WATER LINE 1 PLAN & PROFILE

WATER LINE 2 PLAN & PROFILE

WATER LINES 3 & 4 PLAN & PROFILE

PL2022324

INDEX

COVER SHEET

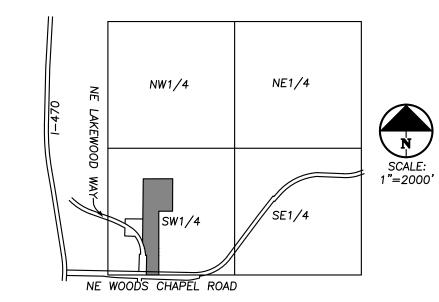
GENERAL LAYOUT

6 WATER LINE DETAILS

CRECKER CERTIFIC CERTIFIC CENGINEE CERTIFIC MISSOURIE CAND SI

SHEET

ORCHARD WOODS



SEC. 9-48-31

2' CURB & GUTTER

UTILITY COMPANIES:

3025 SOUTHEAST CLOVER DRIVE

LUCAS WALLS (LUCAS.WALLS@SUG.COM)

PHILLIP INGRAM (PHILLIP.INGRAM@KCPL.COM) RON DEJARNETTE (RON.DEJARNETTE@KCPL.COM)

STORM SEWER (PUBLIC WORKS DEPARTMENT)

SANITARY SEWER & WATER (WATER UTILITIES DEPT.) (816)-969-1900

MISSOURI GAS ENERGY

LEE'S SUMMIT, MO 64082

1300 HAMBLEN ROAD LEE'S SUMMIT, MO 64081

220 SE GREEN STREET LEE'S SUMMIT, MO 64063

1200 SE HAMBLEM ROAD.

IN THE CITY OF LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

GENERAL NOTES:

- ALL CONSTRUCTION TO FOLLOW THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813.
- ALL WORKMANSHIP AND MATERIALS SHALL BE SUBJECT TO THE INSPECTION AND APPROVAL OF THE ENGINEERING DEPARTMENT OF THE CITY OF LEE'S SUMMIT, MISSOURI.
- LINEAL FOOT MEASUREMENTS SHOWN ON THE PLANS ARE HORIZONTAL MEASUREMENTS, NOT SLOPE MEASUREMENTS. ALL PAYMENTS SHALL BE MADE ON HORIZONTAL MEASUREMENTS.
- NO GEOLOGICAL INVESTIGATION HAS BEEN PERFORMED ON THE SITE. THE UTILITY LOCATIONS SHOWN ON THESE PLANS ARE TAKEN FROM UTILITY COMPANY RECORDS AND
- ASSEMBLY OF THE STATE OF MISSOURI. THE BILL REQUIRES THAT ANY PERSON OR FIRM DOING EXCAVATION ON PUBLIC RIGHT OF WAY DO SO ONLY AFTER GIVING NOTICE TO, AND OBTAINING INFORMATION FROM, UTILITY COMPANIES. STATE LAW REQUIRES 48 HOURS ADVANCE NOTICE. THE CONTRACTOR MAY ALSO UTILIZE THE FOLLOWING TOLL FREE PHONE NUMBER PROVIDED BY "MISSOURI ONE CALL SYSTEM, INC.": 1-800-DIG-RITE. THIS PHONE NUMBER IS APPLICABLE ANYWHERE WITHIN THE STATE OF MISSOURI. PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL NOTIFY ALL THOSE COMPANIES
- WHICH HAVE FACILITIES IN THE NEAR VICINITY OF THE CONSTRUCTION TO BE PERFORMED. PRIOR TO ORDERING PRECAST STRUCTURES, SHOP DRAWING SHALL BE SUBMITTED TO THE DESIGN
- THE CONTRACTOR SHALL PROTECT ALL MAJOR TREES FROM DAMAGE. NO TREE SHALL BE REMOVED WITHOUT PERMISSION OF THE OWNER, UNLESS SHOWN OTHERWISE
- CLEARING AND GRUBBING OPERATIONS AND DISPOSAL OF ALL DEBRIS THEREFROM SHALL BE PERFORMED
- BY THE CONTRACTOR IN STRICT ACCORDANCE WITH ALL LOCAL CODES AND ORDINANCES. ALL WASTE MATERIAL RESULTING FROM THE PROJECT SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR, OR AS DIRECTED BY THE OWNER AT NO ADDITIONAL COST
- ALL EXCAVATIONS SHALL BE UNCLASSIFIED. NO SEPARATE PAYMENT WILL BE MADE FOR ROCK
- 12. THE CONTRACTOR SHALL CONTROL THE EROSION AND SILTATION DURING ALL PHASED OF CONSTRUCTION AND SHALL KEEP THE STREETS CLEAN OF MUD AND DEBRIS.
- 13. THE CONTRACTOR SHALL CONTACT THE CITY'S DEVELOPMENT SERVICES ENGINEERING INSPECTION TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH A FIELD ENGINEERING INSPECTOR PRIOR TO ANY LAND DISTURBANCE WORK AT (816) 969-1200
- THE CONTRACTOR SHALL CONTACT THE RIGHT OF WAY INSPECTOR AT 816-969-1800 PRIOR TO ANY LAND DISTURBANCE ACTIVITIES WITHIN THE RIGHT OF WAY. THESE ACTIVITIES MAY REQUIRE A PERMIT. 15. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL TRAFFIC HANDLING MEASURES NECESSARY TO ENSURE THAT THE GENERAL PUBLIC IS PROTECTED AT ALL TIMES. TRAFFIC CONTROL SHALL CONFORM TO
- THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD-LATEST EDITION). 16. ALL SANITARY SEWER LATERALS SHALL HAVE A TRENCH CHECK, CONSISTING OF FLOWABLE BACKFILL, INSTALLED DURING CONSTRUCTION. TRENCH CHECK SHALL EXTEND TO BOTTOM OF TRENCH, TO WIDTH OF TRENCH, TO 12 INCHES ABOVE PIPE, FOR A MINIMUM LENGTH OF 12 INCHES. TRENCH CHECK SHALL BE LOCATED AT LEAST 5 FEET FROM SANITARY MAIN.

EARTHWORK:

- PRIOR TO EARTHWORK ACTIVITIES, PRE-DISTURBANCE EROSION AND SEDIMENT CONTROL DEVICES SHALL BE IN PLACE PER THE STORM WATER POLLUTION PREVENTION PLAN AND/OR THE EROSION AND SEDIMENT CONTROL PLAN PREPARED FOR THIS SITE.
- ALL BACKFILL MATERIAL SHALL BE PLACED IN MAXIMUM 6-INCH LIFTS AND COMPACTED TO 95-PERCENT OF MAXIMUM DENSITY AS DEFINED USING A STANDARD PROCTOR TEST (AASHTO T99/ASTM 698).
- BACKFILL MATERIALS SHALL NOT INCLUDE ORGANIC MATTER, DEBRIS OR TOPSOIL
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REDISTRIBUTING THE TOPSOIL OVER PROPOSED TURF AND LANDSCAPED AREAS TO A MINIMUM DEPTH OF 6-INCHES BELOW FINAL GRADE.
- ALL AREAS SHALL BE GRADED FOR POSITIVE DRAINAGE. UNLESS NOTED OTHERWISE THE FOLLOWING GRADES SHALL APPLY:
- A. TURF AREAS 2.5% MINIMUM, 4H:1V MAXIMUM
- ALL DISTURBED AREAS SHALL BE FERTILIZED, SEEDED AND MULCHED IMMEDIATELY AFTER EXCAVATION ACTIVITIES HAVE CEASED. SEEDING SHALL BE PER THE EROSION AND SEDIMENT CONTROL PLAN AND/OR LANDSCAPE PLAN. IF NOT SPECIFIED SEEDING SHALL BE PER APWA SECTION 2400, LATEST EDITION. UNLESS
- POLLUTION PREVENTION PLAN (SWPPP) PREPARED FOR THIS PROJECT. EROSION AND SEDIMENT CONTROL DEVICES SHALL BE PROPERLY MAINTAINED AND KEPT CLEAN OF SILT AND DEBRIS AND IN GOOD WORKING ORDER. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AS REQUIRED

UTILITIES:

- EXISTING UTILITIES HAVE BEEN SHOWN TO THE GREATEST EXTENT POSSIBLE BASED UPON INFORMATION PROVIDED TO THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE RESPECTIVE UTILITY COMPANIES AND FIELD LOCATING UTILITIES PRIOR TO CONSTRUCTION AND IDENTIFYING ANY ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ANY REQUIRED UTILITY RELOCATIONS. UTILITIES DAMAGED THROUGH THE NEGLIGENCE OF THE CONTRACTOR SHALL BE REPAIRED AT THE
- CONTRACTOR SHALL VERIFY FLOW-LINES AND STRUCTURE TOPS PRIOR TO CONSTRUCTION, AND SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES. PROVIDE SHOP DRAWINGS FOR ALL PRECAST AND MANUFACTURED UTILITY STRUCTURES FOR REVIEW BY THE ENGINEER PRIOR TO CONSTRUCTION OF THE
- UTILITY SEPARATION: WATERLINES SHALL HAVE A MINIMUM OF 10 FEET HORIZONTAL AND 2 FEET VERTICAL SEPARATION FROM ALL SANITARY AND STORM SEWER LINES. IF MINIMUM SEPARATIONS CAN NOT BE OBTAINED, DUCTILE IRON PIPE, DIP, SHALL BE REQUIRED 10 FEET IN EACH DIRECTION OF THE CONFLICT ON
- 5. PAYMENT FOR TRENCHING, BACKFILLING, PIPE EMBEDMENT, FLOWABLE FILL, BACKFILL MATERIALS, CLEAN UP, SEEDING, SODDING AND ANY OTHER ITEMS NECESSARY FOR THE CONSTRUCTION OF THE UTILITY LINE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE UTILITY INSTALLATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING RESPECTIVE UTILITY COMPANIES 48-HOURS IN ADVANCE FOR THE INSPECTION OF ANY PROPOSED UTILITY MAIN EXTENSION OR SERVICE LINE OR SERVICE CONNECTION TO ANY EXISTING MAIN.
- TRENCH SPOILS SHALL BE NEATLY PLACED ONSITE ADJACENT TO THE TRENCH, AND COMPACTED TO PREVENT SATURATION AND EXCESS SEDIMENT RUNOFF. UNSUITABLE MATERIALS, ROCK AND SHALE, ASPHALT, CONCRETE, TREES, BRUSH ETC. SHALL BE PROPERLY DISPOSED OF OFFSITE. MATERIALS MAY BE WASTED ONSITE AT THE DIRECTION OF THE OWNER OR HIS APPOINTED REPRESENTATIVE.

PREPARED & SUBMITTED BY: PHELPS ENGINEERING, INC. 1270 N. WINCHESTER OLATHE, KS 66061 913-393-1155 OFFICE 913-393-1166 FAX CONTACT: JUDD CLAUSSEN, P.E.

OWNER:

ENTRES DEVELOPMENT, LLC ATTN: DANIEL VILLANUEVA 424 NE BROCKTON DR LEE'S SUMMIT MO, 64064 (310) 760-6205

SUMMARY OF QUANTITIES

PREPARED BY: KSJ CHECKED BY: KAD 1-27-2023

ITEM	DESCRIPTION	QUANTITY	UNITS
1	8" C-900 PVC*	2376	L.F.
2	8"x8"x8" Tee	4	EA.
3	8" Gate Valve	12	EA.
4	Valve Box, Cover, & Lid	12	EA.
5	Tap Ex. 8" Main	1	EA.
6	8" 11.25° Bend W/ Horizontal Thrust Block	12	EA.
7	8" 22.5° Bend W/ Horizontal Thurst Block	1	EA.
8	8" 45° Bend W/ Horizontal Thurst Block	3	EA.
9	8" 90° Bend W/ Horizontal Thurst Block	1	EA.
10	8" 45° Bend W/ Vertical Thurst Block	14	EA.
11	Temporary In-Line Fire Hydrant Assembly	2	EA.
12	Fire Hydrant Assembly	5	EA.
13	Remove Existing 8" Gate Valve & Blow Off Assembly	1	LS.
14	Trench & Backfill Under Pavement	181	L.F.
15	Misc. Fittings	1	LS.

* UNCLASSIFIED TRENCH & TAMPED BACKFILL

RELEASED FOR CONSTRUCTION As Noted on Plan Review

> **Development Services Department** Lee's Summit, Missouri 02/15/2023

BENCHMARKS:

CENTER LINE FRONT FACE OF CURB INLET SOUTHEAST COR. OF INTERSECTION OF NE LAKEWOOD WAY, PRIVATE DRIVE FOR HOPE CHAPEL, AND PRIVATE DRIVE FOR LEE'S SUMMIT WATER TOWER. ELEVATION = 963.96

"+" CUT S.W. CORNER CURB INLET EAST SIDE OF INTERSECTION OF NE SUWANNEE DRIVE & NE PIEDMONT DRIVE ELEVATION=965.22

LEE'S SUMMIT, MO 64081 AT&T (913) 383-4929 MR. CLAYTON ANSPAUGH (CA4089@ATT.COM) 9444 NALL AVENUE OVERLAND PARK, KANSAS 66207

VISUAL INDICATIONS OF UTILITIES ARE AS SHOWN. UNDERGROUND LOCATIONS SHOWN, AS FURNISHED BY THEIR LESSORS, ARE APPROXIMATE AND SHOULD BE VERIFIED IN THE FIELD AT THE TIME OF CONSTRUCTION. FOR ACTUAL FIELD LOCATIONS OF UNDERGROUND UTILITIES CALL 811.

(816) 969-2218

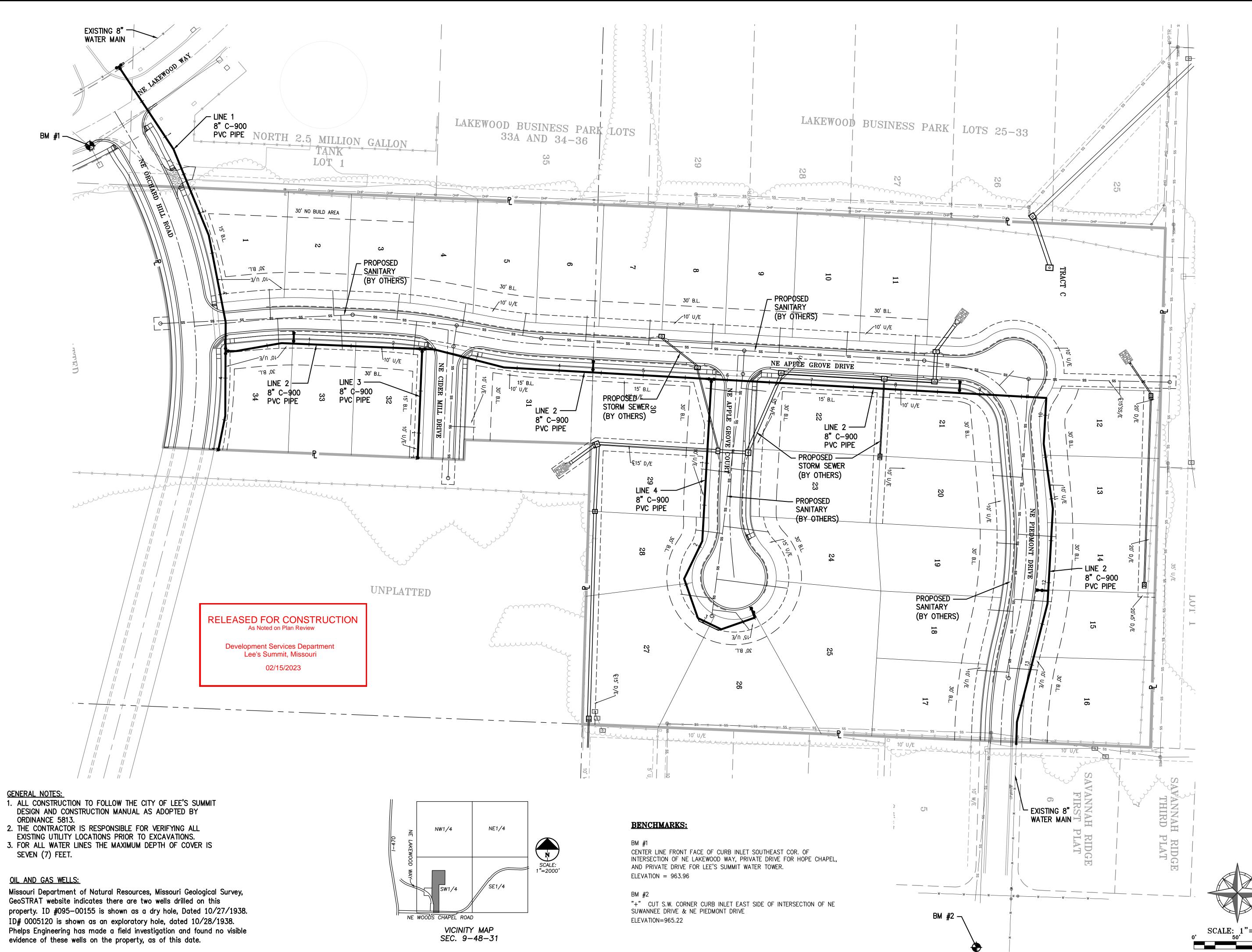
(816) 347-4339

(816) 347-4316

(816) 969-1800

(913) 383-4849-FAX

Know what's **below**. Call before you dig.



DOUGLAS EUGENE UBBEN, JR. NUMBER PE-2011010998 O1/30/2023

PHELPS ENGINEERING, INC 1270 N. Winchester Olathe, Kansas 66061 (913) 393-1155 Fax (913) 303-1166

PLANNING ENGINEERING IMPLEMENTATION

PLANNIN

GENERAL LAYOUT

ORCHARD WOODS
F'S SUMMIT JACKSON COUNTY ME

PROJECT NO.

DATE: 11-14-202

SHEET 2

WATER LINE "1"

SCALE: 1"=50' HORIZ. 1"=10' VERT.

 PROJECT NO.
 211142
 No.
 Date

 DATE: 11-14-2022 | DRAWN:KSJ
 1
 12/15/22

 CHECKED: DEU | APPROVED: DEU | 2
 01/18/23

 CERTIFICATE OF AUTHORIZATION KANSAS LAND SIRVEYING - LS-82 ENGINEERING - E-391
 1

SHEET 3

STA. 3+33.64, WATER LINE 1
NISTALL 5* 11.25* BEND
NHORIZONTAL TRRUST BLOCK
N=1026147, 3588

STA. 4+85.88, WATER LINE 1
NISTALL 5* 11.25* BEND
NHORIZONTAL TRRUST BLOCK
N=1026147, 3588

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NHORIZONTAL TRRUST BLOCK
N=1026147, 3588

STA. 3+33.64* On WATER LINE 1
NISTALL 5* 11.25* BEND
NHORIZONTAL TRRUST BLOCK
N=1026147, 3588

STA. 3+67.90* WATER LINE 1
NISTALL 5* 11.25* BEND
NHORIZONTAL TRRUST BLOCK
N=2831467, 3907

STA. 4+85.88, WATER LINE 1
NISTALL 5* 11.25* BEND
NHORIZONTAL TRRUST BLOCK
N=2831467, 3907

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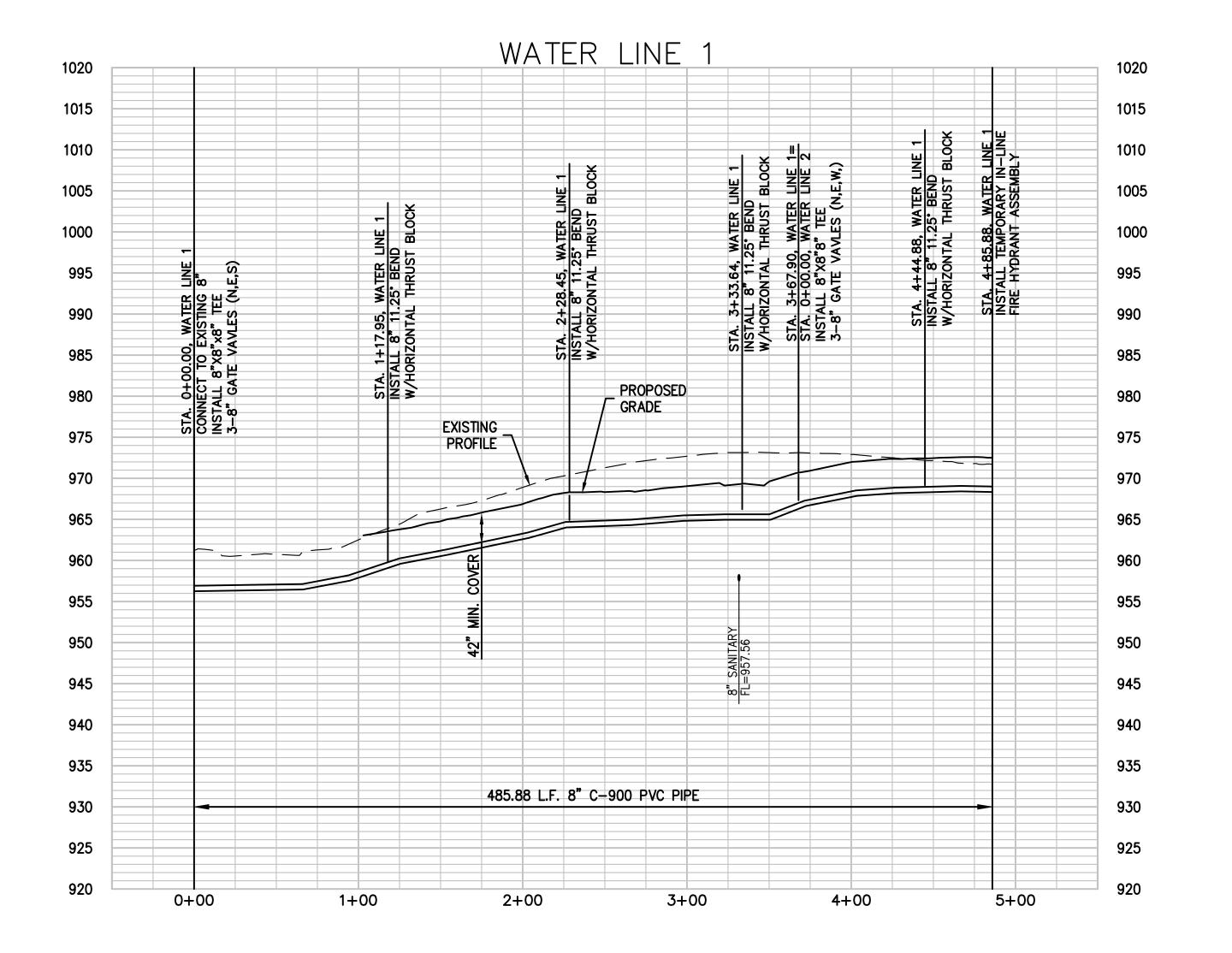
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NHORIZONTAL TRRUST BLO





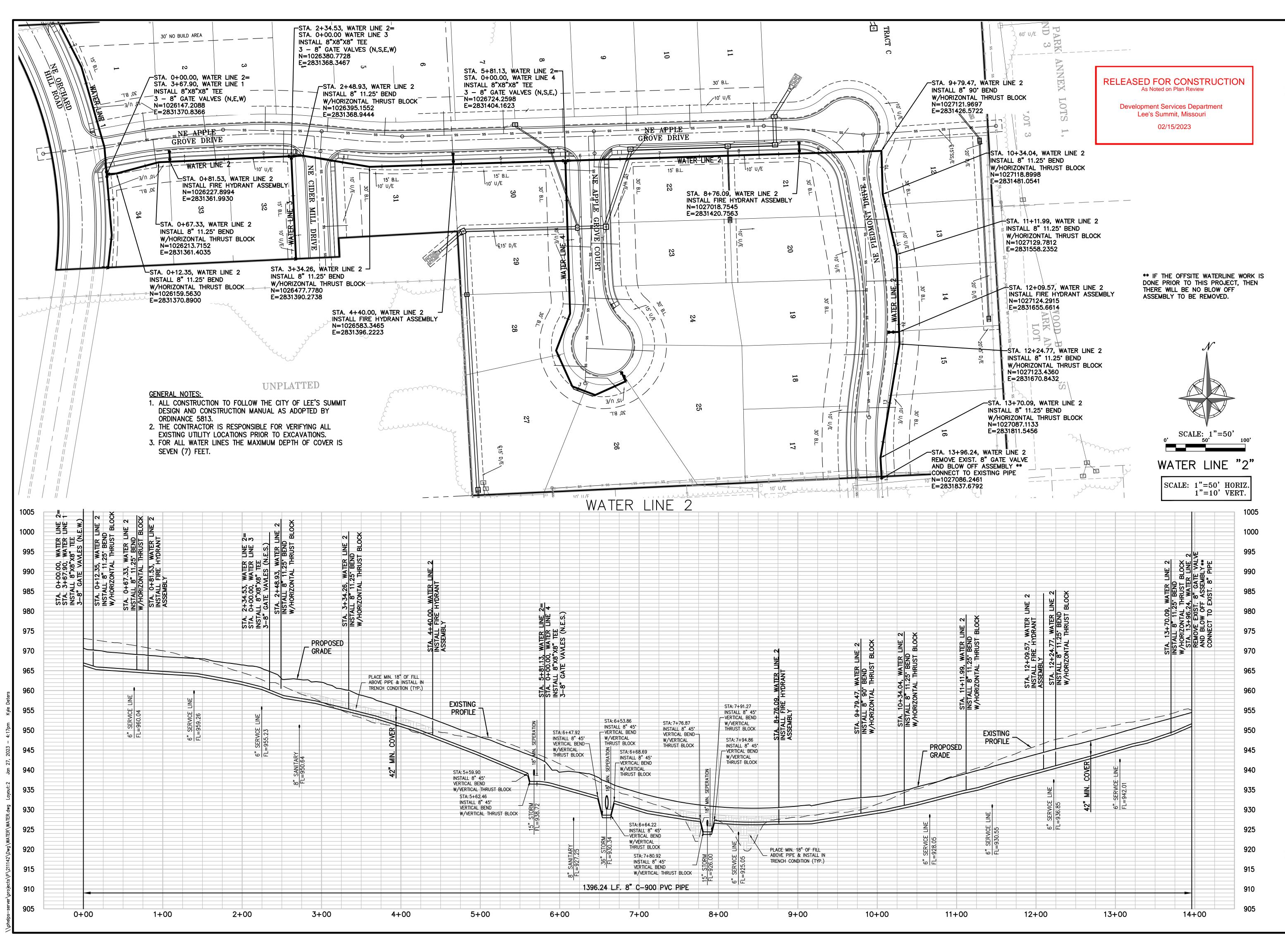
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- SEVEN (7) FEET.

RELEASED FOR CONSTRUCTION
As Noted on Plan Review

Development Services Department Lee's Summit, Missouri 02/15/2023



DOUGLAS EUGENE UBBEN, JR.
NUMBER PE-2011010998
01/30/2023

PHELPS ENGINEERING, INC.
1270 N. Winchester
Olathe, Kansas 66061
(913) 393-1155
Fax (913) 393-1166
www.bhelpsengineering.com

PLANNING ENGINEERING IMPLEMENTA

/ISSOURI

WATERLINE PLAN & PROFILION ORCHARD WOODS LEE'S SUMMIT. JACKSON COUNTY, MIS

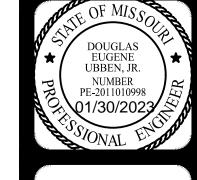
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 Date
 Revisions:
 By App.

 1
 12/15/22
 REVISED PER CITY COMMENTS
 KSJ DEU

 2
 01/18/23
 REVISED PER CITY COMMENTS
 JMO DEU

KÄNSAS LAND SLRVETING – LS–82 ENGINEERING – E–391 CERTIFICATE OF AUTHORIZATION MISSOURI LAND SLRVETING–2007001128 ENGINEERING–2007005058

SHEET 4



PHELPS ENGINEEKING, INC 1270 N. Winchester Olathe, Kansas 66061 (913) 393-1155 Fax (913) 393-1166

PLANNING ENGINEERING IMPLEMENTATION

PLANN

JFILE , MISSOURI

WATERLINE PLAN & PROFILE ORCHARD WOODS

Revisions:

REVISED PER CITY COMMENTS
KSJ DE
REVISED PER CITY COMMENTS
JMO DE

 NO.
 211142
 No.
 Date

 -2022 | DRAWN:KSJ
 1
 12/15/22

 EU | APPROVED: DEU
 2
 01/18/23

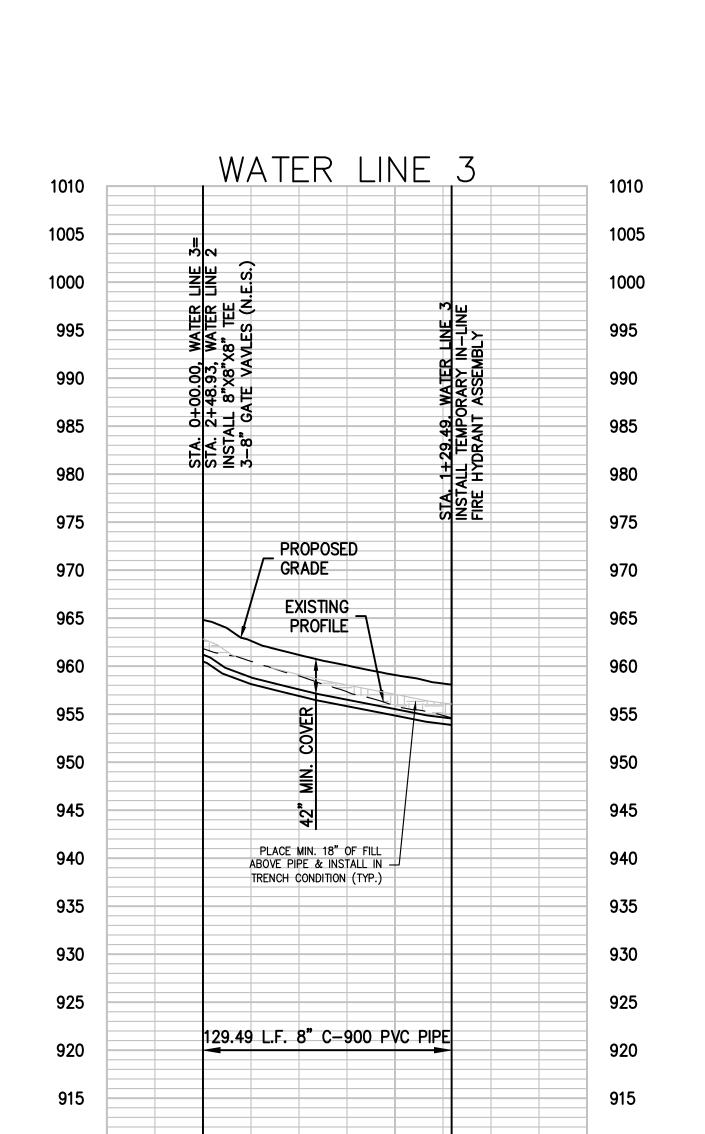
 OF AUTHORIZATION
 4
 12/15/22

 OF AUTHORIZATION
 4
 12/15/22

PROJECT N
DATE: 11–14CHECKED: DI
CERTIFICATE
KANSAS

SHEET

23 /-STA. 3+64.78, WATER LINE 4 INSTALL FIRE HYDRANT ASSEMBLY N=1026775.5680 E=2831687.6811 STA. 3+22.83, WATER LINE 4
INSTALL 8" 45" BEND
W/HORIZONTAL THRUST BLOCK STA. 0+00.00, WATER LINE 4 STA. 5+81.13, WATER LINE 2 INSTALL 8"X8"x8" TEE 3 - 8" GATE VALVES (N,S,E,) N=1026724.2598 E=2831404.1623 s NE APPLE GROVE COURT N=1026735.9668 E=2831701.5298 MATER LINE 4 -STA. 2+91.99, WATER LINE 4 STA. 1+92.80, WATER LINE 4 - INSTALL 22.5 BEND INSTALL 8" 45° BEND
W/HORIZONTAL THRUST BLOCK W/HORIZONTAL THRUST BLOCK N=1026713.4130 N=1026708.1838 E=2831688.1438 E=2831596.6611 STA. 2+42.49, WATER LINE 4 INSTALL 8" 45" BEND
W/HORIZONTAL THRUST BLOCK
N=1026691.8458 €15' D/E_\ _E=2831641.4242



1+00

2+00

NE CIDER MILL DRIVE

15' B.L. 10' U/E

STA. 1+29.49, WATER LINE 3
INSTALL TEMP. IN-LINE
FIRE HYDRANT ASSEMBLY.
END CONSTRUCTION
N=1026375.4513

E=2831497.7282

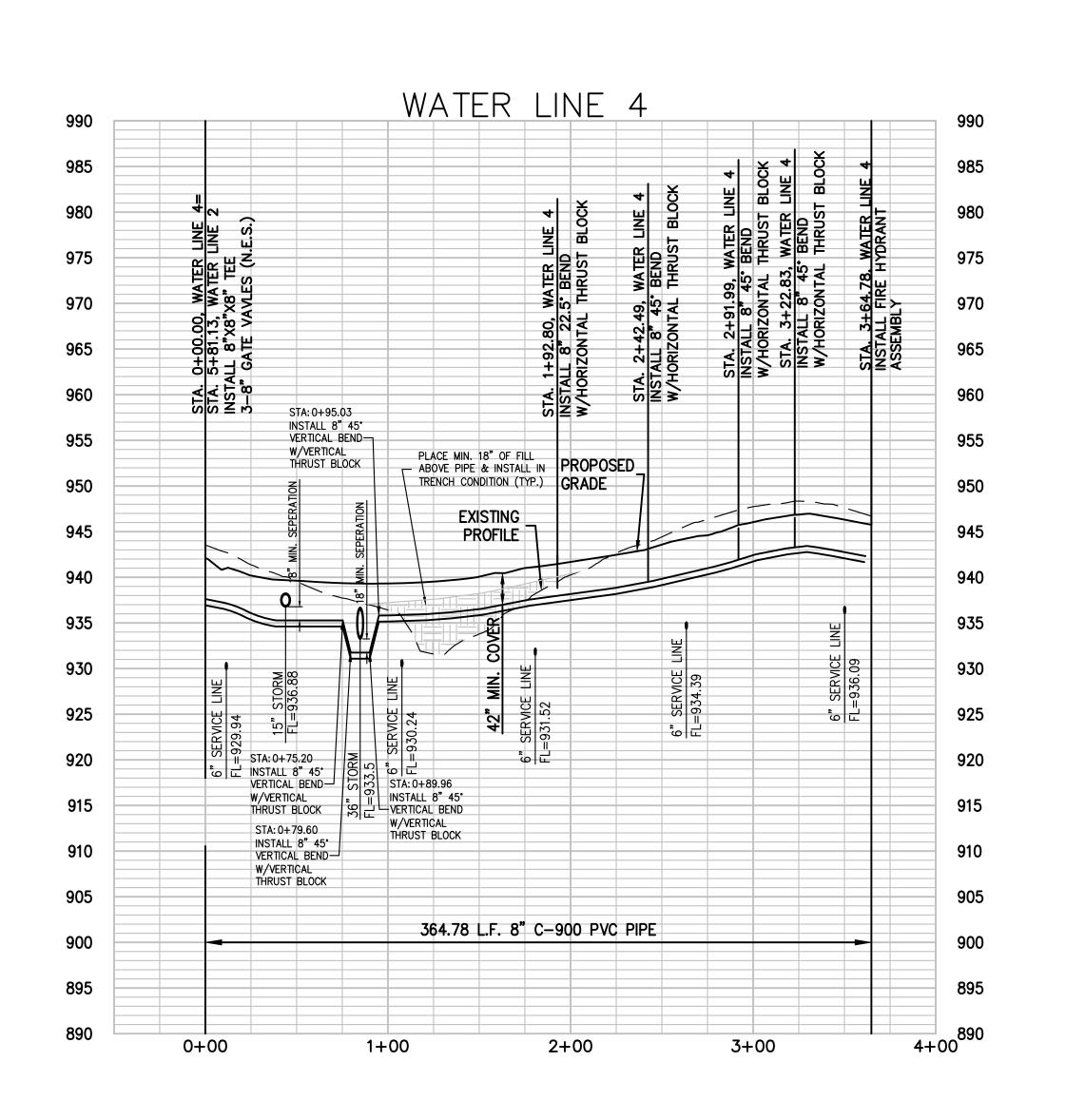
WATER, LINE 3

STA. 0+00.00, WATER LINE 3= STA. 2+34.53, WATER LINE 2
INSTALL 8"X8"X8" TEE
3 - 8" GATE VALVES (N,S,E,W)
N=1026380.7728

910

0+00

E=2831368.3467



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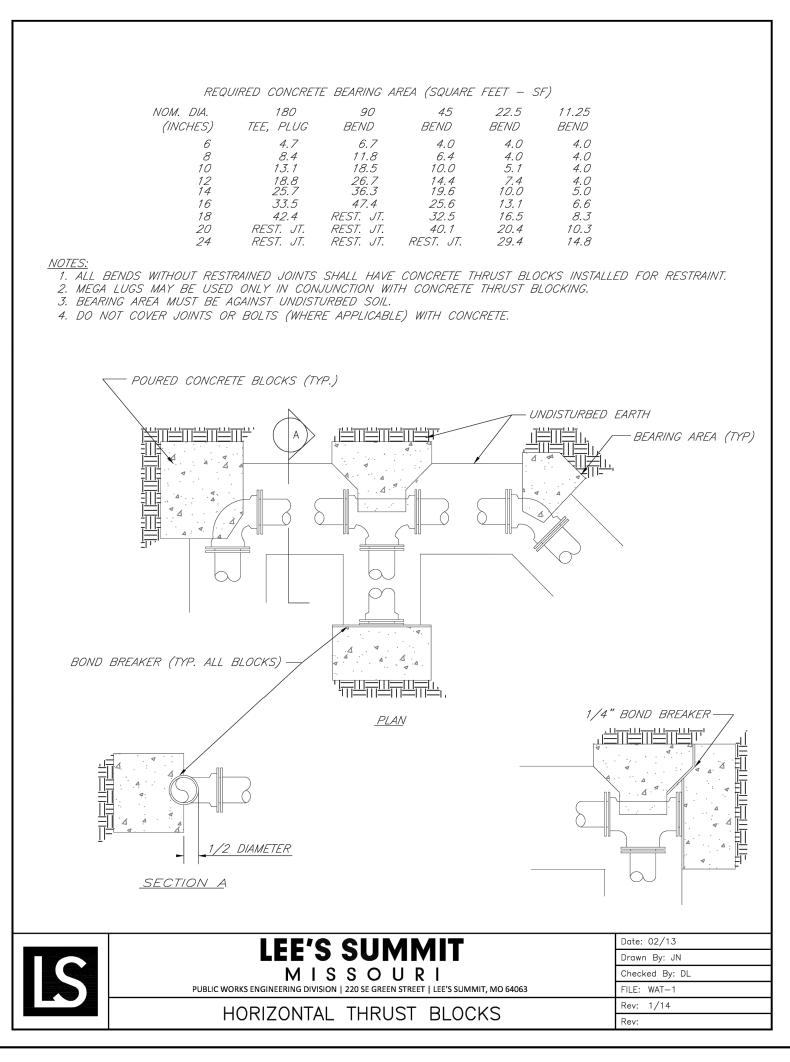
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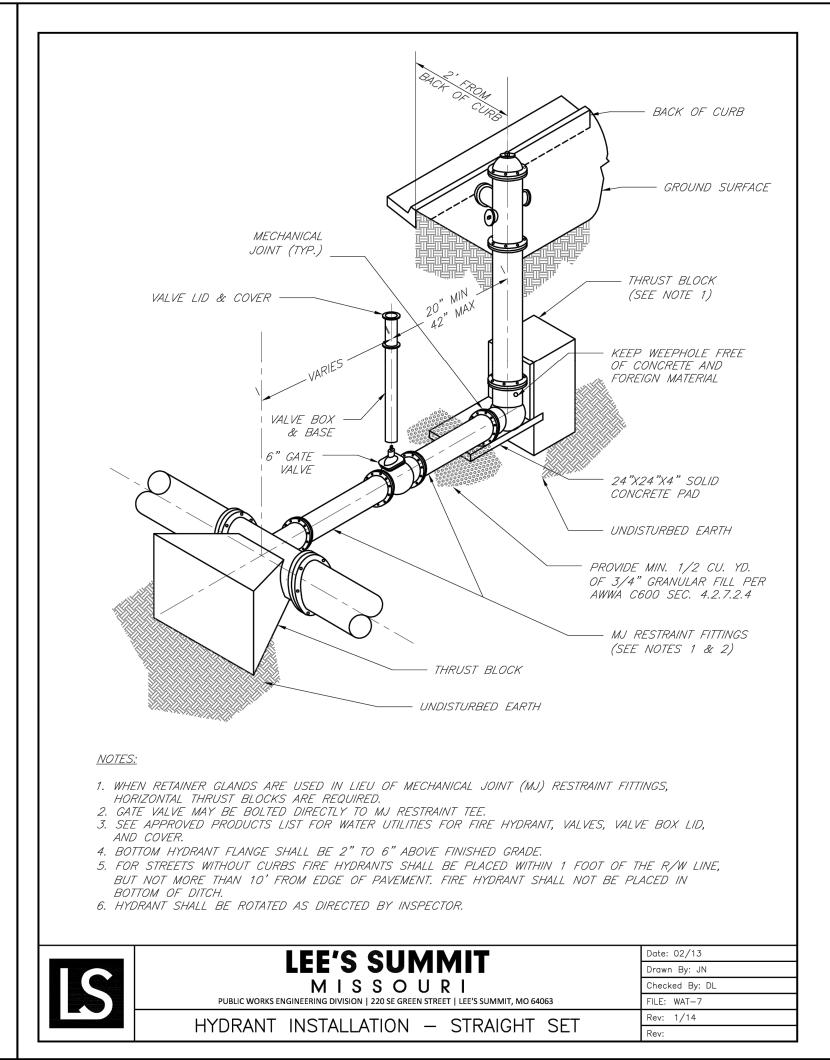
WATER LINE "3" & "4"

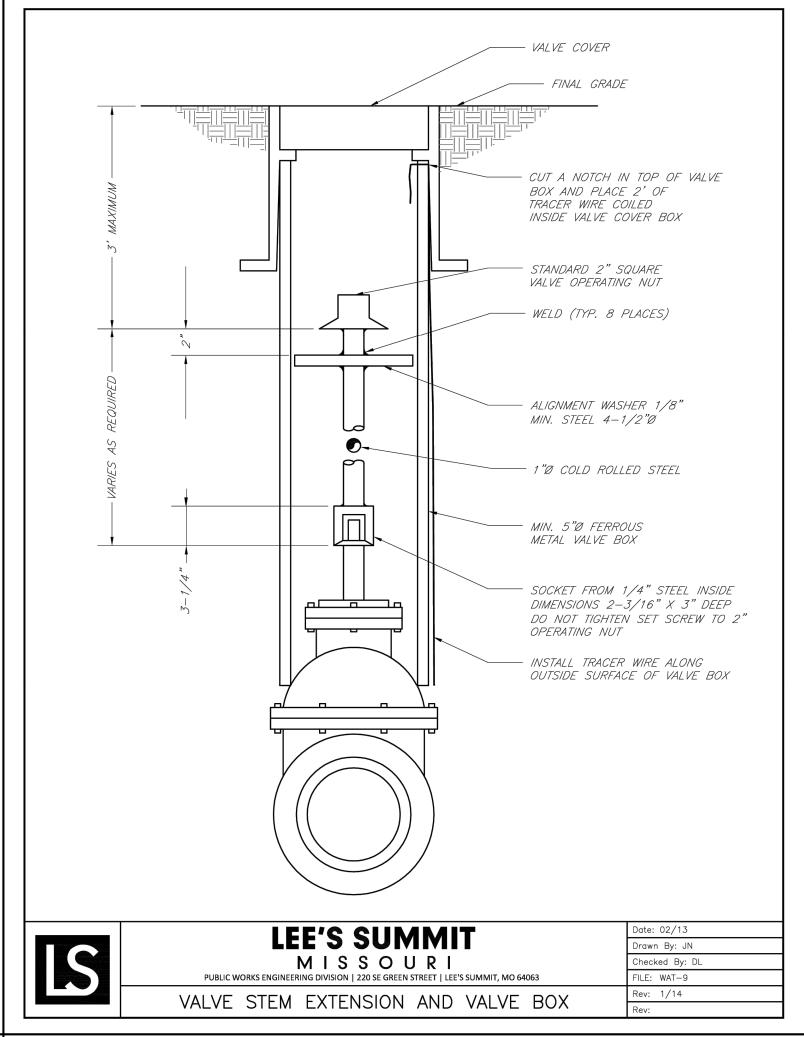
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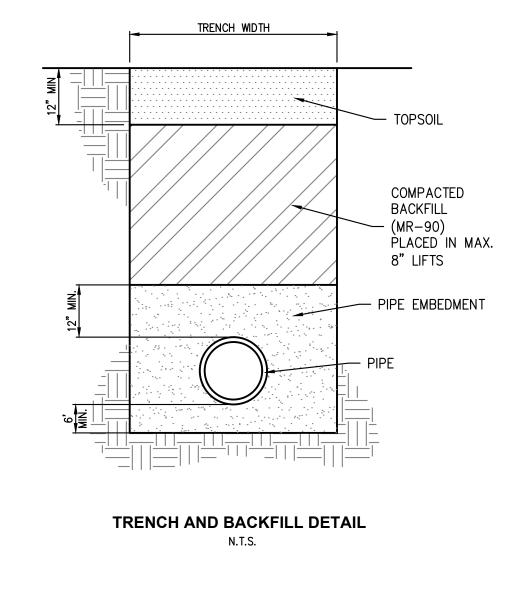
1"=10' VERT.

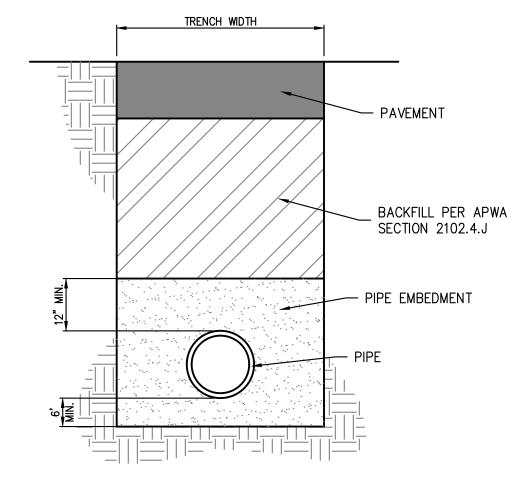
Development Services Department Lee's Summit, Missouri 02/15/2023



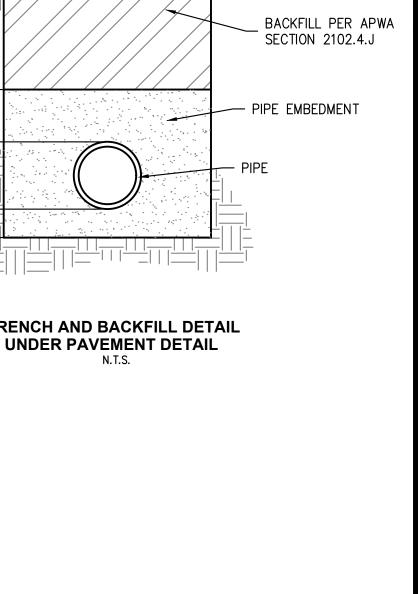




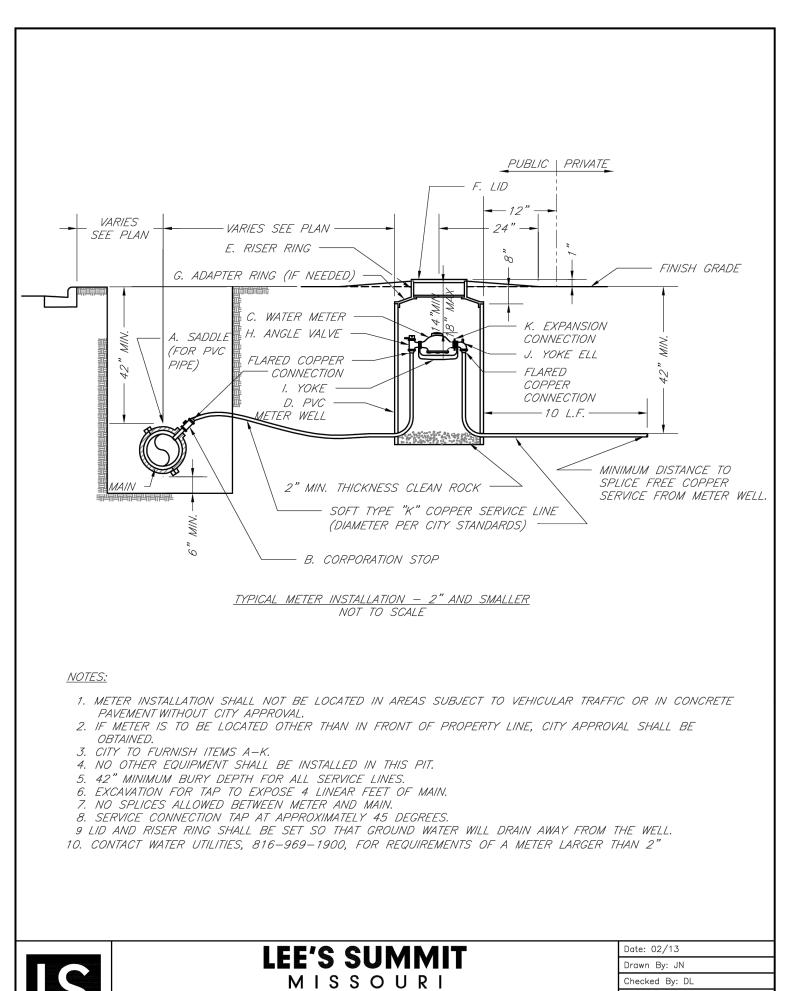












SERVICE CONNECTION/METER WELL

E: WAT-11

v: 1/14

