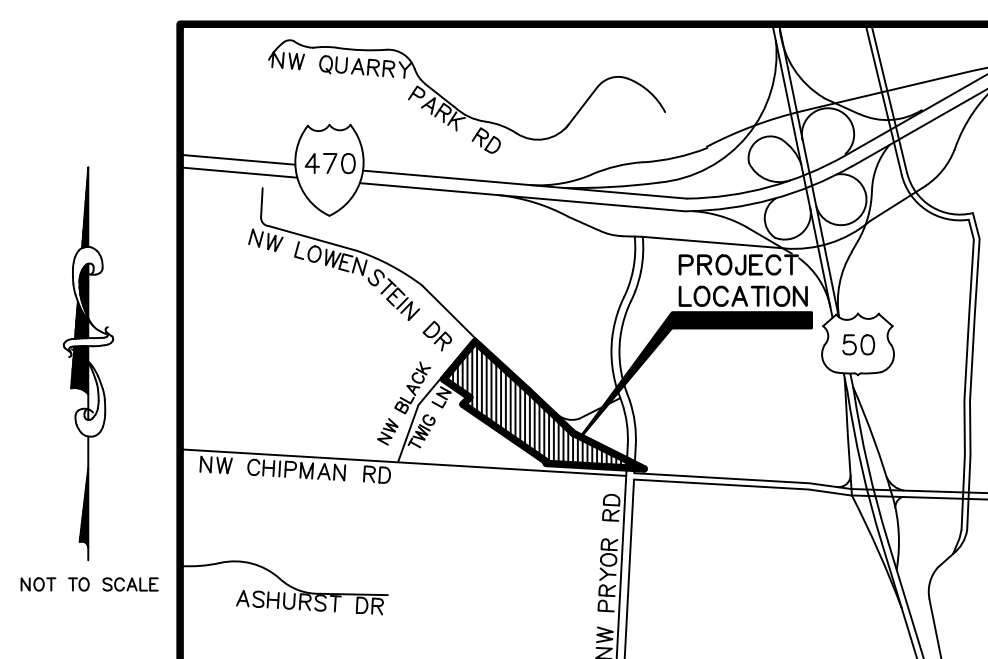


**CONSTRUCTION PLANS
FOR
LOWENSTEIN PARK
IMPROVEMENTS
STREETS OF WEST PRYOR
LEE'S SUMMIT, MISSOURI**

JUNE 2019



LOCATION MAP
CITY OF LEE'S SUMMIT, MISSOURI

INDEX TO SHEETS

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| MEP2 | SPECIFICATIONS |
| M1 | MECHANICAL PLAN / DETAILS / NOTES / SCHEDULES / SYMBOLS |
| P1 | PLUMBING PLAN / NOTES / SYMBOLS |
| P2 | PLUMBING DETAILS / SCHEDULES / RISER |
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| LANDSCAPING | |
| L 2.01 | LANDSCAPE PLAN |

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rebeccadavis@google.com



CALL BEFORE YOU
DIG - DRILL - BLAST
1-800-344-7483
(TOLL FREE)

MISSOURI ONE CALL SYSTEM, INC.

UTILITY STATEMENT:

THE UNDERGROUND UTILITIES SHOWN HEREON ARE FROM FIELD SURVEY INFORMATION OF ONE—CALL LOCATED UTILITIES, FIELD SURVEY INFORMATION OF ABOVE GROUND OBSERVABLE EVIDENCE, AND/OR THE SCALING AND PLOTTING OF EXISTING UTILITY MAPS AND DRAWINGS AVAILABLE TO THE SURVEYOR AT THE TIME OF THE SURVEY. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPREHEND ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. FURTHERMORE, THE SURVEYOR DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NO PHYSICAL COPIES OF THE UNDERGROUND UTILITIES BY EXCAVATION UNLESS OTHERWISE NOTED ON THIS SURVEY.

CAUTION – NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION 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 APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT LOCATIONS OF POSSIBLE CONFLICTS PRIOR TO ANY CONSTRUCTION.

SAFETY NOTICE TO CONTRACTOR

IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

WARRANTY / DISCLAIMER

THE DESIGNS REPRESENTED IN THESE PLANS ARE IN ACCORDANCE WITH ESTABLISHED PRACTICES OF CIVIL ENGINEERING FOR THE DESIGN FUNCTIONS AND USES INTENDED BY THE OWNER AT THIS TIME. HOWEVER, NEITHER KAW VALLEY ENGINEERING, INC NOR ITS PERSONNEL CAN OR DO WARRANT THESE DESIGNS OR PLANS AS CONSTRUCTED, EXCEPT IN THE SPECIFIC CASES WHERE KAW VALLEY ENGINEERING PERSONNEL INSPECT AND CONTROL THE PHYSICAL CONSTRUCTION ON A CONTEMPORARY BASIS AT THE SITE.

OWNER:
STREETS OF WEST PRYOR, LLC
7200 WEST 132ND STREET
OVERLAND PARK, KS 66213
CONTACT: MATT PENNINGTON
email: matt@drakekc.com

DEVELOPER:
STREETS OF WEST PRYOR, LLC
7200 WEST 132ND STREET
OVERLAND PARK, KS 66213
AGENT: DAVID N. OLSON
email: daveolson@monarchprojectllc.com

PREPARED BY:
KAW VALLEY ENGINEERING, INC
2319 N. JACKSON
JUNCTION CITY, KS 66441
785-762-5040
CONTACT: LEON D OSBOURN
EMAIL: ldo@kveng.com

APPROVED THIS _____ DAY OF _____, _____

OWNER: MATT PENNINGTON

APPROVED THIS _____ DAY OF _____, _____

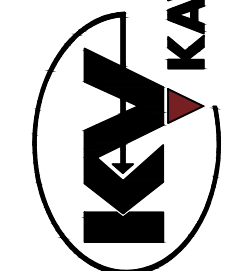
CITY APPROVAL

DATUM BENCHMARK:
VERTICAL DATUM IS NAVD 83 ESTABLISHED USING GNSS PROJECTS ON PROJECT CONTROL

BENCHMARKS:
 BM #1: CHISELED "SQUARE" ON TOP OF CURB POINT OF INTERSECTION OF WEST PARK
 PARKING LOT AT EAST DRIVE ENTRANCE. ELEV=984.97
 BM #2: CHISELED "SQUARE" ON NORTHWEST CORNER AREA INLET, 25'± EAST OF CURB
 LINE AND ON-LINE WITH SOUTH CURB OF LOWENSTEIN DRIVE AT 90° BEND IN ROAD. FJ FV=970.98

LEON D. OSBOURN
ENGINEER
MO # 021726

2319 N. JACKSON | P.O. BOX 1304
JUNCTION CITY, KANSAS 66441
PH: (785) 762-5040 | FAX: (785) 762-7744
jck@kveng.com | www.kveng.com



KAW VALLEY ENGINEERING, INC., IS AUTHORIZED TO OFFER ENGINEERING
SERVICES BY MISSOURI STATE CERTIFICATE OF AUTHORITY # 000842.
EXPIRES 12/31/19

STREETS OF WEST PRYOR
NW/4 NW PRYOR RD & NW LOWENSTEIN DR
LEE'S SUMMIT, MISSOURI

LOWENSTEIN PARK IMPROVEMENTS TITLE SHEET

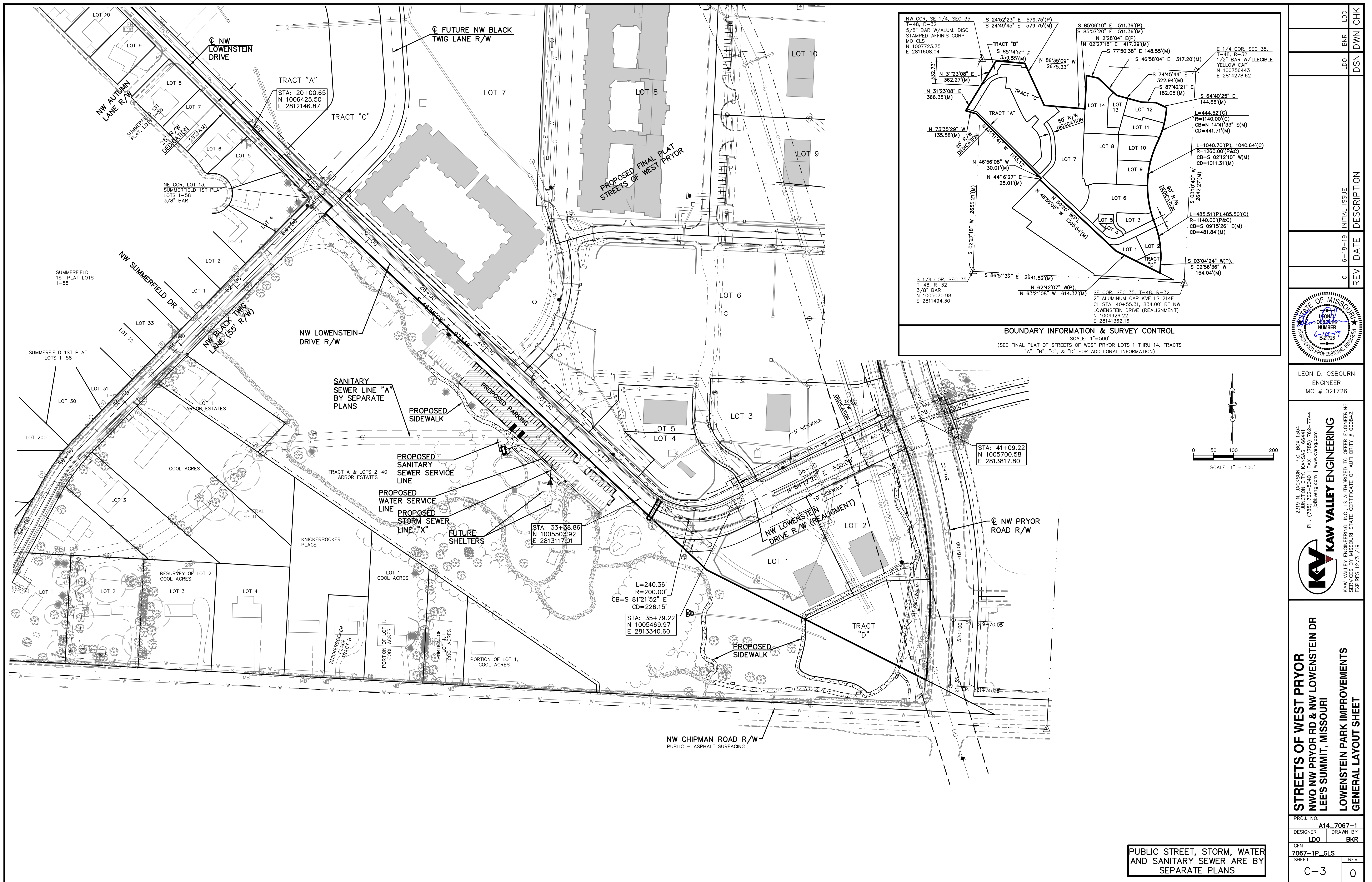
PROJ. NO.	
A14_7067-1	
DESIGNER	DRAWN BY
LDO	BKR
CFN	
7067-1P_TS	
SHEET	REV
C-1	0

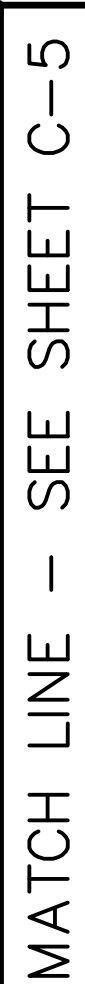
CONSTRUCTION NOTES:

1. EXCESS EXCAVATION SHALL BE DEPOSITED IN AREAS AS DIRECTED BY THE OWNER.
2. THE CONTRACTOR SHALL TAKE CARE NOT TO DAMAGE EXISTING SURFACING ON STREETS NEEDED TO BE TRAVELED UPON BY EQUIPMENT DURING CONSTRUCTION, AND IF DAMAGED, HE SHALL REPLACE THE SURFACING AND REPAIR THE STREET TO THE ORIGINAL CONDITION. NO TYPE OF EARTH MOVING EQUIPMENT WILL BE PERMITTED TO HAUL ON OR OVER ANY EXISTING STREET.
3. THE CONTRACTOR SHALL TAKE CARE IN PROTECTING EXISTING TREES AND SHRUBS OUTSIDE OF THE PROPOSED CONSTRUCTION. CARE SHALL BE TAKEN NOT TO DISTURB LAWNS OR EXISTING STRUCTURES OUTSIDE OF THE CONSTRUCTION LIMITS.
4. CONTRACTOR SHALL SEED ALL DISTURBED AREAS IN ACCORDANCE TO REQUIREMENTS OF TECHNICAL SPECIFICATIONS. BUILDING LOTS WILL NOT REQUIRE SEEDING BUT ALL SLOPES AND BACKFILL BEHIND CURBS SHALL BE SEEDED WITHIN RIGHT-OF-WAY LIMITS, AND ON SLOPES OF EMBANKMENTS. AREAS SHALL BE SEEDED WITHIN 28 DAYS OF FINISH GRADING OR AS DIRECTED BY OWNER.
5. JOINT SPACING FOR CONCRETE PAVEMENT SHALL BE MODIFIED TO MEET THE CONTRACTOR'S CONSTRUCTION EQUIPMENT AND METHODS OF POURING. CONTRACTOR TO DRILL AND INSERT EPOXY-COATED DOWEL BARS INTO CONSTRUCTION JOINTS AND HEADERS. CONTRACTOR TO SAW-CUT CLEAN VERTICAL EDGE AT JOINT LOCATION. SAWED CONTRACTION JOINTS SHALL BE REQUIRED ON MAXIMUM 12'-0" CENTERS.
6. CONTRACTOR SHALL SUBMIT A JOINTING PLAN AND RECEIVE APPROVAL FROM THE ENGINEER AND CITY PRIOR TO CONCRETE PAVING OPERATIONS.
7. CONTRACTOR SHALL INSTALL SILT FENCE TO PREVENT SEDIMENT FROM LEAVING CONSTRUCTION LIMITS. SILT FENCE IS REQUIRED AT BOTTOM OF SLOPE ON ALL EMBANKMENTS AND AT DISCHARGE POINTS OF STREETS, STORM SEWER INLETS AND PIPE END SECTIONS.
8. THE CONSTRUCTION AREA SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL AND ORGANIC MATTER FROM ALL AREAS TO BE OCCUPIED BY PAVING. TOPSOIL FOR REPLACEMENT ON SLOPES MAY BE STOCKPILED ON-SITE. EXCESS TOPSOIL MAY BE WASTED IN FILL SLOPES PROVIDED THAT NO TOPSOIL WILL BE WASTED WITHIN 10 FEET OF THE EDGE OF THE BUILDING OR PARKING AREA. BURNING OF TIMBER WILL NOT BE PERMITTED UNLESS APPROVAL IS OBTAINED FROM GOVERNING OFFICIALS. STRIPPING EXISTING TOPSOIL AND ORGANIC MATTER SHALL BE TO A MINIMUM DEPTH OF 6 INCHES.
9. CONTRACTOR SHALL COMPLETE ROUGH SITE AND STREET GRADING PRIOR TO INSTALLATION OF UTILITIES.

LEGEND			
	SECTION CORNER, ORIGIN UNKNOWN UNLESS OTHERWISE NOTED		STORM SEWER MANHOLE
	TELEPHONE SIGN		TELEPHONE MANHOLE
	MONUMENT FOUND, ORIGIN UNCERTAIN UNLESS OTHERWISE NOTED		TELEPHONE PEDESTAL
(D) DESCRIBED	DESCRIBED		UNDERGROUND TELEPHONE LINE
(M) MEASURED	MEASURED		SPLICE BOX
(C) CALCULATED	CALCULATED		FIBER OPTIC CABLE SIGN
(P) PLATTED	PLATTED		UNDERGROUND FIBER OPTIC CABLE
	STREET SIGN		TRAFFIC CONTROL POLE
	UTILITY POLE		PULL BOX
	UTILITY POLE W/ LIGHT		FLAG POLE
	UTILITY POLE W/TRANSFORMER		MAILBOX
	LIGHT POLE		HANDICAP SIGN
	DEADMAN ANCHOR		HANDICAP PAINTED SYMBOL
	OVERHEAD UTILITY - # LINES		LEFT TURN ARROW
	AIR CONDITIONING UNIT		STRAIGHT ARROW
	ELECTRIC PEDESTAL		RIGHT TURN ARROW
	ELECTRIC METER		GATE POST
	UNDERGROUND ELECTRIC LINE		FENCE POST
	UTILITY MANHOLE		WOOD FENCE
	CABLE TV SIGN		CHAIN LINK FENCE
	CABLE TV PEDESTAL		BARBED WIRE FENCE
	GAS SIGN		DECIDUOUS TREE W/SIZE & DRIP LINE
	GAS METER		EVERGREEN TREE W/SIZE & DRIP LINE
	UNDERGROUND GAS LINE		SAPPLING TREE
	GAS CATHODIC PROTECTION STATION		SHRUB
	WATER LINE		STUMP
	WATER LINE GATE VALVE		TREE LINE
	WATER SPIGOT		SHRUB LINE
	WATER METER		PARKING STALL COUNT
	WELL		1' CONTOUR INTERVAL
	FIRE HYDRANT		RESTRICTED ACCESS
	SANITARY SEWER MANHOLE		BACK OF CURB TO BACK OF CURB
	SANITARY SEWER LINE		EDGE TO EDGE

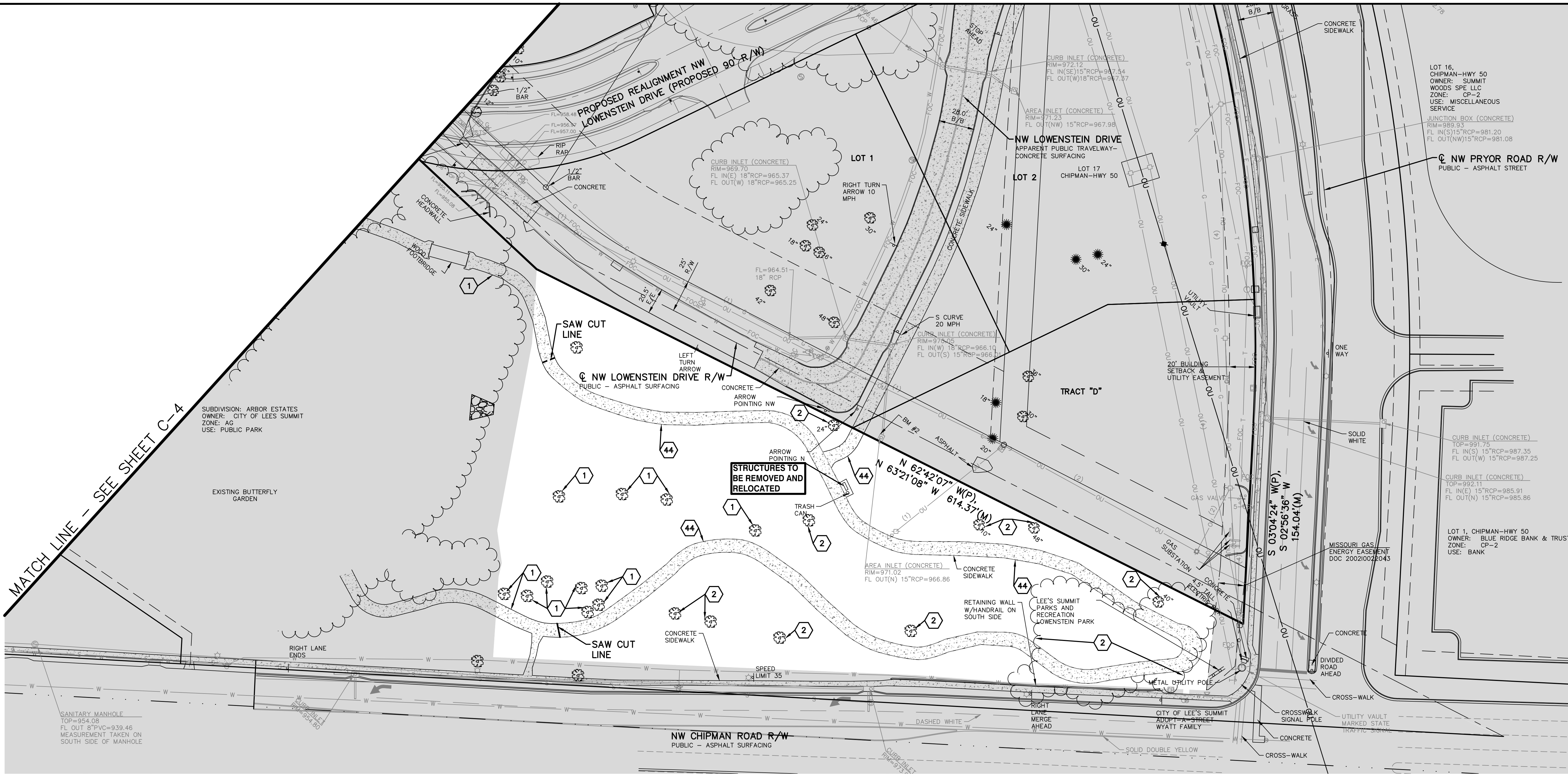
	LDO	CHK
	BKR	DWN
	LDO	DSN
	INITIAL ISSUE	DESCRIPTION
	6-18-19	DATE
0	REV	REV
LEON D. OSBOURN ENGINEER MO # 021726		
2319 N. JACKSON P.O. BOX 1304 JUNCTION CITY, KANSAS 66441 PH. (785) 762-5040 FAX (785) 762-7744 joe@kveeng.com www.kveeng.com		
KAW VALLEY ENGINEERING KAW VALLEY ENGINEERING, INC. IS AUTHORIZED TO OFFER ENGINEERING SERVICES IN MISSOURI STATE CERTIFICATE OF AUTHORITY # 000842. EXPIRES 12/31/19		
STREETS OF WEST PRYOR NWQ NW PRYOR RD & NW LOWENSTEIN DR LEE'S SUMMIT, MISSOURI		
LOWENSTEIN PARK IMPROVEMENTS GENERAL NOTES		
PROJ. NO. A14_7067-1		
DESIGNER	DRAWN BY	
LDO	BKR	
CFN		
7067-1P_GEN		
SHEET	REV	
C-2	0	





<div>STREETS OF WEST PRYOR NWQ NW PRYOR RD & NW LOWENSTEIN DR LEE'S SUMMIT, MISSOURI</div>		<div>LOWENSTEIN PARK IMPROVEMENTS DEMOLITION PLAN</div>	
PROJ. NO. A14_7067-1			
DESIGNER LDO		DRAWN BY BKR	
CFN 7067-1P_DEMO			
SHEET C-4		REV 0	

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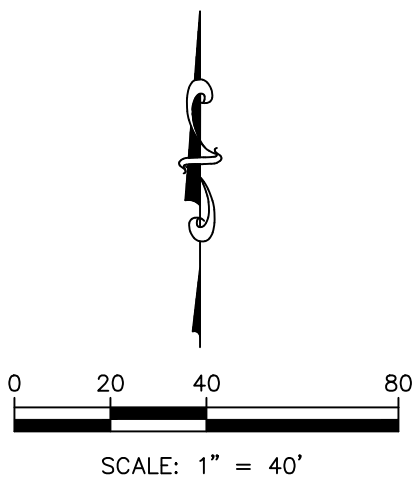


DEMOLITION NOTES:

- 1 TO REMAIN
- 2 REMOVE TREES
- 3 TREES TO REMAIN
- 5 REMOVE PIPE AND RIPRAP
- 7 SIGN TO BE RELOCATED
- 11 TO BE REMOVED BY ELECTRIC COMPANY
- 16 TO BE RELOCATED BY ELECTRIC COMPANY
- 44 CONTRACTOR TO REMOVE (SIDEWALK)
- 46 CONTRACTOR TO REMOVE PAVING AND CURBS TO EXISTING LOWENSTEIN PAVEMENT
- 47 CONTRACTOR TO REMOVE STRUCTURE, APPURTENANCES AND PAVING, COORDINATE WITH PARKS DEPARTMENT

LEGEND

NOT A PART OF DEMOLITION ACTIVITIES



DATUM BENCHMARK:
VERTICAL DATUM IS NAVD 88 ESTABLISHED USING
OPUS PROJECTS ON PROJECT CONTROL.

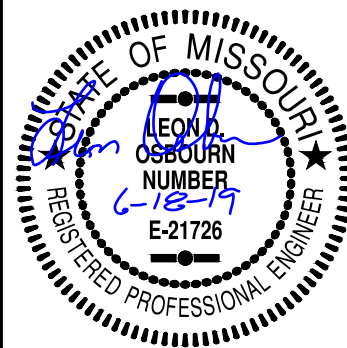
BENCHMARKS:
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OF INTERSECTION OF WEST PARK PARKING LOT AT
EAST DRIVE ENTRANCE. ELEV=984.97

BM #2: CHISELED "SQUARE" ON NORTHWEST CORNER
AREA INLET, 25± EAST OF CURB LINE AND ON-LINE
WITH SOUTH CURB OF LOWENSTEIN DRIVE AT 90°
BEND IN ROAD. ELEV=970.98

STREETS OF WEST PRYOR
NWQ NW PRYOR RD & NW LOWENSTEIN DR
LEE'S SUMMIT, MISSOURI

LOWENSTEIN PARK IMPROVEMENTS
DEMOLITION PLAN

PROJ. NO.	A14-7067-1
DESIGNER	LDO
DRAWN BY	BKR
CFN	7067-1P-DEMO
SHEET	C-5
REV	0

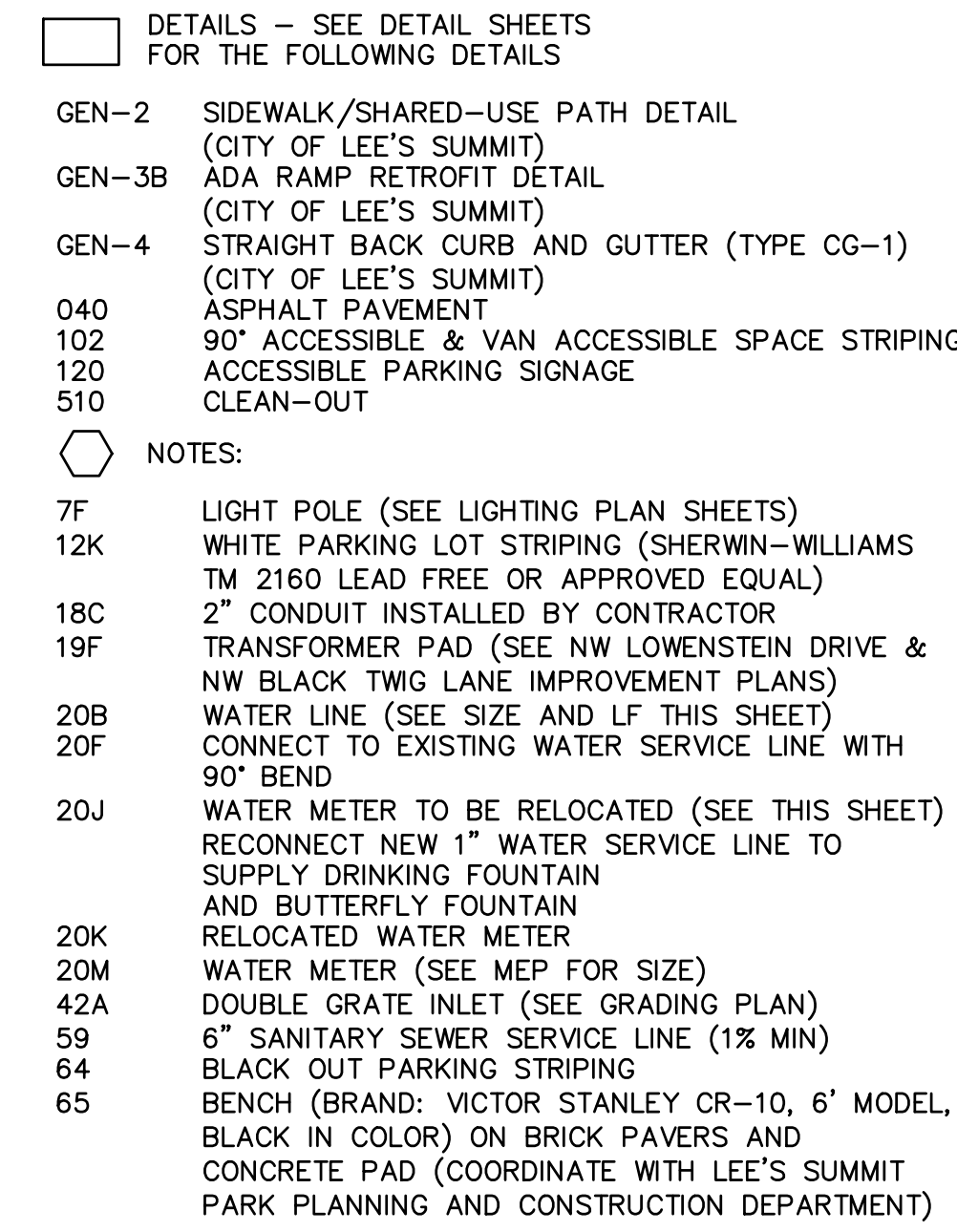


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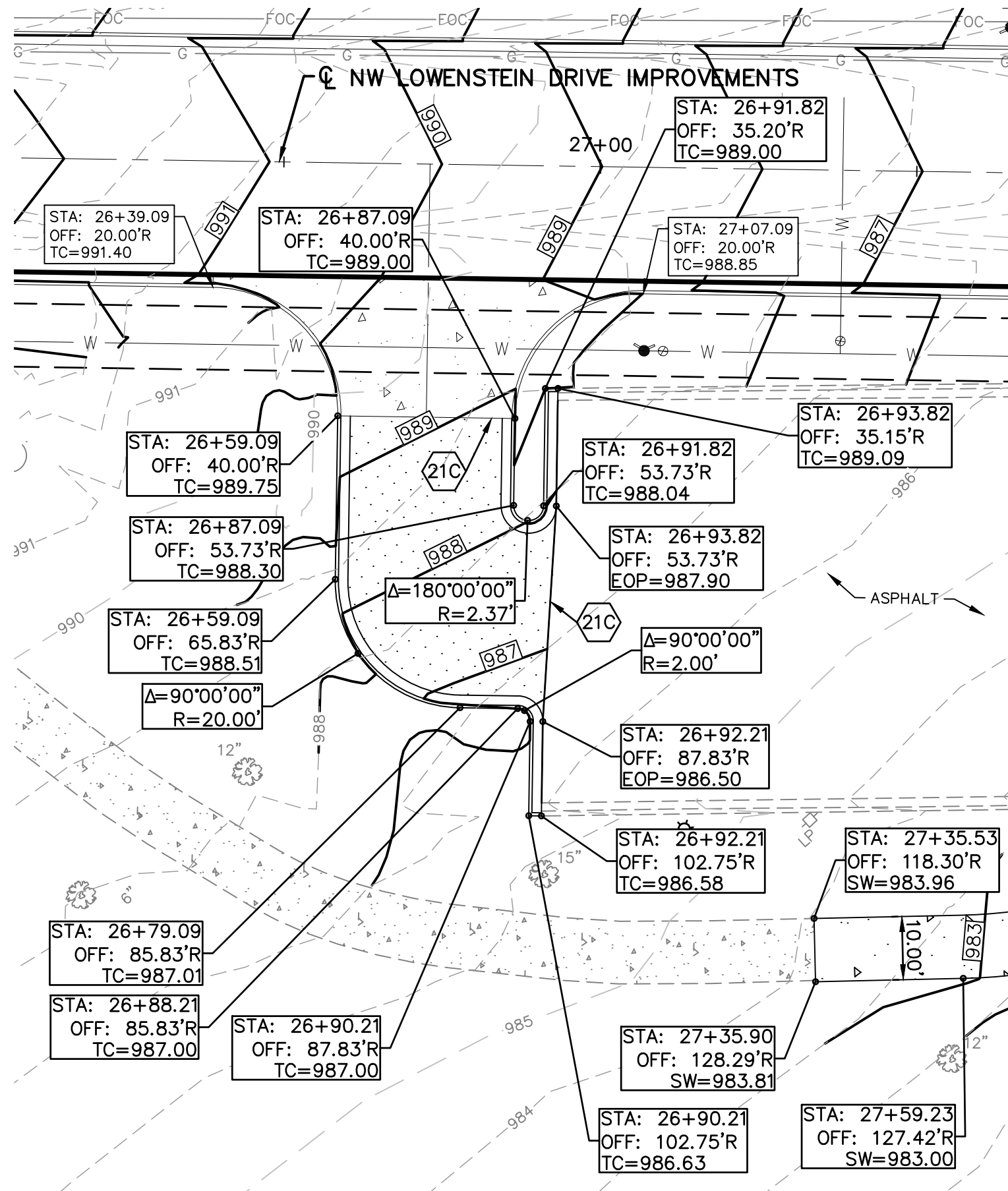
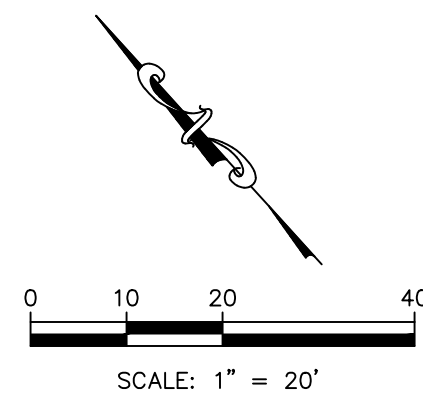
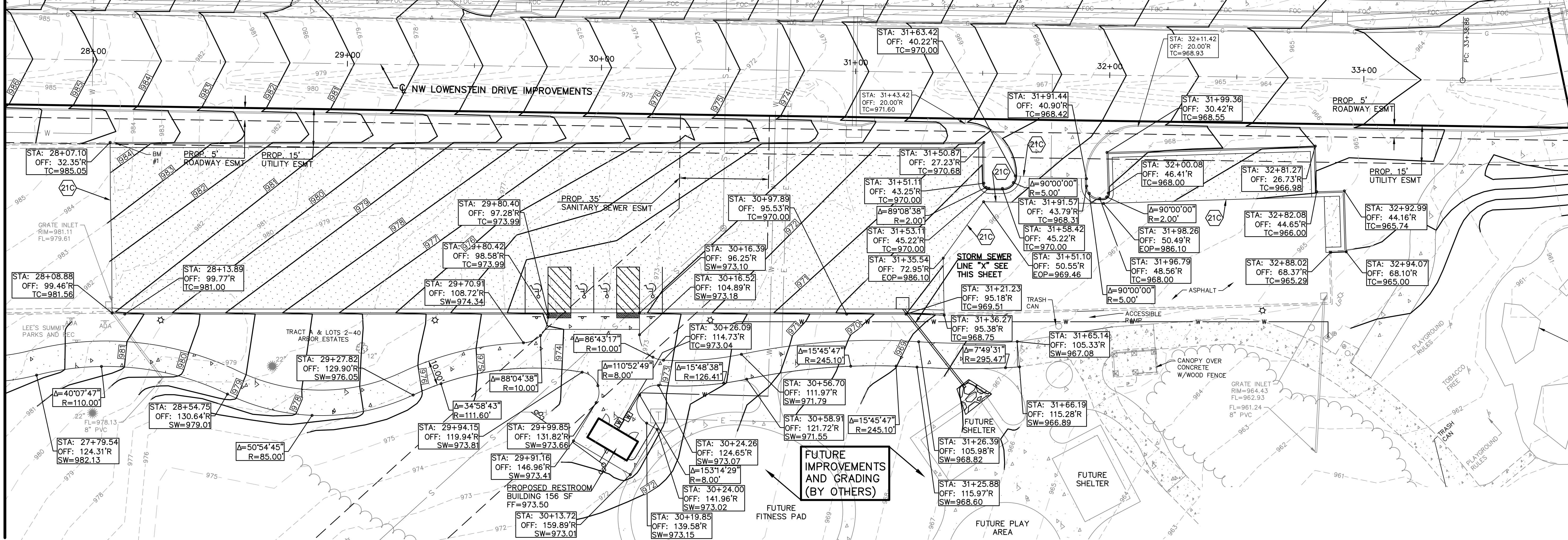
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SERVICES IN THE STATE OF MISSOURI. CERTIFICATE OF AUTHORITY # 000842.
EXPIRES 12/31/19

REV	DATE	DESCRIPTION	INITIALS
0	6-18-19	INITIAL ISSUE	LDO
			BKR
			CHK



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MATCH LINE THIS SHEET



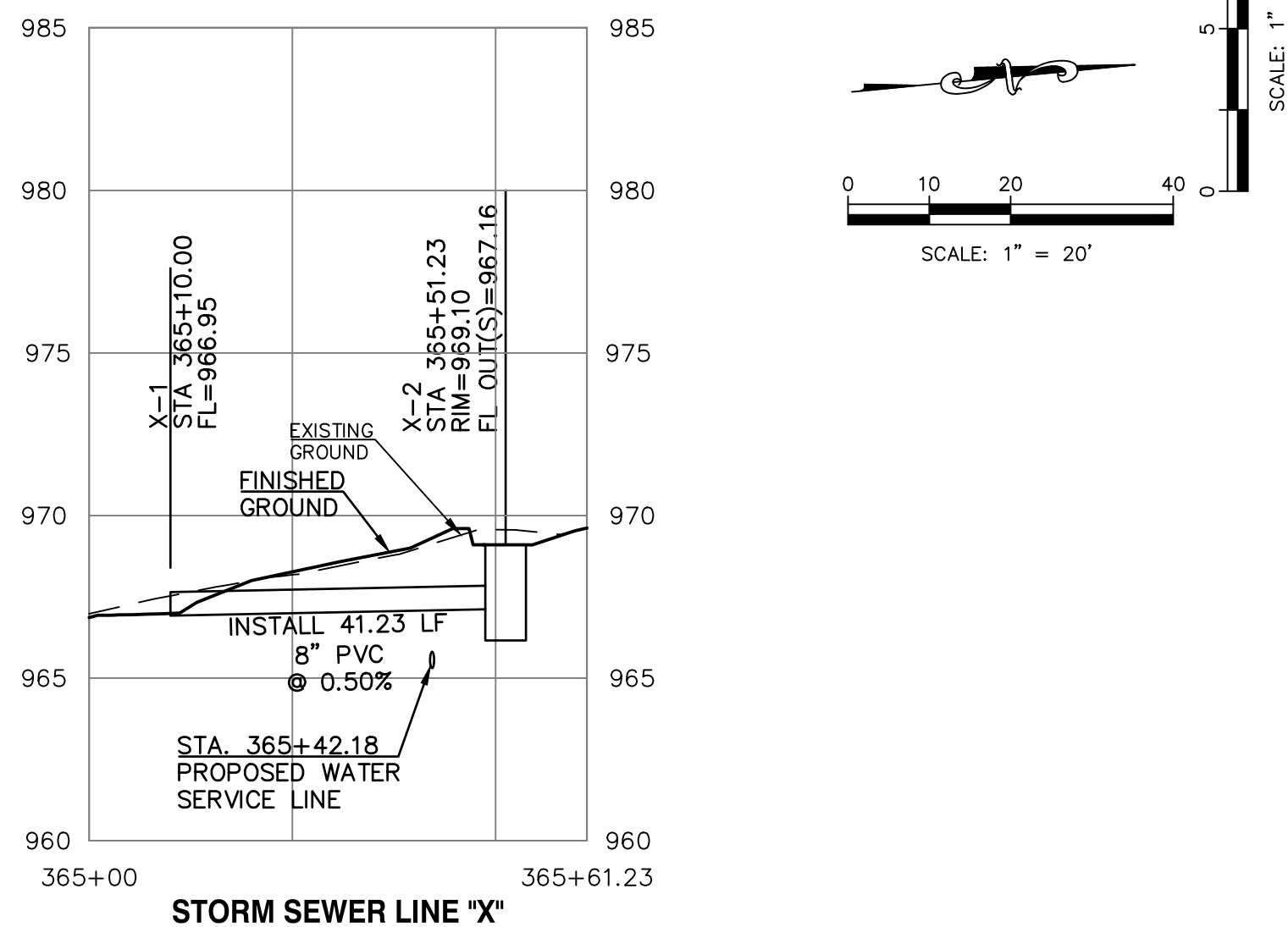
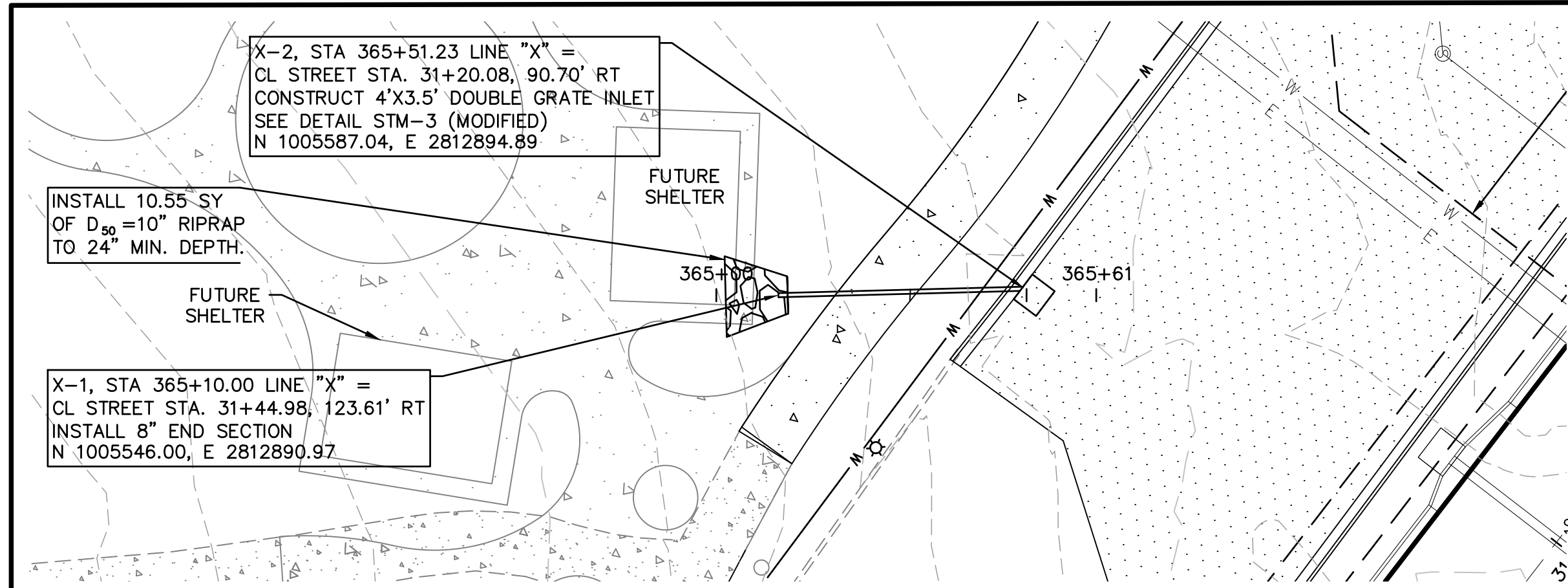
MATCH LINE THIS SHEET

- LEGEND (PROPOSED)
- TC TOP OF CURB
 - SW SIDEWALK
 - EOP EDGE OF PAVEMENT
 - 974 FINISHED 1' CONTOUR INTERVALS, TOP OF PAVEMENT

- DETAILS - SEE DETAIL SHEETS NO. C-13 FOR THE FOLLOWING DETAILS
- STM-3 JUNCTION BOX DETAIL
- NOTES:
- 21C MATCH EXISTING PAVEMENT ELEVATIONS

PUBLIC STREET, STORM, WATER AND SANITARY SEWER ARE BY SEPARATE PLANS

THE COORDINATES PROVIDED IN THESE PLANS ARE FOR INFORMATION AND CHECKING PURPOSES ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CALCULATE CONSTRUCTION STAKING COORDINATES ACCORDING TO THE DIMENSIONS SHOWN ON THESE PLANS. CONTRACTOR SHALL VERIFY THE ACCURACY OF THE COORDINATES SHOWN IN THE TABLE HEREON BEFORE CONSTRUCTION.



REV	DATE	DESCRIPTION	INITIAL	ISSUE	DSN	CHK
0	6-18-19	INITIAL ISSUE				

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KAW VALLEY ENGINEERING
KAW VALLEY ENGINEERING, INC. IS AUTHORIZED TO OFFER ENGINEERING SERVICES IN THE STATE OF MISSOURI. EXPIRES 12/31/19.

STREETS OF WEST PRYOR
NWQ NW PRYOR RD & NW LOWENSTEIN DR
LEE'S SUMMIT, MISSOURI

LOWENSTEIN PARK IMPROVEMENTS
GRADING PLAN & STORM SEWER LINE X - PLAN & PROFILE


PROJ. NO.	DESIGNER	DRAWN BY	CN	SHEET
A14-7067-1	LDO	BKR	7067-1P-CP	0

C-8

[illegible]

This topographic map depicts a site with various contour lines and spot elevations. The map includes labels for 'ESC-01', 'ESC-03', 'ESC-04', 'ESC-05', and 'ESC-06'. A scale bar is shown at the bottom right.

1. PROPERTY LINE IS LIMITS OF CONSTRUCTION EXCEPT AS SHOWN.
2. THE CONTRACTOR SHALL INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE DRAWINGS PRIOR TO BEGINNING EARTHWORK OPERATIONS.
3. THE CONTRACTOR SHALL MAINTAIN ALL SILT CONTROL MEASURES DURING CONSTRUCTION.
4. ALL SILT SHALL REMAIN ON SITE AND SURROUNDING STREETS SHALL BE KEPT CLEAR OF ALL MUD AND DEBRIS.
5. A SEDIMENTATION BARRIER IS TO BE INSTALLED AS SHOWN.
6. ACCUMULATED SEDIMENT SHALL BE REMOVED AND THE SEDIMENTATION BARRIERS MAINTAINED AS NEEDED TO PREVENT SEDIMENTATION BYPASS OF THE BARRIER.
7. SLOPES ARE TO BE LEFT IN A ROUGH CONDITION DURING GRADING.
8. CURB INLET SEDIMENTATION BARRIERS ARE TO BE INSTALLED AROUND INLETS AND WEIRS WHERE SEDIMENTATION IS A CONCERN. INLET BARRIERS SHALL BE EITHER BLOCK AND GRAVEL, OR SECURED STRAW BALES, OR SILT FENCE.
9. SEDIMENT IS TO BE REMOVED FROM STORM WATER DRAINAGE SYSTEMS.
10. RIPRAP IS TO BE INSTALLED AT AREAS OF CONCENTRATED FLOW (I.E. CULVERT OUTLETS).
11. CONTRACTOR IS RESPONSIBLE FOR INSTALLING ANY ADDITIONAL EROSION CONTROL AS HE/SHE DEEMS NECESSARY.
12. THE CONTRACTOR SHALL PROVIDE ALL MATERIALS, TOOLS, EQUIPMENT AND LABOR AS NECESSARY TO INSTALL AND MAINTAIN ADEQUATE EROSION AND SILTATION CONTROLS REQUIRED TO PREVENT SOIL EROSION FROM LEAVING THE PROJECT SITE. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO ENSURE THAT METHODS UTILIZED ARE ADEQUATE AND COMPLY WITH REQUIREMENTS OF THE SPECIFICATIONS AND GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THE WORK.
13. TEMPORARY SEDIMENT FENCE TO REMAIN UNTIL ADEQUATE VEGETATION IS ESTABLISHED.
14. MUD AND DEBRIS SHALL BE CLEANED UP AT THE CONCLUSION OF EACH WORKING DAY, OR AFTER EACH RAINFALL IF SILT IS PRESENT.
15. INSPECTION, MAINTENANCE AND REPAIR OF EROSION CONTROL DEVICES SHALL BE ON GOING THROUGHOUT THE LIFE OF BUILDING CONSTRUCTION TO KEEP THE DEVICES IN OPERABLE CONDITION AT ALL TIMES. ADDITIONAL MEASURES SHALL BE INSTALLED AS REQUIRED BY ACTUAL FIELD CONDITIONS AND/OR GOVERNING INSPECTION AGENCIES.
16. INSTALL CONSTRUCTION ENTRANCE AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING THE SITE AND AS SHOWN ON PLANS.
17. AT COMPLETION OF SITE GRADING AND OTHER RELATED CONSTRUCTION ACTIVITIES, ALL DISTURBED AREAS WITHIN THE PROJECT SITE SHALL BE SEEDED, SODDED, OR LANDSCAPED AS SHOWN ON THE LANDSCAPE PLAN WITHIN 14 DAYS.
18. TOPSOIL IS TO BE PLACED IN AREAS UNSUITABLE FOR VEGETATIVE GROWTH.
19. STRIP TOPSOIL PRIOR TO EXCAVATION, STOCKPILE AND SPREAD ONTO DISKED SUBGRADE (4" MIN) A THICKNESS OF 4 INCHES.

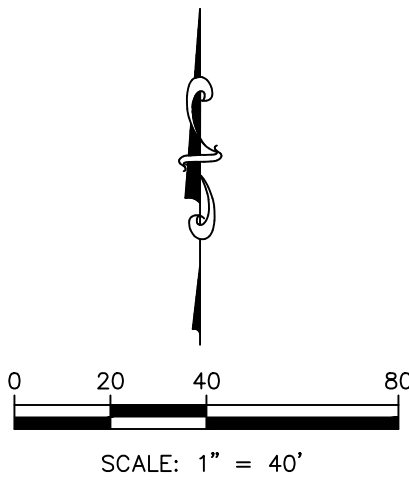
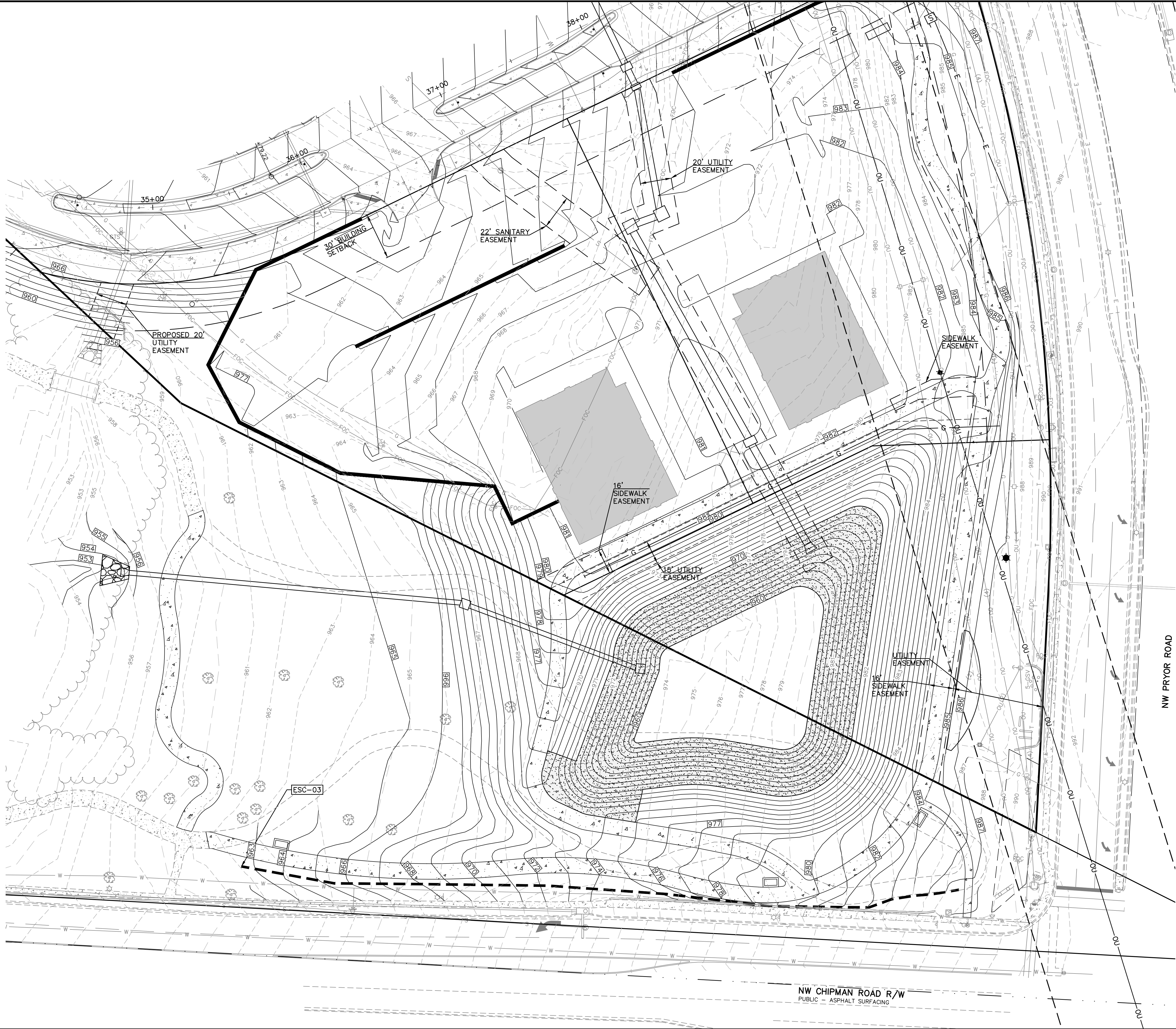

 DETAILS - SEE EROSION CONTROL DETAIL SHEETS
 FOR THE FOLLOWING DETAILS

ESC-01	CONSTRUCTION ENTRANCE DETAIL
ESC-03	SILT FENCE
ESC-06	CURB INLET PROTECTION
ESC-14	OUTLET PROTECTION

CONTRACTOR TO COORDINATE EROSION CONTROL
WITH MASS GRADING CONSTRUCTION IN PHASES

PUBLIC STREET, STORM, WATER
AND SANITARY SEWER ARE BY
SEPARATE PLANS

STREETS OF WEST PRYOR NWQ NW PRYOR RD & NW LOWENSTEIN DR LEE'S SUMMIT, MISSOURI		PROJ. NO. A14-7067-1	
		DESIGNER LDO	DRAWN BY BKR
CFN 7067-1P_ECP		REV 0	
SHEET C-10		LDO BKR DSN DWN CHK	



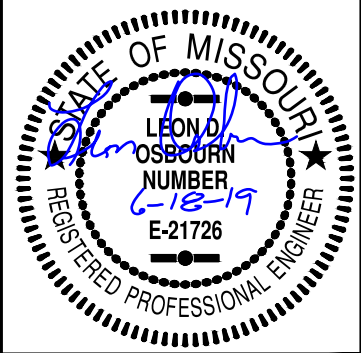
DETAILS — SEE EROSION CONTROL DETAIL SHEETS FOR THE FOLLOWING DETAILS

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- ESC-03 SILT FENCE
- ESC-06 CURB INLET PROTECTION
- ESC-14 OUTLET PROTECTION

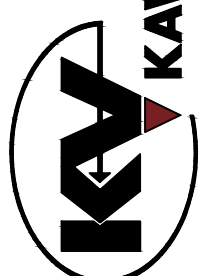
EROSION & PROPOSED IMPROVEMENTS LEGEND:

- 970--- EXISTING GROUND CONTOUR (1' INTERVALS)
- [970] PROPOSED FINISHED GROUND CONTOUR (1' INTERVALS)
- SILT FENCE
- [] INLET PROTECTION

REV	DATE	DESCRIPTION	DSN	DWN	CHK
0	6-18-19	INITIAL ISSUE			



LEON D. OSBOURN
ENGINEER
MO # 021726



KAW VALLEY ENGINEERING
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EXPIRES 12/31/19

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STREETS OF WEST PRYOR
NWQ NW PRYOR RD & NW LOWENSTEIN DR
LEE'S SUMMIT, MISSOURI

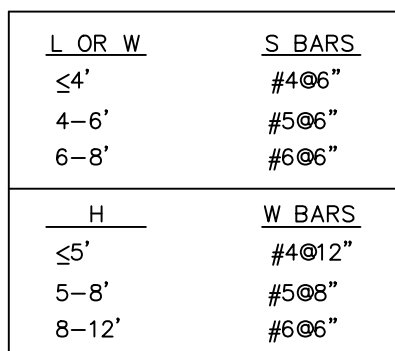
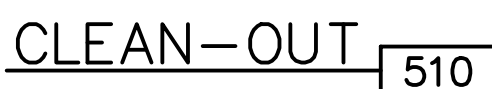
LOWENSTEIN PARK IMPROVEMENTS
EROSION CONTROL PLAN

PROJ. NO.	A14_7067-1
DESIGNER	LDO
DRAWN BY	BKR
CFN	
7067-1P_ECP	
SHEET	REV
C-11	0

PUBLIC STREET, STORM, WATER
AND SANITARY SEWER ARE BY
SEPARATE PLANS



1. FLEXIBLE PAVEMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MISSOURI DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR STATE ROAD & BRIDGE CONSTRUCTION.



ALL CONCRETE: $F'_C = 3500$ P.S.I.

NOTE:

1. L AND W BARS SHALL BE #6@6" CENTER
2. GRATE - R-6673-J, USE R-6673-0 WHERE DOUBLE GRATE IS SPECIFIED UNLESS OTHERWISE NOTED ON SITE GRADING PLAN.

ALTERNATE TOP TO STM-3
FOR DOUBLE GRATE INLET



** INCREASE IN MULTIPLES OF 6"
(7'-0") MAX WITHOUT SPECIAL DESIGN.
(SEE PROJECT PLANS FOR DETAILS)

BARS	BAR SIZE	SPACING (IN.)
H	4	12
V	4	12
L	5	6
W	5	6

REINFORCING



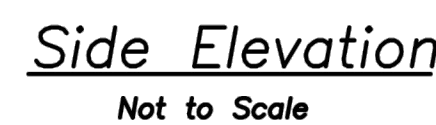
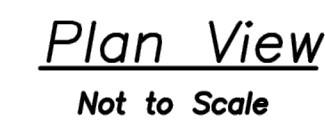
GENERAL NOTES:

1. LOCATE RING AND COVER ON BLANK WALL.
2. USE $\frac{3}{4}$ " CHAMFER STRIP OR $\frac{1}{2}$ " R EDGER TOOL ON ALL EXPOSED CONCRETE CORNERS.
3. STEPS REQUIRED AT 16" O.C. WHEN DEPTH FROM TOP OF CASTING TO INVERT EXCEEDS 4' ON BLANK WALL IF POSSIBLE.
4. BOXOUTS WILL NOT BE ALLOWED TO PROJECT THROUGH THE CORNERS OF THE STRUCTURE AND THE MINIMUM DISTANCE BETWEEN BOXOUTS IS 6".
5. THE MINIMUM REINFORCING SHALL BE 1 H-BAR OVER A CAST-IN-PLACE PIPE AND 2 H-BARS OVER A PRECAST BOXOUT.
6. PRECAST LIDS SHALL BE PINNED, SEALED WITH NON-SHRINKABLE GROUT AND REMOVABLE FOR FUTURE MAINTENANCE.
7. REINFORCING OF COVERS IN STREETS REQUIRE SPECIAL DESIGN.
10. FOR RING AND COVER SEE THE STORMWATER APPROVED PRODUCT LIST.

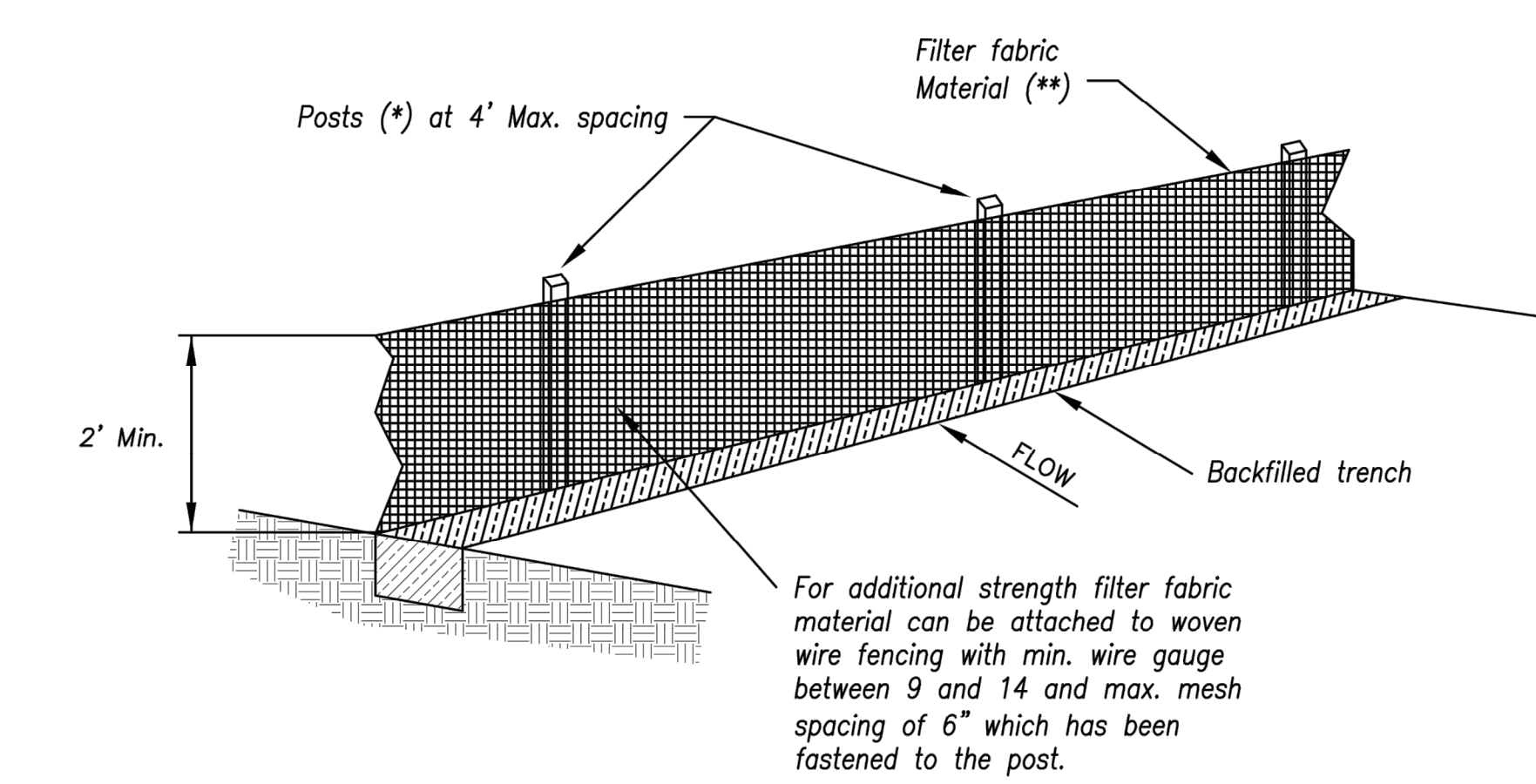


NOTE: PARKING SPACES AND ACCESS ISLES SHALL BE LEVEL WITH SURFACE SLOPES NOT EXCEEDING 1:50 IN ALL DIRECTIONS





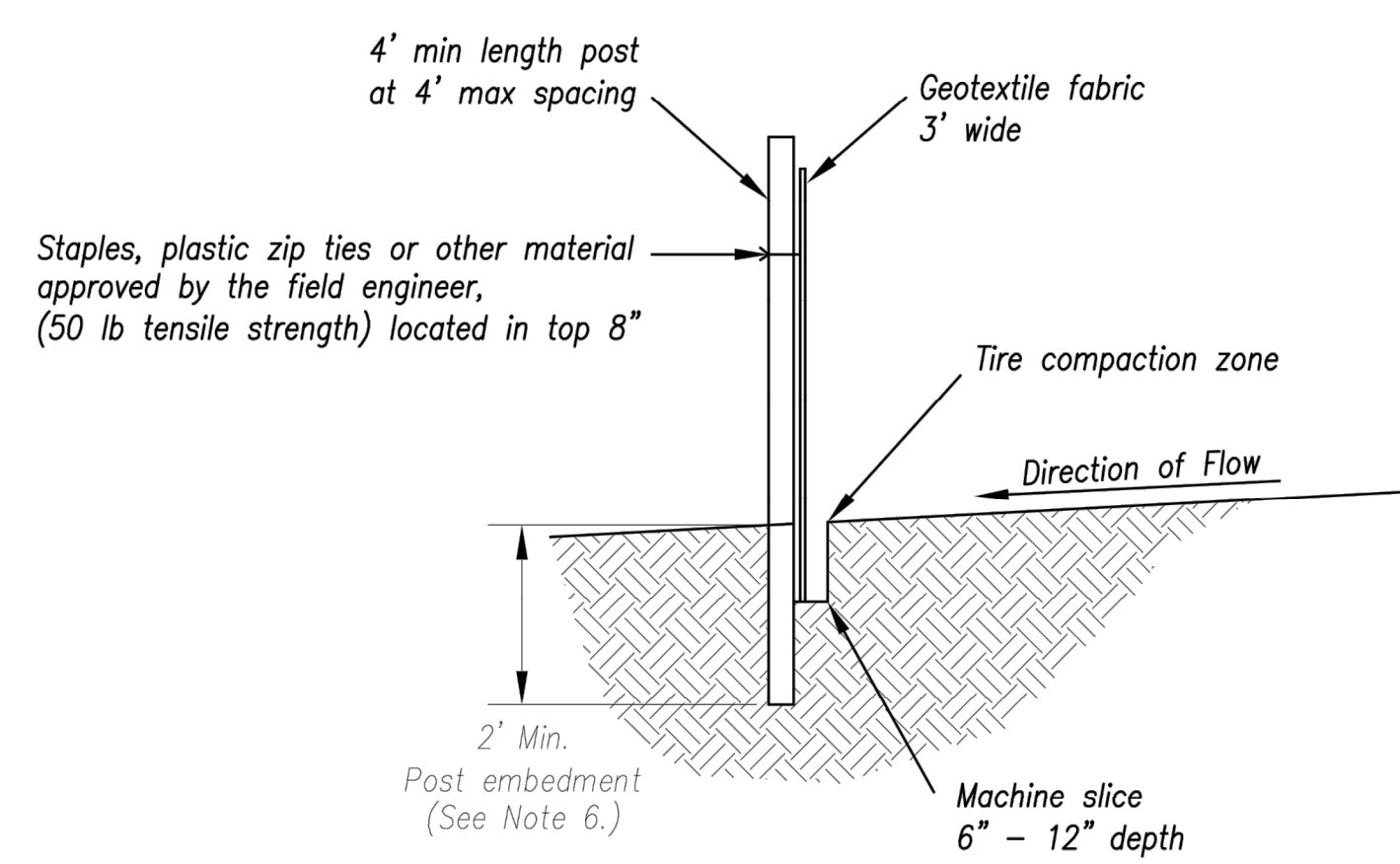
THIS DRAWING SHALL NOT BE UTILIZED BY ANY PERSON, FIRM, OR CORPORATION IN WHOLE OR IN PART WITHOUT THE SPECIFIC PERMISSION OF KAW VALLEY ENGINEERING, INC.



- (*) POSTS

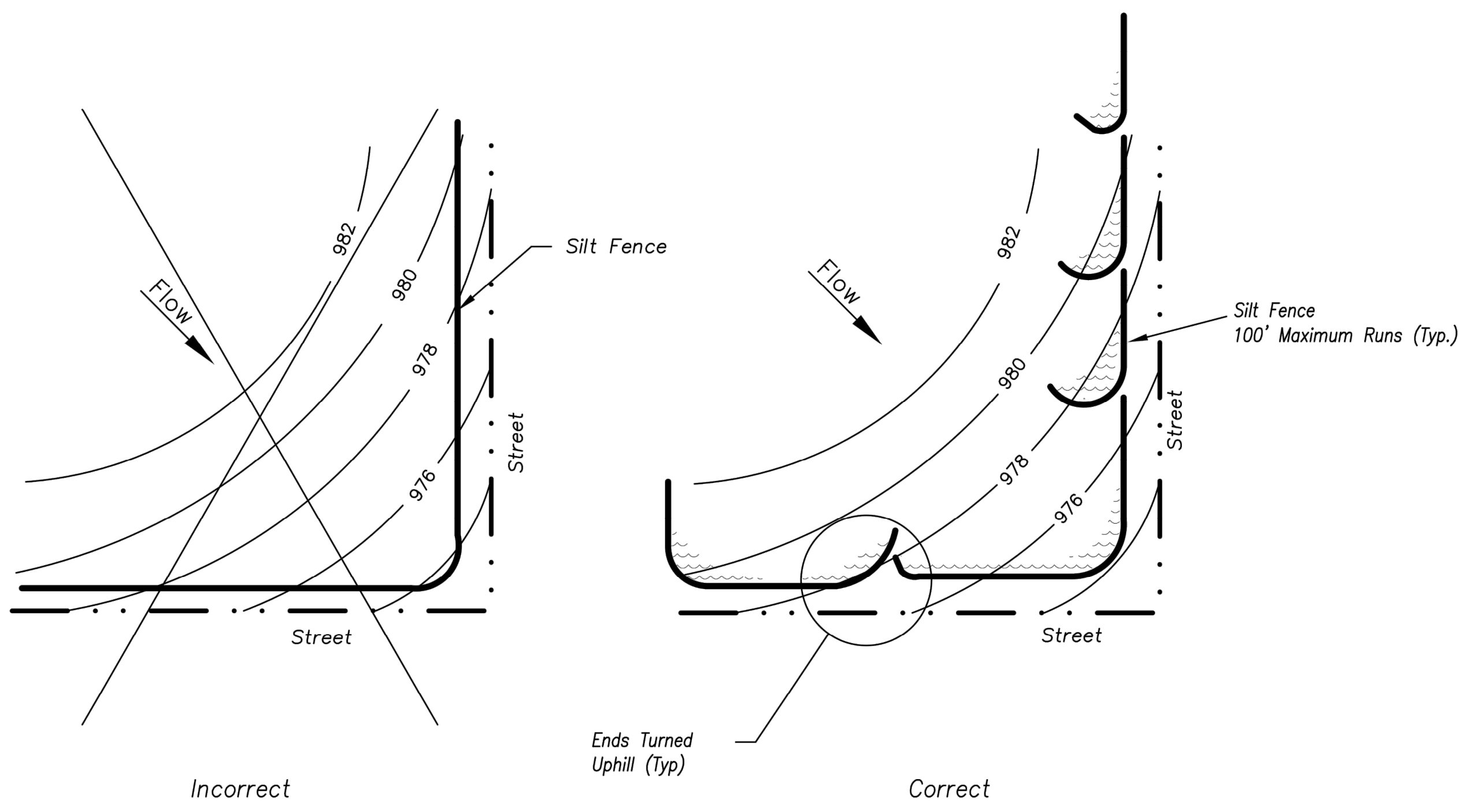
 - MIN. LENGTH 4'
 - HARDWOOD 1 3/16" x 1 3/16"
 - NO.2 SOUTHERN PINE 2 5/8" x 2 5/8"
 - STEEL 1.33 LB/FT
- (**) - Geotextile Fabric shall meet the requirements of AASHTO M288

SILT FENCE DETAILS
Not to Scale

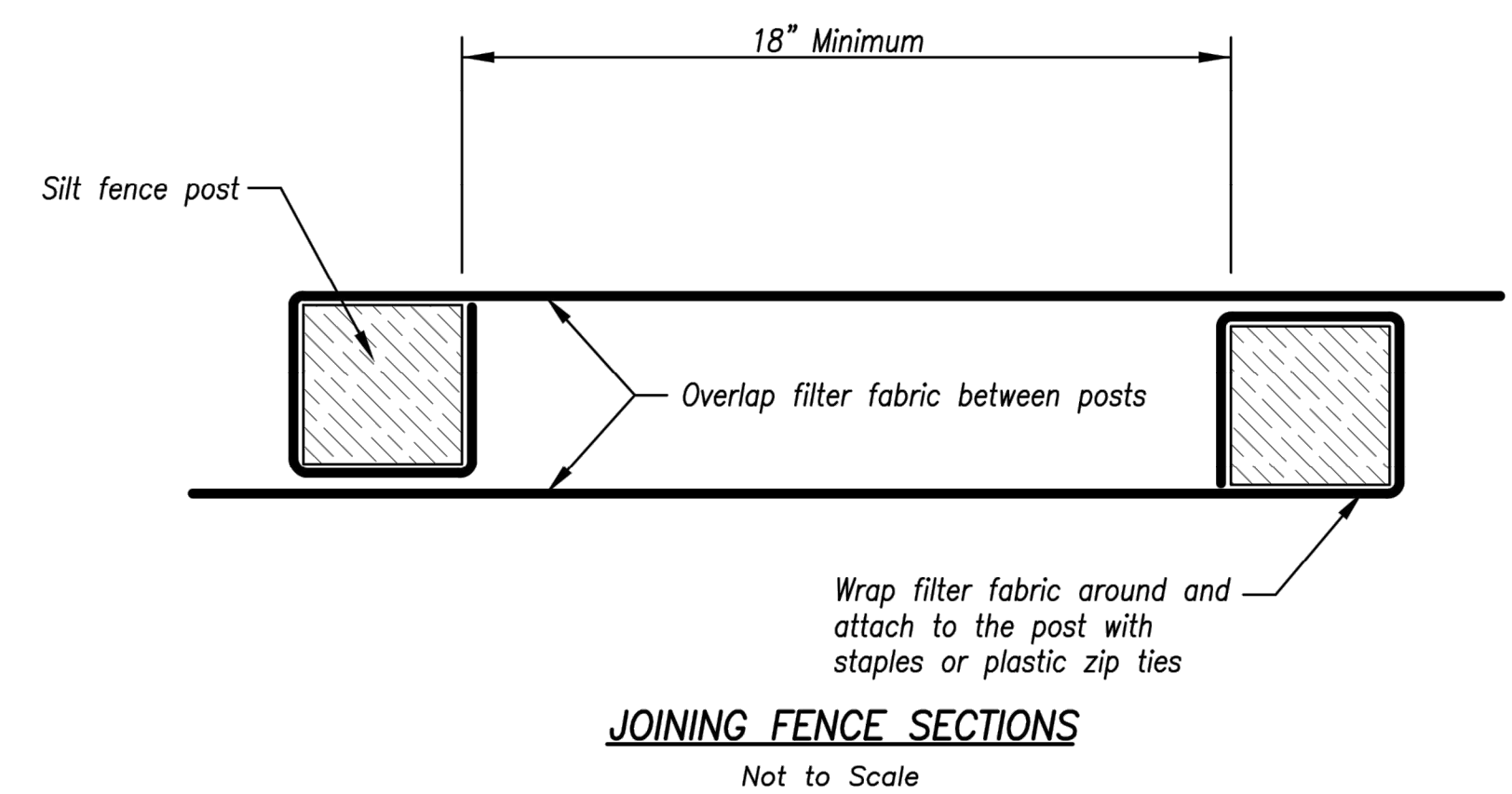
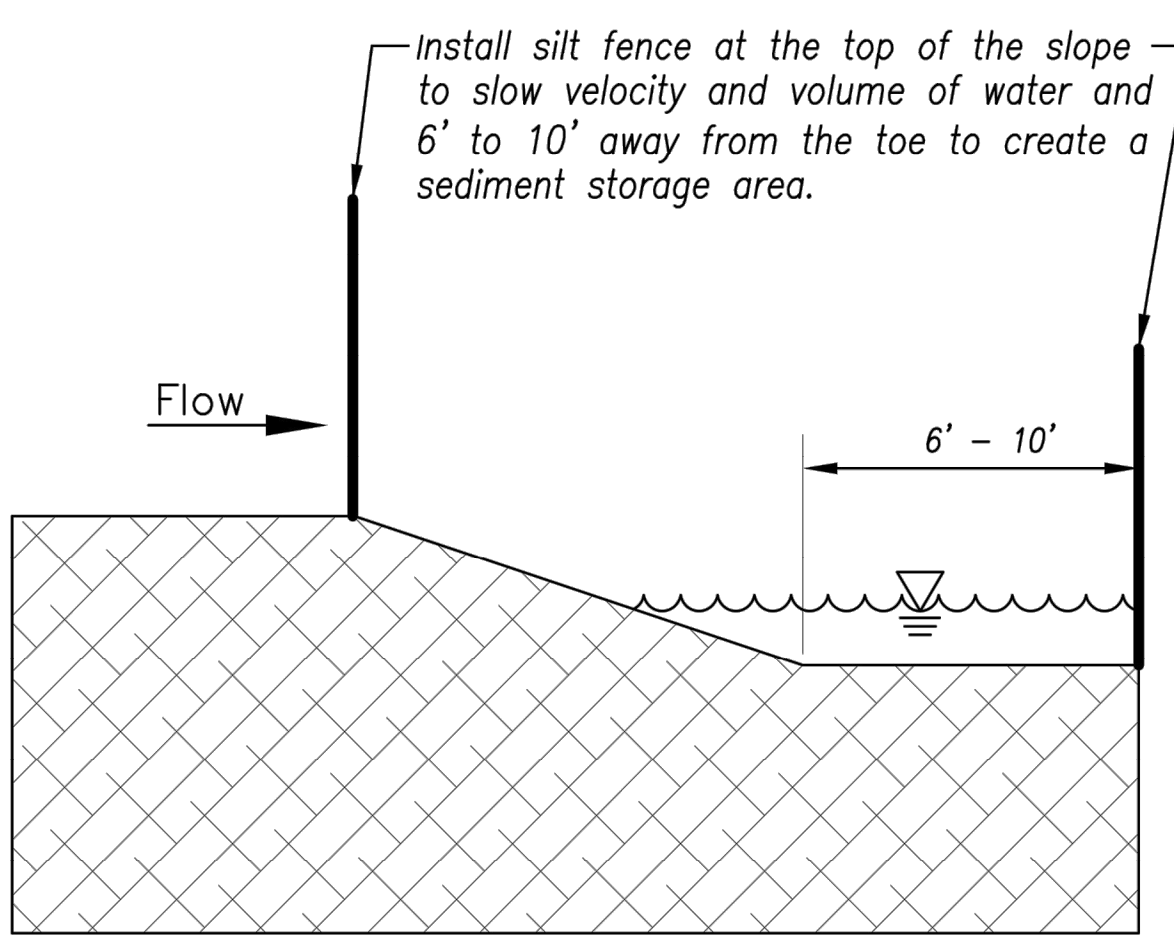


- Notes:
1. In order to contain water, the ends of the silt fence must be turned uphill (Figure A).
 2. Long perimeter runs of silt fence must be limited to 100'. Runs should be broken up into several smaller segments to minimize water concentrations (Figure A).
 3. Long slopes should be broken up with intermediate rows of silt fence to slow runoff velocities.
 4. Attach fabric to upstream side of post.
 5. Install posts a minimum of 2' into the ground.
 6. Trenching will only be allowed for small or difficult installation, where slicing machine cannot be reasonably used.

- Maintenance:
1. Remove and dispose of sediment deposits when the deposit approaches 1/3 the height of silt fence.
 2. Repair as necessary to maintain function and structure.



SILT FENCE LAYOUT
Not to Scale



AMERICAN PUBLIC WORKS ASSOCIATION
Kansas City Metro Chapter
APWA
AMERICAN PUBLIC WORKS ASSOCIATION

KANSAS CITY METRO CHAPTER

SILT FENCE

STANDARD DRAWING NUMBER ESC-03
ADOPTED:
10/24/2016

Modified from 2015 Overland Park Standard Details for Erosion and Sediment Control.

LDO

CHK

BKR

DWN

LDO

DSN

6-18-19

INITIAL ISSUE

0

REV

DATE

DESCRIPTION

STATE OF MISSOURI

LEON D. OSBOURN

REGISTERED PROFESSIONAL ENGINEER

E-21726

LEON D. OSBOURN
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MO # 021726

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STREETS OF WEST PRYOR
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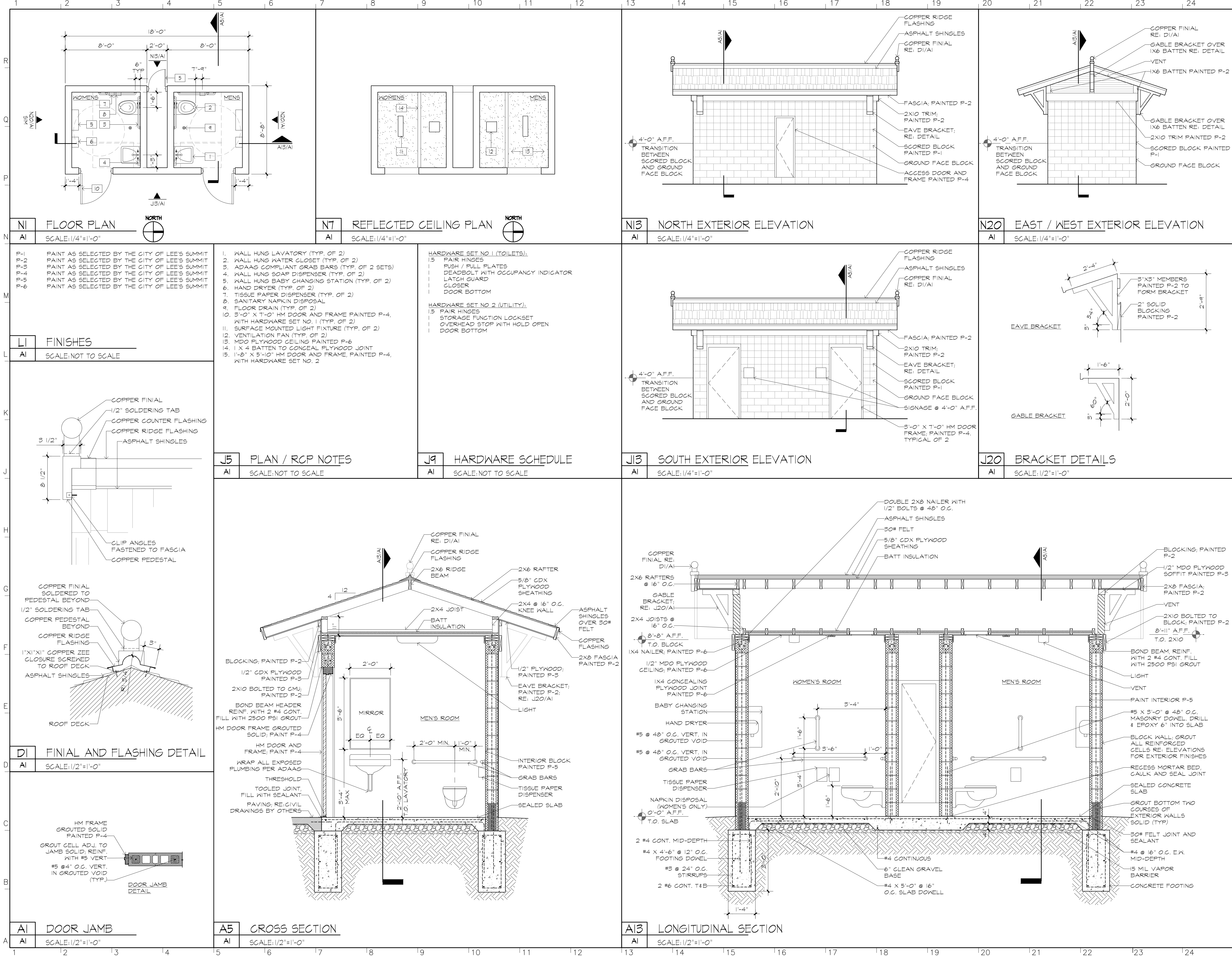
LOWENSTEIN PARK IMPROVEMENTS
EROSION CONTROL DETAIL

PROJ. NO. **A14-7067-1**

DESIGNER **LDO** DRAWN BY **BKR**

CFN **7067-1P_DET**

SHEET **C-15** REV **0**



AMAI ARCHITECTURE
1510 Walnut Suite 200
Kansas City, MO 64108
P 816.994.5900 / 5901 F



LOWENSTEIN PARK

2050 NW Lowenstein Dr.
Lee's Summit, MO 64081
Project No. 2019-075

MEP CONSULTANT:
LANKFORD FENDLER & ASSOCIATES
1730 WALNUT ST, KANSAS CITY, MO, 64108
816.221.1411

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ISSUED FOR:
BUILDING PERMIT 19 JUNE 2019

PLANS, SECTIONS,
ELEVATIONS
AND DETAILS

A1

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22, 23 & 26 - 1
SECTION 22, 23 AND 26 - GENERAL PROVISIONS

- 1.0 DESCRIPTION:
- A. Divisions 22, 23 and 26 shall be governed by all applicable provisions of the Contract Document.
- B. The Contractor shall furnish, install and connect all materials, equipment, apparatuses, and incidentals required for a complete and working installation. For all systems shown and required, the Contractor shall supply all necessary labor, equipment, tools, insurance, and tax services, and shall assume full responsibility for all obligations associated with completion of work as provided by the Contract Documents.
- 2.0 STANDARDS, REGULATIONS AND CODES:
- A. Work shall comply with the edition of the applicable standards, regulations and codes currently in force of all Federal, State and local authorities having jurisdiction. Where quantities, sizes, or other requirements indicated on the drawings or herein specified are in excess of the standard or code requirements, the specifications and/or drawings shall govern. In the absence of other applicable local codes, acceptable to the Architect/Engineer, the International Set of Codes and the National Electrical Code shall apply to this work.
- B. The Contractor shall comply with rules and regulations of public utilities and municipal departments affected by connections of services. The Contractor shall pay all fees associated there with.
- C. The Contractor shall be licensed to perform associated work in the municipality in which the project is located.
- D. All products and types of construction shall meet or exceed the latest edition of applicable standards of manufacturer, testing, performance and installation.
- E. Where indicated or required, comply with all provisions of the ADA and/or the ABA Accessibility Guidelines.
- F. Where indicated or required, comply with all applicable provisions of energy and ventilation codes in force at the local jurisdiction.
- 3.0 LOCAL CONDITIONS:
- A. The Contractor shall carefully examine the local conditions and existing installations and shall become thoroughly familiar with all existing conditions which may affect associated work. The Contractor shall locate all existing utilities and protect them during the execution of the work.
- B. The Contractor shall examine all project drawings and specifications to become familiar with the type of construction, materials, and equipment, to be used for all work and how it will affect the installation of this contract.
- C. By the act of submitting a bid, the Contractor will be deemed to have made such examination, to have accepted such conditions, to have made allowance therefore, and included all costs in his proposal. Failure to determine existing conditions will not be considered a basis for the granting of additional compensation.
- 4.0 WORKMANSHIP:
- A. All work performed under this Contract shall provide a neat and "workmanlike" appearance when completed, to the satisfaction of the Owner's Representative. The complete installation shall function as designed and intended with respect to efficiency, capacity, and noise level, etc.
- 5.0 CUTTING AND PATCHING:
- A. All necessary cutting, drilling and patching shall be provided by this Contractor. Structural members shall not be disturbed without prior approval of the Owner's Representative. All areas disturbed by work performed under this Contract shall be neatly repaired and refinished to the condition of adjoining surfaces in a manner suitable to the Owner's Representative.
- 6.0 OPERATION DURING CONSTRUCTION:
- A. The Contractor is responsible for the installation and operation, service and maintenance of all new equipment during construction and prior to acceptance by the Owner of the completed project. Warranty periods shall not commence until final acceptance by the Owner or Owner Representative.
- B. The Contractor shall provide, at his own expense, all temporary utilities required to provide for and protect the work and as necessary to maintain an adequate work force unless use of existing facilities is specifically permitted.
- 7.0 SAFETY REGULATIONS:
- A. All work shall be performed in compliance with all applicable governing safety regulations, including OSHA regulations. Provide safety lights, guards and signs required.
- 8.0 HOUSEKEEPING:
- A. The Contractor shall be responsible for keeping stocks of material and equipment stored on the premises in a neat and orderly manner.
- B. The Contractor shall clean and maintain their specific portions of the work as specified in the General Conditions.
- C. The Contractor shall remove from the premises all waste material present as a result of his work.
- 9.0 GRAPHIC REPRESENTATION AND JOB CONDITIONS:
- A. The Drawings shall serve as working drawings for the general layout of the various items of equipment; are diagrammatic unless specifically dimensioned, and do not necessarily indicate every required item.
- B. Architectural and Structural drawings take precedence over all other drawings in the representation of the general construction work; any conflicts shall be resolved prior to commencing work. Failure to do so shall not be considered a basis for the granting of additional compensation.
- C. Arrange work in a neat, well organized manner. Coordinate work with other trades involved, prior to commencing work.
- 10.0 GUARANTEES/WARRANTY:
- A. The Contractor shall guarantee/warranty all work performed, including labor, materials and equipment furnished under this contract, against defects in materials and workmanship for a period of one year from the date of the Owner's Representative Final Acceptance of the work, or as noted in each section.
- 11.0 SUBSTITUTIONS:
- A. Materials, products and equipment described in the Bidding Documents established a standard of quality to be met by any proposed substitution.
- B. Contractor's bids shall be based on the material mentioned or specified, and any proposals for substitution shall be made in writing to the Architect/Engineer allowing adequate time for appropriate action. The products of other manufacturers may be accepted, if in the opinion of the Architect/Engineer, the substitute material is of quality as good or better than the material specified, and will serve with equal efficiency and dependability, the purpose for which the items specified were intended. The burden of proof of equality is upon the proposer.
- C. Refer to Division 1 requirements for additional substitution procedures.
- D. Wherever substitutions alter the design or space requirements, the Contractor shall be responsible for and include all associated cost items of the revised design and or construction work required by his or other trades affected by the proposed substitution.
- 12.0 SHOP DRAWINGS AND PRODUCT DATA:
- A. The checking of shop drawings is a gratuitous assistance and in no way relieves the Contractor of responsibility for deviations from the Contract Documents.
- B. Shop drawings and catalog data on all major items of equipment and apparatus, and such other illustrative materials as may be considered necessary by the Owner's Representative shall be submitted by the Contractor in adequate time to prevent delay and changes during construction.
- C. Refer to Architectural Documents for additional shop drawing submission procedures.
- 13.0 OPERATING AND MAINTENANCE BROCHURE:
- A. On completion of the project, the Contractor shall provide manuals electronically (PDF format unless otherwise instructed) containing operating, service and lubrication instructions, and parts lists for all major equipment and manufacturer's guarantees or warranties.
- 14.0 RECORD DRAWINGS:
- A. On completion of the project, the Contractor shall submit two (2) new sets of blueline prints (unless otherwise instructed) with all field changes neatly noted. The original routing and layout shall be clearly marked out.
- B. Refer to Architectural Documents for additional record drawing submission procedures.
- 15.0 FOUNDATIONS AND SUPPORTS:
- A. The Contractor shall provide concrete bases, hangers and foundations for all machinery and equipment specified or shown in this contract, including fans, air conditioning units, pumps, motors, electrical gear, etc., unless specifically noted otherwise.
- B. All hangers, brackets, clamps, etc., shall be of standard weight steel. Perforated strap hangers shall not be used in any work. When two (2) or more pipes or conduits are run parallel, or where ducts interfere with the proper location of hangers, they may be supported on trapeze hangers. Other hangers shall be hinged ring malleable iron, by Grinnell or Fee and Mason or approved equal with rods and hanger adjusters for adequate size to carry the loads imposed. All piping, ductwork and conduit systems shall each be independently supported from other systems and from equipment so that no weight is born by equipment.
- C. The Contractor shall take all precautions against excessive noise or vibration by isolating the various items of equipment from the building structure. Provide flexible connectors where indicated and at all rotating equipment and for equipment mounted on vibration isolators.

230100 - 2
SECTION 230100 - HEATING, VENTILATION AND AIR CONDITIONING

- 1.0 SCOPE:
- A. The work included under this contract consists of providing all labor, materials, tools, transportation, services, etc., necessary to complete the installation of the heating, ventilating, and air conditioning systems and other items herein listed and as described in these specifications, as illustrated in the accompanying drawings or as directed by the Architect/Engineer.
- 2.0 SHEET METAL:
- A. Provide ductwork shown with necessary dampers and other duct accessories. Ducts shall be new prime grade galvanized steel sheets constructed per ASHRAE and SMACNA Standards. Duct system(s) installation shall be in accordance with SMACNA Duct Construction Standards Manual and industry standards. Provide round or rectangular duct as indicated.
- B. Fabricate for the pressure and SMACNA seal class required by the application.
- Leakage class minimum requirements are:
1. Up thru 2" WG pressure - rectangular - Class 24.
- Seal class minimum requirements are:
1. Up thru 2" WG pressure - class A for all duct joints.
- 3.0 GRILLES, REGISTERS, INLETS AND OUTLETS:
- A. All exhaust grilles shall be as scheduled on the drawings. Commercial quality - E.H. Price or acceptable equal by Trius, Carnes, Krueger or Nalor.
- B. Louvers shall be Greenheck, 4" deep AMCA certified extruded aluminum drainable blade with bird screen, finish as noted on drawings or acceptable equal by Ruskin, Carnes, American Warming and Ventilating, Louvers and Dampers, Nalor.
- 4.0 FANS:
- A. Fans shall be as scheduled with all required accessories including vibration isolators, hangers, rate of rise thermostats, etc. Commercial quality fans shall be AMCA rated by Greenheck or acceptable equal by Cook, Acme, Carnes, Penn Barry.
- 5.0 EQUIPMENT AND PIPE LABELS:
- A. Equipment labels shall be provided for all mechanical equipment and shall be self adhesive engraved plastic, blue with white lettering, sized, minimum 1-1/2" high, and located for viewing from ground or floor level. Label shall indicate drawing designation or unique equipment number.
- C. Warning labels shall be self-adhesive engraved plastic or preprinted plastic as required by application with white lettering on red background provided at locations as required by code or where hazards to personnel exist.
- 6.0 TESTING AND ADJUSTING:
- A. Contractor shall operate and test the air conditioning and ventilation systems and instruct the Owner in its operation. Perform a series of general capacity and operating tests. The tests shall demonstrate the specified capacities of various pieces of equipment.

END OF SECTION 230100



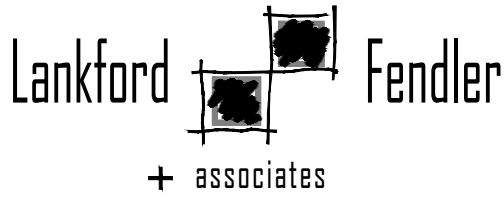
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SEAL

LOWENSTEIN
PARK

2050 NW Lowenstein Dr.
Lee's Summit, MO 64081
Project No. 2019-075



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1915 Frederick Avenue, St. Joseph, Missouri 64501
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LANKFORD / FENDLER + ASSOCIATES, CONSULTING ENGINEERS, INC.
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COA No. 2008001168

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ISSUED FOR:

BUILDING PERMIT 19 JUNE 2019

SPECIFICATIONS

MEP1

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220100 - 7
SECTION 220100 - PLUMBING

- 1.0 SCOPE:
- A. The work included under this contract consists of providing all labor, materials, tools, transportation, services, etc., necessary to complete the installation and to provide complete working systems of the Plumbing Systems, including hot and cold water, waste and vent, storm drainage, fixtures, equipment and other items described in these Specifications, as illustrated in the accompanying drawings, or as directed by the Architect/Engineer.
- B. Extend piping systems as indicated on contract documents or to point of connection as follows:
1. 5'-0" from exterior building wall lines unless otherwise indicated on drawings.
- 2.0 PIPING, FITTINGS AND VALVES:
- A. Domestic cold water underground --
1. Pipes, copper -- type "K", soft temper, wrought copper fittings, silver solder joints, 1/2" through 3".
2. Water piping installed interior/exterior to the building shall be a minimum of 48" below grade.
- B. Domestic water, interior, above ground -
1. Pipe, copper tube -
- a. 2" and Smaller - Type "L" hard temper, wrought or cast copper fittings, Lead free 95/5 or Eagle Hard Silvalbite or "CB" solder or roll grooved mechanical joints, pressure seal joint fittings with EPDM O-ring seals.
2. Water piping 2" and smaller may be cross-linked high density 100% virgin polyethylene, PEX-a, flexible tubing. Piping shall be tested and certified by UL and NSF for potable water use. PEX-a piping shall be rated at 180F at 100 PSIG.
- a. Minimum bend radius shall be 6 times the pipe outside diameter.
- b. Necessary joints shall be made with compression, expansion or crimp fittings approved for use with flexible tubing.
- c. Manifolds for branch piping shall be permitted and shall be copper tube.
- d. Upsize PEX-a piping 1 pipe size to minimize fitting pressure drop where restrictive fittings are using in lieu of full flow fittings.
- e. Support all PEX-a piping systems in accordance with manufacturer recommendations. Support spacing shall not exceed 32".
- f. Stubouts to fixtures or equipment shall be rigid copper, anchored to substrate.
- g. Piping within 5' of water heaters shall be copper.
- h. PEX-a systems shall be insulated throughout as specified for copper systems.
- i. PEX-a piping systems may be installed in return air plenums only when installed in accordance with the mechanical code and manufacturer's listing requirements. In addition to other insulation requirements, PEX-a piping installed in plenums shall be fully enclosed uninterrupted with hanger and shields exterior to insulation throughout its length with insulation material listed and labeled for installation within a plenum. Insulation shall be noncombustible meeting flame rating not more than 25 and smoke rating not more than 50 when tested in accordance with ASTM E-84.
- j. PEX-a piping shall be Uponor AquaPEX or acceptable equivalent by Viega or Rehau.
3. Valves -
- a. 1/4 turn Service -
- 1/2" thru 2" - Nibco 585-66-LF lead free, 600 PSIG, full port, stainless steel ball and stem.
4. Securely anchor, with adequate provisions for expansion and contraction. Grade lines, free of traps, to low point at cut-off and drain valve. Provide valves where indicated on the drawings, where required by code or required for service.
5. Hot and cold supply lines to have manufactured pre-charged piston type water hammer arrestors at each and every fixture or group or battery of fixtures to prevent water hammer, sized as shown or per manufacturers recommendation. An arrestor shall be required at each solenoid actuated quick closing valve. Sioux Chief, JR Smith or equal. Provide access panel where required.
6. At contractor option, flexible stainless steel braided hose, 125 PSIG rated, with non-toxic liner and compression fittings may be used in lieu of chrome plated brass riser tube.
- C. Sanitary sewer, vent, interior --
1. Pipe -- Cast iron hubless with no-hub mechanical joint; solid wall schedule 40 PVC, ABS with solvent cement joints; vents may be galvanized malleable iron.
2. All drainage shall be graded per code, with piping 3" and 4" not less than 1/4" per foot unless noted otherwise. Larger piping may be sloped at 1/8" per foot.
- D. Sanitary sewer, vent, below grade --
1. Pipe -- Cast iron hubless with no-hub mechanical joint; solid wall schedule 40 PVC, ABS with solvent cement joints.
2. All drainage shall be graded per code but not less than 1/8" per foot unless noted otherwise. 3" and 4" piping shall be sloped at 1/4" per foot where possible and where required by local codes.
- 3.0 CLEANOUTS AND TRAP SEALS:
- A. Provide cleanout at the base of each stack or riser, at ends of runs greater than 10', each 135 degree aggregate change of direction in horizontal piping, where indicated on the drawings or as required by code. Plugs, extra heavy cast brass, screwed. Soriated tops in unfinished areas, carpet markets in carpet floors, tile top in tile floors, stainless steel cover in finished walls. Cleanouts same size as pipe up to 4" diameter, 4" cleanouts for larger pipe unless otherwise noted. Cleanouts outside the building extend to grade and terminate with X.H. soil pipe cleanout set in 12" square 6" thick concrete pad.
- B. Where trap primers are not specified provide all floor and hub drains with trap seal with EPDM diaphragm, Rectorseal SS series, Provent Proset or acceptable equal.
- 4.0 FLASHINGS, ESCUTCHEONS AND UV PROTECTION:
- A. Flash all pipes and vents extending through roof. Flashing details shall be in accordance with roof manufacturer's requirements.
- B. Provide escutcheons at all penetrations of exposed walls and ceilings. Escutcheons shall be chrome plated metal in occupied areas, prime paint finish for unoccupied areas unless otherwise noted. Escutcheons for exterior or moist areas shall be brass.
- C. Plastic piping without UV inhibitors which is exposed to UV radiation from sunlight shall be protected by coating with a UV resistant paint.
- 5.0 UNIONS:
- A. Provide between each item of equipment and its service valve. Copper to ferrous pipe connections shall have isolation coupling or union.
- 6.0 CROSS- CONNECTIONS AND INTERCONNECTIONS:
- A. No plumbing device or piping shall be installed which will provide cross-connection or interconnection between a distributing supply or waste so as to make possible the backflow or back-siphonage of polluted water into the potable water supply system. Where the possibility of back-siphonage exists, water supply to the fixture shall be introduced through a suitable vacuum breaker in non-pressurized systems and a reduced pressure type back-flow preventer in pressurized systems or as otherwise required by the authority having jurisdiction. Installed backflow preventers must be approved through the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research.
- 7.0 PLUMBING EQUIPMENT:
- A. Water heaters shall be as scheduled or by acceptable equivalent by one of the following:
- Water Heaters, Tankless Electric: Eemax, Stiebel, Chronomite, Hubbell.
- 8.0 INSULATION:
- A. Insulate all cold water piping above the ground, Owens Corning or acceptable equal.
- B. Cold water piping insulation: 1" fiber glass sectional pipe covering with universal vapor barrier jacket.
- C. Seal all joints on cold water insulation to maintain vapor barrier.
- D. Insulation shall run continuously thru hangers and supports without interruption.
- E. Pipe insulation shall conform to the International Energy Conservation Code.
- 9.0 PIPE SUPPORTS AND ROUTING:
- A. Provide adjustable hangers, inserts, brackets, rolls, clamps, guides, flexible connectors, supplementary steel, etc., as required for proper support of all pipe lines. Unistrut may be used for support of multiple pipes. Hangers shall be designed to allow for expansion and contraction of pipe lines and shall be of adequate size to permit covering when required. Provide protective saddles and blocking where supporting insulated piping to prevent crushing insulation. Install building attachment at required locations for proper piping support. Space attachment within maximum piping span length indicated in MSS SP-69.
- B. Each piping system shall be independently supported with no piping bearing on another and installed such that no weight of piping is borne by the equipment.
- C. Pipe Slopes: Install hangers and supports to provide indicated pipe slopes, and so that maximum pipe deflections allowed by ANSI B31 are not exceeded.
- D. Piping shall be routed parallel to building lines, coordinated with building structure and other trades. Adjust pipe routing and drop locations with necessary pipe offsets to accommodate beams and other obstructions.

END OF SECTION 220100

260100 - 5
SECTION 260100 - ELECTRICAL

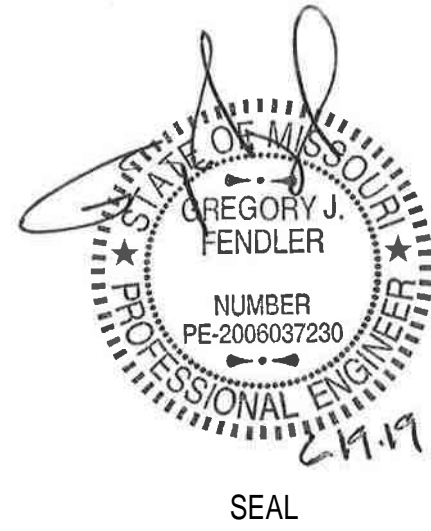
- 1.0 SCOPE:
- A. The work included under this contract consists of the furnishing of all labor, materials, tools, transportation, services, etc., necessary to complete the installation of the electrical systems and other items herein listed, all as directed by the Architect or Engineer, which work is comprised of, but not limited to the following principal items:
1. Electrical system for light and power:
- a. Electrical service and distribution system revisions.
- b. Switches and panel boards.
- c. Systems of conduit, conductors, and boxes.
- d. Receptacles and wiring devices.
- e. Lighting fixtures and lamps.
- f. Power service to the various motors.
- g. Complete lighting and power systems.
- h. All systems, wiring and conduit as required.
2. Control wiring and electrical installation and connections for items in other contracts as may be listed in the drawings.
3. Empty conduit and boxes for future installation of telephone wiring and miscellaneous systems.
4. Rough-in and final connection to equipment furnished by others.
- B. Raceway wiring systems shall be concealed in all finished parts of the building, where possible. Where the raceways are exposed, they shall be run parallel with the building walls in a neat and workmanlike manner. Should it appear necessary to expose any conduit or wiring in finished spaces, it shall be brought to the Architect's attention immediately and this Contractor shall rearrange associated work as directed to facilitate an approved installation. Contractor to coordinate with mechanical trades to avoid ductwork and piping.
- C. Contractor is responsible to provide liaison with electrical and communication companies. The Contractor shall provide and install all required equipment and connect as required to complete an operating service to the building.
- 2.0 RACEWAYS:
- A. All electrical conductors are to be installed in metal raceways, unless specifically specified or noted otherwise. Galvanized steel or intermediate steel conduit as permitted by code. No conduit smaller than 3/4" to be used. Use set screw or compression type fittings. Provide flexible conduit connection for final connection to each motor not to exceed 3' in length and recessed lighting fixtures not to exceed 6' in length. Provide pull wires in all empty conduit systems. Identify terminus of each pull wire. All exposed raceways shall be installed with runs parallel and/or perpendicular with building walls. Fasten all rigid/non-flexible conduit every 8' and 2' from each box. Conduit shall be EMT where not subject to mechanical damage as permitted by National Electric Code (N.E.C.). EMT connectors and couplings 4" and smaller shall be compression type. Type MC Cable is not permitted.
- B. Conduit bushings shall be provided and installed inside all disconnects, pull boxes, panelboards, switchboard or similar type equipment and where permitted by National Electric Code (N.E.C.).
- C. Schedule 40 conduit can be used for underground installation and where permitted by National Electric Code (N.E.C.).
- 3.0 WIRES AND CABLES:
- A. Electrical conductors, soft annealed copper with conductivity 98% of that of pure, stranded copper, 90 degree - 600V insulation and equal to General Cable Company. Wire and cable for all feeders, subfeeders, motor circuits and high ambient location type shall be THHN. All other branch circuit wiring shall be type XHHN or THHN. Minimum wire size shall be #12 gauge AWG. Control wiring may be #14 gauge.
- B. For conductors #4 or small use the following color-code:
- 120/240V, 1-phase: black, red, white.
 - Green shall be used for ground wire conductor.
- Contractor shall use the following color designations and be consistent throughout the project. Color designation for switch legs and or travelers: Violet, Pink or Purple may be used.
- C. For conductors larger than #4, Field-Applied, Color-Coding Conductor Tape can be applied in half-lapped turns for a minimum distance of 6 inches from terminal points and in boxes where splices or taps are made. Apply last two turns of tape with no tension to prevent possible unwinding. Locate bands to avoid obscuring factory cable markings. When using black insulated conductors, contractor shall color-code conductor inside all pullbox or similar type enclosures.
- D. Conductor Material Applications:
- a. Feeders: Copper; solid for No. 10 AWG and smaller; stranded for No. 8 AWG and larger.
- b. Branch Circuits: Copper. Solid for No. 12 AWG and smaller; stranded for No. 10 AWG and larger.
- E. Conductor insulation and multi-conductor cable application and wiring methods:
- a. Service Entrance: Type THWN-2, single conductors in raceway.
- b. Exposed Feeders: Type THHN, single conductors in raceway.
- c. Feeders Concealed in Ceilings, Walls, Partitions, and Crawlspace: Type THHN, single conductors in raceway.
- d. Feeders Concealed below Slabs-on-Grade, and Underground: Type THWN-2, single conductors in raceway.
- e. Exposed Branch Circuits, Including in Crawlspace: Type THHN, single conductors in raceway.
- f. Branch Circuits Concealed in Ceilings, Walls, and Partitions: Type THHN, single conductors in raceway.
- g. Branch Circuits Concealed in Concrete, below Slabs-on-Grade, and Underground: Type THWN-2, single conductors in raceway.
- 4.0 GROUNDING:
- A. Ground all electrical apparatus in accordance with N.E.C. and as specified herein. Provide a separate grounding conductor for all lighting, receptacle and equipment circuits. All cabinets, switchboards, equipment cases, motor frames, interior metal cold water piping systems, and system neutral conductors shall be effectively grounded. Use solderless pressure type connectors, no perforated strap connectors will be allowed. Ensure continuous bond where flexible conduit is used. Provide bonding jumper inside all flexible conduit. Grounding per N.E.C. 250, and any local requirements.
- 5.0 SPLICE AND TAPS:
- A. Make splices at junction boxes, pull boxes, or outlet boxes only.
- 6.0 CABINETS, JUNCTION AND PULL BOXES:
- A. Flush or surface mounted as indicated on drawings. Provide where shown on drawings and where required by code. Construct of cold gauge steel for flush surface mounting.
- 7.0 OUTLET BOXES:
- A. General Electric, Appleton, Steel City or Raco hot dipped galvanized steel boxes, or equal. Install at terminal of each conduit run, each outlet, or device. Provide size, type and design to suit structural conditions. Adequate to accommodate size and number of raceways, conductors, device or fixture served. Provide plaster rings or covers on boxes where required on exposed work, use approved cast ferrous alloy outlet, junction boxes and fittings. Fixture or device cover shall completely conceal the size outlet box used. Install 3/8" fixture stud for lighting fixtures where required. Locate ceiling outlets to work with architectural features as directed. Switches installed 48" above floor on strike side of door as finally hung. Receptacles and telephone outlets, 18" above finished floor unless otherwise noted. Verify all outlet locations on job with Architect.
- 8.0 PANELBOARDS:
- A. Panel boards are as indicated on the drawings. Main lugs only unless noted or specified otherwise. Provide typewritten schedule of circuits in index cardholder. Provide with hinged door and hinged cover. All circuit breakers shall be bolt-on molded case and have positive "trip" indication. Breakers used on existing panels shall match existing units and shall be labeled to have positive "trip" indication. Breakers shall be labeled to indicate suite number and use. Panelboards shall be General Electric, Square D, Siemens or Eaton/Cutler Hammer. All single pole circuit breakers shall be "switch duty rated". Panelboards shall be fully rated. Series rated panels are not permitted.
- 9.0 DISCONNECT SWITCHES:
- A. Heavy duty NEMA type "HD" - same manufacturer as panelboards. Plastic nameplate properly engraved with name of equipment served, secured to switch cover. Fuses shall be Bussmann of sizes and types scheduled.
- 10.0 MOTOR AND CONTROL WIRING AND CONNECTIONS:
- A. This Contractor to provide all necessary conduit, boxes and supports to equipment furnished by Owner and as indicated on drawings. Provide a disconnect switch and starter if required.

- 11.0 LABELING:
- A. Contractor shall label each and every j-box above ceiling with a permanent marker with panel and circuit number.
- B. Outlets, adhesive film label, machine printed clear background with black letters, by thermal transfer or equivalent process. Minimum letter height shall be 1/4 inch. Face plate shall be labeled with panel and circuit number.
- C. Interior equipment self-adhesive, engraved, laminated acrylic or melamine label: adhesive backed, with white letters on a dark-gray background. Minimum letter height shall be 3/8 inch (10 mm).
- D. Exterior equipment: Stenciled or engraved, laminated acrylic or melamine label: punched or drilled for screw mounting. White letters on a black background. Minimum letter height shall be 1 inch (25 mm).
- 12.0 WIRING DEVICES:
- A. Duplex receptacles shall be Hubbell #5352-X grounding type, 20A., 125V.; G.F.C.I. shall be Hubbell GF-5352-X, 20A., 125V.; duplex, G.F.C.I. TYPE. Isolated ground receptacles shall be orange in color, Hubbell IG-5352, 20A, 125V, duplex. Isolated ground receptacles shall be equipped with a Hubbell IGP-8 plate, orange in color inscribed "Isolated Ground". Wall toggle switches shall be Hubbell Number 1221-X and Number 1223-X for single pole and three way types respectively. Other switch, receptacle, and outlet device variations shall be by Hubbell of "Spec. Grade" quality. Equivalent devices of P & S or Leviton will be acceptable in lieu of the above listed devices. Contractor to verify color of devices with Architect before purchase. Provide stainless steel cover plates to mate and match device for each outlet.
- B. All wiring devices shall be gray in color.
- C. Motion sensor: contractor shall verify with owner for proper time delay settings.
- 13.0 LIGHTING FIXTURES:
- A. This Contractor shall furnish and install complete, unless otherwise specified, a lighting fixture on each and every lighting outlet shown on the drawings of each type scheduled by letter and description. All fixtures shall be equipped with lamps as scheduled or specified herein. All fixtures installed in suspended ceilings must be securely fastened to framing members per NEC 410-36b and local earthquake code requirements.

END OF SECTION 260100

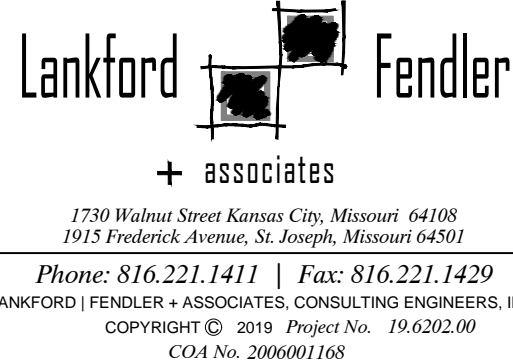


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PARK

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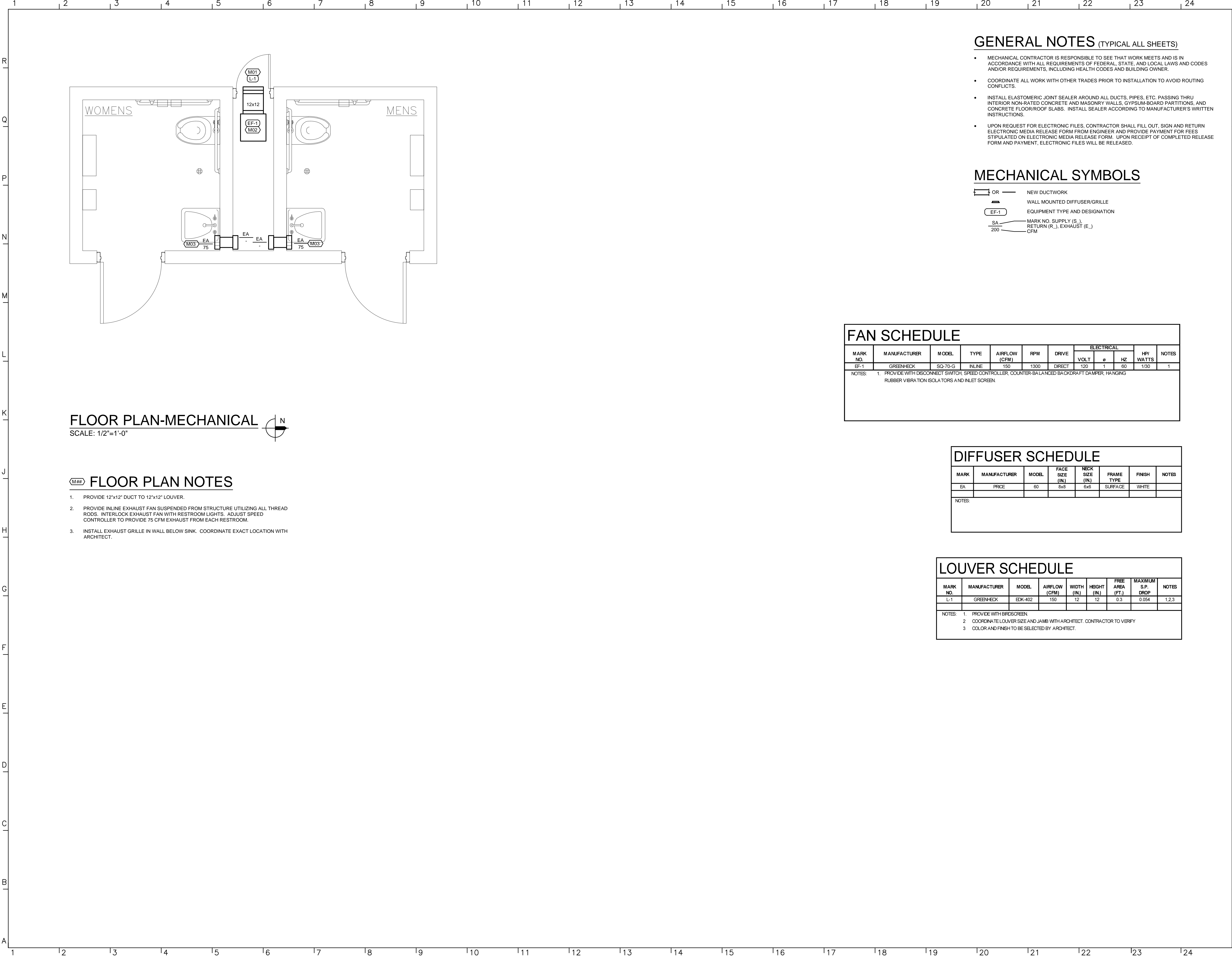
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SPECIFICATIONS

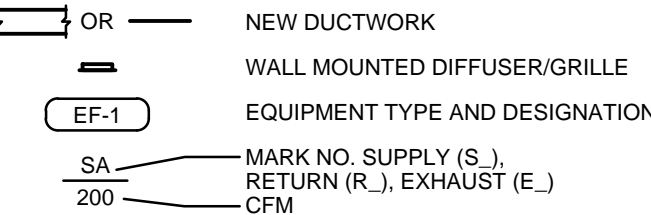
MEP2



GENERAL NOTES (TYPICAL ALL SHEETS)

- MECHANICAL CONTRACTOR IS RESPONSIBLE TO SEE THAT WORK MEETS AND IS IN ACCORDANCE WITH ALL REQUIREMENTS OF FEDERAL, STATE, AND LOCAL LAWS AND CODES AND/OR REQUIREMENTS, INCLUDING HEALTH CODES AND BUILDING OWNER.
- COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO INSTALLATION TO AVOID ROUTING CONFLICTS.
- INSTALL ELASTOMERIC JOINT SEALER AROUND ALL DUCTS, PIPES, ETC. PASSING THRU INTERIOR NON-RATED CONCRETE AND MASONRY WALLS, GYPSUM-BOARD PARTITIONS, AND CONCRETE FLOOR/ROOF SLABS. INSTALL SEALER ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.
- UPON REQUEST FOR ELECTRONIC FILES, CONTRACTOR SHALL FILL OUT, SIGN AND RETURN ELECTRONIC MEDIA RELEASE FORM FROM ENGINEER AND PROVIDE PAYMENT FOR FEES STIPULATED ON ELECTRONIC MEDIA RELEASE FORM. UPON RECEIPT OF COMPLETED RELEASE FORM AND PAYMENT, ELECTRONIC FILES WILL BE RELEASED.

MECHANICAL SYMBOLS



FAN SCHEDULE

MARK NO.	MANUFACTURER	MODEL	TYPE	AIRFLOW (CFM)	RPM	DRIVE	ELECTRICAL			HPI WATTS	NOTES
							VOLT	ø	HZ		
EF-1	GREENHECK	SQ-70-G	INLINE	150	1300	DIRECT	120	1	60	1/30	1

NOTES: 1. PROVIDE WITH DISCONNECT SWITCH, SPEED CONTROLLER, COUNTER-BALANCED BACKDRAFT DAMPER, HANGING RUBBER VIBRATION ISOLATORS AND INLET SCREEN.

DIFFUSER SCHEDULE

MARK	MANUFACTURER	MODEL	FACE SIZE (IN.)	NECK SIZE (IN.)	FRAME TYPE	FINISH	NOTES
EA	PRICE	60	6x6	6x6	SURFACE	WHITE	

NOTES:

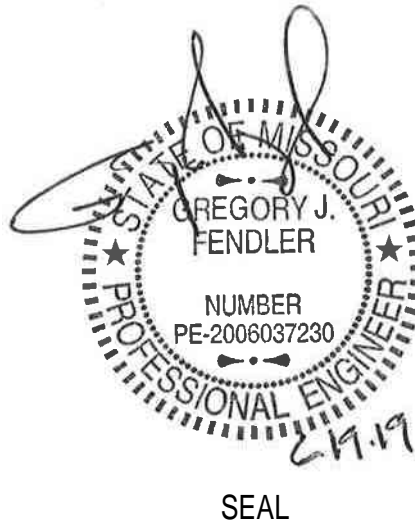
LOUVER SCHEDULE

MARK NO.	MANUFACTURER	MODEL	AIRFLOW (CFM)	WIDTH (IN.)	HEIGHT (IN.)	FREE AREA (FT.)	MAXIMUM S.P. DROP	NOTES
L-1	GREENHECK	EDK-402	150	12	12	0.3	0.054	1,2,3

NOTES: 1. PROVIDE WITH BIRDSCREEN.
2. COORDINATE LOUVER SIZE AND JAMB WITH ARCHITECT. CONTRACTOR TO VERIFY.
3. COLOR AND FINISH TO BE SELECTED BY ARCHITECT.



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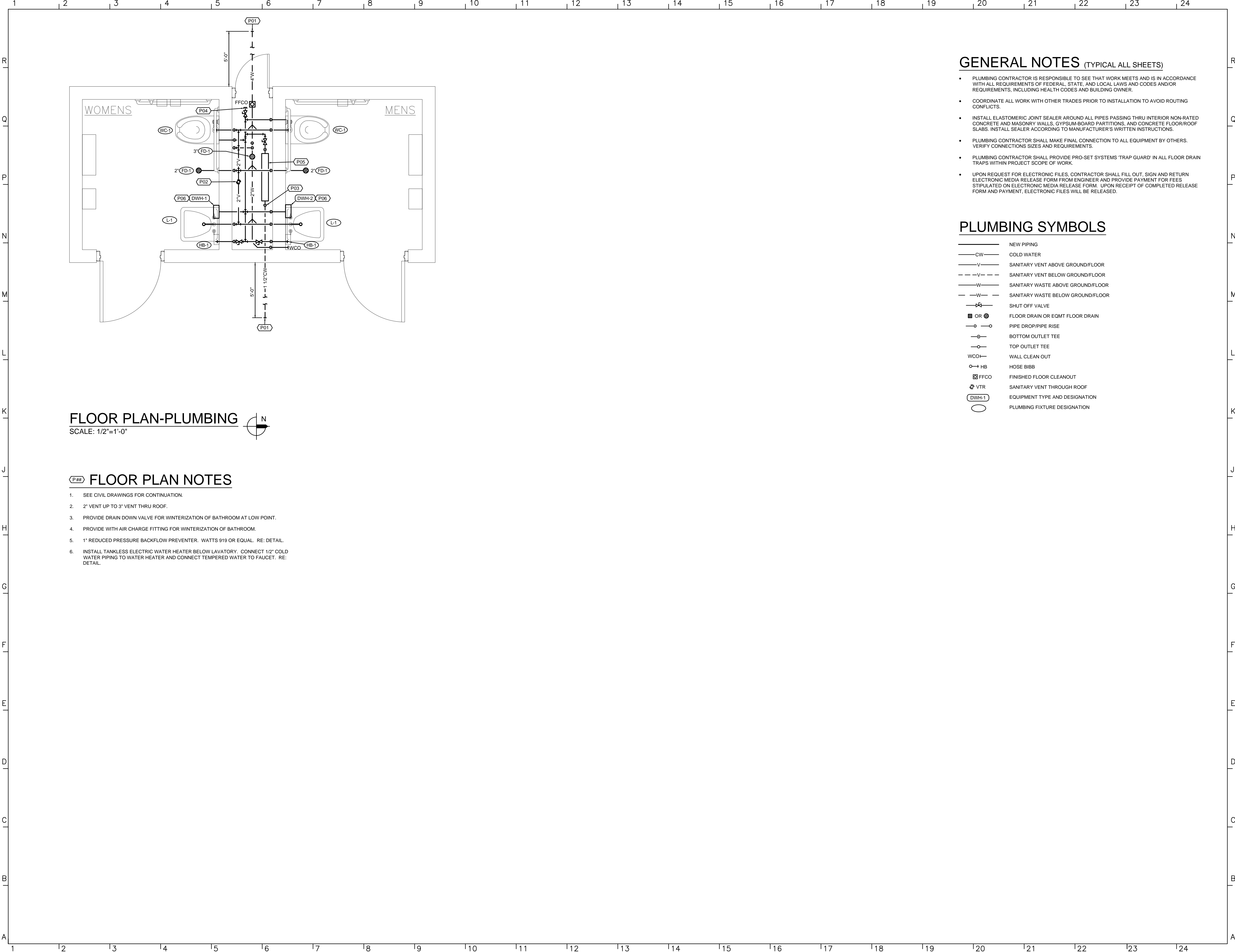
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MECHANICAL
PLAN / DETAILS / NOTES /
SCHEDULES / SYMBOLS

M1



FLOOR PLAN-PLUMBING

SCALE: 1/2"=1'-0"

FLOOR PLAN NOTES

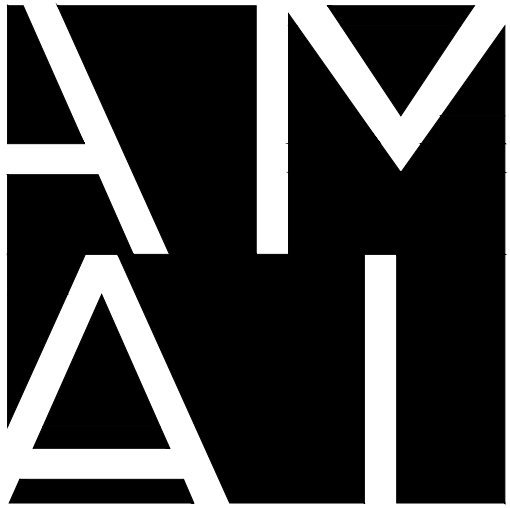
- 1. SEE CIVIL DRAWINGS FOR CONTINUATION.
- 2. 2" VENT UP TO 3" VENT THRU ROOF.
- 3. PROVIDE DRAIN DOWN VALVE FOR WINTERIZATION OF BATHROOM AT LOW POINT.
- 4. PROVIDE WITH AIR CHARGE FITTING FOR WINTERIZATION OF BATHROOM.
- 5. 1" REDUCED PRESSURE BACKFLOW PREVENTER. WATTS 919 OR EQUAL. RE: DETAIL.
- 6. INSTALL TANKLESS ELECTRIC WATER HEATER BELOW LAVATORY. CONNECT 1/2" COLD WATER PIPING TO WATER HEATER AND CONNECT TEMPERED WATER TO FAUCET. RE: DETAIL.

GENERAL NOTES (TYPICAL ALL SHEETS)

- PLUMBING CONTRACTOR IS RESPONSIBLE TO SEE THAT WORK MEETS AND IS IN ACCORDANCE WITH ALL REQUIREMENTS OF FEDERAL, STATE, AND LOCAL LAWS AND CODES AND/OR REQUIREMENTS, INCLUDING HEALTH CODES AND BUILDING OWNER.
- COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO INSTALLATION TO AVOID ROUTING CONFLICTS.
- INSTALL ELASTOMERIC JOINT SEALER AROUND ALL PIPES PASSING THRU INTERIOR NON-RATED CONCRETE AND MASONRY WALLS, GYPSUM-BOARD PARTITIONS, AND CONCRETE FLOOR/ROOF SLABS. INSTALL SEALER ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.
- PLUMBING CONTRACTOR SHALL MAKE FINAL CONNECTION TO ALL EQUIPMENT BY OTHERS. VERIFY CONNECTIONS SIZES AND REQUIREMENTS.
- PLUMBING CONTRACTOR SHALL PROVIDE PRO-SET SYSTEMS 'TRAP GUARD' IN ALL FLOOR DRAIN TRAPS WITHIN PROJECT SCOPE OF WORK.
- UPON REQUEST FOR ELECTRONIC FILES, CONTRACTOR SHALL FILL OUT, SIGN AND RETURN ELECTRONIC MEDIA RELEASE FORM FROM ENGINEER AND PROVIDE PAYMENT FOR FEES STIPULATED ON ELECTRONIC MEDIA RELEASE FORM. UPON RECEIPT OF COMPLETED RELEASE FORM AND PAYMENT, ELECTRONIC FILES WILL BE RELEASED.

PLUMBING SYMBOLS

- NEW PIPING
- CW COLD WATER
- V SANITARY VENT ABOVE GROUND/FLOOR
- - V - - SANITARY VENT BELOW GROUND/FLOOR
- W SANITARY WASTE ABOVE GROUND/FLOOR
- - W - - SANITARY WASTE BELOW GROUND/FLOOR
- SHUT OFF VALVE
- FLOOR DRAIN OR EQMT FLOOR DRAIN
- PIPE DROP/PIPE RISE
- BOTTOM OUTLET TEE
- TOP OUTLET TEE
- WCO WALL CLEAN OUT
- HOSE BIBB
- FFCO FINISHED FLOOR CLEANOUT
- VTR SANITARY VENT THROUGH ROOF
- EQUIPMENT TYPE AND DESIGNATION
- PLUMBING FIXTURE DESIGNATION

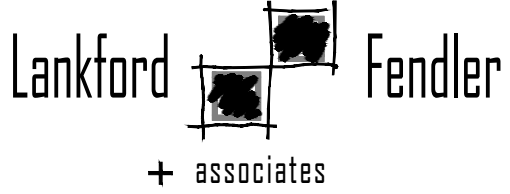


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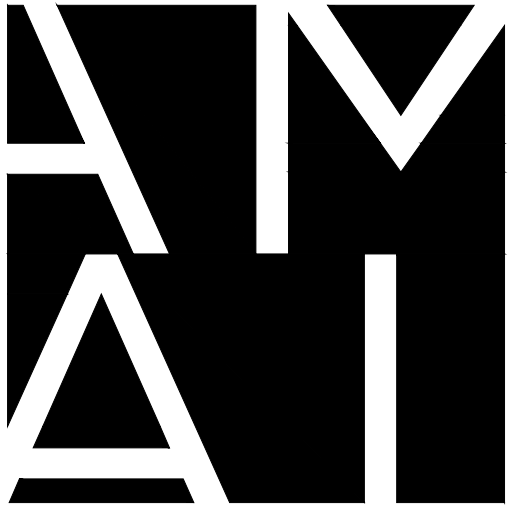
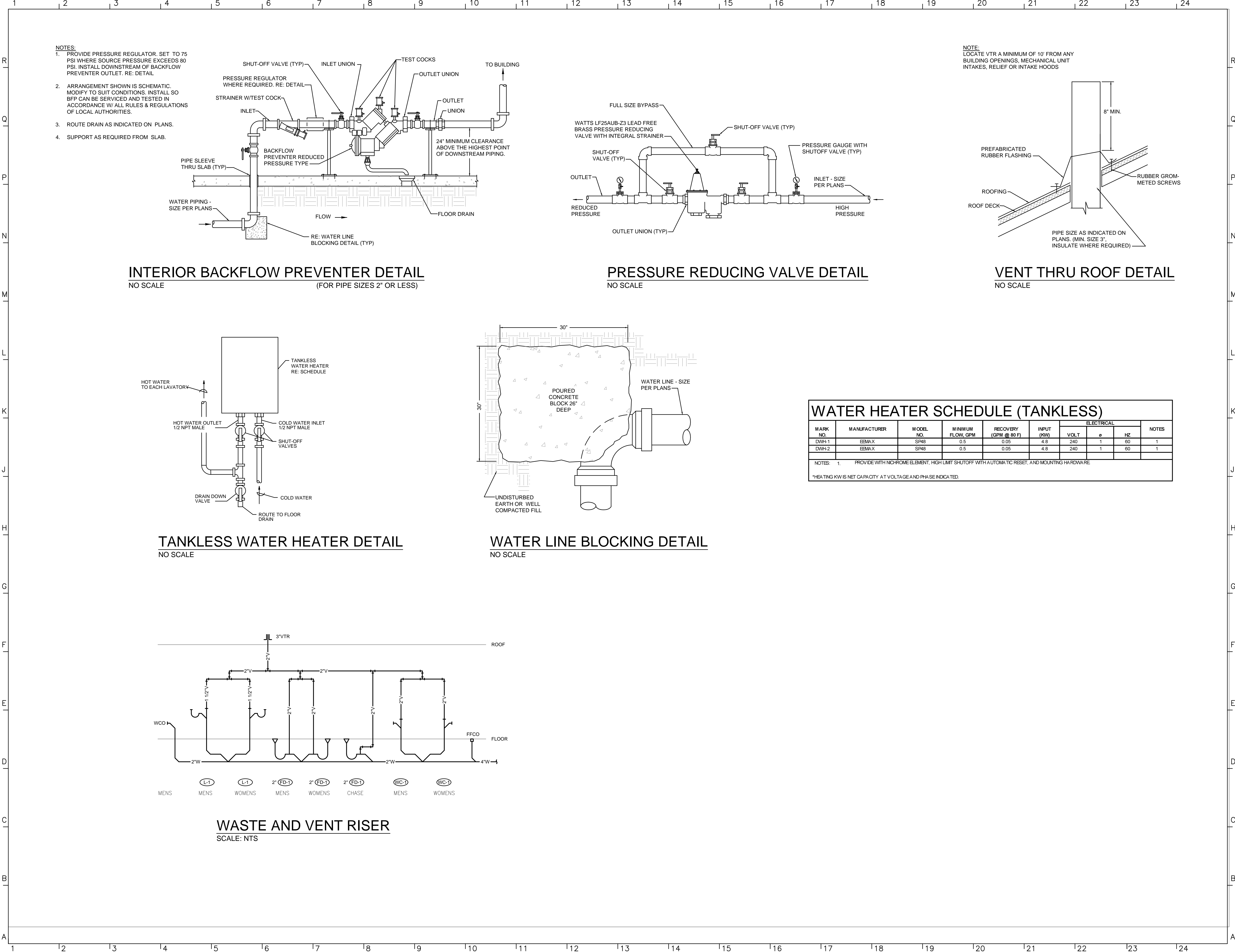
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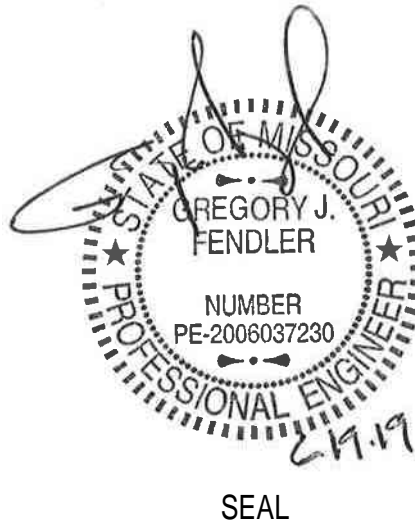
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PLUMBING
PLAN / NOTES /
SYMBOLS

P1



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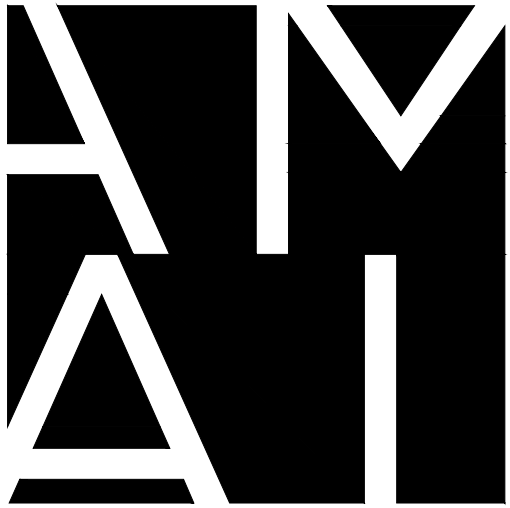
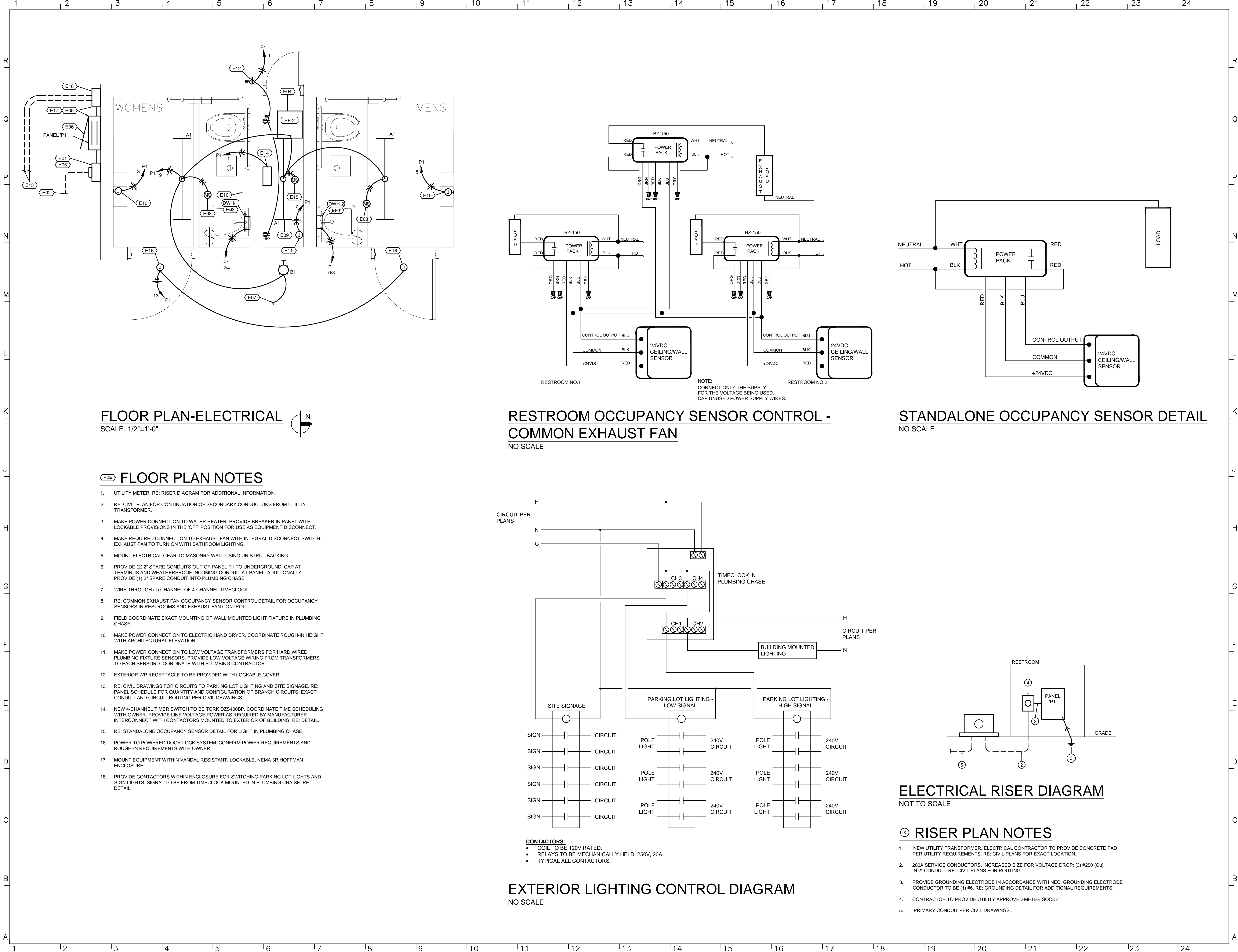
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+ associates
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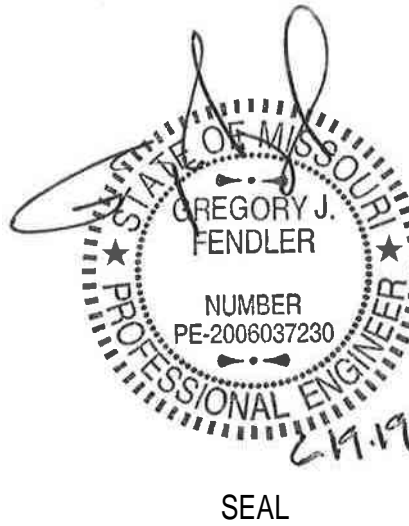
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PLUMBING DETAILS /
SCHEDULES / RISER

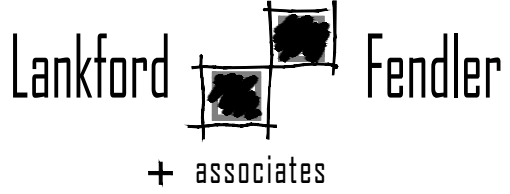


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ELECTRICAL
PLAN / DETAILS

E1



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DESCRIPTION

The Galleon™ LED luminaire delivers exceptional performance in a highly scalable, low-profile design. Patented, high-efficiency AccuLED Optics™ system provides uniform and energy conscious illumination to walkways, parking lots, roadways, building areas and security lighting applications. IP66 rated and UL/UL Listed for wet locations.

SPECIFICATION FEATURES

Construction

Extruded aluminum driver enclosure thermally isolated from Light Squares for optimal thermal performance. Heavy-wall, die-cast aluminum and cast enclosure housing and die-cast aluminum heat sinks. A unique, patent pending interlocking housing and heat sink provides scalability with superior structural rigidity. 83 vibration tested and rated. Optional tool-less hardware available for ease of entry into electrical chamber. Housing is IP66 rated.

Optics

Patented, high-efficiency injection-molded AccuLED Optics technology. Optics are precisely designed to shape the distribution maximizing efficiency and application spacing. AccuLED Optics create consistent distributions with the scalability to meet customized application requirements. Offered standard in 4000K (4-275K) CCT 70 CRI. Optional 3000K, 5000K and 6000K CCT.

Electrical

LED drivers are mounted to removable tray assembly for ease of maintenance. 120-277V 50/60Hz, 247V 60Hz or 480V 50Hz operation. 480V is compatible for use with 480V Wye systems only. Standard with 0-10V dimming. Shipped standard with Eaton proprietary circuit module designed to withstand 10kV of transient line surge. The Galleon LED luminaire is suitable for operation in -40°C to 40°C ambient environments. For applications with ambient temperatures exceeding 40°C, specify the HA (High Ambient) option. Light Squares are IP66 rated. Greater than 50% lumen maintenance expected at 50,000 hours. Available in standard 1A drive current and optional 800mA, 800mA and 1200mA drive currents (nominal).

Mounting

STANDARD ARM MOUNT: Extruded aluminum arm includes internal bolt guides allowing for easy positioning of fixture during mounting. When mounting two or more luminaires at 90° and 120° apart, the EA extended arm may be required. Refer to the arm mounting requirement table.

Finish

Housing finished in super durable TGIC polyester powder coat paint. 2.5 mil nominal thickness for superior protection against fade and wear. Heat sink is powder coated black. Standard housing colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available.

Warranty

Five-year warranty.

McGraw-Edison

Catalog #

Type

Project

Date

Comments

Prepared by

GLEON GALLEON LED

1-10 Light Squares Solid Pole LED AREA/SITE LUMINAIRE

12000002EN

June 2, 2019 11:11 AM

ARM MOUNTING REQUIREMENTS

Configuration	90° Apart	120° Apart
GLEON-AF-01	7" Arm (Standard)	7" Arm (Standard)
GLEON-AF-02	7" Arm (Standard)	7" Arm (Standard)
GLEON-AF-03	7" Arm (Standard)	7" Arm (Standard)
GLEON-AF-04	7" Arm (Standard)	7" Arm (Standard)
GLEON-AF-05	10" Extended Arm (Required)	7" Arm (Standard)
GLEON-AF-06	10" Extended Arm (Required)	7" Arm (Standard)
GLEON-AF-07	13" Extended Arm (Required)	13" Extended Arm (Required)
GLEON-AF-08	13" Extended Arm (Required)	13" Extended Arm (Required)
GLEON-AF-09	16" Extended Arm (Required)	16" Extended Arm (Required)
GLEON-AF-10	16" Extended Arm (Required)	16" Extended Arm (Required)

STANDARD WALL MOUNT

MAST ARM MOUNT

QUICK MOUNT ARM (INCLUDES FIXTURE ADAPTER)

QM Quick Mount Arm (Standard)

QMA Quick Mount Arm (Extended)

OPTIONAL DIMENSIONS

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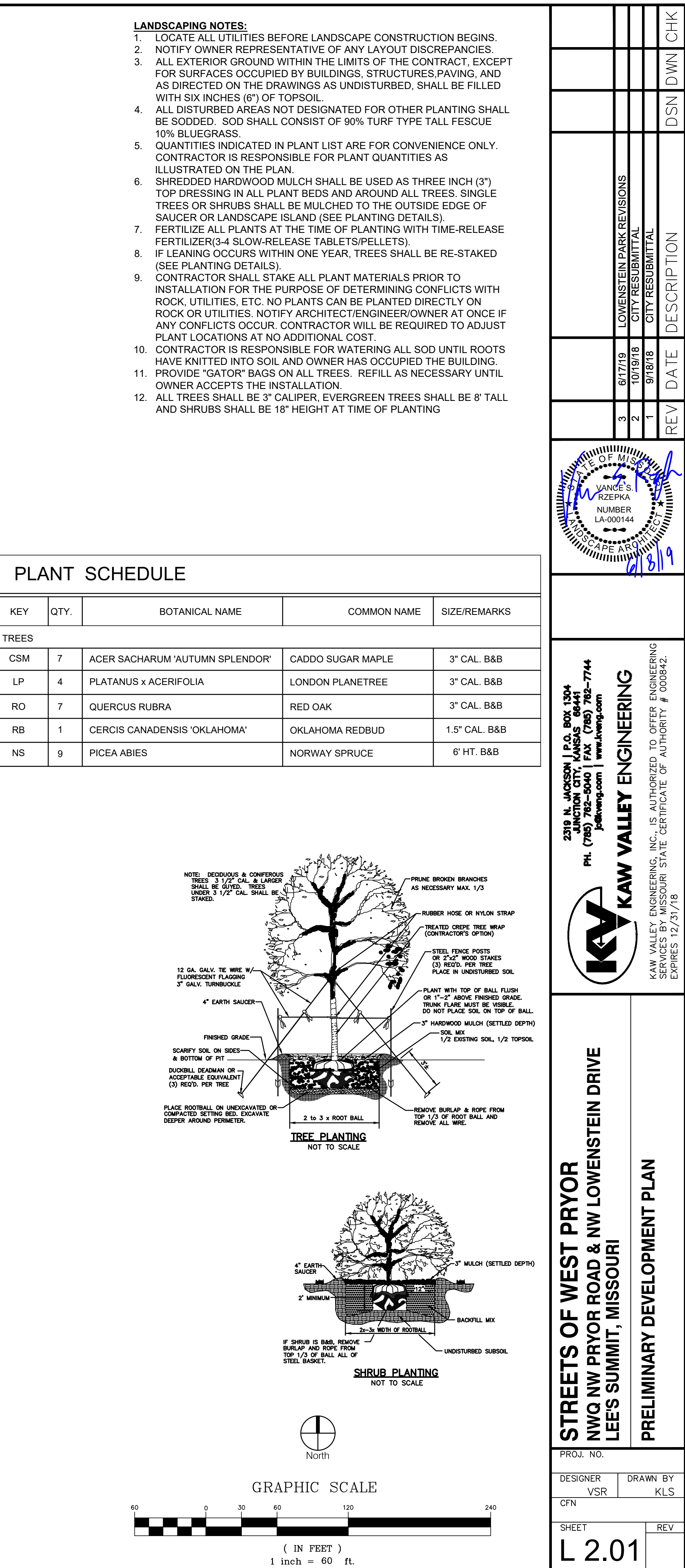
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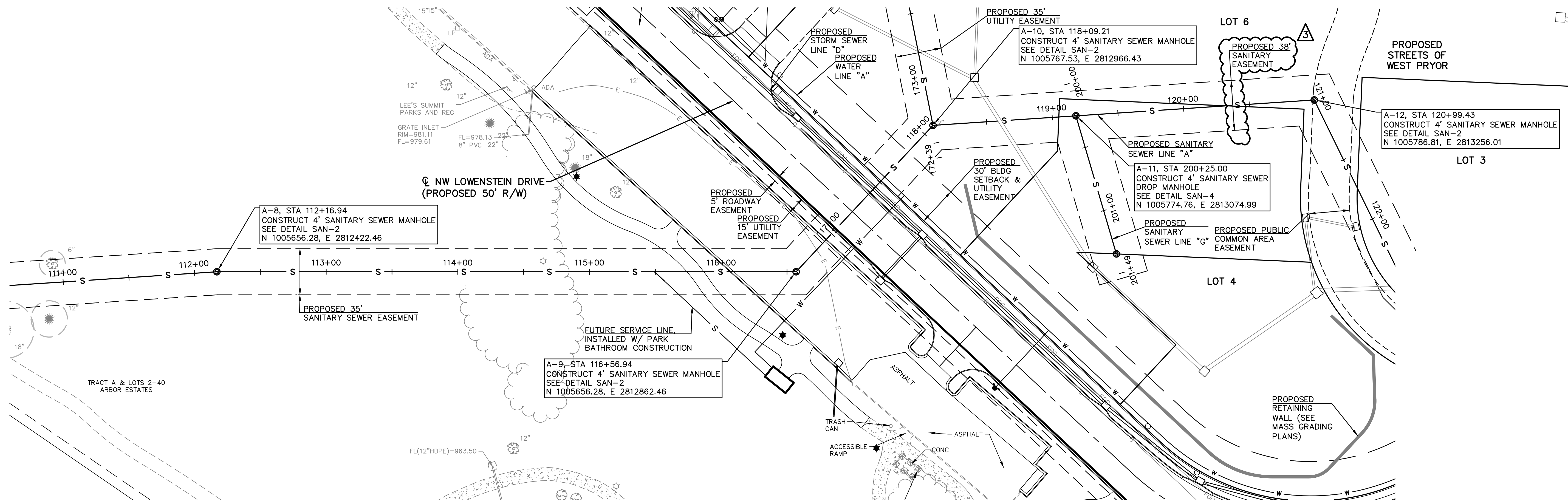
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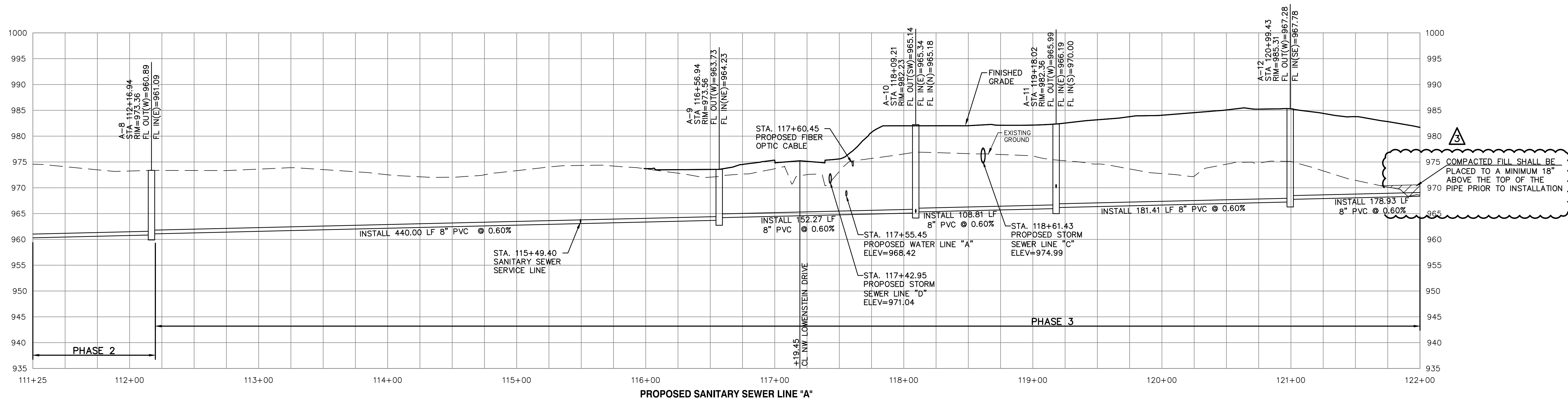
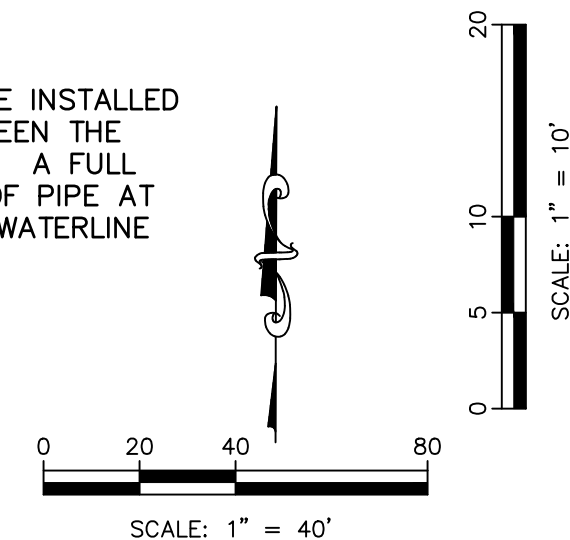
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NOTE:
AT EACH WATER LINE CROSSING, THE SANITARY SEWER SHALL BE INSTALLED WITH A MINIMUM VERTICAL CLEAR DISTANCE OF 18 INCHES BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SEWER. A FULL LENGTH OF SEWER PIPE SHALL BE LOCATED WITH THE CENTER OF PIPE AT THE CROSSINGS SO THAT BOTH JOINTS ARE AS FAR FROM THE WATERLINE AS POSSIBLE.



975 COMPACTED FILL SHALL BE PLACED TO A MINIMUM 18" ABOVE THE TOP OF THE 970 PIPE PRIOR TO INSTALLATION

PUBLIC STREET, STORM & WATER ARE BY SEPARATE PLANS

PROJ. NO. A14-7067-1		DESIGNER LDO	DRAWN BY JT/BKR
CFN 7067-1S_SPP		C-5	3
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STATE OF MISSOURI
LEON D. OSBOURN
REGISTERED PROFESSIONAL ENGINEER
NUMBER 021726
EXPIRES 12/31/19

LEON D. OSBOURN
ENGINEER
MO # 021726

2319 N. JACKSON | P.O. BOX 1304
JUNCTION CITY, KANSAS 66441
PH. (785) 762-5040 | FAX (785) 762-7744
joe@kvw.com | www.kvw.com

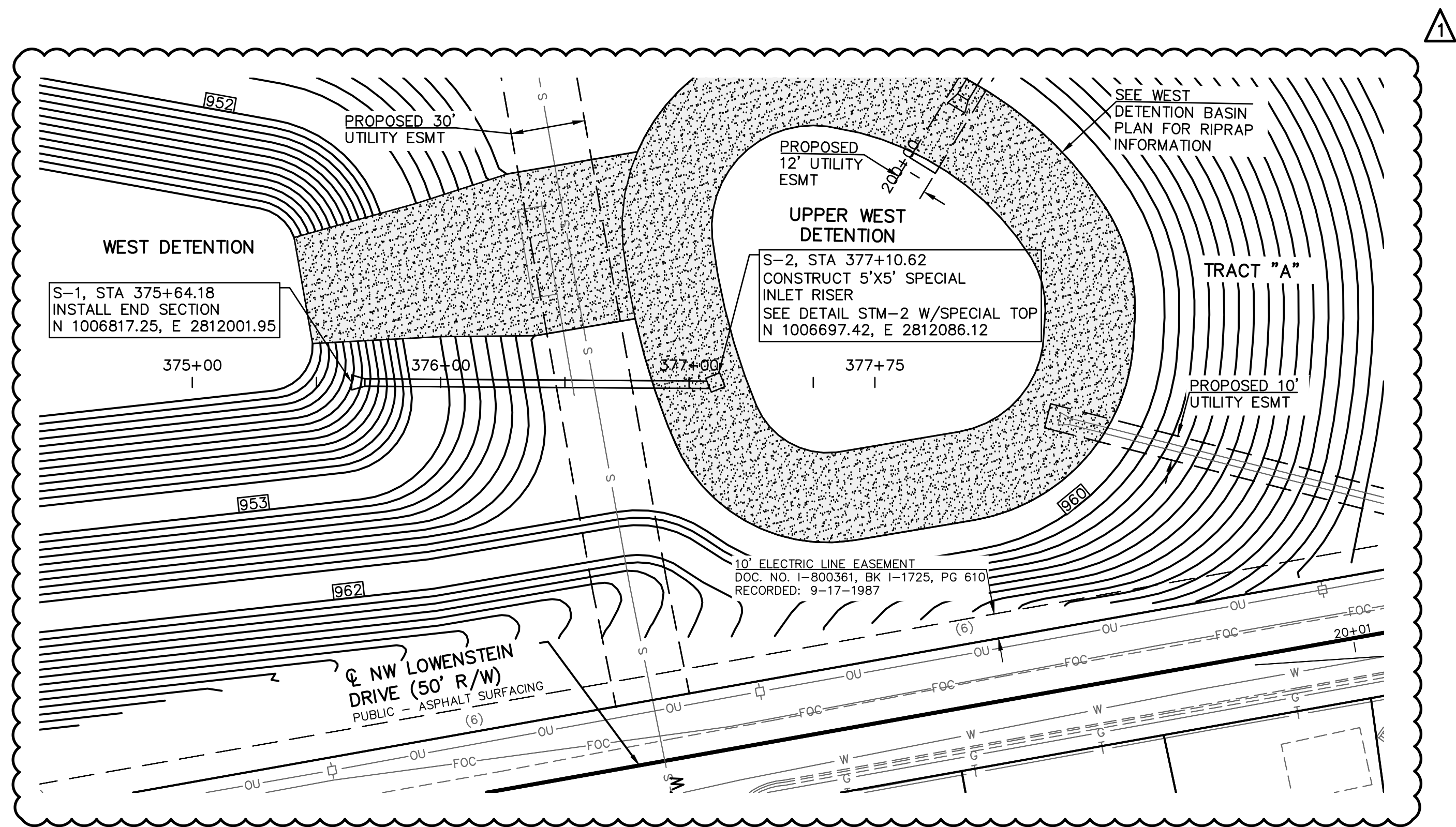
KAW VALLEY ENGINEERING
KAW VALLEY ENGINEERING, INC. IS AUTHORIZED TO OFFER ENGINEERING SERVICES BY MISSOURI STATE CERTIFICATE OF AUTHORITY # 000842.
EXPIRES 12/31/19

STREETS OF WEST PRYOR
NWQ NW PRYOR ROAD & NW LOWENSTEIN DRIVE
LEE'S SUMMIT, MISSOURI

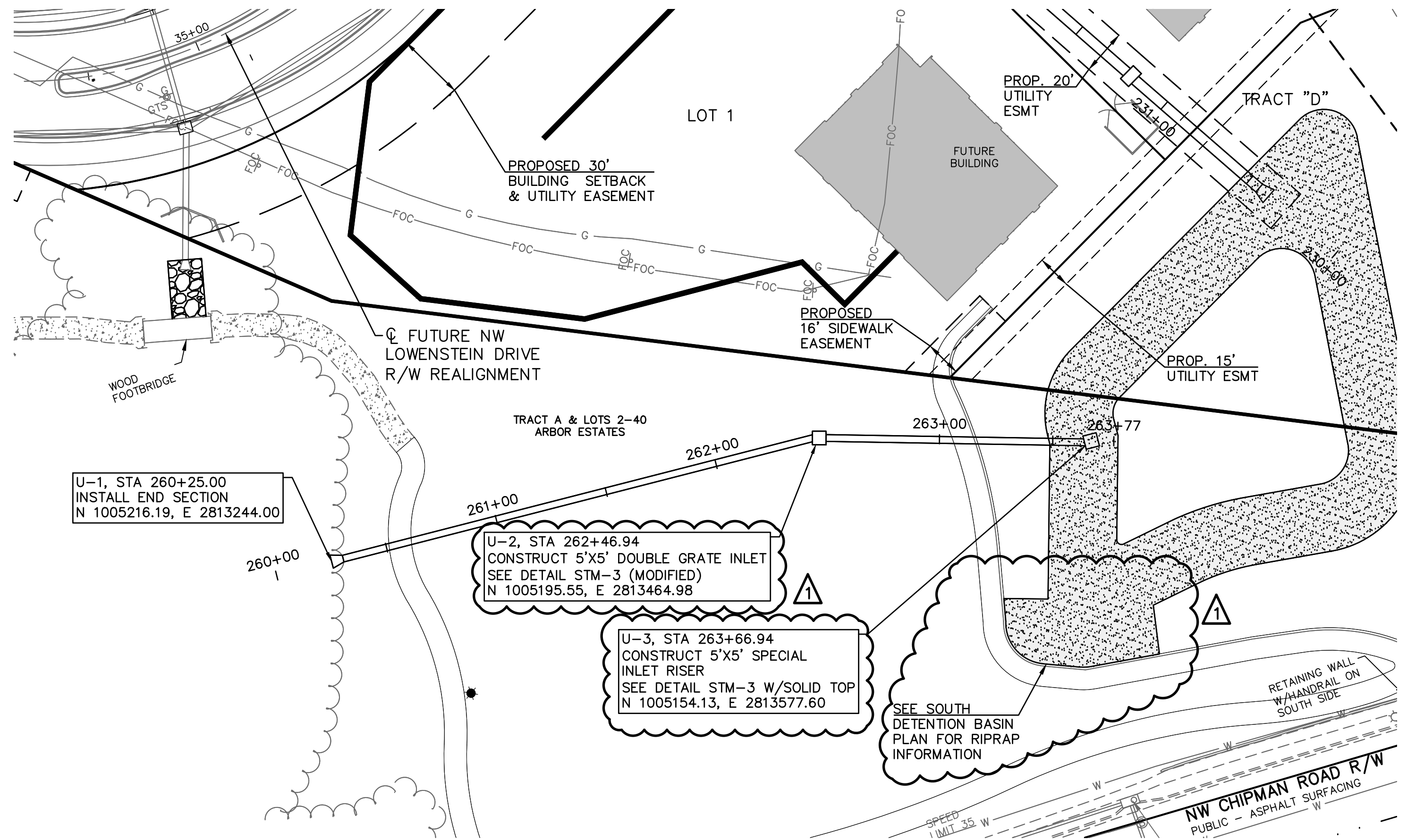
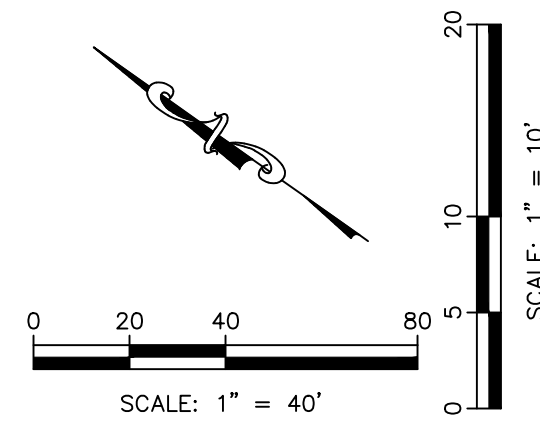
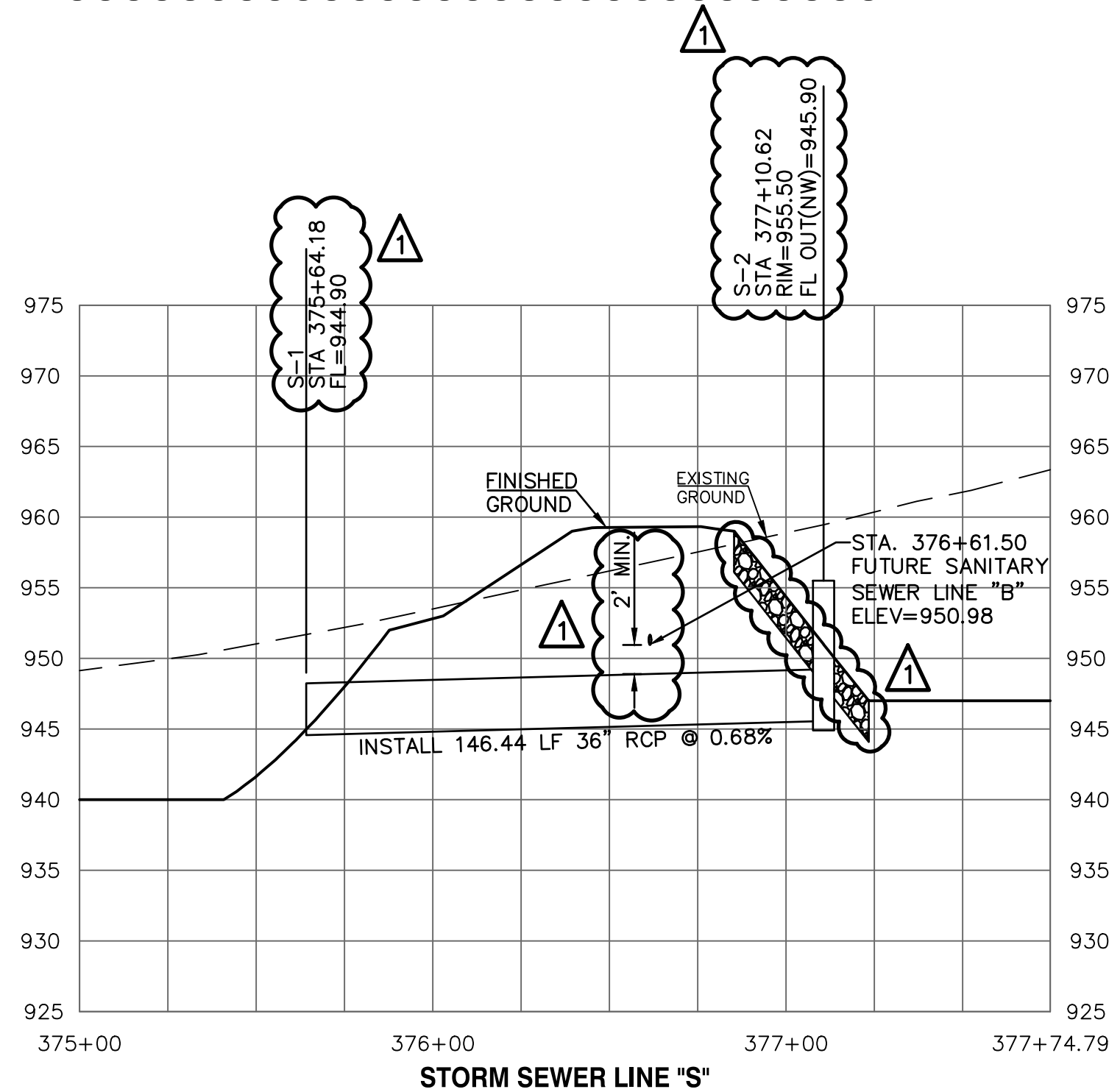
SANITARY SEWER PLANS
SANITARY SEWER LINE A

REV	DATE	DESCRIPTION
0	1-8-19	INITIAL ISSUE
1	1-23-19	REVISED PER CITY COMMENT
2	2-26-19	REVISED PER CITY COMMENT
3	4-15-19	REVISED PER CITY COMMENT

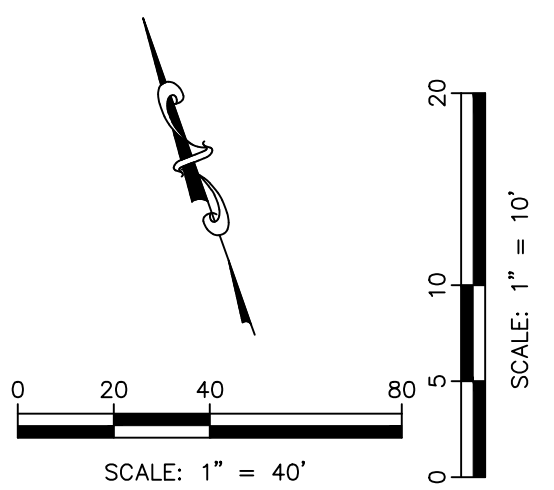
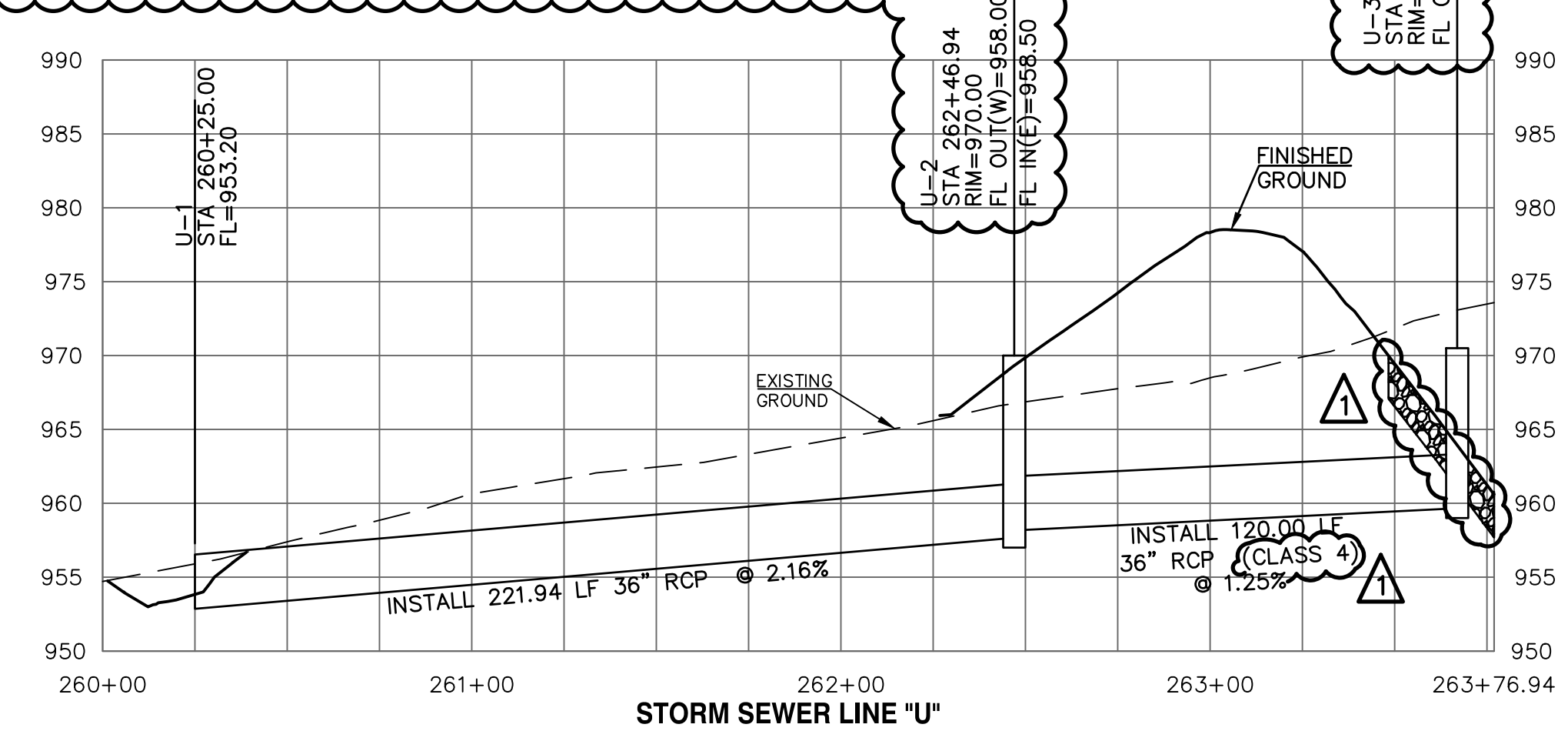
CHK	DWN	DSN
LDO	JT/BKR	LDO
LDO	JT	LDO
LDO	JT	LDO



STRUCTURE S-2
RISER CONTROL ELEMENTS:
TRASH RACK AND GRATE INLET, IN RISER TOP, 5'X5' OPENING,
WEIR EL 955.50, TRASH RACK EL=956.17



STRUCTURE U-3
RISER CONTROL ELEMENTS:
1 - 2.5" DIA ORIFICE OPENINGS AT EL 968.0, NORTH FACE
2 - 8" DIA ORIFICE OPENINGS AT EL 968.0, SOUTH FACE 1-8" DIA.
ORIFICE OPENING AT EL 968.0, WEST FACE
1 - 36"W X 18"H RECT. OPENING AT EL 970.0, NORTH FACE
SOLID TOP INLET, RIM ELEV=973.0



ADDED ESMTS

ALL RCP SHALL BE CLASS 3 EXCEPT WHERE INDICATED OTHERWISE.

PUBLIC STREET, STORM AND WATER ARE BY SEPARATE PLANS

ALL PROPOSED STORM LINES ARE PRIVATE UNLESS NOTED OTHERWISE

1	5-18-19	REVISED PER CITY COMMENTS	LDO	JT	LDO
0	12-16-19	INITIAL ISSUE	LDO	JT	LDO
	REV	DATE	DESCRIPTION	DSN	CHK

LEON D. OSBOURN
ENGINEER
MO # 021726

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KAW VALLEY ENGINEERING

KAW VALLEY ENGINEERING, INC. IS AUTHORIZED TO OFFER ENGINEERING SERVICES IN THE STATE OF MISSOURI. CERTIFICATE OF AUTHORITY # 000642. EXPIRES 12/31/19.

STREETS OF WEST PRYOR
NWQ NW PRYOR RD & NW LOWENSTEIN DR
LEE'S SUMMIT, MISSOURI

MASS GRADING & STORM SEWER IMPROVEMENTS
STORM SEWER LINES & U-PLAN AND PROFILE

PROJ. NO.	A14-7067-1
DESIGNER	LDO
DRAWN BY	JT
CFN	7067-1G_DPP
SHEET	REV
C-30	1