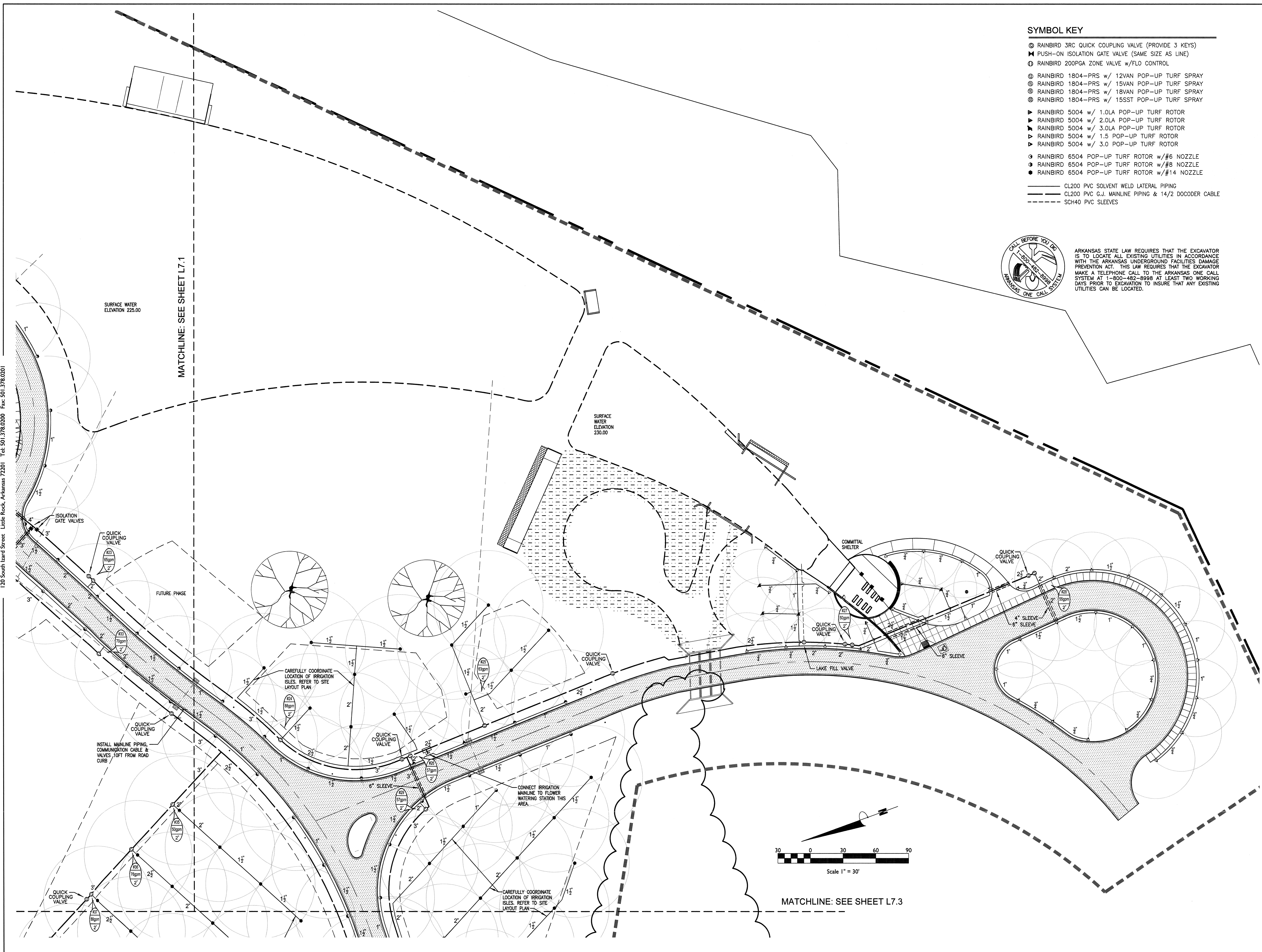
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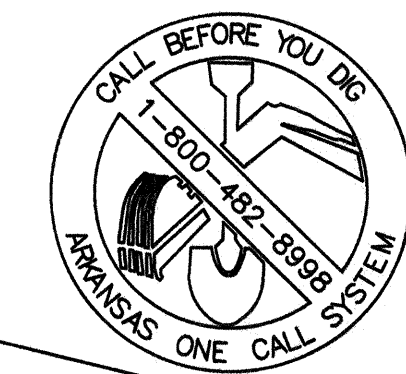
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120 South Hard Street Little Rock, Arkansas 72201 Tel: 501.378.0200 Fax: 501.378.0201



- SYMBOL KEY**
- RAINBIRD 3RC QUICK COUPLING VALVE (PROVIDE 3 KEYS)
 - PUSH-ON ISOLATION GATE VALVE (SAME SIZE AS LINE)
 - RAINBIRD 200PGA ZONE VALVE w/FLO CONTROL
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 - CL200 PVC G.J. MAINLINE PIPING & 14/2 DCCODER CABLE
 - SCH40 PVC SLEEVES



ARKANSAS STATE LAW REQUIRES THAT THE EXCAVATOR IS TO LOCATE ALL EXISTING UTILITIES IN ACCORDANCE WITH THE ARKANSAS UNDERGROUND FACILITIES DAMAGE PREVENTION ACT. THIS LAW REQUIRES THAT THE EXCAVATOR MAKE A TELEPHONE CALL TO THE ARKANSAS ONE CALL SYSTEM AT 1-800-482-8998 AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATION TO INSURE THAT ANY EXISTING UTILITIES CAN BE LOCATED.

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