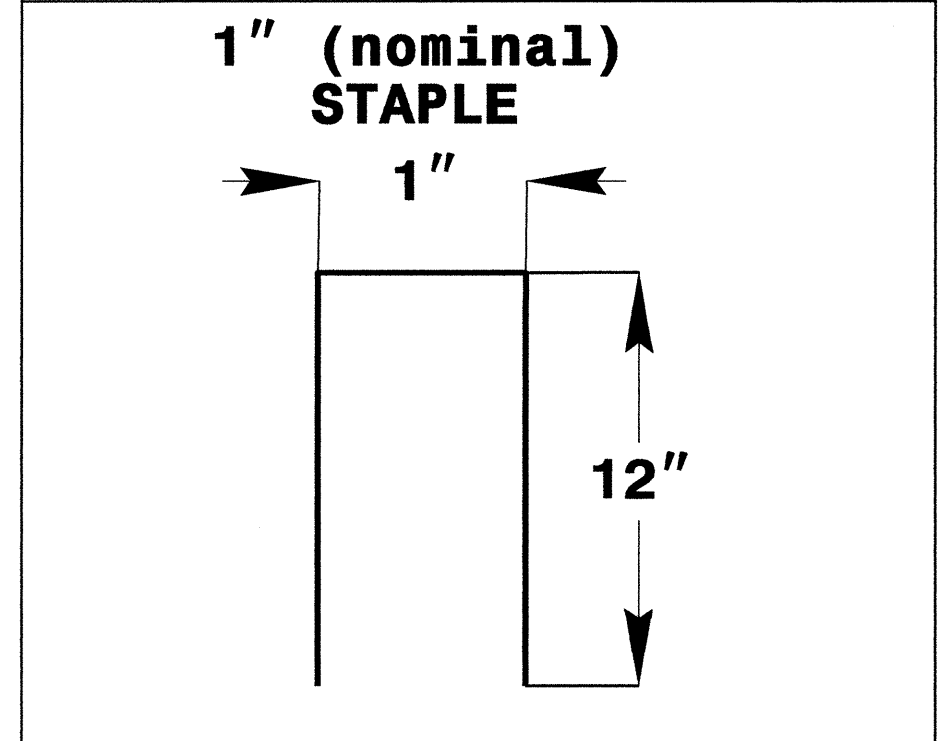
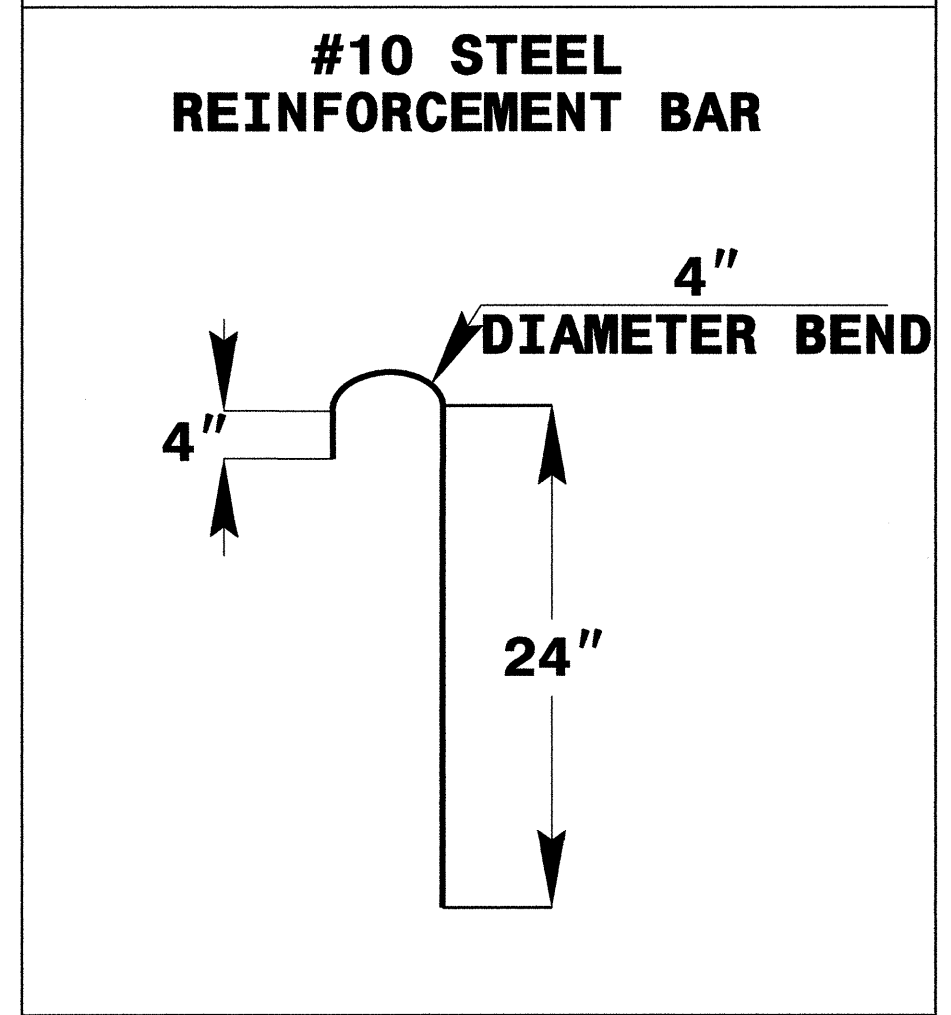
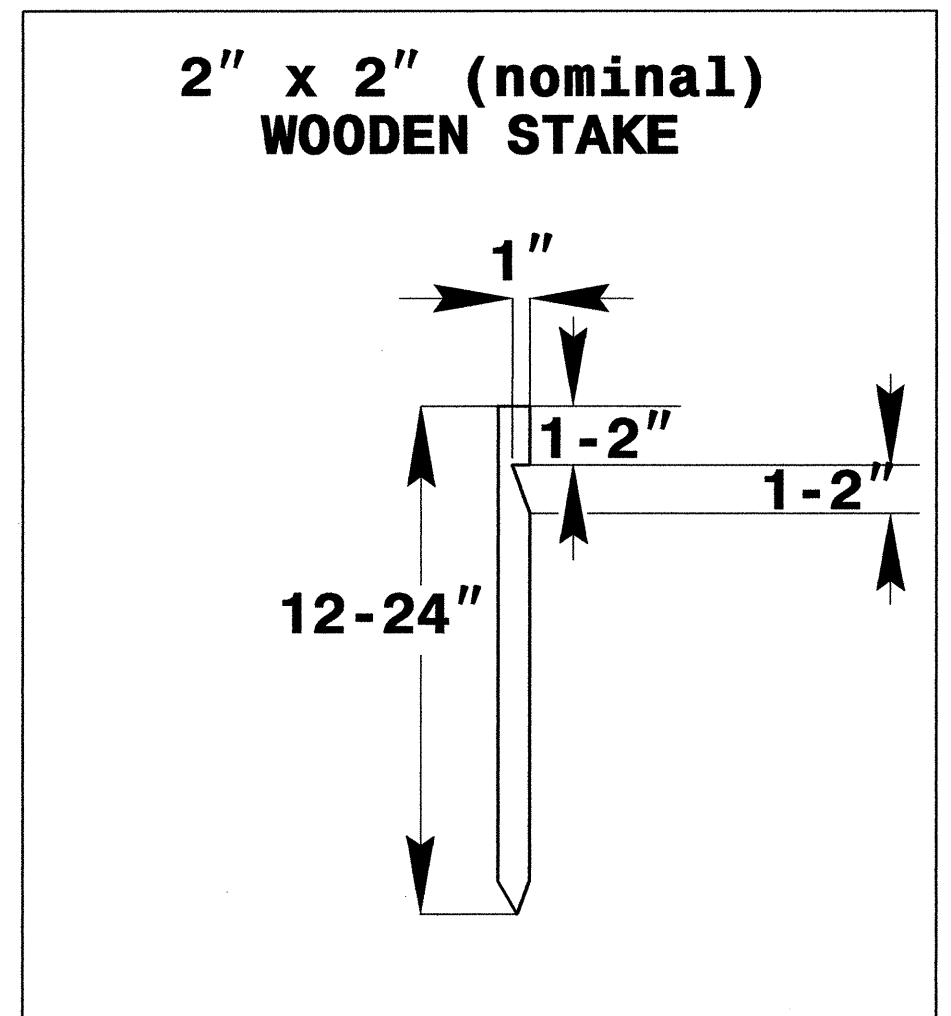
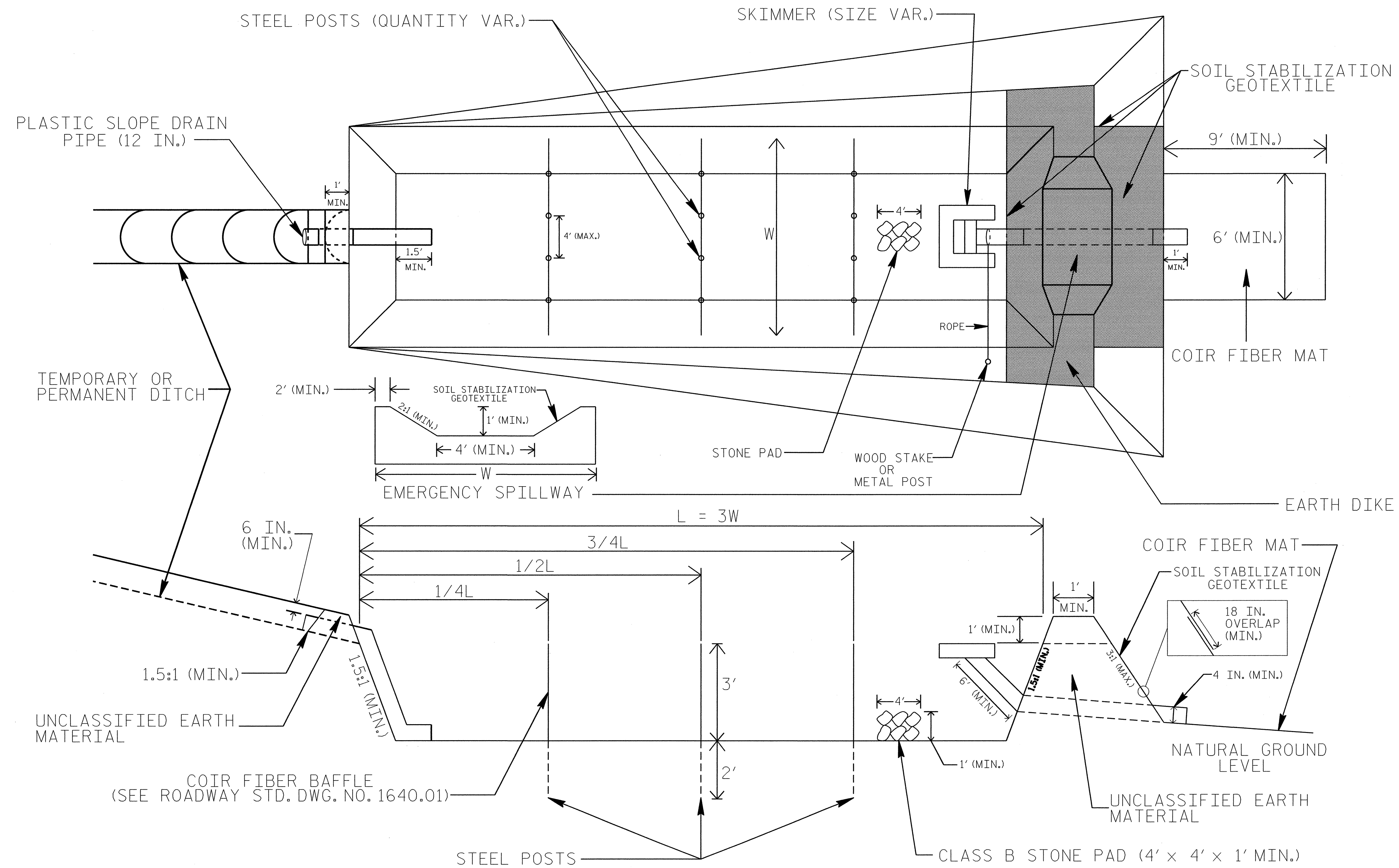


PROJECT REFERENCE NO. U-4444B	SHEET NO. EC-02
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SKIMMER BASIN WITH BAFFLES DETAIL



COIR FIBER MAT ANCHOR OPTIONS

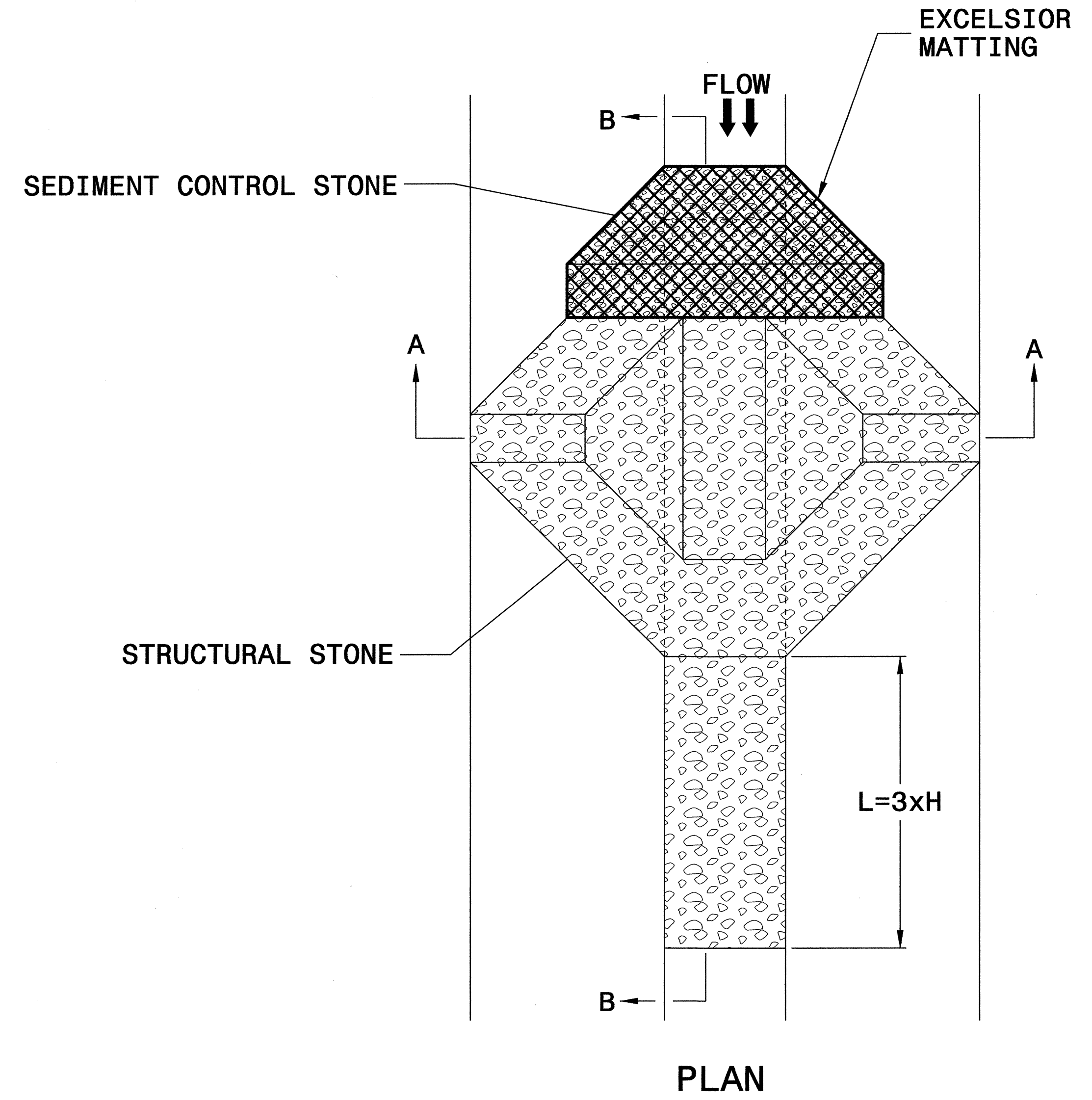
NOTES

1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR AND EXTERIOR SIDESLOPES.
2. LIMIT EARTH DIKE HEIGHT TO 5 FT.
3. FOR BASIN DEPTH OF 3 FT., THE MINIMUM BASIN WIDTH SHALL BE 9 FT.
4. DETERMINE EMERGENCY SPILLWAY LENGTH (FT.) USING $Q/0.8$, WHERE Q IS FLOW RATE (CFS) INTO BASIN.
5. PLASTIC SLOPE DRAIN PIPE AT INLET OF BASIN MAY BE REPLACED BY FILTRATION GEOTEXTILE AS DIRECTED.
6. SOIL STABILIZATION GEOTEXTILE FOR EMERGENCY SPILLWAY SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18 IN. (MIN.).

NOT TO SCALE

PROJECT REFERENCE NO. U-4444B	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY ROCK SILT CHECK TYPE 'A' WITH EXCELSIOR MATTING AND POLYACRYLAMIDE (PAM)

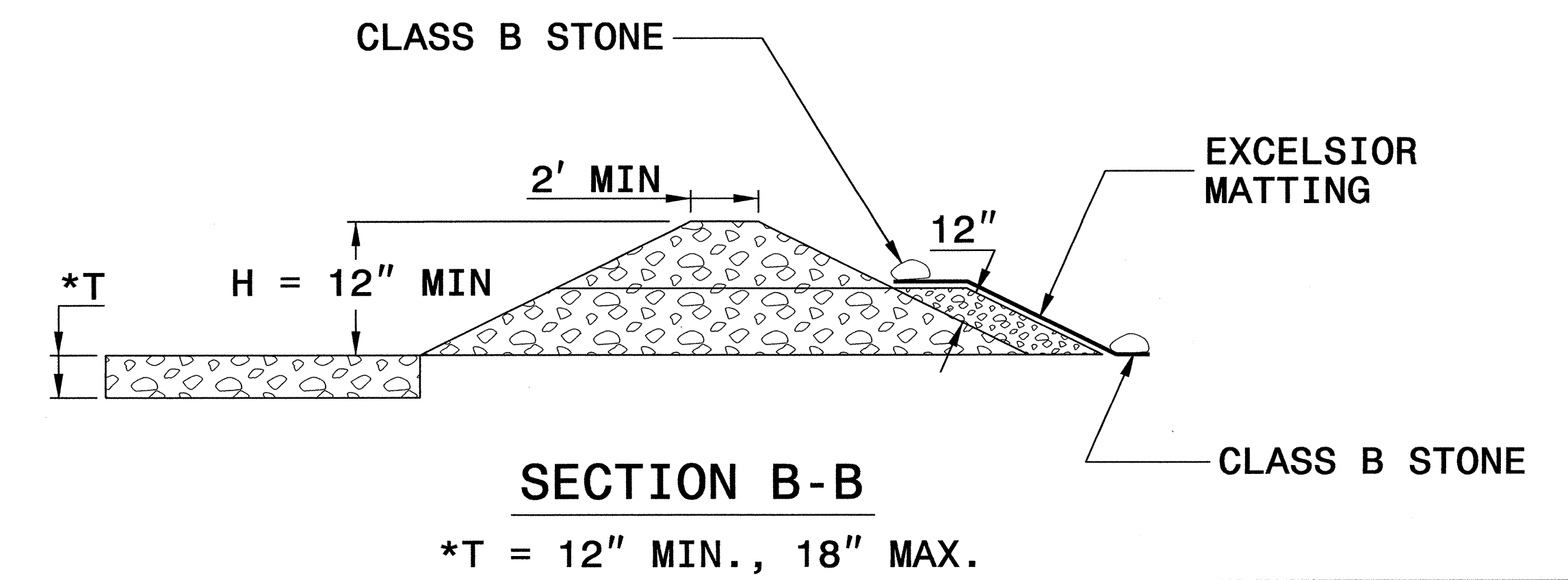
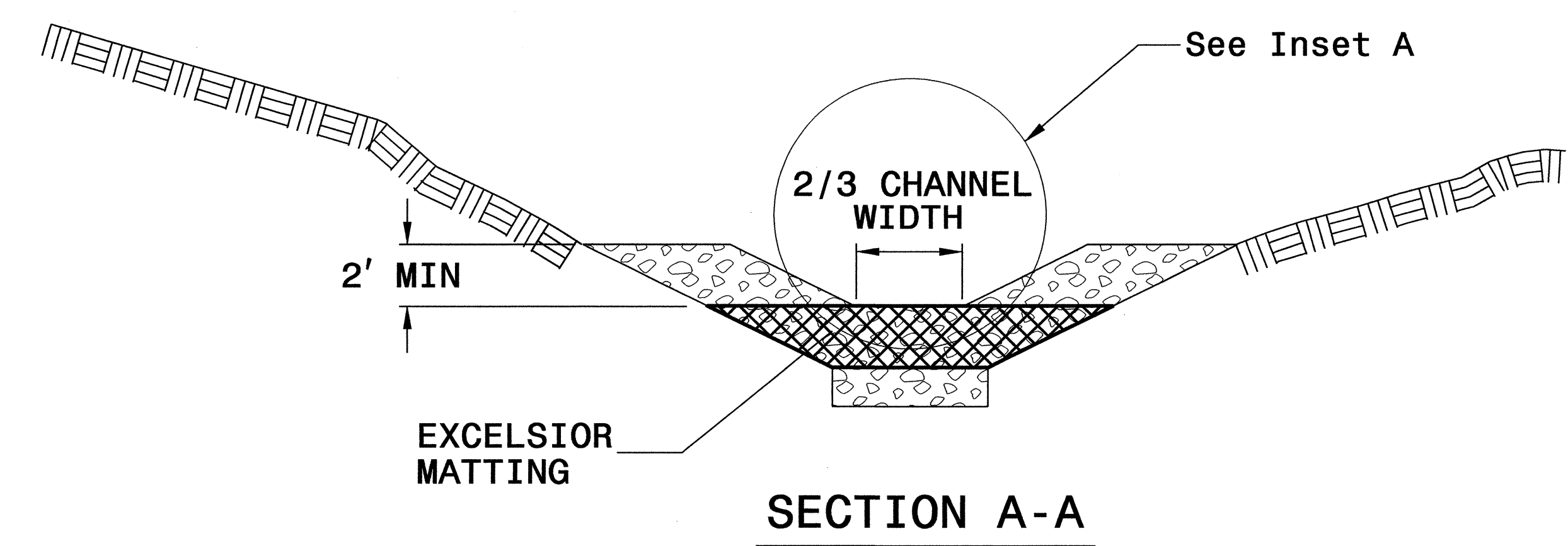
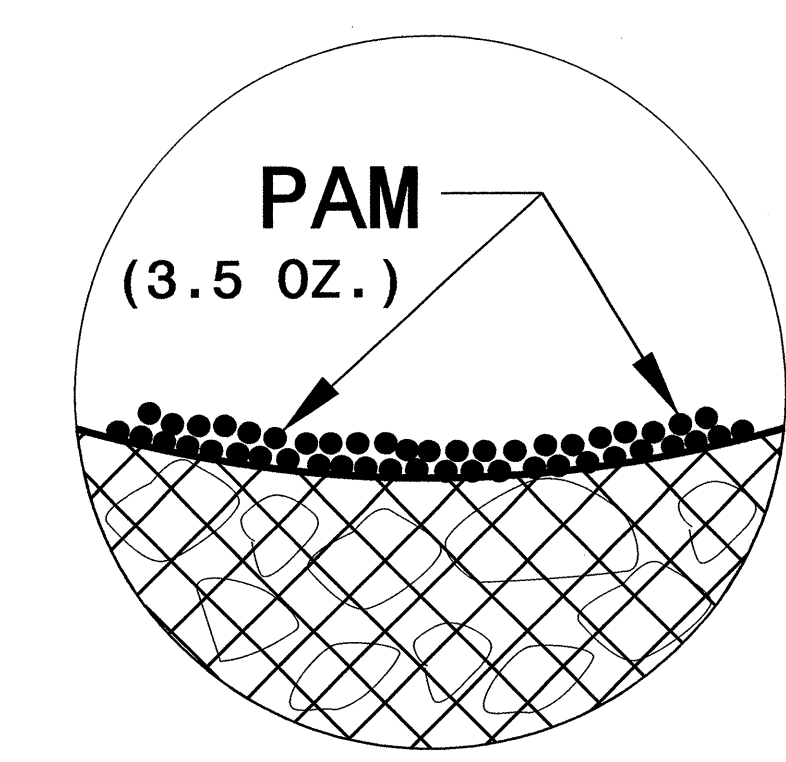


NOTES

USE EXCELSIOR FOR MATTING MATERIAL AND ANCHOR MATTING SECTION AT TOP AND BOTTOM WITH CLASS B STONE.

PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH ROCK SILT CHECK.

INITIALLY APPLY 3.5 OUNCES OF POLYACRYLAMIDE (PAM) TO TOP OF MATTING SECTION AND AFTER EVERY RAINFALL EVENT THAT EQUALS OR EXCEEDS 0.50 INCHES.



NOT TO SCALE

BORROW PIT DEWATERING BASIN DETAIL

PROJECT REFERENCE NO. U-4444B	SHEET NO. EC-2B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

GENERAL NOTES:

DETERMINE BORROW PIT DEWATERING BASIN SIZE USING $V = 8.0203 * Q * T$, WHERE V IS VOLUME (FT³), Q IS PUMP FLOW RATE (GPM), AND T IS DEWATERING TIME (HR). USE MAXIMUM FLOW RATE OF 1000 GPM AND A MINIMUM DEWATERING TIME OF 2 HOURS.

RISER SHALL BE A NON-PERFORATED, SMOOTH OR CORRUGATED MATERIAL WITH A FLASHBOARD OPTION.

CONSTRUCT THE COIR FIBER BAFFLE IN ACCORDANCE WITH ROADWAY STANDARD DRAWING 1640.01 AND WITH MATERIAL THAT MEETS THE SPECIFICATIONS OF ROADWAY STANDARD 1060-14.

PROVIDE 5' STEEL POSTS OF THE SELF-FASTENER ANGLE STEEL TYPE. INSTALL STEEL POSTS WITH NO MORE THAN 3' OF THE POST APPEARING ABOVE THE GROUND.

ATTACH THE COIR FIBER MAT TO THE STEEL POSTS WITH WIRE OR OTHER ACCEPTABLE MEANS AND STAPLED INTO THE BOTTOM AND SIDE SLOPES OF THE BASIN WITH 12" STAPLES.

INSTALL TYPE 2 GEOTEXTILE ON SIDESLOPES AND BOTTOM OF BASIN AT INLET AS SHOWN IN THE DETAIL.

USE THE TYPICAL SECTION SHOWN FOR THE BORROW PIT DEWATERING BASIN AS A GUIDE. THE BASIN MAY HAVE ANY TYPE CONFIGURATION AS LONG AS SUFFICIENT VOLUME IS PROVIDED AND PROVISIONS ARE MADE FOR A NON-PERFORATED RISER.

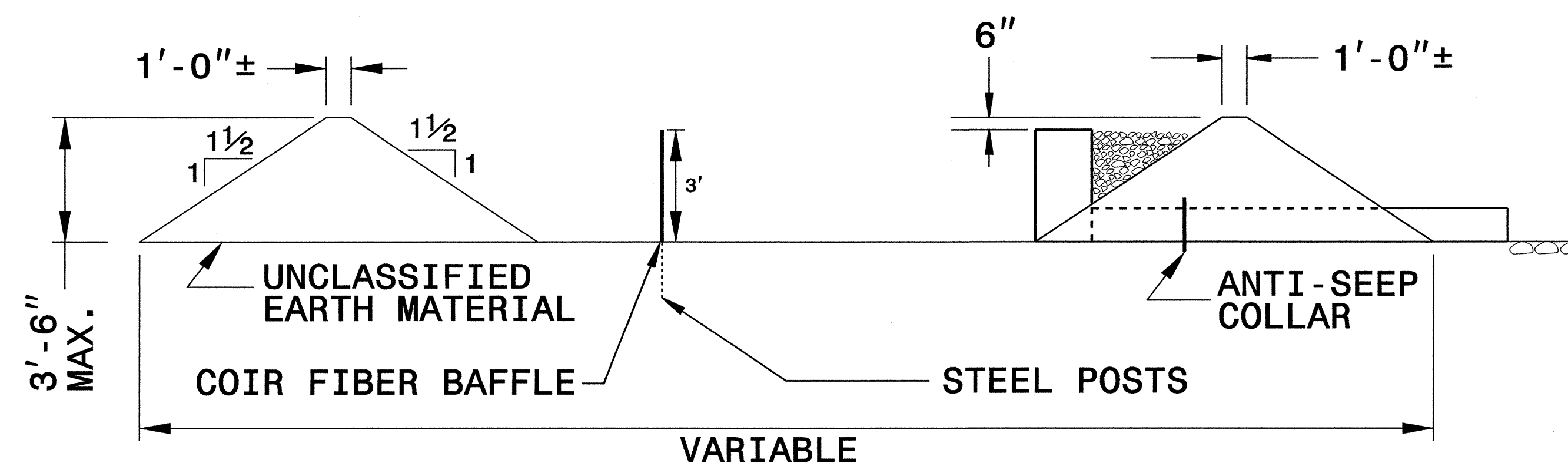
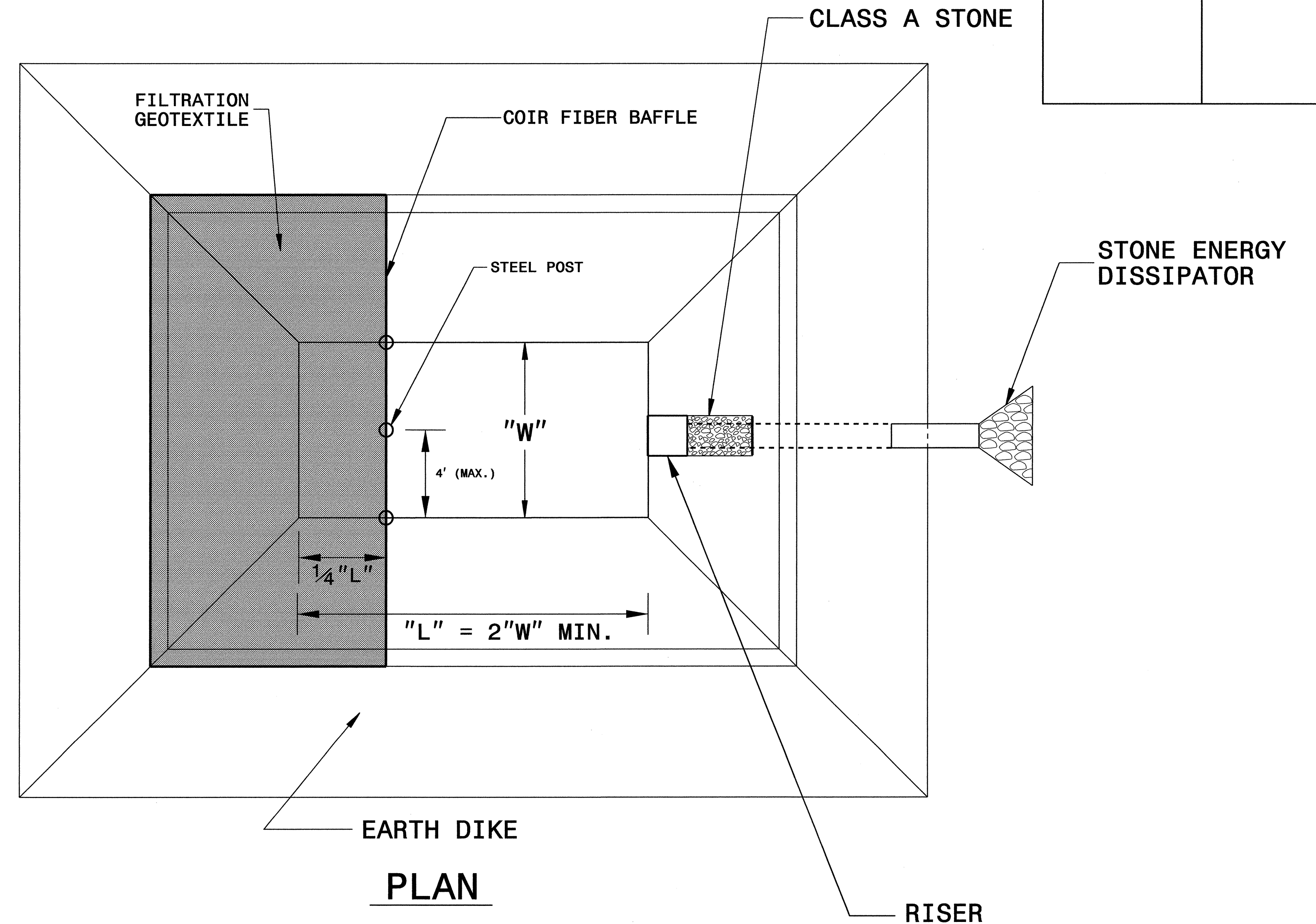
DO NOT EXCEED 3½ FT. IN HEIGHT FOR THE EARTH DIKES REQUIRED FOR BORROW PIT DEWATERING BASIN.

THE BORROW PIT DEWATERING BASIN SIZE IS VARIABLE AND DEPENDENT ON SPECIFIC SITE REQUIREMENTS AS WELL AS PROPOSED CONSTRUCTION OPERATIONS.

SUBMIT THE SIZE, LOCATION AND RISER PIPE MATERIAL FOR APPROVAL PRIOR TO CONSTRUCTION.

PUMP THE EFFLUENT INTO THE BORROW PIT DEWATERING BASIN TO A MAXIMUM DEPTH OF 6 IN. BELOW TOP OF EARTH DIKE.

PROVIDE A STONE ENERGY DISSIPATOR PAD AT THE OUTLET OF THE PUMP DISCHARGE HOSE AND OUTLET OF THE RISER BARREL IN ACCORDANCE WITH ROADWAY STANDARD DRAWING 876.02 FOR OUTLET W/O DITCH.



TYPICAL SECTION VIEW

NOT TO SCALE

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. <i>U-4444B</i>	SHEET NO. <i>EC-3</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SOIL STABILIZATION TIMEFRAMES

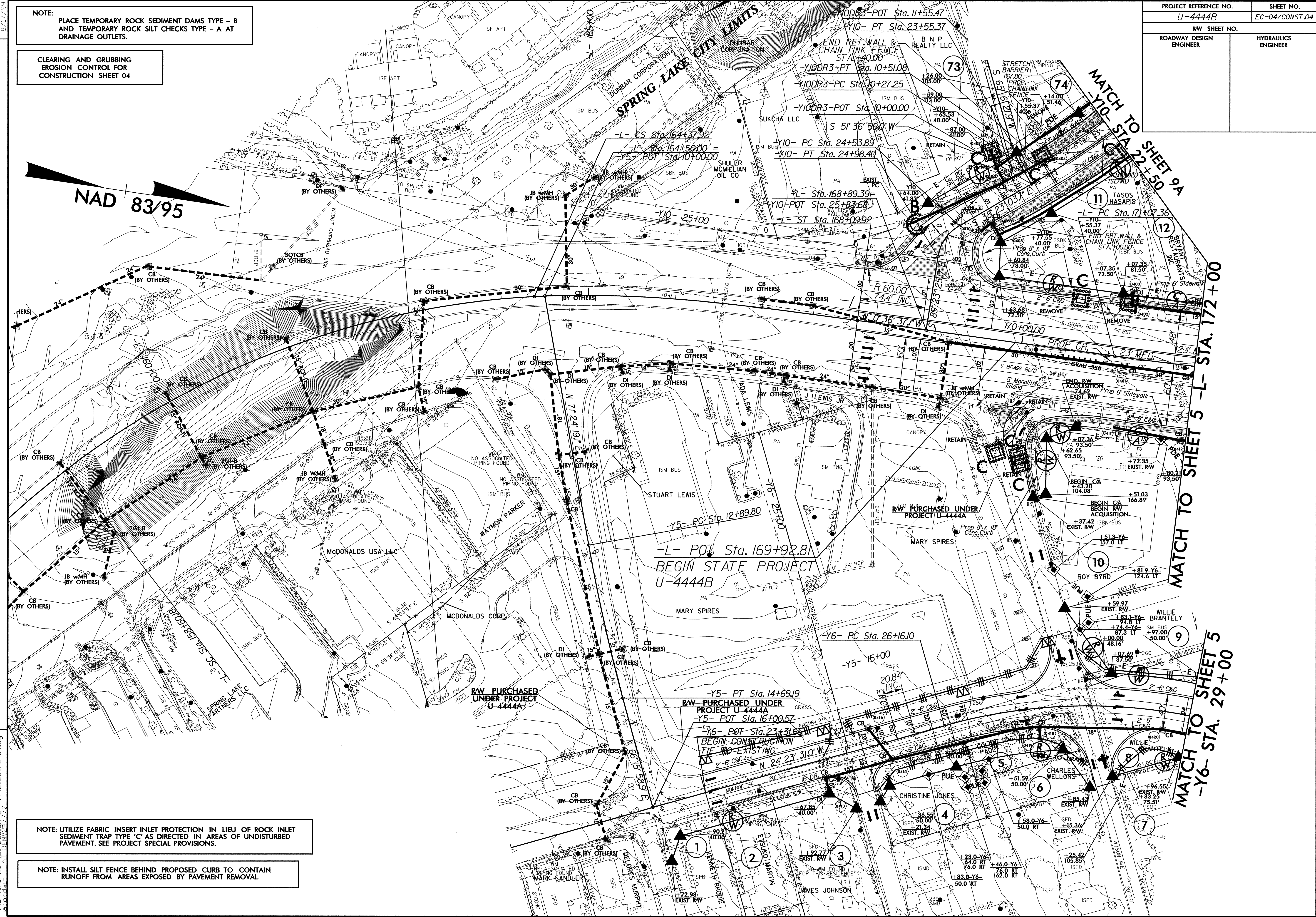
<i>SITE DESCRIPTION</i>	<i>STABILIZATION TIME</i>	<i>TIMEFRAME EXCEPTIONS</i>
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 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.
U-4444B	EC-04/CONST.04
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS 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 04

NAD 83/95



NOTE: UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE 'C' AS DIRECTED IN AREAS OF UNDISTURBED PAVEMENT. SEE PROJECT SPECIAL PROVISIONS.

NOTE: INSTALL SILT FENCE BEHIND PROPOSED CURB TO CONTAIN RUNOFF FROM AREAS EXPOSED BY PAVEMENT REMOVAL.

REVISIONS
 Right-of-way Revision 03-22-11 - Added utility easement on parcel 4, 5, 6, 9, and 10.
 Right-of-way Revision 12-06-11 - Added parcels 73 and 74. Revised right of way and temporary construction easement on parcel 11.

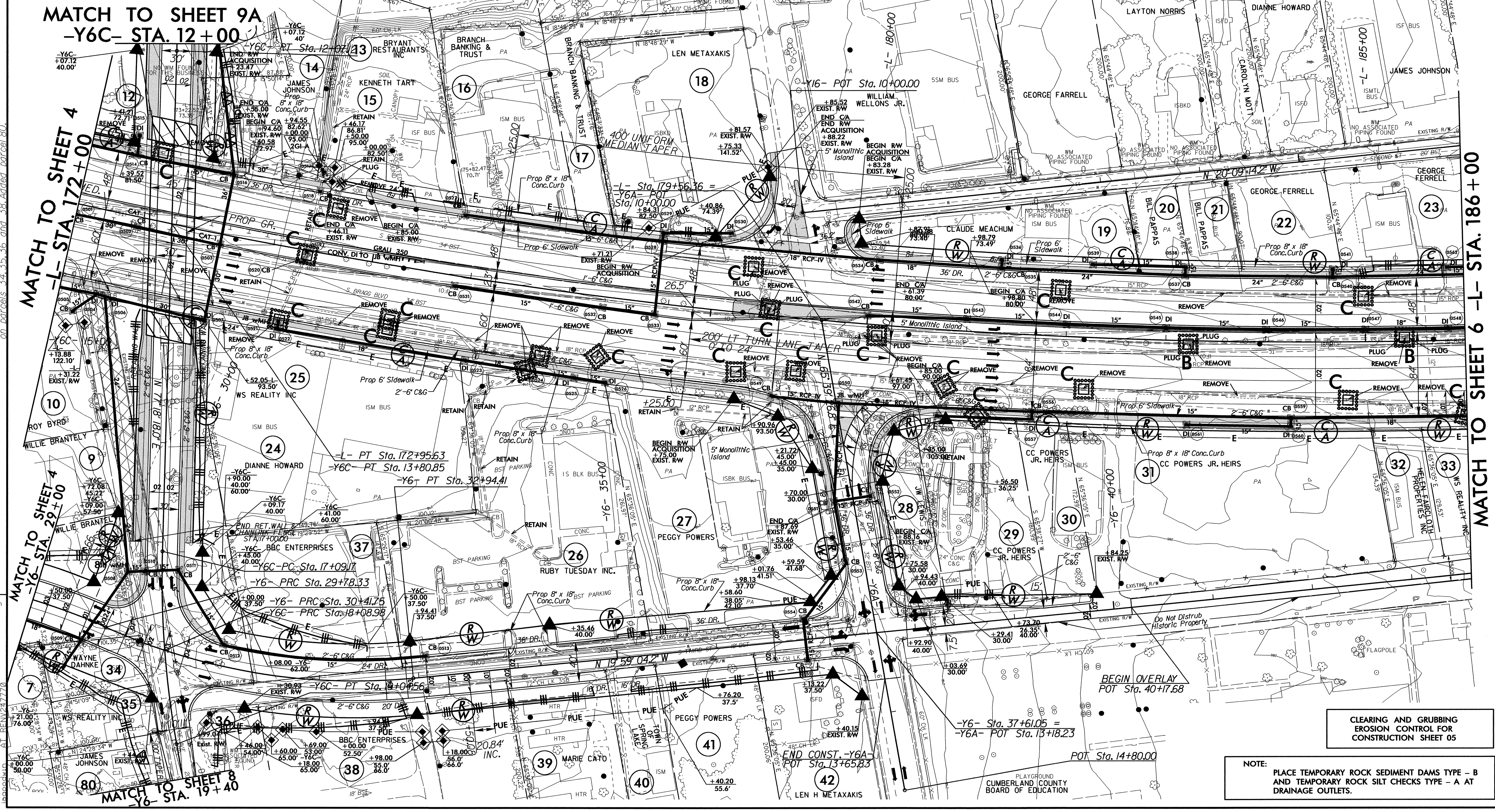
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PROJECT REFERENCE NO.	SHEET NO.
U-4444B	EC-05/CONST.05
RW SHEET NO. U-4444B-5	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE 'C' AS DIRECTED IN AREAS OF UNDISTURBED PAVEMENT. SEE PROJECT SPECIAL PROVISIONS.

NOTE: INSTALL SILT FENCE BEHIND PROPOSED CURB TO CONTAIN RUNOFF FROM AREAS EXPOSED BY PAVEMENT REMOVAL.

NAD 83/95



MATCH TO SHEET 9A
-Y6C- STA. 12+00

MATCH TO SHEET 4
-L- STA. 172+00

MATCH TO SHEET 4
-Y6C- STA. 29+00

MATCH TO SHEET 8
-Y6- STA. 19+40

MATCH TO SHEET 6 -L- STA. 186+00

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 05

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

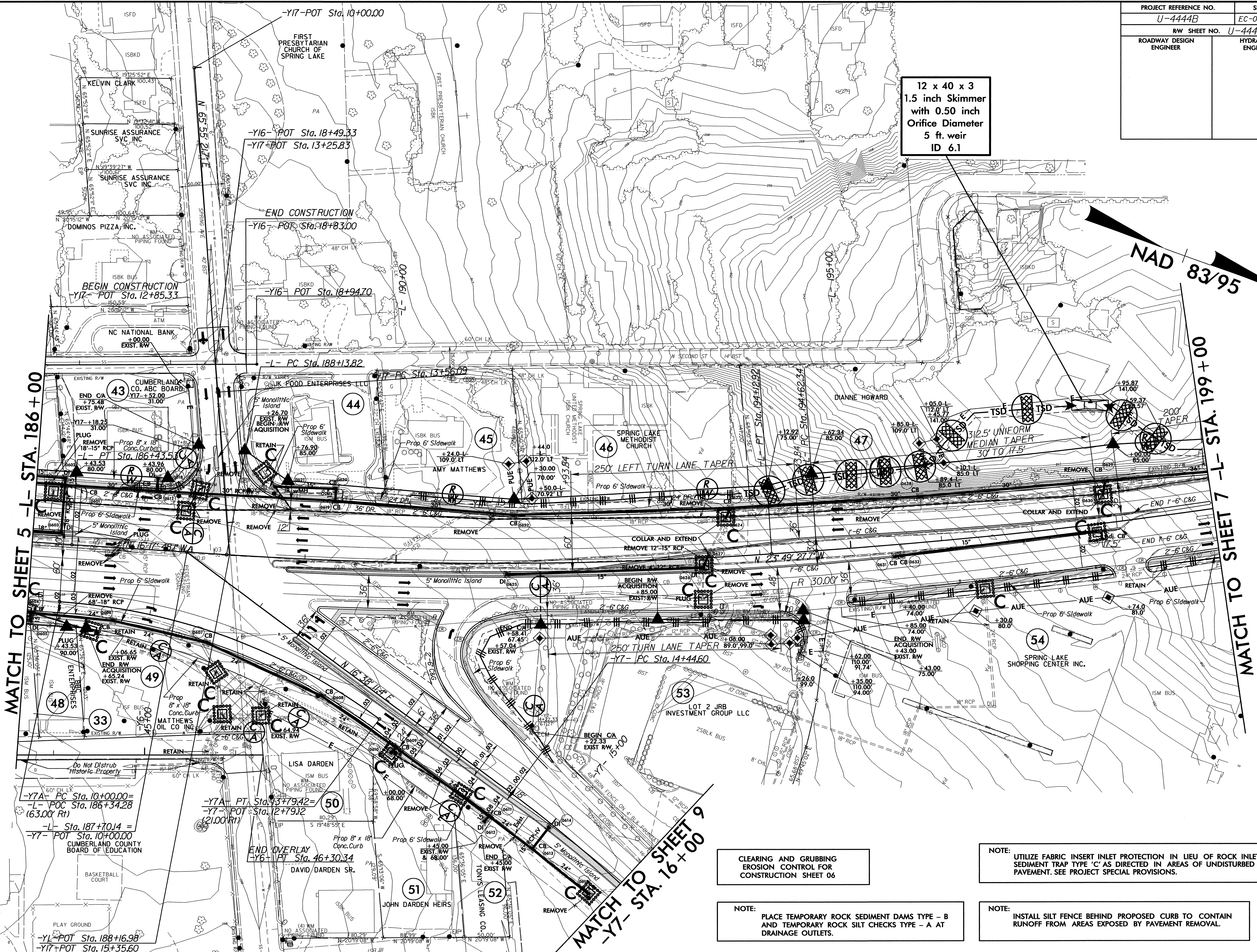
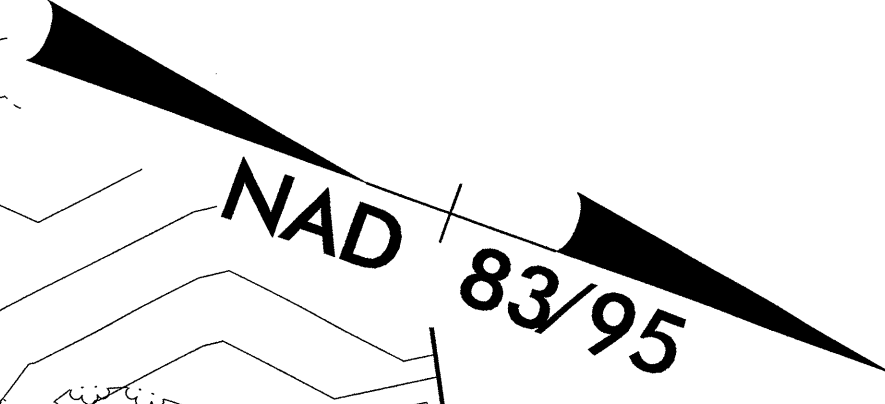
REVISIONS
 Right-of-way Revision 03-22-11 - Revised utility easement on parcel 36, 39, 40, 41, and 42.
 Right-of-way Revision 09-08-11 - Revised utility easement on parcel 27, 29, and 41. Removed utility easement on parcel 42, and Cumberland County Board of Education Parcel.
 Right-of-way Revision 12-06-11 - Revised right of way on parcels 8, 12, 13, 14, 24, 25, 34, 35, 36, and 37. Revised TCE on parcels 12, 14, and 25. Added TCE on parcels 34, 35, 36, and 38. Added parcel 80.

8/17/99

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PROJECT REFERENCE NO.	SHEET NO.
U-4444B	EC-06/CONST.06
RW SHEET NO. U-4444B-6	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

12 x 40 x 3
1.5 inch Skimmer
with 0.50 inch
Orifice Diameter
5 ft. weir
ID 6.1



NOTE: CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 06

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

NOTE: UTILIZE FABRIC INSERT PROTECTION IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE 'C' AS DIRECTED IN AREAS OF UNDISTURBED PAVEMENT. SEE PROJECT SPECIAL PROVISIONS.

NOTE: INSTALL SILT FENCE BEHIND PROPOSED CURB TO CONTAIN RUNOFF FROM AREAS EXPOSED BY PAVEMENT REMOVAL.

REVISIONS
Right-of-way Revision 03-22-11 - Revised utility easement on parcel 53 and 54. Added utility easement on parcels 45, 46, and 47.
Right-of-way Revision 11-01-11 - Added TCE on parcel 45.
Right-of-way Revision 12-06-11 - Revised Right of way and TCE on parcel 53.

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03-MAR-2012 13:47
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PROJECT: U-4444B-EC-PSH06.dgn
REVISED: 12/06/11

MATCH TO SHEET 5 -L- STA. 186+00

MATCH TO SHEET 7 -L- STA. 199+00

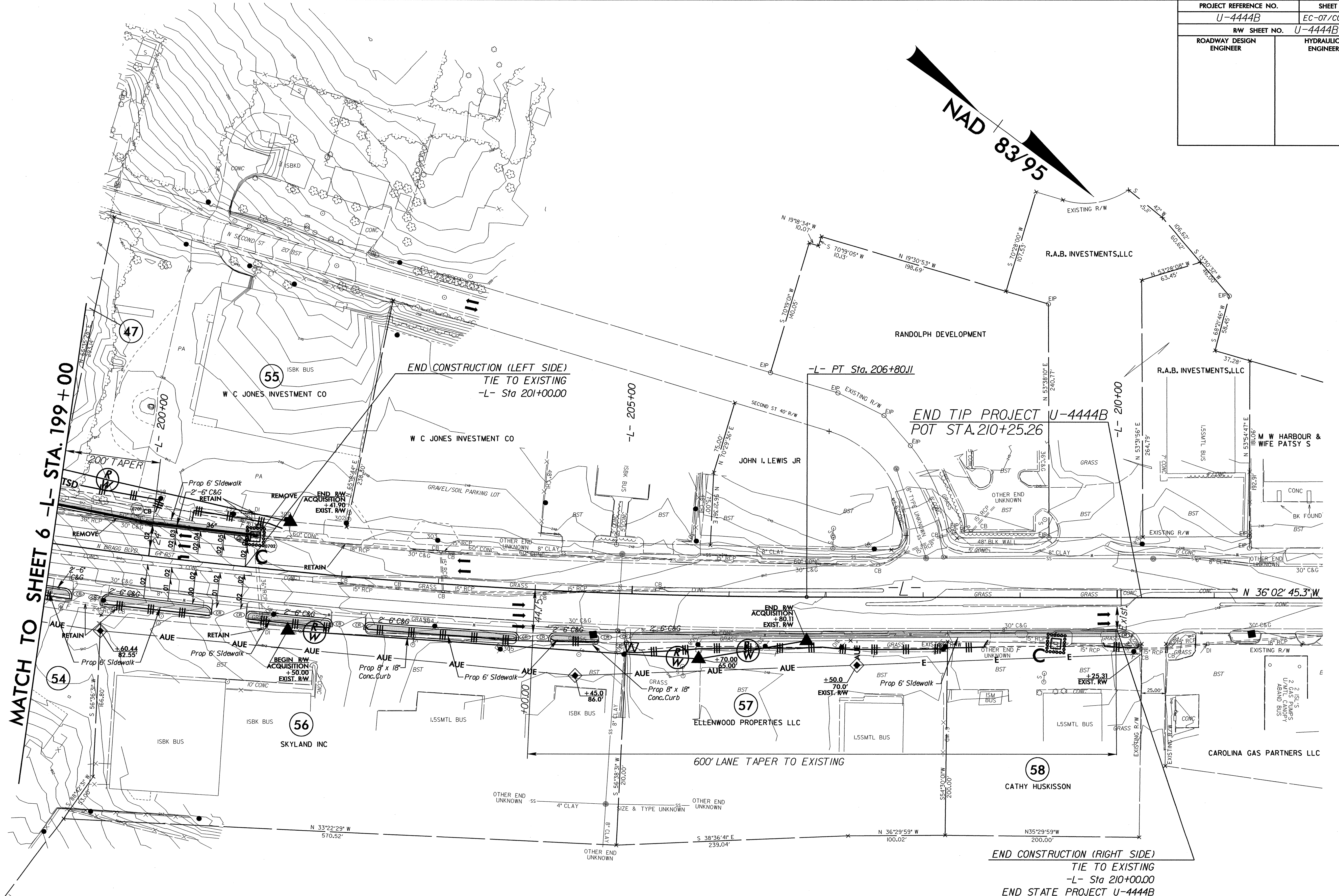
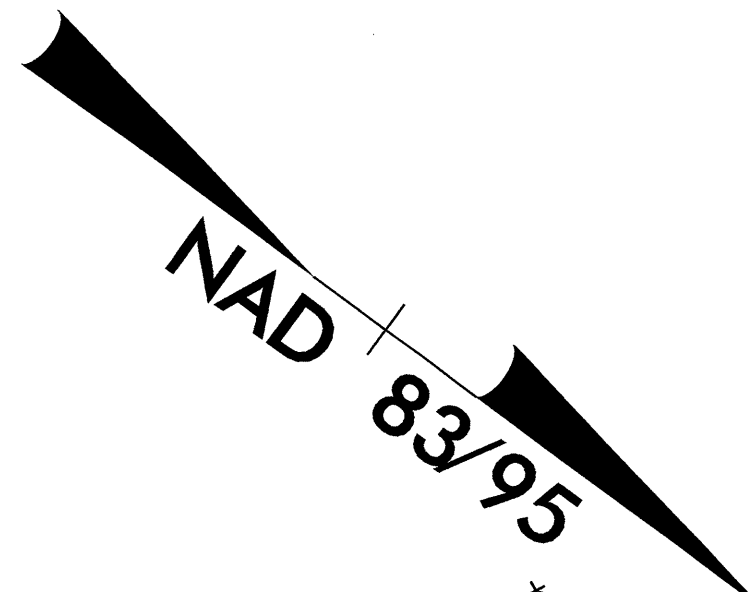
MATCH TO SHEET 9
-Y7-PC Sta. 16+00

-Y7A-PC Sta. 10+00.00=
-L-POC Sta. 186+34.28
(63.00' Rt)
-L- Sta. 187+70.14 =
-Y7-POT Sta. 10+00.00
CUMBERLAND COUNTY
BOARD OF EDUCATION

-Y7A-PT Sta. 13+79.42=
-Y7-POT Sta. 12+79.12
(21.00' Rt)
END OVERLAY
-Y6-PT Sta. 46+30.34
DAVID DARDEN SR.

-YL-POT Sta. 188+16.98
-Y17-POT Sta. 15+35.60

PROJECT REFERENCE NO.	SHEET NO.
U-4444B	EC-07/CONST.07
R/W SHEET NO.	U-4444B-7
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



REVISIONS

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 07

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

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF ROCK INLET
SEDIMENT TRAP TYPE 'C' AS DIRECTED IN AREAS OF UNDISTURBED
PAVEMENT. SEE PROJECT SPECIAL PROVISIONS.

NOTE: INSTALL SILT FENCE BEHIND PROPOSED CURB TO CONTAIN
RUNOFF FROM AREAS EXPOSED BY PAVEMENT REMOVAL.

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PROJECT REFERENCE NO.	SHEET NO.
U-4444B	EC-08/CONST.08
RW SHEET NO. U-4444B-5A	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/99

MATCH TO SHEET 5
-Y6C- STA. 19+40

NAD 83/95



REVISIONS

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 08

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

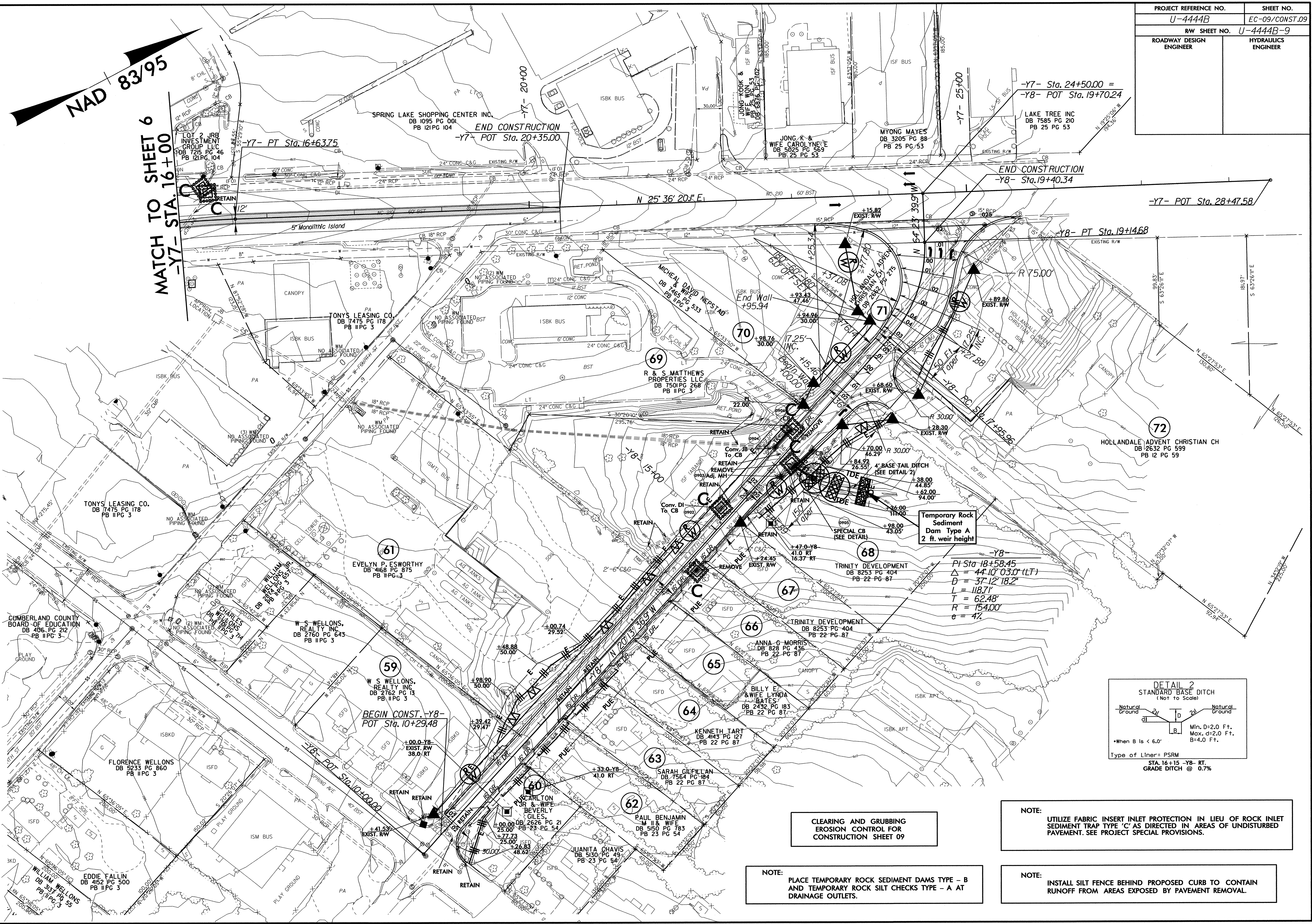
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PAVEMENT. SEE PROJECT SPECIAL PROVISIONS.

NOTE: INSTALL SILT FENCE BEHIND PROPOSED CURB TO CONTAIN
RUNOFF FROM AREAS EXPOSED BY PAVEMENT REMOVAL.

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8/17/99

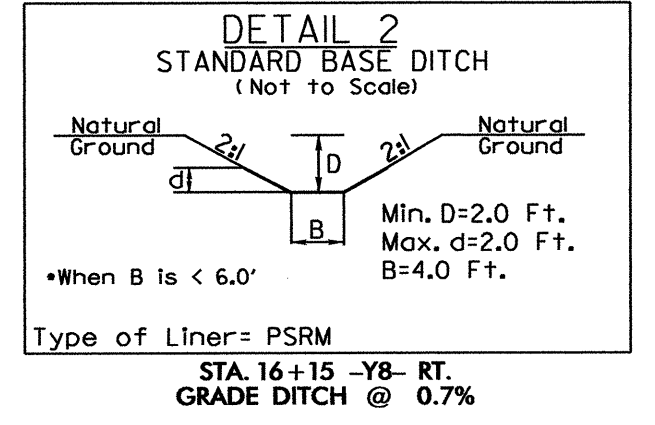
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U-4444B	EC-09/CONST.09
RW SHEET NO. U-4444B-9	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



MATCH TO SHEET 6
-Y7- STA. 16+00

NAD 83/95

Temporary Rock Sediment Dam Type A
 2 ft. weir height



NOTE:
 CLEARING AND GRUBBING
 EROSION CONTROL FOR
 CONSTRUCTION SHEET 09

NOTE:
 UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF ROCK INLET
 SEDIMENT TRAP TYPE 'C' AS DIRECTED IN AREAS OF UNDISTURBED
 PAVEMENT. SEE PROJECT SPECIAL PROVISIONS.

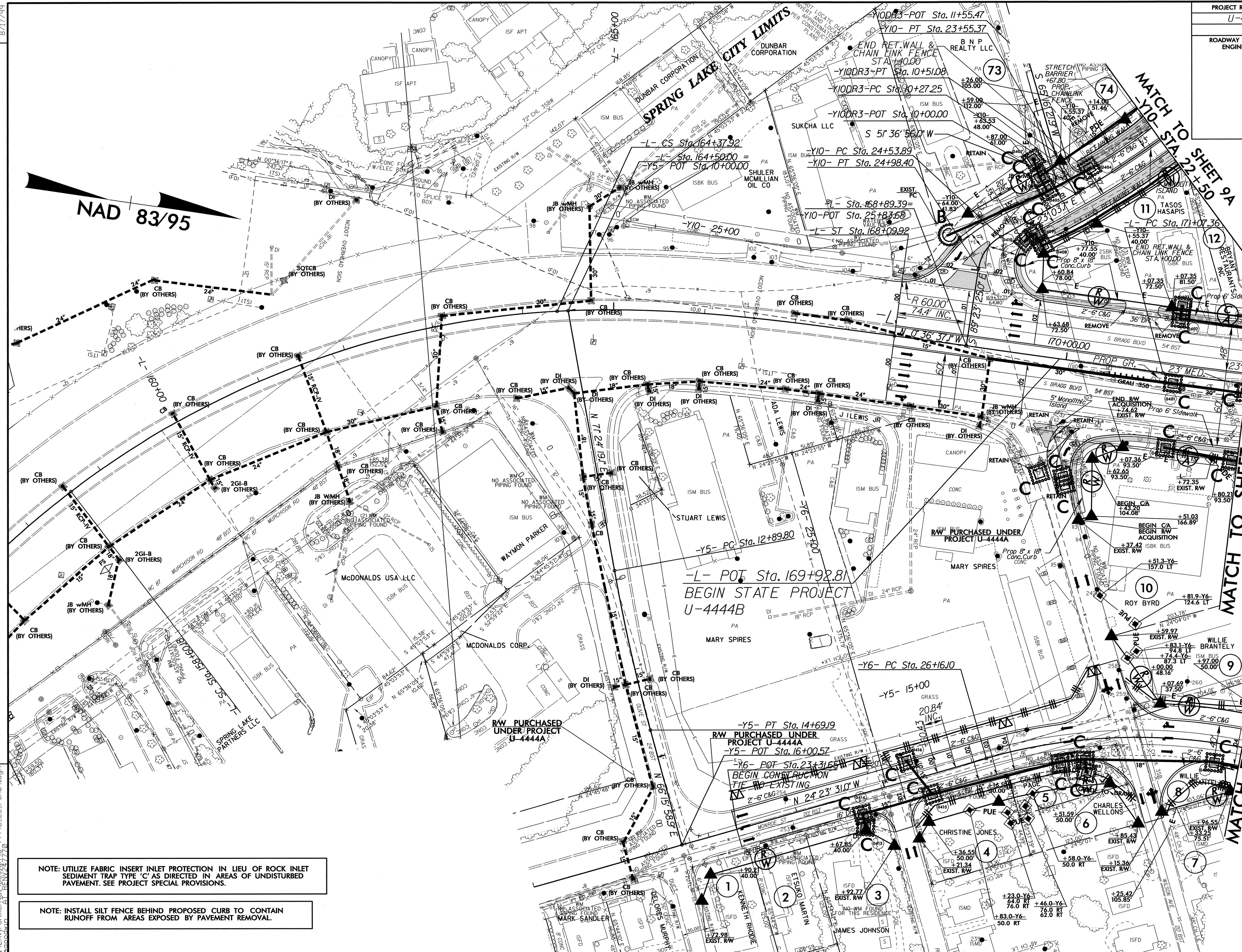
NOTE:
 PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
 AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
 DRAINAGE OUTLETS.

NOTE:
 INSTALL SILT FENCE BEHIND PROPOSED CURB TO CONTAIN
 RUNOFF FROM AREAS EXPOSED BY PAVEMENT REMOVAL.

REVISIONS

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PROJECT REFERENCE NO. U-4444B	SHEET NO. EC-II/CONST.04
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



REVISIONS
 Right-of-way Revision 03-22-11 - Added utility easement on parcel 4, 5, 6, 9, and 10.
 Right-of-way Revision 12-06-11 - Added parcels 73 and 74. Revised right of way and temporary construction easement on parcel 11.

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE 'C' AS DIRECTED IN AREAS OF UNDISTURBED PAVEMENT. SEE PROJECT SPECIAL PROVISIONS.

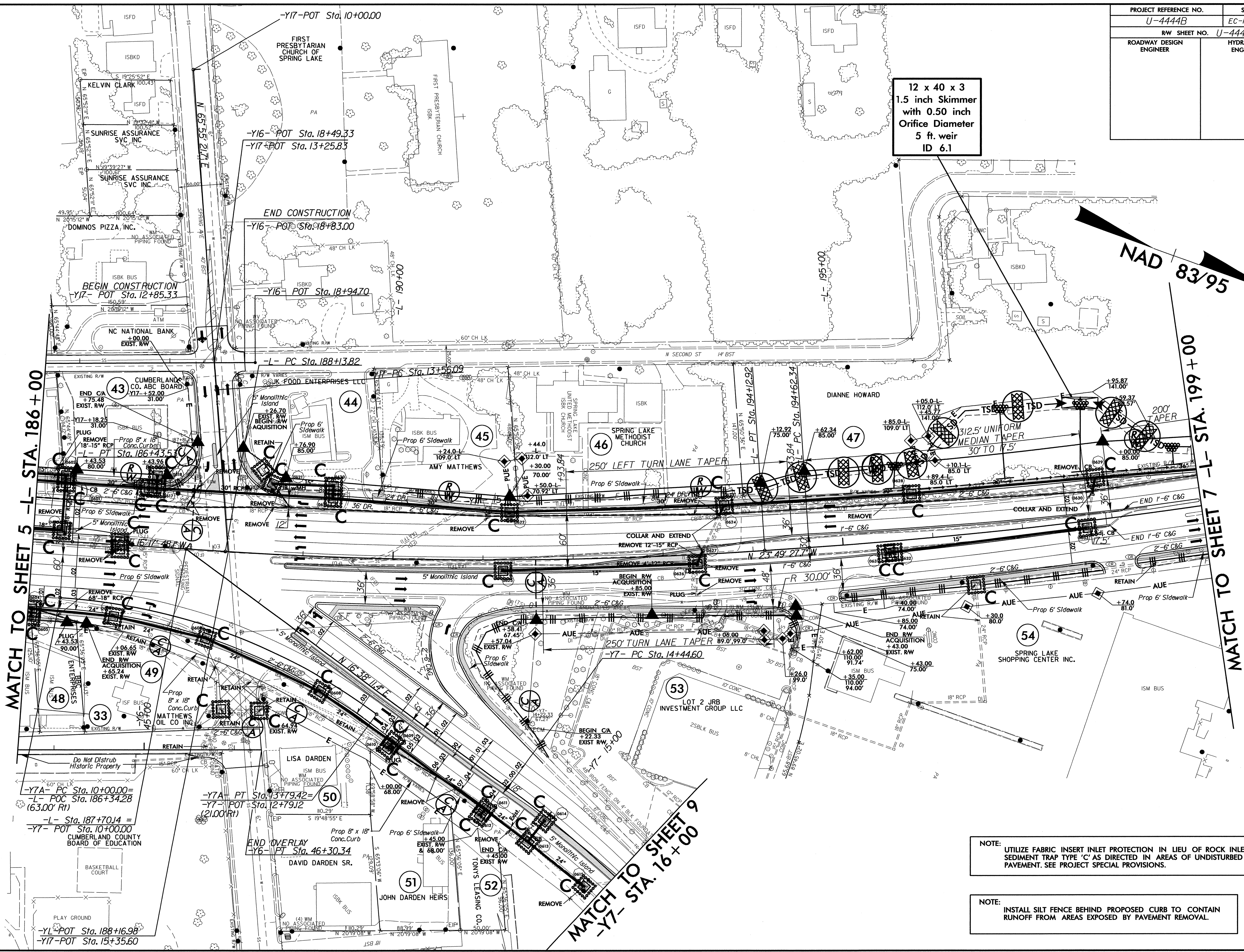
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PROJECT REFERENCE NO.	SHEET NO.
U-4444B	EC-13/CONST.06
R/W SHEET NO.	U-4444B-6
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

12 x 40 x 3
1.5 inch Skimmer
with 0.50 inch
Orifice Diameter
5 ft. weir
ID 6.1

NAD 83/95



REVISIONS
 Right-of-way Revision 03-22-11 - Revised utility easement on parcel 53 and 54. Added utility easement on parcels 45, 46, and 47.
 Right-of-way Revision 11-01-11 - Added TCE on parcel 43.
 Right-of-way Revision 12-06-11 - Revised Right of way and TCE on parcel 53.

MATCH TO SHEET 5 - L- STA. 186+00

MATCH TO SHEET 7 - L- STA. 199+00

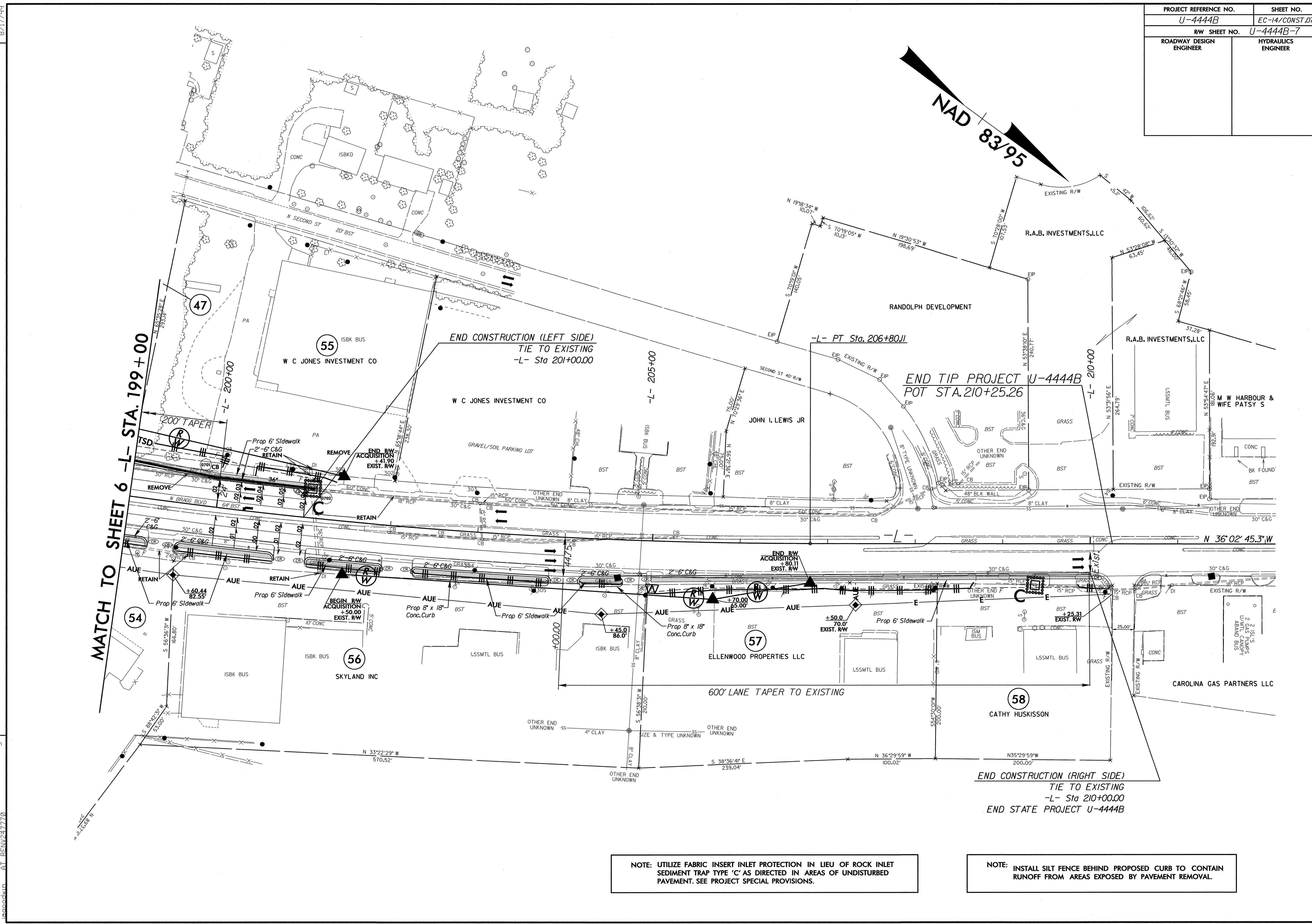
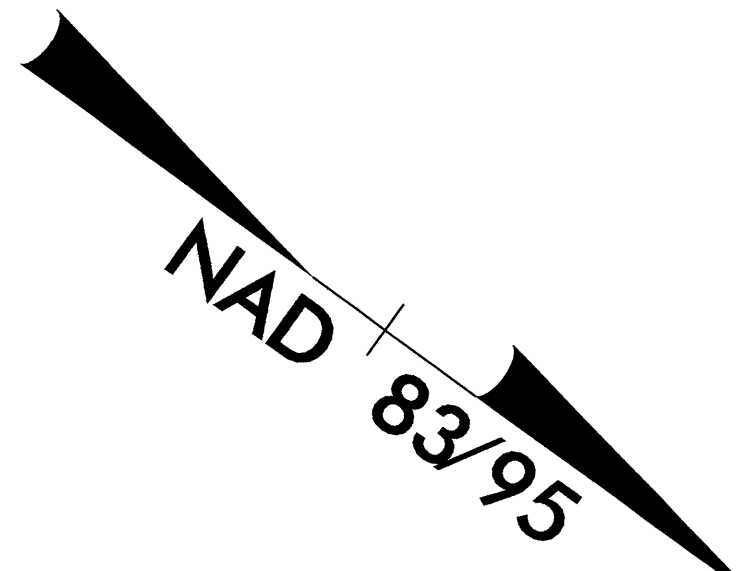
MATCH TO SHEET 9
-Y7- STA. 16+00

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE 'C' AS DIRECTED IN AREAS OF UNDISTURBED PAVEMENT. SEE PROJECT SPECIAL PROVISIONS.

NOTE:
INSTALL SILT FENCE BEHIND PROPOSED CURB TO CONTAIN RUNOFF FROM AREAS EXPOSED BY PAVEMENT REMOVAL.

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PROJECT REFERENCE NO.	SHEET NO.
U-4444B	EC-14/CONST.07
R/W SHEET NO.	U-4444B-7
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



MATCH TO SHEET 6 -L- STA. 199+00

END TIP PROJECT U-4444B
POT STA. 210+25.26

END CONSTRUCTION (LEFT SIDE)
TIE TO EXISTING
-L- Sta 201+00.00

END CONSTRUCTION (RIGHT SIDE)
TIE TO EXISTING
-L- Sta 210+00.00
END STATE PROJECT U-4444B

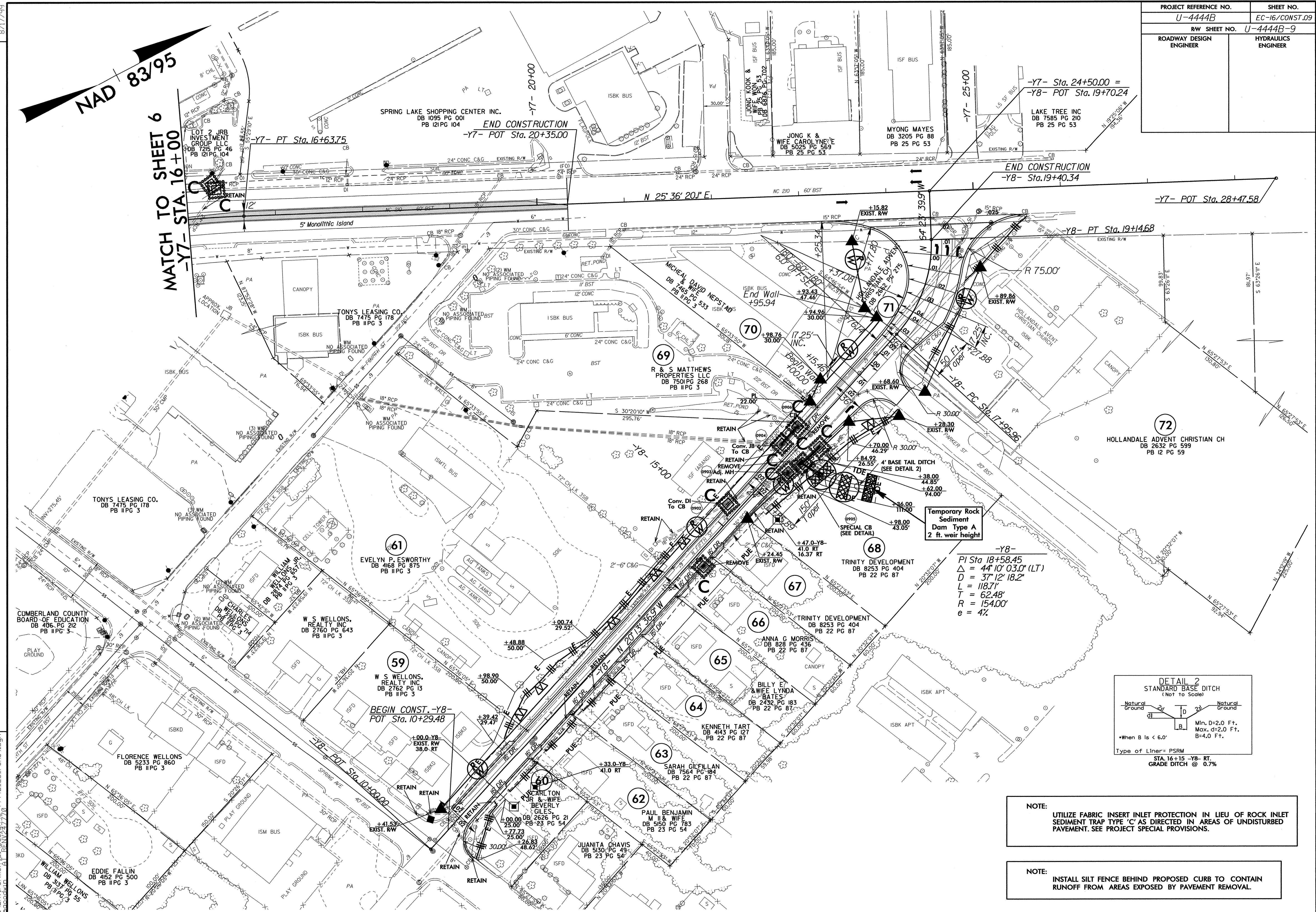
NOTE: UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE 'C' AS DIRECTED IN AREAS OF UNDISTURBED PAVEMENT. SEE PROJECT SPECIAL PROVISIONS.

NOTE: INSTALL SILT FENCE BEHIND PROPOSED CURB TO CONTAIN RUNOFF FROM AREAS EXPOSED BY PAVEMENT REMOVAL.

REVISIONS

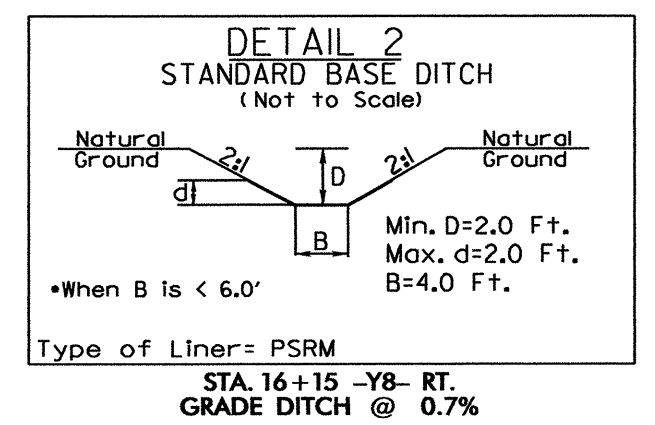
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PROJECT REFERENCE NO.	SHEET NO.
U-4444B	EC-16/CONST.09
R/W SHEET NO.	U-4444B-9
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



8/17/09
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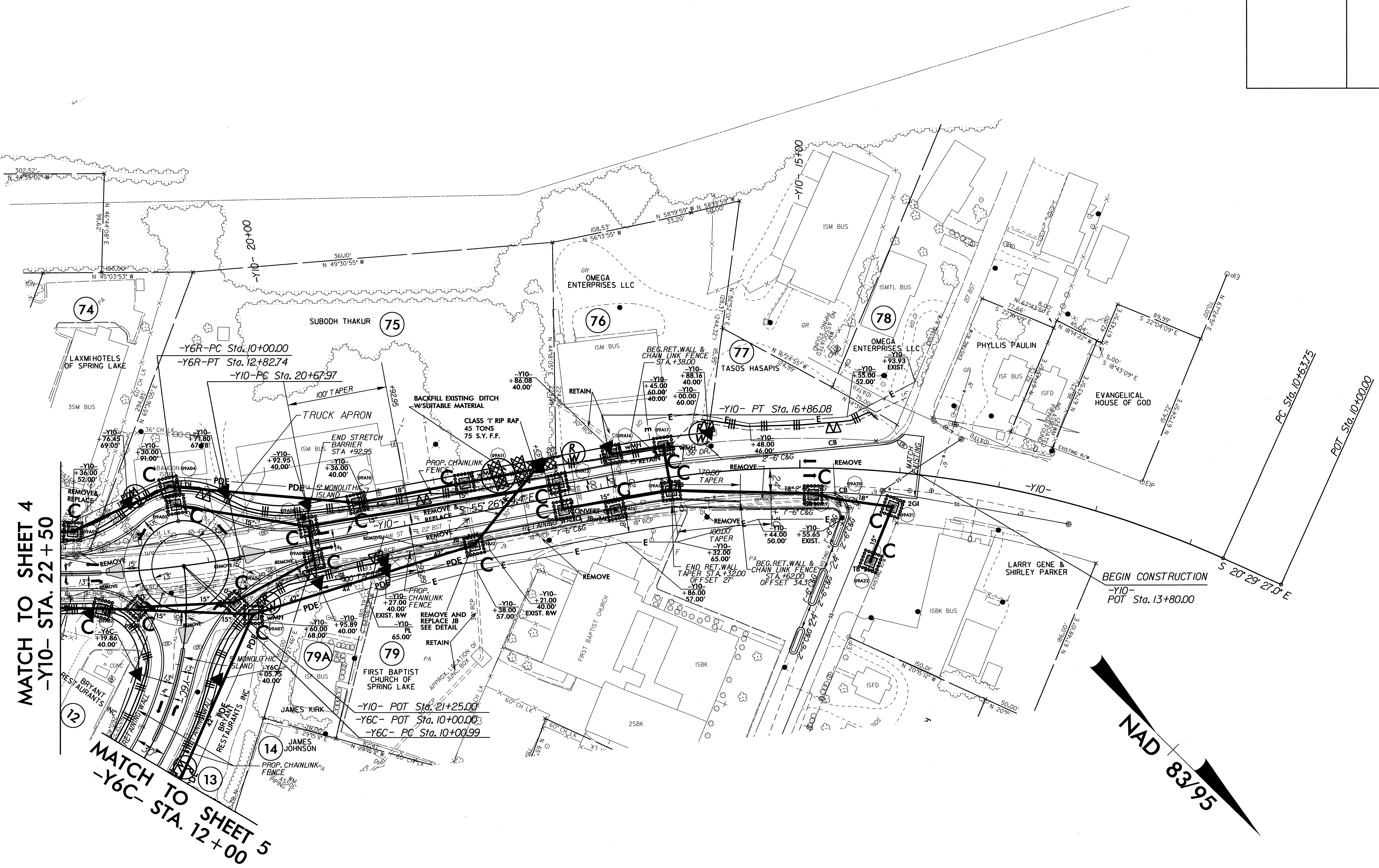
- NOTE:** UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE 'C' AS DIRECTED IN AREAS OF UNDISTURBED PAVEMENT. SEE PROJECT SPECIAL PROVISIONS.
- NOTE:** INSTALL SILT FENCE BEHIND PROPOSED CURB TO CONTAIN RUNOFF FROM AREAS EXPOSED BY PAVEMENT REMOVAL.



PROJECT REFERENCE NO.	SHEET NO.
U-4444B	EC-17/CONST.9A
RW SHEET NO.	U-4444B-9A
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

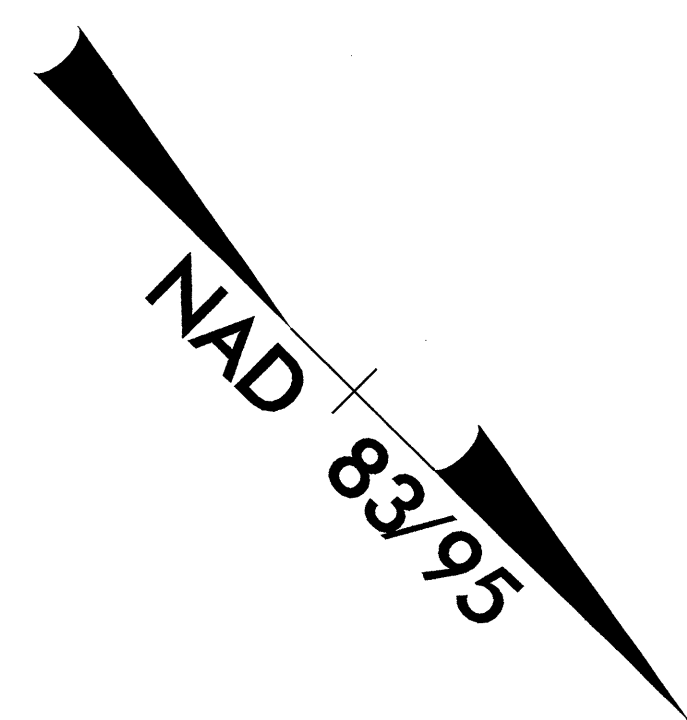
8/17/99

REVISIONS
 Right-of-way Revision 12- -11 - Added parcels 74,75,76,77,78,79 and 79A. Added right of way to parcels 12 and 13 and permanent drainage easement to parcel 13.



MATCH TO SHEET 4
 -Y10- STA. 22+50

MATCH TO SHEET 5
 -Y6C- STA. 12+00



NOTE:
 UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE 'C' AS DIRECTED IN AREAS OF UNDISTURBED PAVEMENT. SEE PROJECT SPECIAL PROVISIONS.

NOTE:
 INSTALL SILT FENCE BEHIND PROPOSED CURB TO CONTAIN RUNOFF FROM AREAS EXPOSED BY PAVEMENT REMOVAL.

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