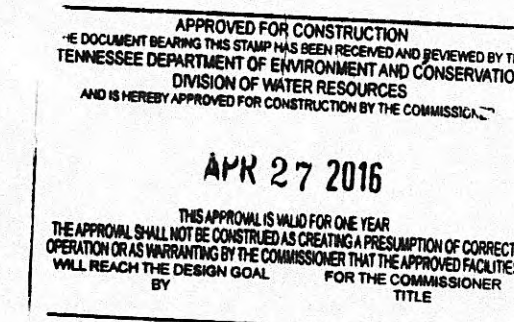


HARRIMAN UTILITY BOARD

P.O. BOX 434
HARRIMAN, TN 37748

DW 16 0436



TN DEPT OF ENVIRONMENT
AND CONSERVATION
APR 25 2016
DIV OF WATER RESOURCES
RECEIVED

CONTRACT 116 WATER LINE REPLACEMENT - AIRPORT ROAD OAKDALE, MORGAN COUNTY, TN

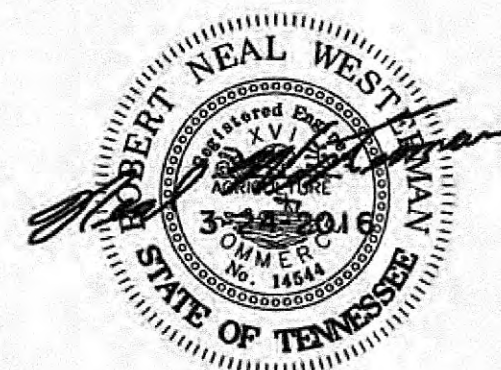
ECD #10212

LOCATION MAP



PROJECT LOCATION

Project Engineer



PLANS REVIEWED AND APPROVED BY HARRIMAN UTILITY BOARD

Constance D. Vannoy

04/19/2016
DATE

SHEET INDEX

TITLE SHEET	
WATER LINE REPLACEMENTS - STA. 0+00 TO STA. 50+00	1
WATER LINE REPLACEMENTS - STA. 50+00 TO STA. 98+40	2
STANDARD DETAILS (1 OF 2)	3
STANDARD DETAILS (2 OF 2)	4



WESTERMAN ENGINEERING
PHONE: 615-375-6054

DICKSON, TENNESSEE, 37055
<http://www.westengr.com>

2015 CDBG
Waterline Repl.
Airport Rd.

TDEC
Approval

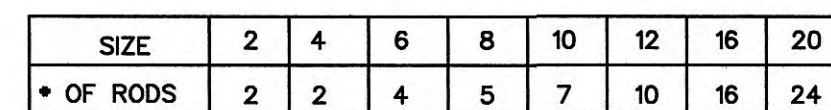


Diagram illustrating the cross-section of a road construction area. The diagram shows a central road bed with a width of 20'-0" (Maximum Pay Width). On either side of the road bed, there is a 1'-0" wide rip-rap disturbed area. The total width of the construction area is 22'-0".

IN FILL AREA BACKFILL TO BE 95% PROCTOR

3' 6"

6"

6 - #6 BARS EACH WAY

UNDISTURBED EARTH

15"

SET SCREW RETAINER GLAND
ALIGN GLAND HOLES TO
MATCH FITTING HOLES

TRENCH WALL

5' 4" / -

36"

12" OR 16"
CL. 52 D.J.

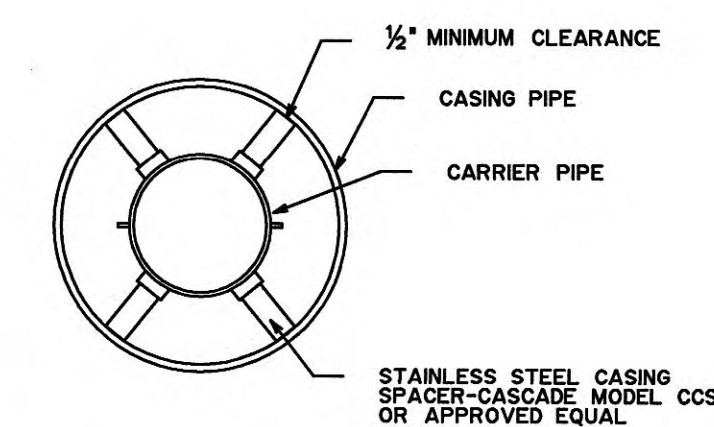
15"

UNDISTURBED EARTH

18"

10 DAY CONC. PRIOR TO
PRESSURIZING LINE - USE
4000 LB. CONC. HIGH
EARLY CONC.

1/4" ALL THREAD RODS, CADMIUM
COATED, DOUBLE NUT EACH SIDE
FITTING AND GLAND - USE 5/8"
RODS FOR 16" CL. 51 D.J.
USE 4 3/4" RODS FOR 12" CL. 51 D.J.

[illegible]

NOTES:

1. ALL JOINTS WITHIN CASING TO BE RESTRAINED.
2. CARRIER PIPE TO BE IN CENTER OF CASING TO PROVIDE RESTRAINT AGAINST MOVEMENT

Valve Box w/ 2 1/2" Square x 4" Thick Conc. Valve Box Cap

Iron Nozzle Cap

Traffic Break-Away Coupling

ANY SIZE NOZZLE UP TO 2 1/2" NST

LOCKING COVER

2" PIPE

OPERATING ROD

BRASS PLUNGER

O' RING

SEAT RUBBER

BRASS VALVE W/ 2" FIP INLET

2" Ø x 3" BRONZE NIPPLE

CONC. BRACE

2" BRONZE 90° BEND

6 1/2"

2" GATE VALVE WITH 2" OP. NUT

2' Ø x 6" BRONZE NIPPLE

PLUG W/ 2" TAP

20'

2" GATE VALVE

USE MEG-A-LUGS ON ALL FITTINGS



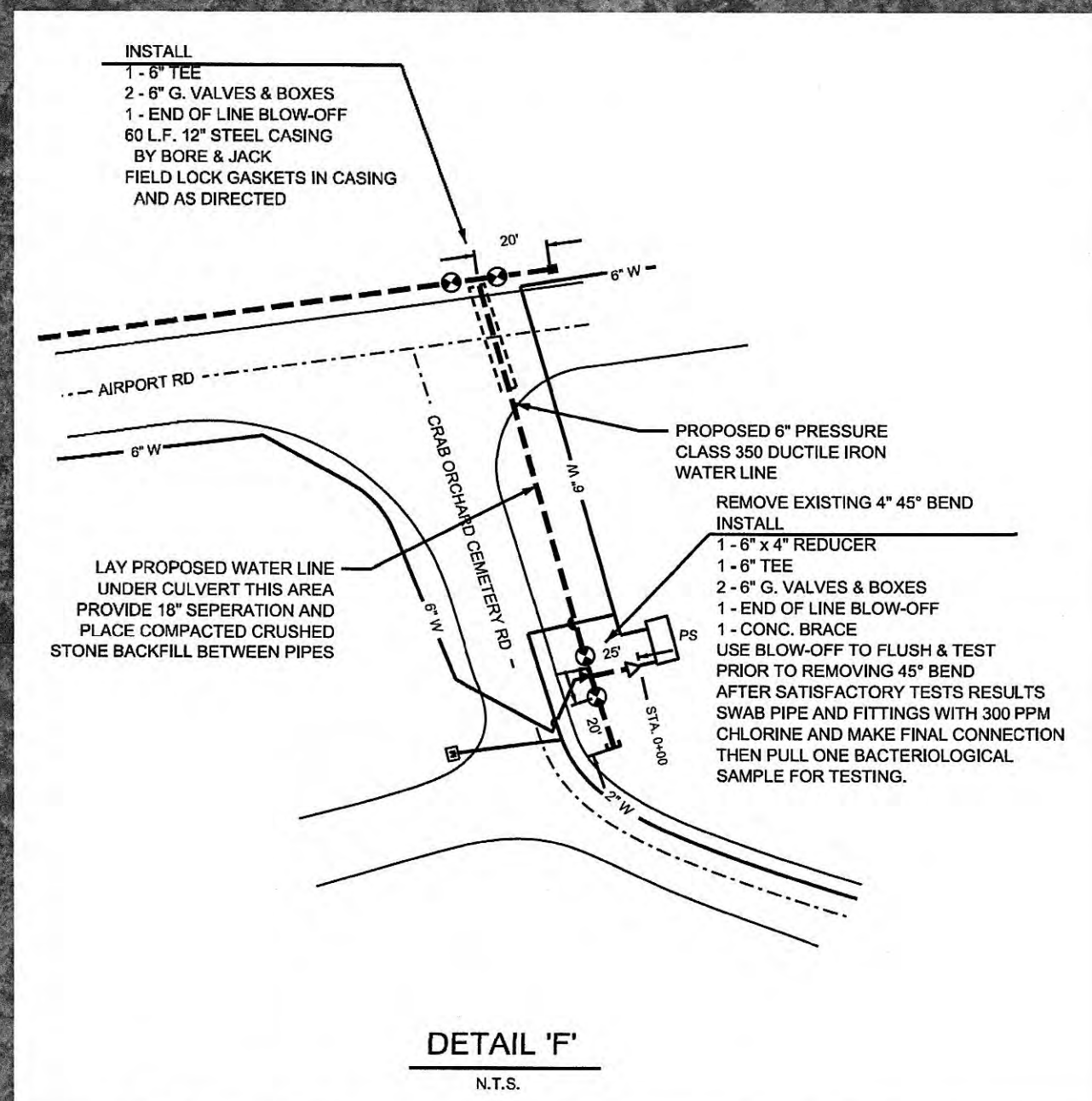
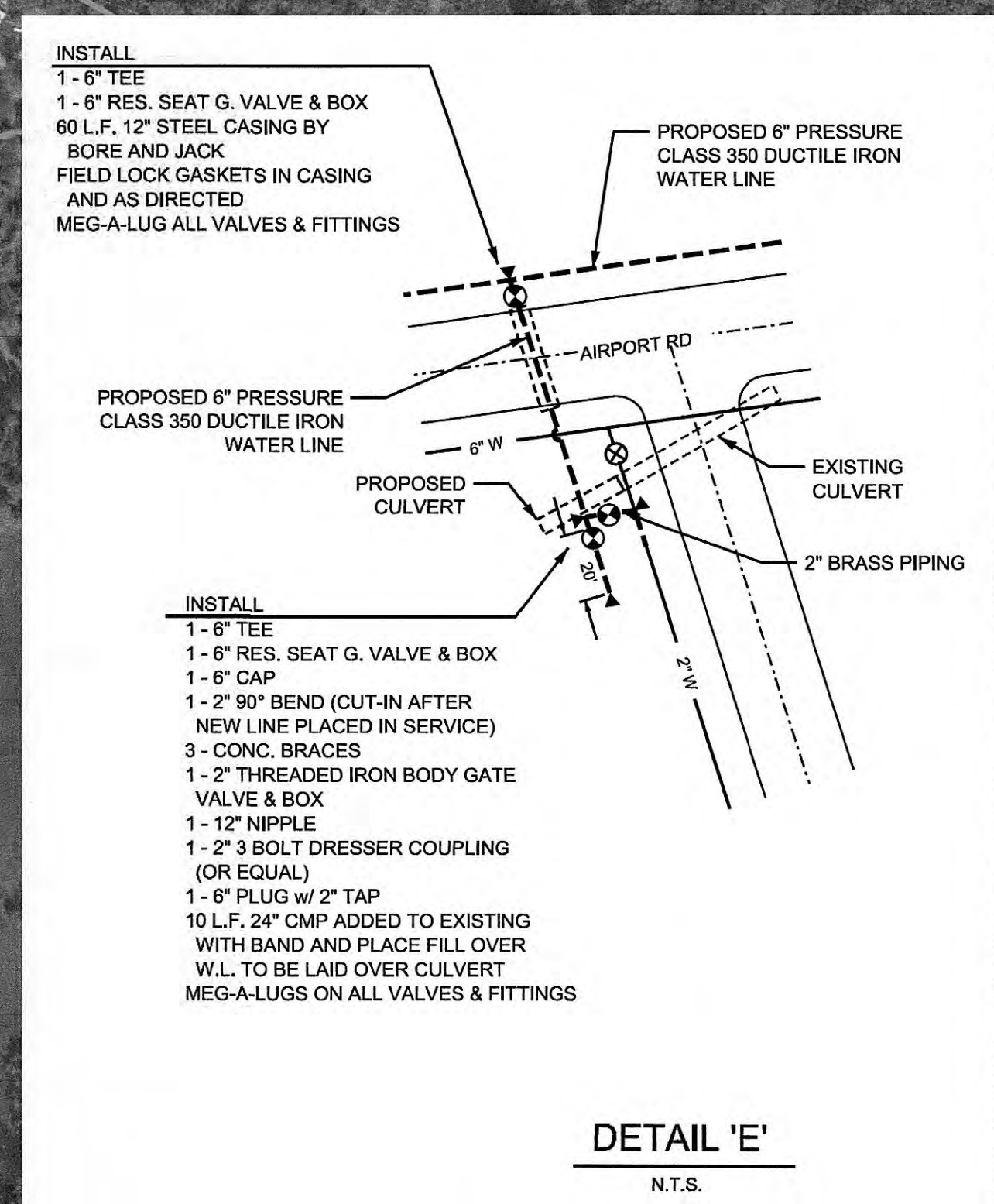
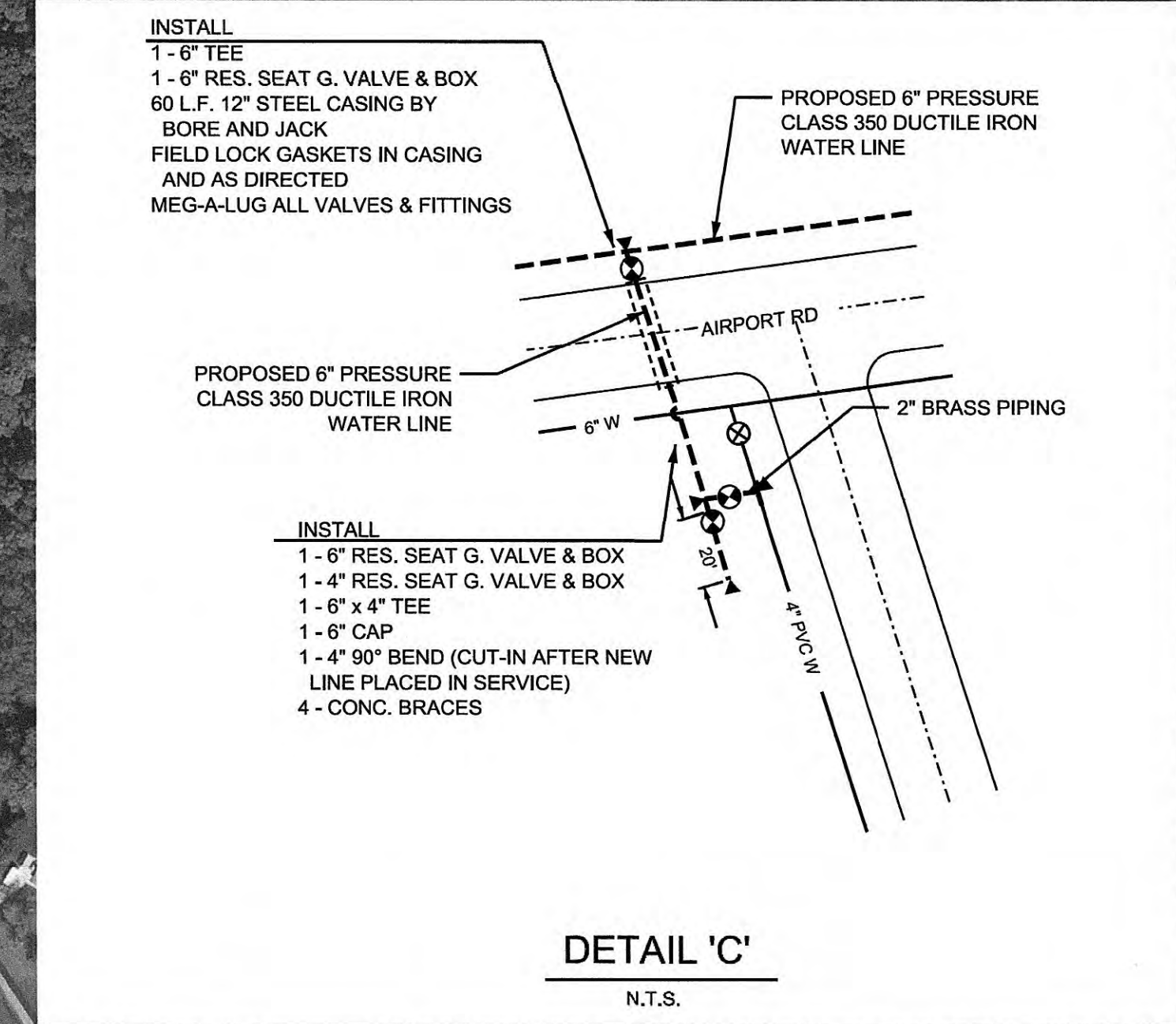
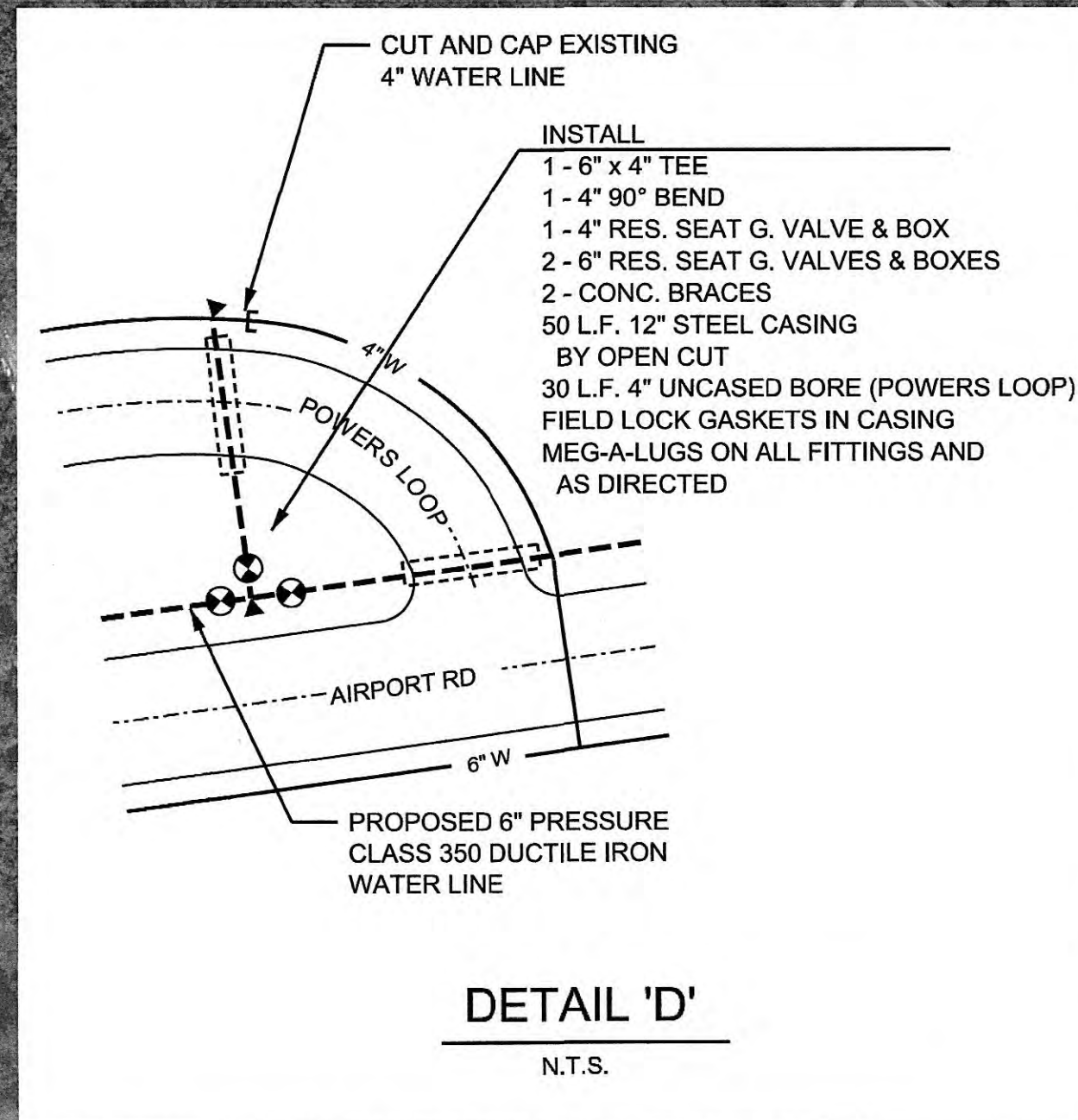
Dickson, Tennessee 37055

PH: 615-375-6054

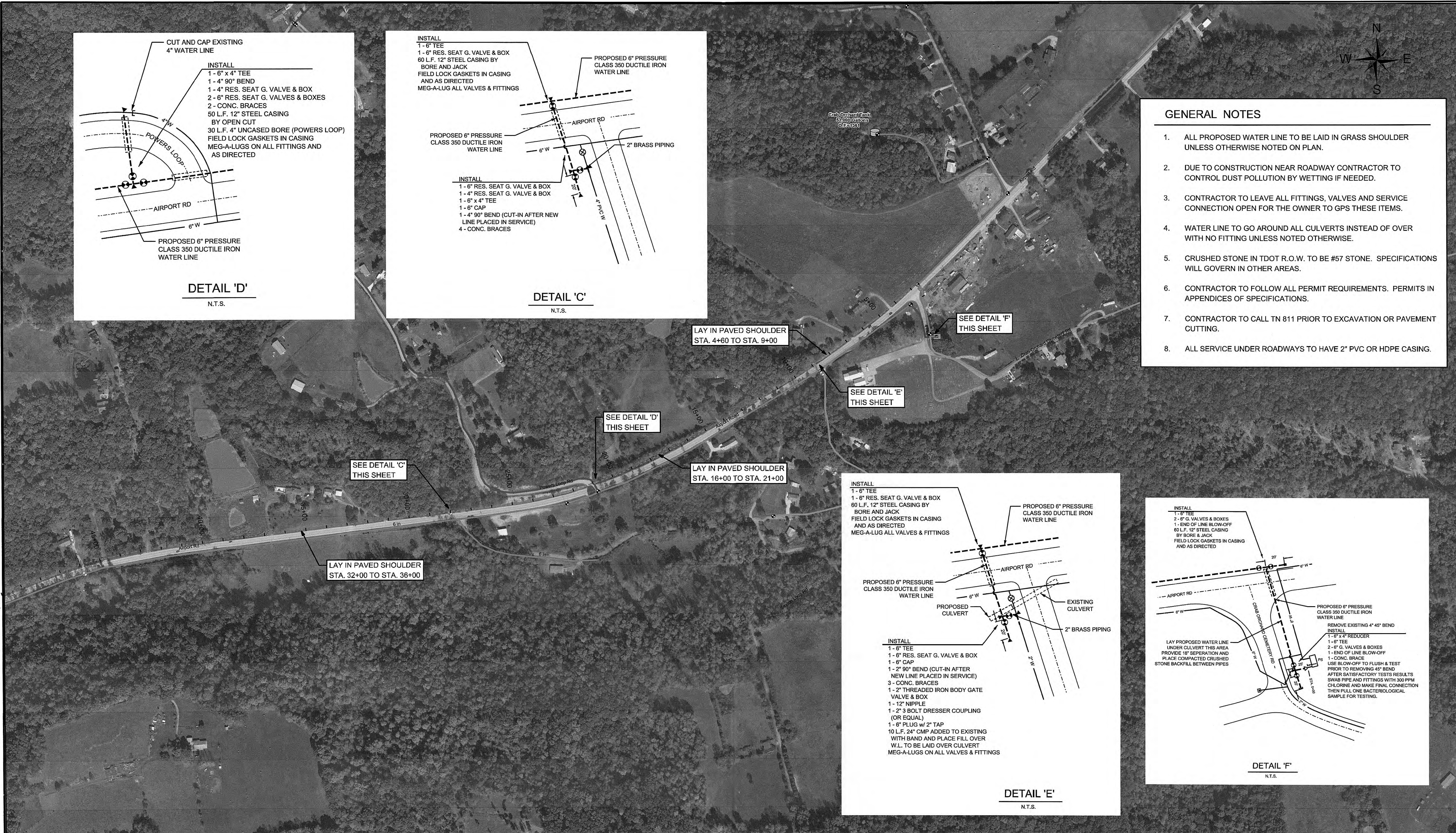
www.westengr.com

STANDARD DETAILS
2 OF 2

DESIGN	DRAWN	CHECKED
RNW	LLB	RNW
DATE	SCALE	PROJECT NO.
MAR 2016	NONE	15306



- ### GENERAL NOTES
1. ALL PROPOSED WATER LINE TO BE LAID IN GRASS SHOULDER UNLESS OTHERWISE NOTED ON PLAN.
 2. DUE TO CONSTRUCTION NEAR ROADWAY CONTRACTOR TO CONTROL DUST POLLUTION BY WETTING IF NEEDED.
 3. CONTRACTOR TO LEAVE ALL FITTINGS, VALVES AND SERVICE CONNECTION OPEN FOR THE OWNER TO GPS THESE ITEMS.
 4. WATER LINE TO GO AROUND ALL CULVERTS INSTEAD OF OVER WITH NO FITTING UNLESS NOTED OTHERWISE.
 5. CRUSHED STONE IN TDOT R.O.W. TO BE #57 STONE. SPECIFICATIONS WILL GOVERN IN OTHER AREAS.
 6. CONTRACTOR TO FOLLOW ALL PERMIT REQUIREMENTS. PERMITS IN APPENDICES OF SPECIFICATIONS.
 7. CONTRACTOR TO CALL TN 811 PRIOR TO EXCAVATION OR PAVEMENT CUTTING.
 8. ALL SERVICE UNDER ROADWAYS TO HAVE 2" PVC OR HDPE CASING.

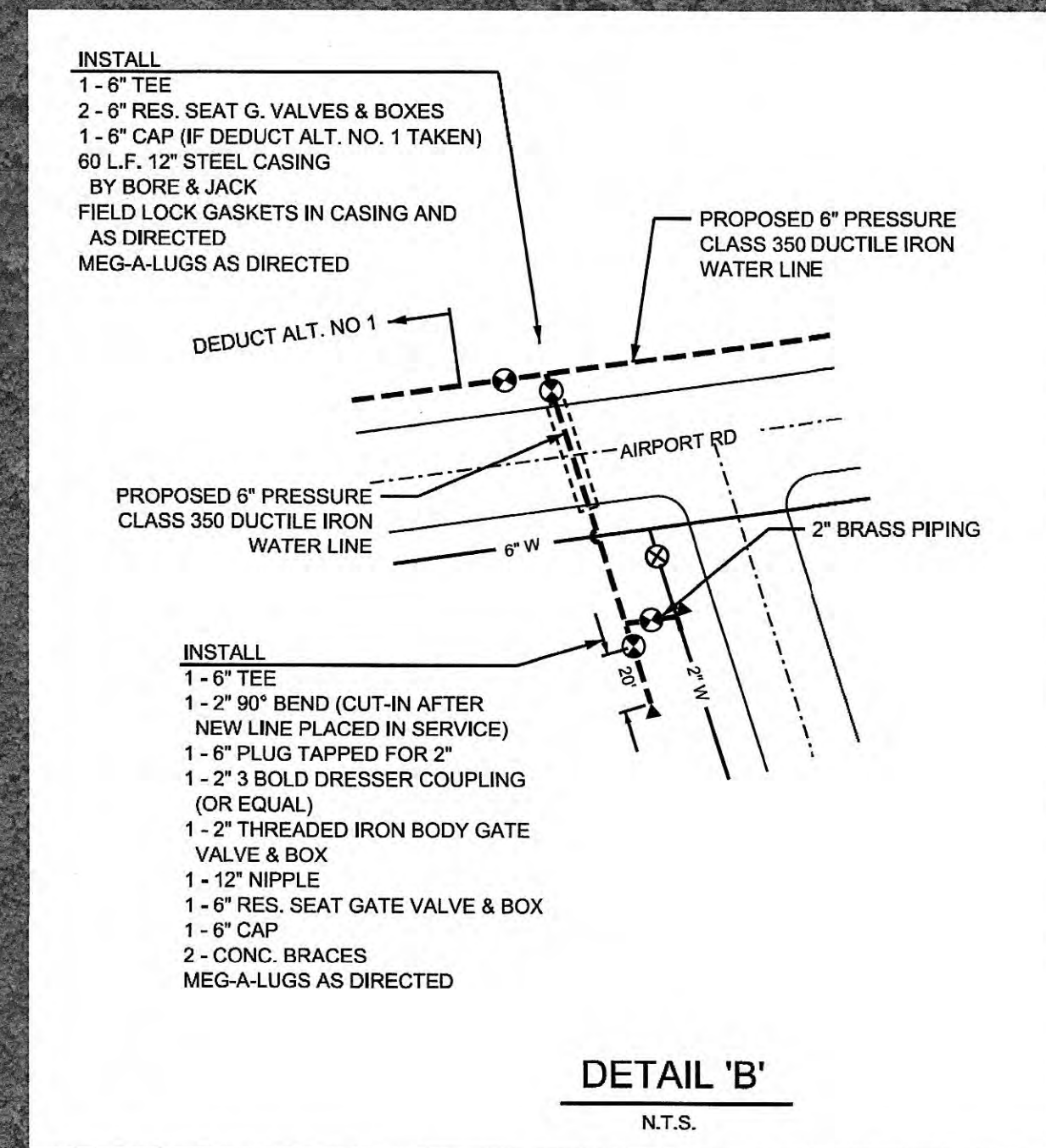
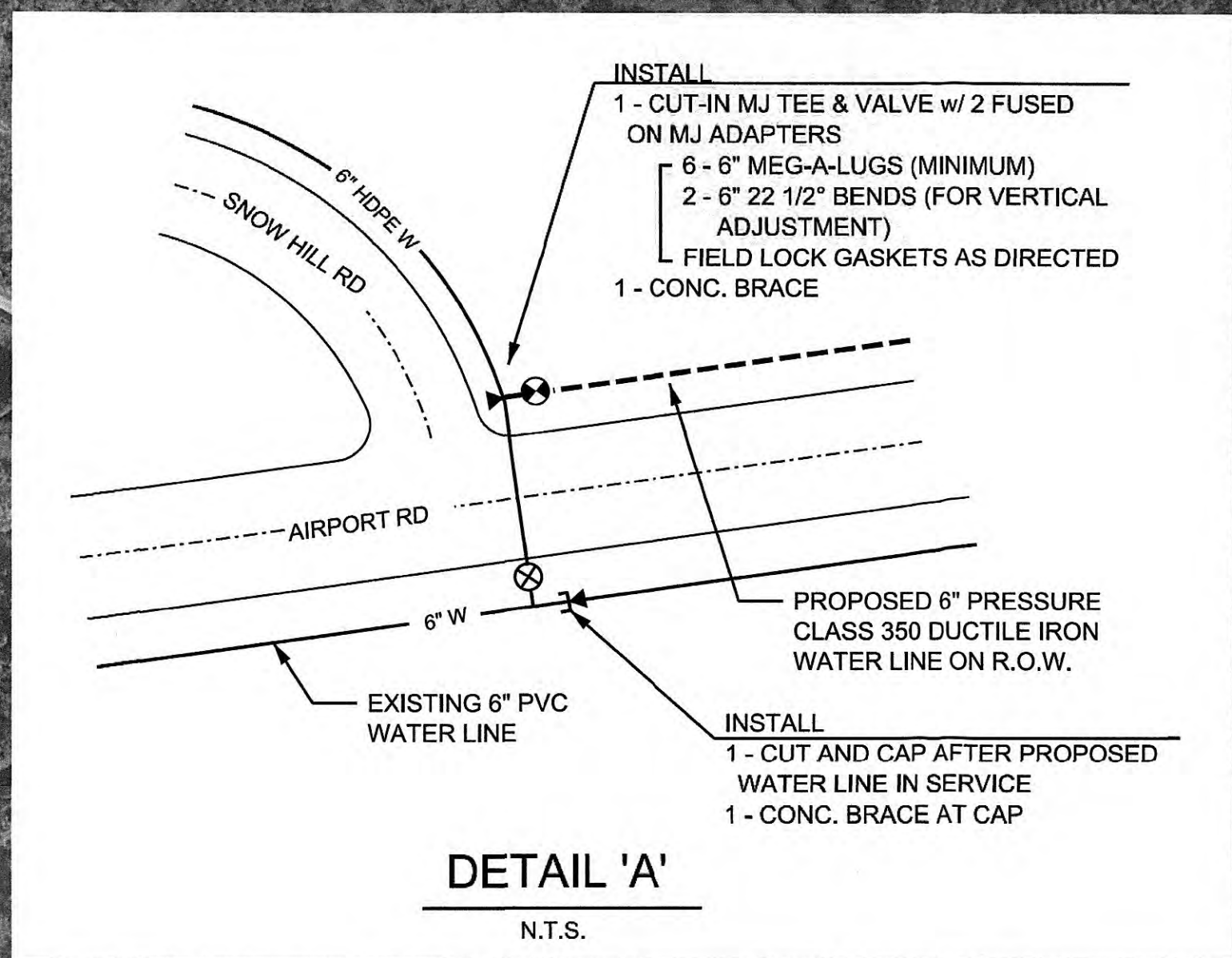
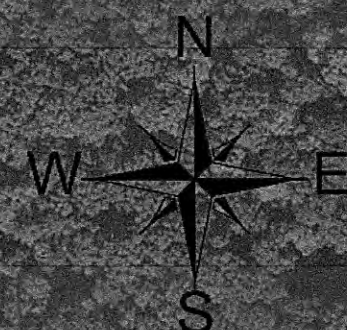


WESTERMAN ENGINEERING
Dickson, Tennessee 37055
PH: 615-375-6054 www.westengr.com

HARRIMAN
UTILITY BOARD
Morgan County, Tennessee

DESIGN	DRAWN	CHECKED	SHEET
RNW	LLB	RNW	1
DATE MAR 2016	SCALE 1" = 200'	PROJECT NO. 15306	

WATER LINE REPLACEMENT
STA. 0+00 TO STA. 50+00

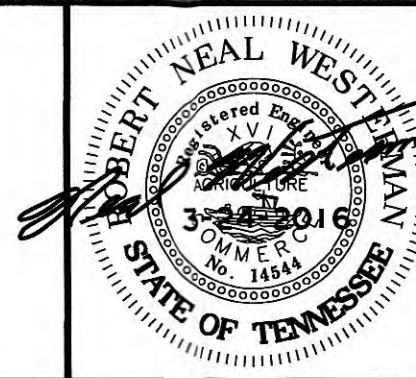


SEE DETAIL 'A'
THIS SHEET

DEDUCT ALTERNATE NO. 1

LAY AROUND END OF CULVERT
BY DEFLECTING JOINTS
(NO FITTINGS ALLOWED)

SEE DETAIL 'B'
THIS SHEET

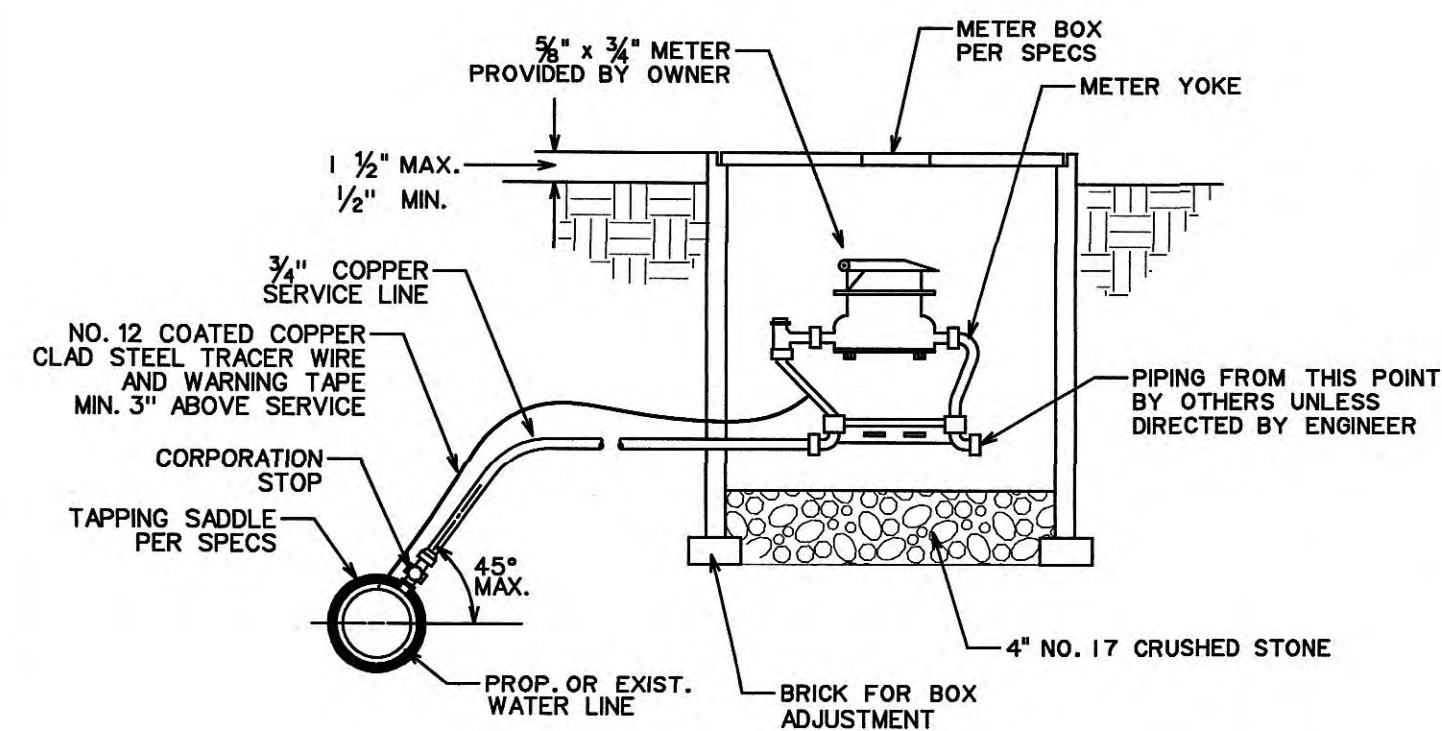


WESTERMAN ENGINEERING
Dickson, Tennessee 37055
PH: 615-375-6054 www.westengr.com

HARRIMAN
UTILITY BOARD
Morgan County, Tennessee

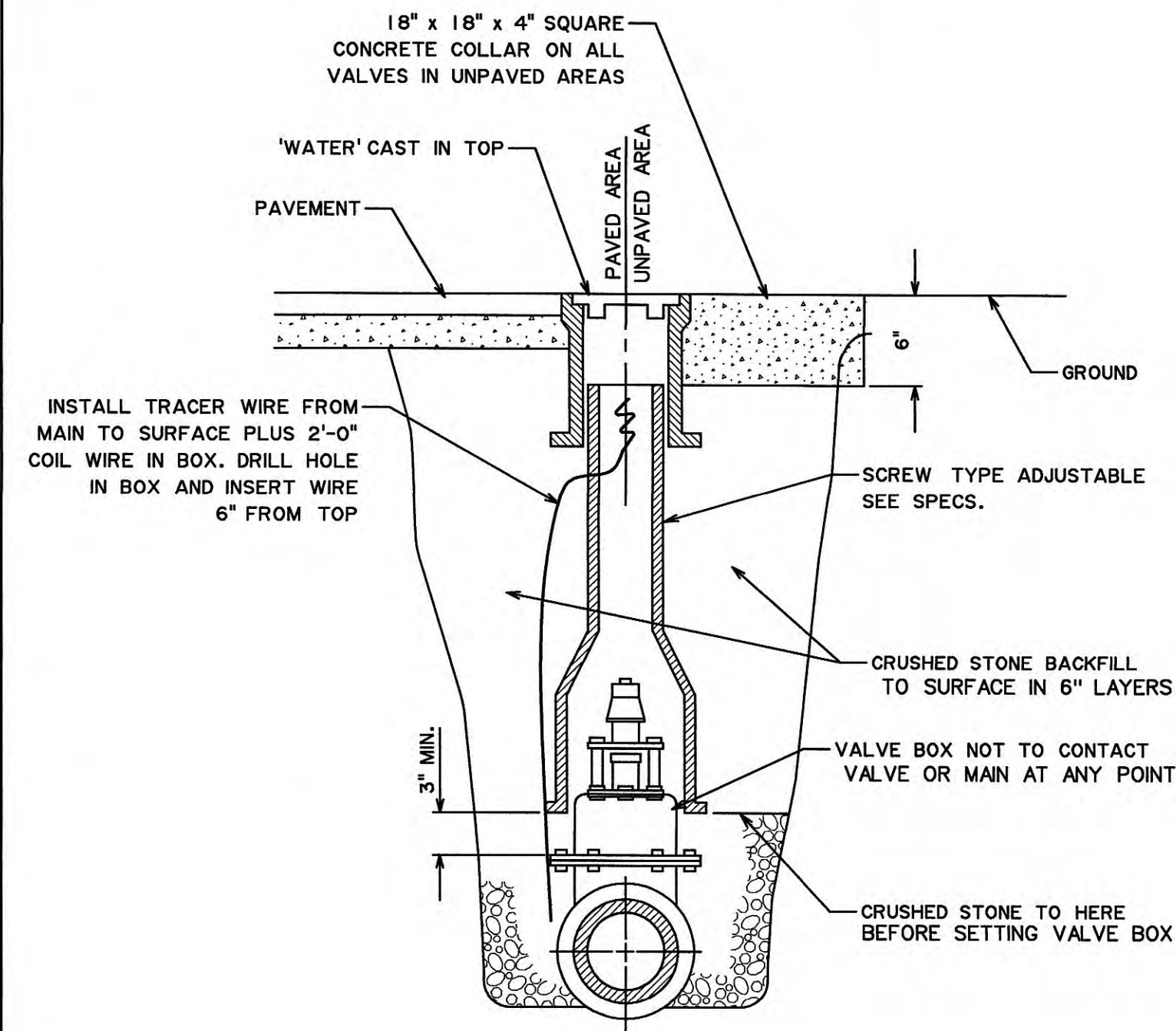
WATER LINE REPLACEMENT
STA. 50+00 TO STA. 98+40

DESIGN	DRAWN	CHECKED
RNW	LLB	RNW
DATE	SCALE	PROJECT NO.
MAR 2016	1" = 200'	15306

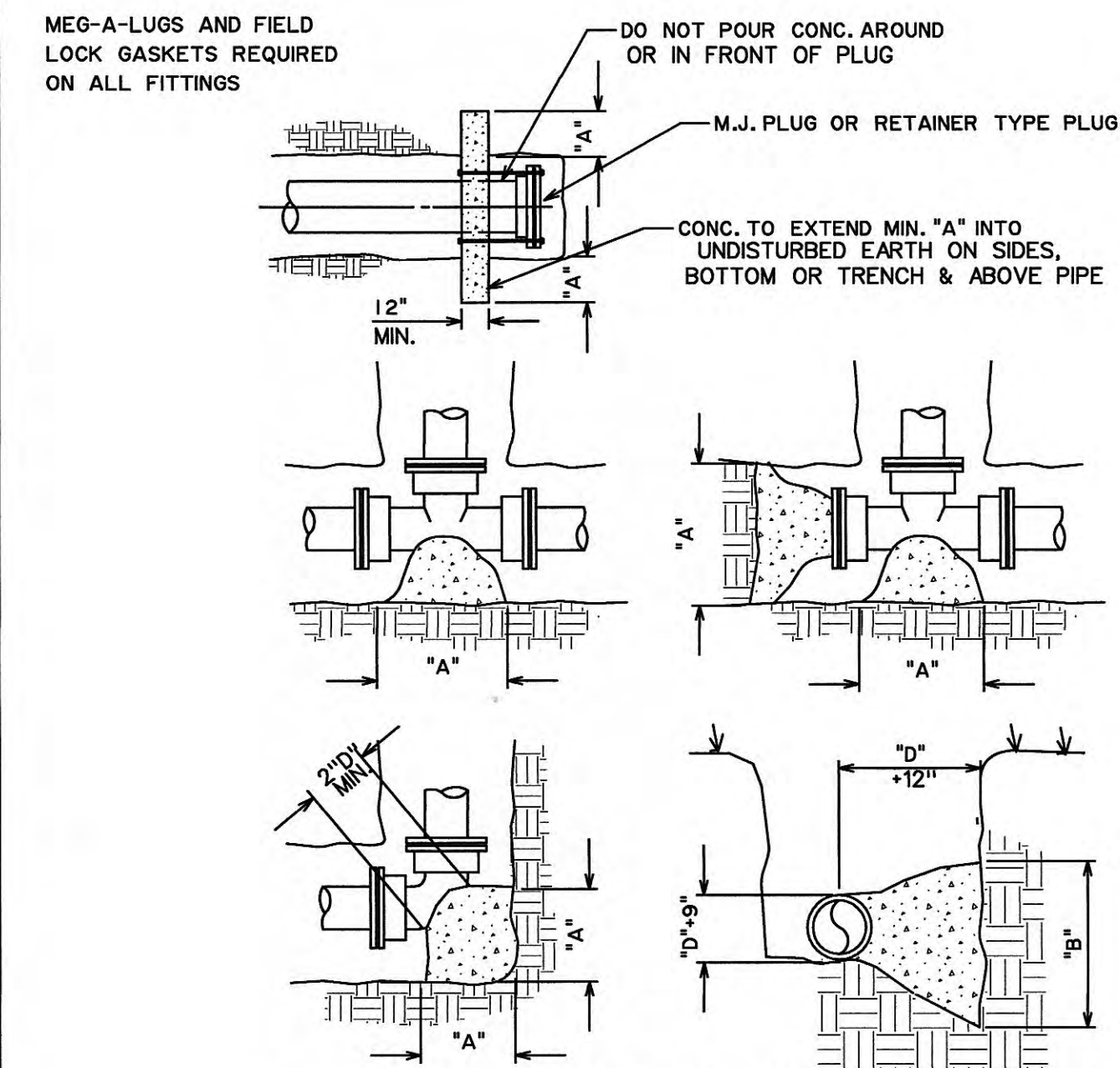


- NOTES:
- SERVICE LINE TO RUN FROM MAIN TO METER BOX ALONG THE SHORTEST, MOST DIRECT ROUTE POSSIBLE UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
 - SERVICE LINE TO BE CONTINUOUS FROM MAIN LINE TO METER YOKE WITHOUT COUPLINGS.
 - SERVICE LINE UNDER ROADWAYS TO HAVE 2" PVC OR HDPE CASING.

TYPICAL SERVICE CONNECTION



TYPICAL VALVE BOX SETTING

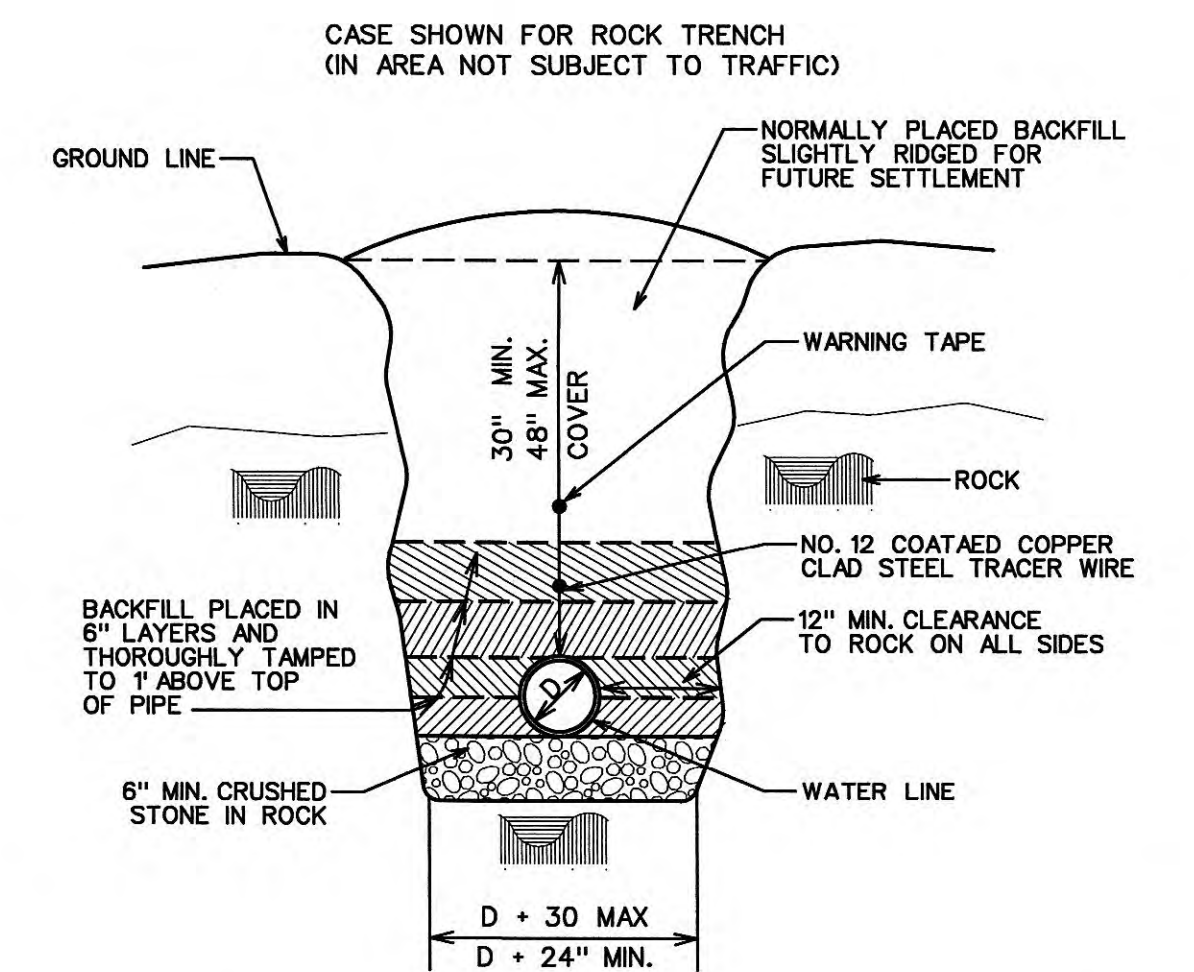


BLOCK MUST BE POURED AGAINST UNDISTURBED EARTH (TYP.)

CONCRETE BRACE DIMENSION SCHEDULE

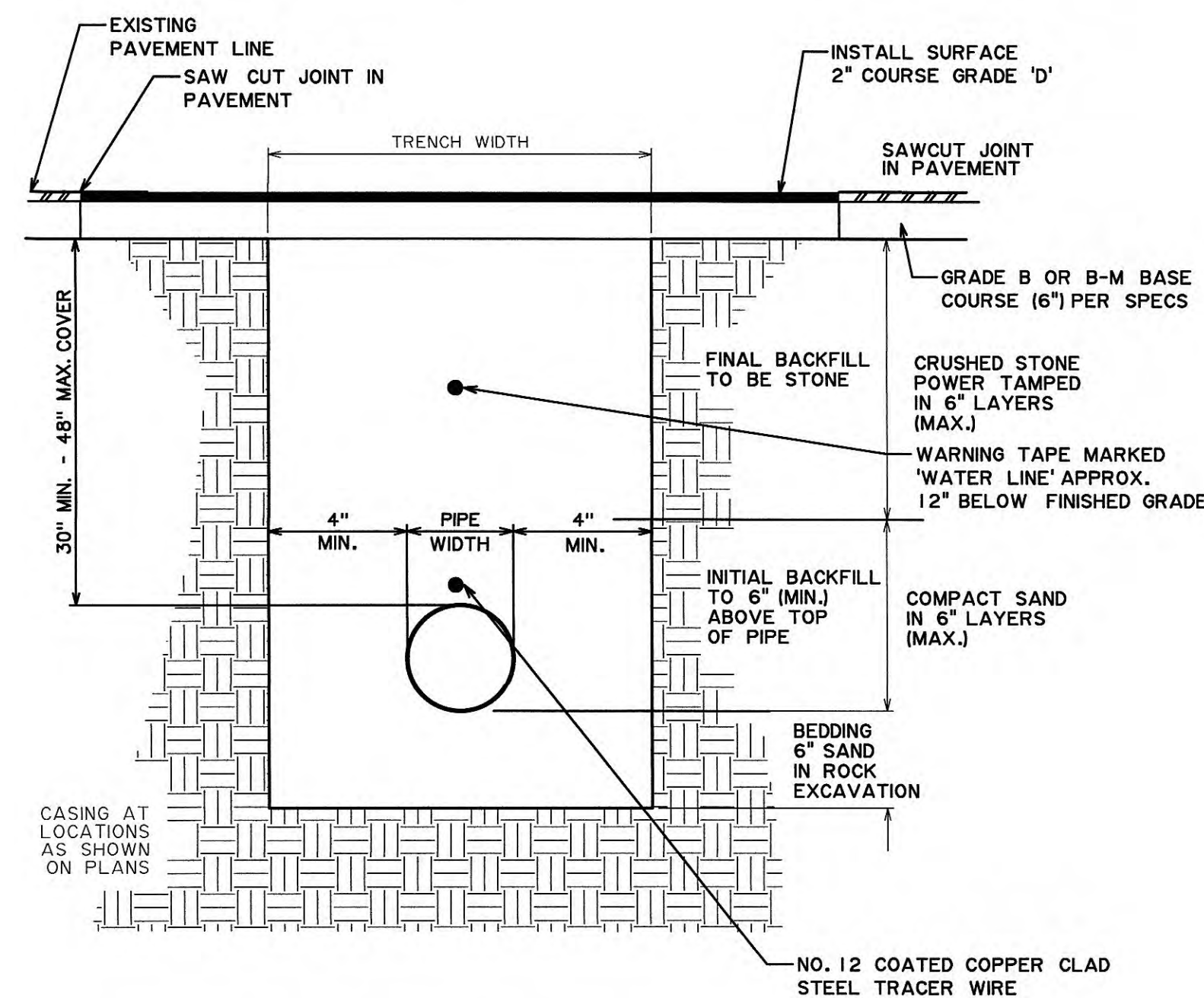
PIPE SIZE	90° BEND		45° BEND		22 1/2° BEND		TEE		DEAD END	
	A	B	A	B	A	B	A	B	A	B
6" OR UNDER	2'-0"	2'-0"	1'-6"	1'-6"	1'-6"	1'-6"	2'-0"	2'-0"	1'-6"	1'-6"
8"	2'-3"	2'-3"	1'-9"	1'-9"	1'-9"	1'-9"	2'-6"	2'-6"	2'-0"	2'-0"
10"	2'-6"	2'-6"	2'-0"	2'-0"	2'-0"	2'-0"	3'-0"	3'-0"	2'-4"	2'-4"
12"	3'-6"	3'-0"	2'-6"	2'-6"	2'-3"	2'-3"	4'-0"	3'-6"	2'-9"	2'-9"
16"	4'-0"	4'-0"	3'-0"	3'-0"	2'-6"	2'-6"	5'-6"	4'-0"	3'-0"	3'-0"
20"	5'-6"	5'-0"	4'-0"	3'-6"	3'-0"	3'-0"	6'-6"	5'-0"	5'-0"	3'-6"
24"	7'-0"	5'-0"	5'-0"	4'-0"	3'-6"	3'-6"	8'-0"	6'-0"	6'-0"	4'-0"
30"	9'-0"	6'-0"	6'-6"	4'-6"	4'-0"	4'-0"	12'-0"	6'-0"	7'-9"	5'-0"

CONC. THRUST BLOCK (BRACE)

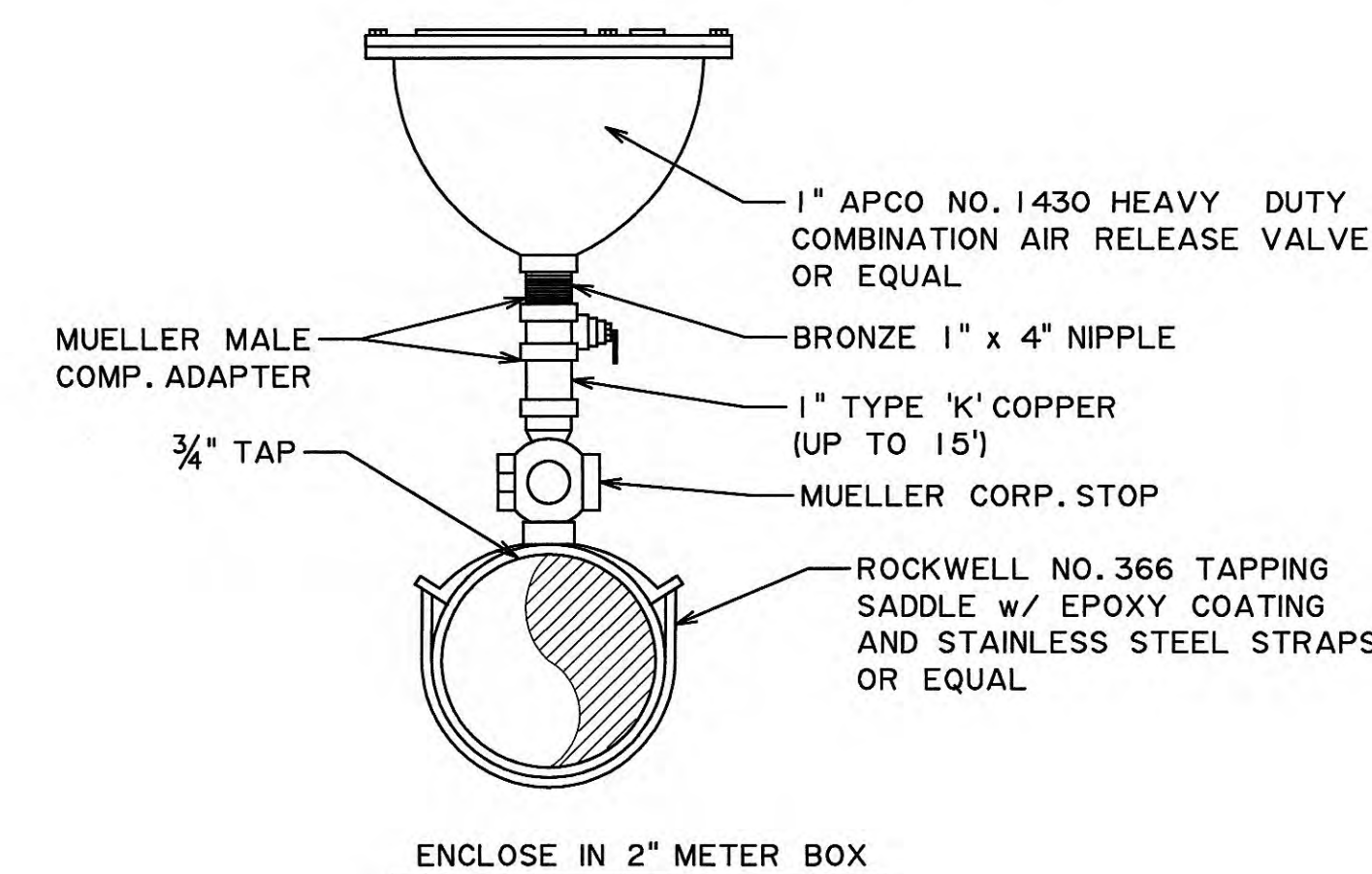


TYPICAL TRENCH SECTION

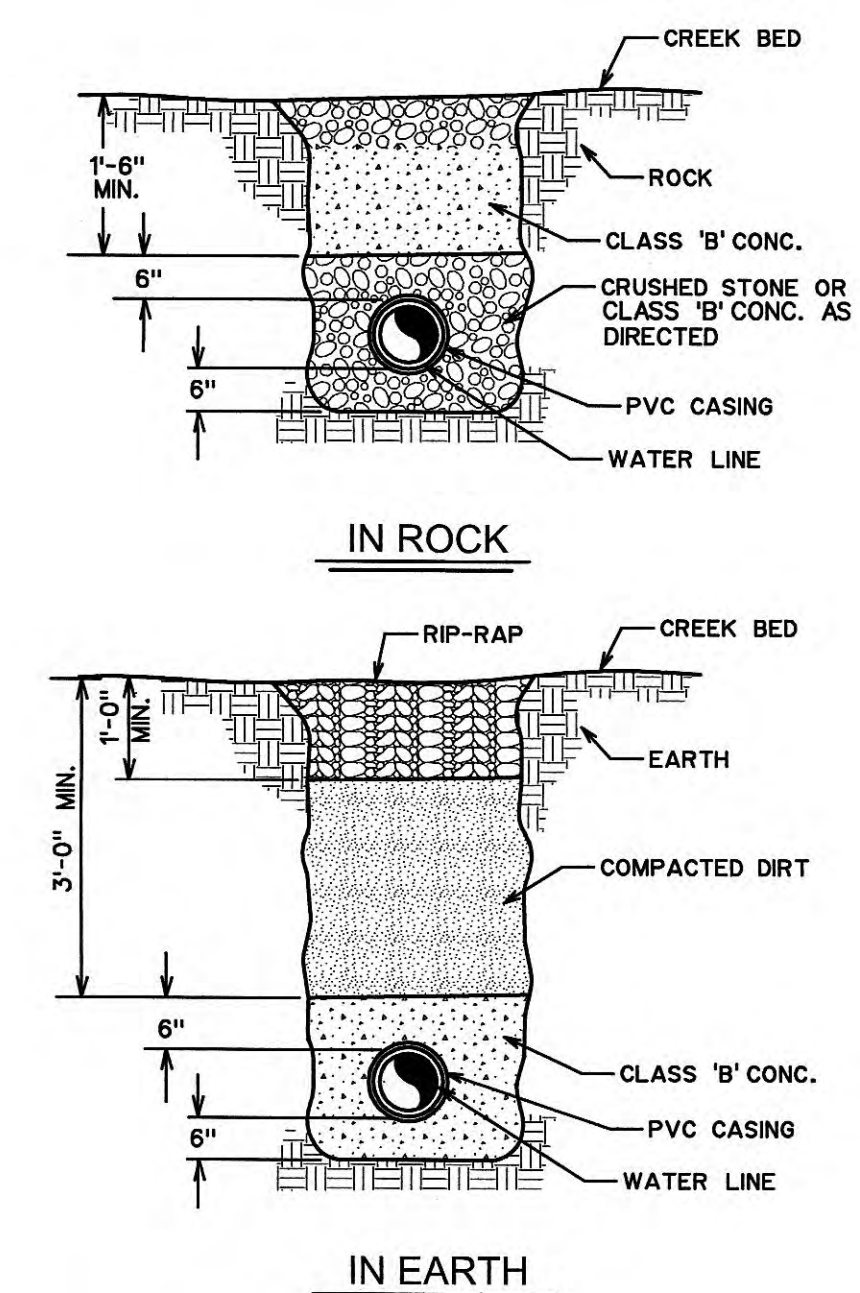
- NOTES:
- CRUSHED STONE DRIVES SHALL BE PREPARED IN ACCORDANCE WITH THIS DETAIL EXCEPT THAT THE REPLACEMENT PAVING SHALL BE DELETED.
 - WHEN CASING IS REQUIRED, THE PIPE WIDTH AND MINIMUM COVER SHALL REFER TO THE CASING DIAMETER.
- PAVEMENT NOTES:
- EDGE TO BE SAWED WITH A CONCRETE SAW TO A NEAT SQUARED EDGE. ALL PATCHES SHALL BE SQUARE OR RECTANGULAR PARALLEL TO CURB OR ROAD EDGE. CUTS SHALL BE BROOMED CLEAN OF DUST BEFORE TACK COAT IS APPLIED.
 - EDGES TO BE TACKED WITH EMULSIFIED ASPHALT TACK CRS-I OR CRS-II.
 - CUTTING AND REPAIRING EXISTING PAVEMENT CONCRETE OR GRAVEL SHALL BE IN ACCORDANCE WITH OWNERS REQUIREMENTS.
 - BACKFILL AND BEDDING MATERIAL SHALL BE COMPACTED IN 6" LIFTS WITH JUMPING JACK COMPACTOR TO 95% DENSITY PRIOR TO PLACING SUCCEEDING LIFTS.
 - CRUSHED STONE TO BE AS PER SPECIFICATIONS.
 - CONNECTORS FOR TRACER WIRE TO BE AS PER SPECIFICATIONS



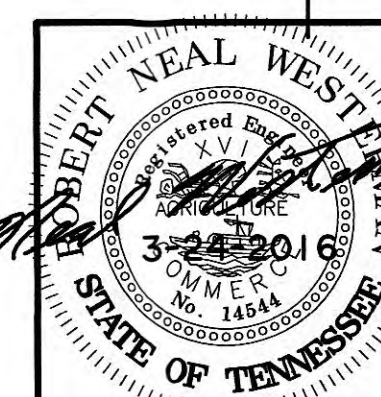
TYPICAL TRENCH SECTION UNDER PAVEMENT



TYPICAL AIR RELEASE ASSEMBLY



TYPICAL STREAM CROSSING DETAIL



WESTERMAN ENGINEERING
Dickson, Tennessee 37055
PH: 615-375-6054 www.westengr.com

HARRIMAN
UTILITY BOARD
Morgan County, Tennessee

STANDARD DETAILS
1 OF 2

DESIGN	DRAWN	CHECKED	SHEET
RNW	LLB	RNW	3
DATE	SCALE	PROJECT NO.	
MAR 2016	NONE	15306	