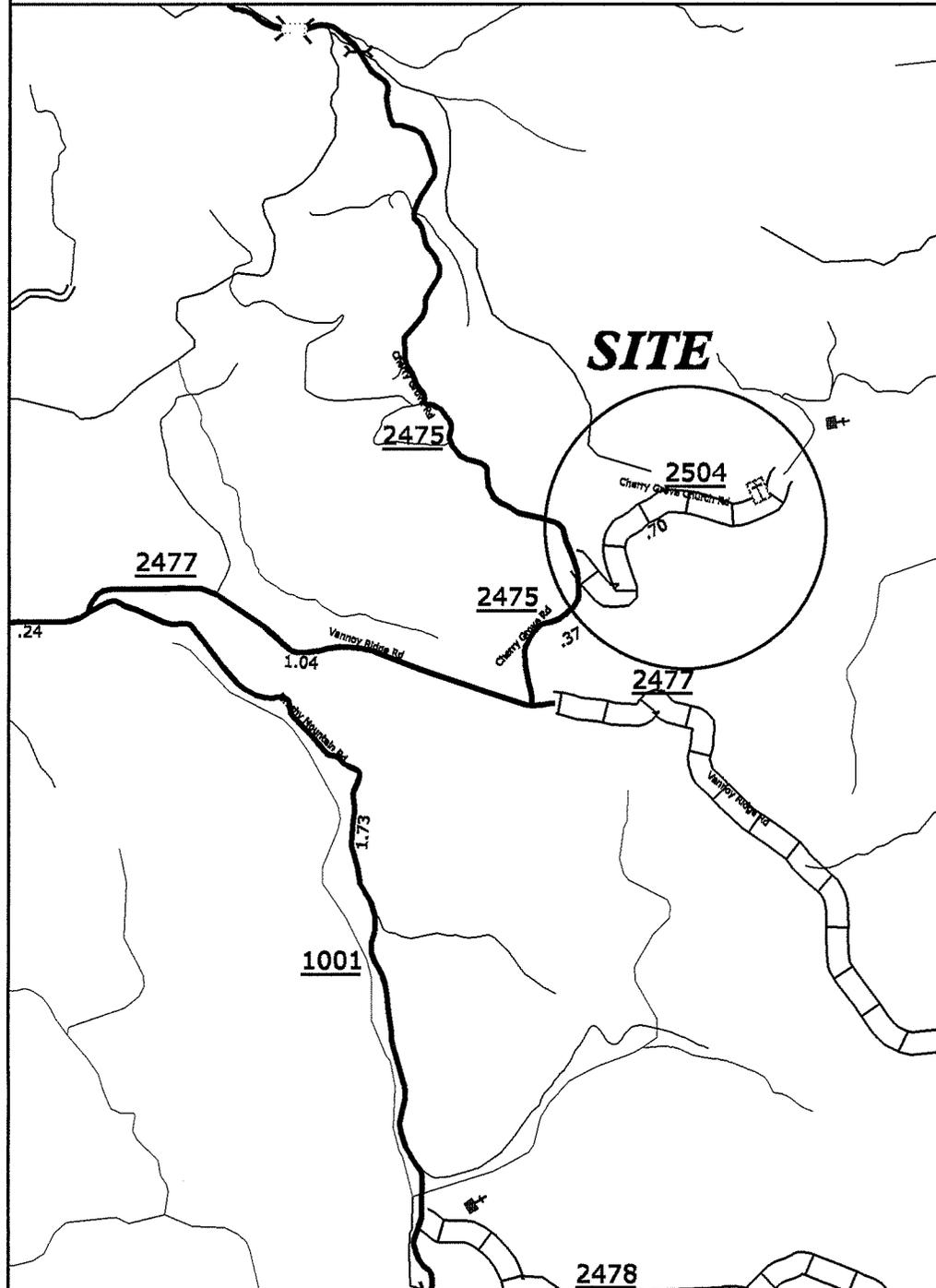


## VICINITY MAP



## SR 2504 CHERRY GROVE CHURCH RD. EROSION CONTROL PLANS

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

Sed. #	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	
1632.03	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.

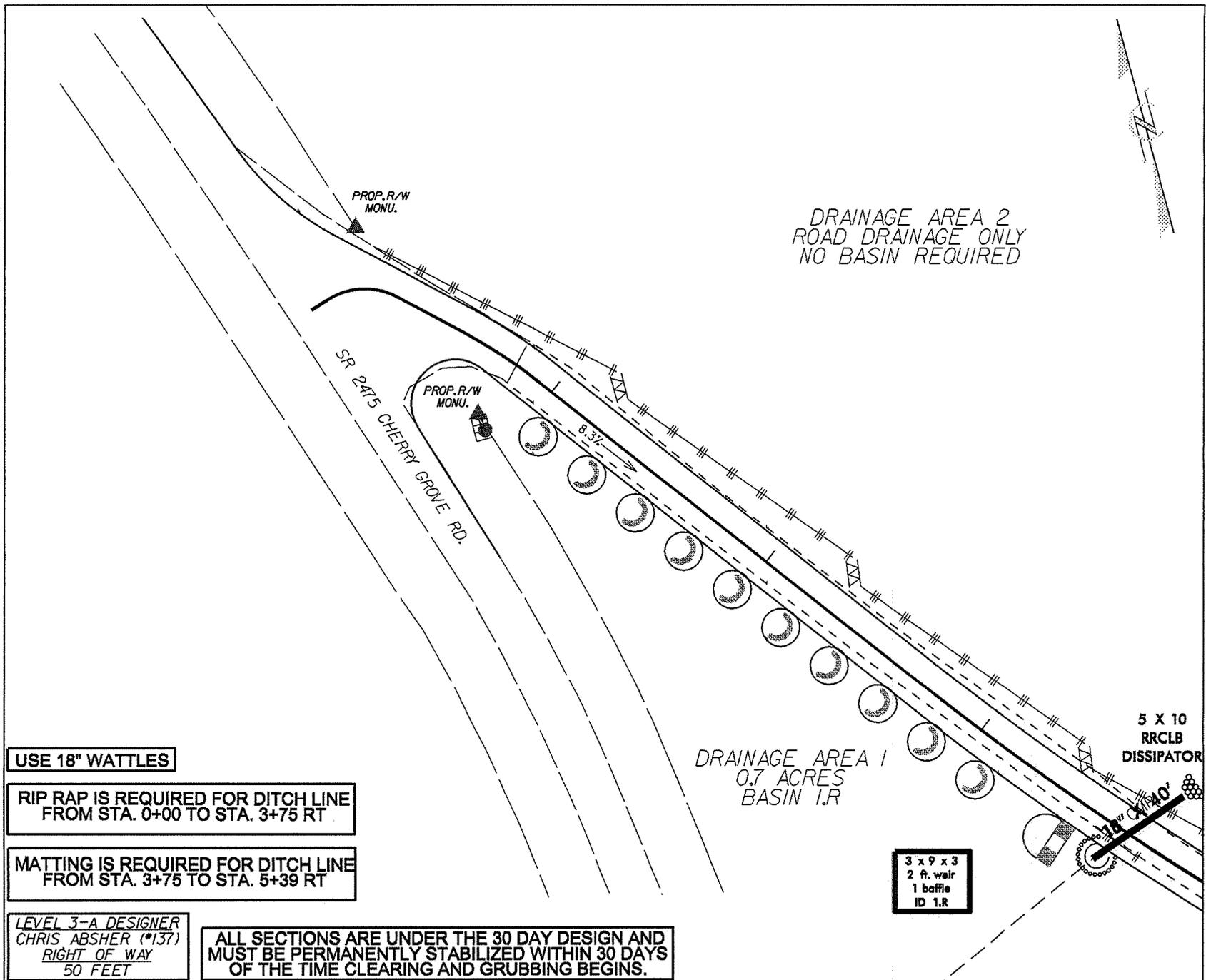
The disturbed areas within the stream buffer shall be restored to native vegetation characteristic of an undisturbed buffer to the extent practical upon completion of construction.

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 HQW zones)



USE 18" WATTLES

RIP RAP IS REQUIRED FOR DITCH LINE FROM STA. 0+00 TO STA. 3+75 RT

MATTING IS REQUIRED FOR DITCH LINE FROM STA. 3+75 TO STA. 5+39 RT

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

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

DRAINAGE AREA 1  
0.7 ACRES  
BASIN 1.R

DRAINAGE AREA 2  
ROAD DRAINAGE ONLY  
NO BASIN REQUIRED

5 X 10  
RRCLB  
DISSIPATOR

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

MATCHLINE SEE SHEET 4

HORIZONTAL SCALE 1" = 50'

MATCHLINE SEE SHEET 5

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

RIP RAP IS REQUIRED FOR DITCH LINE FROM STA. 0+00 TO STA. 12+40 LT

PSRM IS REQUIRED FOR DITCH LINE FROM STA. 12+40 TO STA. 16+40 RT

5 X 10 RRCLB DISSIPATOR



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

USE 18" WATTLES

DRAINAGE AREA 1.3 ACRES  
BASIN 5.R

HOUSE

DRAINAGE AREA 2  
ROAD DRAINAGE ONLY  
NO BASIN REQUIRED

MATCHLINE SEE SHEET 3

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



3 x 9 x 3  
2 ft. weir  
1 baffle  
ID 4.R

DRAINAGE AREA 4  
1.8 ACRES  
BASIN 4.R

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

HORIZONTAL SCALE 1" = 50'

DRAINAGE AREA 2  
ROAD DRAINAGE ONLY  
NO BASIN REQUIRED

5 X 10  
RRCLB  
DISSIPATOR

3 x 9 x 3  
2 ft. weir  
1 baffle  
ID 6.R

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

DRAINAGE AREA 7  
1.5 ACRES  
BASIN 7.R

DRAINAGE AREA 6  
2.3 ACRES  
BASIN 6.R

USE 18" WATTLES

PSRM IS REQUIRED FOR DITCH LINE  
FROM STA. 9+60 TO STA. 12+80 RT

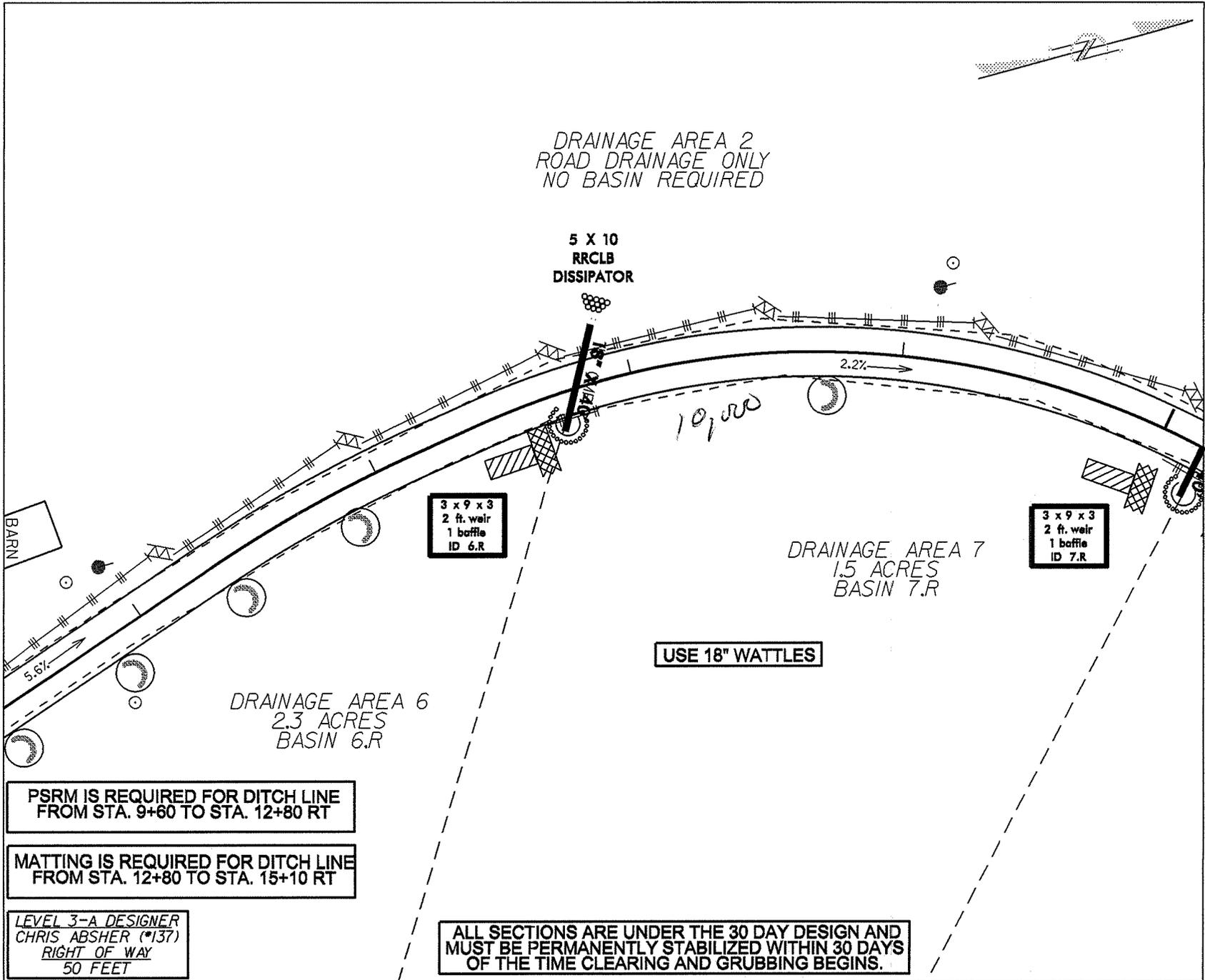
MATTING IS REQUIRED FOR DITCH LINE  
FROM STA. 12+80 TO STA. 15+10 RT

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

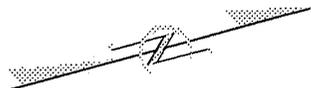
ALL SECTIONS ARE UNDER THE 30 DAY DESIGN AND  
MUST BE PERMANENTLY STABILIZED WITHIN 30 DAYS  
OF THE TIME CLEARING AND GRUBBING BEGINS.

MATCHLINE SEE SHEET 4

MATCHLINE SEE SHEET 6



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



MATCHLINE SEE SHEET 5

5 X 10 RRCLB DISSIPATOR



3 x 9 x 3  
2 ft. weir  
1 baffle  
ID 8.R

DRAINAGE AREA 8  
1.4 ACRES  
BASIN 8.R

5 X 10 RRCLB DISSIPATOR



USE 18" WATTLES

DRAINAGE AREA 2  
ROAD DRAINAGE ONLY  
NO BASIN REQUIRED

NO REQUIREMENT FOR DITCH LINE FROM STA. 15+10 TO STA. 17+00 RT

MATTING IS REQUIRED FOR DITCH LINE FROM STA. 17+00 TO STA. 22+30 RT

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

DRAINAGE AREA 9  
2.9 ACRES  
BASIN 9.R

10,000

MATCHLINE SEE SHEET 7

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

HORIZONTAL SCALE 1" = 50'

DRAINAGE AREA 2  
ROAD DRAINAGE ONLY  
NO BASIN REQUIRED

20

5 X 10  
RRCLB  
DISSIPATOR

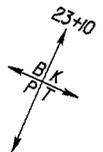
MATCHLINE SEE SHEET 6

MATCHLINE SEE SHEET 8

DRAINAGE AREA 9  
2.9 ACRES  
BASIN 9.R

10,000

DRAINAGE AREA 10  
2.4 ACRES  
BASIN 10.R



USE 18" WATTLES

MATTING IS REQUIRED FOR DITCH LINE  
FROM STA. 17+00 TO STA. 22+30 RT

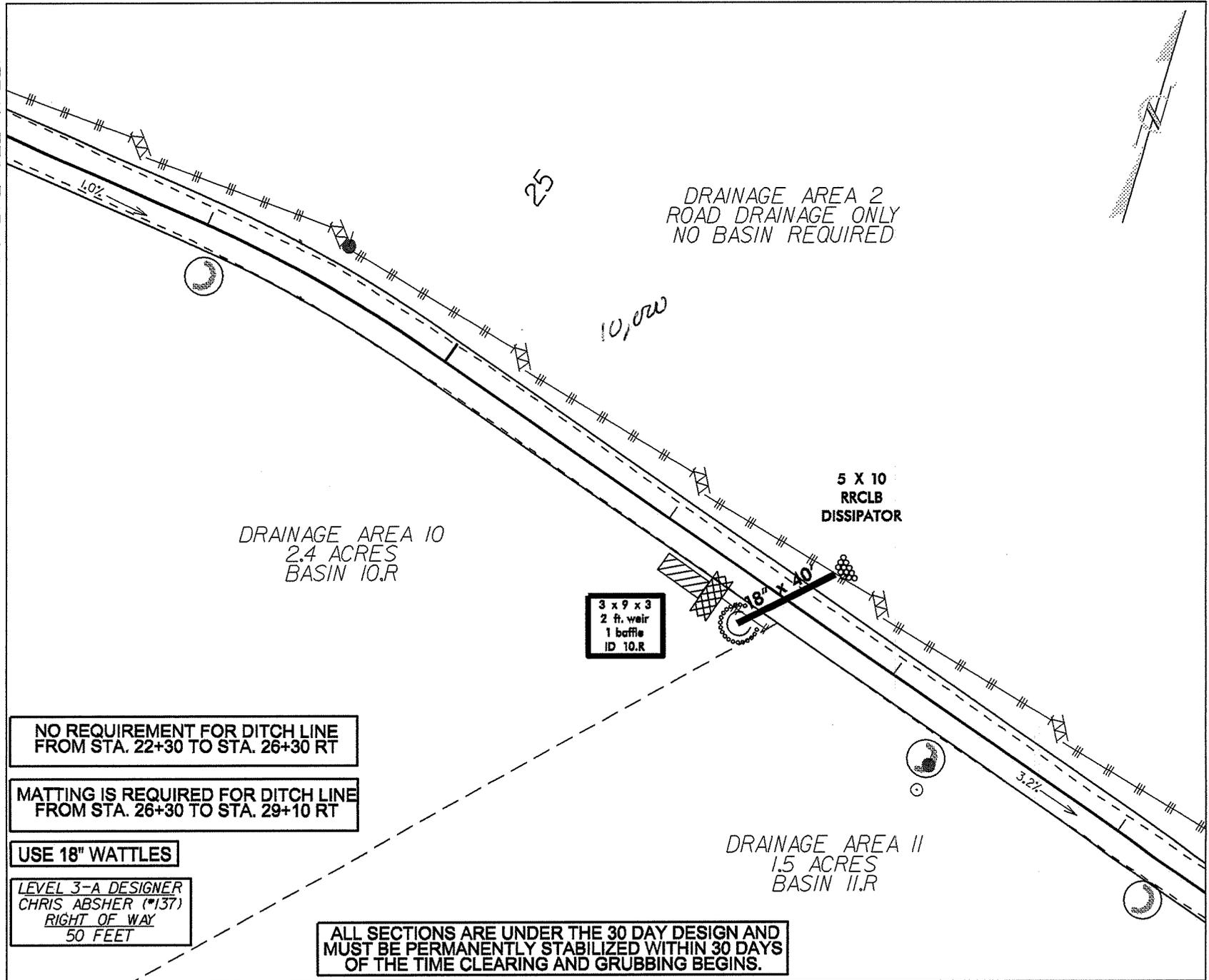
NO REQUIREMENT FOR DITCH LINE  
FROM STA. 22+30 TO STA. 26+30 RT

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  
50 FEET

HORIZONTAL SCALE 1"= 50'

MATCHLINE SEE SHEET 7



MATCHLINE SEE SHEET 9

NO REQUIREMENT FOR DITCH LINE FROM STA. 22+30 TO STA. 26+30 RT

MATTING IS REQUIRED FOR DITCH LINE FROM STA. 26+30 TO STA. 29+10 RT

USE 18" WATTLES

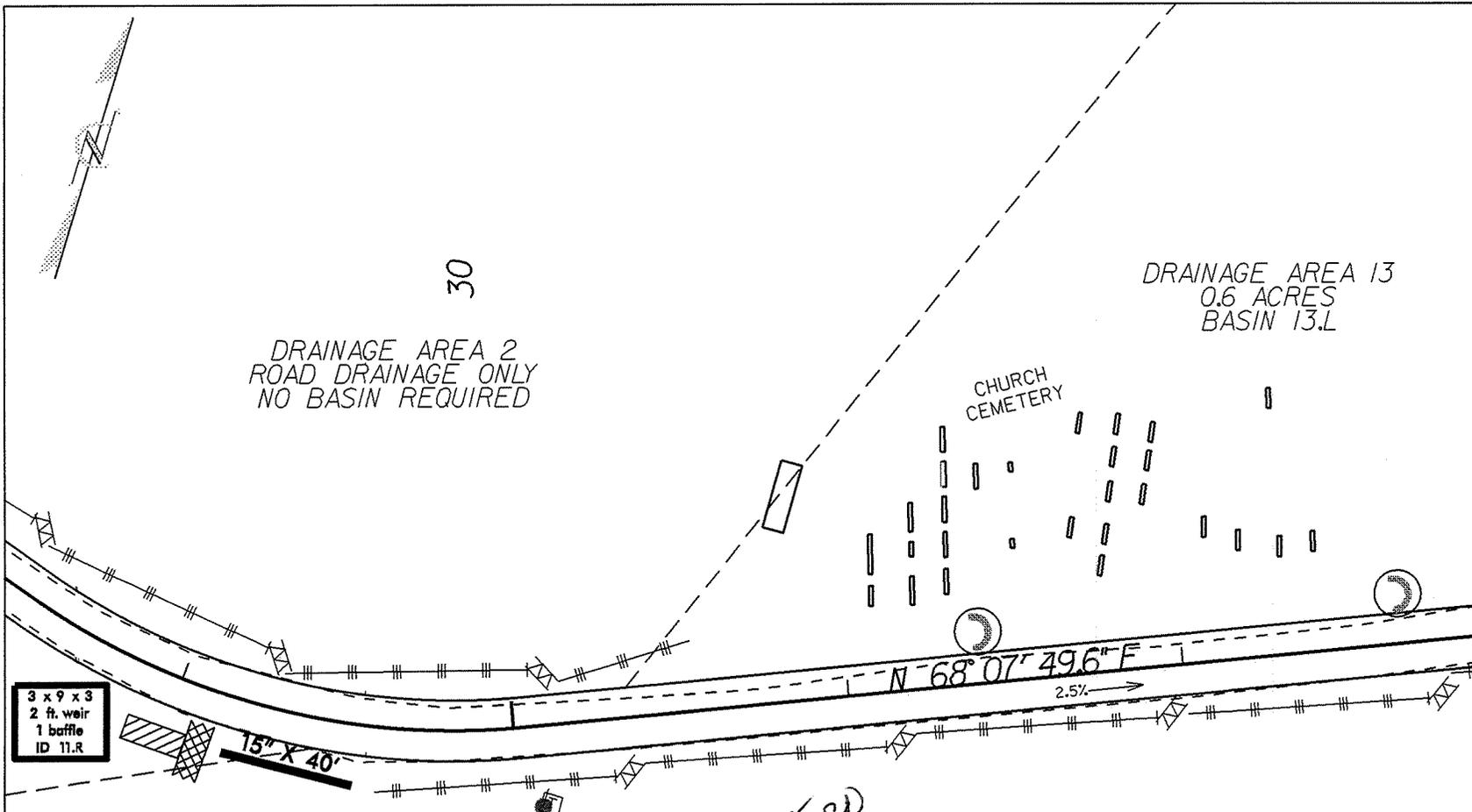
LEVEL 3-A DESIGNER  
CHRIS ABSHER (\*137)  
RIGHT OF WAY  
50 FEET

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

HORIZONTAL SCALE 1"= 50'

MATCHLINE SEE SHEET 8

MATCHLINE SEE SHEET 10



3 x 9 x 3
2 ft. weir
1 baffle
ID 11.R

USE 18" WATTLES

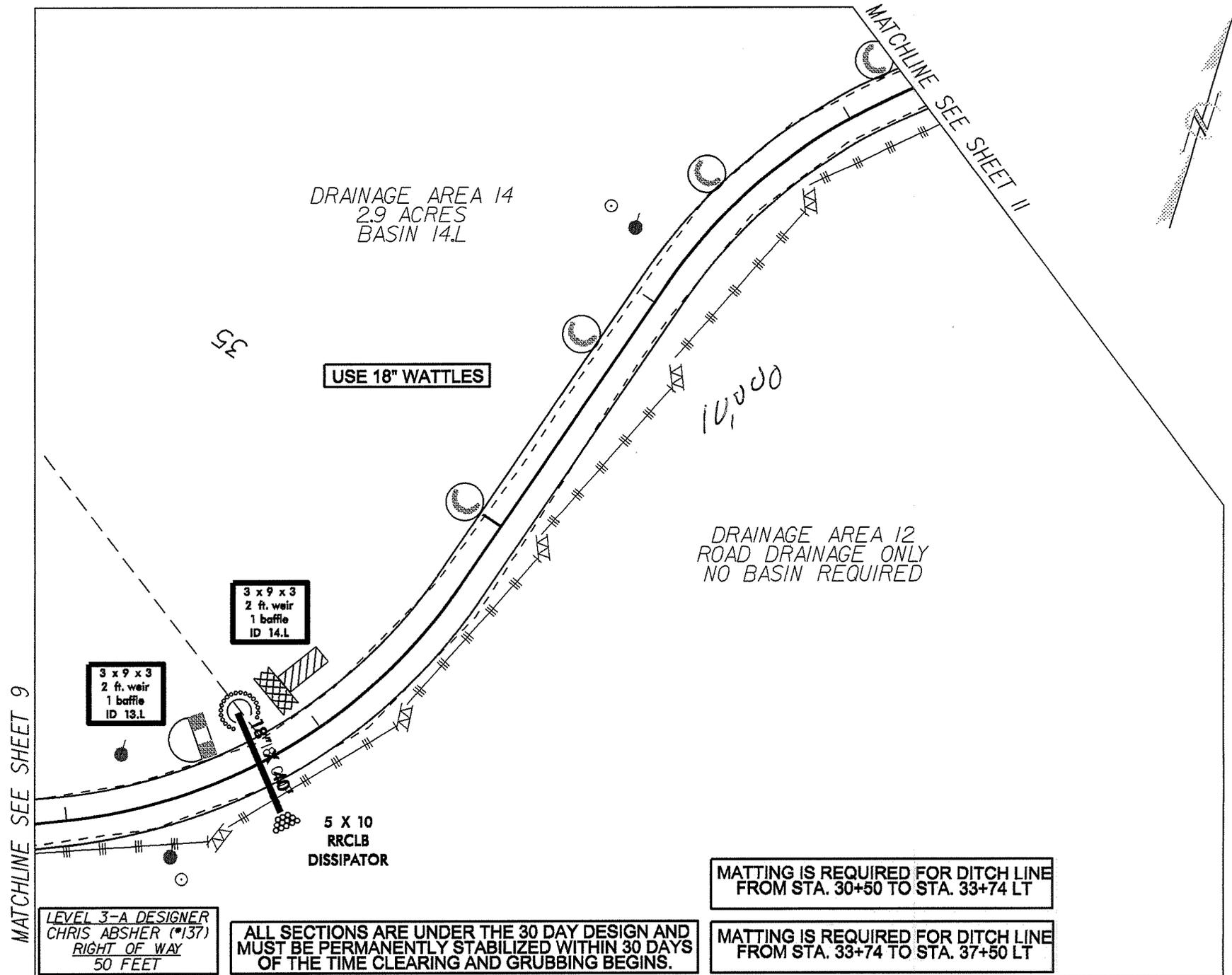
MATTING IS REQUIRED FOR DITCH LINE FROM STA. 26+30 TO STA. 29+10 RT

MATTING IS REQUIRED FOR DITCH LINE FROM STA. 30+50 TO STA. 33+74 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
50 FEET

DRAINAGE AREA 12  
ROAD DRAINAGE ONLY  
NO BASIN REQUIRED



DRAINAGE AREA 14  
2.9 ACRES  
BASIN 14.L

USE 18" WATTLES

DRAINAGE AREA 12  
ROAD DRAINAGE ONLY  
NO BASIN REQUIRED

3 x 9 x 3  
2 ft. weir  
1 baffle  
ID 14.L

3 x 9 x 3  
2 ft. weir  
1 baffle  
ID 13.L

5 X 10  
RRCLB  
DISSIPATOR

MATTING IS REQUIRED FOR DITCH LINE  
FROM STA. 30+50 TO STA. 33+74 LT

MATTING IS REQUIRED FOR DITCH LINE  
FROM STA. 33+74 TO STA. 37+50 LT

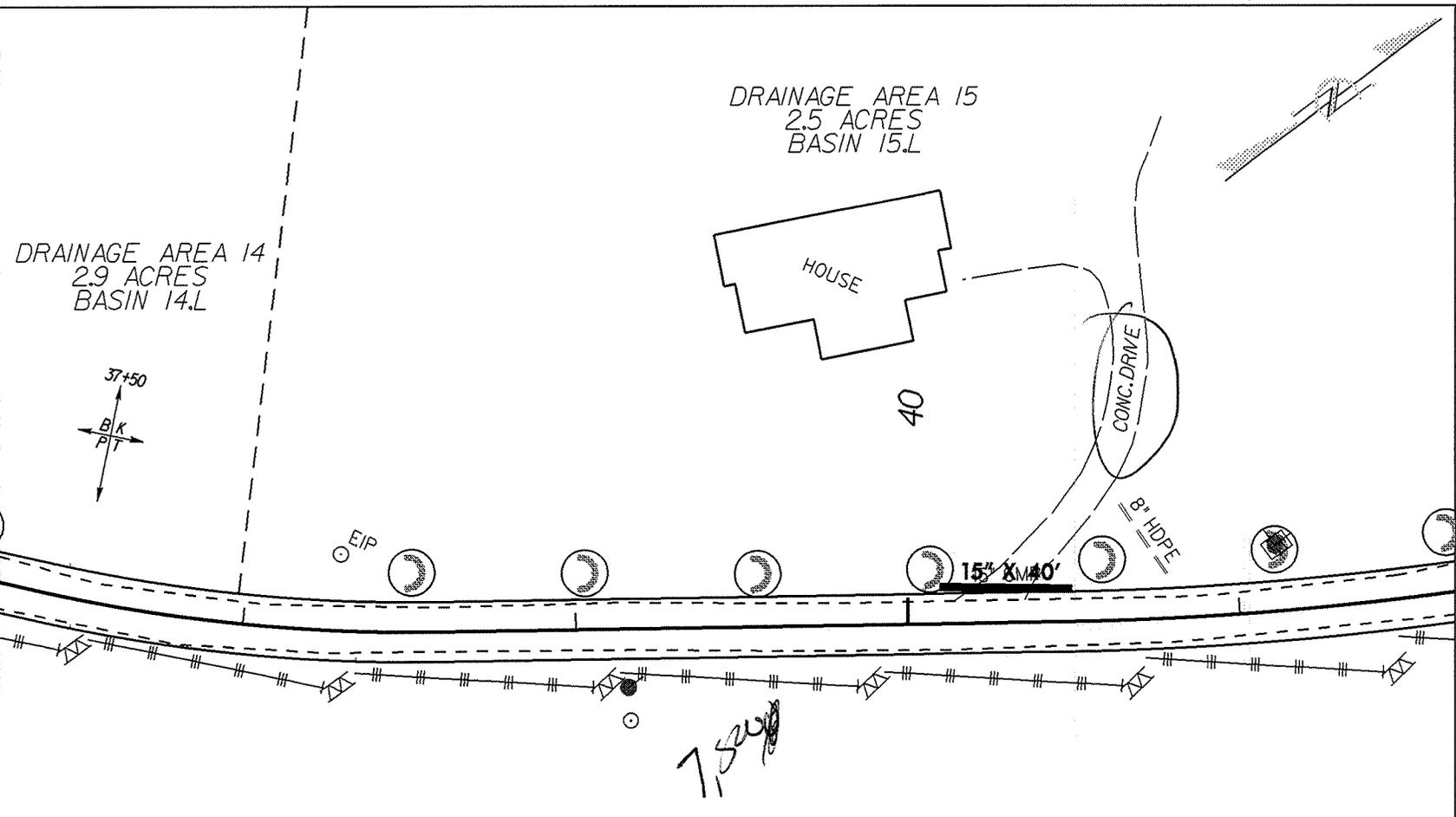
MATCHLINE SEE SHEET 9

MATCHLINE SEE SHEET 11

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

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

MATCHLINE SEE SHEET 3



USE 18" WATTLES

MATTING IS REQUIRED FOR DITCH LINE FROM STA. 33+74 TO STA. 37+50 LT

NO REQUIREMENT FOR DITCH LINE FROM STA. 37+50 TO STA. 42+75 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  
50 FEET

DRAINAGE AREA 12  
ROAD DRAINAGE ONLY  
NO BASIN REQUIRED

MATCHLINE SEE SHEET 5

DRAINAGE AREA 15  
2.5 ACRES  
BASIN 15.L

3 x 9 x 3  
2 ft. weir  
1 baffle  
ID 15.L

GRAVEL DRIVE

15' x 30'

CHURCH  
PARKING LOT

CHERRY GROVE  
BAPTIST CHURCH

MATCHLINE SEE SHEET 3

MATCHLINE SEE SHEET 5

USE 18" WATTLES

NO REQUIREMENT FOR DITCH LINE  
FROM STA. 37+50 TO STA. 42+75 LT

DRAINAGE AREA 12  
ROAD DRAINAGE ONLY  
NO BASIN REQUIRED

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  
50 FEET

HORIZONTAL SCALE 1" = 50'



# SR 2504 CHERRY GROVE CHURCH RD.

## PROPOSED TYPICAL

