

WATER PLANS FOR EMERTS COVE RD & GRASSY BRANCH RD

2021 TDEC ARPA CONTRACT #75541

EMERTS COVE RD, PITTMAN CENTER, TN SEVIER COUNTY WATER DEPARTMENT



LOCATION MAP --
EMERTS COVE RD & GRASSY BRANCH RD
N.T.S.

INDEX OF SHEETS

SHEET NO.	SHEET NAME
1.	COVER TITLE
2.	WATER LINE 'A' LAYOUT PLAN
3.	WATER LINE 'A' LAYOUT PLAN
4.	WATER LINE 'B' LAYOUT PLAN
5.	WATER LINE 'C' LAYOUT PLAN
6.	WATER DETAILS
7.	WATER DETAILS

DW20240217
APPROVED FOR CONSTRUCTION
THE DOCUMENT BEARING THIS STAMP HAS BEEN RECEIVED AND REVIEWED BY THE
TENNESSEE DEPT. OF ENVIRONMENT & CONSERVATION
DIVISION OF WATER RESOURCES
AND IS HEREBY APPROVED FOR CONSTRUCTION BY THE COMMISSIONER

[Signature]
04/11/2024

THIS APPROVAL SHALL NOT BE CONSTRUED AS CREATING A PRESUMPTION OF CORRECT OPERATION OR AS WARRANTING BY THE COMMISSIONER THAT THE APPROVED FACILITIES WILL REACH THE DESIGNED GOALS.
APPROVAL EXPIRES ONE YEAR FROM ABOVE DATE

[Signature]
BRENT SHULTS
WATER SUPERINTENDENT
SEVIER COUNTY WATER DEPARTMENT

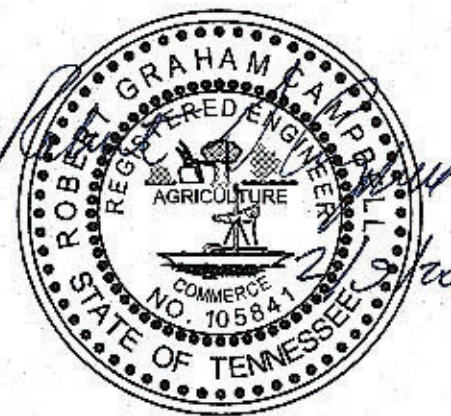
UTILITIES: BRENT SHULTS
SEVIER COUNTY WATER DEPARTMENT
227 CEDAR ST. SEVIERVILLE, TN 37862
(865) 774-3763

ENGINEER: ROBERT G. CAMPBELL & ASSOCIATES, L.P.
7523 TAGGART LN.
KNOXVILLE, TN. 37938
(865) 947-5996
621 WALL STREET
SEVIERVILLE, TN 37862
(865) 429-4683

ROBERT G. CAMPBELL & ASSOCIATES, L.P. CONSULTING ENGINEERS



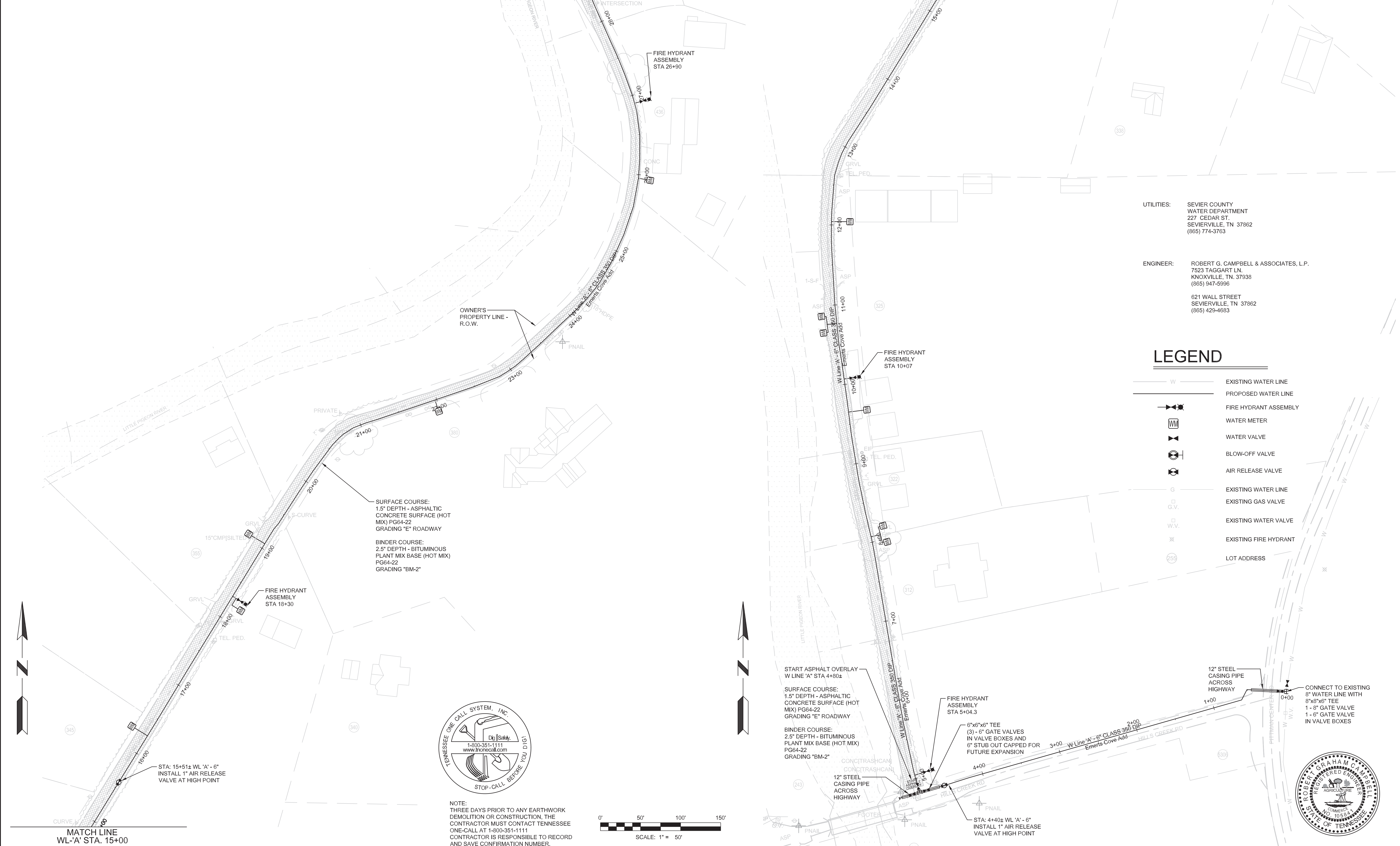
KNOXVILLE, TENNESSEE
SEVIERVILLE, TENNESSEE



		ROBERT G. CAMPBELL & ASSOC., L.P. CONSULTING ENGINEERS KNOXVILLE, TENNESSEE	EMERTS COVE RD & GRASSY BRANCH RD SEVIER COUNTY, TN	COVER SHEET	DESIGNED BY MM CHECKED BY RGC SCALE N.T.S. DRAWN BY ZW DATE 10/30/23 FILE NO. 22244	SHEET NO. 1 OF 6 SHEETS
NO.	DATE	DESCRIPTION	BY	CKD.	REVISIONS	

MATCH LINE
WL-'A' STA. 28+00
SHEET 3

MATCH LINE
WL-'A' STA. 15+00



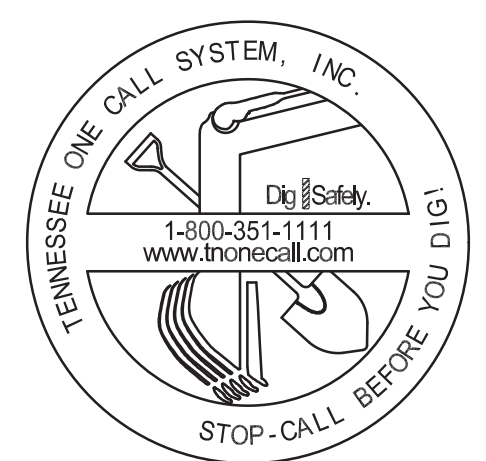
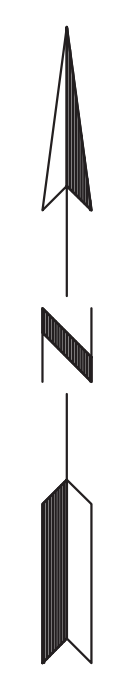
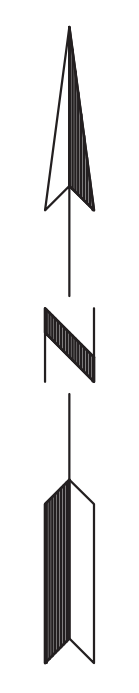
UTILITIES: SEVIER COUNTY WATER DEPARTMENT
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SEVIERVILLE, TN 37862
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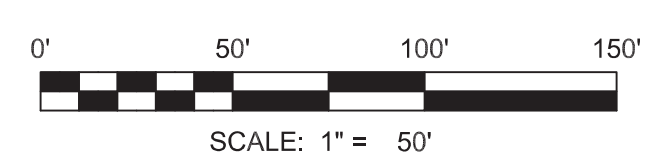
621 WALL STREET
SEVIERVILLE, TN 37862
(865) 429-4683

LEGEND

- W — EXISTING WATER LINE
- PROPOSED WATER LINE
- FIRE HYDRANT ASSEMBLY
- WM WATER METER
- WV WATER VALVE
- BOV BLOW-OFF VALVE
- ARV AIR RELEASE VALVE
- G — EXISTING WATER LINE
- G.V. — EXISTING GAS VALVE
- W.V. — EXISTING WATER VALVE
- X — EXISTING FIRE HYDRANT
- 265 LOT ADDRESS



NOTE:
THREE DAYS PRIOR TO ANY EARTHWORK DEMOLITION OR CONSTRUCTION, THE CONTRACTOR MUST CONTACT TENNESSEE ONE-CALL AT 1-800-351-1111. CONTRACTOR IS RESPONSIBLE TO RECORD AND SAVE CONFIRMATION NUMBER.



NO.	DATE	DESCRIPTION	BY	CHKD.
REVISIONS				

RGC&A
ROBERT G. CAMPBELL & ASSOC., L.P.
CONSULTING ENGINEERS
KNOXVILLE, TENNESSEE

EMERTS COVE RD & GRASSY BRANCH RD
SEVIER COUNTY, TN

WATER LINE 'A'
LAYOUT PLAN

DESIGNED BY MM	CHECKED BY RGC	SCALE 1"=50'	SHEET NO. 2
DRAWN BY ZW	DATE 10/30/23	FILE NO. 22244	OF 6 SHEETS



MATCH LINE
WL-'A' STA. 40+00

SURFACE COURSE:
1.5" DEPTH - ASPHALTIC
CONCRETE SURFACE (HOT
MIX) PG64-22
GRADING "E" ROADWAY

BINDER COURSE:
2.5" DEPTH - BITUMINOUS
PLANT MIX BASE (HOT MIX)
PG64-22
GRADING "BM-2"

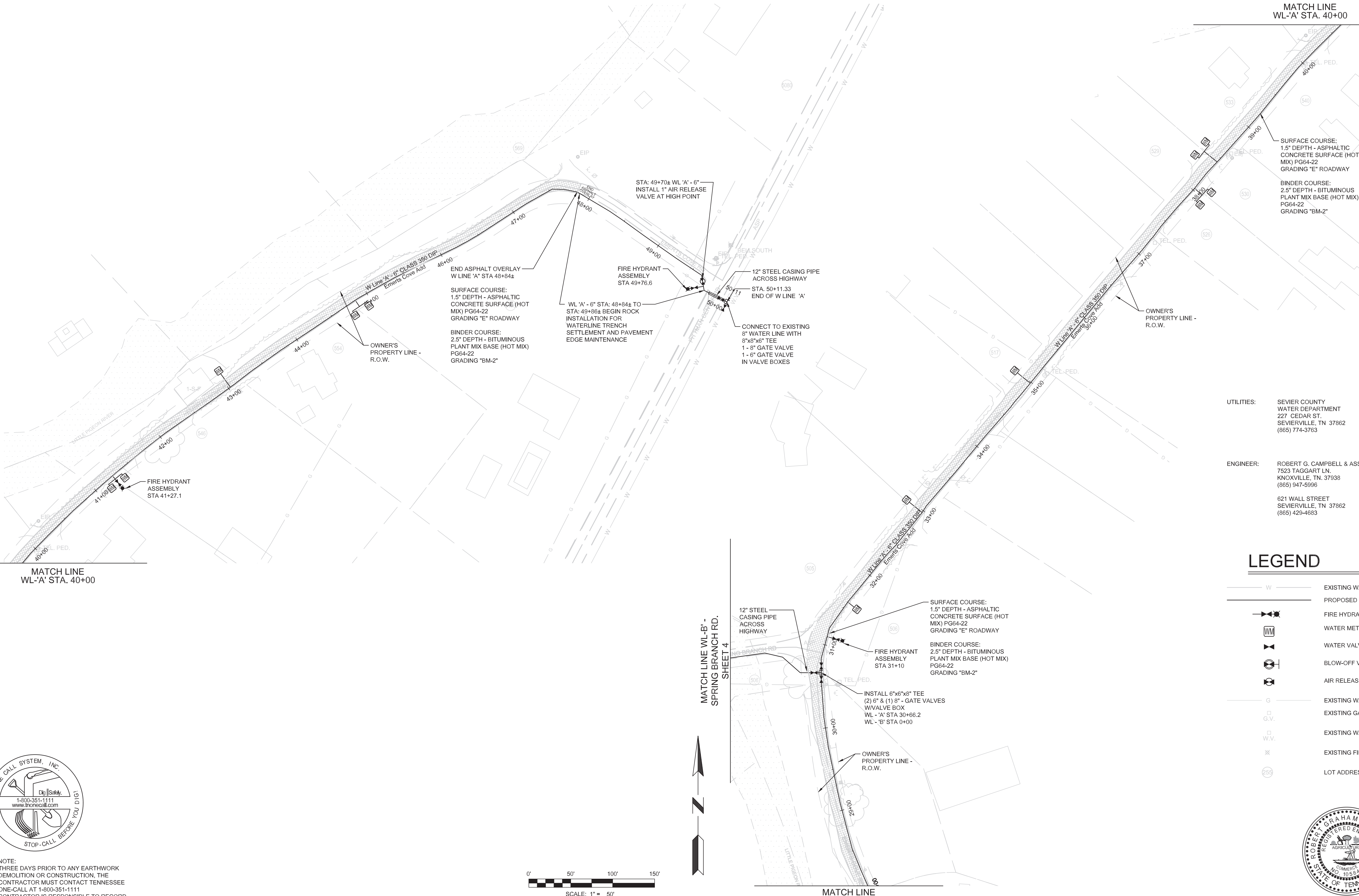
UTILITIES: SEVIER COUNTY
WATER DEPARTMENT
227 CEDAR ST.
SEVIERVILLE, TN 37862
(865) 774-3763

ENGINEER: ROBERT G. CAMPBELL & ASSOCIATES, L.P.
7523 TAGGART LN.
KNOXVILLE, TN 37838
(865) 947-5996

621 WALL STREET SEVIERVILLE, TN 37862
(865) 423-4683

LEGEND

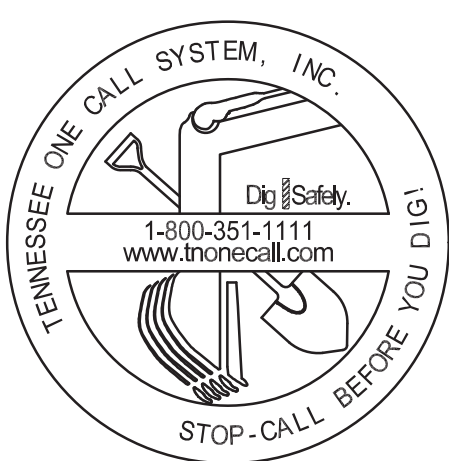
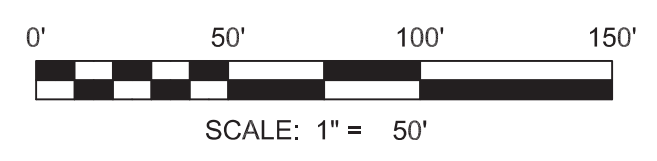
- W — EXISTING WATER LINE
- — PROPOSED WATER LINE
- — FIRE HYDRANT ASSEMBLY
- — WATER METER
- — WATER VALVE
- — BLOW-OFF VALVE
- — AIR RELEASE VALVE
- G — EXISTING WATER LINE
- G.V. — EXISTING GAS VALVE
- W.V. — EXISTING WATER VALVE
- — EXISTING FIRE HYDRANT
- 255 — LOT ADDRESS



MATCH LINE
WL-'A' STA. 40+00

MATCH LINE WL-'B' -
SPRING BRANCH RD.
SHEET 4

MATCH LINE
WL-'A' STA. 28+00
SHEET 2



NOTE:
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DEMOLITION OR CONSTRUCTION, THE
CONTRACTOR MUST CONTACT TENNESSEE
ONE-CALL AT 1-800-351-1111
CONTRACTOR IS RESPONSIBLE TO RECORD
AND SAVE CONFIRMATION NUMBER.

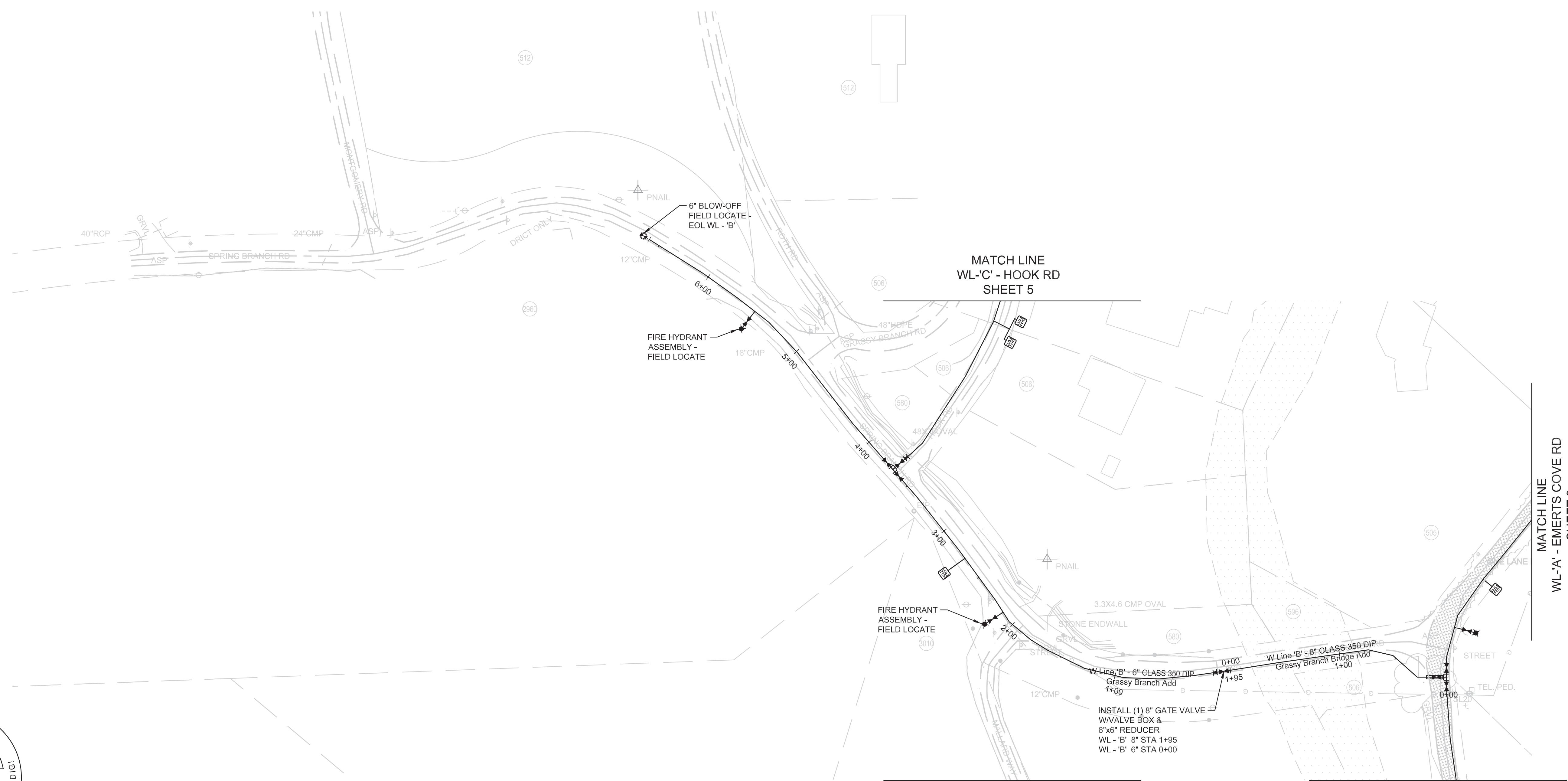
NO.	DATE	DESCRIPTION	BY	CHKD.

ROBERT G. CAMPBELL & ASSOC., L.P.
CONSULTING ENGINEERS
KNOXVILLE, TENNESSEE

EMERTS COVE RD & GRASSY BRANCH RD
SEVIER COUNTY, TN

WATER LINE 'A'
LAYOUT PLAN

DESIGNED BY MM	CHECKED BY RGC	SCALE 1"=50'	SHEET NO. 3
DRAWN BY ZW	DATE 10/30/23	FILE NO. 22244	OF 6 SHEETS



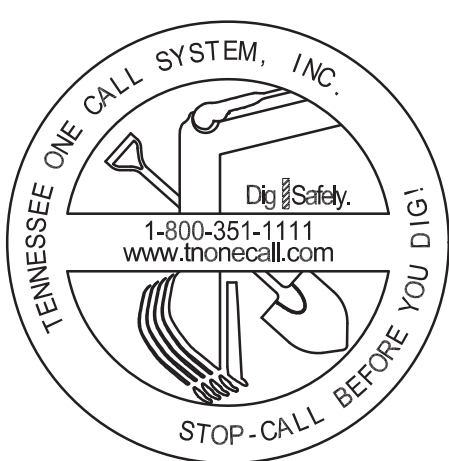
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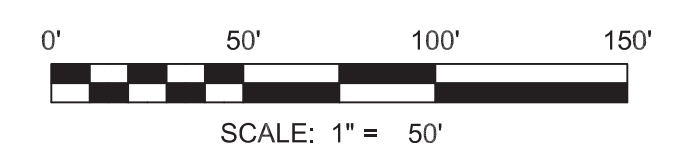
621 WALL STREET
SEVIERVILLE, TN 37862
(865) 429-4683

LEGEND

- EXISTING WATER LINE
- PROPOSED WATER LINE
- FIRE HYDRANT ASSEMBLY
- WATER METER
- WATER VALVE
- BLOW-OFF VALVE
- AIR RELEASE VALVE
- EXISTING WATER LINE
- EXISTING GAS VALVE
- EXISTING WATER VALVE
- EXISTING FIRE HYDRANT
- LOT ADDRESS



NOTE:
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AND SAVE CONFIRMATION NUMBER.



NO.	DATE	DESCRIPTION	BY	CKD.
REVISIONS				

RG&A
ROBERT G. CAMPBELL & ASSOC., L.P.
CONSULTING ENGINEERS
KNOXVILLE, TENNESSEE

EMERTS COVE RD & GRASSY BRANCH RD
SEVIER COUNTY, TN

WATER LINE 'B'
LAYOUT PLAN

DESIGNED BY MM	CHECKED BY RGC	SCALE 1"=50'	SHEET NO. 4
DRAWN BY ZW	DATE 10/30/23	FILE NO. 22244	OF 6 SHEETS



UTILITIES: SEVIER COUNTY WATER DEPARTMENT
 227 CEDAR ST.
 SEVIERVILLE, TN 37862
 (865) 774-3763

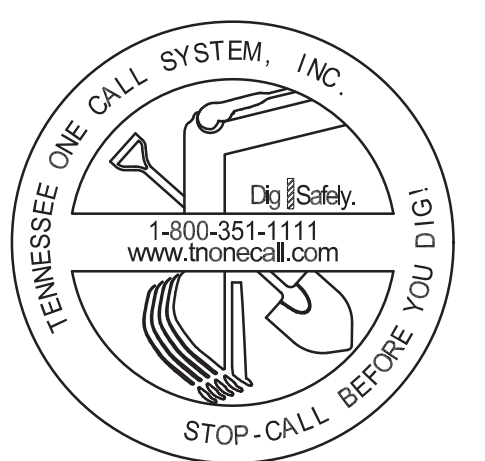
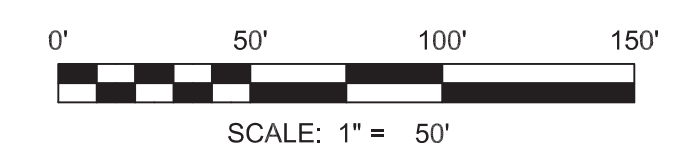
ENGINEER: ROBERT G. CAMPBELL & ASSOCIATES, L.P.
 7523 TAGGART LN.
 KNOXVILLE, TN. 37938
 (865) 947-5996
 621 WALL STREET
 SEVIERVILLE, TN 37862
 (865) 429-4683

LEGEND

- W — EXISTING WATER LINE
- — PROPOSED WATER LINE
- |—|—| FIRE HYDRANT ASSEMBLY
- WM WATER METER
- WV WATER VALVE
- BOV BLOW-OFF VALVE
- ARV AIR RELEASE VALVE
- G — EXISTING WATER LINE
- G.V. EXISTING GAS VALVE
- W.V. EXISTING WATER VALVE
- ⊗ EXISTING FIRE HYDRANT
- 259 LOT ADDRESS

MATCH LINE
 WL-B - SPRING BRANCH RD.
 SHEET 4

MATCH LINE
 WL-B - GRASSY BRANCH RD.
 CONT'D (FROM UPPER LEFT)



NOTE:
 THREE DAYS PRIOR TO ANY EARTHWORK
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 CONTRACTOR IS RESPONSIBLE TO RECORD
 AND SAVE CONFIRMATION NUMBER.



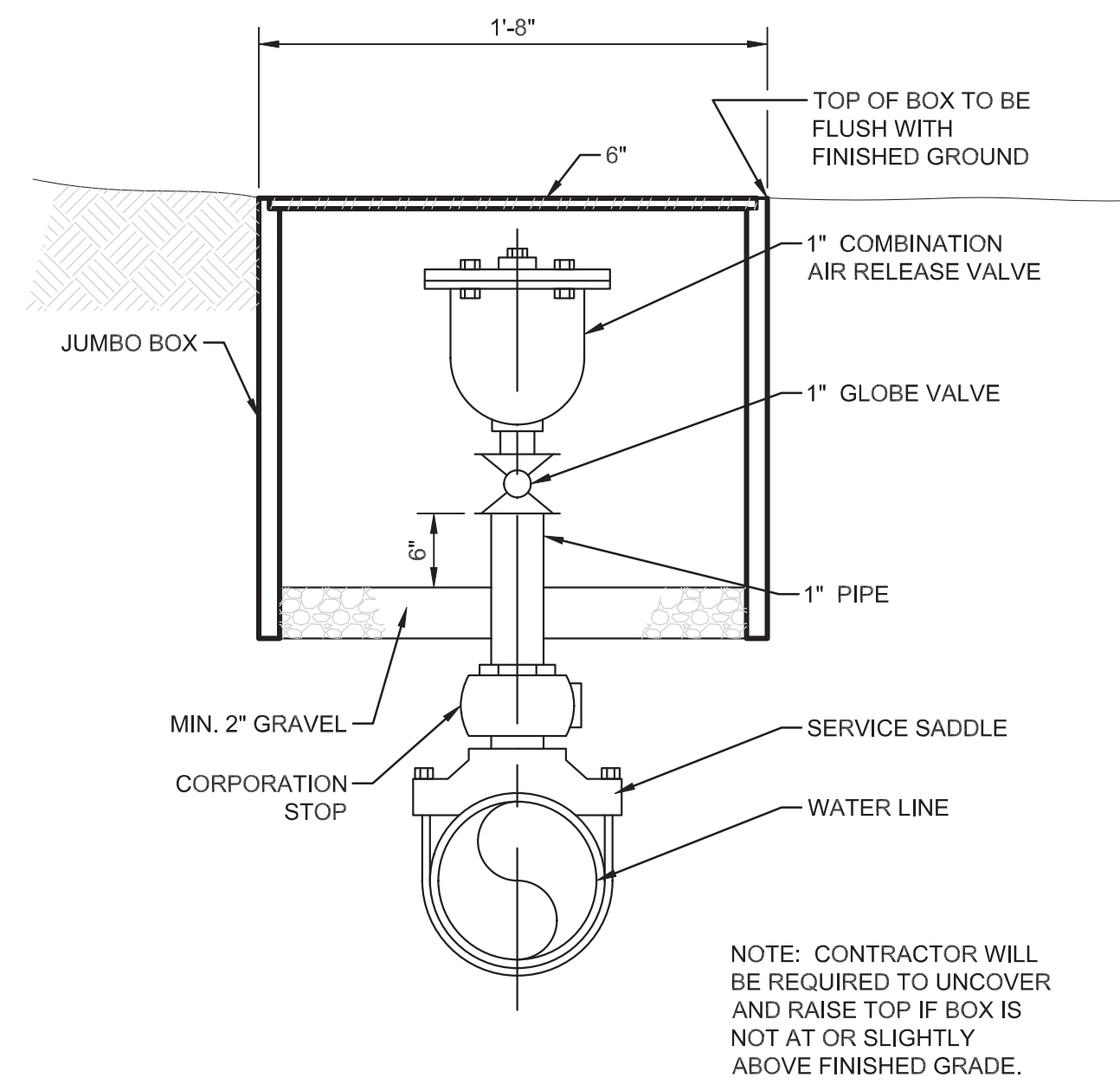
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REVISIONS				

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 KNOXVILLE, TENNESSEE

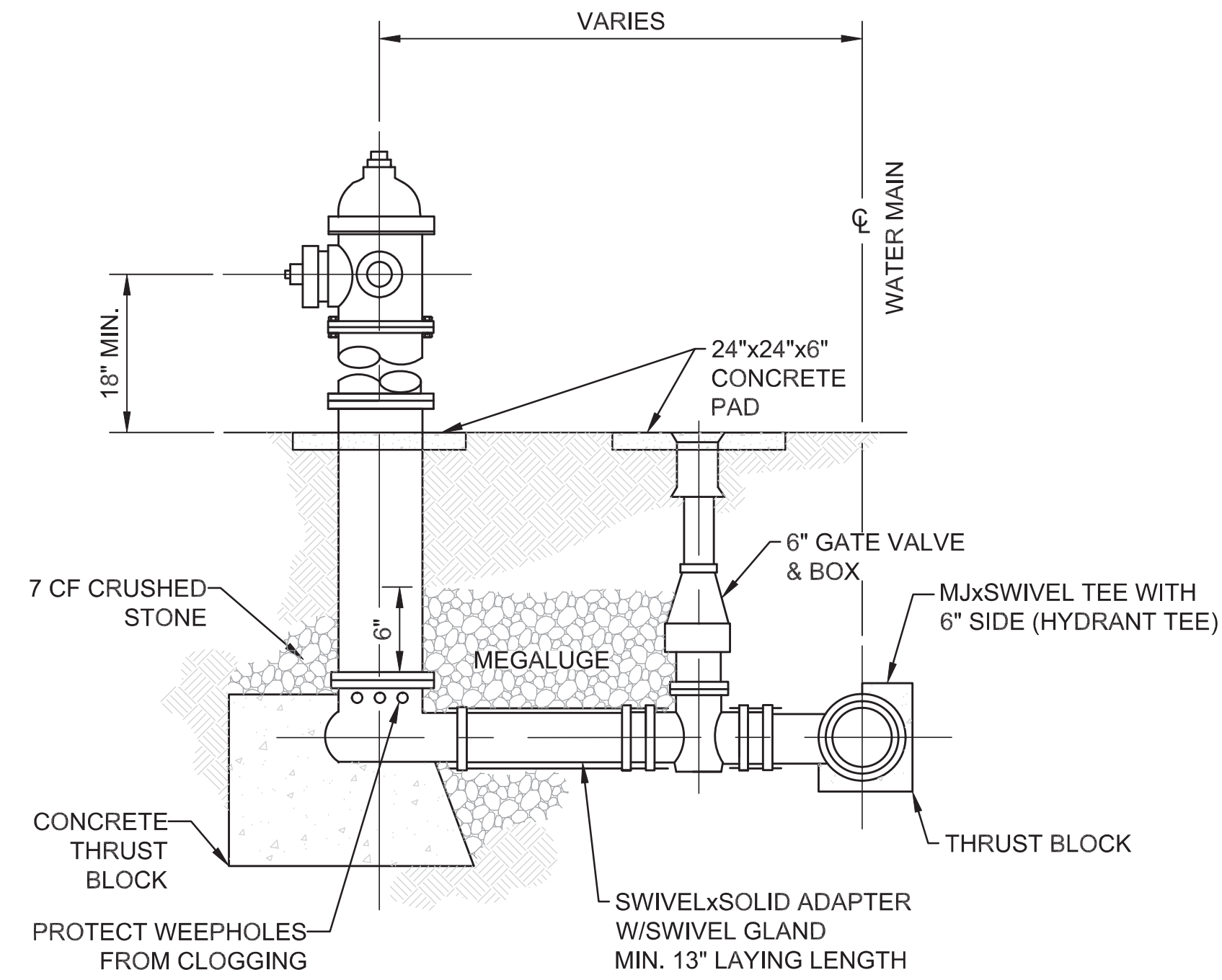
EMERTS COVE RD & GRASSY BRANCH RD
 SEVIER COUNTY, TN

WATER LINE "C"
 LAYOUT PLAN

DESIGNED BY MM	CHECKED BY RGC	SCALE 1"=50'	SHEET NO. 5
DRAWN BY ZW	DATE 10/30/23	FILE NO. 22244	OF 6 SHEETS



AIR RELEASE VALVE
TO BE INSTALLED AT CREST

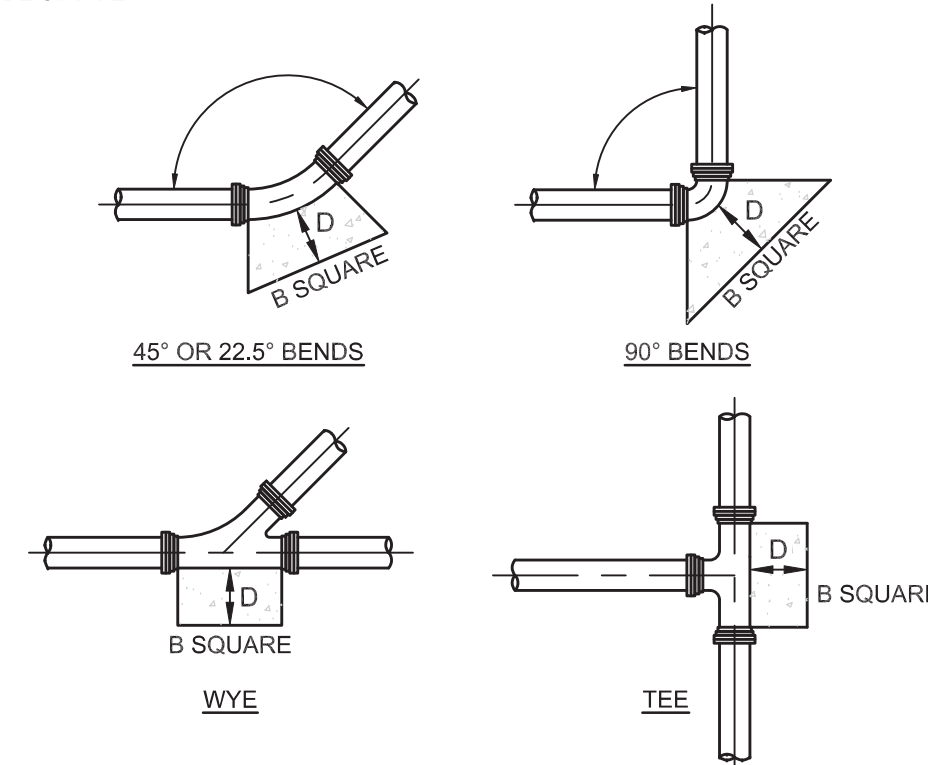


FIRE HYDRANT ASSEMBLY

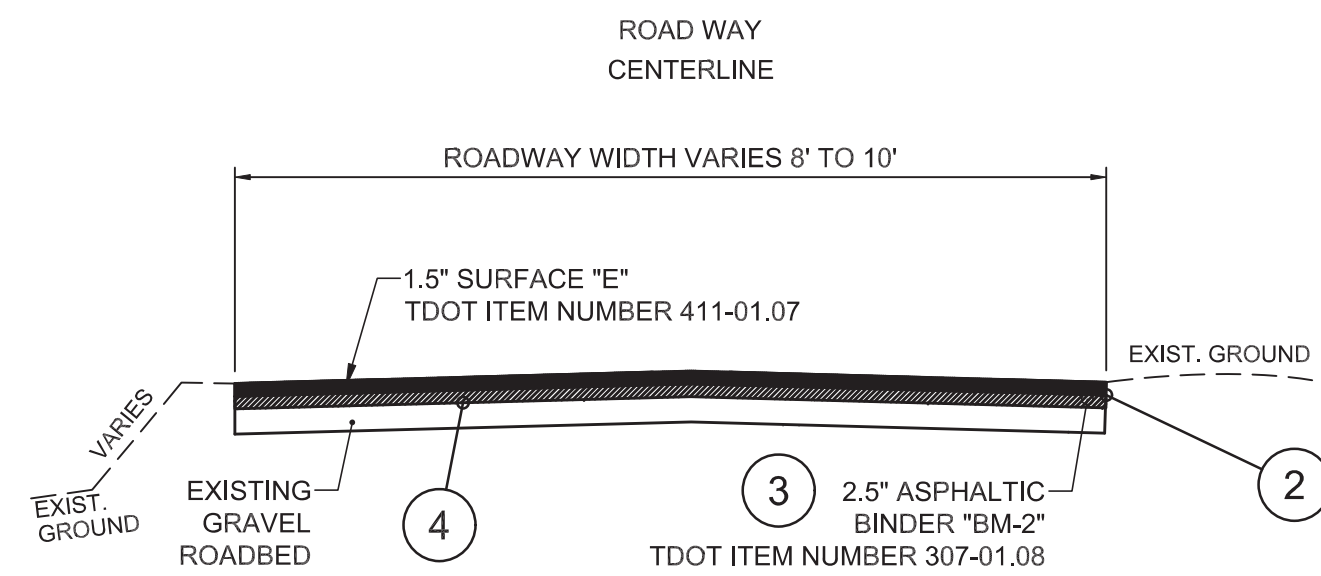
PIPE IN.	THRUST BLOCKS							
	90° BENDS		45° BENDS		22.5° BENDS		WYES & TEES	
	B	D	B	D	B	D	B	D
2	1.0'	1.0'	1.0'	1.0'	1.0'	1.0'	1.0'	1.0'
3	1.0'	1.0'	1.0'	1.0'	1.0'	1.0'	1.0'	1.0'
4	1.0'	1.0'	1.0'	1.0'	1.0'	1.0'	1.2'	1.0'
6	1.4'	1.0'	1.0'	1.0'	1.0'	1.0'	1.0'	1.0'
8	1.8'	1.0'	1.4'	1.0'	1.0'	1.0'	2.2'	1.0'
10	2.2'	1.0'	1.7'	1.0'	1.2'	1.0'	2.7'	1.0'
12	2.7'	1.0'	2.0'	1.0'	1.4'	1.0'	3.2'	1.0'
14	3.2'	1.0'	(4) #5	2.4'	1.0'	(3) #5	1.7'	1.0'
16	3.6'	1.0'	(5) #5	2.7'	1.0'	(3) #5	1.9'	1.0'
18	4.1'	1.2'	(5) #5	3.0'	1.0'	(4) #5	2.2'	1.0'
20	4.6'	1.2'	(5) #5	3.4'	1.0'	(4) #5	2.4'	1.0'
24	5.5'	1.2'	(5) #5	4.0'	1.0'	(5) #5	2.8'	1.0'
30	6.6'	1.5'	(5) #5	5.0'	1.2'	(5) #5	3.6'	1.0'
36	8.2'	1.7'	(5) #5	6.0'	1.3'	(7) #5	4.3'	1.2'
42	9.6'	1.8'	(10) #5	7.0'	1.3'	(8) #5	5.0'	1.2'

NOTES:

- THRUST BLOCK TO BE MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI CONCRETE AT 28 DAYS.
- ALL THRUST BLOCKING SHALL BEAR AGAINST UNDISTURBED SOIL.
- AT THRUST BLOCKS USE ALL THREAD RODS WITH TWO RODS ON EACH SIDE OF PIPE



THRUST BLOCKS



TYPICAL SECTION OF PAVING ASPHALT OVERLAY SITE ACCESS ROAD

PROPOSED PAVEMENT SCHEDULE

- ASPHALTIC CONCRETE SURFACE (HOT MIX) PG64-22 GRADING "E" ROADWAY @ 1.5" THICK (APPROX. 159 LB./S.Y.)**

411-01.11 ACS MIX (PG64-22) GRADING "E" ROADWAY

- TACK COAT**

403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC) AT 0.12 GALLONS/S.Y.

- BITUMINOUS PLANT MIX BASE (HOT MIX) PG64-22 GRADING "B-M2" @ 2.5" THICK (APPROX. 282.5 LB./S.Y.)**

307-01.08 ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING "B-M2"

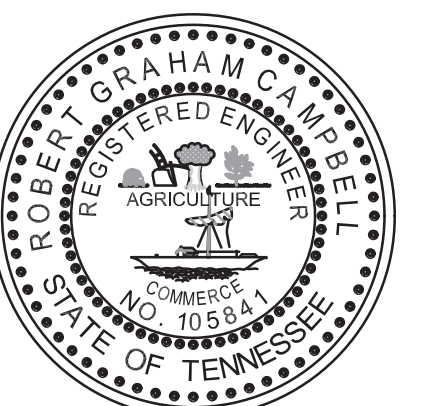
- PRIME COAT**

402-01 BITUMINOUS MATERIAL FOR PRIME COAT (PC) AT 0.35 GALLONS/S.Y.

- MINERAL AGGREGATE 8" THICK**

* 303-01 MINERAL AGGREGATE, TYPE "A" BASE, GRADING "D"

* TO BE USED FOR WATERLINE TRENCH SETTLEMENT AND EDGE OF PAVEMENT MAINTENANCE



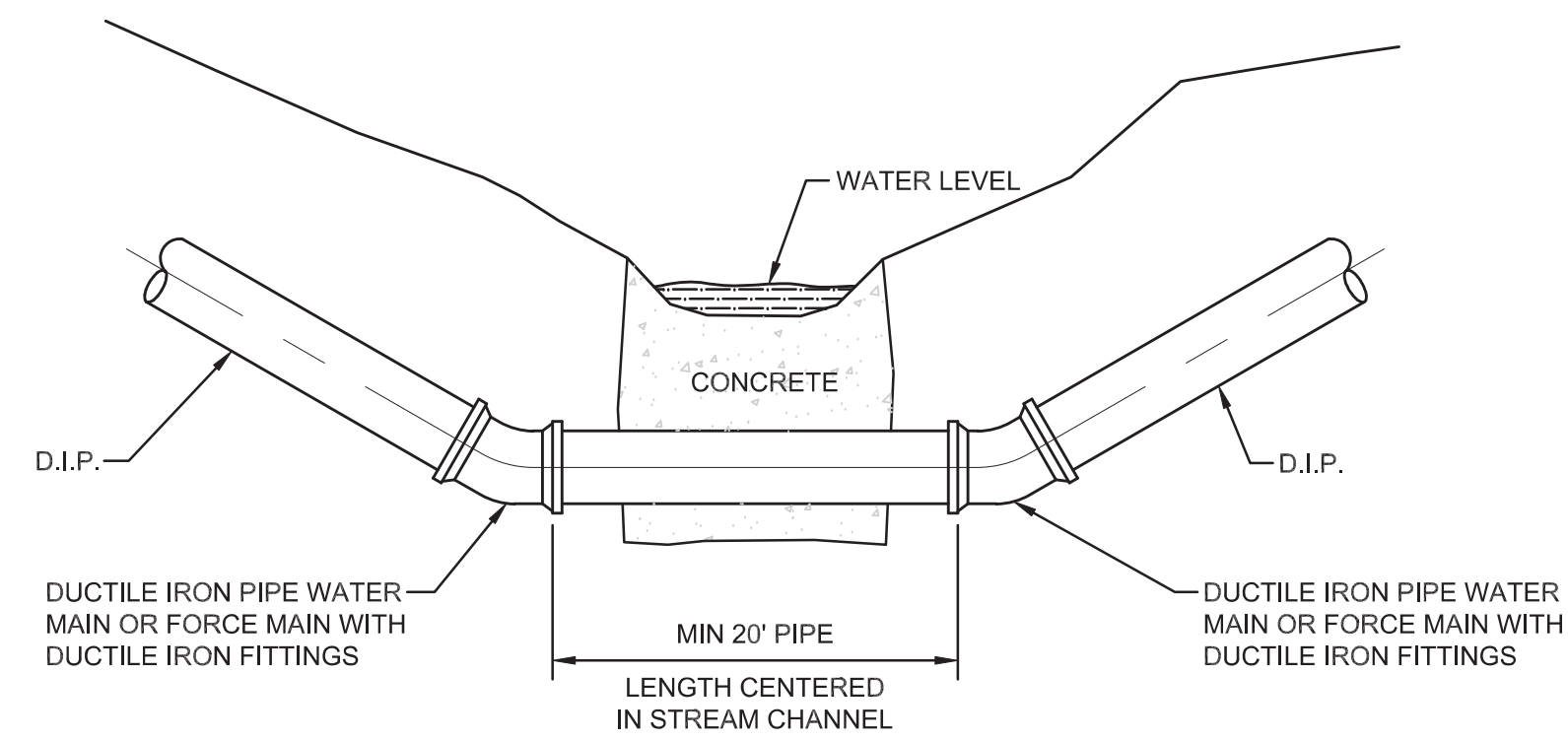
NO.	DATE	DESCRIPTION	BY	CHK.
REVISIONS				

ROBERT G. CAMPBELL & ASSOC., L.P.
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KNOXVILLE, TENNESSEE

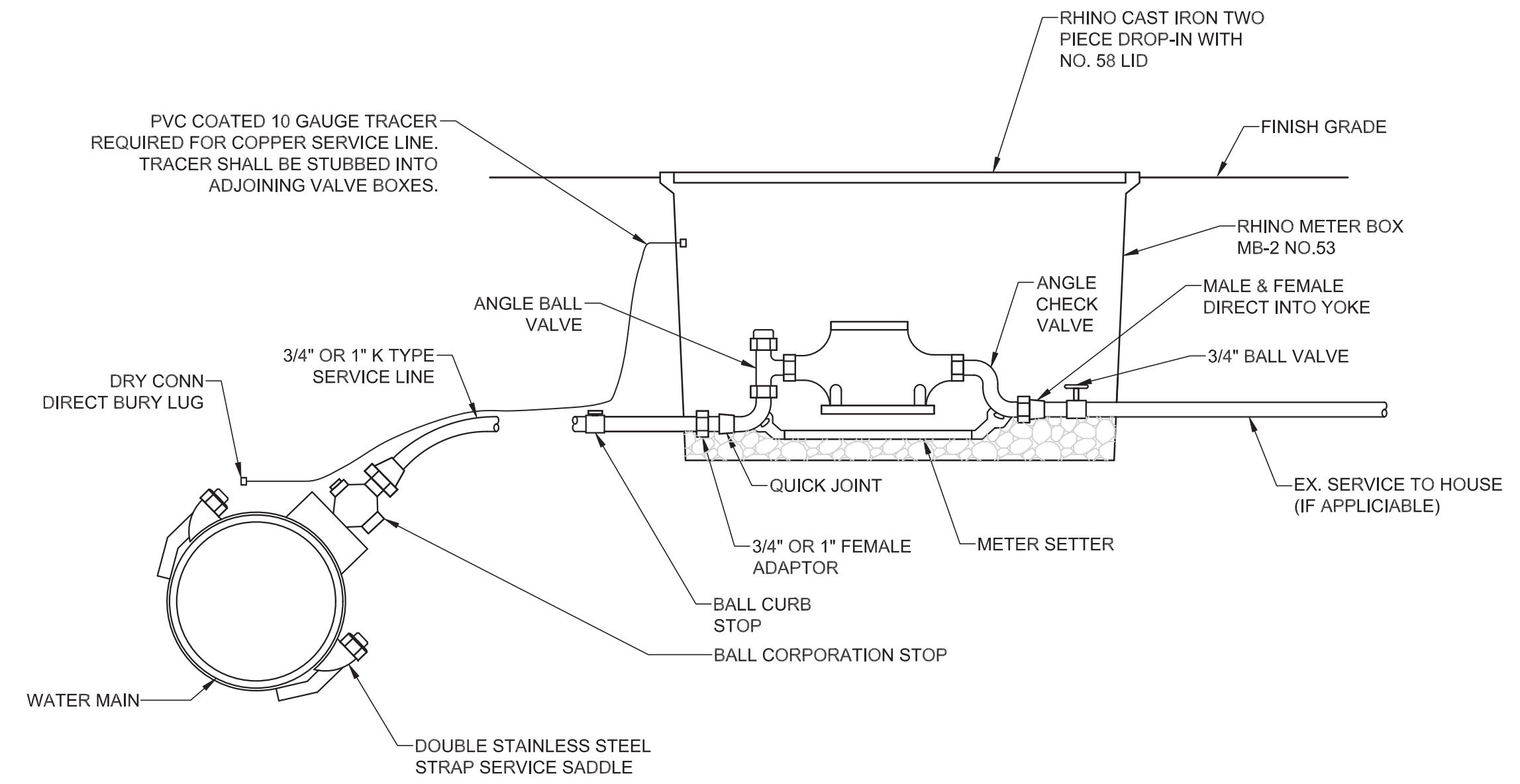
EMERTS COVE RD & GRASSY BRANCH RD
SEVIER COUNTY, TN

WATER DETAILS

DESIGNED BY	CHECKED BY	SCALE	SHEET
MM	RGC	N.T.S.	NO. 6
DRAWN BY	DATE	FILE NO.	OF 6 SHEETS
ZW	10/30/23	22244	

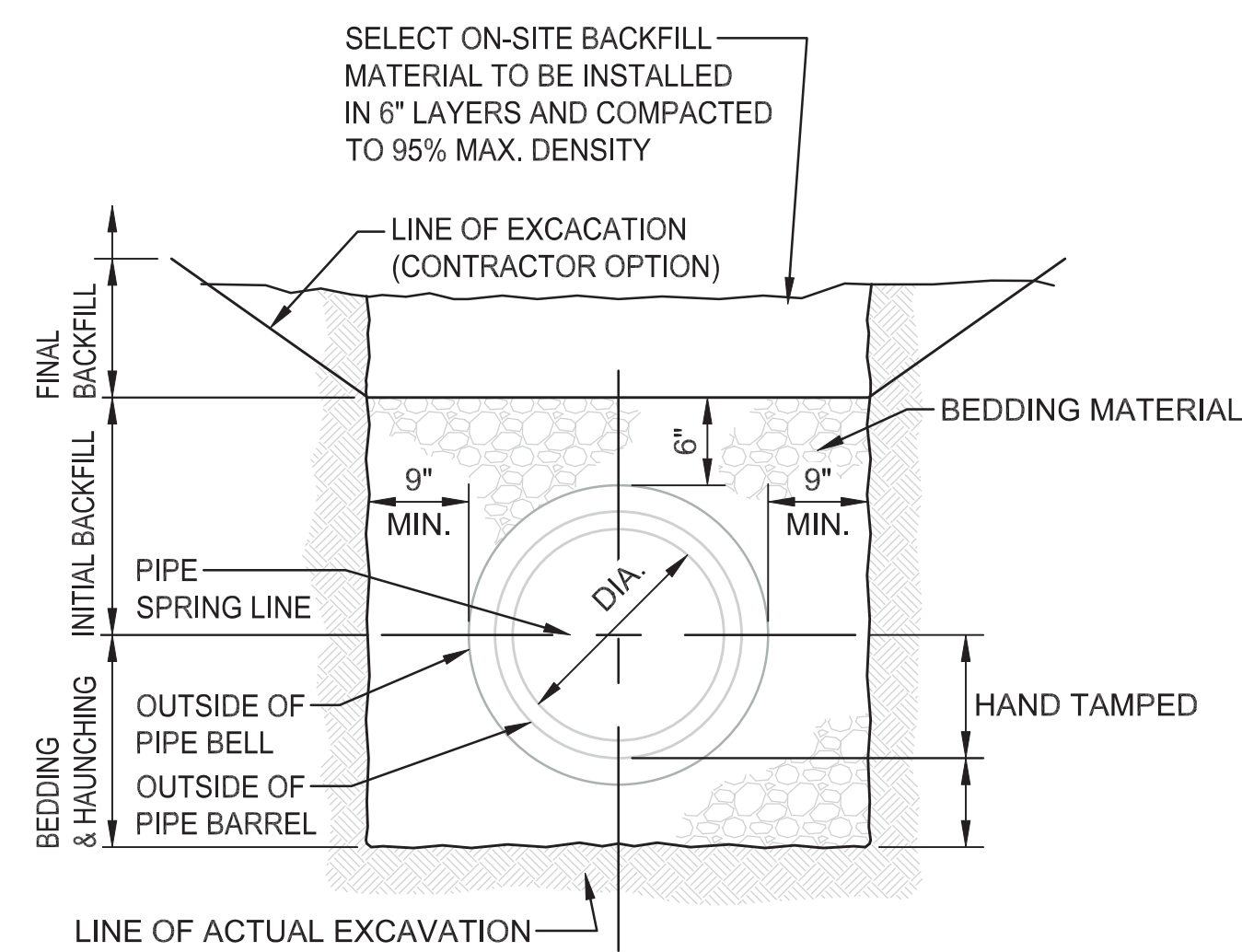


TYPICAL CREEK CROSSING

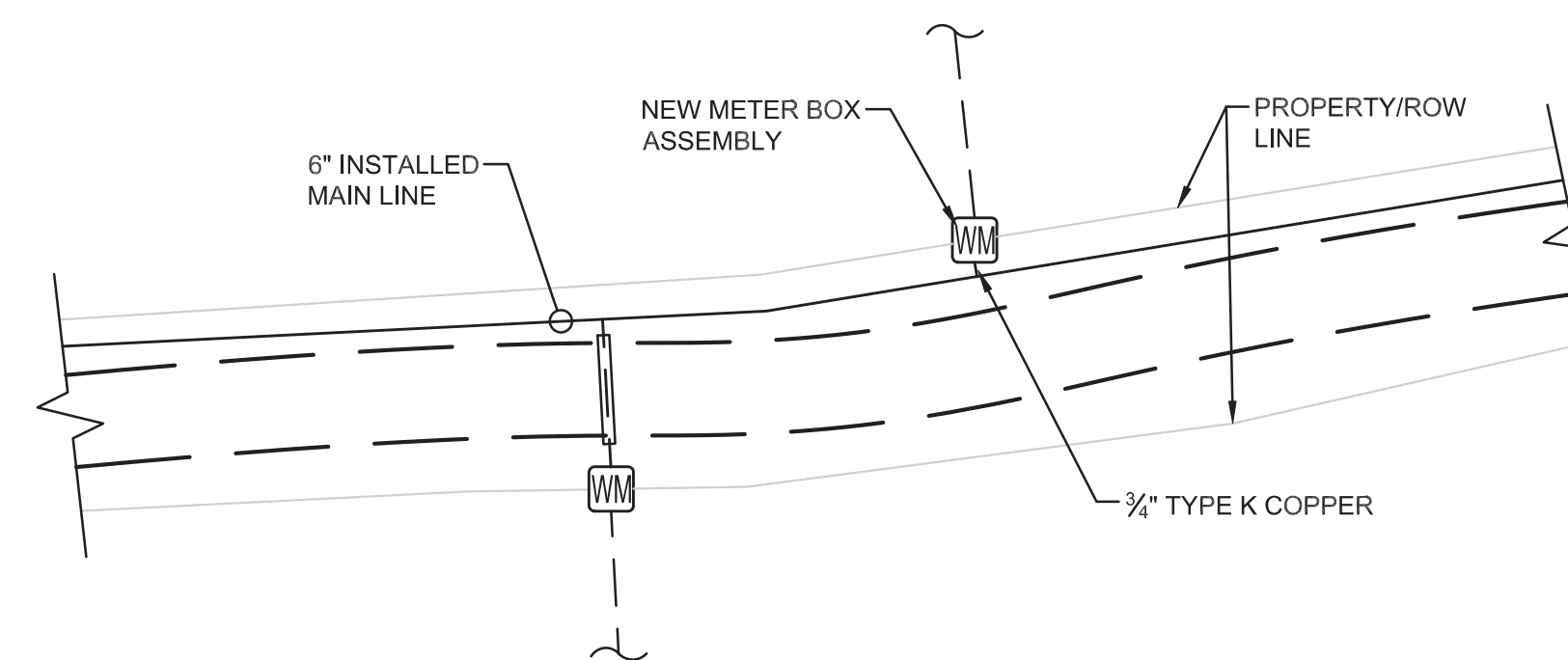


NOTES:
1. WATER METER TO BE SUPPLIED BY SEVIER COUNTY WATER DEPARTMENT

SERVICE LINE CONNECTION AND WATER METER INSTALLATION



UNDERGROUND INSTALLATION OF ALL WATER PIPE



TYPICAL WATERLINE SERVICE CONNECTION



NO.	DATE	DESCRIPTION	BY	CKD.
REVISIONS				

RG&A
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CONSULTING ENGINEERS
KNOXVILLE, TENNESSEE

EMERTS COVE RD & SPRING BRANCH RD
SEVIER COUNTY, TN

WATER DETAILS

DESIGNED BY	CHECKED BY	SCALE	SHEET
MM	RGC	N.T.S.	NO. 7
DRAWN BY	DATE	FILE NO.	OF 6 SHEETS
ZW	10/30/23	22244	