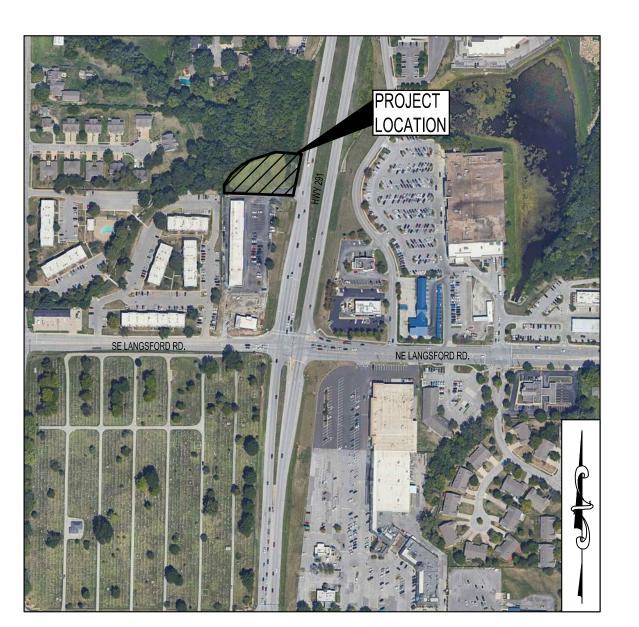
# PROPOSED TAKE 5 OIL CHANGE

RTE 291 @ SE LANGSFORD RD LEE'S SUMMIT, MISSOURI



## VICINITY MAP

## RELEASED FOR CONSTRUCTION As Noted on Plan Review

Development Services Departme Lee's Summit, Missouri 04/24/2025

## **SHEET INDEX**

CIVIL		
1.	COVER	COVER SHEET
2.	SURVEY	
3.	ES-1	EROSION CONTROL PLAN
4.	ES-2	<b>EROSION CONTROL DETAILS</b>
5.	C-1	SITE PLAN
6.	C-1.1	JOINT LAYOUT PLAN
7.	C-2	GRADING PLAN
8.	C-2.1	PROFILES
9.	C-2.2	DETENTION BASIN PLAN
10.	C-3	UTILITY PLAN
11.	C-4.1	SITE DETAILS
12.	C-4.2	SITE DETAILS
13.	C-4.3	SITE DETAILS
14.	C-4.4	DRAINAGE DETAILS
15.	C-4.5	DRAINAGE DETAILS
16.	C-4.6	SEWER DETAILS
17.	C-4.7	UTILITY DETAILS

#### LANDSCAPE

20.	L-1.0	LANDSCAPE PLAN
21	I -1 2	LANDSCAPE DETAILS

UTILITY DETAILS

UTILITY DETAILS

#### NOTE

- THIS PROJECT IS TO BE CONSTRUCTED WITHIN THE JURISDICTIONAL BOUNDARIES OF THE CITY OF LEE'S SUMMIT, MO.
- UNLESS OTHERWISE NOTED ALL IMPROVEMENTS SHALL COMPLY WITH THE CITY OF LEE'S SUMMIT, MO STANDARD SPECIFICATIONS AND DRAWINGS.

# DEVELOPER

DRIVEN ASSETS, LLC 2101 PEARL STREET BOULDER, CO 80302

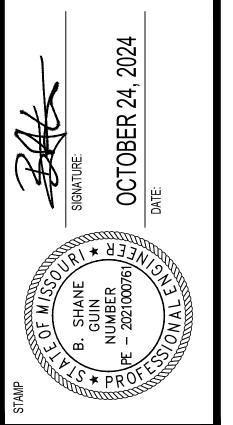
PRCOM20250361
PRSUBD20245695



	REVISION	BY
1	10/24/2024 REVISED PER CITY	KRG

ONSULTANTS LLC
ONSULTANTS LLC
34 N. COLUMBIA ST, SUITE 200A
COVINGTON, LA 70433
www.hightidela.com





LEE'S SUMMIT, MISSOURI
FOR DRIVEN ASSETS, LLC
2101 PEARL STREET
BOULDER, CO 80302

DRAWN
KRG

CHECKED
RCG

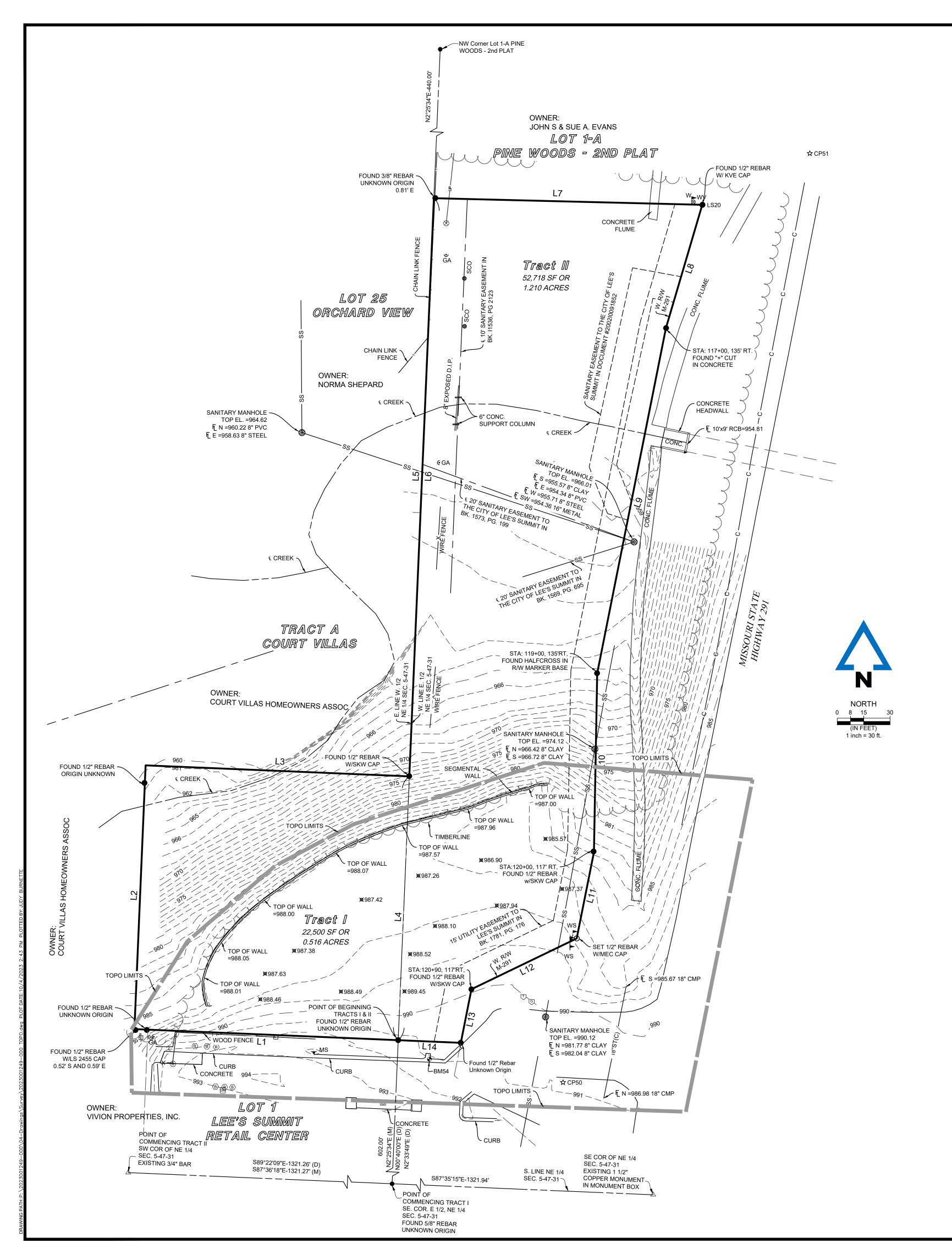
ISSUED DATE
07/30/2024

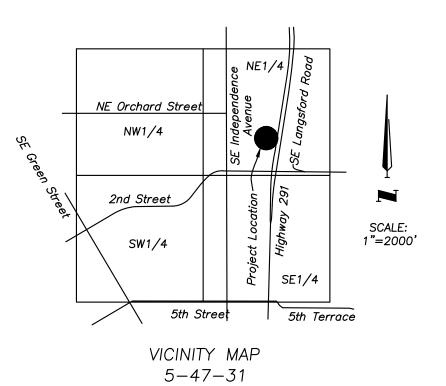
ISSUED FOR
PERMITTING

PROJECT NO.
22-218

FILE
22-218 COVER

COVER





#### **LEGEND**

GA = GUY ANCHOR

▼ MS = METAL SIGN

PP = POWER POLE

⊗ SSMH = SANITARY SEWER MANHOLE Δ = SECTION CORNER ⊗ SCO = SEWER CLEAN OUT

 $\blacktriangleright$  W= WATER MARKER⊗ WV= WATER VALVE $\blacktriangleright$  WS= WOOD SIGN $\blacktriangleright$  B= BOLLARD $\blacktriangleright$   $\blacktriangleright$  = GAS METER

= LIGHT POLE w/CONC. BASE

PROJECT CONTROL POINTS TABLE				
CP#	NORTHING	EASTING	ELEV.	DESCRIPTIO
50	1002321.14'	2828279.79'	990.78'	CP 50
51	1002848.95'	2828419.99'	979.14'	CP 51
52	1001994.38'	2828211.00'	997.15'	CP 52
53	1002195.40'	2828248.41'	994.99'	BM 53
54	1002334.35'	2828203.90'	991.66'	BM 54

LINE TABLE				
LINE NO.	BEARING	DISTANCE		
L1	N87°36'18"W (M) N89°22'09"E (D)	150.00'		
L2	N2°25'34"E (M) N00°40'00"E (D)	150.00'		
L3	S89°22'09"E (D) S87°36'18"E (M)	150.00'		
L4	N00°40'00"E (D) N2°25'34"E (M)	150.00'		
L5	N2°33'49"E (D) N2°25'34"E (M)	328.79'		
L6	N2°33'49"E (D) N2°25'34"E (M)	478.79'		
L7	S88°27'48"E (D) S88°36'03"E (M)	152.53'		
L8	S16°24'21"W (M) S16°32'36"W (D)	73.03'		
L9	11°15'42"W (M) S11°23'57"W (D)	200.00'		
L10	S1°11'44"W (D) S1°03'29"W (M)	101.61'		
L11	S11°15'42"W (M) S11°23'57"W (D)	50.00'		
L12	S64°13'25"W (M) S64°21'40"W (D)	66.40'		
L13	S11°15'42"W (M) S11°23'57"W (D)	31.03'		
L14	N87°34'58"W (M) N87°26'43"W (D)	35.61'		

- 1/2" IRON BAR WITH SKW TRAVERSE CAP

  1. NORTH 3.0 FEET TO THE SOUTH EDGE OF AN ASPHALT ENTRANCE.

  2. SOUTHWEST 8.5 FEET TO THE WEST CURB RETURN.
- CP 51 1/2" IRON BAR WITH SKW CAP
- 1. EAST 10.50 FEET TO THE WEST EDGE OF HIGHWAY 291. 2. WEST 15.5 FEET TO THE EAST EDGE OF A CONCRETE FLUME.

2. EAST 41.8 FEET TO THE WEST EDGE OF HIGHWAY 291.

3. SOUTH 36.8 FEET TO A FIRE HYDRANT.

3. SOUTHEAST 24.0 FEET TO THE SOUTH END OF AN 18"CMP.

MAG & SHINER IN THE TOP OF A CURB AT THE NORTH END OF YELLOW NO PARKING.

1. WEST 28.0 FEET TO THE EAST END OF AN ISLAND.

BENCHMARK 53 ELEV.: 994.99
SET + CUT THE NORTH BOLT TOP FLANGE OF A FIRE HYDRANT ±150'
SOUTHEAST OF THE SOUTHEAST CORNER OF THIS SURVEY.

BENCHMARK 54 ELEV.: 991.62
EXISTING SQUARE CUT ON BACK OF CURB 50'± EAST NORTHEAST OF
THE NORTHEAST CORNER OF MEINEKE ON THE NORTH SIDE DRIVE AT
THE FLUME.

## **TOPOGRAPHIC SURVEY**

**SURVEY PREPARED FOR** 

DRIVEN ASSETS, LLC 2101 PEARL STREET BOULDER, CO. 80302 TODD MINIS, MANAGING PARNTER todd@drivenassets.com

SURVEY NOTES

- 1. INFORMATION AS SHOWN FOR UNDERGROUND UTILITIES HAS BEEN COMPILED FROM THE RECORDS OF VARIOUS UTILITY COMPANIES CONCERNED, AND AS MARKED IN THE FIELD BY THE MISSOURI ONE CALL SYSTEM, 1 (800) 344-7483. WHEN PRECISE LOCATIONS OF UNDERGROUND UTILITIES ARE NEEDED PRIOR TO EXCAVATION OR CONNECTIONS, THE VARIOUS UTILITY COMPANIES CONCERNED ARE TO FURNISH A CREW TO POINT OUT THE LOCATIONS AT THE JOB SITE. Missouri One Call Ticket #232351453.
- 3. CONTOURS SHOWN HEREON ARE 1 FOOT INTERVALS AND BASED NAVD88.
- 4. BASIS OF BEARINGS: MISSOURI STATE PLANE, WEST ZONE.
- 5. CLASS OF SURVEY: URBAN
- 6. WE HAVE REVIEWED THE "FLOOD INSURANCE RATE MAP", COMMUNITY PANEL NO. 29095C0436G HAVING AN EFFECTIVE JANUARY 20, 2017 AS PUBLISHED BY FEDERAL EMERGENCY MANAGEMENT AGENCY. OUR REVIEW OF THIS MAP INDICATES THAT THIS PARCEL OF LAND LIES WITHIN ZONE X OTHER FLOOD AREAS, WHICH IS "AREAS OF 0.2%; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FORM 1% ANNUAL CHANCE FLOOD."

LEGAL DESCRIPTION PER TITLE COMMITMENT

TRACT I:

THE SOUTH 150 FEET OF THE EAST 150 FEET OF THE NORTH 300 FEET OF THE SOUTH 902 FEET OF THE EAST 880 FEET OF THE WEST ONE HALF OF THE NORTHEAST QUARTER OF SECTION 5, TOWNSHIP 47, RANGE 31, IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHWEST CORNER OF THE NORTHEAST QUARTER OF SAID SECTION 5, TOWNSHIP 47, RANGE 31; THENCE SOUTH 89 DEGREES, 22 MINUTES, 09 SECONDS EAST ALONG THE SOUTH LINE OF THE WEST ONE HALF OF SAID QUARTER SECTION, A DISTANCE OF 1321.26 FEET TO THE SOUTHEAST CORNER OF SAID WEST ONE HALF; THENCE NORTH 00 DEGREES, 40 MINUTES, 00 SECONDS EAST ALONG THE EAST LINE OF SAID WEST ONE HALF, A DISTANCE OF 602.00 FEET TO THE POINT OF BEGINNING; THENCE NORTH 89 DEGREES, 22 MINUTES, 09 SECONDS EAST, PARALLEL WITH THE SOUTH LINE OF SAID WEST ONE HALF, A DISTANCE OF 150.00 FEET; THENCE NORTH 00 DEGREES, 40 MINUTES, 00 SECONDS EAST, PARALLEL WITH THE EAST LINE OF SAID WEST ONE HALF, A DISTANCE OF 150.00 FEET; THENCE SOUTH 89 DEGREES, 22 MINUTES, 09 SECONDS EAST, PARALLEL WITH THE SOUTH LINE OF SAID WEST ONE HALF, A DISTANCE OF 150.00 FEET TO A POINT ON THE EAST LINE OF SAID WEST ONE HALF; THENCE SOUTH 00 DEGREES, 40 MINUTES, 00 SECONDS WEST ALONG SAID EAST LINE, A DISTANCE OF 150.00 FEET TO THE POINT OF BEGINNING.

#### TRACT II:

COMMENCING AT THE SOUTHWEST CORNER OF THE EAST 1/2 OF THE NORTHEAST 1/4 OF SECTION 5, TOWNSHIP 47, RANGE 31, LEE'S SUMMIT, JACKSON COUNTY, MISSOURI; THENCE ALONG THE WEST LINE OF SAID 1/2 OF 1/4 SECTION NORTH 2 DEGREES, 33 MINUTES, 49 SECONDS EAST 602 FEET TO THE TRUE POINT OF BEGINNING OF THIS TRACT; THENCE ALONG SAID WEST LINE NORTH 2 DEGREES, 33 MINUTES, 49 SECONDS EAST 478.79 FEET; THENCE SOUTH 88 DEGREES, 27 MINUTES, 48 SECONDS EAST 152.53 FEET TO A POINT ON THE WEST LINE OF THE RIGHT-OF-WAY OF M-291; THENCE ALONG SAID RIGHT-OF-WAY LINE AS FOLLOWS; SOUTH 16 DEGREES, 32 MINUTES, 36 SECONDS WEST 73.03 FEET TO A POINT 135 FEET OPPOSITE CENTER LINE STATION 117+00; THENCE SOUTH 11 DEGREES, 23 MINUTES, 57 SECONDS WEST 200 FEET TO A POINT 135 FEET OPPOSITE CENTER LINE STATION 119+00; THENCE SOUTH 1 DEGREE, 11 MINUTES, 44 SECONDS WEST 101.61 FEET TO A POINT 117 FEET OPPOSITE CENTER LINE STATION 120+00; THENCE PARALLEL TO SAID CENTER LINE SOUTH 11 DEGREES, 23 MINUTES, 57 SECONDS WEST 50 FEET; THENCE SOUTH 64 DEGREES, 21 MINUTES, 40 SECONDS WEST 66.40 FEET TO A POINT 170 FEET OPPOSITE CENTER LINE STATION 120+90; THENCE PARALLEL TO SAID CENTER LINE SOUTH 11 DEGREES, 23 MINUTES, 57 SECONDS WEST 31.03 FEET; THENCE LEAVING SAID RIGHT-OF-WAY NORTH 87 DEGREES, 26 MINUTES, 43 SECONDS WEST 35.61 FEET TO THE TRUE POINT OF BEGINNING

RELEASED FOR CONSTRUCTION

As Noted on Plan Review

Development Services Department Lee's Summit, Missouri

04/24/2025



#### **UTILITY WARNING**

THE UTILITIES DEPICTED ON THIS DOCUMENT HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND/OR RECORDS OBTAINED. THE SURVEYOR MAKES NO GUARANTEE THAT THE UTILITIES OR SUBSURFACE FEATURES SHOWN COMPRISE ALL SUCH ITEMS IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UTILITIES OR SUBSURFACE FEATURES SHOWN ARE IN THE EXACT LOCATION INDICATED EXCEPT WHERE NOTED AS QUALITY LEVEL A.

TOPOGRAPHIC SURVEY

ENGINEER DRAWN BY J.BURNETTE : SURVEYOR CREW CHIEF S.WHITAKER : ...

01/01

REVISIONS LEE'S SUMMIT, JACKSON CO.

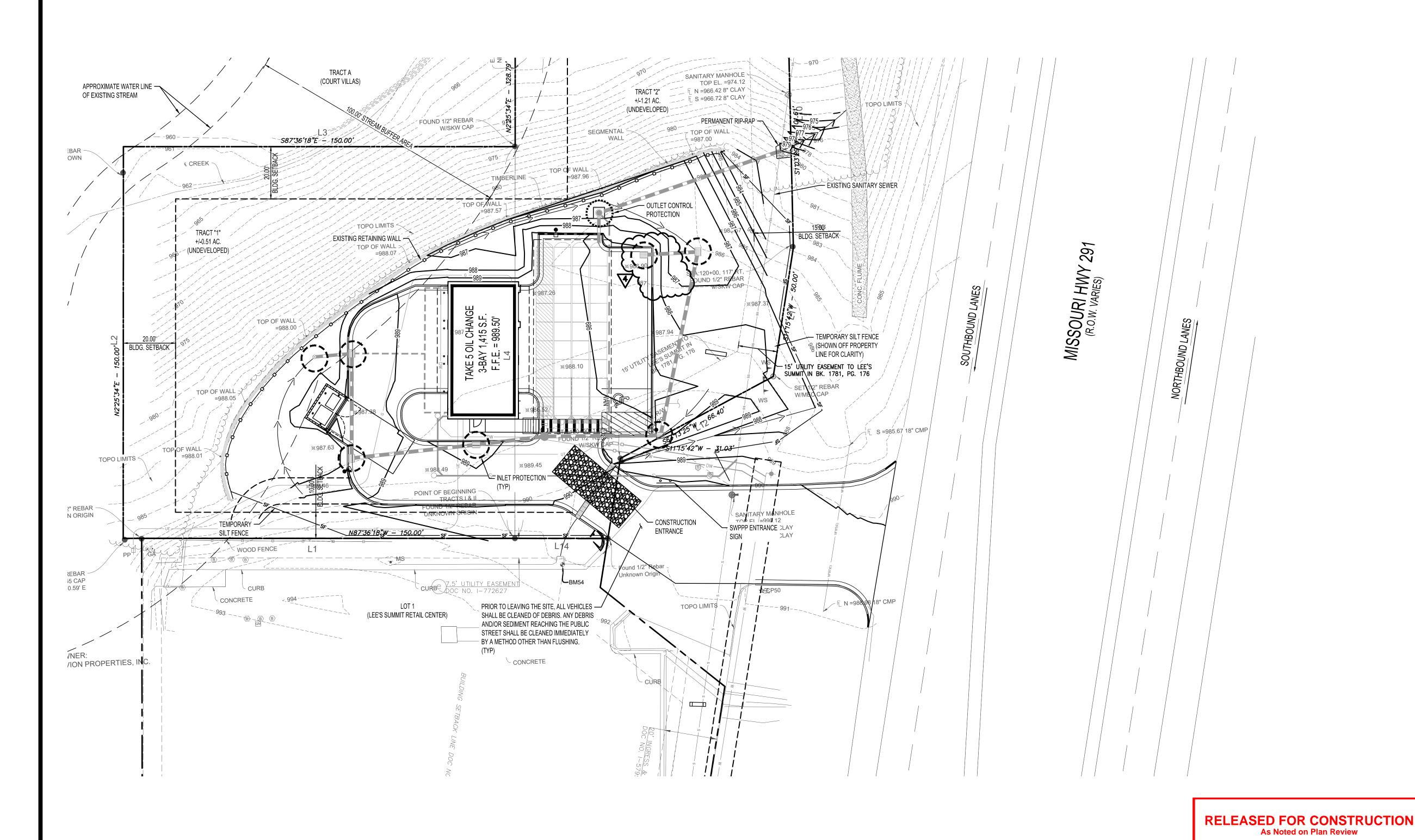
. MISSOUIR
. SEC. 5-T47-R31
. 2023001249-000
. 9/13/2023

**MCCLURE** 

making lives better.

1700 Swift Street, STE 100

North Kansas City, Missouri 641 816-756-0444



#### **EROSION CONTROL NOTES:**

- 1. SEDIMENT AND EROSION CONTROL FACILITIES AND STORM DRAINAGE FACILITIES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION.
- 2. CONTRACTOR SHALL MAINTAIN EROSION CONTROL FACILITIES DURING THE ENTIRE CONSTRUCTION PERIOD. FACILITIES ARE NOT TO BE REMOVED UNTIL COMPLETION OF THE PROJECT.
- 3. ADDITIONAL EROSION CONTROL BMP'S MAY BE REQUIRED AS DEEMED NECESSARY BY GOVERNING AUTHORITIES.
- 4. SILT FENCES SHALL BE CLEANED OR REPLACED WHEN SILT BUILDS UP TO  $\frac{1}{2}$  THE HEIGHT OF THE FENCE.
- 5. EROSION CONTROL MEASURES ARE TO BE INSPECTED WEEKLY AND AFTER EACH
- RAINFALL AND REPAIRED AS NECESSARY. 6. ALL GRADED AREAS SHALL BE STABILIZED WITH A PERMANENT FAST GROWING COVER AND/OR MULCH UPON COMPLETION OF GRADING OPERATIONS. COMPLETION OF GRADING OPERATIONS DOES NOT MEAN AT THE END OF THE PROJECT. AS SOON AS FINAL GRADES ARE ESTABLISHED IN AN UNPAVED AREA, THE CONTRACTOR SHALL STABILIZE WITH A TEMPORARY GRASS OR PERMANENT SOD. IF A TEMPORARY GRASS IS APPLIED, IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO APPLY A PERMANENT SEED OR SOD AT THE PROPER TIME OF YEAR.
- 7. FILL SLOPES SHOULD BE PLANTED AS SOON AS AN AREA OF THE SITE IS BROUGHT TO FINAL GRADE. SURFACE RUNOFF SHALL BE INTERCEPTED AT THE TOP OF TEMPORARY AND PERMANENT SLOPES DURING CONSTRUCTION SO THAT WATER IS NOT ALLOWED TO FLOW OVER THE SLOPE FACE.
- 8. THE GENERAL CONTRACTOR AND THE GRADING CONTRACTOR SHALL REVIEW THEIR GRADING SEQUENCE TO INSURE THAT THE LEAST AMOUNT OF LAND POSSIBLE AT ANY ONE TIME IS DISTURBED WITHOUT PERMANENT STABILIZATION.
- 9. CONTRACTOR SHALL INSTALL TEMPORARY CONSTRUCTION ENTRANCES PRIOR TO ANY
- EARTHWORK OPERATIONS. 10. CONTRACTOR SHALL MAINTAIN SILT FENCE FOR THE DURATION OF THE PROJECT UNTIL ACCEPTED BY THE OWNER AT NO EXPENSE TO OWNER.
- 11. CONTRACTOR SHALL INSPECT ON A DAILY BASIS FOR NEEDED REMOVAL OF ANY ACCUMULATED SILTS, DEBRIS, OR REPAIR OF DAMAGED SILT FENCE AT NO ADDITIONAL EXPENSE TO OWNER.
- 12. PRIOR TO CONSTRUCTION, THE EROSION AND SEDIMENT CONTROL MEASURES SHOWN HEREON SHALL BE IN PLACE. CLEARING AND GRUBBING OPERATIONS WILL BE ENGAGED IN ONLY AS NECESSARY TO ALLOW THE PLACEMENT OF EROSION AND SEDIMENT
- CONTROL MEASURES AS SHOWN HEREON UNTIL ALL SUCH MEASURES ARE IN PLACE. 13. THE CONTRACTOR SHALL OBTAIN AND COMPLY WITH ALL MISSOURI DEPT. OF NATURAL RESOURCES/NPDES STORM WATER GENERAL PERMIT REQUIREMENTS THROUGHOUT THE DURATION OF CONSTRUCTION.
- 14. CONTRACTOR SHALL UPDATE MAP AS NEEDED DURING CONSTRUCTION TO INDICATE LOCATIONS OF PORTABLE TOILETS, MATERIAL STORAGE AREAS, CONCRETE WASHOUTS, ETC. AND TO DOCUMENT BMP INSTALLATION AND CHANGES.

#### **BMP MAINTENANCE EROSION NOTES:**

ALL MEASURES STATED ON THIS SITE MAP SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION & SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, & REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

- 1. INLET PROTECTION DEVICES & BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.
- 2. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, & RESEEDED AS NEEDED.

3. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED.

- SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-HALF THE HEIGHT OF THE SILT FENCE. 4. THE CONSTRUCTION ENTRANCE / EXIT SHALL BE MAINTAINED IN A CONDITION WHICH
- WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION EXITS AS CONDITIONS
- 5. THE TEMPORARY PARKING & STORAGE AREA PROVIDED BY CONTRACTOR SHALL BE

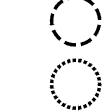
PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AREA AS CONDITIONS DEMAND.

6. PRIOR TO LEAVING THE SITE, ALL VEHICLES SHALL BE CLEANED OF DEBRIS. ANY DEBRIS &/OR SEDIMENT REACHING THE PUBLIC STREET SHALL BE CLEANED IMMEDIATELY BY A METHOD OTHER THAN FLUSHING.

#### **EROSION CONTROL LEGEND**

CONSTRUCTION ENTRANCE

OUTLET CONTROL PROTECTION



INLET PROTECTION



PERMANENT RIP-RAP

REFER TO SURVEY SHEETS FOR LEGEND OF EXISTING FEATURES

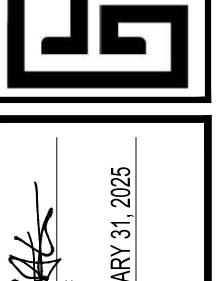


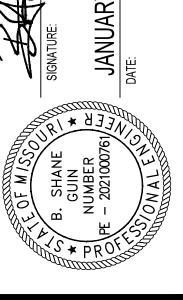
**Development Services Department** Lee's Summit, Missouri

04/24/2025



REVISION 10/24/2024 REVISED PER CITY 12/16/2024 REVISED PER CITY 1/17/2025 REVISED PER CITY 1/31/2025 reviśed per city



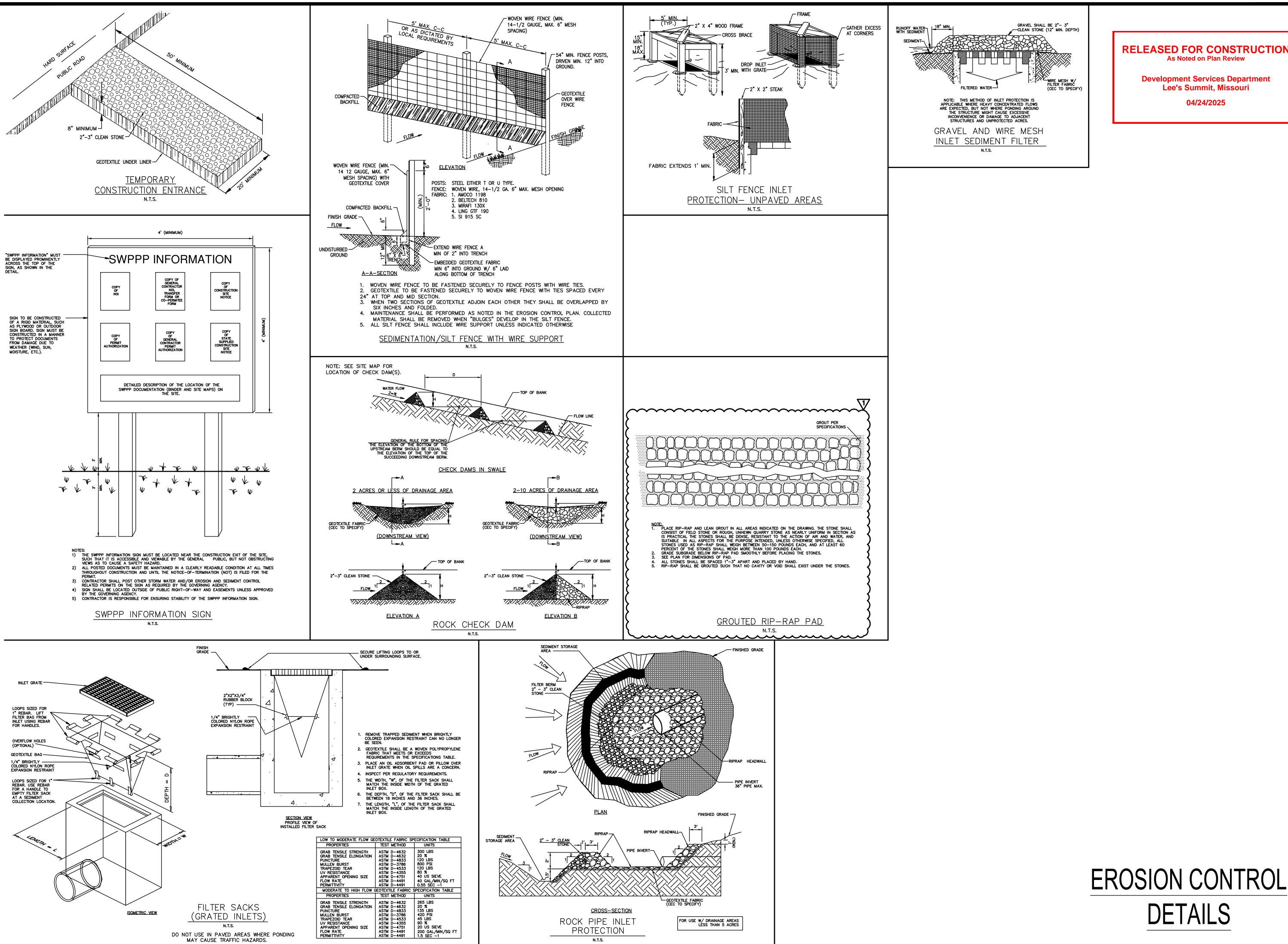


KRG CHECKED RCG ISSUED DATE 07/30/2024 ISSUED FOR PERMITTING PROJECT NO. 22-218

22-218 ES-1 Erosion Control Plan SHEET

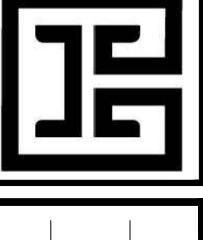
ES-

ACCORDING TO THE MISSOURI DEPARTMENT OF NATURAL RESOURCES GIS MAP, NO EXISTING OIL AND GAS WELLS ARE LOCATED ON SITE.



**Development Services Department** Lee's Summit, Missouri 04/24/2025

REVISION 10/24/2024 REVISED PER CITY

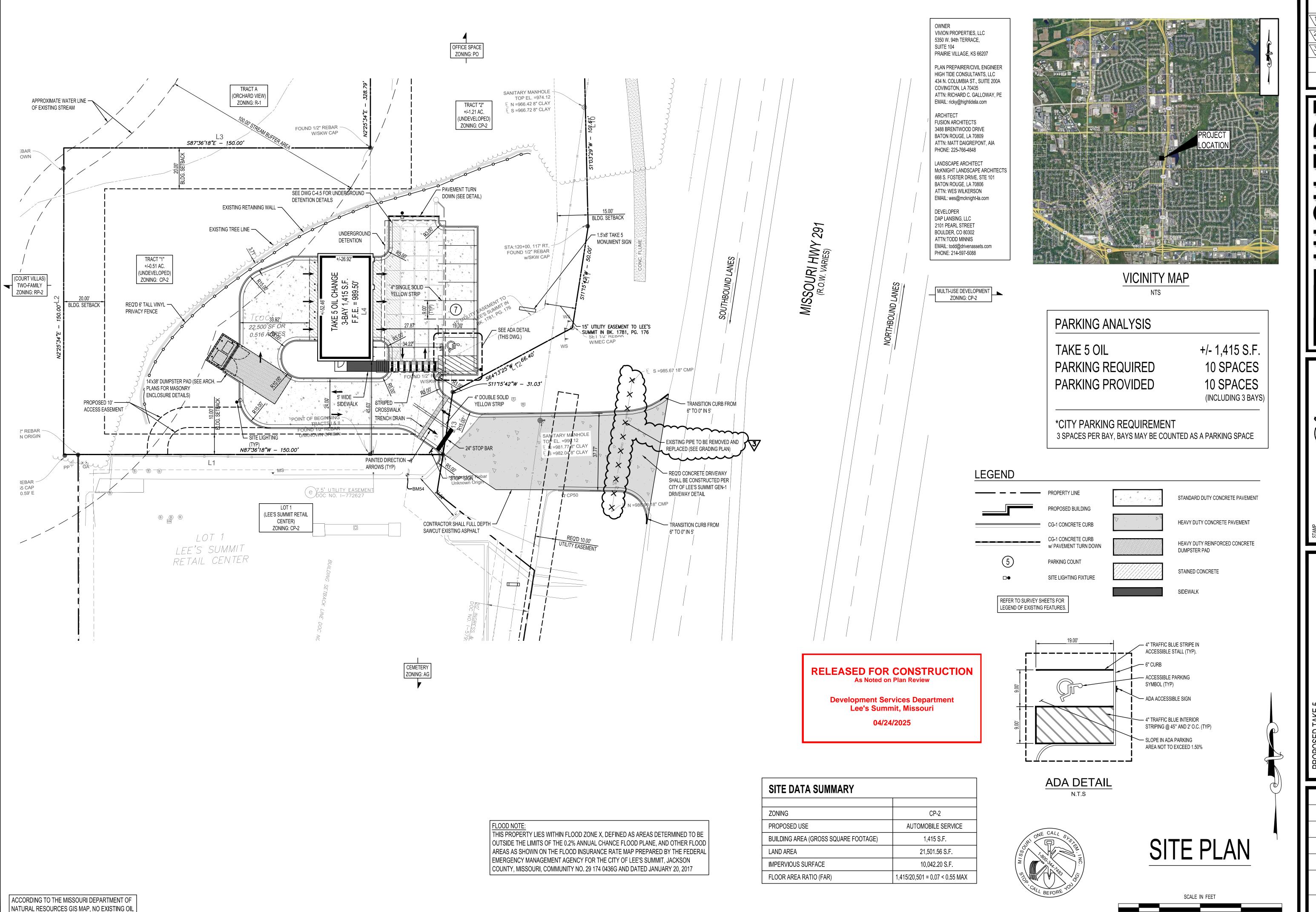


FOR I 2101 BOUL

KRG CHECKED RCG ISSUED DATE 07/30/2024 ISSUED FOR PERMITTING PROJECT NO. 22-218 FILE

SHEET ES-2

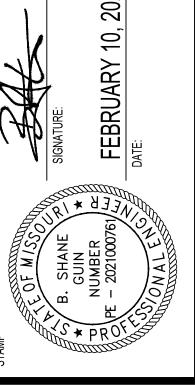
22-218 C-4 Details



AND GAS WELLS ARE LOCATED ON SITE.

REVISION 10/24/2024 REVISED PER CITY 12/17/2024 REVISED PER CITY 2/10/2025 REVISED PER CITY



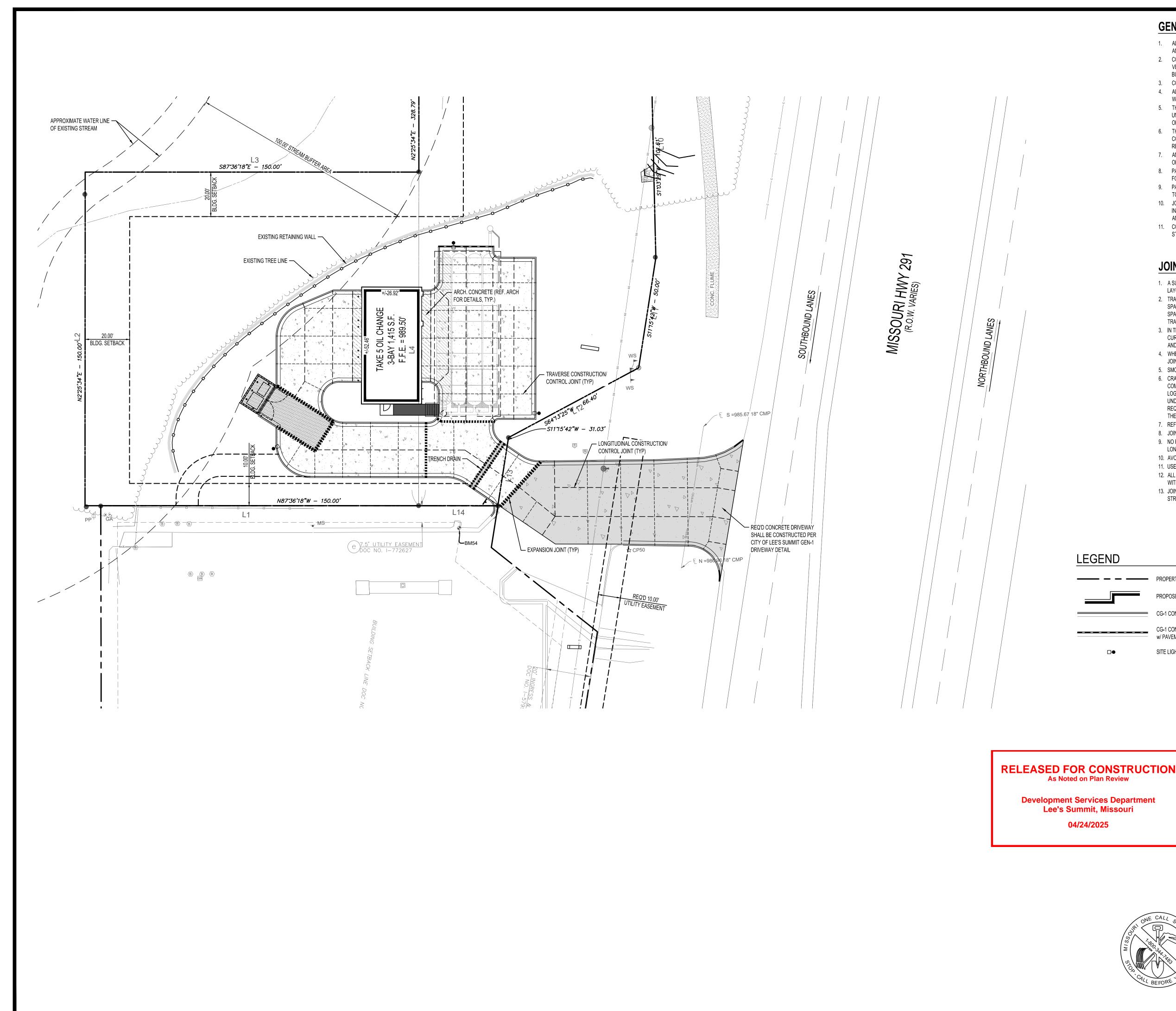


FOR E 2101 F BOUL

KRG CHECKED RCG ISSUED DATE 07/30/2024 ISSUED FOR PERMITTING PROJECT NO. 22-218

SHEET

22-218 C-1 Site Plan



#### **GENERAL PAVING NOTES**

- 1. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY OF LEE'S SUMMIT AND MoDOTD REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
- 2. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF VESTIBULES, SLOPE PAVING, SIDEWALKS, EXIT PORCHES, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.
- 3. CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING BENCHMARK.
- 4. ALL NECESSARY PERMITS AND APPROVALS FROM AGENCIES GOVERNING THE CONSTRUCTION OF THIS WORK SHALL BE SECURED PRIOR TO BEGINNING CONSTRUCTION.
- 5. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL AREAS INDICATED TO REMAIN UNDISTURBED OR TO REMAIN AS BUFFERS, ALL PROPERTY CORNERS, AND REPLACING ALL PINS DAMAGED
- OR ELIMINATED DURING CONSTRUCTION. 6. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRS OR DAMAGE TO ANY EXISTING IMPROVEMENTS DURING CONSTRUCTION SUCH AS, BUT NOT LIMITED TO, DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC.
- REPAIRS SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS. 7. ANY WORK IN THE RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH MISSOURI DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT'S STANDARD DRAWINGS AND SPECIFICATIONS.
- 8. PAVEMENT JOINTS SHOWN HEREIN ARE PROVIDED FOR REFERENCE ONLY. CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH THE PAVEMENT JOINT DETAILS PROVIDED IN THE DETAIL SHEETS.
- 9. PAVEMENT JOINTS SHALL BE SAWCUT AS SOON AS THE CONCRETE HAS REACHED SUFFICIENT STRENGTH
- TO SUPPORT THE SAWING EQUIPMENT AND TEARING OF CONCRETE DOES NOT OCCUR. 10. JOINTS SHALL BE SEALED WITH APPROVED EXTERIOR PAVEMENT JOINT SEALANTS AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. JOINTS SHALL BE CELAN
- 11. CONSTRUCT EXPANSION, WEAKENED PLANE CONTROL (CONTRACTION), AND CONSTRUCTION JOINTS STRAIGHT WITH FACE PERPENDICULAR TO THE CONCRETE SURFACE.

#### **JOINT LAYOUT NOTES**

AND DRY PRIOR TO THE APPLICATION OF THE SEALANT.

- 1. A SUGGESTED JOINT LAYOUT PLAN HAS BEEN PROVIDED. THE CONTRACTOR SHALL ADJUST THE JOINT LAYOUT AS REQUIRED TO MEET ALL SPACING REQUIREMENTS AND ADJUST TO CONSTRUCTION SEQUENCING. 2. TRANSVERSE JOINTS SHALL BE PLACED PERPENDICULAR TO THE LONGITUDINAL JOINTS SHOWN AT A SPACING NO LARGER THAN 1.3 TIMES THE SPACING OF THE LONGITUDINAL JOINT. FOR EXAMPLE, IF THE SPACING BETWEEN THE LONGITUDINAL JOINTS IS 10 FEET, THE MAXIMUM SPACING FOR THE ASSOCIATED
- TRANSVERSE JOINT SHALL BE 13 FEET. 3. IN THE AREAS WITH HORIZONTAL CURVES, THE LONGITUDINAL JOINTS SHALL BE TRUE OFFSETS OF THE CURVES. THE TRANSVERSE JOINTS SHALL BE RADIAL TO THAT HORIZONTAL CURVE. SEE THE LAYOUT SHOWN AND APPLY THE SAME PRINCIPAL TO THE REMAINDER OF THE SITE.
- 4. WHERE JOINTS DO NOT FALL PERPENDICULAR TO A PAVEMENT EDGE, A TWO FOOT MINIMUM LENGTH OF JOINT SHALL BE TURNED PERPENDICULAR TO THE PAVEMENT EDGE TO AVOID "POINTS" IN PANELS. 5. SMOOTH BARS IN RACKS SHALL BE HORIZONTAL AND PERPENDICULAR TO THE JOINT.
- 6. CRACKED PANELS OR SPALLS AT JOINT OR PAVEMENT EDGES SHALL BE REPAIRED OR THE PANEL COMPLETELY REMOVED AND REPLACED AT THE COMPLETE DISCRETION OF THE ENGINEER. THE GENERAL LOGIC TO BE USED BY THE ENGINEER FOLLOWS FAA ADVISORY CIRCULAR 150-5370-10F DATED 9/30/2011 UNDER SECTIONS 501-4.19 AND 501-4.20 BUT THE FINAL CRITERIA IS LEFT UP TO THE ENGINEER. ANY REQUIRED REPAIRS INCLUDING COMPLETE REMOVAL OF THE PANEL SHALL BE AT NO ADDITIONAL COST TO THE OWNER.
- 7. REFER TO PAVING DETAIL SHEET FOR JOINT DETAILS.
- 8. JOINTS SHALL BE 90° AT THE FACE OF CURB.
- 9. NO PANEL SHALL BE SMALLER THAN 4' IN ANY DIRECTION. FOR RECTANGULAR PANELS, THE LENGTH OF THE LONG SIDE SHALL NOT EXCEED TWICE THE LENGTH OF THE SHORT SIDE.
- 10. AVOID IRREGULAR SHAPES.
- 11. USE SELF LEVELING SILICONE SEALANT. COLOR TO MATCH PAVEMENT.
- 12. ALL EARTHWORK, SITE PREPARATION, AND PAVEMENT CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT RECOMMENDATIONS.
- 13. JOINT LAYOUT SHALL BE ADJUSTED IN THE FIELD AS NECESSARY TO ACCOMMODATE EXACT LOCATIONS OF STRUCTURES INCLUDING MANHOLES, CATCH BASINS, FLUMES, STOOPS, ETC.

#### LEGEND

PROPERTY LINE

PROPOSED BUILDING CG-1 CONCRETE CURB

CG-1 CONCRETE CURB w/ PAVEMENT TURN DOWN SITE LIGHTING FIXTURE

STANDARD DUTY CONCRETE PAVEMENT (12.5' MAX JOINT SPACING) HEAVY DUTY CONCRETE PAVEMENT (15.0' MAX JOINT SPACING)

HEAVY DUTY REINFORCED CONCRETE DUMPSTER PAD

STAINED CONCRETE

LONGITUDINAL \_\_\_\_\_ CONSTRUCTION/CONTROL JOINT CONSTRUCTION/CONTROL JOINT

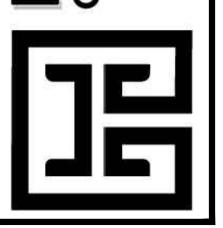
EXPANSION JOINT

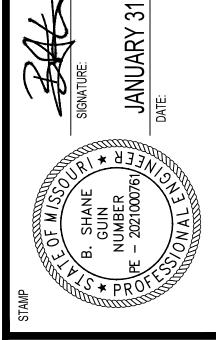
REFER TO SURVEY SHEETS FOR LEGEND OF EXISTING FEATURES.





REVISION

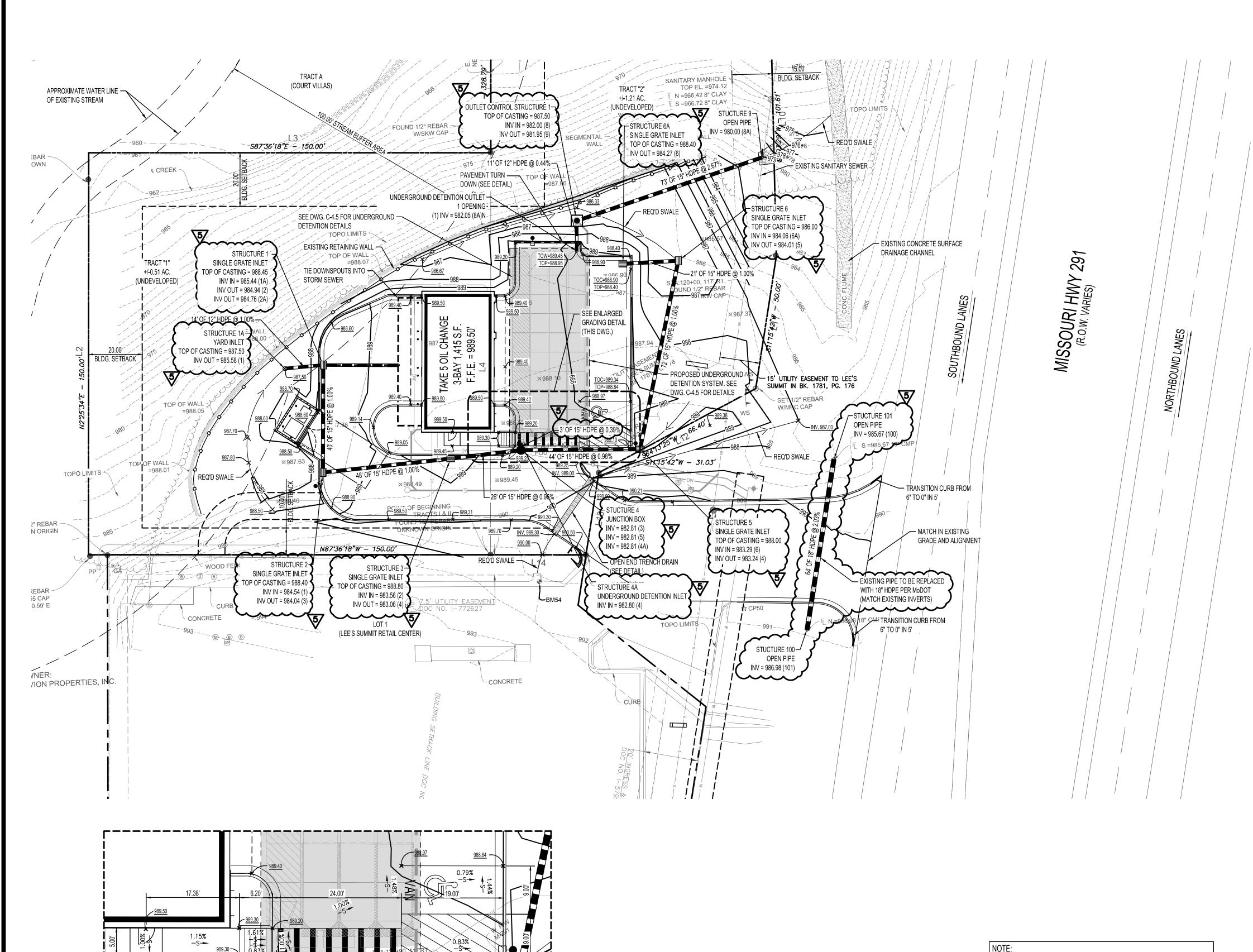




KRG CHECKED RCG ISSUED DATE 07/30/2024 ISSUED FOR PERMITTING PROJECT NO. 22-218 22-218 C-1.1 Joint Layout Plan

SHEET

**U-1.**1



> **Development Services Department** Lee's Summit, Missouri

> > 04/24/2025

THIS SITE IS LOCATED WITHIN THE WEST PRAIRIE LEE WATERSHED

FLOOD NOTE:

THIS PROPERTY LIES WITHIN FLOOD ZONE X, DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE LIMITS OF THE 0.2% ANNUAL CHANCE FLOOD PLANE, AND OTHER FLOOD AREAS AS SHOWN ON THE FLOOD INSURANCE RATE MAP PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY FOR THE CITY OF LEE'S SUMMIT. JACKSON COUNTY, MISSOURI, COMMUNITY NO. 29 174 0436G AND DATED JANUARY 20, 2017

#### **GRADING NOTES**

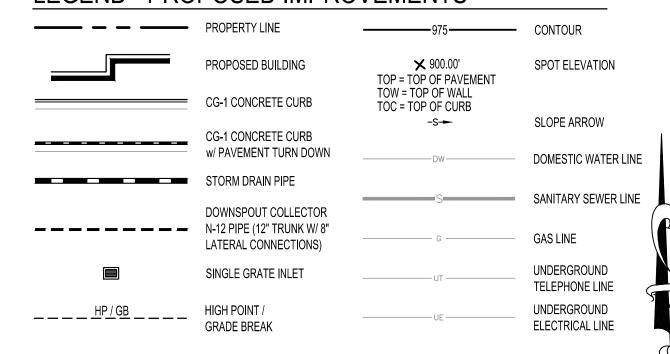
- CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING FEATURES, INCLUDING REMOVAL OF ANY EXISTING UTILITIES UNLESS OTHERWISE NOTED ON THE PLANS. UTILITIES ARE TO BE REMOVED TO THE RIGHT-OF-WAY LIMITS.
- 2. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES 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 COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- 3. ALL CUT OR FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE NOTED.
- 4. PRECAST STRUCTURES MAY BE USED AT CONTRACTORS OPTION.
- 5. EXISTING PIPES TO BE CLEANED OUT TO REMOVE ALL SILT AND DEBRIS.
- 6. IF ANY EXISTING STRUCTURES SHOWN TO REMAIN ARE DAMAGED DURING CONSTRUCTION. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR
- AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER. ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE IS WATERTIGHT
- 8. ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT AND SHALL HAVE TRAFFIC BEARING RING & COVERS. MANHOLES IN UNPAVED AREAS SHALL BE 6" ABOVE FINISH GRADE. LIDS SHALL BE LABELED "STORM SEWER".
- 9. CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
- CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
- 11. TOPOGRAPHIC INFORMATION IS TAKEN FROM A TOPOGRAPHIC SURVEY BY McCLURE. IF THE CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, THEN THE CONTRACTOR SHALL SUPPLY, AT THEIR EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR TO THE OWNER FOR REVIEW.
- 12. ALL UNSURFACED AREAS DISTURBED BY GRADING OPERATION SHALL RECEIVE 4 INCHES OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES 3H:1V OR STEEPER. CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH GOVERNING SPECIFICATIONS UNTIL A HEALTHY STAND OF VEGETATION IS ESTABLISHED.
- 13. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
- 14. CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST STANDARD OF OSHA DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES.
- 15. ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED MORTAR INVERT FROM INVERT IN TO INVERT OUT
- 16. ALL PIPES AND STRUCTURES WITHIN THE STREET RIGHT-OF-WAY SHALL BE PER MISSOURI DEPARTMENT OF TRANSPORTATION STANDARDS & SPECIFICATIONS, LATEST EDITION AND MODOT STANDARD DETAILS.
- 17. DRAINAGE STRUCTURES SHALL BE PRECAST OR CAST-IN-PLACE CONCRETE IN ACCORDANCE WITH SPECIFICATIONS PROVIDED. REFER TO DETAIL SHEETS
- FOR DETAILS OF AREA INLETS AND MANHOLES. ALL INLET FRAMES AND GRATES SHALL BE VULCAN FOUNDRY CORP. CATALOG # V-4863 OR EQUAL.

#### SITE AND PAD PREPARATION NOTES

- 1. ALL EARTHWORK, PAD AND SITE PREPARATION SHALL BE DONE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEERING SERVICES REPORT PREPARED BY TERRACON CONSULTANTS, INC., DATED NOVEMBER 2, 2023, TERRACON PROJECT NO. 02225258.
- THE CONTRACTOR SHALL OBTAIN A COPY OF THE GEOTECHNICAL REPORT FROM THE OWNER, BECOME FAMILIAR WITH THE REPORT AND RECOMMENDATIONS
- AND SHALL FOLLOW THE RECOMMENDATIONS AND REQUIREMENTS OF THE REPORT. SITE PREPARATION SHALL INCLUDE THE STRIPPING OF EXISTING PAVEMENT SECTIONS, VEGETATION, ORGANICS, SILTY SOILS, AND LOOSE, SOFT OR OTHERWISE UNSUITABLE MATERIAL. COMPLETE STRIPPING OF THE ROOT MAT SHALL BE PERFORMED IN THE PROPOSED BUILDING AND PAVEMENT AREAS.
- STRIPPED MATERIALS CONSISTING OF VEGETATION AND ORGANIC MATERIALS SHALL BE WASTED OFF SITE. THE ACTUAL STRIPPING AND UNDERCUTTING DEPTHS SHALL BE DETERMINED BY A REPRESENTATIVE OF THE GEOTECHNICAL ENGINEER AT THE TIME OF CONSTRUCTION. THE SOILS WITHIN THE PLANNED BUILDING AREA SHALL BE FURTHER UNDERCUT AS NECESSARY TO ACCOMMODATE PLACEMENT OF THE RECOMMENDED
- FOLLOWING INITIAL STRIPPING AND ANY NECESSARY UNDERCUTTING, THE EXPOSED SOILS SHALL BE PROOFROLLED. A TERRACON REPRESENTATIVE SHOULD OBSERVE THE PROOFROLLING. PROOFROLLING CAN BE ACCOMPLISHED USING A LOADED TANDEM-AXLE DUMP TRUCK WITH A GROSS WEIGHT OF AT LEAST 20 TONS, OR SIMILARLY LOADED EQUIPMENT. AREAS THAT DISPLAY EXCESSIVE DEFLECTION (PUMPING) OR RUTTING DURING PROOFROLL OPERATIONS SHOULD
- BE IMPROVED BY SCARIFICATION/COMPACTION OR BY REMOVAL AND REPLACEMENT WITH ENGINEERED FILL SEE GEOTECHNICAL REPORT FOR FILL MATERIAL TYPES, ACCEPTABLE LOCATION FOR PLACEMENT, AND FILL COMPACTION REQUIREMENTS.
- POSSIBLE POOR DRAINAGE CONDITIONS CAN LEAD TO INSTABILITY IN THE AREAS AROUND THE BUILDING AND HAMPER CONSTRUCTION PROGRESS. THE SITE GRADING AND GENERAL CONTRACTOR SHOULD CONSIDER THEIR MEANS AND METHODS TO MAINTAIN DRAINAGE DURING THE CONSTRUCTION PHASE.
- EXPOSED SUBGRADES SHALL BE SLOPED TO PROVIDE POSITIVE DRAINAGE SO THAT SATURATION OF THE SUBGRADES IS AVOIDED. SURFACE WATER SHALL NOT BE PERMITTED TO ACCUMULATE ON THE SITE.
- 10. UPON COMPLETION OF FILLING AND GRADING, CARE SHOULD BE TAKEN TO MAINTAIN THE SUBGRADE WATER CONTENT PRIOR TO CONSTRUCTION OF FLOOR
- 11. CONSTRUCTION TRAFFIC OVER THE COMPLETED SUBGRADES SHOULD BE AVOIDED TO THE EXTENT PRACTICAL 12. THE SITE SHOULD ALSO BE GRADED TO PREVENT PONDING OF SURFACE WATER ON THE PREPARED SUBGRADES OR IN EXCAVATIONS. WATER COLLECTING OVER, OR ADJACENT TO, CONSTRUCTION AREAS SHOULD BE REMOVED, IF THE SUBGRADE DESICCATES, SATURATES, OR IS DISTURBED. THE AFFECTED MATERIAL SHOULD BE REMOVED, OR THE MATERIALS SHOULD BE SCARIFIED, MOISTURE CONDITIONED, AND RECOMPACTED, PRIOR TO FLOOR SLAB
- 13. AS A MINIMUM, EXCAVATIONS SHOULD BE PERFORMED IN ACCORDANCE WITH OSHA 29 CFR, PART 1926, SUBPART P, "EXCAVATIONS" AND ITS APPENDICES, AND IN ACCORDANCE WITH ANY APPLICABLE LOCAL, AND/OR STATE REGULATIONS

SEE TERRACON GEOTECHNICAL REPORT DATED 11/2/2023 FOR ALL SITE AND PAD PREPARATION REQUIREMENTS.

#### **LEGEND - PROPOSED IMPROVEMENTS**



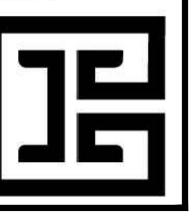
REFER TO SURVEY SHEETS FOR LEGEND OF EXISTING FEATURES

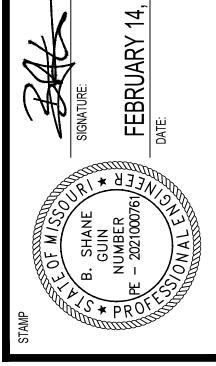


**GRADING PLAN** 

REVISION 10/24/2024 REVISED PER CITY 12/16/2024 REVISED PER CITY 1/17/2025 REVISED PER CITY 1/31/2025 REVISED PER CITY 2/14/2025

REVIŚED PER CITY



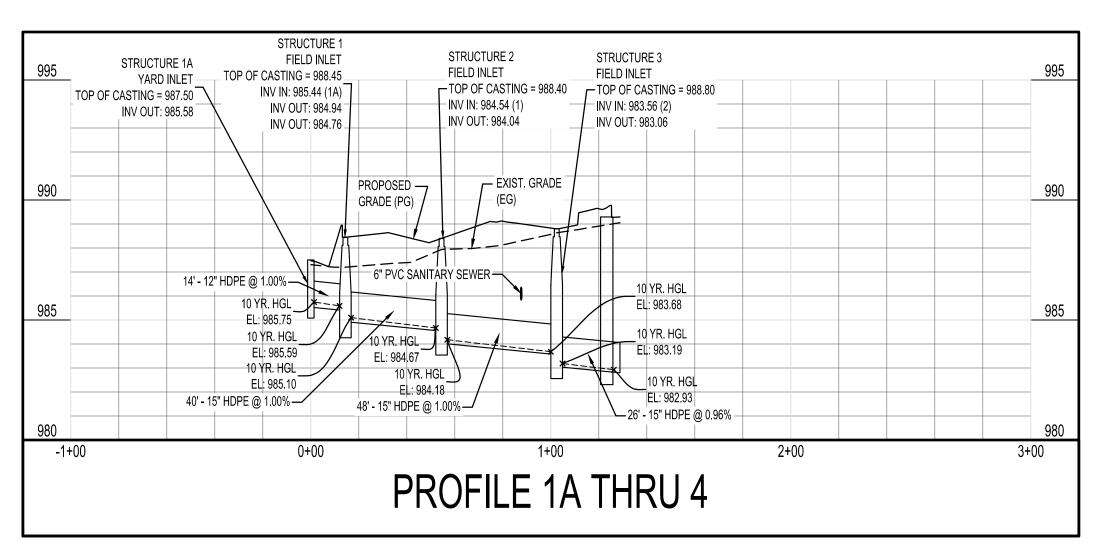


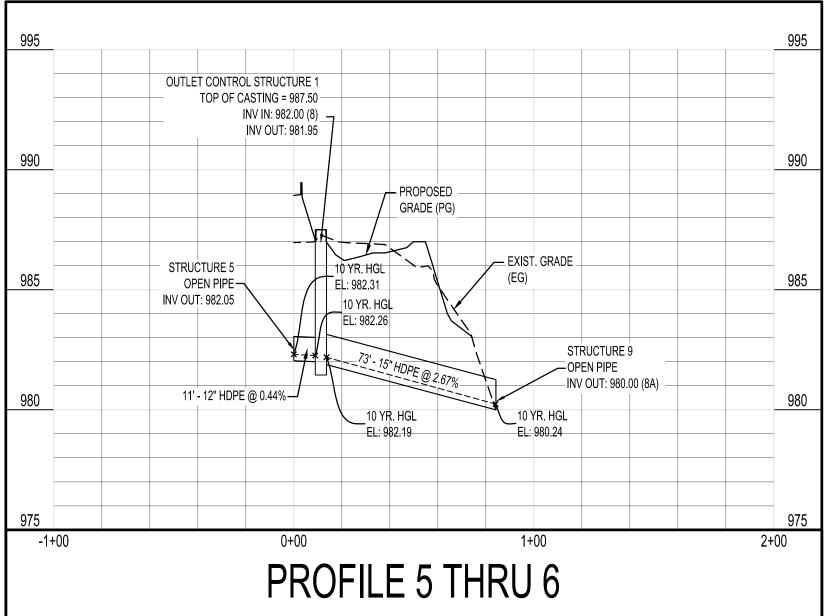
FOR I 2101 BOUL KRG CHECKED RCG ISSUED DATE 07/30/2024 ISSUED FOR PERMITTING PROJECT NO. 22-218 22-218 C-2 Grading Plan

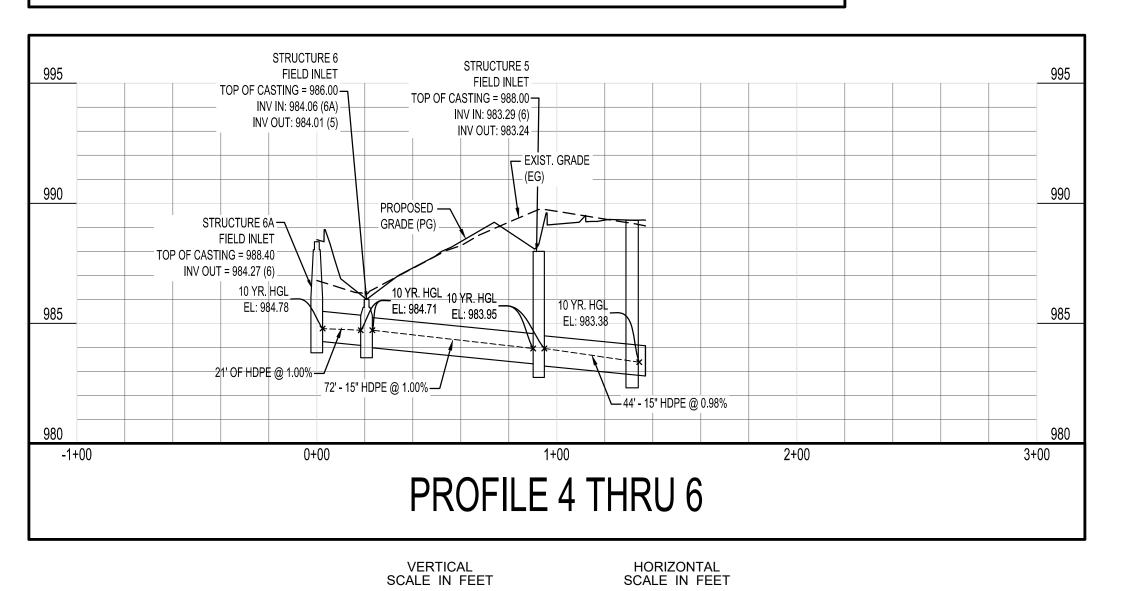
> SHEET **U-Z**

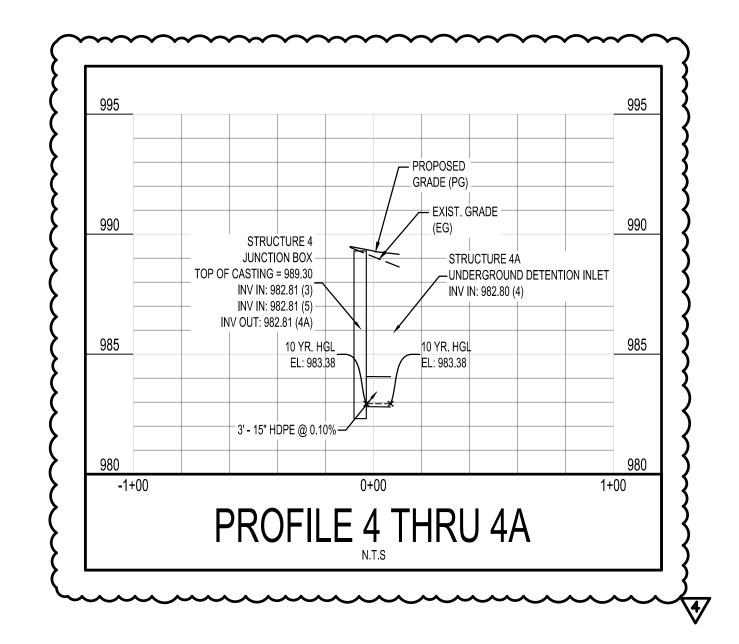
ACCORDING TO THE MISSOURI DEPARTMENT OF NATURAL RESOURCES GIS MAP, NO EXISTING OIL AND GAS WELLS ARE LOCATED ON SITE.

**ENLARGED GRADING DETAIL** 





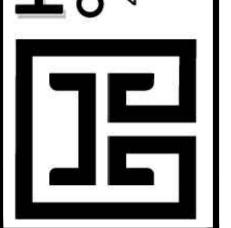


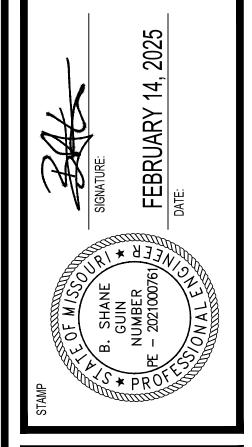


Development Services Department Lee's Summit, Missouri 04/24/2025

		REVISION	BY
	1	12/16/2024 REVISED PER CITY	KRG
	2	1/17/2025 REVISED PER CITY	KRG
	3	1/31/2025 REVISED PER CITY	KRG
	4	2/14/2025 REVISED PER CITY	KRG



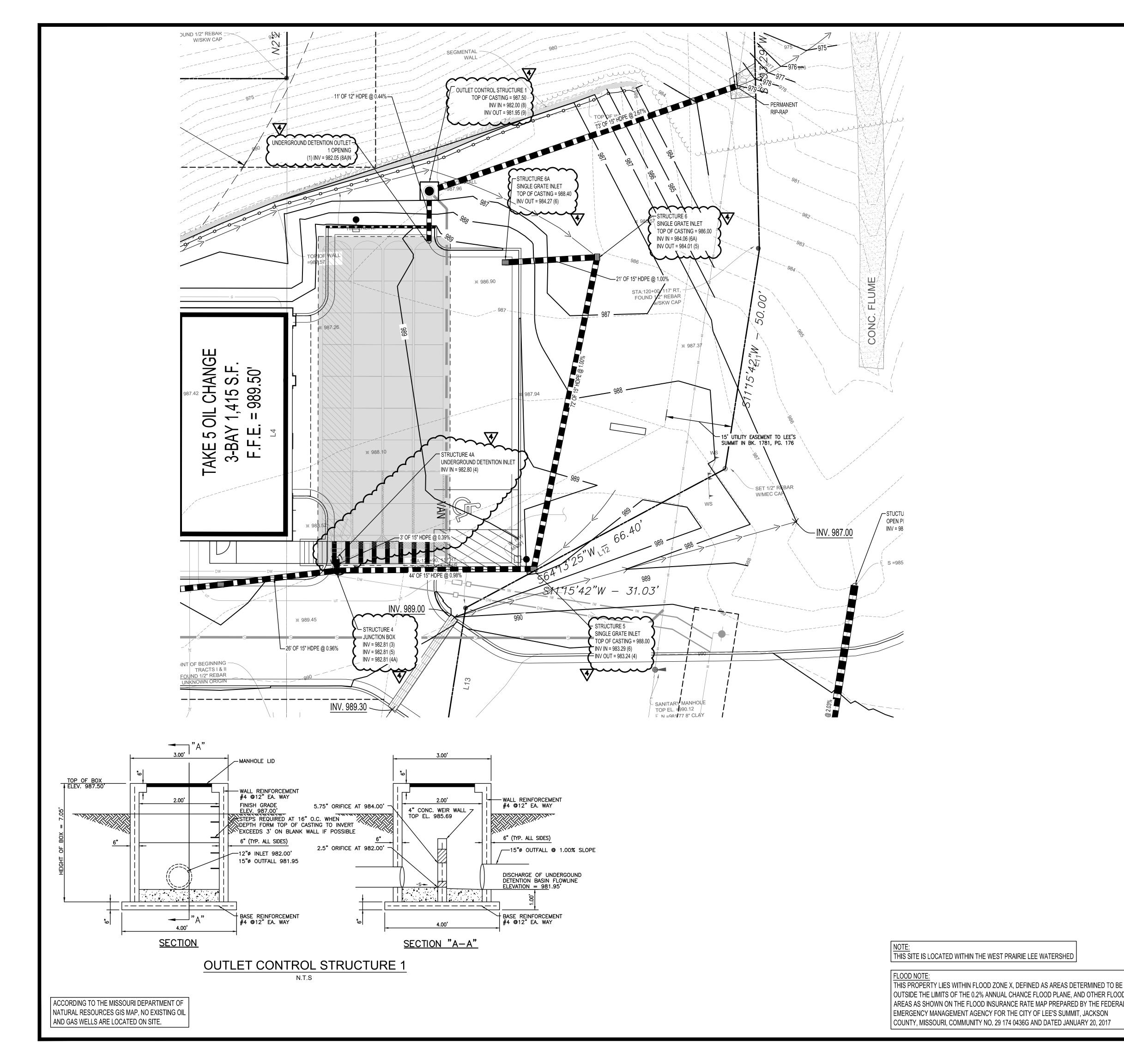




SOURI	rs, LLC :T 2
AKE 5 , MISSOURI	SSETS, LLC TREET 80302

8 2 7 E	
DRAWN	
KRG	
CHECKED RCG	
ISSUED DATE 10/24/2024	
ISSUED FOR PERMITTING	
PROJECT NO. 22-218	
FILE 22-218 X-Layout	

C-2.1



**RELEASED FOR CONSTRUCTION** 

As Noted on Plan Review

**Development Services Department** Lee's Summit, Missouri 04/24/2025

100 YEAR DESIGN STORAGE VOLUME = 5,488 CF

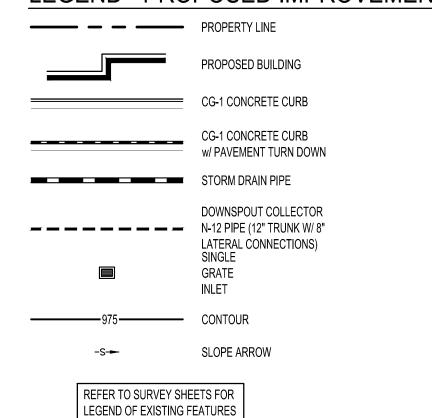
REFER TO ADS STORM TECH DETAILS ON SHEET C-4.5 FOR UNDERGROUND **DETENTION SECTIONS AND DETAILS** 

DETENTION BASIN SHALL BE CONSTRUCTED PRIOR TO ALL OTHER WORK EXCEPT FOR **EROSION AND SEDIMENT CONTROL** 

#### NOTE:

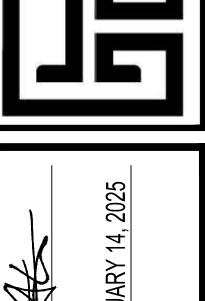
AN AS-GRADED AND AS BUILT RECORD DRAWINGS SHALL BE SUBMITTED AND ACCEPTED BY THE CITY PRIOR TO ANY CERTIFICATE OF OCCUPANCY BY THE CITY

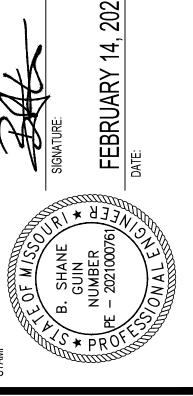
#### LEGEND - PROPOSED IMPROVEMENTS



DETENTION BASIN PLAN

REVISION 12/16/2024 REVISED PER CITY 1/17/2025 REVISED PER CITY 1/31/2025 REVISED PER CITY 2/14/2025 reviśed per city

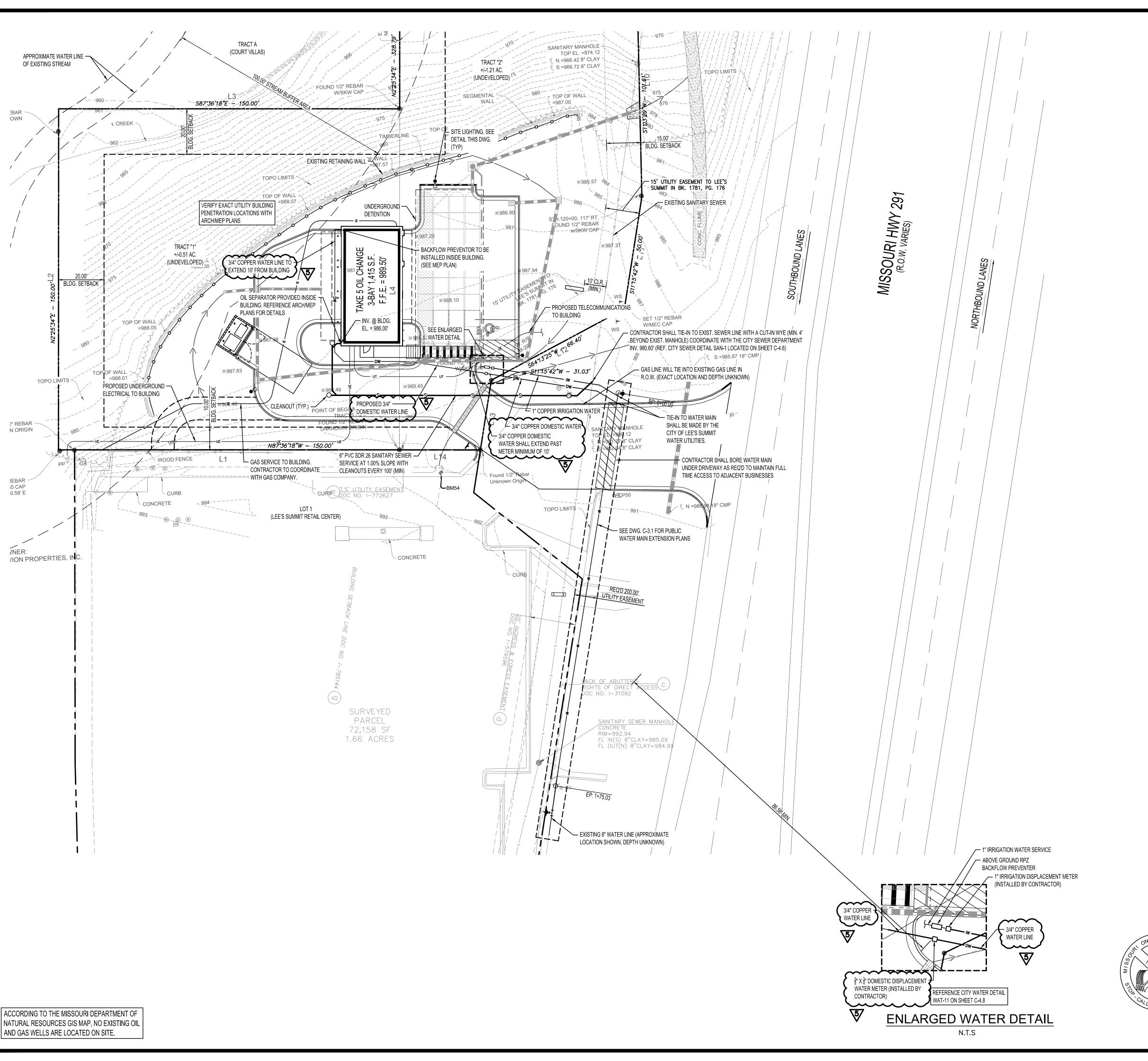




FOR DRIVEN ASSETS, 2101 PEARL STREET BOULDER, CO 80302

KRG CHECKED RCG ISSUED DATE 10/24/2024 ISSUED FOR PERMITTING PROJECT NO. 22-218 22-218 C-2 Grading Plan

> SHEET C-2.2



#### **UTILITY NOTES**

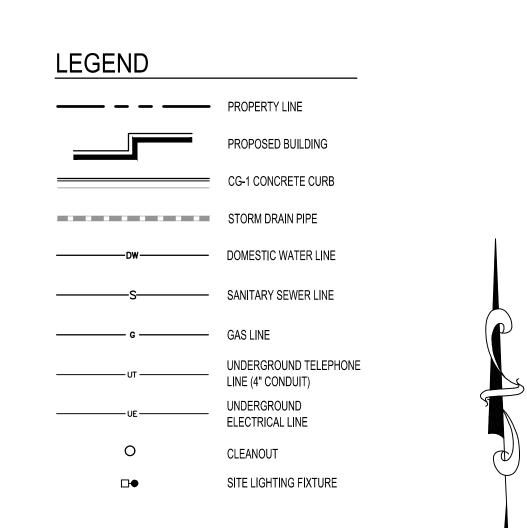
- 1. ALL FILL MATERIAL IS TO BE IN PLACE AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
- 2. ALL SEWER UTILITY WORK SHALL BE DONE TO THE CITY OF LEE'S SUMMIT STANDARDS AND SPECIFICATIONS. ALL WATER UTILITY WORK SHALL BE DONE TO LEE'S SUMMIT WATER UTILITIES STANDARDS AND SPECIFICATIONS. ALL ELECTRICAL UTILITY WORK SHALL BE DONE IN ACCORDANCE WITH LOCAL STANDARDS AND SPECIFICATIONS. ALL GAS UTILITY WORK SHALL BE DONE TO LOCAL GAS STANDARDS AND SPECIFICATIONS.
- 3. CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITIES INSPECTORS 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
- 4. SANITARY SEWER PIPE SHALL BE AS FOLLOWS:
- 6" PVC SCHEDULE 40
- 5. WATER LINES SHALL BE AS FOLLOWS:
- WATER SERVICE LINES GREATER THAN 1". BUT LESS THAN 4"
- FROM THE CITY'S MAIN TO THE CURB VALVE SHALL BE FLEXIBLE OR RIGID TYPE "K" COPPER. FROM THE CURB VALVE TO 10' BEYOND THE METER WELL SHALL BE FLEXIBLE OR RIGID TYPE "K" OR "L" COPPER. ALSO, COPPER MUST BE USED OUTSIDE THE BUILDING WALL OF THE PREMISES SERVED, A
- MINIMUM OF 10' 6. MINIMUM TRENCH WIDTH SHALL BE 2 FEET.
- 7. ON COPPER WATER SERVICE LINE, JOINTS (EXCLUDING JOINTS ON PRE-PURCHASED "METER SETTER") SHALL BE FLARED, COMPRESSION, OR BRAZED. USE OF ANY OTHER TYPE OF JOINT IS PROHIBITED, UNLESS SPECIFICALLY AUTHORIZED IN WRITING BY THE CITY.
- 8. ALL WATER AND SANITARY SEWER UTILITIES SHOULD MAINTAIN A MINIMUM TEN (10') OF HORIZONTAL SEPARATION OR, WHEN CROSSING, 18" OF VERTICAL SEPARATION (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF
- 9. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 4'-0" COVER ON ALL WATERLINES.
- 10. IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATER LINES, SANITARY LINES, STORM LINES AND GAS LINES (EXISTING AND PROPOSED), THE SANITARY LINE SHALL BE DUCTILE IRON PIPE WITH MECHANICAL JOINTS AT LEAST 10 FEET ON BOTH SIDES OF CROSSING, THE WATER LINE SHALL HAVE MECHANICAL JOINTS WITH APPROPRIATE THRUST BLOCKING AS REQUIRED TO PROVIDE A MINIMUM OF 18" CLEARANCE. MEETING REQUIREMENTS OF ANSI A21.10 OR ANSI 21.11 (AWWA C-151) (CLASS 50).
- 11. LINES UNDERGROUND SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
- 12. TOPS OF EXISTING MANHOLES SHALL BE ADJUSTED AS NECESSARY TO BE FLUSH WITH PROPOSED PAVEMENT ELEVATIONS. IN UNPAVED AREAS, EXISTING MANHOLE TOPS SHALL BE 6" ABOVE FINISHED GROUND ELEVATIONS AND CONTAIN WATER TIGHT LIDS.
- 13. ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH AT 3000 P.S.I. 14. REFER TO ARCHITECTURAL AND MEP DRAWINGS FOR EXACT BUILDING TIE-IN LOCATIONS OF ALL UTILITIES.
- 15. CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE SPECIFICATIONS OF THE LOCAL AUTHORITIES WITH
- REGARDS TO MATERIALS AND INSTALLATION OF THE WATER AND SEWER LINES. 16. 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 COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- 17. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES. THIS AND THE FINAL CONNECTIONS OF THE SERVICE SHALL BE COMPLETED 30 DAYS PRIOR TO BUILDING OCCUPANCY.
- 18. CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS.
- 19. REFER TO BUILDING PLANS FOR SITE LIGHTING ELECTRICAL PLAN. 20. CONTRACTOR SHALL COORDINATE WITH THE CITY OF LEE'S SUMMIT PUBLIC WORKS FOR TIE-IN LOCATIONS TO
- PUBLIC UTILITIES PRIOR TO COMMENCEMENT OF WORK.
- 21. EXISTING PUBLIC WATER LINE SHOWN IS BASED ON APPROXIMATE LOCATION PER MAP PROVIDED BY LEE'S SUMMIT WATER UTILITIES, EXACT SIZE AND LOCATION SHALL BE VERIFIED PRIOR TO START OF CONSTRUCTION. ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES.
- 22. TOPOGRAPHIC INFORMATION IS TAKEN FROM A TOPOGRAPHIC SURVEY BY McCLURE DATED 13 SEPTEMBER 2023. IF THE CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, THEN THE CONTRACTOR SHALL SUPPLY, AT THEIR EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR TO THE OWNER FOR REVIEW.

## RELEASED FOR CONSTRUCTION

As Noted on Plan Review

**Development Services Department** Lee's Summit, Missouri

04/24/2025

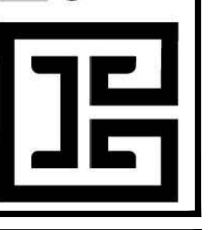


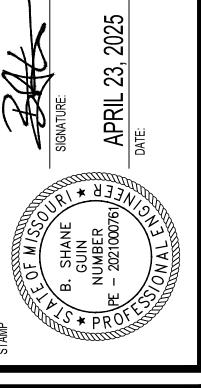


# UTILITY PLAN

REVISION 10/24/2024 REVISED PER CITY 12/16/2024 REVISED PER CITY 1/16/2025 REVISED PER CITY 4/9/2025 DOMESTIC WATER SIZE 4/23/2025

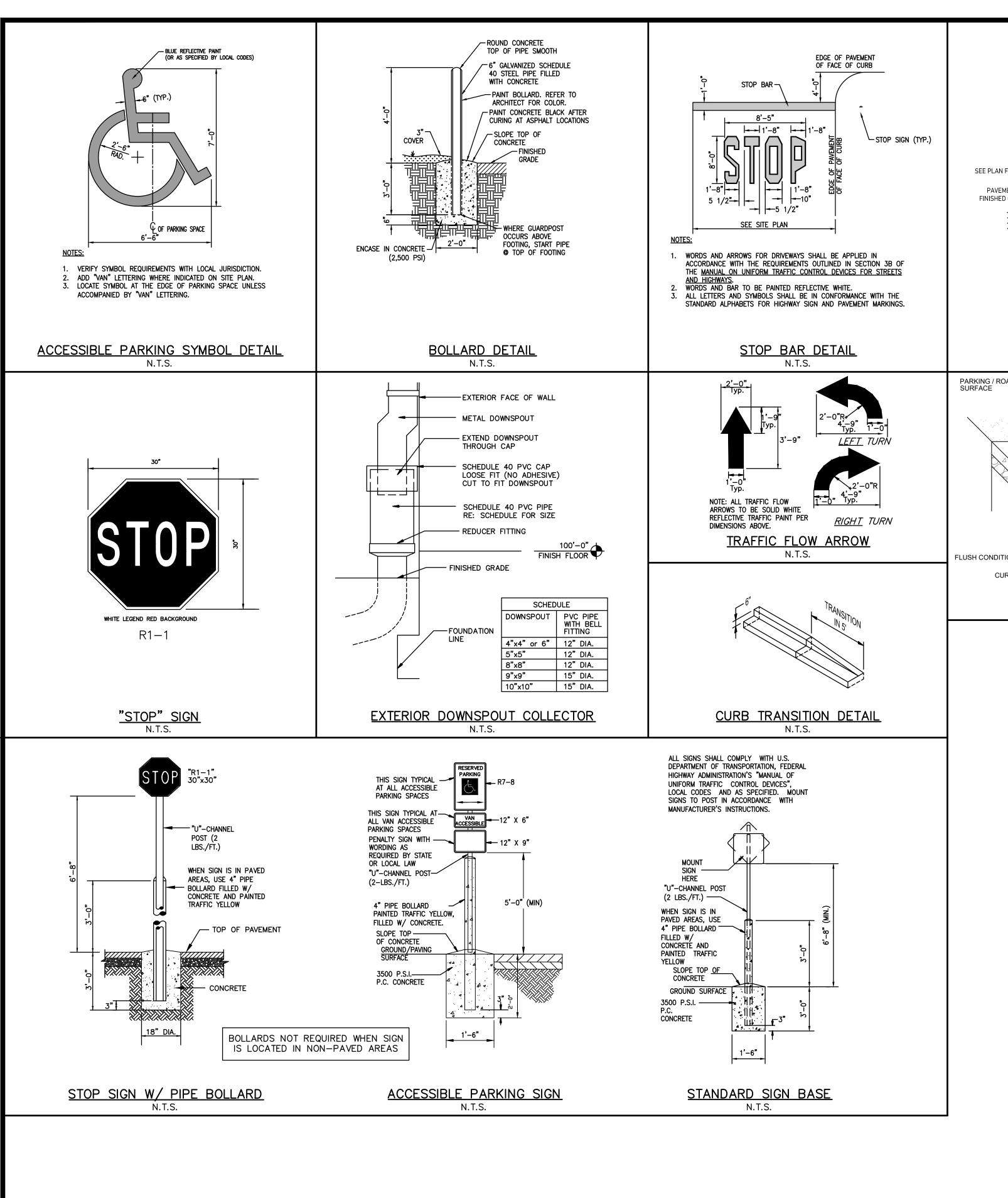
DOMESTIC WATER SIZE

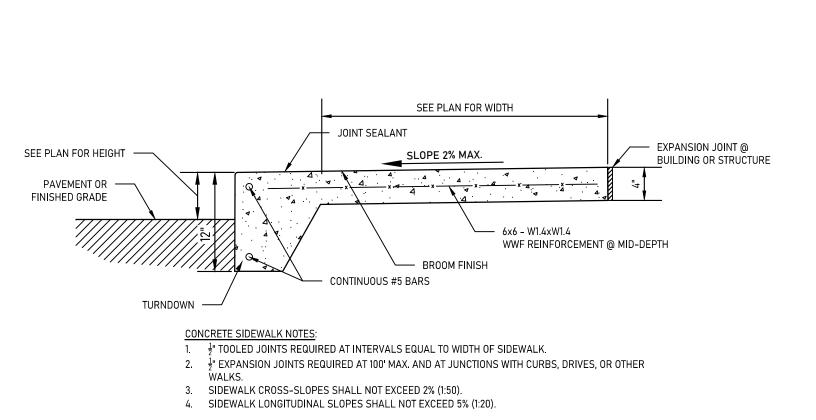


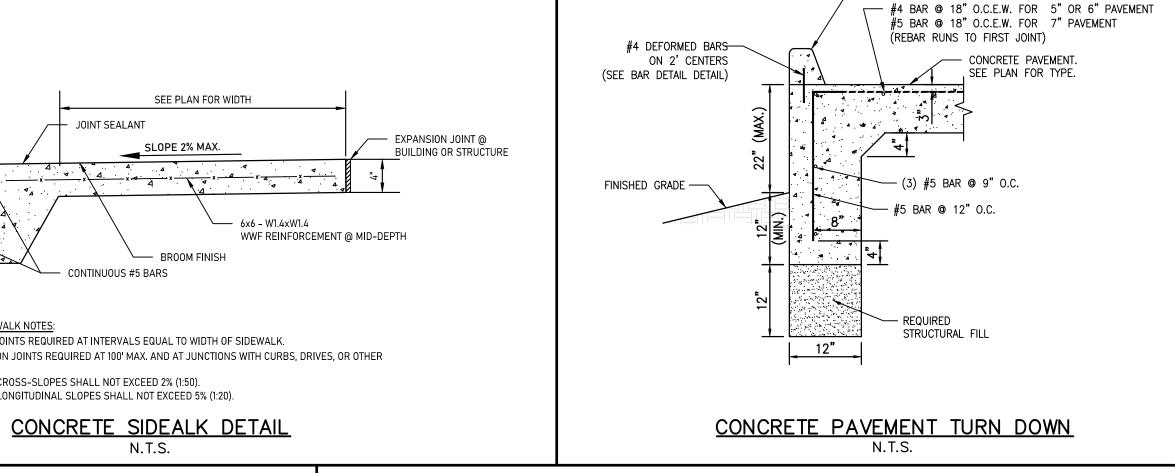


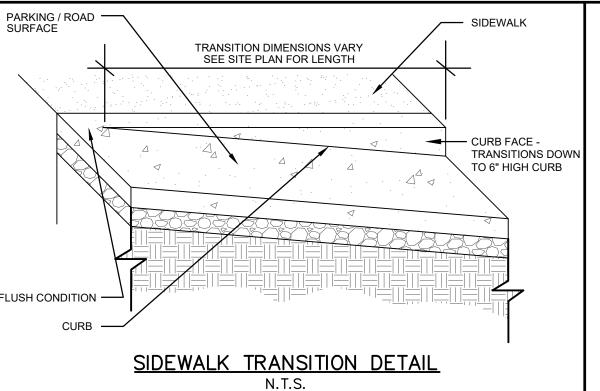
KRG CHECKED RCG ISSUED DATE 07/30/2024 ISSUED FOR PERMITTING PROJECT NO. 22-218 FILE 22-218 C-3 Utility Plan

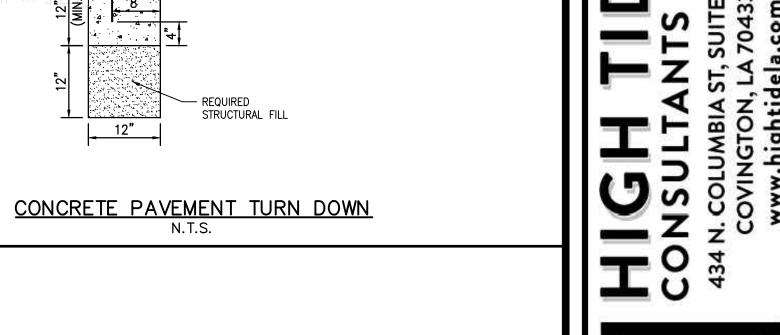
> SHEET **し**-3













- CONCRETE BARRIER CURB

(11/C200).

**Development Services Department** Lee's Summit, Missouri 04/24/2025

SH	SIGNATURE:	DATE:	
STAMP STAMP OF MISSON	B. SHANE AS GUIN COUNTY OF THE	MOSONAL ENCH	
	<u> </u>		

REVISION

12/16/2024

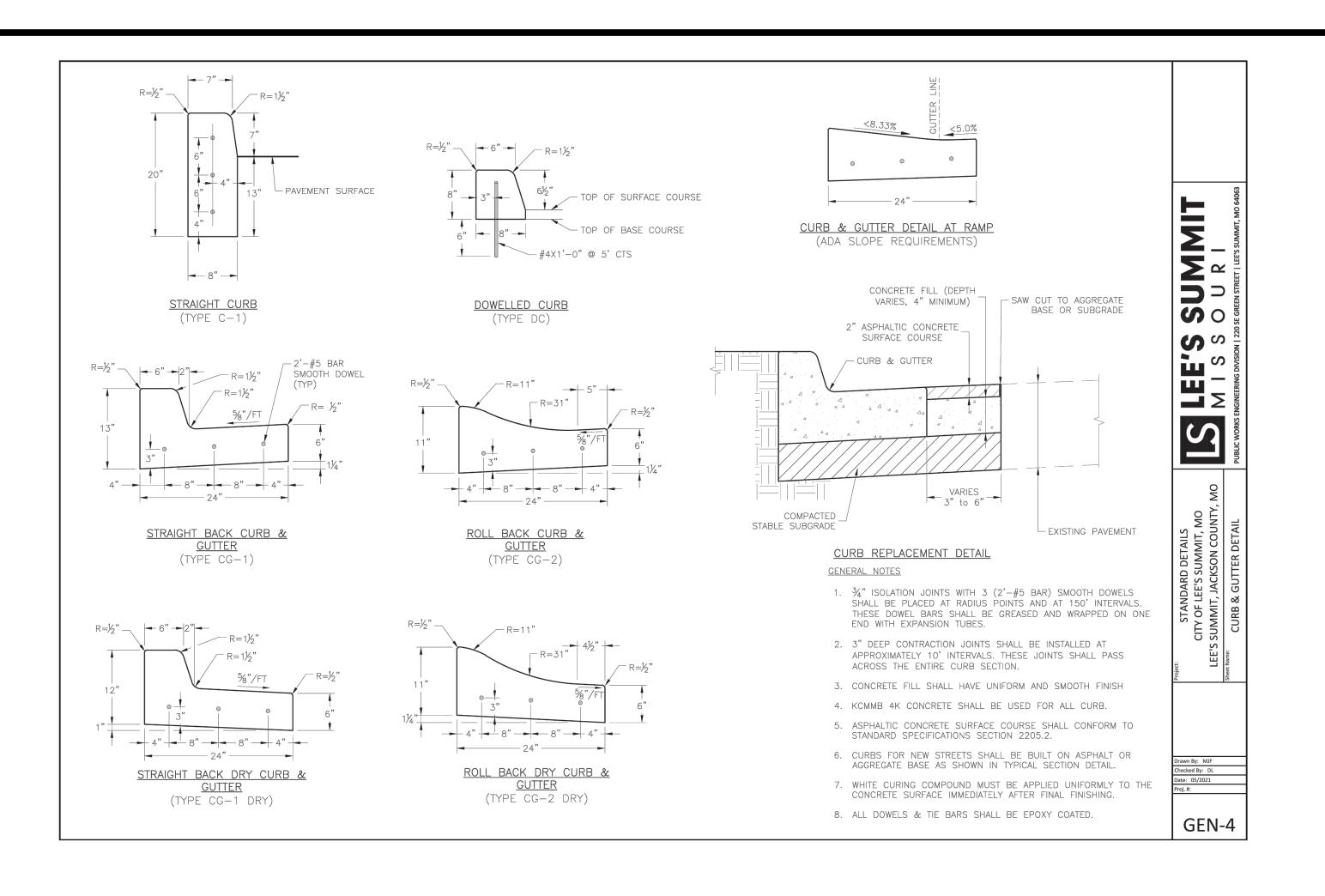
REVISED PER CITY

1/17/2025

reviśed per city

KRG CHECKED RCG ISSUED DATE 07/30/2024 ISSUED FOR PERMITTING PROJECT NO. 22-218 FILE 22-218 C-4 Details SHEET

SITE DETAILS

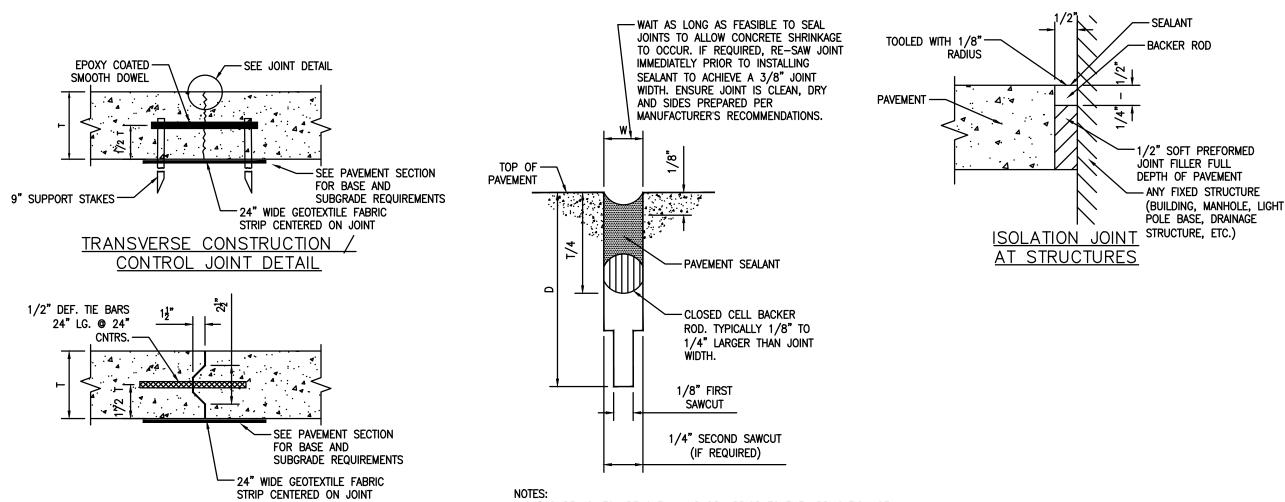


#### TABLE 1

PAVEMENT THICKNESS	SMOOTH DOWEL BARS			MINIMUM JOINT DEPTH
" T " (IN)	SIZE Ø (IN)	LENGTH (IN)	SPACING (IN)	" D " (IN)
5"	1/2"	12"	18"	1 1/2"
6"	3/4"	14"	12"	1 3/4"
7"	1"	16"	12"	2"
8"	1 1/4"	18"	12"	3"
9"	1 1/4"	18"	12"	3"
10"	1 1/4"	18"	12"	3 1/4"

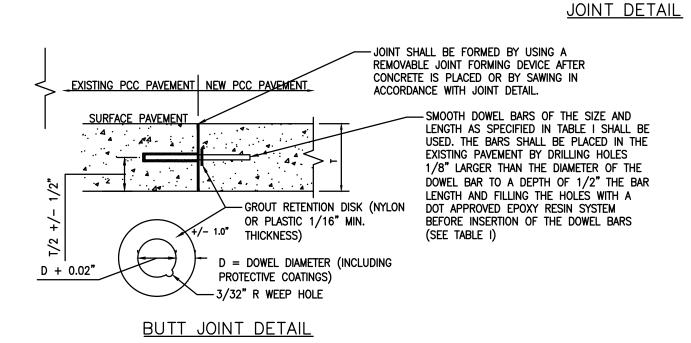
#### 1. JOINTS SHALL BE SAWCUT AS SOON AS THE CONCRETE HAS REACHED SUFFICIENT STRENGTH TO SUPPORT THE SAWING EQUIPMENT AND TEARING OF CONCRETE DOES NOT OCCUR.

- 2. GEOTEXTILE FABRIC SHALL BE CONSTRUCTED OF NON-WOVEN POLYPROPYLENE FIBERS RESISTANT TO CHEMICAL ATTACK, MILDEW, AND ROT. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A GEOTEXTILE MATERIAL SUBMITTAL FOR APPROVAL.
- 3. CONSTRUCT EXPANSION, WEAKENED PLANE CONTROL (CONTRACTION), AND CONSTRUCTION JOINTS STRAIGHT WITH FACE PERPENDICULAR TO CONCRETE SURFACE.
- 4. CONSTRUCT CONTROL JOINTS FOR DEPTH EQUAL TO AT LEAST 1/4 OF THE CONCRETE THICKNESS AS A. FORM TOOLED JOINTS IN FRESH CONCRETE BY GROOVING TOP WITH RECOMMENDED TOOL AND
- FINISHING EDGE WITH JOINTER. B. FORM SAWED JOINTS USING POWERED SAWS EQUIPPED WITH SHATTERPROOF ABRASIVE OR DIAMOND RIMMED BLADES. CUT JOINTS INTO HARDENED CONCRETE AS SOON AS SURFACE WILL NOT BE TORN, ABRADED, OR OTHERWISE DAMAGED BY CUTTING ACTION.
- 5. CONSTRUCTION JOINTS: PLACE CONSTRUCTION JOINTS AT END OF PLACEMENTS AND AT LOCATIONS WHERE PLACEMENTS OPERATIONS ARE STOPPED FOR PERIOD OF MORE THAN 1/2 HOUR, EXCEPT WHERE SUCH PLACEMENTS TERMINATE AT EXPANSION JOINTS. CONSTRUCT JOINTS IN ACCORDANCE WITH DETAILS.
- 6. EXPANSION JOINTS: LOCATE EXPANSION JOINTS AT MAXIMUM OF 180'-0" ON CENTERS, MAXIMUM EACH WAY UNLESS OTHERWISE SHOWN ON THE CONSTRUCTION DRAWINGS. PROVIDE PRE-MOLDED JOINT FILLER FOR EXPANSION JOINTS ABUTTING CONCRETE CURBS, CATCH BASINS, MANHOLES, INLETS, STRUCTURES, SIDEWALKS, AND OTHER FIXED OBJECTS.
- 7. BUTT JOINTS: FOR JOINTS AGAINST EXISTING PAVEMENT, PLACE DOWELS OF THE SIZE INDICATED IN TABLE 1 INTO HOLES DRILLED INTO CENTER OF EXISTING SLAB. EPOXY DOWELS INTO HOLES WITH APPROVED EPOXY COMPOUND. PLACE DOWELS PRIOR TO CONCRETE PLACEMENT FOR NEW CONCRETE. DOWEL SPACING TO BE AS INDICATED IN TABLE 1. SAW JOINTS AND FILL WITH JOINT SEALER.
- 8. JOINT FILLERS: EXTEND JOINT FILLERS FULL WIDTH AND DEPTH OF JOINT, AND NOT LESS THAN 1/2-INCH OR MORE THAN 1-INCH BELOW FINISHED SURFACE WHERE JOINT SEALER IS INDICATED. FURNISH JOINT FILLERS IN 1 PIECE LENGTHS FOR FULL WIDTH BEING PLACED, WHEREVER POSSIBLE WHERE MORE THAN 1 LENGTH IS REQUIRED LACE OR CLIP JOINT FILLER SECTIONS TOGETHER.
- 9. JOINT SEALANTS: JOINTS SHALL BE SEALED WITH APPROVED EXTERIOR PAVEMENT JOINT SEALANTS AND SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- 10. DOWELS SHALL NOT BE PLACED CLOSER THAN 12" TO A JOINT INTERSECTION.



1. ENSURE JOINTS ARE CLEAN AND DRY PRIOR TO THE APPLICATION OF THE JOINT SEALANT.

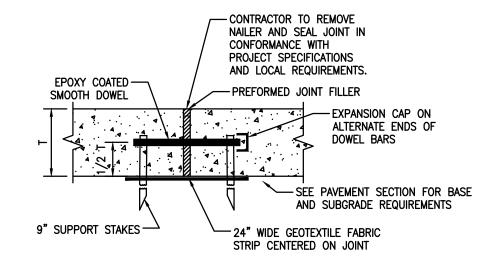
- INSTALL CLOSED CELL BACKER ROD AFTER JOINTS HAVE BEEN CLEANED AND DRIED IN ACCORDANCE WITH SEALANT MANUFACTURER'S REQUIREMENTS.
- INSTALL BACKER ROD AT CONSISTENT AND UNIFORM DEPTH. 4. JOINT SEALANT APPLICATION SHALL BE IN STRICT COMPLIANCE WITH SEALANT MANUFACTURER'S REQUIREMENTS.



**CONCRETE JOINT DETAILS** 

LONGITUDINAL CONSTRUCTION

/ CONTROL JOINT DETAIL

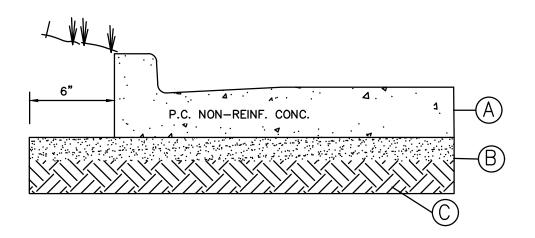


NOTE:
EXPANSION JOINTS TO BE PLACED AT ALL RADIUS POINTS, OR MAXIMUM 180' O.C. SPACING. **EXPANSION JOINT** <u>DETAIL (EJ)</u>

P.C. NON-REINF. CONC.

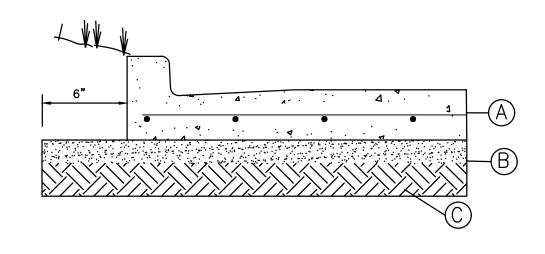
- $\Delta$  6" MIN. OF PORTLAND CEMENT CONCRETE PAVEMENT (PCCP). (MAXIMUM CONTROL JOINT SPACING 12.5') PORTLAND CEMENT CONCRETE PAVEMENT SHALL BE KCMMB 4K MIX.
  - **B** 4" COMPACTED GRANULAR AGGREGATE BASE WITH GEOGRID
  - PROPERLY PREPARED SUBGRADE

#### STANDARD DUTY CONCRETE PAVEMENT



- 8" MIN. OF PORTLAND CEMENT CONCRETE PAVEMENT (PCCP). (MAXIMUM CONTROL JOINT SPACING 15.0') PORTLAND CEMENT CONCRETE PAVEMENT SHALL BE KCMMB 4K MIX.
- 4" COMPACTED GRANULAR AGGREGATE BASE WITH GEOGRID
- PROPERLY PREPARED SUBGRADE

#### HEAVY DUTY **CONCRETE PAVEMENT**

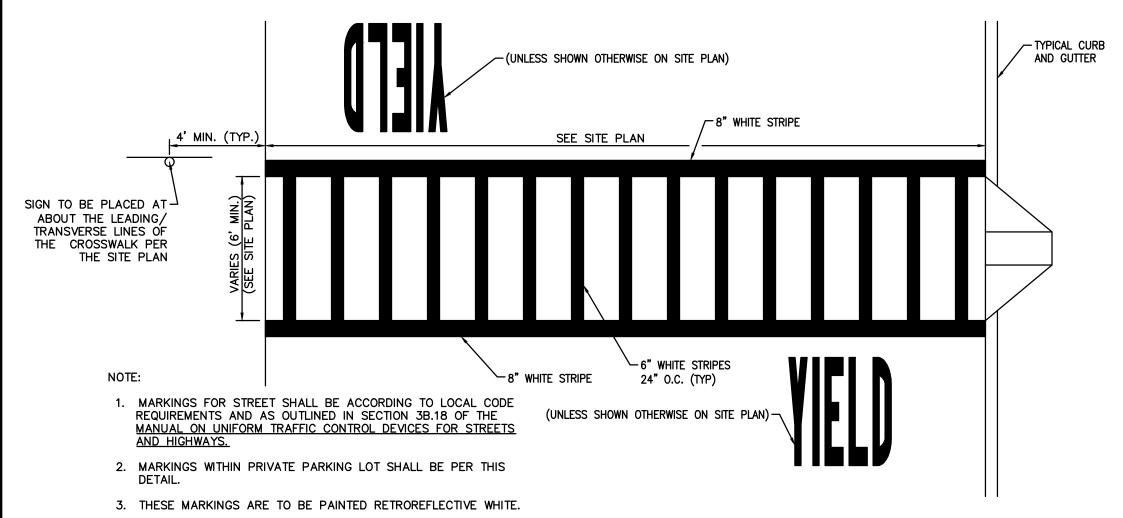


- 7" MIN. OF REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT (PCCP). (REINFORCING SHALL BE #4 BARS AT 18" O.C. EACH WAY.) PORTLAND CEMENT CONCRETE PAVEMENT SHALL BE KCMMB 4K MIX.
- 4" COMPACTED GRANULAR AGGREGATE BASE WITH GEOGRID
- PROPERLY PREPARED SUBGRADE

#### REINFORCED CONCRETE DUMPSTER PAD / APRON

- 1. PORTLAND CEMENT CONCRETE PAVEMENT SHALL BE KCMMB 4K MIX. 2. ALL PAVEMENT, BASE, FILL MATERIAL, AND SITE AND BUILDING PAD PREPARATION SHALL BE IN
- ACCORDANCE WITH THE GEOTECHNICAL REPORT RECOMMENDATIONS. REPORT PREPARED BY TERRACON ENGINEERING, LLC DATED 11/2/2023, TERRACON PROJECT NO. 02225258. 3. THE EXPOSED SUBGRADE SHOULD BE PROOFROLLED WITH A RUBBER TIRED VEHICLE
- WEIGHING 20 TONS. SOILS WHICH ARE OBSERVED TO RUT OR DEFLECT EXCESSIVELY UNDER THE MOVING LOAD SHALL BE UNDERCUT AND REPLACED WITH COMPACTED STRUCTURAL FILL.

AGGREGATE SHALL BE MoDOT TYPE 5. 5. GRANULAR FILL SHALL BE PLACED IN MAXIMUM 8" LOOSE LIFTS AND COMPACTED TO 95% MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 (STANDARD PROCTOR) WITHIN 3% OF OPTIMUM MOISTURE CONTENT.



CROSSWALK MARKING W/ LONGITUDINAL STRIPES

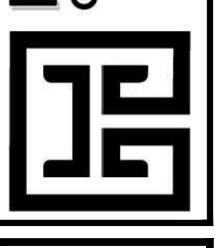
N.T.S.

#### **RELEASED FOR CONSTRUCTION** As Noted on Plan Review

**Development Services Department** Lee's Summit, Missouri 04/24/2025

SITE DETAILS

REVISION

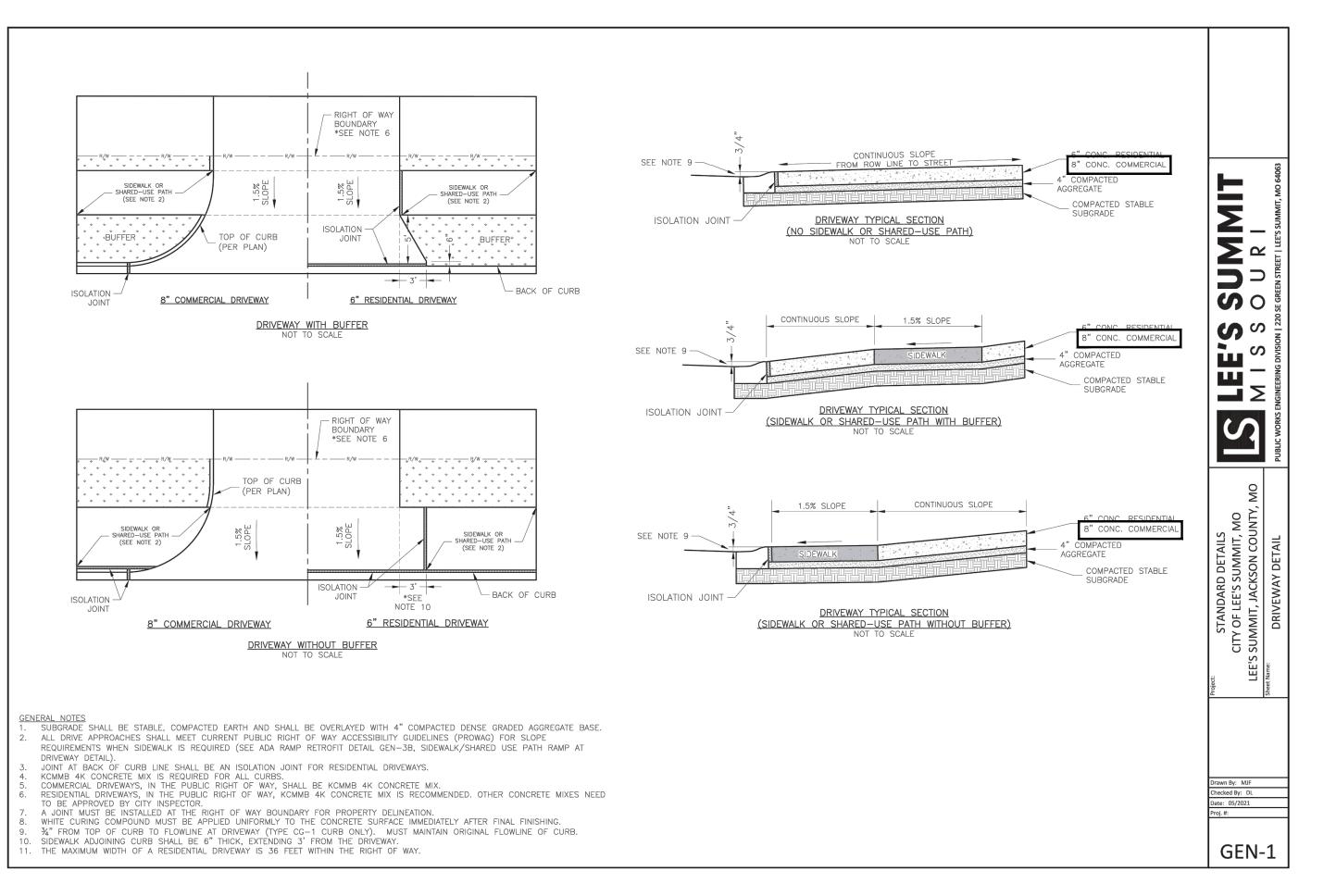


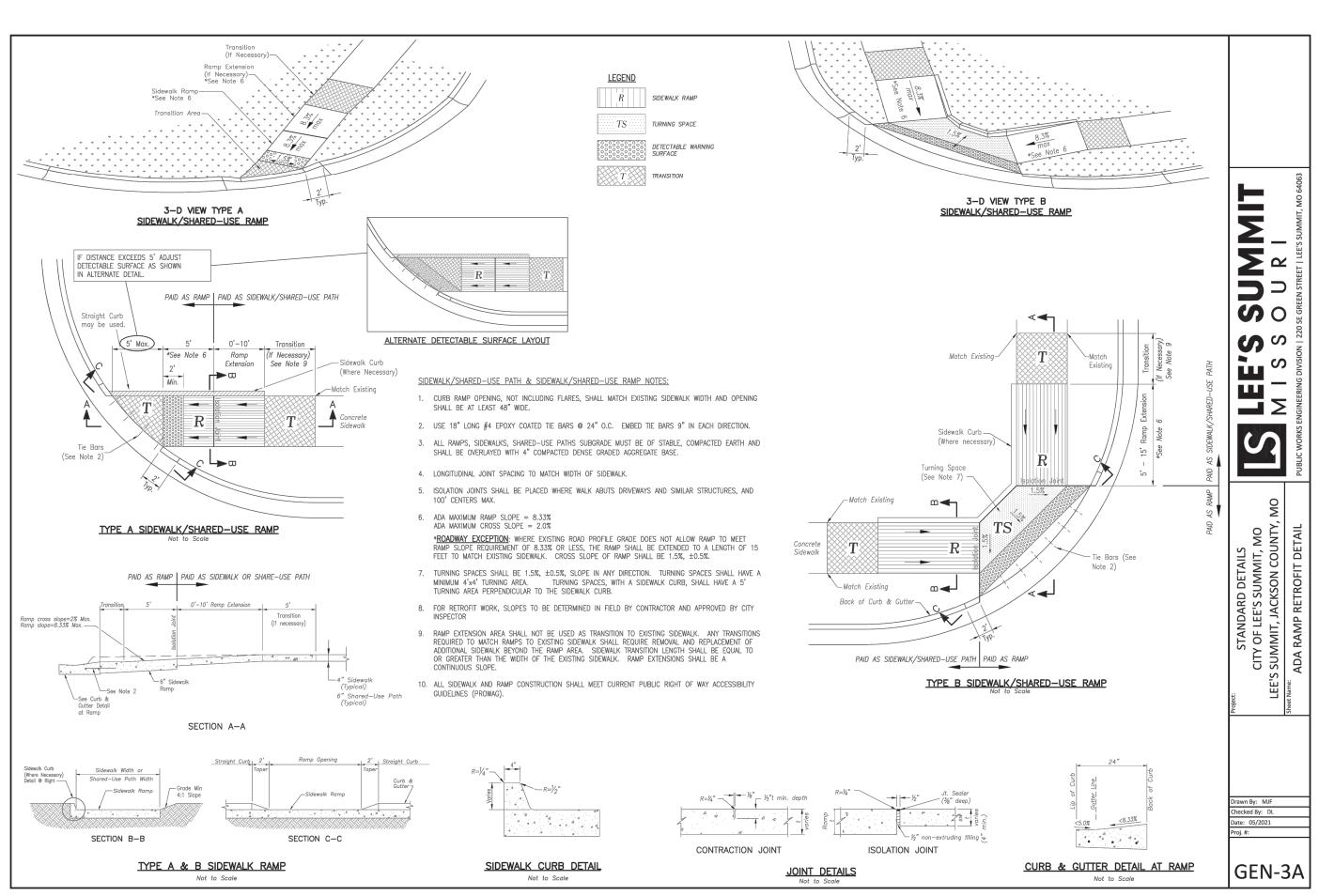


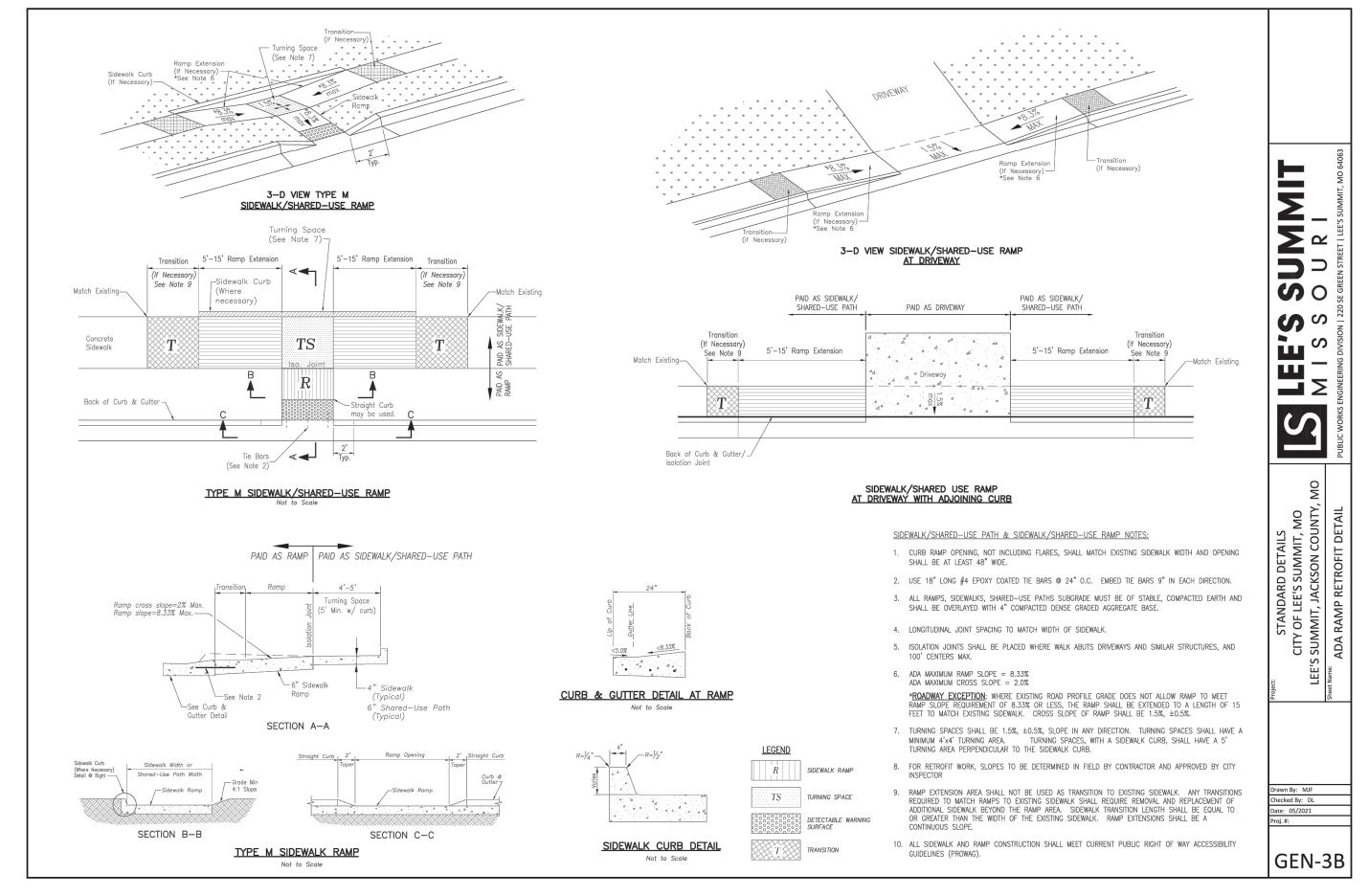
FOR I 2101 BOUL KRG CHECKED RCG ISSUED DATE 07/30/2024 ISSUED FOR PERMITTING PROJECT NO. 22-218 22-218 C-4 Details

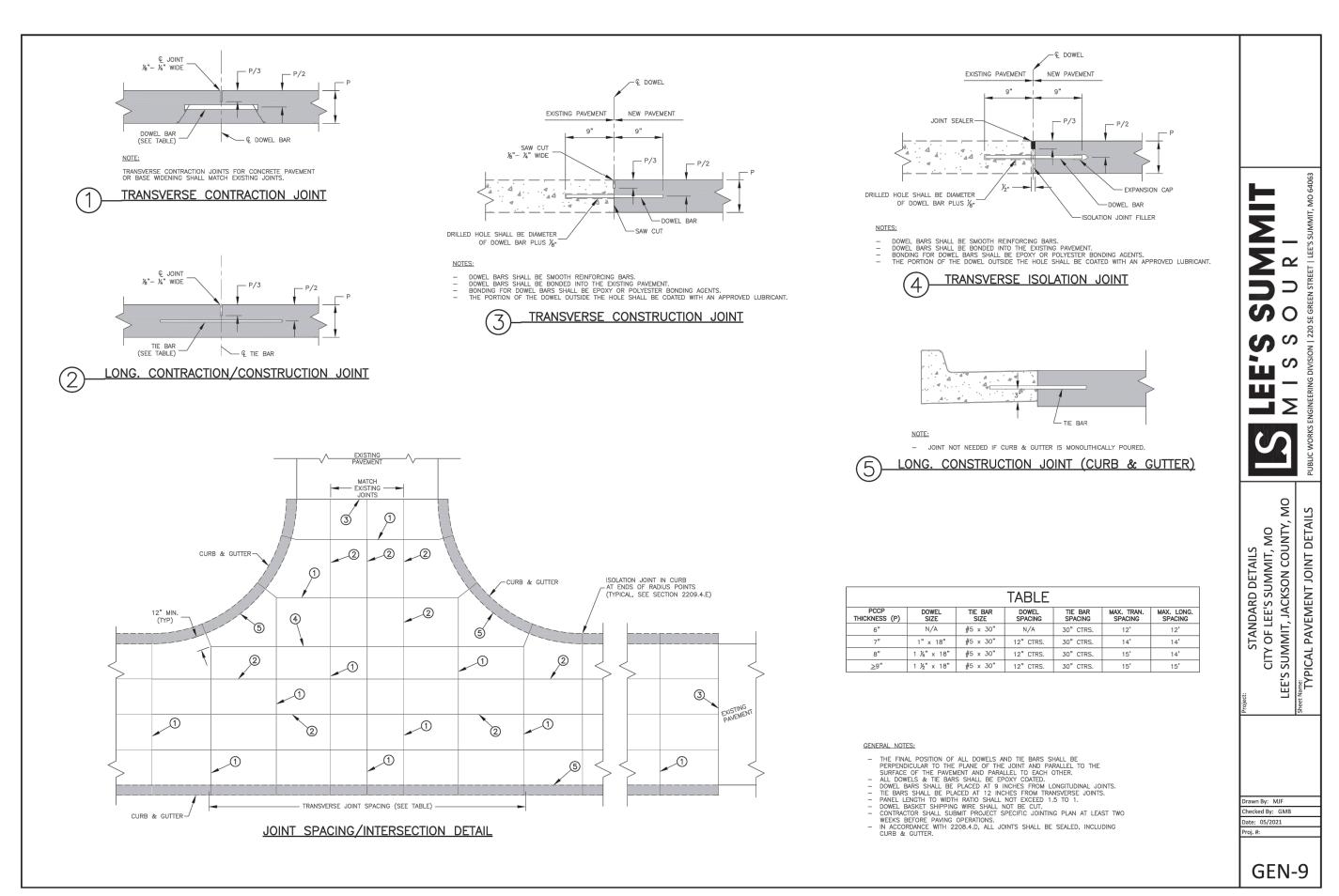
. S

SHEET









RELEASED FOR CONSTRUCTION
As Noted on Plan Review

Development Services Department
Lee's Summit, Missouri

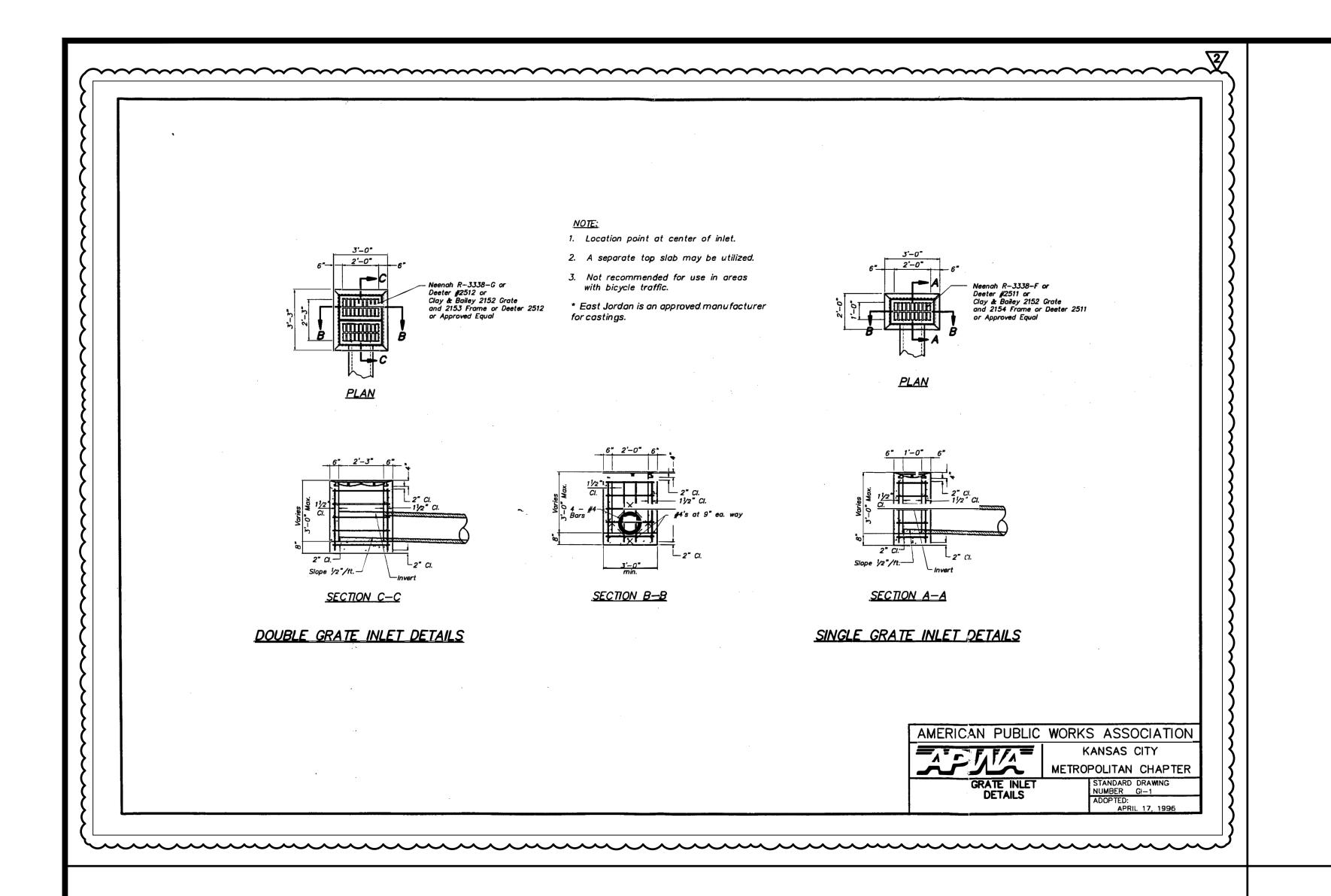
04/24/2025

SITE DETAILS

CLC PROPOSED TAK LEE'S SUMMIT, I FOR I 2101 BOUL DRAWN KRG CHECKED RCG ISSUED DATE 07/30/2024 ISSUED FOR PERMITTING PROJECT NO. 22-218 FILE 22-218 C-4 Details

SHEET

REVISION



SLAB TOP ALTERNATE FOR JUNCTION BOX (SHALLOW)

6" CLEAR
TYPICAL

WALL CORNER DETAIL

1 1/2" CLEAR —

H BARS —

1½"CLEAR -

<u>PLAN</u>

1"X1"X18" RECESSED LIFTING —

SLOTS (TYP)

DIAGONALS

\_ CONC ADJUSTMENT RING

PIPE O.R. +3"

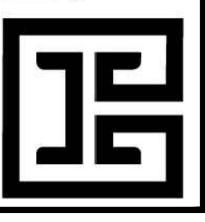
OF 4" MIN THICKNESS

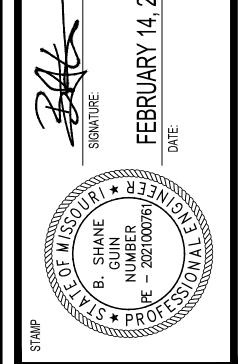


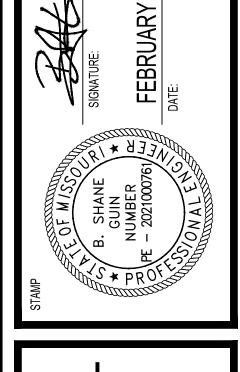
**Development Services Department** Lee's Summit, Missouri 04/24/2025

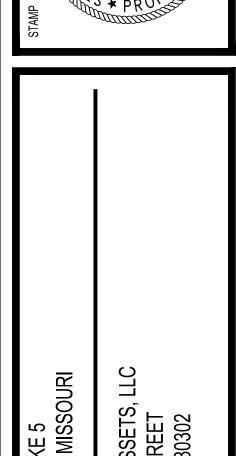
REVISION	BI	
1/31/2025 REVISED PER CITY	KRG	
2/14/2025 REVISED PER CITY	KRG	











	FO  210 BO	
	DRAWN KRG	
	CHECKED RCG	
	ISSUED DATE 07/30/2024	
	ISSUED FOR PERMITTING	
F	PROJECT NO. 22-218	
	FILE	

22-218 C-4 Details

SHEET

DRAINAGE DETAILS

3130 VERONA AVE BUFORD, GA 30518

PHN (770) 932-2443

Nyloplast FAX (770) 932-2445 www.nyloplast-us.c

DRAIN BASIN & INLINE DRAIN NON TRAFFIC INSTALLATION

7001-110-111 REV E

NON TRAFFIC INSTALLATION

THE BACKFILL MATERIAL SHALL BE CRUSHED STONE OR OTHER GRANULAR MATERIAL MEETING THE REQUIREMENTS OF CLASS I,

CLASS II, OR CLASS III MATERIAL AS DEFINED IN ASTM D2321. BEDDING & BACKFILL FOR SURFACE DRAINAGE INLETS SHALL BE PLACED & COMPACTED UNIFORMLY IN ACCORDANCE WITH ASTM D2321.

NYLOPLAST HAS PROPRIETARY RIGHTS. THE RECEIPT OR POSSESSION OF THIS PRINT DOES NOT CONFER,

TRANSFER, OR LICENSE THE USE OF THE DESIGN OR

REPRODUCTION OF THIS PRINT OR ANY INFORMATION CONTAINED HEREIN, OR MANUFACTURE OF ANY

ARTICLE HEREFROM, FOR THE DISCLOSURE TO OTHERS

YARD INLET N.T.S.

TECHNICAL INFORMATION SHOWN HEREIN

IS FORBIDDEN, EXCEPT BY SPECIFIC WRITTEN PERMISSION FROM NYLOPLAST. ©2201

DRAIN BASIN

GRATE/COVER

4" MIN ON 8" - 24"

6" MIN ON 30"

INLINE DRAIN

- THE BACKFILL MATERIAL SHALL BE CRUSHED STONE OR OTHER GRANULAR MATERIAL MEETING THE REQUIREMENTS OF CLASS I,

PLACED & COMPACTED UNIFORMLY IN ACCORDANCE WITH ASTM D2321.

CLASS II, OR CLASS III MATERIAL AS DEFINED IN ASTM D2321. BEDDING & BACKFILL FOR SURFACE DRAINAGE INLETS SHALL BE

GRATE/COVER

DWG SIZE A SCALE SHEET 1 OF 1 DWG NO.

TOP SOIL -



SUMMIT ○ U R |

S

**□** ≥

STM-3

\*\* INCREASE IN MULTIPLES OF 6"

<u>REINFORCING</u>

 BARS
 BAR SIZE
 SPACING (IN.)

 H
 4
 12

 V
 4
 12

 L
 5
 6

 W
 5
 6

GENERAL NOTES: 1. LOCATE RING AND COVER ON BLANK WALL.

DISTANCE BETWEEN BOXOUTS IS 6".

DESIGN.

PRODUCT LIST.

2. USE ¾" CHAMFER STRIP OR ½" 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

4. BOXOUTS WILL NOT BE ALLOWED TO PROJECT THROUGH THE CORNERS OF THE STRUCTURE, AND THE MINIMUM

5. THE MINIMUM REINFORCING SHALL BE 1 H-BAR OVER A CAST-IN-PLACE PIPE AND 2 H-BARS OVER A PRECAST

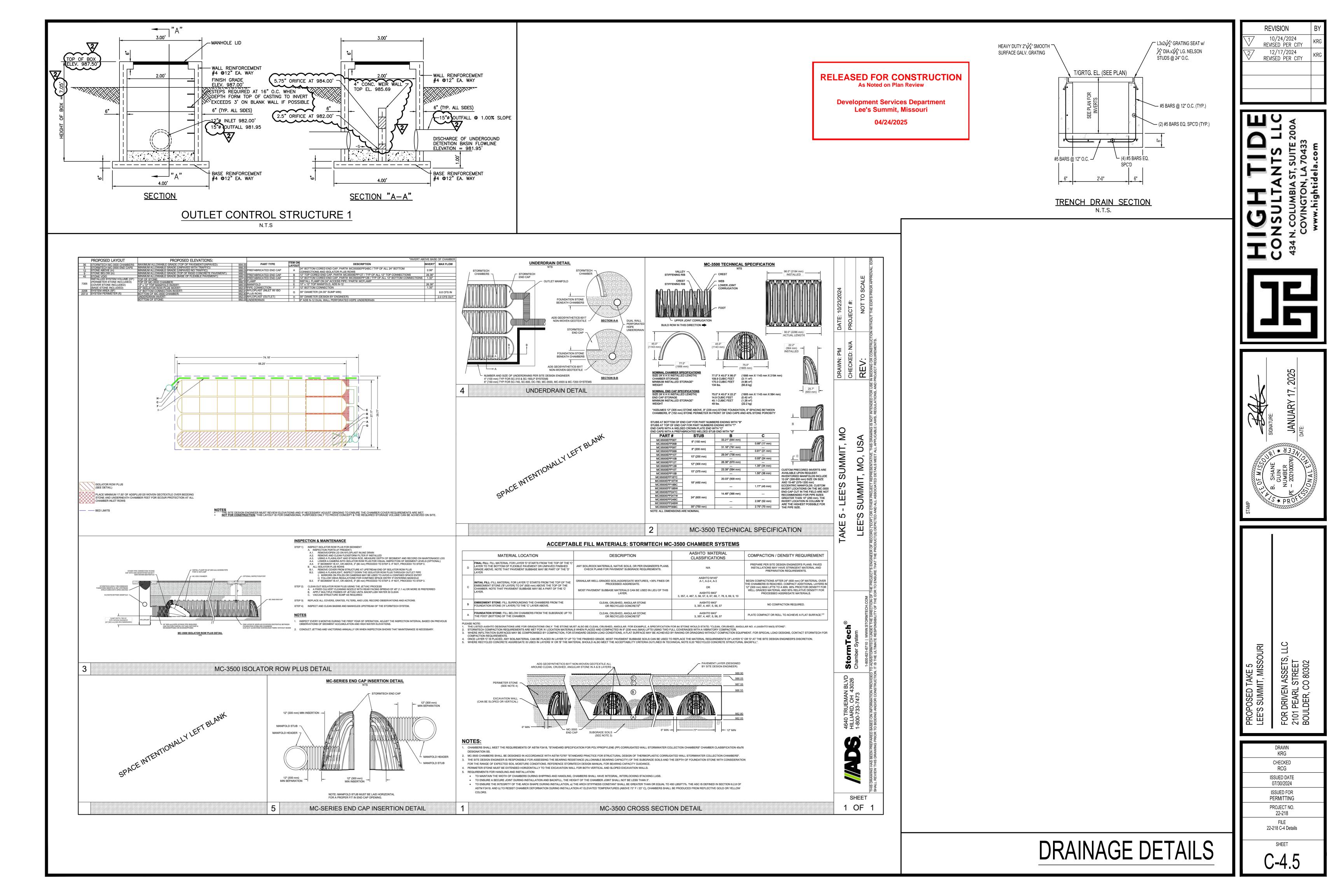
NON-SHRINKABLE GROUT AND REMOVABLE FOR FUTURE

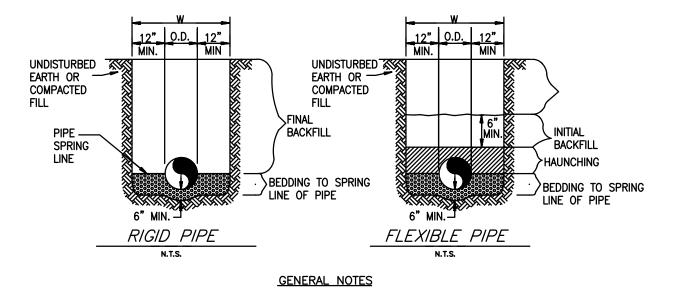
9. REINFORCING OF COVERS IN STREETS REQUIRE SPECIAL

10. FOR RING AND COVER SEE THE STORMWATER APPROVED

8. PRECAST LIDS SHALL BE PINNED, SEALED WITH

(7'-0") MAX WITHOUT SPECIAL DESIGN. (SEE PROJECT PLANS FOR DETAILS)





- 1. BEDDING SHALL BE CLASS I—A WORKED BY HAND. IF GROUNDWATER IS ANTICIPATED, THEN BEDDING SHALL BE CLASS I—B COMPACTED TO
- 95% STANDARD PROCTOR.

  2. HAUNCHING SHALL BE WORKED AROUND THE PIPE BY HAND TO ELIMINATE VOIDS AND SHALL BE CLASS I—A OR CLASS I—B OR CLASS II COMPACTED TO 95% PROCTOR.
- CLASS I-A WORKED BY HAND, OR CLASS I-B OR CLASS II COMPACTED TO 95% STANDARD PROCTOR.
- 4. INITIAL BACKFILL NOT UNDER PAVED
  AREAS CAN BE CLASS III COMPACTED
- TO 90% STANDARD PROCTOR.

  5. FINAL BACKFILL UNDER PAVED AREAS SHALL BE CLASS I, II, OR III COMPACTED AS NOTED IN NOTES 3. AND 4.

3. INITIAL BACKFILL UNDER PAVED AREAS SHALL BE

\*SEE CHART ON D-3 FILL TYPES

6.	FINAL BACKFILL NOT UNDER PAVED AREAS CAN BE CLASS IV—A COMPACTED TO 95% STANDARD PROCTOR.
7.	
	ACCORDANCE WITH ASTM D 2321-LATEST EDITION.
8.	ALL MATERIALS SHALL BE INSTALLED IN
	MAXIMUM 8" LOOSE LIFTS IN ACCORDANCE
	WITH ASTM D 698. CLASS III AND IV-A
	MATERIALS SHALL BE COMPACTED NEAR
	OPTIMUM MOISTURE CONTENT.
9.	FILL SALVAGED FROM EXCAVATION SHALL
	BE FREE OF DEBRIS, ORGANICS AND
	POCKS LARGER THAN 3"

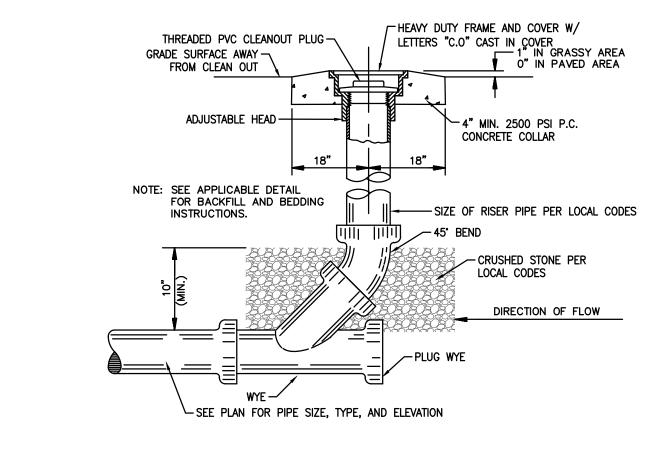
- ROCKS LARGER THAN 3".

  10. ALL TRENCH EXCAVATIONS SHALL BE SLOPED, SHORED, SHEETED, BRACED, OR OTHERWISE SUPPORTED IN COMPLIANCE WITH OSHA REGULATIONS AND LOCAL
- ORDINANCES.

  11. GEOTECH FABRIC TO BE USED UNDER BEDDING
  MATERIAL WHEN UNSUITABLE SOILS ARE
  ENCOUNTERED OR A STABLE NON—YIELDING
  FOUNDATION CANNOT BE OBTAINED.
- 12. HAUNCHING FOR FLEXIBLE PIPE SHALL BE WORKED A MINIMUM OF 6" ABOVE THE TOP OF PIPE OR PER THE MANUFACTURER'S RECOMMENDATION, WHICHEVER IS MORE STRINGENT.

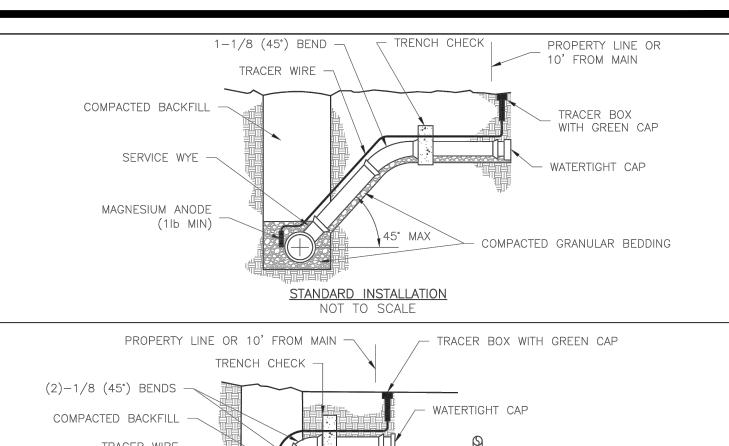
CLASS	TYPE	SOIL GROUP SYMBOL D2487	DESCRIPTION
1A	MANUFACTURED AGGREGATES; OPEN-GRADED, CLEAN		ANGULAR, CRUSHED STONE OR ROCK, CRUSHED GRAVEL, BROKEN CORAL, CRUSHED SLAC CINDERS OR SHELLS; LARGE VOID CONTENT, CONTAIN LITTLE OR NO FINES
1B	MANUFACTURED, PROCESSED AGGREGATES: DENSE— GRADED, CLEAN.	NONE	ANGULAR, CRUSHED STONE (OR OTHER CLASS 1A MATERIALS) AND STONE/SAND MIXTURES WITH GRADATIONS SELECTED TO MINIMIZE MIGRATION OF ADJACENT SOILS; CONTAIN LITTLE OR NO FINES (SEEX1.8)
II	COARSE-GRAINED SOILS CLEAN	GW	WELL-GRADED GRAVELS AND GRAVEL-SAND MIXTURES; LITTL OR NO FINES
		GP	POORLY-GRADED GRAVELS AND GRAVEL-SAND MIXTURES; LITTL OR NO FINES
		SW	WELL—GRADED SANDS AND GRAVELY SANDS; LITTLE OR NO FINES (NO. 200 SIEVE)
		SP	POORLY—GRADED SANDS AND GRAVELY SANDS; LITTLE OR OR NO FINES (NO. 200 SIEVE)
	COARSE-GRAINED SOILS BORDERLINE CLEAN TO W/ FINES	e.g. GW-GC, SP-SM	SANDS AND GRAVELS WHICH ARE BORDERLINE BETWEEN CLEAN AND WITH FINES
III	COARSE-GRAINED SOILS WITH FINES	GM	SILTY GRAVELS, GRAVEL—SAND SILT MIXTURES
		GC	CLAYEY GRAVELS, GRAVEL— SAND—CLAY MIXTURES
		SM	SILTY SANDS, SAND—SILT MIXTURES
		SC	CLAYEY SANDS, SAND-CLAY MIXTURES
IV-A	FINE-GRAINED SOILS (INORGANIC)	ML	INORGANIC SILTS AND VERY FIN SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS, SILTS WIT SLIGHT PLASTICITY
		CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
IV-B	FINE-GRAINED SOILS (INORGANIC)	МН	INORGANIC SILTS, MICACEOUS O DIATOMACEOUS FINE SANDY OR SILTY SOILS, ELASTIC SILTS
		CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS.
٧	ORGANIC SOILS	OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICIT
		ОН	ORGANIC CLAYS OF MEDIUM TO
			HIGH PLASTICITY, ORGANIC SILT

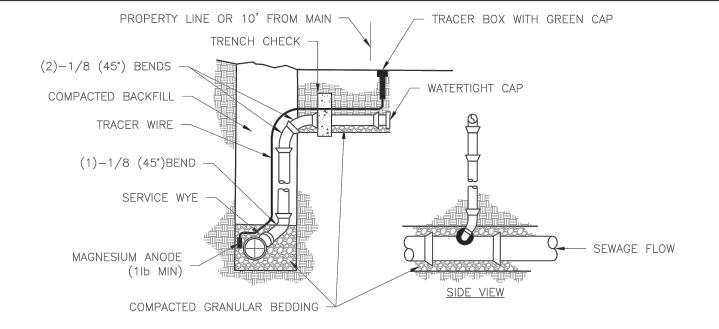
## STORM SEWER TRENCH AND BEDDING N.T.S.



SANITARY SEWER CLEAN-OUT

N.T.S.





#### VERTICAL RISER

1. ALL SEWER STUBS SHALL BE CONSTRUCTED TO PROPERTY LINE OR 10' MINIMUM FROM THE MAIN, WHICHEVER IS GREATER. WHERE SIDEWALKS ARE PRESENT, CONTRACTOR SHALL EXTEND SERVICE LINE UNDER EXISTING SIDEWALK TO TWO FEET BEYOND.

2. IMPERVIOUS TRENCH CHECKS SHALL BE PLACED ON BUILDING SEWER STUBS (AT LEAST 5' AWAY FROM THE SANITARY

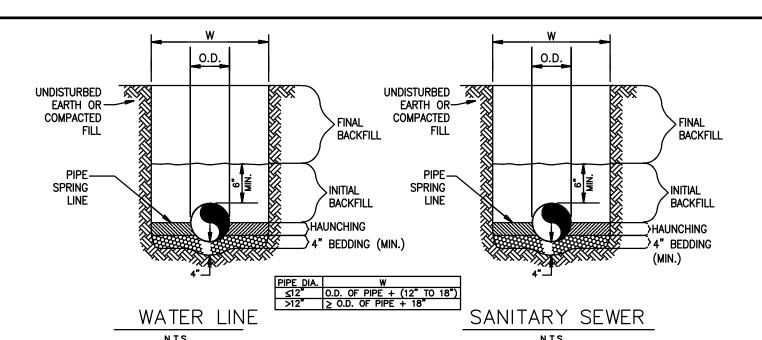
- SEWER MAIN).

  3. TRENCH CHECKS ON THE BUILDING SEWER STUBS SHALL EXTEND 6" BELOW THE BOTTOM OF THE PIPE. LENGTH SHALL BE A MINIMUM OF 12". THE HEIGHT OF THE TRENCH CHECK SHALL EXTEND 12" ABOVE THE TOP OF THE PIPE. THE WIDTH OF THE TRENCH CHECK SHALL BE THE WIDTH OF THE TRENCH.
- 4. SEE SPECIFICATION SECTION 2100 FOR SEWER MAIN BEDDING AND BACKFILL.
  5. #12 GAUGE GREEN INSULATED COPPER TRACER WIRE SHALL BE INSTALLED. TRACER WIRE TERMINAL BOXES SHALL BE INSTALLED DIRECTLY ABOVE THE SEWER SERVICE OR AS DETERMINED BY THE ENGINEER.
  6. FOR SERVICES, TRACER WIRE SHALL RUN FROM THE WYE AND TERMINATE IN A FLUSH MOUNTED TRACER BOX WITH A

GREEN CAST IRON LOCKABLE TOP. WIRE SHALL BE TAPED OR TIED TO THE PIPE AT 5' INTERVALS.

7. TRACER WIRE BOX SHALL BE INSTALLED WITHIN 1.0' OF PROPERTY LINE.
8. THE TRACER WIRE SHALL REMAIN CONTINUOUS TO THE GREATEST EXTENT POSSIBLE. SPLICES IN THE TRACER WIRE SHOULD BE MADE WITH SPLIT BOLT CONNECTIONS. WIRE NUTS SHALL NOT BE USED. A WATER—PROOF CONNECTION IS NECESSARY TO PREVENT CORROSION.





- GENERAL NOTES

  1. BEDDING SHALL BE CLASS I—A WORKED BY HAND. IF
  GROUNDWATER IS ANTICIPATED, THEN BEDDING SHALL BE
- GROUNDWATER IS ANTICIPATED, THEN BEDDING SHALL BE CLASS I-B COMPACTED TO 85% STANDARD PROCTOR.

  2. HAUNCHING SHALL BE WORKED AROUND THE PIPE BY HAND TO ELIMINATE VOIDS AND SHALL BE CLASS I-A OR CLASS I-B OR CLASS II COMPACTED TO 85% PROCTOR.
- 3. INITIAL BACKFILL SHALL BE CLASS I—A WORKED BY HAND,
  OR CLASS I—B OR CLASS II COMPACTED TO 85% STANDARD
  PROCTOR.

  4. INITIAL BACKFILL NOT LINDER BAYED AREAS CAN BE CLASS
- INITIAL BACKFILL NOT UNDER PAVED AREAS CAN BE CLASS III COMPACTED TO 90% STANDARD PROCTOR.
   FINAL BACKFILL SHALL BE CLASS I, II, OR III COMPACTED AS NOTED IN NOTES 3. AND 4.
- 6. FINAL BACKFILL NOT UNDER PAVED AREAS CAN BE CLASS IV—A COMPACTED TO 95% STANDARD PROCTOR.
  7. ALL MATERIALS ARE CLASSIFIED IN ACCORDANCE WITH ASTM
- 8. ALL MATERIALS SHALL BE INSTALLED IN MAXIMUM 8" LOOSE LIFTS IN ACCORDANCE WITH ASTM D 698. CLASS III AND IV—A MATERIALS SHALL BE COMPACTED NEAR OPTIMUM MOISTURE CONTENT.

  9. FILL SALVAGED FROM EXCAVATION SHALL BE FREE OF
- DEBRIS, ORGANICS AND ROCKS LARGER THAN 3".

  10. ALL TRENCH EXCAVATIONS SHALL BE SLOPED, SHORED, SHEETED, BRACED, OR OTHERWISE SUPPORTED IN COMPLIANCE WITH OSHA REGULATIONS AND LOCAL ORDINANCES. (SEE SPECIFICATIONS)

## UTILITY TRENCH AND BEDDING N.T.S.

## RELEASED FOR CONSTRUCTION As Noted on Plan Review

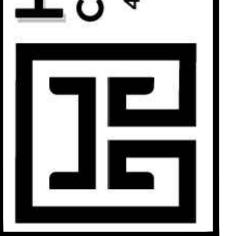
D 2321-89.

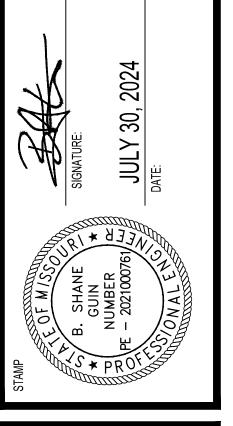
Development Services Department Lee's Summit, Missouri 04/24/2025

SEWER DETAILS

REVISION BY

SULTANTS LLC
COLUMBIA ST, SUITE 200A
OVINGTON, LA 70433





OPOSED TAKE 5
E'S SUMMIT, MISSOURI

DRAWN
KRG

CHECKED
RCG

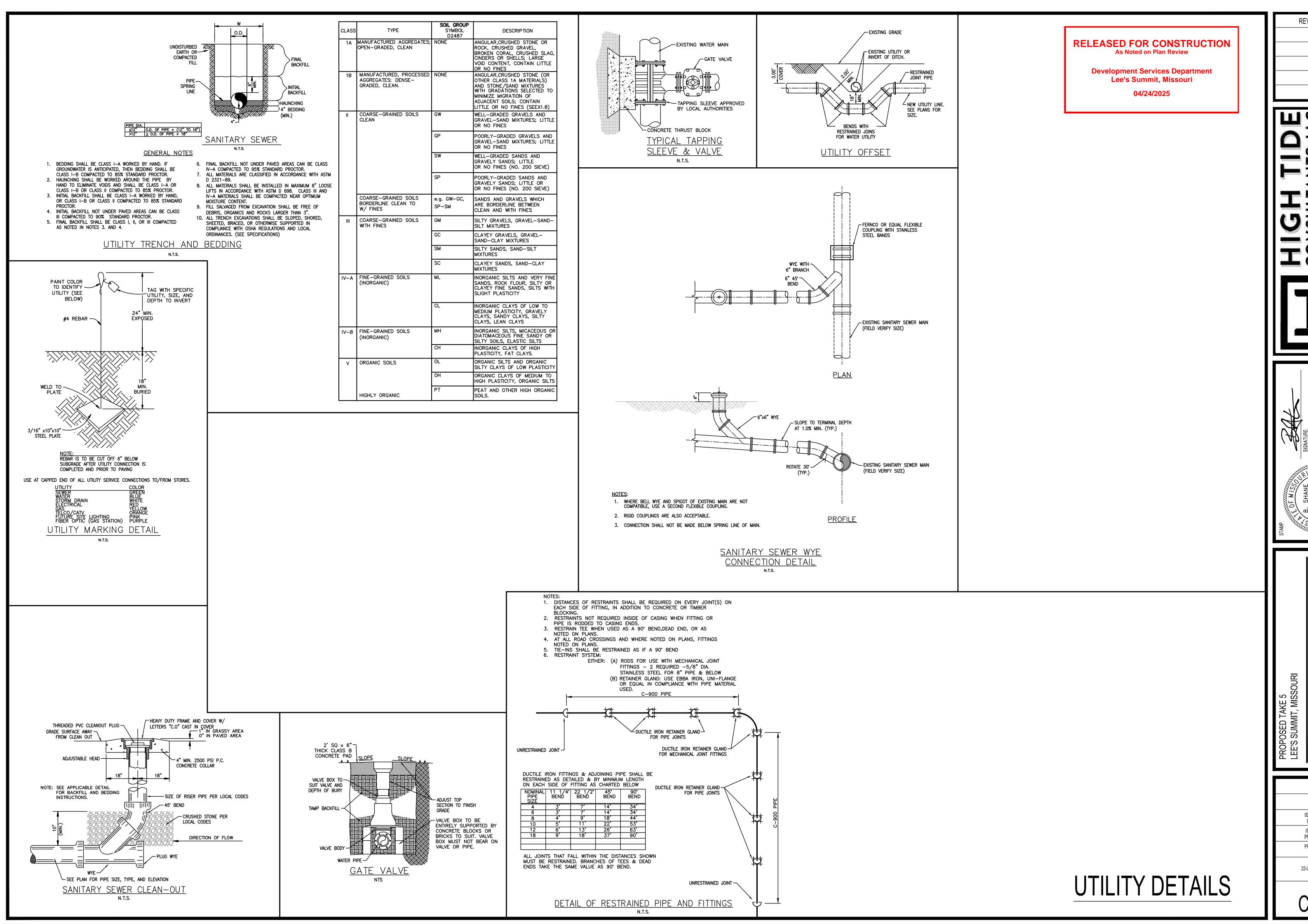
ISSUED DATE
07/30/2024

ISSUED FOR
PERMITTING

PROJECT NO.
22-218

FILE
22-218 C-4 Details

C-4.6



REVISION BY

SULTANTS LLC SOLUMBIA ST, SUITE 200A VINGTON, LA 70433

STAMP

SIGNATURE:

SIGNATURE:

SIGNATURE:

SIGNATURE:

SIGNATURE:

SIGNATURE:

SIGNATURE:

DATE:

DATE:

PROPOSED TAKE 5
LEE'S SUMMIT, MISSOURI
FOR DRIVEN ASSETS, LLC
2101 PEARL STREET
BOULDER, CO 80302

DRAWN
KRG

CHECKED
RCG

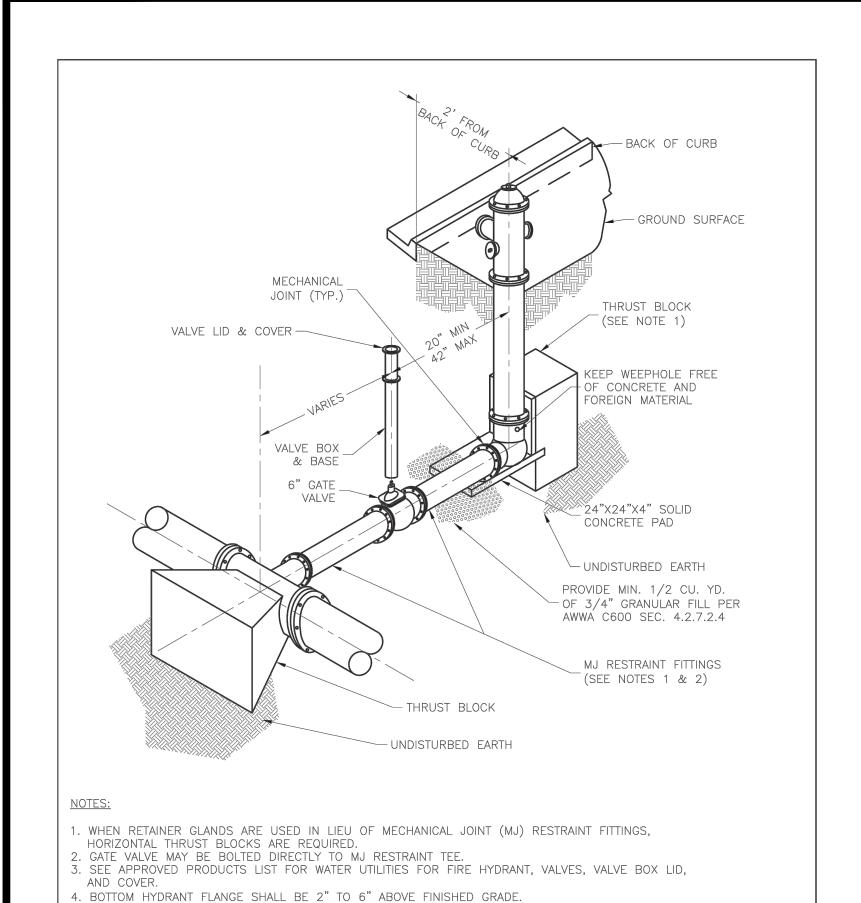
ISSUED DATE
07/30/2024

ISSUED FOR
PERMITTING

PROJECT NO.
22-218

FILE
22-218 C-4 Details

C-4.7



5. FOR STREETS WITHOUT CURBS FIRE HYDRANTS SHALL BE PLACED WITHIN 1 FOOT OF THE R/W LINE,

**LEE'S SUMMIT** 

HYDRANT - STRAIGHT SET

MISSOURI

Drawn By: JN

Checked By: DL

WAT-9

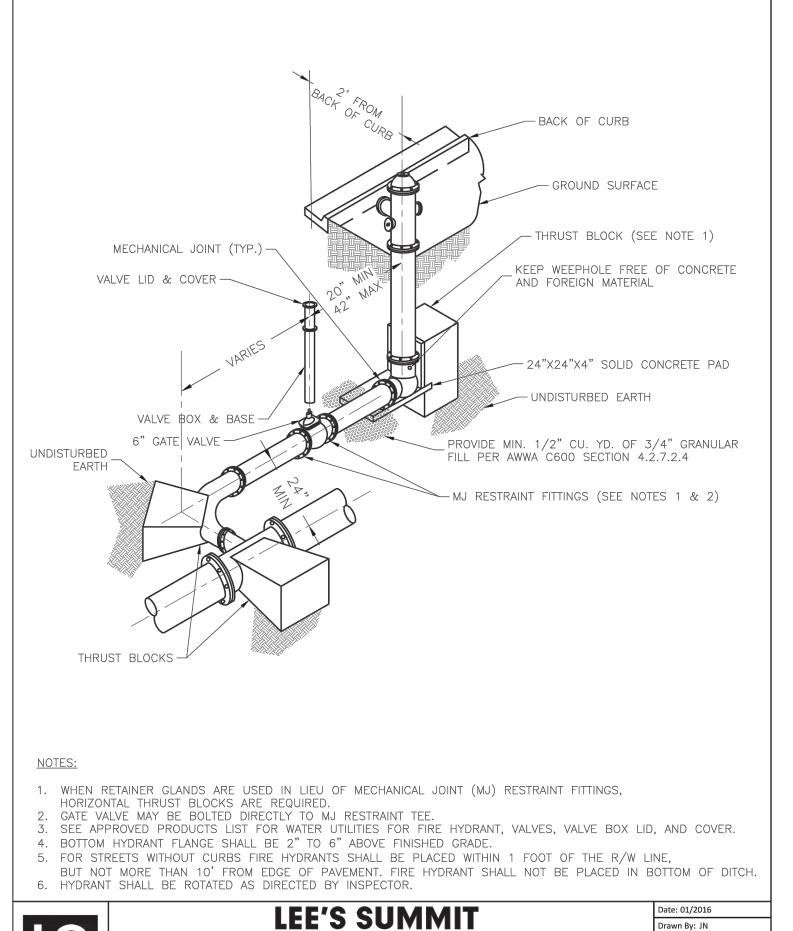
Checked By: DL

WAT-7

BUT NOT MORE THAN 10' FROM EDGE OF PAVEMENT. FIRE HYDRANT SHALL NOT BE PLACED IN

BOTTOM OF DITCH.

. HYDRANT SHALL BE ROTATED AS DIRECTED BY INSPECTOR.

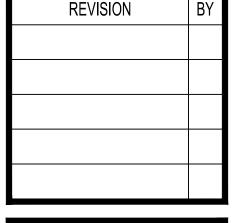


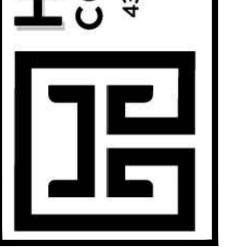
MISSOURI

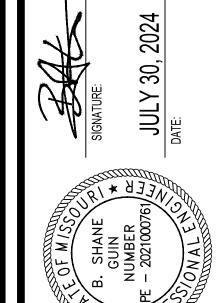
HYDRANT WITH 90 DEGREE BEND

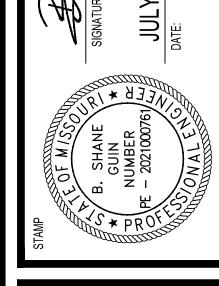


**Development Services Department** Lee's Summit, Missouri 04/24/2025







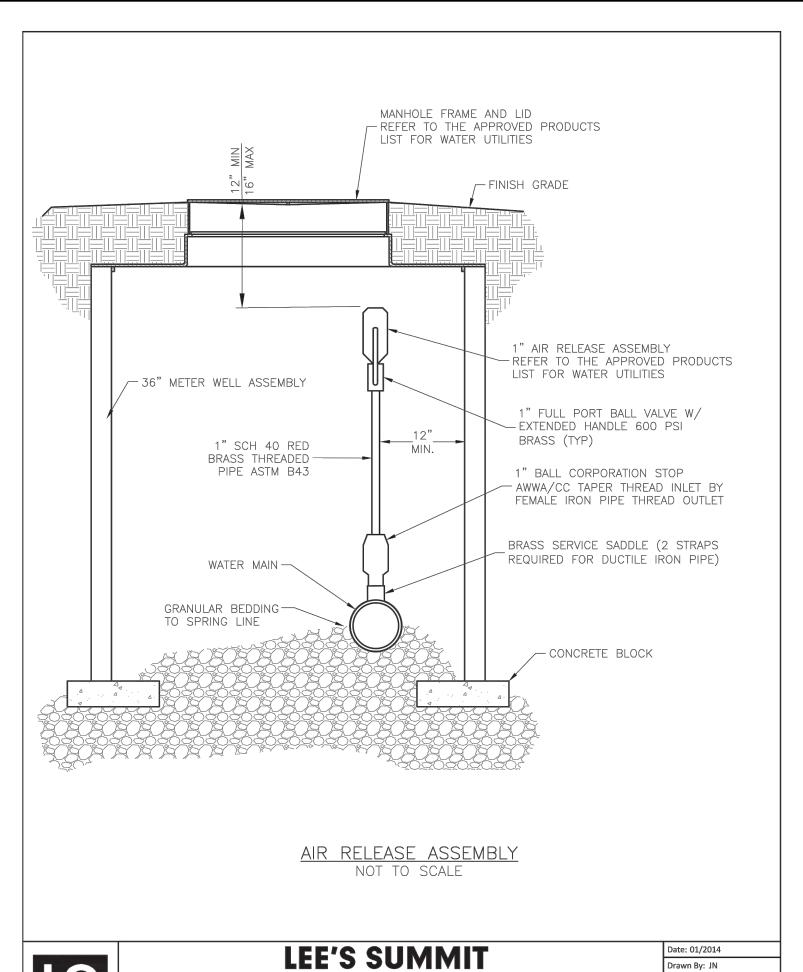


PROPOSED TAK LEE'S SUMMIT, I

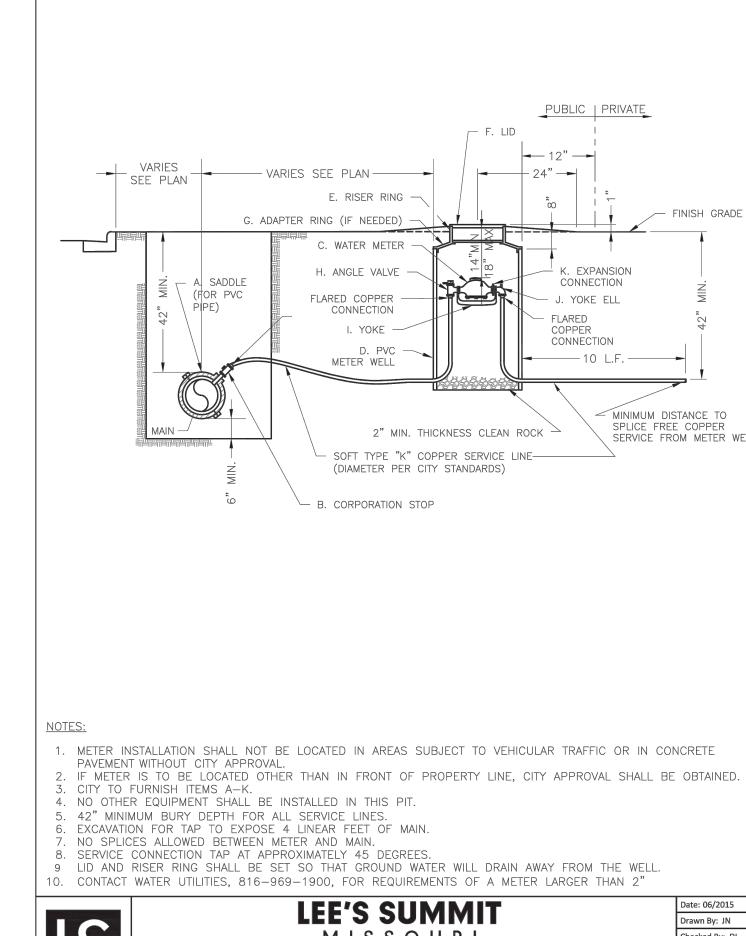
KRG CHECKED RCG ISSUED DATE 07/30/2024 ISSUED FOR PERMITTING PROJECT NO. 22-218 22-218 C-4 Details

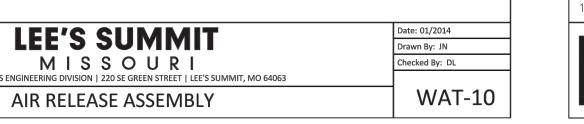
FOR I 2101 BOUL

SHEET



MISSOURI





Checked By: DL

WAT-8

UTILITY DETAILS

rawn By: JN MISSOURI ecked By: DL WAT-11 SERVICE CONNECTION WITH METER WELL

- K. EXPANSION

CONNECTION

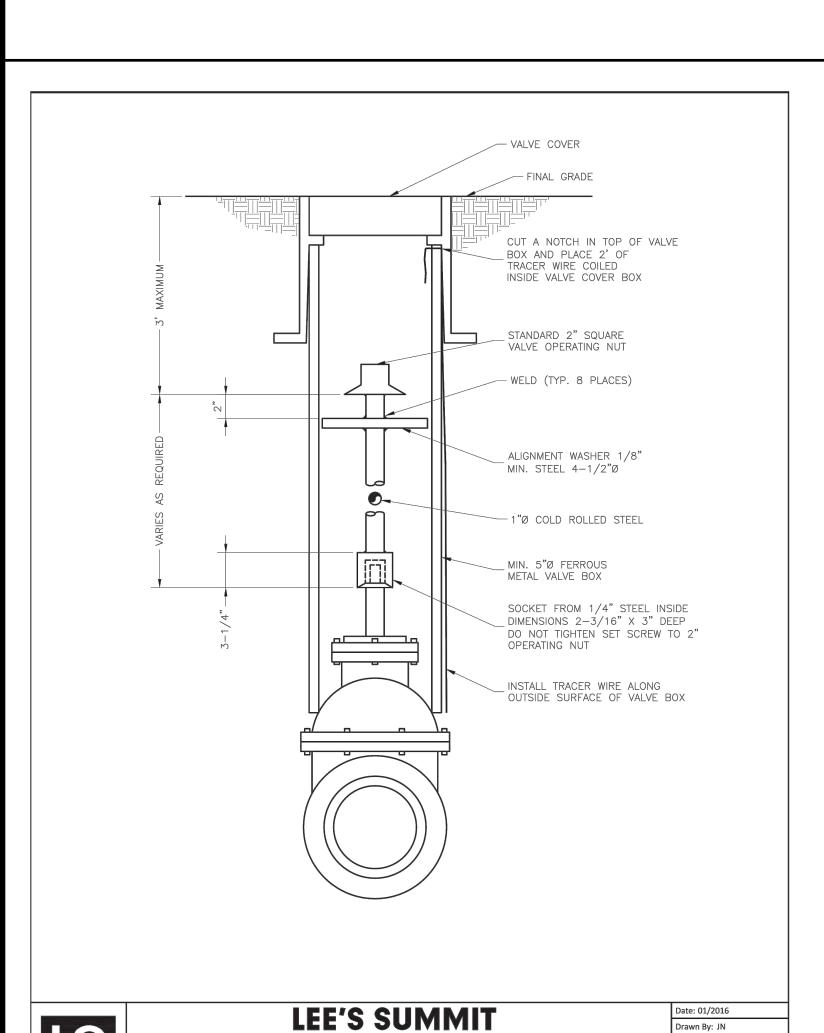
J. YOKE ELL

CONNECTION

─\_ 10 L.F. ─<del>---</del>

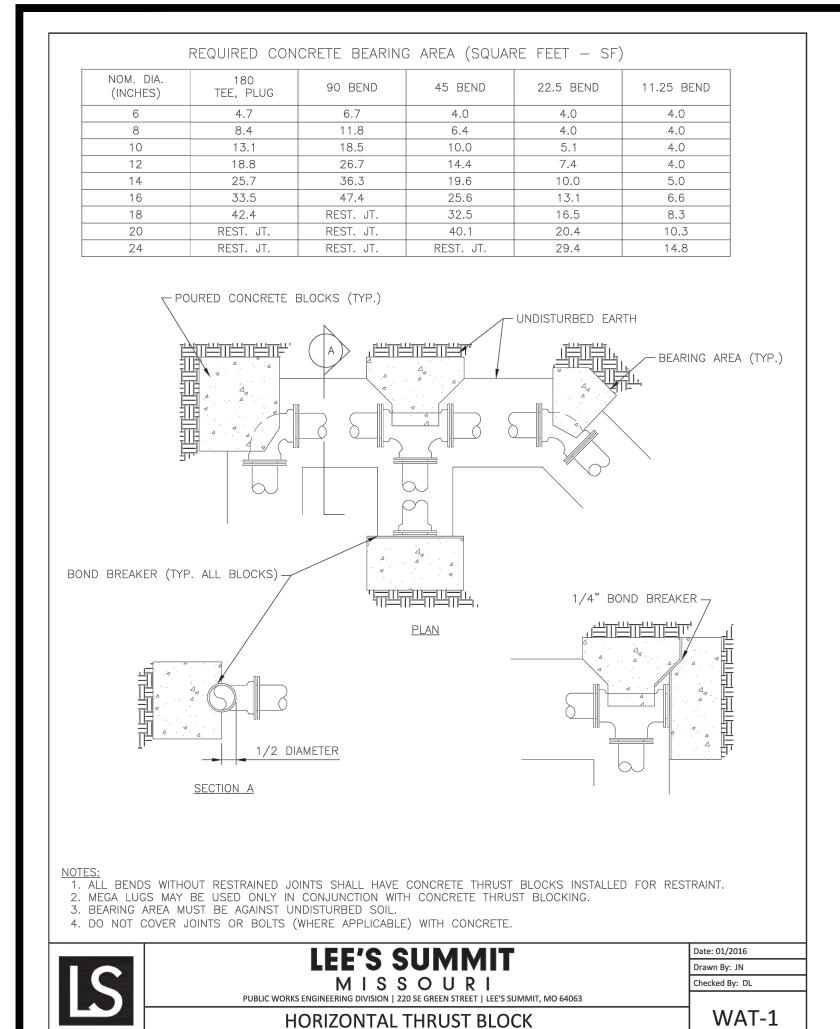
SPLICE FREE COPPER

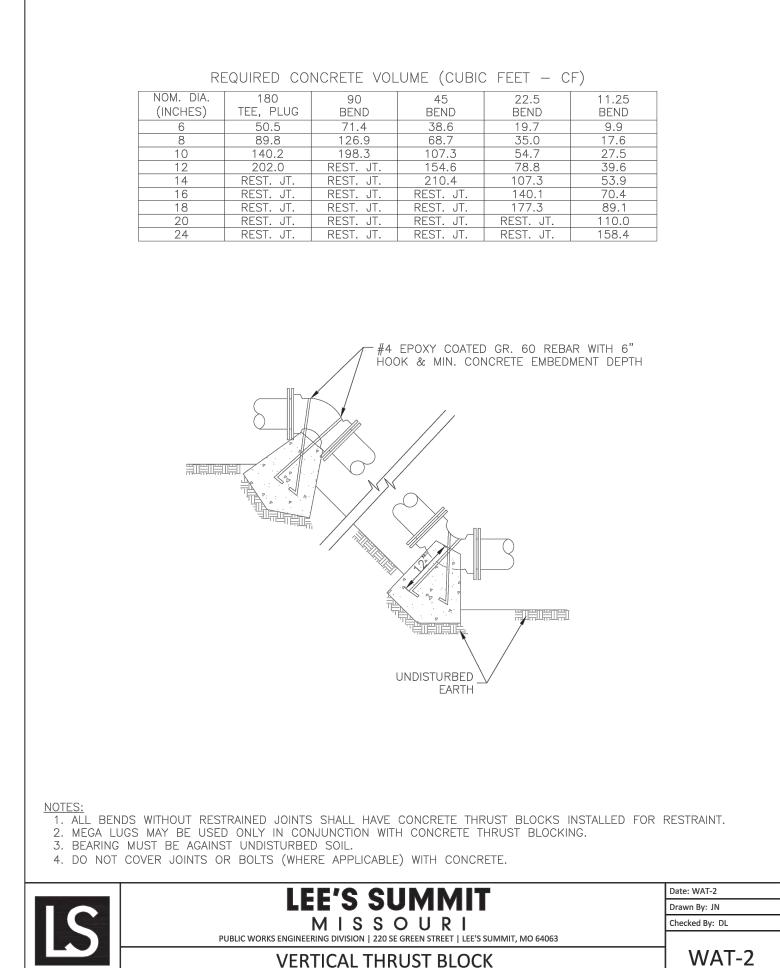
SERVICE FROM METER WELL.

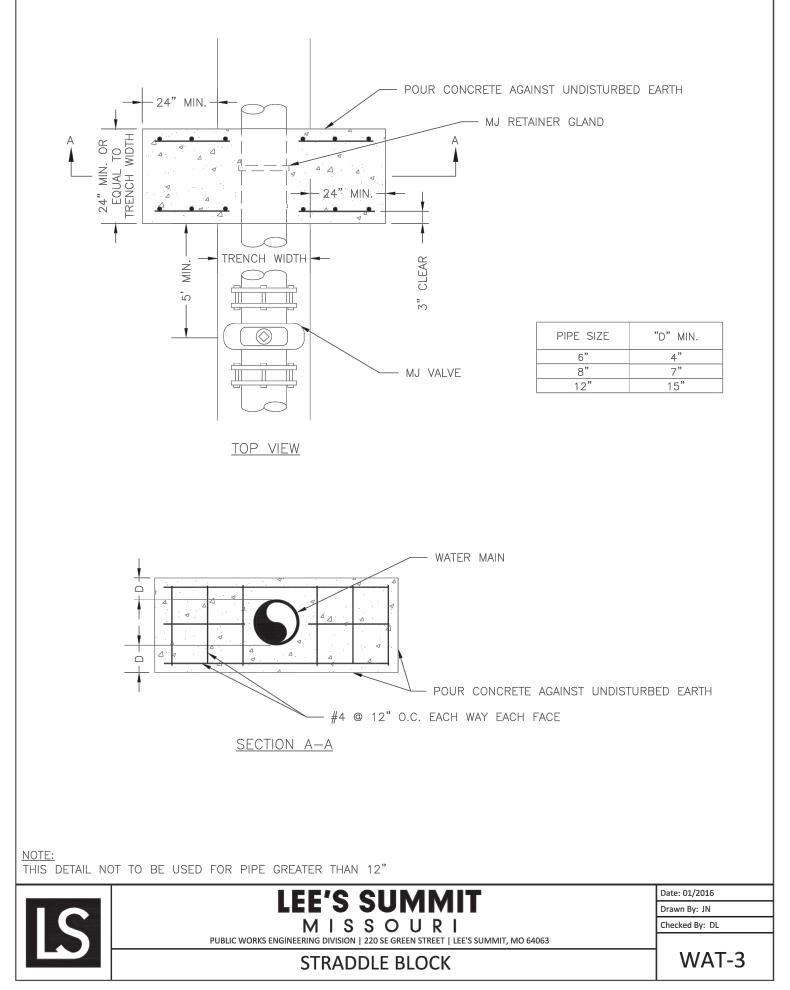


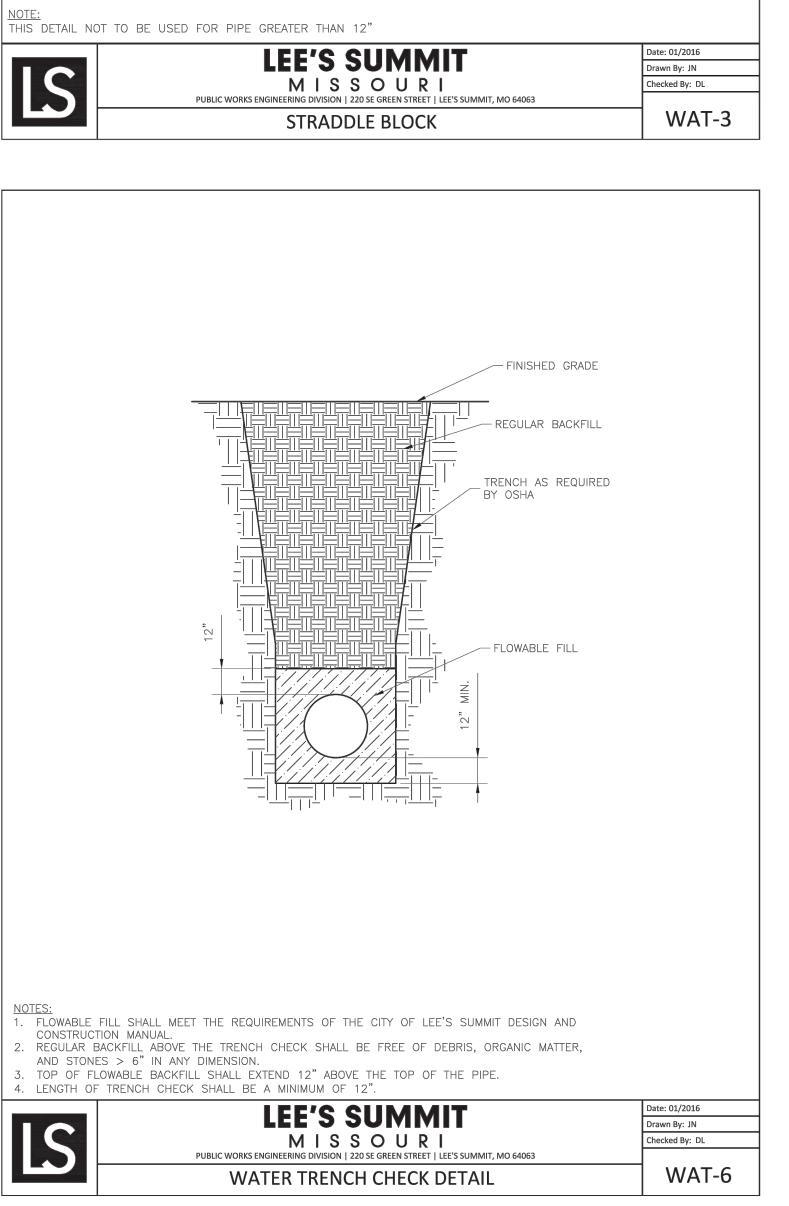
MISSOURI

VALVE STEM EXTENSION AND VALVE BOX

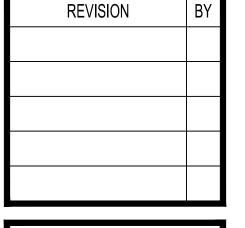




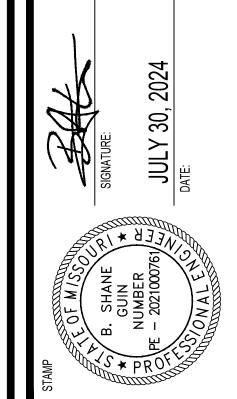










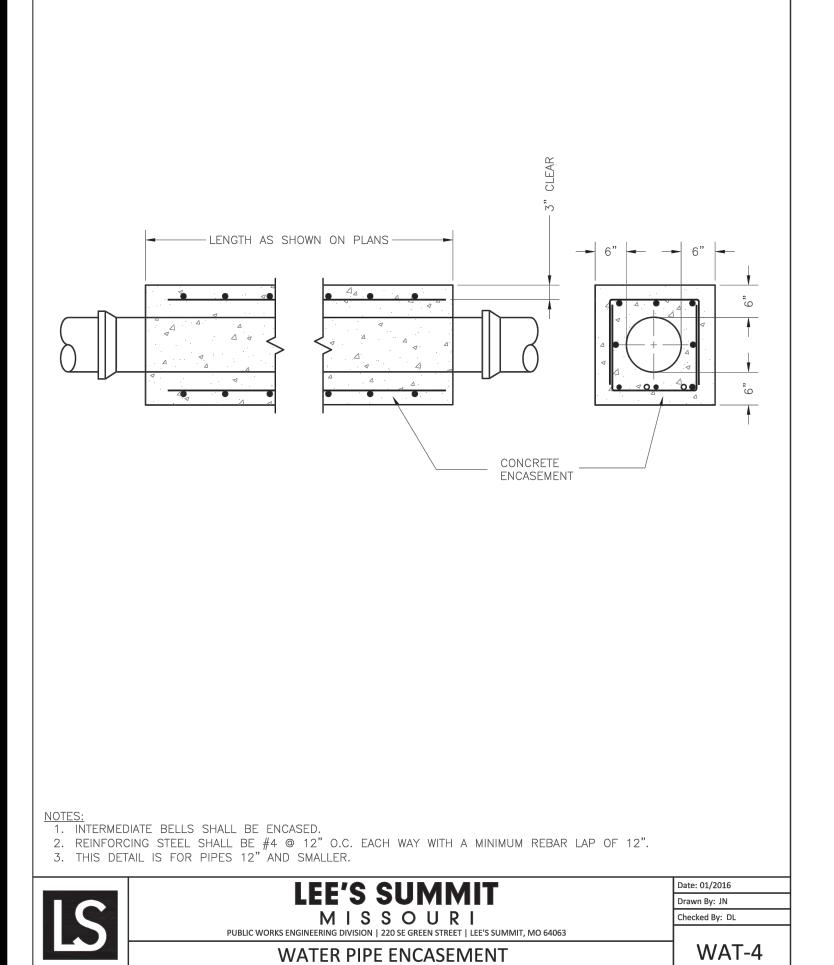


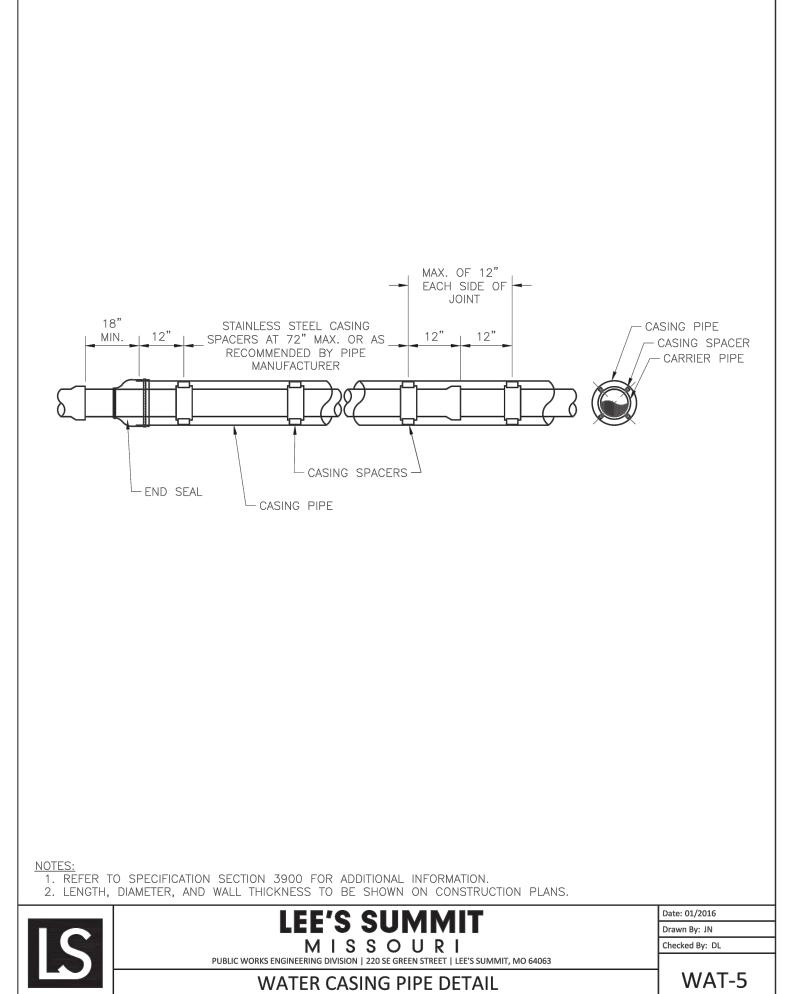
KRG ISSUED DATE 07/30/2024 ISSUED FOR PERMITTING PROJECT NO. 22-218

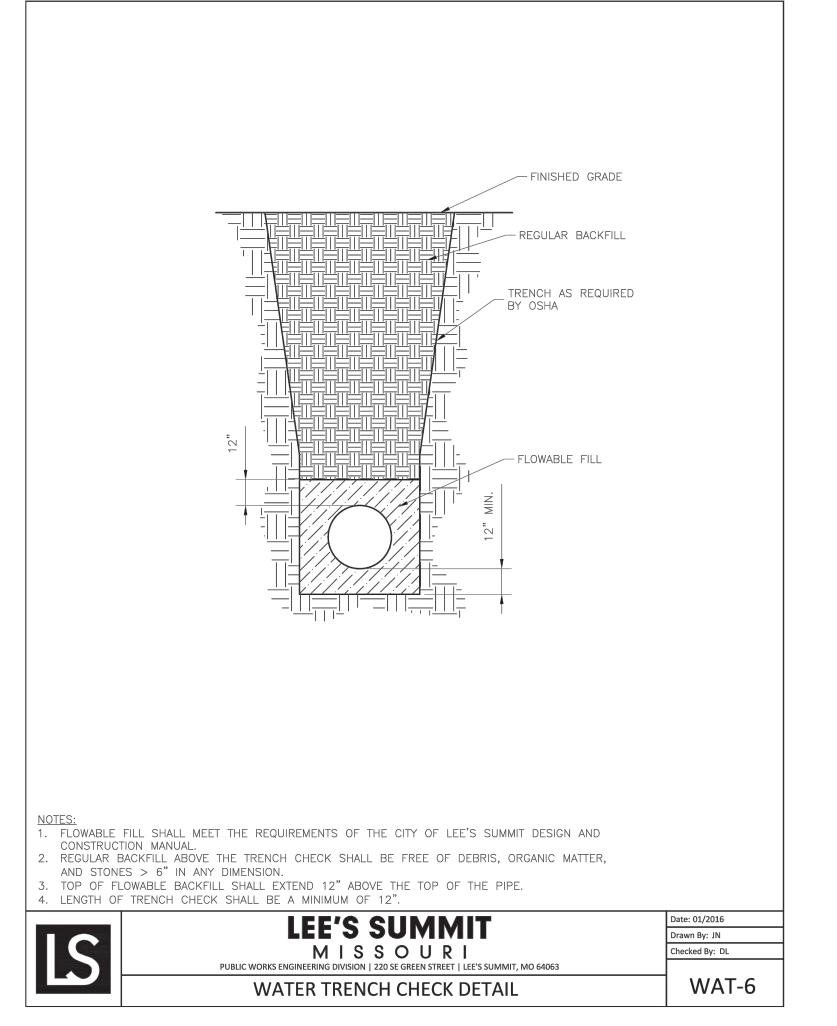
SHEET

UTILITY DETAILS

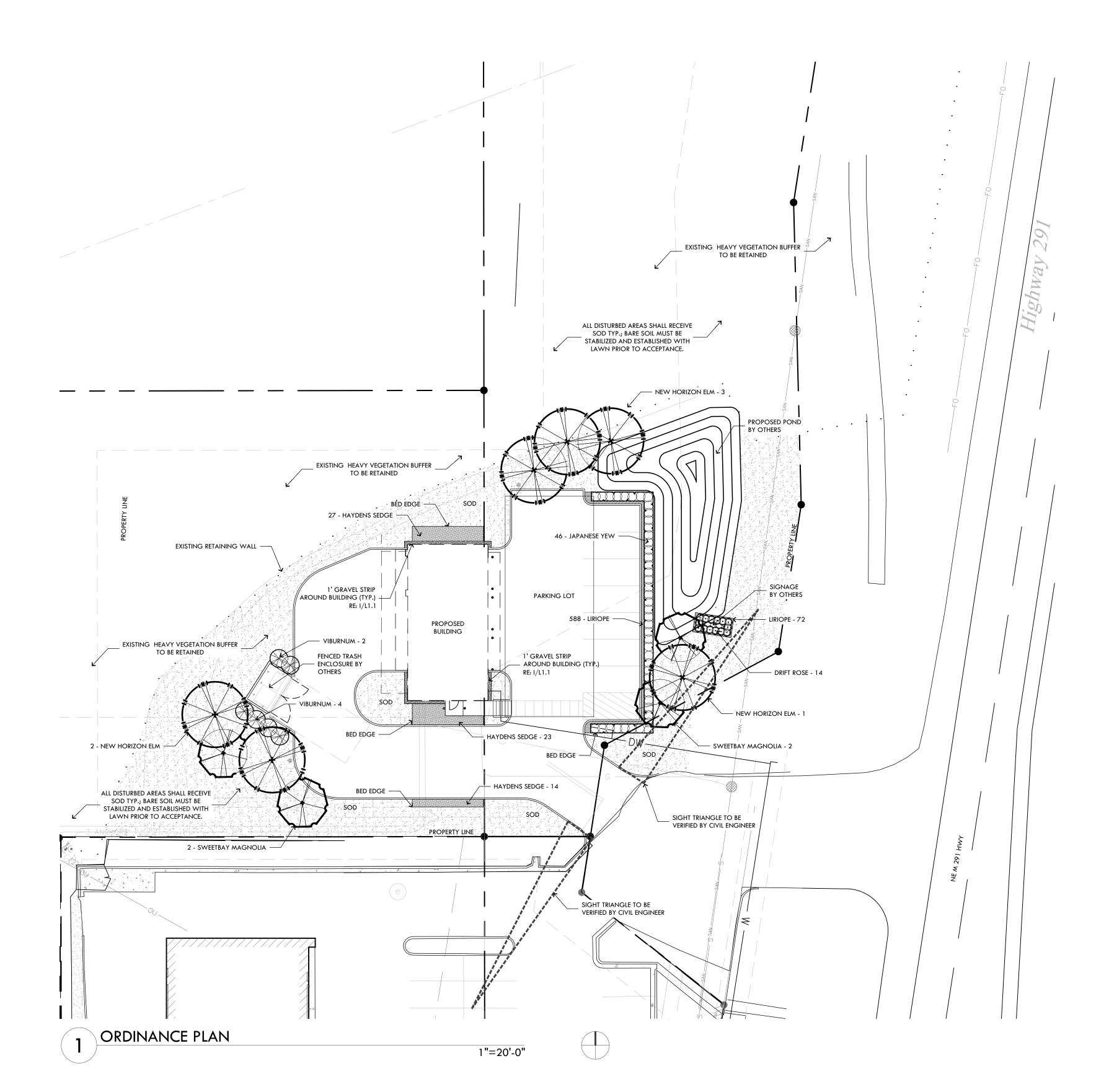
22-218 C-4 Details







Development Services Department Lee's Summit, Missouri 04/24/2025





668 S. FOSTER DRIVE, SUITE 101
BATON ROUGE, LOUISIANA 70806

© 225.924.1265 © 225.709.0748

McKnight-LA.com

LANDSCAPE ORDINANCE CALCULATIONS

LEE'S SUMMIT MO DEVELOPMENT CODE, DIVISION III; SECTION 8.710-900,

STREET FRONTAGE (NON RESIDENTIAL ZONE)

A. 1 TREE PER 30 L.F. OF STREET FRONTAGE

**ZONED: CP2** 

REQUIRED: 5 TREES PROVIDED: 5 TREES

B. 20' WIDE LANDSCAPE STRIP TO SEPARATE PARKING AREA FROM THE STREET.

PROVIDED: 20' LANDSCAPE STRIP

C. 1 SHRUB FOR EACH 20' OF STREET FRONTAGE

REQUIRED: 7 SHRUBS PROVIDED: 14 SHRUBS (NEAR SIGNAGE)

#### OPEN YARD AREA

LOT CONTAINS A LARGE CONSERVATION AREA THAT WILL REMAIN. CALCULATIONS BELOW ARE BASED ON CLEARED PORTION OF THE LOT; 23,670 SQUARE FEET.

A. 2 SHURBS PER 5,000 SQUARE FEET

REQUIRED: 10 SHRUBS
PROVIDED: 20 SHRUBS (PROVIDED TO HIDE TRASH
ENCLOSURE AND DRIVEWAY)

B. 1 TREE PER 5,000 SQUARE FEET

REQUIRED: 5 TREES PROVIDED: 5 TREES

PARKING LOT SCREENING

A.  $2\frac{1}{2}$ ' HEIGHT OF SCREENING REQUIRED ALONG THE EDGE OF PARKING LOT CLOSEST TO THE STREET

B. A HEDGE CONSISTING OF AT LEAST 12 SHRUBS PER 40'. HEDGE MUST BE AT LEAST 18" TALL AT TIME OF PLANTING.

REQUIRED: 36 SHRUBS (CONTINUOUS HEDGE)
PROVIDED: 44 SHRUBS (PROVIDED TO HAVE CONTINUOUS

SOUTH & EAST BUFFER (CP2 ADJACENT TO CP2)

NO REQUIRED BUFFER

NORTH & WEST BUFFER (CP2 ADJACENT TO RP-2 & RP-4)

HEDGE AROUND PARKING LOT PER CODE)

REQUIRED: 20' BUFFER YARD (HEAVY)
PROVIDED: EXISTING 30'-100' VEGETATED BUFFER & EXISTING
RETAINING WALL

#### LANDSCAPE ORDINANCE STANDARDS

WITH APPROVED PLAN.

LANDSCAPE MATERIALS AND PLANTS LIST

Hardwood Mulch, shredded (square feet)

Bed Preparation (square feet)

first 3" of imported planting soil.

Metal Edging (linear feet)

Gravel Border (square feet)

certified weed and pest free

Liriope (Liriope muscari)

4 per square foot

Lawn - Turf Type Fescue (square yards)

Drift Rose 'Popcorn' (Rosa 'Novarospop')

around all trees

and gravel border

PLANT / MATERIAL NAME AND DESCRIPTION

6" planting soil over 8" loosened topsoil. Mix top 4" of topsoil with

3" thick layer in all planting areas and 2x root ball diameter ring

 $\frac{1}{8}$ " x 4" aluminum edging color black; install between planting

 $\frac{1}{2}$ " - 1" river rock. 3" deep layer over non-woven filter fabric

3 gallon container, 15"-18" spread, dense and compact growth

New Horizon Elm (Ulmus davidiana var. japonicus x Ulmus pumilia)

Sweetbay Magnolia 'Green Shadow'; (Magnolia virginiana 'Green

45 gallon container, 12'-14' height, 5'-7' spread,  $2\frac{1}{2}$ "-3" caliper,

7'-8' height, 4'-5' spread, standard, 1"caliper, heavily branched

5 gallon container, 18" height, 18" spread, dense and compact

3 gallon container, 7"- 8" height, 12" - 18" spread at base, full

OWNER'S REPRESENTATIVE SHALL REVIEW LANDSCAPING

FOLLOWING INSTALLATION TO CERTIFY COMPLIANCE

container, heavy and active foliage, planted 24" o.c.

4" Container, 4"-6" height and spread, full container

straight trunk, heavily branched, heavy canopy

Viburnum (Viburnum rhytidophylloides 'Allegheny')
5 gallon container, 3' height, dense foliage, full container

Japanese Yew (Podocarpus macrophyllus)

growth habit, strong central leader

'Hayden's Sedge' Carex haydenii

QUANTITY

AS NEEDED

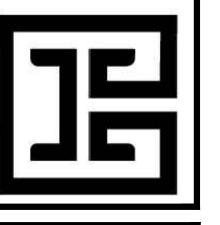
- 1. THE CONTRACTOR SHALL VERIFY AND COORDINATE ALL FINAL GRADE WITH THE LANDSCAPE ARCHITECT AND OR DESIGN TEAM PRIOR TO COMPLETION.
- LOCATION AND PLACEMENT OF ALL PLANT MATERIAL SHALL BE COORDINATED WITH THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- 3. THE LOCATION OF ALL UTILITIES ARE APPROXIMATE, THE CONTRACTOR SHALL FIELD VERIFY LOCATIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION OPERATIONS.
- 4. REFER TO CIVIL DRAWINGS FOR ALL GRADING AND BERMING, EROSION CONTROL, STORM DRAINAGE, UTILITIES AND SITE LAYOUT.
- 5. PLANT QUANTITIES ARE FOR INFORMATION ONLY DRAWING SHALL PREVAIL IF CONFLICT OCCURS. CONTRACTOR IS RESPONSIBLE FOR CALCULATING OWN QUANTITIES AND BID ACCORDINGLY.
- 6. THE CONTRACTOR IS TO NOTIFY LANDSCAPE ARCHITECT AFTER STAKING IS COMPLETE AND BEFORE PLANT PITS ARE EXCAVATED. PROVIDE PHOTOGRAPHS.
- TREE LOCATIONS IN AREAS ADJACENT TO DRIVES, WALKS, WALLS AND LIGHT FIXTURES MAY BE FIELD ADJUSTED AS APPROVED BY LANDSCAPE ARCHITECT.
- 8. THE CONTRACTOR SHALL REPORT SUBSURFACE SOIL OR DRAINAGE PROBLEMS TO THE LANDSCAPE ARCHITECT.
- 9. THE PLAN IS SUBJECT TO CHANGES BASED ON PLANT SIZE AND MATERIAL AVAILABILITY. ALL CHANGES OR SUBSTITUTIONS MUST BE APPROVED BY THE CITY OF LEE'S SUMMIT, MISSOURI AND THE LANDSCAPE ARCHITECT.
- 10. ALUMINUM LANDSCAPE EDGING TO BE USED ON ALL LANDSCAPE BEDS ABUTTING TURF AREAS AS NOTED ON LANDSCAPE PLANS/LEGEND.
- 11. LANDSCAPE CONTRACTOR IS TO BE RESPONSIBLE FOR WATERING ALL PLANT MATERIAL UNTIL THE TIME THAT A PERMANENT WATER SOURCE IS READY.
- 12. THE CONTRACTOR SHALL SHOW PROOF OF PROCUREMENT, SOURCES, QUANTITIES AND VARIETIES FOR ALL SHRUBS, PERENNIALS ORNAMENTAL GRASSES AND ANNUALS WITHIN 21 DAYS FOLLOWING THE AWARD OF THE CONTRACT.
- 13. CONTRACTOR SHALL PROVIDE FULL MAINTENANCE FOR NEWLY LANDSCAPED AREAS FOR A PERIOD OF 30 DAYS AFTER THE DATE OF FINAL ACCEPTANCE. AT THE END OF THE MAINTENANCE PERIOD, A HEALTHY, WELL-ROOTED, EVEN-COLORED, VIABLE TURF AND LANDSCAPED AREA MUST BE ESTABLISHED. THE LANDSCAPED AREAS SHALL BE FREE OF WEEDS, OPEN JOINTS, BARE AREAS AND SURFACE IRREGULARITIES.
- 14. LANDSCAPE CONTRACTOR SHALL PROVIDE HARDWOOD MULCH SAMPLE TO OWNER FOR APPROVAL.

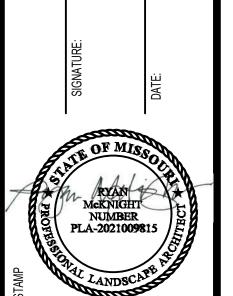
#### GENERAL PLANTING NOTES

- LOCATE ALL UTILITIES ON SITE PRIOR TO COMMENCING WORK. ANY DAMAGE DONE TO EXISTING OR NEW UTILITIES SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL COST TO OWNER.
- PLANTS SHALL BE WELL FORMED, NO. 1 GRADE OR BETTER NURSERY STOCK AND SHALL MEET THE APPLICABLE STANDARDS NOTED HEREIN AND SHALL BE SUBJECT TO REJECTION BY THE LANDSCAPE ARCHITECT.
- 3. STAKE OUT ALL TREE LOCATIONS FOR APPROVAL BY THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION. LOCATE ALL TREES AS SHOWN ON PLAN.
- 4. COORDINATE WORK WITH THE WORK OF OTHER TRADES ON THE
- 5. ENTIRE SITE SHALL BE GRADED TO FINISH GRADE PRIOR TO SCHEDULING PLANTING INSTALLATION.
- 6. PLANTS SHALL BE SPECIMEN QUALITY, FULL POT AND HEAD, SYMMETRICAL FOLIAGE AND BRANCHING STRUCTURE. SHRUBS SHALL BE FULL TO GROUND.
- 7. PLANT MATERIAL OF THE SAME SPECIES SHALL BE MATCHING IN CHARACTER AND SIZE, OBTAINED FROM THE SAME SOURCE.
- 8. ANY CHANGES IN PLANT MATERIAL SIZE, QUANTITY, SPECIES OR VARIETY MUST BE APPROVED BY THE OWNER AND/OR LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- 9. INSTALLATION MUST BE COMPLIANT WITH LANDSCAPE ORDINANCE STANDARDS.
- 10. SOD ALL AREAS DISTURBED BY CONSTRUCTION.

REVISION BY

ONSULTANTS L
ONSULTANTS L
34 N. COLUMBIA ST, SUITE 20
COVINGTON, LA 70433





S, LLC

FOR DRIVEN ASSET 2101 PEARL STREET BOULDER, CO 80302

DRAWN
ML

CHECKED
BG/RM

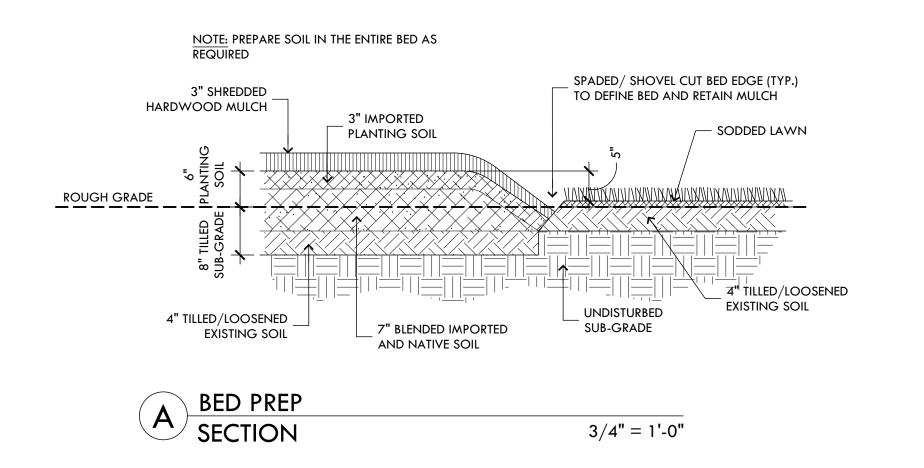
ISSUED DATE
9.08.2023

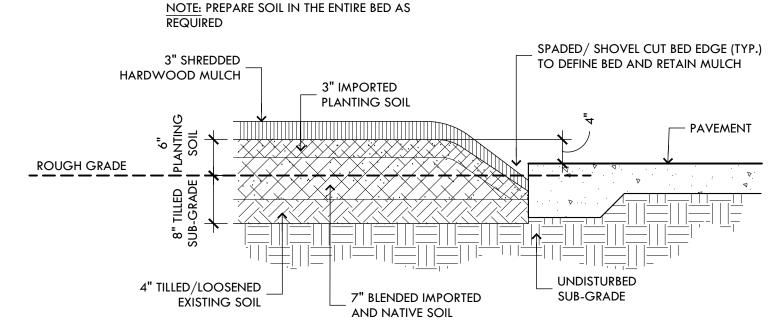
ISSUED FOR
PRELIMINARY DEVELOPMENT

PROJECT NO.

FILE L1.0 LANDSCAPE ORDINANCE PLAN

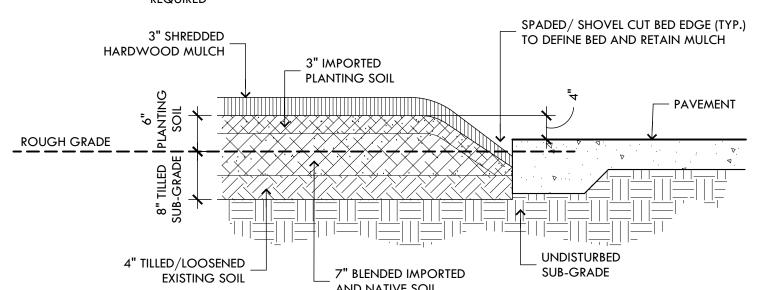
L1.0

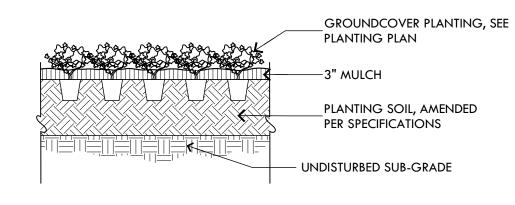




BED PREP AT PAVEMENT

LAWN SECTION







RELEASED FOR CONSTRUCTION As Noted on Plan Review **Development Services Department** Lee's Summit, Missouri

04/24/2025

— CULTIVATED/AMENDED SOIL (TYP.)

1/2" = 1'-0"

1" = 1'-0"

- EXISTING SUB-GRADE

668 S. FOSTER DRIVE, SUITE 101

BATON ROUGE, LOUISIANA 70806

P 225.924.1265 P 225.709.0748

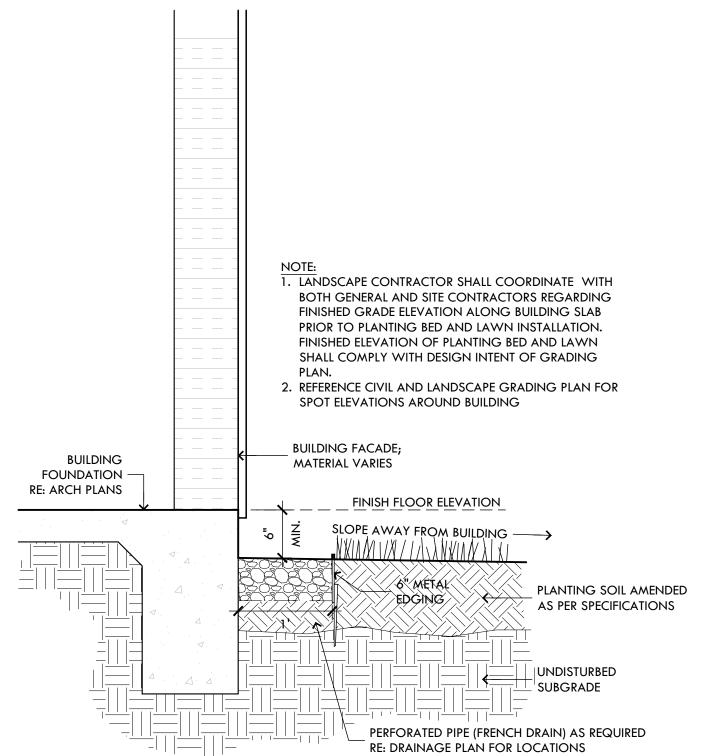
McKnight-LA.com

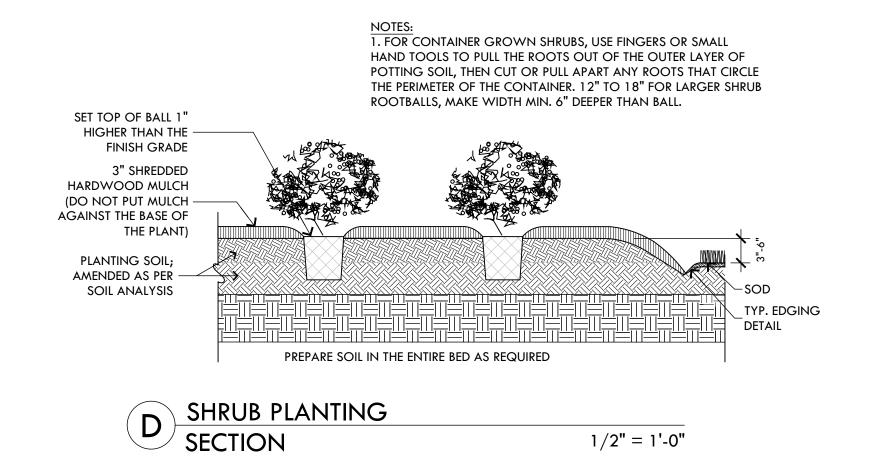
SODDED LAWN (TYP.); CROWN OF SOD SHALL BE SET (SOIL/GRASS BLADE LINE) LEVEL OR SLIGHTLY ABOVE (MAX. 1") CONCRETE PAVEMENT ABOVE FINISHED PAVEMENT PER CIVL SPECIFICATIONS

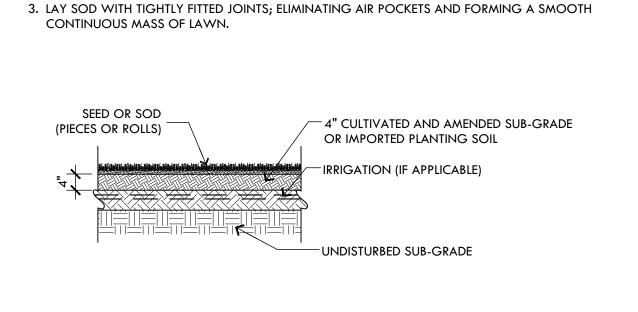
> COMPACTED BASE PER SPECIFICATIONS (TYP.)

F PAVEMENT TO LAWN TRANISTION SECTION

PLANTING AT BUILDING
SECTION







1/2" = 1'-0"

3/4" = 1'-0"

1. CONTRACTOR SHALL OBTAIN A SOIL ANALYSIS FROM AN INDEPENDENT LABORATORY

SHALL BE INCORPORATED INTO PREPARATION.

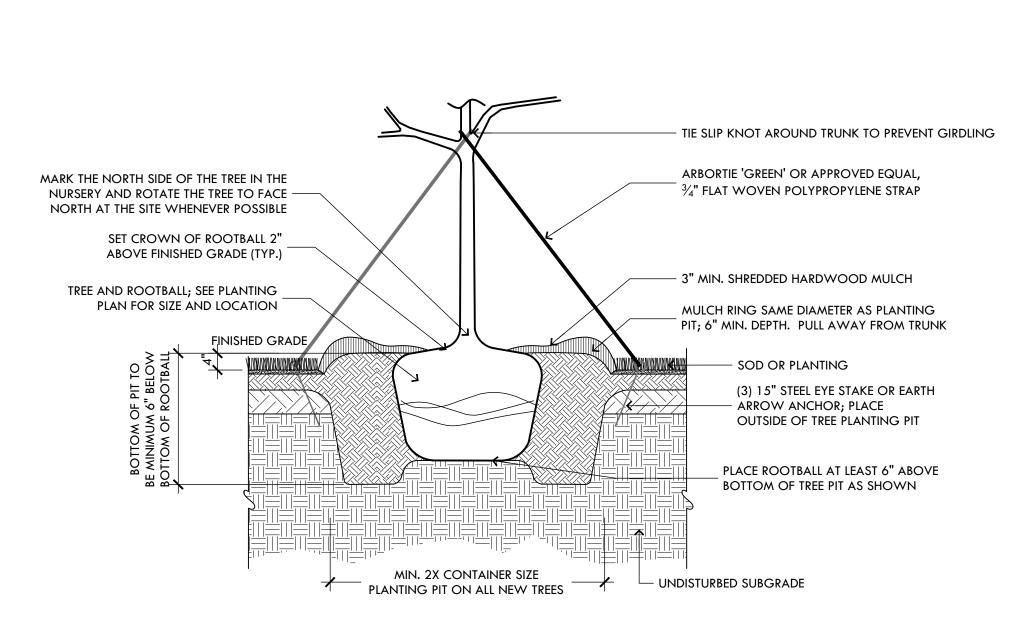
AS PER SPECIFICATIONS.

APPROVED BY THE STATE DEPARTMENT OF AGRICULTURE. ANY RECOMMENDED AMENDMENTS

2. CONTRACTOR SHALL LOOSEN THE TOP FOUR (4") INCHES OF SOIL IN AREAS TO RECEIVE LAWN.

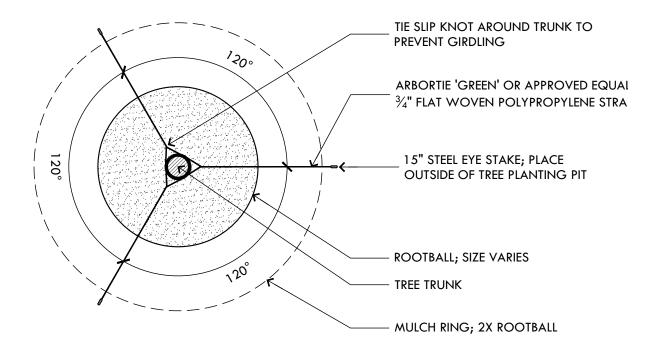
REMOVE ALL DEBRIS, STICKS, ROOTS, RUBBISH, CLUMPS OF SOIL, STONES OVER ONE (1) INCH

IN DIAMETER, AND ALL OTHER EXTRANEOUS MATTER PRIOR TO FINE GRADING FOR SOD AREAS



1/2" = 1'-0"

G TREE PLANTING - SINGLE TRUNK SECTION



H TREE STAKING - SINGLE TRUNK PLAN 1/2" = 1'-0"

FOR DRIVEN ASSETS, I 2101 PEARL STREET BOULDER, CO 80302 DRAWN ISSUED DATE 9.08.2023 ISSUED FOR PRELIMINARY DEVELOPMENT PROJECT NO. L1.2 PLANTING DETAILS SHEET

REVISION

REVISION #1

McKNIGHT NUMBER PLA-2021009815

