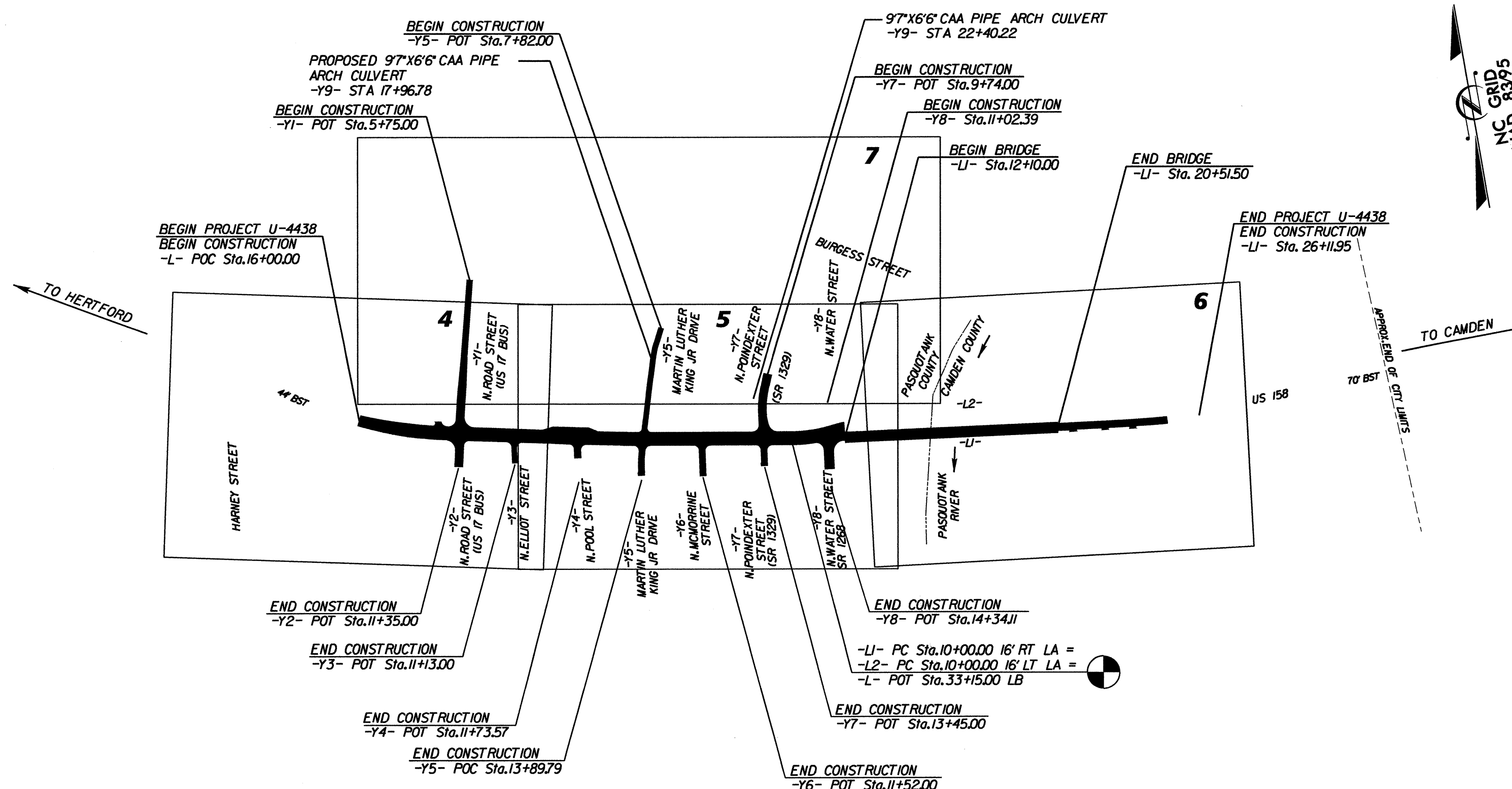


TIP PROJECT: U-4438

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL
PASQUOTANK & CAMDEN COUNTIES

LOCATION: US 158 (EAST ELIZABETH STREET) FROM US 17 BUSINESS (NORTH ROAD STREET) TO EAST OF PASQUOTANK RIVER

TYPE OF WORK: GRADING, DRAINAGE, PAVING, SIGNALS, CULVERTS, AND STRUCTURES

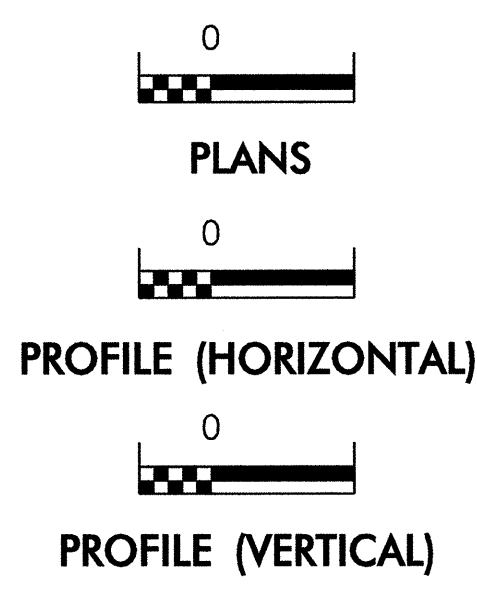


EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	TD
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	III III III
1606.01	Special Sediment Control Fence	▲▲▲▲▲
1622.01	Temporary Berms and Slope Drains	▲▲▲▲▲
	Silt Basin Type B	▨
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/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	A
1632.02	Type B	B
1632.03	Type C	C
	Skimmer Basin	▨
	Tiered Skimmer Basin	▨
	Infiltration Basin	▨

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

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

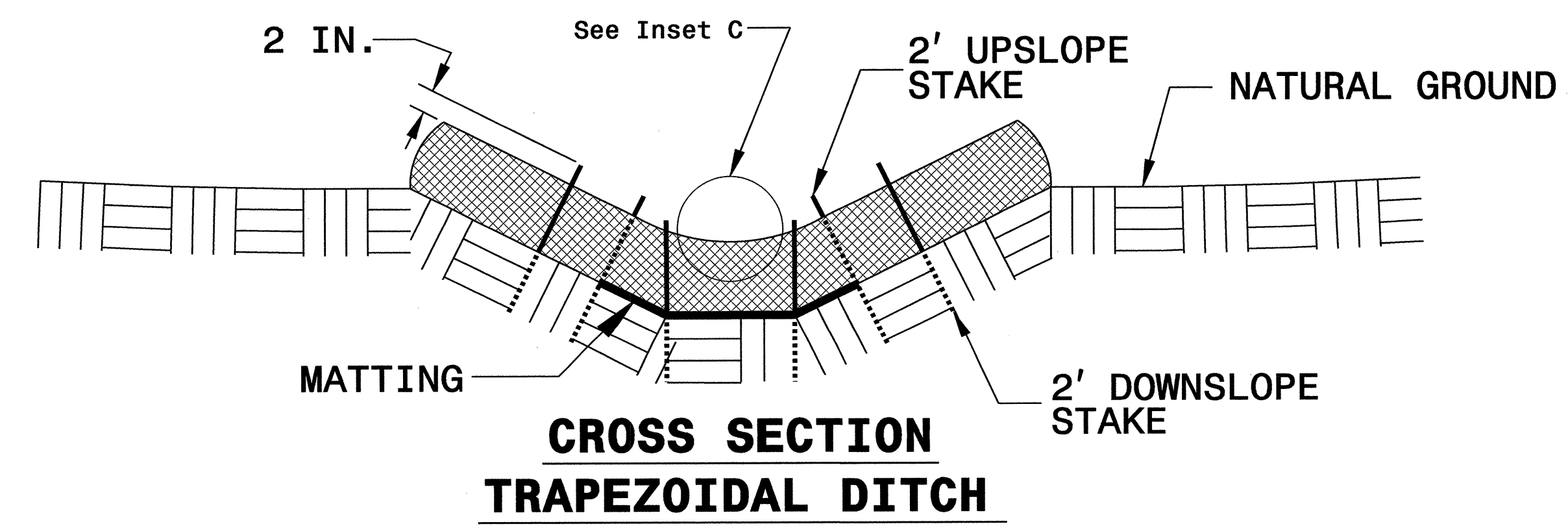
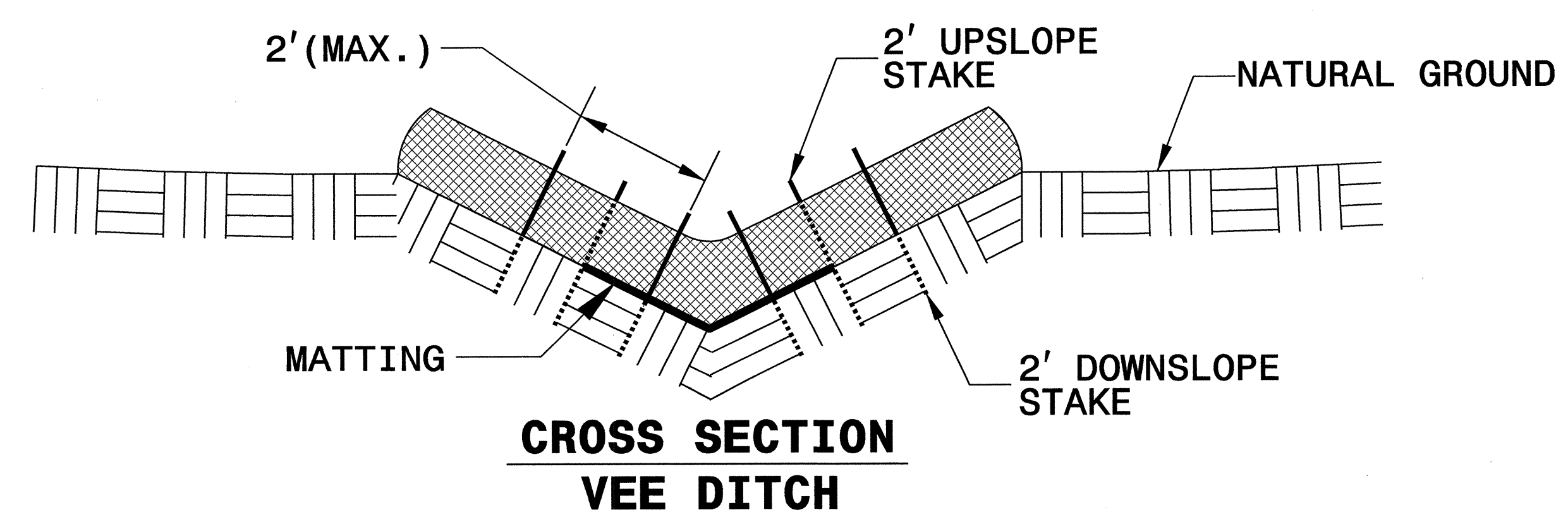
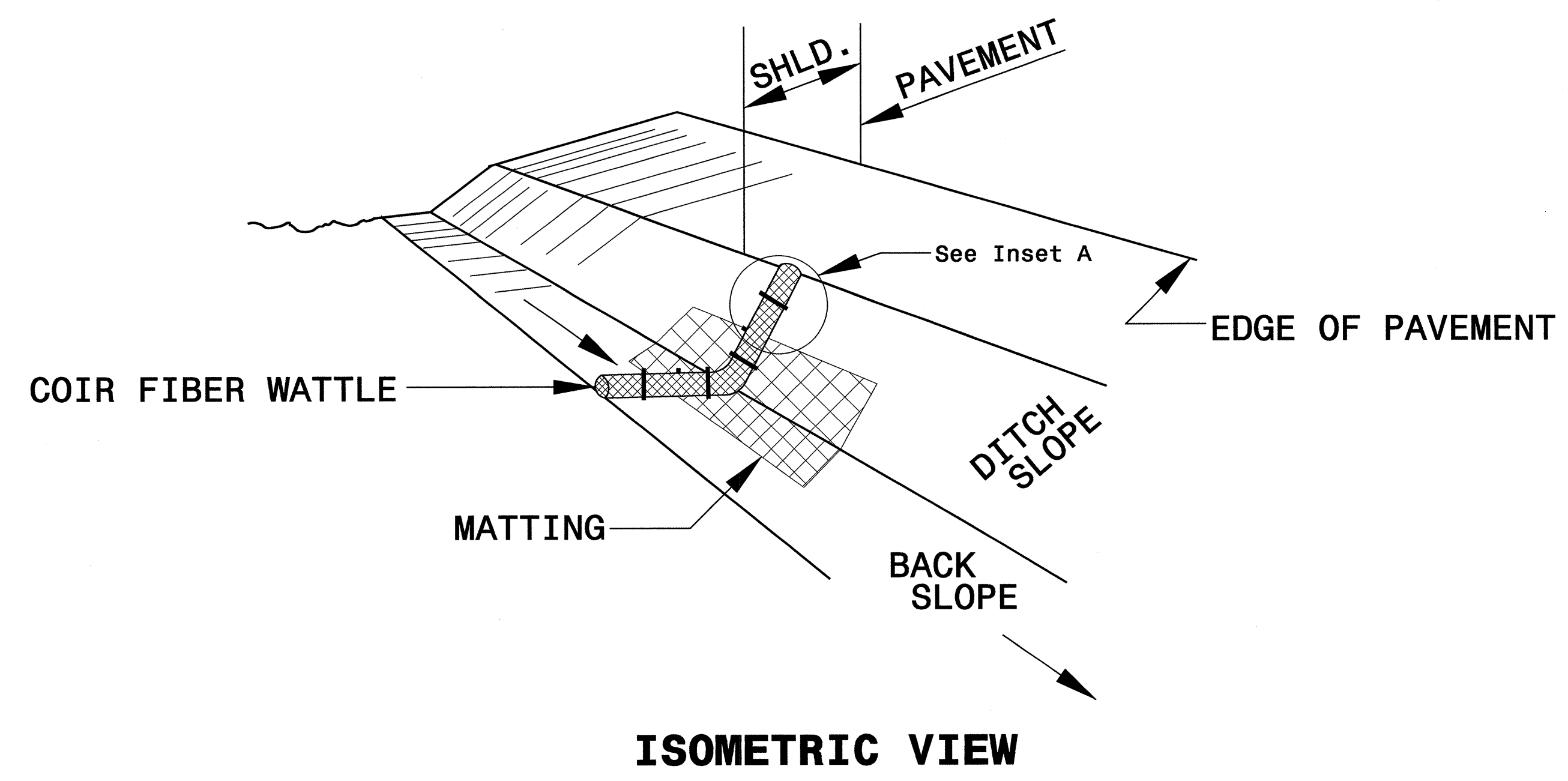
The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated July 18, 2006 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1605.01 Temporary Silt Fence	1622.01 Temporary Berms and Slope Drains
1606.01 Special Sediment Control Fence	1630.06 Special Stilling Basin
1607.01 Gravel Construction Entrance	1632.03 Rock Inlet Sediment Trap Type C

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R:\EN\CONTRACTS\4438\U4438_EC.tsh.dgn
mlaughlin - AT REN247798

PROJECT REFERENCE NO. U-4438	SHEET NO. EC-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

COIR FIBER WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL



NOTES:

USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) WATTLE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

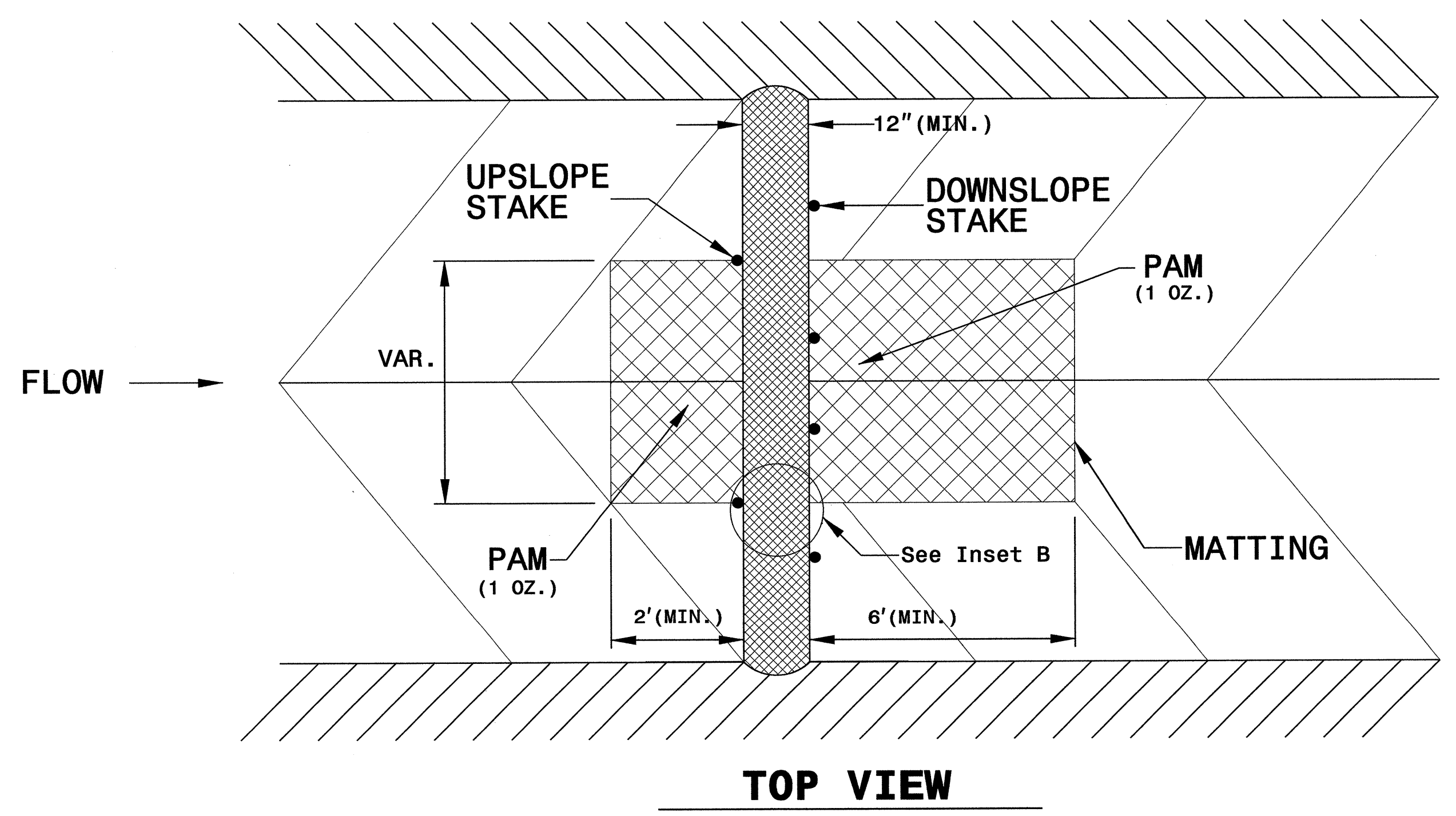
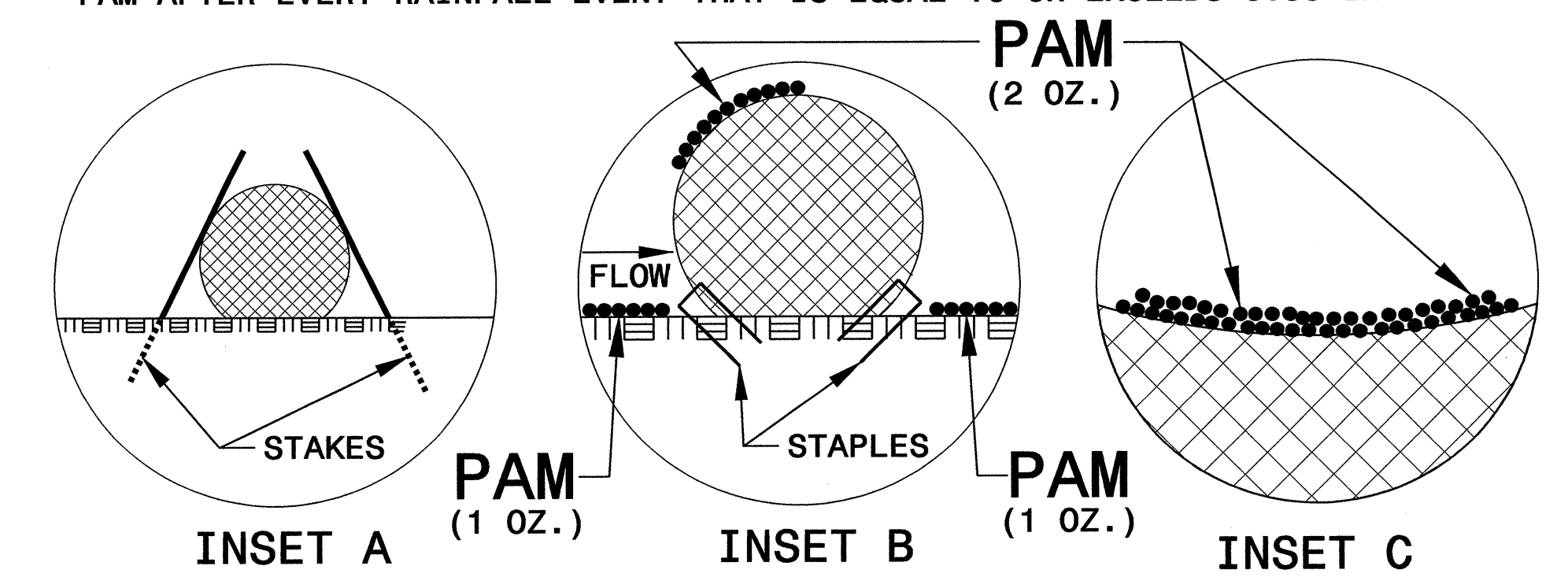
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.

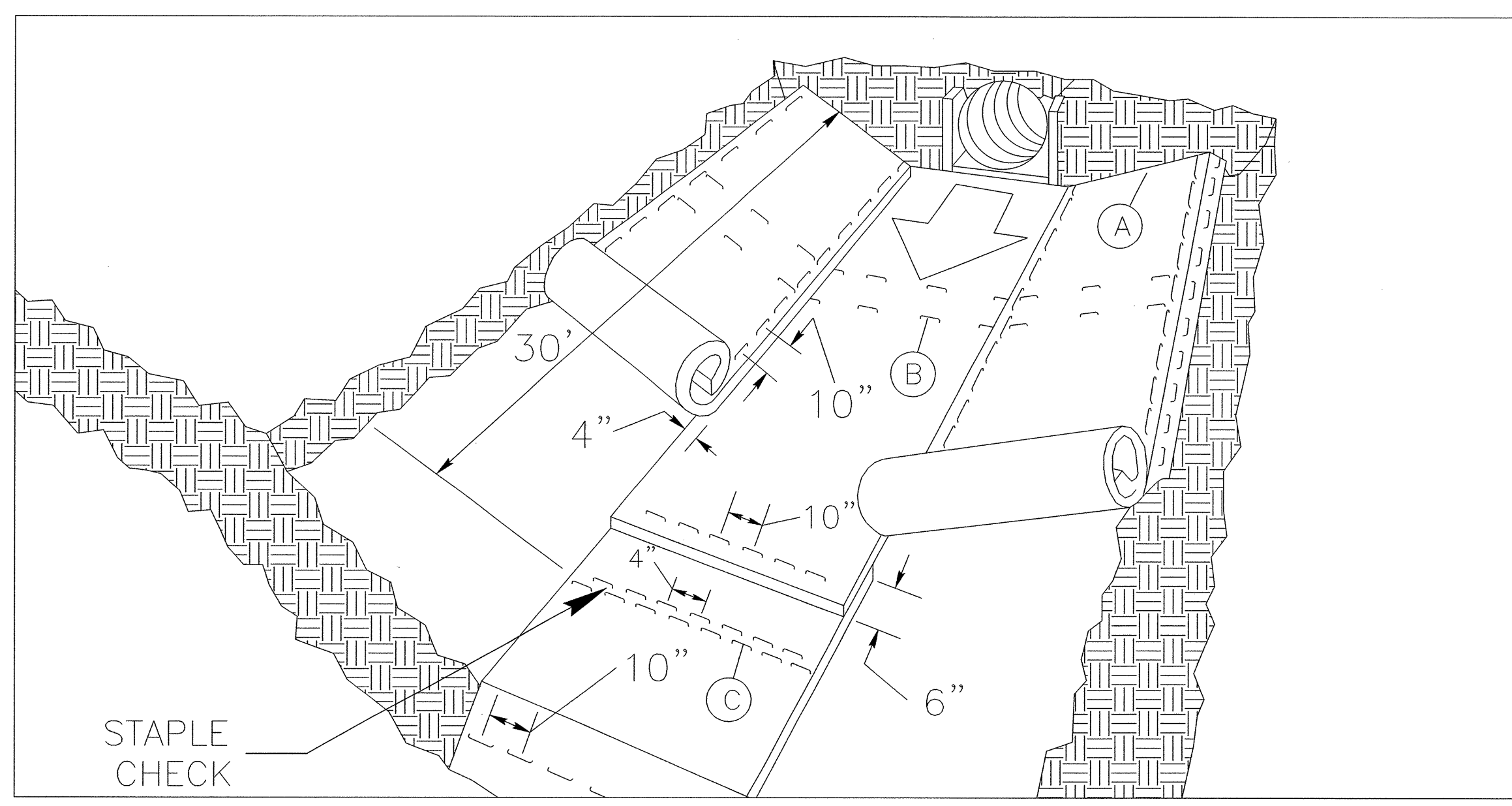
PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.

INITIALLY APPLY 2 OUNCES OF ANIONIC OR NEUTRALLY CHARGED PAM OVER WATTLE WHERE WATER WILL FLOW AND 1 OUNCE OF PAM ON MATTING ON EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.



PROJECT REFERENCE NO. U-4438	SHEET NO. EC-3
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

MATTING INSTALLATION DETAIL



MATTING IN DITCHES

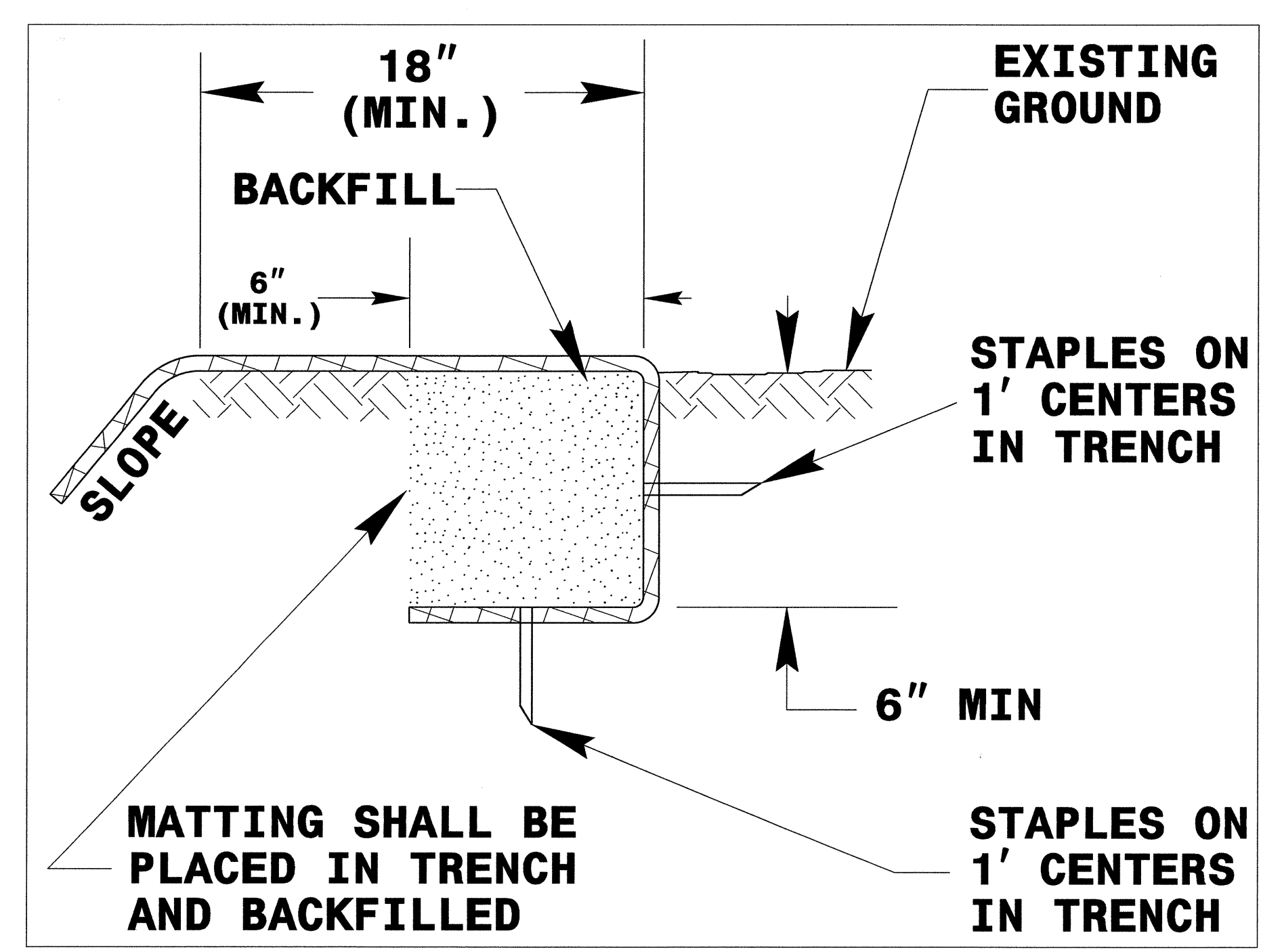
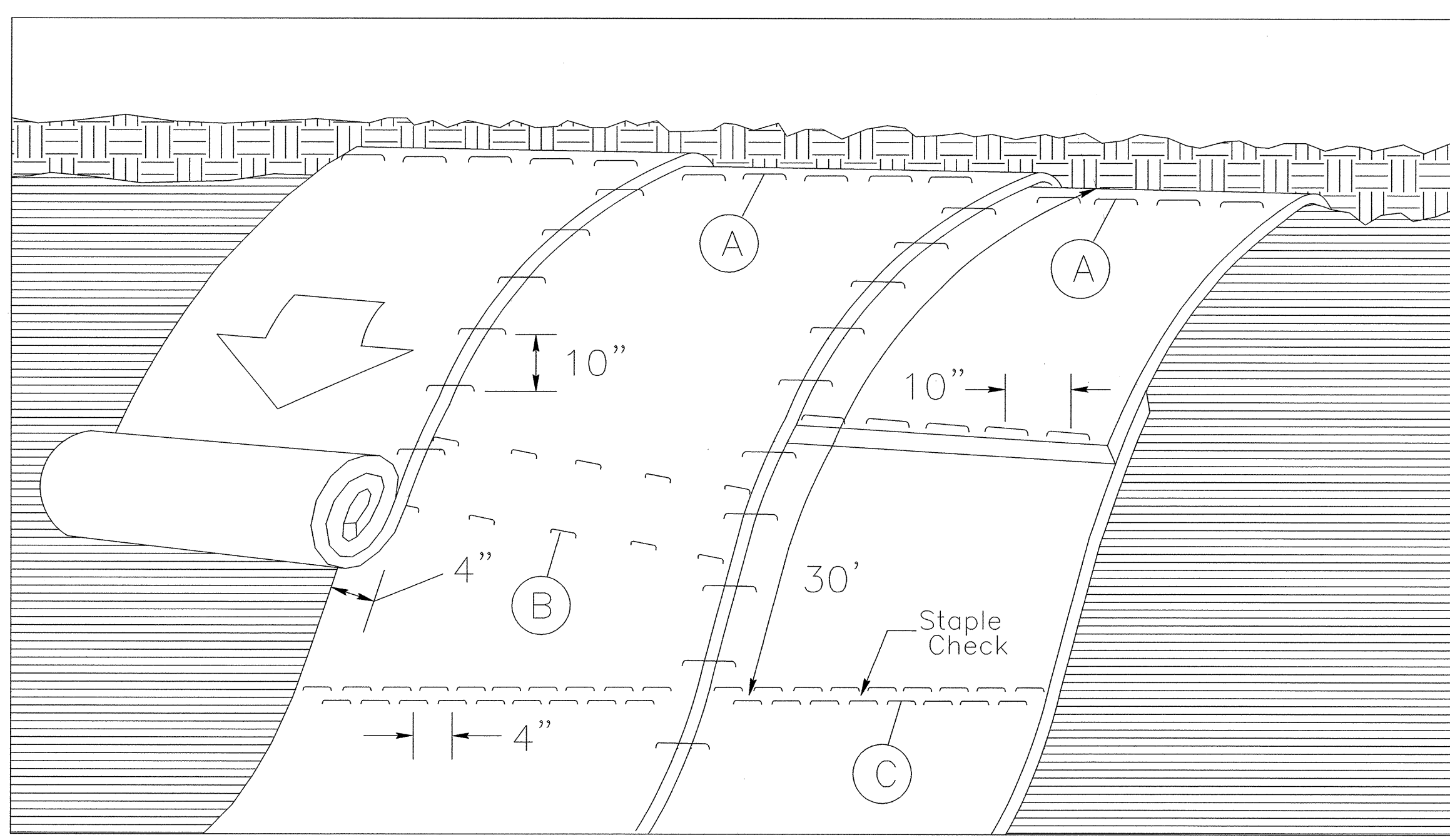


DIAGRAM (A)



MATTING ON SLOPES

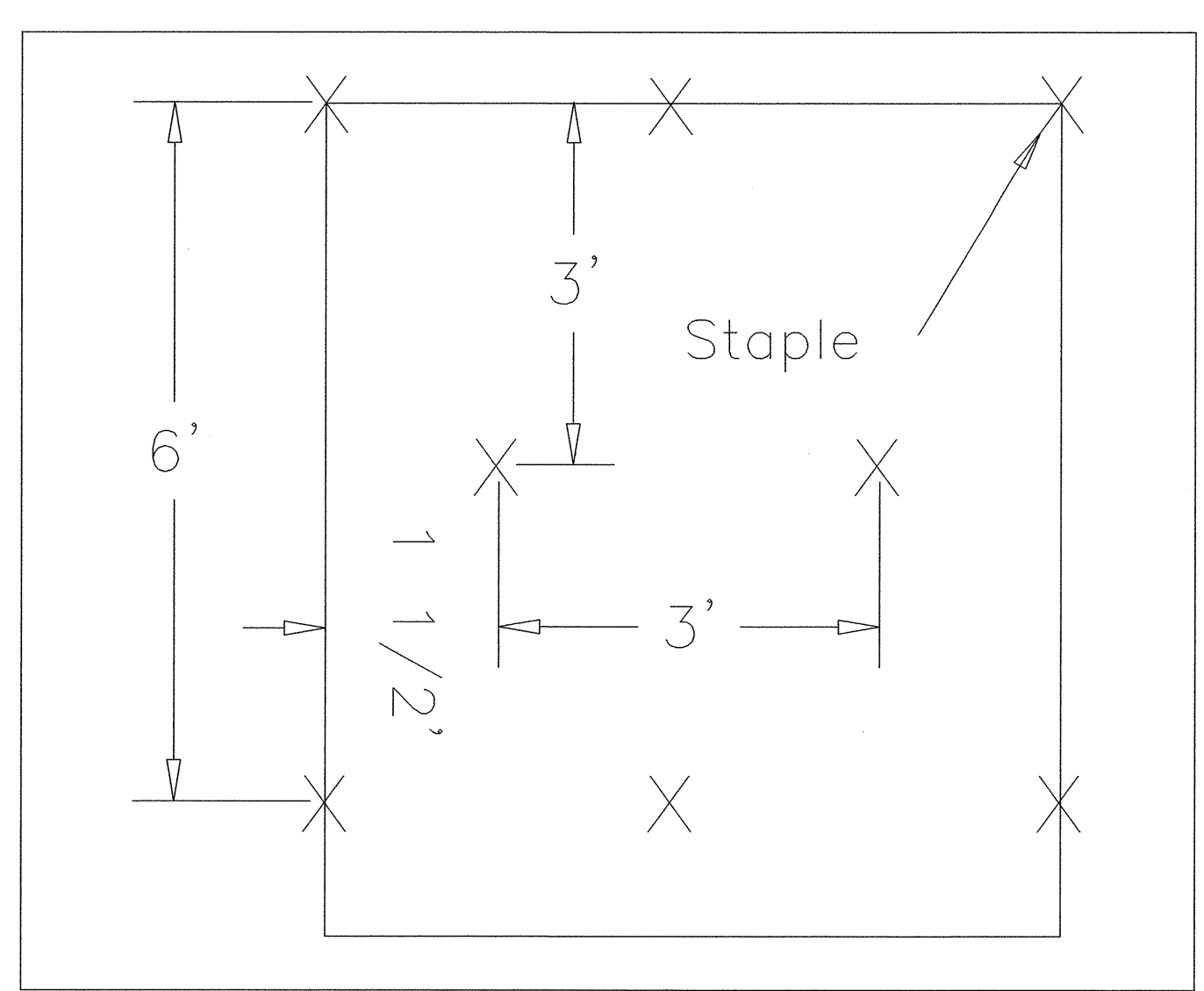


DIAGRAM (B)

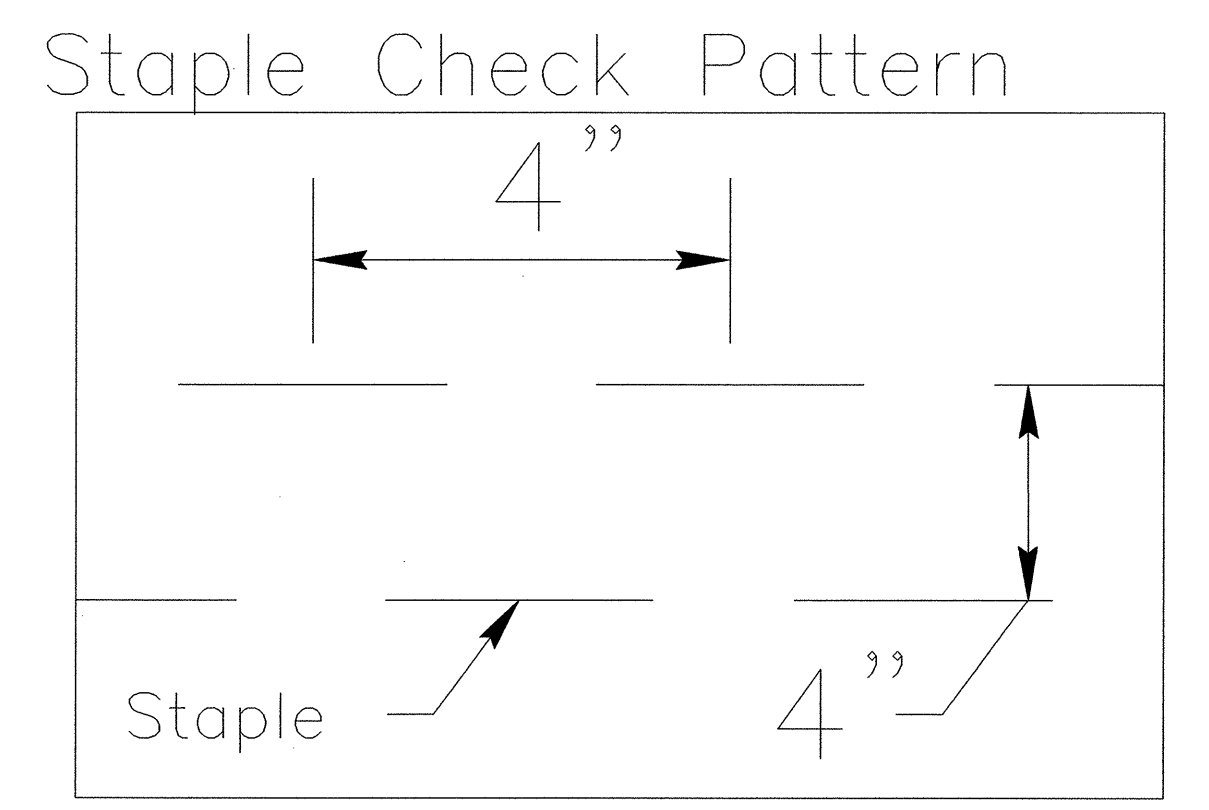


DIAGRAM (C)

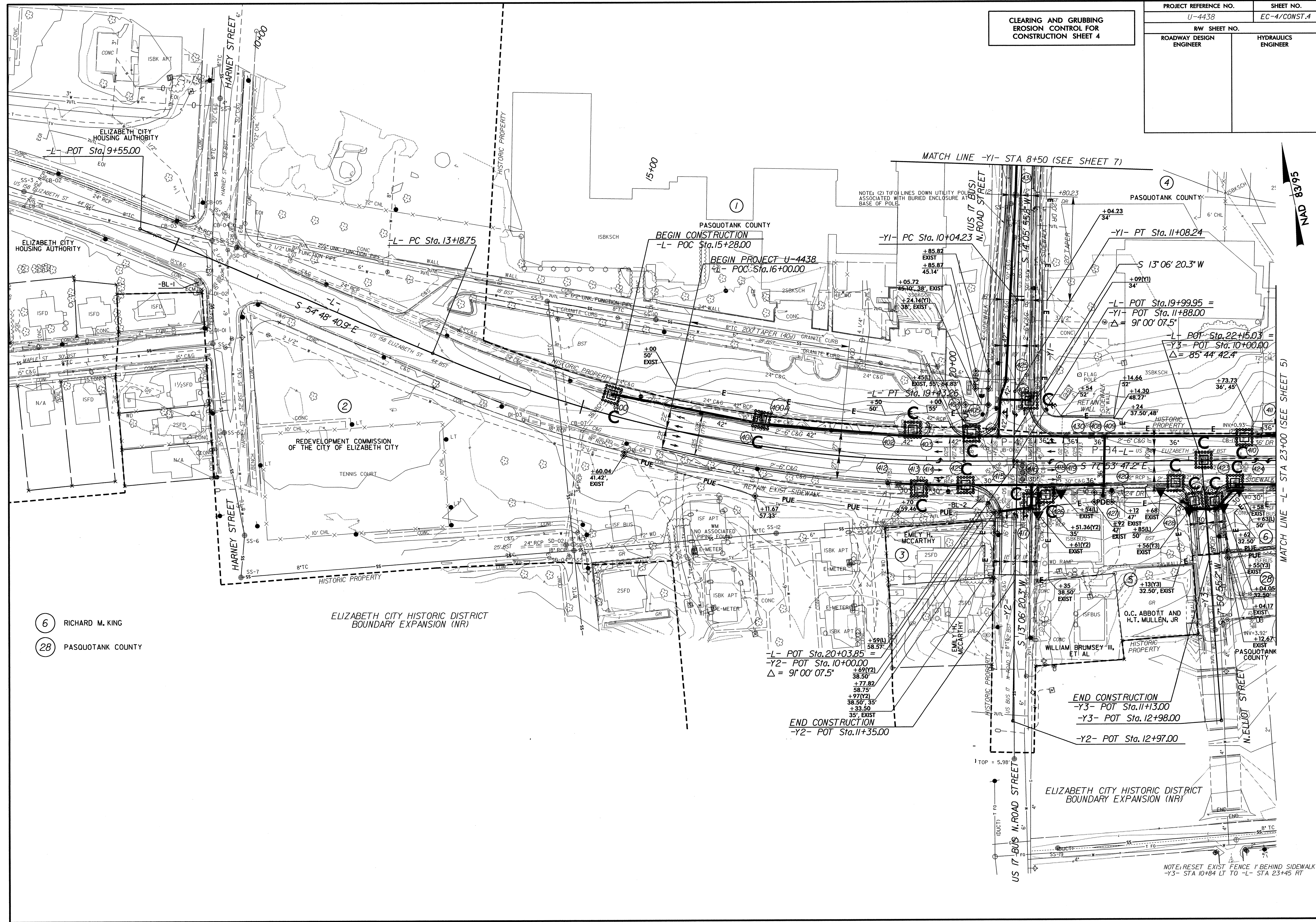
NOTES:

THIS DETAIL APPLIES TO STRAW, EXCELSIOR, AND PERMANENT SOIL REINFORCEMENT MAT (PSRM) INSTALLATION.
 STAPLES SHALL BE NO. 11 GAUGE STEEL WIRE FORMED INTO A "U" SHAPE WITH A MINIMUM THROAT WIDTH OF 1 INCH AND NOT LESS THAN 6 INCHES IN LENGTH.

NOT TO SCALE

**CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4**

PROJECT REFERENCE NO. U-4438	SHEET NO. EC-4/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



- 6 RICHARD M. KING
- 28 PASQUOTANK COUNTY

MATCH LINE -L- STA 23+00 (SEE SHEET 5)

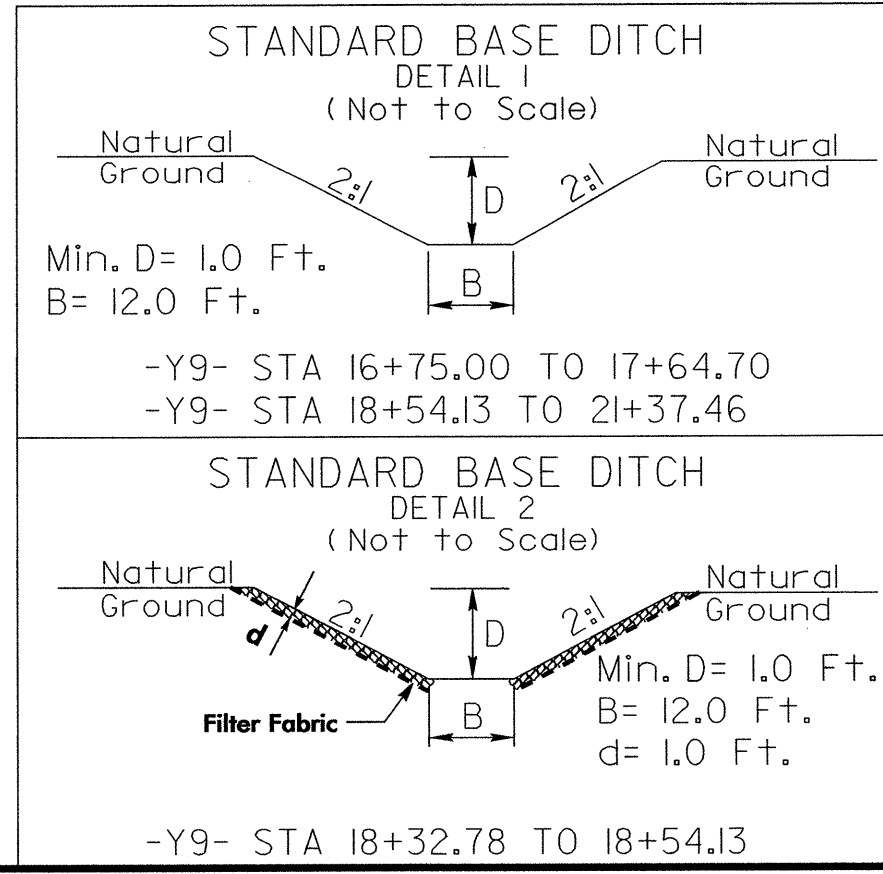
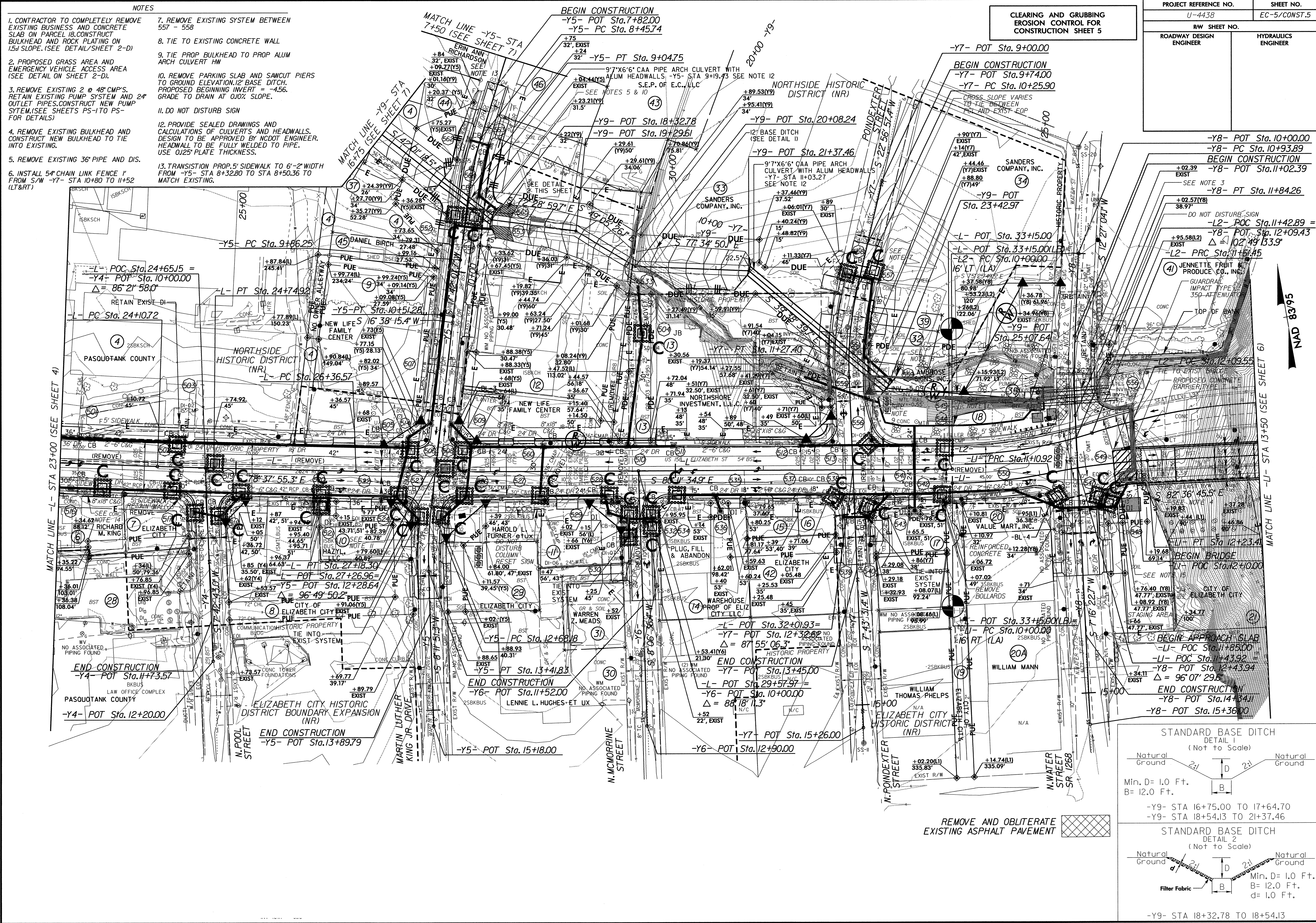
NAD 83/95

NOTE: RESET EXIST. FENCE 1' BEHIND SIDEWALK
-Y3- STA 10+84 LT TO -L- STA 23+45 RT

- NOTES**
- CONTRACTOR TO COMPLETELY REMOVE EXISTING BUSINESS AND CONCRETE SLAB ON PARCEL 18. CONSTRUCT BULKHEAD AND ROCK PLATING ON 1.5% SLOPE. (SEE DETAIL/SHEET 2-D)
 - PROPOSED GRASS AREA AND EMERGENCY VEHICLE ACCESS AREA (SEE DETAIL ON SHEET 2-D).
 - REMOVE EXISTING 2 @ 48" CMP'S. RETAIN EXISTING PUMP SYSTEM AND 24" OUTLET PIPES. CONSTRUCT NEW PUMP SYSTEM. (SEE SHEETS PS-1 TO PS-4 FOR DETAILS)
 - REMOVE EXISTING BULKHEAD AND CONSTRUCT NEW BULKHEAD TO TIE INTO EXISTING.
 - REMOVE EXISTING 36" PIPE AND DIS.
 - INSTALL 54" CHAIN LINK FENCE 1' FROM S/W -Y7- STA 10+80 TO 11+52 (LT&RT)
 - REMOVE EXISTING SYSTEM BETWEEN 557 - 558
 - TIE TO EXISTING CONCRETE WALL
 - TIE PROP BULKHEAD TO PROP ALUM ARCH CULVERT HW
 - REMOVE PARKING SLAB AND SAWCUT PIERS TO GROUND ELEVATION. 12" BASE DITCH. PROPOSED BEGINNING INVERT = -4.56. GRADE TO DRAIN AT 0.00% SLOPE.
 - DO NOT DISTURB SIGN
 - PROVIDE SEALED DRAWINGS AND CALCULATIONS OF CULVERTS AND HEADWALLS. DESIGN TO BE APPROVED BY MCDOT ENGINEER. HEADWALL TO BE FULLY WELDED TO PIPE. USE 0.125" PLATE THICKNESS.
 - TRANSITION PROP. 5' SIDEWALK TO 6'-2" WIDTH FROM -Y5- STA 8+32.80 TO STA 8+50.36 TO MATCH EXISTING.

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 5

PROJECT REFERENCE NO.	SHEET NO.
U-4438	EC-5/CONST.5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



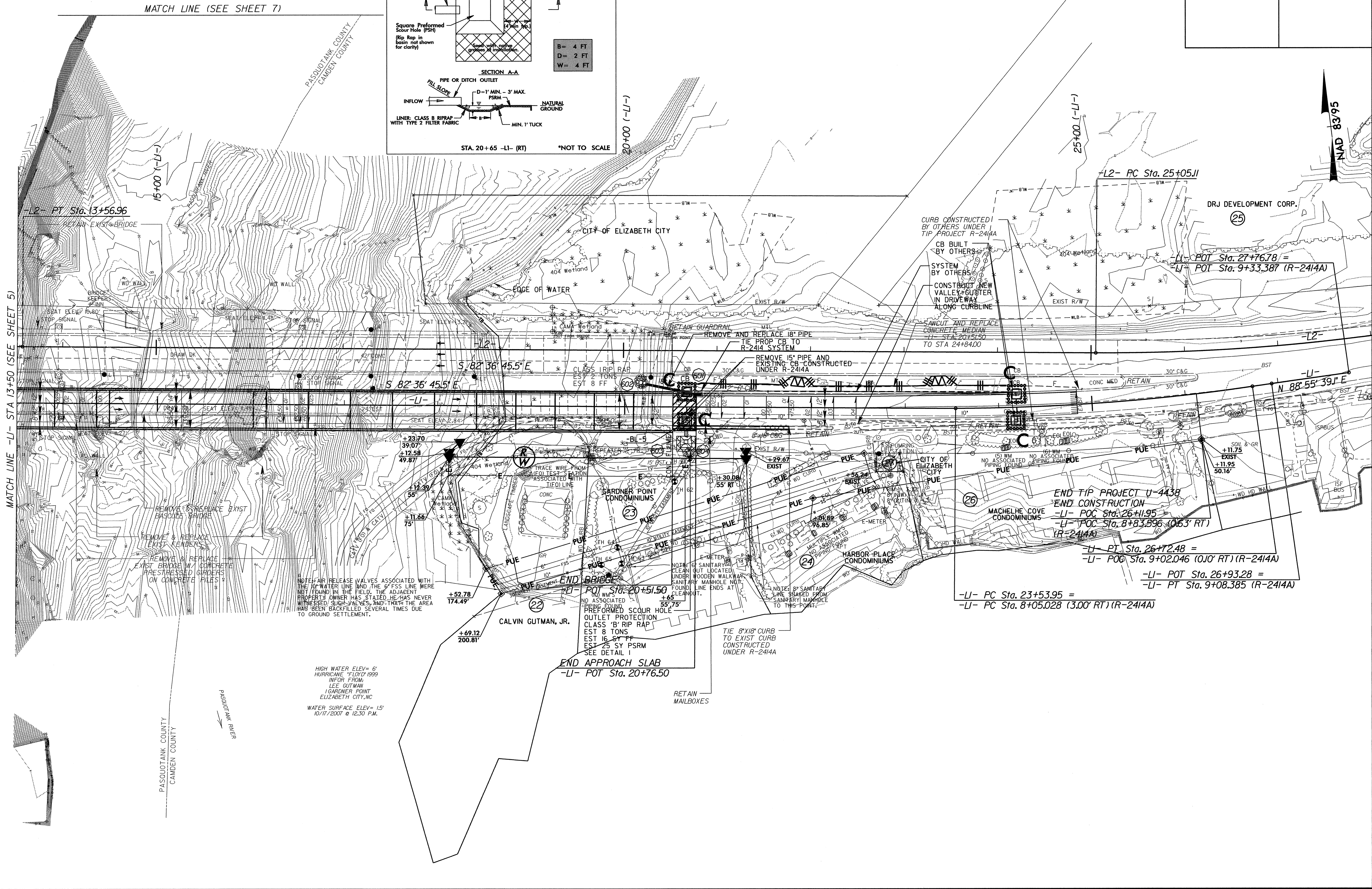
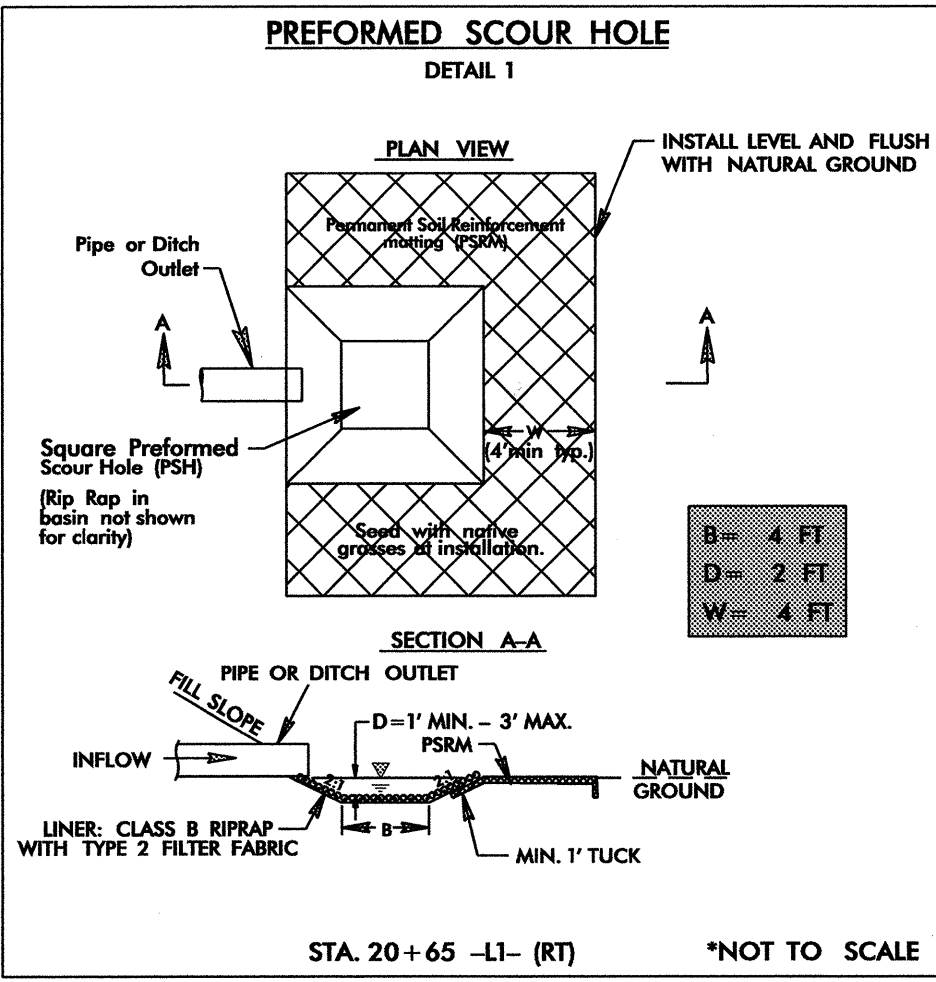
MATCH LINE -U- STA 13+50 (SEE SHEET 6)

MATCH LINE -L- STA 23+00 (SEE SHEET 4)

NAD 83/95

PROJECT REFERENCE NO. U-4438	SHEET NO. EC-6/CONST.6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 6

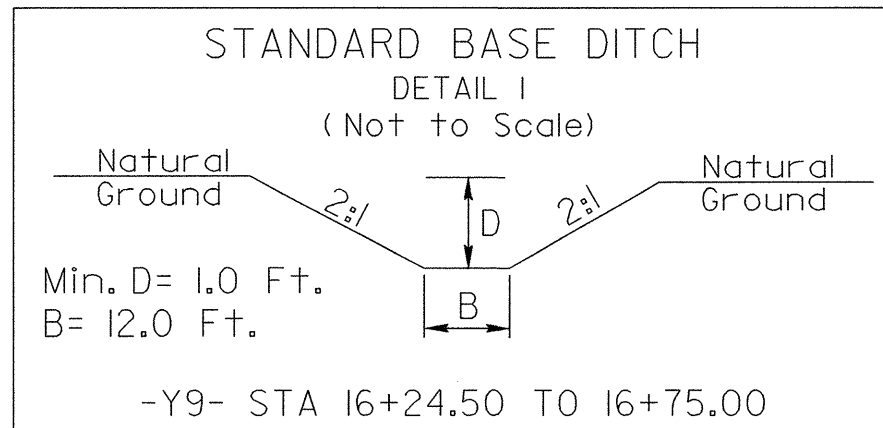


HIGH WATER ELEV= 6'
HURRICANE FLOOD 1999
INFORM FROM:
LEE GUTMAN
GARDNER POINT
ELIZABETH CITY, NC
WATER SURFACE ELEV= 15'
10/17/2007 @ 12:30 P.M.

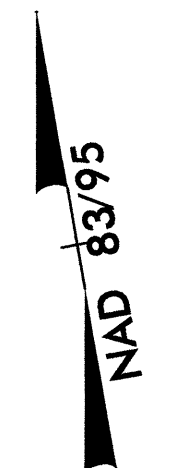
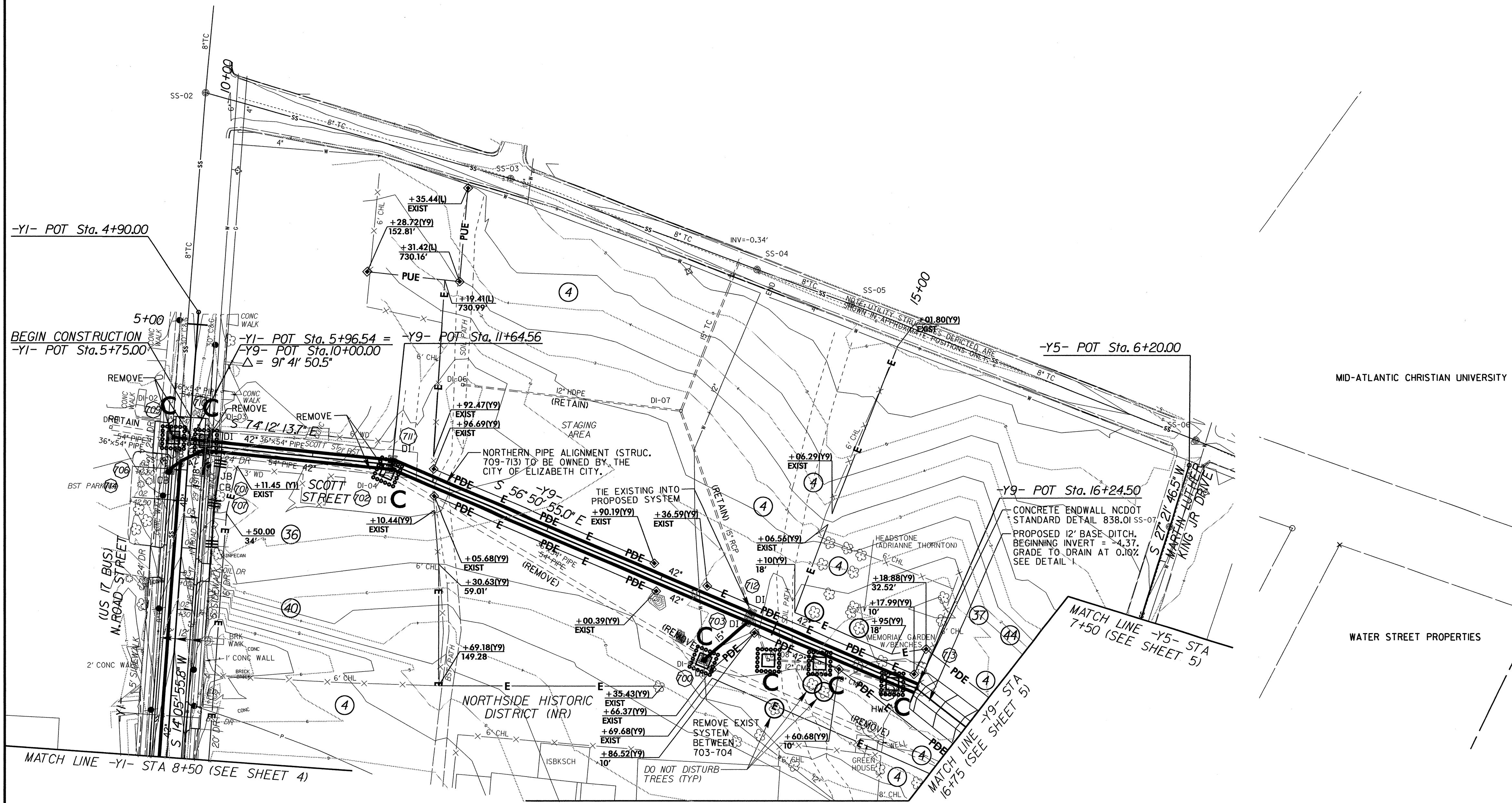
PASQUOTANK RIVER
PASQUOTANK COUNTY
CAMDEN COUNTY

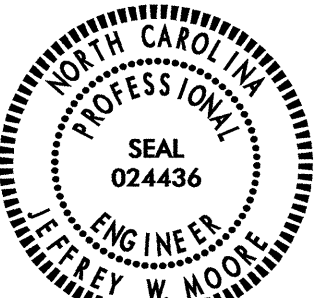

NAD 83/95

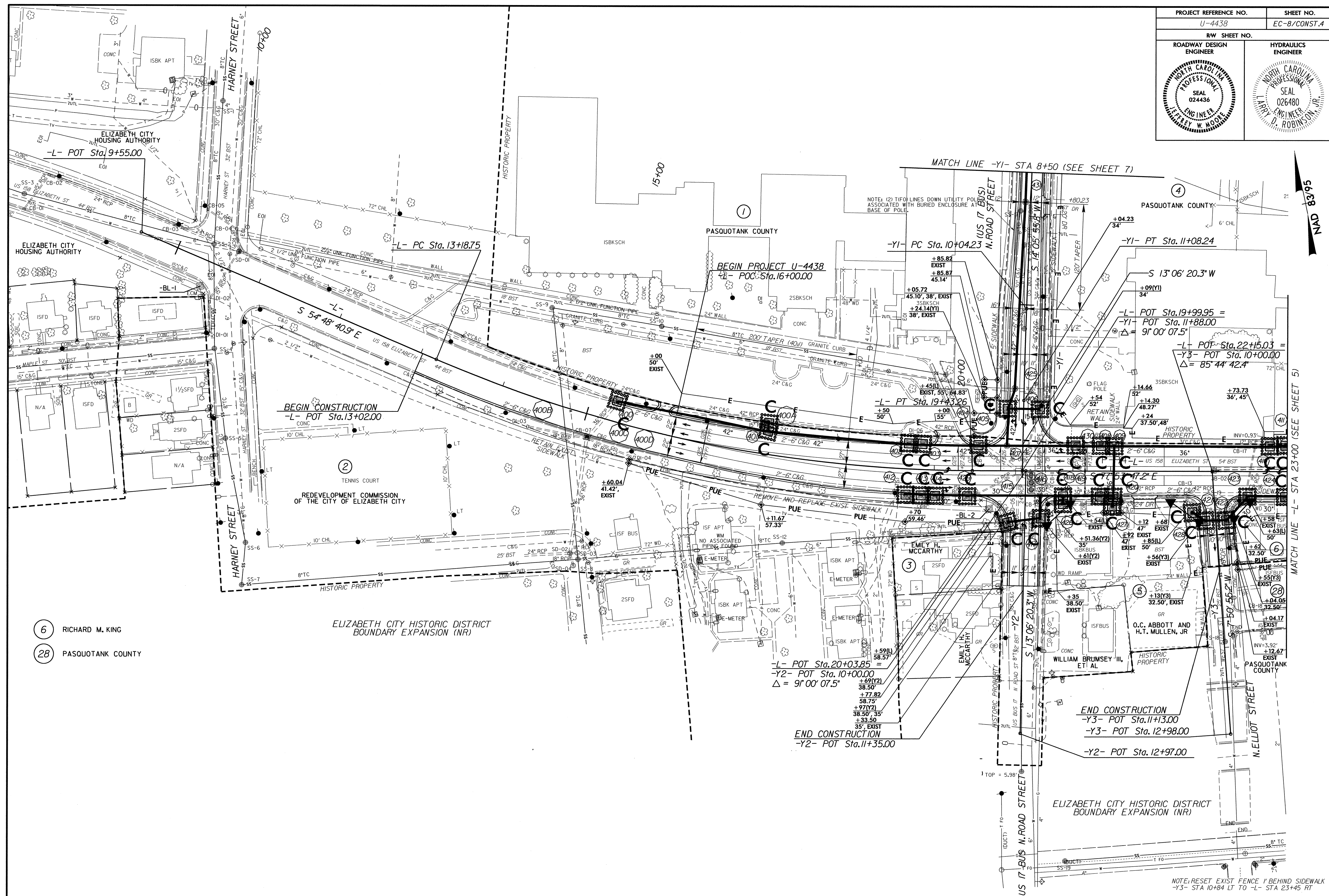
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 7



PROJECT REFERENCE NO.	SHEET NO.
U-4438	EC-7/CONST.7
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



PROJECT REFERENCE NO. U-4438	SHEET NO. EC-8/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	



- 6 RICHARD M. KING
- 28 PASQUOTANK COUNTY

ELIZABETH CITY HISTORIC DISTRICT BOUNDARY EXPANSION (NR)

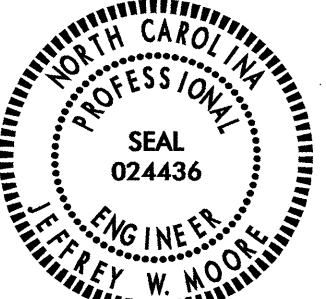
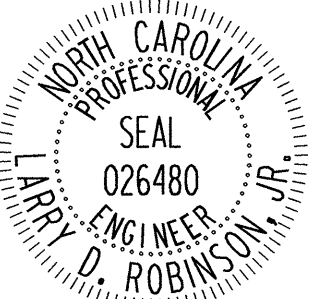
-L- POT Sta. 20+03.85 =
 -Y2- POT Sta. 10+00.00
 Δ = 90' 00" 07.5"

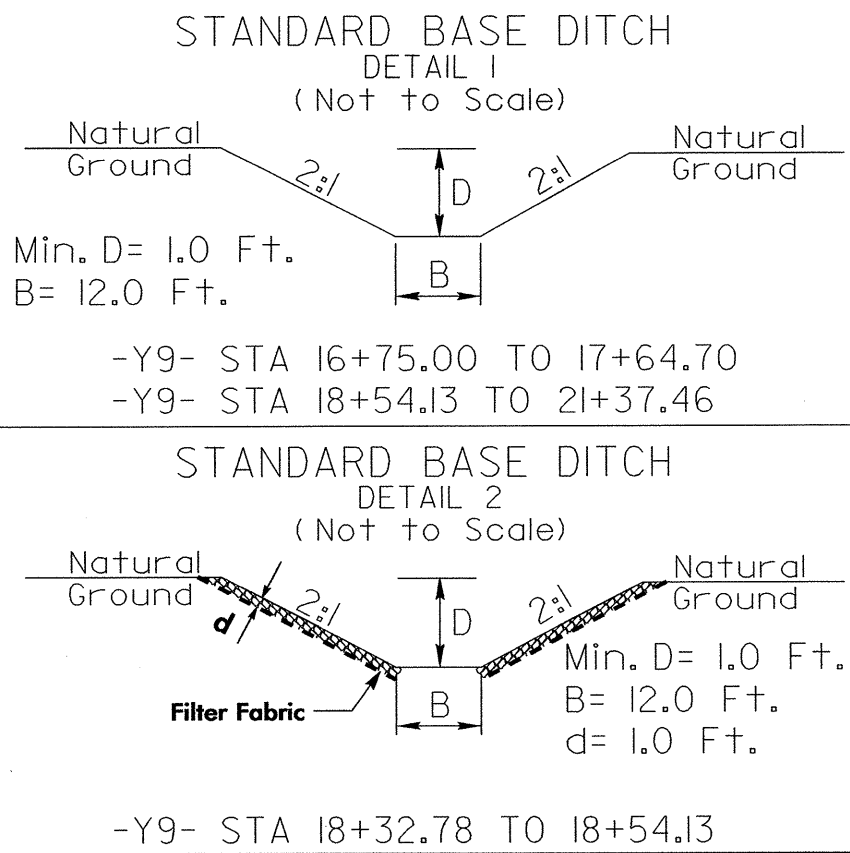
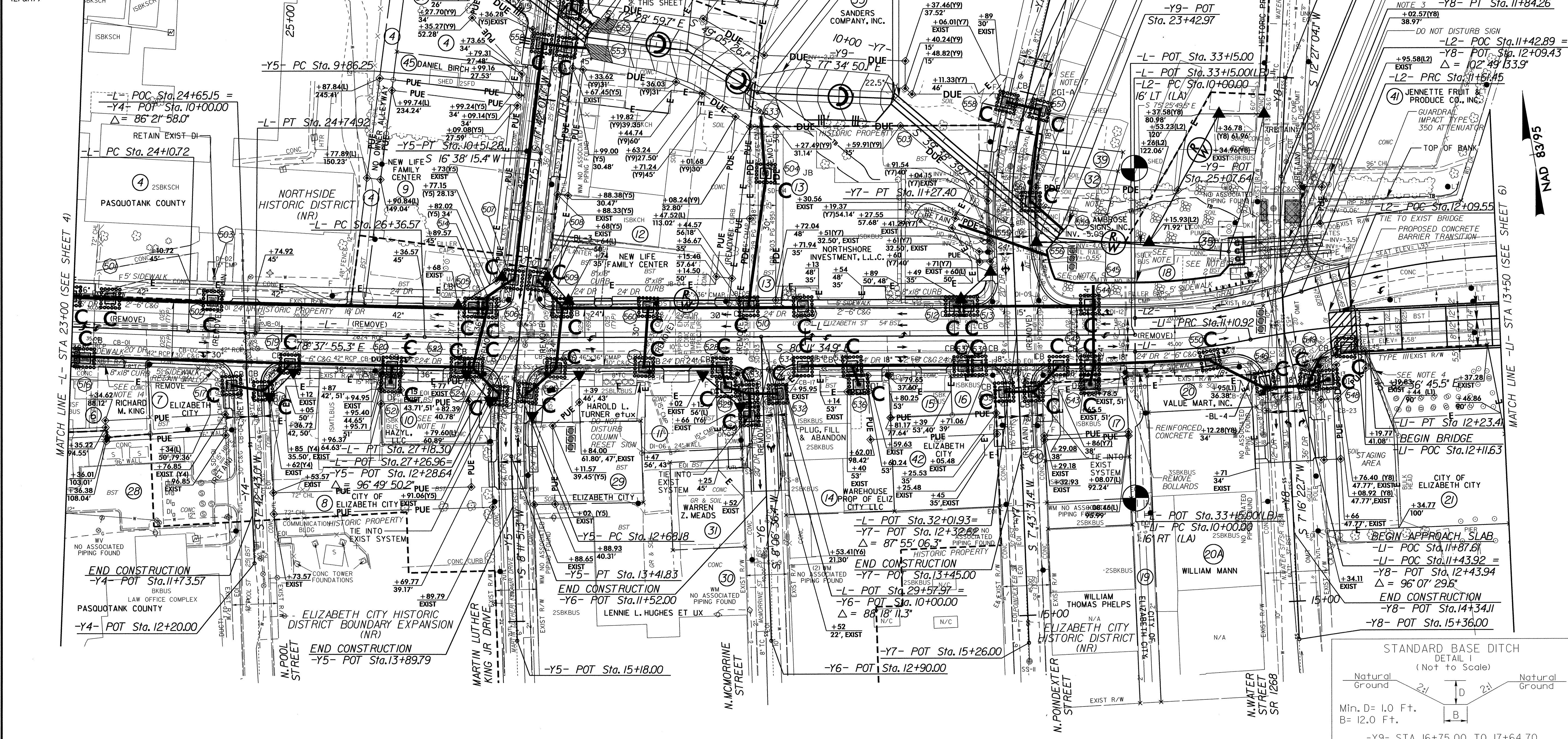
END CONSTRUCTION
 -Y2- POT Sta. 11+35.00

END CONSTRUCTION
 -Y3- POT Sta. 11+13.00
 -Y3- POT Sta. 12+98.00
 -Y2- POT Sta. 12+97.00

NOTE: RESET EXIST FENCE 1' BEHIND SIDEWALK
 -Y3- STA 10+84 LT TO -L- STA 23+45 RT

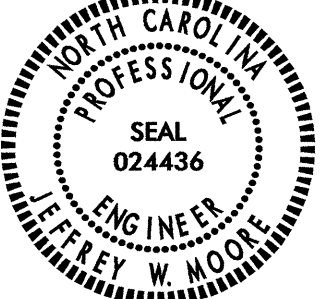
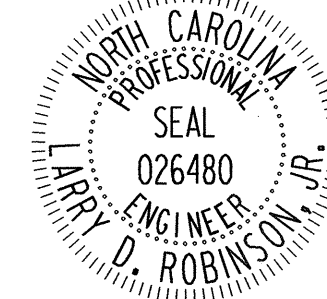
- NOTES**
- CONTRACTOR TO COMPLETELY REMOVE EXISTING BUSINESS AND CONCRETE SLAB ON PARCEL 18. CONSTRUCT BULKHEAD AND ROCK PLATING ON 1.5% SLOPE. (SEE DETAIL/SHEET 2-D)
 - PROPOSED GRASS AREA AND EMERGENCY VEHICLE ACCESS AREA (SEE DETAIL ON SHEET 2-D).
 - REMOVE EXISTING 2 @ 48" CMP'S. RETAIN EXISTING PUMP SYSTEM AND 24" OUTLET PIPES. CONSTRUCT NEW PUMP SYSTEM. (SEE SHEETS PS-1 TO PS-FOR DETAILS)
 - REMOVE EXISTING BULKHEAD AND CONSTRUCT NEW BULKHEAD TO TIE INTO EXISTING.
 - REMOVE EXISTING 36" PIPE AND DIS.
 - INSTALL 54" CHAIN LINK FENCE 1' FROM S/W -Y7- STA 10+80 TO 11+52 (LT&RT)
 - REMOVE EXISTING SYSTEM BETWEEN 557 - 558
 - TIE TO EXISTING CONCRETE WALL
 - TIE PROP BULKHEAD TO PROP ALUM ARCH CULVERT HW
 - REMOVE PARKING SLAB AND SAWCUT PIERS TO GROUND ELEVATION. 12" BASE DITCH. PROPOSED BEGINNING INVERT = -4.56. GRADE TO DRAIN AT 0.02% SLOPE.
 - DO NOT DISTURB SIGN
 - PROVIDE SEALED DRAWINGS AND CALCULATIONS OF CULVERTS AND HEADWALLS. DESIGN TO BE APPROVED BY NCDOT ENGINEER. HEADWALL TO BE FULLY WELDED TO PIPE. USE 0.25" PLATE THICKNESS.
 - TRANSITION PROP. 5' SIDEWALK TO 6'-2" WIDTH FROM -Y5- STA 8+32.80 TO STA 8+50.36 TO MATCH EXISTING.

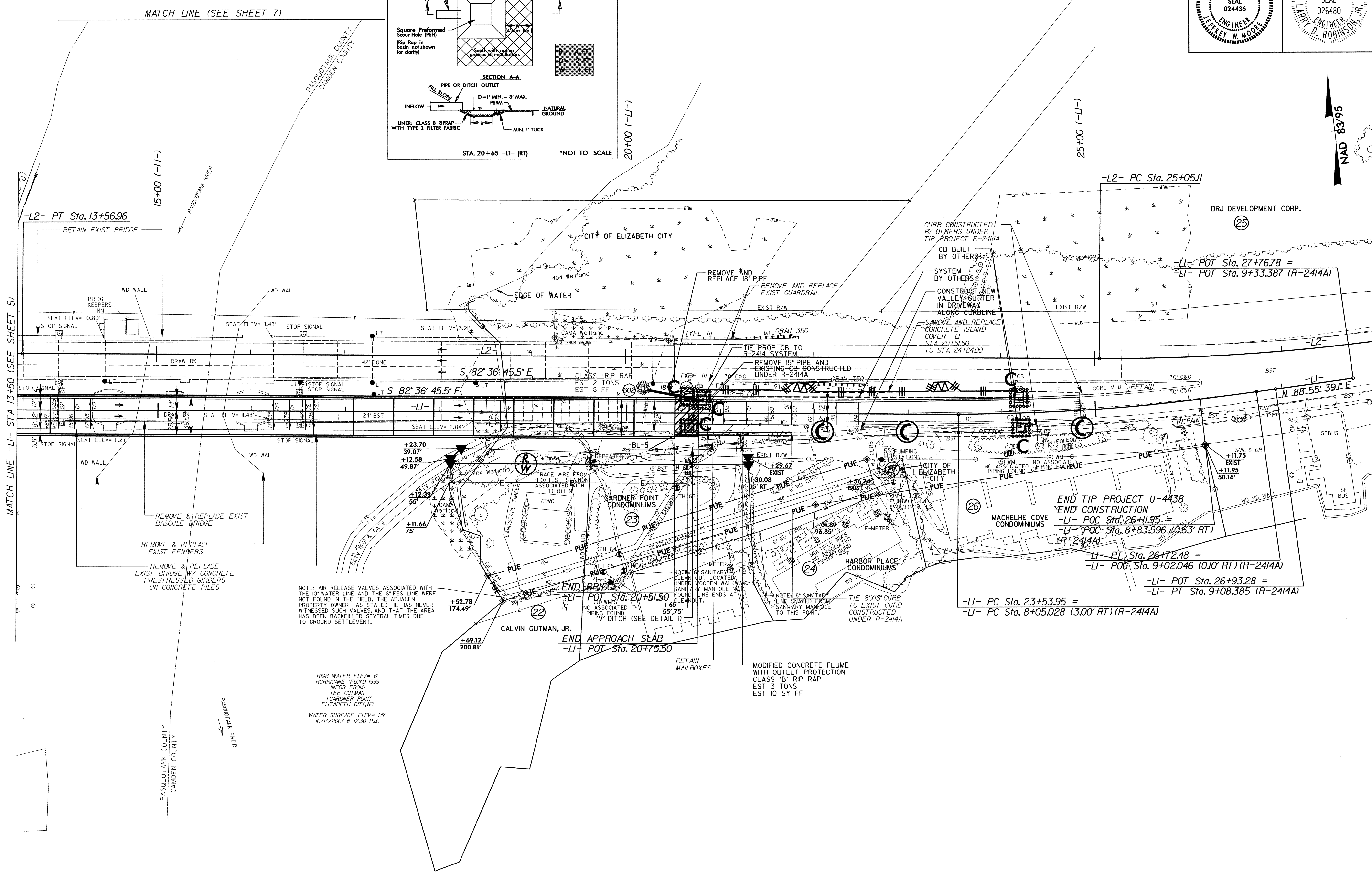
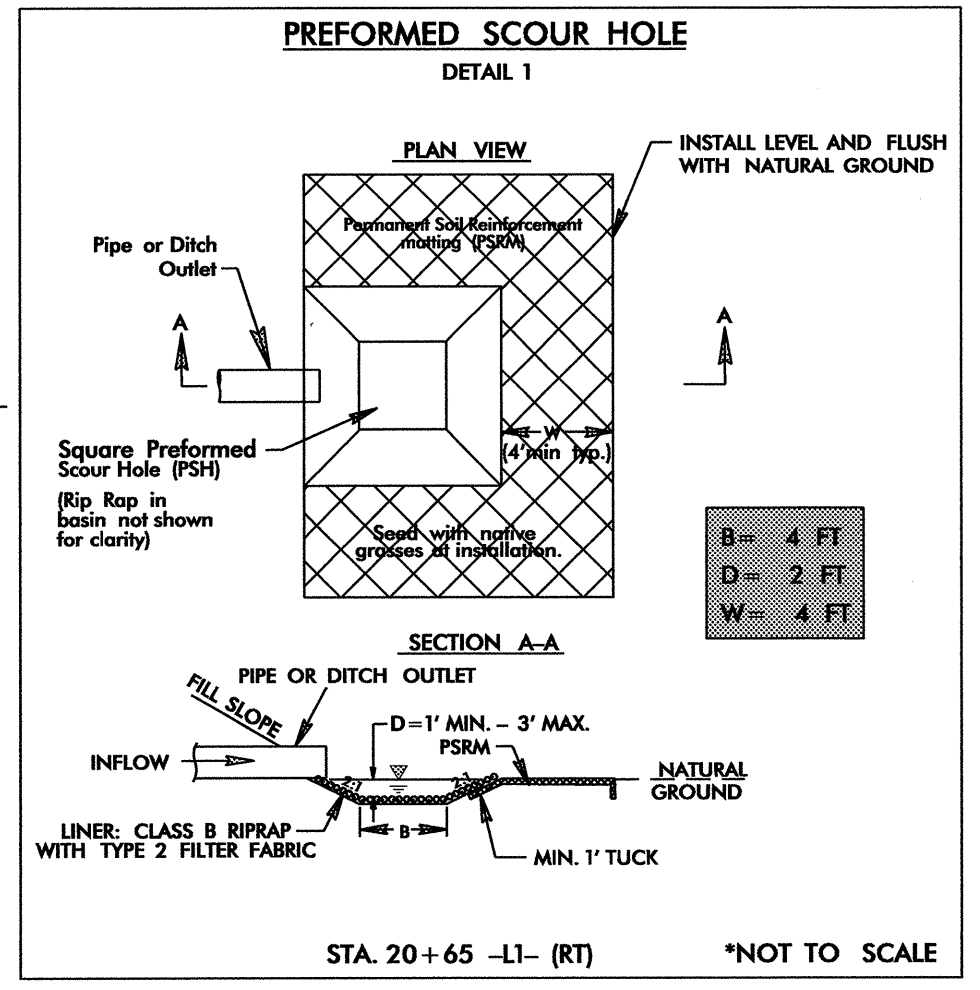
PROJECT REFERENCE NO. U-4438	SHEET NO. EC-9/CONST.5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	



REMOVE AND OBLITERATE EXISTING ASPHALT PAVEMENT

NAD 83/95

PROJECT REFERENCE NO. U-4438	SHEET NO. EC-10/CONST.6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	



MATCH LINE -LI- STA 13+50 (SEE SHEET 5)

MATCH LINE (SEE SHEET 7)

NAD 83/95

HIGH WATER ELEV= 6'
HURRICANE "FLOYD" 1999
INFORM FROM:
LEE GUTMAN
GARDNER POINT
ELIZABETH CITY, NC
WATER SURFACE ELEV= 15'
10/17/2007 @ 12:30 P.M.

NOTE: AIR RELEASE VALVES ASSOCIATED WITH THE 10" WATER LINE AND THE 6" FSS LINE WERE NOT FOUND IN THE FIELD. THE ADJACENT PROPERTY OWNER HAS STATED HE HAS NEVER WITNESSED SUCH VALVES, AND THAT THE AREA HAS BEEN BACKFILLED SEVERAL TIMES DUE TO GROUND SETTLEMENT.

END BRIDGE
-LI- POT Sta. 20+51.50
END APPROACH SLAB
-LI- POT Sta. 20+75.50

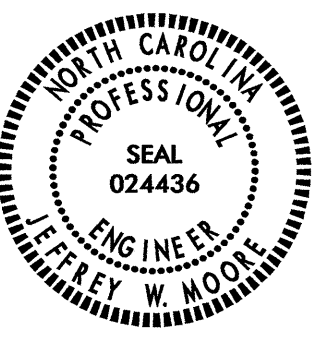

END TIP PROJECT U-4438
END CONSTRUCTION
-LI- POC Sta. 26+11.95 =
-LI- POC Sta. 8+83.596 (0.63' RT) (R-2414A)
-LI- PT Sta. 26+72.48 =
-LI- POC Sta. 9+02.046 (0.0' RT) (R-2414A)
-LI- POT Sta. 26+93.28 =
-LI- PT Sta. 9+08.385 (R-2414A)

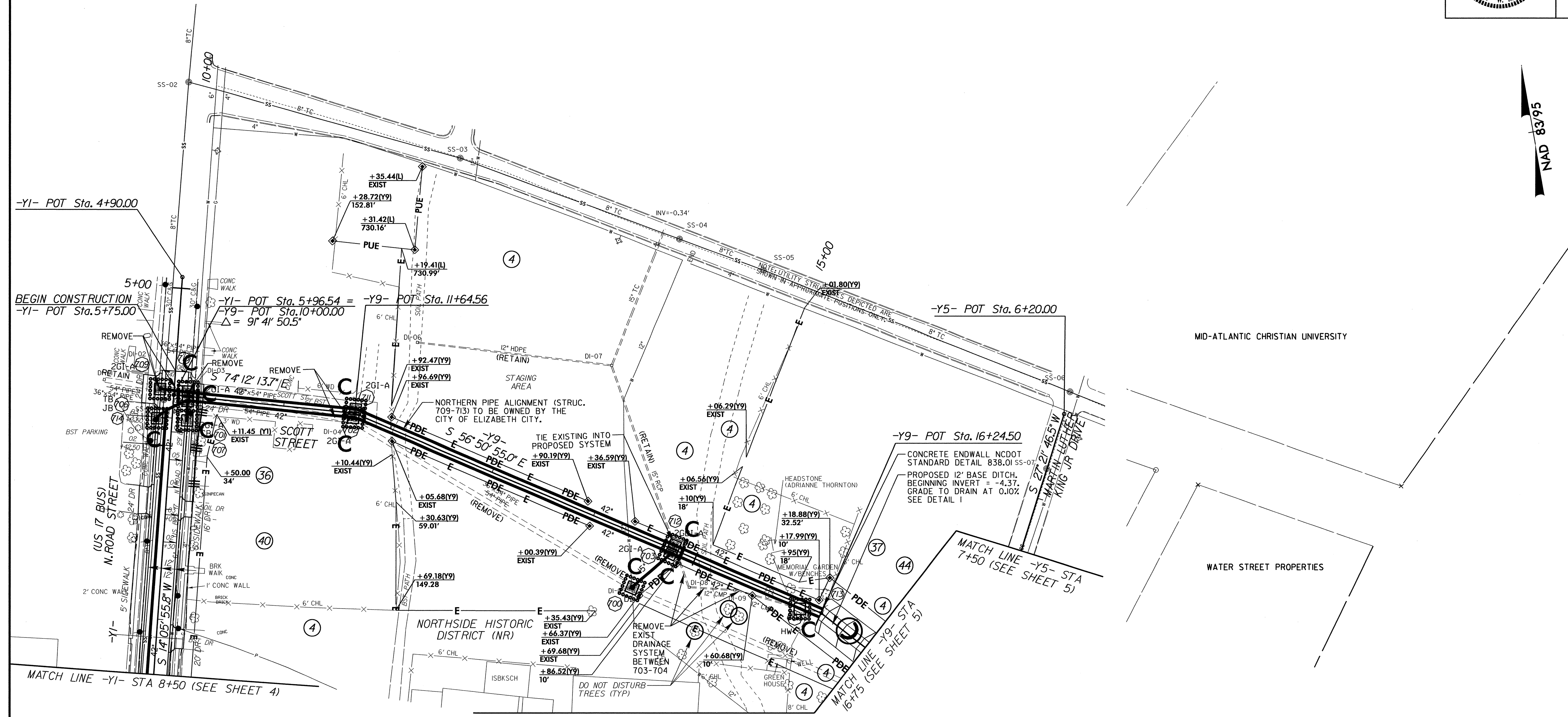
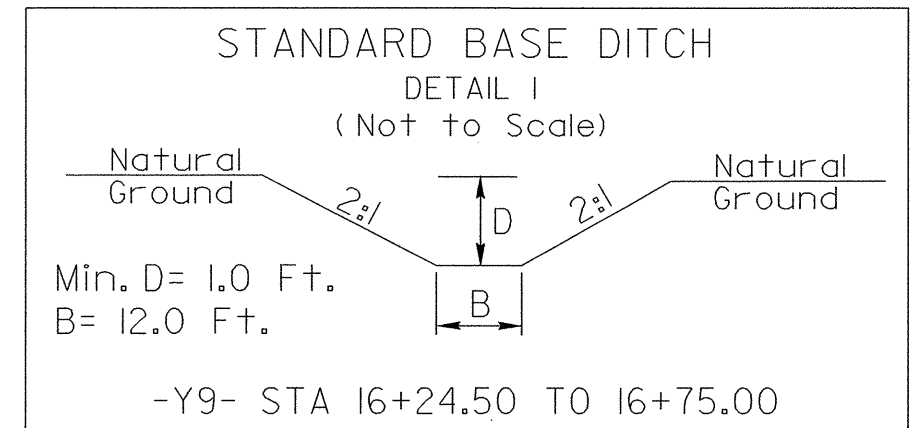
-LI- PC Sta. 23+53.95 =
-LI- PC Sta. 8+05.028 (3.00' RT) (R-2414A)

-LI- POT Sta. 27+76.78 =
-LI- POT Sta. 9+33.387 (R-2414A)

-L2- PC Sta. 25+05.11

-L2- PT Sta. 13+56.96

PROJECT REFERENCE NO. U-4438	SHEET NO. EC-II/CONST.7
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	



NAD 83/95

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DATE\$