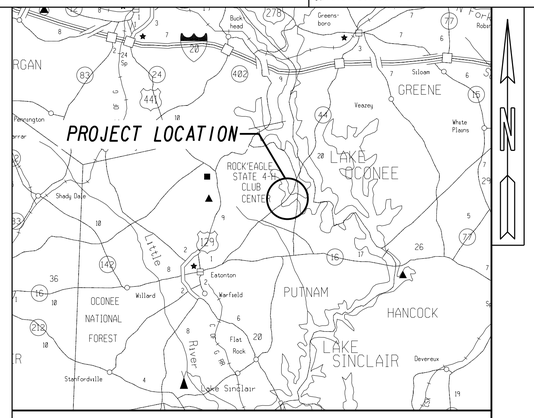
5/8/2019	GPLOT-V8	I:\CUSTOMERS_PROJECTS\1146 Putnam County\1146-19-037 Eng. Services For Guardrail & Survey\4619037\DGN\4619037_01-0001.dgn	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
SOUTHEASTERN ENGINEERING, INC.	gplotborder-V81-P0.tbl	GRNCOV	GA	4619037	1	41



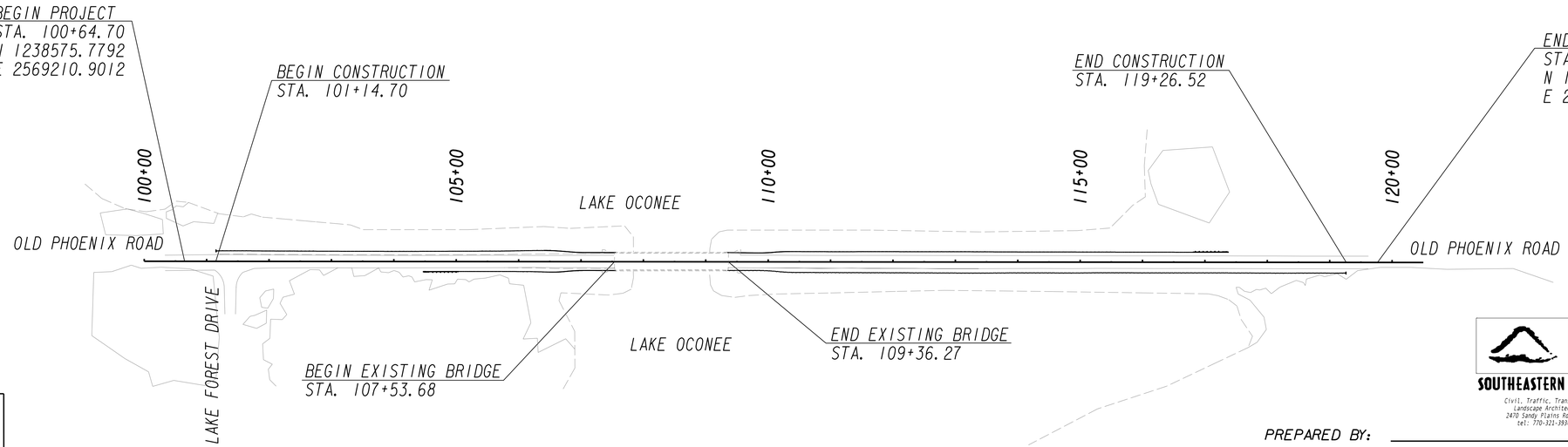
LOCATION SKETCH

PUTNAM COUNTY
BOARD OF COMMISSIONERS

PLAN AND PROFILE OF PROPOSED

OLD PHOENIX ROAD AT LAKE OCONEE
GUARDRAIL REPLACEMENT

FEDERAL ROUTE * N/A
STATE ROUTE * N/A
PROJECT NO. 4619037



THIS PROJECT HAS BEEN PREPARED USING THE HORIZONTAL GEORGIA COORDINATE SYSTEM OF 1984 (NAD 1983)/94 WEST ZONE, AND THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988.

LENGTH OF PROJECT	COUNTY No. 237 Project No. 4619037
	MILES
NET LENGTH OF ROADWAY	0.3275
NET LENGTH OF BRIDGES	0.0346
NET LENGTH OF PROJECT	0.3621
NET LENGTH OF EXCEPTIONS	0.0000
GROSS LENGTH OF PROJECT	0.3621

THE DATA, TOGETHER WITH ALL OTHER INFORMATION SHOWN ON THESE PLANS OR IN ANYWAY INDICATED THEREBY, WHETHER BY DRAWINGS OR NOTES, OR IN ANY OTHER MANNER, ARE BASED UPON FIELD INVESTIGATIONS AND ARE BELIEVED TO BE INDICATIVE OF ACTUAL CONDITIONS. HOWEVER, THE SAME ARE SHOWN AS INFORMATION ONLY, ARE NOT GUARANTEED, AND DO NOT BIND THE DEPARTMENT OF TRANSPORTATION IN ANY WAY. THE ATTENTION OF BIDDER IS SPECIFICALLY DIRECTED TO SUBSECTIONS 102.04, 102.05, AND 104.03 OF THE SPECIFICATIONS.

SCALE IN FEET
0 100 200 400

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PREPARED BY: _____
DESIGN

DATE	COLLABORATIVE INFRASTRUCTURES SERVICES (404) 909-5619 COUNTY MANAGER: PAUL VAN HAUTE

PLANS COMPLETED 05-08-2019	
REVISIONS	

DRAWING No. 01-0001

GRNCOVSLD
01/26/2015

SHEET NO.	DWG NO.	DESCRIPTION
1	01-0001	COVER
2	02-0001	INDEX
3	04-0001	GENERAL NOTES
4-5	05-0001 TO 05-0002	TYPICAL SECTIONS
6	09-0001	DETAILED ESTIMATE
7-10	13-0001 TO 13-0004	MAINLINE PLANS
11-17	23-0001 TO 23-0007	CROSS SECTIONS
18	40-0001	CONSTRUCTION DETAILS
19-25	41-0001 TO 41-0007	GEORGIA STANDARDS
26-32	52-0001 TO 52-0007	EROSION CONTROL LEGEND
33-36	54-0001 TO 54-0004	BMP LOCATION DETAILS
37-41	56-0001 TO 56-0005	CONSTRUCTION STANDARDS AND DETAILS (FOR EROSION CONTROL ITEMS ONLY)

SHEET NO.	DWG NO.	DESCRIPTION
		GEORGIA DEPARTMENT OF TRANSPORTATION CONSTRUCITON DETAILS
	T-3A	TYPE 7,8, AND 9 SQUARE TUBE POST INSTALLATION DETAIL (07-02)
		GEORGIA DEPARTMENT OF TRANSPORTATION STANDARDS
	4270	"T" BEAM GUARDRAIL (12-15)
	4380	"W" BEAM GUARDRAIL 31 INCH HEIGHT (01-16)
	4381	POSTS AND OFFSET BLOCKS FOR "W" (01-16)
	4383	GUARDRAIL ANCHORAGE TYPE 1 31 INCH GUARDRAIL HEIGHT (08-11)
	4384	TYPE 12 31 INCH GUARDRAIL HEIGHT (01-16)
	4385	"T" BEAM GUARDRAIL CONNECTIONS TO 31 INCH HEIGHT "W" BEAM (08-11)
	4390	"W" BEAM GUARDRAIL TRANSITION 27 INCH GUARDRAIL TO 31 INCH GUARDRAIL HEIGHT (01-16)
		GEORGIA DEPARTMENT OF TRANSPORTATION EROSION CONTROL LEGEND AND UNIFORM CODE DRAWING
	EC-L1	EROSION CONTROL LEGEND AND UNIFORM CODE SHEET, SH. 1 OF 7 (03-17)
	EC-L2	EROSION CONTROL LEGEND AND UNIFORM CODE SHEET, SH. 2 OF 7 (11-18)
	EC-L3	EROSION CONTROL LEGEND AND UNIFORM CODE SHEET, SH. 3 OF 7 (03-17)
	EC-L4	EROSION CONTROL LEGEND AND UNIFORM CODE SHEET, SH. 4 OF 7 (03-17)
	EC-L5	EROSION CONTROL LEGEND AND UNIFORM CODE SHEET, SH. 5 OF 7 (03-17)
	EC-L6	EROSION CONTROL LEGEND AND UNIFORM CODE SHEET, SH. 6 OF 7 (11-18)
	EC-L7	EROSION CONTROL LEGEND AND UNIFORM CODE SHEET, SH. 7 OF 7 (03-17)
		GEORGIA DEPARTMENT OF TRANSPORTATION EROSION CONTROL CONSTRUCTION DETAILS
	D-24A	TEMPORARY SILT FENCE (SHEET 1 OF 4) (01-11)
	D-24B	TEMPORARY SILT FENCE BERM DITCH, INSTALLATION, BRUSH BARRIER (SHEET 2 OF 4) (01-11)
	D-24C	TEMPORARY SILT FENCE J-HOOKS, INLET SEDIMENT TRAPS (SHEET 3 OF 4) (01-11)
	D-24D	TEMPORARY SILT FENCE FABRIC CHECK DAM (SHEET 4 OF 4) (07-15)
	D-42	INLET SEDIMENT TRAPS (05-08)

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REVISION DATES

PUTNAM COUNTY
BOARD OF COMMISSIONERS

COLLABORATIVE INFRASTRUCTURES SERVICES

INDEX

OLD PHOENIX ROAD AT LAKE OCONEE
GUARDRAIL REPLACEMENT

DRAWING No.
02-0001

09/17/2015 GPLNOLD

PROJECT GENERAL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE GEORGIA DEPARTMENT OF TRANSPORTATION STANDARD AND SUPPLEMENTAL SPECIFICATIONS, CURRENT EDITION.

2. ALL KNOWN UTILITY FACILITIES ARE SHOWN SCHEMATICALLY ON PLANS, AND ARE NOT NECESSARILY ACCURATE IN LOCATION AS TO PLAN OR ELEVATION. UTILITY FACILITIES SUCH AS SERVICE LINES OR UNKNOWN FACILITIES NOT SHOWN ON PLANS WILL NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY UNDER THIS REQUIREMENT. "EXISTING UTILITY FACILITIES" MEANS ANY UTILITY THAT EXISTS ON THE PROJECT IN ITS ORIGINAL, RELOCATED OR NEWLY INSTALLED POSITION.

3. THE FOLLOWING UTILITIES HAVE FACILITIES IN THE PROJECT AREA:

   1) GA Power Transmission

   2) Tri-County EMC

4. INGRESS AND EGRESS SHALL BE MAINTAINED AT ALL TIMES TO ADJACENT PROPERTIES. REFER TO SUB-SECTION 107.07 OF THE GEORGIA STANDARD SPECIFICATIONS.

5. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO FURNISH SUITABLE BORROW MATERIAL FOR THE PROJECT AND TO DISPOSE OF ANY UNSUITABLE OR WASTE MATERIAL IN COMPLIANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS. CONCRETE AND ASPHALT MATERIALS REMOVED FROM THE PROJECT SITE MAY NOT BE PLACED IN FILL LOCATIONS THAT FALL WITHIN EASEMENT AREAS. WITH THE PRIOR APPROVAL OF THE ENGINEER, THESE MATERIALS MAY BE PLACED WITHIN THE R/W PROVIDED THERE IS THREE (3') FEET OF MINIMUM COVER AND THERE ARE NO PLANS FOR THE FUTURE WIDENING OF THE ROADWAY.

6. PERFORATED UNDERDRAIN SHALL BE PLACED IN AREAS WHERE WET CONDITIONS EXIST IN THE SUBGRADE AS DIRECTED BY THE ENGINEER.

7. STRUCTURES, TREES, SHRUBS AND OTHER PLANT MATERIAL THAT FALL WITHIN THE RIGHT-OF-WAY AND EASEMENT LIMITS, BUT OUTSIDE THE LIMITS OF CONSTRUCTION, SHALL NOT BE DISTURBED UNLESS DIRECTED BY THE ENGINEER.

8. LUMP-SUM TRAFFIC CONTROL: THE PRICE BID FOR LUMP-SUM TRAFFIC CONTROL SHALL INCLUDE THE COST OF STAGED CONSTRUCTION, MAINTENANCE OF TRAFFIC (INCLUDING AGGREGATE SURFACE COURSE), INSTALLATION AND REMOVAL OF ALL TEMPORARY SIGNAGE, INTERIM PAVEMENT MARKINGS, BARRICADES, AND OTHER INTERIM TRAFFIC CONTROL DEVICES NECESSARY FOR THE CONSTRUCTION AND MAINTENANCE OF THE PROJECT. DEVICES UTILIZED ON THE PROJECT SHALL BE IN COMPLIANCE THE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), CURRENT EDITION AND SECTION 150. ALL DEVICES, SIGNS, POSTS, BARRICADES, ETC SHALL BE FROM THE GDOT QUALIFIED PRODUCTS LIST (QPL). ALL DEVICES SHALL BE CRASHWORTHY UNDER AASHTO AND NCHRP 350 REQUIREMENTS. THE ENGINEER MAY DIRECT THAT ADDITIONAL DEVICES AND MARKINGS BE ADDED TO THE TRAFFIC CONTROL PLAN. THE COST OF NOMINAL ITEMS ADDED BY THE ENGINEER SHALL BE INCLUDED IN LUMP-SUM TRAFFIC CONTROL EXCEPT FOR THE ADDTION OF A CHANGEABLE MESSAGE SIGN(S). THE CONTRACT UNIT PRICE WILL BE PAID FOR A CHANGEABLE MESSAGE SIGN(S) OR A UNIT PRICE WILL BE DETERMINED WHEN A CHANGEABLE MESSAGE SIGN(S) IS NOT INCLUDED IN THE CONTRACT.

9. ALL CUT AND FILL SLOPES SHALL BE STABILIZED TO COMPLY WITH SECTION 161.3.05.B OF THE SPECIFICATIONS IN ORDER TO REDUCE THE POTENTIAL FOR EROSION. IF THE SEASON DOES NOT PERMIT PERMANENT GRASSING, TEMPORARY STRAW MULCH AND/OR TEMPORARY VEGETATION SHALL BE USED AS PER THE EROSION AND SEDIMENTATION POLLUTION CONTROL PLAN (ESPCP) OR AS DIRECTED BY THE ENGINEER.

10. AN N.O.I. (NOTICE OF INTENT) IS NOT REQUIRED FOR THIS PROJECT. THE DISTURBED AREA IS 0.60 ACRES

11. GUARDRAIL POSTS PLACED IN, OR IN PROXIMITY TO, EXISTING POST HOLE LOCATIONS SHALL BE GROUTED PER GDOT STANDARD 4381 AND SPEC. 600

12. EXISTING GUARDRAIL SHALL BE DELIVERED TO PUTNAM COUNTY DEPT. OF PUBLIC WORKS

MAINTENANCE OF TRAFFIC GENERAL NOTES

1. ALL ITEMS NECESSARY FOR COMPLIANCE WITH THESE REQUIREMENTS SHALL BE INCLUDED IN THE PRICE BID FOR "TRAFFIC CONTROL".

2. ALL SIGNS AND PAVEMENT MARKINGS SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.

3. ALL SIGNS SHALL HAVE TYPE IX RETROREFLECTIVE SHEETING UNLESS OTHERWISE NOTED.

4. IN RESIDENTIAL AREAS, TEMPORARY AND PERMANENT SIGNS SHALL BE LOCATED ON OR AS CLOSE AS POSSIBLE TO PROPERTY LINES.

5. EXISTING TRAFFIC SIGNS SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION. MAINTENANCE INCLUDES REPLACING DAMAGED AND STOLEN SIGNS, AND PERIODIC CLEANING OF EXISTING SIGNS AND CONSTRUCTION RELATED TRAFFIC CONTROL DEVICES.

6. THE WORKSITE TRAFFIC CONTROL SUPERVISOR (WTCS) SHALL BE RESPONSIBLE FOR THE ELIMINATION OF ANY CONFLICTING PAVEMENT MARKINGS. THE WTCS SHALL NOT USE "BLACK OUT PAINT" TO ERADICATE CONFLICTING MARKINGS. THE ENGINEER SHALL MAKE THE FINAL DETERMINATION WHETHER THE CONFLICTING MARKINGS HAVE BEEN ADEQUATELY ELIMINATED.

7. TEMPORARY TRAFFIC BARRIERS SHALL HAVE A TWO (2') FEET MINIMUM OFFSET FROM THE EDGE OF ANY TRAVEL LANE. ONLY TRAFFIC DRUMS, MEETING THE MINIMUM REQUIREMENTS OF THE MUTCD AND SECTION 150, AND TEMPORARY BARRIERS THAT ARE CRASHWORTHY SHALL BE USED ADJACENT TO TRAVEL LANES. UNLESS PRIOR APPROVAL IS GRANTED BY PUTNAM COUNTY BOARD OF COMMISSIONERS, THE TEMPORARY BARRIERS CAN NOT BE PLACED LESS THAN TWO (2') FEET FROM THE EDGE OF THE TRAVEL LANE. THE USE OF TYPE I AND II BARRICADES AND TRAFFIC CONES IS PROHIBITED.

8. TRAFFIC DRUMS MEETING THE MINIMUM REQUIREMENTS OF THE MUTCD AND SECTION 150 SHALL BE USED FOR CHANNELIZATION OF TRAFFIC IN ALL TRAFFIC SHIFTS. FOR ANY WORK ZONE, THE MAXIMUM DRUM SPACING, IN FEET, SHALL BE THE DESIGN OR POSTED SPEED LIMIT, WHICHEVER IS LESS. BASED ON FIELD CONDITIONS, THE MAXIMUM SPACING OF THE TRAFFIC DRUMS MAY NEED TO BE FURTHER REDUCED.

9. ALL TRAFFIC CONTROL DEVICES SHALL BE MAINTAINED BY THE CONTRACTOR SO AS NOT TO INTERFERE WITH SIGHT DISTANCES ALONG ANY ADJACENT SIDE ROAD OR DRIVEWAY.

10. THE PUTNAM COUNTY BOARD OF COMMISSIONERS RESERVES THE RIGHT TO MODIFY THIS MAINTENANCE OF TRAFFIC PLAN AS FIELD CONDITIONS WARRANT. IF ADDITIONAL TRAFFIC CONTROL DEVICES ARE REQUIRED, THESE SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE BOARD OF COMMISSIONERS

11. THE CONTRACTOR MUST OBTAIN A ROAD CLOSURE PERMIT FROM PUTNAM COUNTY BOARD OF COMMISSIONERS A MINIMUM OF 3 WEEKS PRIOR TO ROAD CLOSURE. FOR INFORMATION CALL COLLABORATIVE INFRASTRUCTURES SERVICES (404)909-5619.

12. REFLECTORIZED TYPE 3 BARRICADES SHALL BE USED AT THE ACTUAL LOCATION OF TOTAL STREET CLOSURE. EACH BARRICADE SHALL HAVE TWO TYPE 'A' LIGHTS AND ONE R11-2 (ROAD CLOSED) SIGN ATTACHED.

13. ALL M4-9 SIGNS SHALL HAVE ADVISORY BLADES (INSTALLED ABOVE THE "DETOUR" SIGN) IDENTIFYING THE CLOSED STREET THAT THE DETOUR ROUTE SERVES.

14. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PREPARE A MAINTENANCE OF TRAFFIC PLAN FOR APPROVAL BY PUTNAM COUNTY BOARD OF COMMISSIONERS BEFORE STARTING CONSTRUCTION. PAYMENT SHALL BE INCLUDED IN THE PRICE FOR "TRAFFIC CONTROL". THE CONTRACTOR WILL NOT BE ALLOWED TO CLOSE THE ROAD DURING THE CONSTRUCTION OF THE PROJECT WITHOUT APPROVAL BY THE ENGINEER.

15. NO LANE CLOSURES ARE ALLOWED BETWEEN 6-9AM AND 4-7PM WITHOUT PRIOR APPROVAL BY COLLABORATIVE INFRASTRUCTURE SERVICES (404) 909-5619

16. THE CONTRACTOR SHALL MAINTAIN INGRESS AND EGRESS TO ALL DRIVEWAYS AT ALL TIMES.

POINT OF CONTACT: COLLABORATIVE INFRASTRUCTURES SERVICES; INC; 945 BANK STREET, CONYERS, GA; 404-909-5619

09/17/2015 GPLNOLD

GEORGIA811 Utilities Protection Center, Inc
Know what's below. Call before you dig.

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REVISION DATES

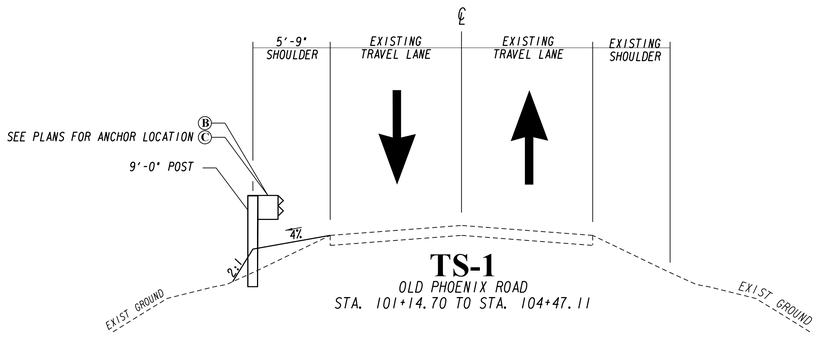
PUTNAM COUNTY
BOARD OF COMMISSIONERS

COLLABORATIVE INFRASTRUCTURES SERVICES

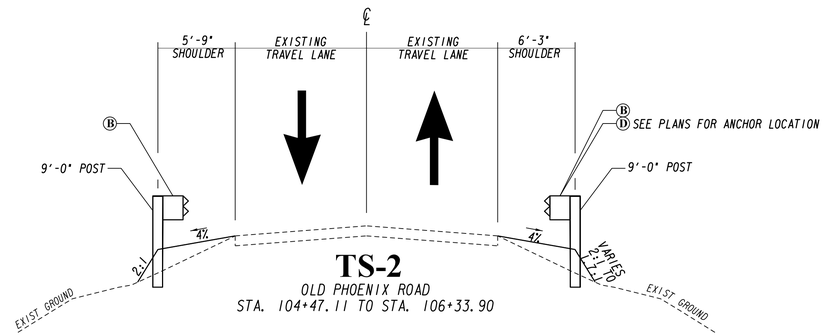
GENERAL NOTES

OLD PHOENIX ROAD AT LAKE OCONEE
GUARDRAIL REPLACEMENT

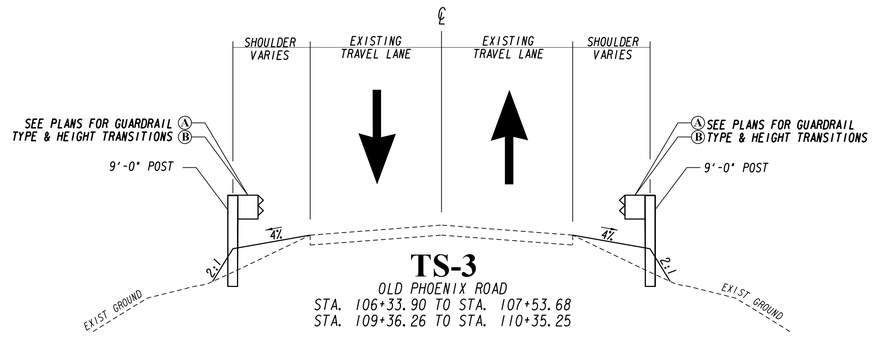
DRAWING No. 04-0001



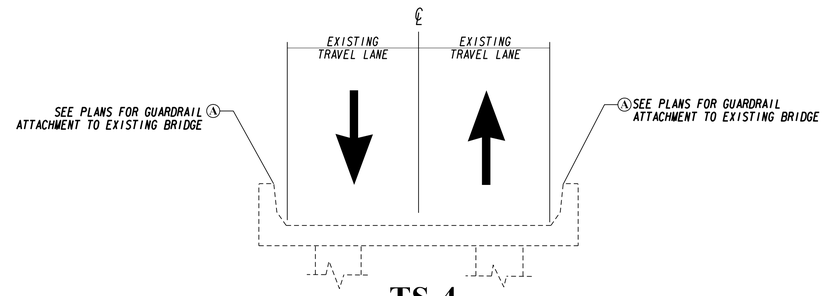
TS-1
OLD PHOENIX ROAD
STA. 101+14.70 TO STA. 104+47.11



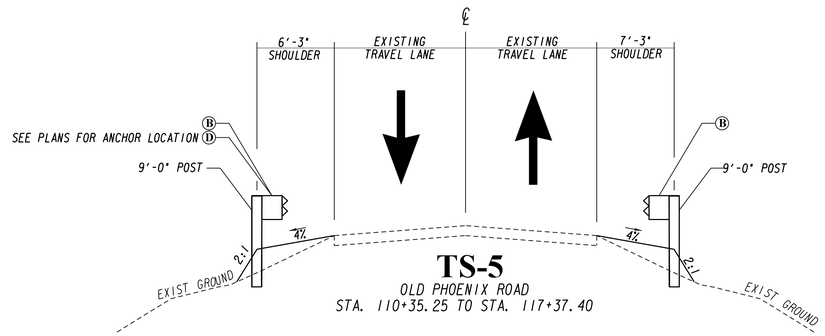
TS-2
OLD PHOENIX ROAD
STA. 104+47.11 TO STA. 106+33.90



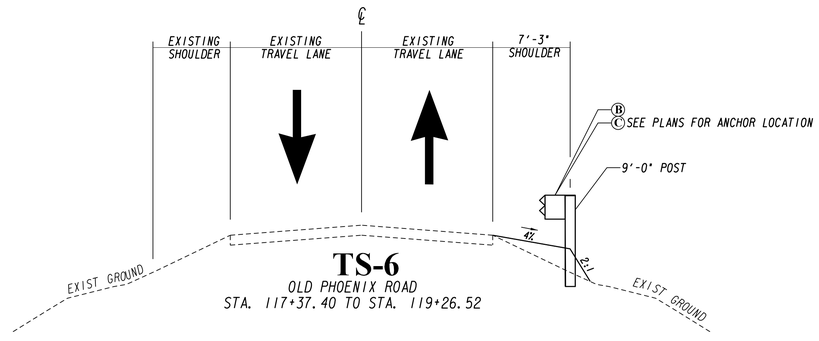
TS-3
OLD PHOENIX ROAD
STA. 106+33.90 TO STA. 107+53.68
STA. 109+36.26 TO STA. 110+35.25



TS-4
OLD PHOENIX ROAD
STA. 107+53.68 TO STA. 109+36.26



TS-5
OLD PHOENIX ROAD
STA. 110+35.25 TO STA. 117+37.40



TS-6
OLD PHOENIX ROAD
STA. 117+37.40 TO STA. 119+26.52

TYPICAL SECTION LEGEND

Ⓐ GUARDRAIL, TP T, ITEM NUMBER 641-1100
Ⓑ GUARDRAIL, TP W, ITEM NUMBER 641-1200
Ⓒ GUARDRAIL ANCHORAGE, TP 1, ITEM NUMBER 641-5001
Ⓓ GUARDRAIL TERMINAL, TP 12A, 31 IN, TANGENT, ENERGY-ABSORBING, ITEM NUMBER 641-5015

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REVISION DATES

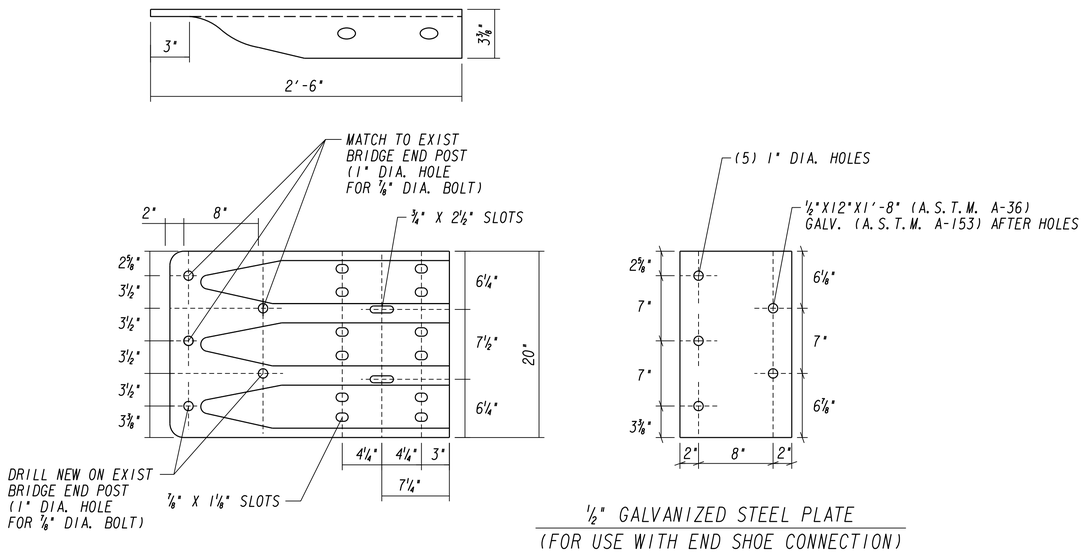
PUTNAM COUNTY
BOARD OF COMMISSIONERS
COLLABORATIVE INFRASTRUCTURES SERVICES

TYPICAL SECTIONS

OLD PHOENIX ROAD AT LAKE OCONEE
GUARDRAIL REPLACEMENT

DRAWING No. 05-0001

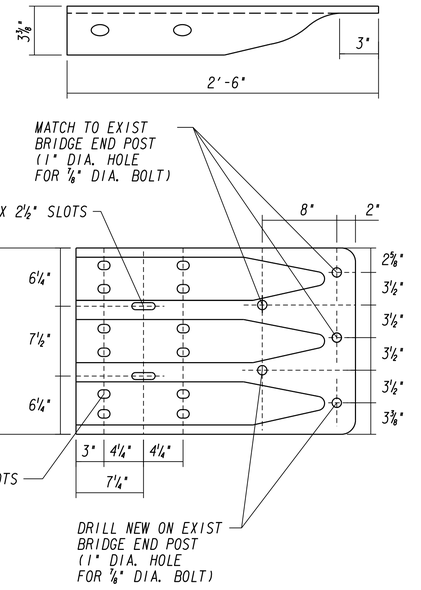
09/17/2015 GPLNOLD

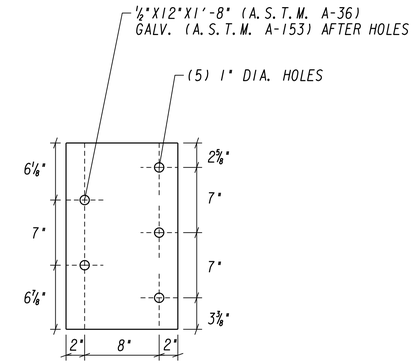


½" GALVANIZED STEEL PLATE
(FOR USE WITH END SHOE CONNECTION)

SPECIAL DETAIL 1-A
(MODIFIED GDOT STD 4270)

T-BEAM END SHOE & STEEL PLATE - MODIFIED
FOR ATTACHMENT TO EXISTING BRIDGE END POST
(LEADING END)

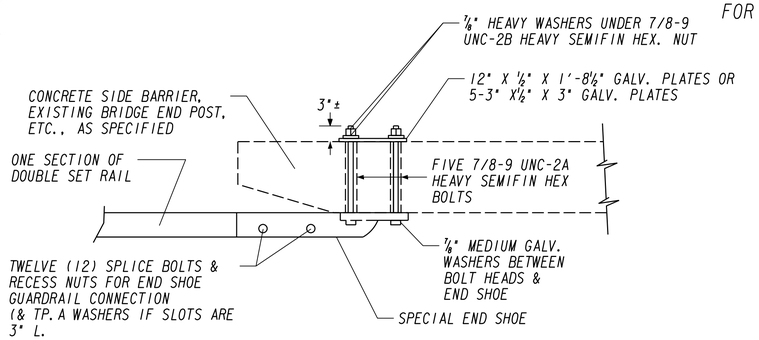




½" GALVANIZED STEEL PLATE
(FOR USE WITH END SHOE CONNECTION)

SPECIAL DETAIL 1-B
(MODIFIED GDOT STD 4270)

T-BEAM END SHOE & STEEL PLATE - MODIFIED
FOR ATTACHMENT TO EXISTING BRIDGE END POST
(TRAILING END)



TYPICAL SPECIAL END SHOE CONNECTION
(MODIFIED GDOT STD 4270)

NOTE: THE "T" BEAM RAIL ELEMENT/END SHOE SPLICE SHALL BE LAPPED IN THE DIRECTION OF THE NEAREST TRAFFIC

NOTES:

1) REFER TO GDOT STANDARD 4270 FOR ADDITIONAL INFORMATION AS NEEDED

2) PAYMENT FOR GUARDRAIL (TYPE "T") WILL INCLUDE ALL POSTS, BLOCKS, HARDWARE ACCESSORIES AND WHERE REQUIRED ALL ADDITIONAL POSTS, END SHOES, TERMINAL SECTIONS, TRANSITION SECTIONS, BACK-UP PLATES AND REMOVAL AND REPLACEMENT OF PORTIONS OF MEDIAN PAVING, SPILLWAYS OR CATCH BASINS WHERE NECESSARY

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REVISION DATES

PUTNAM COUNTY
BOARD OF COMMISSIONERS
COLLABORATIVE INFRASTRUCTURES SERVICES

TYPICAL SECTIONS

OLD PHOENIX ROAD AT LAKE OCONEE
GUARDRAIL REPLACEMENT

DRAWING No. 05-0002

09/17/2015 GPLNOLD

DETAILED ESTIMATE

OLD PHOENIX ROAD GUARDRAIL REPLACEMENT DETAILED ESTIMATE

ITEM NO.	ITEM DESCIRPTION	QUANTITY	UNIT
	ROADWAY ITEMS		
150-1000	TRAFFIC CONTROL	1	LS
210-0100	GRADING COMPLETE	1	LS
610-9001	REM SIGN	4	EA
611-5551	RESET SIGN	4	EA
641-1100	GUARDRAIL, TP T	92	LF
641-1200	GUARDRAIL, TP W	2671	LF
641-5001	GUARDRAIL ANCHORAGE, TP 1	2	EA
641-5015	GUARDRAIL TERMINAL, TP 12A, 31 IN, TANGENT, ENERGY-ABSORBING	2	EA
	EROSION CONTROL ITEMS		
163-0232	TEMPORARY GRASSING	0.36	AC
163-0240	MULCH	0.36	TN
165-0030	MAINTENANCE OF TEMPORARY SILT FENCE, TYPE C	3244	LF
171-0030	TEMPORARY SILT FENCE, TYPE C	6487	LF
700-6910	PERMANENT GRASSING	0.36	AC
700-7000	AGRICULTURAL LIME	0.36	TN
700-8000	FERTILIZER MIXED GRADE	0.36	TN
700-8100	FERTILIZER NITROGEN CONTENT	30	LB

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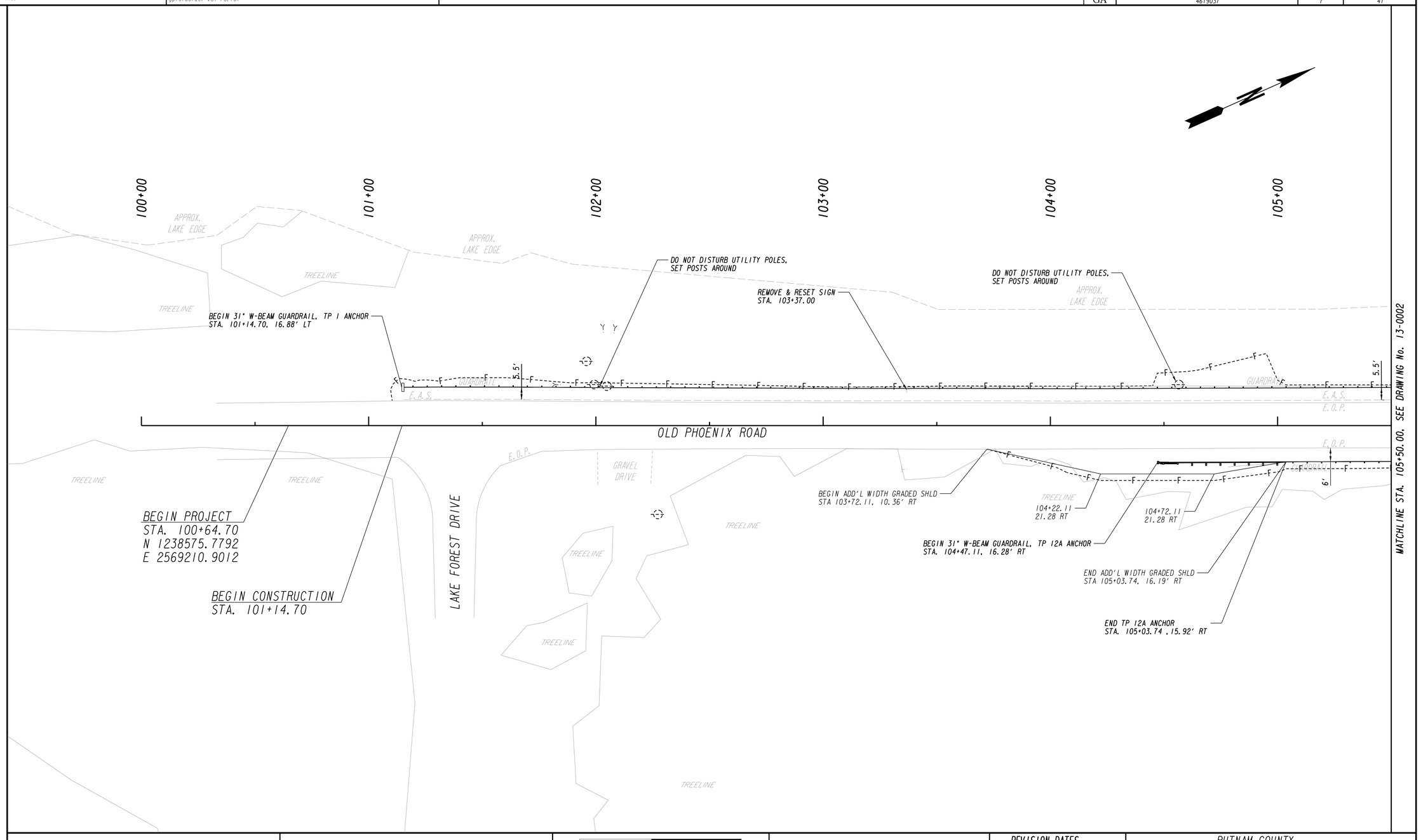
REVISION DATES

PUTNAM COUNTY
BOARD OF COMMISSIONERS
COLLABORATIVE INFRASTRUCTURES SERVICES
SUMMARY QUANTITIES
OLD PHOENIX ROAD AT LAKE OCONEE
GUARDRAIL REPLACEMENT
DRAWING No. 09-0001

09/17/2015 GPLNOLD

5/8/2019 4:29:04 PM	GPLOT-V8	I:\CUSTOMERS_PROJECTS\1146 Putnam County\1146-19-037 Eng. Services For Guardrail & Survey\4619037\DGN\4619037_13-0001.dgn	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
SOUTHEASTERN ENGINEERING, INC.	gplotborder-V81-P0.tbl		GA	4619037	7	41



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

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SCALE IN FEET
0 20 40 80

REVISION DATES

PUTNAM COUNTY
BOARD OF COMMISSIONERS
COLLABORATIVE INFRASTRUCTURES SERVICES

MAINLINE PLAN

OLD PHOENIX ROAD AT LAKE OCONEE
GUARDRAIL REPLACEMENT

DRAWING No. 13-0001

09/17/2015 GPLNOLD

5/8/2019 4:29:23 PM	GPLOT-V8	I:\CUSTOMERS_PROJECTS\1146 Putnam County\1146-19-037 Eng. Services For Guardrail & Survey\4619037\DGN\4619037_13-0002.dgn	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
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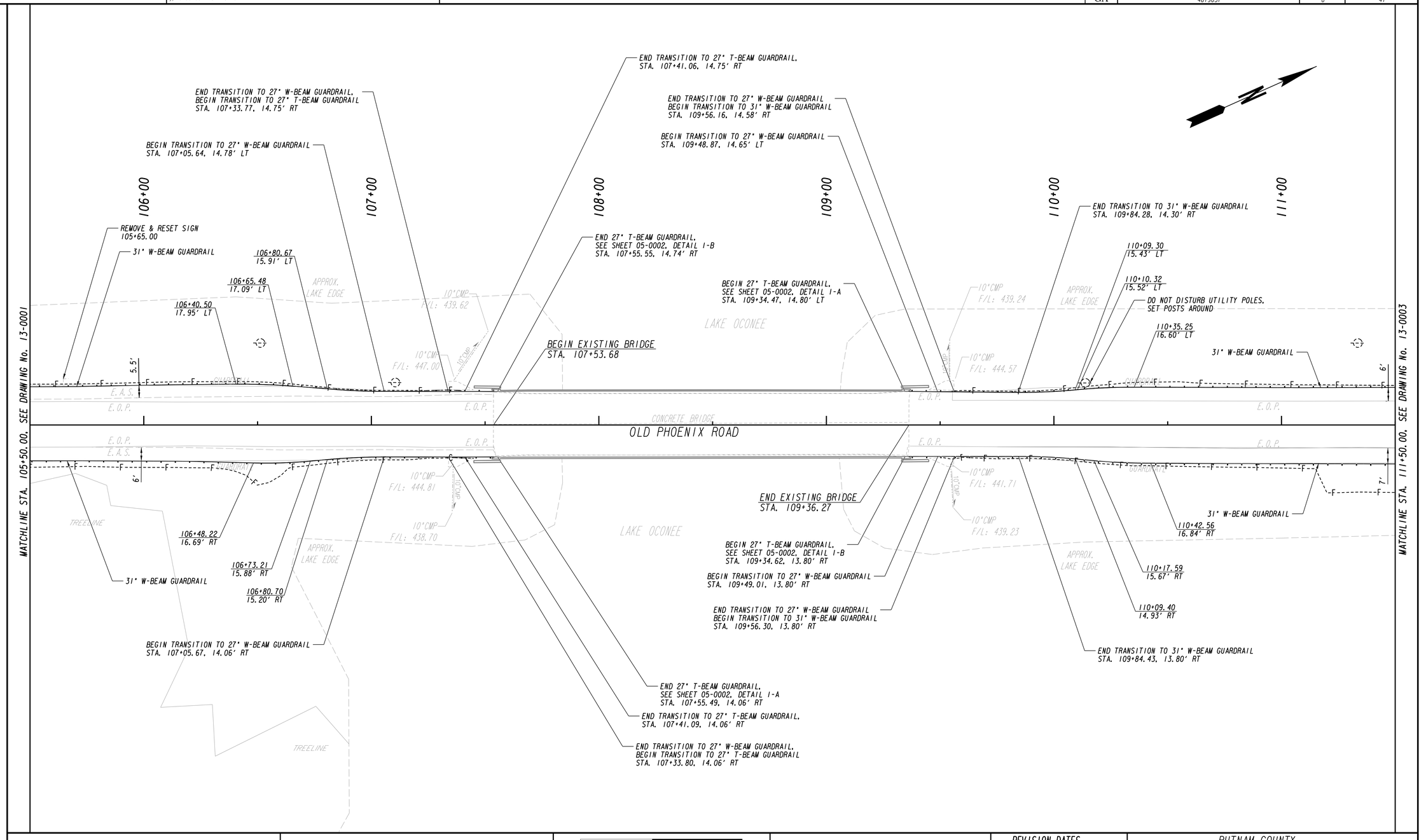

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

SOUTHEASTERN ENGINEERING, INC.
Civil,Traffic, Transportation, Land Surveying, Landscape Architecture, and Land Planning
2470 Sandy Plains Road Marrietta, Georgia 30066
tel: 770-321-3936; www.seengineering.com

SCALE IN FEET
0 20 40 80

REVISION DATES

PUTNAM COUNTY
BOARD OF COMMISSIONERS
COLLABORATIVE INFRASTRUCTURES SERVICES

MAINLINE PLAN

OLD PHOENIX ROAD AT LAKE OCONEE
GUARDRAIL REPLACEMENT

DRAWING No. 13-0002

09/17/2015 GPLNOLD

5/8/2019 4:29:43 PM	GPLOT-V8	I:\CUSTOMERS_PROJECTS\1146 Putnam County\1146-19-037 Eng. Services For Guardrail & Survey\4619037\DGN\4619037_13-0003.dgn	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
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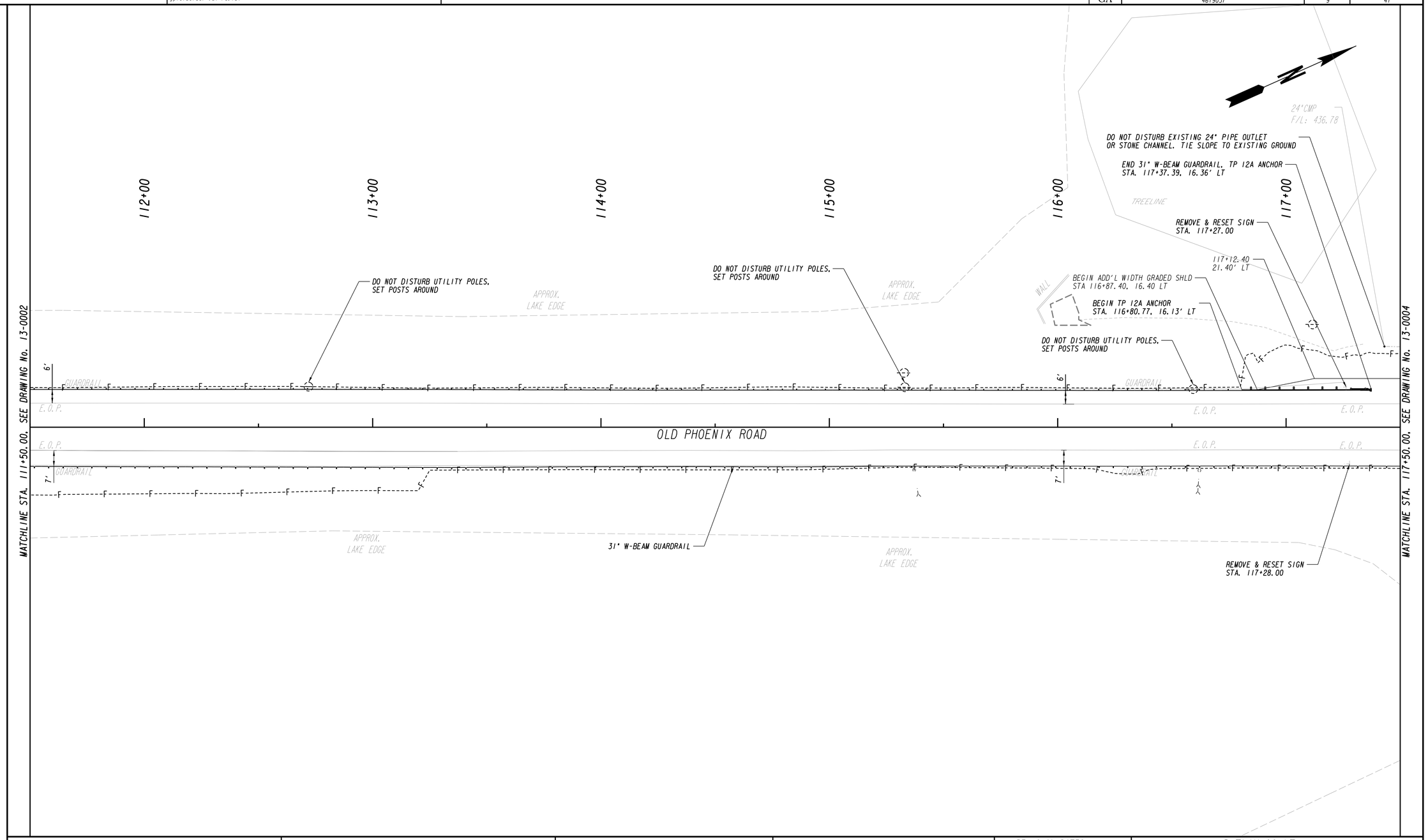

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
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LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

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REVISION DATES

PUTNAM COUNTY
BOARD OF COMMISSIONERS
COLLABORATIVE INFRASTRUCTURES SERVICES

MAINLINE PLAN

OLD PHOENIX ROAD AT LAKE OCONEE
GUARDRAIL REPLACEMENT

DRAWING No. 13-0003

09/17/2015 GPLNOLD

5/8/2019 4:30:03 PM SOUTHEASTERN ENGINEERING, INC.	GPLOT-V8 gplotborder-V81-P0.tbl	I:\CUSTOMERS_PROJECTS\1146 Putnam County\1146-19-037 Eng. Services For Guardrail & Survey\4619037\DGN\4619037_13-0004.dgn	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
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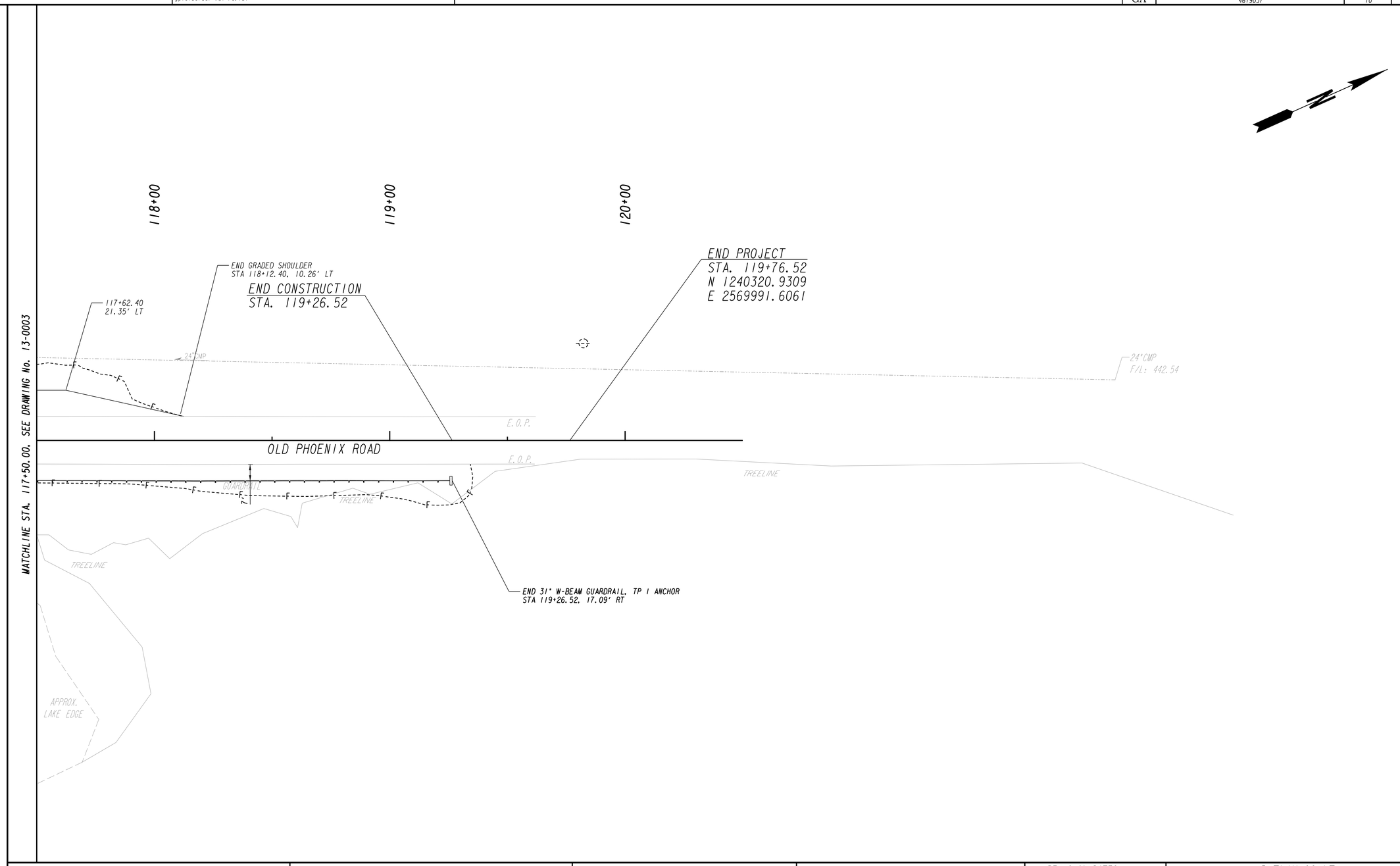

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

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REVISION DATES

PUTNAM COUNTY
BOARD OF COMMISSIONERS
COLLABORATIVE INFRASTRUCTURES SERVICES

MAINLINE PLAN

OLD PHOENIX ROAD AT LAKE OCONEE
GUARDRAIL REPLACEMENT

DRAWING No. 13-0004

09/17/2015 GPLNOLD

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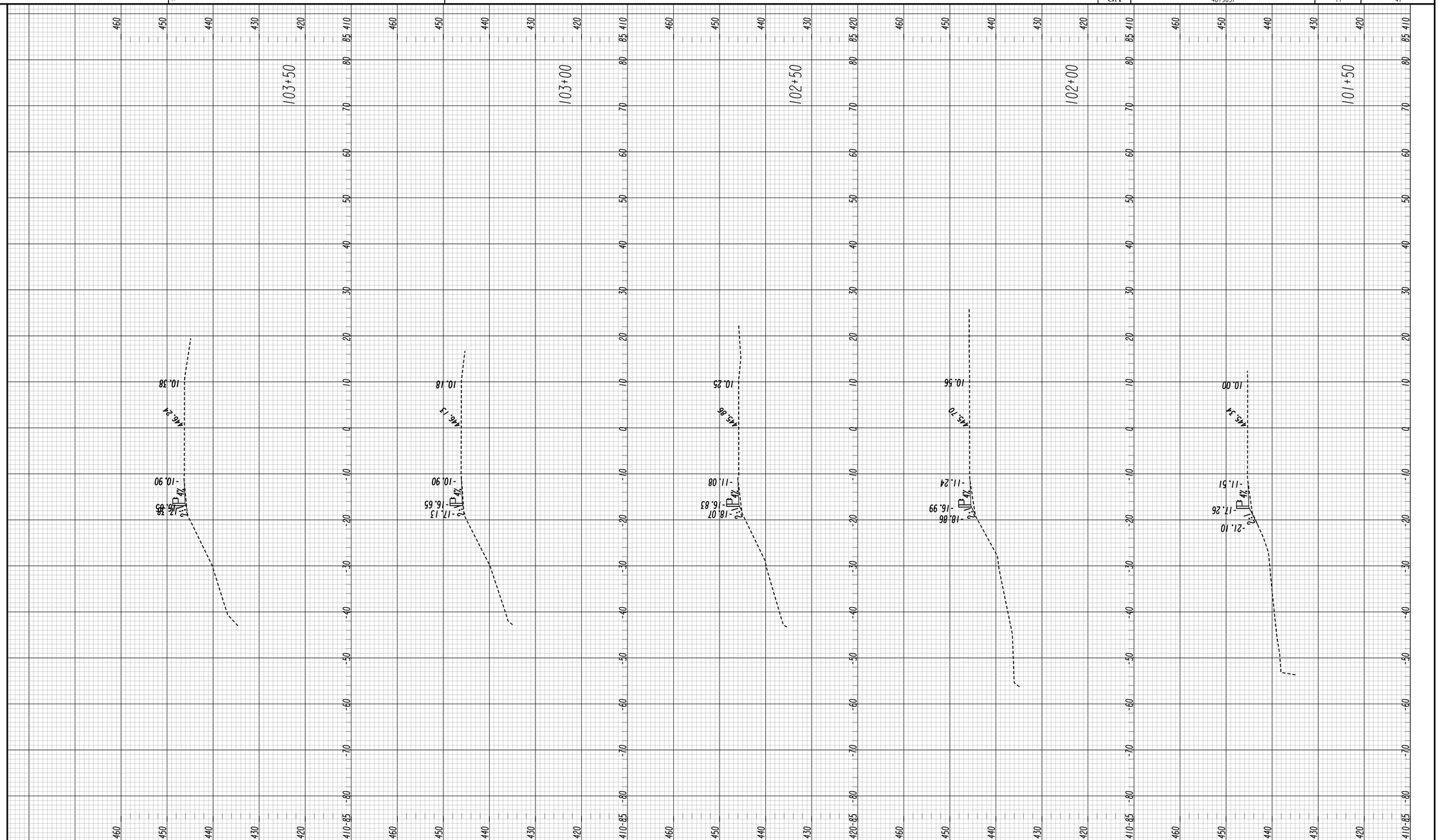

09/17/2015 SUXENOLD

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tel: 770-321-3936, www.seengineering.com

SCALE IN FEET
0 10 20 40

REVISION DATES

PUTNAM COUNTY
BOARD OF COMMISSIONERS
COLLABORATIVE INFRASTRUCTURES SERVICES

CROSS SECTIONS

OLD PHOENIX ROAD AT LAKE OCONEE
GUARDRAIL REPLACEMENT

DRAWING No. 23-0001

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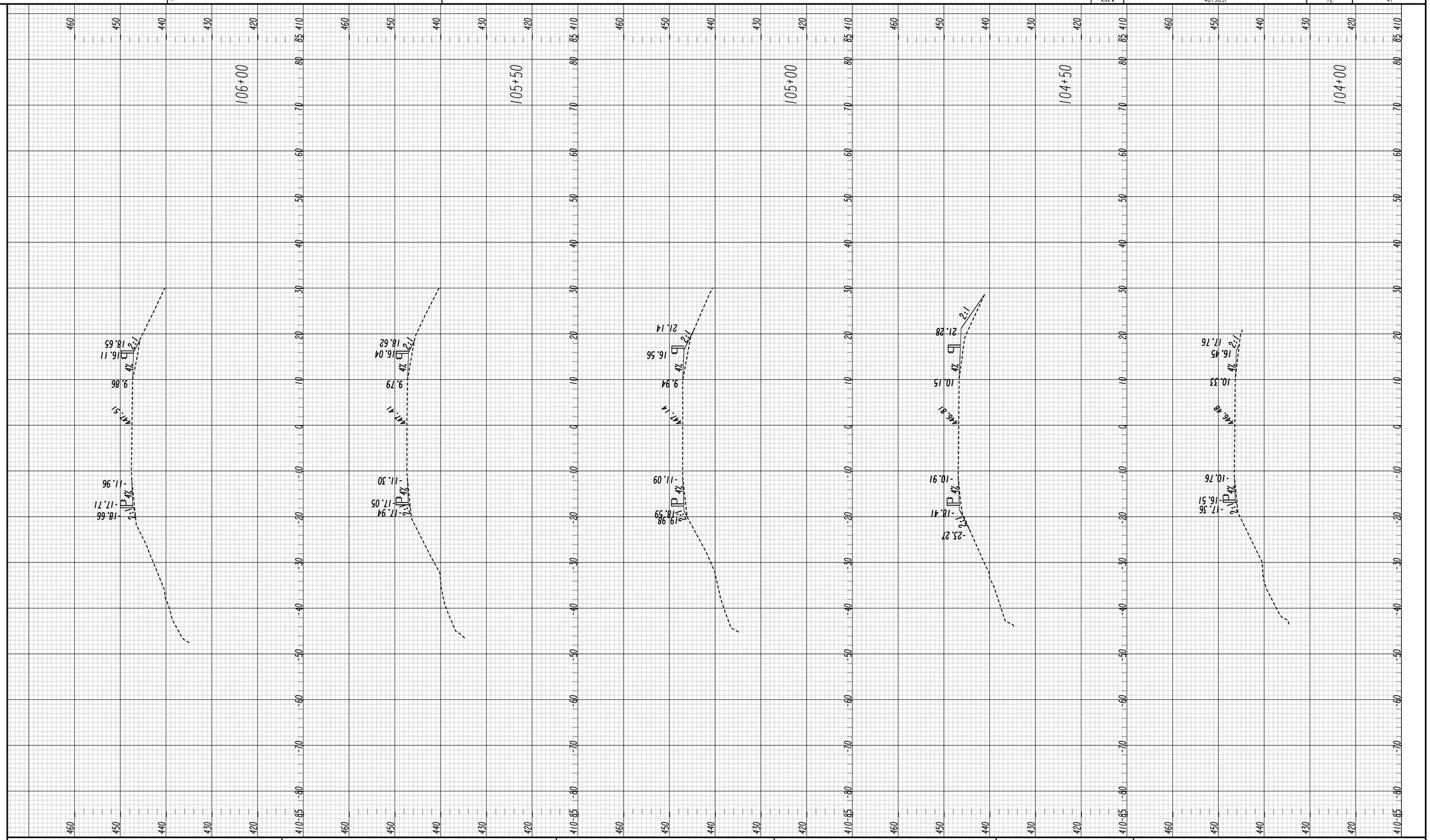

09/17/2015 SUXENOLD

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SCALE IN FEET
0 10 20 40

REVISION DATES		

PUTNAM COUNTY
BOARD OF COMMISSIONERS
COLLABORATIVE INFRASTRUCTURES SERVICES

CROSS SECTIONS

OLD PHOENIX ROAD AT LAKE OCONEE
GUARDRAIL REPLACEMENT

DRAWING No. 23-0002

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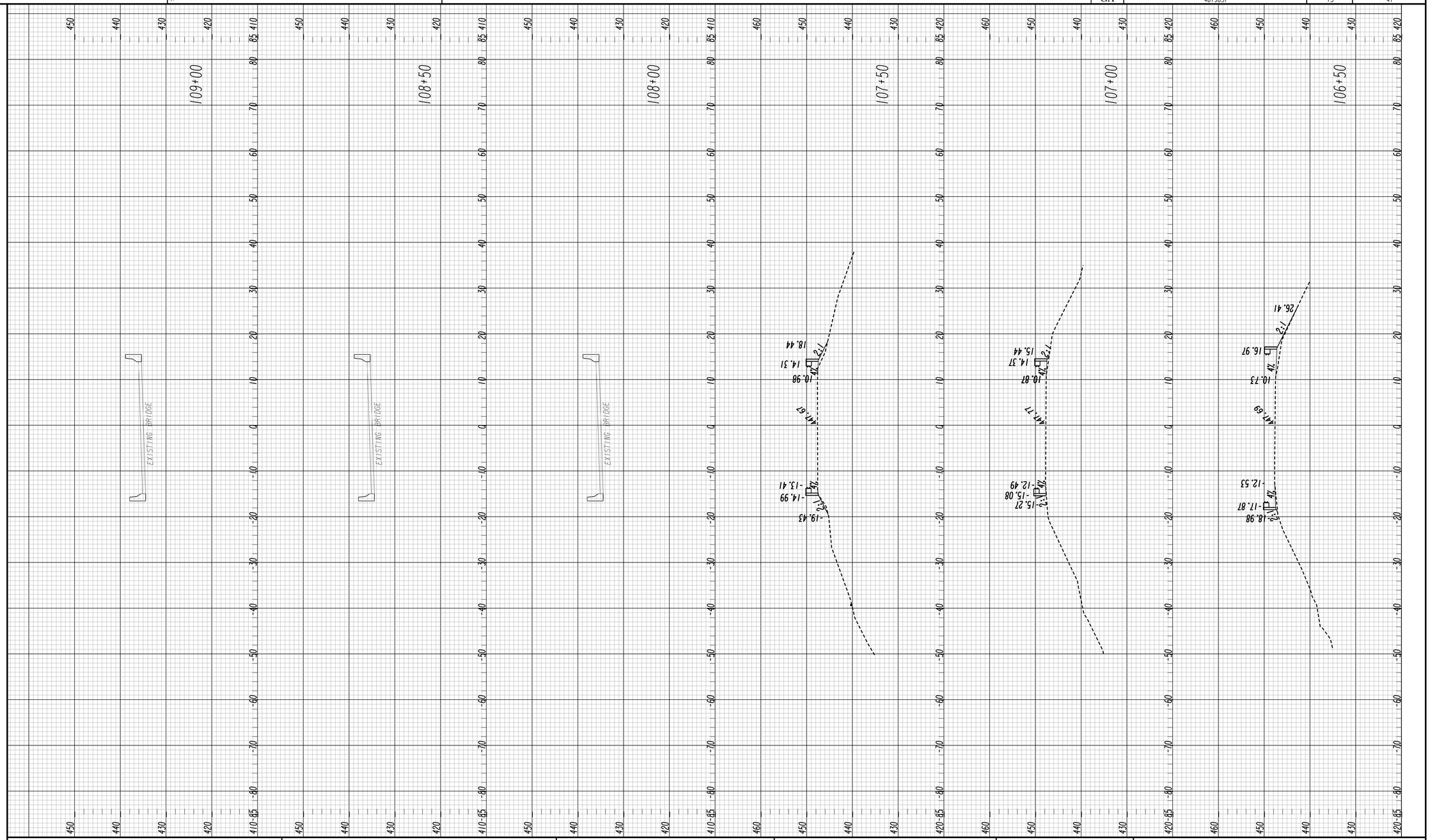

09/17/2015 SUXENOLD

SEI
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REVISION DATES

PUTNAM COUNTY
BOARD OF COMMISSIONERS
COLLABORATIVE INFRASTRUCTURES SERVICES

CROSS SECTIONS

OLD PHOENIX ROAD AT LAKE OCONEE
GUARDRAIL REPLACEMENT

DRAWING No.
23-0003

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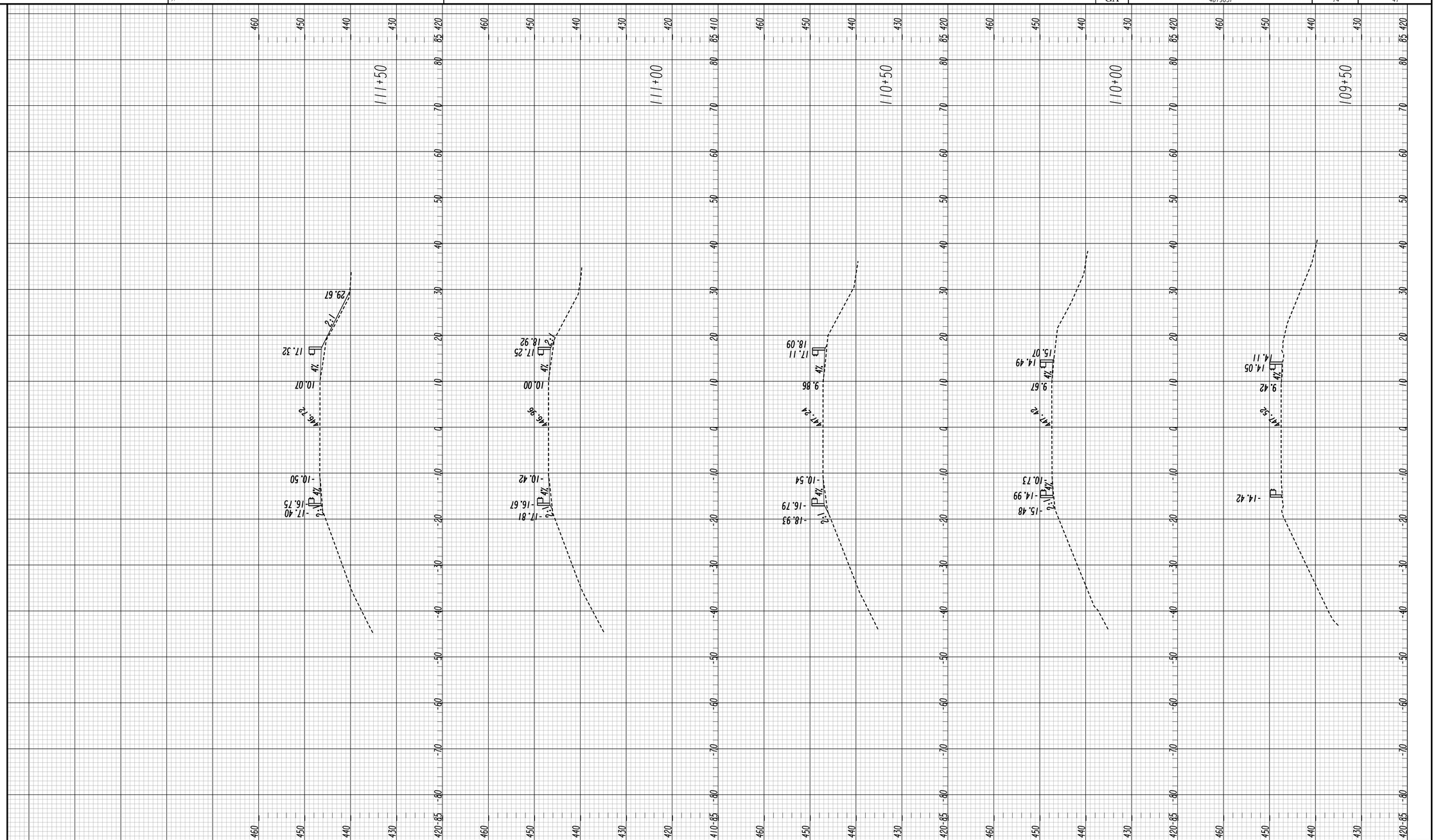

				REVISION DATES	PUTNAM COUNTY BOARD OF COMMISSIONERS
		SEI SOUTHEASTERN ENGINEERING, INC.	SCALE IN FEET 0 10 20 40		COLLABORATIVE INFRASTRUCTURES SERVICES
		Civil,Traffic, Transportation, Land Surveying, Landscape Architecture, and Land Planning 2470 Sandy Plains Road Marietta, Georgia 30066 tel: 770-321-3936, www.seengineering.com			CROSS SECTIONS
					OLD PHOENIX ROAD AT LAKE OCONEE GUARDRAIL REPLACEMENT
					DRAWING No. 23-0004

09/17/2015 SUXENOLD

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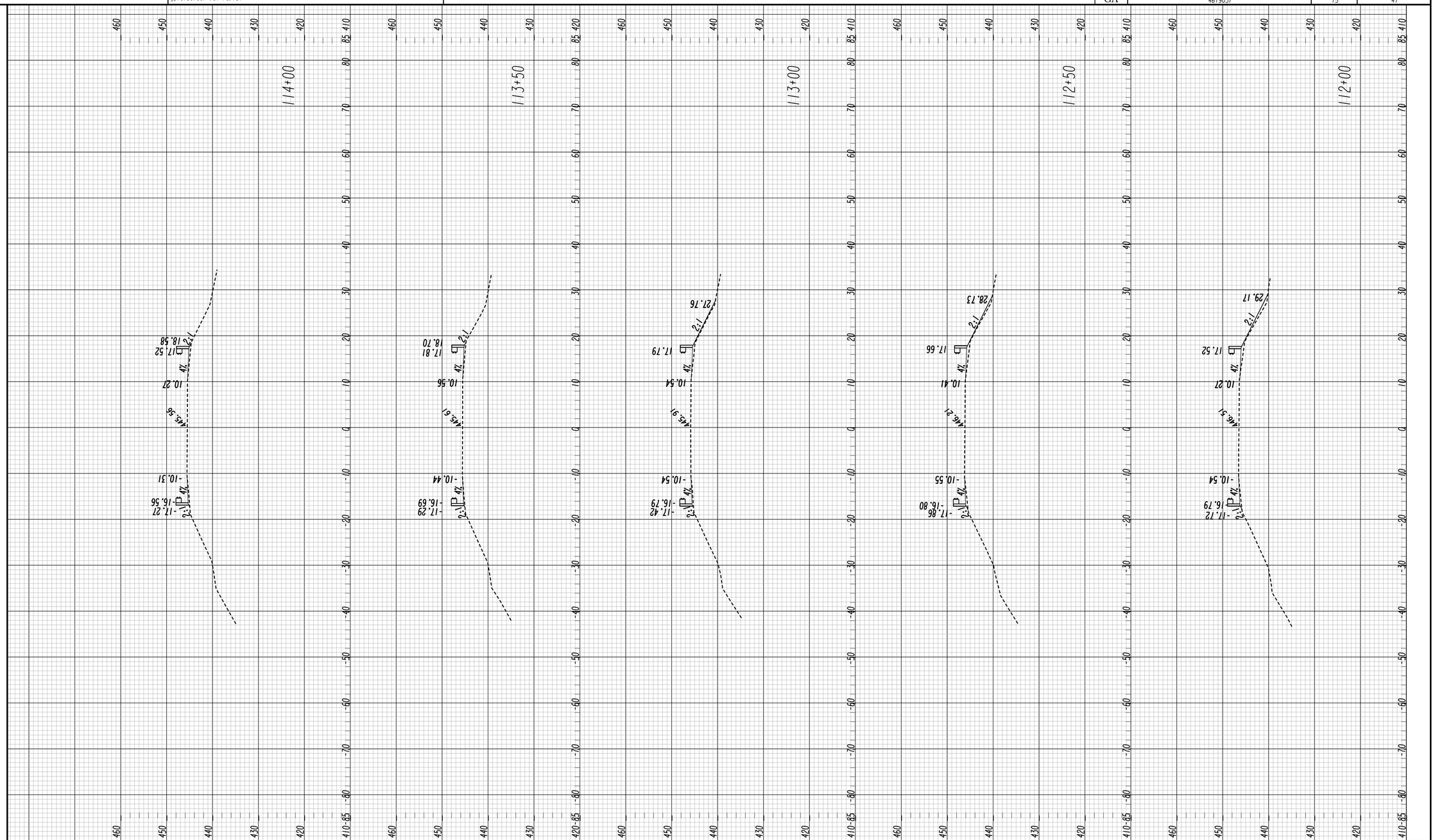

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SCALE IN FEET
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REVISION DATES		

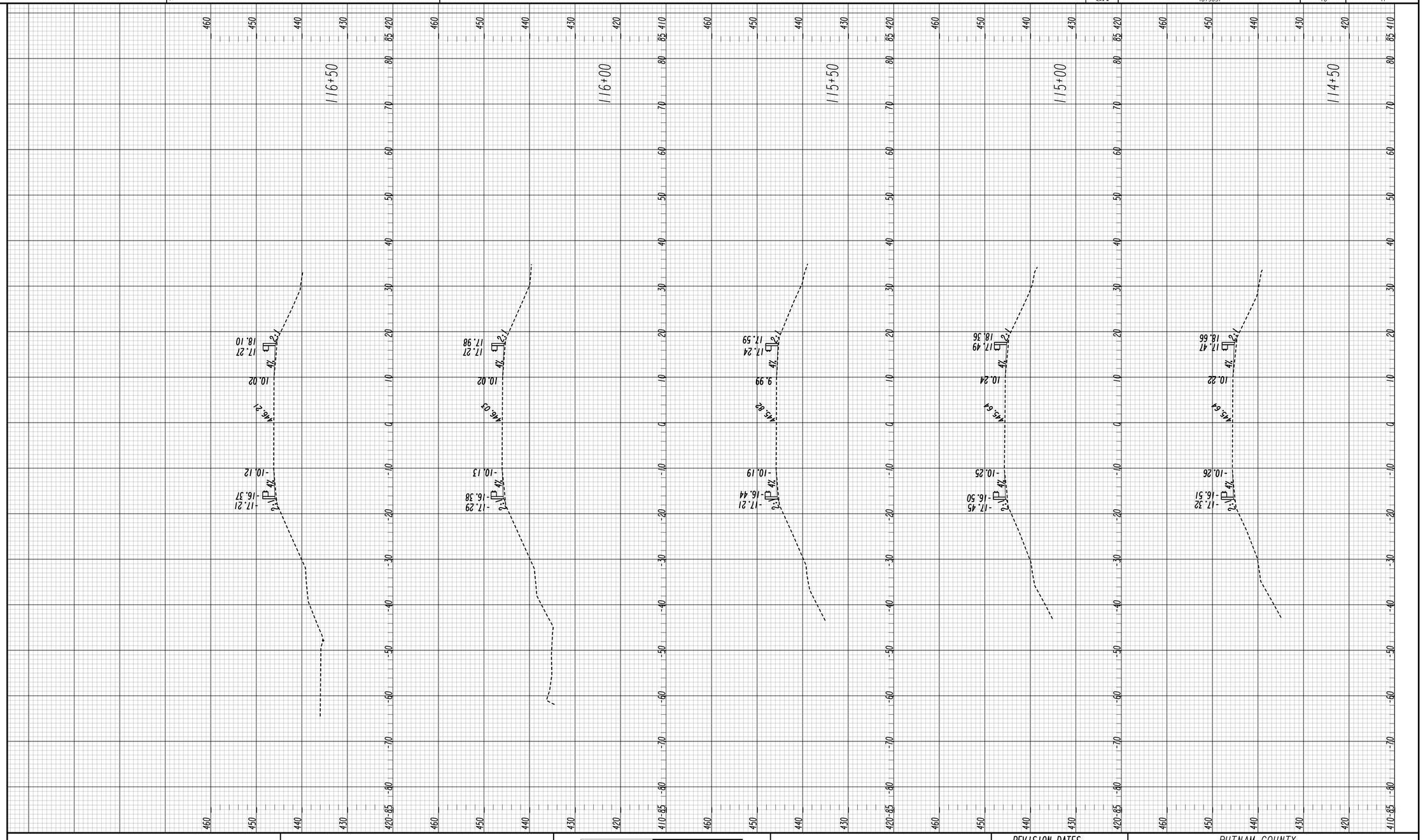
PUTNAM COUNTY
BOARD OF COMMISSIONERS
COLLABORATIVE INFRASTRUCTURES SERVICES

CROSS SECTIONS

OLD PHOENIX ROAD AT LAKE OCONEE
GUARDRAIL REPLACEMENT

DRAWING No. 23-0005

09/17/2015 SUXENOLD



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SCALE IN FEET
0 10 20 40

REVISION DATES

PUTNAM COUNTY
BOARD OF COMMISSIONERS

COLLABORATIVE INFRASTRUCTURES SERVICES

CROSS SECTIONS

OLD PHOENIX ROAD AT LAKE OCONEE
GUARDRAIL REPLACEMENT

DRAWING No.
23-0006

09/17/2015 SUXENOLD

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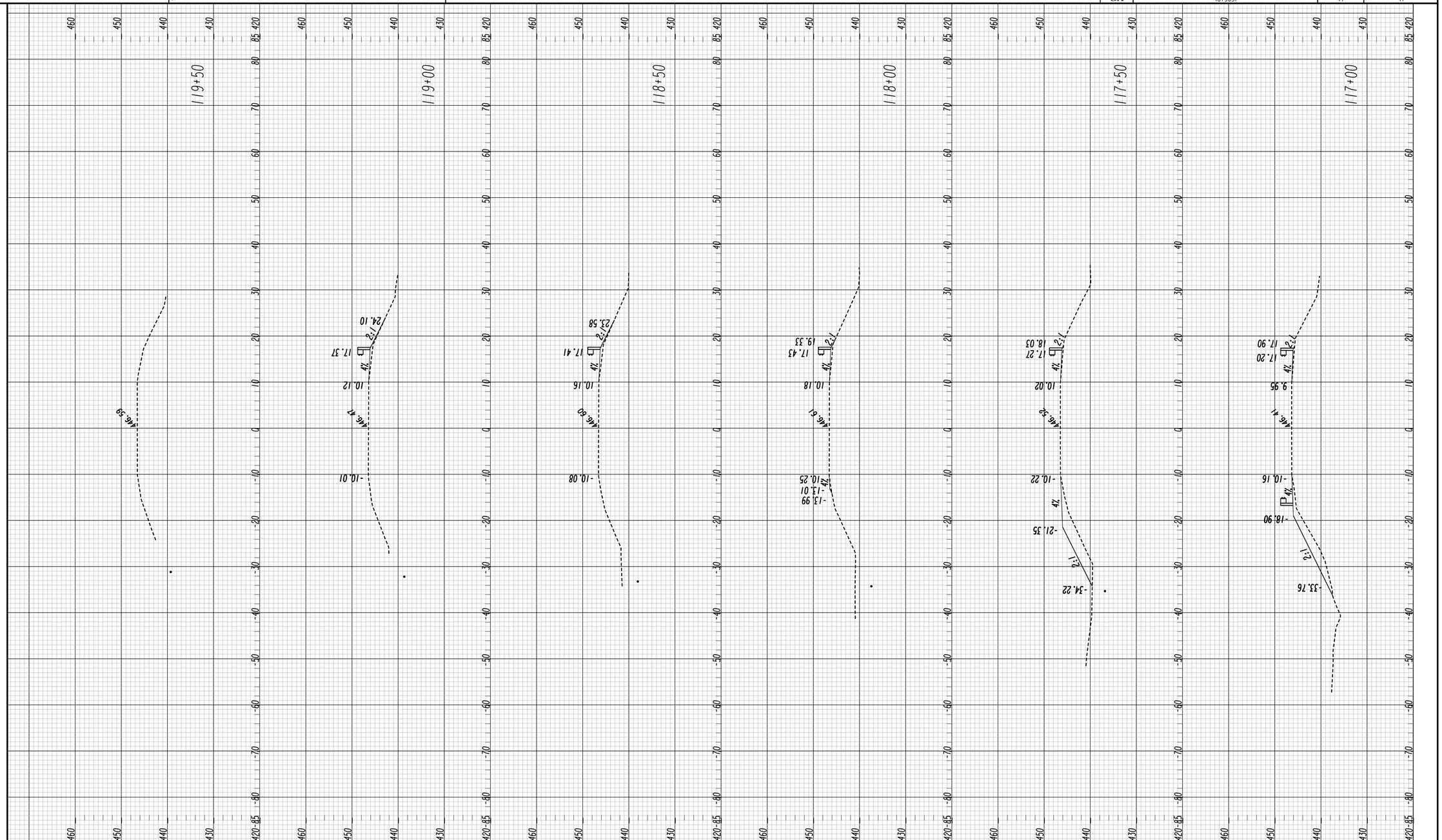


		SOUTHEASTERN ENGINEERING, INC. Civil,Traffic, Transportation, Land Surveying, Landscape Architecture, and Land Planning 2470 Sandy Plains Road Marietta, Georgia 30066 tel: 770-321-3936, www.seengineering.com	SCALE IN FEET 0 10 20 40	REVISION DATES

PUTNAM COUNTY
BOARD OF COMMISSIONERS

COLLABORATIVE INFRASTRUCTURES SERVICES

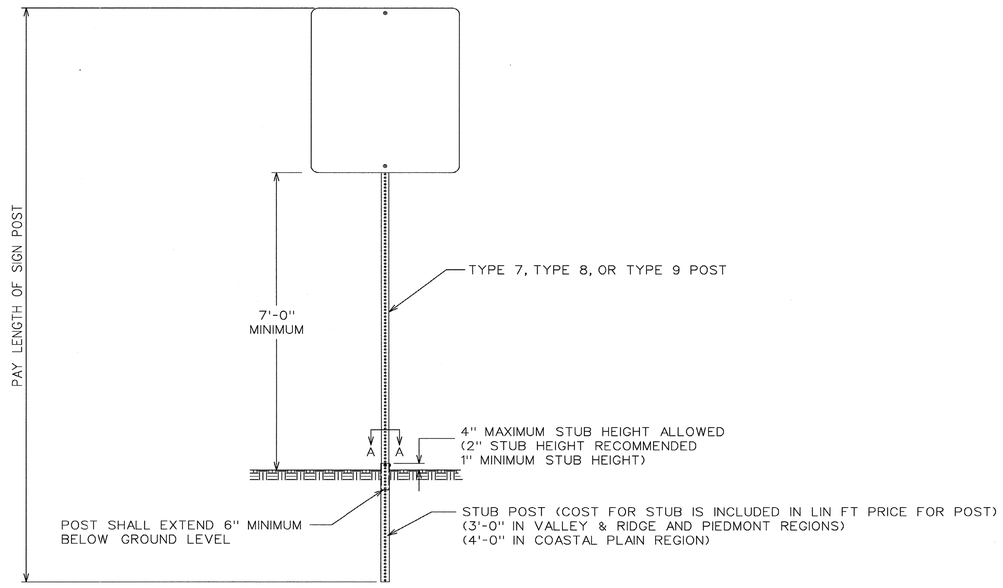
CROSS SECTIONS

OLD PHOENIX ROAD AT LAKE OCONEE
GUARDRAIL REPLACEMENT

DRAWING No.
23-0007

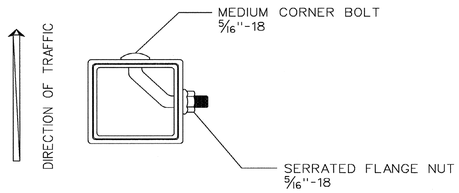
09/17/2015 SUXENOLD

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			



FRONT VIEW

POST	STUB SIZE
TYPE 7	2¼" x 2¼"
TYPE 8	2¾" x 2¾"
TYPE 9	2½" x 2½"



SECTION A-A

SIGN POST SELECTION CHART

70 MPH Wind Load Chart + 15% Gust Factor

	SLIP BASE NOT REQUIRED				GROUND MOUNTED BREAKAWAY SIGN SUPPORT REQUIRED				
	TYPE 7 2"14 ga.		TYPE 9 2-1/4"14 ga	TYPE 8 2-1/2"12 ga.	TYPE 8 2-1/2"12 ga.		TYPE 8 w/TYPE 9 Insert* 2-1/2"12 ga. W/2-1/4"14 ga.		
Sign Centroid	1 Post	2 Post	1 Post	1 Post	2 Post	3 Post	1 Post	2 Post	3 Post
	SQUARE FOOTAGE				SQUARE FOOTAGE				
6'	13.50	27.00	19.25	30.00	60.00	90.00	49.25	98.50	147.75
7'	11.60	23.20	16.50	25.75	51.50	77.25	42.25	84.50	126.75
8'	10.15	20.30	14.45	22.55	45.10	67.65	37.00	74.00	111.00
9'	9.00	18.00	12.85	20.00	40.00	60.00	32.85	65.70	98.55
10'	8.10	16.20	11.55	18.00	36.00	54.00	29.55	59.10	88.65
11'	7.40	14.80	10.50	16.40	32.80	49.20	26.90	53.80	80.70
12'	6.80	13.60	9.65	15.00	30.00	45.00	24.65	49.30	73.95
13'	6.25	12.50	8.90	13.85	27.70	41.55	22.75	45.50	68.25
14'	5.80	11.60	8.25	12.90	25.80	38.70	21.15	42.30	63.45
15'	5.00	10.00	6.45	10.10	20.20	30.30	16.55	33.10	49.65
16'	4.70	9.40	6.05	9.45	18.90	28.35	15.50	31.00	46.50
17'	4.40	8.80	5.70	8.90	17.80	26.70	14.60	29.20	43.80
18'	4.15	8.30	5.40	8.40	16.80	25.20	13.80	27.60	41.40
19'	3.95	7.90	5.10	7.95	15.90	23.85	13.05	26.10	39.15
20'	3.75	7.50	4.85	7.55	15.10	22.65	12.40	24.80	37.20

SIGN CENTROID IS DISTANCE FROM GROUND LEVEL TO BOTTOM OF SIGN *PLUS* HALF THE HEIGHT OF SIGN.
EXAMPLE: 24" X 48" SIGN THAT IS 7 FEET FROM GROUND TO BOTTOM OF SIGN. ADD HALF OF 48" (24" OR 2 FT) *PLUS* 7 FT. = 9' CENTROID.

SIGN PLATE SHALL NOT EXCEED 48" IN WIDTH ON A SINGLE POST.

* TYPE 9 INSERT SHALL BE A CONTINOUS POST INSERTED INTO THE TYPE 8 POST WHERE REQUIRED. THE INSERT POST SHALL EXTEND FROM THE BOTTOM OF THE SLIP BASE UPPER ASSEMBLY TO 4" BELOW THE BOTTOM OF THE SIGN. THE INSERT POST SHALL NOT EXTEND ABOVE THE BOTTOM OF THE SIGN. PAYMENT FOR THE INSERT POST SHALL BE PER LINEAR FOOT OF TYPE 9 POST.

GROUND MOUNTED BREAKAWAY SIGN SUPPORT WILL BE MEASURED AND PAID FOR SEPARATELY. THE COST FOR THIS WORK SHALL INCLUDE THE UPPER AND LOWER ASSEMBLY, STUB POST, CLASS "A" CONCRETE, ALL HARDWARE NECESSARY TO COMPLETE THE INSTALLATION, AND BE INCLUDED IN THE BID PRICE SUBMITTED FOR ITEM 636-3010.

DATE	REVISIONS

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF TRAFFIC SAFETY & DESIGN

TYPE 7, 8, AND 9
SQUARE TUBE POST
INSTALLATION DETAIL

NO SCALE JULY 2002

T-3A

PCBDTB

I:\CUSTOMERS_PROJECTS\1146 Putnam County\1146-19-037 Eng. Services For Guardrail & Survey\4619037\DGN\4619037_40-0001.dgn Jan 03, 2003 16:10:11

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REVISION DATES

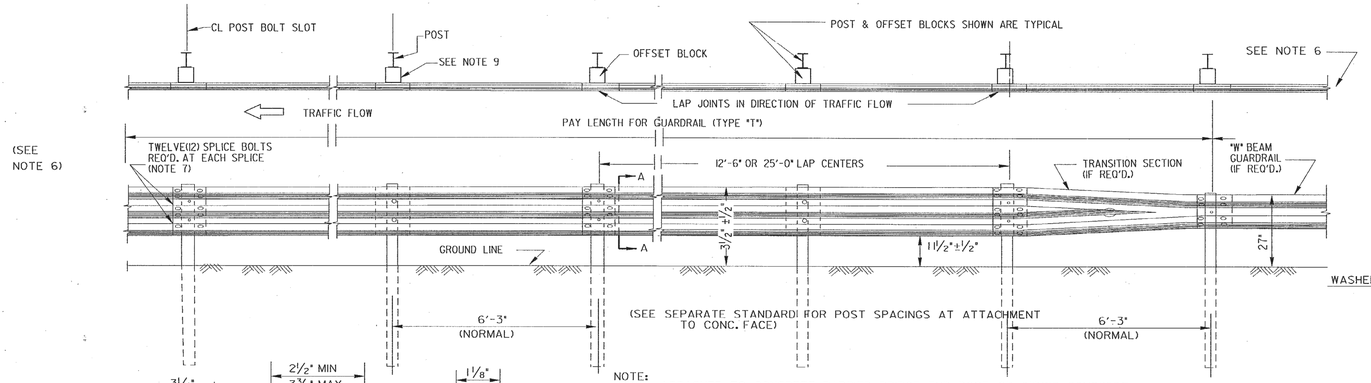
PUTNAM COUNTY
BOARD OF COMMISSIONERS
COLLABORATIVE INFRASTRUCTURES SERVICES

CONSTRUCTION DETAILS

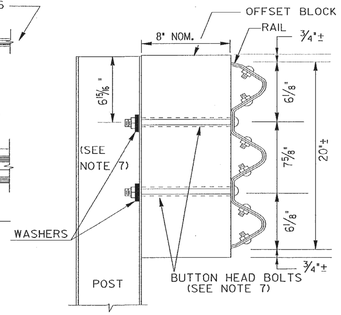
OLD PHOENIX ROAD AT LAKE OCONEE
GUARDRAIL REPLACEMENT

DRAWING No. 40-0001

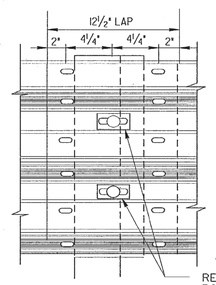
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			



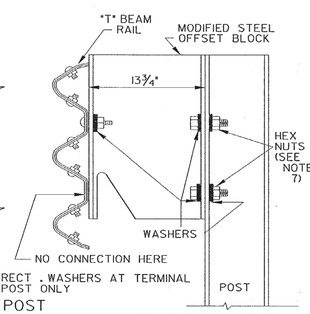
NOTE:
WHERE ATTACHED TO CONCRETE BARRIER, BRIDGE END POST OR OTHER CONCRETE FACE, PAYMENT FOR T BEAM GUARDRAIL SHALL INCLUDE ADDITIONAL POSTS, OFFSET BLOCKS AND DOUBLE THICKNESS (ONE RAIL NESTED INSIDE ANOTHER) SECTION OF T BEAM GUARDRAIL AS SPECIFIED.



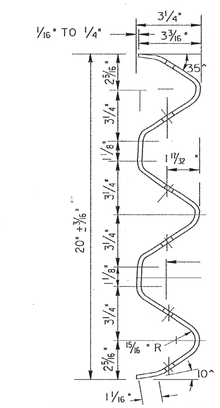
SECTIONAL VIEW
(GUARDRAIL TP. T-LIN. FT.)



"T" BEAM SPLICE AT POST

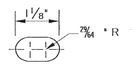


SECTIONAL VIEW
(GUARDRAIL TP. T, MODIFIED OFFSET BLOCKS -LIN. FT.)

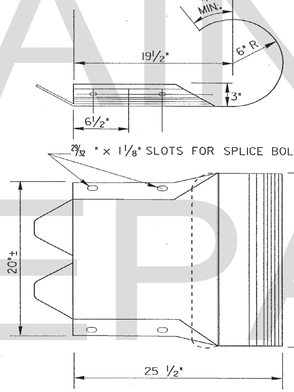


SECTION THROUGH RAIL ELEMENT (SEC. A-A)

ERECTING BOLT SLOT



SPLICE BOLT SLOT



ROUNDED TERMINAL SECTION
TO BE LAPPPED ON TRAFFIC FACE OF RAIL WHERE TYPE I ANCHORAGE IS REQUIRED

THE FLARED TERMINAL SECTION MAY BE USED AS AN ALTERNATE TO THE ROUND TERMINAL SECTION.

FLARED TERMINAL SECTION

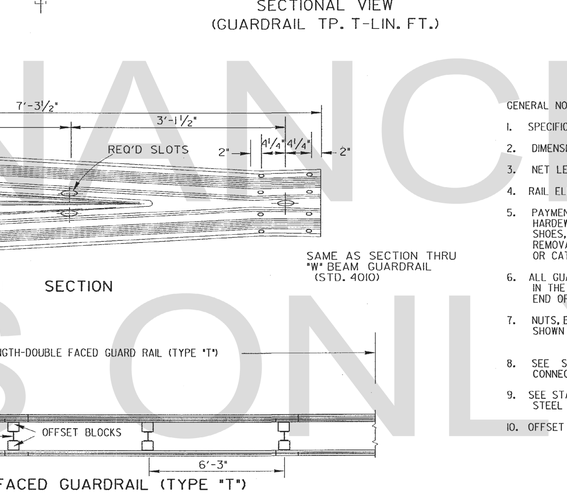
½" GALVANIZED STEEL PLATE
(FOR USE WITH END SHOE CONN.)
ALTERNATE: FIVE 3" × ½" × 3" GALV. PLATES WITH 1" DIA. HOLE CENTERED, GALV. AFTER HOLES.

"T" BEAM SPECIAL END SHOE

SAME AS SECTION THRU "W" BEAM GUARDRAIL (STD. 4010)

SAME AS SECTION THRU "T" BEAM RAIL ELEMENT

TRANSITION SECTION



DOUBLE FACED GUARDRAIL (TYPE "T")

TYPICAL SPECIAL END SHOE CONNECTION
NOTE: THE "T" BEAM RAIL ELEMENT/END SHOE SPLICE SHALL BE LAPPED IN THE DIRECTION OF THE NEAREST TRAFFIC.

GENERAL NOTES:

1. SPECIFICATIONS: GA. STANDARD CURRENT EDITION & SUPPLEMENTS THERETO
2. DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
3. NET LENGTH OF RAIL ELEMENTS MAY BE EITHER 12'-6" OR 25'-0".
4. RAIL ELEMENTS ON CURVES OF RADII LESS THAN 150' WILL BE PRECURVED.
5. PAYMENT FOR GUARDRAIL (TYPE "T") WILL INCLUDE ALL POSTS, BLOCKS, HARDEWARE ACCESSORIES AND WHERE REQUIRED ALL ADDITIONAL POSTS, END SHOES, TERMINAL SECTIONS, TRANSITION SECTIONS, BACK-UP PLATES AND REMOVAL AND REPLACEMENT OF PORTIONS OF MEDIAN PAVING, SPILLWAYS OR CATCH BASINS WHERE NECESSARY.
6. ALL GUARDRAIL TERMINALS SHALL REQUIRE AN APPROVED ANCHORAGE AS SPECIFIED IN IN THE PLANS OR APPROVED BY THE ENGINEER EXCEPT WHERE CONNECTED TO A BRIDGE END OR OTHER CONCRETE FACE.
7. NUTS, BOLTS AND WASHERS WHICH ARE NOT DETAILED ON THIS STANDARD, SHALL BE AS SHOWN FOR W BEAM GUARDRAIL ON STANDARD 4010.
8. SEE SEPARATE STANDARDS AS APPLICABLE FOR ANCHORAGES, POSTS, OFFSET BLOCKS, CONNECTIONS TO CONCRETE FACE, W BEAM GUARDRAIL, ETC.
9. SEE STANDARD 4011-A FOR DETAILS AND REQUIREMENTS OF BACK -UP PLATES, WHERE STEEL OFFSET BLOCKS ARE ALLOWED OR SPECIFIED.
10. OFFSET BLOCKS SHALL BE PLASTIC UNLESS OTHERWISE APPROVED OR SPECIFIED.

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

STANDARD

"T" BEAM GUARDRAIL

NO SCALE REV. & REDR. NOV., 1999

BY	DATE	REVISION
DES. & REV.		
REDR.		
CHK.		

(SUBMITTED) STATE ROAD & AIRPORT DESIGN ENGR.
(APPROVED) CHIEF ENGINEER

NUMBER 4270

SOUTHEASTERN ENGINEERING, INC.
Civil, Traffic, Transportation, Land Surveying, Landscape Architecture, and Land Planning
2470 Sandy Plains Road Marietta, Georgia 30066
tel: 770-321-3936, www.seengineering.com

REVISION DATES

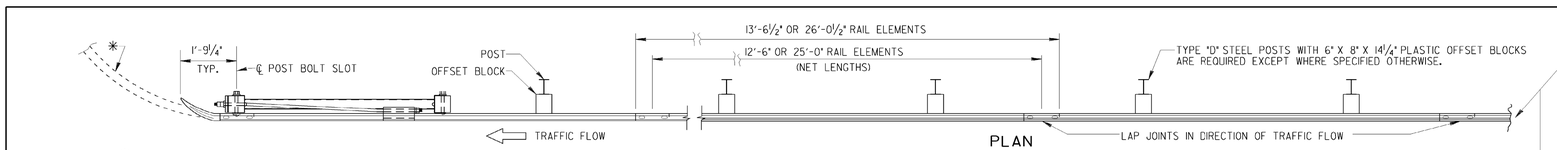
PUTNAM COUNTY
BOARD OF COMMISSIONERS
COLLABORATIVE INFRASTRUCTURES SERVICES
GEORGIA STANDARDS
OLD PHOENIX ROAD AT LAKE OCONEE
GUARDRAIL REPLACEMENT

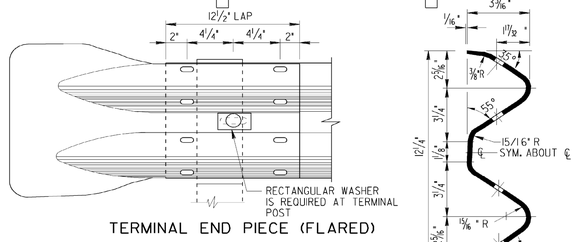
DRAWING No. 41-0001

09/17/2015 GPLNOLD

3/4/2016 9:28:18 AM \\GDOT-DSN1\GOPLOT\OCE\OCC.cpt hqwarjes P:\Policy&Lighting\Standards\GA Standards\4380\Revision_2016-1-29\4380_Revised_2016-1-29.prf

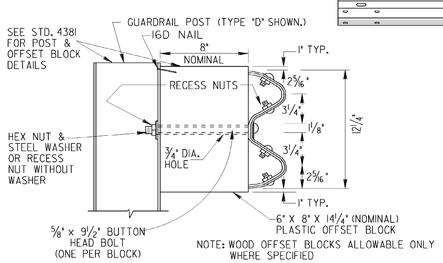
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			





TERMINAL END PIECE (FLARED)

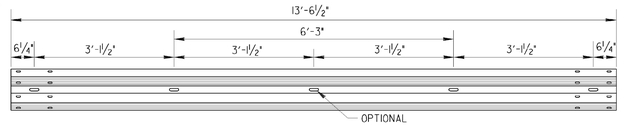
SECTION THROUGH RAIL ELEMENT



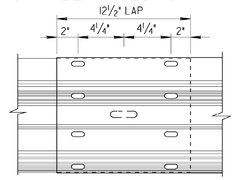
NOTE: WOOD OFFSET BLOCKS ALLOWABLE ONLY WHERE SPECIFIED

"W" BEAM OFFSET BLOCK DETAIL

NOTE: OFFSET BLOCKS FOR "W" BEAM GUARDRAIL WILL BE PLASTIC EXCEPT WHERE SPECIFIED OTHERWISE.



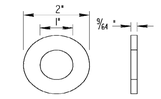
12'-6" W-BEAM SECTION



"W" BEAM SPLICE MID SPAN

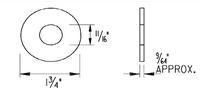
NOTE: EIGHT (8) SPLICE BOLTS REQUIRED AT ALL RAIL SPLICES

NOTE: UNLESS SPECIFIED OTHERWISE, ALL REFERENCES TO GUARDRAIL ON STANDARDS AND/OR CONSTRUCTION DETAILS WILL MEAN "W" BEAM GUARD-RAIL AS SHOWN ON THIS STANDARD.



TYPE A WASHER (GALV.)

IF SLOTS IN SPECIAL END SHOE ARE 3" LONG TP. A WASHERS ARE REQ'D UNDER SPLICE BOLT HEADS & UNDER NUTS WITH 2" LONG SPLICE BOLTS. IF END SHOE SLOTS ARE 1⅛" LONG, USE NORMAL SPLICE CONNECTIONS

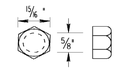


STEEL WASHER (GALV.)

(REQ'D. UNDER ⅝" HEX NUTS AND AS SPECIFIED)

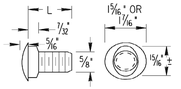
SPECIAL NOTE: ALL GUARDRAIL SPLICES WILL BE PROPERLY SECURED WITH EIGHT SPLICE BOLT CONNECTIONS. ALL NUTS WILL BE TIGHTENED. LOOSE NUTS, OMITTED BOLTS, OR OMITTED NUTS WILL BE CAUSE FOR REJECTION.

GUARDRAIL NOT ERECTED AT A 31" TOP OF RAIL HEIGHT MAY BE CAUSE FOR REJECTION.



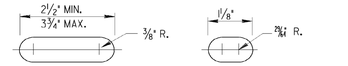
⅝" DIA. HEX NUT

L	THREAD LENGTH
1¼"	FULL LENGTH
2"	1½" MIN.
9½"	1¾" MIN.

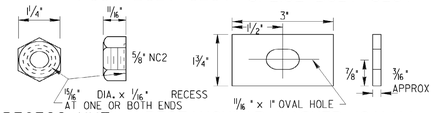


BUTTON HEAD (OR SPLICE) BOLT

(8 REQ'D PER SPLICE)



POST BOLT SLOT SPLICE BOLT SLOT

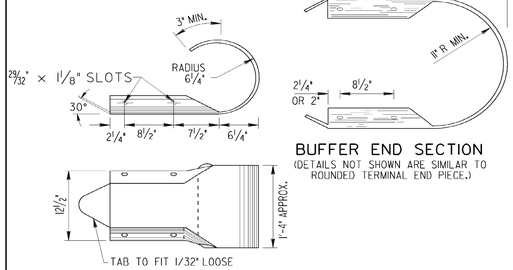


RECESS NUT RECTANGULAR WASHER (GALV.)

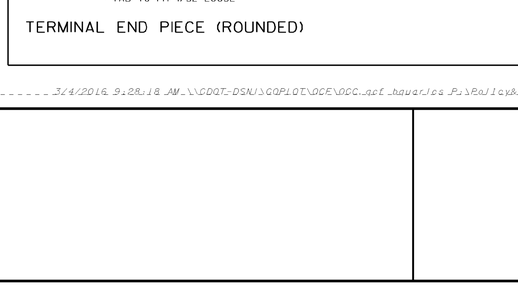
(FOR USE AT TERMINAL POST OR WHERE SPECIFIED)

GENERAL NOTES:

1. SPECIFICATIONS: GEORGIA STANDARD CURRENT EDITION, AND SUPPLEMENTS THERETO.
2. NUTS, BOLTS, WASHERS, RAIL, TERMINAL SECTIONS, END SHOES, BACK-UP PLATES, END SECTIONS AND OTHER GUARDRAIL HARDWARE ARE IN ACCORDANCE WITH THE CURRENT ARTBA TECHNICAL BULLETIN NO. 268 _ UNLESS SPECIFIED OTHERWISE. DIMENSIONS FOR POSTS AND OFFSET BLOCKS WILL BE ACCORDING TO GA. STANDARD 438I.
3. FOR DETAILS OF GUARDRAIL ANCHORAGES, SEE APPLICABLE STANDARDS AND/OR CONSTRUCTION DETAILS.
4. FOR LOCATION OF GUARDRAIL SEE APPLICABLE LOCATION STANDARDS.
5. ALL STEEL HARDWARE COMPONENTS WILL BE GALVANIZED AFTER FABRI-CATION. GALVANIZING REPAIR COMPOUND (SEC. 645) WILL BE FIELD APPLIED TO ANY COATINGS DAMAGED.
6. WHEN GUARDRAIL IS REQUIRED ON CURVES WITH RADII LESS THAN 150', PRECURVED RAIL WILL BE REQUIRED.
7. PAYMENT FOR GUARDRAIL (Type "W") TO INCLUDE OFFSET BLOCKS, POST, BACK-UP PLATES WHERE REQUIRED, BOLTS, NUTS, WASHERS, TERMINAL SEC-TIONS, ADDITIONAL POST WHERE REQUIRED, LEAVE-OUTS INCLUDING GROUT WHERE REQUIRED, & REMOVAL AND REPLACEMENT OF PORTIONS OF MEDIAN PAVING, SPILLWAYS, OR CATCH BASINS WHERE NECESSARY.
8. ALL DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
9. STANDARD NET LENGTH OF RAIL ELEMENTS MAY BE EITHER 12'-6" OR 25'-0". THESE LENGTHS SHALL BE ARRANGED TO PROVIDE AS NEARLY AS POSSIBLE THE REQUIRED LENGTH FOR EACH INSTALLATION.



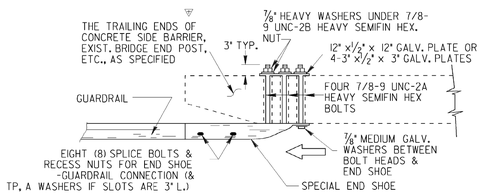
TERMINAL END PIECE (FLARED)



TERMINAL END PIECE (ROUNDED)

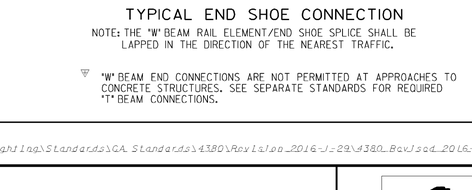
BUFFER END SECTION

(DETAILS NOT SHOWN ARE SIMILAR TO ROUNDED TERMINAL END PIECE.)



NOTE: DETAILS FOR DOUBLE FACED GUARDRAIL NOT SHOWN ARE SIMILAR TO THAT SHOWN FOR SINGLE FACED RAIL.

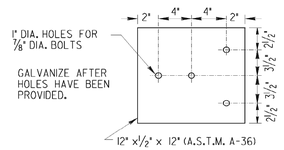
DOUBLE FACED GUARDRAIL (Type "W")



TYPICAL END SHOE CONNECTION

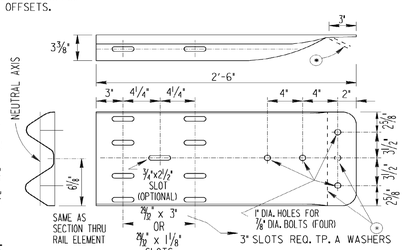
NOTE: THE "W" BEAM RAIL ELEMENT/END SHOE SPLICE SHALL BE LAPPED IN THE DIRECTION OF THE NEAREST TRAFFIC.

▽ "W" BEAM END CONNECTIONS ARE NOT PERMITTED AT APPROACHES TO CONCRETE STRUCTURES. SEE SEPARATE STANDARDS FOR REQUIRED "T" BEAM CONNECTIONS.



1/2" GALVANIZED STEEL PLATE

(TO BE USED WITH SPECIAL END SHOE CONNECTION UNDER NUTS & WASHERS ON BACK OF BRIDGE END POST OR BACK OF CONCRETE SIDE BARRIER) (FOUR 3" x½" x 3" GALV. PLATES WITH 1" DIA. HOLE CENTERED, MAY BE USED AS AN ALTERNATE)



SPECIAL END SHOE DETAIL

(FOR USE IN CONNECTING GUARDRAIL TO BRIDGE END POST, CONCRETE BARRIERS, ETC.)

SPECIAL END SHOE WILL BE 10 GAUGE STEEL GALVANIZED ACCORDING TO A.A.S.H.T.O. M-111

⊙ APPLIES ONLY TO END SHOE WITH BUFFERED END ASSEMBLY OF ANCHORAGE.

BY	REVISION	DATE
FSF	REV. 4-BM BLOCK TO 8" DEPTH	1-29-16

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

STANDARD
"W" BEAM GUARDRAIL
31 INCH GUARDRAIL HEIGHT

NO SCALE AUGUST 2011

DES.	G.L.O.	(SUBMITTED)	STATE DESIGN POLICY ENGINEER
DRW.	G.L.O.		
CHK.	B.R.E.	(APPROVED) Margaret B Pinkelo	CHIEF ENGINEER
REVIEW	B.A.S.		

NUMBER 4380

SOUTHEASTERN ENGINEERING, INC.

Civil, Traffic, Transportation, Land Surveying, Landscape Architecture, and Land Planning
2470 Sandy Plains Road Marietta, Georgia 30066
tel: 770-321-3936, www.seengineering.com

REVISION DATES		

PUTNAM COUNTY
BOARD OF COMMISSIONERS
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GEORGIA STANDARDS

OLD PHOENIX ROAD AT LAKE OCONEE
GUARDRAIL REPLACEMENT

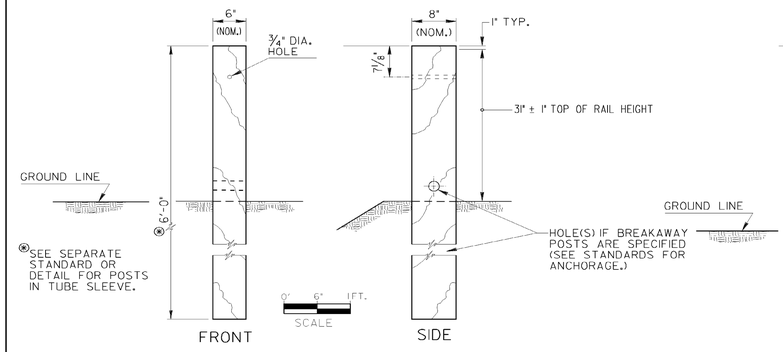
DRAWING No. 41-0002

09/17/2015 GPLNOLD

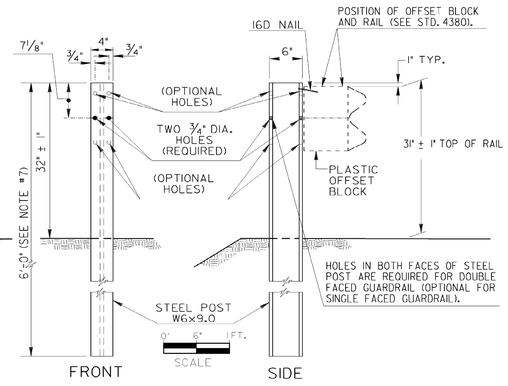
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			

TYPE A WOOD POST (FOR "W" BEAM GUARDRAIL)

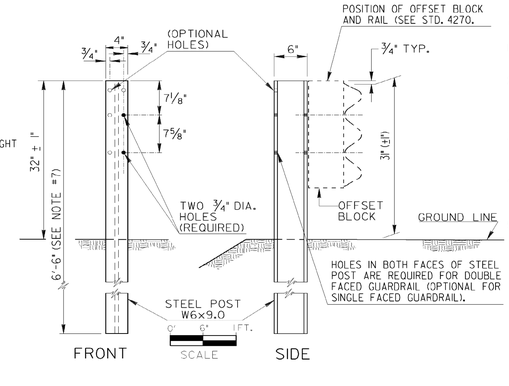
NOTE: WOOD POST ARE ALLOWABLE ONLY WHERE SPECIFIED.



TYPE D STEEL POST (FOR "W" BEAM GUARDRAIL)



TYPE D-T STEEL POST (FOR "T" BEAM GUARDRAIL)



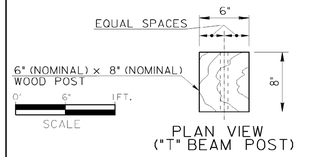
GENERAL NOTES:

1. SPECIFICATIONS GEORGIA STANDARD, CURRENT EDITION AND SUPPLEMENTS THERETO.
2. STEEL POSTS MAY BE EITHER ROLLED OR WELDED STRUCTURAL SHAPES. STEEL OFFSET BLOCKS SHALL BE ROLLED. WELDED POSTS SHALL BE SEAL WELDED BETWEEN WEB AND FLANGE BEFORE GALVANIZING.
3. WHERE WOOD POST OR WOOD OFFSET BLOCKS ARE PERMITTED, THE WOOD SHALL BE TREATED IN ACCORDANCE WITH GEORGIA STANDARD SPECIFICATIONS.
4. ALL BOLTS USED FOR FASTENING THE RAIL AND OFFSET BLOCKS TO WOOD POSTS SHALL HAVE SUFFICIENT LENGTH TO EXTEND AT LEAST 1/4" BEYOND THE FULL NUT, UP TO 3" BEYOND.
5. (a) "W" BEAM GUARDRAIL: ALL OFFSET BLOCKS SHALL BE 8" DEPTH PLASTIC BLOCKS EXCEPT FOR (d) BELOW.

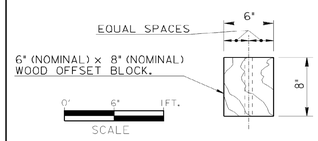
   (b) "T" BEAM GUARDRAIL: STANDARD INSTALLATION WILL USE 8" DEPTH PLASTIC BLOCKS UNLESS OTHERWISE APPROVED.

   (c) 13 3/4" DEPTH MODIFIED STEEL OFFSETS MAY BE SPECIFIED WHERE JUSTIFIED FOR MORE SEVERE CONDITIONS. PAY ITEM IS --GUARDRAIL, TP T, MODIFIED OFFSET BLOCK---PER LIN. FT.

   (d) WOOD OFFSET BLOCKS MAY BE USED ONLY AT AN ISOLATED LOCATION WITHIN A RUN OF GUARDRAIL. WHERE OTHER BLOCK TYPES WOULD NOT PROVIDE PROPER FIT, AS DETERMINED BY THE ENGINEER OR SHOWN IN THE PLANS.
6. POSTS WILL BE SPACED AT 6'-3" C. TO C., UNLESS OTHERWISE NOTED.
7. ADDITIONAL LENGTH POSTS, WHERE SPECIFIED, SHALL BE 7'-0" AND 7'-6" LONG FOR "W" BEAM AND "T" BEAM GUARDRAILS RESPECTIVELY, WITH HOLES DIMENSIONED FROM THE POST-TOP THE SAME AS SHOWN.
8. 9'-0" POST REQUIRED IF GUARDRAIL INSTALLED ON A 2:1 SLOPE.
9. GROUT FILL SHALL BE A CONTROLLED LOW STRENGTH FLOWABLE FILL THAT HAS A MAXIMUM 28-DAY COMPRESSIVE STRENGTH OF 100 P.S.I. ACCORDING TO SPEC. 600.



PLAN VIEW ("T" BEAM POST)



PLAN VIEW (FOR "W" BEAM OFFSET BLOCK)

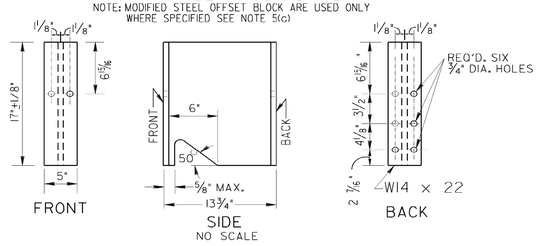
WOOD POSTS AND WOOD OFFSET BLOCKS MAY BE ROUGH OR SURFACED.

DIMENSIONS FOR WOOD POSTS AND WOOD OFFSET BLOCKS ARE NOMINAL IN ACCORDANCE WITH ACCEPTED LUMBER INDUSTRY STANDARDS.

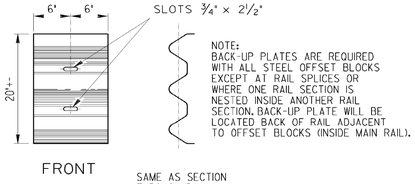
NOTE:
WHERE WOOD OFFSET BLOCK ON STEEL POST IS PERMITTED IN "W" BEAM INSTALLATION, A NAIL OR SCREW FROM POST TO WOOD IS REQUIRED TO PREVENT ROTATION OF THE BLOCK.

MODIFIED STEEL OFFSET BLOCK FOR "T" BEAM GUARDRAIL

NOTE: MODIFIED STEEL OFFSET BLOCK ARE USED ONLY WHERE SPECIFIED SEE NOTE 5(c)

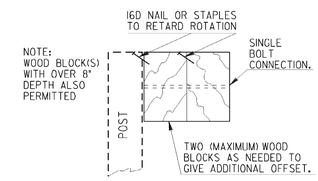


BACK-UP PLATE (FOR "T" BEAM GUARDRAIL)



ADDITIONAL DEPTH OFFSET BLOCKOUTS

(FOR USE WHERE GREATER THAN STANDARD OFFSET IS SPECIFIED)

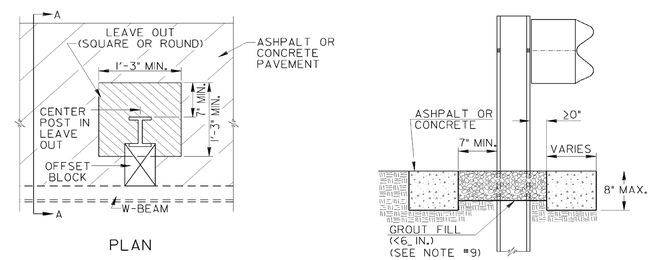


NOTE: ADDITIONAL DEPTH OFFSETS BELOW ARE SHOWN FOR "W" BEAM. SIMILAR OFFSETS MAY BE APPLIED FOR "T" BEAM GUARDRAIL.

NOTE: ADDITIONAL DEPTH OFFSETS ARE PERMITTED ONLY WHERE AN ISOLATED POST MUST BE PLACED AT A GREATER THAN NORMAL OFFSET.

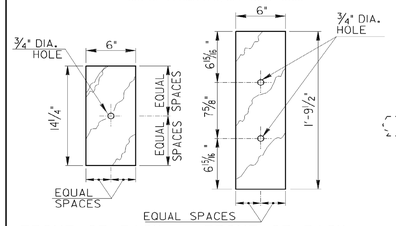
NOTE: FOR BLOCK CONNECTION TO POST AND TO RAIL SEE STD. 4380 OR 4385.

GUARDRAIL POST DETAILS IN ASPHALT OR CONCRETE PAVEMENT APPLICATIONS



WOOD OFFSET BLOCKS

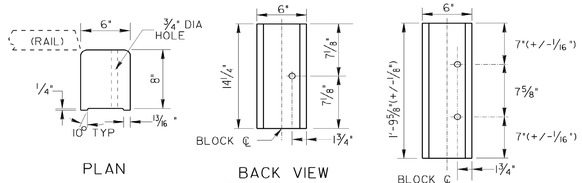
(WHERE PERMITTED, SEE NOTE 5(d))



(PLAN VIEW IS SAME AS SHOWN FOR WOOD POST ABOVE)

STANDARD PLASTIC OFFSET BLOCKS

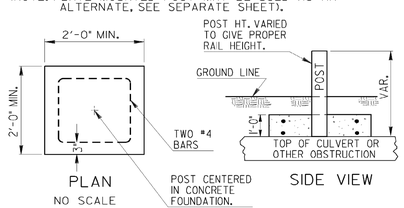
NOTE: PLASTIC OFFSET BLOCKS SHALL BE OF TYPE LISTED IN GA. DOT QPL OF APPROVED PRODUCTS OR PER STANDARD SPECIFICATIONS.



NOTE:
DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES.

CONCRETE FOUNDATION FOR POST IN SHALLOW FILLS OVER CULVERTS OR OTHER OBSTRUCTIONS

(NOTE: PLATE MOUNTED POST MAY BE USED AS AN ALTERNATE, SEE SEPARATE SHEET).

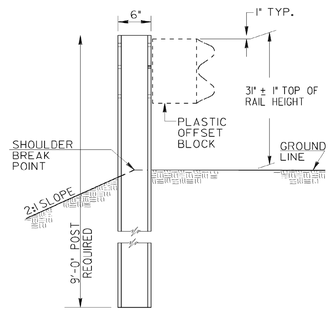


STEEL POST TO BE PLUMBED AND FOUNDATION CONCRETE POURED AROUND POST TO FINISHED ELEVATION.

PAYMENT FOR GUARDRAIL TO INCLUDE ALL EXTRA WORK AND MATERIALS INCLUDING CONCRETE (CL. A OR CL. B) AND NO. 4 BARS.

IF OFFSET FROM RAIL FACE TO HEADWALL IS LESS THAN 4'-3", POST SPACINGS ARE REDUCED TO 3'-1½" C.C. ACROSS THE CULVERT WITH 7 SUCH SPACINGS IN ADVANCE AT NO ADDITIONAL PAYMENT.

2:1 SLOPE DETAIL



DATE	REVISION	BY
1-29-16	REV. W-BM BLOCK TO 8" DEPTH	FBF
	ADDED MOW STRIP/ROAD PAV. INSTALLATION DETAILS	

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

STANDARD
POSTS AND OFFSET BLOCKS FOR "W" & "T" BEAM GUARDRAIL 31 INCH GUARDRAIL HEIGHT

SCALE: AS SHOWN — AUGUST 2011

DES.	G.L.O.	(SUBMITTED)
DRW.	G.L.O.	STATE DESIGN POLICY ENGINEER
CHK.	B.R.E.	(APPROVED) Margaret B Pirkle
REVIEW	B.A.S.	CHIEF ENGINEER

NUMBER 4381

09/17/2015 GPLNOLD

SOUTHEASTERN ENGINEERING, INC.
Civil, Traffic, Transportation, Land Surveying, Landscape Architecture, and Land Planning
2470 Sandy Plains Road Marietta, Georgia 30066
tel: 770-321-3936, www.seengineering.com

REVISION DATES		

PUTNAM COUNTY
BOARD OF COMMISSIONERS
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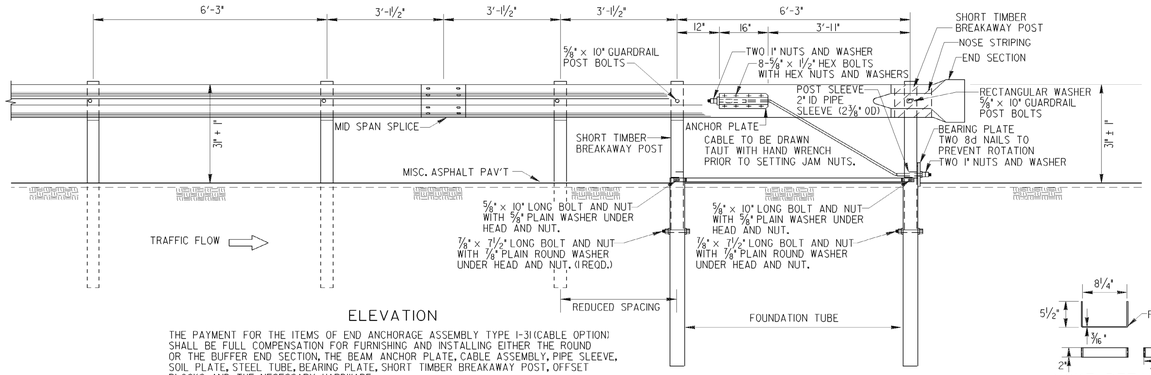
GEORGIA STANDARDS

OLD PHOENIX ROAD AT LAKE OCONEE
GUARDRAIL REPLACEMENT

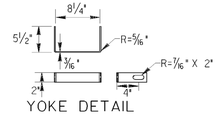
DRAWING No. 41-0003

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			

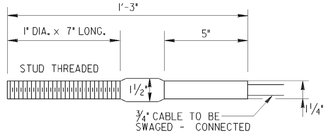


ELEVATION

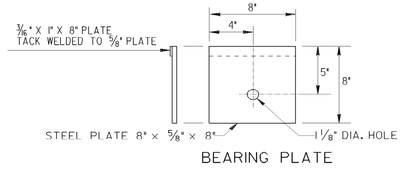
THE PAYMENT FOR THE ITEMS OF END ANCHORAGE ASSEMBLY TYPE I-31 (CABLE OPTION) SHALL BE FULL COMPENSATION FOR FURNISHING AND INSTALLING EITHER THE ROUND OR THE BUFFER END SECTION, THE BEAM ANCHOR PLATE, CABLE ASSEMBLY, PIPE SLEEVE, SOIL PLATE, STEEL TUBE, BEARING PLATE, SHORT TIMBER BREAKAWAY POST, OFFSET BLOCKS AND THE NECESSARY HARDWARE.



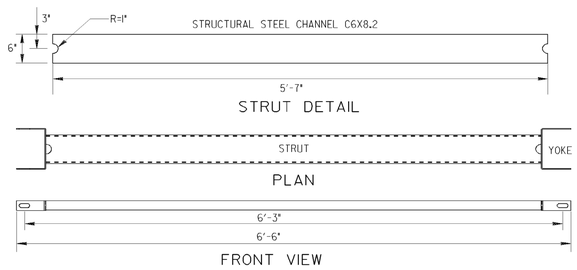
YOKE DETAIL



SWAGED FITTING AND STUD



BEARING PLATE

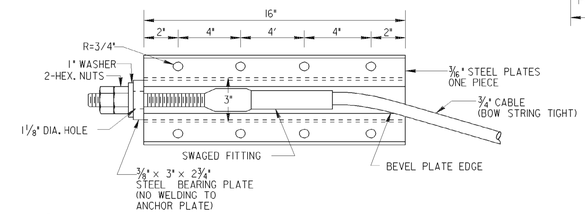


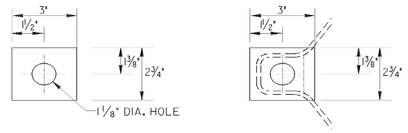
STRUT DETAIL

PLAN

FRONT VIEW

ANCHOR PLATE DETAIL

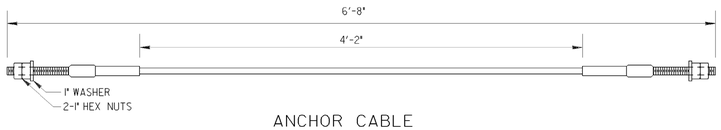




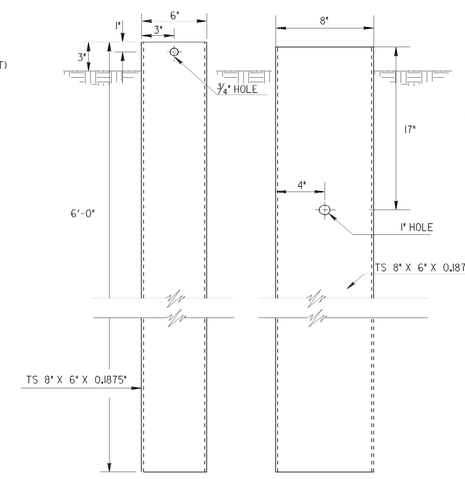
ANCHOR PLATE BEARING PLATE DETAIL

NOTE: ANCHOR PLATES SHOWN HERE WITH GUARDRAIL (TYPE "W") ATTACHMENT TO GUARDRAIL (TYPE "T") WILL BE THE SAME EXCEPT THAT THE ANCHOR PLATE WILL BE LOCATED BETWEEN THE BOTTOM AND MIDDLE CORRUGATIONS.

STANDARD ANCHOR PLATE DETAILS



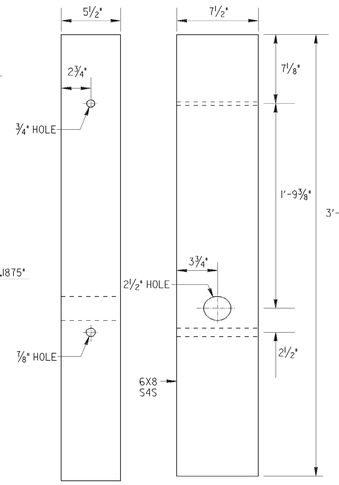
ANCHOR CABLE



FRONT VIEW SIDE VIEW

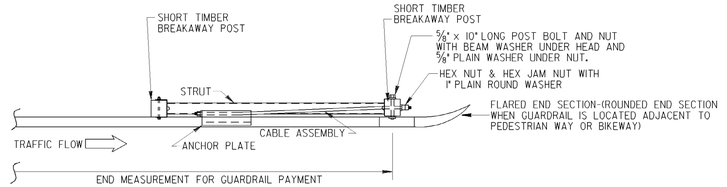
FOUNDATION TUBE

NOTE: SEE STANDARD 4382 FOR GUARDRAIL CONNECTION TO CONCRETE FACE.

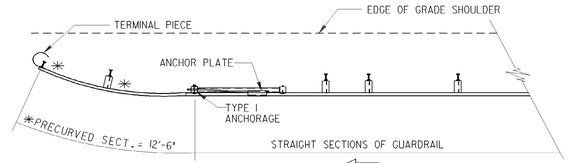


FRONT VIEW SIDE VIEW

SHORT TIMBER BREAKAWAY POST

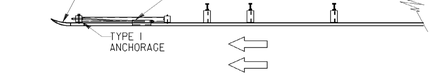


CABLE ANCHOR



* PRECURVED SECTION SHALL UTILIZE POST OF THE SAME LENGTH AS REQUIRED FOR THE ADJOINING STRAIGHT SECTIONS, REGARDLESS OF DISTANCE TO GRADED SHOULDER EDGE.

AT TRAILING END OF TWO-WAY TRAFFIC (WHICH FALLS OUTSIDE CLEAR ZONE OF OPPOSING TRAFFIC)



AT TRAILING END OF ONE-WAY TRAFFIC

NOTE:
SEE STD. 4388 OR OTHER APPLICABLE DETAILS FOR REQUIREMENT FOR TYPE 12 ANCHORAGE ON THE TRAILING END.

GENERAL NOTES:

1. SPECIFICATIONS: GEORGIA STANDARD, CURRENT EDITION & SUPPLEMENTS THERE TO.
2. FOR DETAILS OF GUARDRAIL HARDWARE, POST, OTHER TYPE ANCHORAGE, LOCATION, ETC. SEE SEPARATE STANDARDS AS APPLICABLE.
3. GUARDRAIL INSTALLATIONS, INCLUDING ANCHORAGES AND CONNECTIONS, ARE TO BE COMPLETED BEFORE BEING SUBJECT TO TRAFFIC UNLESS OTHERWISE APPROVED.
4. PAYMENT FOR ANCHORAGE INCLUDES ANCHOR PLATE; ¾" CABLE; BREAKAWAY POSTS; FOUNDATION TUBES; STRUT AND ALL ACCOMPANYING HARDWARE.

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

STANDARD

GUARDRAIL ANCHORAGE TYPE I 31 INCH GUARDRAIL HEIGHT

NO SCALE — AUGUST 2011

BY: DES. G.L.O. (SUBMITTED) — STATE DESIGN POLICY ENGINEER
DRW. G.L.O.
CHK. B.R.E. (APPROVED) — CHIEF ENGINEER
REVIEW B.A.S.

DATE / REVISION

NUMBER 4383

SOUTHEASTERN ENGINEERING, INC.
Civil, Traffic, Transportation, Land Surveying, Landscape Architecture, and Land Planning
2470 Sandy Plains Road Marietta, Georgia 30066
tel: 770-321-3936, www.seengineering.com

REVISION DATES

PUTNAM COUNTY
BOARD OF COMMISSIONERS

COLLABORATIVE INFRASTRUCTURES SERVICES

GEORGIA STANDARDS

OLD PHOENIX ROAD AT LAKE OCONEE
GUARDRAIL REPLACEMENT

DRAWING No. 41-0004

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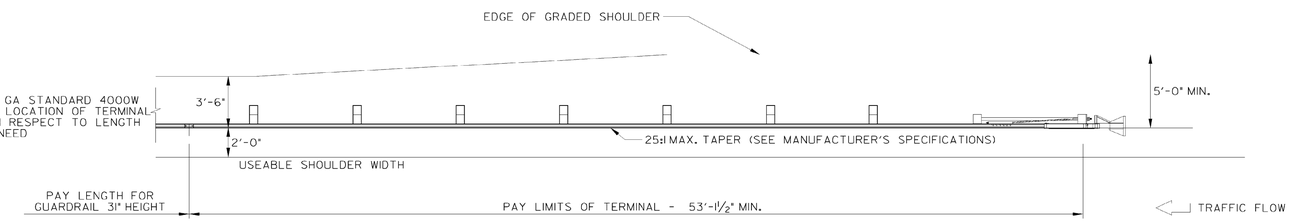
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			

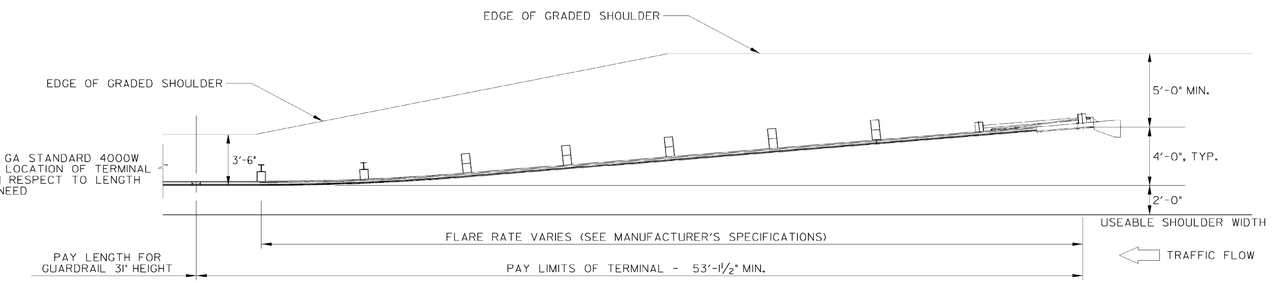


TYPE 12A - 31" GUARDRAIL TERMINAL
(TANGENT, ENERGY-ABSORBING)

GENERAL NOTES:

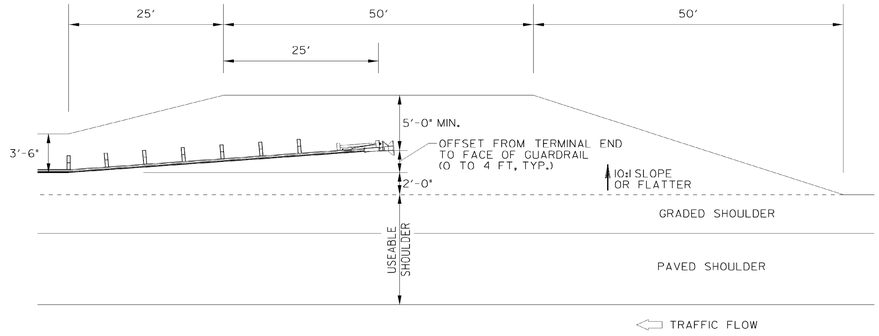
1. SPECIFICATIONS: GEORGIA STANDARD CURRENT EDITION, AND SUPPLEMENTS THERETO.
2. SEE GDOT OPL 64 FOR APPROVED PRODUCTS.
3. THIS SHEET DEPICTS THE PAY LIMITS FOR GUARDRAIL AND TYPE 12 TERMINALS. TYPE 12 TERMINALS SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
4. W-BEAM INSTALLATIONS LESS THAN 150 FEET IN ADVANCE OF ANY SHIELDED OBJECT OR TOTAL LENGTH OF W-BEAM INSTALLATION IS LESS THAN ABOUT 150 FEET, AN ENGERGY-ABSORBING TERMINAL SHOULD BE SELECTED.

ITEM NO.	UNITS	DESCRIPTION
641-5015	EA	GUARDRAIL TERMINAL, TP 12A - 31", TANGENT, ENERGY-ABSORBING
641-5020	EA	GUARDRAIL TERMINAL, TP 12B - 31", FLARED, ENERGY-ABSORBING
641-5025	EA	GUARDRAIL TERMINAL, TP 12C - 31", FLARED, NON-ENERGY-ABSORBING



TYPE 12B - 31" GUARDRAIL TERMINAL
(FLARED, ENERGY-ABSORBING)

TYPE 12C - 31" TERMINAL
(FLARED, NON-ENERGY-ABSORBING)



TERMINAL PAD GRADING DETAIL

BY	REVISION	DATE
FBF	ADDED 12A, 12B, & 12C GRADING DTL	1-29-16

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

STANDARD
GUARDRAIL TERMINALS, TYPE 12A, 12B, AND 12C 31 INCH GUARDRAIL HEIGHT

NO SCALE — AUGUST 2011

DES. G.L.O. (SUBMITTED) — STATE DESIGN POLICY ENGINEER
DRW. G.L.O.
CHK. B.R.E. (APPROVED) Margaret B Pinkelo — CHIEF ENGINEER
REVIEW B.A.S.

NUMBER 4384

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SOUTHEASTERN ENGINEERING, INC.
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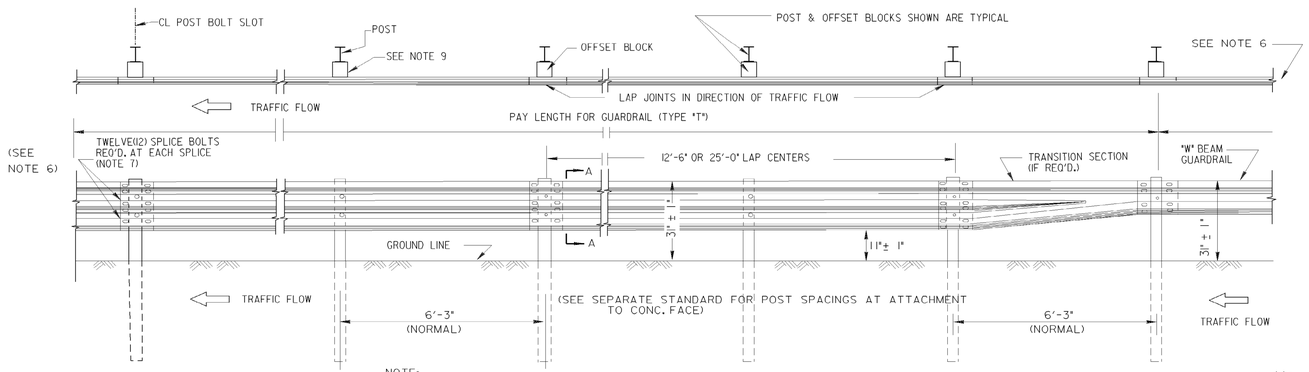
REVISION DATES		

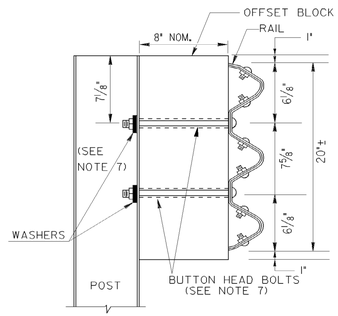
PUTNAM COUNTY
BOARD OF COMMISSIONERS
COLLABORATIVE INFRASTRUCTURES SERVICES
GEORGIA STANDARDS
OLD PHOENIX ROAD AT LAKE OCONEE
GUARDRAIL REPLACEMENT

DRAWING No. 41-0005

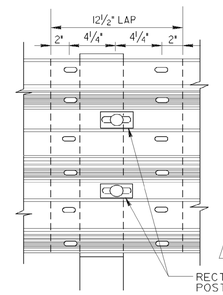
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			



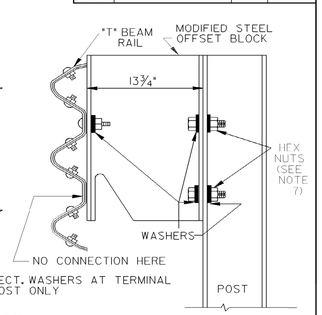
NOTE:
WHERE ATTACHED TO CONCRETE BARRIER, BRIDGE END POST OR OTHER CONCRETE FACE, PAYMENT FOR T BEAM GUARDRAIL SHALL INCLUDE ADDITIONAL POSTS, OFFSET BLOCKS AND DOUBLE THICKNESS (ONE RAIL NESTED INSIDE ANOTHER) SECTION OF T BEAM GUARDRAIL AS SPECIFIED.



SECTIONAL VIEW
(GUARDRAIL TP. T-LIN. FT.)

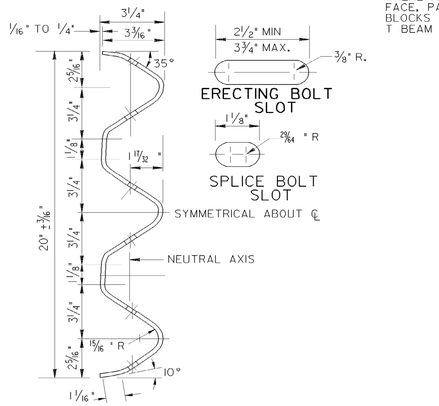


"T" BEAM SPLICE AT POST

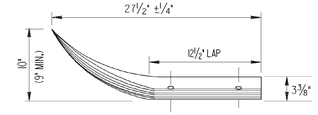


SECTIONAL VIEW
(GUARDRAIL TP. T,
MODIFIED OFFSET BLOCK)

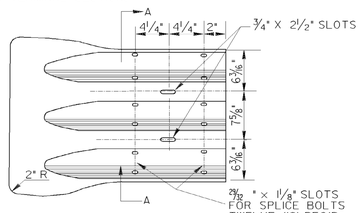
NOTE:
13¾" DEPTH MODIFIED STEEL OFFSETS BLOCKS MAY BE SPECIFIED WHERE JUSTIFIED FOR MORE SEVERE CONDITIONS. PAY ITEM IS --GUARDRAIL, TP T, MODIFIED OFFSET BLOCK---PER LIN. FT.



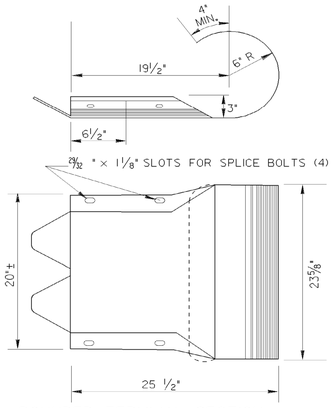
SECTION THROUGH
RAIL ELEMENT (SEC. A-A)



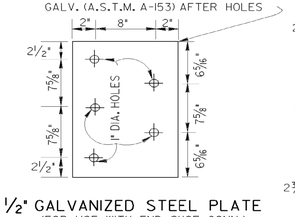
THE FLARED TERMINAL SECTION MAY BE USED AS AN ALTERNATE TO THE ROUND TERMINAL SECTION.



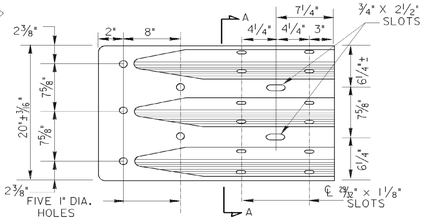
FLARED TERMINAL SECTION



ROUNDED TERMINAL SECTION
TO BE LAPPED ON TRAFFIC FACE OF RAIL WHERE TYPE I ANCHORAGE IS REQUIRED

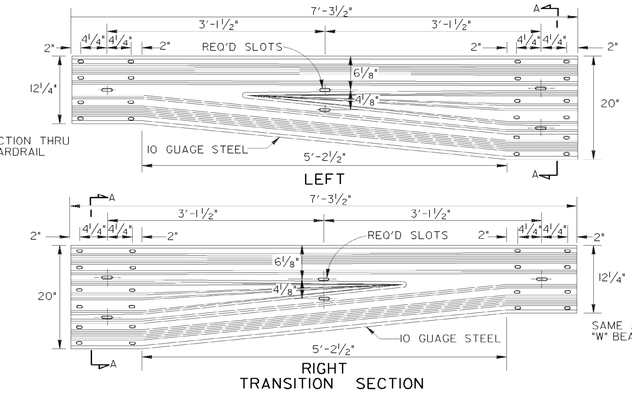


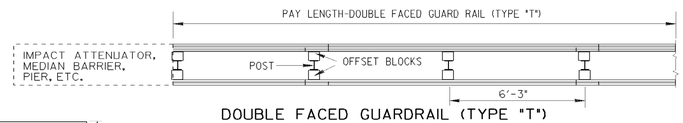
½" GALVANIZED STEEL PLATE
(FOR USE WITH END SHOE CONN.)
ALTERNATE: FIVE 3" X½" X 3" GALV. PLATES WITH 1" DIA. HOLE CENTERED, GALV. AFTER HOLES.



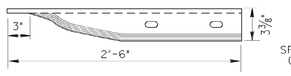
"T" BEAM SPECIAL END SHOE

NOTE:
WHERE ATTACHED TO CONCRETE BARRIER, BRIDGE END POST OR OTHER CONCRETE FACE, PAYMENT FOR T BEAM GUARDRAIL SHALL INCLUDE ADDITIONAL POSTS, OFFSET BLOCKS AND DOUBLE THICKNESS (ONE RAIL NESTED INSIDE ANOTHER) SECTION OF T BEAM GUARDRAIL AS SPECIFIED.

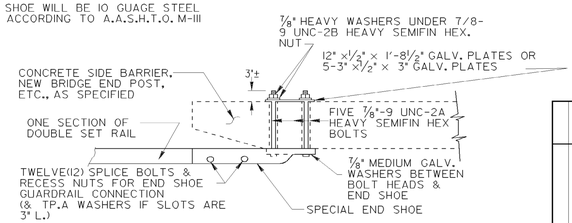




DOUBLE FACED GUARDRAIL (TYPE "T")



SPECIAL END SHOE WILL BE 10 GUAGE STEEL GALVANIZED ACCORDING TO A.A.S.H.T.O. M-111



TYPICAL SPECIAL END SHOE CONNECTION
NOTE: THE "T" BEAM RAIL ELEMENT/END SHOE SPLICE SHALL BE LAPPED IN THE DIRECTION OF THE NEAREST TRAFFIC.

GENERAL NOTES:

1. SPECIFICATIONS: GA. STANDARD CURRENT EDITION & SUPPLEMENTS THERETO
2. DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
3. NET LENGTH OF RAIL ELEMENTS MAY BE EITHER 12'-6" OR 25'-0".
4. RAIL ELEMENTS ON CURVES OF RADII LESS THAN 150' WILL BE PRECURVED.
5. PAYMENT FOR GUARDRAIL (TYPE "T") WILL INCLUDE ALL POSTS, BLOCKS, HARDEWARE ACCESSORIES AND WHERE REQUIRED ALL ADDITIONAL POSTS, END SHOES, TERMINAL SECTIONS, TRANSITION SECTIONS, BACK-UP PLATES AND REMOVAL AND REPLACEMENT OF PORTIONS OF MEDIAN PAVING, SPILLWAYS OR CATCH BASINS WHERE NECESSARY.
6. ALL GUARDRAIL TERMINALS SHALL REQUIRE AN APPROVED ANCHORAGE AS SPECIFIED IN IN THE PLANS OR APPROVED BY THE ENGINEER EXCEPT WHERE CONNECTED TO A BRIDGE END OR OTHER CONCRETE FACE.
7. NUTS, BOLTS AND WASHERS WHICH ARE NOT DETAILED ON THIS STANDARD, SHALL BE AS SHOWN FOR W BEAM GUARDRAIL ON STANDARD 4380.
8. SEE SEPARATE STANDARDS AS APPLICABLE FOR ANCHORAGES, POSTS, OFFSET BLOCKS, CONNECTIONS TO CONCRETE FACE, W BEAM GUARDRAIL, ETC.
9. SEE STANDARD 4381 FOR DETAILS AND REQUIREMENTS OF BACK-UP PLATES, WHERE STEEL OFFSET BLOCKS ARE ALLOWED OR SPECIFIED.
10. OFFSET BLOCKS SHALL BE PLASTIC UNLESS OTHERWISE APPROVED OR SPECIFIED.

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

STANDARD
"T" BEAM GUARDRAIL
CONNECTION TO 31 INCH HEIGHT "W" BEAM

NO SCALE — AUGUST 2011

REVISION	DATE	BY

DES. G.L.O. (SUBMITTED) STATE DESIGN POLICY ENGINEER
DRW. G.L.O.
CHK. B.R.F. (APPROVED) CHIEF ENGINEER
REVIEW B.A.S.

NUMBER 4385

SOUTHEASTERN ENGINEERING, INC.
Civil, Traffic, Transportation, Land Surveying, Landscape Architecture, and Land Planning
2470 Sandy Plains Road Marietta, Georgia 30066
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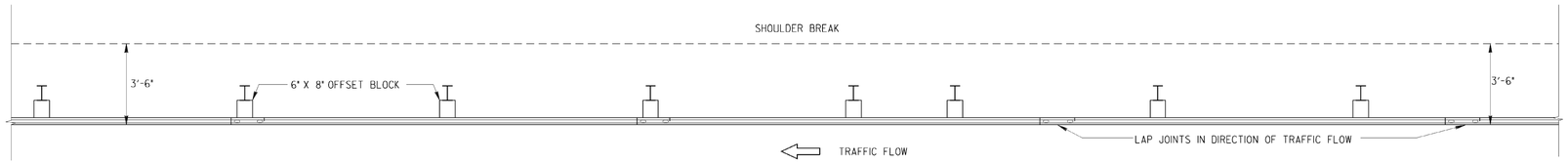
REVISION DATES		

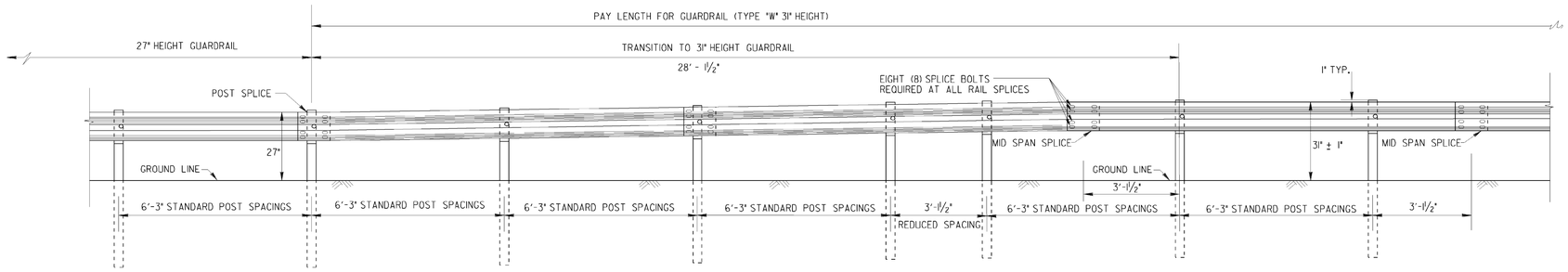
PUTNAM COUNTY
BOARD OF COMMISSIONERS
COLLABORATIVE INFRASTRUCTURES SERVICES
GEORGIA STANDARDS
OLD PHOENIX ROAD AT LAKE OCONEE
GUARDRAIL REPLACEMENT

DRAWING No. 41-0006

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			



PLAN



ELEVATION

(TYPICAL VIEW ALONG ROADWAY)

GENERAL NOTES:

1. SPECIFICATIONS: GEORGIA STANDARD CURRENT EDITION, AND SUPPLEMENTS THERETO.
2. NUTS, BOLTS, WASHERS, RAIL, TERMINAL SECTIONS, END SHOES, BACK-UP PLATES, END SECTIONS AND OTHER GUARDRAIL HARDWARE ARE IN ACCORDANCE WITH THE CURRENT ARTBA TECHNICAL BULLETIN NO. 268 __ UNLESS SPECIFIED OTHERWISE. DIMENSIONS FOR POSTS AND OFFSET BLOCKS WILL BE ACCORDING TO GA. STANDARD 438I.
3. FOR DETAILS OF GUARDRAIL ANCHORAGES AND TERMINALS, SEE APPLICABLE STANDARDS AND/OR CONSTRUCTION DETAILS.
4. FOR LOCATION OF GUARDRAIL SEE APPLICABLE LOCATION STANDARDS.
5. ALL STEEL HARDWARE COMPONENTS WILL BE GALVANIZED AFTER FABRICATION. GALVANIZING REPAIR COMPOUND (SEC. 645) WILL BE FIELD APPLIED TO ANY COATINGS DAMAGED.
6. WHEN GUARDRAIL IS REQUIRED ON CURVES WITH RADII LESS THAN 150', PRECURVED RAIL WILL BE REQUIRED.
7. PAYMENT FOR GUARDRAIL (Type "W") TO INCLUDE OFFSET BLOCKS, POST, BACK-UP PLATES WHERE REQUIRED, BOLTS, NUTS, WASHERS, TERMINAL SECTIONS, ADDITIONAL POST WHERE REQUIRED, & REMOVAL AND REPLACEMENT OF PORTIONS OF MEDIAN PAVING, SPILLWAYS, OR CATCH BASINS WHERE NECESSARY.
8. ALL DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
9. STANDARD NET LENGTH OF RAIL ELEMENTS MAY BE EITHER 12'-6" OR 25'-0". THESE LENGTHS SHALL BE ARRANGED TO PROVIDE AS NEARLY AS POSSIBLE THE REQUIRED LENGTH FOR EACH INSTALLATION.

BY	REVISION	DATE
FBF	REV. 3"# BM BLOCK TO 6"X8"	1-29-16

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

STANDARD

"W" BEAM GUARDRAIL
TRANSITION 27 INCH GUARDRAIL TO
31 INCH GUARDRAIL HEIGHT

NO SCALE AUGUST 2011

DES. G.L.O.	(SUBMITTED)	STATE DESIGN POLICY ENGINEER	NUMBER
DRW. G.L.O.			
CHK. B.R.E.	(APPROVED)	Margaret B Pinkelo	4390
REVIEW D.A.S.		CHIEF ENGINEER	

3/4/2016 10:14:20 AM \\GDOT-DSNI\GOPLOT\OCF\OGC.gef bguarles P:\Policy&Lighting\Standards\GA_Standards\4390\Revision_2016-1-29\4390_Revised_2016-1-29.prf

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SOUTHEASTERN ENGINEERING, INC.
Civil, Traffic, Transportation, Land Surveying, Landscape Architecture, and Land Planning
2470 Sandy Plains Road Marietta, Georgia 30066
tel: 770-321-3936, www.seengineering.com

REVISION DATES

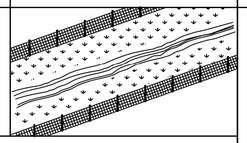
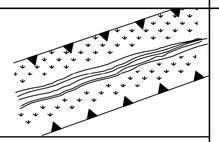
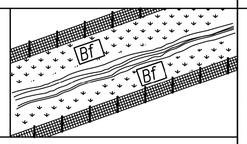
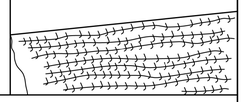
PUTNAM COUNTY
BOARD OF COMMISSIONERS

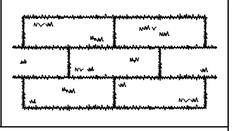
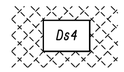
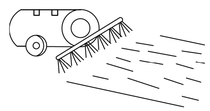
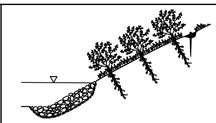
COLLABORATIVE INFRASTRUCTURES SERVICES

GEORGIA STANDARDS

OLD PHOENIX ROAD AT LAKE OCONEE
GUARDRAIL REPLACEMENT

DRAWING No. 41-0007

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
	ORANGE BARRIER FENCE		ORANGE BARRIER FENCE DELINEATES ENVIRONMENTALLY SENSITIVE AREAS WHERE THE CONTRACTOR SHALL NOT CLEAR, GRUB, OR PLACE CONSTRUCTION MATERIALS OR EQUIPMENT WITHIN THIS AREA.
		LINE CODE  ORANGE BARRIER FENCE	
ESA	ENVIRONMENTALLY SENSITIVE AREA		AN ENVIRONMENTALLY SENSITIVE AREA (ESA) CONTAINS RESOURCES THAT ARE ENVIRONMENTALLY, CULTURALLY, OR HISTORICALLY SENSITIVE. ESAs INCLUDE, BUT ARE NOT LIMITED TO: STATE WATER BUFFERS, HISTORIC SITES, ARCHAEOLOGICAL SITES, AND PROTECTED ANIMAL AND PLANT SPECIES HABITATS. IF WORK IS AUTHORIZED IN THIS AREA, THE WORK MUST BE PERFORMED IN ACCORDANCE WITH SECTION 107 AND ANY OTHER APPLICABLE SPECIAL PROVISIONS AND APPLICABLE PLAN NOTES.
		LINE CODE  ESA-25'(OR 50')STREAM BUFFER, ETC.	
Bf	BUFFER ZONE		A STRIP OF UNDISTURBED ORIGINAL VEGETATION, ENHANCED OR RESTORED EXISTING VEGETATION, OR THE RE-ESTABLISHMENT OF VEGETATION SURROUNDING AN AREA OF DISTURBANCE OR BORDERING STREAMS, PONDS, WETLANDS, LAKES, AND COASTAL WATERS. WHEN NECESSARY, BUFFER ZONES ARE TO BE PROTECTED BY ORANGE BARRIER FENCE.
		SYMBOL Bf	
Ds1	MULCH SECTION 163		THIS IS AN APPLICATION OF STRAW MULCH USED TO REDUCE SOIL EROSION AND STABILIZE THE SOIL. IT IS USED TO CONTROL EROSION IN AREAS WHERE PERMANENT VEGETATION IS OUT OF SEASON OR TO TEMPORARILY STABILIZE AREAS PRIOR TO FINAL GRADING. MULCHING REQUIREMENTS ARE ADDRESSED BY STANDARD SPECIFICATIONS AND/OR THE PROJECT ENGINEER. THE BMP SYMBOL FOR APPLICABLE AREAS AND/OR A NOTE SHALL BE INCLUDED ON APPLICABLE SHEETS IN SECTION 54.
		SYMBOL Ds1	
Ds2	TEMPORARY GRASSING SECTION 163, 700		THE SOWING OF A QUICK GROWING SPECIES OF GRASS SUITABLE TO THE AREA AND SEASON. IT IS TYPICALLY USED TO CONTROL EROSION IN AREAS LONGER THAN MULCHING IS EXPECTED TO LAST. TEMPORARY GRASSING SHOULD BE USED ON ALL PROJECTS ACCORDING TO THE STANDARD SPECIFICATIONS. THE BMP SYMBOL FOR APPLICABLE AREAS AND/OR A NOTE SHALL BE INCLUDED ON APPLICABLE SHEETS IN SECTION 54.
		SYMBOL Ds2	

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Ds3	PERMANENT GRASSING SECTION 700		THE SOWING OF PERMANENT VEGETATION, SUCH AS GRASS, SUITABLE TO THE AREA AND SEASON. PERMANENT VEGETATION SHALL BE USED ON ALL PROJECTS ACCORDING TO THE STANDARD SPECIFICATION. THE BMP SYMBOL FOR APPLICABLE AREAS AND/OR A NOTE SHALL BE INCLUDED ON APPLICABLE SHEETS IN SECTION 54.
		SYMBOL Ds3	
Ds4	SODDING CONSTRUCTION DETAIL D-54 SECTION 700, 890		THE INSTALLATION OF A SPECIES OF GRASS SODDING SUITABLE TO THE AREA AND SEASON TO PROVIDE IMMEDIATE PERMANENT VEGETATION. SODDING MAY BE SHOWN FOR HIGHLY SENSITIVE AREAS, TO IMPROVE AESTHETICS, OR FOR SPECIAL PLANTING REQUIREMENTS ON THE BASIS OF ENVIRONMENTAL COMMITMENTS OR LANDSCAPING REQUIREMENTS. THE BMP PATTERN FOR APPLICABLE AREAS AND/OR A NOTE SHALL BE INCLUDED ON APPLICABLE SHEETS IN SECTION 54.
		PATTERN 	
Fl-Co	FLOCCULANTS COAGULANTS SECTION 163, 700, 895		FLOCCULANTS AND COAGULANTS ARE USED TO SETTLE SUSPENDED SEDIMENT, HEAVY METALS, AND HYDROCARBONS (TSS) IN SLOW MOVING RUNOFF FROM CONSTRUCTION SITES FOR WATER CLARIFICATION. ANIONIC POLYACRYLAMIDES (PAM) MAY BE USED IN CONJUNCTION WITH BMPs WITHIN CHANNELS UPSTREAM OF A POST-CONSTRUCTION POND, TEMPORARY SEDIMENT BASIN, OR TEMPORARY SEDIMENT TRAP. FLOCCULANTS SHALL NOT BE USED DOWNSTREAM OF AFOREMENTIONED BMPs! FLOCCULANTS/COAGULANTS ARE TO BE SHOWN ON PLANS WITH APPLICABLE BMP IF NEEDED. PAYMENT FOR PAM AS A FLOCCULANT WILL BE INCLUDED IN THE PRICE FOR THE INSTALLATION AND/OR MAINTENANCE OF THE BMP IT IS USED IN CONJUNCTION WITH. NO SEPARATE PAYMENT WILL BE MADE.
		SYMBOL Fl-Co POLYACRYLAMIDE	
Sb	STREAMBANK STABILIZATION SECTION 702		STREAMBANK STABILIZATION IS THE USE OF READILY AVAILABLE NATIVE PLANT MATERIALS TO MAINTAIN AND ENHANCE STREAMBANKS, OR TO PREVENT, OR RESTORE AND REPAIR SMALL STREAMBANK EROSION PROBLEMS. STREAMBANK STABILIZATION AREAS SHOULD BE SHOWN ON THE PLANS WHEN APPLICABLE TO THE PROJECT. REFER TO THE PROJECT'S STREAM AND STREAM BUFFER MITIGATION PLANS FOR PLANT SPECIES, LOCATIONS, AND OTHER PLANTING DETAILS.
		PATTERN 	

NOTE:

1. DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
2. FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".

NO SCALE

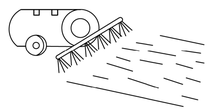
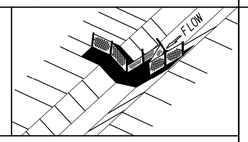
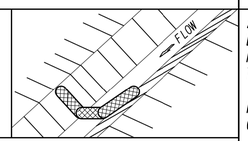
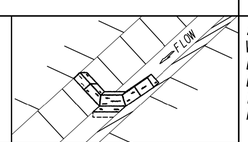
REVISION DATES
3/2/2017

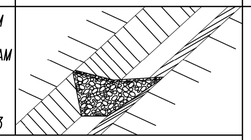
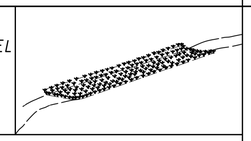
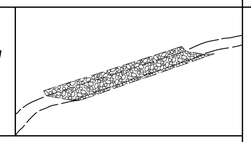
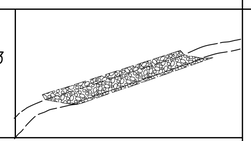
EROSION CONTROL LEGEND

UNIFORM CODE SHEET

SHEET 1 OF 7

CHECKED:	D. EAGLETON	DATE:	01/01/16	DRAWING No.
BACKCHECKED:		DATE:		52-0001
CORRECTED:		DATE:		
VERIFIED:		DATE:		

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Ss	SLOPE STABILIZATION CONSTRUCTION DETAIL D-35 SECTION 716		SLOPE STABILIZATION (EROSION CONTROL MATTING) IS A PROTECTIVE COVERING USED TO PREVENT EROSION AND ESTABLISH TEMPORARY OR PERMANENT VEGETATION ON STEEP SLOPES, SHORE LINES, OR CHANNELS. SLOPE STABILIZATION MAY BE A ROLLED EROSION CONTROL PRODUCT (RECP) OR A HYDRAULIC EROSION CONTROL PRODUCT (HECP). SLOPE STABILIZATION SHALL BE USED ON ALL CUT OR FILL SLOPES OF 2.5:1 OR STEEPER AND WITHIN 50 FEET OF ALL CROSS DRAINS AND CULVERTS. NOTE: ONLY COCONUT FIBER BLANKET OR WOOD FIBER BLANKET SHALL BE USED AS SLOPE STABILIZATION WITHIN BUFFERED AREAS.
	PATTERN 		
Tac	TACKIFIERS SECTION 163, 700, 895		TACKIFIERS HYDRATE IN WATER AND READILY BLEND WITH OTHER SLURRY MATERIALS AND ARE USED TO TIE-DOWN FOR SOIL, COMPOST, SEED, STRAW, HAY OR MULCH. TACKIFIERS REQUIREMENTS, SUCH AS ANIONIC POLYACRYLAMIDES (PAM) ARE ADDRESSED BY STANDARD SPECIFICATIONS AND ARE NOT TYPICALLY SHOWN ON THE PLANS. PAM IS TYPICALLY USED BY THE CONTRACTOR FOR TEMPORARY OR PERMANENT GRASSING. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR CRITERIA.
	SYMBOL Tac POLYACRYLAMIDE		
Cd-F	FABRIC CHECK DAM CONSTRUCTION DETAIL D-24D SECTION 171		A CHECK DAM COMPOSED OF SYNTHETIC FIBER FABRIC, WIRE REINFORCED, POST, OVERFLOW WEIR, AND TURF REINFORCEMENT MATTING (TRM) SPLASHPAD PLACED IN DITCHES IN A SPECIAL CONFIGURATION WHICH CONTROLS ENERGY DISSIPATION AND FILTRATION OF STORM WATER. SEE CONSTRUCTION DETAIL D-24D FOR ADDITIONAL INFORMATION AND SPACING REQUIREMENTS. THIS ITEM IS SUITABLE FOR USE IN ROADSIDE DITCHES THAT ARE PART OF INFRASTRUCTURE CONSTRUCTION PROJECTS AND WITHIN THE CLEAR ZONE. IF THIS ITEM IS USED IN AN AREA WITH FLOWS GREATER THAN 2.0-CFS OR WITHOUT A SEDIMENT BASIN, A MINIMUM OF ONE ROCK FILTER DAM SHALL BE USED AT THE DOWNSTREAM DISCHARGE POINT.
	SYMBOL Cd-F		
Cd-Fs	COMPOST FILTER SOCK CHECK DAM CONSTRUCTION DETAIL D-52 SECTION 163		A COMPOST FILTER SOCK CHECK DAM IS COMPOSED OF A PHOTODEGRADABLE OR BIODEGRADABLE KNITTED MESH MATERIAL CONTAINING A WEED FREE FILLER MATERIAL DERIVED FROM A WELL-DECOMPOSED SOURCE OF ORGANIC MATTER. THEY SHALL BE PROPERLY STAKED FOR DITCH APPLICATIONS. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR MATERIAL SPECIFICATIONS. IF THIS ITEM IS USED IN AN AREA WITH FLOWS GREATER THAN 2.0-CFS OR WITHOUT A SEDIMENT BASIN, A MINIMUM OF ONE ROCK FILTER DAM SHALL BE USED AT THE DOWNSTREAM DISCHARGE POINT.
	SYMBOL Cd-Fs		
Cd-Hb	BALED STRAW CHECK DAM CONSTRUCTION DETAIL D-52 SECTION 163		A BALE STRAW CHECK DAM IS COMPOSED OF BALES PREFERABLY BOUND WITH WIRE OR NYLON INSTEAD OF TWINE. BALES SHOULD BE PLACED IN ROWS WITH BALE ENDS TIGHTLY ABUTTING ADJACENT BALES. THE DOWNSTREAM ROW OF BALES SHALL BE PLACED IN A TRENCH TO ALLOW THE TOP OF THE BALE'S LONG, WIDE SIDE TO BE LEVEL WITH THE GROUND AS A NON-ERODIBLE SPLASH PAD. PROPER STAKING IS ALSO REQUIRED FOR DITCH APPLICATIONS. IF THIS ITEM IS USED IN AN AREA WITH FLOWS GREATER THAN 2.0-CFS OR WITHOUT A SEDIMENT BASIN, A MINIMUM OF ONE ROCK FILTER DAM SHALL BE USED AT THE DOWNSTREAM DISCHARGE POINT.
	SYMBOL Cd-Hb		

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Cd-S	STONE CHECK DAM OR SANDBAG CHECK DAM CONSTRUCTION DETAIL D-56 SECTION 163.603		STONE CHECK DAMS ARE CONSTRUCTED OF TYPE-3 RIP-RAP WITH GEOTEXTILE UNDERLINER. STONE CHECK DAMS ARE PREFERRED IN ROADWAY DITCHES OUTSIDE THE CLEAR ZONE. CONSIDERATION SHOULD BE GIVEN TO USING OTHER APPROPRIATE CHECK DAMS AND/OR BMPs WITHIN THE CLEAR ZONE. SANDBAG CHECK DAMS ARE RECOMMENDED IN CONCRETE LINED CHANNELS FOR TEMPORARY VELOCITY CONTROL ONLY. ENSURE DISCHARGE POINT IS PROPERLY STABILIZED AND INCLUDE APPROPRIATE BMPs FOR SEDIMENT STORAGE UPSTREAM AND/OR DOWNSTREAM OF CONCRETE LINED CHANNELS. IF THIS ITEM IS USED IN AN AREA WITH FLOWS GREATER THAN 2.0-CFS OR WITHOUT A SEDIMENT BASIN, A MINIMUM OF ONE ROCK FILTER DAM SHALL BE USED AT THE DOWNSTREAM DISCHARGE POINT.
	SYMBOL Cd-S		
Ch-1	VEGETATED CHANNEL STABILIZATION SECTION 700		A NEW OR EXISTING CHANNEL MAY BE LINED WITH PERMANENT VEGETATION ONLY FOR VELOCITIES UP TO 5.0 fps. THIS MEASURE SHALL BE DESIGNED IN ACCORDANCE WITH THE GDOT CHANNEL LINING DESIGN PROGRAM. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED. TYPICALLY NOT SHOWN IN PLANS.
	LINE CODE 		
Ch-2R1	CHANNEL STABILIZATION RIP-RAP, TYPE 1 CONSTRUCTION DETAIL D-49 SECTION 603		THIS ITEM CONSISTS OF LINING A CHANNEL WITH TYPE 1 RIP-RAP 24" THICK (UNLESS SPECIFIED OTHERWISE) PLACED ON TOP OF A GEOTEXTILE UNDERLINER. THE RIP-RAP SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED. "Dp" SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
	LINE CODE 		
Ch-2R3	CHANNEL STABILIZATION RIP-RAP, TYPE 3 CONSTRUCTION DETAIL D-49 SECTION 603		THIS ITEM CONSISTS OF LINING A CHANNEL WITH TYPE 3 RIP-RAP 24" THICK (UNLESS SPECIFIED OTHERWISE) PLACED ON TOP OF A GEOTEXTILE UNDERLINER. THE RIP-RAP SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED. "Dp" SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
	LINE CODE 		

NOTE:

1. DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
2. FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".

GDOT

NO SCALE

REVISION DATES
3/2/2017
11/28/2018

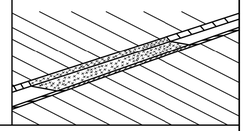
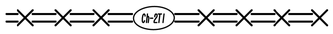
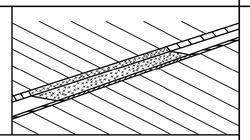
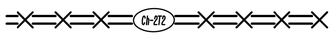
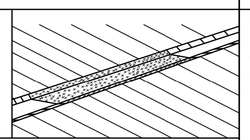
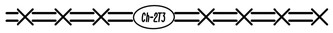
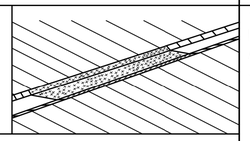
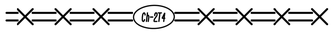
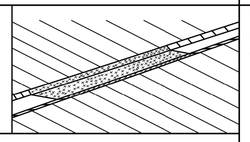
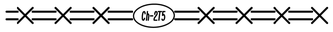
EROSION CONTROL LEGEND

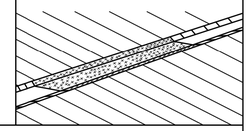
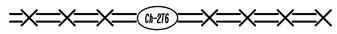
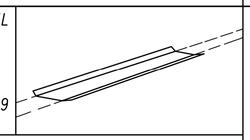
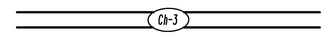
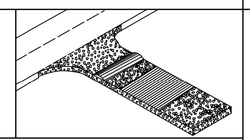
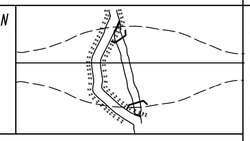
UNIFORM CODE SHEET

SHEET 2 OF 7

CHECKED:	D. EAGLETON	DATE:	01/01/16
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No. 52-0002

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Ch-2T1	TURF REINFORCEMENT MAT (TRM) CONSTRUCTION DETAIL D-35 SECTION 711	 LINE CODE 	THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN CHANNELS TO STABILIZE THE SOIL BY REINFORCING THE GRASS ROOTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0-2 psf. THE TRM SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH 'Dp' RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM. 'Dp' SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
Ch-2T2	TURF REINFORCEMENT MAT (TRM) CONSTRUCTION DETAIL D-35 SECTION 711	 LINE CODE 	THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN CHANNELS TO STABILIZE THE SOIL BY REINFORCING THE GRASS ROOTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0-4 psf. THE TRM SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH 'Dp' RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM. 'Dp' SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
Ch-2T3	TURF REINFORCEMENT MAT (TRM) CONSTRUCTION DETAIL D-35 SECTION 711	 LINE CODE 	THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN CHANNELS TO STABILIZE THE SOIL BY REINFORCING THE GRASS ROOTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0-6 psf. THE TRM SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH 'Dp' RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM. 'Dp' SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
Ch-2T4	TURF REINFORCEMENT MAT (TRM) CONSTRUCTION DETAIL D-35 SECTION 711	 LINE CODE 	THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN CHANNELS TO STABILIZE THE SOIL BY REINFORCING THE GRASS ROOTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0-8 psf. THE TRM SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH 'Dp' RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM. 'Dp' SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
Ch-2T5	TURF REINFORCEMENT MAT (TRM) CONSTRUCTION DETAIL D-35 SECTION 711	 LINE CODE 	THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN CHANNELS TO STABILIZE THE SOIL BY REINFORCING THE GRASS ROOTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0-10 psf. THE TRM SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH 'Dp' RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM. 'Dp' SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Ch-2T6	TURF REINFORCEMENT MAT (TRM) CONSTRUCTION DETAIL D-35 SECTION 711	 LINE CODE 	THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN CHANNELS TO STABILIZE THE SOIL BY REINFORCING THE GRASS ROOTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0-12 psf. THE TRM SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH 'Dp' RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM. 'Dp' SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
Ch-3	CONCRETE CHANNEL STABILIZATION CONSTRUCTION DETAIL D-10, D-49 SECTION 441	 LINE CODE 	CHANNELS ARE LINED WITH CONCRETE FOR VELOCITIES >/= 10 fps. THIS ITEM CONSISTS OF CONSTRUCTING A 4" THICK CONCRETE CHANNEL. THE CONCRETE SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH 'Dp' RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM. 'Dp' SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN. RIP-RAP SHOULD BE USED TO DISSIPATE ENERGY DOWNSTREAM OF CONCRETE LINED CHANNELS.
Co	CONSTRUCTION EXIT CONSTRUCTION DETAIL D-41 SECTION 163, 800	 SYMBOL 	A CONSTRUCTION EXIT IS A STONE STABILIZED PAD THAT REDUCES OR ELIMINATES THE TRANSPORT OF MUD FROM CONSTRUCTION AREAS ONTO PUBLIC ROADS BY EQUIPMENT OR RUNOFF. BEST USED AT ACCESS POINTS, I.e. NEW LOCATION PROJECTS, BORROW PITS, WASTE PITS, ACCESS ROADS, ETC. SHOULD BE MINIMUM 20' WIDE, 50' LONG, 6" THICK, AND REQUIRES A GEOTEXTILE UNDERLINER. ON SITES WHERE THE GRADE TOWARD A PAVED AREA IS GREATER THAN 2%, A FULL WIDTH DIVERSION RIDGE 6" TO 8" HIGH WITH 3:1 SLOPES SHALL BE CONSTRUCTED APPROXIMATELY 15' UPSTREAM OF PAVED AREA. A TIRE WASHING AREA TO REMOVE MUD MAY ALSO BE REQUIRED PRIOR TO ENTRANCE ONTO PUBLIC ROADWAYS. ALL CONSTRUCTION EXIT REQUIREMENTS ARE INCLUDED IN THE PRICE OF THE CONSTRUCTION EXIT.
Dc-A	STREAM DIVERSION CHANNEL GEOTEXTILE, POLYETHYLENE FILM SECTION 163	 LINE CODE 	A TEMPORARY CHANNEL CONSTRUCTED TO CONVEY FLOW AROUND A CONSTRUCTION SITE WHILE A PERMANENT DRAINAGE STRUCTURE IS BEING CONSTRUCTED IN A NATURAL STREAM. THIS IS A MEASURE USED TO PROTECT STREAM BEDS FROM EROSION. LINE THE CHANNEL WITH GEOTEXTILE OR POLYETHYLENE FILM. INSTALL TWO ROWS OF Sdl-S PARALLEL TO THE CHANNEL TO PREVENT SEDIMENT LADEN RUNOFF FROM ENTERING THE STREAM. THE SIZE OF THE CHANNEL WILL DEPEND ON THE DISCHARGE, CHANNEL GEOMETRY, CHANNEL SLOPE AND ROUGHNESS. IT IS ACCEPTABLE FOR VELOCITIES BETWEEN 0 - 2.5 fps. THE DRAINAGE AREA SHALL BE NOT GREATER THAN 1 SQUARE MILE. CONSTRUCTION OF THE DIVERSION CHANNEL IS INCLUDED IN THE COST OF THE STRUCTURE.

NOTE:

1. DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
2. FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".

NO SCALE

REVISION DATES

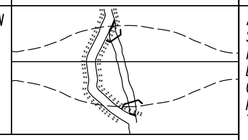
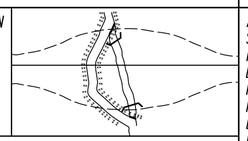
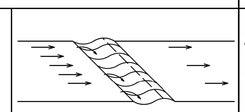
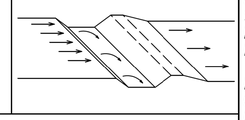
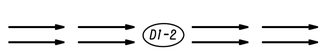
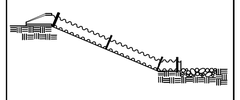
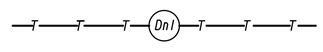
3/2/2017		

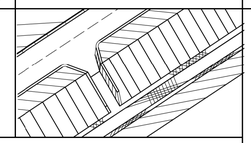
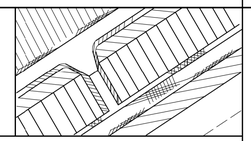
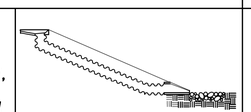
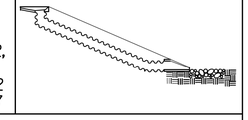
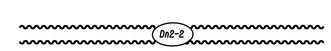
EROSION CONTROL LEGEND

UNIFORM CODE SHEET

SHEET 3 OF 7

CHECKED:	D. EAGLETON	DATE: 01/01/16	DRAWING No.
BACKCHECKED:		DATE:	52-0003
CORRECTED:		DATE:	
VERIFIED:		DATE:	

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Dc-B	STREAM DIVERSION CHANNEL GEOTEXTILE ONLY SECTION 163		A TEMPORARY CHANNEL CONSTRUCTED TO CONVEY FLOW AROUND A CONSTRUCTION SITE WHILE A PERMANENT DRAINAGE STRUCTURE IS BEING CONSTRUCTED IN A NATURAL STREAM. THIS IS A MEASURE USED TO PROTECT STREAM BEDS FROM EROSION. LINE THE CHANNEL WITH GEOTEXTILE ONLY. INSTALL TWO ROWS OF Sdl-S PARALLEL TO THE CHANNEL TO PREVENT SEDIMENT LADEN RUNOFF FROM ENTERING THE STREAM. THE SIZE OF THE CHANNEL WILL DEPEND ON THE DISCHARGE, CHANNEL GEOMETRY, CHANNEL SLOPE AND ROUGHNESS. IT IS ACCEPTABLE FOR VELOCITIES BETWEEN 2.5 - 9.0 fps. THE DRAINAGE AREA SHALL BE NOT GREATER THAN 1 SQUARE MILE. CONSTRUCTION OF THE DIVERSION CHANNEL IS INCLUDED IN THE COST OF THE STRUCTURE.
	LINE CODE		
Dc-C	STREAM DIVERSION CHANNEL RIP-RAP & GEOTEXTILE SECTION 163		A TEMPORARY CHANNEL CONSTRUCTED TO CONVEY FLOW AROUND A CONSTRUCTION SITE WHILE A PERMANENT DRAINAGE STRUCTURE IS BEING CONSTRUCTED IN A NATURAL STREAM. THIS IS A MEASURE USED TO PROTECT STREAM BEDS FROM EROSION. LINE THE CHANNEL WITH RIP-RAP AND GEOTEXTILE. INSTALL TWO ROWS OF Sdl-S PARALLEL TO THE CHANNEL TO PREVENT SEDIMENT LADEN RUNOFF FROM ENTERING THE STREAM. THE SIZE OF THE CHANNEL WILL DEPEND ON THE DISCHARGE, CHANNEL GEOMETRY, CHANNEL SLOPE AND ROUGHNESS. IT IS ACCEPTABLE FOR VELOCITIES BETWEEN 9.0 - 13.0 fps. THE DRAINAGE AREA SHALL BE NOT GREATER THAN 1 SQUARE MILE. CONSTRUCTION OF THE DIVERSION CHANNEL IS INCLUDED IN THE COST OF THE STRUCTURE.
	LINE CODE		
Dl-1	DIVERSION BERM CONSTRUCTION DETAIL D-47 SECTION 205		A NON-DESIGNED TEMPORARY EARTHEN BERM WITH A COMPACTED SUPPORTING RIDGE ON THE LOWER SIDE TO BE USED AT THE EDGE OF EMBANKMENT DURING THE GRADING OPERATION. THE BERMS ARE ALSO CONSTRUCTED ABOVE, ACROSS OR BELOW A SLOPE TO REDUCE THE LENGTH OF A SLOPE. THEY ARE USED TO INTERCEPT RUNOFF, PREVENTING SLOPE EROSION AND TO DIRECT THE RUNOFF TO A STABLE OUTLET, DOWN DRAINS 'Dnl'OR CATCHMENT AREAS AND ON ALL GRADING PROJECTS.
	LINE CODE		
Dl-2	DIVERSION CHANNEL SECTION 205		A DESIGNED TEMPORARY OR PERMANENT CHANNEL WITH A COMPACTED SUPPORTING RIDGE ON THE LOWER SIDE TO DIVERT OFFSITE RUNOFF AWAY FROM DISTURBED AREAS WITHIN THE PROJECT AREA. CHANNEL FOR OFFSITE RUNOFF SHALL BE STABILIZED WITH APPROPRIATE CHANNEL STABILIZATION. REFER TO THE LATEST EDITION OF THE 'MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA' FOR DESIGN CRITERIA. A DIVERSION CHANNEL DETAIL MUST ALSO BE PROVIDED IN THE ESPCP. RUNOFF FROM DISTURBED AREAS WITHIN THE PROJECT AREA SHALL NOT BE ALLOWED TO CONVERGE WITH OFFSITE RUNOFF WITHIN THIS DIVERSION.
	LINE CODE		
Dnl	TEMPORARY DOWNDRAIN STRUCTURE FLEXIBLE CONSTRUCTION DETAIL D-19 SECTION 163		A TEMPORARY PIPE SLOPE DRAIN IS A PLASTIC FLEXIBLE PIPE TO CARRY WATER FROM THE WORK AREA TO A LOWER ELEVATION. TEMPORARY SLOPE DRAINS SHOULD BE PLACED AT INTERVALS OF 350 FEET ON 0% - 2% GRADES, 200 FEET ON STEEPER GRADES AND MORE FREQUENTLY AS DICTATED BY FIELD CONDITIONS. THE TYPICAL PIPE SIZE IS A CORRUGATED 10'. THE PIPE WILL BE ANCHORED WITH STAKES AT INTERVALS NOT TO EXCEED 10'. THE OUTLET AREA SHALL BE STABILIZED FOR VELOCITY DISSIPATION AND EROSION CONTROL.
	LINE CODE		

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Dn2-A	PERMANENT DOWNDRAIN STRUCTURE CONCRETE CONSTRUCTION DETAIL D-9 SECTION 441		A CONCRETE FLUME TYPE 'A' IS USED TO DIRECT SURFACE RUNOFF DOWN A ROADWAY SLOPE INTO ANOTHER FORM OF CONTROL. IT IS USED IN ALL DEPRESSED AREAS WHERE WATER WILL FLOW DOWN THE SLOPE. IT IS DESIGNED FOR A 25-YEAR STORM AND MUST HAVE SOME FORM OF OUTLET PROTECTION. ADDITIONAL LABELING IS NOT REQUIRED IF SHOWN AS A PERMANENT DRAINAGE STRUCTURE ON THE CONSTRUCTION PLANS. INLETS SHALL BE SPACED ACCORDING TO GDOT GUIDELINES (REGARDING GUTTER SPREAD AND OTHER CRITERIA).
	LINE CODE		
Dn2-B	PERMANENT DOWNDRAIN STRUCTURE CONCRETE CONSTRUCTION DETAIL D-9 SECTION 441		A CONCRETE FLUME TYPE 'B' IS USED TO DIRECT SURFACE DITCH RUNOFF DOWN A BACK SLOPE INTO ANOTHER FORM OF CONTROL. IT IS USED IN DEPRESSED AREAS WHERE CONCENTRATED OFFSITE WATER REACHES THE CUT SLOPE. IT IS DESIGNED TO SAFELY CONVEY WATER DOWN THE CUT SLOPE. IT IS DESIGNED FOR A 25-YEAR STORM AND MUST HAVE SOME FORM OF OUTLET PROTECTION. ADDITIONAL LABELING IS NOT REQUIRED IF SHOWN AS A PERMANENT DRAINAGE STRUCTURE ON THE CONSTRUCTION PLANS. INLETS SHALL BE SPACED ACCORDING TO GDOT GUIDELINES (REGARDING GUTTER SPREAD AND OR OTHER CRITERIA).
	LINE CODE		
Dn2-1	PERMANENT DOWNDRAIN STRUCTURE GA. STD 9013 TP1, 9017J TP1, DETAIL D-26 TP1 SECTION 576, 577		CONCRETE DRAIN INLET WITH METAL PIPE IS USED TO DRAIN CURBS, ON A GRADE, DOWN TO A LOWER ELEVATION. THIS IS A PERMANENT STRUCTURE, REQUIRING OUTLET PROTECTION, TEMPORARY AND PERMANENT. INLETS SHALL BE SPACED ACCORDING TO GDOT GUIDELINES (REGARDING GUTTER SPREAD AND OR OTHER CRITERIA).
	LINE CODE		
Dn2-2	PERMANENT DOWNDRAIN STRUCTURE GA. STD 9013 TP2, 9017J TP2, DETAIL D-26 TP2 SECTION 576, 577		CONCRETE DRAIN INLET AND METAL PIPE IS USED TO DRAIN CURB, IN A SAG, DOWN TO A LOWER ELEVATION. THIS IS A PERMANENT STRUCTURE, REQUIRING OUTLET PROTECTION, TEMPORARY AND PERMANENT. INLETS SHALL BE SPACED ACCORDING TO GDOT GUIDELINES (REGARDING GUTTER SPREAD AND OR OTHER CRITERIA).
	LINE CODE		

NOTE:

1. DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
2. FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, 'MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA'.

NO SCALE

REVISION DATES		
3/2/2017		

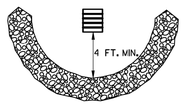
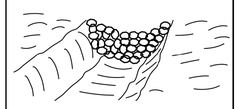
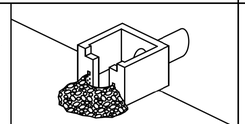
EROSION CONTROL LEGEND

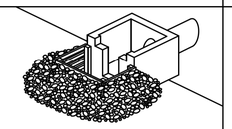
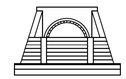
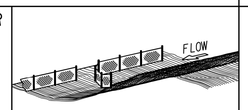
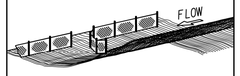
UNIFORM CODE SHEET

SHEET 4 OF 7

CHECKED:	D. EAGLETON	DATE:	01/01/16
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No. 52-0004

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Fr	FILTER RING CONSTRUCTION DETAIL D-46 SECTION 163 SYMBOL: Fr		A TEMPORARY STONE BARRIER CONSTRUCTED AT DRAINAGE STRUCTURE INLETS AND POST-CONSTRUCTION POND OUTLETS. IT REDUCES RUNOFF VELOCITY AND HELPS PREVENT SEDIMENT FROM LEAVING SITE PRIOR TO PERMANENT STABILIZATION OF THE DISTURBED AREA. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR ADDITIONAL INFORMATION ON USAGE.
Rd	ROCK FILTER DAM CONSTRUCTION DETAIL D-43 SECTION 163, 603 SYMBOL: Rd		ROCK FILTER DAMS ARE CONSTRUCTED OF TYPE 3 STONE RIP-RAP FACED WITH #57 STONE ON THE UPSTREAM SIDE. THEY ARE PLACED ACROSS DRAINAGEWAYS WHICH DRAIN 50 ACRES OR LESS. GEOTEXTILE UNDERLINER SHALL BE USED WHEN PLACING ROCK FILTER DAMS. THE DAM SHOULD NOT BE HIGHER THAN THE CHANNEL BANKS. ROCK FILTER DAMS SHOULD BE USED IN DITCHES PRIOR TO DISCHARGING INTO STREAMS, WETLANDS, OPEN-WATERS, OR OTHER ESAs.
Rd-B	STONE FILTER BERM CONSTRUCTION DETAIL D-50 SECTION 163, 603 LINE CODE: Rd-B		STONE FILTER BERMS ARE CONSTRUCTED SIMILAR TO ROCK FILTER DAMS FOR A LINEAR APPLICATION. THEY ARE CONSTRUCTED OF TYPE-3 STONE RIP-RAP FACED WITH #57 STONE ON THE UPSTREAM SIDE. GEOTEXTILE UNDERLINER SHALL BE USED WHEN PLACING STONE FILTER BERMS. STONE FILTER BERMS ARE IDEAL ALONG THE PERIMETER FOR SHEET FLOW AND/OR SHALLOW CONCENTRATED FLOW TO A COMMON LOW AREA WHERE PERIMETER SILT FENCE ALONE MAY BE INSUFFICIENT, THERE IS NO WELL-DEFINED CHANNEL FOR A STANDARD ROCK FILTER DAM, AND/OR CONSTRUCTING A ROCK OUTLET TEMPORARY SEDIMENT TRAP IS NOT APPLICABLE.
Rp	RIP-RAP SECTION 603 PATTERN: Rp		RIP-RAP IS A FLEXIBLE PERMANENT BLANKET FOR PROTECTION OF FILL SLOPES AND BRIDGE END ROLLS. RIP-RAP TYPE-1 SHOULD BE PLACED ON TOP OF A GEOTEXTILE UNDERLINER AT A MINIMUM 24" THICKNESS OR AS INDICATED ON THE PLANS. RIP-RAP MAY ALSO BE USED AT DRAINAGE STRUCTURE OUTLETS WITHIN THE RIGHT-OF-WAY. HOWEVER, APPROPRIATE OUTLET PROTECTION SHOULD BE PROVIDED AT OUTFALLS. REFER TO STORM DRAIN OUTLET PROTECTION FOR ADDITIONAL INFORMATION ON USING RIP-RAP AT OUTFALLS.
Rt-P	RETROFITTING PERFORATED HALF-ROUND PIPE CONSTRUCTION DETAIL D-44 SECTION 163 SYMBOL: Rt-P		A PERFORATED HALF-ROUND PIPE WITH STONE FILTER PLACED IN FRONT OF A PERMANENT STORMWATER DETENTION POND OUTLET STRUCTURE TO SERVE AS A TEMPORARY SEDIMENT FILTER. SHOULD BE USED ONLY IN DETENTION PONDS WITH LESS THAN 30 ACRES TOTAL DRAINAGE AREA. SHALL ONLY BE USED IN DETENTION BASINS LARGE ENOUGH TO STORE 67 CUBIC YARDS OF SEDIMENT PER ACRE OF DISTURBED AREA. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR DESIGN CRITERIA.

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Rt-B	RETROFITTING SLOTTED BOARD DAM CONSTRUCTION DETAIL D-45 SECTION 163 SYMBOL: Rt-B		A SLOTTED BOARD DAM CONSISTS OF STONE AND/OR FILTER FABRIC AND BOARDS WITH 0.5" - 1.0" SPACING TO SERVE AS A TEMPORARY SEDIMENT FILTER. PERMANENT STORMWATER DETENTION POND OUTLET: -DRAINAGE AREA UP TO 100 ACRES -DETENTION BASINS LARGE ENOUGH TO STORE 67 CUBIC YARDS OF SEDIMENT PER ACRE OF DISTURBED AREA ROADWAY DRAINAGE STRUCTURE: -OPEN END PIPES, WINGED HEADWALLS, OR CONCRETE WEIR OUTLETS WITH DRAINAGE AREA LESS THAN 30 ACRES REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR DESIGN CRITERIA.
Rt-Sg1 Rt-Sg2 Rt-Sg3	RETROFITTING SILT CONTROL GATES CONSTRUCTION DETAIL D-20 SECTION 163 SYMBOL: Rt-Sg1 Rt-Sg2 Rt-Sg3		A SILT CONTROL GATE CONSISTS OF BOARDS WITHOUT SPACING AND FILTER FABRIC TO BE USED FOR TEMPORARY SEDIMENT STORAGE ON ROADWAY PROJECTS AT THE INLET OF STRUCTURES WITH A DRAINAGE AREA UP TO 50 ACRES. THE DISTURBED AREA WITHIN THE DRAINAGE AREA SHALL NOT EXCEED 5 ACRES. SILT CONTROL GATES SHOULD NOT BE USED ALONE, BUT WITH ANOTHER BMP DOWNSTREAM PRIOR TO DISCHARGE LEAVING PROJECT AREA. DO NOT USE SILT GATES IN STATE WATERS. Rt-Sg1=TYPE 1: USED ON BOX CULVERTS Rt-Sg2=TYPE 2: USED ON STRAIGHT HEADWALLS Rt-Sg3=TYPE 3: USED ON FLARED END SECTIONS AND TAPERED HEADWALLS
Sdl-NS	SEDIMENT BARRIER (NON-SENSITIVE) SILT FENCE TYPE A CONSTRUCTION DETAIL D-24 SECTION 171 LINE CODE: A A A Sdl-NS A A A		SEDIMENT BARRIERS MINIMIZE AND PREVENT SEDIMENT CARRIED BY SHEET FLOW FROM LEAVING THE PROJECT AREA BY CAUSING DEPOSITION AND/OR FILTRATION OF SEDIMENT. SILT FENCE USED AS PERIMETER CONTROL SHALL NOT BE INSTALLED ACROSS CONCENTRATED FLOW. TYPE-A SILT FENCE IS TYPICALLY USED IN NON-ENVIRONMENTALLY SENSITIVE AREAS (ESAs) OR IN AREAS WITH FILLS LESS THAN 10'. IT SHOULD BE PLACED A MINIMUM OF 10' FROM CONSTRUCTION LIMITS OR ALONG THE RIGHT-OF-WAY LINE.
Sdl-S	SEDIMENT BARRIER (SENSITIVE) SILT FENCE TYPE C CONSTRUCTION DETAIL D-24 SECTION 171 LINE CODE: C C C Sdl-S C C C		SEDIMENT BARRIERS MINIMIZE AND PREVENT SEDIMENT CARRIED BY SHEET FLOW FROM LEAVING THE PROJECT AREA BY CAUSING DEPOSITION AND/OR FILTRATION OF SEDIMENT. SILT FENCE USED AS PERIMETER CONTROL SHALL NOT BE INSTALLED ACROSS CONCENTRATED FLOW. TYPE-C SILT FENCE IS TYPICALLY USED IN ENVIRONMENTALLY SENSITIVE AREAS (ESAs) OR IN AREAS WITH FILLS 10' AND GREATER. ALL ENVIRONMENTALLY SENSITIVE AREAS (ESAs) SHALL BE PROTECTED WITH A DOUBLE-ROW OF TYPE-C SILT FENCE REGARDLESS OF FILL HEIGHT. A SINGLE-ROW MAY BE USED FOR OTHER APPLICATIONS. IT SHOULD BE PLACED A MINIMUM OF 10' FROM CONSTRUCTION LIMITS OR ALONG THE RIGHT-OF-WAY LINE.

NOTE:

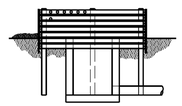
1. DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
2. FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".

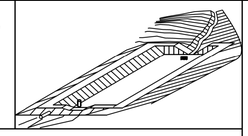
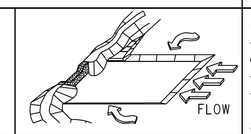
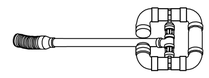
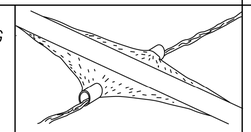
NO SCALE

REVISION DATES
3/2/2017

EROSION CONTROL LEGEND
UNIFORM CODE SHEET
SHEET 5 OF 7

CHECKED:	D. EAGLETON	DATE: 01/01/16	DRAWING No.
BACKCHECKED:		DATE:	52-0005
CORRECTED:		DATE:	
VERIFIED:		DATE:	

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Sd1-BB	SEDIMENT BARRIER BRUSH BARRIER CONSTRUCTION DETAIL D-24B SECTION 201		THIS ITEM CONSISTS OF INTERMINGLED BRUSH, LOGS, ETC. SO AS NOT TO FORM A SOLID DAM. CONSTRUCTED AT THE TOE OF FILL SLOPES ONLY DURING THE CLEARING AND GRUBBING OPERATION. THE BARRIER SHOULD BE USED AT THE TOE OF FILL SLOPES ON GRADING PROJECTS IN RURAL AREAS WHERE SUFFICIENT RIGHT OF WAY OR EASEMENT IS AVAILABLE (10 FEET OR MORE). THE BARRIER SHOULD RUN ROUGHLY PERPENDICULAR TO THE FLOW OF WATER WHERE THIS DOES NOT CONFLICT WITH RIGHT-OF-WAY OR EASEMENT LIMITS. THEY WILL NOT BE PLACED IN WETLANDS. TYPICALLY NOT SHOWN ON PLANS. PAYMENT FOR THIS ITEM IS INCLUDED IN THE CLEARING AND GRUBBING COST. NO SEPARATE PAYMENT SHALL BE MADE.
	LINE CODE * * * Sd1-BB * * *		
Sd2-B	INLET SEDIMENT TRAP (BAFFLE BOX) CONSTRUCTION DETAIL D-42 SECTION 163		BAFFLE BOX INLET SEDIMENT TRAP USED FOR INLETS RECEIVING HIGH FLOW RATE AND/OR VELOCITY. A GUIDE FOR USE WILL BE FOR AN INLET RECEIVING FLOW RATES 7 cfs AND GREATER.
	SYMBOL Sd2-B		
Sd2-Bg	INLET SEDIMENT TRAP (BLOCK & GRAVEL) CONSTRUCTION DETAIL D-42 SECTION 163		BLOCK AND GRAVEL DROP INLET PROTECTION USED FOR WHERE HEAVY FLOWS ARE EXPECTED AND WHERE OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE. CAN BE USED AT CULVERT INLETS. A GUIDE FOR USE WILL BE FOR AN INLET RECEIVING FLOW RATES THAT RANGE FROM 5 - 7 cfs.
	SYMBOL Sd2-Bg		
Sd2-F	INLET SEDIMENT TRAP (FILTER FABRIC) CONSTRUCTION DETAIL D-24C SECTION 163		(a) A SEDIMENT BARRIER CONSISTING OF A PREFABRICATED FRAME WITH FILTER FABRIC USED AROUND A DROP INLET OR CATCH BASIN. (b) A SEDIMENT BARRIER CONSISTING OF A PERFORATED METAL STAND PIPE WITH FILTER FABRIC USED AROUND A DROP INLET OR CATCH BASIN. (c) TYPE C SILT FENCE WITH SUPPORTING FRAME CAN BE USED AS AN ALTERNATE TO INLET SEDIMENT TRAP FOR AREAS WITH SLOPES < 5%. THIS ITEM IS USED TO PREVENT SILT FROM ENTERING THE PIPE SYSTEM. SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS. RECOMMENDED FOR INLET RECEIVING FLOW RATES THAT RANGE FROM 0 - 4 cfs.
	SYMBOL Sd2-F		
Sd2-G	INLET SEDIMENT TRAP (GRAVEL) CONSTRUCTION DETAIL D42 SECTION 163		GRAVEL DROP INLET PROTECTION USED WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED. STONE AND GRAVEL ARE USED TO TRAP SEDIMENT. THE SLOPE TOWARD THE INLET SHALL BE NO MORE THAN 3:1. A GUIDE FOR USE WILL BE FOR AN INLET RECEIVING FLOW RATES THAT RANGE FROM 3 - 5 cfs.
	SYMBOL Sd2-G		

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Sd3	TEMPORARY SEDIMENT BASIN CONSTRUCTION DETAIL D-22A, D-22B SECTION 163		A BASIN CREATED BY EXCAVATING AN AREA, DAMMING CONCENTRATED FLOW, OR A COMBINATION OF BOTH. THE BASIN IS DESIGNED TO STORE 67 CUBIC YARDS OF SEDIMENT PER ACRE OF DRAINAGE AREA. THE DRAINAGE AREA SHOULD NOT EXCEED 150 ACRES. BASINS TYPICALLY CONSISTS OF A DAM, PRINCIPAL SPILLWAY, AND AN EMERGENCY SPILLWAY. A FLOATING SURFACE SKIMMER SHALL BE REQUIRED AS PART OF THE PRINCIPAL SPILLWAY UNLESS INFEASIBLE. SUFFICIENT RIGHT-OF-WAY OR EASEMENT IS NEEDED FOR BASIN CONSTRUCTION AND MAINTENANCE ACCESS. SEDIMENT BASINS SHALL BE CONSIDERED ON ALL PROJECTS, BUT MAY NOT BE PRACTICAL. BASINS SHOULD BE LOCATED TO MINIMIZE INTERFERENCE WITH CONSTRUCTION ACTIVITIES AND UTILITIES. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR DESIGN CRITERIA.
	SYMBOL Sd3		
Sd4-C	ROCK OUTLET TEMPORARY SEDIMENT TRAP CONSTRUCTION DETAIL D-53 SECTION 163		TEMPORARY POND WITH ROCK OUTLET DESIGNED TO STORE 67 CUBIC YARDS OF SEDIMENT PER DRAINAGE AREA. DRAINAGE AREA SHALL NOT EXCEED 5 ACRES. DISTINGUISHED FROM TEMPORARY SEDIMENT BASIN BY LACK OF PRINCIPAL SPILLWAY. MAXIMUM POND DEPTH FROM BOTTOM OF POND TO EMERGENCY SPILLWAY IS 4 FEET. A TEMPORARY SEDIMENT BASIN SHALL BE EVALUATED PRIOR TO CONSIDERING A TEMPORARY SEDIMENT TRAP. A TEMPORARY SEDIMENT TRAP IS IDEAL FOR SMALL AREAS WITH NO UNUSUAL DRAINAGE FEATURES AND EFFECTIVE AGAINST COARSE SEDIMENT, BUT NOT AGAINST SILT OR CLAY PARTICLES THAT REMAIN SUSPENDED. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR DESIGN CRITERIA.
	SYMBOL Sd4-C		
Sk	FLOATING SURFACE SKIMMER CONSTRUCTION DETAIL D-22A, D-22B SECTION 163		A BUOYANT DEVICE THAT DRAINS WATER FROM THE SURFACE OF A TEMPORARY SEDIMENT BASIN AT A CONTROLLED FLOW RATE. THE INLET/ORIFICE SIZE IS DESIGNED TO DRAIN THE BASIN WITHIN 24 - 48 HOURS. THE SKIMMER INFORMATION SHALL BE PROVIDED IN CONJUNCTION WITH THE SEDIMENT BASIN INFORMATION IN PLANS. IF A SKIMMER IS INFEASIBLE, THE DESIGNER SHALL PROVIDE A WRITTEN JUSTIFICATION IN THE PLANS. SKIMMERS ARE ATTACHED TO A RISER WITHOUT PERFORATIONS AND ACTS AS THE PRIMARY SPILLWAY. THE SKIMMER BMP SYMBOL SHALL BE SHOWN IN CONJUNCTION WITH THE TEMPORARY SEDIMENT BASIN BMP SYMBOL WHEN APPLICABLE. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR ADDITIONAL INFORMATION.
	SYMBOL Sk		
Sr	TEMPORARY STREAM CROSSING SECTION 107		A TEMPORARY STRUCTURE INSTALLED ACROSS A FLOWING STREAM OR WATERCOURSE FOR USE BY CONSTRUCTION EQUIPMENT. THIS BMP PROVIDES A MEANS TO CROSS STREAMS OR WATERCOURSES WITHOUT MOVING SEDIMENT INTO STREAMS, DAMAGING THE STREAM BED OR CHANNEL, OR CAUSING FLOODING. THIS BMP SHOULD NOT BE USED ON STREAMS WITH DRAINAGE AREAS GREATER THAN ONE SQUARE MILE, UNLESS SPECIFICALLY DESIGNED TO ACCOMMODATE THE ADDITIONAL DRAINAGE AREA BY THE DESIGN PROFESSIONAL. A CERTIFICATION STATEMENT AND SIGNATURE SHALL ACCOMPANY THE DESIGN. THIS BMP SHALL BE DESIGNED ACCORDING TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA". FOR CONTRACTOR'S USE ONLY!
	SYMBOL Sr		

NOTE:

1. DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
2. FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".

GDOT

NO SCALE

REVISION DATES
3/2/2017
11/28/2018

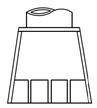
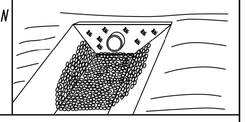
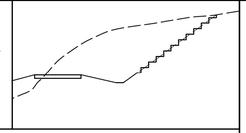
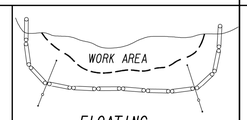
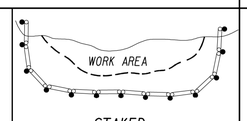
EROSION CONTROL LEGEND

UNIFORM CODE SHEET

SHEET 6 OF 7

CHECKED:	D. EAGLETON	DATE: 01/01/16	DRAWING No.
BACKCHECKED:		DATE:	52-0006
CORRECTED:		DATE:	
VERIFIED:		DATE:	

7/31/2015 GPLN

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
St	STORM DRAIN OUTLET PROTECTION GA. STD. 1125 & 2332	 SYMBOL St	A PIPE OR BOX CULVERT OUTLET HEADWALL WITH AN APRON AND DISSIPATOR BLOCKS IS USED TO REDUCE VELOCITY AT THE OUTLET OF A PIPE PRIOR TO ENTERING AN EXISTING STREAM OR PUBLICLY MAINTAINED DRAINAGE SYSTEM. IT IS USED ON THE OUTLET OF ALL BOX CULVERTS AND ON 48" AND LARGER PIPES. MAY BE USED ON INLET FOR FLOWING STREAMS. USE ON SMALL PIPES WHEN OUTLET VELOCITY OF THE 25-YEAR STORM IS 12 fps AND GREATER.
St-Rp	STORM DRAIN OUTLET PROTECTION (RIP-RAP) CONSTRUCTION DETAIL D-55 SECTION 603	 PATTERN FLAT AREA St-Rp OR St-Rp WELL-DEFINED CHANNEL	RIP-RAP OUTLET PROTECTION IS USED TO REDUCE VELOCITY AT THE OUTLET OF A PIPE, CHANNEL, OR STRUCTURE PRIOR TO ENTERING AN EXISTING STREAM OR PUBLICLY MAINTAINED DRAINAGE SYSTEM. THE MINIMUM DESIGN OF RIP-RAP OUTLET PROTECTION SHALL BE THE 25-YEAR STORM PEAK FLOW, BUT LARGER STORMS ARE RECOMMENDED. TYPE-1 RIP-RAP AT A DEPTH OF 36" AND PLACED ON FILTER FABRIC IS PREFERRED FOR ALL d50 </= 1.2 FEET. TYPE-3 RIP-RAP AT A DEPTH OF 18" AND PLACED ON FILTER FABRIC MAY BE USED FOR d50 </= 0.7 FEET. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR REQUIRED DESIGN DIMENSIONS AND OTHER INFORMATION TO BE INCLUDED IN THE PLANS.
Su	SURFACE ROUGHENING SERRATED SLOPES CONSTRUCTION DETAIL S-7 SECTION 205	 LINE CODE Su	PROVIDING A ROUGH SOIL SURFACE WITH HORIZONTAL DEPRESSIONS, BY OPERATING A CLEATED DOZER ON THE SLOPE IN A VERTICAL DIRECTION. CREATING SERRATED SLOPES IN THE GRADING PROCESS TO CONSTRUCT BENCHES WILL REDUCE RUNOFF VELOCITY AND INCREASE INFILTRATION OF WATER. IN MOST CASES THIS BMP IS NOT REQUIRED TO BE SHOWN ON THE PLANS, BUT REQUIRED TO BE COMPLETED BY THE CONTRACTOR UNDER ALL PROJECTS. IF SERRATED SLOPES ARE SPECIFIED BY THE SOIL SURVEY, THEN THIS BMP SHALL BE SHOWN ON THE PLANS WHERE SERRATED SLOPES ARE TO BE USED.
Tc-F	TURBIDITY CURTAIN FLOATING CONSTRUCTION DETAIL D-51 SECTION 170	 WORK AREA FLOATING LINE CODE Tc-F	A FLOATING TURBIDITY CURTAIN IS USED TO PREVENT SEDIMENT FROM MOVING IN WATER BY ALLOWING IT TO DROP OUT OF SUSPENSION AND REMAIN WITHIN THE CONSTRUCTION AREA. IT IS TYPICALLY USED WHERE CONSTRUCTION IS REQUIRED IN A LARGE BODY OF WATER SUCH AS LAKES AND RIVERS. IT SHOULD BE USED AS DIRECTED BY THE ENGINEER. THIS BMP IS ONLY TO BE USED WHEN PERMITTED FILL IS BEING PLACED INTO A STATE WATER, OR AS A SUPPLEMENT TO ADEQUATELY PLACED PERIMETER BMPs. IT MAY ALSO BE REFERRED TO AS A FLOATING BOOM, SILT BARRIER, OR SILT CURTAIN.
Tc-S	TURBIDITY CURTAIN STAKED CONSTRUCTION DETAIL D-51 SECTION 170	 WORK AREA STAKED LINE CODE Tc-S	A STAKED TURBIDITY CURTAIN IS USED TO PREVENT SEDIMENT FROM MOVING IN WATER BY ALLOWING IT TO DROP OUT OF SUSPENSION AND REMAIN WITHIN THE CONSTRUCTION AREA. IT IS TYPICALLY USED IN SHALLOW INUNDATED AREAS. IT MAY BE USED TO PROTECT A SMALL STREAM BEING REALIGNED OR RESTORED. IN THIS CASE, CURTAIN SHOULD EXTEND TO BOTTOM OF STREAMBED. THE HEIGHT SHOULD BE LIMITED TO 5 FEET UNLESS DIRECTED AND EXTEND 2 FEET ABOVE NORMAL WATER ELEVATION. IT SHOULD BE USED AS DIRECTED BY THE ENGINEER. THIS BMP IS ONLY TO BE USED WHEN PERMITTED FILL IS BEING PLACED INTO A STATE WATER, OR AS A SUPPLEMENT TO ADEQUATELY PLACED PERIMETER BMPs. IT MAY BE REFERRED TO AS A SILT BARRIER OR SILT CURTAIN.

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION

NOTE:

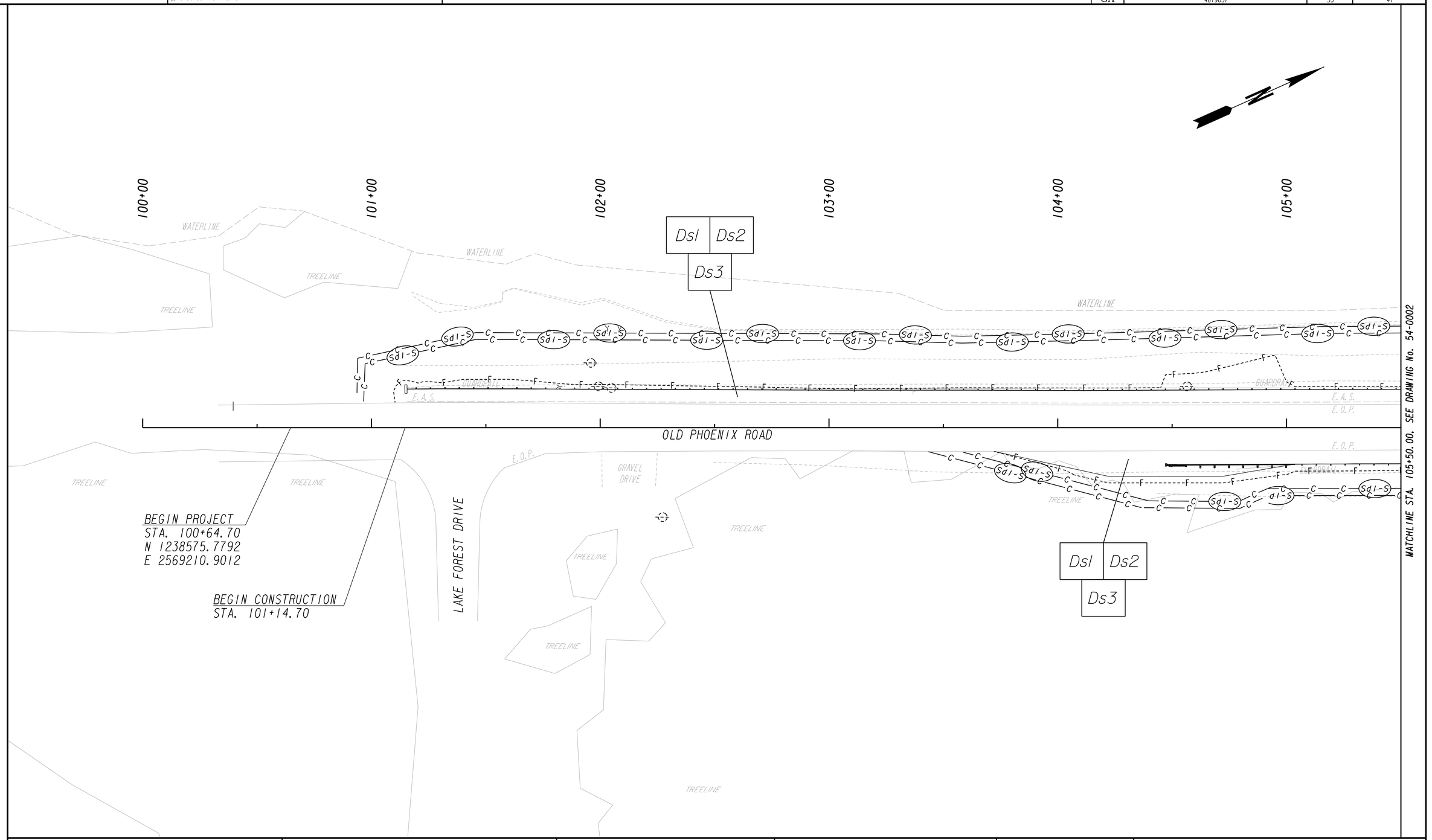
1. DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
2. FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".

NO SCALE

REVISION DATES
3/2/2017

EROSION CONTROL LEGEND
UNIFORM CODE SHEET
SHEET 7 OF 7

CHECKED:	D. EAGLETON	DATE: 01/01/16	DRAWING No.
BACKCHECKED:		DATE:	52-0007
CORRECTED:		DATE:	
VERIFIED:		DATE:	



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

SOUTHEASTERN ENGINEERING, INC.
Civil, Traffic, Transportation, Land Surveying, Landscape Architecture, and Land Planning
2470 Sandy Plains Road Marietta, Georgia 30066
tel: 770-321-3936, www.seengineering.com

SCALE IN FEET
0 20 40 80

REVISION DATES

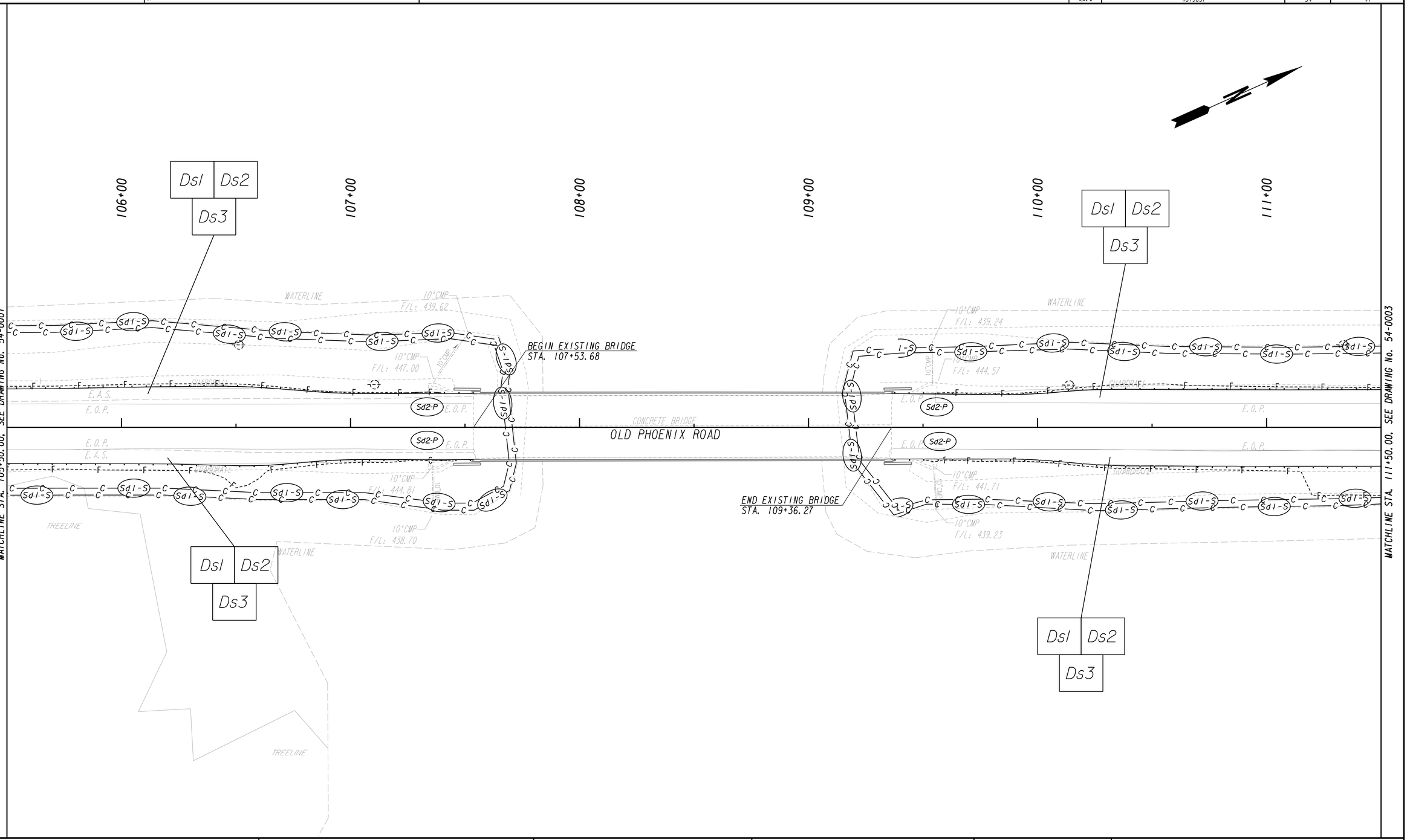
PUTNAM COUNTY
BOARD OF COMMISSIONERS
COLLABORATIVE INFRASTRUCTURES SERVICES

BMP LOCATION DETAILS

OLD PHOENIX ROAD AT LAKE OCONEE
GUARDRAIL REPLACEMENT

DRAWING No. 54-0001

09/17/2015 GPLNOLD



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

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SCALE IN FEET
0 20 40 80

REVISION DATES

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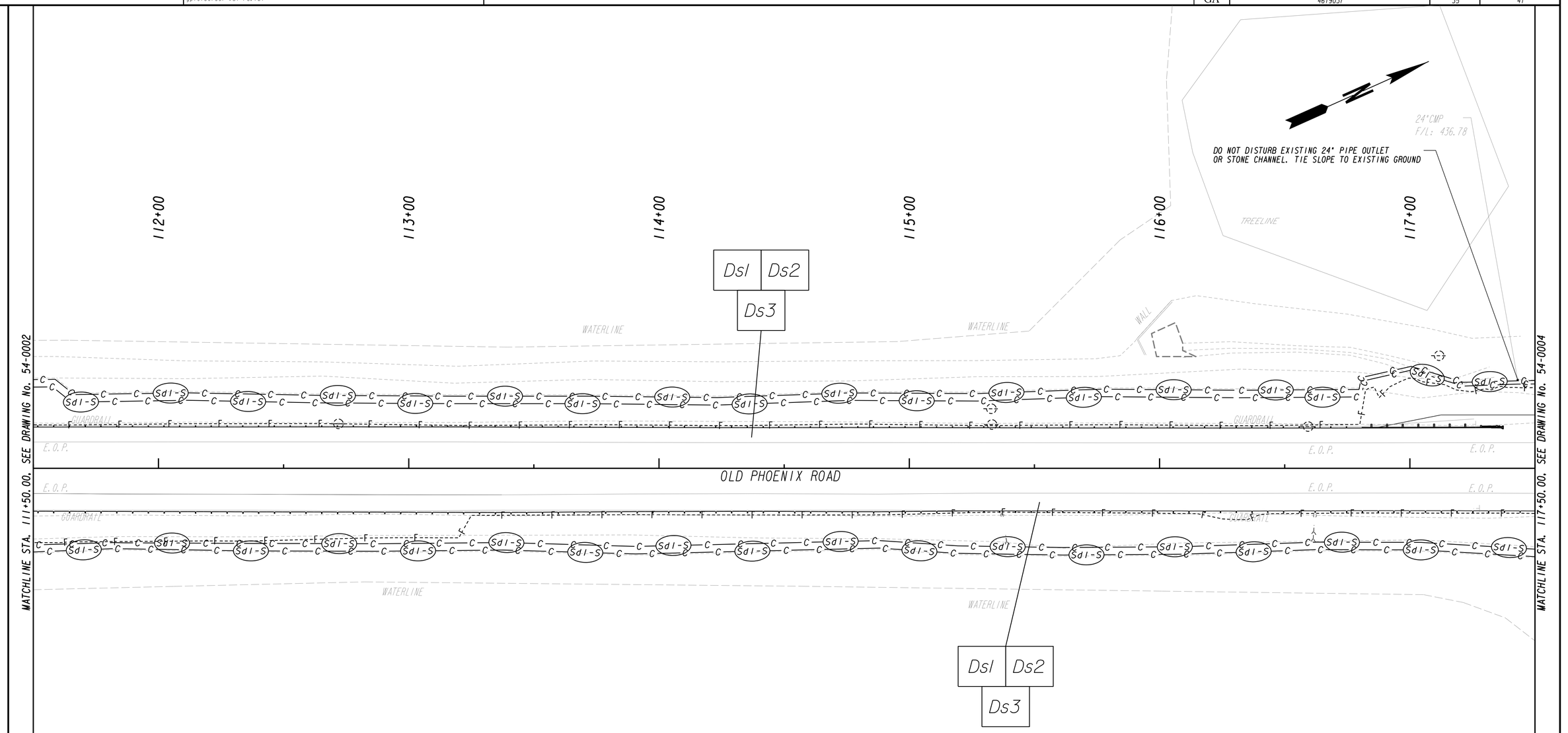
BMP LOCATION DETAILS

OLD PHOENIX ROAD AT LAKE OCONEE
GUARDRAIL REPLACEMENT

DRAWING No. 54-0002



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
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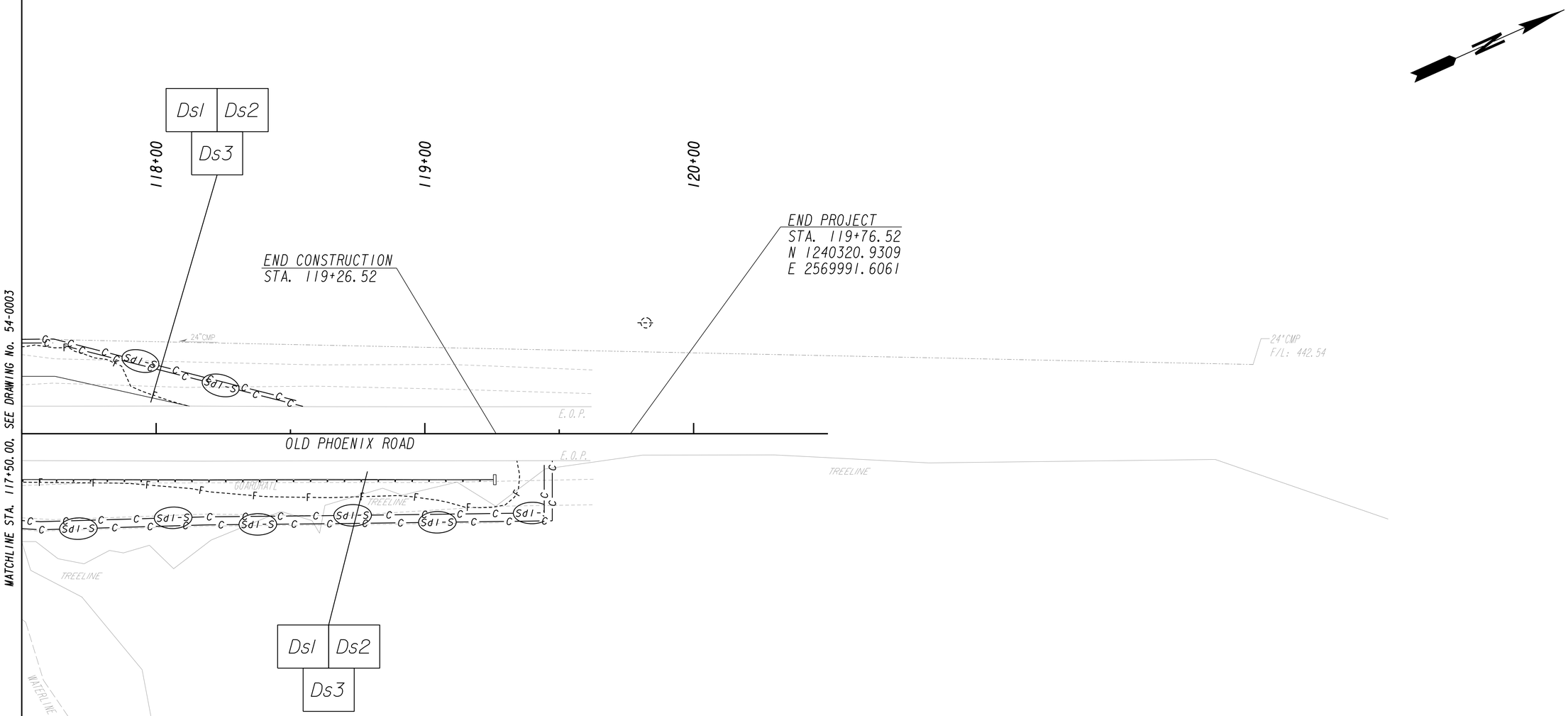
BMP LOCATION DETAILS

OLD PHOENIX ROAD AT LAKE OCONEE
GUARDRAIL REPLACEMENT

DRAWING No. 54-0003

09/17/2015 GPLNOLD



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
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BEGIN LIMIT OF ACCESS.....BLA
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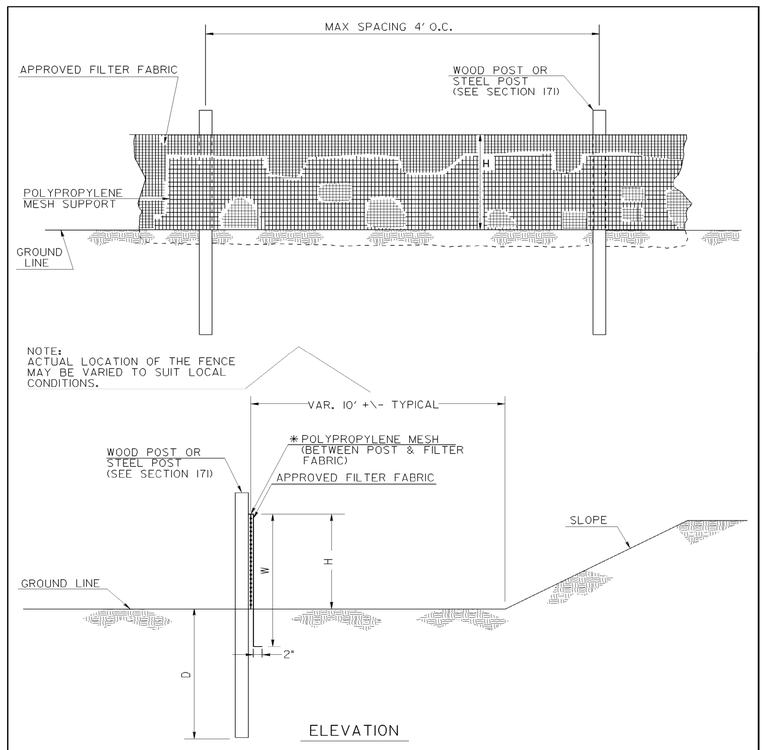
BMP LOCATION DETAILS

OLD PHOENIX ROAD AT LAKE OCONEE
GUARDRAIL REPLACEMENT

DRAWING No. 54-0004

09/17/2015 GPLNOLD



SINGLE ROW TYPE C SILT FENCE WITH POLYPROPYLENE MESH SUPPORT

FENCE TYPE	POST LENGTH	H	D	W	TYPICAL USES
OMITTED					
TYPE "C"	4 FT.	2'-4"	1'-6"	3'-0"	AT BRIDGE END ROLLS. DOUBLE ROW ALONG STREAMS, WETLANDS AND ENVIRONMENTALLY SENSITIVE AREAS FOR USE OF THIS MATERIAL IN FABRIC CHECKDAMS SEE D-24D.

NOTES:

1. WIRE STAPLES SHALL BE AT LEAST 17 GAUGE, WITH LEGS AT LEAST 1/2 INCHES LONG AND A CROWN AT LEAST 3/4 INCHES WIDE. NAILS SHALL BE AT LEAST 14 GAUGE, 1 INCH LONG, WITH BUTTON HEADS AT LEAST 3/4 INCHES WIDE.
2. NAILS OR STAPLES SHALL BE EVENLY PLACED WITH AT LEAST 5 PER POST FOR TYPE A FENCE AND 4 PER POST FOR TYPE C FENCE.
3. THE VERTICAL WIRES FOR THE WOVEN WIRE SUPPORT FENCE SHALL HAVE A MAXIMUM SPACING OF 12 INCHES. THE TOP AND BOTTOM WIRES SHALL BE AT LEAST 10 GAUGE AND ALL OTHER WIRES SHALL BE AT LEAST 12 1/2 GAUGE.
4. TEMPORARY SILT FENCE INSTALLATION IS DIFFERENT THAN THE SILT RETENTION BARRIER INSTALLATION.
5. SEE SECTION 171 FOR SILT FENCE SPECIFICATIONS.
6. SEE SECTION 894 FOR FENCING SPECIFICATIONS.
7. SEE QPL-36 FOR A LIST APPROVED SILT FENCE FABRIC.
8. TEMPORARY SILT FENCE SHALL NOT BE PLACED WITHIN STATE WATERS UNLESS PERMITTED.

OMITTED

REVISION	BY	DATE

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

CONSTRUCTION DETAILS

TEMPORARY SILT FENCE

NO SCALE REV. AND REDRAWN JAN. 2011

NUMBER D-24A (SHEET 1 OF 4)

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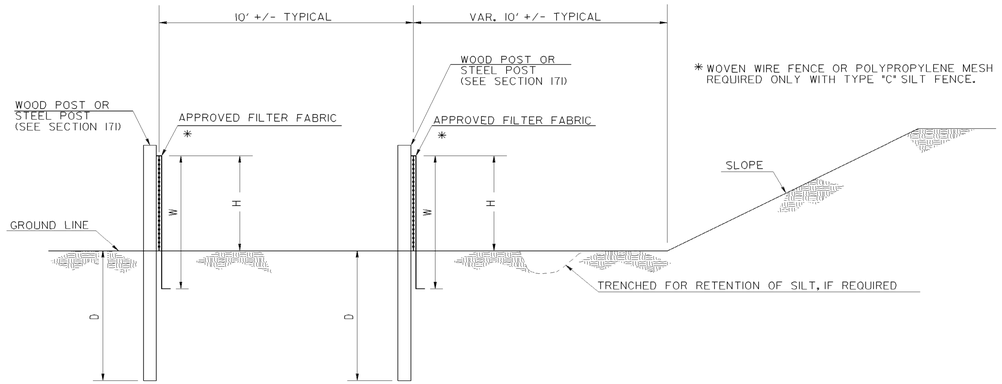
PUTNAM COUNTY
BOARD OF COMMISSIONERS
COLLABORATIVE INFRASTRUCTURES SERVICES

EROSION CONTROL CONSTRUCTION DETAILS
OLD PHOENIX ROAD AT LAKE OCONEE
GUARDRAIL REPLACEMENT

DRAWING NO. 56-0001



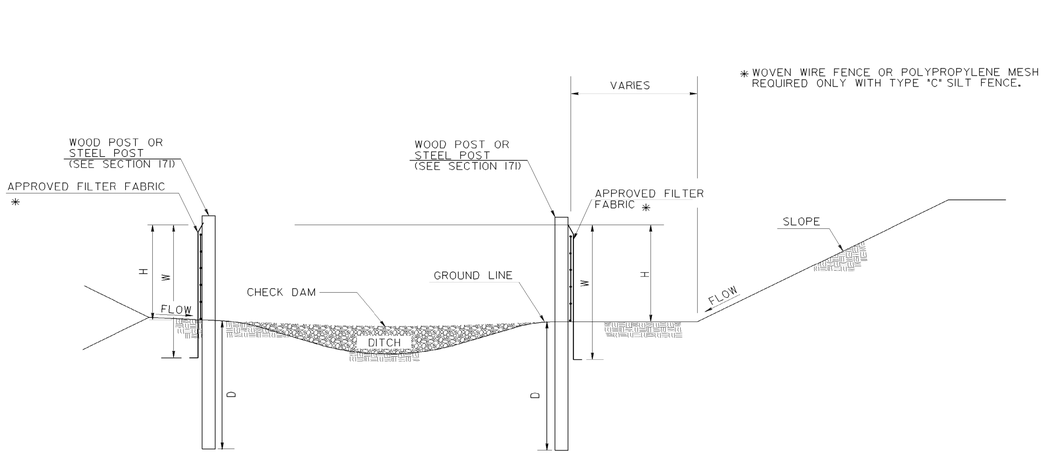
ELEVATION

DOUBLE ROW SILT FENCE

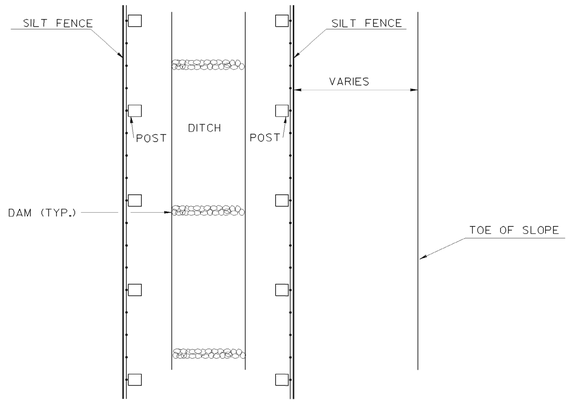
FENCE TYPE	POST LENGTH	H	D	W	TYPICAL USES
TYPE "A"	4 FT.	2'-4"	1'-6"	3'-0"	
TYPE "C"	4 FT.	2'-4"	1'-6"	3'-0"	AT BRIDGE END ROLLS, DOUBLE ROW ALONG STREAMS, WETLANDS AND ENVIRONMENTALLY SENSITIVE AREAS FOR USE OF THIS MATERIAL IN FABRIC CHECKDAMS SEE D-24D.

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS

OMITTED



ELEVATION



PLAN

NOTE: TEMPORARY SILT FENCE SHALL NOT BE PLACED WITHIN STATE WATERS.

FENCE TYPE	POST LENGTH	H	D	W	TYPICAL USES
TYPE "A"	4 FT.	2'-4"	1'-6"	3'-0"	
TYPE "C"	4 FT.	2'-4"	1'-6"	3'-0"	AT BRIDGE END ROLLS, DOUBLE ROW ALONG STREAMS, WETLANDS AND ENVIRONMENTALLY SENSITIVE AREAS FOR USE OF THIS MATERIAL IN FABRIC CHECKDAMS SEE D-24D.

SILT FENCE
PERIMETER INSTALLATION ALONG DITCH SECTION

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

CONSTRUCTION DETAILS

TEMPORARY SILT FENCE

BERM DITCH, INSTALLATION, BRUSH BARRIER

NO SCALE REV. AND REDRAWN JAN. 2011

NUMBER D-24B (SHEET 2 OF 4)

REVISION | DATE | BY

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EROSION CONTROL CONSTRUCTION DETAILS
OLD PHOENIX ROAD AT LAKE OCONEE
GUARDRAIL REPLACEMENT

DRAWING NO. 56-0001

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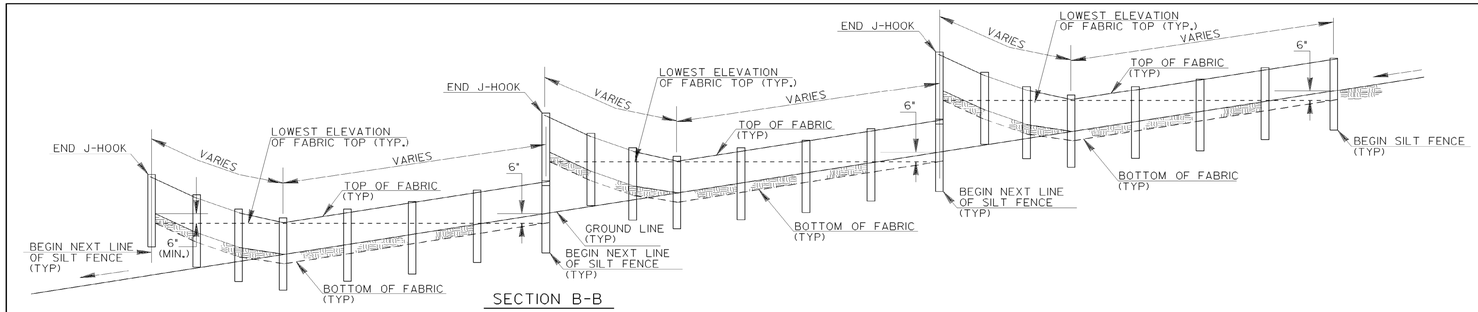
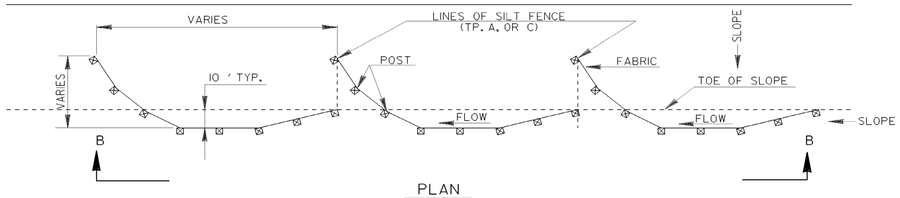
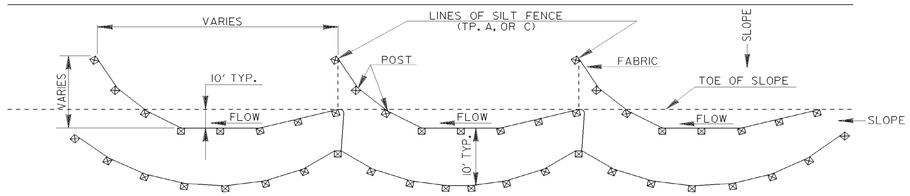


SECTION B-B



PLAN

SINGLE ROW SILT FENCE



PLAN

DOUBLE ROW SILT FENCE

TYPICAL J HOOK SPACING		
SLOPE PERCENT	TYPE OF SILT FENCE	MINIMUM SPACING (FEET)
1% TO 2%	TYPE A	100' ±
2% TO 3%	TYPE A	50' ±
3% TO 4%	TYPE C	50' ±
4% TO 5%	TYPE C	25' ±

NOTE:

1. IF THE GRADE IS BETWEEN 0 TO 1 PERCENT, THE SILT FENCE SHALL BE PLACED ACROSS THE DITCH.
2. TEMPORARY SILT FENCE SHALL NOT BE PLACED WITHIN STATE WATERS.

OMITTED

OMITTED

NOTE:
SEE SEPARATE SHEET ENTITLED "TEMPORARY SILT FENCE DETAILS" FOR SILT FENCE ERECTION DETAILS.

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

CONSTRUCTION DETAILS
TEMPORARY SILT FENCE
J-HOOK, INLET SEDIMENT TRAPS

NO SCALE JANUARY 2011

DATE | REVISION | BY

NUMBER D-24C (SHEET 3 OF 4)

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EROSION CONTROL
CONSTRUCTION DETAILS
OLD PHOENIX ROAD AT LAKE OCONEE
GUARDRAIL REPLACEMENT

DRAWING No. 56-0001

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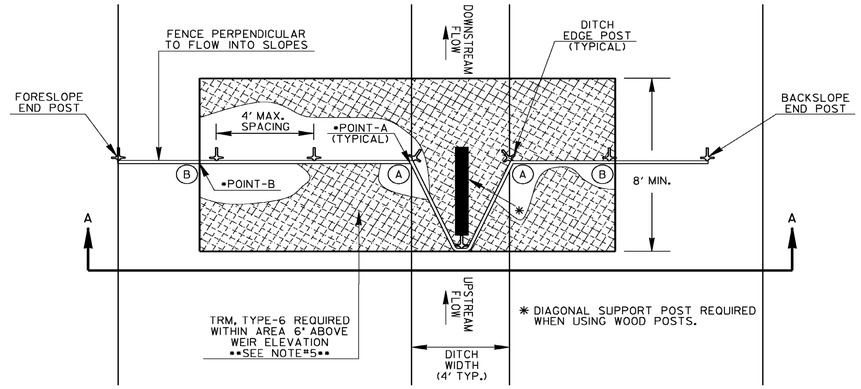
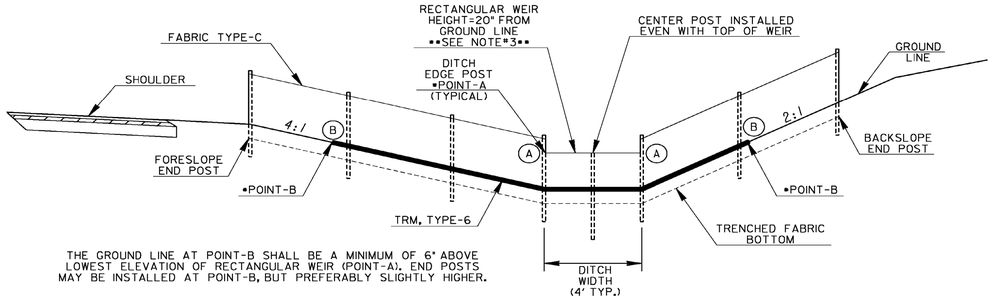


PLAN VIEW

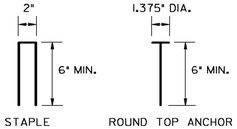
TYPICAL FABRIC CHECK DAM SPACING	
GRADE OF DITCH	MINIMUM SPACING (FEET)
LESS THAN 1%	100' ±
1% TO 3%	75' ±
3% TO 6%	50' ±
6% TO 8%	25' ±



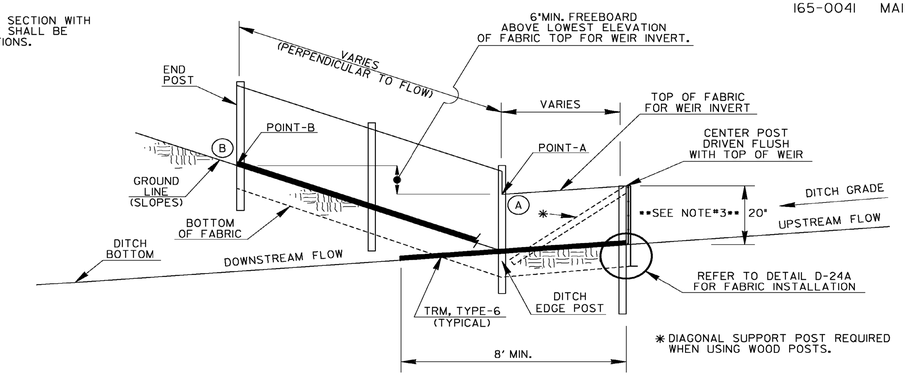
SECTION A-A

NOTE: CROSS-SECTION SHOWN IS AN EXAMPLE OF A TYPICAL CUT SECTION WITH A 4-FT FLAT BOTTOM DITCH. ACTUAL FABRIC CHECK DAMS SHALL BE INSTALLED SIMILARLY ACCORDING TO ROADWAY CROSS-SECTIONS.

TURF REINFORCEMENT MATTING ANCHOR



NOTE: TURF REINFORCEMENT MATTING SHALL BE ANCHORED WITH 8-GAUGE METAL STAPLES OR ROUND TOP ANCHORS. ANCHORS SHALL BE LONG ENOUGH TO PROVIDE SUFFICIENT GROUND PENETRATION TO RESIST PULL OUT.



STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			

NOTES:

1. FABRIC CHECK DAMS MAY BE USED FOR FLOWS UP TO 2.0-CFS. A ROCK FILTER DAM SHALL BE USED AT THE DOWNSTREAM POINT FOR FLOWS GREATER THAN 2.0-CFS.
2. FABRIC CHECK DAMS SHALL NOT BE PLACED WITHIN FLOWING STATE WATERS.
3. FABRIC CHECK DAMS MAY BE USED IN DITCHES WITH DEPTHS AT LEAST 26-IN. IF DITCH DEPTH IS LESS THAN 26-IN, THE WEIR INVERT MAY BE LOWERED SLIGHTLY IN THE FIELD TO PROVIDE 6-IN MINIMUM FREEBOARD ABOVE POINT-A OR TO MATCH SPACING OF WIRE SUPPORT. THE WEIR HEIGHT SHALL BE NO LESS THAN 15-IN. THE DESIGNER SHALL CONSIDER OTHER APPROPRIATE BMPs FOR CONCENTRATED FLOW FOR DITCH DEPTHS LESS THAN 26-IN.
4. THE FOLLOWING STEPS ARE RECOMMENDED FOR PROPER FABRIC CHECK DAM INSTALLATION:
   - A) DETERMINE DITCH CENTERLINE AND USE A LINE LEVEL OR OTHER MEANS TO FIND POINT-B WITHIN THE DITCH FORESLOPE AND BACKSLOPE TO PROVIDE 6-IN MINIMUM FREEBOARD ABOVE POINT-A.
   - B) CREATE TRENCH 6-IN BELOW DITCH GRADE TO FIT LAYOUT FROM STEP-A WITH MINIMAL SOIL DISTURBANCE.
   - C) LAYOUT TURF REINFORCEMENT MATTING (TRM), TYPE-6 TO PROVIDE PROTECTION A MINIMUM LENGTH OF 8-FT DOWNSTREAM OF CENTER POST TO FUNCTION AS A SPLASH PAD TO PREVENT SCOURING. ADDITIONAL NECESSARY TRM SHALL BE OVERLAPPED 3-FT. THE WIDTH SHALL BE THE DISTANCE BETWEEN POINT-B ON THE DITCH FORESLOPE AND POINT-B ON BACKSLOPE.
   - D) INSTALL FENCE POSTS THROUGH TRM WITHIN TRENCH. CENTER POST AND POSTS WITHIN WEIR AREA SHALL BE INSTALLED FLUSH WITH WEIR. CUT TRM WITHIN TRENCH FOLLOWING CHECK DAM LAYOUT AND SAVE UPSTREAM PORTION OF TRM FOR FURTHER USE.
   - E) PROPERLY INSTALL TYPE-C SILT FENCE. TRENCH BACKFILL SHALL BE COMPACTED WITH A HAND TAMPER, JUMPING JACK COMPACTOR, OR PLATE COMPACTOR TO PREVENT UNDERMINING.
   - F) INSTALL PREVIOUSLY CUT TRM FROM STEP-D UPSTREAM AGAINST CHECK DAM. INSTALLING UPSTREAM AND DOWNSTREAM TRM ACCORDING TO DETAIL D-35 FOR THIS TEMPORARY APPLICATION IS NOT REQUIRED. HOWEVER, TRM SHALL HAVE PROPER CONTACT WITH GROUND SURFACE, ANCHORED 6-IN MAXIMUM SPACING ALONG THE EDGES, AND ADEQUATELY WITHIN THE MATTED AREA.
5. TEMPORARY INSTALLATION OF TRM WITH FABRIC CHECK DAMS SHALL BE INCLUDED IN THE LINEAR COST OF THE CONSTRUCTION, REMOVAL, AND MAINTENANCE OF EACH FABRIC CHECK DAM. NO ADDITIONAL PAYMENT WILL BE MADE.

PAY ITEMS:
163-0528 CONSTRUCT & REMOVE FABRIC CHECK DAM, TYPE-C SILT FENCE (LF)
165-0041 MAINTENANCE OF CHECK DAMS - ALL TYPES (LF)

BY	DATE	REVISION

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

CONSTRUCTION DETAILS
TEMPORARY SILT FENCE
FABRIC CHECK DAM

NO SCALE REV. AND REDRAWN, JULY 2015

NUMBER D-24D (SHEET 4 OF 4)

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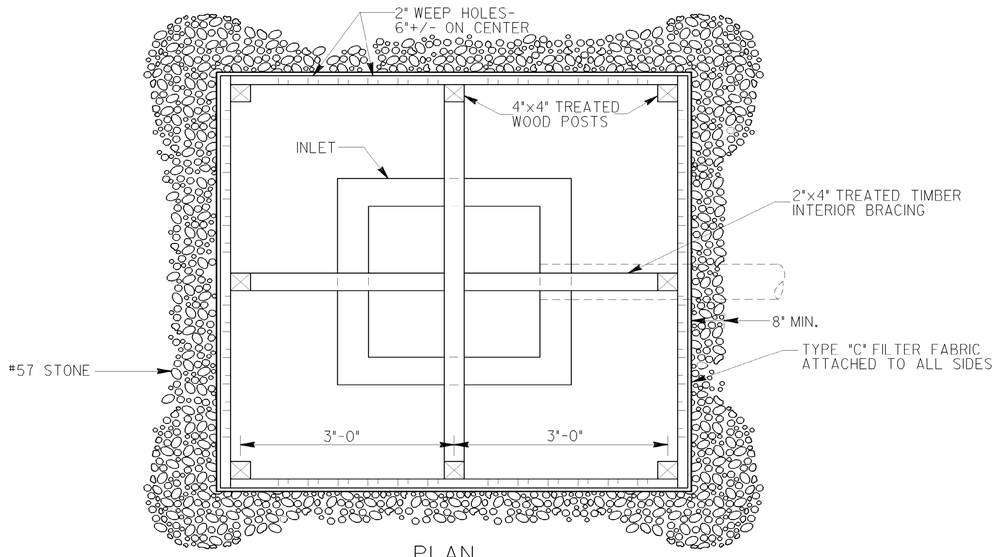
CONSTRUCTION DETAILS
OLD PHOENIX ROAD AT LAKE OCONEE
GUARDRAIL REPLACEMENT

DRAWING No. 56-0001

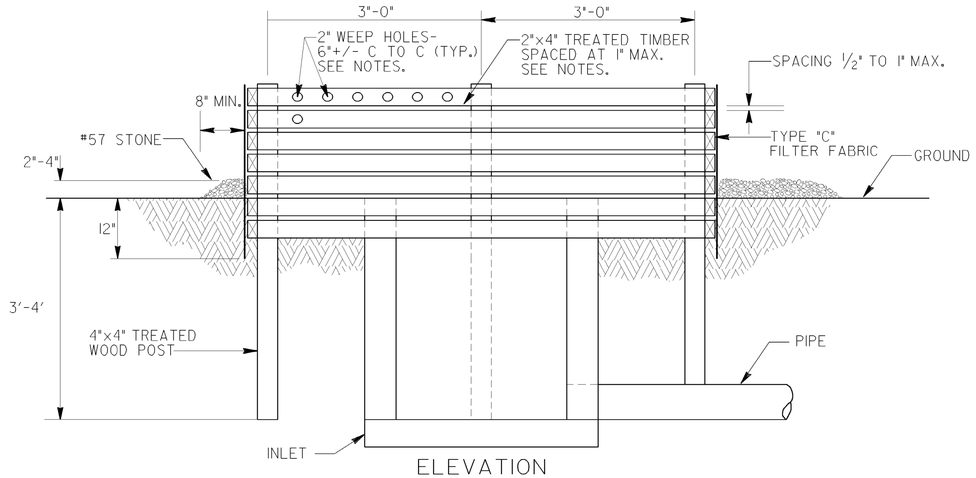


PLAN

NOTES:

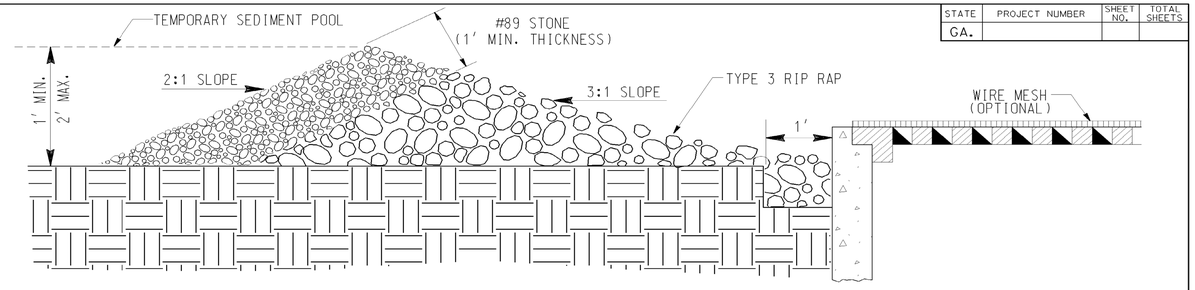
BAFFLE BOX SHALL BE CONSTRUCTED OF 2"x4" TREATED TIMBER SPACED A MAXIMUM OF 1" APART OR OF PLYWOOD WITH WEEP HOLES 2" IN DIAMETER PLACED APPROXIMATELY 6" ON CENTER VERTICALLY AND HORIZONTALLY.

GRAVEL SHALL BE PLACED OUTSIDE THE BOX, ALL AROUND THE INLET, TO A DEPTH OF 2 TO 4 INCHES. THE ENTIRE BOX SHALL BE WRAPPED IN TYPE "C" FILTER FABRIC THAT SHALL BE ENTRENCHED 12 INCHES AND BACKFILLED.

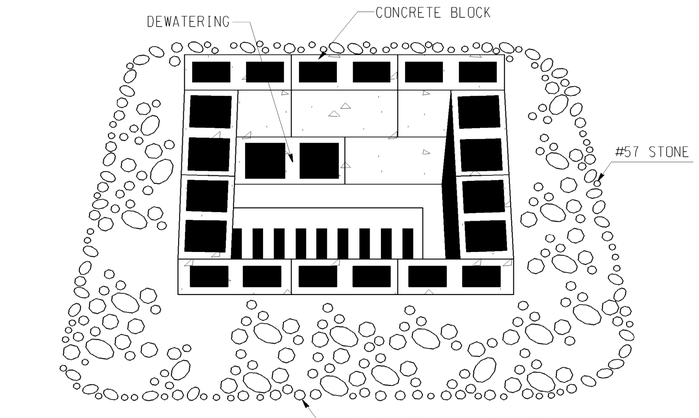


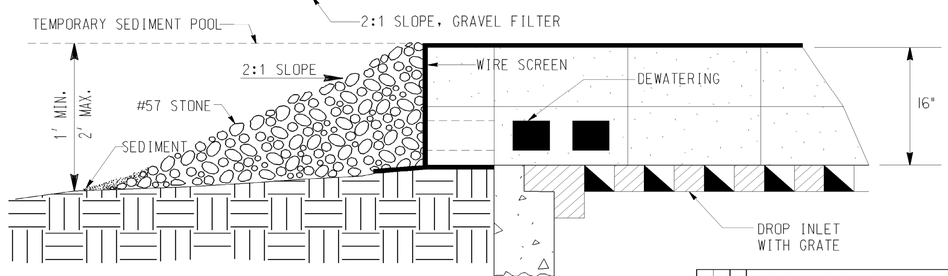
ELEVATION

BAFFLE BOX (Sd2-B)



GRAVEL DROP INLET PROTECTION (GRAVEL DONUT) Sd2-G





BLOCK & GRAVEL DROP INLET PROTECTION (Sd2-Bg)

BASIS OF PAYMENT:
CONSTRUCT AND REMOVE INLET SEDIMENT TRAP _____ EACH

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

CONSTRUCTION DETAIL
INLET SEDIMENT TRAPS
BAFFLE BOX Sd2-B
BLOCK AND GRAVEL DROP INLET PROTECTION Sd2-Bg
GRAVEL DROP INLET PROTECTION Sd2-G

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EROSION CONTROL CONSTRUCTION DETAILS
OLD PHOENIX ROAD AT LAKE OCONEE
GUARDRAIL REPLACEMENT

DRAWING No. 56-0001

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