

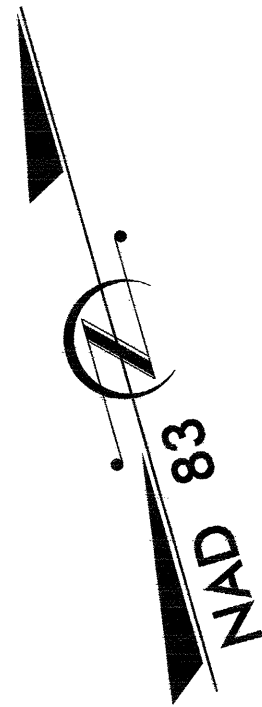
# TIP PROJECT: U-4010

## STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS PLAN FOR PROPOSED HIGHWAY EROSION CONTROL

### DURHAM COUNTY

**LOCATION: DURHAM - NC 98 (HOLLOWAY ST.) FROM EAST OF US 70  
BYPASS TO EAST OF JUNCTION ROAD**

**TYPE OF WORK: WIDENING, DRAINAGE, GRADING, PAVING,  
CURB & GUTTER AND SIGNALS**

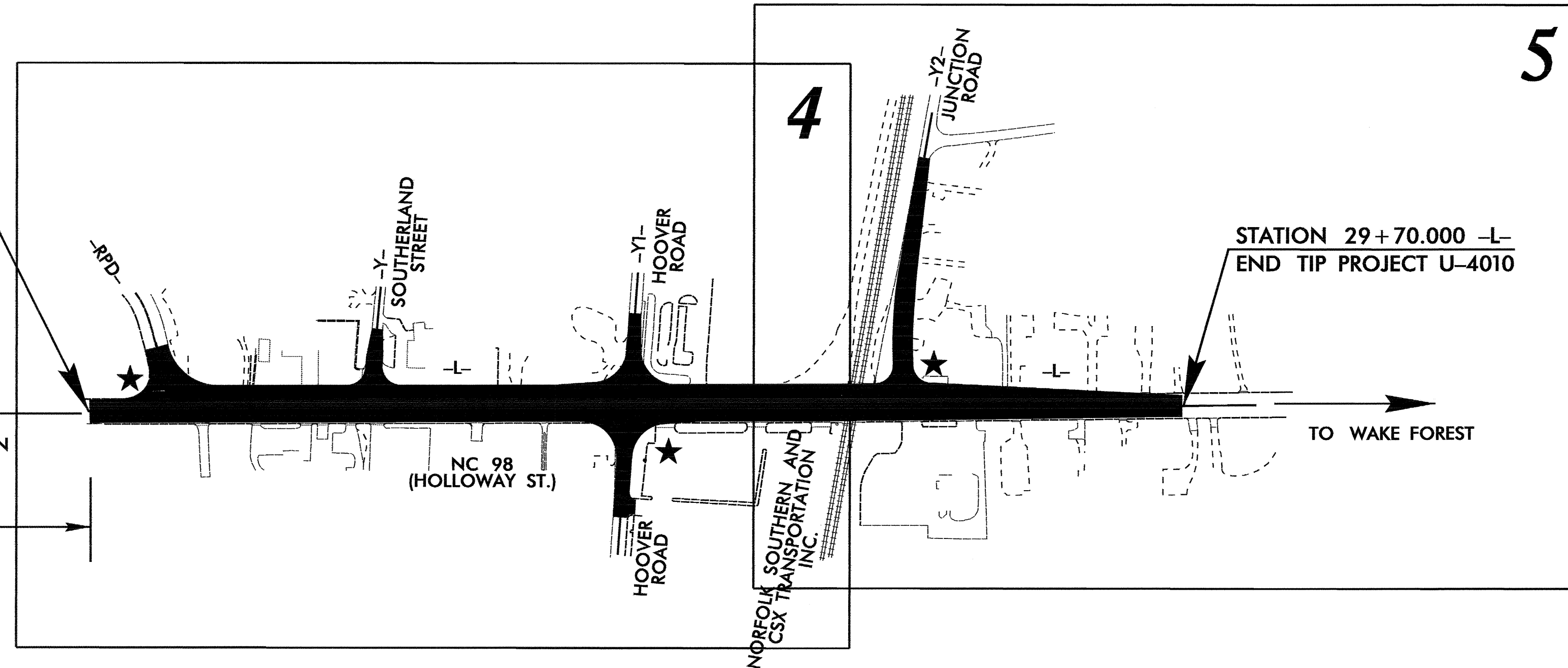


STATION 10+00.000 -L-  
BEGIN TIP PROJECT U-4010

BEG. CONST.  
NC 98 (HOLLOWAY ST.)  
AT US 70 EB RAMP  
SEE SIGNAL PLANS

TO DOWNTOWN  
DURHAM

600' +/-



**4**

**5**

STATION 29+70.000 -L-  
END TIP PROJECT U-4010

TO WAKE FOREST

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-4010	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

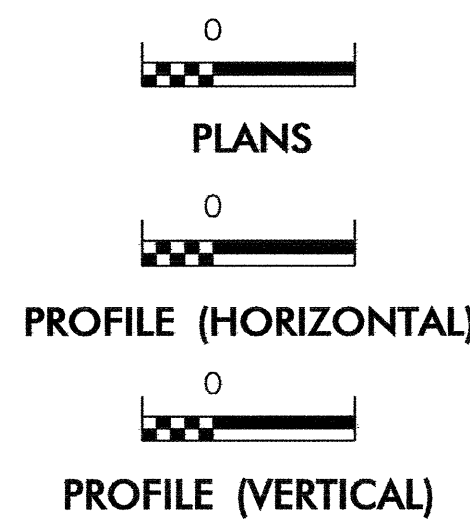
#### EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
	Streambank Reforestation	
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	
1630.01	Riser Basin	
1630.02	Silt Basin Type B	
1633.01	Temporary Rock Silt Check Type-A	
	Temporary Rock Silt Check Type-B	
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	
	Rock Inlet Sediment Trap:	
1632.01	Type A	
1632.02	Type B	
1632.03	Type C	
	Skimmer Basin	

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

**THIS PROJECT HAS  
BEEN DESIGNED TO  
SENSITIVE WATERSHED  
STANDARDS.**

#### GRAPHIC SCALE



ROADSIDE ENVIRONMENTAL UNIT  
DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA

Prepared in the Office of:  
**ROADSIDE ENVIRONMENTAL UNIT**  
1 South Wilmington St.  
Raleigh, NC 27611  
**2006 STANDARD SPECIFICATIONS**

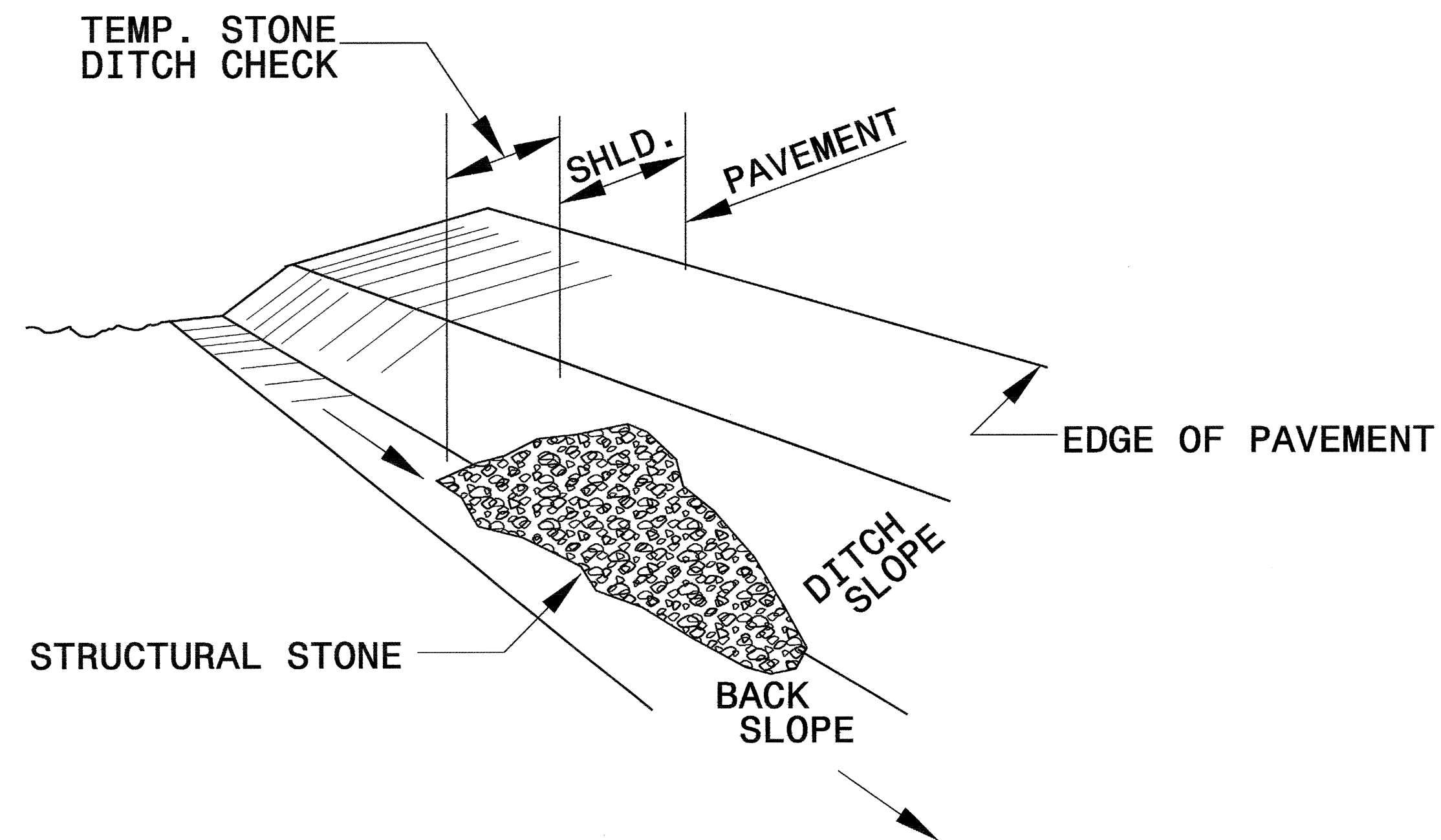
#### Roadway Standard Drawings

The following roadway english standards as appear in "Roadway Standard Drawings" - Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated July 18, 2006 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	1630.02 Silt Basin Type B
1605.01 Temporary Silt Fence	1632.03 Rock Inlet Sediment Trap Type C
1607.01 Gravel Construction Entrance	1633.01 Temporary Rock Silt Check Type A

PROJECT REFERENCE NO. U-4010	SHEET NO. EC-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL

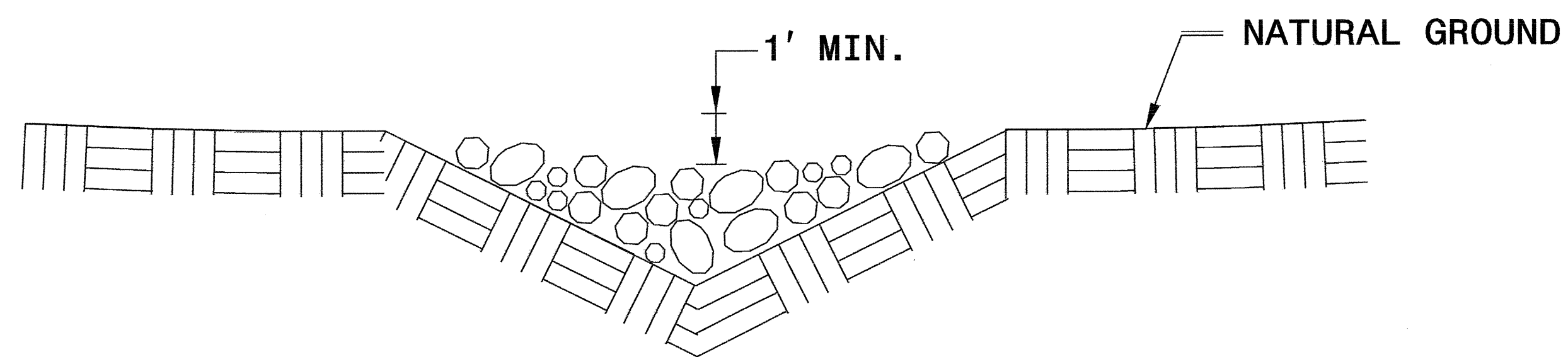


**ISOMETRIC VIEW**

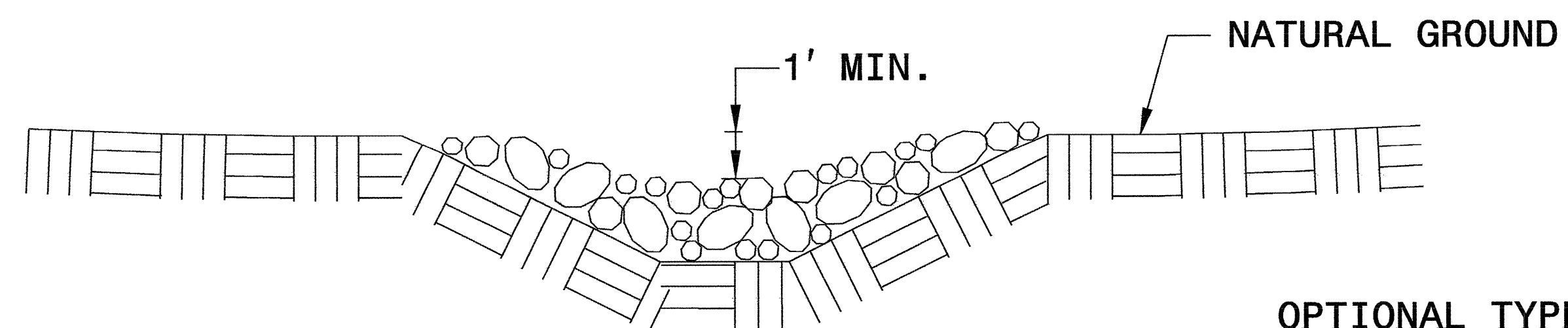
**NOTES:**

USE CLASS 'B' EROSION CONTROL STONE FOR STRUCTURAL STONE.

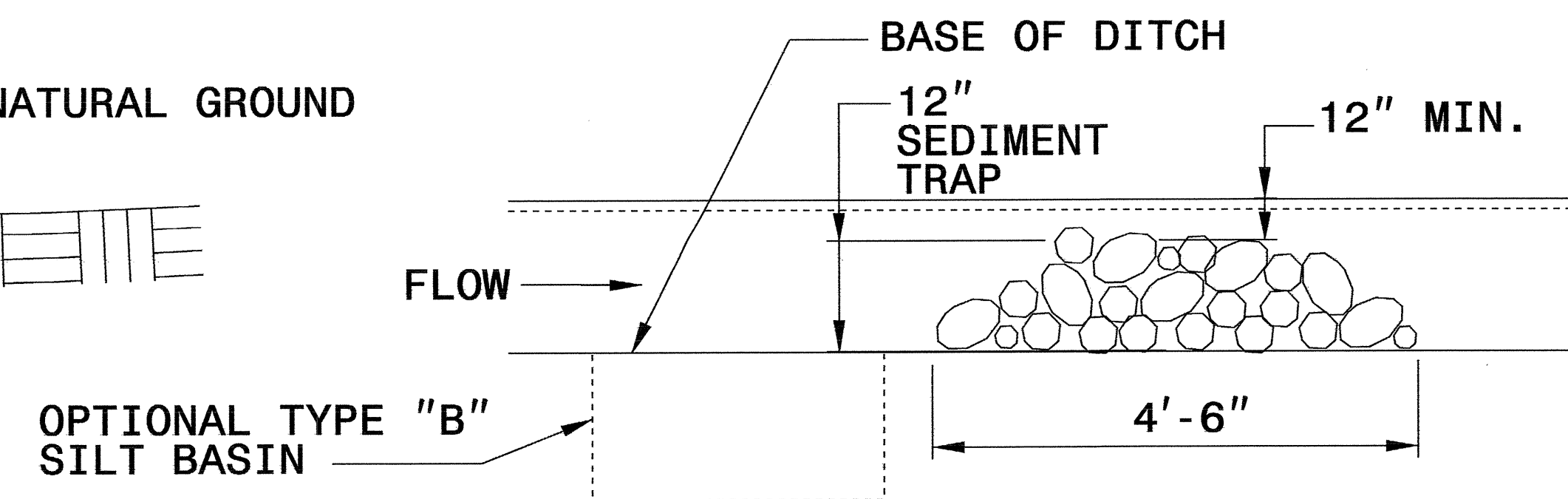
THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



**CROSS SECTION  
VEE DITCH**



**CROSS SECTION  
TRAPEZOIDAL DITCH**

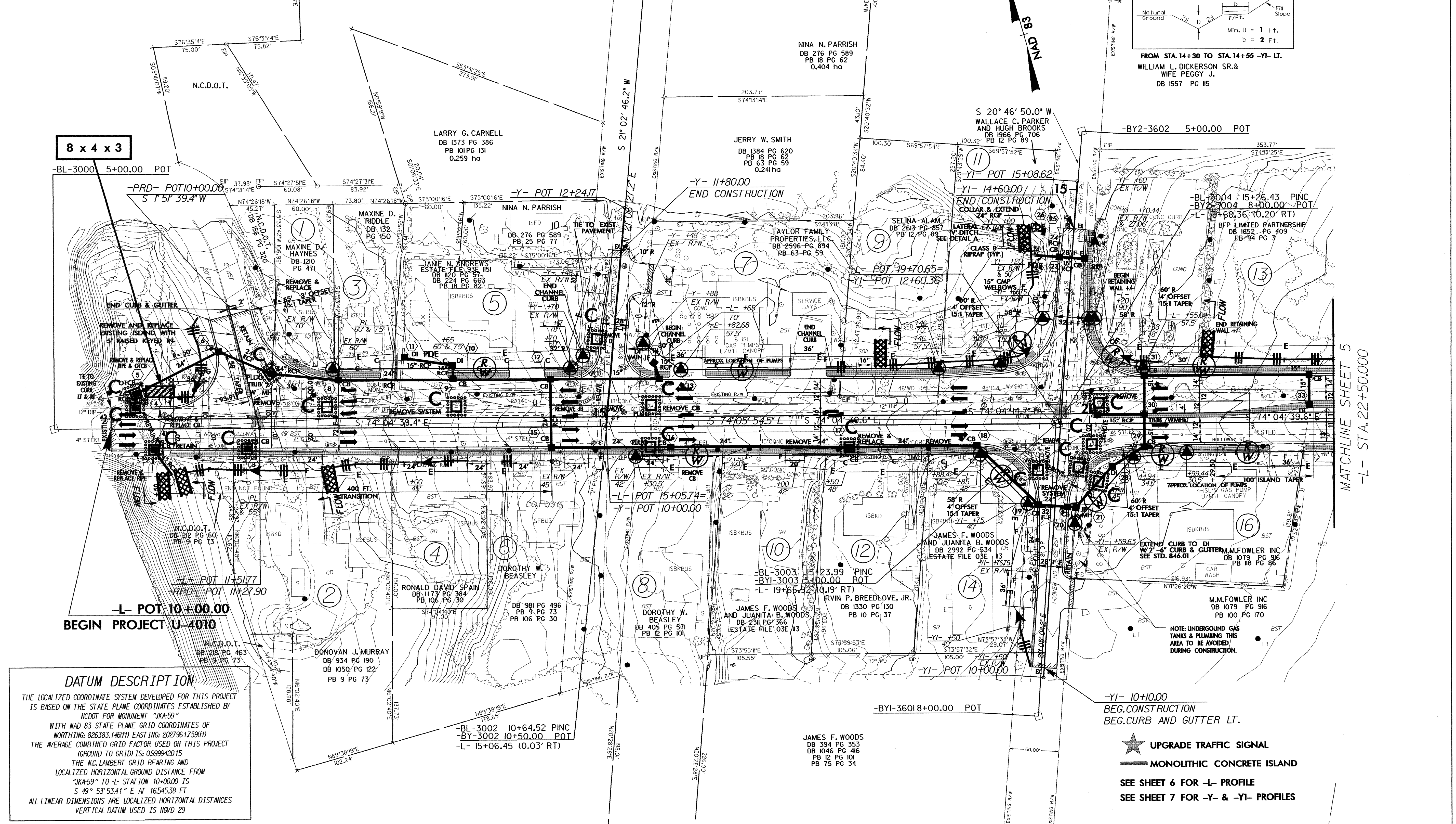
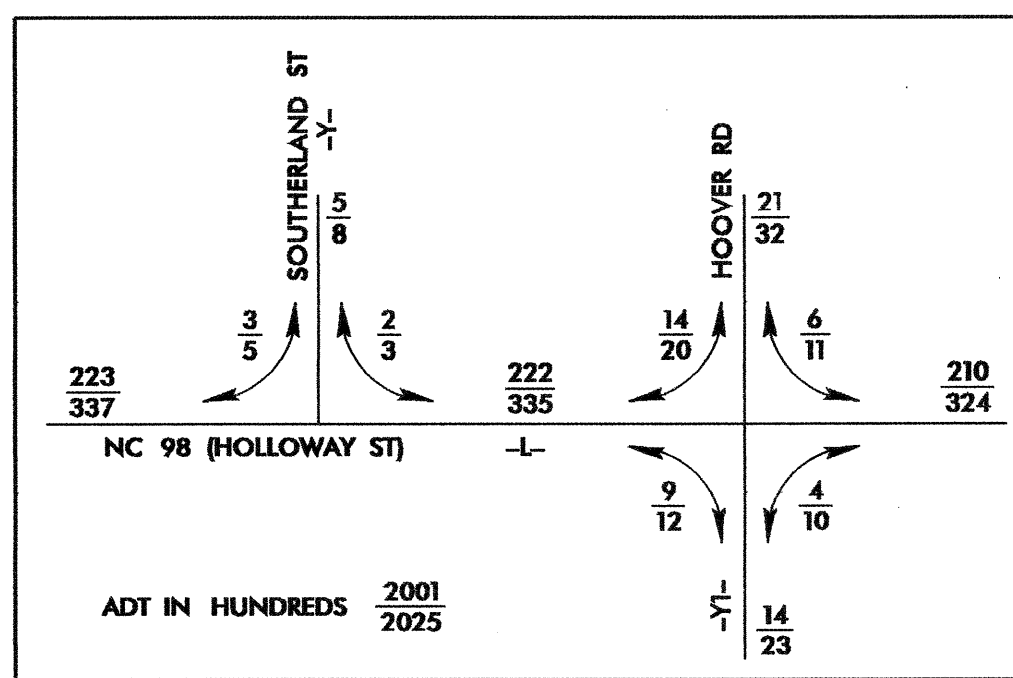
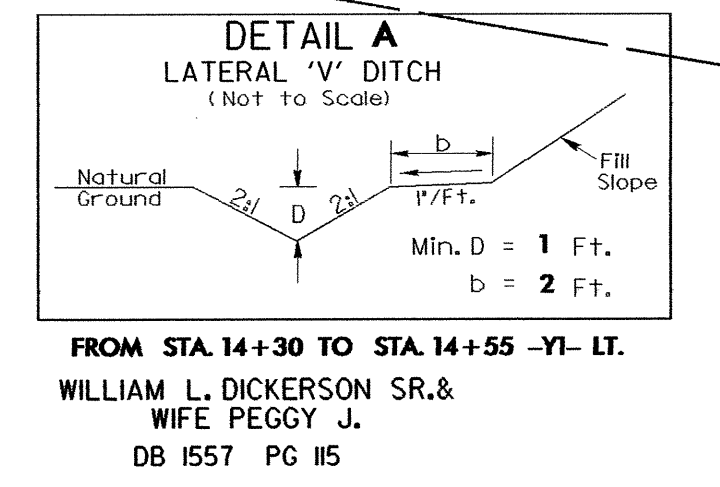


**ELEVATION VIEW**

PROJECT REFERENCE NO.	SHEET NO.
U-4010	EC-3/CONST.4
R/W SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

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

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 4



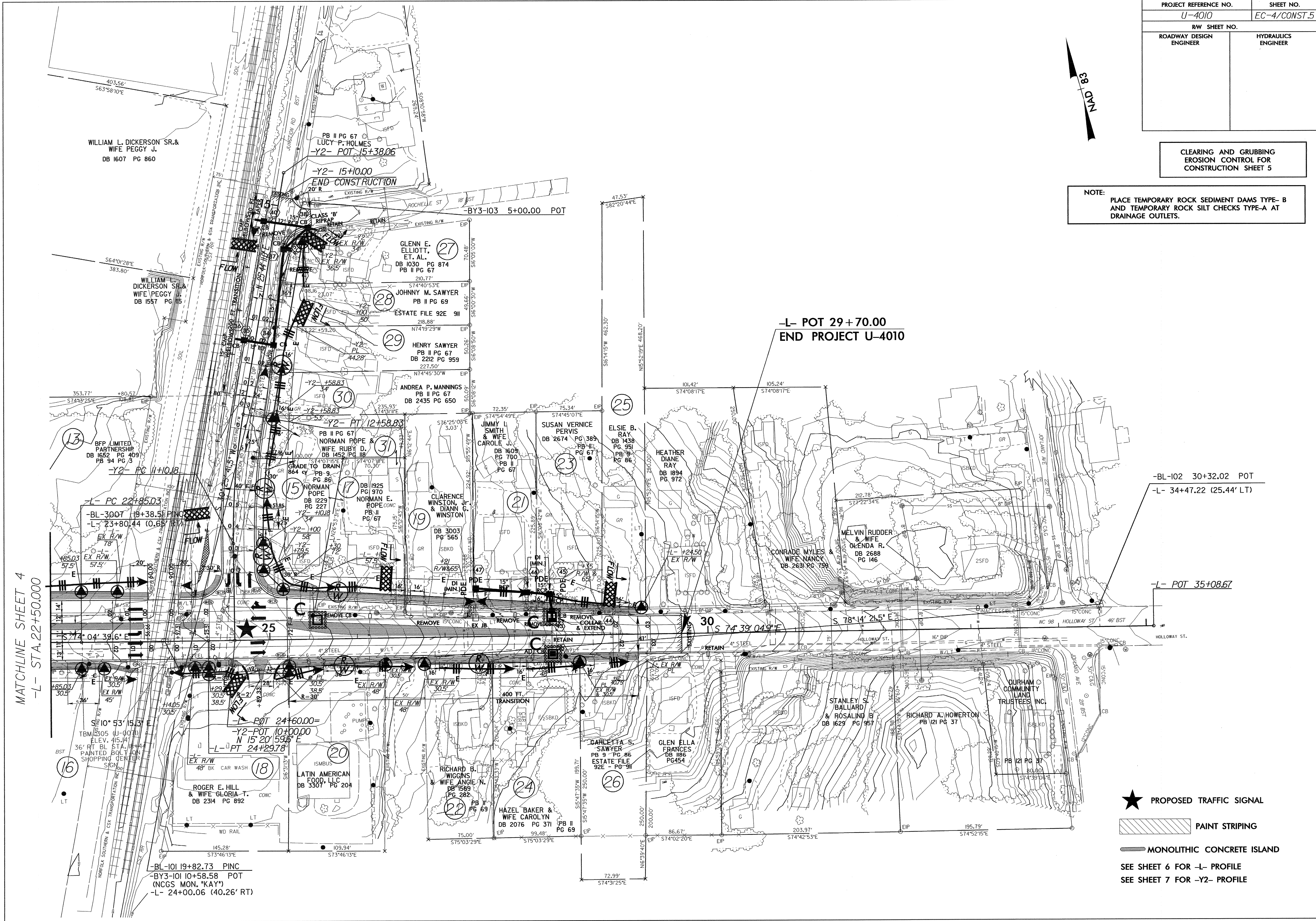
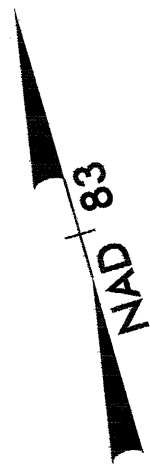
**DATUM DESCRIPTION**  
 THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "JKA-59"  
 WITH NAD 83 STATE PLANE GRID COORDINATES OF  
 NORTHING: 826383.146(1) EASTING: 202796.175(1)  
 THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.999942015  
 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "JKA-59" TO -L- STATION 10+00.00 IS  
 S 49° 53' 53.41" E AT 16,545.38 FT  
 ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES  
 VERTICAL DATUM USED IS NGVD 29

★ UPGRADE TRAFFIC SIGNAL  
 ■ MONOLITHIC CONCRETE ISLAND  
 SEE SHEET 6 FOR -L- PROFILE  
 SEE SHEET 7 FOR -Y- & -YI- PROFILES

PROJECT REFERENCE NO.	SHEET NO.
U-4010	EC-4/CONST.5
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEARING AND GRUBBING  
EROSION CONTROL FOR  
CONSTRUCTION SHEET 5

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



MATCHLINE SHEET 4  
-L- STA. 22+50.00

-L- POT 29+70.00  
END PROJECT U-4010

-BL-102 30+32.02 POT  
-L- 34+47.22 (25.44' LT)

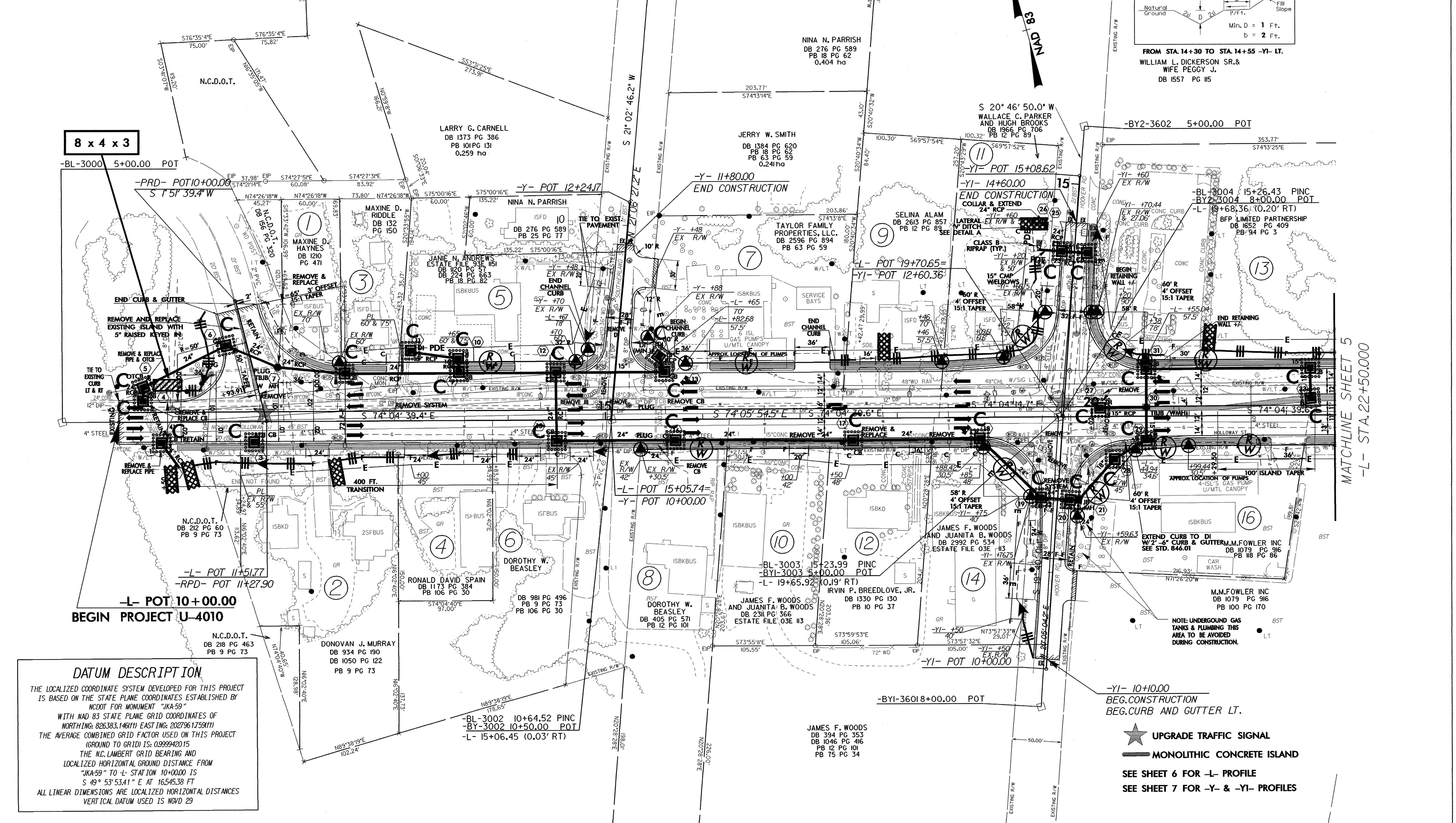
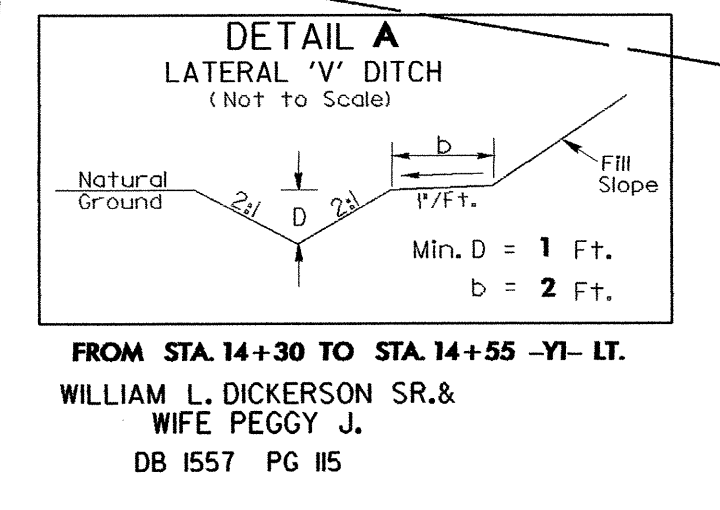
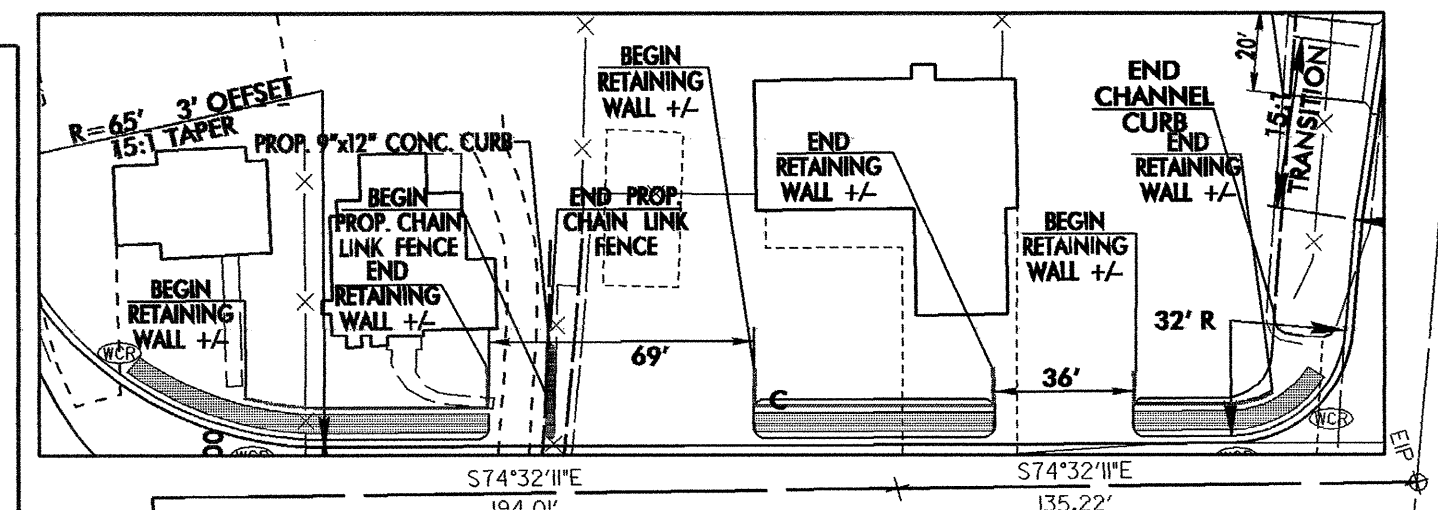
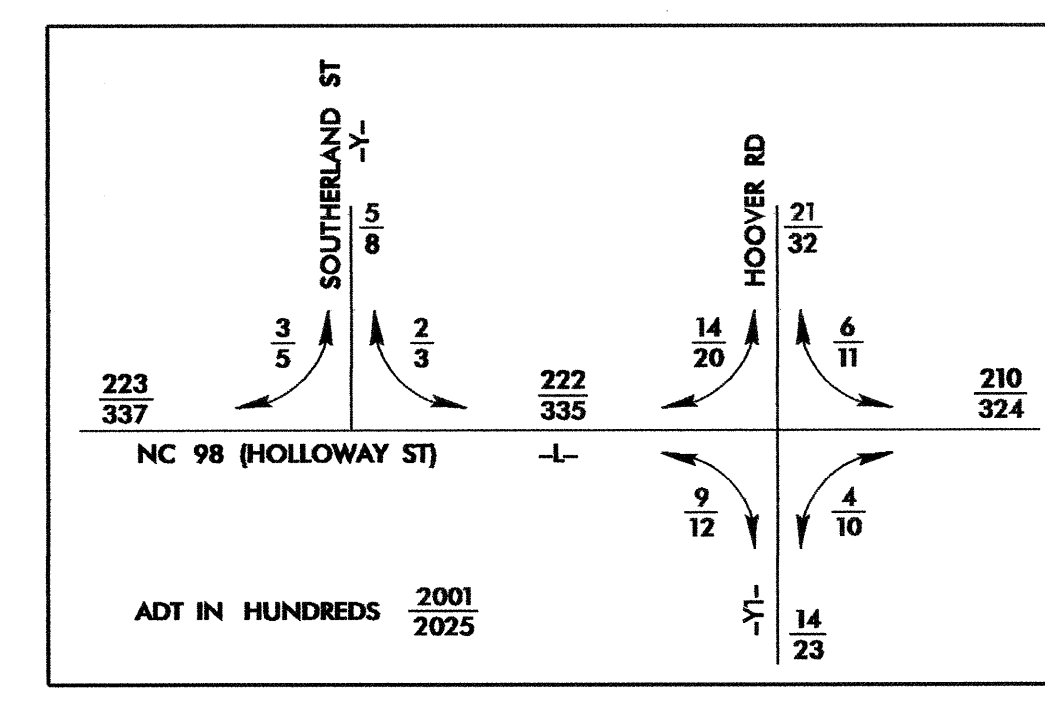
-L- POT 35+08.67

-BL-101 19+82.73 PINC  
-BY3-101 10+58.58 POT  
(NCCS MON. "KAY")  
-L- 24+00.06 (40.26' RT)

- ★ PROPOSED TRAFFIC SIGNAL
- ▨ PAINT STRIPING
- ▬ MONOLITHIC CONCRETE ISLAND

SEE SHEET 6 FOR -L- PROFILE  
SEE SHEET 7 FOR -Y2- PROFILE

PROJECT REFERENCE NO.	SHEET NO.
U-4010	EC-5/CONST.4
R/W SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	



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★ UPGRADE TRAFFIC SIGNAL

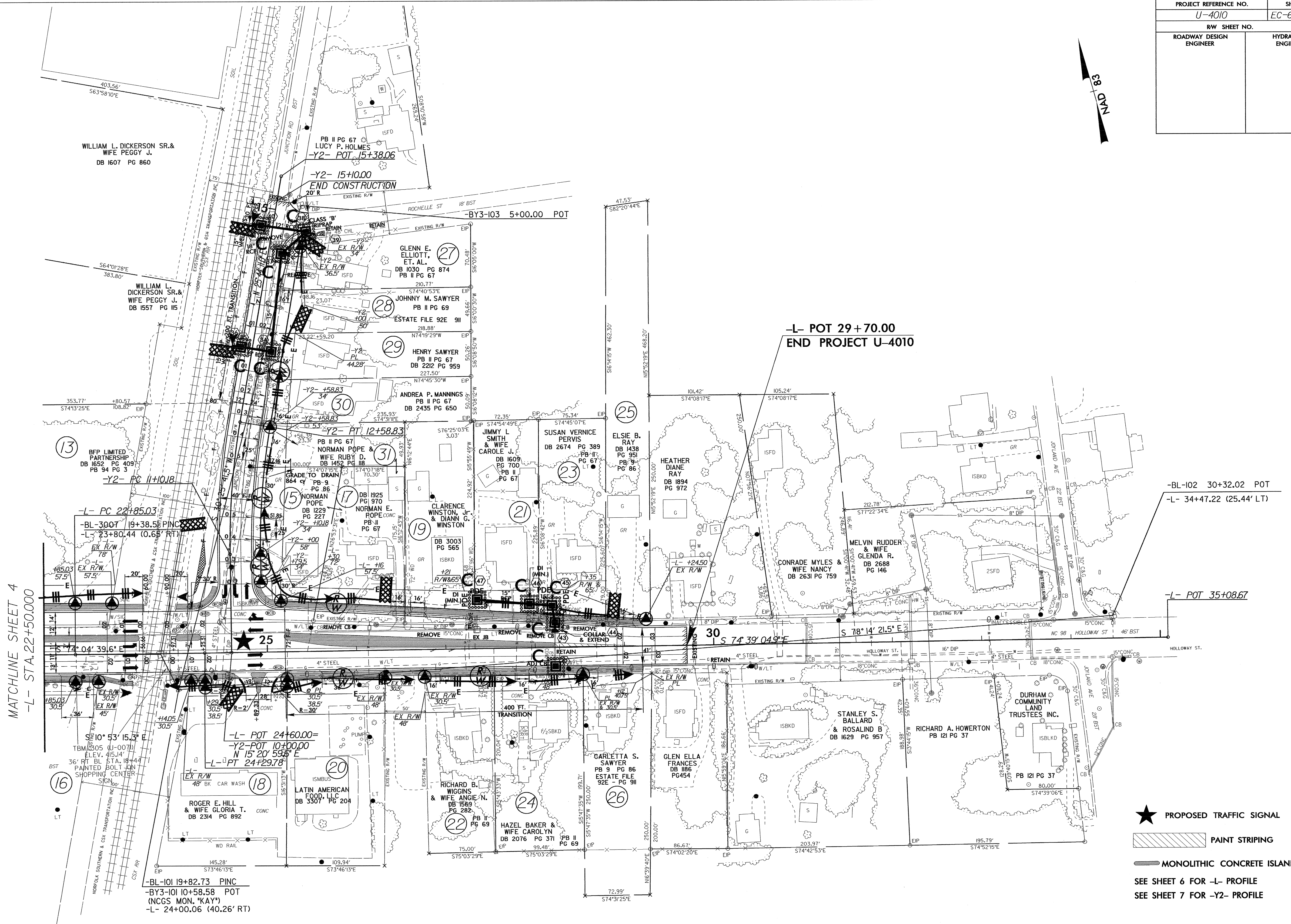
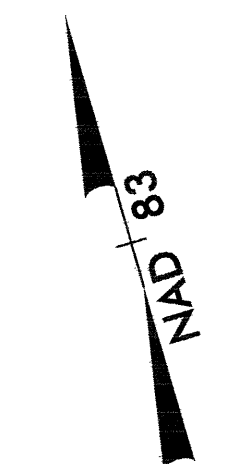
— MONOLITHIC CONCRETE ISLAND

SEE SHEET 6 FOR -L- PROFILE

SEE SHEET 7 FOR -Y- & -YI- PROFILES

MATCHLINE SHEET 5  
-L- STA. 22+50.000

PROJECT REFERENCE NO.	SHEET NO.
U-4010	EC-6/CONST.5
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



MATCHLINE SHEET 4  
-L- STA. 22+50.000

-L- POT 29+70.00  
END PROJECT U-4010

-BL-102 30+32.02 POT  
-L- 34+47.22 (25.44' LT)

-L- POT 35+08.67

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-BY3-101 10+58.58 POT  
(NCGS MON. \*KAY\*)  
-L- 24+00.06 (40.26' RT)

- PROPOSED TRAFFIC SIGNAL
- PAINT STRIPING
- MONOLITHIC CONCRETE ISLAND

SEE SHEET 6 FOR -L- PROFILE  
SEE SHEET 7 FOR -Y2- PROFILE