

# PUBLIC WATER MAIN EXTENSION FOR TAKE 5 OIL CHANGE

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



VICINITY MAP  
N.T.S

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.

SHEET INDEX

CIVIL		
1.	CO	COVER SHEET
2.		SURVEY
3.	ES-1.1	OFFSITE EROSION CONTROL PLAN AND DETAILS
4.	C-4.1	OFFSITE UTILITY PLAN AND PROFILE
5.	C-4.2	OFFSITE WATER DETAILS
6.	C-4.3	OFFSITE WATER DETAILS

DEVELOPER

DRIVEN ASSETS, LLC  
2101 PEARL STREET  
BOULDER, CO 80302



REVISION	BY
12/19/2024 REVISED PER CITY	KRG

HIGH TIDE

CONSULTANTS LLC

434 N. COLUMBIA ST, SUITE 200A

COVINGTON, LA 70433

www.hightidela.com

SIGNATURE

DECEMBER 19, 2024

DATE

STAMP

PUBLIC WATER MAIN EXTENSION FOR TAKE 5 OIL CHANGE

LEE'S SUMMIT, MISSOURI

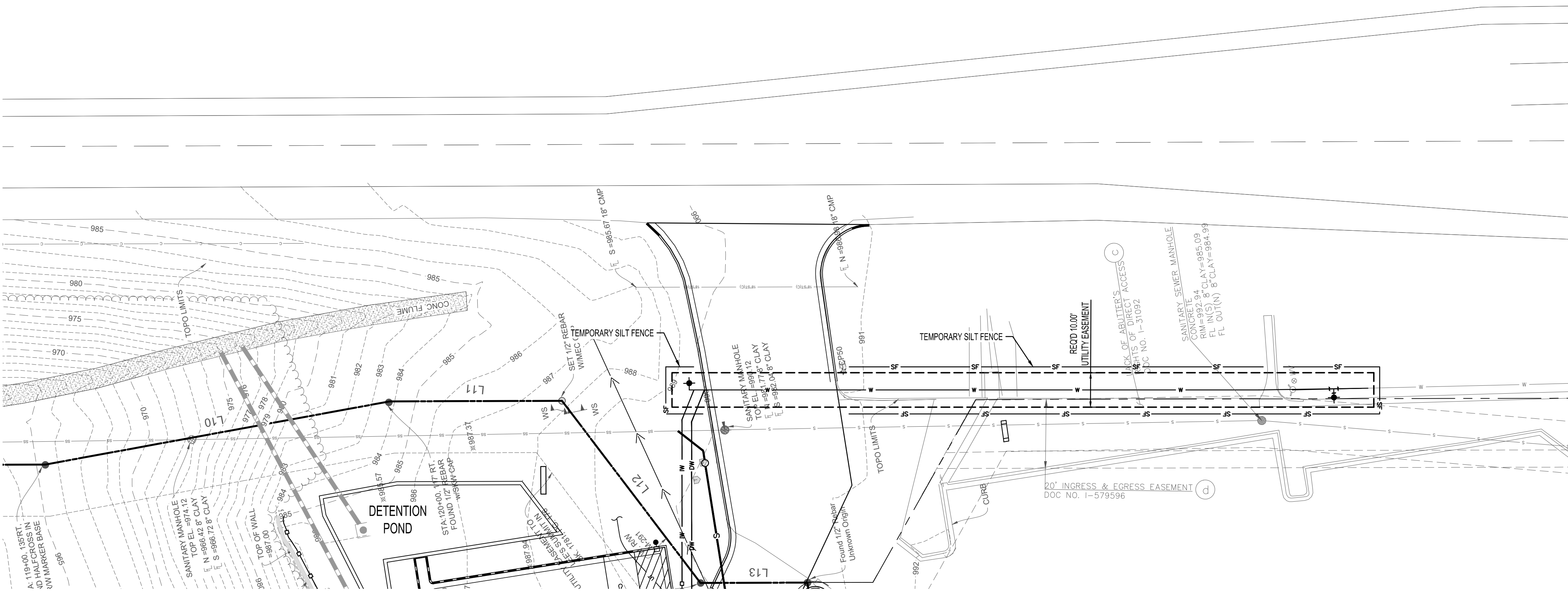
FOR DRIVEN ASSETS, LLC

2101 PEARL STREET

BOULDER, CO 80302

DRAWN KRG
CHECKED RCG
ISSUED DATE 10/24/2024
ISSUED FOR PERMITTING
PROJECT NO. 22-218
FILE 22-218 C-5 Offsite Utility Plan
SHEET CO





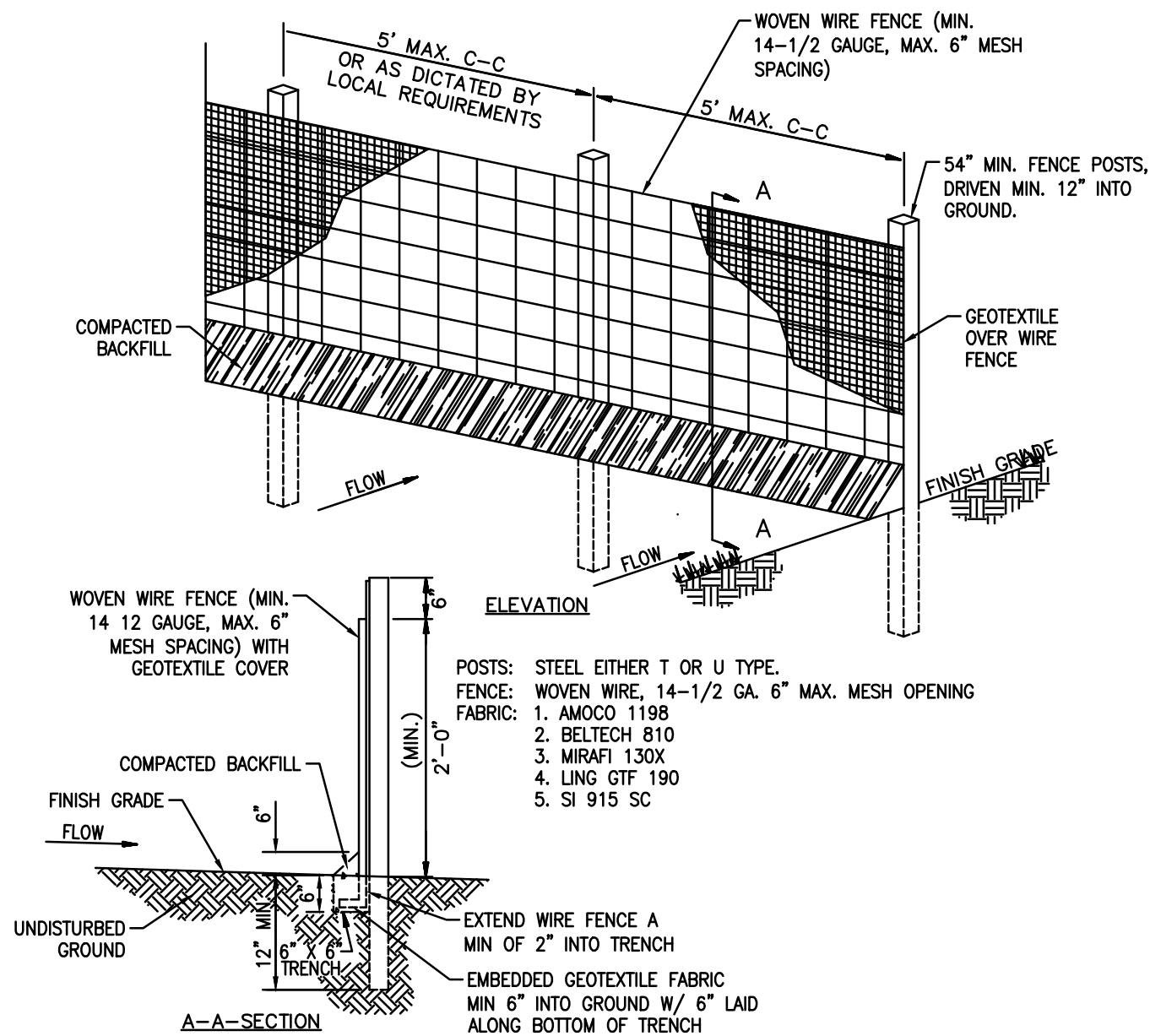
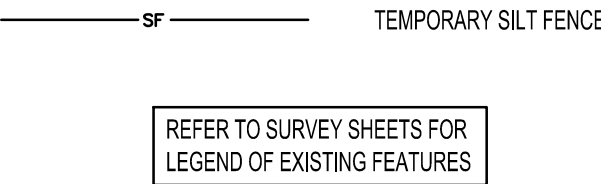
EROSION CONTROL NOTES:

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 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. THE CONTRACTOR SHALL OBTAIN AND COMPLY WITH ALL MISSOURI DEPT. OF NATURAL RESOURCES NPDES STORM WATER GENERAL PERMIT REQUIREMENTS THROUGHOUT THE DURATION OF CONSTRUCTION.
13. 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, & RESEED 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 DEMAND.
  5. THE TEMPORARY PARKING & STORAGE AREA PROVIDED BY CONTRACTOR SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING & STORAGE). THIS MAY REQUIRE 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



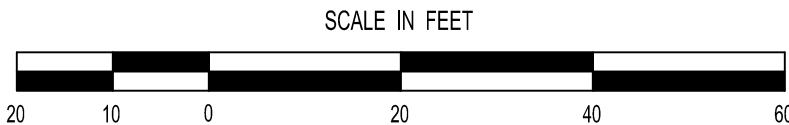
1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES.
2. GEOTEXTILE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF GEOTEXTILE ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NOTED IN THE EROSION CONTROL PLAN. COLLECTED MATERIAL SHALL BE REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.
5. ALL SILT FENCE SHALL INCLUDE WIRE SUPPORT UNLESS INDICATED OTHERWISE.

SEDIMENTATION/SILT FENCE WITH WIRE SUPPORT  
N.T.S.

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



OFFSITE EROSION  
CONTROL PLAN & DETAIL



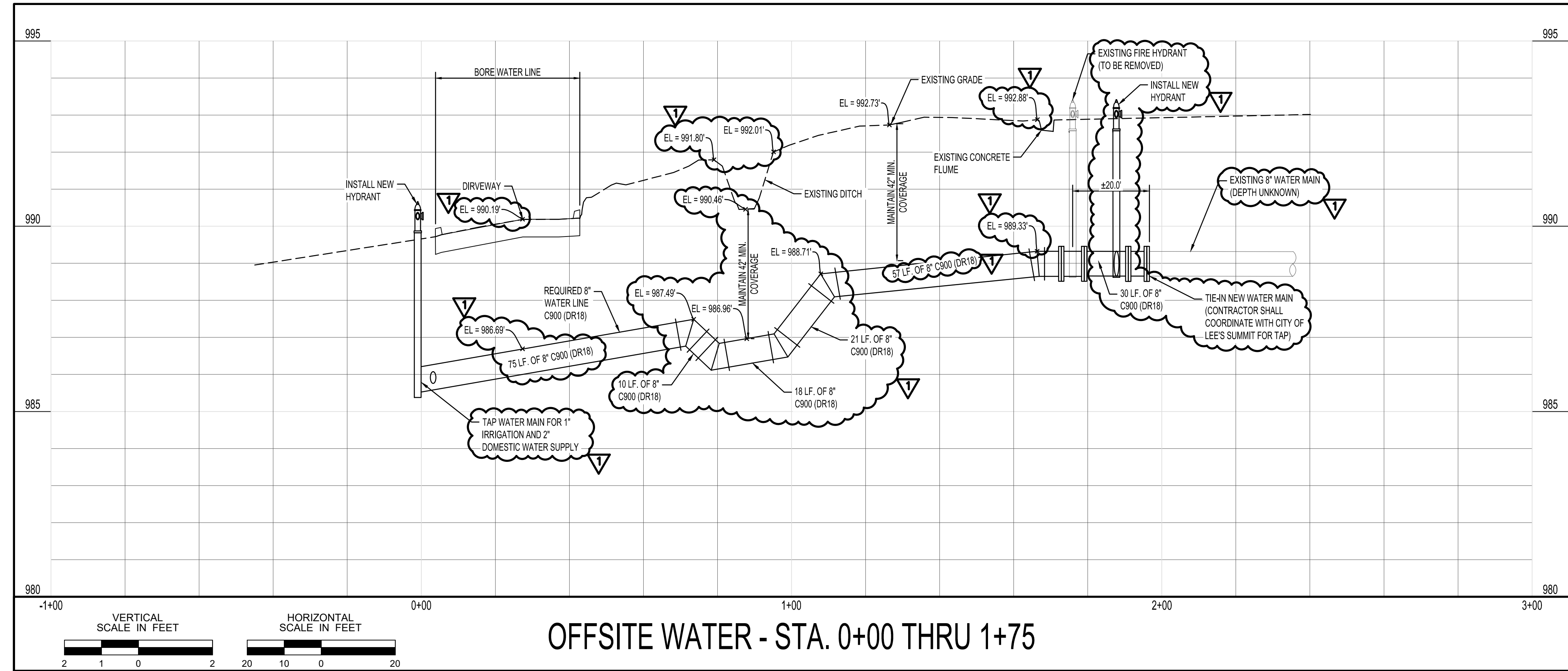
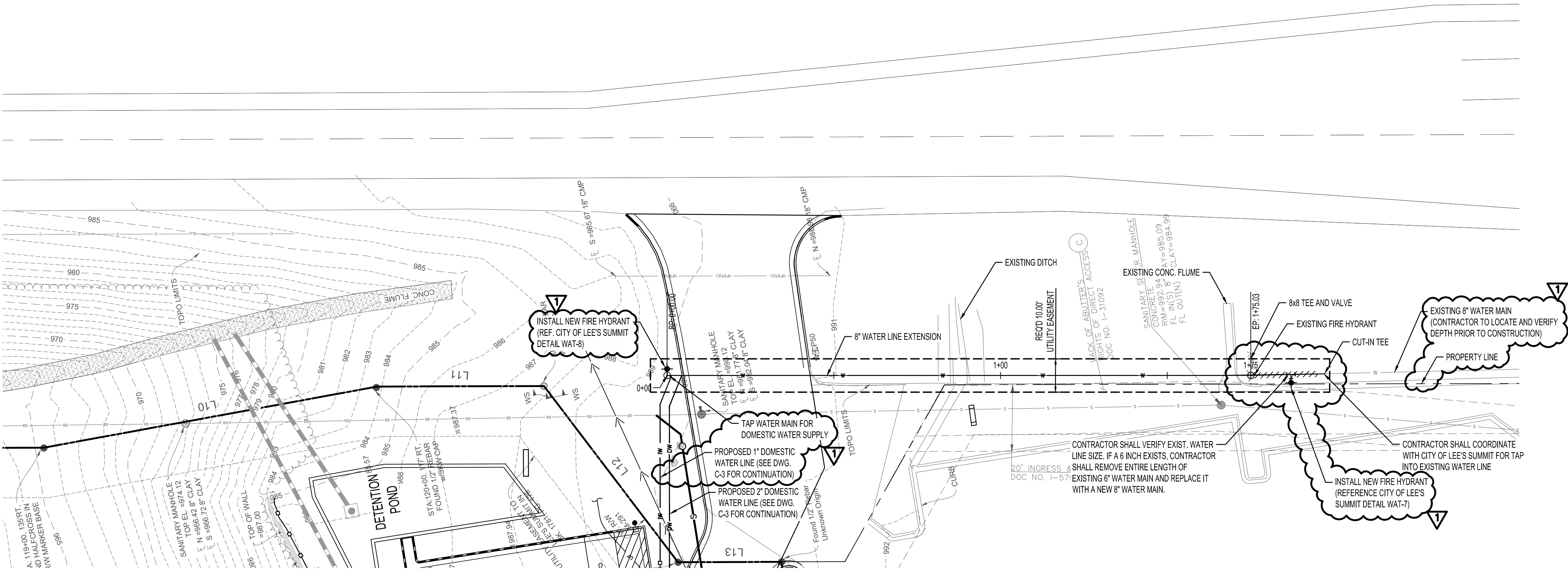
REVISION	BY

**HIGH TIDE**  
**CONSULTANTS LLC**  
434 N. COLUMBIA ST, SUITE 200A  
COVINGTON, LA 70433  
www.hightidel.com

SIGNATURE  
DECEMBER 19, 2024  
DATE  
B. SHANE GUIN  
NUMBER  
202100076  
PROFESSIONAL ENGINEER  
STATE OF MISSOURI  
STAMP

PUBLIC WATER MAIN EXTENSION FOR TAKE 5 OIL CHANGE  
LEE'S SUMMIT, MISSOURI  
FOR DRIVEN ASSETS, LLC  
2101 PEARL STREET  
BOULDER, CO 80302

DRAWN  
KRG  
CHECKED  
RCG  
ISSUED DATE  
12/19/2024  
ISSUED FOR  
PERMITTING  
PROJECT NO.  
22-218  
FILE  
22-218 ES-1.1 Offsite Erosion Control Plan  
SHEET  
ES-1.1



### UTILITY NOTES

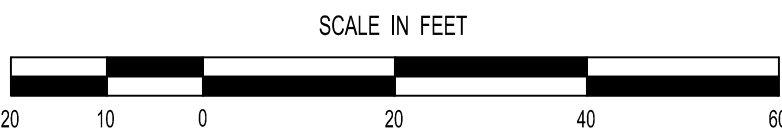
- ALL FILL MATERIAL IS TO BE IN PLACE AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
- ALL SEWER UTILITY WORK SHALL BE DONE TO THE CITY OF LEE'S SUMMIT STANDARDS AND SPECIFICATIONS. ALL WATER UTILITY WORK SHALL BE DONE TO LEE'S SUMMIT WATER UTILITIES STANDARDS AND SPECIFICATIONS. ALL ELECTRICAL 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.
- 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.
- SANITARY SEWER PIPE SHALL BE AS FOLLOWS:
  - 6" PVC SCHEDULE 40
- 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'
  - 8" PUBLIC WATER MAIN
    - 8" C900 DR 18
- MINIMUM TRENCH WIDTH SHALL BE 2 FEET.
- 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.
- 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 PIPE).
- CONTRACTOR SHALL MAINTAIN A MINIMUM OF 4'-0" COVER ON ALL WATER LINES.
- 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).
- ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH AT 3000 P.S.I. REFER TO ARCHITECTURAL AND MEP DRAWINGS FOR EXACT BUILDING TIE-IN LOCATIONS OF ALL UTILITIES.
- CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE SPECIFICATIONS OF THE LOCAL AUTHORITIES WITH REGARDS TO MATERIALS AND INSTALLATION OF THE WATER AND SEWER LINES.
- 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.
- 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.
- CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS.
- REFER TO BUILDING PLANS FOR SITE LIGHTING ELECTRICAL PLAN.
- CONTRACTOR SHALL COORDINATE WITH THE CITY OF LEE'S SUMMIT PUBLIC WORKS FOR TIE-IN LOCATIONS TO PUBLIC UTILITIES PRIOR TO COMMENCEMENT OF WORK.
- 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.
- TOPOGRAPHIC INFORMATION IS TAKEN FROM A TOPOGRAPHIC SURVEY BY MCLURE 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.

### LEGEND

- PROPERTY LINE
- DOMESTIC WATER LINE
- WATER MAIN



## OFFSITE UTILITY PLAN



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

REVISION	BY
12/19/2024 REVISED PER CITY	KRG

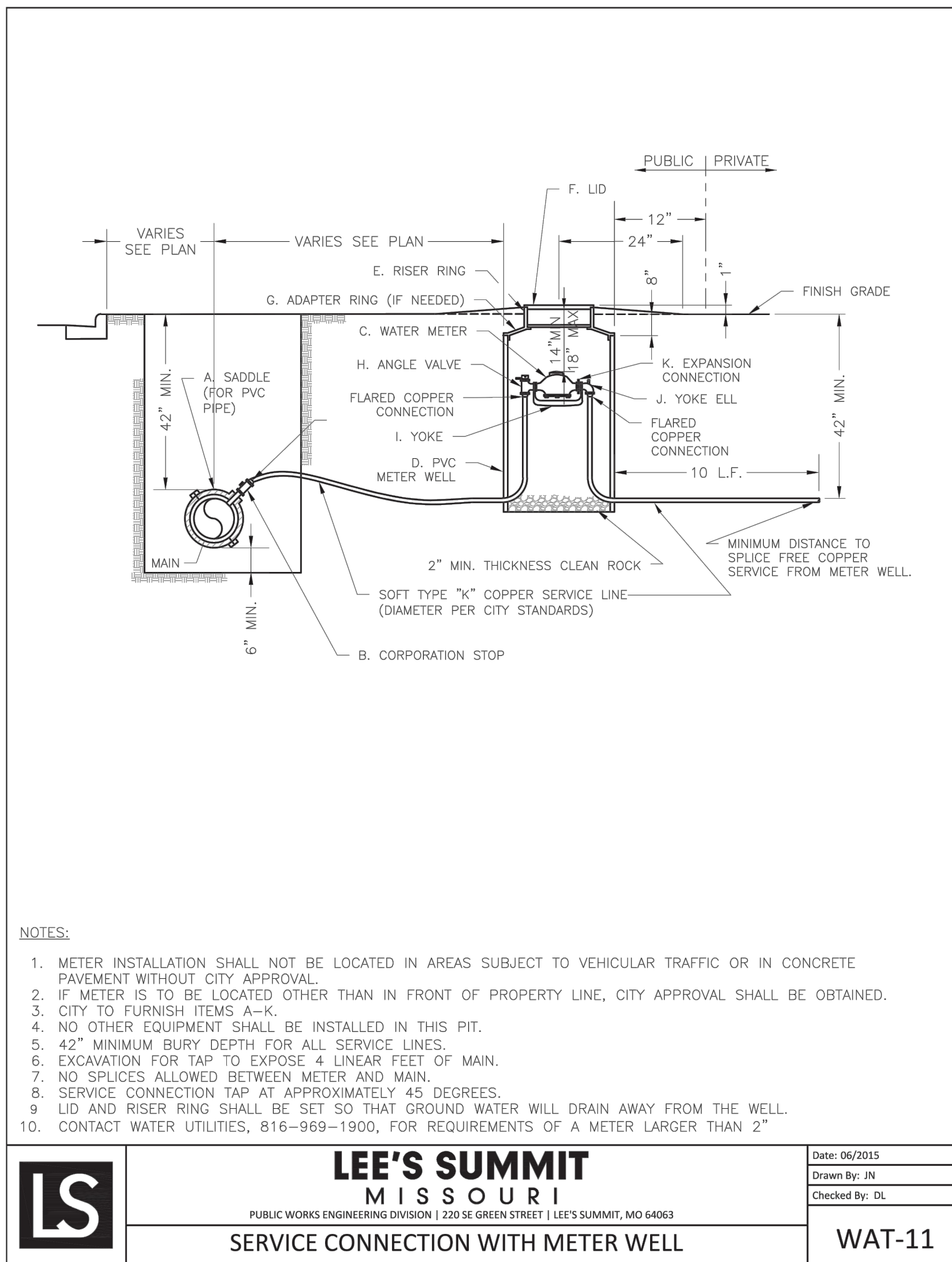
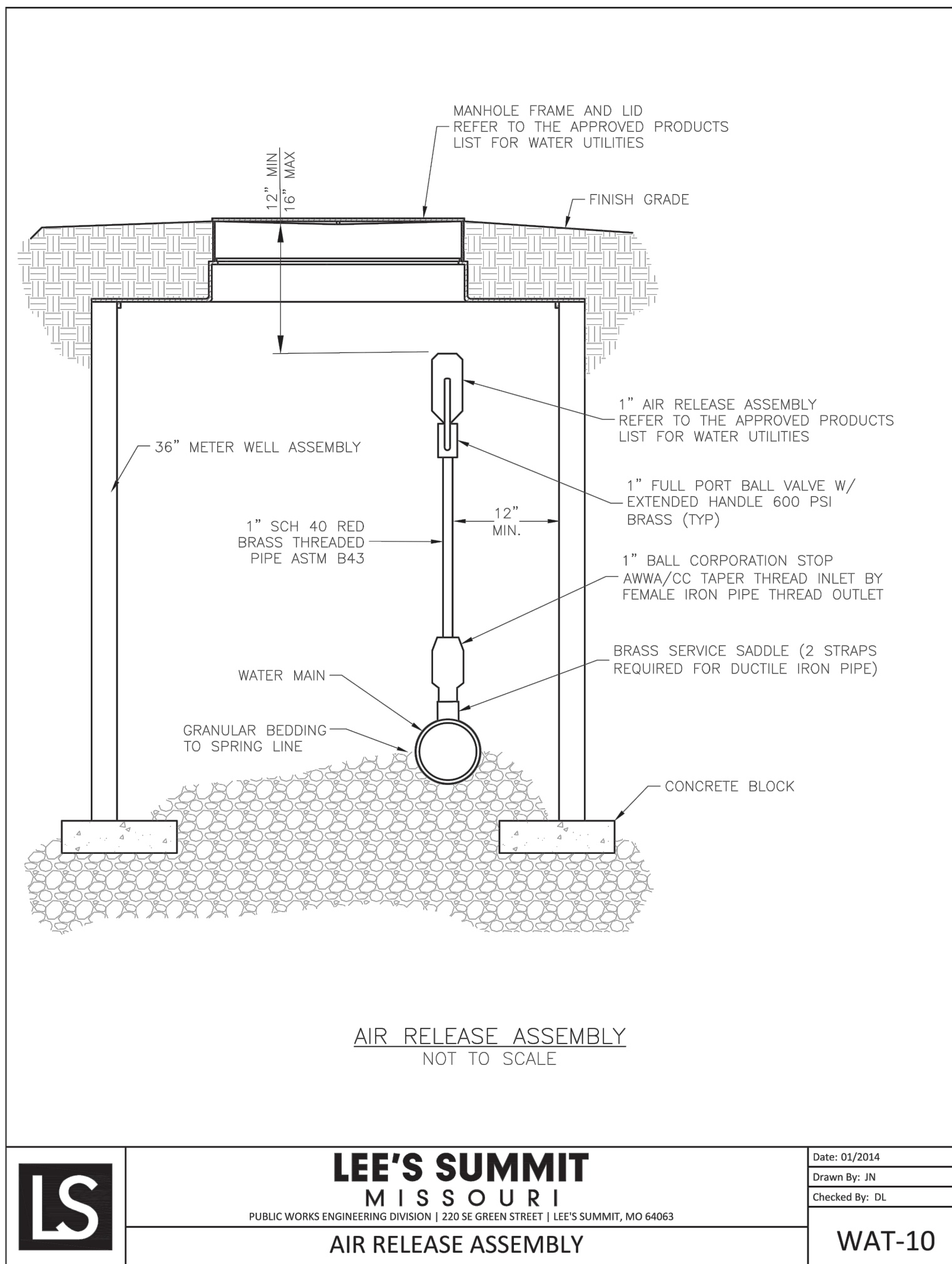
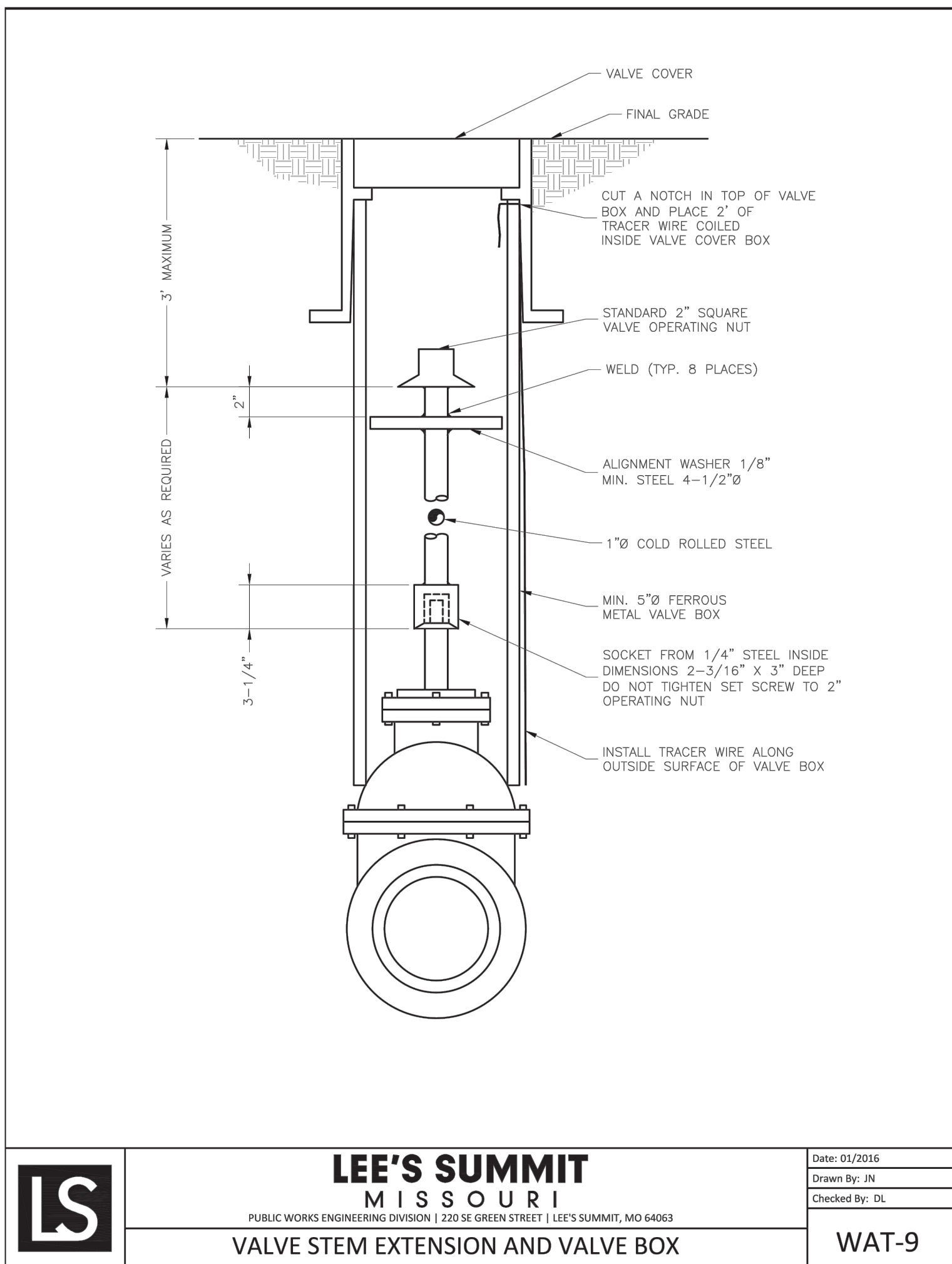
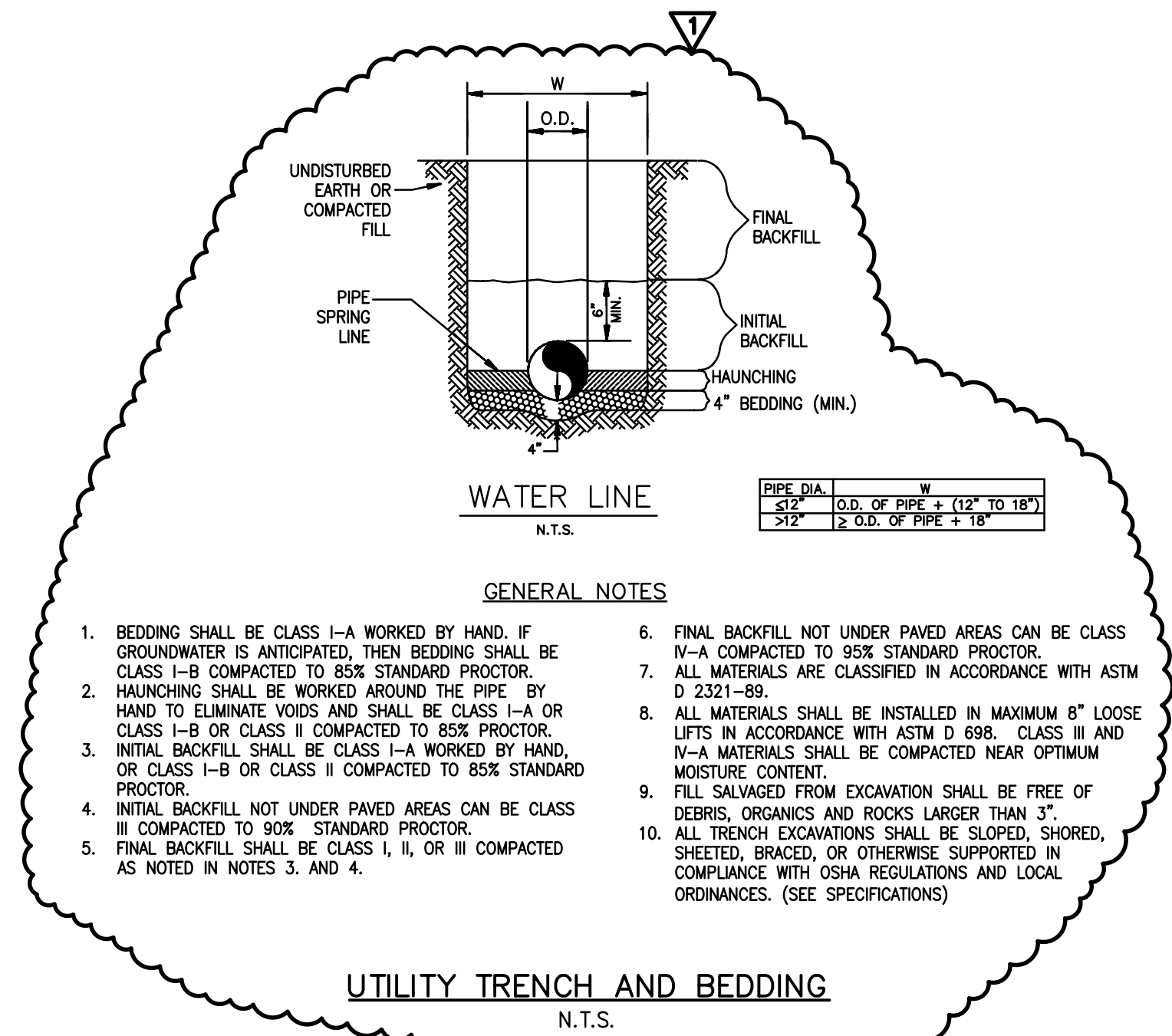
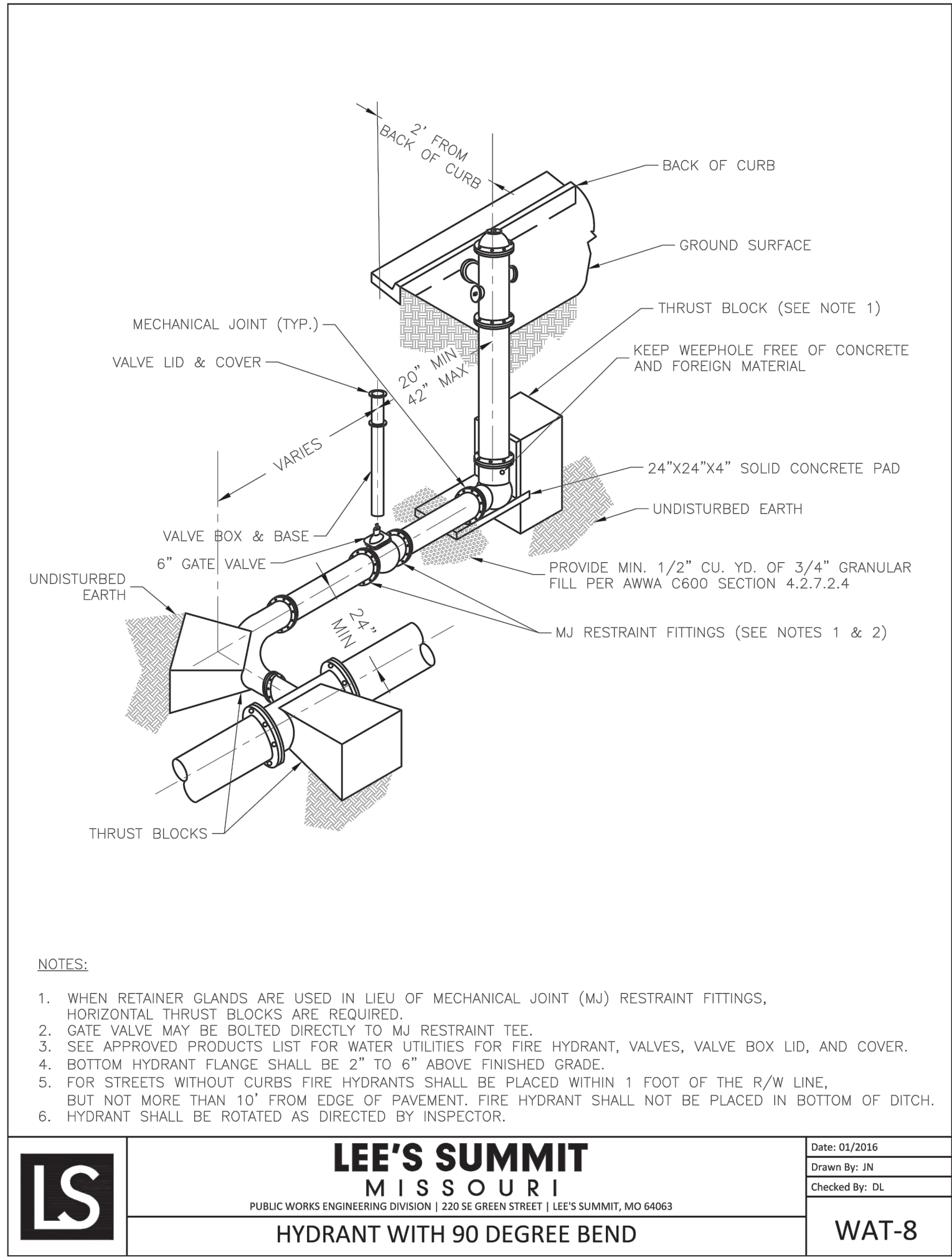
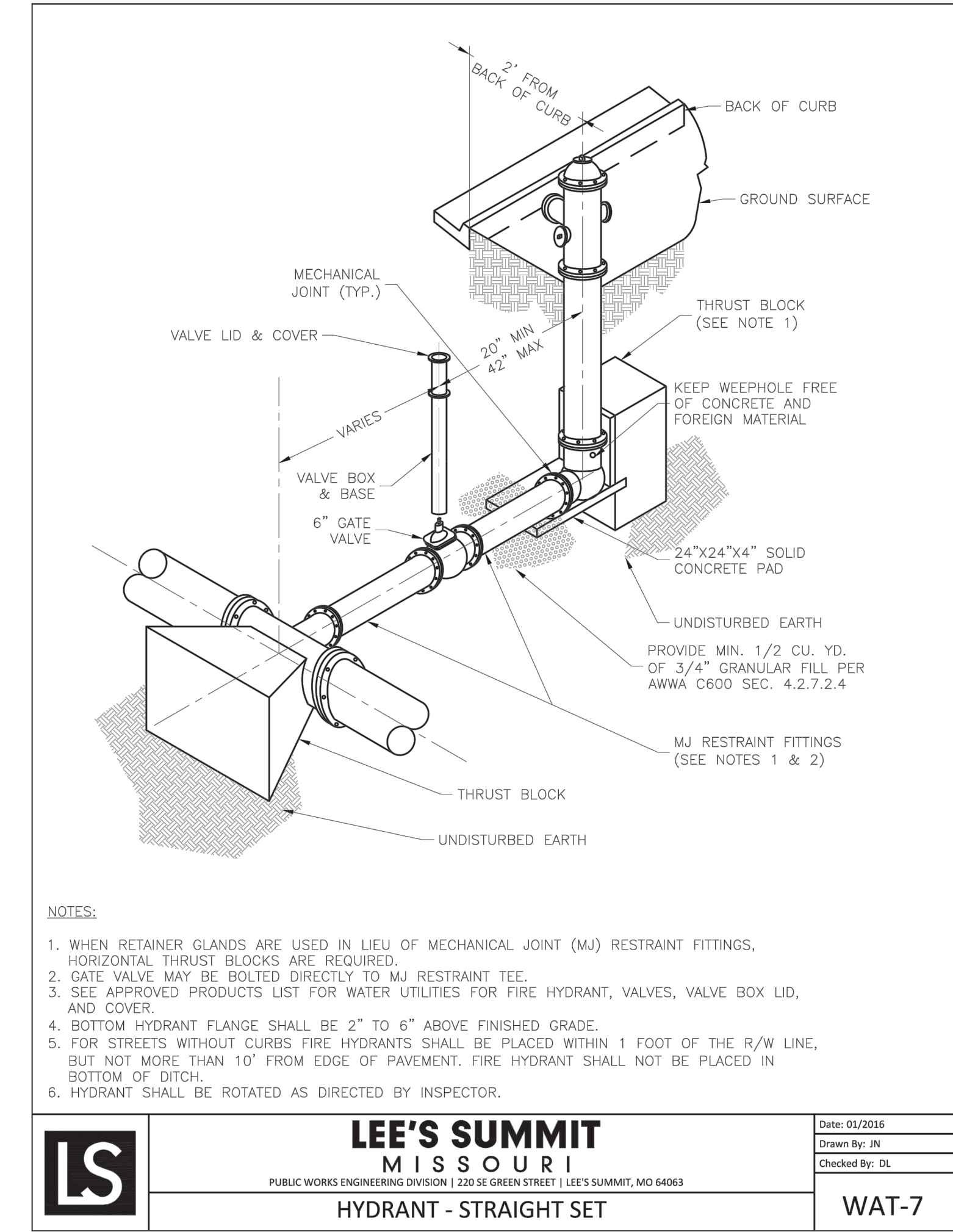
**HIGH TIDE CONSULTANTS LLC**  
434 N. COLUMBIA ST, SUITE 200A  
COVINGTON, LA 70433  
www.hightidela.com

**DECEMBER 19, 2024**  
DATE  
B. SHANE GUN  
NUMBER  
202100076  
PROFESSIONAL ENGINEER  
STATE OF MISSOURI  
SIGNATURE  
STAMP

**PUBLIC WATER MAIN EXTENSION FOR TAKE 5 OIL CHANGE**  
LEE'S SUMMIT, MISSOURI  
FOR DRIVEN ASSETS, LLC  
2101 PEARL STREET  
BOULDER, CO 80302

DRAWN  
KRG  
CHECKED  
RCG  
ISSUED DATE  
11/XX/22  
ISSUED FOR  
PERMITTING  
PROJECT NO.  
22-218  
FILE  
22-218 C-5 Offsite Utility Plan  
SHEET  
**C-4.1**





## OFFSITE WATER DETAILS

REVISION	BY
12/19/2024 REVISED PER CITY	KRG

**HIGH TIDE**  
CONSULTANTS LLC  
434 N. COLUMBIA ST, SUITE 200A  
COVINGTON, LA 70433  
www.hightidela.com

DECEMBER 19, 2024  
DATE

STAMP

STATE OF MISSOURI  
B. SHANE  
GUN  
NUMBER  
PE - 202100076  
ENGINEER  
PROFESSIONAL

PUBLIC WATER MAIN EXTENSION FOR TAKE 5 OIL CHANGE  
LEE'S SUMMIT, MISSOURI

FOR DRIVEN ASSETS, LLC  
2101 PEARL STREET  
BOULDER, CO 80302

DRAWN  
KRG

CHECKED  
RCG

ISSUED DATE  
11/0X/22

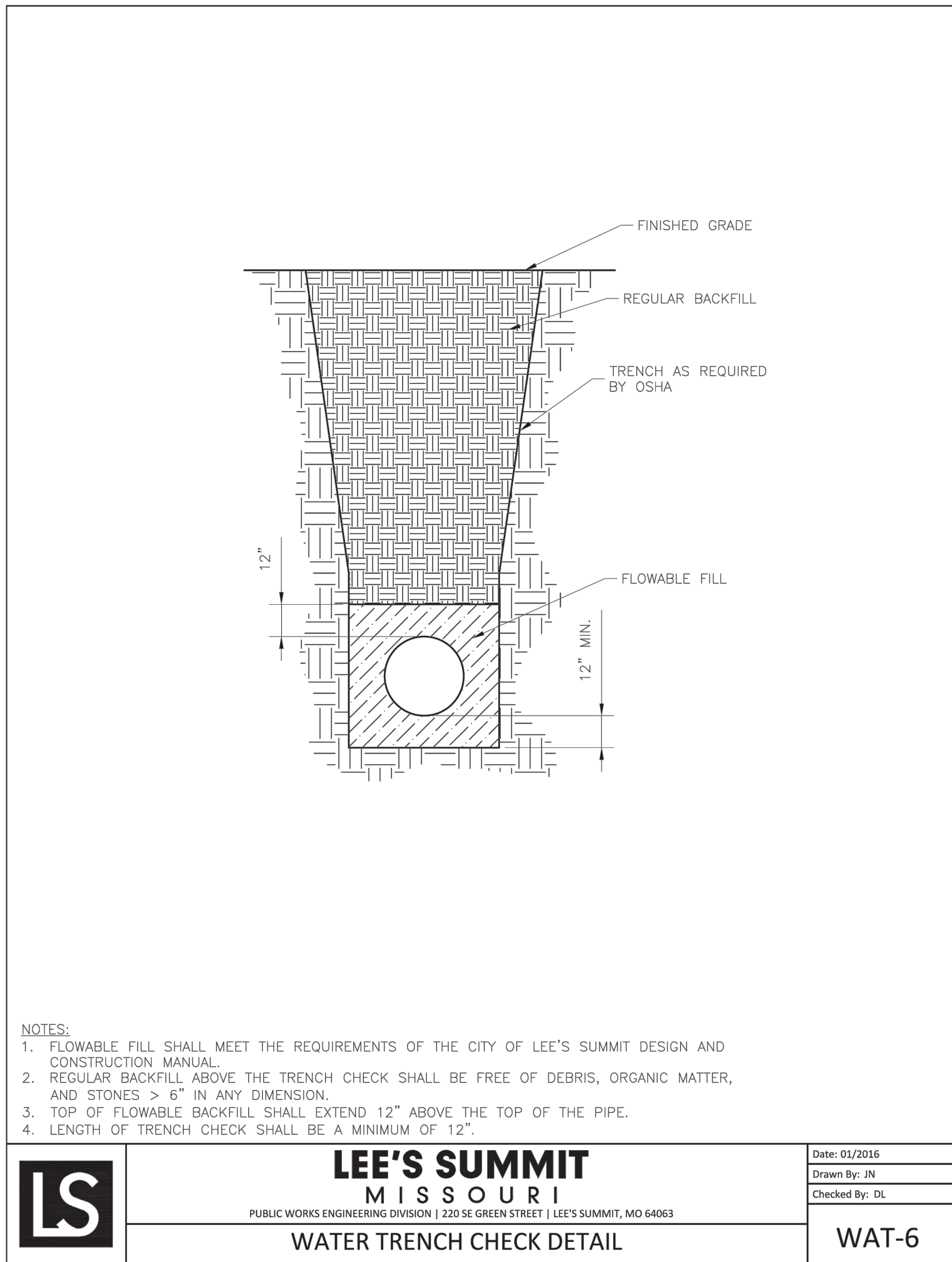
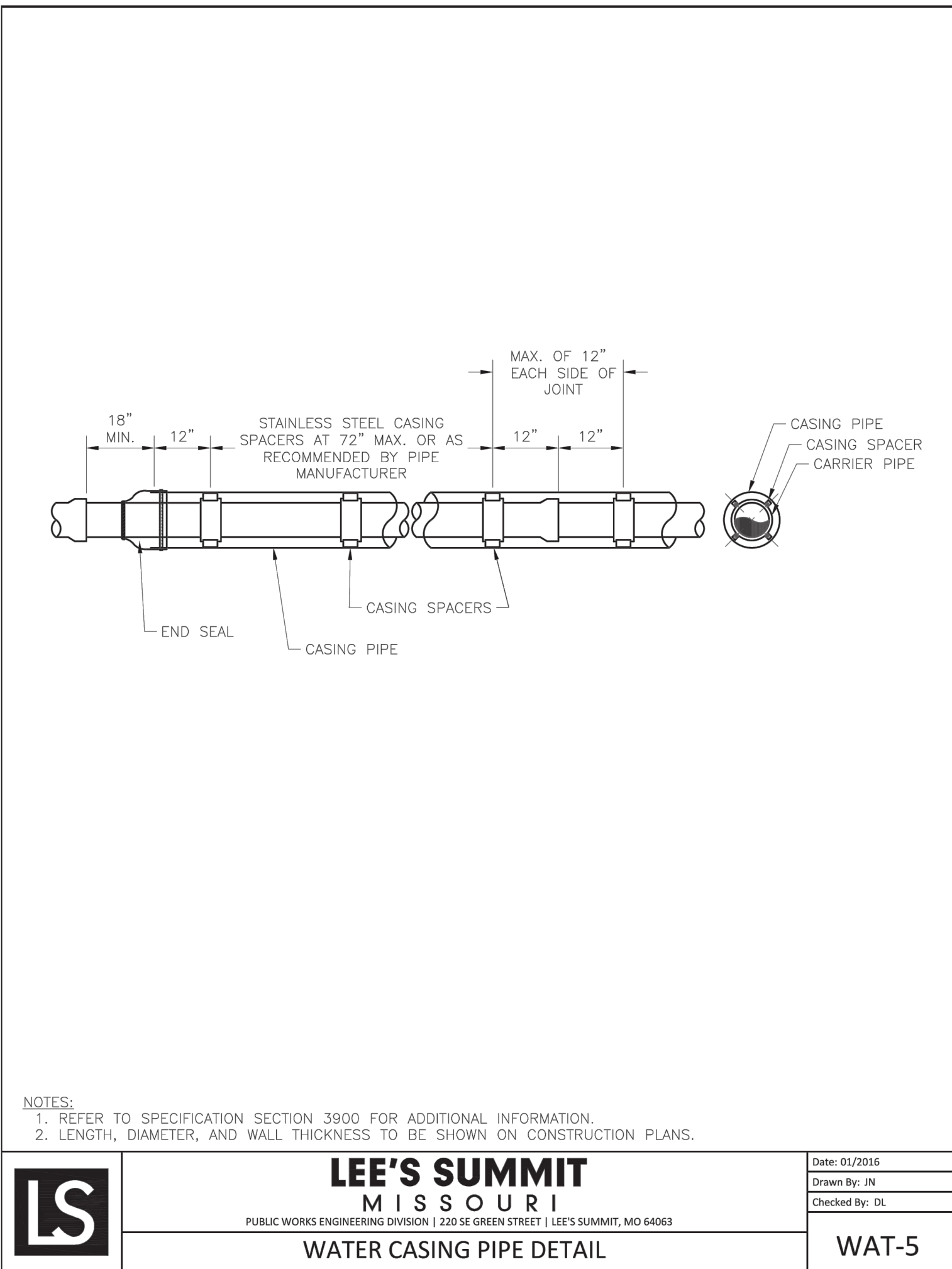
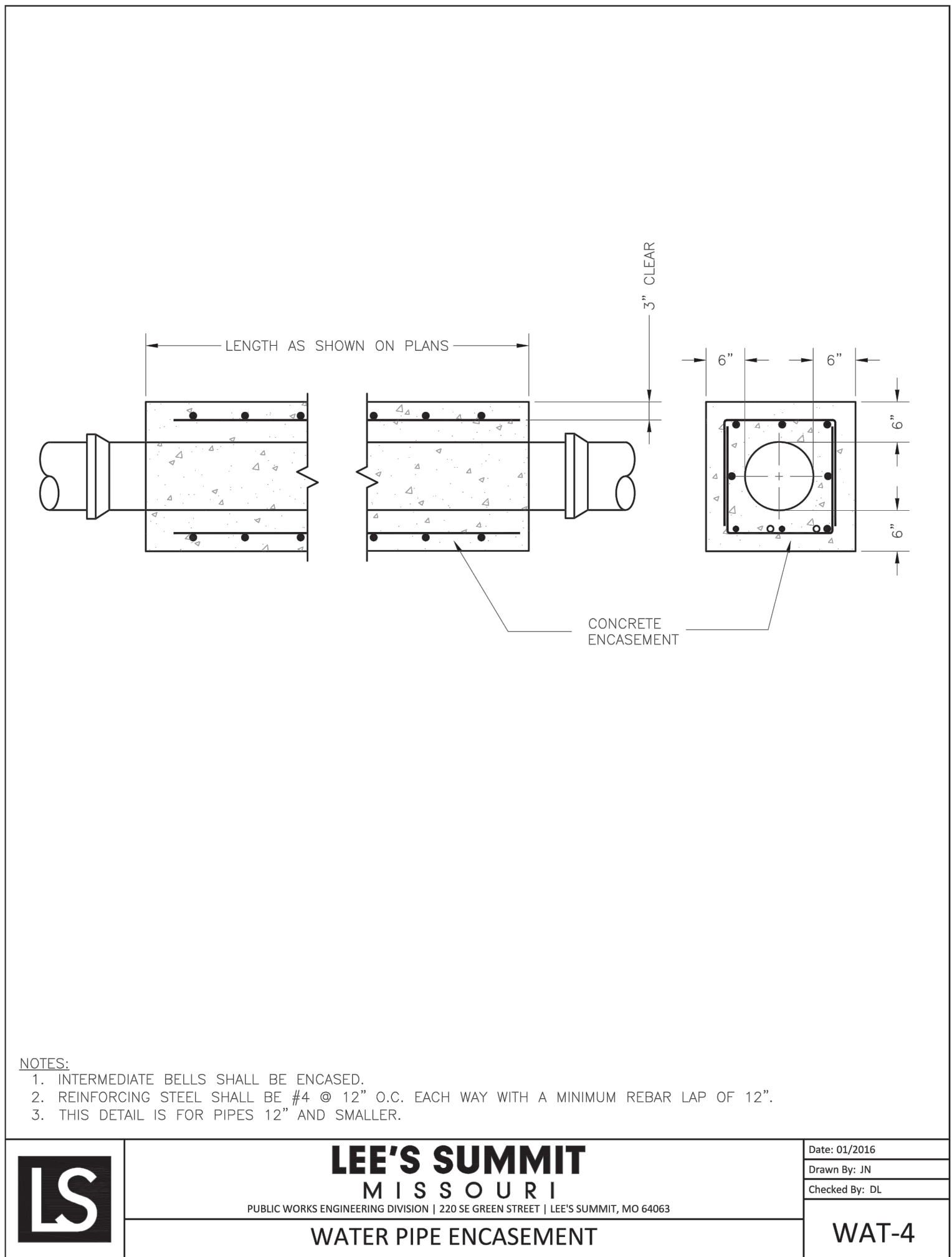
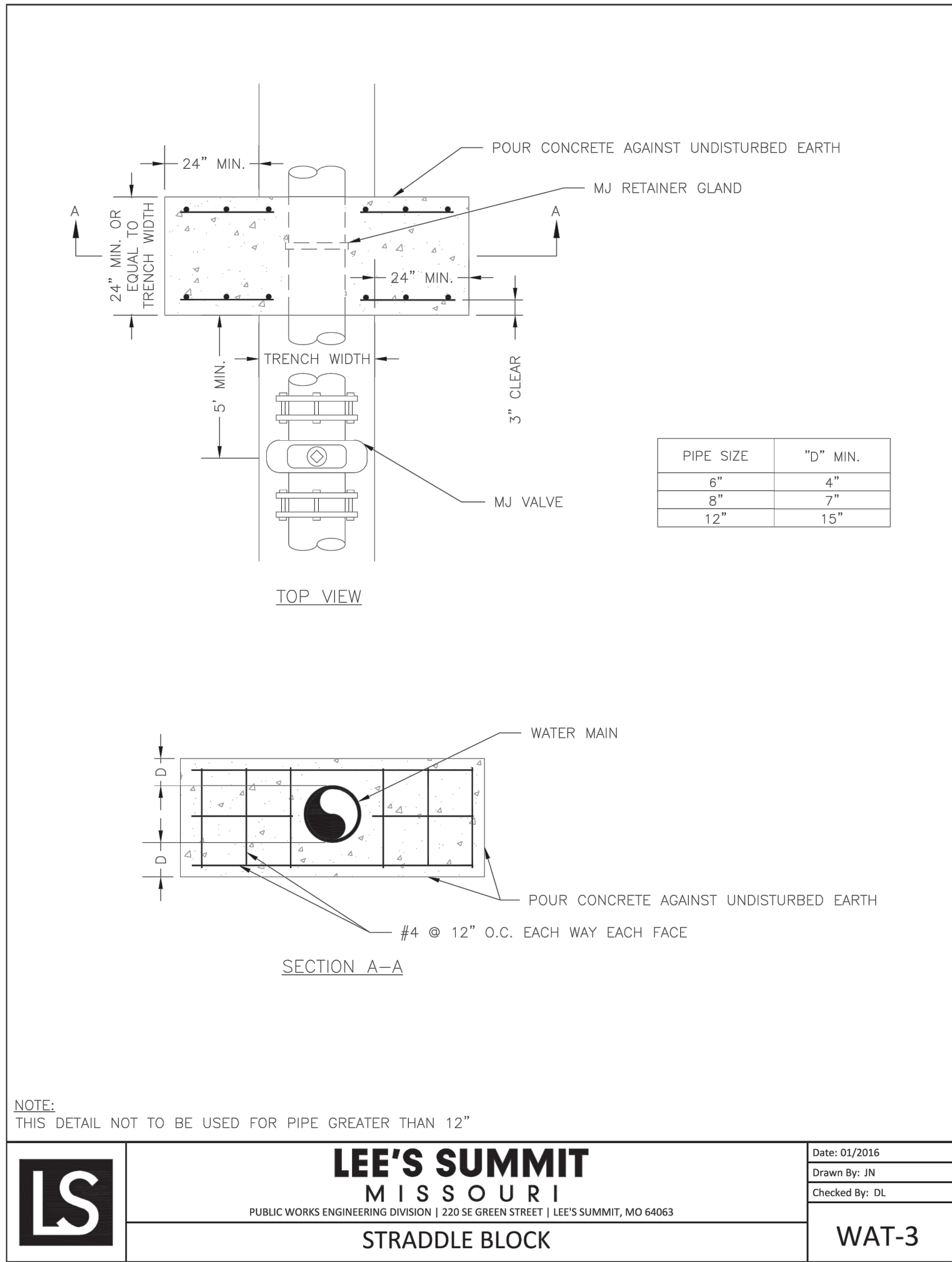
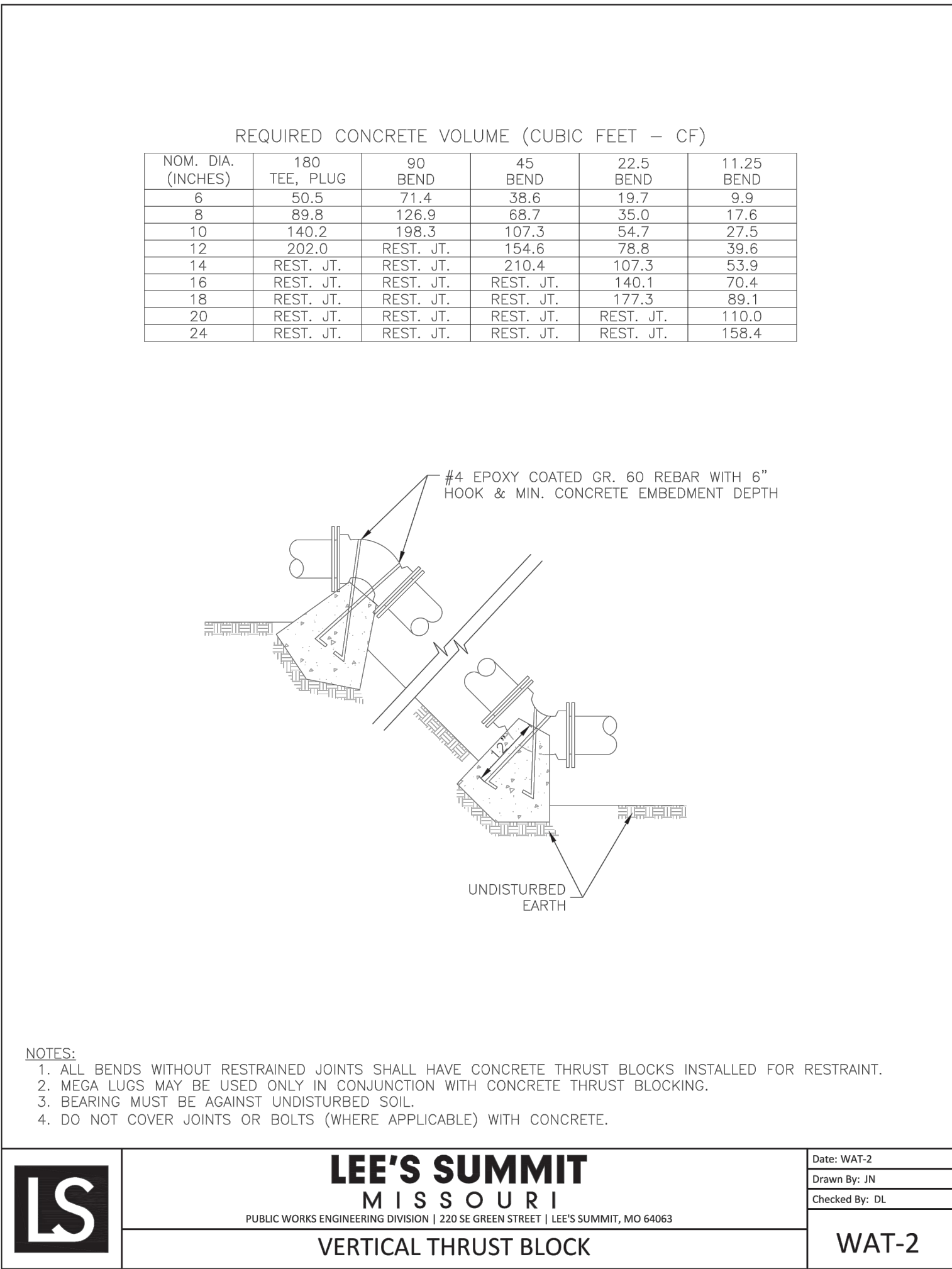
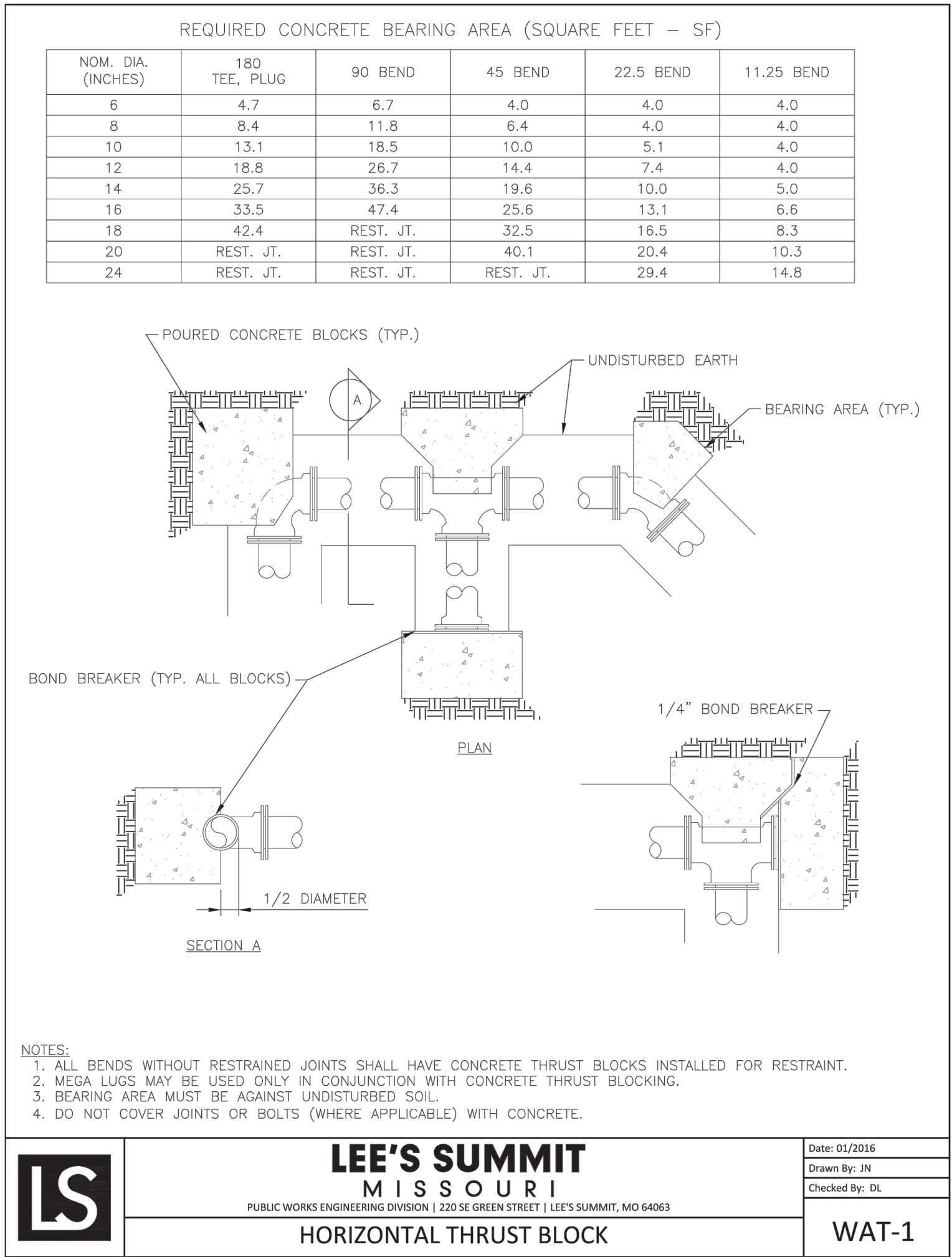
ISSUED FOR  
PERMITTING

PROJECT NO.  
22-218

FILE  
22-218 C-5 Offsite Utility Plan

SHEET  
C-4.2







## OFFSITE WATER DETAILS

REVISION	BY

**HIGH TIDE**  
**CONSULTANTS LLC**  
434 N. COLUMBIA ST, SUITE 200A  
COVINGTON, LA 70433  
[www.hightidela.com](http://www.hightidela.com)

  
SIGNATURE

OCTOBER 24, 2024  
DATE

  
B. SHANE GUIN  
NUMBER  
202100076  
STATE OF MISSOURI  
PROFESSIONAL ENGINEER

STAMP

PROPOSED TAKE 5  
LEE'S SUMMIT, MISSOURI

FOR DRIVEN ASSETS, LLC  
2101 PEARL STREET  
BOULDER, CO 80302

DRAWN  
KRG

CHECKED  
RCG

ISSUED DATE  
11/XX/22

ISSUED FOR  
PERMITTING

PROJECT NO.  
22-218

FILE  
22-218 C-5 Offsite Utility Plan