

TIP PROJECT: B-3861

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

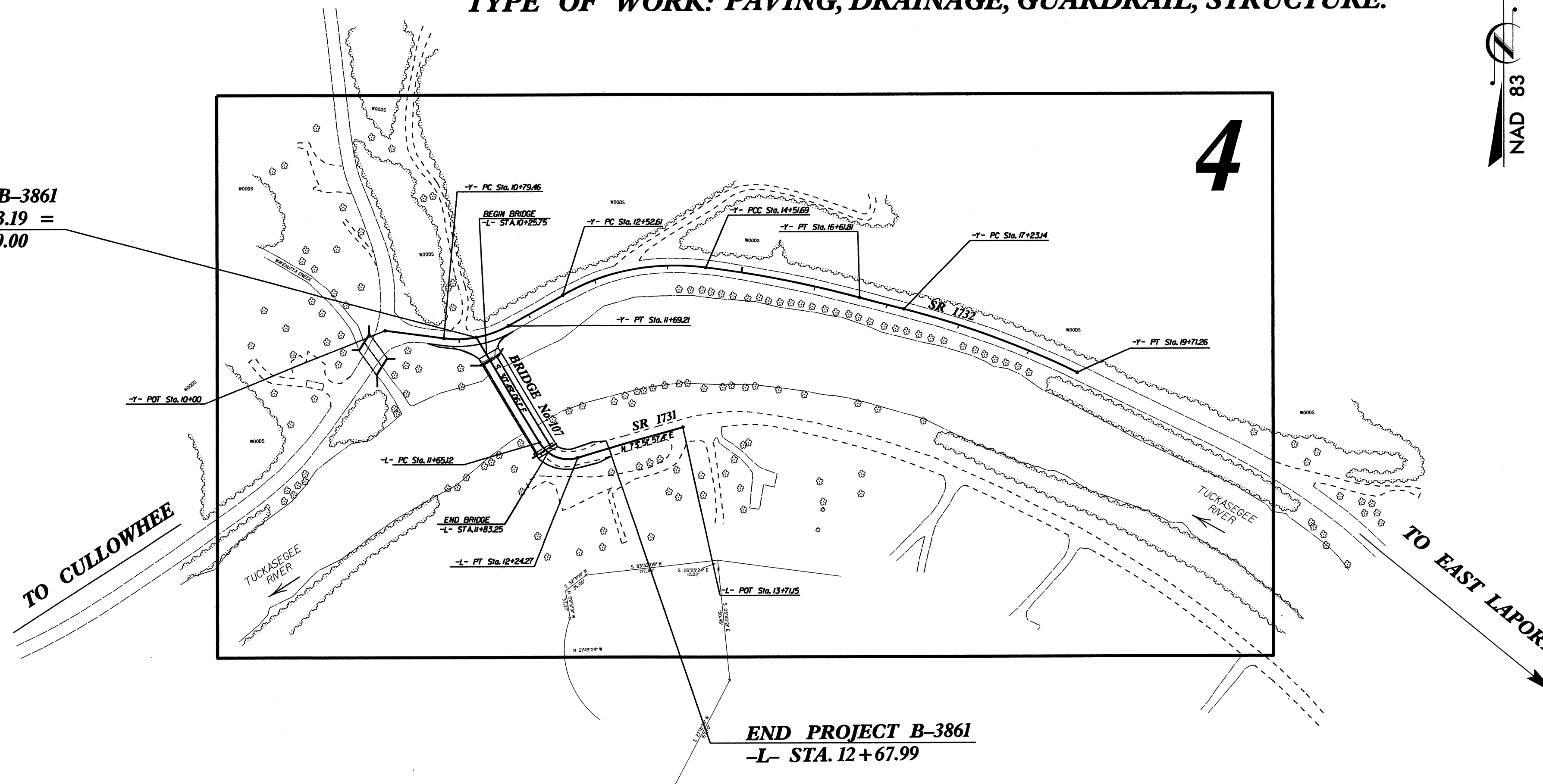
PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

JACKSON COUNTY

**LOCATION: REPLACEMENT OF BRIDGE No. 107 ON SR 1731
OVER TUCKASEGEE RIVER.**

TYPE OF WORK: PAVING, DRAINAGE, GUARDRAIL, STRUCTURE.

BEGIN PROJECT B-3861
-Y- POC Sta. 11+23.19 =
-L- POT Sta. 10+00.00



4

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-3861	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

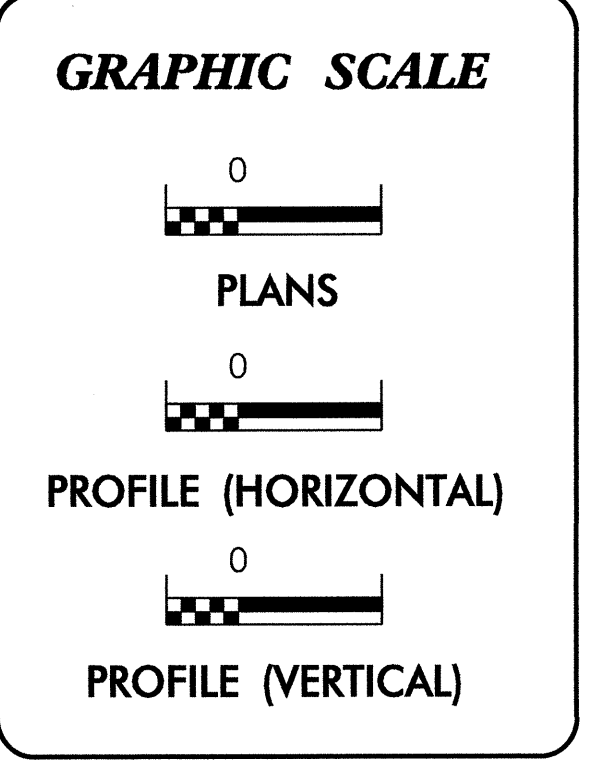
EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch.....	
1630.05	Temporary Diversion.....	
1605.01	Temporary Silt Fence.....	
1606.01	Special Sediment Control Fence.....	
1622.01	Temporary Berms and Slope Drains.....	
1630.02	Silt Basin Type B.....	
1633.01	Temporary Rock Silt Check Type-A.....	
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM).....	
1633.02	Temporary Rock Silt Check Type-B.....	
	Wattle / Coir Fiber Wattle.....	
	Wattle / Coir Fiber Wattle with Polyacrylamide (PAM).....	
1634.01	Temporary Rock Sediment Dam Type-A.....	
1634.02	Temporary Rock Sediment Dam Type-B.....	
1635.01	Rock Pipe Inlet Sediment Trap Type-A.....	
1635.02	Rock Pipe Inlet Sediment Trap Type-B.....	
1630.04	Stilling Basin.....	
1630.06	Special Stilling Basin.....	
	Rock Inlet Sediment Trap:	
1632.01	Type A.....	
1632.02	Type B.....	
1632.03	Type C.....	
	Skimmer Basin.....	
	Tiered Skimmer Basin.....	
	Infiltration Basin.....	

THIS PROJECT CONTAINS EROSION CONTROL PLANS FOR CLEARING AND GRUBBING PHASE OF CONSTRUCTION.

THIS PROJECT HAS BEEN DESIGNED TO SENSITIVE WATERSHED STANDARDS.

ENVIRONMENTALLY SENSITIVE AREA(S) EXIST ON THIS PROJECT
Refer To E. C. Special Provisions for Special Considerations.



ROADSIDE ENVIRONMENTAL UNIT
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 3, 2011 ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WATER QUALITY.

Prepared in the Office of:
ROADSIDE ENVIRONMENTAL UNIT
1 South Wilmington St.
Raleigh, NC 27611

2012 STANDARD SPECIFICATIONS

Roadway Standard Drawings

The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2012 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1604.01 Railroad Erosion Control Detail	1632.01 Rock Inlet Sediment Trap Type A
1605.01 Temporary Silt Fence	1632.02 Rock Inlet Sediment Trap Type B
1606.01 Special Sediment Control Fence	1632.03 Rock Inlet Sediment Trap Type C
1607.01 Gravel Construction Entrance	1633.01 Temporary Rock Silt Check Type A
1622.01 Temporary Berms and Slope Drains	1633.02 Temporary Rock Silt Check Type B
1630.01 Riser Basin	1634.01 Temporary Rock Sediment Dam Type A
1630.02 Silt Basin Type B	1634.02 Temporary Rock Sediment Dam Type B
1630.03 Temporary Silt Ditch	1635.01 Rock Pipe Inlet Sediment Trap Type A
1630.04 Stilling Basin	1635.02 Rock Pipe Inlet Sediment Trap Type B
1630.05 Temporary Diversion	1640.01 Coir Fiber Baffle
1630.06 Special Stilling Basin	1645.01 Temporary Stream Crossing
1631.01 Matting Installation	

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PLOT: 1103.dgn

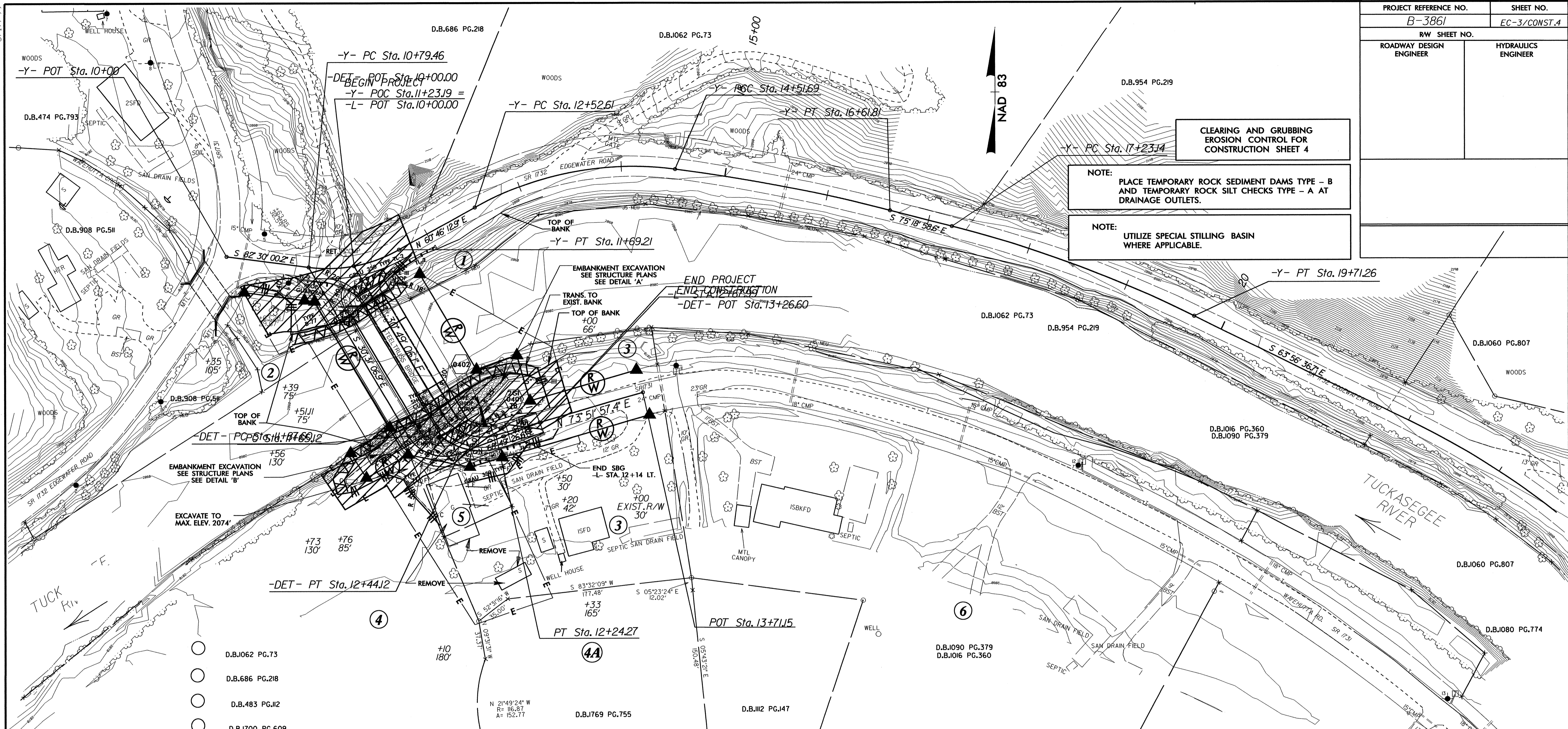
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. <i>B-3861</i>	SHEET NO. <i>EC-2</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SOIL STABILIZATION TIMEFRAMES

<i>SITE DESCRIPTION</i>	<i>STABILIZATION TIME</i>	<i>TIMEFRAME EXCEPTIONS</i>
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' 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 WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES.

PROJECT REFERENCE NO.	SHEET NO.
B-3861	EC-3/CONST.4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

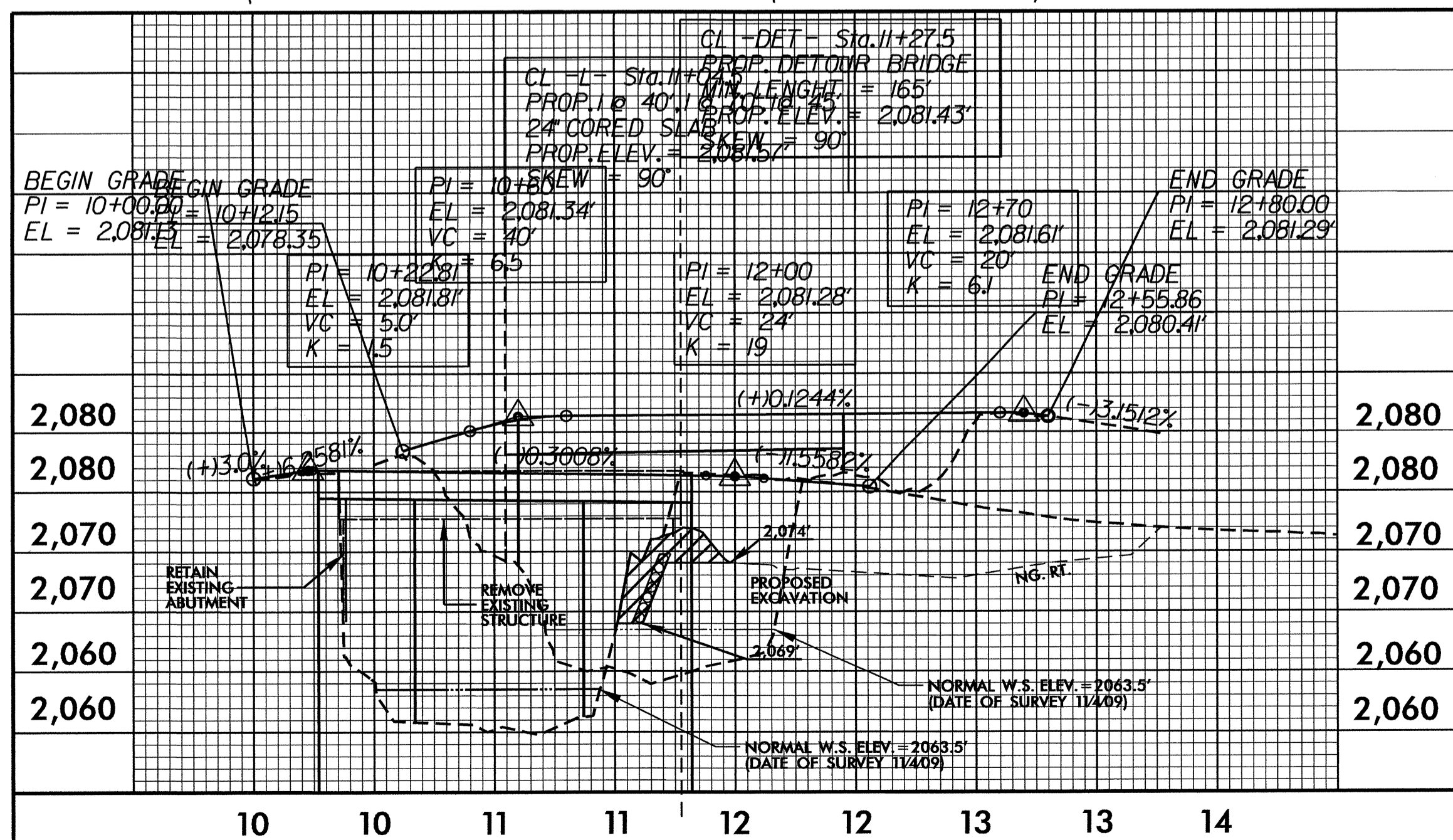
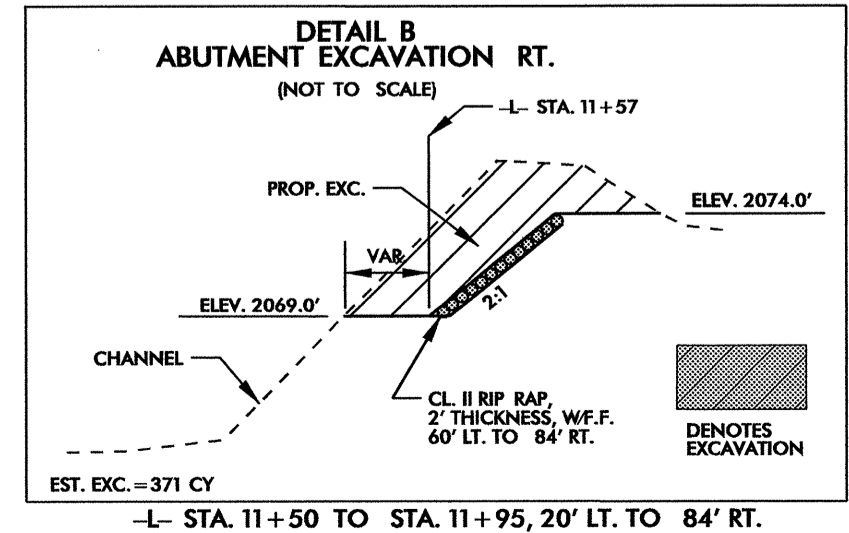
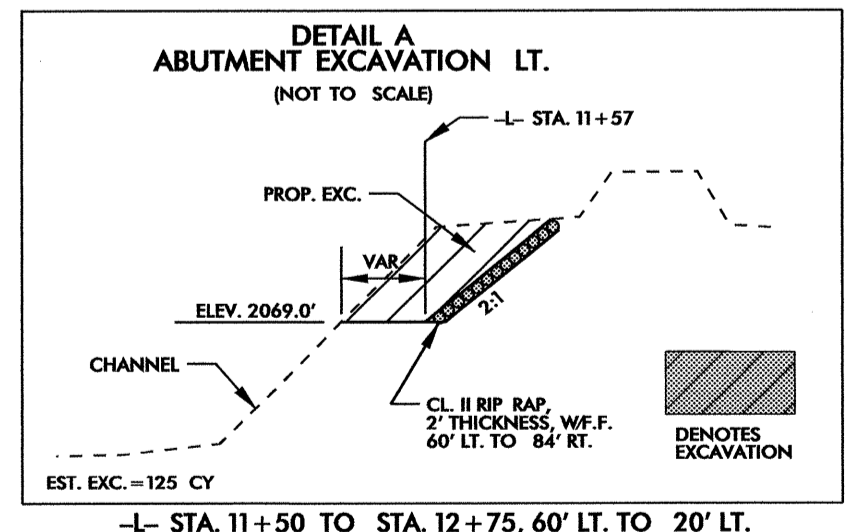


CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 4

NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

NOTE: UTILIZE SPECIAL STILLING BASIN WHERE APPLICABLE.

- D.B.I062 PG.73
- D.B.686 PG.218
- D.B.483 PG.II2
- D.B.I700 PG.609
- D.B.796 PG.286



ENVIRONMENTALLY SENSITIVE AREA SEE PROJECT SPECIAL PROVISIONS

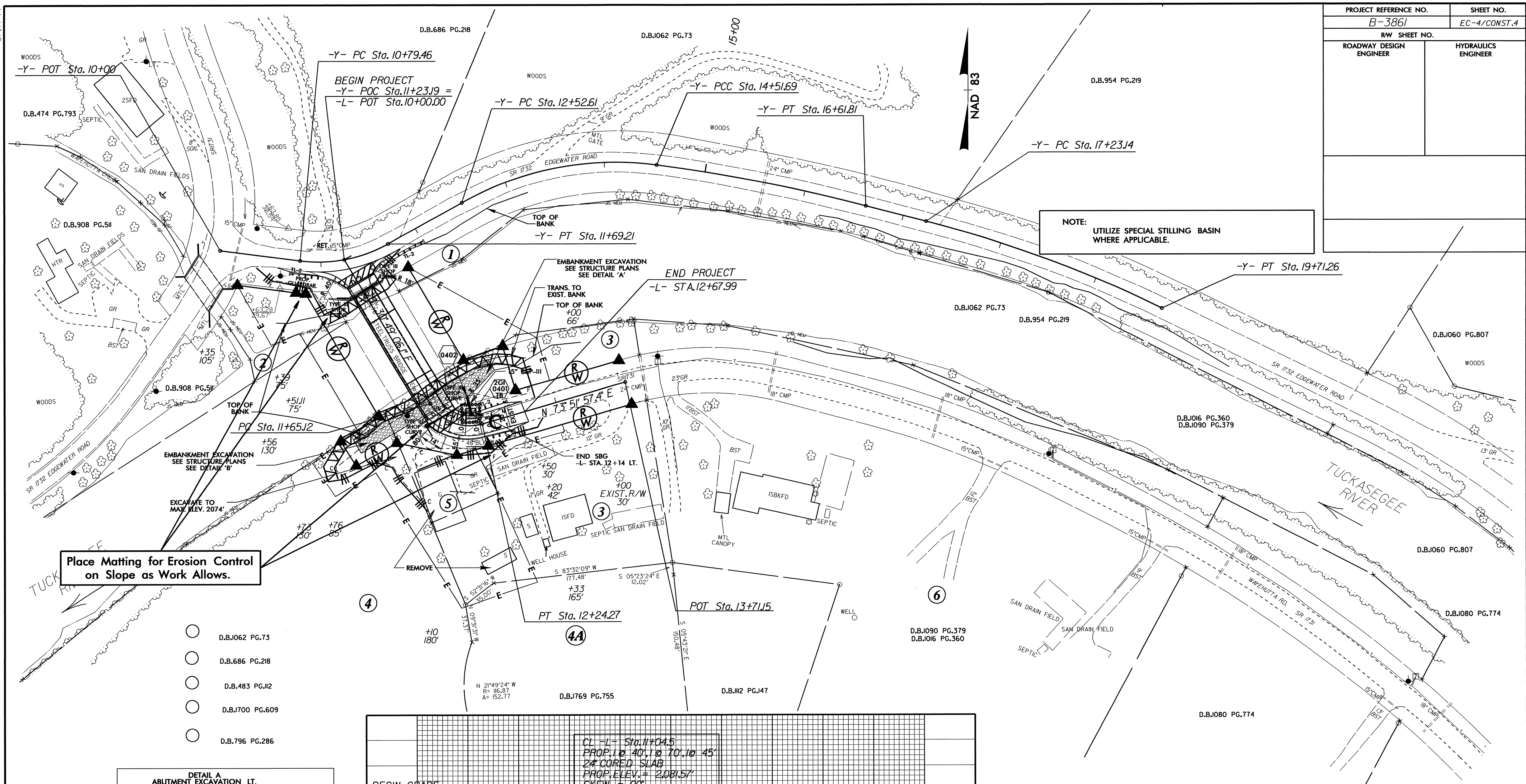
BRIDGE HYDRAULIC DATA
Bridge No. 107

DESIGN DISCHARGE	= 22,620 CFS
DESIGN FREQUENCY	= 50 YR
DESIGN HW ELEVATION	= 2,081.27 FT
BASE DISCHARGE	= 28,985 CFS
BASE FREQUENCY	= 100 YR
BASE HW ELEVATION	= 2,082.17 FT
OVERTOPPING DISCHARGE	= 20,000 CFS
OVERTOPPING FREQUENCY	= 25 + YR
OVERTOPPING ELEVATION	= 2,078.0 FT

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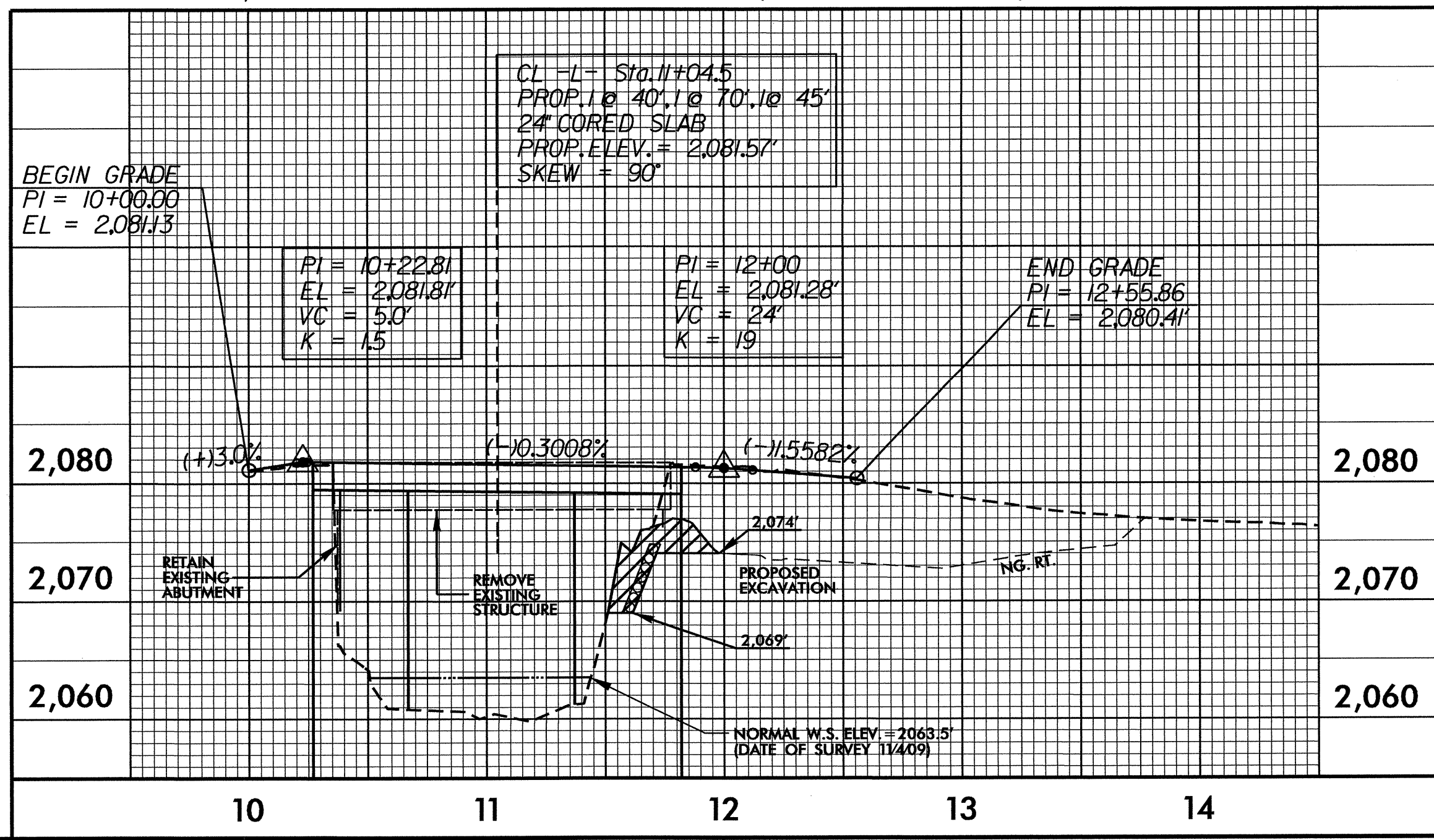
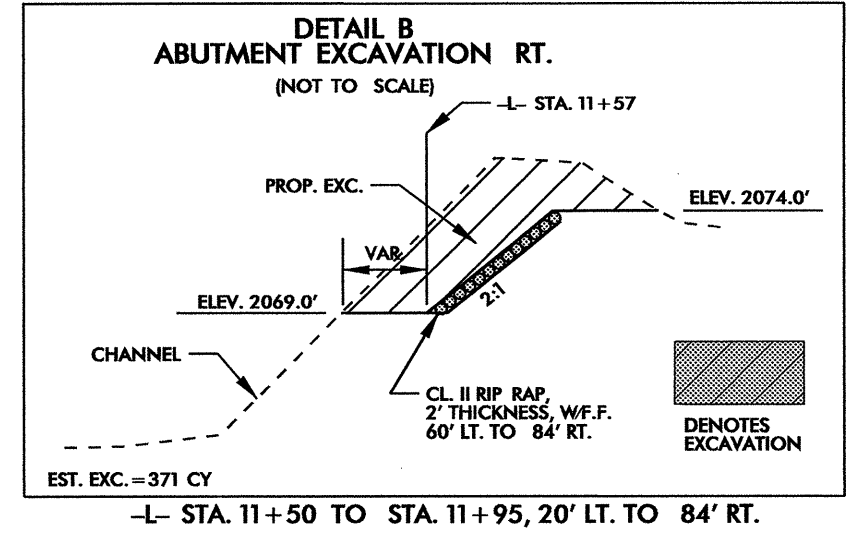
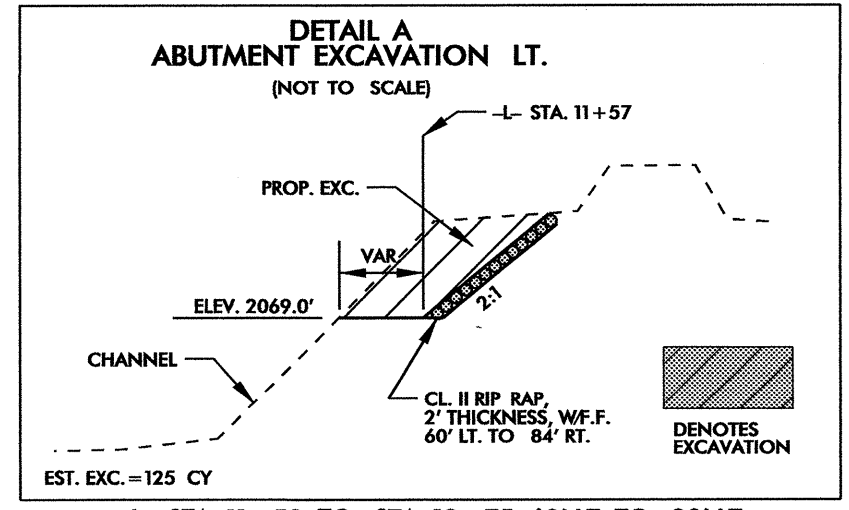
PROJECT REFERENCE NO.	SHEET NO.
B-3861	EC-4/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



NOTE:
UTILIZE SPECIAL STILLING BASIN
WHERE APPLICABLE.

Place Matting for Erosion Control
on Slope as Work Allows.

- D.B.1062 PG.73
- D.B.686 PG.218
- D.B.483 PG.112
- D.B.1700 PG.609
- D.B.796 PG.286



BRIDGE HYDRAULIC DATA
Bridge No. 107

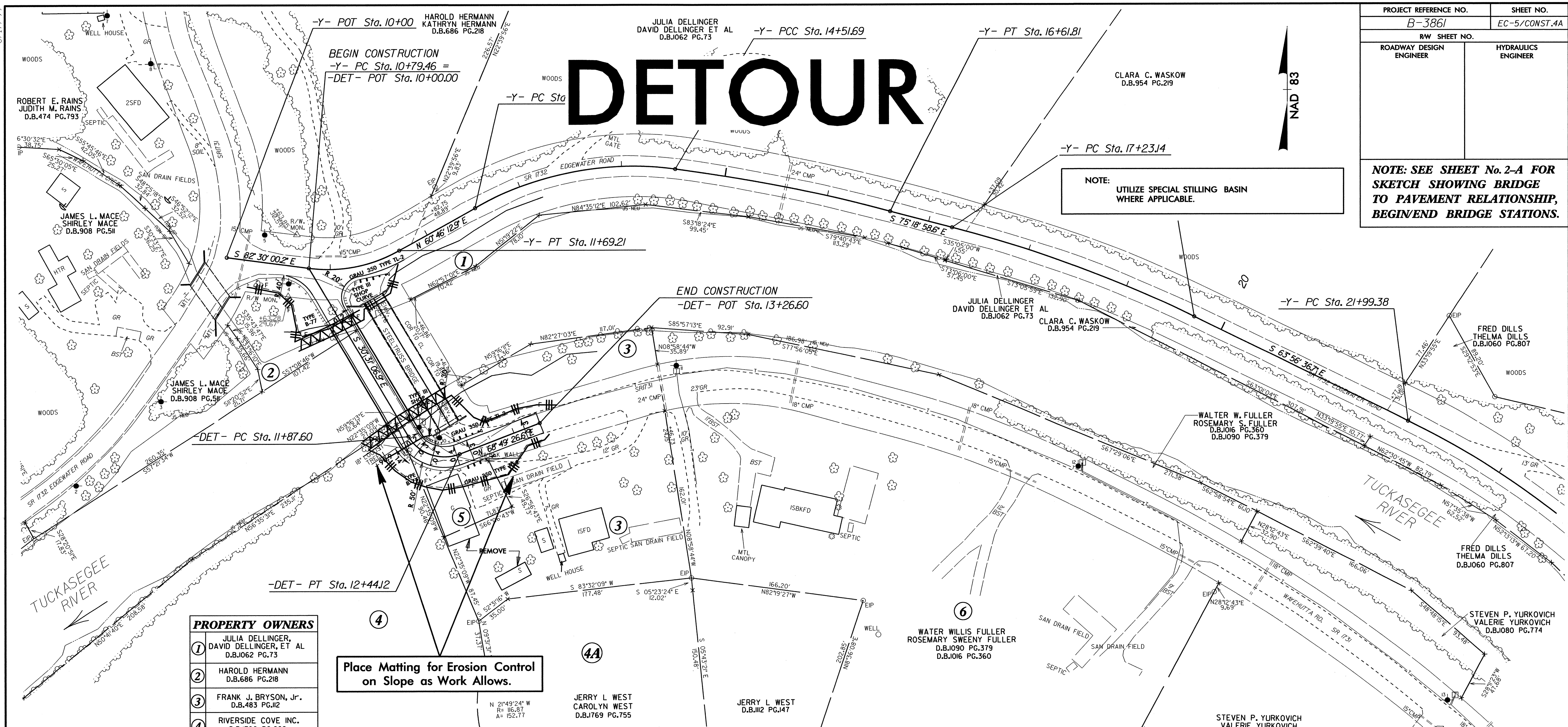
DESIGN DISCHARGE	=	22,620 CFS
DESIGN FREQUENCY	=	50 YR
DESIGN HW ELEVATION	=	2,081.27 FT
BASE DISCHARGE	=	28,985 CFS
BASE FREQUENCY	=	100 YR
BASE HW ELEVATION	=	2,082.17 FT
OVERTOPPING DISCHARGE	=	20,000 CFS
OVERTOPPING FREQUENCY	=	25 + YR
OVERTOPPING ELEVATION	=	2,078.0 FT

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PROJECT REFERENCE NO.	SHEET NO.
B-3861	EC-5/CONST.4A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTE: SEE SHEET No. 2-A FOR SKETCH SHOWING BRIDGE TO PAVEMENT RELATIONSHIP, BEGIN/END BRIDGE STATIONS.

DETOUR



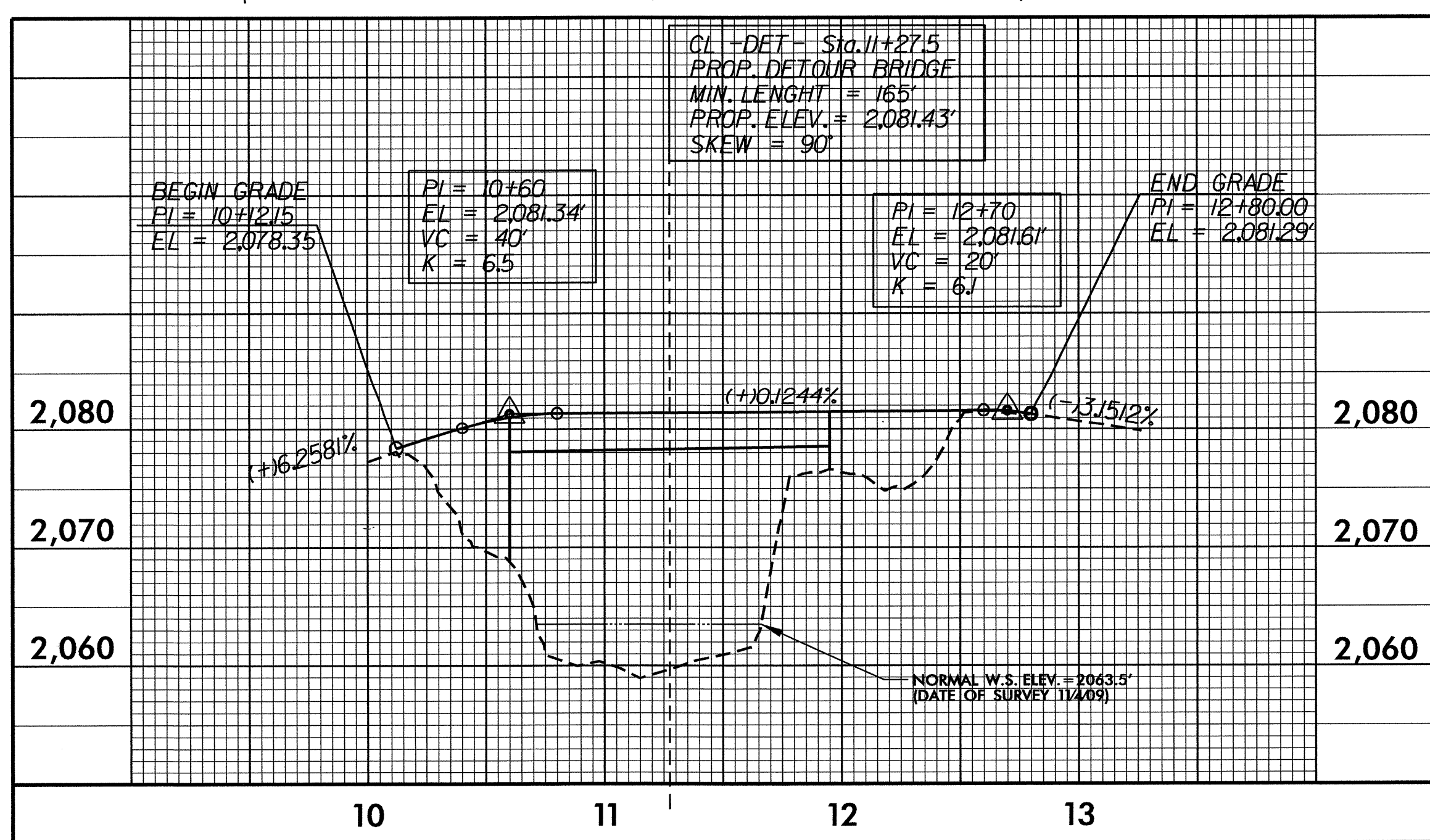
PROPERTY OWNERS

1	JULIA DELLINGER, DAVID DELLINGER, ET AL D.B.1062 PG.73
2	HAROLD HERMANN D.B.686 PG.218
3	FRANK J. BRYSON, Jr. D.B.483 PG.112
4	RIVERSIDE COVE INC. D.B.1700 PG.609
5	RUSSELL A. BRYSON, CONNIE BRYSON D.B.796 PG.286

Place Matting for Erosion Control on Slope as Work Allows.

BRIDGE HYDRAULIC DATA
TEMPORARY DETOUR BRIDGE

DESIGN DISCHARGE	= 10,400 CFS
DESIGN FREQUENCY	= 5 YRS
DESIGN HW ELEVATION	= 2,073.7 FT



NOTE: USE PLAN SHEET No. 4A FOR DETOUR CONSTRUCTION.

-DET-
PI Sta 12+21.74
Δ = 80' 57" 33.52" (LT)
D = 143' 14" 22.02"
L = 56.52'
T = 34.14'
R = 40.00'

-Y-

PI Sta 11+25.93 Δ = 36' 43" 46.9" (LT) D = 40' 55" 32.0" L = 89.75' T = 46.48' R = 140.00'	PI Sta 13+55.72 Δ = 36' 47" 44.8" (RT) D = 18' 28" 57.0" L = 199.08' T = 103.11' R = 310.00'	PI Sta 15+56.89 Δ = 7' 07" 03.7" (RT) D = 3' 23" 14.8" L = 210.12' T = 105.20' R = 1,691.42'	PI Sta 18+47.61 Δ = 11' 22" 21.9" (RT) D = 4' 35" 01.2" L = 248.11' T = 124.47' R = 1,250.00'
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