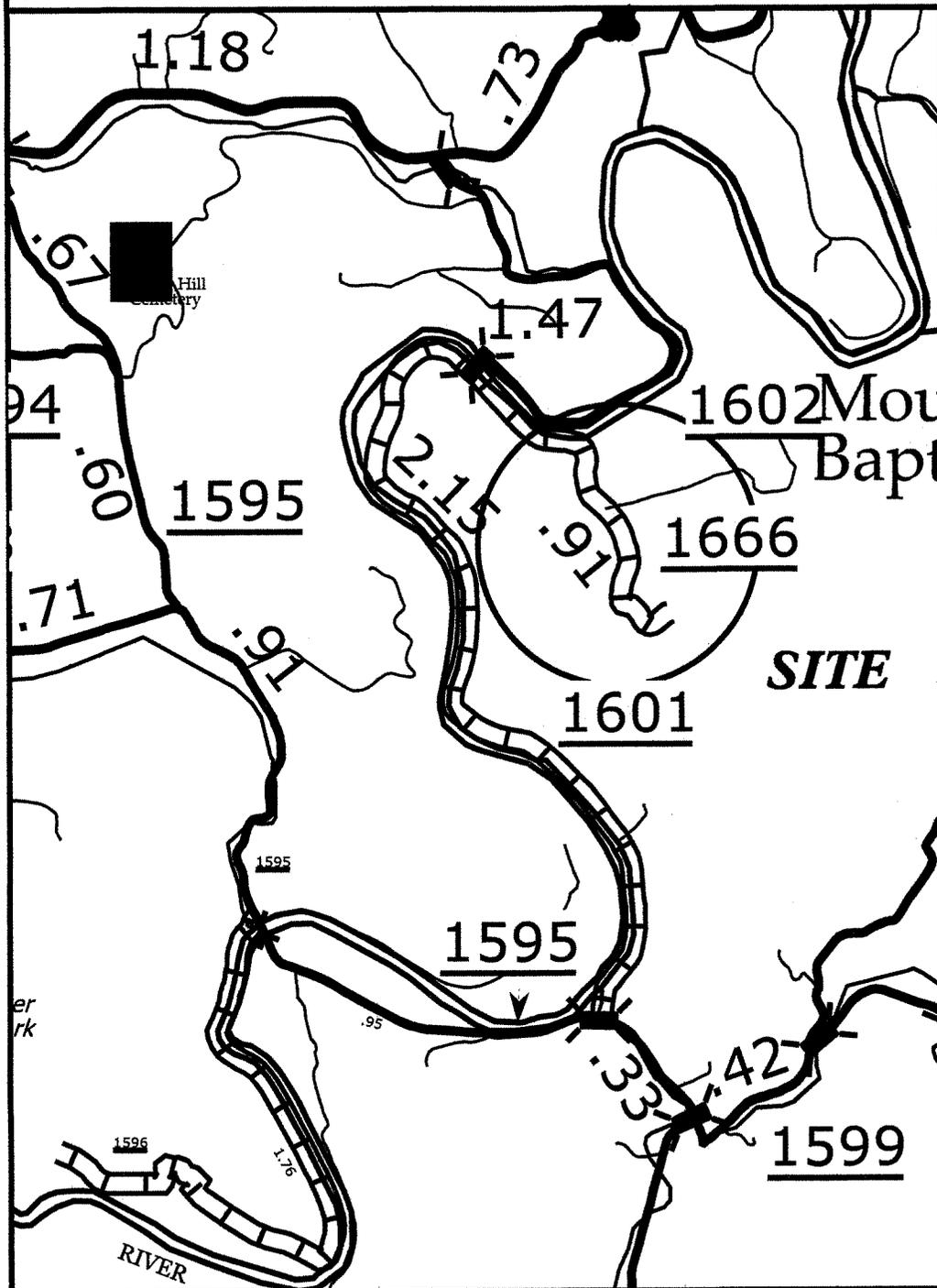


VICINITY MAP



**SR 1666 W.A. REED RD.
EROSION CONRTOL PLANS**

These Erosion and Sediment Control Plans comply with the resulations set forth by the NCG010000 general construction permit effective August 3, 2011 issued by the North Carolina Departmetn of Environment and Natural Resources Division of Water Quality.

St. #	Description	Symbol
1605.01	Temporary Silt Fence.....	
1606.01	Special Sediment Control Fence.....	
1622.01	Temporary Berms and Slope Drains.....	
1630.02	Silt Basin Type B.....	
1630.03	Temporary Silt Ditch.....	
1630.05	Temporary Diversion.....	
1630.06	Special Stilling Basin	
1632.05	Rock Inlet Sediment Trap Type C.....	
1633.01	Temporary Rock Silt Check Type-A.....	
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM).....	
	Temporary Rock Silt Check Type-B.....	
	Wattle.....	
	Wattle with Polyacrylamide (PAM).....	
1634.02	Temporary Rock Sediment Dam Type-B.....	
1635.01	Rock Pipe Inlet Sediment Trap Type-A.....	

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"

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.

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 HWQ zones)

HORIZONTAL SCALE 1" = 50'

BEGIN PROJECT
POT Sta. 0+00.00

BRIDGE

PC Sta. 0+48.11

NEW RIVER

PT Sta. 1+84.67

DRAINAGE AREA 20
NO BASIN REQUIRED
ROAD DRAINAGE ONLY

DO NOT
DISTURB

DO NOT
DISTURB

MATCHLINE SEE SHEET 4



3 x 9 x 3
1 Baffle
2 ft. weir
ID 1.R



DRAINAGE AREA 1
1.4 ACRES

MOBILE HOME

USE 18" WATTLES

PSRM IS REQUIRED FOR DITCH LINE
FROM STA. 0+00 TO STA. 4+50 RT

ALL SECTIONS ARE UNDER THE 30 DAY DESIGN AND
MUST BE PERMANENTLY STABILIZED WITHIN 30 DAYS
OF THE TIME CLEARING AND GRUBBING BEGINS.

LEVEL 3-A DESIGNER
CHRIS ABSHER (*137)
RIGHT OF WAY
45 FEET

SUBGRADE IS TO BE CUT 10" BELOW EXISTING ROADWAY
GRADE SO THAT FINISH ELEVATION REMAINS THE SAME AS
EXISTING ROADWAY. NO CHANGE IN PROFILE ELEVATION

LEVEL 3-A DESIGNER
CHRIS ABSHER (*137)
RIGHT OF WAY
45 FEET

SUBGRADE IS TO BE CUT 10" BELOW EXISTING ROADWAY
GRADE SO THAT FINISH ELEVATION REMAINS THE SAME AS
EXISTING ROADWAY. NO CHANGE IN PROFILE ELEVATION

ALL SECTIONS ARE UNDER THE 30 DAY DESIGN AND
MUST BE PERMANENTLY STABILIZED WITHIN 30 DAYS
OF THE TIME CLEARING AND GRUBBING BEGINS.

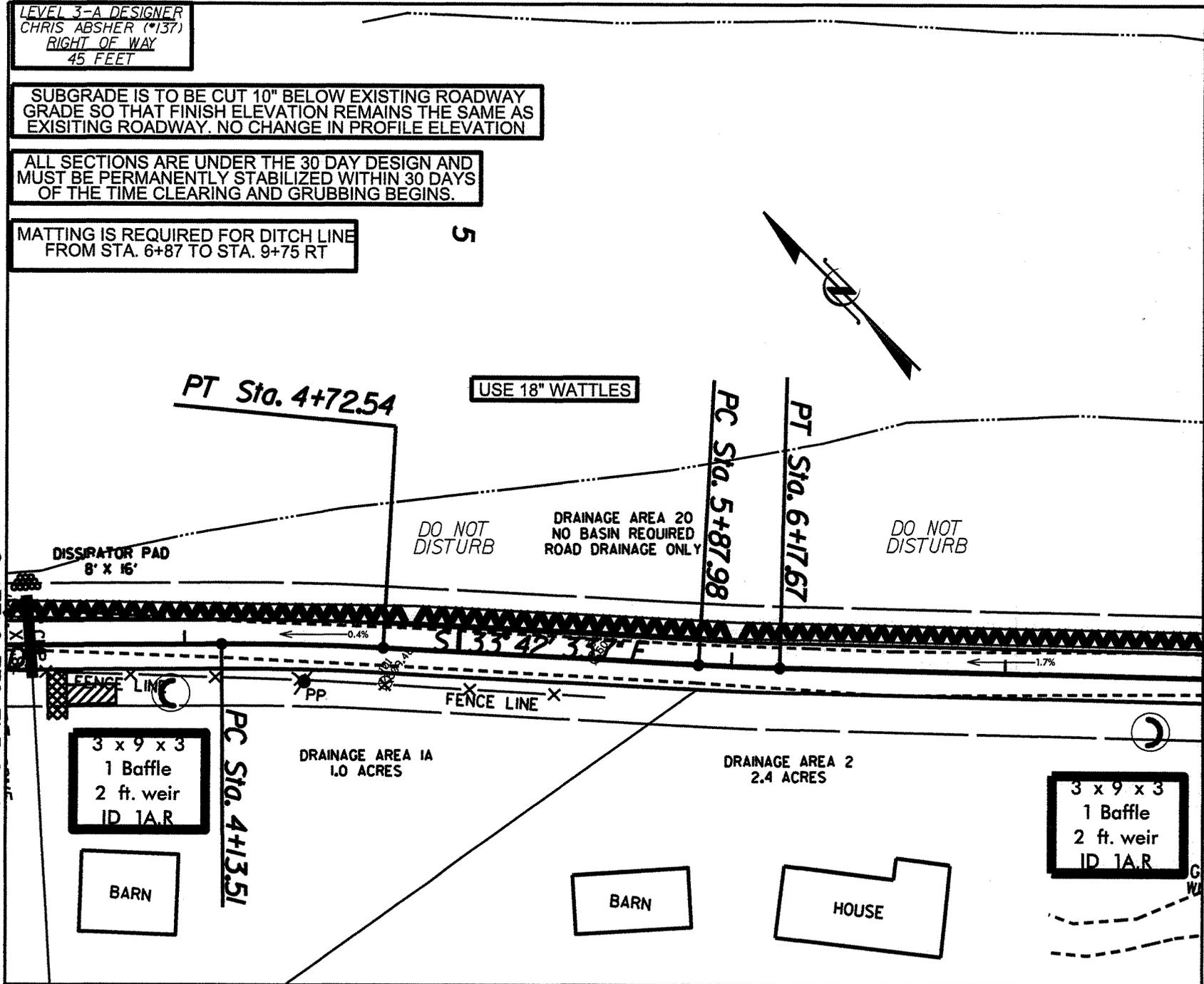
MATTING IS REQUIRED FOR DITCH LINE
FROM STA. 6+87 TO STA. 9+75 RT

5



MATCHLINE SEE SHEET 3

MATCHLINE SEE SHEET 5



HORIZONTAL SCALE 1" = 50'

LEVEL 3-A DESIGNER
CHRIS ABSHER (*137)
RIGHT OF WAY
45 FEET

SUBGRADE IS TO BE CUT 10" BELOW EXISTING ROADWAY
GRADE SO THAT FINISH ELEVATION REMAINS THE SAME AS
EXISTING ROADWAY. NO CHANGE IN PROFILE ELEVATION

ALL SECTIONS ARE UNDER THE 30 DAY DESIGN AND
MUST BE PERMANENTLY STABILIZED WITHIN 30 DAYS
OF THE TIME CLEARING AND GRUBBING BEGINS.

MATTING IS REQUIRED FOR DITCH LINE
FROM STA. 6+87 TO STA. 9+75 RT

PSRM IS REQUIRED FOR DITCH LINE
FROM STA. 9+75 TO STA13+00 RT

USE 18" WATTLES

MATCHLINE SEE SHEET 4

NEW RIVER



DISSIPATOR PAD
7' X 14'

DO NOT
DISTURB

MINIMUM DISTURBANCE
PERMITTED FOR
PIPE INSTALLATION
ONLY

DRAINAGE AREA 20
NO BASIN REQUIRED
ROAD DRAINAGE ONLY

DISSIPATOR PAD
7' X 14'

DO NOT
DISTURB

PC Sta. 11+01.35

DRAINAGE AREA 20
NO BASIN REQUIRED
ROAD DRAINAGE ONLY

PT Sta. 11+98.69

24' X 60'

DRAINAGE AREA 3
1.0 ACRES

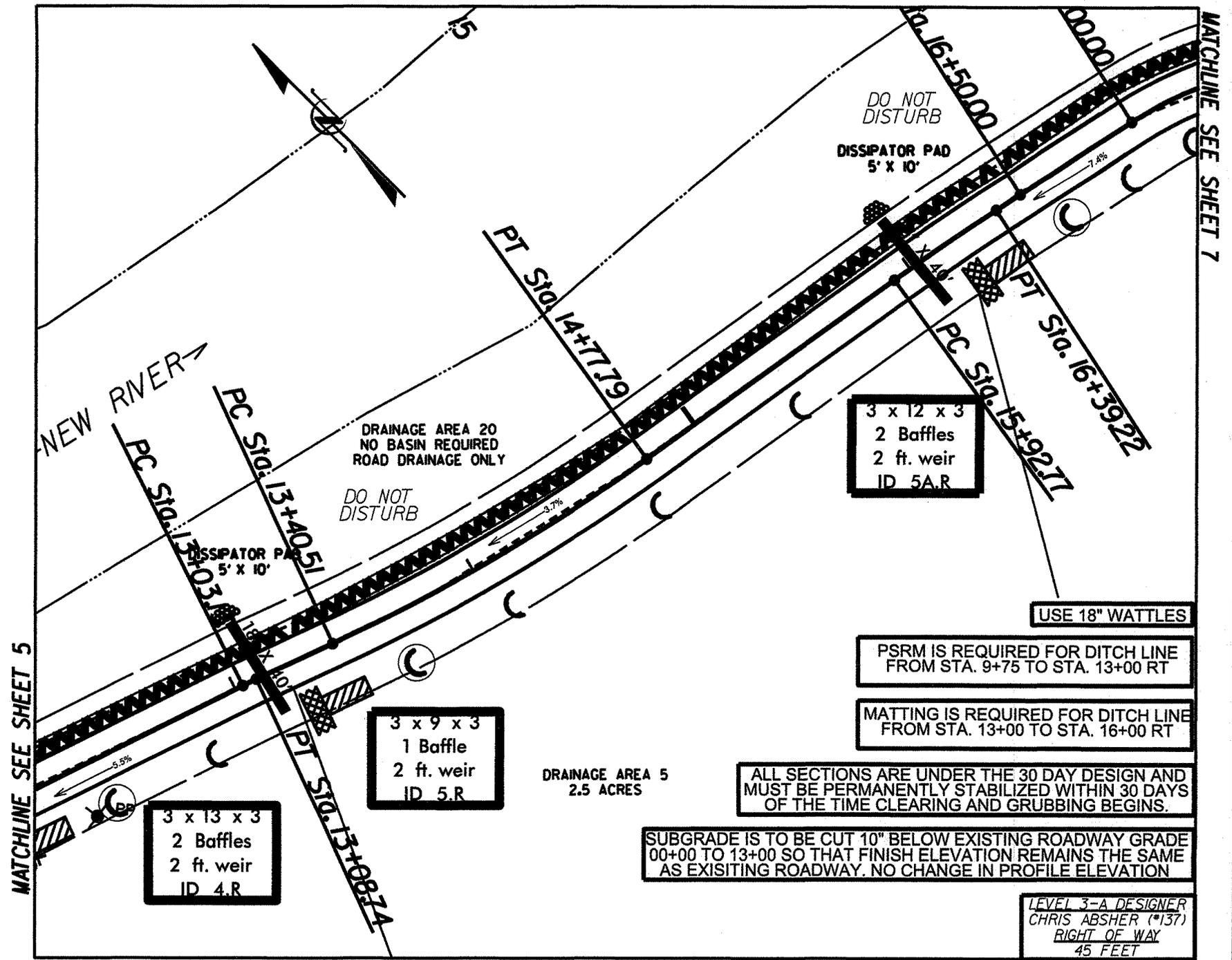
3 x 9 x 3
1 Baffle
2 ft. weir
ID 3.R

DRAINAGE AREA 4
2.9 ACRES

USE UNDERDRAIN TO PIPE
WATER TO DITCHLINE

SPRING
BOX

MATCHLINE SEE SHEET 6



MATCHLINE SEE SHEET 5

MATCHLINE SEE SHEET 7

NEW RIVER

DO NOT DISTURB

DISSIPATOR PAD
5' X 10'

DRAINAGE AREA 20
NO BASIN REQUIRED
ROAD DRAINAGE ONLY

DO NOT DISTURB

3 x 12 x 3
2 Baffles
2 ft. weir
ID 5A.R

USE 18" WATTLES

PSRM IS REQUIRED FOR DITCH LINE
FROM STA. 9+75 TO STA. 13+00 RT

MATTING IS REQUIRED FOR DITCH LINE
FROM STA. 13+00 TO STA. 16+00 RT

3 x 9 x 3
1 Baffle
2 ft. weir
ID 5.R

DRAINAGE AREA 5
2.5 ACRES

ALL SECTIONS ARE UNDER THE 30 DAY DESIGN AND
MUST BE PERMANENTLY STABILIZED WITHIN 30 DAYS
OF THE TIME CLEARING AND GRUBBING BEGINS.

SUBGRADE IS TO BE CUT 10" BELOW EXISTING ROADWAY GRADE
00+00 TO 13+00 SO THAT FINISH ELEVATION REMAINS THE SAME
AS EXISTING ROADWAY. NO CHANGE IN PROFILE ELEVATION

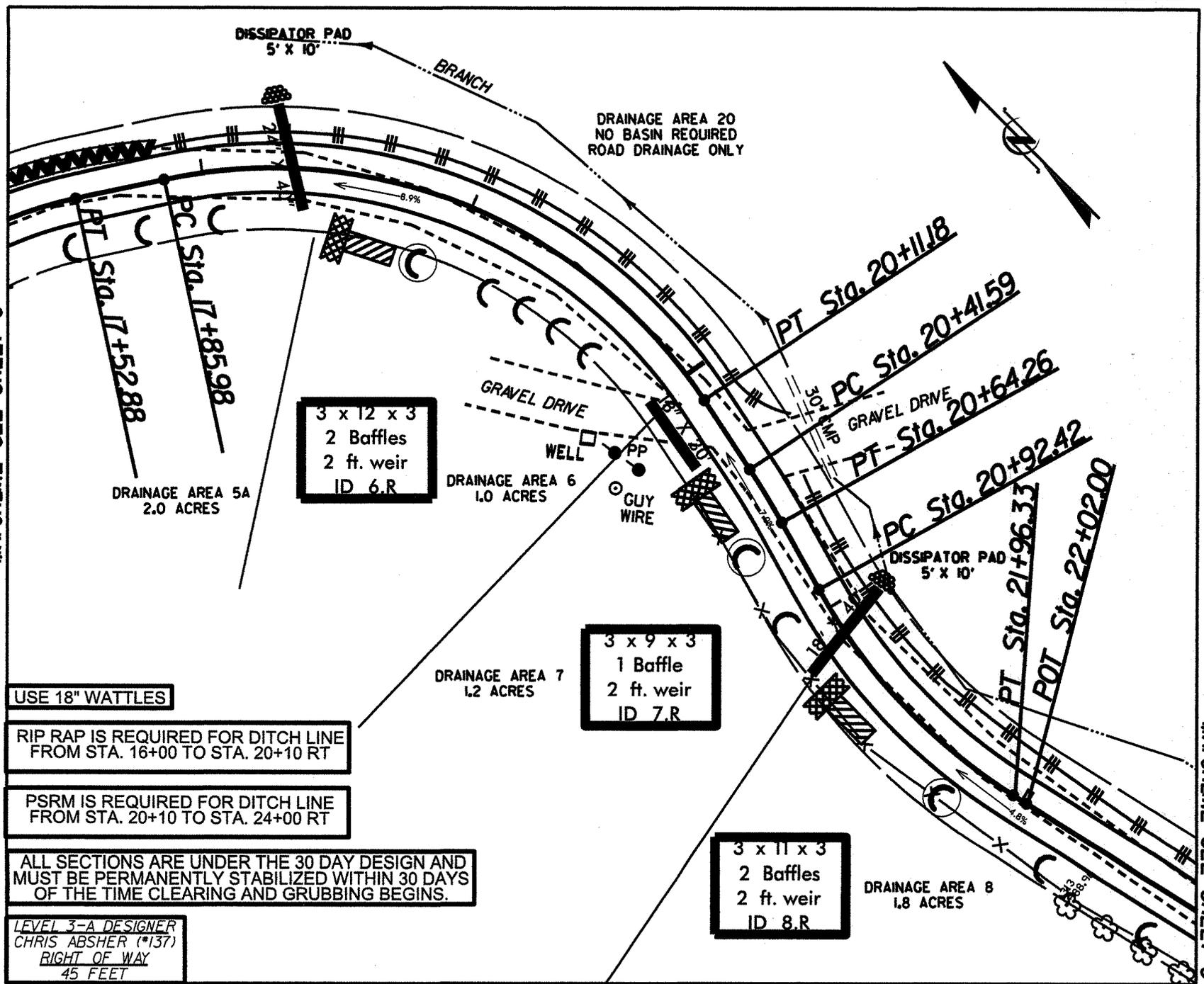
3 x 13 x 3
2 Baffles
2 ft. weir
ID 4.R

LEVEL 3-A DESIGNER
CHRIS ABSHER (*137)
RIGHT OF WAY
45 FEET

HORIZONTAL SCALE 1" = 50'

MATCHLINE SEE SHEET 6

MATCHLINE SEE SHEET 8



3 x 12 x 3
2 Baffles
2 ft. weir
ID 6.R

3 x 9 x 3
1 Baffle
2 ft. weir
ID 7.R

3 x 11 x 3
2 Baffles
2 ft. weir
ID 8.R

USE 18" WATTLES

RIP RAP IS REQUIRED FOR DITCH LINE FROM STA. 16+00 TO STA. 20+10 RT

PSRM IS REQUIRED FOR DITCH LINE FROM STA. 20+10 TO STA. 24+00 RT

ALL SECTIONS ARE UNDER THE 30 DAY DESIGN AND MUST BE PERMANENTLY STABILIZED WITHIN 30 DAYS OF THE TIME CLEARING AND GRUBBING BEGINS.

LEVEL 3-A DESIGNER
CHRIS ABSHER (*137)
RIGHT OF WAY
45 FEET

HORIZONTAL SCALE 1" = 50'

MATCHLINE SEE SHEET 8

MATCHLINE SEE SHEET 10

3 x 11 x 3
2 Baffles
2 ft. weir
ID 22.L

3 x 11 x 3
2 Baffles
2 ft. weir
ID 22A.L

3 x 11 x 3
2 Baffles
2 ft. weir
ID 23.L

DRAINAGE AREA 22
1.7 ACRES

DRAINAGE AREA 22A
1.5 ACRES

DRAINAGE AREA 23
2.9 ACRES

DRAINAGE AREA 9
NO BASIN REQUIRED
ROAD DRAINAGE ONLY

USE 18" WATTLES

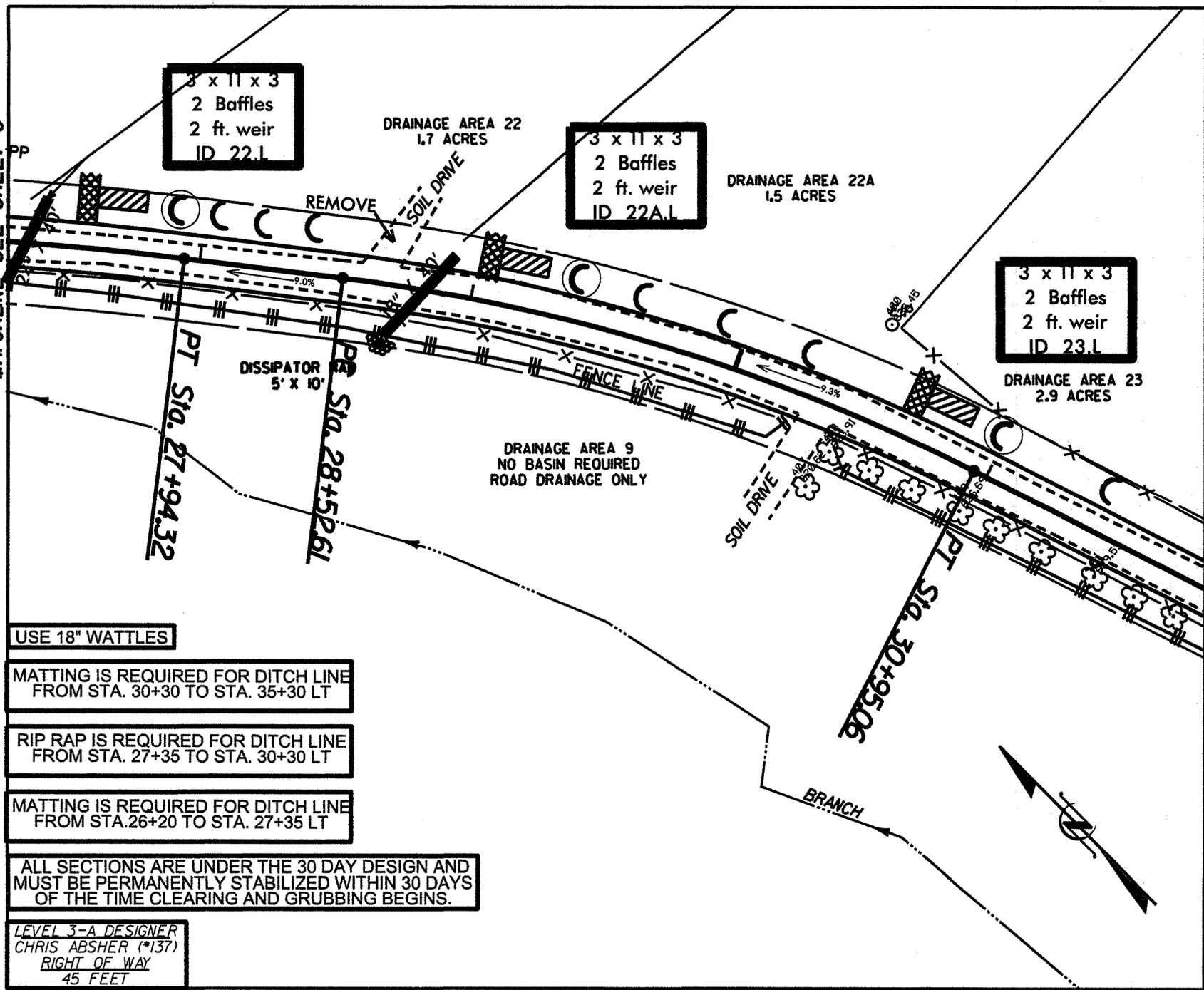
MATTING IS REQUIRED FOR DITCH LINE
FROM STA. 30+30 TO STA. 35+30 LT

RIP RAP IS REQUIRED FOR DITCH LINE
FROM STA. 27+35 TO STA. 30+30 LT

MATTING IS REQUIRED FOR DITCH LINE
FROM STA. 26+20 TO STA. 27+35 LT

ALL SECTIONS ARE UNDER THE 30 DAY DESIGN AND
MUST BE PERMANENTLY STABILIZED WITHIN 30 DAYS
OF THE TIME CLEARING AND GRUBBING BEGINS.

LEVEL 3-A DESIGNER
CHRIS ABSHER (*137)
RIGHT OF WAY
45 FEET



HORIZONTAL SCALE 1" = 50'

LEVEL 3-A DESIGNER
CHRIS ABSHER (#137)
RIGHT OF WAY
45 FEET

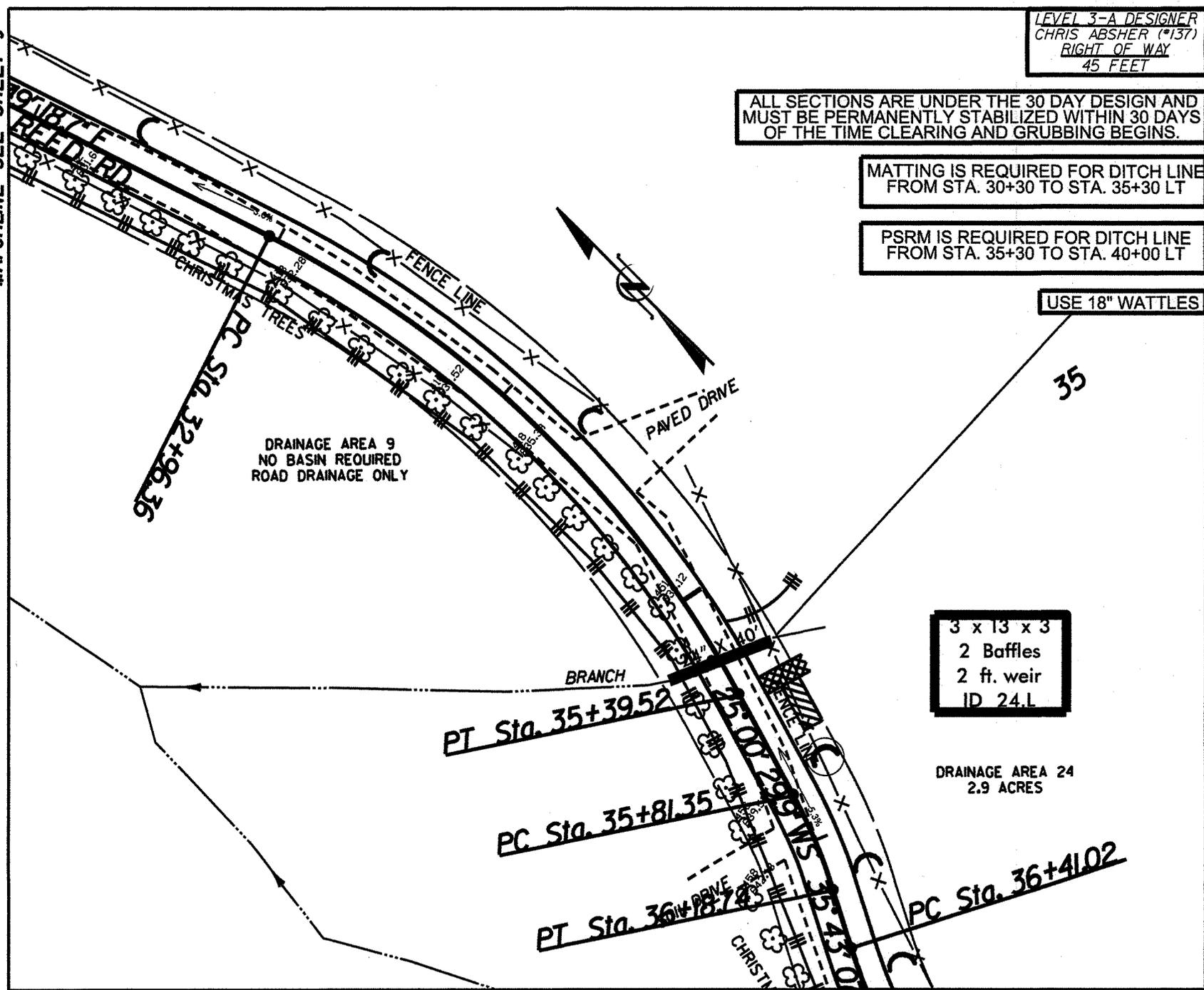
ALL SECTIONS ARE UNDER THE 30 DAY DESIGN AND
MUST BE PERMANENTLY STABILIZED WITHIN 30 DAYS
OF THE TIME CLEARING AND GRUBBING BEGINS.

MATTING IS REQUIRED FOR DITCH LINE
FROM STA. 30+30 TO STA. 35+30 LT

PSRM IS REQUIRED FOR DITCH LINE
FROM STA. 35+30 TO STA. 40+00 LT

USE 18" WATTLES

MATCHLINE SEE SHEET 9



DRAINAGE AREA 9
NO BASIN REQUIRED
ROAD DRAINAGE ONLY

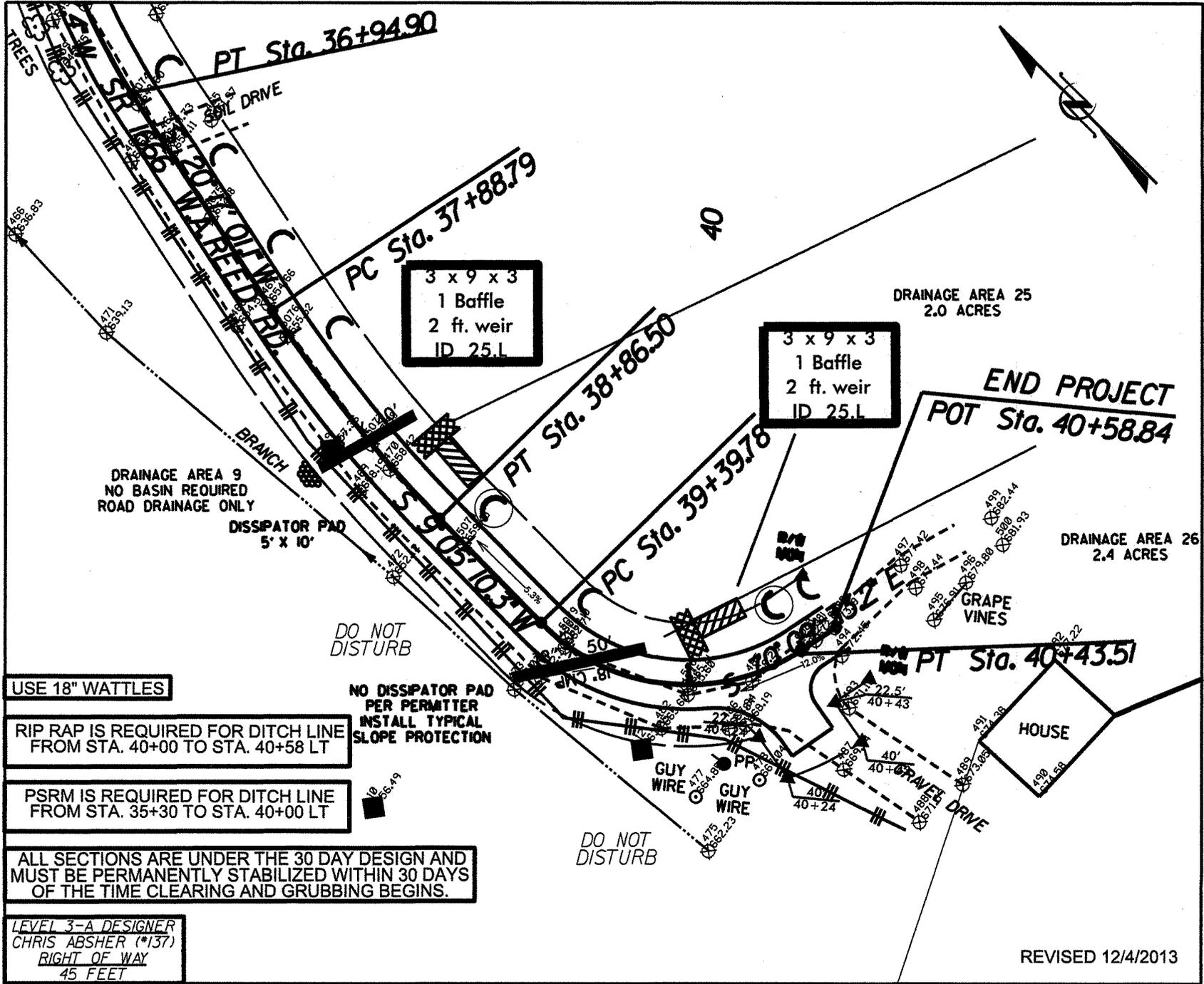
3 x 13 x 3
2 Baffles
2 ft. weir
ID 24.L

DRAINAGE AREA 24
2.9 ACRES

35

MATCHLINE SEE SHEET 11 HORIZONTAL SCALE 1" = 50'

MATCHLINE SEE SHEET 10



USE 18" WATTLES

RIP RAP IS REQUIRED FOR DITCH LINE FROM STA. 40+00 TO STA. 40+58 LT

PSRM IS REQUIRED FOR DITCH LINE FROM STA. 35+30 TO STA. 40+00 LT

ALL SECTIONS ARE UNDER THE 30 DAY DESIGN AND MUST BE PERMANENTLY STABILIZED WITHIN 30 DAYS OF THE TIME CLEARING AND GRUBBING BEGINS.

LEVEL 3-A DESIGNER
CHRIS ABSHER (*137)
RIGHT OF WAY
45 FEET

REVISED 12/4/2013

HORIZONTAL SCALE 1" = 50'