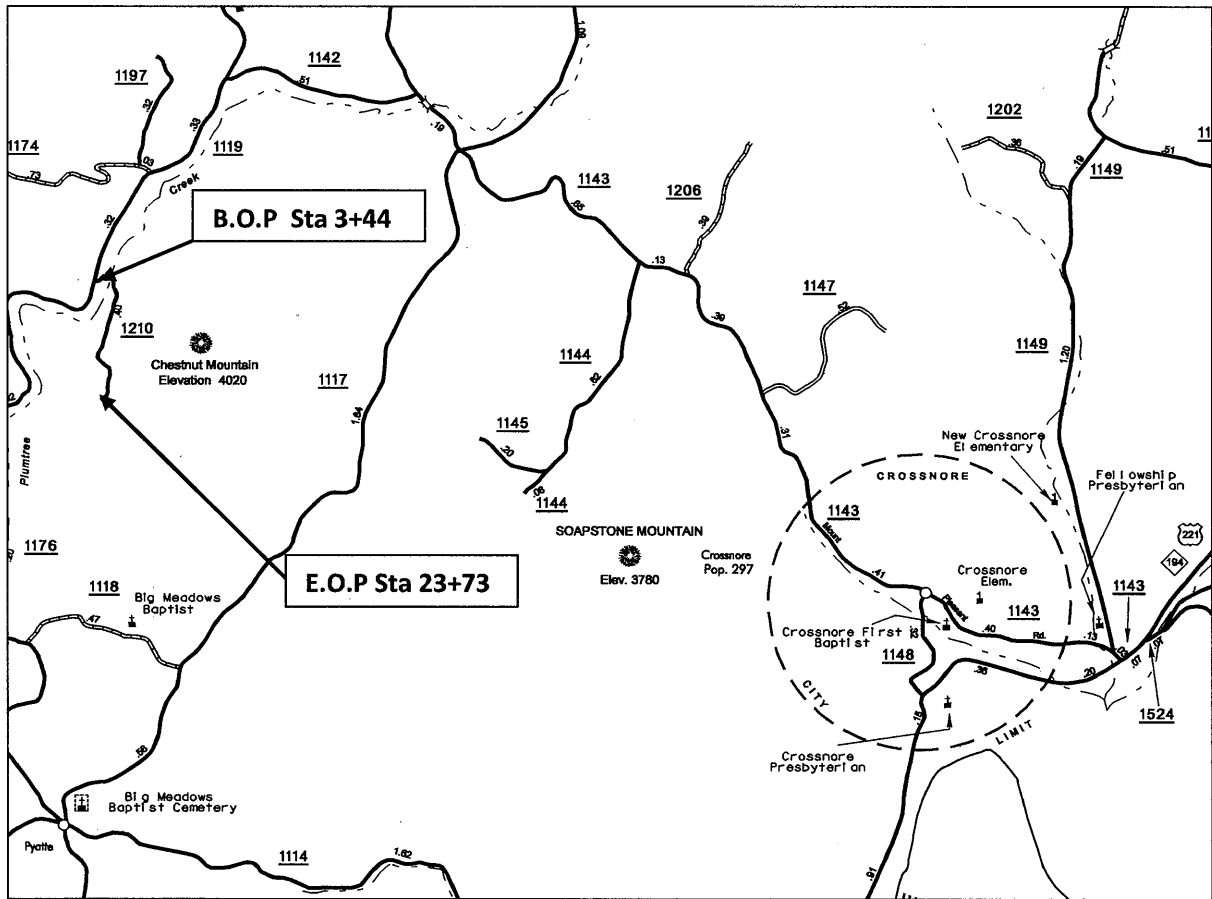


# Vicinity Map

SR 1210 Old Chestnut Mountain Road – 0.38 miles



# EROSION CONTROL & PIPE INSTALLATION SCHEDULE

## TROUT BUFFER ZONE SEQUENCE

### GENERAL E&SC NOTES

### GROUND STABILIZATION CHART

#### Erosion Control Schedule and Notes

1. Generally, the order of installation of the erosion control measures will be as follows:

- A. Temporary silt basins shall be installed before clearing and grubbing begins.
  - B. Silt fences and temporary silt ditches shall be installed after clearing and before grading.
  - C. Temporary stone ditch checks with PAM or wattles with PAM shall be installed in all disturbed areas as soon as the disturbance begins.
  - D. Final stone ditch checks or wattles shall be installed as soon as ditch line is established.
  - E. Pipe outlet and inlet protection will be done as soon as the pipe is installed.
  - F. Other permanent erosion control measures are to be implemented as soon as practical.
2. Temporary rock silt checks, type B will be spaced by percent grade as shown in the erosion control plan.
3. No. 5 stone, or equivalent, will be used in conjunction with the temporary rock silt checks in locations where water is leaving the project or entering a pipe.
4. All devices are to be cleaned out when half full.
5. Establish permanent vegetation per ground stabilization chart.

#### Notes:

For silt basin size see the attached erosion control plans. PAM is to be placed on all Type A checks and wattles in the erosion control chain except for the final device in HWQ and Trout projects.

#### Wet Pipe Installation Schedule and Notes

- 1. Prior to installing any E&SC measures identify permit conditions and impact area limits.
- 2. Install erosion control devices.
- 3. Manage the water course. The pipe must be placed in the dry. Install dewatering measures.
- 4. Remove material and existing pipe while limiting material and sediment from entering stream and escaping the project.
- 5. Excavation of stream channel shall not exceed 10' on either side of new pipe or culvert unless indicated on permit.
- 6. Per permit conditions for Corps of Engineers and the Wildlife Resources Commission, all pipes in streams 48" or greater must be buried 12" below streambed elevation. Pipes less than 48" must be buried with 20% of the diameter below streambed elevation.
- 7. Place the new pipe and compact backfill.
- 8. Install slope protection on the outlet and inlet ends of the pipe. Also complete installation of erosion control measures and perform maintenance as needed on existing measures.
- 9. Establish permanent vegetation per ground stabilization chart.
- 10. More information on wet pipe installation can be found in the BMP manual section 4.2 "Pipe & Culvert installation"

#### GROUND STABILIZATION CHART

Site Area Description	Stabilization Time Frame	Stabilization Time Frame Exceptions
Perimeter dikes, swales, ditches and slopes	7 days	None
High Quality Water Zones	7 days	None
Slopes steeper than 3:1	7 days	If slopes are 10 ft. or less in length and are not steeper than 2:1, 14 days are allowed
Slopes 3:1 or flatter	14 days	7 days for slopes greater than 50' in length
All other areas flatter than 4:1	14 days	None (except for perimeters and HQW zones)

#### General Erosion Control Sequence & Notes for NC DOT Projects in Trout Buffer Zones

- 1. Prior to installing any E&SC measures identify permit conditions and impact area limits. Review trout buffer variance approval conditions for any special provisions.
- 2. All materials should be on the hand before work is commenced.
- 3. Install EC devices
- 4. Work within the buffer zone should be sequenced to minimize the length of time that disturbed areas are exposed. Stream bank stabilization, which includes the area from the edge of water to the top of bank, should be phased so that each day's work is a completed work, including provision of adequate ground cover.
- 5. Graded slopes and fills within the trout buffer zone will within 7 calendar days of completion of any phase of grading be planted or otherwise provided with temporary or permanent ground cover, devices, or structures sufficient to restrain erosion.
- 6. Graded slopes and fills within the trout buffer zone (excluding road shoulders) shall be protected with rolled erosion control product, bonded fiber matrix, or flexible growth medium after seeding.

#### Notes:

Silt fence backed by woven wire, with a post spacing of 6 feet, shall be used instead of standard silt fence in trout buffer zone. Special sediment control fence shall be used in areas where bedrock is encountered which prohibits the proper anchoring of fabric, and in low points of the silt fence in 3-foot sections to allow for concentrated flows.

The disturbed areas within the stream buffer shall be restored to native vegetation characteristic of an undisturbed buffer to the extent practical upon completion of construction.

Flyrock protection such as blast mats should be provided for blasting in close proximity to streams.

PAM is to be placed on all Type A checks and wattles in the erosion control chain except for the final device in HWQ and Trout projects.

PROJECT:	IIC.006015 (R/W)
	063 (CONST)
ROAD:	SR 1210 OLD CHESTNUT MOUNTAIN ROAD
COUNTY:	AVERY
TYPE:	GRADE, DRAIN, BASE, AND PAVE (0.38 MI)
SCALE: 1" = 50'	SHEET 1 OF 5 DATE: 1/28/13

GREENE, ZEB & ALICE  
C/O WILMETA V. CALLOWAY  
53 Pg: 400

4+00.00  
17% GRADE FROM B.O.P. TO STA. 5+00

5+00.00  
13% GRADE FROM STA. 5+00 TO STA. 6+00

INSTALL RIP RAP IN THE PROPOSED DITCH LINE.

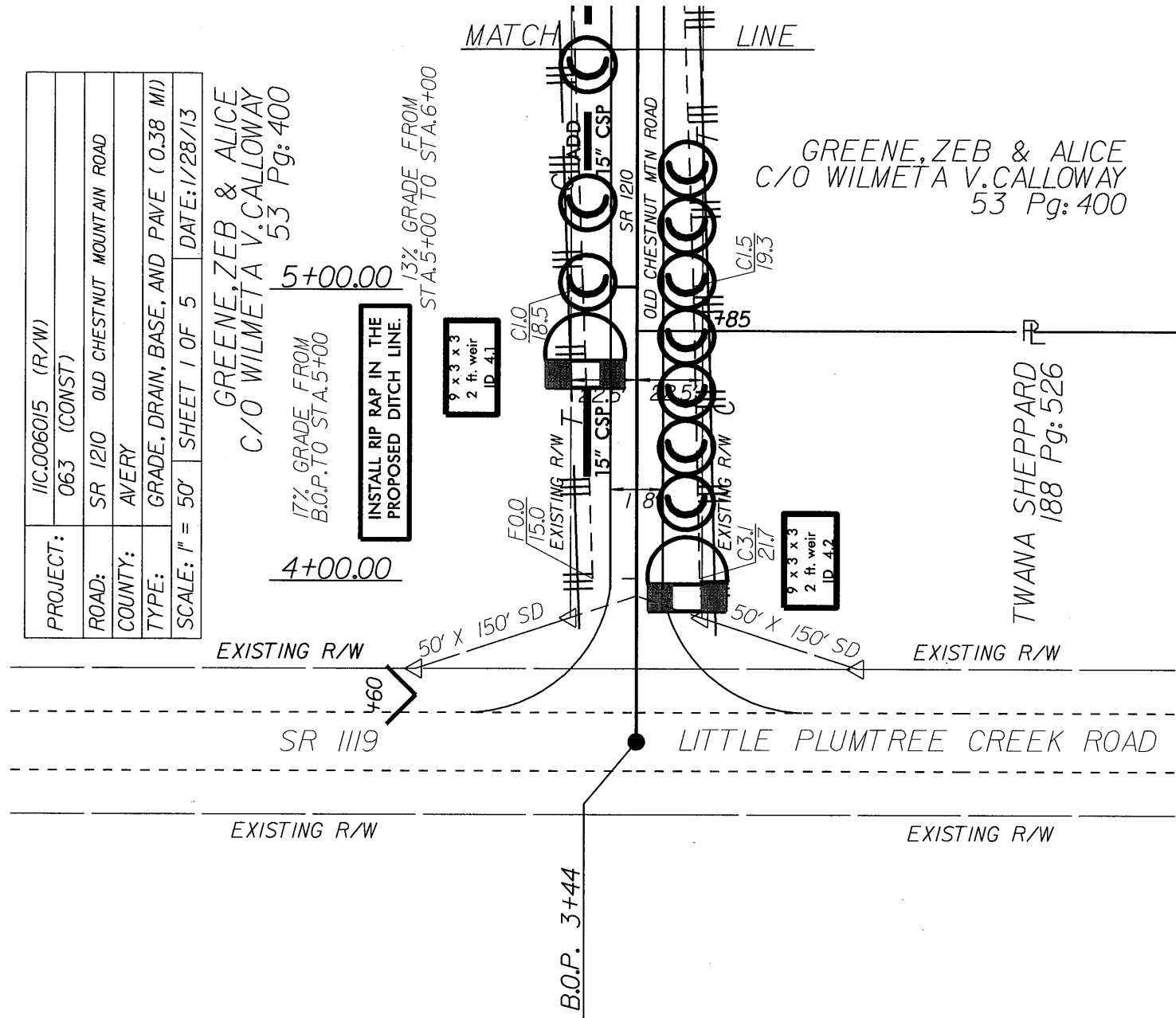
9 x 3 x 3  
2 ft. weir  
ID. 41

9 x 3 x 3  
2 ft. weir  
ID. 42

MATCH LINE

GREENE, ZEB & ALICE  
C/O WILMETA V. CALLOWAY  
53 Pg: 400

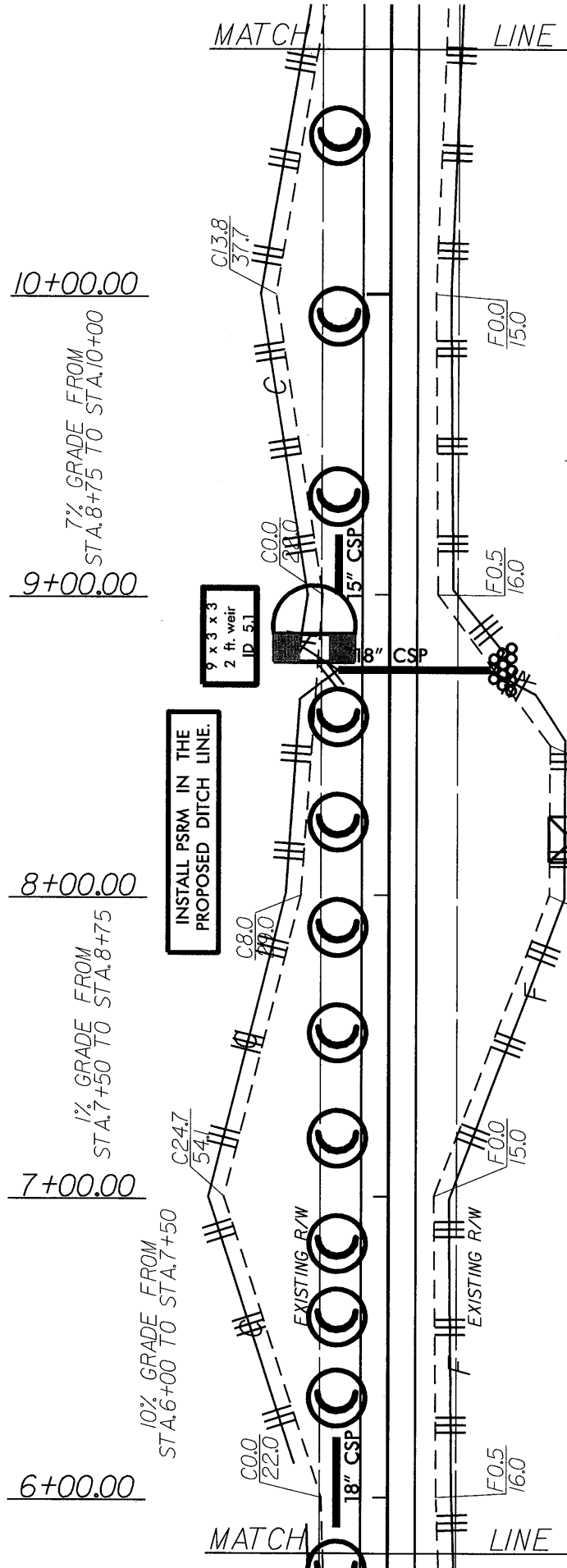
TWANA SHEPPARD  
188 Pg: 526



B.O.P. 3+44

GREENE, ZEB & ALICE  
C/O WILMETA V. CALLOWAY  
53 Pg: 400

1.6% GRADE FROM  
STA. 10+00 TO STA. 11+15



GREENE, ZEB & ALICE  
C/O WILMETA V. CALLOWAY  
53 Pg: 400

GREENE, ZEB & ALICE  
C/O WILMETA V. CALLOWAY  
53 Pg: 400

STONE, W C &  
STONE, WYONA  
406 Pg: 106

8% GRADE FROM  
STA. 11+15 TO STA. 12+00

10% GRADE FROM  
STA. 12+00 TO STA. 13+00

15% GRADE FROM  
STA. 13+00 TO STA. 14+86

8% GRADE FROM  
STA. 14+86 TO STA. 17+50

11+00.00

12+00.00

13+00.00

14+00.00

15+00.00

9 x 3 x 3  
2 ft. weir  
ID .61

INSTALL RIP RAP IN THE  
PROPOSED DITCH LINE.

INSTALL RIP RAP IN THE  
PROPOSED DITCH LINE.

C19.3  
46.0

C20.8  
48.2

C10.7  
33.1

C8.0  
29.0

+86

+15

+14

+48

24" CSP

EXISTING R/W

EXISTING R/W

E1.5  
18.0

F1.0  
17.0

F0.0  
15.0

F0.0  
18.0

No Embankment Construction.  
Sta 14+00 To 19+00Rt.

GREENE, ZEB & ALICE  
C/O WILMETA V. CALLOWAY  
53 Pg: 400

BUCKLAND, BETSY L  
FULLER, L FRANCES  
321 Pg: 1179

VANCE, BILLY LEE  
272 Pg: 496

MATCH

LINE

LINE

MATCH

BENFIELD, JESSE & CRYSTAL  
229 Pg: 789

GREENE, ZEB & ALICE  
C/O WILMETA V. CALLOWAY  
53 Pg: 400

GATES, ROSE T  
196 Pg: 498

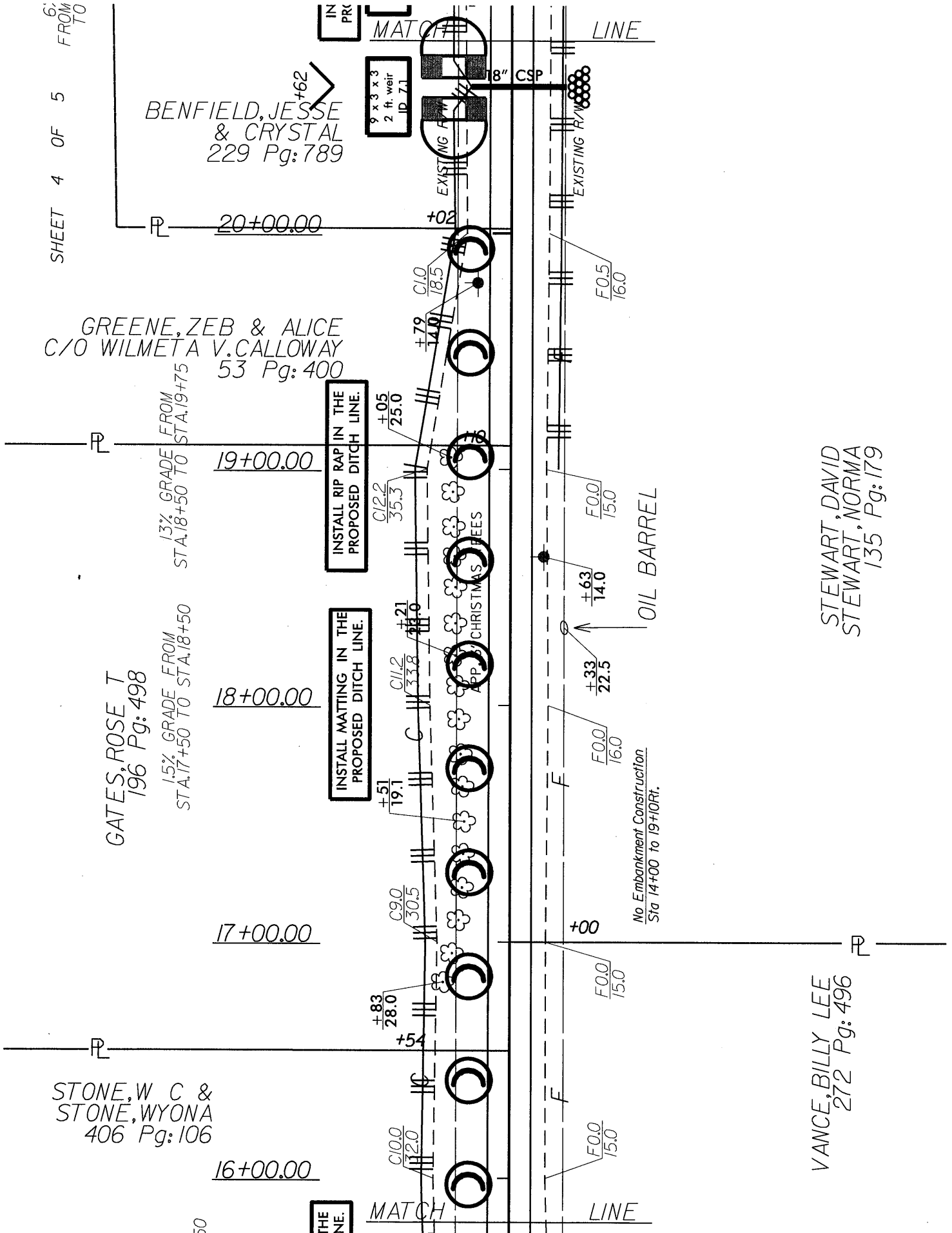
1.5% GRADE FROM  
STA. 17+50 TO STA. 18+50

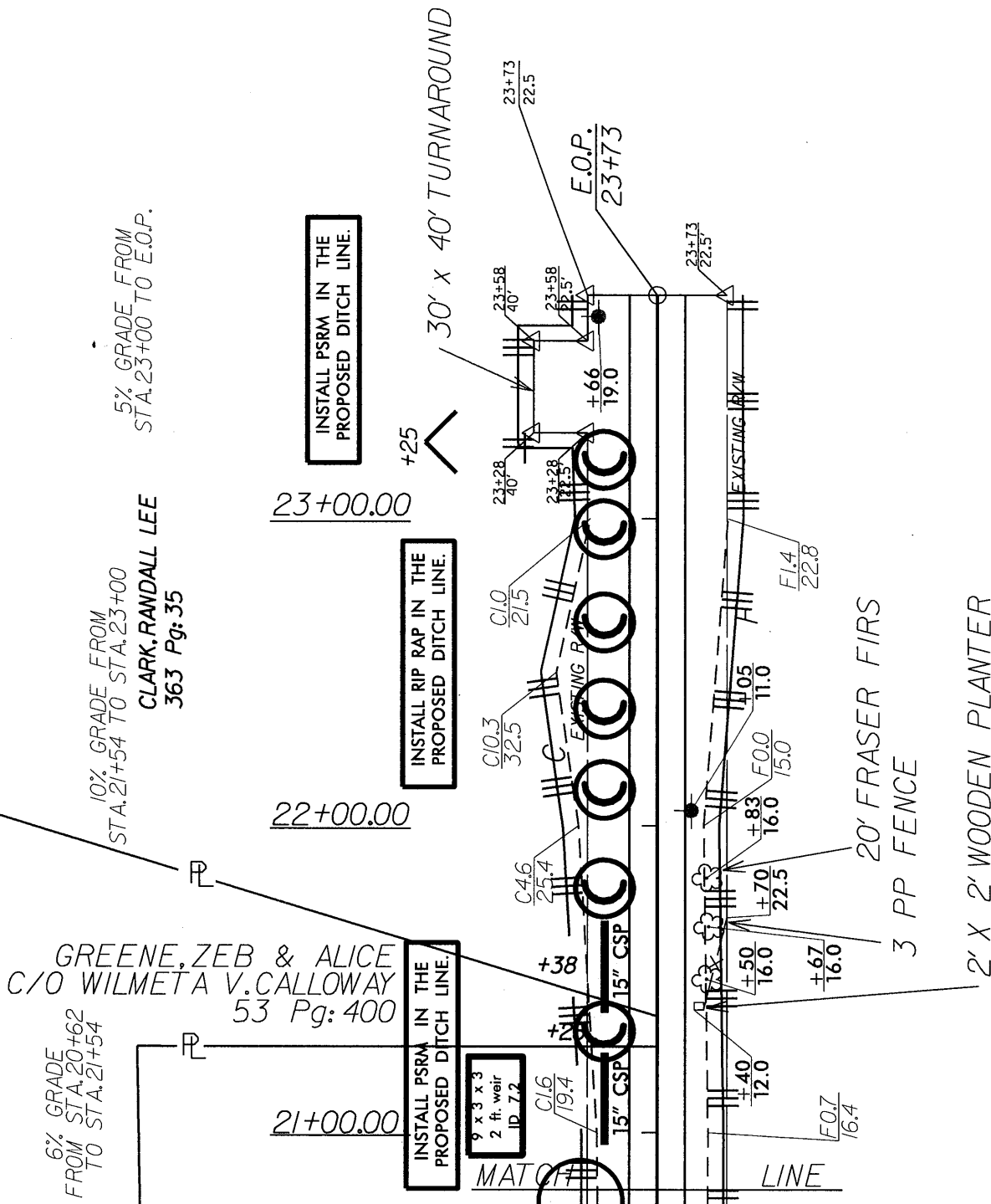
13% GRADE FROM  
STA. 18+50 TO STA. 19+75

STONE, W C &  
STONE, WYONA  
406 Pg: 106

STEWART, DAVID  
STEWART, NORMA  
135 Pg: 179

VANCE, BILLY LEE  
272 Pg: 496





STEWART, DAVID  
STEWART, NORMA  
135 Pg: 179

**STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS**

PROJECT NO.

SR 1210

SHEET NO.

3-C

*LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48" & UNDER)*

SIZE	TYPE	STATION	LOCATION (L, RT, OR CL)	NEW PIPES								EXISTING PIPES								REMARKS							
				BITUMINOUS COATED C.S. PIPE TYPE B (UNLESS NOTED OTHERWISE)																							
				12"	15"	18"	24"	30"	36"	42"	48"	12"	15"	18"	24"	30"	36"	42"	48"								
04-60		LT																	PIPE REMOVAL		D1, STD. 840.14 OR STD. 840.15	D1, FRAME AND GRATE STD. 840.16	J.B. STD. 840.31 OR 840.32		DRIVE PIPE		
05-50		LT																								ADD DRIVE PIPE	
08-05		LT																								DRIVE PIPE	
08-75		CL																								DRIVE PIPE	
09-10		LT																								DRIVE PIPE	
11-15		CL																								WET	
20-62		CL																								DRIVE PIPE	
21-11		LT																								DRIVE PIPE	
21-64		LT																								DRIVE PIPE	
<b>SHEET TOTALS</b>																											

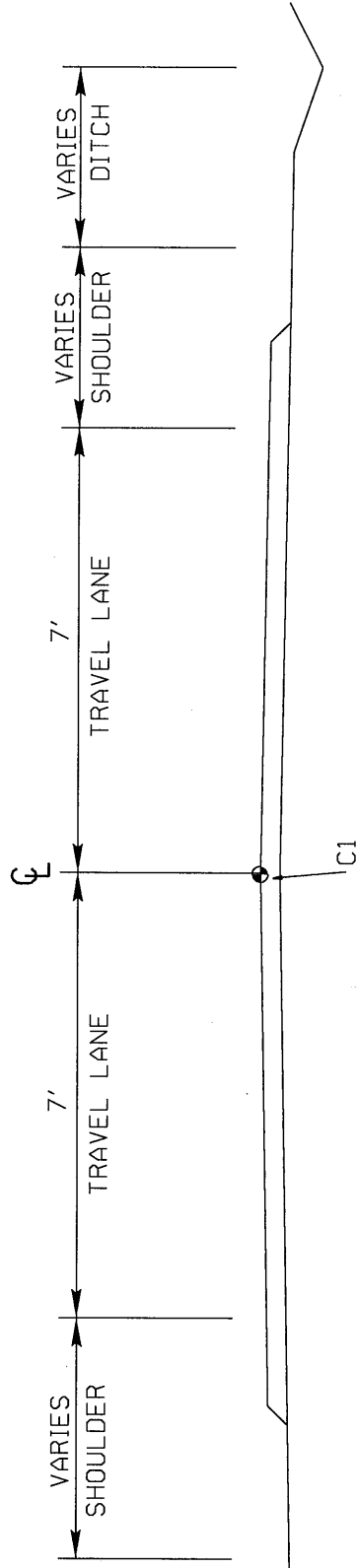


ROAD NAME: SR1210 (OLD CHESTNUT MTN RD)

DATE: 02-18-13

COUNTY: WATAUGA

PROJECT (WBS) : 11C.006015 (R/W)  
(CONST)



14' EXISTING TYPICAL SECTION

C1	EXISTING GRAVEL ROADBED

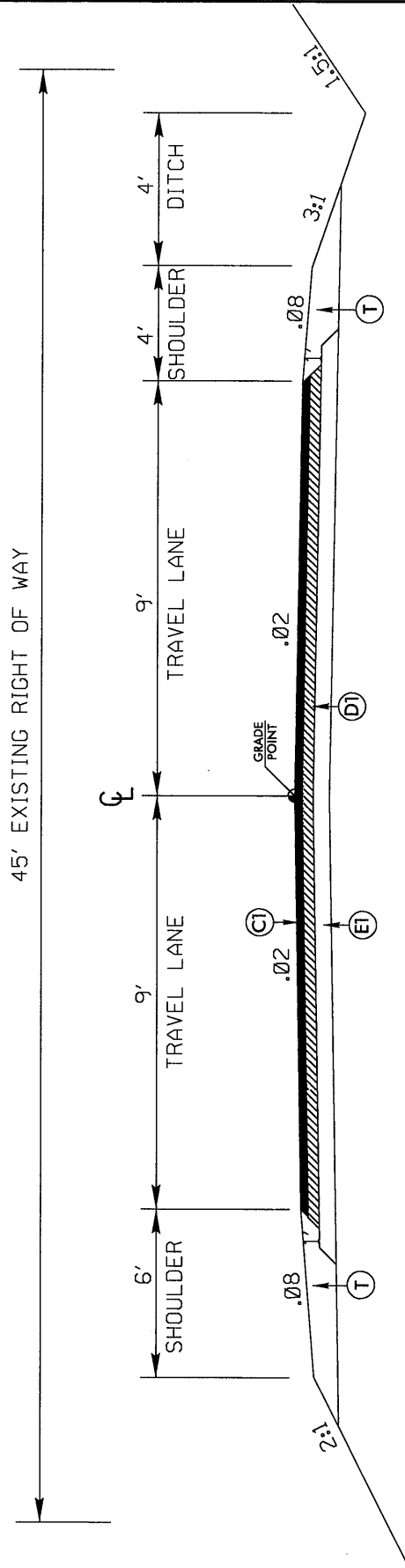
ROAD NAME: SR 1210 (OLD CHESTNUT MTN RD)

COUNTY: WATAUGA

PROJECT (WBS) : 11C.006015 (R/W)  
(CONST.)

DATE: 02/18/13

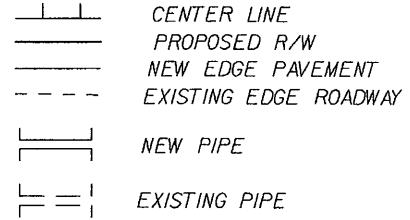
NOTE-CONSTRUCT EXTRA WIDENING IN CURVES AS DIRECTED BY ENGINEER



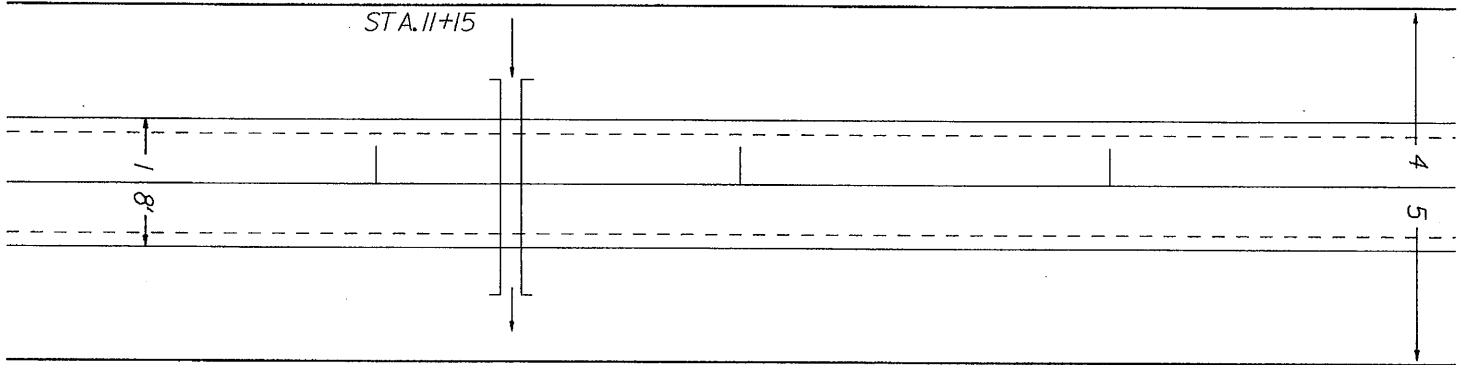
32' TYPICAL SECTION

C1
D1
E1
T

PROJECT:	IIC.006015 (R/W)	
	(CONST)	
ROAD:	SR 1210 OLD CHESTNUT MTN ROAD	
COUNTY:	AVERY	
TYPE:	WET PIPE SURVEY STA. 11+15	
SCALE: 1" = 20'	SHEET 1 OF 1	DATE: 5-2-13

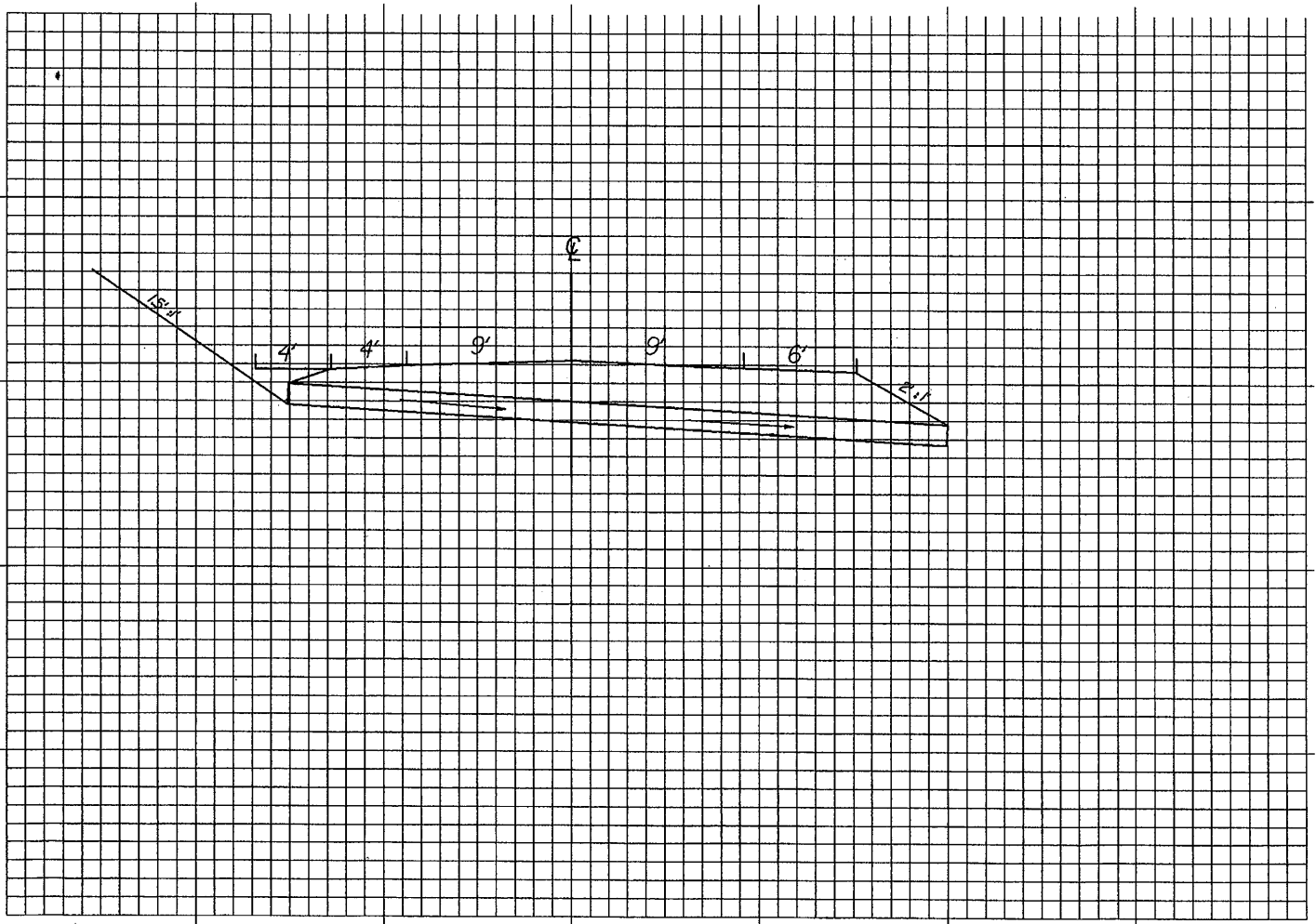


STREAM NAME: UNNAMED TRIBUTARY TO LITTLE PLUMTREE CREEK  
 RATING: WS-5,TR.  
 1' AVERAGE STREAM WIDTH



EXISTING PIPE SIZE: 40' x 24"  
 NEW PIPE SIZE: 40' x 24"

PIPE TO BE LAID ON A 90° SKEW WITH 2% FALL



NOTE: TEMPORARY EROSION CONTROL DEVICES NOT SHOWN.