CLEARING AND GRUBBING PHASE.
SEE SHEET EC-17 FOR THE POST GRADING PHASE.

PROJECT REFERENCE NO.	SHEET NO.
EB-4707B	EC-5
R/W SHEET NO. 8	

Kimley»Horn
P.O. BOX 33068
RALEIGH, N.C. 27636-3068

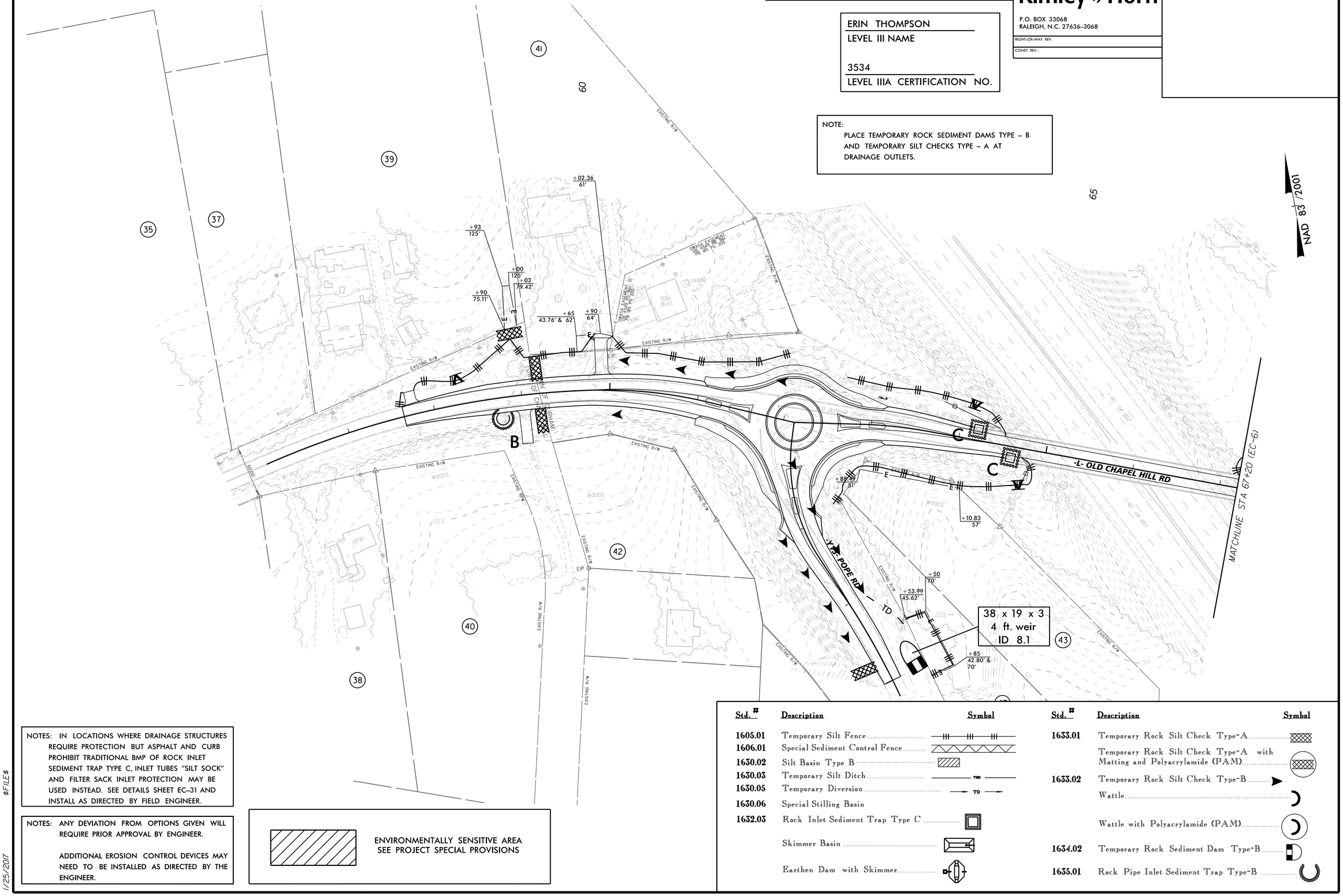
RIGHT-OF-WAY REV.
CONST. REV.

ERIN THOMPSON
LEVEL III NAME

3534
LEVEL IIIA CERTIFICATION NO.

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

NAD 83/2001



NOTES: IN LOCATIONS WHERE DRAINAGE STRUCTURES REQUIRE PROTECTION BUT ASPHALT AND CURB PROHIBIT TRADITIONAL BMP OF ROCK INLET SEDIMENT TRAP TYPE C, INLET TUBES "SILT SOCK" AND FILTER SACK INLET PROTECTION MAY BE USED INSTEAD. SEE DETAILS SHEET EC-31 AND INSTALL AS DIRECTED BY FIELD ENGINEER.

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

Std. #	Description	Symbol
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1630.02	Silt Basin Type B	
1630.03	Temporary Silt Ditch	TSD
1630.05	Temporary Diversion	TD
1630.06	Special Stilling Basin	
1632.03	Rock Inlet Sediment Trap Type C	
	Skimmer Basin	
	Earthen Dam with Skimmer	

Std. #	Description	Symbol
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	
	Wattle with Polyacrylamide (PAM)	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.01	Rock Pipe Inlet Sediment Trap Type-B	

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1/25/2017

CLEARING AND GRUBBING PHASE.
SEE SHEET EC-18 FOR THE POST GRADING PHASE.

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RALEIGH, N.C. 27636–3068

RIGHT-OF-WAY REV.

CONST. REV.

PROJECT REFERENCE NO.	SHEET NO.
EB-4707B	EC-6
R/W SHEET NO.	9

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

NAD 83/2001

-Y14- MT MORIAH RD

-L- OLD CHAPEL HILL RD

-Y15- PIN OAK DR

MATCHLINE STA 67+20 (EC-5)

MATCHLINE STA 80+00 (EC-7)

NOTES: IN LOCATIONS WHERE DRAINAGE STRUCTURES REQUIRE PROTECTION BUT ASPHALT AND CURB PROHIBIT TRADITIONAL BMP OF ROCK INLET SEDIMENT TRAP TYPE C, INLET TUBES "SILT SOCK" AND FILTER SACK INLET PROTECTION MAY BE USED INSTEAD. SEE DETAILS SHEET EC-31 AND INSTALL AS DIRECTED BY FIELD ENGINEER.

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

Std. #	Description	Symbol
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1630.02	Silt Basin Type B	
1630.03	Temporary Silt Ditch	TSD
1630.05	Temporary Diversion	TD
1630.06	Special Stilling Basin	
1632.03	Rock Inlet Sediment Trap Type C	
	Skimmer Basin	
	Earthen Dam with Skimmer	

Std. #	Description	Symbol
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	
	Wattle with Polyacrylamide (PAM)	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.01	Rock Pipe Inlet Sediment Trap Type-B	

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1/25/2017

CLEARING AND GRUBBING PHASE.
SEE SHEET EC-19 FOR THE POST GRADING PHASE.

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

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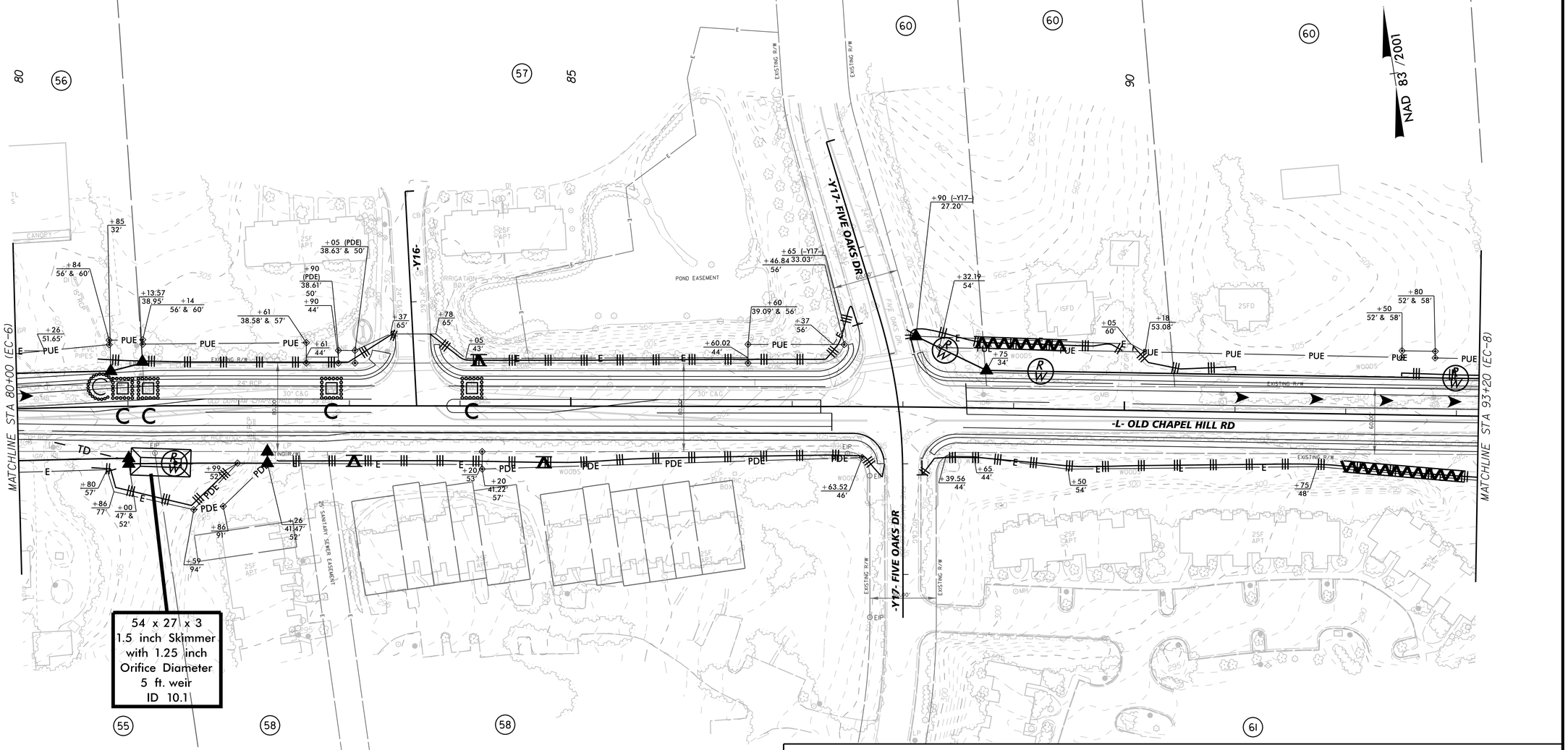
RALEIGH, N.C. 27636–3068

RIGHT-OF-WAY REV.

CONST. REV.

PROJECT REFERENCE NO.	SHEET NO.
EB-4707B	EC-7
R/W SHEET NO.	10

NAD 83 / 2001



NOTES: IN LOCATIONS WHERE DRAINAGE STRUCTURES REQUIRE PROTECTION BUT ASPHALT AND CURB PROHIBIT TRADITIONAL BMP OF ROCK INLET SEDIMENT TRAP TYPE C, INLET TUBES "SILT SOCK" AND FILTER SACK INLET PROTECTION MAY BE USED INSTEAD. SEE DETAILS SHEET EC–31 AND INSTALL AS DIRECTED BY FIELD ENGINEER.

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

Std. #	Description	Symbol
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1630.02	Silt Basin Type B	
1630.03	Temporary Silt Ditch	TRD
1630.05	Temporary Diversion	TD
1630.06	Special Stilling Basin	
1632.03	Rock Inlet Sediment Trap Type C	
	Skimmer Basin	
	Earthen Dam with Skimmer	

Std. #	Description	Symbol
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	
	Wattle with Polyacrylamide (PAM)	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.01	Rock Pipe Inlet Sediment Trap Type-B	

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1/25/2017

CLEARING AND GRUBBING PHASE.
SEE SHEET EC-20 FOR THE POST GRADING PHASE.

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

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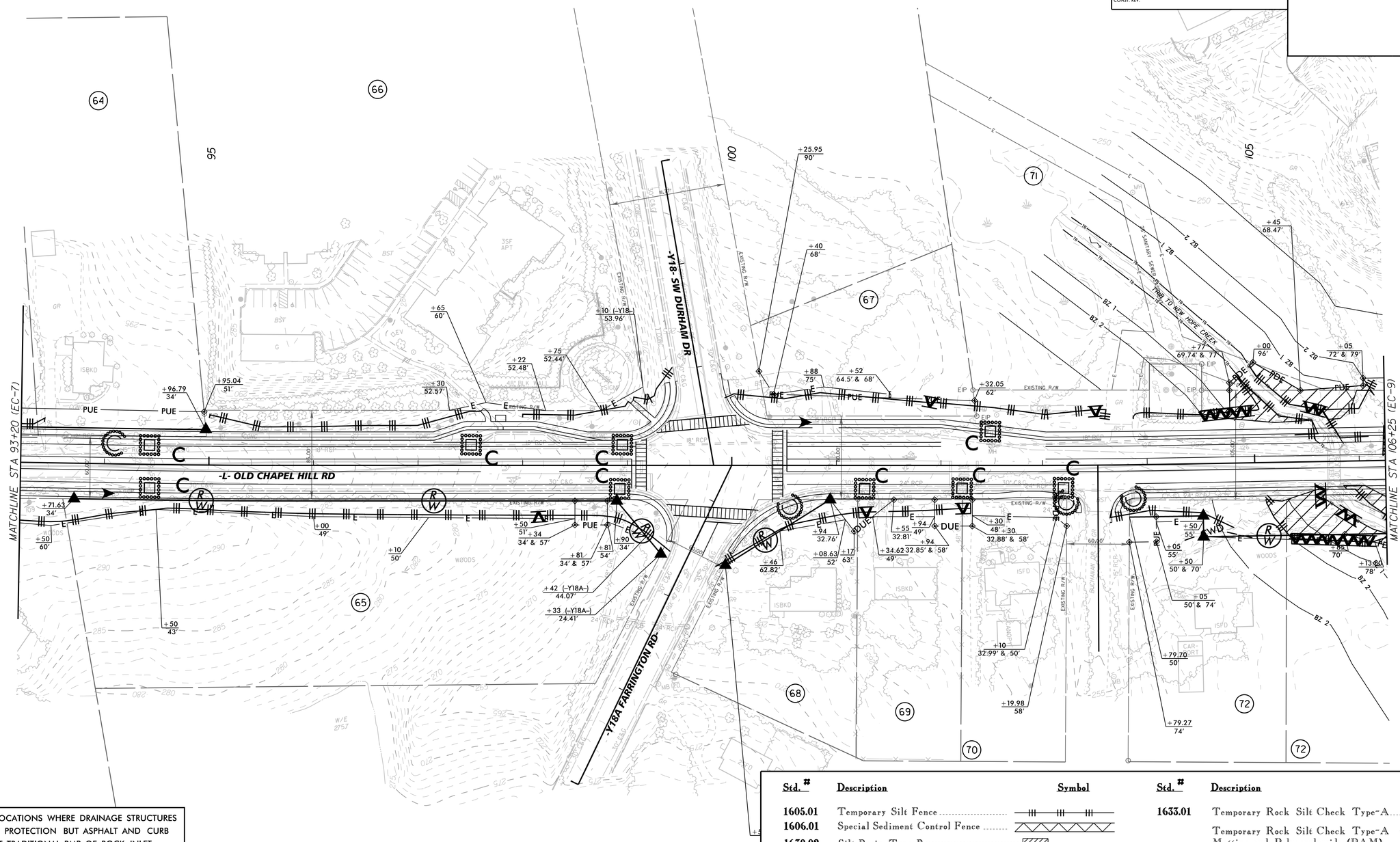
RALEIGH, N.C. 27636–3068

RIGHT-OF-WAY REV.
CONST. REV.

PROJECT REFERENCE NO.	SHEET NO.
EB-4707B	EC-8
R/W SHEET NO.	11

NAD 83/2001



NOTES: IN LOCATIONS WHERE DRAINAGE STRUCTURES REQUIRE PROTECTION BUT ASPHALT AND CURB PROHIBIT TRADITIONAL BMP OF ROCK INLET SEDIMENT TRAP TYPE C, INLET TUBES "SILT SOCK" AND FILTER SACK INLET PROTECTION MAY BE USED INSTEAD. SEE DETAILS SHEET EC–31 AND INSTALL AS DIRECTED BY FIELD ENGINEER.

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

Std. #	Description	Symbol
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1630.02	Silt Basin Type B	
1630.03	Temporary Silt Ditch	TSD
1630.05	Temporary Diversion	TD
1630.06	Special Stilling Basin	
1632.03	Rock Inlet Sediment Trap Type C	
	Skimmer Basin	
	Earthen Dam with Skimmer	

Std. #	Description	Symbol
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	
	Wattle with Polyacrylamide (PAM)	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.01	Rock Pipe Inlet Sediment Trap Type-B	

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1/25/2017

CLEARING AND GRUBBING PHASE.
SEE SHEET EC-21 FOR THE POST GRADING PHASE.

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

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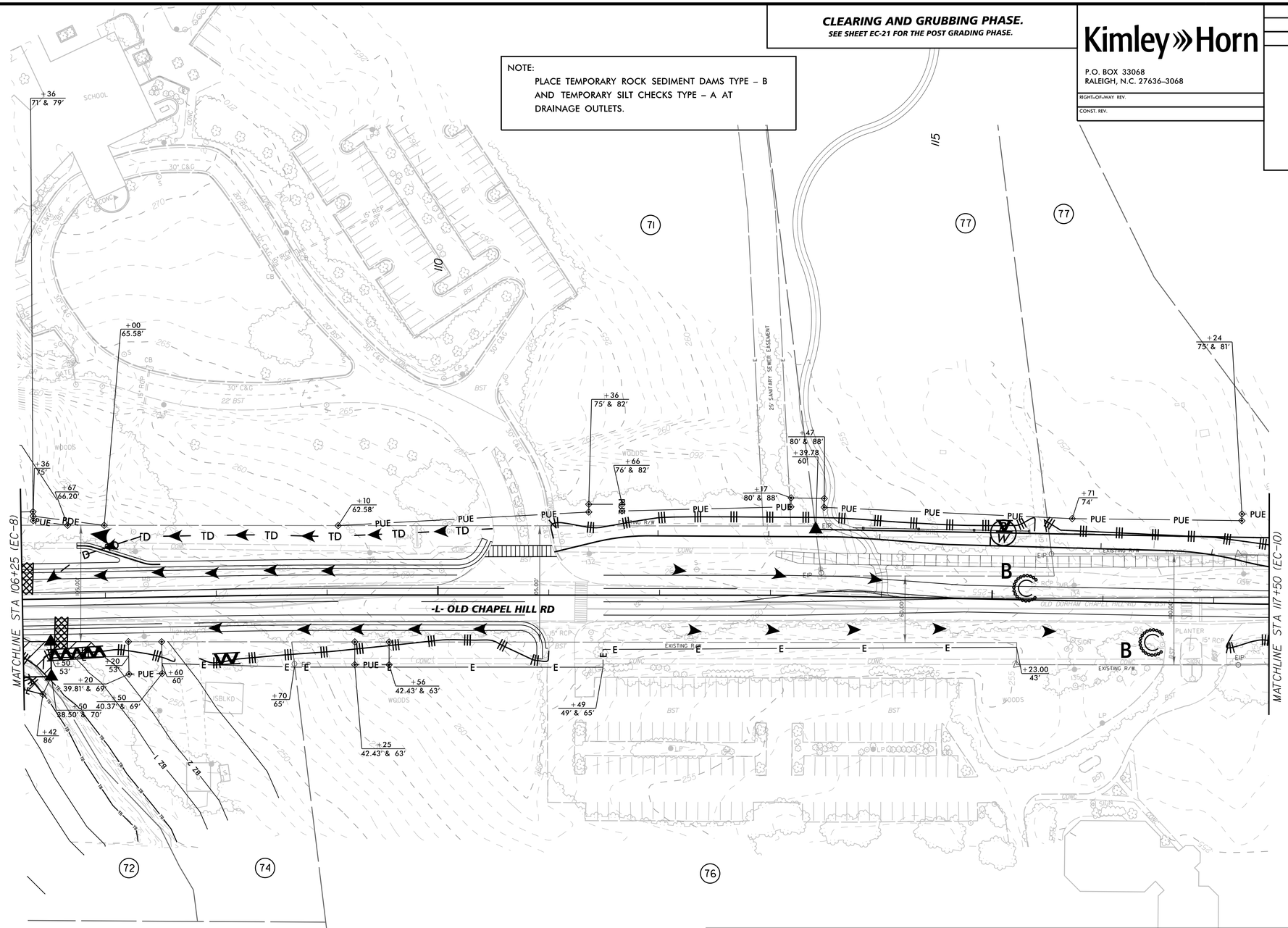
RIGHT-OF-WAY REV.

CONST. REV.

PROJECT REFERENCE NO.	SHEET NO.
EB-4707B	EC-9
R/W SHEET NO.	12

NAD 83 /2001



NOTES: IN LOCATIONS WHERE DRAINAGE STRUCTURES REQUIRE PROTECTION BUT ASPHALT AND CURB PROHIBIT TRADITIONAL BMP OF ROCK INLET SEDIMENT TRAP TYPE C, INLET TUBES "SILT SOCK" AND FILTER SACK INLET PROTECTION MAY BE USED INSTEAD. SEE DETAILS SHEET EC-31 AND INSTALL AS DIRECTED BY FIELD ENGINEER.

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

Std. #	Description	Symbol
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1630.02	Silt Basin Type B	
1630.03	Temporary Silt Ditch	TSD
1630.05	Temporary Diversion	TD
1630.06	Special Stilling Basin	
1632.03	Rock Inlet Sediment Trap Type C	
	Skimmer Basin	
	Earthen Dam with Skimmer	

Std. #	Description	Symbol
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	
	Wattle with Polyacrylamide (PAM)	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.01	Rock Pipe Inlet Sediment Trap Type-B	

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1/25/2017

CLEARING AND GRUBBING PHASE.
SEE SHEET EC-22 FOR THE POST GRADING PHASE.

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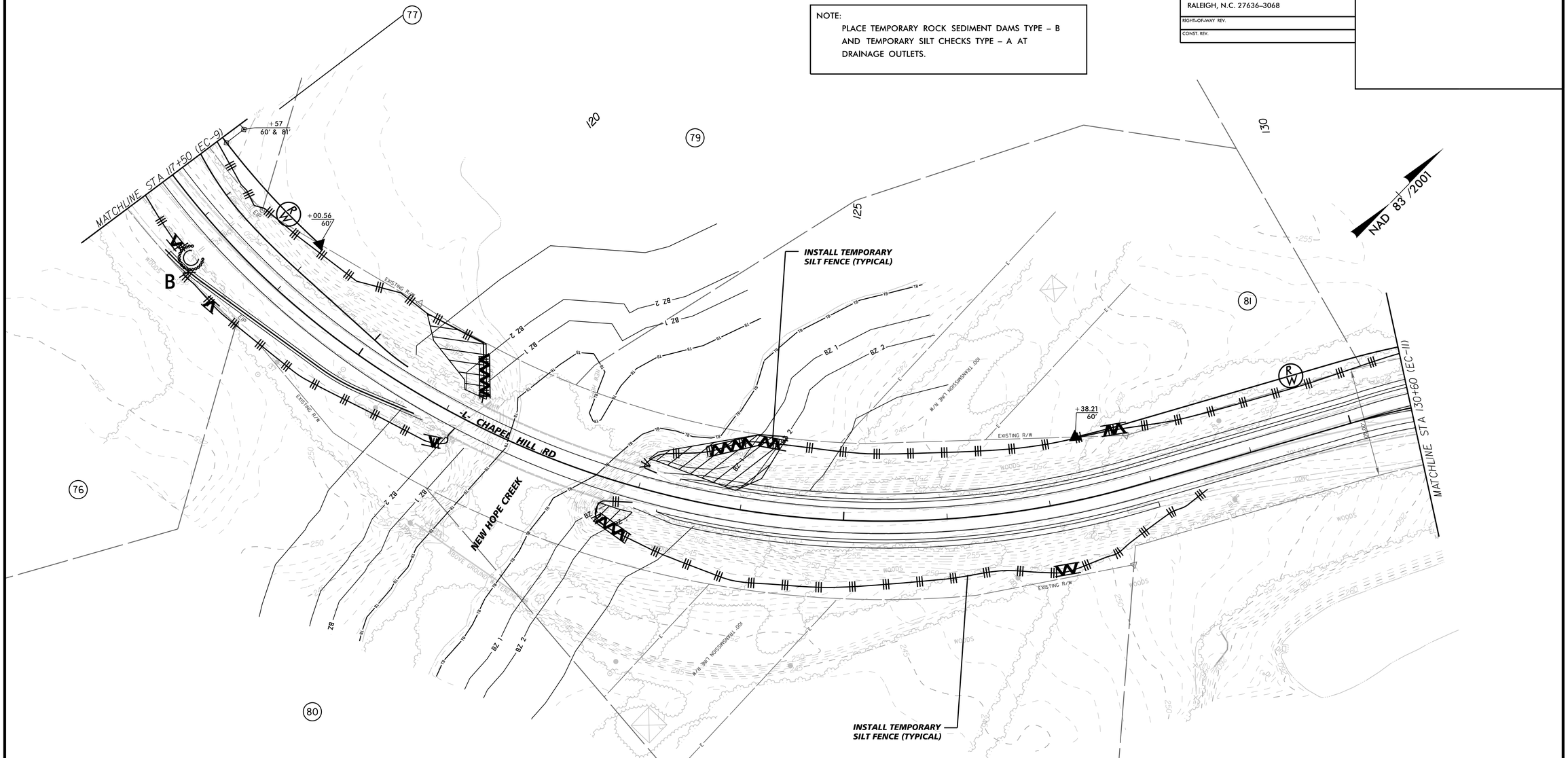
RALEIGH, N.C. 27636–3068

RIGHT-OF-WAY REV.

CONST. REV.

PROJECT REFERENCE NO.	SHEET NO.
EB-4707B	EC-10
R/W SHEET NO.	13

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



NOTES: IN LOCATIONS WHERE DRAINAGE STRUCTURES REQUIRE PROTECTION BUT ASPHALT AND CURB PROHIBIT TRADITIONAL BMP OF ROCK INLET SEDIMENT TRAP TYPE C, INLET TUBES "SILT SOCK" AND FILTER SACK INLET PROTECTION MAY BE USED INSTEAD. SEE DETAILS SHEET EC–31 AND INSTALL AS DIRECTED BY FIELD ENGINEER.

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

Std. #	Description	Symbol
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1630.02	Silt Basin Type B	
1630.03	Temporary Silt Ditch	TSD
1630.05	Temporary Diversion	TD
1630.06	Special Stilling Basin	
1632.03	Rock Inlet Sediment Trap Type C	
	Skimmer Basin	
	Earthen Dam with Skimmer	

Std. #	Description	Symbol
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	
	Wattle with Polyacrylamide (PAM)	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.01	Rock Pipe Inlet Sediment Trap Type-B	

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1/25/2017

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

CLEARING AND GRUBBING PHASE.
SEE SHEET EC-23 FOR THE POST GRADING PHASE.

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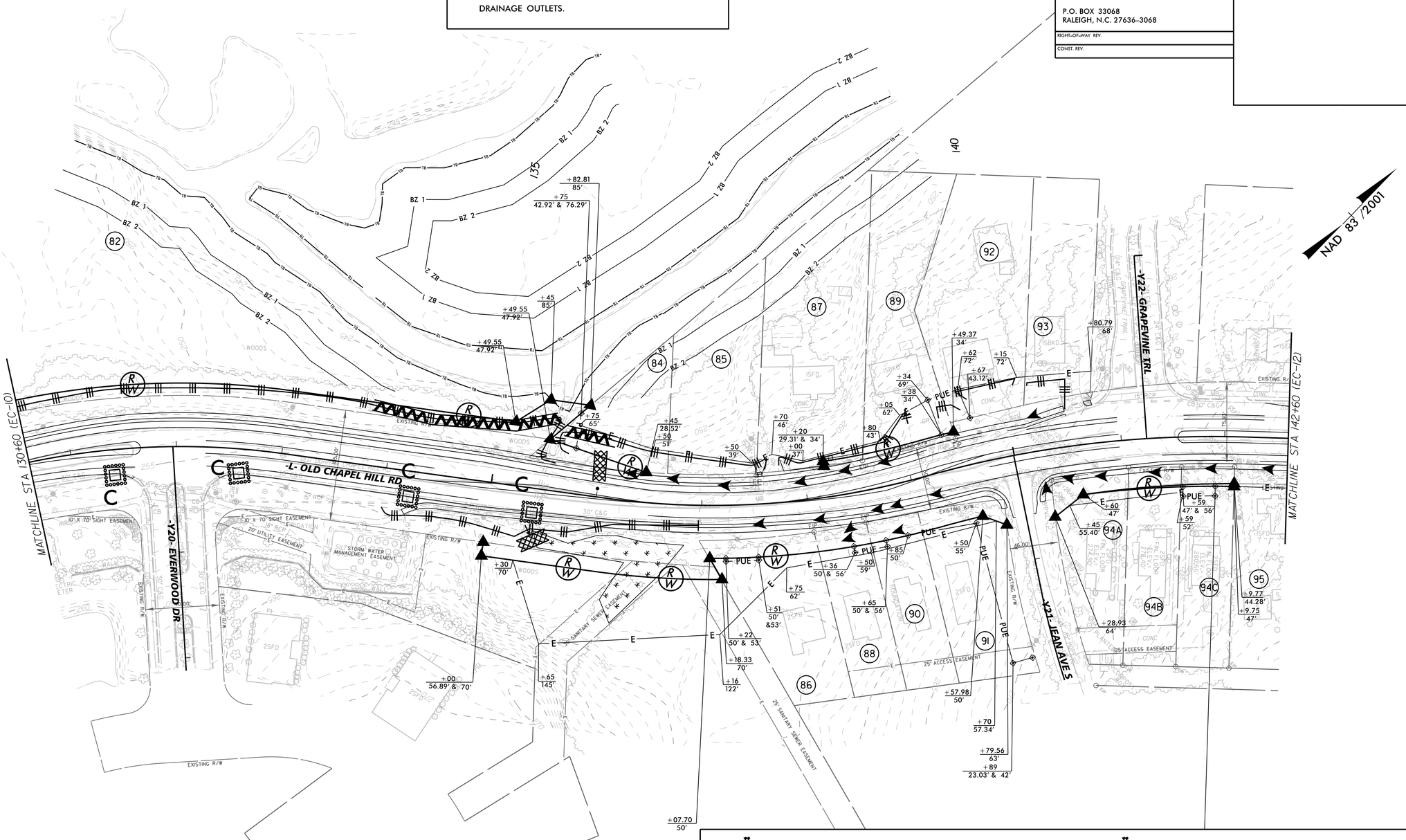
RALEIGH, N.C. 27636–3068

RIGHT-OF-WAY REV.
CONST. REV.

PROJECT REFERENCE NO.	SHEET NO.
EB-4707B	EC-11
R/W SHEET NO.	14



NOTES: IN LOCATIONS WHERE DRAINAGE STRUCTURES REQUIRE PROTECTION BUT ASPHALT AND CURB PROHIBIT TRADITIONAL BMP OF ROCK INLET SEDIMENT TRAP TYPE C, INLET TUBES "SILT SOCK" AND FILTER SACK INLET PROTECTION MAY BE USED INSTEAD. SEE DETAILS SHEET EC–31 AND INSTALL AS DIRECTED BY FIELD ENGINEER.

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

Std. #	Description	Symbol
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1630.02	Silt Basin Type B	
1630.03	Temporary Silt Ditch	TSD
1630.05	Temporary Diversion	TD
1630.06	Special Stilling Basin	
1632.03	Rock Inlet Sediment Trap Type C	
	Skimmer Basin	
	Earthen Dam with Skimmer	

Std. #	Description	Symbol
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	
	Wattle with Polyacrylamide (PAM)	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.01	Rock Pipe Inlet Sediment Trap Type-B	

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1/25/2017

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

CLEARING AND GRUBBING PHASE.
SEE SHEET EC-24 FOR THE POST GRADING PHASE.

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RALEIGH, N.C. 27636–3068

RIGHT-OF-WAY REV.
CONST. REV.

PROJECT REFERENCE NO.	SHEET NO.
EB-4707B	EC-12
R/W SHEET NO.	15

NOTES: IN LOCATIONS WHERE DRAINAGE STRUCTURES REQUIRE PROTECTION BUT ASPHALT AND CURB PROHIBIT TRADITIONAL BMP OF ROCK INLET SEDIMENT TRAP TYPE C, INLET TUBES "SILT SOCK" AND FILTER SACK INLET PROTECTION MAY BE USED INSTEAD. SEE DETAILS SHEET EC–31 AND INSTALL AS DIRECTED BY FIELD ENGINEER.

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

Std. #	Description	Symbol
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1630.02	Silt Basin Type B	
1630.03	Temporary Silt Ditch	TSD
1630.05	Temporary Diversion	TD
1630.06	Special Stilling Basin	
1632.03	Rock Inlet Sediment Trap Type C	
	Skimmer Basin	
	Earthen Dam with Skimmer	

Std. #	Description	Symbol
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	
	Wattle with Polyacrylamide (PAM)	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.01	Rock Pipe Inlet Sediment Trap Type-B	

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1/25/2017

FINAL CONSTRUCTION PHASE
SEE SHEET EC-5 FOR THE CLEARING AND GRUBBING PHASE.

Kimley»Horn
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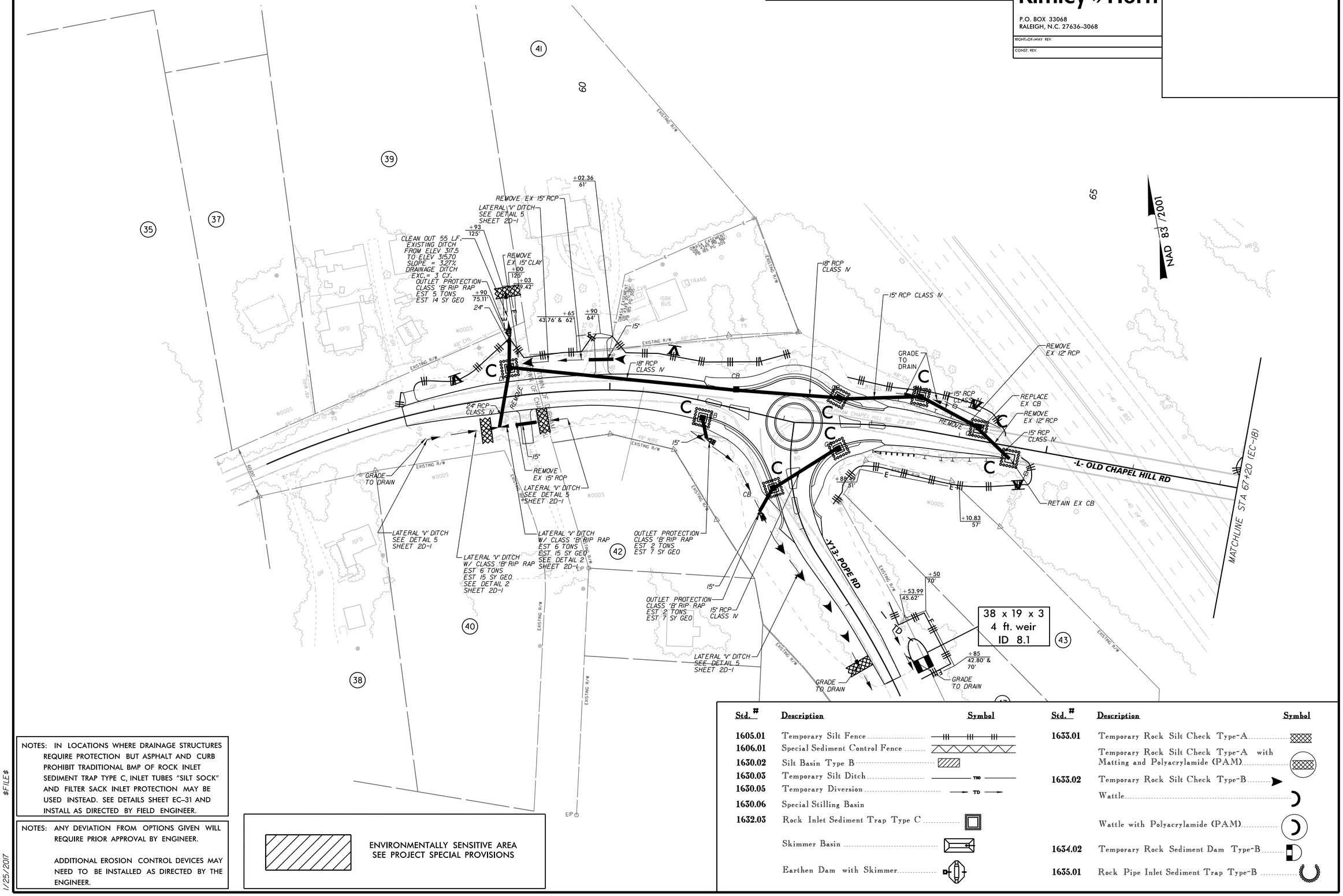
RALEIGH, N.C. 27636-3068

RIGHT-OF-WAY REV.

CONST. REV.

PROJECT REFERENCE NO.	SHEET NO.
EB-4707B	EC-17
R/W SHEET NO.	8



NOTES: IN LOCATIONS WHERE DRAINAGE STRUCTURES REQUIRE PROTECTION BUT ASPHALT AND CURB PROHIBIT TRADITIONAL BMP OF ROCK INLET SEDIMENT TRAP TYPE C, INLET TUBES "SILT SOCK" AND FILTER SACK INLET PROTECTION MAY BE USED INSTEAD. SEE DETAILS SHEET EC-31 AND INSTALL AS DIRECTED BY FIELD ENGINEER.

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

Std. #	Description	Symbol
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1630.02	Silt Basin Type B	
1630.03	Temporary Silt Ditch	TSD
1630.05	Temporary Diversion	TD
1630.06	Special Stilling Basin	
1632.03	Rock Inlet Sediment Trap Type C	
	Skimmer Basin	
	Earthen Dam with Skimmer	

Std. #	Description	Symbol
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	
	Wattle with Polyacrylamide (PAM)	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.01	Rock Pipe Inlet Sediment Trap Type-B	

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1/25/2017

FINAL CONSTRUCTION PHASE
SEE SHEET EC-6 FOR THE CLEARING AND GRUBBING PHASE.

Kimley»Horn
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RALEIGH, N.C. 27636-3068

RIGHT-OF-WAY REV.
CONST. REV.

PROJECT REFERENCE NO.	SHEET NO.
EB-4707B	EC-18
RW SHEET NO.	9

NAD 83/2001

-Y14- MT MORIAH RD

-L- OLD CHAPEL HILL RD

-Y15- PIN OAK DR

MATCHLINE STA 67+20 (EC-17)

MATCHLINE STA 80+00 (EC-19)

REMOVE EX 15" RCP

15" RCP CLASS IV

LATERAL "V" DITCH SEE DETAIL 5 SHEET 2D-1

REMOVE EX 18" RCP

REMOVE EX CB

REMOVE EX DI

NOTES: IN LOCATIONS WHERE DRAINAGE STRUCTURES REQUIRE PROTECTION BUT ASPHALT AND CURB PROHIBIT TRADITIONAL BMP OF ROCK INLET SEDIMENT TRAP TYPE C, INLET TUBES "SILT SOCK" AND FILTER SACK INLET PROTECTION MAY BE USED INSTEAD. SEE DETAILS SHEET EC-31 AND INSTALL AS DIRECTED BY FIELD ENGINEER.

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

Std. #	Description	Symbol
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1630.02	Silt Basin Type B	
1630.03	Temporary Silt Ditch	TSD
1630.05	Temporary Diversion	TD
1630.06	Special Stilling Basin	
1632.03	Rock Inlet Sediment Trap Type C	
	Skimmer Basin	
	Earthen Dam with Skimmer	

Std. #	Description	Symbol
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	
	Wattle with Polyacrylamide (PAM)	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.01	Rock Pipe Inlet Sediment Trap Type-B	

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1/25/2017

FINAL CONSTRUCTION PHASE
SEE SHEET EC-7 FOR THE CLEARING AND GRUBBING PHASE.

Kimley»Horn
P.O. BOX 33068
RALEIGH, N.C. 27636–3068

RIGHT-OF-WAY REV.
CONST. REV.

PROJECT REFERENCE NO.	SHEET NO.
EB-4707B	EC-19
R/W SHEET NO.	10

NAD 83/2001

MATCHLINE STA 80+00 (EC-18)

MATCHLINE STA 93+20 (EC-20)

-Y16-

-Y17- FIVE OAKS DR

-L- OLD CHAPEL HILL RD

54 x 27 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
5 ft. weir
ID 10.1

NOTES: IN LOCATIONS WHERE DRAINAGE STRUCTURES REQUIRE PROTECTION BUT ASPHALT AND CURB PROHIBIT TRADITIONAL BMP OF ROCK INLET SEDIMENT TRAP TYPE C, INLET TUBES "SILT SOCK" AND FILTER SACK INLET PROTECTION MAY BE USED INSTEAD. SEE DETAILS SHEET EC-31 AND INSTALL AS DIRECTED BY FIELD ENGINEER.

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

Std. #	Description	Symbol
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1630.02	Silt Basin Type B	
1630.03	Temporary Silt Ditch	TSD
1630.05	Temporary Diversion	TD
1630.06	Special Stilling Basin	
1632.03	Rock Inlet Sediment Trap Type C	
	Skimmer Basin	
	Earthen Dam with Skimmer	

Std. #	Description	Symbol
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	
	Wattle with Polyacrylamide (PAM)	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.01	Rock Pipe Inlet Sediment Trap Type-B	

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1/25/2017

FINAL CONSTRUCTION PHASE
SEE SHEET EC-8 FOR THE CLEARING AND GRUBBING PHASE.

Kimley»Horn
P.O. BOX 33068
RALEIGH, N.C. 27636–3068

RIGHT-OF-WAY REV.

CONST. REV.

PROJECT REFERENCE NO.	SHEET NO.
EB-4707B	EC-20
R/W SHEET NO.	11

SEE SHEET EC-25 FOR CULVERT CONSTRUCTION PHASING AND EROSION CONTROL MEASURES

NAD 83 /2001

MATCHLINE STA 93+20 (EC-19)

MATCHLINE STA 106+25 (EC-21)

-L- CHAPEL HILL RD

-Y18-SW DURHAM DR

-Y18A FARRINGTON RD

REMOVE EX 15" RCP

REMOVE EX 12" RCP

REMOVE EX 12" RCP

15" RCP CLASS IV

REMOVE EX CB AND INSTALL CONC. COLLAR

REMOVE EX 18" RCP

18" RCP CLASS IV

18" RCP CLASS IV

REMOVE EX CB AND INSTALL CONC. COLLAR

REMOVE

18" RCP CLASS IV

REMOVE EX CB

REMOVE EX 15" RCP AND PLUG EX CB

RETAIN EX CB

RETAIN EX CB

RETAIN EX 24" RCP

RETAIN EX 24" RCP

REMOVE EX 18" RCP

18" RCP CLASS IV

REMOVE EX CURB INLET PLUG, FILL AND ABANDON EX 18" RCP

REMOVE EX 15" RCP

RETAIN EX 24" RCP

RETAIN EX 24" RCP

RETAIN EX 24" RCP

REMOVE EX 24" RCP AND PLUG EX CURB INLET

RETAIN EX CURB INLET

RETAIN EX CB TIE PROP 15" TO EXIST CB

REMOVE EX 15" RCP, AND MH

RETAIN EX CB

RETAIN EX CB

TIE EX SYSTEM TO PROPOSED 24"

REMOVE EX 24" RCP

GRADE TO DRAIN

GRADE TO DRAIN

JURISDICTIONAL STREAM

REMOVE EX 10' x 6' RCBC

2 @ 10'x7' RCBC (BURIED 1')

OUTLET PROTECTION CLASS II RIP RAP EST 5 TONS EST 10 SY GEO

INLET CHANNEL IMPROVEMENTS CLASS "II" RIP RAP EST 85 TONS EST 105 SY GEO SEE DETAIL 7 SHEET 2D-1

TIE PROP 24" RCP INTO SIDE OF PROP RCBC

24" RCP CLASS IV

SANITARY SEWER TO REMAIN

REMOVE EX 18" RCP

24" RCP CLASS IV

24" RCP CLASS IV

24" RCP CLASS IV

30" RCP CLASS IV

15" RCP CLASS IV

30" RCP

30" RCP CLASS IV

REMOVE EX 24" RCP

REMOVE EX BLIND JB AND EX 18" RCP

OUTLET PROTECTION CLASS 'B' RIP RAP EST 8 TON EST 21 SY GEO

LATERAL 2.5' BASE DITCH W/ CLASS 'B' RIP RAP EST 90 TONS EST 195 SY GEO SEE DETAIL 6 SHEET 2D-1

CULVERT CONSTRUCTION PHASING SHEET EC-25

OUTLET CHANNEL IMPROVEMENTS CLASS "II" RIP RAP EST 50 TONS EST 60 SY GEO SEE DETAIL 8 SHEET 2D-1

RETAIN EX 15" RCP

NOTES: IN LOCATIONS WHERE DRAINAGE STRUCTURES REQUIRE PROTECTION BUT ASPHALT AND CURB PROHIBIT TRADITIONAL BMP OF ROCK INLET SEDIMENT TRAP TYPE C, INLET TUBES "SILT SOCK" AND FILTER SACK INLET PROTECTION MAY BE USED INSTEAD. SEE DETAILS SHEET EC-31 AND INSTALL AS DIRECTED BY FIELD ENGINEER.

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

Std. #	Description	Symbol
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1630.02	Silt Basin Type B	
1630.03	Temporary Silt Ditch	TSD
1630.05	Temporary Diversion	TD
1630.06	Special Stilling Basin	
1632.03	Rock Inlet Sediment Trap Type C	
	Skimmer Basin	
	Earthen Dam with Skimmer	

Std. #	Description	Symbol
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	
	Wattle with Polyacrylamide (PAM)	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.01	Rock Pipe Inlet Sediment Trap Type-B	

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FINAL CONSTRUCTION PHASE

SEE SHEET EC-9 FOR THE CLEARING AND GRUBBING PHASE.

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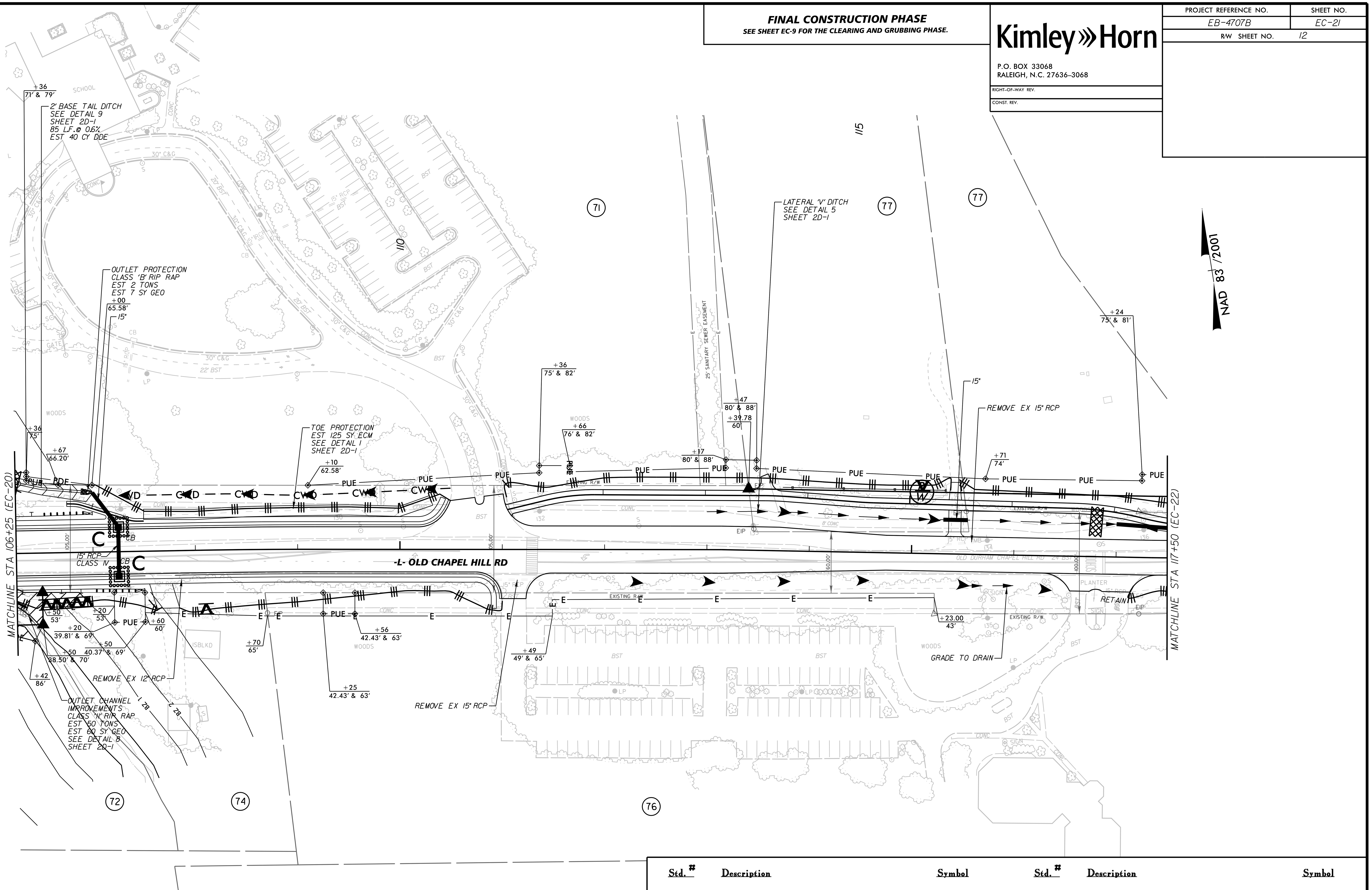
RIGHT-OF-WAY REV.

CONST. REV.

PROJECT REFERENCE NO.	SHEET NO.
EB-4707B	EC-21
R/W SHEET NO.	12



NOTES: IN LOCATIONS WHERE DRAINAGE STRUCTURES REQUIRE PROTECTION BUT ASPHALT AND CURB PROHIBIT TRADITIONAL BMP OF ROCK INLET SEDIMENT TRAP TYPE C, INLET TUBES "SILT SOCK" AND FILTER SACK INLET PROTECTION MAY BE USED INSTEAD. SEE DETAILS SHEET EC-31 AND INSTALL AS DIRECTED BY FIELD ENGINEER.

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

Std. #	Description	Symbol
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1630.02	Silt Basin Type B	
1630.03	Temporary Silt Ditch	TSD
1630.05	Temporary Diversion	TD
1630.06	Special Stilling Basin	
1632.03	Rock Inlet Sediment Trap Type C	
	Skimmer Basin	
	Earthen Dam with Skimmer	
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	
	Wattle with Polyacrylamide (PAM)	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.01	Rock Pipe Inlet Sediment Trap Type-B	

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FINAL CONSTRUCTION PHASE
SEE SHEET EC-10 FOR THE CLEARING AND GRUBBING PHASE.

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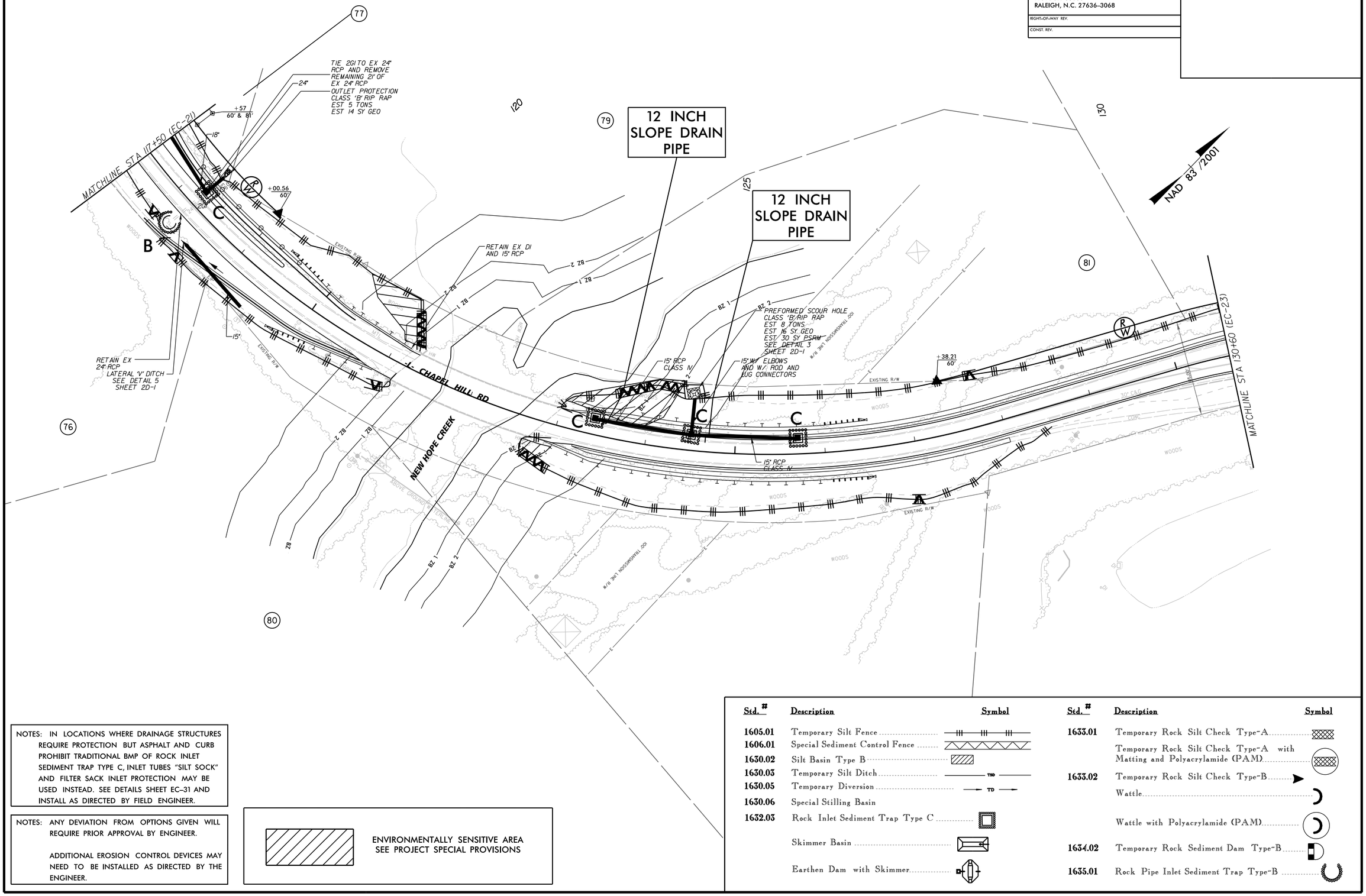
RIGHT-OF-WAY REV.
CONST. REV.

PROJECT REFERENCE NO.	SHEET NO.
EB-4707B	EC-22
R/W SHEET NO.	13



NOTES: IN LOCATIONS WHERE DRAINAGE STRUCTURES REQUIRE PROTECTION BUT ASPHALT AND CURB PROHIBIT TRADITIONAL BMP OF ROCK INLET SEDIMENT TRAP TYPE C, INLET TUBES "SILT SOCK" AND FILTER SACK INLET PROTECTION MAY BE USED INSTEAD. SEE DETAILS SHEET EC-31 AND INSTALL AS DIRECTED BY FIELD ENGINEER.

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

Std. #	Description	Symbol
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1630.02	Silt Basin Type B	
1630.03	Temporary Silt Ditch	TSD
1630.05	Temporary Diversion	TD
1630.06	Special Stilling Basin	
1632.03	Rock Inlet Sediment Trap Type C	
	Skimmer Basin	
	Earthen Dam with Skimmer	

Std. #	Description	Symbol
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	
	Wattle with Polyacrylamide (PAM)	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.01	Rock Pipe Inlet Sediment Trap Type-B	

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FINAL CONSTRUCTION PHASE
SEE SHEET EC-11 FOR THE CLEARING AND GRUBBING PHASE.

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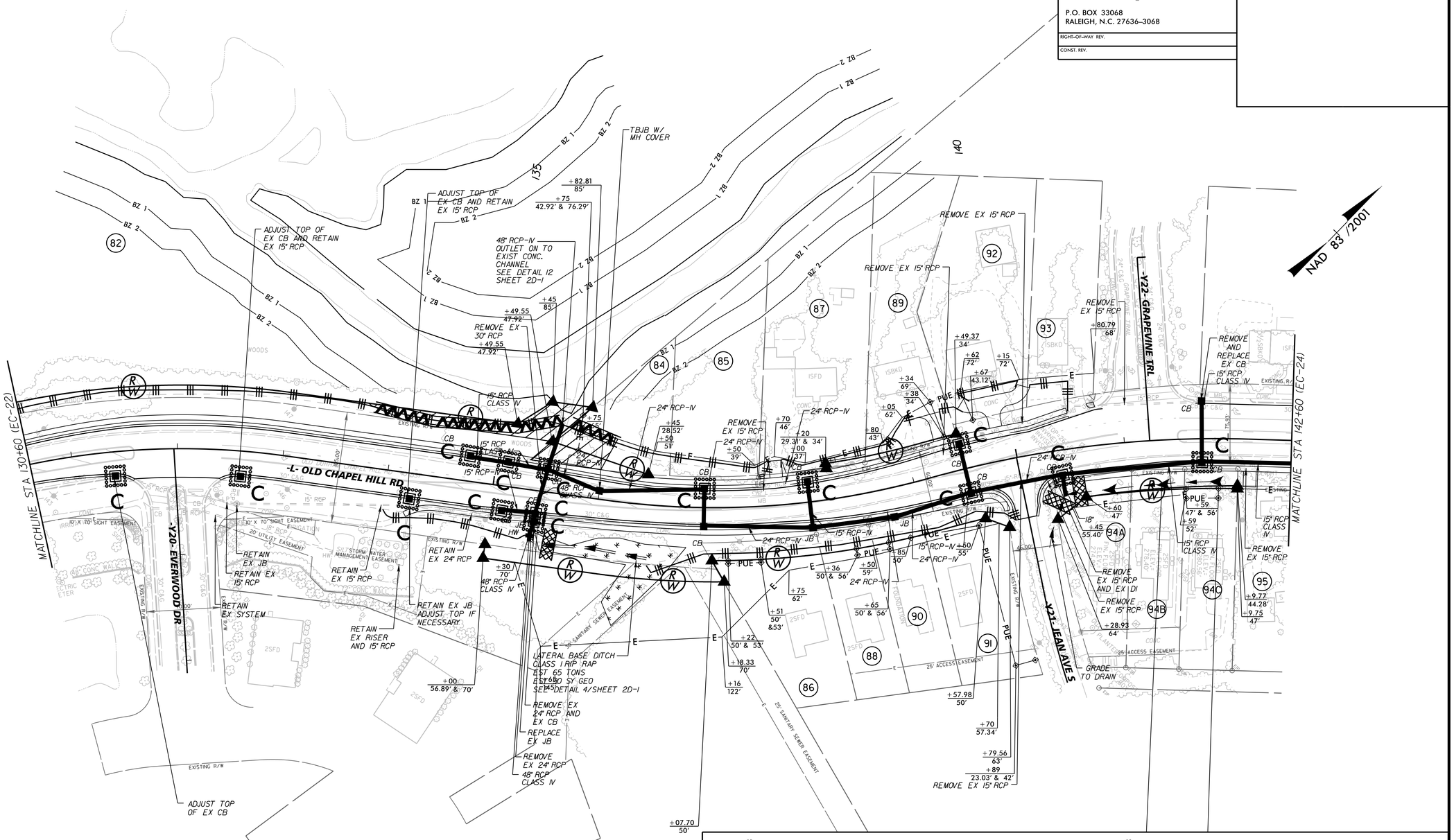
PROJECT REFERENCE NO.	SHEET NO.
EB-4707B	EC-23
R/W SHEET NO.	14



NOTES: IN LOCATIONS WHERE DRAINAGE STRUCTURES REQUIRE PROTECTION BUT ASPHALT AND CURB PROHIBIT TRADITIONAL BMP OF ROCK INLET SEDIMENT TRAP TYPE C, INLET TUBES "SILT SOCK" AND FILTER SACK INLET PROTECTION MAY BE USED INSTEAD. SEE DETAILS SHEET EC–31 AND INSTALL AS DIRECTED BY FIELD ENGINEER.

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

Std. #	Description	Symbol
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1630.02	Silt Basin Type B	
1630.03	Temporary Silt Ditch	TSD
1630.05	Temporary Diversion	TD
1630.06	Special Stilling Basin	
1632.03	Rock Inlet Sediment Trap Type C	
	Skimmer Basin	
	Earthen Dam with Skimmer	

Std. #	Description	Symbol
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	
	Wattle with Polyacrylamide (PAM)	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.01	Rock Pipe Inlet Sediment Trap Type-B	

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FINAL CONSTRUCTION PHASE
SEE SHEET EC-12 FOR THE CLEARING AND GRUBBING PHASE.

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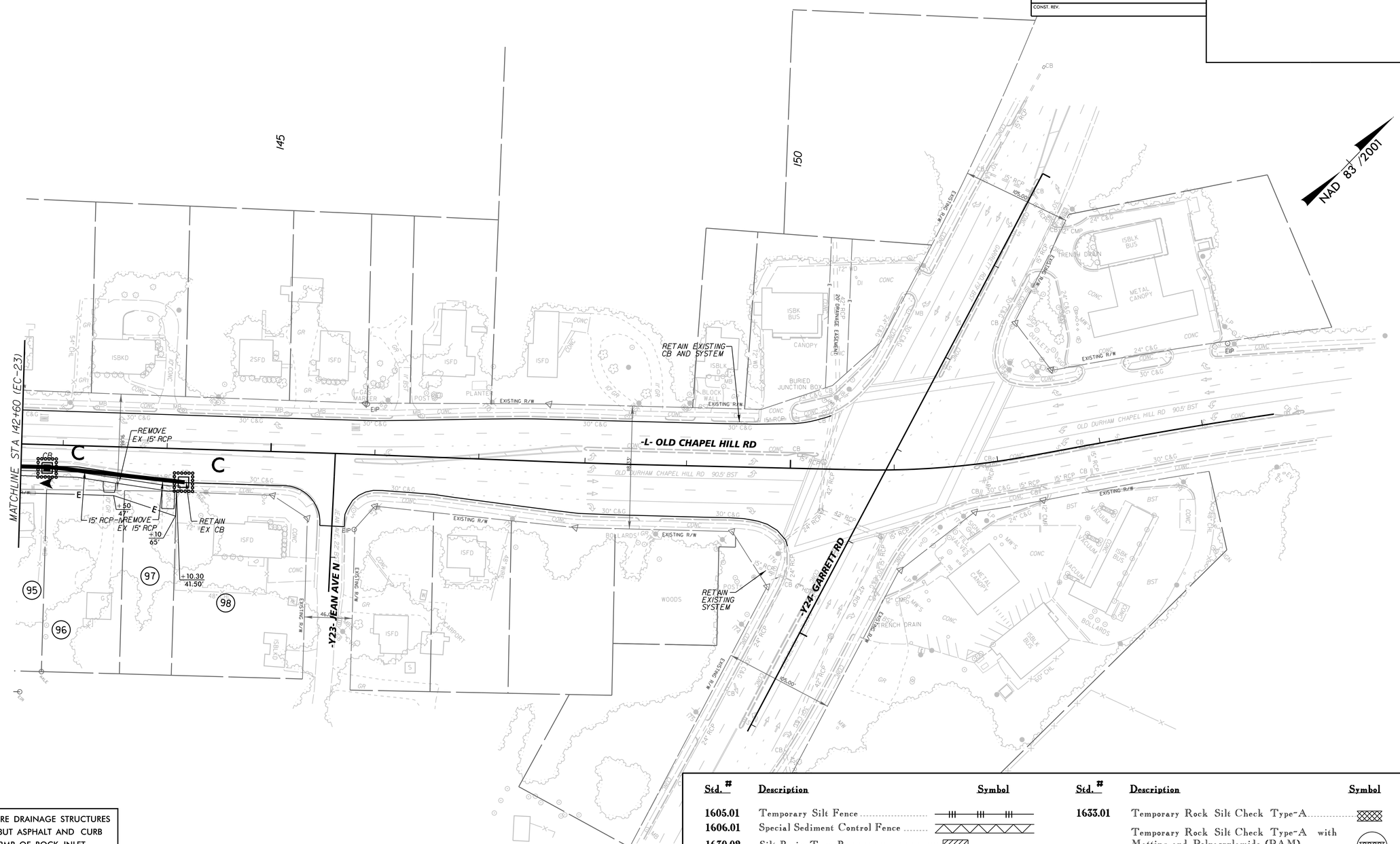
RIGHT-OF-WAY REV.

CONST. REV.

PROJECT REFERENCE NO.	SHEET NO.
EB-4707B	EC-24
R/W SHEET NO. 15	



NOTES: IN LOCATIONS WHERE DRAINAGE STRUCTURES REQUIRE PROTECTION BUT ASPHALT AND CURB PROHIBIT TRADITIONAL BMP OF ROCK INLET SEDIMENT TRAP TYPE C, INLET TUBES "SILT SOCK" AND FILTER SACK INLET PROTECTION MAY BE USED INSTEAD. SEE DETAILS SHEET EC-31 AND INSTALL AS DIRECTED BY FIELD ENGINEER.

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

Std. #	Description	Symbol
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1630.02	Silt Basin Type B	
1630.03	Temporary Silt Ditch	TSD
1630.05	Temporary Diversion	TD
1630.06	Special Stilling Basin	
1632.03	Rock Inlet Sediment Trap Type C	
	Skimmer Basin	
	Earthen Dam with Skimmer	

Std. #	Description	Symbol
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	
	Wattle with Polyacrylamide (PAM)	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.01	Rock Pipe Inlet Sediment Trap Type-B	

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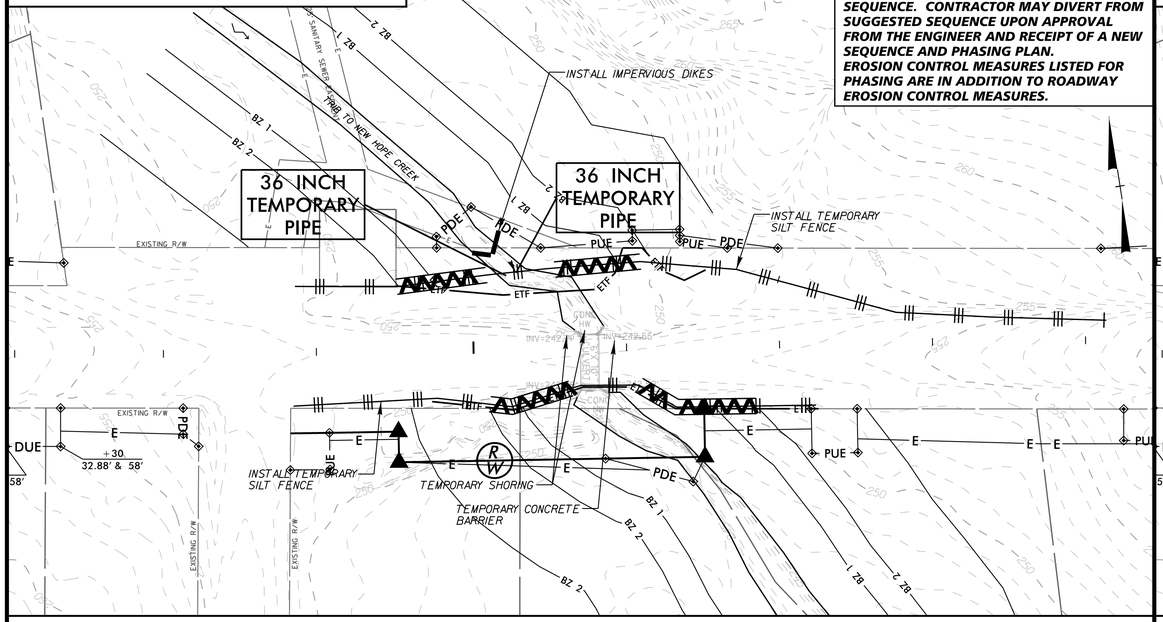
PROJECT REFERENCE NO.	SHEET NO.
EB-4707B	EC-25

CULVERT CONSTRUCTION - PHASE 1

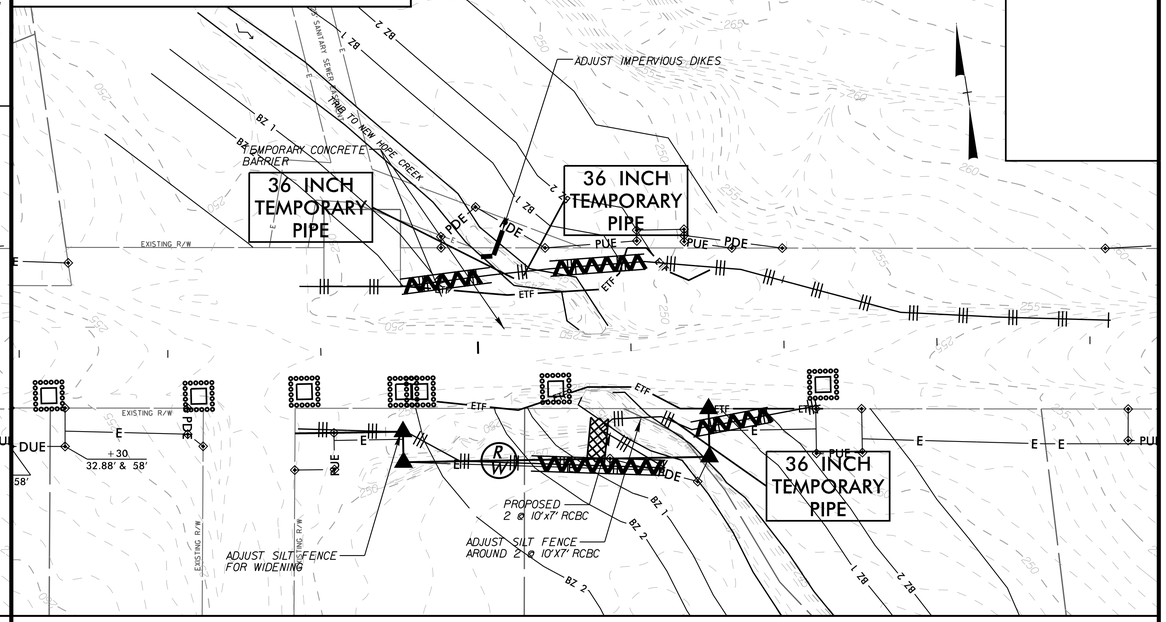
NOTE:
CULVERT CONSTRUCTION PHASING LISTED BELOW SHALL BE USED AS A SUGGESTED SEQUENCE. CONTRACTOR MAY DIVERT FROM SUGGESTED SEQUENCE UPON APPROVAL FROM THE ENGINEER AND RECEIPT OF A NEW SEQUENCE AND PHASING PLAN. EROSION CONTROL MEASURES LISTED FOR PHASING ARE IN ADDITION TO ROADWAY EROSION CONTROL MEASURES.



CULVERT PHASING - PHASE 1

1. INSTALL PORTABLE CONCRETE BARRIER (PCB) ALONG -L-.
2. INSTALL EAST TEMPORARY PIPE FROM EXISTING CHANNEL TO EXISTING CULVERT.
3. INSTALL TEMPORARY IMPERVIOUS DIKES AND DIVERT WATER THROUGH EAST TEMPORARY PIPE INTO EXISTING CULVERT.
4. REMOVE EXISTING WING WALLS ON NORTH SIDE OF EXISTING CULVERT.
5. INSTALL TEMPORARY SHORING ALONG -L- BEHIND PCB.
6. INSTALL WEST TEMPORARY PIPE FROM EXISTING CHANNEL AND SEAL END AT TEMPORARY SHORING.
7. CONSTRUCT TEMPORARY DETOUR ALIGNMENT.

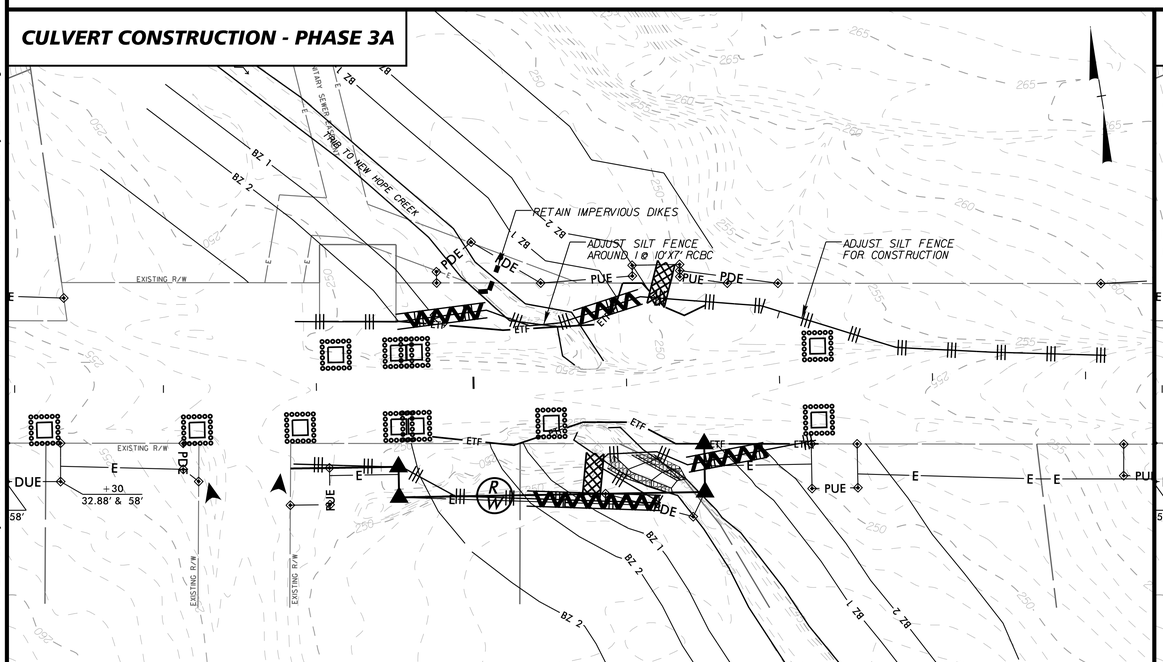
CULVERT CONSTRUCTION - PHASE 2



CULVERT PHASING - PHASE 2

1. INSTALL PCB ON DETOUR ALIGNMENT AND PLACE TRAFFIC ON DETOUR.
2. INSTALL TEMPORARY PIPE ADJACENT TO PROPOSED CULVERT LOCATION.
3. EXTEND EAST TEMPORARY PIPE (INSTALLED IN PHASE 1) TO NEW TEMPORARY PIPE AND DIVERT WATER INTO NEW PIPE.
4. REMOVE THE EXISTING CULVERT.
5. CONSTRUCT BOTH BARRELS OF THE NEW CULVERT (SOUTH PORTION ONLY).
6. EXTEND WEST TEMPORARY PIPE PLACED THROUGH TEMPORARY SHORING (INSTALLED DURING PHASE 1) THROUGH THE WEST BARREL OF THE NEW CULVERT.
7. ADJUST TEMPORARY IMPERVIOUS DIKES AND DIVERT WATER TO THE WEST TEMPORARY PIPE.
8. REMOVE THE SOUTH PORTION OF THE EAST TEMPORARY PIPE LOCATED OUTSIDE THE NEW CULVERT.
9. CONSTRUCT NEW WING WALLS ON SOUTH END OF THE NEW CULVERT.

CULVERT CONSTRUCTION - PHASE 3A

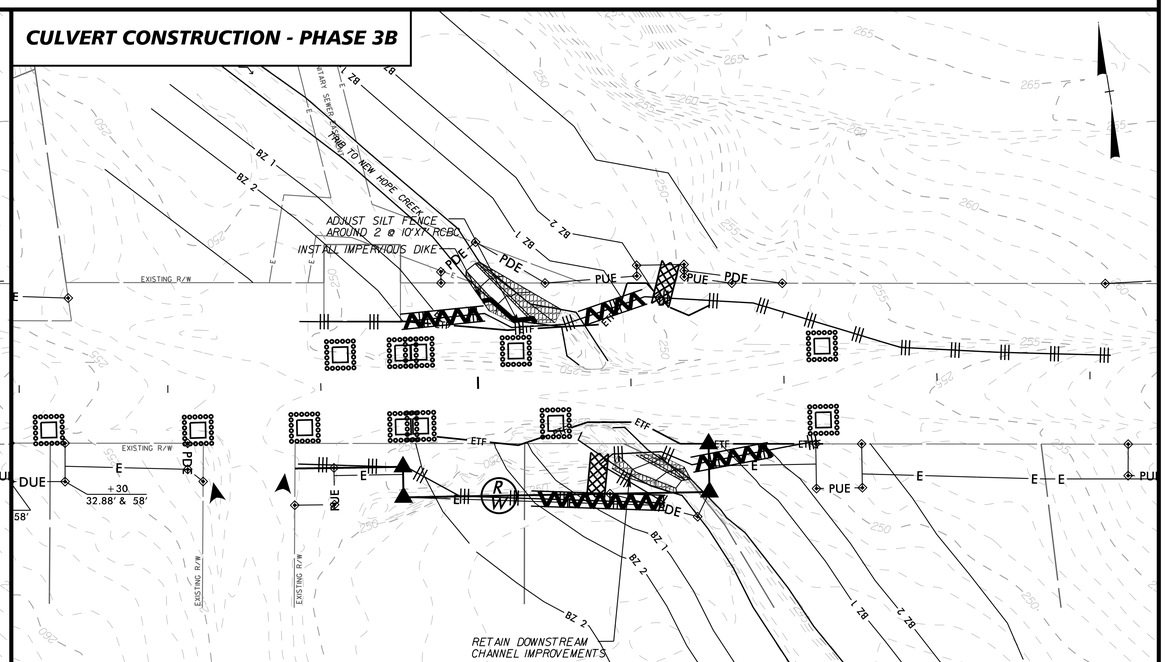


CULVERT PHASING - PHASE 3

PART A:

1. CONSTRUCT DOWNSTREAM CHANNEL IMPROVEMENTS AND INSTALL RIP RAP ALONG BANKS.
2. INSTALL PCB ALONG -L- AND PLACE TRAFFIC ON NEW WIDENING SECTION.
3. REMOVE DETOUR PAVEMENT.
4. REMOVE REMAINDER OF EAST TEMPORARY PIPE.
5. CONSTRUCT FINAL PORTION OF THE EAST BARREL OF THE NEW CULVERT INCLUDING WING WALL.

CULVERT CONSTRUCTION - PHASE 3B



PART B:

6. ADJUST TEMPORARY IMPERVIOUS DIKES AND DIVERT WATER INTO EAST BARREL OF NEW CULVERT.
7. REMOVE WEST TEMPORARY PIPE AND CONSTRUCT REMAINING PORTION OF THE WEST BARREL OF THE NEW CULVERT INCLUDING WING WALL
8. REMOVE TEMPORARY IMPERVIOUS DIKES
9. CONSTRUCT UPSTREAM CHANNEL IMPROVEMENTS.

K:\RAL_Roadway\01\036290 - EB-4707 Part B\Plan\Plan Sheets\EB-4707_rdy_ER025.dgn

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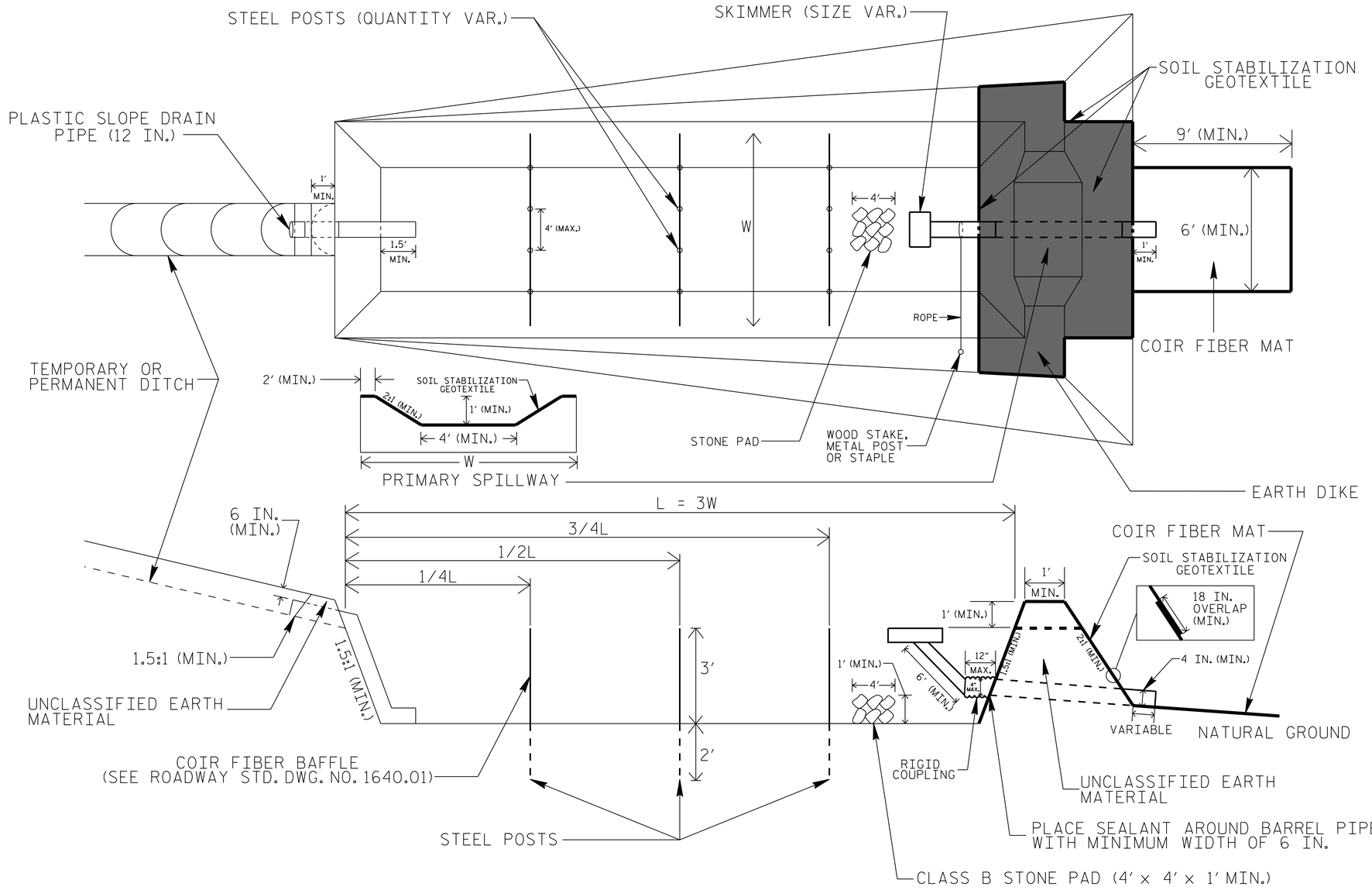
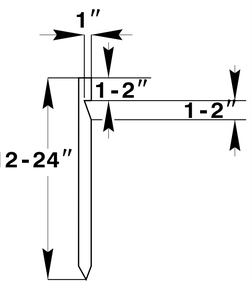
PROJECT REFERENCE NO.	SHEET NO.
EB-4707B	EC-26

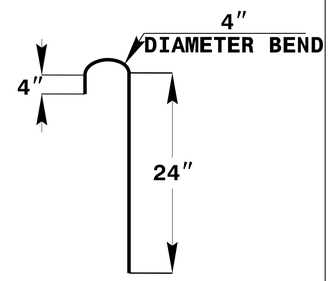
SKIMMER BASIN WITH BAFFLES DETAIL



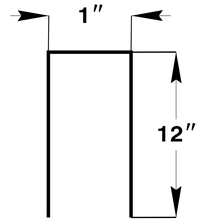
2" x 2" (nominal) WOODEN STAKE



#10 STEEL REINFORCEMENT BAR



1" (nominal) STAPLE



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 PRIMARY SPILLWAY WEIR 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 OR TARP AS DIRECTED.
6. SOIL STABILIZATION GEOTEXTILE FOR PRIMARY SPILLWAY SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18 IN. (MIN.).

NOT TO SCALE

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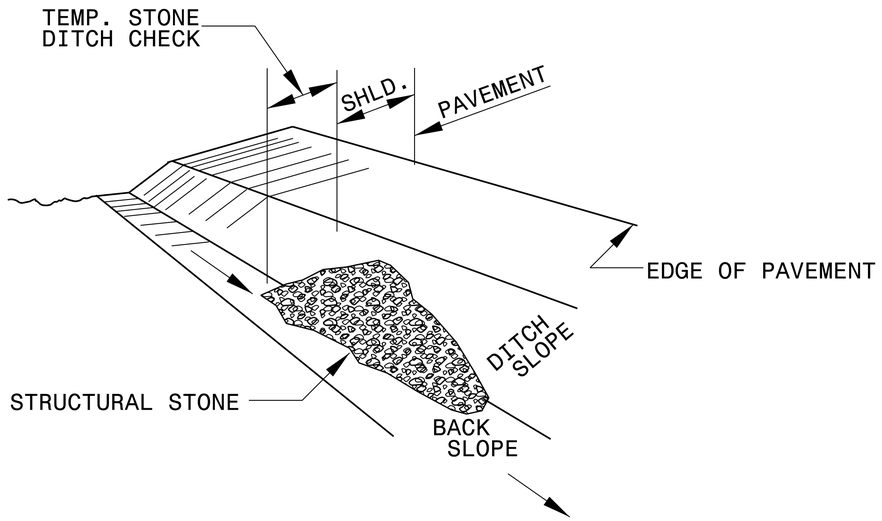
CONST. REV.

PROJECT REFERENCE NO.	SHEET NO.
EB-4707B	EC-27

TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL

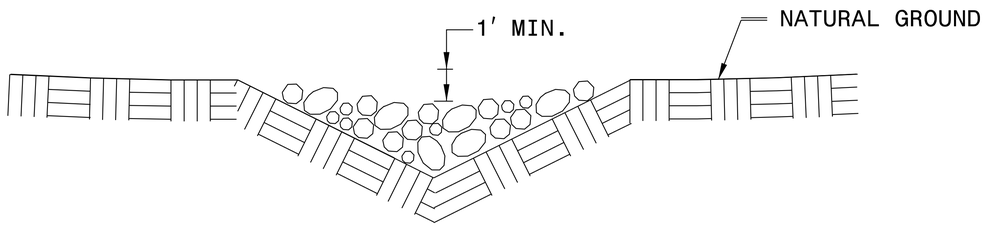


ISOMETRIC VIEW

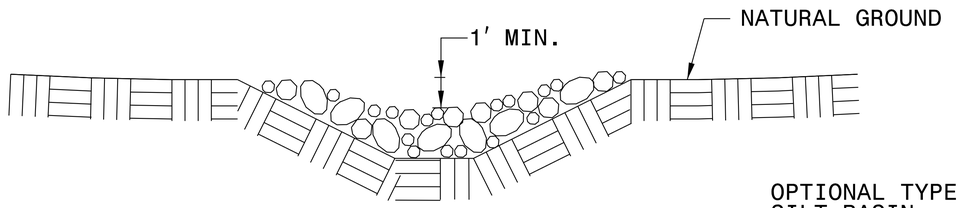
NOTES:

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

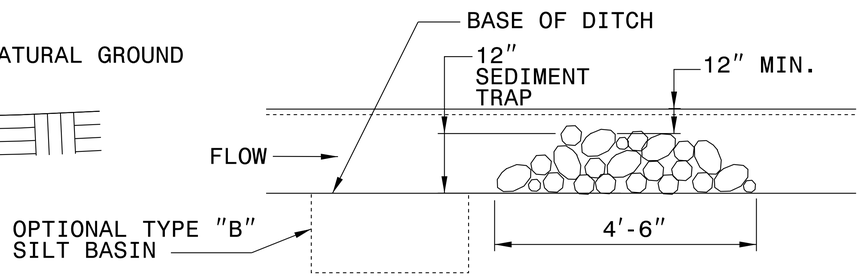
THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



CROSS SECTION
VEE DITCH



CROSS SECTION
TRAPEZOIDAL DITCH



ELEVATION VIEW

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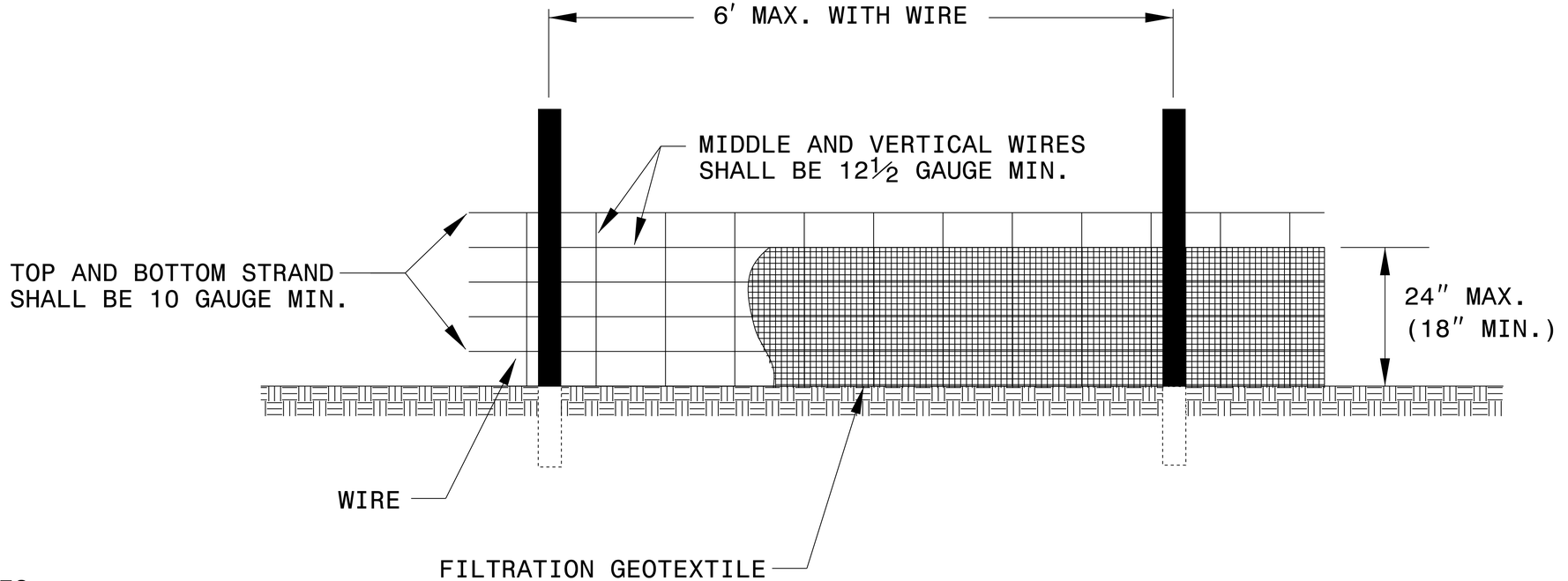
PROJECT REFERENCE NO.	SHEET NO.
EB-4707B	EC-28

RIGHT-OF-WAY REV.

CONST. REV.

REINFORCED TEMPORARY SILT FENCE DETAIL



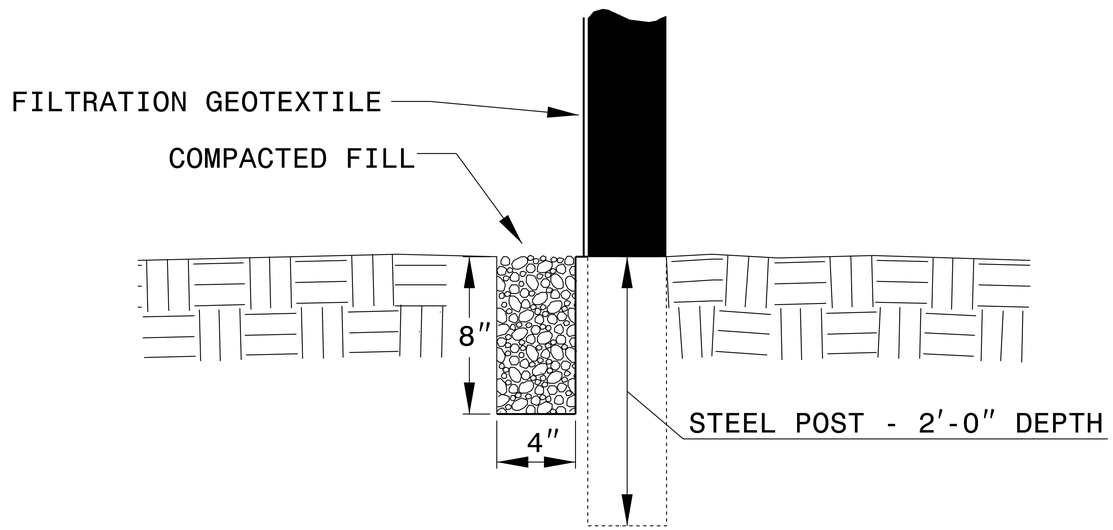
NOTES

USE FILTRATION GEOTEXTILE A MINIMUM OF 36″ IN WIDTH AND FASTEN ADEQUATELY TO THE POSTS AND WIRE AS DIRECTED.

USE WIRE A MINIMUM OF 32″ IN WIDTH AND WITH A MINIMUM OF 6 LINE WIRES WITH 12″ STAY SPACING.

PROVIDE 5′-0″ STEEL POST OF THE SELF-FASTENER ANGLE STEEL TYPE.

FOR MECHANICAL SLICING METHOD INSTALLATION, GEOTEXTILE SHALL BE A MAXIMUM OF 18″ ABOVE GROUND SURFACE.



EXTENSION OF GEOTEXTILE AND WIRE INTO TRENCH

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1/25/2017

SILT BASIN 'B' DETAIL

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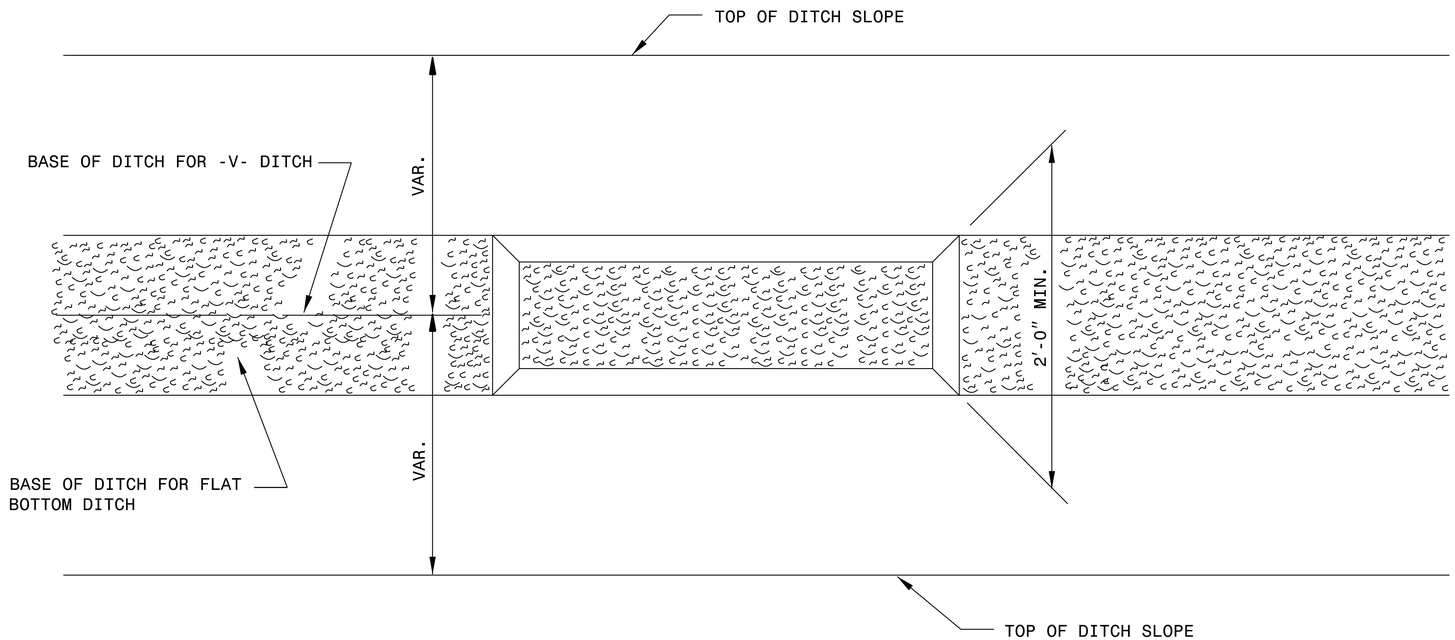
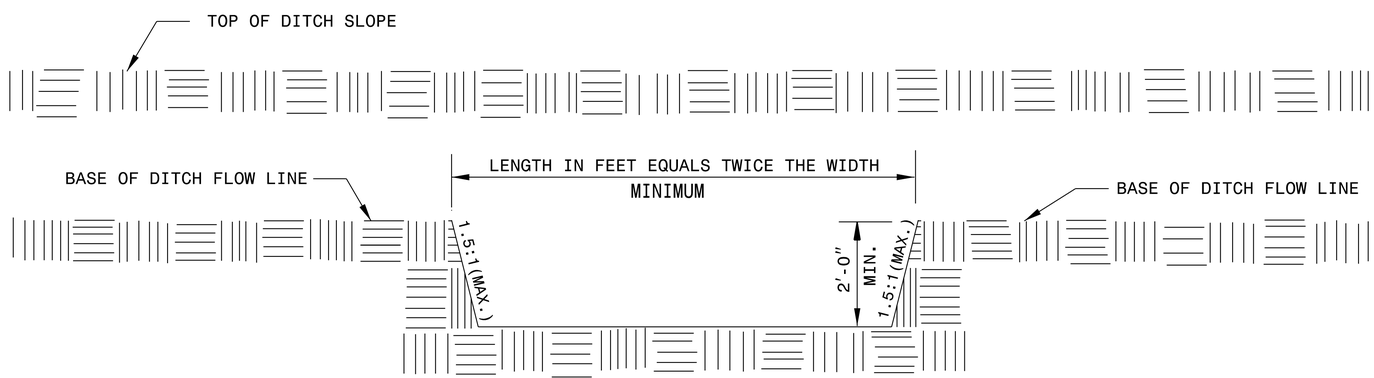
PROJECT REFERENCE NO.	SHEET NO.
EB-4707B	EC-29



PLAN



ELEVATION

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RIGHT-OF-WAY REV.

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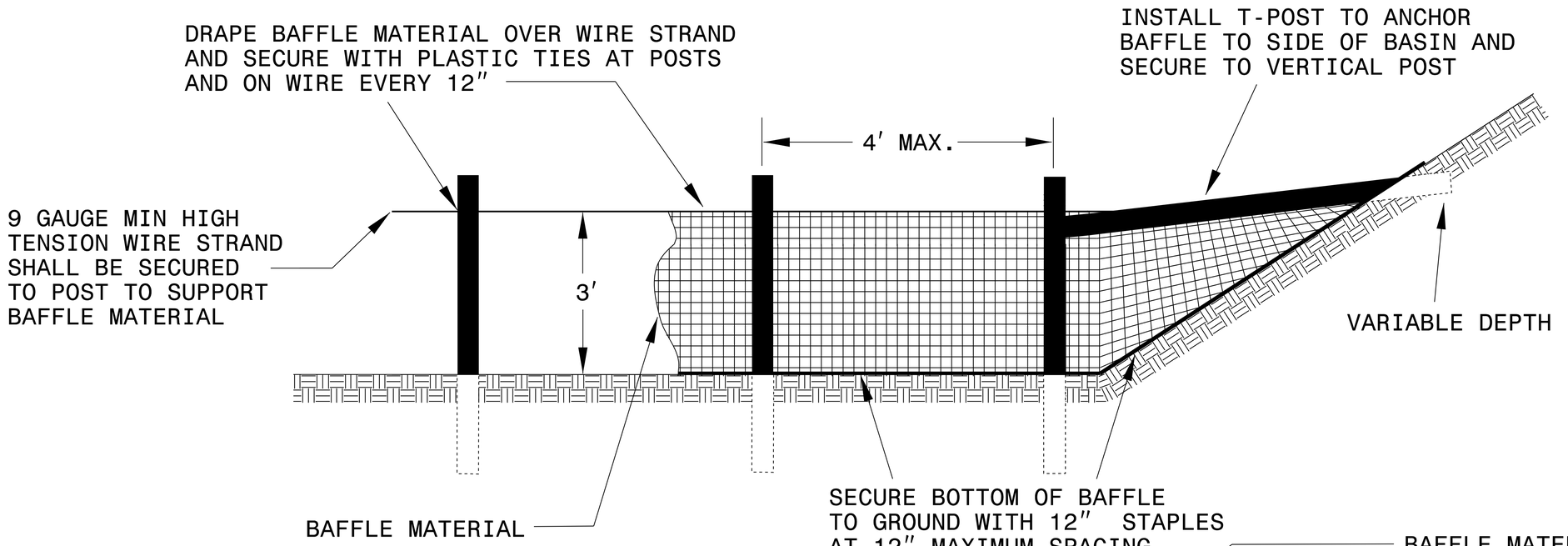
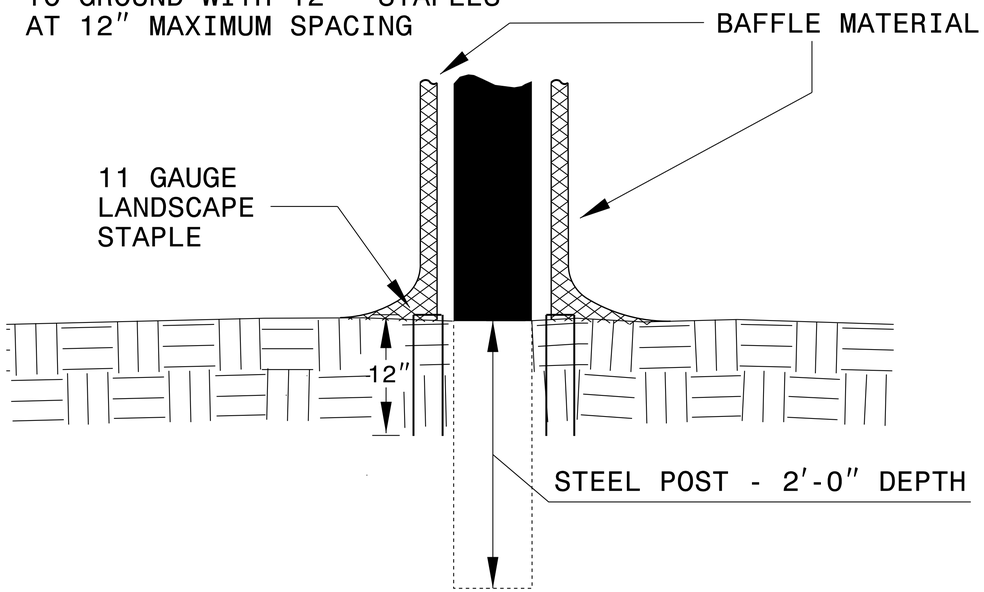
PROJECT REFERENCE NO.	SHEET NO.
EB-4707B	EC-30

COIR FIBER BAFFLE DETAIL





BAFFLE MATERIAL SHALL BE SECURED TO THE BOTTOM AND SIDES OF BASIN USING 12″ LANDSCAPE STAPLES

NOTES:

1. INSTALL THREE(3) COIR FIBER BAFFLES IN SILT BASINS AND SEDIMENT DAMS AT DRAINAGE OUTLETS WITH A SPACING OF ¼ THE BASIN LENGTH.

2. TWO(2) COIR FIBER BAFFLES CAN BE INSTALLED IN SILT BASINS AND DAMS LESS THAN 20 FT. IN LENGTH WITH A SPACING OF 1/3 THE BASIN LENGTH.

3. TOP HEIGHT OF COIR FIBER BAFFLES SHALL NOT BE BELOW BASE OF EMERGENCY SPILLWAY ELEVATION.

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1/25/2017

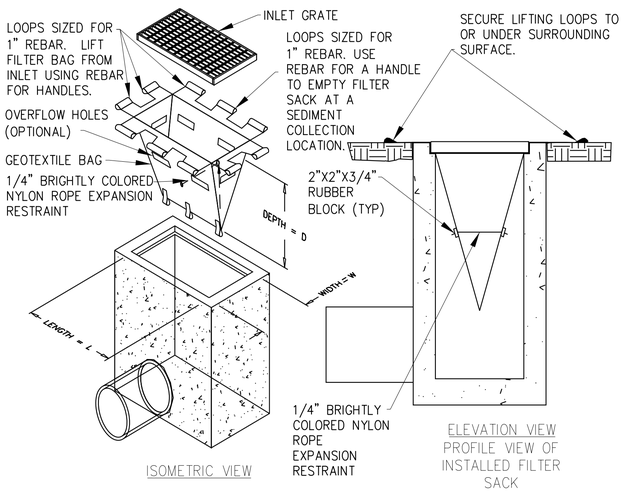
PROJECT REFERENCE NO.	SHEET NO.
EB-4707B	EC-31

Kimley»Horn
P.O. BOX 33068
RALEIGH, N.C. 27636-3068

RIGHT-OF-WAY REV.

CONST. REV.

FILTER SACK INLET PROTECTION

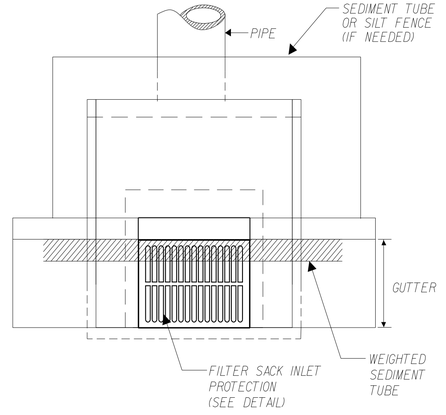


1. EMPTY FILTER SACK WHEN BRIGHTLY COLORED EXPANSION RESTRAINT CAN NO LONGER BE SEEN.
2. GEOTEXTILE WILL BE A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS REQUIREMENTS IN THE SPECIFICATIONS TABLE.
3. AN OIL ADSORBENT PAD OR PILLOW CAN BE PURCHASED WHEN OIL SPILLS ARE A CONCERN.
4. INSPECT PER REGULATORY REQUIREMENTS.
5. THE WIDTH, "W", OF THE FILTER SACK WILL MATCH THE INSIDE WIDTH OF THE GRATED INLET BOX.
6. THE DEPTH, "D", OF THE FILTER SACK WILL BE BETWEEN 18 INCHES AND 36 INCHES.
7. THE LENGTH, "L", OF THE FILTER SACK WILL MATCH THE INSIDE LENGTH OF THE GRATED INLET BOX.

LOW TO MODERATE FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE		
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	300 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4833	120 LBS
MULLEN BURST	ASTM D-3786	800 PSI
TRAPEZOID TEAR	ASTM D-4533	120 LBS
UV RESISTANCE	ASTM D-4355	80 %
APPARENT OPENING SIZE	ASTM D-4751	40 US SIEVE
FLOW RATE	ASTM D-4491	40 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	0.55 SEC -1
MODERATE TO HIGH FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE		
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	265 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4833	135 LBS
MULLEN BURST	ASTM D-3786	420 PSI
TRAPEZOID TEAR	ASTM D-4533	45 LBS
UV RESISTANCE	ASTM D-4355	90 %
APPARENT OPENING SIZE	ASTM D-4751	20 US SIEVE
FLOW RATE	ASTM D-4491	200 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	1.5 SEC -1

INLET TUBES "SILT SOCK"

NOTE: USE INLET TUBES AS NEEDED TO PREVENT SILT AND DEBRIS FROM ENTERING INLETS DURING CONSTRUCTION.



Inlet Tubes

Materials

Use inlet tubes that exhibit the following properties:
Produced by a Manufacturer experienced in sediment tube manufacturing. Composed of compacted geotextiles, curled excelsior wood, natural coconut fibers or hardwood mulch or a mix of these materials enclosed by a flexible netting material. Do not use straw, straw fiber, straw bales, pine needles or leaf mulch under this specification. Utilize an outer netting that consists of seamless, high-density polyethylene photodegradable materials treated with ultraviolet stabilizers or a seamless, high-density polyethylene non-degradable materials.

Installation:
Install inlet tubes lying flat on the ground, with no gaps between the underlying surface and the inlet tube.

Inspection and Maintenance:
Inlet tubes may be temporarily moved during construction as needed. Replace inlet tubes damaged during installation as directed by the Inspector or Manufacturer's Representative at the contractor's expense.

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DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

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RIGHT-OF-WAY REV.

CONST. REV.

PROJECT REFERENCE NO.	SHEET NO.
EB-4707B	EC-32

SOIL STABILIZATION SUMMARY SHEET

MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
EC-17	L	57+84	58+50	RT	105
EC-17	L	59+00	60+00	RT	170
EC-17	L	58+90	60+00	LT	145
EC-18	L	73+50	75+00	RT	125
EC-19	L	80+00	82+12	RT	300
EC-19	L	82+15	83+00	RT	120
EC-20	L	104+62	106+00	RT	305
EC-20	L	106+16	107+00	LT	115
EC-21	L	111+50	115+50	RT	385
EC-21	L	112+00	113+00	LT	120
EC-21	L	113+00	114+00	LT	105
EC-21	L	114+00	116+00	LT	215
EC-21	L	116+00	117+00	LT	125
EC-17	Y13	12+00	12+50	LT	120
	ERO. MISC.				20570
	ROADWAY				300
				SUBTOTAL	23325
MISC.	MATTING TO BE	INSTALLED AS DIRECTED			250
				TOTAL	23575
				SAY	23600

PERMANENT SOIL REINFORCEMENT MAT

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
EC-17	L	5850	5870	RT	35
EC-17	L	5870	5900	RT	205
EC-17	L	60+00	60+50	RT	70
EC-18	L	7775	7850	RT	65
EC-18	L	7850	8000	RT	145
EC-22	L	11850	11900	RT	45
EC-23	L	14040	14100	RT	75
EC-23	L	14100	14150	RT	55
EC-23	L	14150	14200	RT	45
	ROADWAY				30
			SUBTOTAL		770
	ADDITIONAL PSRM TO BE INSTALLED				75
			TOTAL		845
			SAY		850

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PROJECT REFERENCE NO.	SHEET NO.
EB-4707B	EC-33

SOIL STABILIZATION TIMEFRAMES

SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
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.

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1/25/2017