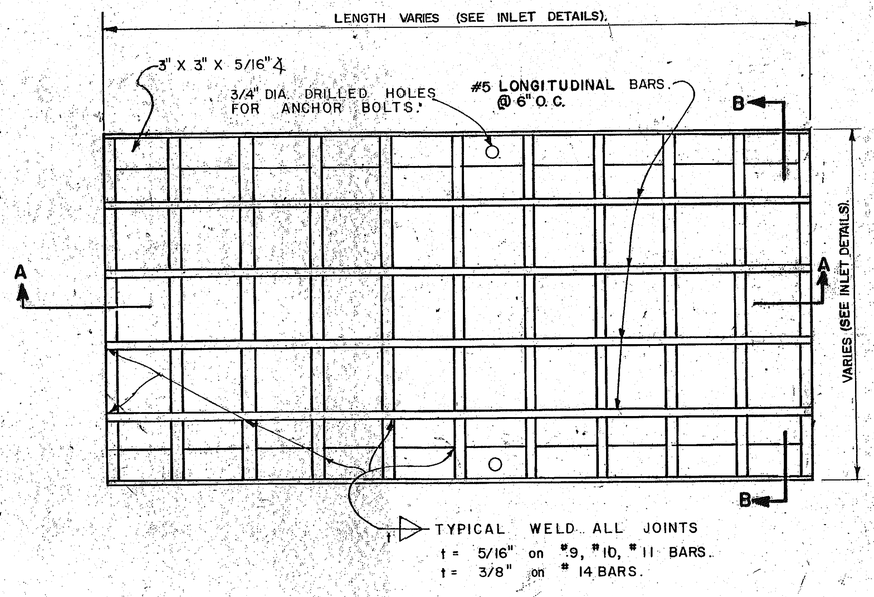
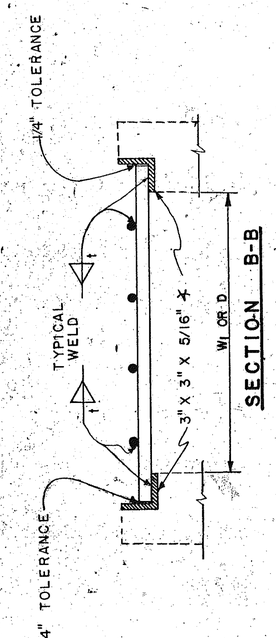
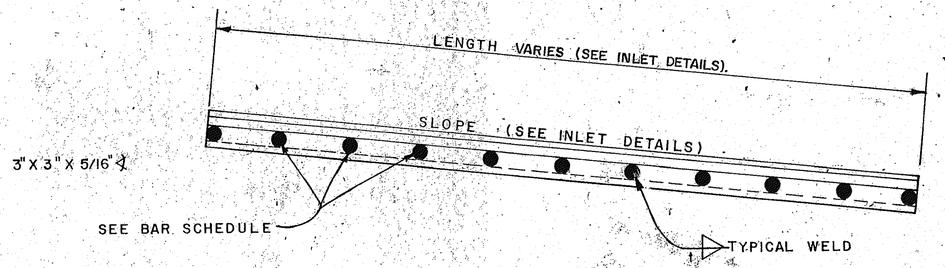
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	CSSTP-0006-00(869)	223	370





SECTION B-B



SECTION A-A

GENERAL NOTES:

1. FABRICATOR WILL ARRANGE FOR TESTING BY STATE D.O.T. MATERIALS LABORATORY 14 DAYS PRIOR TO FABRICATION.
2. ALL BARS SHALL MEET THE REQUIREMENTS OF AASHTO M31-68I GRADE 60.
3. BARS MAY BE SHEAR CUT OR SAWED.
4. ALL HORIZONTAL BARS SHALL BE #5 @6"O.C.

BAR SCHEDULE

GRATE TYPE	BAR SIZE	SPACING	W|ORD
1	# 9	6" O. C.	1'-6" to 2'-0"
2	# 10	" "	2'-6"
3	# 11	" "	3'-0" to 3'-6"
4	# 14	" "	4'-0"
5	# 18	" "	4'-0" to 6'-0"

BASIS OF PAYMENT:
SAFETY GRATE TYPE ____ Sq. Ft.

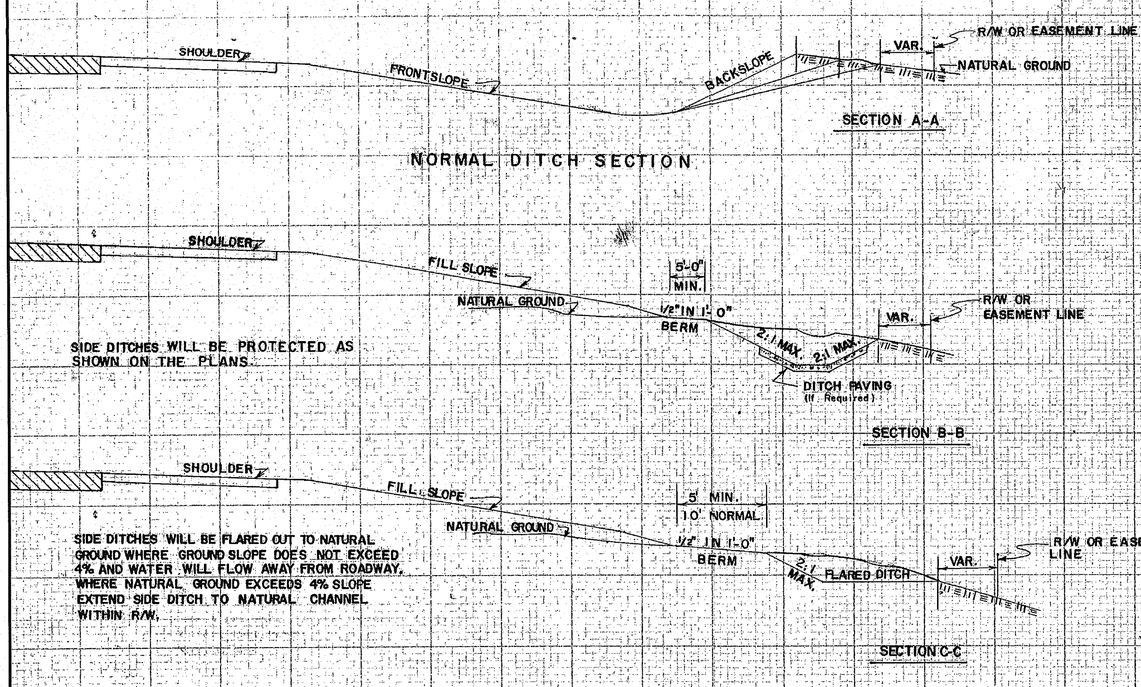
DATE	REVISION	BY
10-72	Revised and Redrawn	JLP

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

FABRICATION DETAILS
FOR
SAFETY GRATES
(ALL KINDS AND SIZES)

D-6

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	CSSTP-0006-00(869)	224	370



SECTION A-A

NORMAL DITCH SECTION

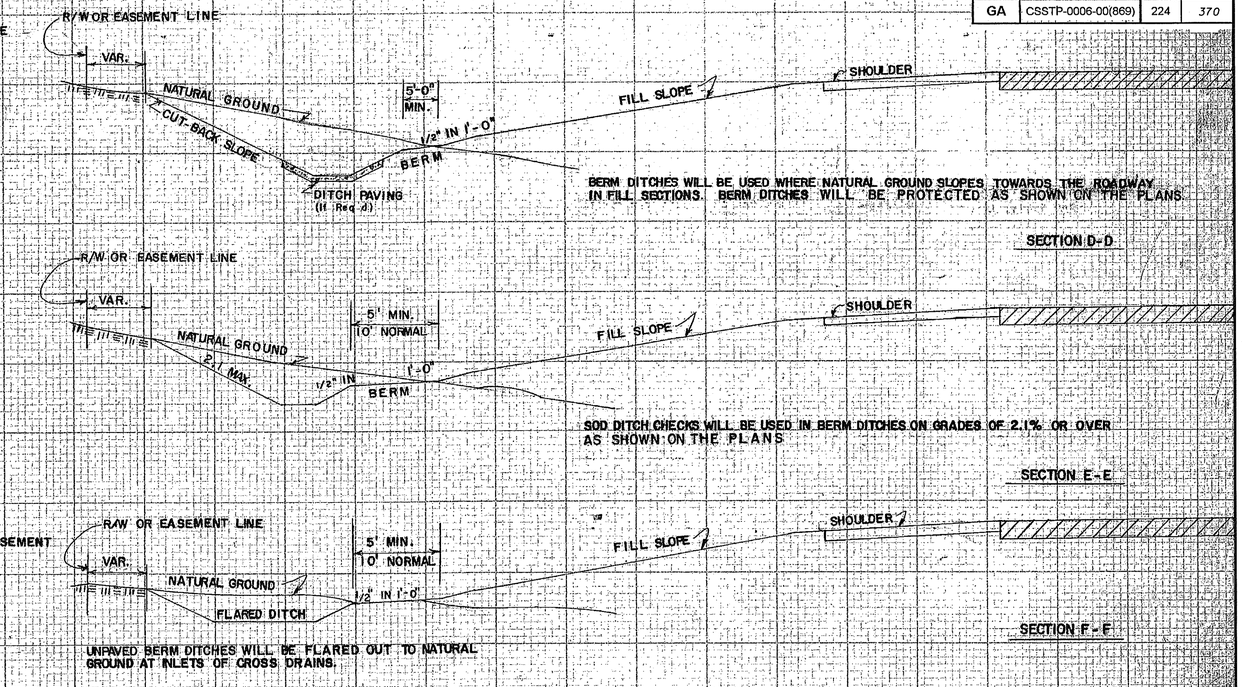
SIDE DITCHES WILL BE PROTECTED AS SHOWN ON THE PLANS.

SECTION B-B

SIDE DITCHES WILL BE FLARED OUT TO NATURAL GROUND WHERE GROUND SLOPE DOES NOT EXCEED 4% AND WATER WILL FLOW AWAY FROM ROADWAY. WHERE NATURAL GROUND EXCEEDS 4% SLOPE EXTEND SIDE DITCH TO NATURAL CHANNEL WITHIN R/W.

SECTION C-C

SIDE DITCHES TO TAIL OUT WATER FROM LONG CUT SECTIONS WILL BE PROTECTED AS DESIGNATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.



BERM DITCHES WILL BE USED WHERE NATURAL GROUND SLOPES TOWARDS THE ROADWAY IN FILL SECTIONS. BERM DITCHES WILL BE PROTECTED AS SHOWN ON THE PLANS.

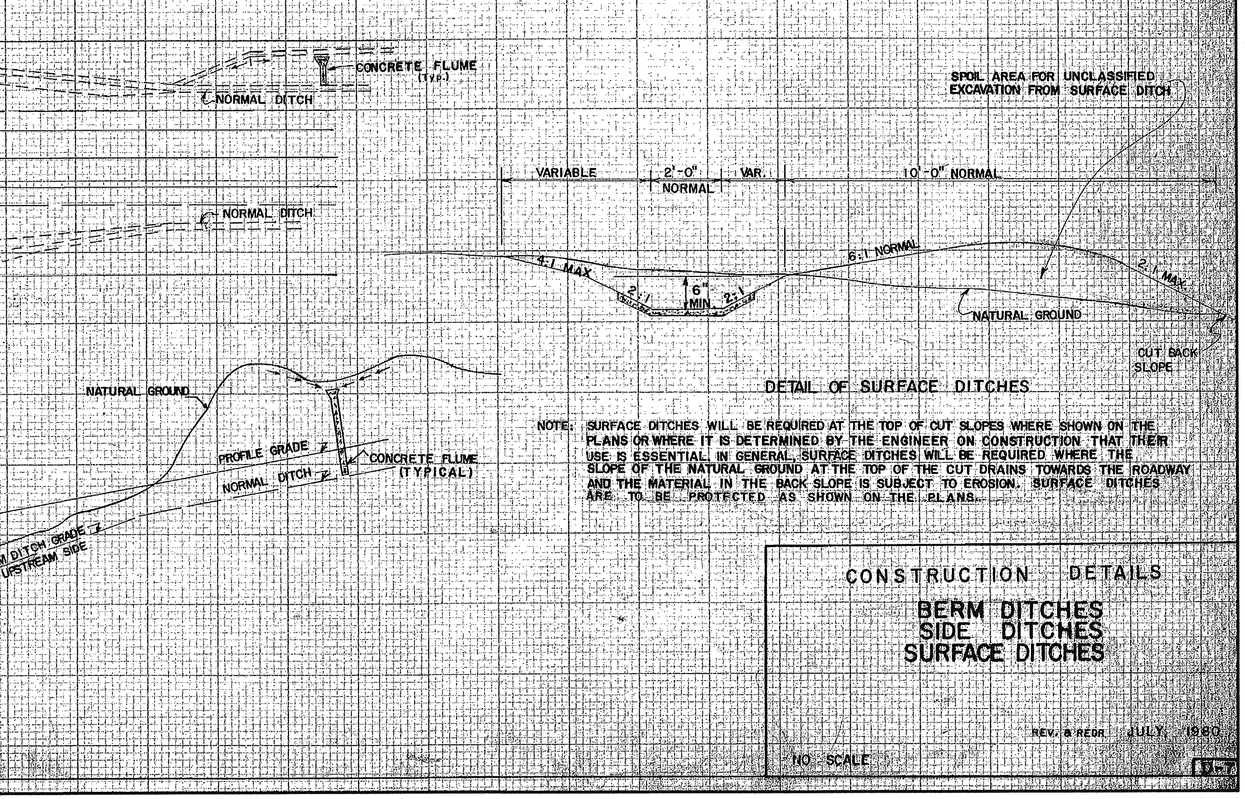
SECTION D-D

SOD DITCH CHECKS WILL BE USED IN BERM DITCHES ON GRADES OF 2.1% OR OVER AS SHOWN ON THE PLANS

SECTION E-E

UNPAVED BERM DITCHES WILL BE FLARED OUT TO NATURAL GROUND AT INLETS OF CROSS DRAINS.

SECTION F-F



DETAIL OF SURFACE DITCHES

NOTE: SURFACE DITCHES WILL BE REQUIRED AT THE TOP OF CUT SLOPES WHERE SHOWN ON THE PLANS OR WHERE IT IS DETERMINED BY THE ENGINEER ON CONSTRUCTION THAT THEIR USE IS ESSENTIAL IN GENERAL, SURFACE DITCHES WILL BE REQUIRED WHERE THE SLOPE OF THE NATURAL GROUND AT THE TOP OF THE CUT DRAINS TOWARDS THE ROADWAY AND THE MATERIAL IN THE BACK SLOPE IS SUBJECT TO EROSION. SURFACE DITCHES ARE TO BE PROTECTED AS SHOWN ON THE PLANS.

CONSTRUCTION DETAILS

BERM DITCHES
SIDE DITCHES
SURFACE DITCHES

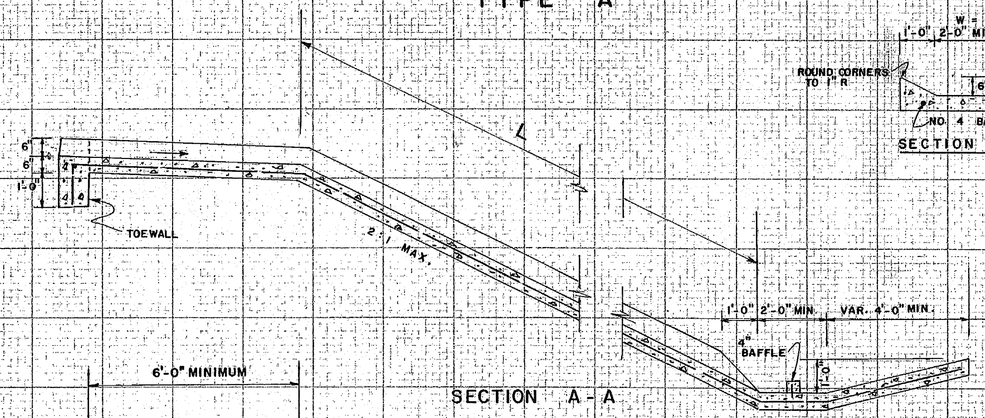
REV. & REDR JULY, 1990

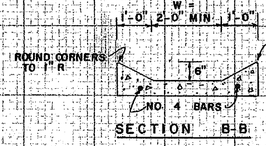
NO SCALE

D-7

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	CSSTP-0006-00(869)	225	370

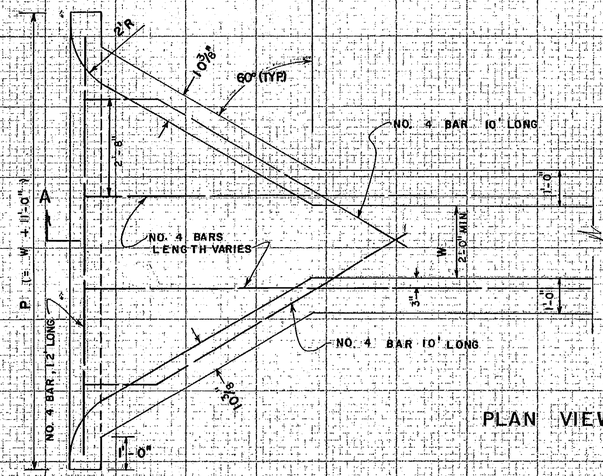
TYPE "A"



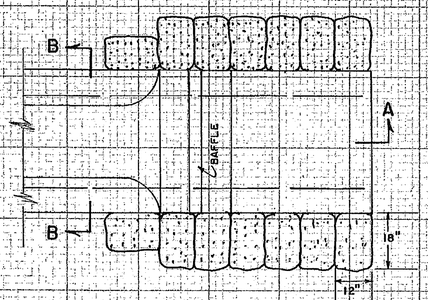


SECTION B-B

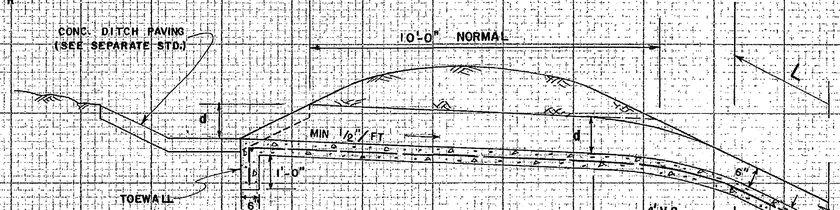
SECTION A-A



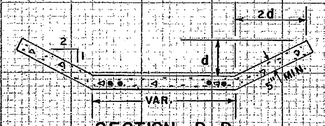
PLAN VIEW



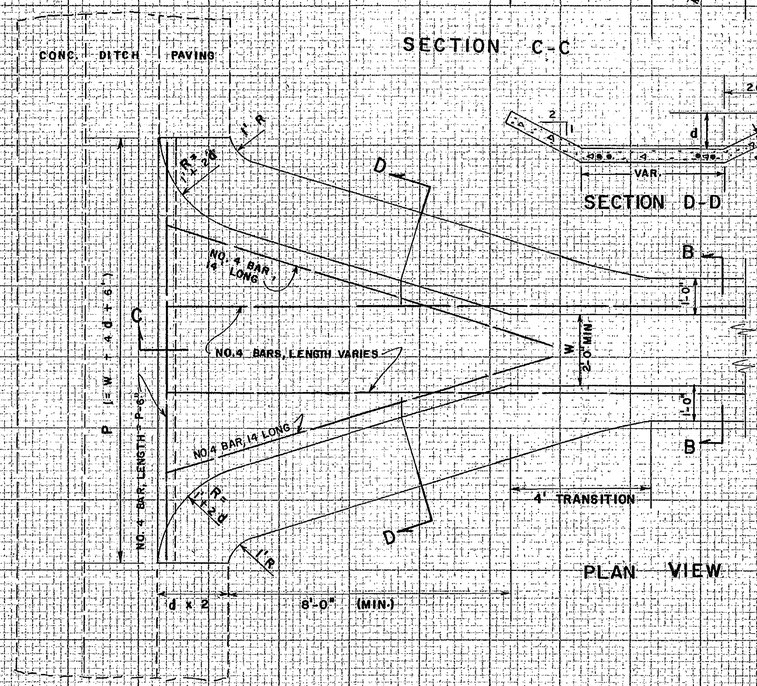
TYPE "B"



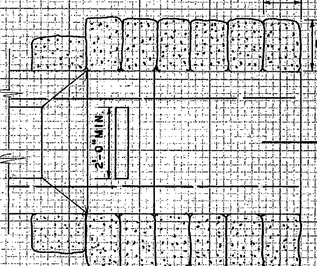
SECTION C-C



SECTION D-D

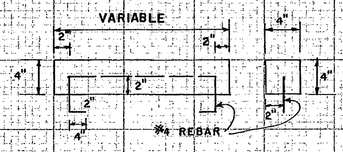


PLAN VIEW



TYPE "A" FLUME QUANTITIES:

(FOR W = 2'-0") CU. YDS. CONCRETE = 2.41 + 0.0926 (L)
(FOR W = 4'-0") CU. YDS. CONCRETE = 2.59 + 0.1306 (L)
(FOR EITHER W) LBS. STEEL = 41 LBS. + (1.336)(L)
SAND CEMENT BAG RIP RAP: 4 BAGS x 0.1667 SQ. YDS/BAG = 2.333 SQ. YDS.



DETAILS OF 4" CONCRETE BAFFLE

GENERAL NOTES:

1. SPECIFICATIONS: GEORGIA STANDARD, CURRENT EDITION, AND SUPPLEMENTS THERETO.
2. SIZE AND DIMENSIONS OF TYPE A OR TYPE B FLUMES MAY BE ADJUSTED FOR AN INDIVIDUAL SITE WHERE SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER.
3. AT LOCATIONS WHERE FLUME OUTLETS INTO AN INLET STRUCTURE, OMIT BAFFLE AND DOWNTURN END AND CONNECT FLUME TO THE INLET STRUCTURE.
4. SAND CEMENT BAG RIP RAP SHALL BE OMITTED IN PAVED DITCHES OR WHERE OTHER APPROVED EROSION CONTROL MATERIALS ARE USED.
5. POURED IN PLACE CONCRETE SHALL BE CLASS B MINIMUM. CLASS A CONCRETE SHALL BE USED FOR BAFFLES IF PRECAST.
6. BASIS OF PAYMENT:

CLASS B CONCRETE	CU.YD.
BAR REINFORCEMENT STEEL	LB.
SAND CEMENT BAG RIP-RAP, 6 IN. OR 8 IN.	SQ.YDS.

TYPE "B" FLUME QUANTITIES:

(FOR W = 2'-0") CU. YDS. CONC. = K + 0.0926 (L)
(FOR W = 4'-0") CU. YDS. CONC. = K + 0.1306 (L)
(FOR EITHER W) LBS. STEEL = 55 + 0.667 (P) + 1.336 (L)
SAND CEMENT BAG RIP RAP: 14 BAGS x 0.1667 SQ. YDS/BAG = 2.333 SQ. YDS.

d	W = 2'-0" P	W = 2'-0" K (cu. yds)	W = 4'-0" P	W = 4'-0" K (cu. yds)
6"	10'	1.94	12'	2.26
9"	11'	2.24	13'	2.68
1'-0"	12'	2.56	14'	3.05
1'-3"	13'	2.98	15'	3.43
1'-6"	14'	3.36	16'	3.84
1'-9"	15'	3.84	17'	4.32
2'-0"	16'	4.35	18'	4.86
2'-3"	17'	4.92	19'	5.48
2'-6"	18'	5.56	20'	6.10

NOTE: P = FLUME OPENING
K = CONCRETE CONSTANT (SEE FORMULAS)

CONCRETE FLUMES TYPES "A" & "B"

NO SCALE

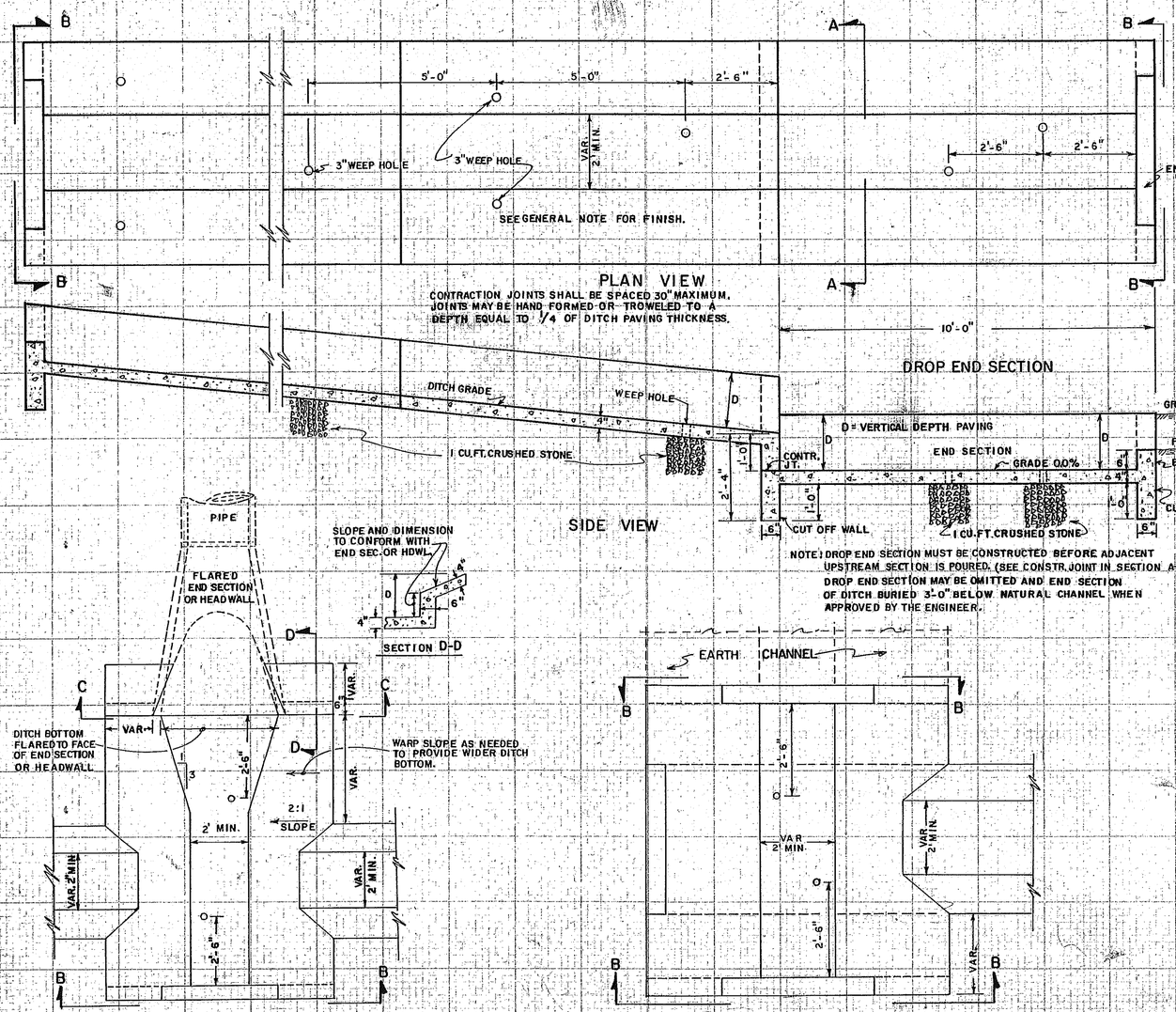
REV. & REDR OCT. 1983

D-9

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	CSSTP-0006-00(869)	226	370

TYPICAL QUANTITIES FOR 4" CONCRETE DITCH PAVING — SQ. YDS./LIN. FT.

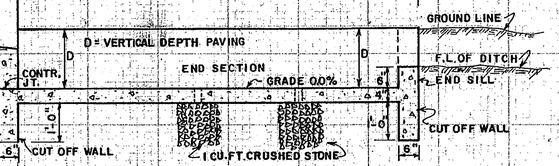
DEPTH (feet)	8:1 FR.SL. V BOTTOM 8:1 BK.SL.	8:1 FR.SL. 2' BOTTOM 8:1 BK.SL.	6:1 FR.SL. 2' BOTTOM 4:1 BK.SL.	8:1 FR.SL. 2' BOTTOM 3:1 BK.SL.	8:1 FR.SL. 2' BOTTOM 2:1 BK.SL.	6:1 FR.SL. 2' BOTTOM 6:1 BK.SL.	6:1 FR.SL. 2' BOTTOM 4:1 BK.SL.	6:1 FR.SL. 2' BOTTOM 3:1 BK.SL.	6:1 FR.SL. 2' BOTTOM 2:1 BK.SL.	4:1 FR.SL. 2' BOTTOM 4:1 BK.SL.	4:1 FR.SL. 2' BOTTOM 3:1 BK.SL.	4:1 FR.SL. 2' BOTTOM 2:1 BK.SL.	2:1 FR.SL. 2' BOTTOM 2:1 BK.SL.	2:1 FR.SL. 3' BOTTOM 2:1 BK.SL.	4:1 FR.SL. 4' BOTTOM 4:1 BK.SL.	4:1 FR.SL. 4' BOTTOM 3:1 BK.SL.	4:1 FR.SL. 4' BOTTOM 2:1 BK.SL.	2:1 FR.SL. 4' BOTTOM 2:1 BK.SL.	2:1 FR.SL. 5' BOTTOM 2:1 BK.SL.	2:1 FR.SL. 6' BOTTOM 2:1 BK.SL.	2:1 FR.SL. 7' BOTTOM 2:1 BK.SL.	2:1 FR.SL. 8' BOTTOM 2:1 BK.SL.	2:1 FR.SL. 9' BOTTOM 2:1 BK.SL.	2:1 FR.SL. 10' BOTTOM 2:1 BK.SL.	2:1 FR.SL. 12' BOTTOM 2:1 BK.SL.	2:1 FR.SL. 14' BOTTOM 2:1 BK.SL.	2:1 FR.SL. 16' BOTTOM 2:1 BK.SL.	2:1 FR.SL. 18' BOTTOM 2:1 BK.SL.	2:1 FR.SL. 20' BOTTOM 2:1 BK.SL.	2:1 FR.SL. 25' BOTTOM 2:1 BK.SL.	2:1 FR.SL. 30' BOTTOM 2:1 BK.SL.	DEPTH (feet)
0.50	0.895	1.118	0.899	0.846	0.794	0.898	0.789	0.735	0.684	0.680	0.575	0.470	0.581	0.902	0.797	0.692	0.804	0.915	1.026	1.137	1.248	1.359	1.581	1.804	2.026	2.248	2.470	3.026	3.581	0.50
0.75	1.343	1.565	1.238	1.158	1.081	1.236	1.072	0.992	0.915	0.909	0.752	0.594	0.705	1.131	0.974	0.817	0.928	1.039	1.150	1.261	1.372	1.483	1.706	1.928	2.150	2.372	2.594	3.150	3.706	0.75
1.00	1.791	2.031	1.576	1.469	1.367	1.573	1.356	1.249	1.146	1.138	0.928	0.719	0.830	1.360	1.151	0.941	1.052	1.163	1.274	1.385	1.496	1.608	1.830	2.052	2.274	2.496	2.719	3.274	3.830	1.00
1.25	2.239	2.461	1.915	1.781	1.652	1.911	1.639	1.506	1.377	1.367	1.105	0.843	0.954	1.589	1.327	1.065	1.176	1.287	1.398	1.510	1.621	1.732	1.954	2.176	2.398	2.621	2.843	3.398	3.954	1.25
1.50	2.687	2.909	2.253	2.093	1.939	2.249	1.923	1.763	1.608	1.596	1.282	0.967	1.078	1.818	1.504	1.189	1.300	1.412	1.523	1.634	1.745	1.856	2.078	2.300	2.523	2.745	2.967	3.523	4.078	1.50
1.75	3.135	3.357				2.587	2.206	2.019	1.839	1.825	1.458	1.091	1.202	2.047	1.680	1.314	1.425	1.536	1.647	1.758	1.869	1.980	2.202	2.425	2.647	2.869	3.091	3.647	4.202	1.75
2.00	3.583	3.805				2.925	2.490	2.276	2.070	2.054	1.635	1.216	1.327	2.276	1.857	1.438	1.549	1.660	1.771	1.882	1.993	2.104	2.327	2.549	2.771	2.993	3.216	3.771	4.327	2.00
2.25	4.031	4.253				3.263	2.773	2.533	2.301	2.283	1.812	1.340	1.451	2.505	2.034	1.562	1.673	1.784	1.895	2.006	2.118	2.229	2.451	2.673	2.895	3.118	3.340	3.895	4.451	2.25
2.50	4.479	4.701				3.601	3.057	2.790	2.533	2.512	1.988	1.464	1.575	2.735	2.210	1.686	1.797	1.908	2.020	2.131	2.242	2.353	2.575	2.797	3.020	3.242	3.464	4.020	4.575	2.50
2.75	4.926	5.149				3.939	3.340	3.047	2.764	2.741	2.165	1.588	1.699	2.964	2.387	1.810	1.922	2.033	2.144	2.255	2.366	2.477	2.699	2.922	3.144	3.366	3.588	4.144	4.699	2.75
3.00	5.374	5.597				4.277	3.624	3.303	2.995	2.970	2.341	1.712	1.824	3.193	2.564	1.935	2.046	2.157	2.268	2.379	2.490	2.601	2.824	3.046	3.268	3.490	3.712	4.268	4.824	3.00
3.25	5.822	6.044				4.615	3.907	3.560	3.226	3.200	2.518	1.837	1.948	3.422	2.740	2.059	2.170	2.281	2.392	2.503	2.614	2.726	2.948	3.170	3.392	3.614	3.837	4.392	4.948	3.25
3.50	6.270	6.492				4.953	4.191	3.817	3.457	3.429	2.695	1.961	2.072	3.651	2.917	2.183	2.294	2.405	2.516	2.628	2.739	2.850	3.072	3.294	3.516	3.739	3.961	4.516	5.072	3.50
3.75	6.718	6.940				5.291	4.474	4.074	3.688	3.658	2.871	2.085	2.196	3.880	3.094	2.307	2.418	2.530	2.641	2.752	2.863	2.974	3.196	3.418	3.641	3.863	4.085	4.641	5.196	3.75
4.00	7.166	7.388				5.629	4.758	4.331	3.919	3.887	3.048	2.209	2.320	4.109	3.270	2.432	2.543	2.654	2.765	2.876	2.987	3.098	3.320	3.543	3.765	3.987	4.209	4.765	5.320	4.00



PLAN VIEW

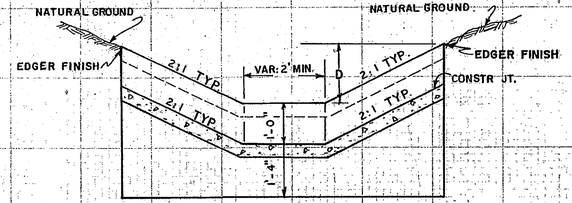
CONTRACTION JOINTS SHALL BE SPACED 30" MAXIMUM. JOINTS MAY BE HAND FORMED OR TROWELED TO A DEPTH EQUAL TO 1/4 OF DITCH PAVING THICKNESS.

SIDE VIEW



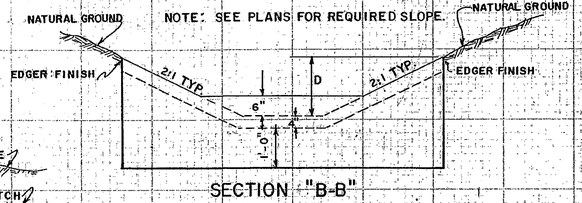
DROP END SECTION

NOTE: DROP END SECTION MUST BE CONSTRUCTED BEFORE ADJACENT UPSTREAM SECTION IS POURED. (SEE CONSTR. JOINT IN SECTION A-A.) DROP END SECTION MAY BE OMITTED AND END SECTION OF DITCH BURIED 3'-0" BELOW NATURAL CHANNEL WHEN APPROVED BY THE ENGINEER.

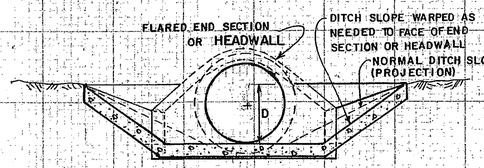


SECTION "A-A"

NOTE: SEE PLANS FOR REQUIRED SLOPE.



SECTION "B-B"



SECTION "C-C"

CONNECTING PAVED DITCH TO FLARED END SECTION OR HEADWALL (TYPICAL DETAIL)

CONNECTING PAVED DITCH TO EARTH CHANNEL (TYPICAL DETAIL)

GENERAL NOTES:

1. SPECIFICATIONS: GEORGIA STANDARD, CURRENT EDITION, & SUPPLEMENTS THERETO.
2. CONCRETE DITCH PAVING IS TO BE CONSTRUCTED TO LINES AND GRADES SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
3. PAYMENT FOR CONCRETE DITCH PAVING INCLUDES THE CUT-OFF WALL & END SILL AT INLET AND OUTLET END OF DITCH; THE CRUSHED STONE FOR WEEP HOLES; AND EXPANSION JOINT MATERIAL.
4. A DROP END SECTION WILL BE CONSTRUCTED AS 4" CONCRETE DITCH PAVING ON THE DOWNSTREAM END OF ALL PAVED DITCHES.
5. SIDE SLOPES ON PAVED BERM AND SURFACE DITCHES SHALL BE 2:1, UNLESS MODIFIED ON CONSTRUCTION TO MEET FIELD CONDITIONS. WHEN PAVING IS PLACED IN A NORMAL ROADWAY DITCH, THE SIDE SLOPES AND BOTTOM WILL CONFORM TO THOSE SHOWN ON THE ROADWAY TYPICAL SECTION.
6. WEEP HOLES SHALL BE OMITTED IN ALL SURFACE DITCHES OF THE TOP OF CUT SLOPES. WEEP HOLES SHALL BE REQUIRED IN BERM DITCHES AND ROADWAY DITCHES WHEN PAVED.
7. SURFACE FINISH SHALL BE FLOATED SUFFICIENTLY TO COVER AGGREGATE WITH MORTAR.
8. EXPANSION JOINTS ARE REQUIRED WHERE PAVED DITCH CONNECTS TO OTHER CONCRETE STRUCTURES.
9. QUANTITIES APPLY TO ANY TYPE OF DITCH REQUIRING PROTECTION. QUANTITIES MAY ALSO BE USED FOR PERMANENT SOIL REINFORCING MAT OR OTHER KINDS OF DITCH PROTECTION ITEMIZED AS SQUARE YARDS.

CONSTRUCTION DETAILS

4" CONCRETE DITCH PAVING

DETAILS & QUANTITIES

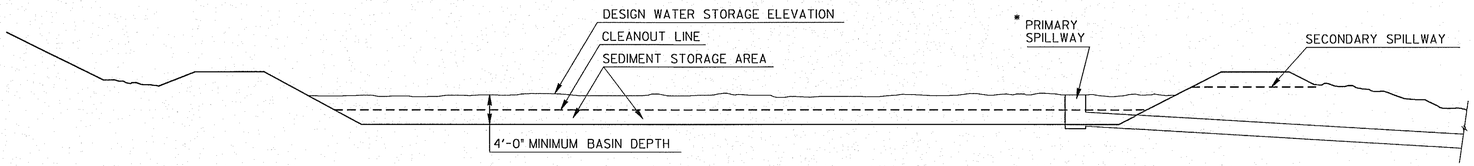
NO SCALE

JAN. 1988

D-10

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	CSSTP-0006-00(869)	227	370

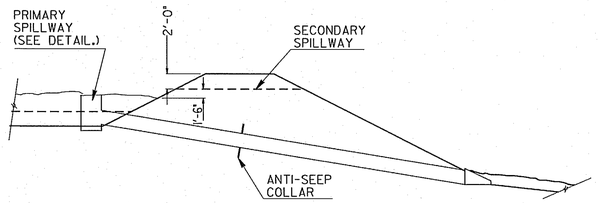
USES:
THIS IS A BASIN THAT IS EXCAVATED OR AN AREA THAT IS DAMMED. THE BASIN WILL BE DESIGNED TO HOLD A SEDIMENT LOAD OF 1815 CUBIC FEET OF VOLUME PER ACRE OF DRAINAGE AREA. IT IS USED FOR DRAINAGE AREAS OF 3 TO 5 ACRES OR WHERE A ROADWAY CUT DITCH EXCEEDS 1,000 CONSECUTIVE FEET IN LENGTH. LARGER DRAINAGE AREAS OR LONGER CUT DITCHES SHOULD BE BROKEN INTO SMALLER AREAS IF POSSIBLE. IF A SEDIMENT BASIN IS USED ON AN AREA LARGER THAN 5 ACRES, THE SIZE WILL BECOME VERY LARGE. THIS REQUIRES SPECIAL CONSIDERATION FOR CLEANOUT ACCESS SUCH AS THE ADDITION OF A CLEANOUT PENINSULA. SUFFICIENT EASEMENT IS NEEDED FOR THE BASIN AND ACCESS FOR CLEANOUT VIA A ROUTE WITH 3:1 SLOPE OR LESS.



SECTION A-A

NOTE: RUNOFF FROM UNDISTURBED, ADJACENT LAND SHOULD BE ROUTED TO BYPASS SEDIMENT BASINS.

NOTE:
ALLOWABLE SEDIMENT DEPTH SHALL NOT EXCEED 1/3 TOTAL BASIN DEPTH.

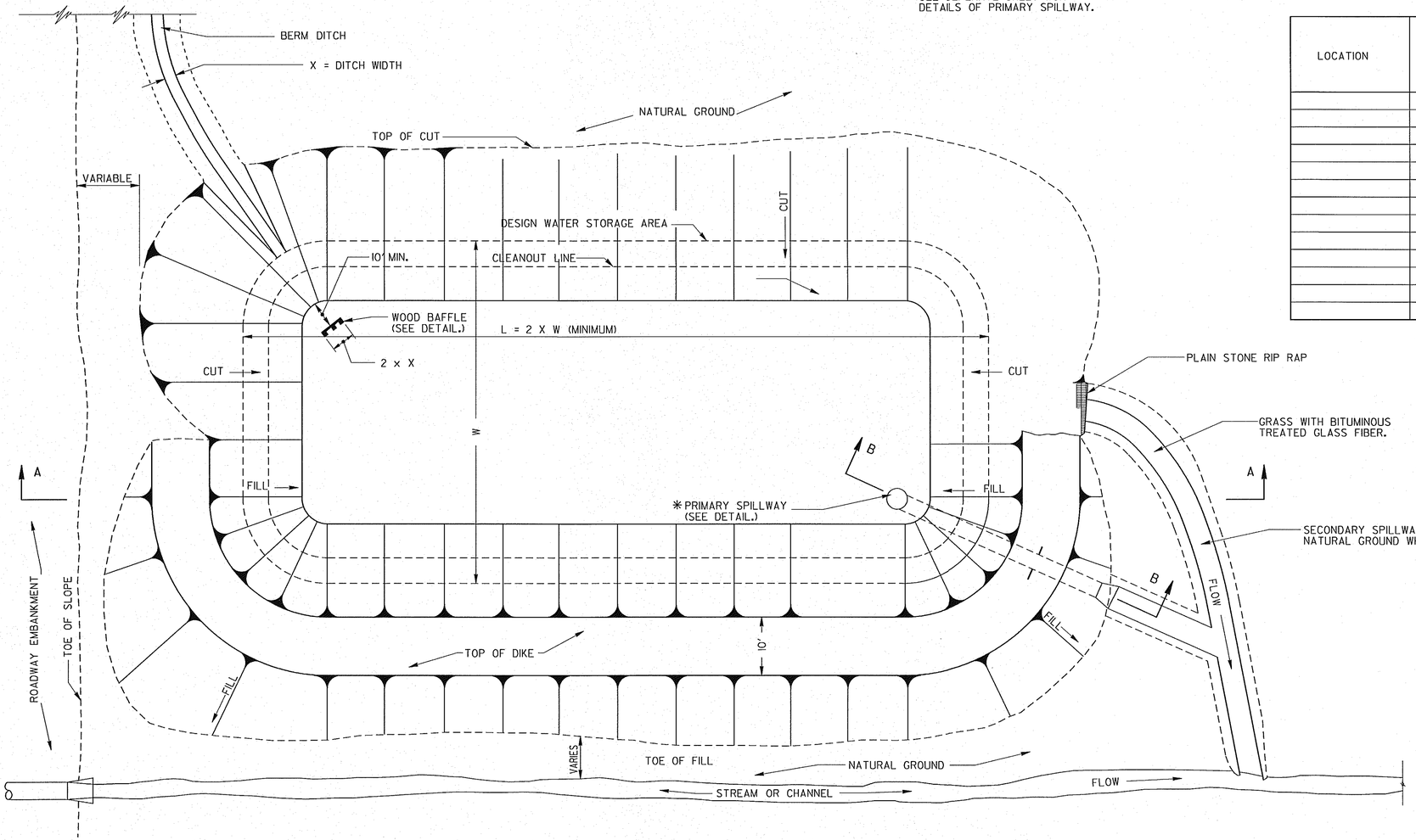


SECTION B-B

* SEE SEPERATE SHEET FOR DETAILS OF PRIMARY SPILLWAY.

LOCATION	SIDE	REQUIRED VOLUME	BASIN DEPTH	W	L	PRIMARY SPILLWAY		SECONDARY SPILLWAY WIDTH
				AT DEPTH SHOWN		D_S	D_O	
		CU. FT.	FT.	FT.	FT.	IN.	IN.	FT.

NOTE:
BASIN DEPTH 4'-0" MINIMUM, W & L MAY VARY TO CONFORM TO SITE CONDITIONS, PROVIDED REQUIRE VOLUME IS MAINTAINED, MINIMUM L = 2W.



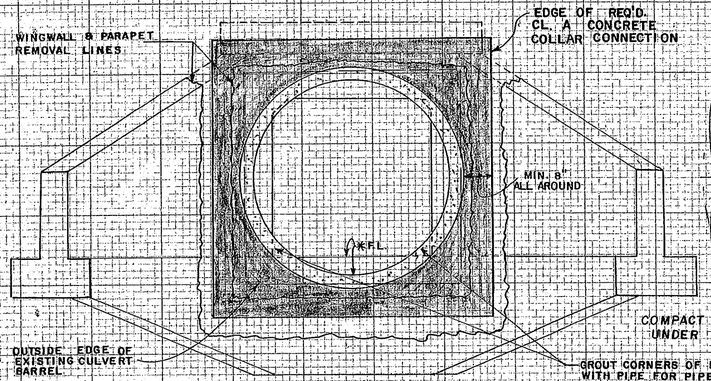
DATE	REVISION	BY
11-19-73	REVISED SEDIMENT	J.M.W.
5-19-89	GEN. REV.	J.M.W.
5-14-93	ADDED "USES" GUIDE	J.M.W.
2-24-95	GEN. REV.	J.M.W.
4-2-01	ADDED RUNOFF NOTE	
10-15-01	RELOC. WOOD BAFFLE	

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

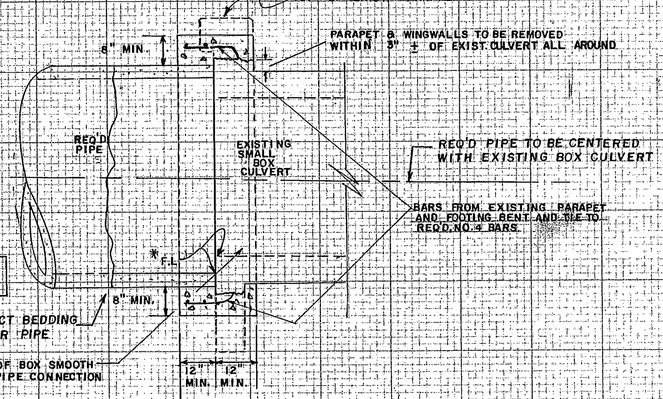
SEDIMENT BASIN TYPE - I
FOR USE OUTSIDE NATURAL CHANNELS

D-22

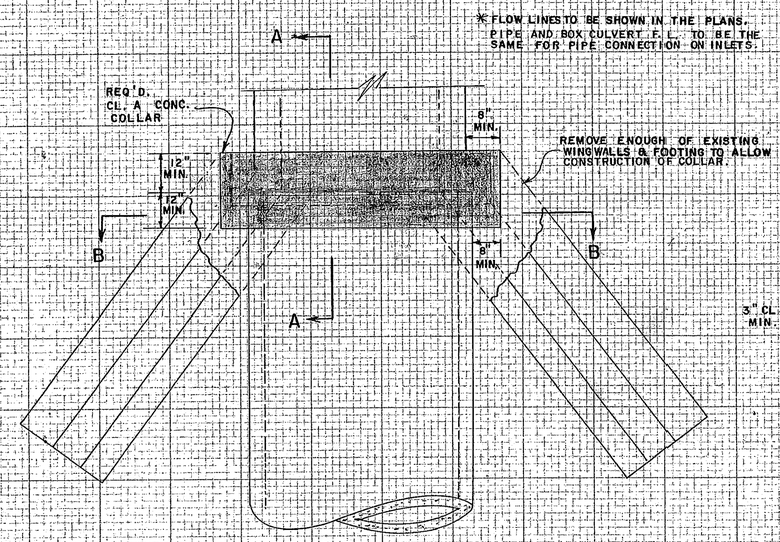
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	CSSTP-0006-00(860)	228	370



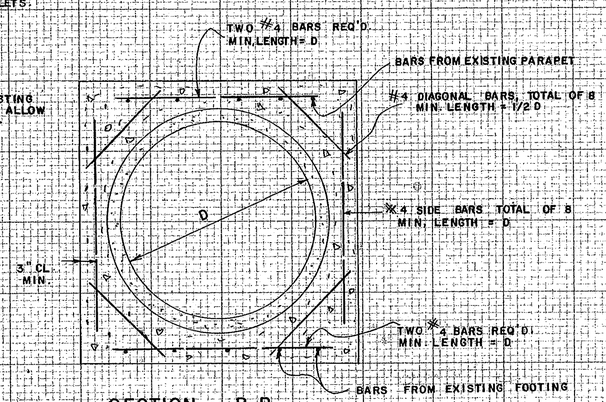
FRONT VIEW



SECTION A-A



PLAN VIEW



SECTION B-B

NOTE:
CROSS SECTION AREA OF COLLAR DOES NOT HAVE TO BE SQUARE OR RECTANGULAR, SHAPE MAY VARY SO LONG MINIMUM DIMENSIONS GIVEN IN OTHER VIEWS ARE MAINTAINED ALL AROUND. COLLAR MAY BE FORMED BY ANY FEASIBLE METHOD APPROVED BY THE ENGINEER.

NOTES:

1. PAYMENT FOR PIPE CULVERT SHALL INCLUDE REMOVING PORTIONS OF WINGWALLS & PARAPET AS SHOWN AND THE CONCRETE AND STEEL REQUIRED FOR COLLAR CONNECTION.
2. COLLAR DIMENSIONS SHOWN ARE MINIMUM. COLLAR MAY BE FORMED AGAINST COMPACTED OR UNDISTURBED SOIL OR AGAINST EDGES OF EXISTING STRUCTURE. EXTERIOR OF COLLAR DOES NOT HAVE TO BE SMOOTH LINES.
3. THESE DETAILS ARE FOR USE WHERE IT IS NOT FEASIBLE TO EXTEND BOX CULVERT WITH SAME, WHERE PLANS SHOW BOX CULVERT EXTENDED WITH PIPE, THE CONTRACTOR MAY ELECT TO EXTEND WITH PRECAST BOX OR CAST-IN-PLACE BOX OF SAME SIZE WHERE FILL HEIGHT PERMITS AND AT NO ADDITIONAL COST TO THE DEPARTMENT.
4. ADJUSTMENTS TO DETAILS SHOWN MAY BE MADE IN THE FIELD AT THE DIRECTION OF THE ENGINEER TO SUIT INDIVIDUAL SITE.

CONSTRUCTION DETAILS

PIPE-BOX CULVERT COLLAR CONNECTIONS DETAILS

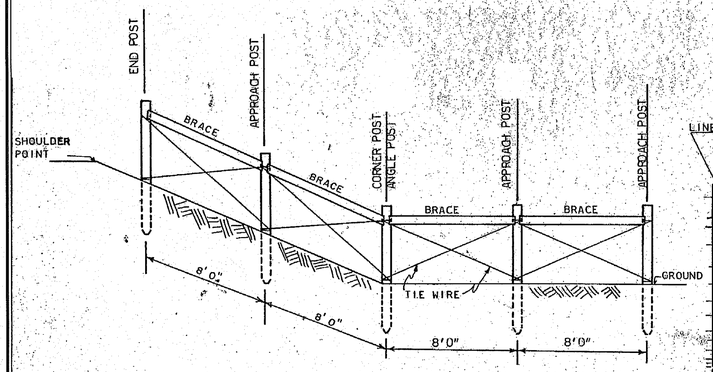
MARCH, 1986

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	CSSTP-0006-00(869)	229	370

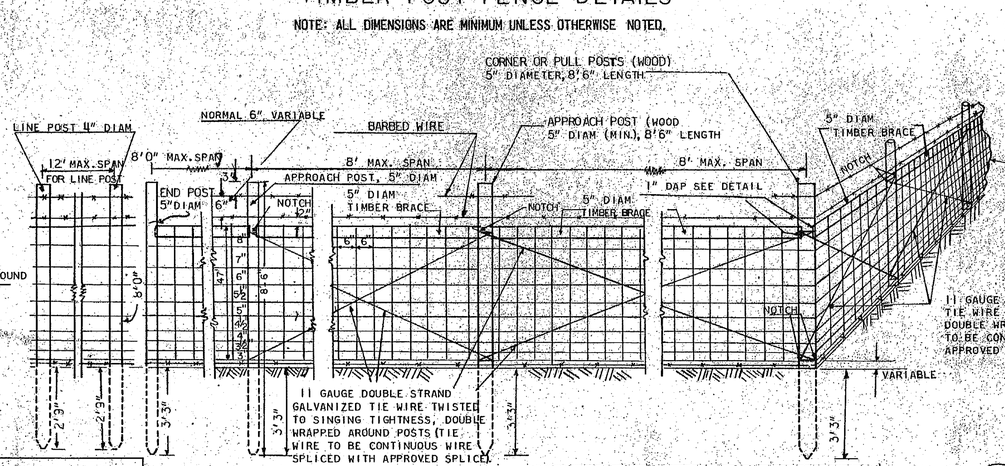
NOTE: PAYMENT FOR WOVEN WIRE FENCE INCLUDES ALL STRANDS OF BARBED WIRE SHOWN AT TOP OF AND AT BOTTOM OF WOVEN WIRE FENCE.

TIMBER POST FENCE DETAILS

NOTE: ALL DIMENSIONS ARE MINIMUM UNLESS OTHERWISE NOTED.



DETAIL OF FENCE BRACING WHEN APPROACHING FILL SLOPE OR ON ANGLE GREATER THAN 15°



GENERAL NOTES:

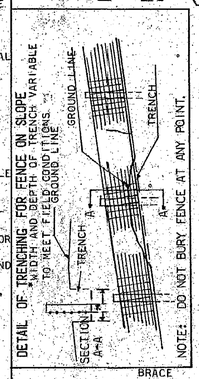
1. FENCE MAY BE ANGLED TO EDGE OF CULVERTS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE DESIGNATION OF THIS DETAIL ON THE PLANS WILL BE ON THE BASIS OF A SAFETY EVALUATION.
2. A CHANGE IN TYPE MATERIAL FOR LINE POST CONSTRUCTION WILL ONLY BE ALLOWED AT NATURAL BREAKS IN THE FENCE LINE SUCH AS GRADE SEPARATIONS, INTERCHANGES, AND BRIDGES.

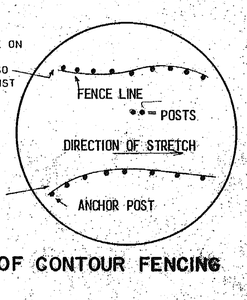
TIMBER POST NOTES:

1. DIMENSIONS SHOWN AS DIAMETERS OF ROUND POSTS ALSO APPLY TO EDGE WIDTH OF SQUARE POSTS.
2. AT ABRUPT CHANGES IN GRADE, STAPLE EVERY LINE WIRE.
3. TIMBER POSTS TO BE SET BY DRIVING OR DRILLING POST HOLES.
4. USE 9 GAUGE GALVANIZED STAPLES 1-1/2" LONG FOR TIMBER POSTS AT APPROACH POST, STAPLE EVERY LINE WIRE IN TOP HALF AND ALTERNATE LINE WIRES IN BOTTOM HALF, SEE STAPLING DETAIL.
5. ALL TIMBER POSTS AND BRACING ARE TO BE SEASONED AND PRESERVATIVE TREATED IN ACCORDANCE WITH SECTION 863 OF THE STANDARD SPECIFICATIONS.
6. THE CONTRACTOR WILL BE ALLOWED TO SUBSTITUTE 4 INCH NOMINAL DIMENSION LINE POSTS FOR THE DETAILS.
7. STUDDED STEEL "T" LINE POSTS MAY BE USED WITH WOODEN PULL, CORNER, END, APPROACH, AND ANGLE POSTS.
8. SQUARE WOODEN LINE POSTS CAN BE USED IN COMBINATION WITH ROUND WOODEN PULL, CORNER, END APPROACH, AND ANGLE POSTS.

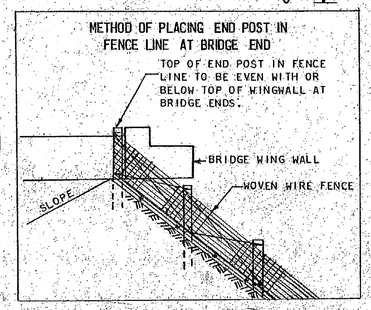
STEEL POST NOTES:

1. SET PULL, CORNER, END AND APPROACH POST IN CONCRETE.
2. SECURE EVERY LINE WIRE AT STEEL CORNER, END, ANGLE AND PULL POSTS AT STEEL LINE POSTS FASTEN EVERY LINE WIRE IN TOP HALF OF FENCE, ALTERNATE LINE WIRES IN BOTTOM HALF.





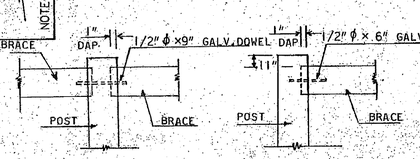
DETAIL OF CONTOUR FENCING



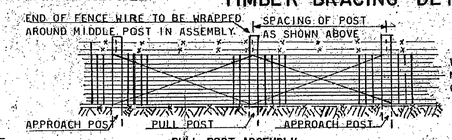
NOTE: THIS FENCE IS TO BE USED AT LARGE PIPES AND CULVERTS WHERE A DISTINCT CHANNEL IS ENCOUNTERED EXCEPT WHERE THE CULVERT HAS BEEN APPROVED AS A CATTLE PASS.

DETAIL SHOWING PLACEMENT OF THREE STRAND BARBED WIRE FENCE

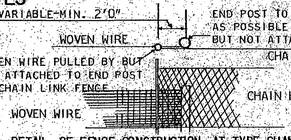
NOTE: THREE STRAND BARBED WIRE FENCE IS NOT INTENDED FOR GENERAL USE AS PASTURE FENCING. SEE CONSTRUCTION DETAILS FOR FOUR AND FIVE STRAND BARBED WIRE FENCE WHERE NEEDED.



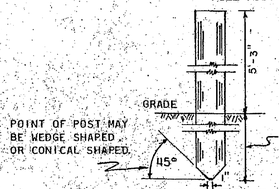
TIMBER BRACING DETAILS



PULL POST ASSEMBLY



DETAIL OF FENCE CONSTRUCTION AT TYPE CHANGE

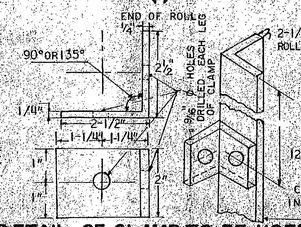


DETAIL OF TIMBER POST

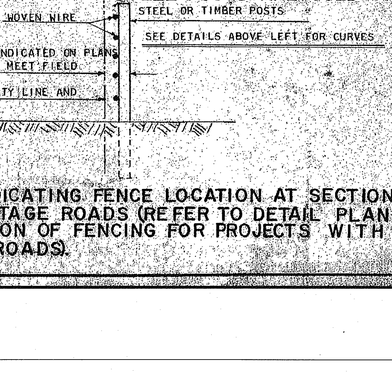
FASTEN EACH CORNER OF METAL CAP TO SIDE OF POST WITH A 1" GALVANIZED ROOFING NAIL.

METHOD OF PLACING METAL CAP ON WOODEN FENCE POSTS

STAPLING DETAILS

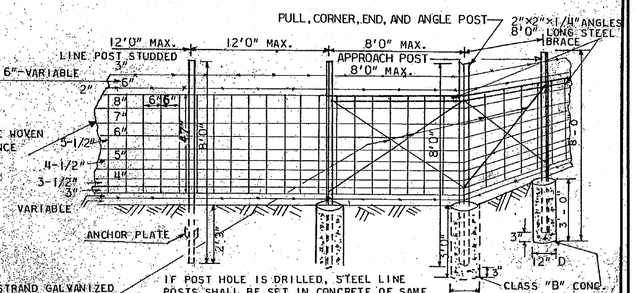


DETAIL OF CLAMP TO BE USED WITH ANGLE & PULL ASSEMBLIES WHERE STEEL POSTS ARE USED



SKETCH INDICATING FENCE LOCATION AT SECTIONS OF NO FRONTAGE ROADS (REFER TO DETAIL PLANS FOR LOCATION OF FENCING FOR PROJECTS WITH FRONTAGE ROADS).

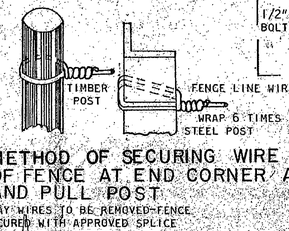
STEEL POST FENCE DETAILS



11 GAUGE DOUBLE STRAND GALVANIZED TIE WIRE TWISTED TO SINGING TIGHTNESS DOUBLE WRAPPED AROUND POSTS TIE WIRE TO BE CONTINUOUS WIRE SPLICED WITH APPROVED SPLICE.

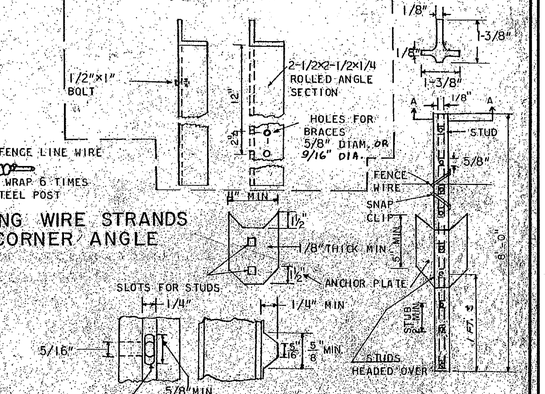
IF POST HOLE IS DRILLED, STEEL LINE POSTS SHALL BE SET IN CONCRETE OF SAME DIMENSIONS AS PULL, CORNER, END, APPROACH AND ANGLE POSTS.

PULL, CORNER, END, APPROACH, AND ANGLE POSTS

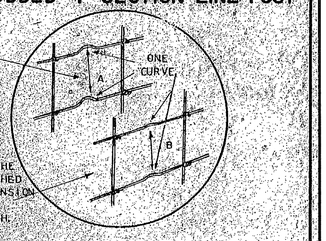


METHOD OF SECURING WIRE STRANDS OF FENCE AT END CORNER ANGLE AND PULL POST

THESE STAY WIRES TO BE REMOVED-FENCE TO BE SECURED WITH APPROVED SPLICE



STUDDED "T" SECTION LINE POST



DETAIL OF TENSION CURVE

3-10-88 REV 8-13-90 NOTE FOR PAYMENT-12-2-97

CONSTRUCTION DETAILS

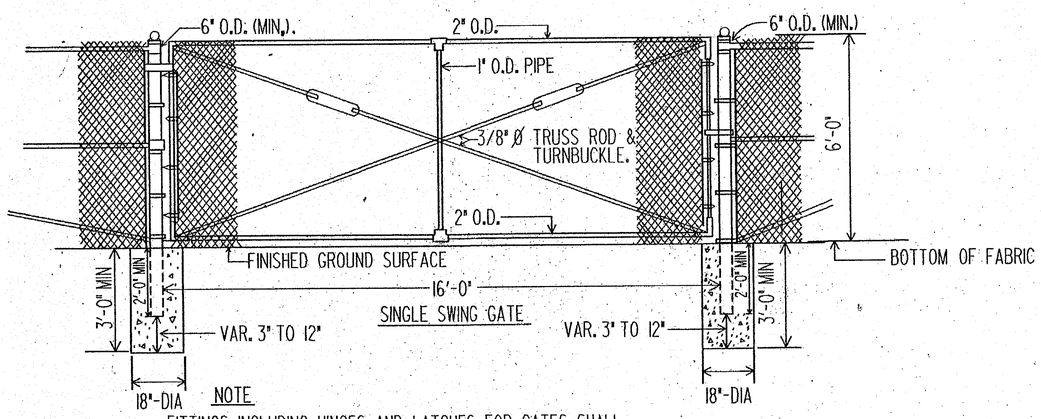
WOVEN WIRE FENCE

REVISED AND REDRAWN 9-29-76

F-1

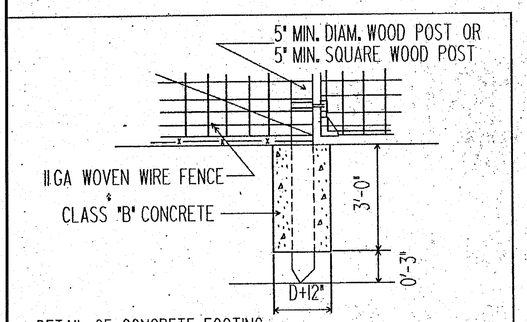
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	CSSTP-0006-00(869)	230	370

NOTE:
WHERE CHAIN LINK WIRE FENCE HAS BARBED WIRE, GATE SHALL ALSO REQUIRE BARBED WIRE BUT WITH VERTICAL EXTENSION ARMS ON THE GATE AND GATE POST UNLESS SPECIFIED OTHERWISE.

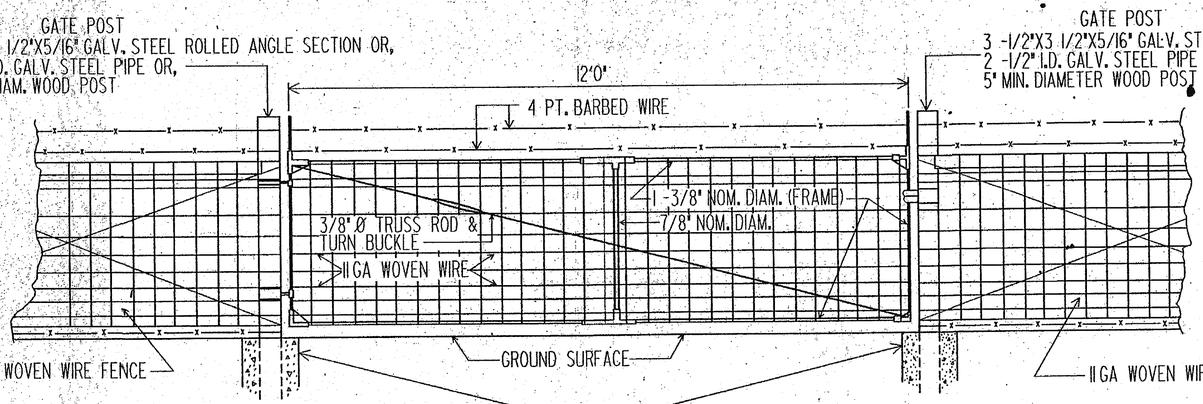


GATE FOR CHAIN LINK FENCE

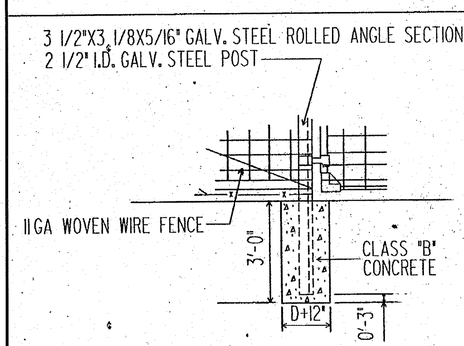
NOTE
FITTINGS INCLUDING HINGES AND LATCHES, FOR GATES SHALL MEET THE APPROVAL OF THE ENGINEER AND THE REQUIREMENTS OF THE SPECIFICATIONS.



DETAIL OF CONCRETE FOOTING USING WOOD GATE POSTS FOR WOVEN WIRE FENCE



GATE FOR WOVEN WIRE FENCE



DETAIL OF CONCRETE FOOTING USING METAL GATE POSTS FOR WOVEN WIRE FENCE

FOR DETAIL OF CONCRETE FOOTINGS SEE DETAILS LEFT

12 FT. SINGLE SWING GATE TO BE USED WITH WOOD POSTS OR METAL POSTS

GATE: (WOVEN WIRE FENCE)

1- 1 -3/8" NOM. DIAMETER GALV. STEEL FRAME (12' X 47")
2- 7/8" NOM. DIAMETER GALV. STEEL CENTER BRACE
3- 3/8" Ø GALV. TRUSS-ROD & TURNBUCKLE
4- FABRIC IS TO BE WRAPPED AND TIED AROUND ENDS OF FRAME AND ATTACHED TOP AND BOTTOM WITH APPROVED FABRIC FASTENERS.
5- FITTINGS INCLUDING HINGES AND LATCHES, FORGATES SHALL MEET THE APPROVAL OF THE ENGINEER AND THE REQUIREMENTS OF THE MATERIAL SPECIFICATIONS.

GATE POSTS: (WOVEN WIRE FENCE)

1- 3 -1/2"X3 1/2"X5/16" GALV. STEEL ROLLED ANGLE SECTION OR
2 -1/2" I.D. GALV. STEEL PIPE OR
5" MIN. DIAMETER (WOOD) OR
5" MIN. SQUARE (WOOD)
2- TYPE OF GATE POSTS TO BE USED IS SELECTED BY CONTRACTOR. WOOD GATE POSTS ARE TO BE USED IF CONTRACTOR ELECTS TO USE WOOD FENCE POSTS, METAL GATE POSTS IF CONTRACTOR ELECTS TO USE METAL FENCE POSTS.
3- GATE REMAINS AS SHOWN ON DETAIL FOR FENCE WITH WOOD POST OR FENCE WITH METAL POSTS.

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

GATE DETAILS FOR
CHAIN LINK AND WOVEN WIRE FENCE

NO SCALE JAN. 1988

DATE	REVISION	BY

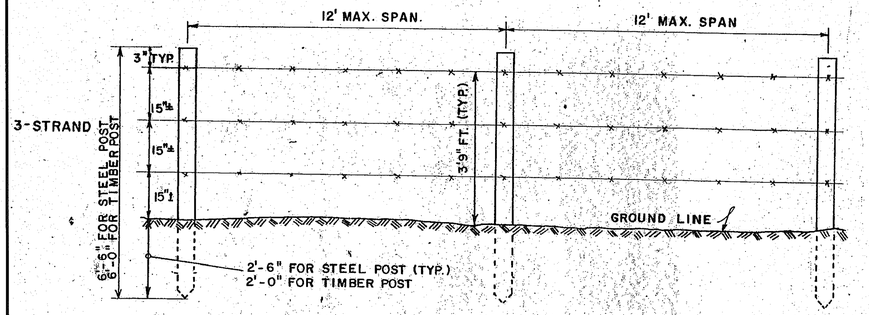
REV. RMU
DRW. AS
TRA. ____
CHK. RMU

F-2

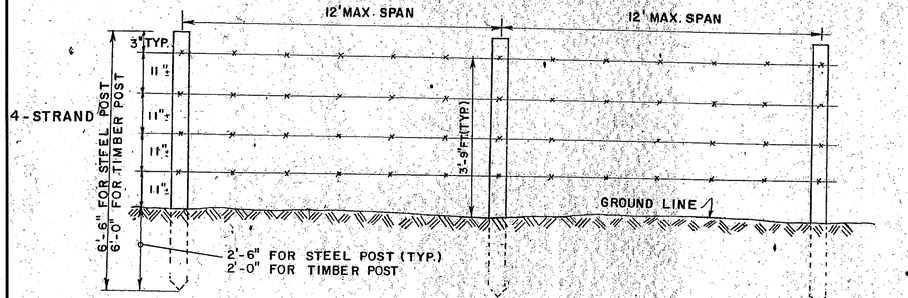
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	CSSTP-0006-00(869)	231	370

DETAILS

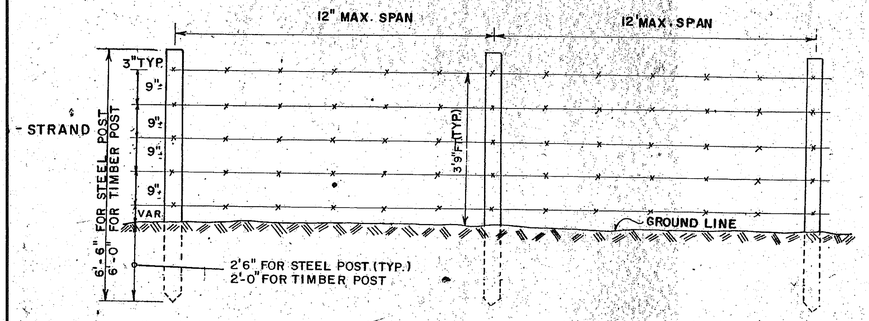
FIELD FENCE BARBED WIRE — TYPICAL



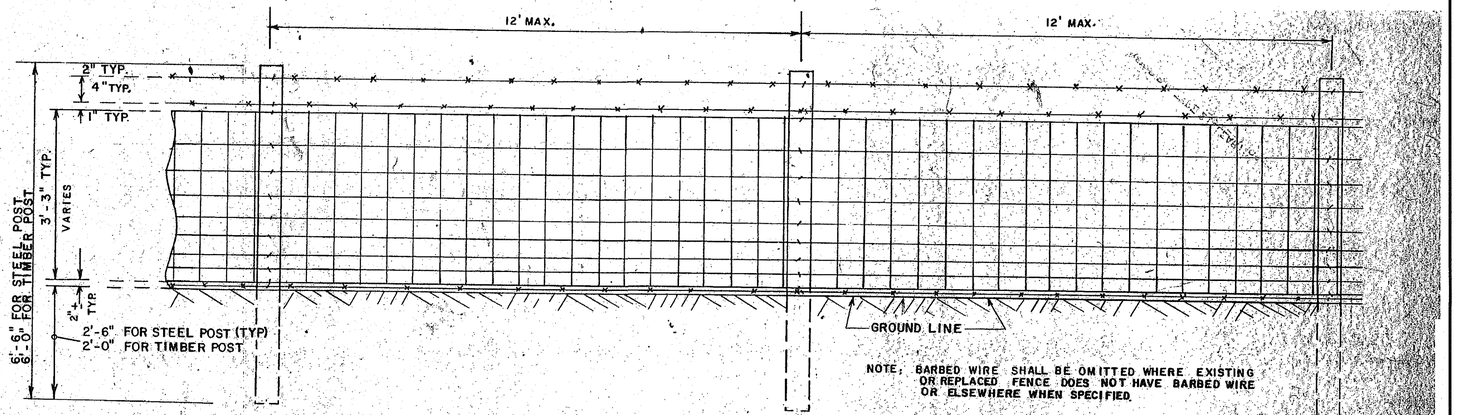
NOTE: 3,4,5 STRAND BARBED WIRE SHOWN, OTHER COMBINATIONS MAY BE SPECIFIED.



NOTE: WIRE HEIGHTS AND/OR SPACINGS VARIED WHERE SPECIFIED.



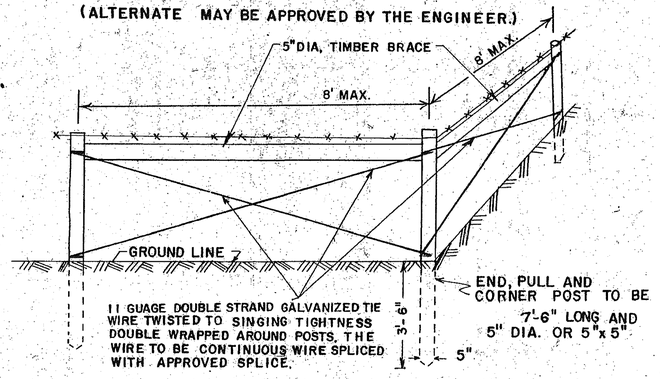
FIELD FENCE WOVEN WIRE — TYPICAL DETAILS



NOTE, BARBED WIRE SHALL BE OMITTED WHERE EXISTING OR REPLACED FENCE DOES NOT HAVE BARBED WIRE OR ELSEWHERE WHEN SPECIFIED.

CORNER POST DETAIL

(ALTERNATE MAY BE APPROVED BY THE ENGINEER.)



NOTE: BRACING FOR END AND PULL POST SHALL BE SAME AS ABOVE.

FENCE LOCATION	FIELD FENCE WOVEN WIRE*								FIELD FENCE BARBED WIRE	LINEAR FT. OF FENCE
	FENCE FABRIC ASTM A116 DESIGN NO.	FENCE FABRIC: NO. OF HORIZONTAL WIRES	FENCE FABRIC: FABRIC HEIGHT (INCHES)	FENCE FABRIC: SPACINGS STAY WIRES (INCHES)	FENCE FABRIC: WIRE GAGES: INTERMED, LINE & STAY WIRES	FENCE FABRIC: WIRE GAGES: TOP & BOTTOM	STRANDS OF BARBED WIRE WITH FENCE: TOP	STRANDS OF BARBED WIRE WITH FENCE: BOTTOM	NO. OF STRANDS	

*SEE GENERAL NOTE NO.1.

GENERAL NOTES:

1. FENCE DESIGN NUMBERS (ASTM-A116 ARE DESIGNATED IN THE FILL-OUT BOX TO APPROXIMATE EXISTING OR REPLACED FENCING. ASTM-A116, DESIGN NO. 939-6-12½ (6 HORIZONTAL WIRES), 39" HEIGHT, 6" STAY WIRE SPACING, (12½ GAGE WIRE FABRIC) SHALL BE USED WITH 3 STRANDS OF BARBED WIRE WHERE OTHER DESIGNS ARE NOT SPECIFIED.
2. CORNER AND PULL POST SHALL BE TREATED TIMBER 5" DIA. OR NOMINAL 5"x5". LINE POST MAY BE EITHER TREATED TIMBER 3" DIA. OR NOMINAL 4"x4" OR STEEL. IF STEEL POSTS ARE USED, THEY WILL BE 1.31 LBS./FT. STUDDED "T" POST, EITHER GALVANIZED OR PAINTED, WITH AN APPROVED ANCHOR PLATE. (4"x4½ TYP.)
3. MATERIALS SHALL BE THE KIND THAT CAN BE PURCHASED AT A HARDWARE OR FARM SUPPLY STORE AND SHALL MEET THE APPROVAL OF THE ENGINEER. MATERIALS DO NOT HAVE TO BE INSPECTED OR APPROVED BY D.O.T. OFFICE OF MATERIALS & RESEARCH, UNLESS THE ENGINEER REQUEST. CONCRETE FOOTINGS ARE NOT REQUIRED.
4. DETAILS MAY DIFFER FROM THAT SHOWN IN ORDER TO MATCH EXISTING OR REPLACED FIELD FENCING OR WHEN SO SPECIFIED.

SPECIAL NOTE:

THESE DETAILS ARE FOR USE IN REPLACEMENT FENCING OUTSIDE THE R/W OR FOR TEMPORARY FENCING (PROVIDED THE MATERIALS ARE NOT REUSED FOR PERMANENT FENCING INSIDE THE R/W.)

BY	REVISION	DATE
RMM	REV. POST REQMTS.	2-8-88

TYPICAL DETAILS FOR

FIELD FENCING

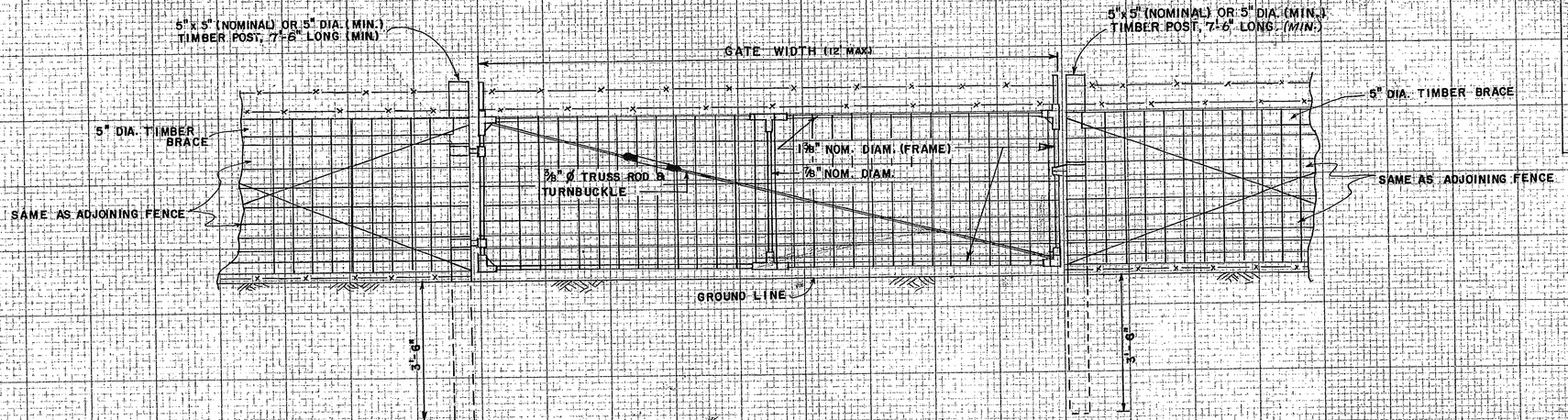
(FIELD FENCE WOVEN WIRE & FIELD FENCE BARBED WIRE)

NO SCALE

SEPT., 1983

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	CSSTP-0006-00(869)	232	370

GATE LOCATION	GATE WIDTH	FENCE DESIGN



GATE:

1. 1⅜" NOM. DIAMETER GALV. STEEL FRAME.
2. 7/8" NOM. DIAMETER GALV. STEEL CENTER BRACE.
3. 3/8" Ø GALV. TRUSS ROD & TURNBUCKLE.
4. FABRIC IS TO BE WRAPPED AND TIED AROUND ENDS OF FRAME AND ATTACHED TOP AND BOTTOM WITH APPROVED FABRIC FASTENERS.
5. FITTINGS INCLUDING HINGES AND LATCHES FOR GATES SHALL MEET THE APPROVAL OF THE ENGINEER.
6. FABRIC FOR GATE SHALL BE SAME AS ADJOINING FENCE FABRIC WHERE APPLICABLE. WHERE FIELD FENCE IS BARBED WIRE, THE FABRIC FOR THE GATE SHALL BE ASTM A116 DESIGN NO. 939-6-12½ (OR DESIGN NO. 1047-6-12½ ALTERNATE).

R.M.U. - MIN. POST LENGTH 3-10-88
R.M.U. - GEN. REV. 1-17-1986

CONSTRUCTION DETAILS

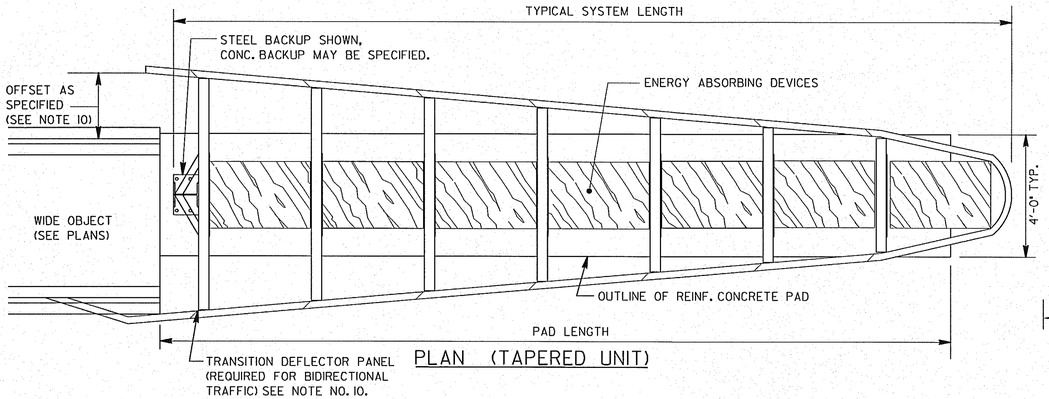
DETAIL OF GATE TO BE USED WITH FIELD FENCE

NO SCALE

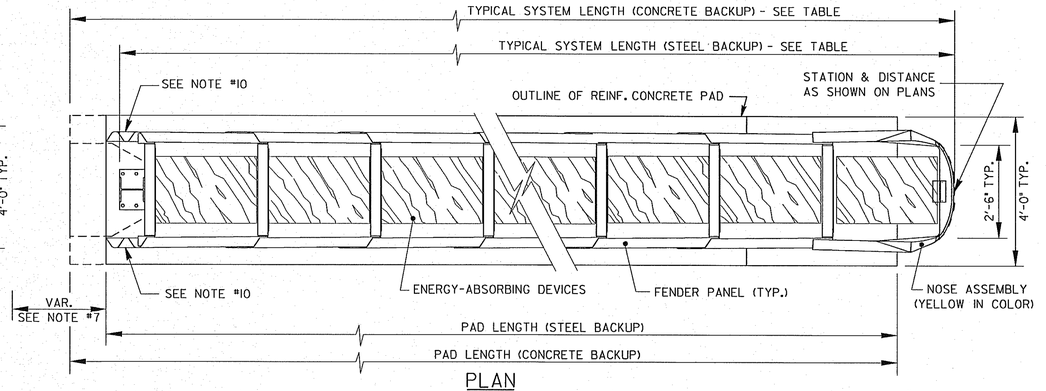
OCT. 1983

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	CSSTP-0006-00(869)	233	370

NOTE: PLAN & ELEVATION VIEWS ARE SHOWN AS TYPICAL AND MAY VARY PER THE MANUFACTURER'S RECOMMENDATIONS AND IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 650.



PLAN (TAPERED UNIT)

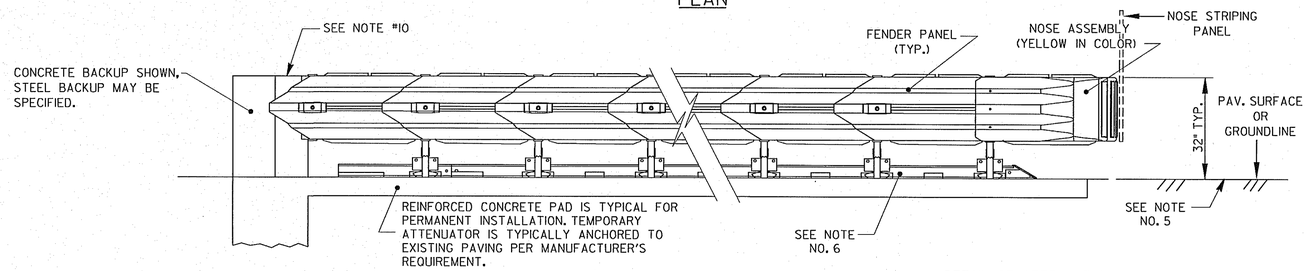


PLAN

DESIGN SPEED (mph)	TYPICAL SYSTEM LENGTHS (FT.)		
	STANDARD LENGTH (WITH STEEL BACK-UP)	MODIFIED FOR CONC. BACK-UP	WITH 10 FT. CONC. TRANS.
TO 35	10	11.5	20
40-45	13	14.5	23
50	16	17.5	26
55	19	20.5	29
60	22	23.5	32
65	26	27.5	36
70	31	32.5	41
75	34	35.5	44

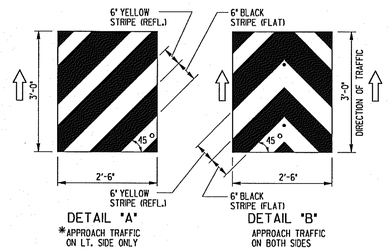
STANDARD STEEL BACK-UP SHALL BE USED UNLESS SPECIFIED OTHERWISE. CONCRETE BACK-UP MAY BE USED AS AN ALTERNATE AT LOCATIONS AS RECOMMENDED BY THE MANUFACTURER.

THE LENGTHS IN ABOVE TABLE ARE COMMON OVERALL APPROXIMATE LENGTHS. VARIATIONS MAY BE SUBMITTED FOR APPROVAL. SEE SUB-SECTION 650.03.



ELEVATION

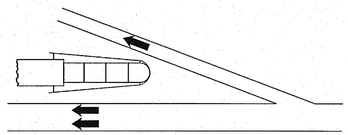
DETAIL OF ATTENUATOR NOSE TREATMENT



*STRIPES SHALL SLOPE DOWNWARD AT AN ANGLE OF 45° TOWARD THE SIDE ON WHICH TRAFFIC IS TO PASS. LEFT SHOWN, RIGHT NOT SHOWN, BUT MAY BE SPECIFIED.
THE 6" YELLOW STRIPES SHALL BE REFLECTIVE SHEETING, TYPE IX.
THE 6" BLACK STRIPES SHALL BE FLAT (NON-GLOSS) PAINT OR ANY OTHER APPROVED APPLICATION.
COLORS SHALL BE ACCORDING TO THE MUTCD.
STRIPING SHALL BE APPLIED TO 0.04" THICK ALUMINUM PLATE
OBJECT MARKER SHALL BE SECURED TO NOSE FRONT WITH THREE GALVANIZED 5/16" DIA. BOLTS WITH NUT AND WASHERS AS DIRECTED BY THE ENGINEER.

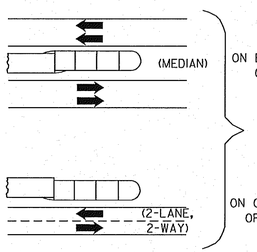
TRAFFIC FLOW DESIGNATIONS (TYP.)

SEE SUB-SECTION 650.03



UNI-DIRECTIONAL (U)

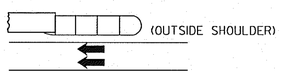
TRAFFIC IN SAME DIRECTION ON BOTH SIDES



BI-DIRECTIONAL (B)

OPPOSITE DIRECTIONS

NOTE:
WHEN ORDERING ATTENUATOR, TRAFFIC SHALL BE SPECIFIED AS "U" OR "B" OR "S" FOR EACH UNIT. SEE SECTION 650 FOR ADDITIONAL DESCRIPTION.



SINGLE DIRECTION (S)

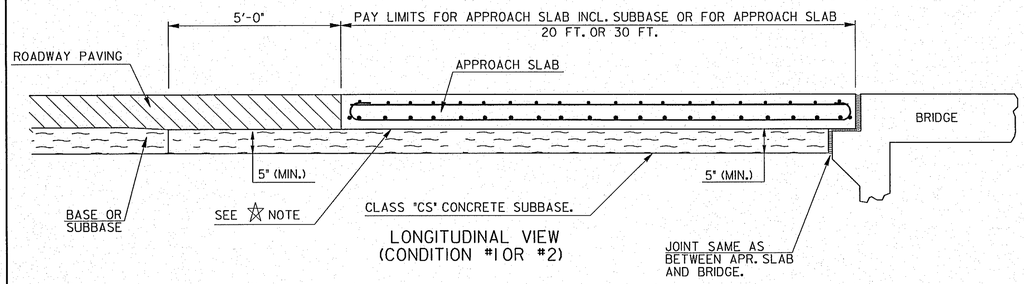
SINGLE SIDE ONLY EXPOSED TO TRAFFIC

GENERAL NOTES

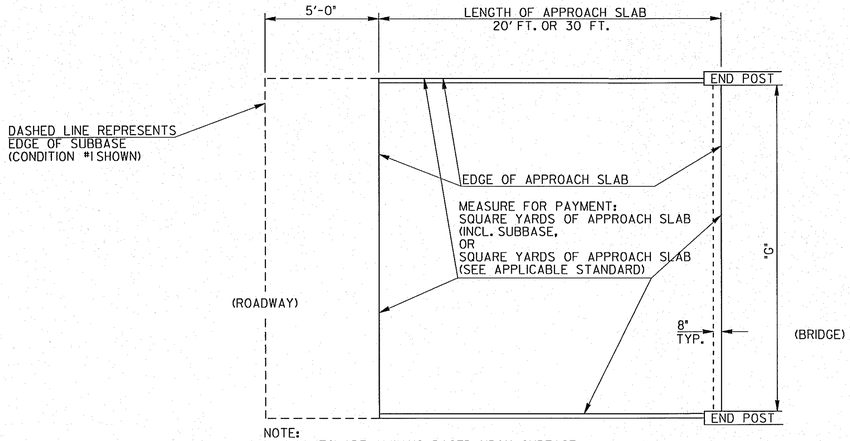
1. SPECIFICATIONS: GEORGIA STANDARD, CURRENT EDITION AND SUPPLEMENTS THERETO. SEE SECTION 650.
2. ALL ATTENUATORS WILL BE OF TYPE WHICH HAS BEEN APPROVED BY THE GA. D.O.T. AND FEDERAL HIGHWAY ADMINISTRATION AS MEETING NCHRP 350 REQUIREMENTS AND HAS BEEN CLASSIFIED AS "ACCEPTED" BY THE DOT OFFICE OF MATERIALS AND RESEARCH.
3. THE WIDTH OF THE SYSTEM SHALL BE 2'-6" UNLESS SPECIFIED OTHERWISE. UNITS HAVING A REAR WIDTH LESS THAN THE BASE OF THE SHIELDED OBJECT SHALL REQUIRE A CONCRETE TRANSITION, EXCEPT WHERE THE UNIT IS LOCATED ON THE OUTSIDE SHOULDER.
4. WHERE OBJECT BEING SHIELDED IS WIDER THAN THE DESIGNATED ATTENUATOR WIDTH, A TRANSITION WILL BE REQUIRED EITHER (a) BY PROVIDING A SPECIAL DESIGN CONCRETE TAPERED TRANSITION (SEE SEPARATE DETAILS) AS PART OF THE BACK-UP SYSTEM OR (b) BY MATCHING ATTENUATOR REAR WIDTH TO OBJECT SIZE UTILIZING A TAPERED ATTENUATOR MODEL WHICH INCREASES IN WIDTH FROM NOSE TO REAR (PER MANUFACTURER'S TAPERED MODEL NO.) WITH A STANDARD BACK-UP UNIT.
5. CROSS SLOPE OF PAD SHALL NOT EXCEED 8% AND NOT VARY MORE THAN 2% FROM FRONT TO BACK. THE ATTENUATOR SYSTEM SHALL BE LOCATED ON A RELATIVE FLAT AREA CLOSE TO OR AT ROADWAY LEVEL.
6. ALL ATTENUATOR UNITS SHALL BE CORRECTLY ANCHORED TO REINFORCED CONCRETE PAD OR OTHER APPROVED PAVED SURFACE PER MANUFACTURER'S RECOMMENDATIONS.
7. THE AREA IMMEDIATELY BACK OF THE ATTENUATOR SHALL BE CLEAR OF OBSTRUCTIONS THAT WOULD PREVENT THE REAR PANELS FROM SLIDING BACKWARD UPON IMPACT FOR A DISTANCE AS RECOMMENDED BY THE MANUFACTURER.
8. PAYMENT FOR IMPACT ATTENUATOR OF THE TYPE SPECIFIED SHALL INCLUDE THE ENTIRE UNIT WITH ALL ACCESSORIES, THE CONCRETE PAD, THE BACKUP SYSTEM, ANY TRANSITION REQUIRED, THE NOSE STRIPING PANEL WITH ALL MATERIALS AND LABOR NECESSARY TO COMPLETE THE SYSTEM.
9. BEFORE WORK BEGINS, THE CONTRACTOR SHALL OBTAIN THE MANUFACTURER'S INSTALLATION MANUAL, ASSEMBLY DETAILS, ANCHORING REQUIREMENTS, REINFORCING STEEL FOR CONCRETE RECOMMENDATIONS, AND ALL OTHER GUIDES AND INSTRUCTIONS NECESSARY FOR PROPER INSTALLATION AND PROVIDE COPIES OF SAME TO THE ENGINEER. THE CONTRACTOR SHALL INFORM THE MANUFACTURER OF ATTENUATOR OF SITE CONDITIONS INCLUDING FURNISHING ANY PLAN SHEETS OR SKETCHES AS NEEDED TO SHOW TRAFFIC FLOW DIRECTIONS, LOCATION AND DESIGN OF SHIELDED OBJECT, AND AVAILABLE ARES SIZE FOR LOCATION OF UNIT.
10. TO PREVENT VEHICLE SNAGGING, AN OFFSET AND/OR A TRANSITION DEFLECTION PANEL OR A CONCRETE TRANSITION SECTION IS REQUIRED AT ATTENUATOR REAR ON EACH SIDE SUBJECT TO TRAFFIC. SEE MANUFACTURER'S REQUIREMENTS.

		4-10-06	DATE	DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA
		REV. REFLECTIVE SH. TYPE	REVISION	CONSTRUCTION DETAIL IMPACT ATTENUATOR UNITS TYPE P - - - TYPE T - - - TYPE T/P - - - SUB-SEC. 650.03
		GLO	BY	NO SCALE REV. & REDR. MAR., 2001
				NUMBER G-11

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	CSSTP-0006-00(869)	234	370



LONGITUDINAL VIEW
(CONDITION #1 OR #2)



NOTE:
PAY LIMITS ARE ALWAYS BASED UPON SURFACE OF APPROACH SLAB ONLY (EITHER CONDITION).

PLAN VIEW

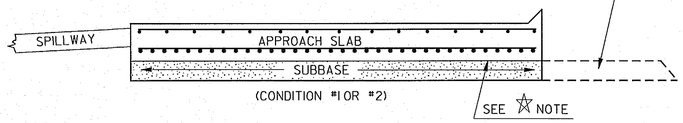
"G"	⊗ CUBIC YARDS OF SUBBASE FOR APPROACH SLAB			
	STD. 9017K	STD. 9017L	STD. 9017P	STD. 9017Q
28'-0"	15.63	11.08		
29'-6"			16.47	11.67
30'-0"				
31'6"			17.54	12.43
32'-0"	17.75	12.58		
33'-6"			18.60	13.18
34'-0"				
35'-6"			19.67	13.94
36'-0"	19.87	14.08		
37'-6"			20.74	14.70
38'-0"				
39'-6"			21.81	15.46
40'-0"	21.99	15.59		
41'-6"			22.88	16.21
42'-0"	23.05	16.34		
43'-6'			23.94	16.97
44'-0"				
45'-6"			25.01	17.73
46'-0"		17.84		
47'-6"			26.08	
48'-0"	26.23	18.59		
49'-6"			27.15	
50'-0"				
51'-6"			28.22	
52'-0"	28.35			
53'-6"			29.29	
54'-0"				
55'-6"			30.35	
56'-0"				
57'-6"			31.42	
58'-0"	31.53			
59'-6"			32.49	
60'-0"	32.59			
61'-6"			35.56	
62'-0"	33.65			
63'-6"			34.63	
64'-0"	34.71			
65'-6"			35.70	
66'-0"	35.77			

⊗ QUANTITES GIVEN IN THE TABLE ARE BASED UPON MINIMUM DIMENSIONS AND ARE GIVEN FOR INFORMATION ONLY.

CUBIC YARDS OF SUBBASE FOR USE WITH STD. 9017M, STD. 9017N OR FOR USE WITH SLAB SIZES NOT GIVEN IN TABLE, MAY BE ESTIMATED WITH THE FOLLOWING FORMULAE:

FOR 30' APPROACH SLABS:
CU. YARDS = 0.5298 TIMES SLAB WIDTH (IN FEET)

FOR 20' APPROACH SLABS:
CUBIC YARDS = 0.3755 TIMES SLAB WIDTH (IN FEET)

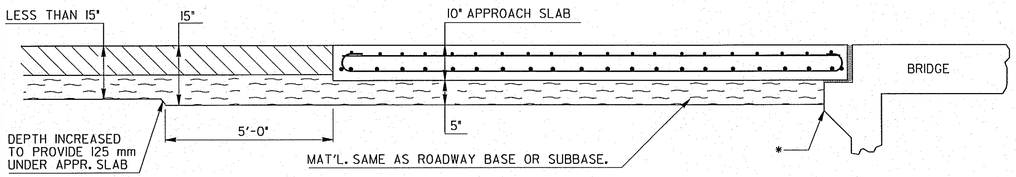


CROSS SECTIONAL VIEW

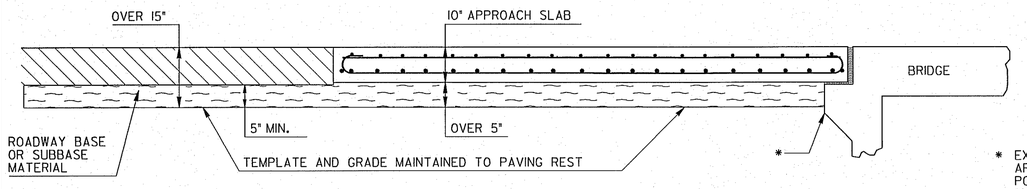
IF MAT'L. UNDER APPROACH SLAB IS FLEXIBLE ENOUGH TO ALLOW DRIVING OF GUARDRAIL POST, THE LIMITS SHALL BE EXTENDED SIMILARLY TO THAT ON THE ROADWAY.

☆ NOTE:
IF "CS" CONCRETE OR P.C. CONC. SUBBASE IS USED, CLEAR POLYETHYLENE SHEETING 8 MILS, MIN. THICKNESS, WITH A 6" OVERLAP, UNIFORMALLY LAYED, SHALL BE REQUIRED UNDER THE APPROACH SLAB TO PREVENT BONDING POLYETHYLENE SHEETING SHALL BE NEW, UNUSED AND FREE OF HOLES, RIPS AND TEARS.

NOTE: SUBBASE SHOWN ABOVE FOR APPROACH SLAB WITH SPILLWAY ON ONE SIDE AND SLOPED EDGE ON OTHER SIDE. SUBBASE DETAILS SIMILAR FOR APPROACH SLAB WITH TRANSITION CURB OR OTHER DRAINAGE STRUCTURES.



LONGITUDINAL VIEW
(CONDITION #2)



LONGITUDINAL VIEW
(CONDITION #2)

CONDITION #1:
WHERE THE CONTRACT FOR THE BRIDGE AND APPROACH SLABS IS LET SEPARATE FROM THE ROADWAY PAVING CONTRACT, THE SUBBASE FOR THE APPROACH SLAB WILL BE CLASS "CS" CONCRETE ACCORDING TO SECTION 500. IN THIS CASE, PAYMENT FOR THE SUBBASE WILL BE INCLUDED IN THE PAYMENT FOR THE APPROACH SLAB.

CONDITION #2:
WHERE THE ROADWAY PAVING AND THE BRIDGE ARE LET UNDER THE SAME CONTRACT, THE APPROACH SLAB SUBBASE MAY BE EITHER CLASS "CS" CONCRETE OR MAY BE THE SAME MATERIAL AS REQUIRED FOR THE ROADWAY BASE OR SUBBASE SUCH AS GRADED AGGREGATE, P.C. CONC. SUBBASE, ETC. IN THIS CASE, PAYMENT FOR THE SUBBASE WILL BE INCLUDED IN THE PAYMENT FOR THE APPROACH SLAB.

* EXPANSION JOINT REQ'D. SAME AS BETWEEN APPROACH SLAB & BRIDGE, IF SUBBASE IS PORTLANT CEMENT CONCRETE OR CLASS "CS" CONCRETE.

BY	REVISION	DATE
G.L.O.	REVISED NOTES	3-28-06
	PAY ITEM - COND. #2	6-14-88

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

CONSTRUCTION DETAIL

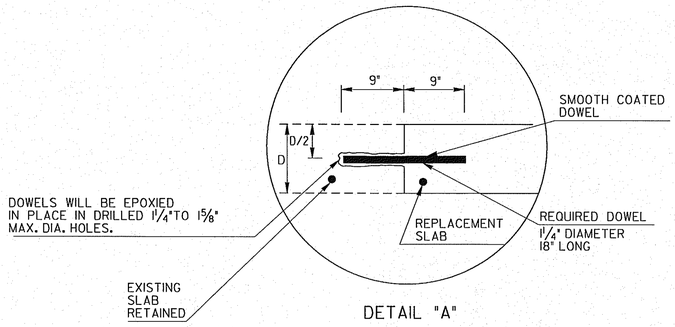
SUBBASES FOR APPROACH SLABS

NO SCALE

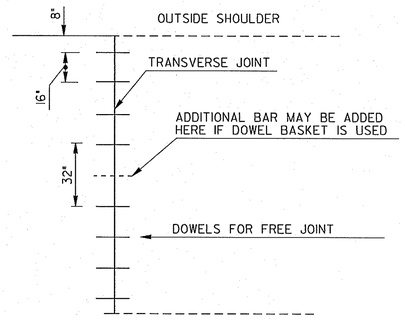
REV. & REDRAWN OCT. 1985

NUMBER
M-2

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	CSSTP-0006-00(869)	235	370



DETAIL "A"
"FREE JOINT"



DETAIL "B"
DOWEL BAR SPACING FOR JOINTS

GUIDELINES FOR SELECTING SLAB REPLACEMENT LENGTHS

1. EXISTING SLAB RETAINED MUST HAVE A MINIMUM LENGTH OF 10 FT.
2. MINIMUM LENGTH OF REPLACEMENT SLAB IS 6 FEET, & MINIMUM WIDTH IS BETWEEN EXISTING LONGITUDINAL JOINTS OR BETWEEN A LONGITUDINAL JOINT AND PAVEMENT EDGE.
3. A JOINT SHALL BE REESTABLISHED AT THE ORIGINAL TRANSVERSE JOINT LOCATION.
4. AN INTERMEDIATE TRANSVERSE JOINT SHALL BE ESTABLISHED AT MID-LENGTH FOR FULL LENGTH SLAB REPLACEMENT 20 FEET OR MORE IN LENGTH. (SEE GENERAL NOTE 2)
5. FOR PAVEMENTS WITH SKEWED JOINTS, THE REESTABLISHED JOINTS MUST ALSO BE SKEWED TO THE SAME DEGREE.
6. ALL REESTABLISHED LONGITUDINAL JOINTS WILL BE BUTT JOINTS WITH NO DOWELS OR REINFORCING BARS. ALL TRANSVERSE JOINTS SHALL HAVE DOWELS IN ACCORDANCE WITH THE PLAN DETAILS.

GENERAL NOTES:

1. THE ENGINEER SHALL DETERMINE WHICH SLABS TO REMOVE AND REPLACE AND WHETHER TO USE FULL OR PARTIAL SLAB REPLACEMENTS. (PARTIAL SLAB REPLACEMENTS ARE TO BE USED TO THE MAXIMUM EXTENT POSSIBLE). FOR PARTIAL SLAB REPLACEMENTS, THE ENGINEER SHALL DETERMINE THE SMALLEST LIMITS OF REMOVAL NECESSARY TO REPAIR THE FAILED AREA USING THE GUIDELINES FOR SLAB REPLACEMENT.
2. WHERE A TRANSVERSE JOINT IS COMMON TO TWO NEW REPLACEMENT SLABS WHICH ARE PLACED AT THE SAME TIME, THE DOWELS SHALL BE PLACED AT D/2 WHERE D IS THE THICKNESS OF THE NEW REPLACEMENT SLAB (SEE PLAN DETAILS A & B). THE REQUIRED DOWEL BARS SHALL BE SECURED IN PLACE BY APPROVED SUPPORTING ASSEMBLIES CAPABLE OF MAINTAINING DOWELS IN CORRECT POSITION WITH MINIMAL MOVEMENT DURING CONCRETE PLACEMENT. ASSEMBLIES SHALL BE SECURED IN POSITION ON THE SUBBASE IN AN APPROVED MANNER THAT WILL HOLD THE ASSEMBLY WITHOUT DISRUPTION DURING CONSTRUCTION. DOWEL BARS SHALL BE PLACED TO A VERTICAL AND HORIZONTAL TOLERANCE OF PLUS OR MINUS 1" OF THE PLAN POSITION. DOWEL BAR MISALIGNMENT SHALL NOT EXCEED 3/8" PER FEET IN A VERTICAL OR OBLIQUE PLANE. WHEN EPOXY COATED DOWELS ARE USED, THE ENTIRE SURFACE SHALL BE UNIFORMLY COATED WITH A THIN FILM OF HEAVY WEATHERPROOFING GREASE. POSITIVE MEANS OF IDENTIFYING DOWEL BAR ASSEMBLY LOCATION SHALL BE PROVIDED TO INSURE ACCURATE POSITIONING OF THE JOINT.
3. AN INITIAL SAWCUT SHALL BE SAWED (1/8" MINIMUM WIDTH) TO WITHIN 1/2" - 1" OF THE TOP OF THE DOWEL BARS. THE SAWING SHALL COMMENCE AS SOON AS THE CONCRETE HAS CURED SUFFICIENTLY TO PERMIT SAWING WITHOUT SURFACE RAVELING. THE SAWING SHALL CONTINUE, REGARDLESS OF WEATHER CONDITIONS, UNTIL COMPLETED AND BEFORE OPENING TO TRAFFIC.

BY	REVISION	DATE
	REV. LOCKED JOINT DETAIL	8-5-99

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

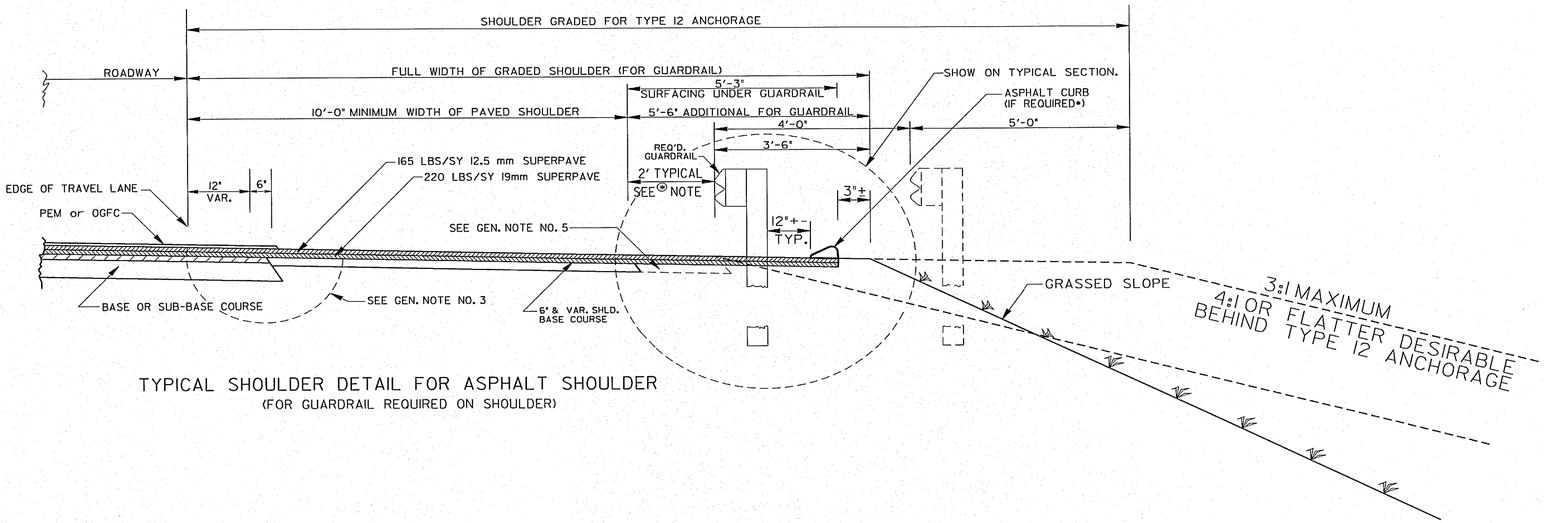
CONSTRUCTION DETAILS

DETAILS AND GUIDELINES FOR FULL DEPTH SLAB REPLACEMENT

K.L.J. SEPT. 1988

P-2

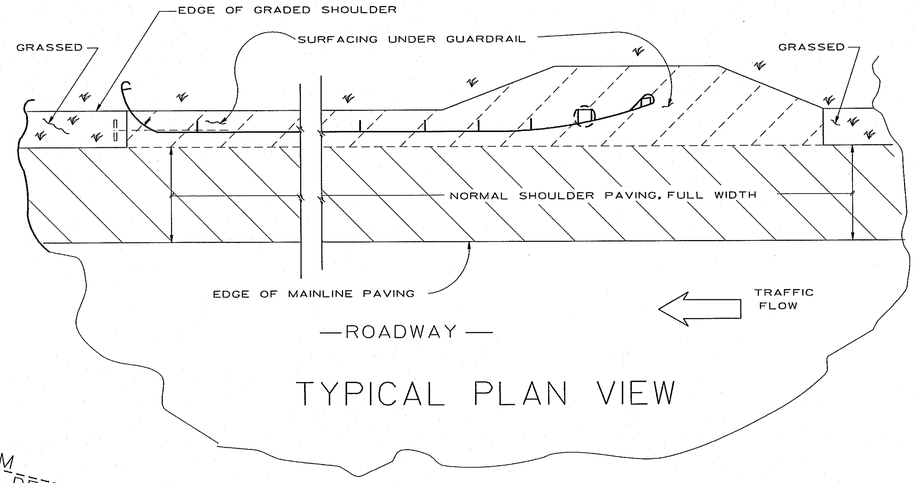
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	CSSTP-0006-00(869)	236	370



TYPICAL SHOULDER DETAIL FOR ASPHALT SHOULDER
(FOR GUARDRAIL REQUIRED ON SHOULDER)

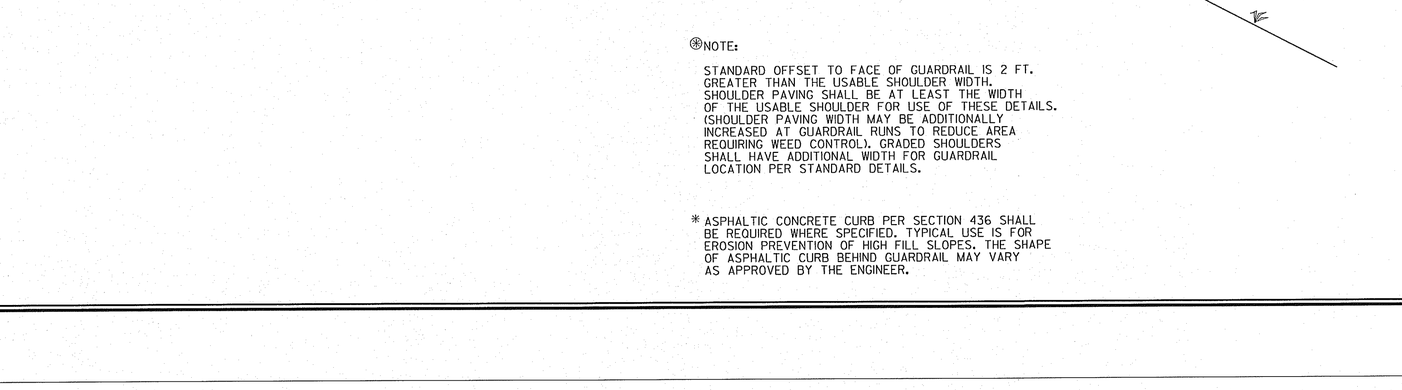
GENERAL NOTES:

1. SPECIFICATIONS: GEORGIA STANDARD, CURRENT EDITION, & SUPPLEMENTS THERETO.
2. THE TREATMENT SHOWN FOR THE OUTER PORTION OF THE SHOULDER APPLIES ONLY WHERE GUARDRAIL IS TO BE LOCATED ALONG PAVED SHOULDER.
3. PAYMENT DESIGN AND NORMAL SHOULDER PAVING ARE ILLUSTRATED AS TYPICAL, OTHER MATERIALS SUCH AS SELECT BORROW, DRAINAGE COURSE, 12.5 MM SUPERPAVE, ETC. SHALL BE AS SPECIFIED ON THE PROJECT, WHERE REQUIRED.
4. AFTER GUARDRAIL POSTS HAVE BEEN INSTALLED, THE SURFACE AREA AROUND THE POSTS SHALL BE SEALED WITH THE APPROPRIATE ASPHALT OR OTHER APPROVED MATERIAL AT NO ADDITIONAL PAYMENT, IF THE ENGINEER DETERMINES IT IS NECESSARY.
5. THE PAVED SHOULDER WIDTH MAY BE EXTENDED TO THE FACE OF THE GUARDRAIL, WHERE SPECIFIED.
6. NORMAL USE OF ASPHALTIC CURB SHALL BE WHERE 2:1 FILL SLOPES WARRANT GUARDRAIL, EXCEPT ON THE HIGH SIDE OF SUPERELEVATION. SEE SEPARATE DETAILS.



TYPICAL PLAN VIEW

NOTE: DETAIL ABOVE IS TYPICAL. SEE GUARDRAIL STANDARDS FOR SHOULDER WIDENING AT ANCHORAGES, WHERE REQUIRED.



TYPICAL SHOULDER DETAIL FOR CONCRETE SHOULDER
(FOR GUARDRAIL REQUIRED ON SHOULDER)

NOTE: NORMAL USE OF THESE DETAILS IS WHERE FULL WIDTH SHOULDER PAVING IS SPECIFIED AND GUARDRAIL IS REQUIRED.

⊕NOTE:

STANDARD OFFSET TO FACE OF GUARDRAIL IS 2 FT. GREATER THAN THE USABLE SHOULDER WIDTH. SHOULDER PAVING SHALL BE AT LEAST THE WIDTH OF THE USABLE SHOULDER FOR USE OF THESE DETAILS. (SHOULDER PAVING WIDTH MAY BE ADDITIONALLY INCREASED AT GUARDRAIL RUNS TO REDUCE AREA REQUIRING WEED CONTROL). GRADED SHOULDERS SHALL HAVE ADDITIONAL WIDTH FOR GUARDRAIL LOCATION PER STANDARD DETAILS.

* ASPHALTIC CONCRETE CURB PER SECTION 436 SHALL BE REQUIRED WHERE SPECIFIED. TYPICAL USE IS FOR EROSION PREVENTION OF HIGH FILL SLOPES. THE SHAPE OF ASPHALTIC CURB BEHIND GUARDRAIL MAY VARY AS APPROVED BY THE ENGINEER.

BY	REVISION	DATE
	REVISED	9-30-02
	REVISED	4-23-02

CONSTRUCTION DETAILS

SHOULDER PAVING AND SURFACING UNDER GUARDRAIL

Interstates & Freeways

NO SCALE — RE-DRAWN OCT. 1999

DES. & REV. MGR
REDR. ADS
CHK.

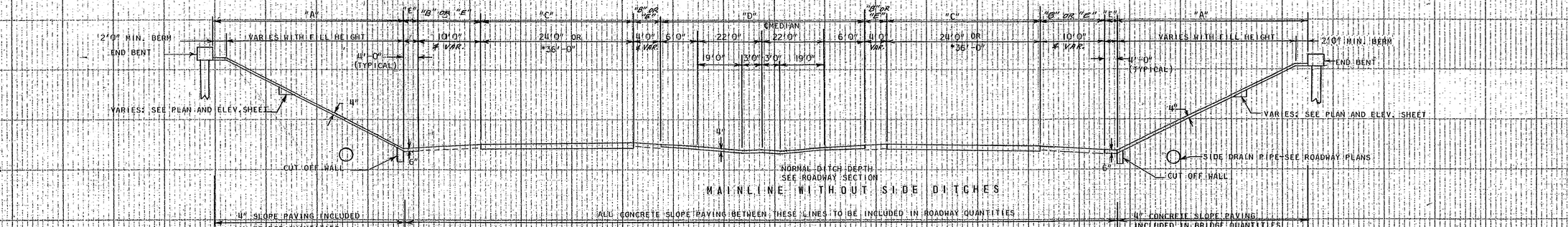
(SUBMITTED) STATE ROAD & AIRPORT DESIGN ENGR.

(APPROVED) CHIEF ENGINEER

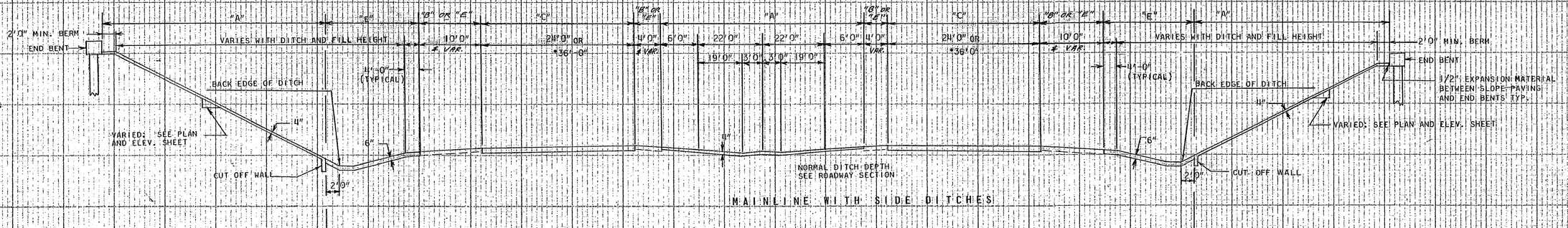
Sheet 2 of 2

S-4

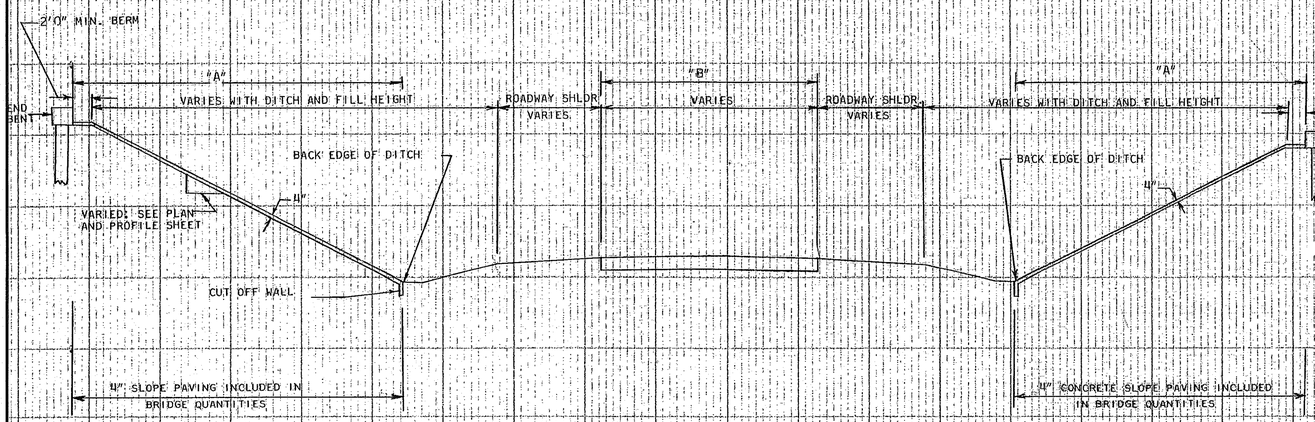
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	CSSTP-0006-00(869)	237	370



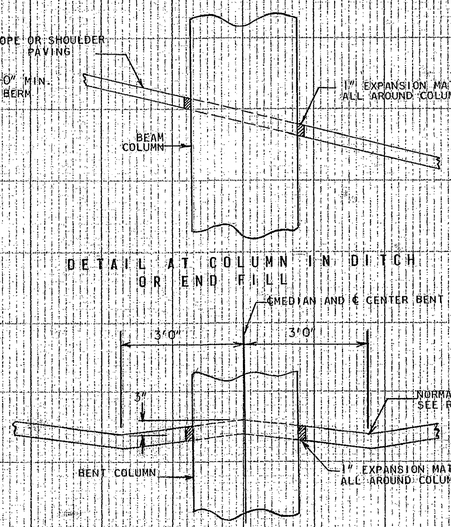
MAINLINE WITHOUT SIDE DITCHES



MAINLINE WITH SIDE DITCHES



CROSS ROAD WITHOUT PAVED SHOULDER



DETAIL AT COLUMN IN DITCH OR END FILL

DETAIL AT MEDIAN

* WHERE ROADWAY PAVEMENT WIDTH IS 36'-0", 6" CONCRETE SLOPE PAVING WILL BE USED IN MEDIAN INSTEAD OF THE 4" CONCRETE SLOPE PAVING SHOWN.

GENERAL NOTES:

"A" - 4" CONCRETE SLOPE PAVING
"B" - SHOULDER PAVEMENT PER ROADWAY PLANS
"C" - ROADWAY PAVEMENT PER ROADWAY PLANS

SECTIONS SHOWN ARE TYPICAL - FOR ACTUAL TEMPLATE SEE ROADWAY PLANS.

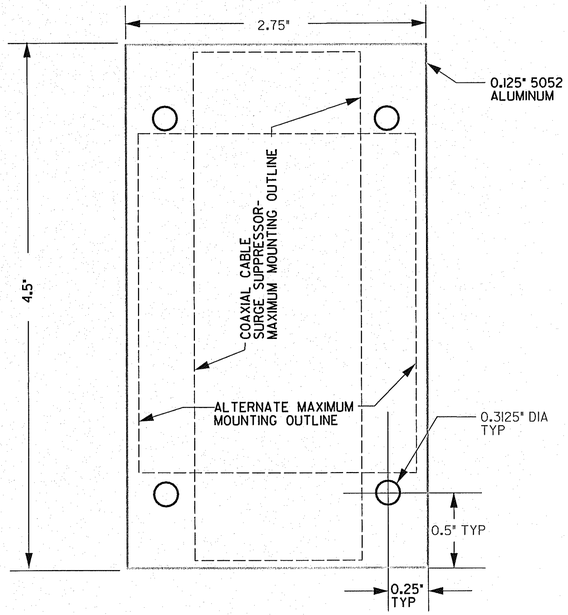
SECTIONS ARE SHOWN NORMAL TO ℄ MEDIAN. LIMIT OF 4" SLOPE PAVING IS OUT TO OUT WIDTH OF UNDERPASS PLUS 5'0" EACH SIDE.

"D" - OMIT 4" CONCRETE SLOPE PAVING IN MEDIAN BRIDGES 28 FT. WIDE OR LESS
"E" - 6" CONCRETE SLOPE PAVING

TYPICAL SLOPE PAVING DETAILS

R.M.U. - "B" OR "E" ON SHLD. - 11-29-88
REDRAWN - MARCH, 1976
ADDED 6" CONC. SLOPE PAV. - R.M.U. - 11-29-77

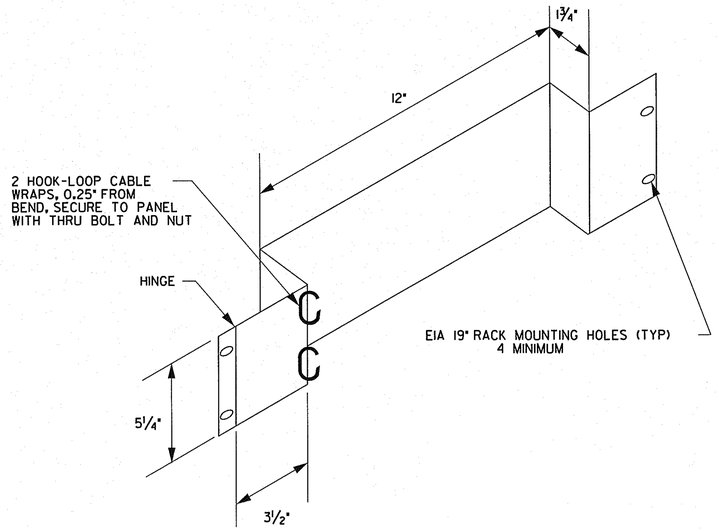
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	CSSTP-0006-00(869)	238	370

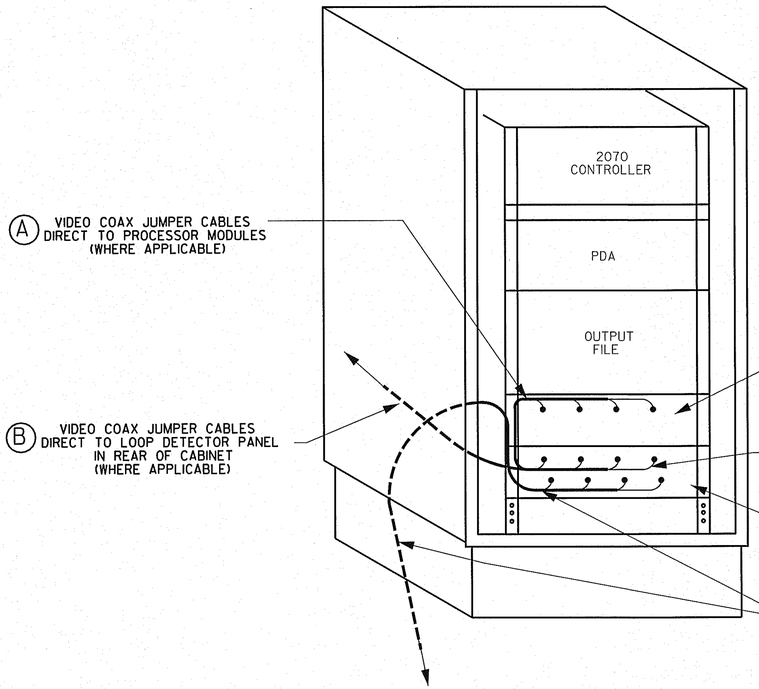


ALL DIMENSIONS +- 0.05" TOLERANCE

COAXIAL CABLE SURGE SUPPRESSOR MOUNTING PLATE

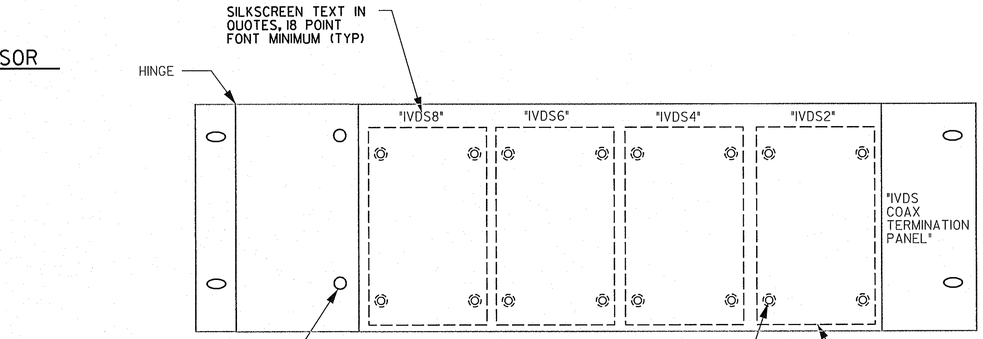
NTS





332 OR 336S CABINET-FRONT VIEW

NTS



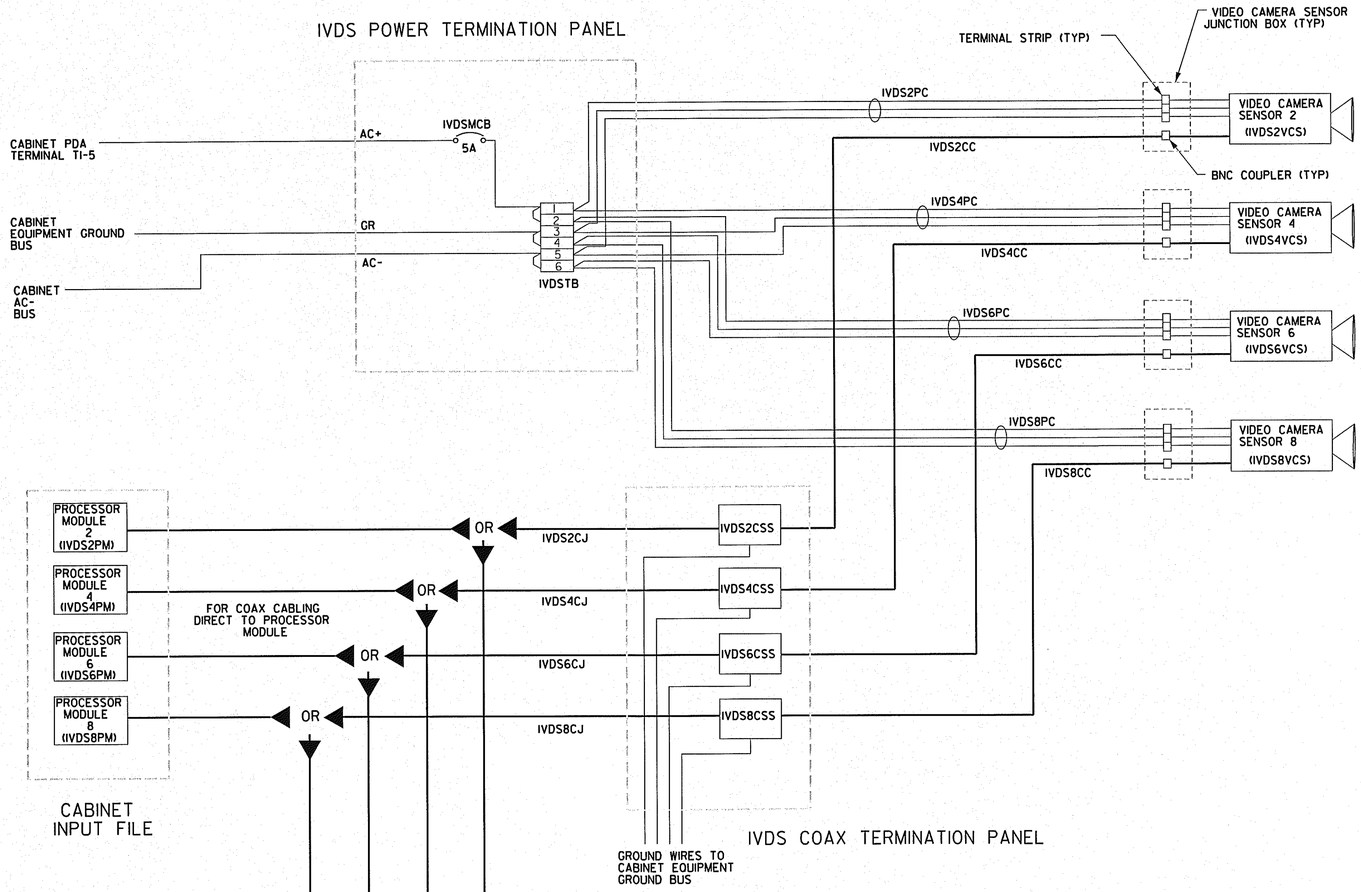
NOTE: FURNISH 4 MOUNTING PLATES AND 16 MOUNTING PLATE SCREWS WITH EACH PANEL

COAXIAL TERMINATION PANEL-332 OR 336S CABINET

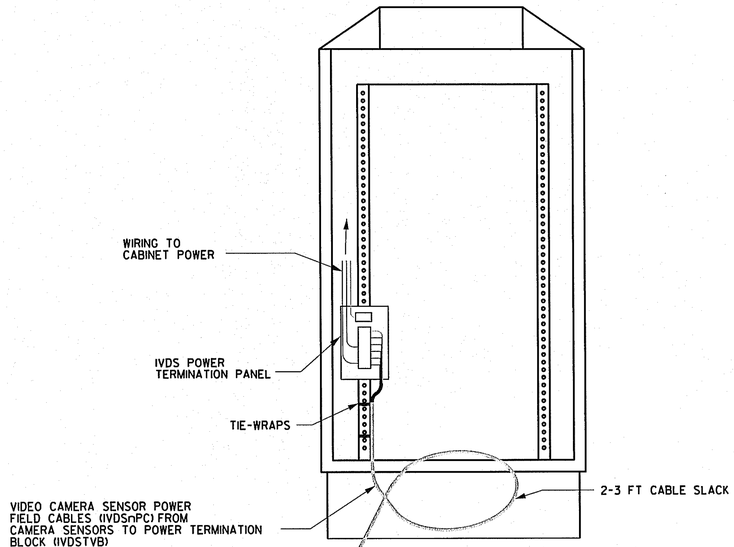
NTS

IVDS DETAILS COAX TERMINATION PANEL

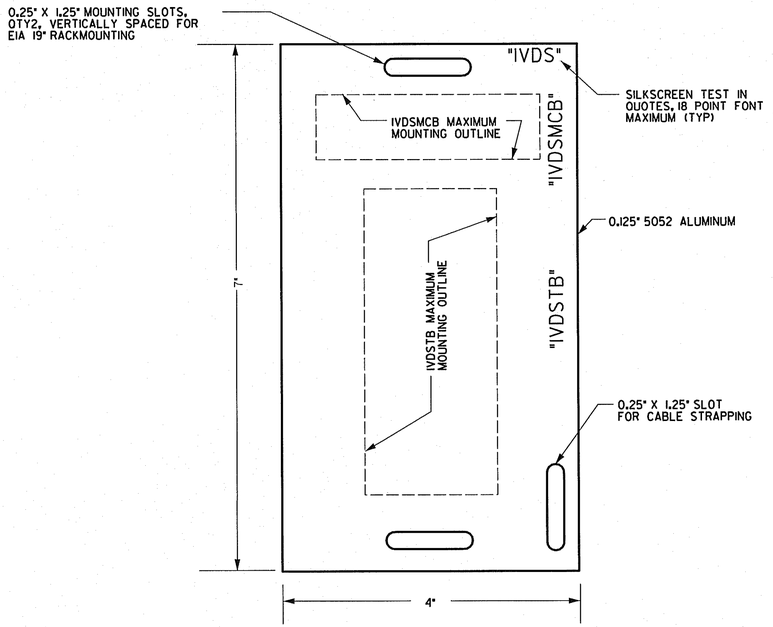
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	CSSTP-0006-00(869)	239	370



BLOCK DIAGRAM



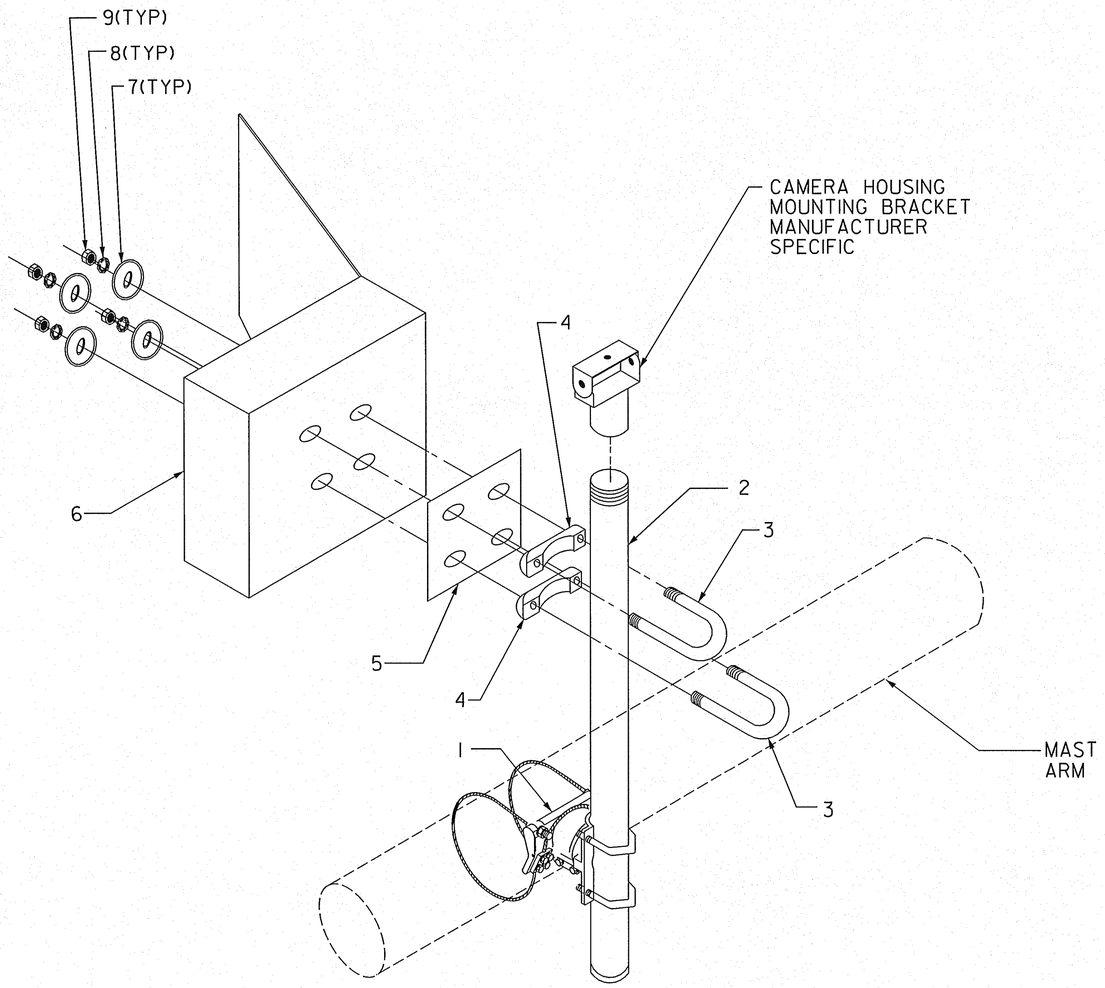
332 OR 336S CABINET-REAR VIEW
NTS



IVDS POWER TERMINATION PANEL
NTS

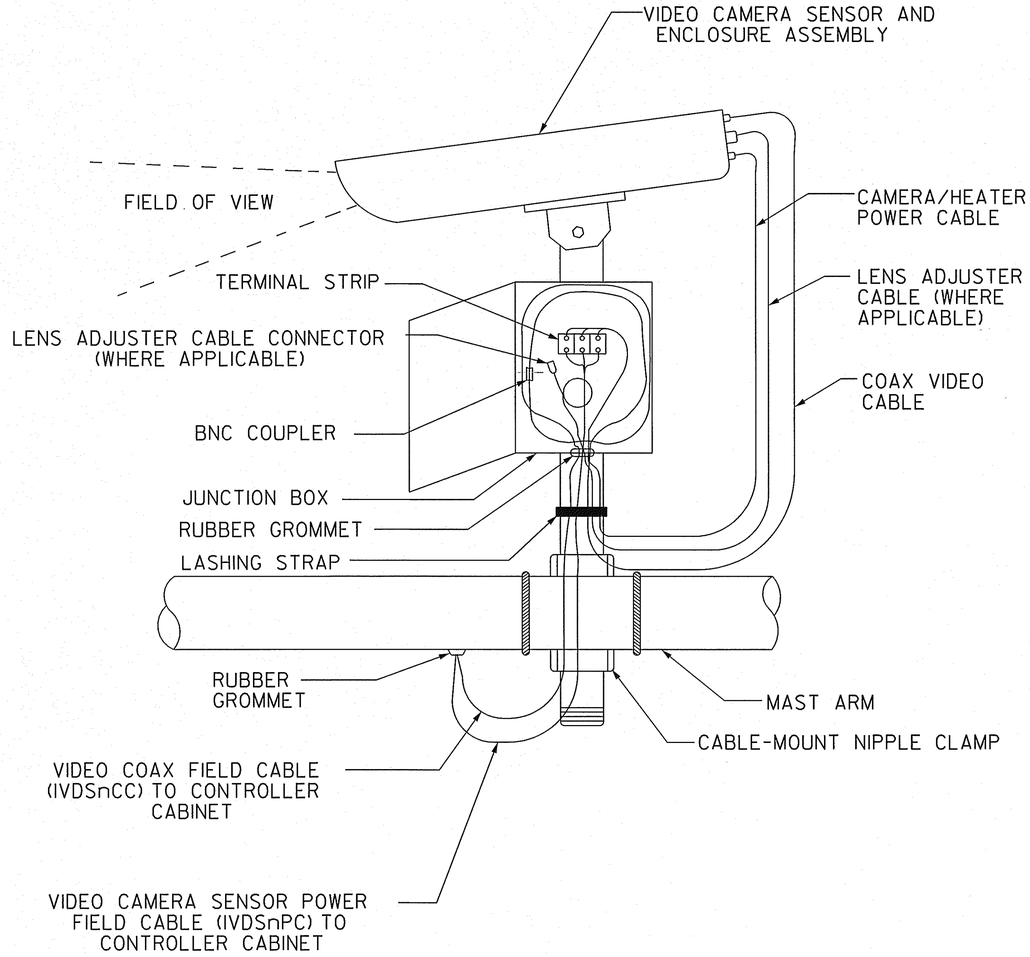
IVDS DETAILS
BLOCK DIAGRAM/POWER TERM PANEL

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	CSSTP-0006-00(869)	240	370



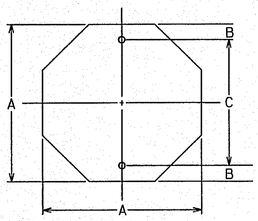
ITEM	DESCRIPTION	QTY
1	CABLE-MOUNT NIPPLE CLAMP	1
2	NIPPLE, ALUMINUM, 1½ INCH X 24 INCH, THREAD BOTH ENDS (LENGTH OTHER THAN 24 INCH IF SHOWN IN PLANS)	1
3	U-BOLT, ⅜ - INCH COARSE, SS OR GLV, MINIMUM 2¾ - INCH VERTICAL SEPERATION BETWEEN U-BOLTS	2
4	PIPE SADDLE, ALUMINUM	2
5	BACKING PLATE, 0.125-INCH 5052 ALUMINUM, 5 INCH X 5 INCH	1
6	VIDEO CAMERA SENSOR JUNCTION BOX	1
7	FENDERWASHER, ⅜ -INCH, SS	4
8	LOCKWASHER, ⅜ -INCH, SS	4
9	NUT, HEX, ⅜ -INCH COARSE, SS	4

SS-STAINLESS STEEL
GLV-HOT-DIPPED GALVANIZED STEEL



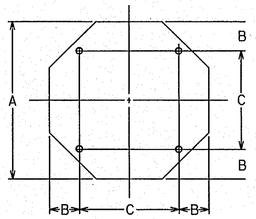
IVDS DETAILS
VIDEO CAMERA SENSOR MOUNTING/JUNCTION BOX

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	CSSTP-0006-00(869)	241	370

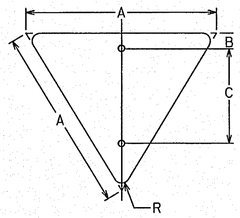


OCTAGON

A	B	C
24	3	18
30	3	24
36	3	30

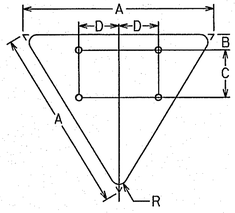


A	B	C
48	9	30

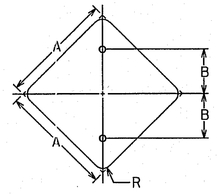


EQUILATERAL TRIANGLE

A	B	C	R
30	3	18	1 1/2
36	3	21	2
48	3	27	3

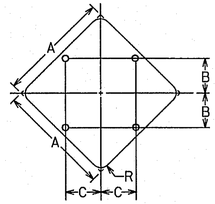


A	B	C	D	R
60	3	18	15	3



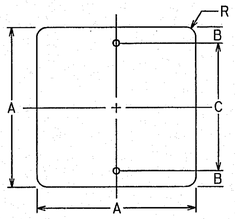
DIAMOND

A	B	R
24	12	1 1/2
30	15	1 7/8
36	18	2 1/4



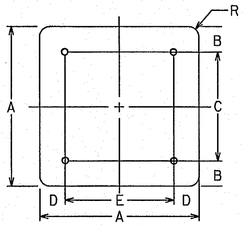
A	B	C	R
*36	10	10	2 1/4
48	15	15	3
60	18	18	3 3/4

* FOR TWO POST ERECTION

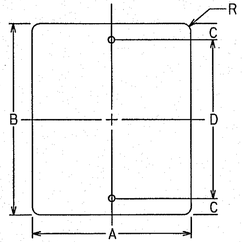


SQUARE

A	B	C	R
18	3	12	1 1/2
24	3	18	1 1/2
30	3	24	1 7/8

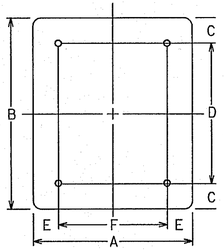


A	B	C	D	E	R
36	6	24	6	24	2 1/4
48	6	36	6	36	3

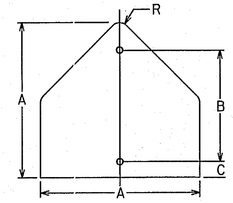


VERTICAL RECTANGLE

A	B	C	D	R
12	18	1 1/2	15	1 1/2
18	24	3	18	1 1/2
24	30	3	24	1 1/2
30	36	3	30	1 7/8

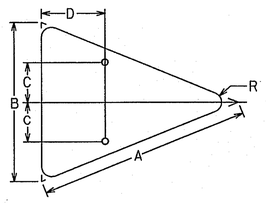


A	B	C	D	E	F	R
36	48	6	36	6	24	2 1/4
48	60	6	48	9	30	3



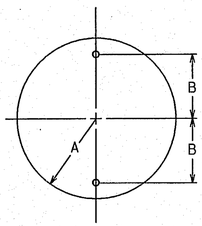
PENTAGON

A	B	C	R
30	21	3	1 7/8
36	24	3	2 1/4



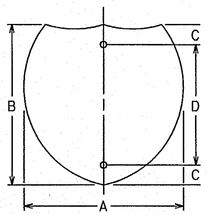
ISOSCELES TRIANGLE

A	B	C	D	R
40	30	7 1/2	12	1 7/8
48	36	9	15	2 1/4



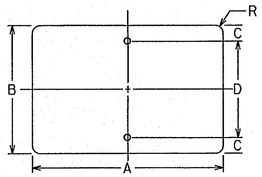
CIRCLE

A	B
15	12
18	15



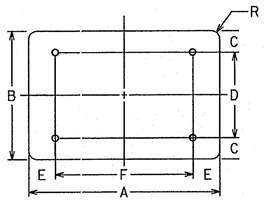
INTERSTATE SHIELD

A	B	C	D
24	24	3	18
30	24	3	18
36	36	6	24
45	36	6	24



HORIZONTAL RECTANGLE

A	B	C	D	R
21	15	1 1/2	12	1 1/2
24	12	1 1/2	9	1 1/2
24	18	3	12	1 1/2
30	15	1 1/2	12	1 1/2
30	24	3	18	1 1/2
36	12	1 1/2	9	1 1/2
36	24	3	18	1 1/2
48	12	1 1/2	9	1 1/2
48	24	3	18	1 7/8



A	B	C	D	E	F	R
48	36	6	24	9	30	2 1/4
60	24	3	18	12	36	1 1/2
60	36	6	24	12	36	2 1/4

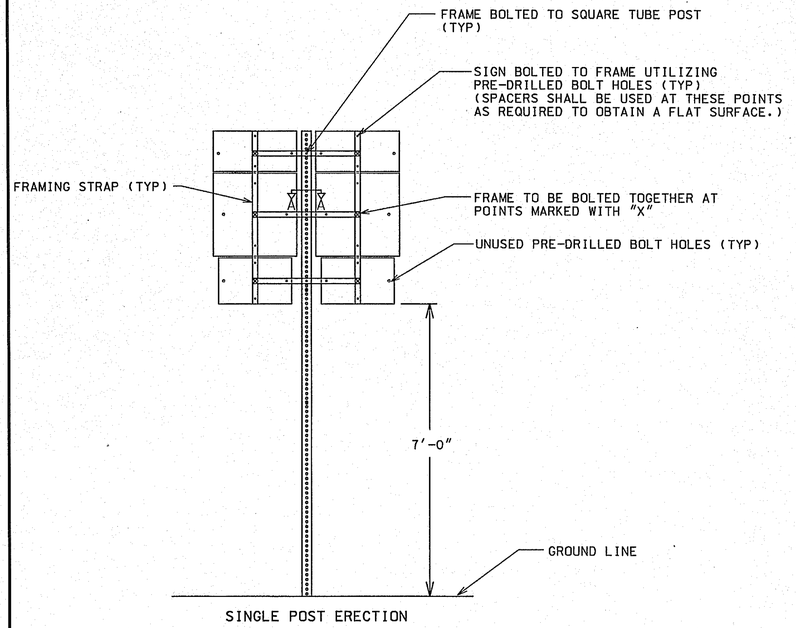
DATE	REVISIONS

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF TRAFFIC SAFETY & DESIGN

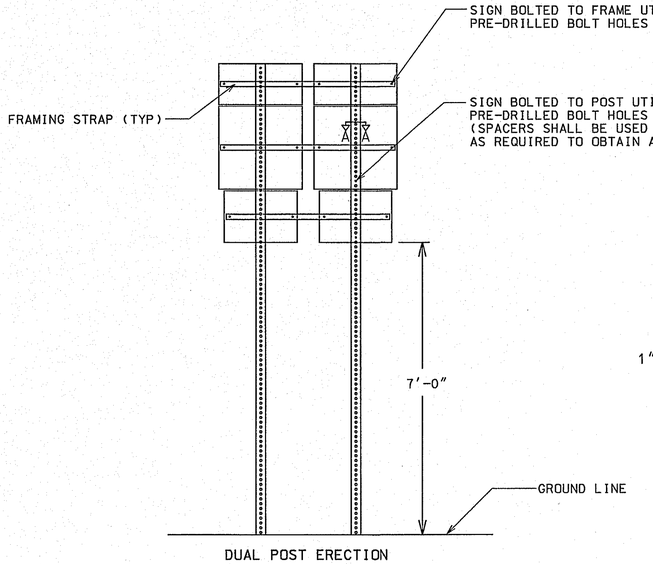
DETAILS OF
SIGN PLATES

NO SCALE JANUARY 2000

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	CSSTP-0006-(869)	242	370

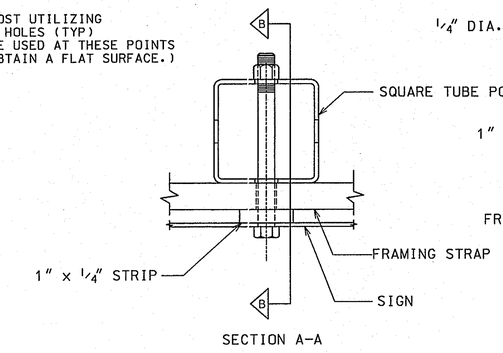


SINGLE POST ERECTION

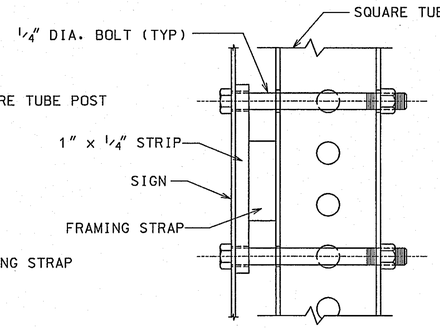


DUAL POST ERECTION

TYPICAL ASSEMBLY UNIT (BACK VIEW)



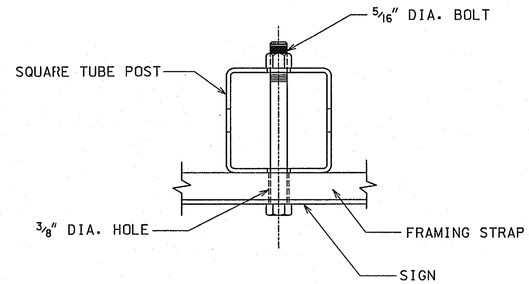
SECTION A-A



SECTION B-B
(ROTATED 90°)

OPTION #1 - FRAMING STRAP WITHOUT MOUNTING HOLE

(ALL FRAMING STRAPS SHALL BE 1 1/2" x 1/2" x REQUIRED LENGTH)



OPTION #2 - FRAMING STRAP WITH MOUNTING HOLE

(ALL FRAMING STRAPS SHALL BE 2" x 1/2" x REQUIRED LENGTH)

GENERAL NOTES:

1. STYLE OF FRAMING IS OPTIONAL. ALTERNATE DESIGNS ARE ACCEPTABLE UPON APPROVAL OF THE ENGINEER. FRAME SHALL BE DESIGNED SO AS TO HOLD THE ASSEMBLY IN A FIXED, RIGID POSITION.
2. FRAMING STRAPS SHALL BE GALVANIZED STEEL OR ALUMINUM.
3. STEEL SHALL BE A.S.T.M. DESIGNATION A-283, GRADE D, GALVANIZED IN ACCORDANCE WITH A.S.T.M. DESIGNATION A-123.
4. ALUMINUM SHALL BE ALLOY 6061-T6.
5. BOLTS, NUTS, WASHERS, AND SPACERS SHALL CONFORM TO THE STANDARD SPECIFICATIONS AND/OR SPECIAL PROVISIONS.
6. FRAMING STRAPS ON A DUAL POST ERECTION SHALL NOT BE BOLTED TO THE POST.

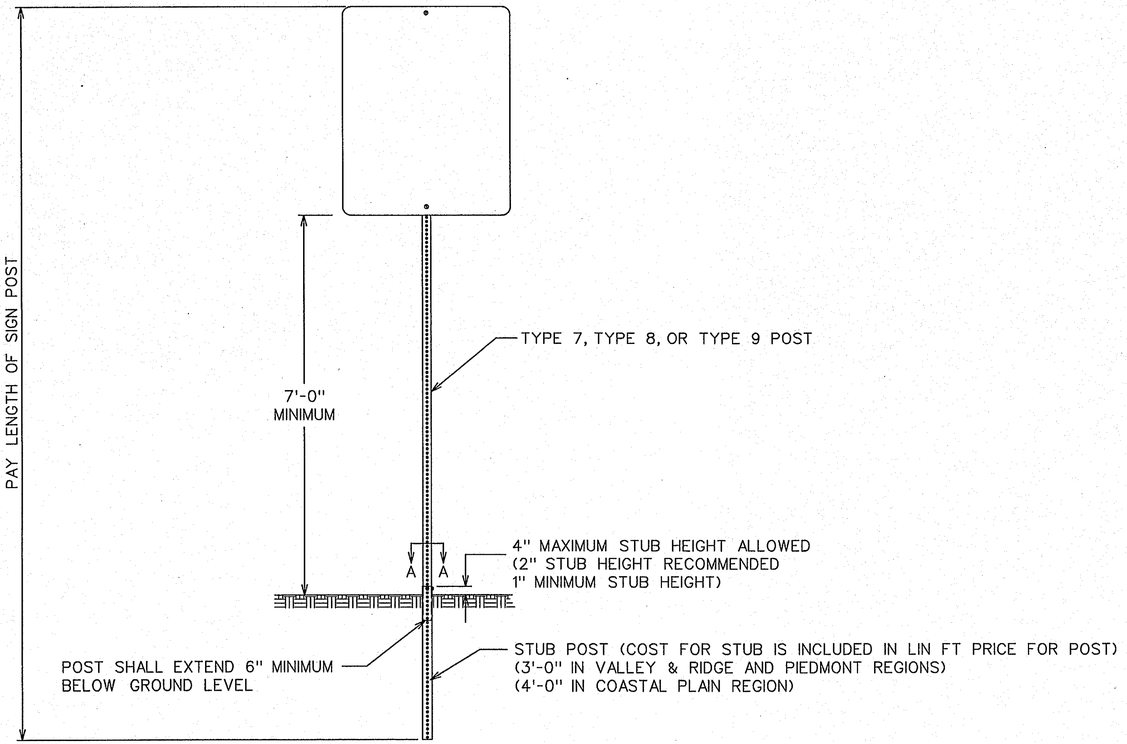
DATE	REVISIONS
3/31/00	CHANGED U-CHANNEL POST TO SQUARE TUBE POST

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF TRAFFIC OPERATIONS

DETAILS FOR
TYPICAL FRAMING

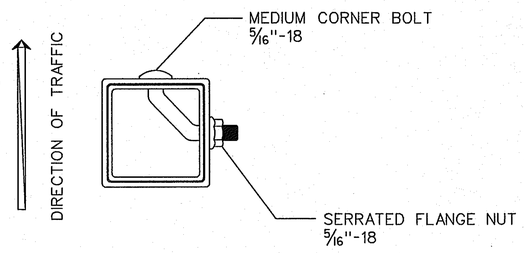
NO SCALE JANUARY 2000

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	CSSTP-0006-00(869)	243	370



FRONT VIEW

POST	STUB SIZE
TYPE 7	2 1/4" x 2 1/4"
TYPE 8	2 3/4" x 2 3/4"
TYPE 9	2 1/2" x 2 1/2"



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.

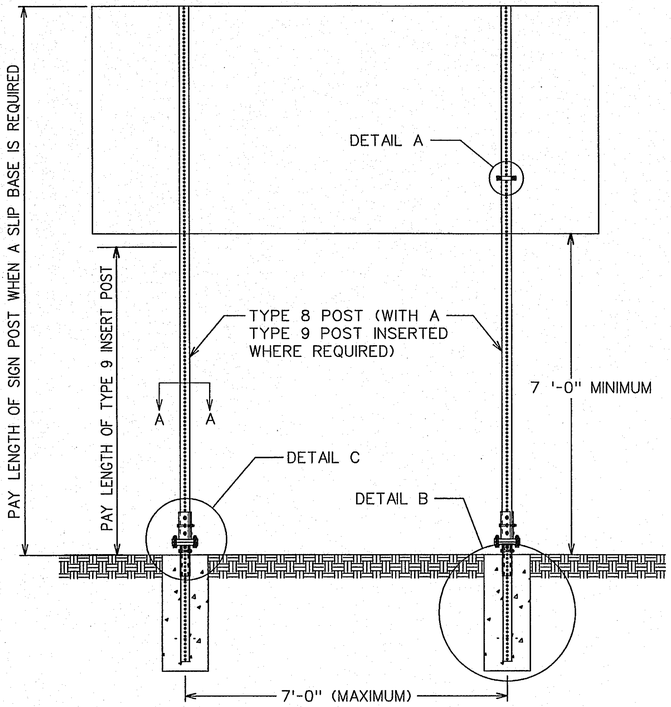
DATE	REVISIONS

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF TRAFFIC SAFETY & DESIGN

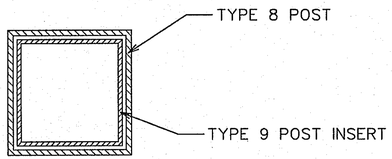
TYPE 7, 8, AND 9
SQUARE TUBE POST
INSTALLATION DETAIL

NO SCALE JULY 2002

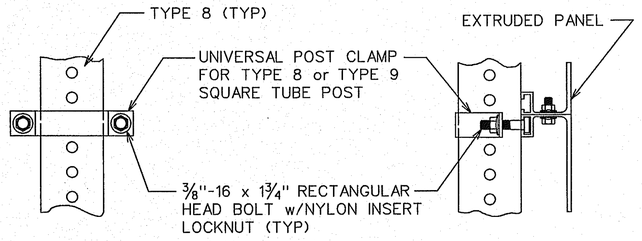
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	CSSTP-0006-00(869)	244	370



BACK VIEW

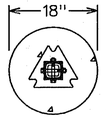


SECTION A-A

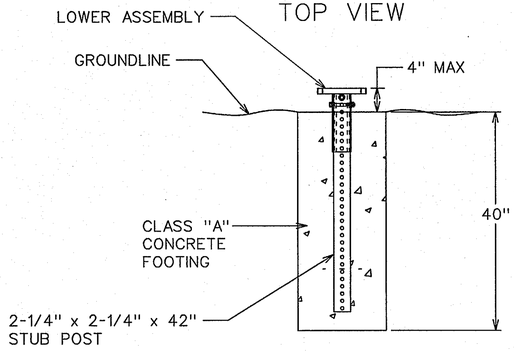


BACK VIEW SIDE VIEW

DETAIL A



TOP VIEW



DETAIL B

GROUND MOUNTED BREAKAWAY SIGN SUPPORT

SIGN POST SELECTION CHART

70 MPH Wind Load Chart + 15% Gust Factor

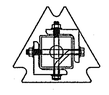
Sign Centroid	SLIP BASE NOT REQUIRED				GROUND MOUNTED BREAKAWAY SIGN SUPPORT REQUIRED				
	TYPE 7 2" 14 ga.		TYPE 9 2-1/4" 14 ga.	TYPE 8 2-1/2" 12 ga.	TYPE 8 2-1/2" 12 ga.		TYPE 8 w/TYPE 9 Insert* 2-1/2" 12 ga. W/2-1/4" 14 ga.		
	1 Post	2 Post	1 Post	1 Post	2 Post	3 Post	1 Post	2 Post	3 Post
	SQUARE 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.

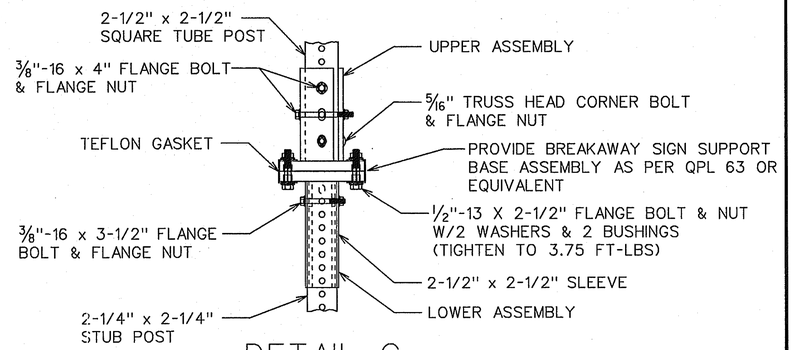
SIGN PLATE SHALL NOT EXCEED 48" IN WIDTH ON A SINGLE POST.

* 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.



TOP VIEW



DETAIL C

(CONCRETE NOT SHOWN)

DATE	REVISIONS

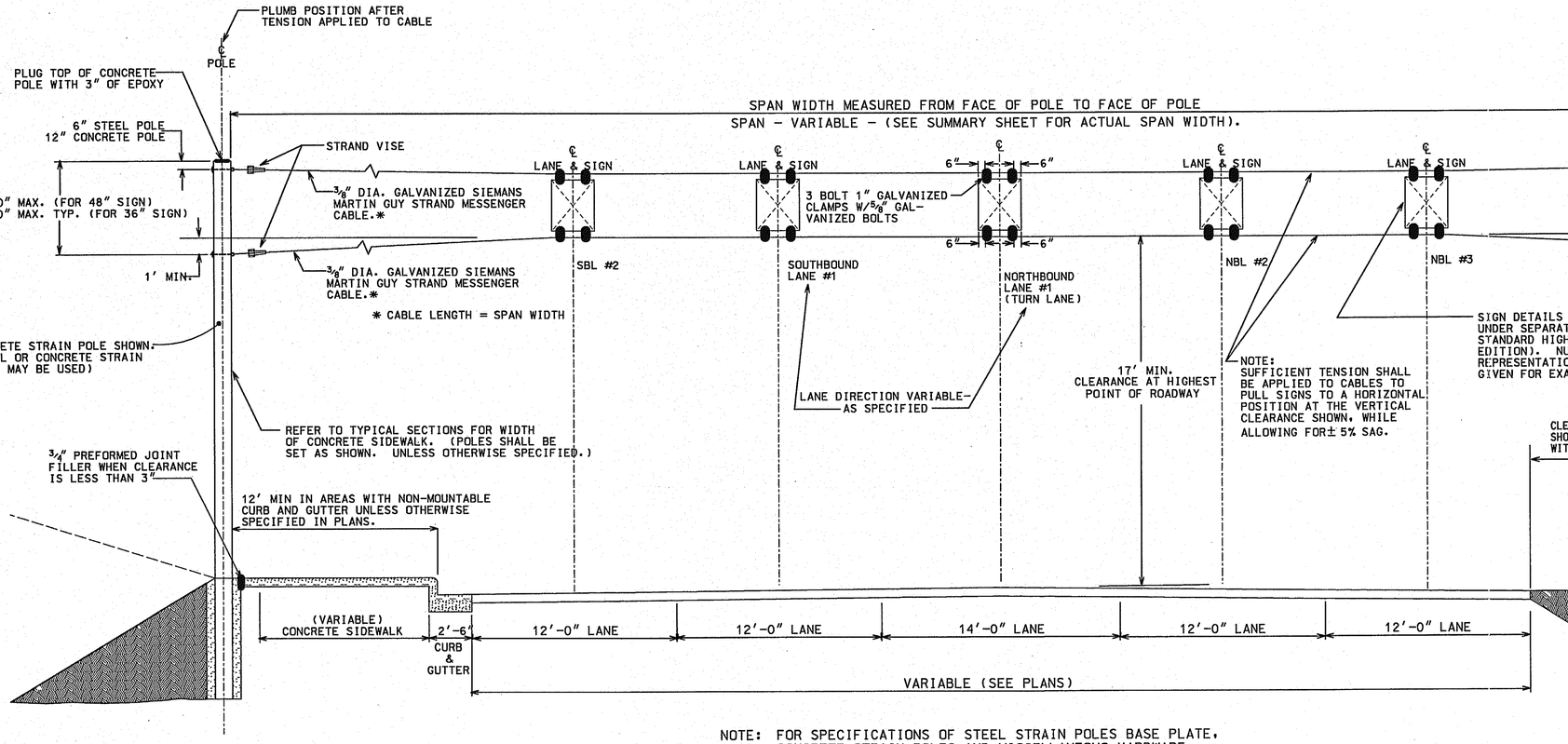
GEORGIA DEPARTMENT OF TRANSPORTATION

OFFICE OF TRAFFIC SAFETY & DESIGN

DETAILS OF SQUARE TUBE POST (BREAKAWAY SIGN SUPPORT)

NO SCALE July 2002

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	CSSTP-0006-00(869)	245	370

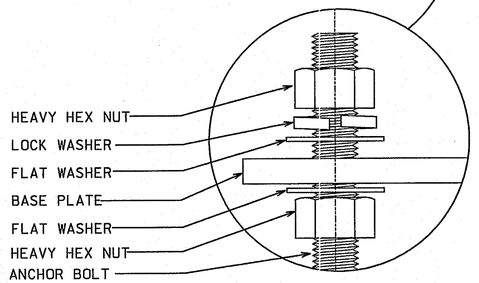


NOTE: FOR SPECIFICATIONS OF STEEL STRAIN POLES BASE PLATE, CONCRETE STRAIN POLES AND MISCELLANEOUS HARDWARE SEE GEORGIA STANDARD SPECIFICATIONS, SECTION 639 AND SPECIAL PROVISION.

CLEAR ZONE DISTANCES (IN FEET FROM EDGE OF DRIVING LANE)

DESIGN SPEED	DESIGN ADT	FILL SLOPES			CUT SLOPES		
		6:1 OR FLATTER	5:1 TO 4:1	3:1	3:1	4:1 TO 5:1	6:1 OR FLATTER
40 MPH OR LESS	UNDER 750	7-10	7-10	••	7-10	7-10	7-10
	750-1500	10-12	12-14	••	10-12	10-12	10-12
	1500-6000	12-14	14-16	••	12-14	12-14	12-14
	OVER 6000	14-16	16-18	••	14-16	14-16	14-16
45-50 MPH	UNDER 750	10-12	12-14	••	8-10	8-10	10-12
	750-1500	12-14	16-20	••	10-12	12-14	14-16
	1500-6000	16-18	20-26	••	12-14	14-16	16-18
	OVER 6000	18-20	24-28	••	14-16	18-20	20-22
55 MPH	UNDER 750	12-14	14-18	••	8-10	10-12	10-12
	750-1500	16-18	20-24	••	10-12	14-16	16-18
	1500-6000	20-22	24-30	••	14-16	16-18	20-22
	OVER 6000	22-24	26-32	••	16-18	20-22	22-24

•• POLES SHOULD NOT BE PLACED IN THE VICINITY OF THE TOP OF THESE SLOPES.



DETAIL OF ANCHOR BOLT AND HARDWARE

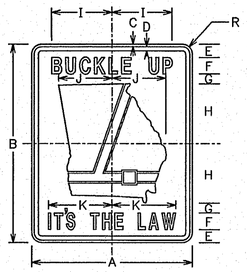
DATE	REVISIONS

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF TRAFFIC SAFETY & DESIGN

DETAILS OF STRAIN POLE ERECTION FOR OVERHEAD SIGNS

NO SCALE JANUARY 2000

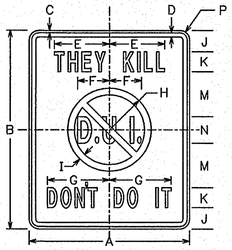
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	CSSTP-0006-00(869)	246	370



R560-1

SIGN	DIMENSIONS (INCHES)										
	A	B	C	D	E	F	G	H	I	J	K	R
MIN & STD	30	36	1/2	3/4	2 1/2	3C	1 1/2	11	8 1/2	10	11	1 7/8
FWY	48	60	3/4	1 1/4	4	5C	3	18	15 1/2	16	18	3

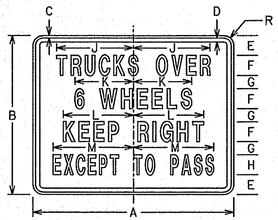
COLORS
STATE SHIELD & BORDER – RED (REFL)
LEGEND & BELT – BLACK (NON-REFL)
BACKGROUND – WHITE (REFL)



R560-2

SIGN	DIMENSIONS (INCHES)															
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P
MIN & STD	30	36	1/2	3/4	11	5	12 1/2	7 1/2	1 1/4	4	4C	3	4 1/2	5C	1 7/8
FWY	48	60	3/4	1 1/4	16 1/2	9 1/2	18 1/2	12 1/2	2	6 1/2	6C	5	8 1/2	8C	3

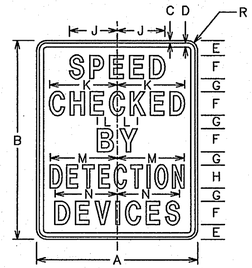
COLORS
CIRCLE & DIAGONAL – RED (REFL)
LEGEND & BORDER – BLACK (NON-REFL)
BACKGROUND – WHITE (REFL)



R560-3

SIGN	DIMENSIONS (INCHES)												
	A	B	C	D	E	F	G	H	J	K	L	M	R
MIN & STD	36	30	1/2	3/4	3 1/2	3 1/2 C	3	3 1/2 B	14	10	11 1/2	14 1/2	1 7/8
FWY	60	48	3/4	1 1/4	6	6C	4	6B	23	17 1/2	21	24	3

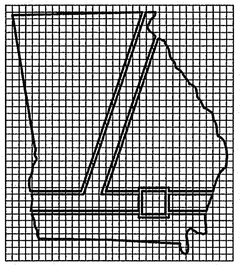
COLORS
LEGEND & BORDER – BLACK (NON-REFL)
BACKGROUND – WHITE (REFL)

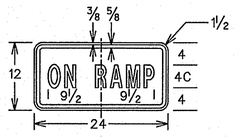


I550-1

SIGN	DIMENSIONS (INCHES)												
	A	B	C	D	E	F	G	H	J	K	L	M	N	R
MIN & STD	30	36	1/2	3/4	4	4D	2	8 3/16	11 9/16	3 1/16	11 3/16	10 5/8	1 7/8
FWY	48	60	3/4	1 1/4	4 1/2	7D	4	7C	14 5/16	20 3/16	6	20	18 3/16	3

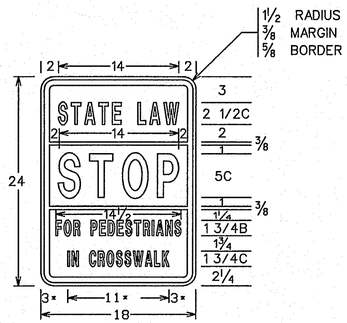
COLORS
LEGEND & BORDER – BLACK (NON-REFL)
BACKGROUND – WHITE (REFL)





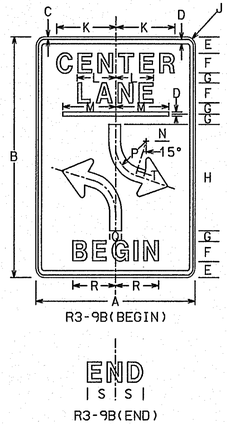
R8-3aP

COLORS
LEGEND & BORDER – RED (REFL)
BACKGROUND – WHITE (REFL)



R560-5

COLORS
LEGEND & BORDER–BLACK (NON-REFL)
WORD "STOP" –RED (REFL)
BACKGROUND –WHITE (REFL)



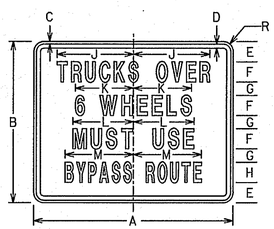
R3-9B(BEGIN)

END
S I S

R3-9B(END)

SIGN	DIMENSIONS (INCHES)																
	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T
STD & MIN	24	36	3/8	5/8	2 1/2	3E	1 1/2	16	1 1/2	8 7/16	5 3/4	8	2 1/2	6	2	6 7/16	4 3/16	1 1/2
SPECIAL	36	48	5/8	7/8	3 1/2	5E	1 1/2	20	2 1/4	14 1/16	9 1/2	12	3	8	3	7 11/16	4 15/16	2

COLORS
LEGEND & BORDER – BLACK (NON-REFL)
BACKGROUND –WHITE (REFL)



R560-4

SIGN	DIMENSIONS (INCHES)													
	A	B	C	D	E	F	G	H	J	K	L	M	R
MIN & STD	36	30	1/2	3/4	3 1/2	3 1/2 C	3	3 1/2 B	14	10	10	12 1/2	1 7/8
FWY	60	48	3/4	1 1/4	6	6C	4	6C	23	17 1/2	17 1/2	25 1/2	3

COLORS
LEGEND & BORDER – BLACK (NON-REFL)
BACKGROUND –WHITE (REFL)

THE I550-1 SIGN SHALL BE ERECTED:

1. ON EVERY HIGHWAY THAT COMPRISES A PART OF THE STATE HIGHWAY SYSTEM AT THAT POINT ON THE HIGHWAY WHICH INTERSECTS THE STATE LINE,
2. AT THE TERMINI OF EVERY HIGHWAY THAT COMPRISES A PART OF THE STATE HIGHWAY SYSTEM WHICH BEGINS OR ENDS WITHIN THE STATE BOUNDARIES,
3. ON EVERY HIGHWAY THAT COMPRISES A PART OF THE STATE HIGHWAY SYSTEM AT THAT POINT ON THE HIGHWAY WHERE TRAFFIC FROM OUTSIDE THE COUNTY FIRST ENTERS A COUNTY THAT HAS A PERMIT TO OPERATE SPEED DETERCTION DEVICES, AND
4. ON EVERY HIGHWAY THAT COMPRISES A PART OF THE STATE HIGHWAY SYSTEM AT THAT POINT ON THE HIGHWAY WHERE TRAFFIC FIRST ENTERS THE CORPORATE LIMITS OF ANY MUNICIPALITY THAT HAS A PERMIT TO OPERATE SPEED DETECTION DEVICES.

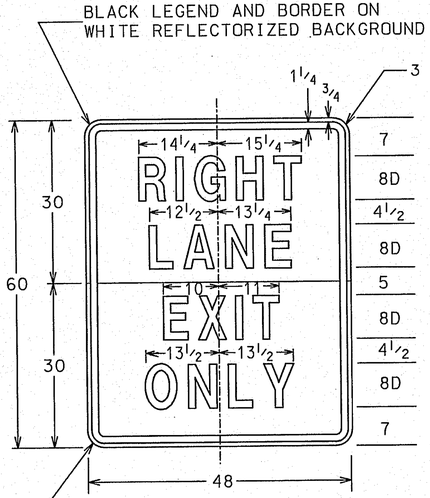
DATE	REVISIONS
5-24-00	ADDED R9-8 DETAIL
1-21-03	DELETED R1-4 SIGNS
1-21-03	REV SIGN CODES FOR R3-9 SIGNS

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF TRAFFIC SAFETY & DESIGN

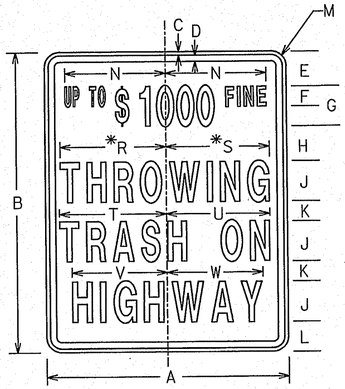
DETAILS OF
REGULATORY SIGNS
SHEET 1 OF 2

NO SCALE JANUARY 2000

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	CSSTP-0006-00(869)	247	370



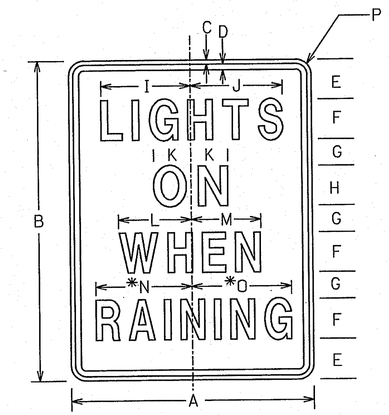
R553-7



R553-1

* REDUCE SPACING 20%

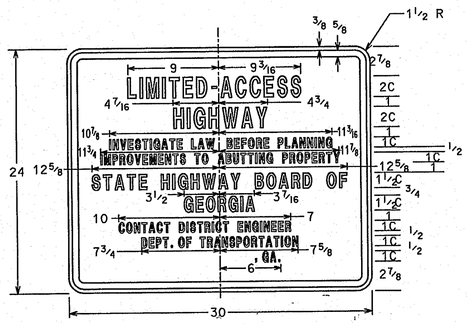
SIGN	DIMENSIONS (INCHES)																		
	A	B	C	D	E	F	G	H	J	K	L	M	N	R	S	T	U	V	W
STD & MIN	24	30	3/8	5/8	3 1/2	2B	4C	3 1/2	4C	2	3	1 1/2	10	10 1/2	10 1/4	10 3/4	10 1/8	9 3/8	9 1/2
EXPWY	36	48	5/8	7/8	6	3B	6C	6	6C	3	6	2 1/4	15	15 3/4	15 3/8	16 1/8	15 3/16	14 1/16	14 1/4
FWY	48	60	3/4	1 1/4	7	4B	7C	8	8C	4	6	3	20	21	20 1/2	21 1/2	20 1/4	18 3/4	19



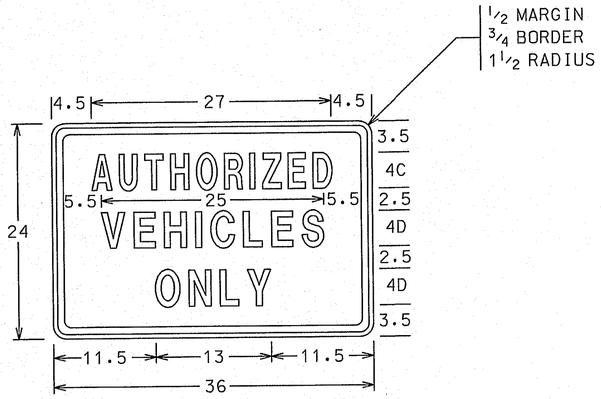
R554-1

* REDUCE SPACING 30%

SIGN	DIMENSIONS (INCHES)														
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
STD & MIN	24	30	3/8	5/8	3 5/8	4D	2 1/4	4E	8 3/4	9 1/4	4	6 3/4	7 1/4	9 1/4	9 3/4	1 1/2
EXPWY	36	48	5/8	7/8	6	6D	4	6E	13 1/4	13 3/4	5 1/2	10 3/4	10 1/4	14 1/4	14 3/4	2 1/4
FWY	48	60	3/4	1 1/4	7 1/4	8D	4 1/2	8E	17 1/8	17 7/8	7	14 3/8	13 5/8	18 5/8	19 3/8	3



R552-1



R552-2

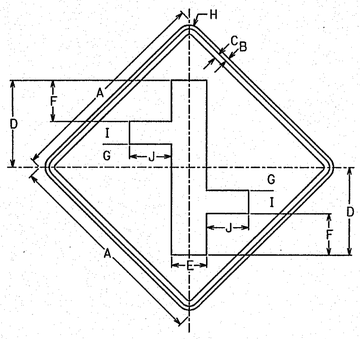
DATE	REVISIONS

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF TRAFFIC SAFETY & DESIGN

DETAILS OF
REGULATORY SIGNS
SHEET 2 OF 2

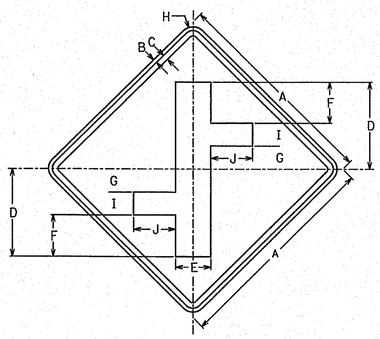
NO SCALE JANUARY 2000

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	CSSTP-0006-00(869)	248	370



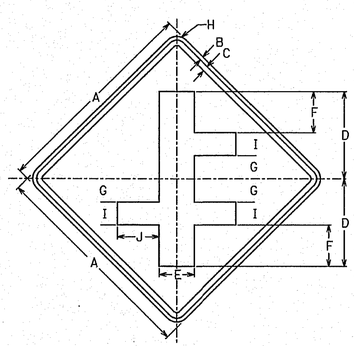
W552-1

SIGN	DIMENSIONS (INCHES)									
	A	B	C	D	E	F	G	H	I	J
STD & MIN	30	1/2	3/4	12 1/2	5	6	3 1/4	1 7/8	3 1/4	6
EXPWY	36	5/8	7/8	15	6	7	4	2 1/4	4	7
FWY	48	7/8	1 1/4	20	8	9 1/2	5 1/4	3	5 1/4	9 1/2



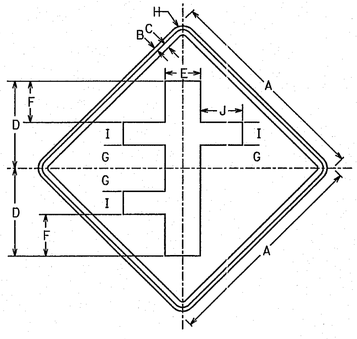
W552-2

SIGN	DIMENSIONS (INCHES)									
	A	B	C	D	E	F	G	H	I	J
STD & MIN	30	1/2	3/4	12 1/2	5	6	3 1/4	1 7/8	3 1/4	6
EXPWY	36	5/8	7/8	15	6	7	4	2 1/4	4	7
FWY	48	7/8	1 1/4	20	8	9 1/2	5 1/4	3	5 1/4	9 1/2



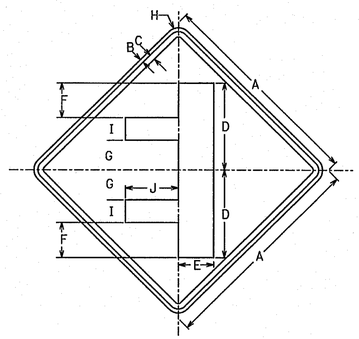
W552-3

SIGN	DIMENSIONS (INCHES)									
	A	B	C	D	E	F	G	H	I	J
STD & MIN	30	1/2	3/4	12 1/2	5	6	3 1/4	1 7/8	3 1/4	6
EXPWY	36	5/8	7/8	15	6	7	4	2 1/4	4	7
FWY	48	7/8	1 1/4	20	8	9 1/2	5 1/4	3	5 1/4	9 1/2



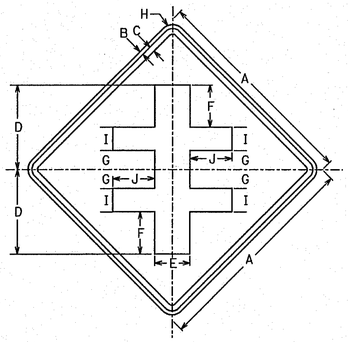
W552-4

SIGN	DIMENSIONS (INCHES)									
	A	B	C	D	E	F	G	H	I	J
STD & MIN	30	1/2	3/4	12 1/2	5	6	3 1/4	1 7/8	3 1/4	6
EXPWY	36	5/8	7/8	15	6	7	4	2 1/4	4	7
FWY	48	7/8	1 1/4	20	8	9 1/2	5 1/4	3	5 1/4	9 1/2



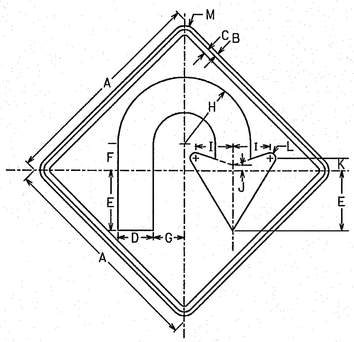
W552-5

SIGN	DIMENSIONS (INCHES)									
	A	B	C	D	E	F	G	H	I	J
STD & MIN	30	1/2	3/4	12 1/2	5	5	4 1/4	1 7/8	3 1/4	8
EXPWY	36	5/8	7/8	15	6	6	5	2 1/4	4	10
FWY	48	7/8	1 1/4	20	8	8	6 3/4	3	5 1/4	12



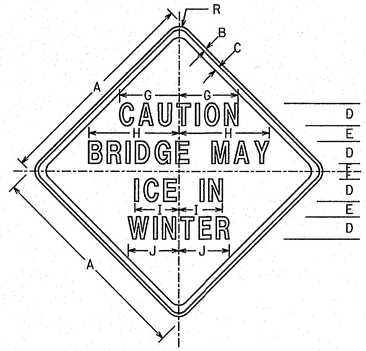
W552-6

SIGN	DIMENSIONS (INCHES)									
	A	B	C	D	E	F	G	H	I	J
STD & MIN	30	1/2	3/4	12 1/2	5	5	3 1/4	1 7/8	3 1/4	6
EXPWY	36	5/8	7/8	15	6	7	4	2 1/4	4	7
FWY	48	7/8	1 1/4	20	8	9 1/2	5 1/4	3	5 1/4	9 1/2



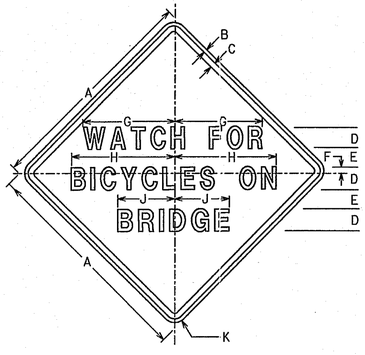
W551-1

SIGN	DIMENSIONS (INCHES)												
	A	B	C	D	E	F	G	H	I	J	K	L	M
STD & MIN	30	1/2	3/4	5	8 1/2	33/4	4 3/8	9 3/8	5 3/4	3/4	1 5/8	3/4	1 7/8
EXPWY	36	5/8	7/8	6	10	4 1/2	5 1/4	11 1/4	6 7/8	15/16	2 3/16	15/16	2 1/4
FWY	48	7/8	1 1/4	8	13 1/2	6	7	15	8 7/16	1 1/4	2 3/4	1 1/4	3



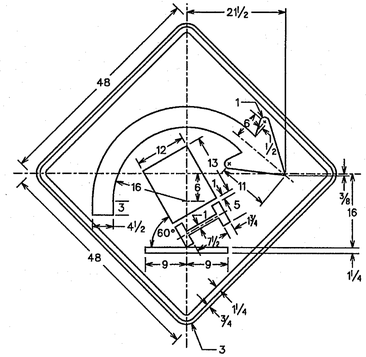
W560-1

SIGN	DIMENSIONS (INCHES)										
	A	B	C	D	E	F	G	H	I	J	R
MIN & STD	30	1/2	3/4	3D	2 3/16	1 3/32	8	12 1/2	6	7	1 7/8
EXPWY	36	5/8	7/8	4D	2 5/8	1 5/16	11	16 1/2	8	9	2 1/4
FWY	48	3/4	1 1/4	5D	3 1/2	1 3/4	13 1/2	20 1/2	10	11 1/2	3



W560-2

SIGN	DIMENSIONS (INCHES)									
	A	B	C	D	E	F	G	H	J	K
MIN & STD	30	1/2	3/4	3C	1 1/2	1 3/32	9 1/2	11 1/2	6	1 7/8
EXPWY	36	5/8	7/8	4C	3 1/4	2	13	15	7 1/2	2 1/4



W560-3

SIGNS SHALL HAVE YELLOW REFLECTORIZED BACKGROUNDS WITH BLACK LEGENDS, BORDERS, AND SYMBOLS.

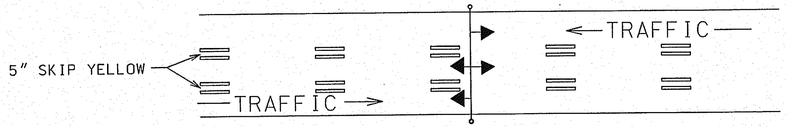
DATE	REVISIONS

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF TRAFFIC SAFETY & DESIGN

DETAILS OF
WARNING SIGNS

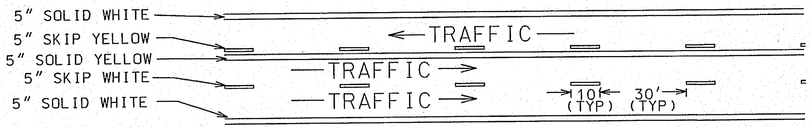
NO SCALE JANUARY 2000

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	CSSTP-0006-00(869)	249	370

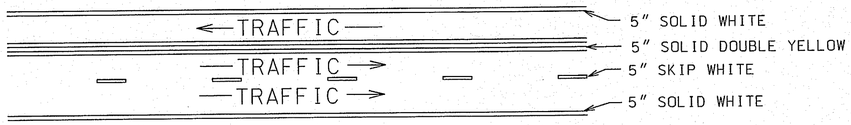


REVERSIBLE LANE SIGN OR SIGNAL SYSTEM REQUIRED

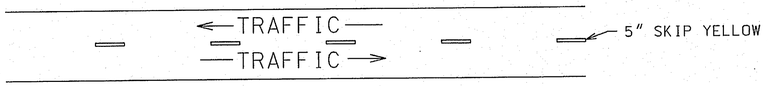
TWO-WAY TRAFFIC WITH A REVERSIBLE CENTER LANE



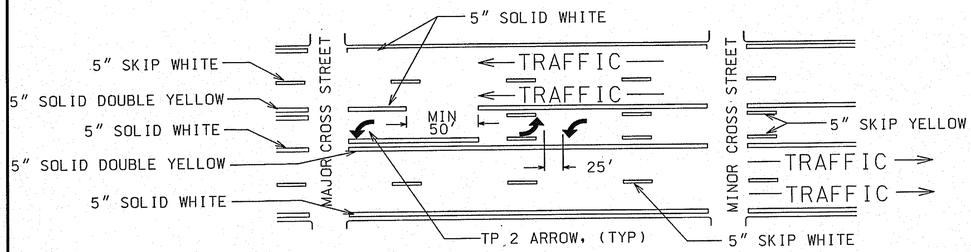
TWO-WAY TRAFFIC WHERE MOTORISTS IN A SINGLE LANE ARE PERMITTED TO PASS



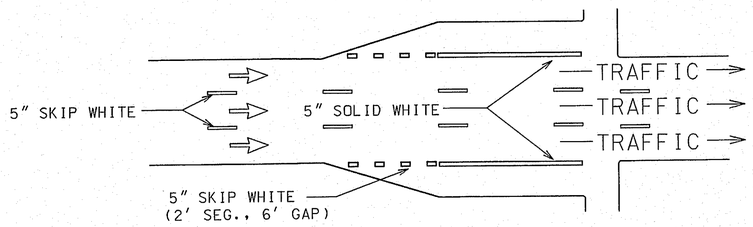
TWO-WAY TRAFFIC WHERE MOTORISTS IN A SINGLE LANE ARE NOT PERMITTED TO PASS



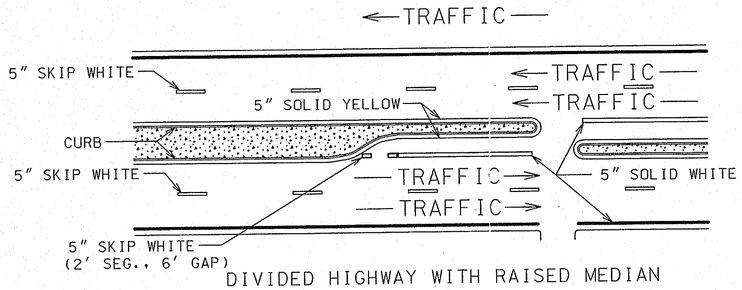
TWO-LANE, TWO-WAY TRAFFIC WITH PASSING PERMITTED



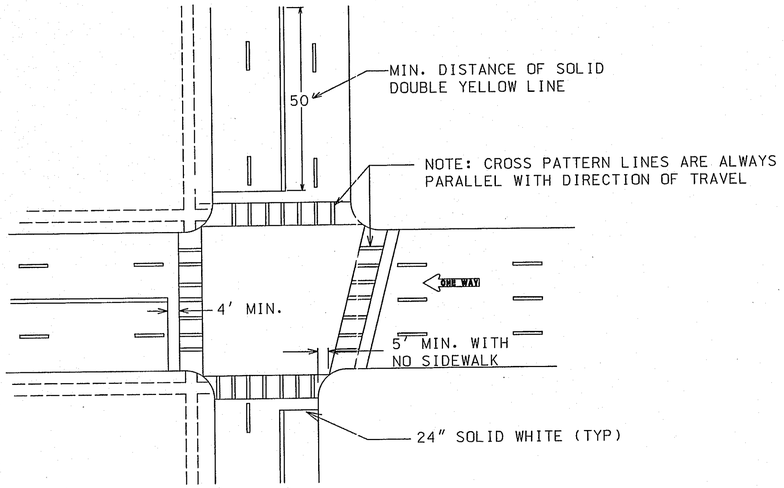
MULTI-LANE, TWO-WAY TRAFFIC WITH SINGLE LANE, TWO-WAY LEFT TURN CHANNELIZATION



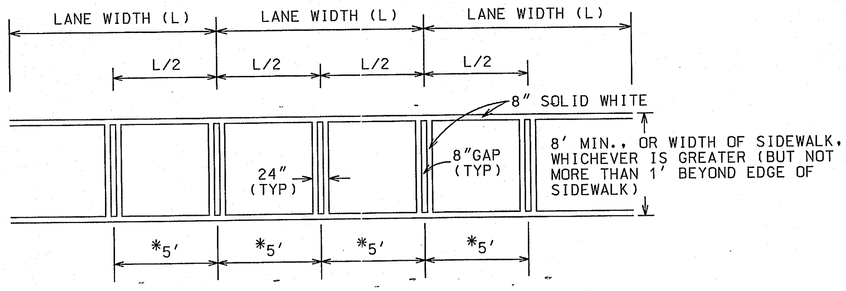
ONE-WAY TRAFFIC WITH ADDED TURN LANES



DIVIDED HIGHWAY WITH RAISED MEDIAN



TYPICAL LOCATION OF CROSSWALKS AND STOP BARS



*USE WHERE THE LANE WIDTH EXCEEDS 12' OR WHERE LANE LINES HAVE BEEN OMITTED

CROSSWALK DETAIL

GENERAL NOTES:

1. SPACING BETWEEEN DOUBLE LINES SHALL BE EQUAL TO THE LINE WIDTH.
2. EDGE LINES SHALL BE PLACED A MINIMUM OF 4 INCHES FROM THE NORMAL EDGE OF PAVEMENT.

DATE	REVISIONS

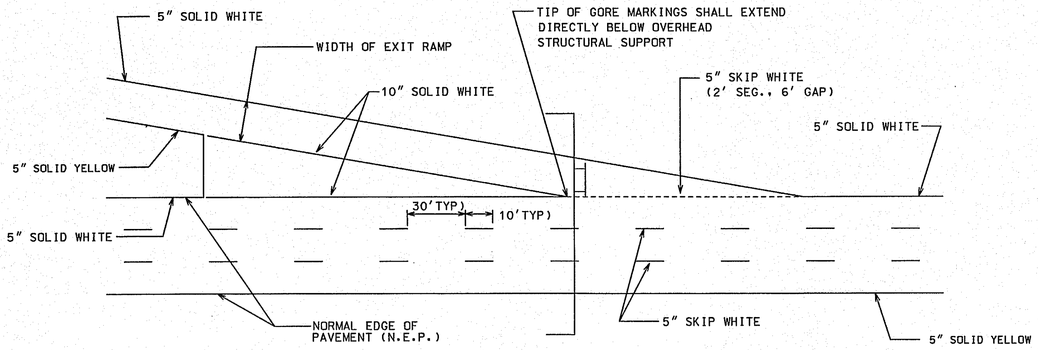
GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF TRAFFIC SAFETY & DESIGN

DETAILS OF PAVEMENT MARKING PLACEMENT NON-LIMITED ACCESS ROADWAY

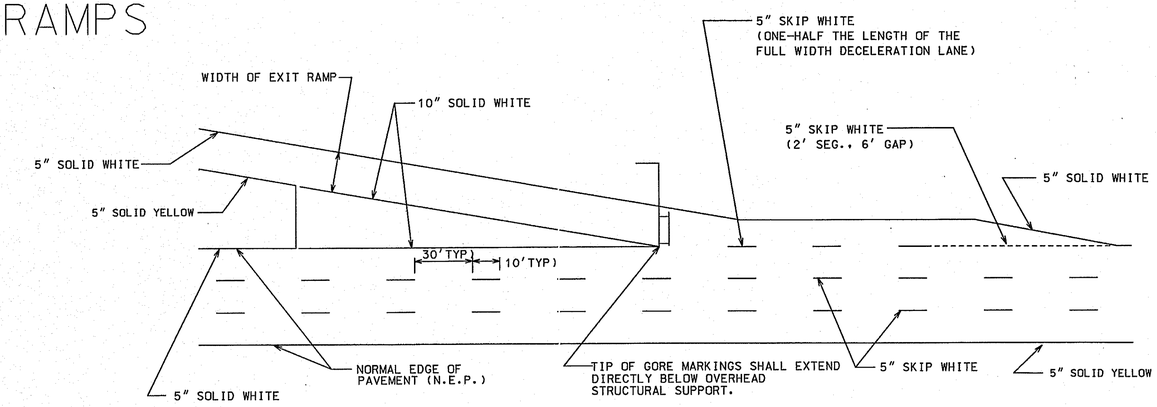
NO SCALE JANUARY 2000

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	CSSTP-0006-00(869)	250	370

EXIT RAMPS

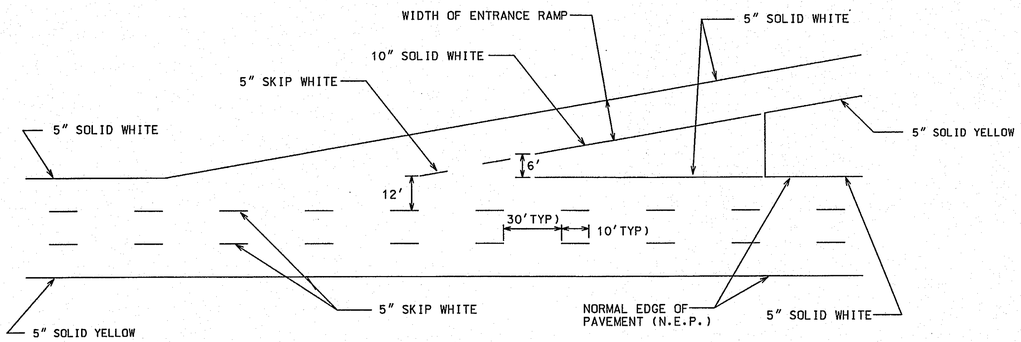


TAPERED DECELERATION LANE

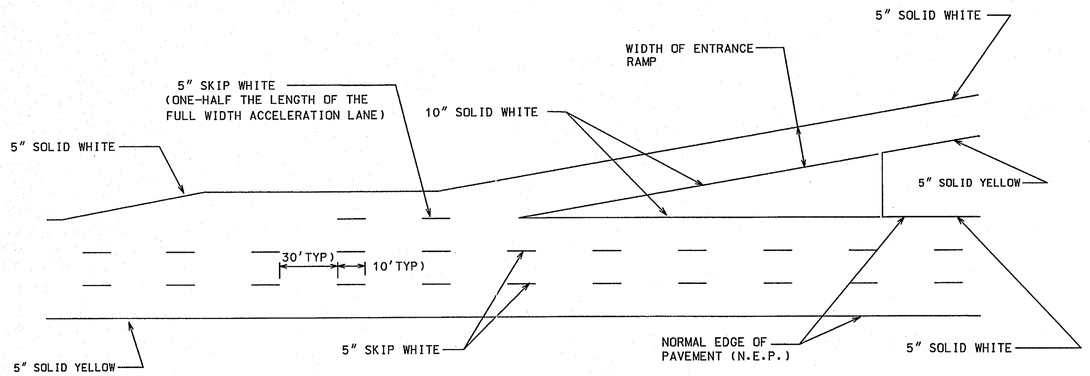


PARALLEL DECELERATION LANE

ENTRANCE RAMPS



TAPERED ACCELERATION LANE



PARALLEL ACCELERATION LANE

GENERAL NOTES:

1. ALL PAVEMENT MARKINGS SHALL BE REFLECTORIZED.
2. EDGE LINES SHALL BE OFFSET 4 INCHES FROM THE NORMAL EDGE OF PAVEMENT.
3. EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH NEW PAVEMENT MARKINGS SHALL BE OBLITERATED OR REMOVED PRIOR TO THE INSTALLTION OF NEW PAVEMENT MARKINGS AS DIRECTED BY THE ENGINEER. NO SEPARATE PAYMENT SHALL BE MADE FOR THIS WORK BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE NEW PAVEMENT MARKINGS.

DATE	REVISIONS

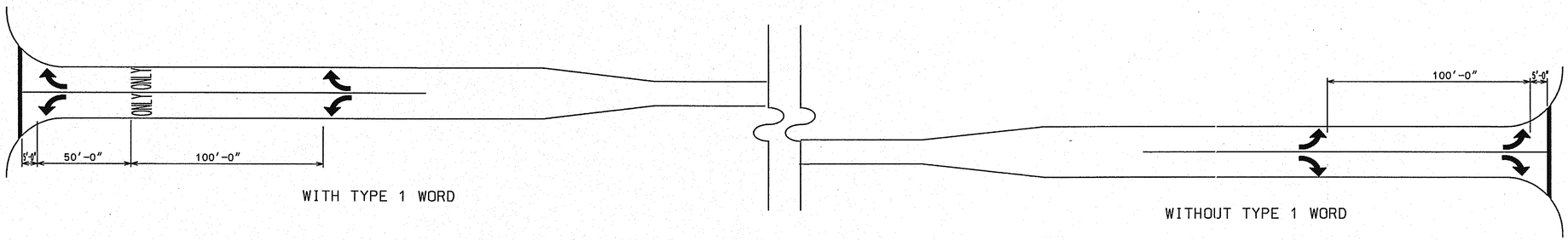
GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF TRAFFIC SAFETY & DESIGN

DETAILS OF
PAVEMENT MARKING PLACEMENT
LIMITED ACCESS ROADWAY

NO SCALE JANUARY 2000

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	CSSTP-0006-00(869)	251	370

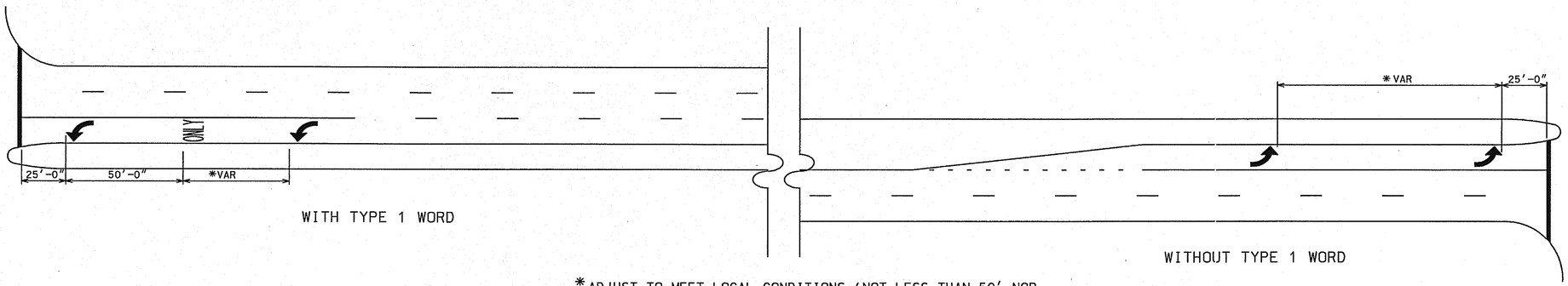
EXIT RAMPS



WITH TYPE 1 WORD

WITHOUT TYPE 1 WORD

SHORT TURN LANES

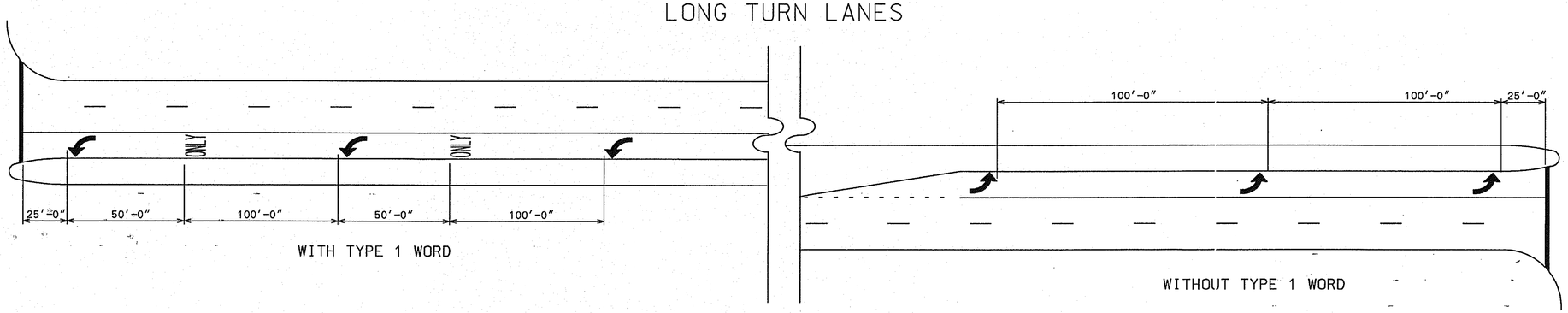


WITH TYPE 1 WORD

WITHOUT TYPE 1 WORD

*ADJUST TO MEET LOCAL CONDITIONS (NOT LESS THAN 50' NOR MORE THAN 100')

LONG TURN LANES



WITH TYPE 1 WORD

WITHOUT TYPE 1 WORD

GENERAL NOTES:

1. SPACING OF TYPE 2 ARROW IS REPRESENTATIVE OF SPACING FOR TYPE 1, TYPE 3, TYPE 4, & TYPE 5 ARROWS.
2. ALL TURNING LANES SHALL HAVE A MINIMUM OF 2 ARROWS.
3. GROUND MOUNTED OR OVERHEAD SIGNING SHALL BE SUPPLEMENTED BY TYPE 1 WORD.

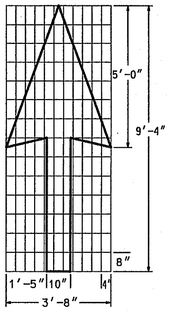
DATE	REVISIONS

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF TRAFFIC SAFETY & DESIGN

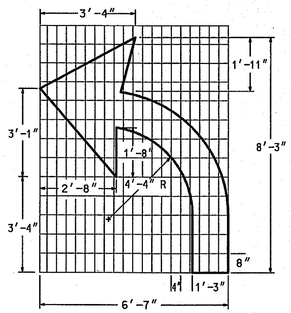
DETAILS OF PAVEMENT MARKING ARROW LOCATION

NO SCALE JANUARY 2000

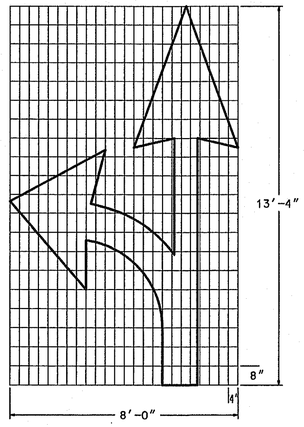
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	CSSTP-0006-00(869)	252	370



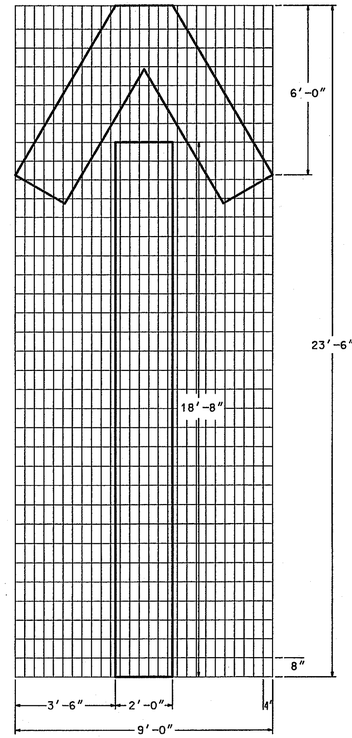
PAVEMENT MARKING, ARROW, TYPE 1
WHITE
(12.0 SQ. FT.)



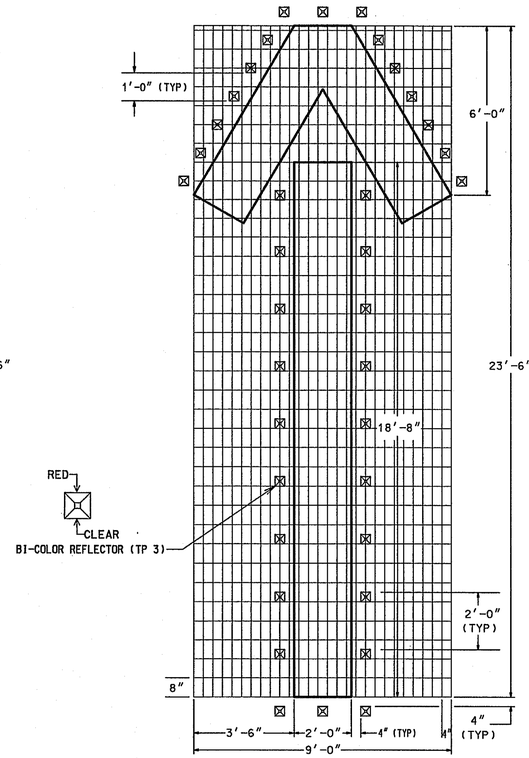
PAVEMENT MARKING, ARROW, TYPE 2
WHITE
(16.0 SQ. FT.)



PAVEMENT MARKING, ARROW, TYPE 3
WHITE
(28.5 SQ. FT.)

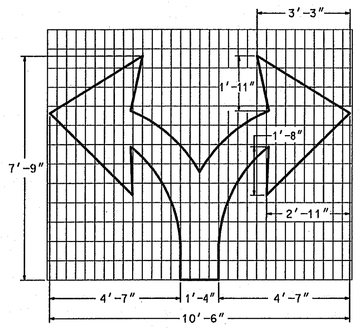


PAVEMENT MARKING, ARROW, TYPE 4
WHITE
(64.5 SQ. FT.)

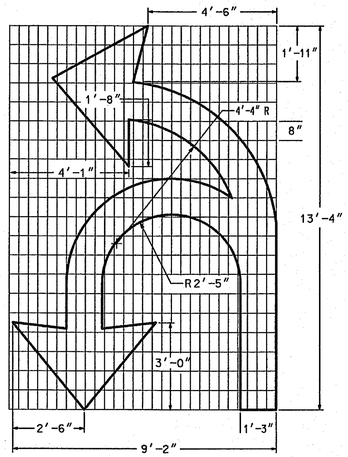


PAVEMENT MARKING, ARROW, WRONG WAY
WHITE
(64.5 SQ. FT.)

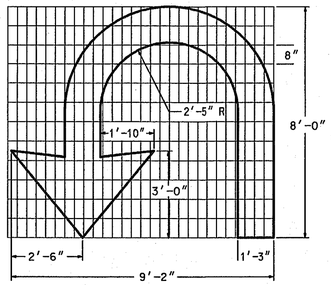
ARROW- WHITE REFLECTORIZED PAINT THERMOPLASTIC, AS SPECIFIED BY GEORGIA STANDARD SPECIFICATIONS, SECTION 655.



PAVEMENT MARKING, ARROW, TYPE 5
WHITE
(25.5 SQ. FT.)



PAVEMENT MARKING, ARROW, TYPE 6
WHITE
(42.0 SQ. FT.)



PAVEMENT MARKING, ARROW, TYPE 7
WHITE
(26.0 SQ. FT.)

DATE	REVISIONS
4-11-00	CHANGED LOCATION OF RPMs ON WRONG WAY ARROW

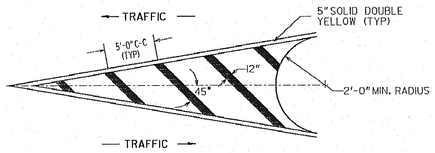
GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF TRAFFIC SAFETY & DESIGN

DETAILS OF
PAVEMENT MARKINGS-ARROWS

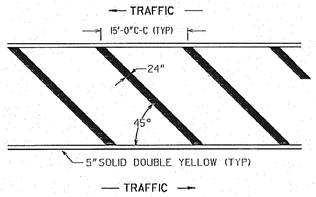
NO SCALE JANUARY 2000

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	CSSTP-0006-00(869)	253	370

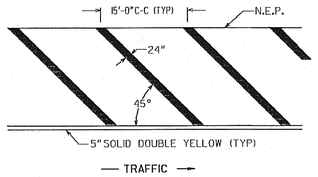
DETAIL "A" (YELLOW)



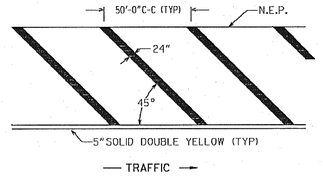
DETAIL "B" (YELLOW)



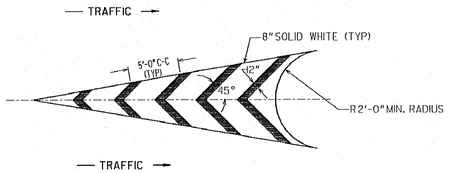
DETAIL "C" (YELLOW)



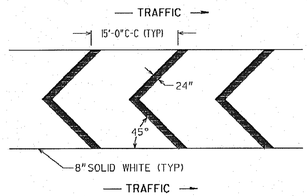
DETAIL "D" (YELLOW)



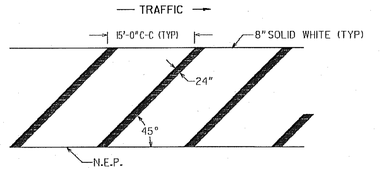
DETAIL "A" (WHITE)



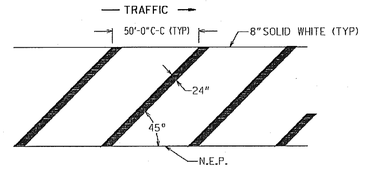
DETAIL "B" (WHITE)



DETAIL "C" (WHITE)



DETAIL "D" (WHITE)



GENERAL NOTES:

1. FOR YELLOW STRIPING. THE SQUARE YARDS SHOWN ON PLAN. SUMMARY AND DETAILED ESTIMATE SHEETS INCLUDE THE AREA WITHIN THE BORDERS AND THE 5" SOLID DOUBLE YELLOW BORDER.
2. FOR WHITE STRIPING. THE SQUARE YARDS SHOWN ON PLAN. SUMMARY AND DETAILED ESTIMATE SHEETS INCLUDES THE AREA WITHIN THE BORDERS AS WELL AS THE 8" SOLID WHITE BORDER.

GEORGIA
DEPARTMENT OF TRANSPORTATION

- NO SCALE -

DATE	REVISIONS
6/25/04	Modified general note 1
1/18/05	CHANGED BORDER
11/21/08	Modified general note 1

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: TRAFFIC OPERATIONS

SIGNING AND MARKING PLANS

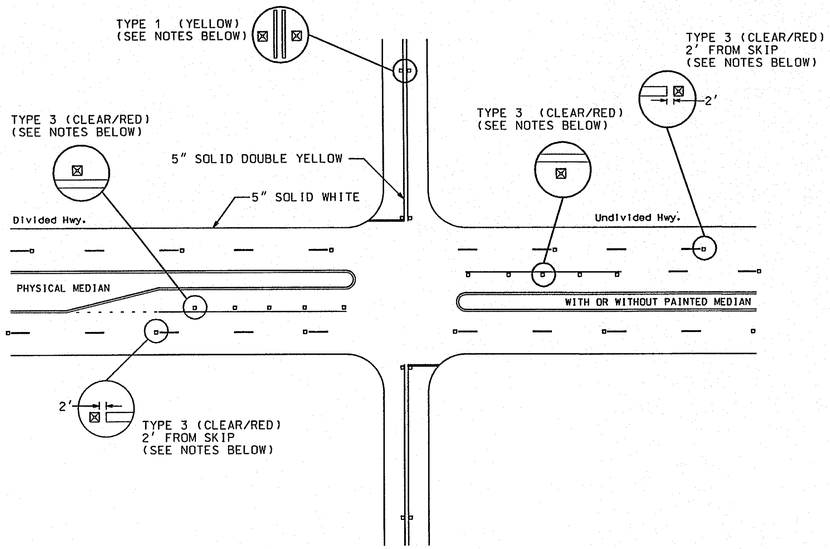
T-14

DETAIL OF PAVEMENT MARKING HATCHING

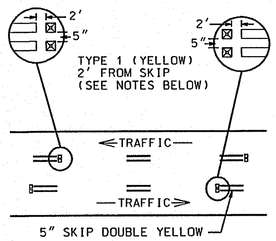
JANUARY 2000

NUMBER T -14

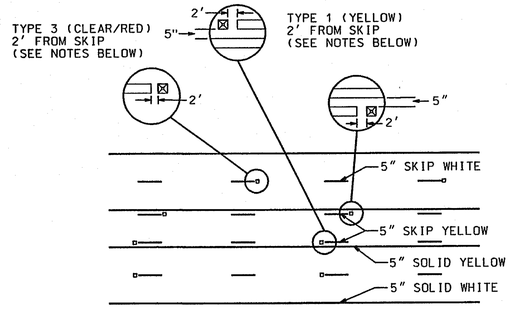
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	CSSTP-0006-00(869)	254	370



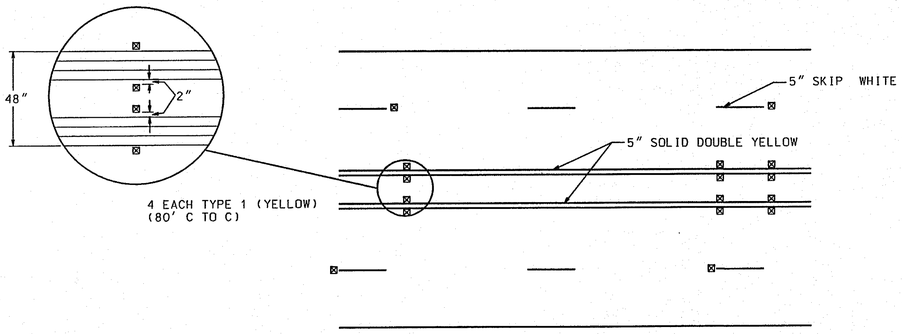
DIVIDED / UNDIVIDED HIGHWAY



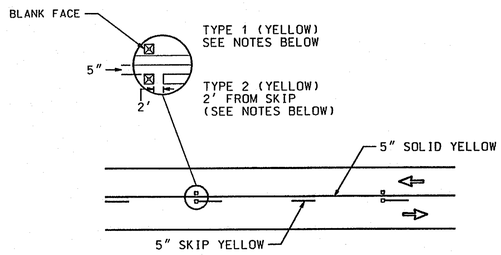
REVERSIBLE LANE



TWO WAY LEFT TURN LANE



4'-0" STRIPED FLUSH MEDIAN



NO PASSING ZONE

GENERAL NOTES:

1. RAISED PAVEMENT MARKERS SHALL BE SPACED EVERY 80 FT UNLESS OTHERWISE SPECIFIED.
2. ON SOLID WHITE TURN BAY LINES, SPACING SHALL BE 20 FT.
3. RAISED PAVEMENT MARKERS SHALL BE OFFSET 5 INCHES FROM SOLID LANE LINES.
4. CLEAR FACE OF TYPE 3 RAISED PAVEMENT MARKERS SHALL BE ORIENTED TOWARD ONCOMING TRAFFIC.
5. ON HORIZONTAL CURVES WHERE AT LEAST 3 MARKERS CANNOT BE SEEN AT ONE TIME USING NORMAL SPACING, MARKERS SHALL BE PLACED 40 FT.

T-15A

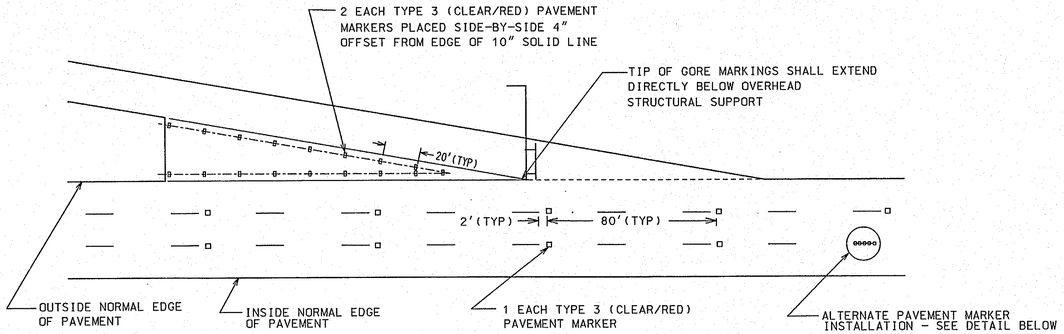
DATE	REVISIONS
9-4-03	NO PASSING ZONE RPM's
1-13-04	NO PASSING ZONE RPM's

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF TRAFFIC SAFETY & DESIGN

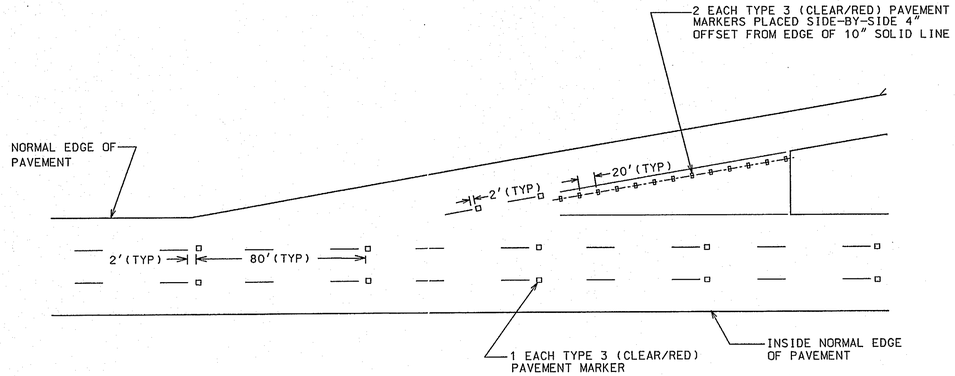
DETAILS OF
RAISED PAVEMENT MARKER LOCATION
NON-LIMITED ACCESS ROADWAY
NO SCALE JANUARY 2000

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	CSSTP-0006-00(869)	255	370

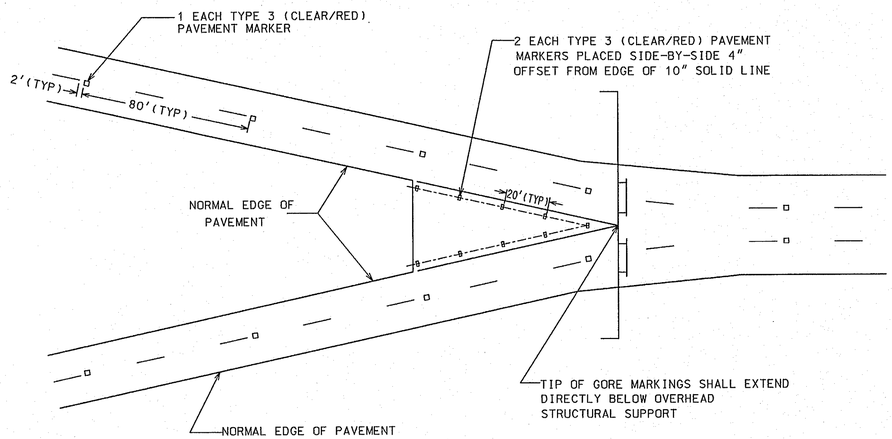
EXIT RAMP



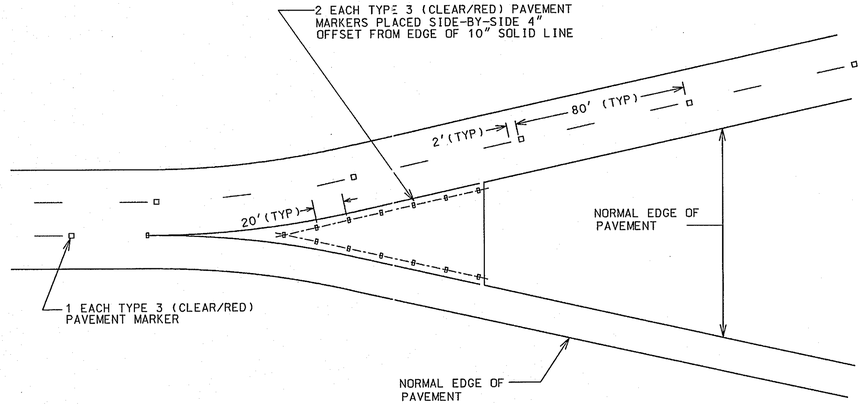
ENTRANCE RAMP

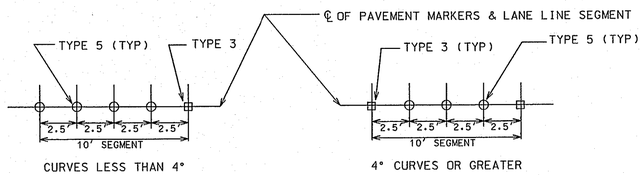


DIVERGING RAMPS



CONVERGING RAMPS





ALTERNATE PAVEMENT MARKER INSTALLATION

(USE ON ALL LANE LINES WHEN LANE LINES CROSS LONGITUDINAL CONCRETE PAVEMENT JOINTS)

T-15B

GENERAL NOTES:

1. FOR SPECIFICATIONS REFER TO STANDARD SPECIFICATIONS; SECTION 654-RAISED PAVEMENT MARKERS.
2. CENTERLINE OF TYPE 3 RAISED PAVEMENT MARKERS SHALL COINCIDE WITH CENTERLINE OF LANES.
3. CLEAR FACE OF TYPE 3 RAISED PAVEMENT MARKERS SHALL BE ORIENTED TOWARD APPROACHING TRAFFIC.

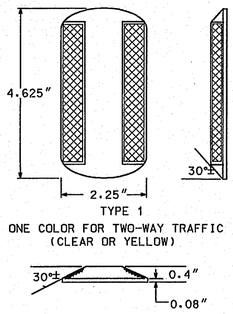
DATE	REVISIONS

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF TRAFFIC SAFETY & DESIGN

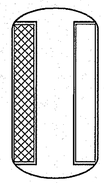
DETAILS OF RAISED PAVEMENT MARKER LOCATION LIMITED ACCESS ROADWAY

NO SCALE JANUARY 2000

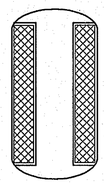
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	CSSTP-0006-00(869)	256	370



TYPE 1
ONE COLOR FOR TWO-WAY TRAFFIC
(CLEAR OR YELLOW)

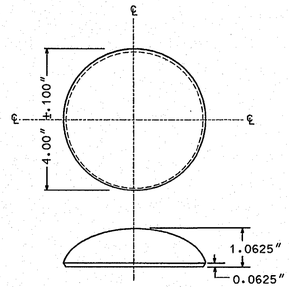


TYPE 2
ONE COLOR FOR ONE-WAY TRAFFIC
(CLEAR, YELLOW OR RED)

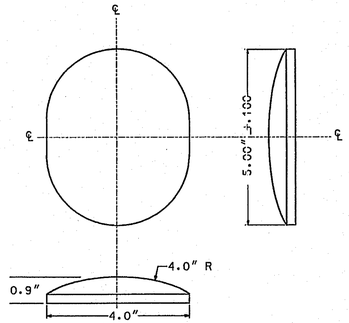


TYPE 3
TWO COLOR FOR ONE-WAY TRAFFIC
(ANY COMBINATION OF CLEAR, YELLOW OR RED)

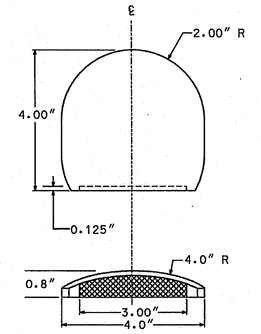
RAISED REFLECTIVE MARKERS



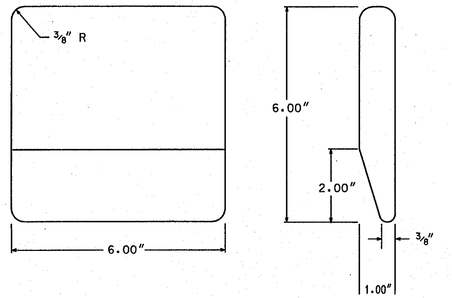
TYPE 4
OPAQUE CERAMIC MARKER
(WHITE, YELLOW OR BLACK)



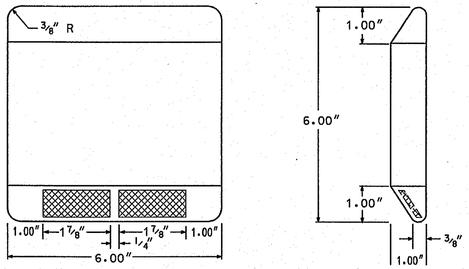
TYPE 5
OVAL CERAMIC MARKER
(NON-REFLECTIVE WHITE, YELLOW OR BLACK)



TYPE 6
REFLECTIVE CERAMIC MARKER
(REFLECTIVE WHITE, YELLOW OR BLACK)

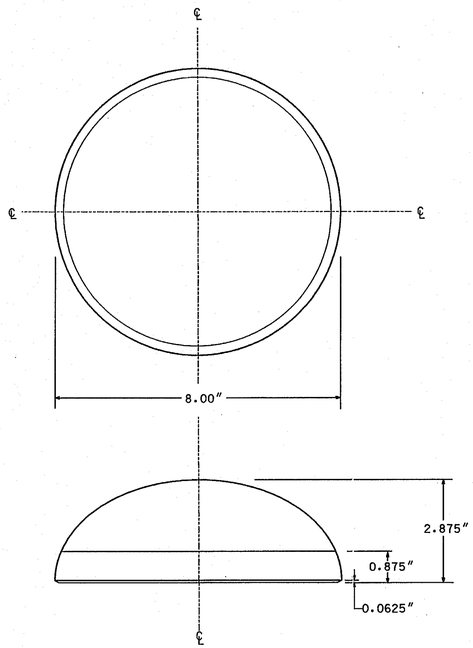


TYPE 7
NON-REFLECTIVE MARKER
(WHITE OR YELLOW)

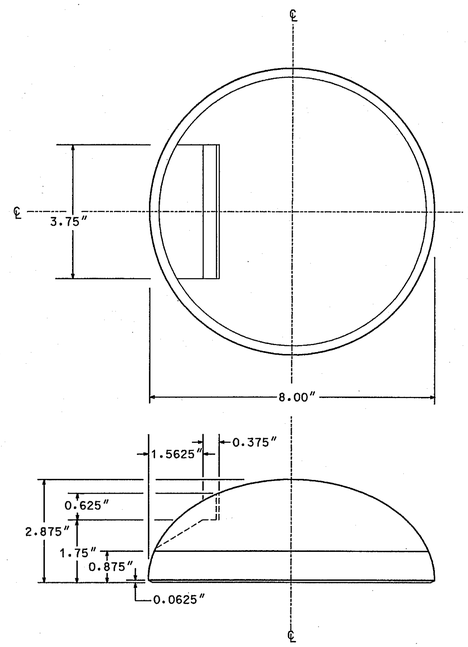


TYPE 8
REFLECTIVE MARKER
(WHITE OR YELLOW)

CERAMIC JIGGLE BAR MARKER

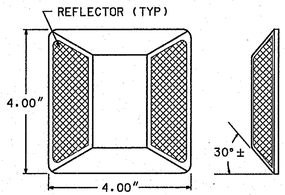


TYPE 9
NON-REFLECTIVE
(WHITE OR YELLOW)

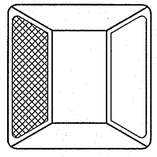


TYPE 10
REFLECTIVE
(WHITE OR YELLOW)

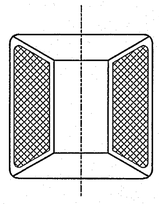
CERAMIC CHANNEL MARKER



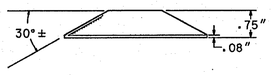
TYPE 11
ONE COLOR FOR TWO-WAY TRAFFIC
(CLEAR OR YELLOW)



TYPE 12
ONE COLOR FOR ONE-WAY TRAFFIC
(CLEAR, YELLOW, OR RED)



TYPE 13
TWO COLOR FOR ONE-WAY TRAFFIC
(ANY COMBINATION OF CLEAR, YELLOW, OR RED)



ALTERNATE RAISED REFLECTIVE MARKERS

GENERAL NOTES:

1. SPECIFICATIONS SHALL BE PER THE SPECIAL PROVISIONS, OR AS SPECIFIED BELOW.
2. COLORS FOR REFLECTIVE ELEMENTS SHALL BE EITHER CLEAR, YELLOW, OR RED AS SPECIFIED.
3. THE SHELL OF THE REFLECTIVE MARKERS SHALL BE OF ONE COLOR OR OF A COMBINATION OF TWO COLORS, WHICH SHALL BE THE SAME AS THE REFLECTIVE ELEMENT.
4. THE SURFACE OF OPAQUE CERAMIC MARKERS SHALL BE GLAZED AND OF THE COLOR SPECIFIED IN THE PLANS WITH A WHITE, VITREOUS, CERAMIC BASE.
5. RAISED REFLECTIVE MARKERS TYPES 1, 2, AND 3 SHALL BE STIMSONITE SERIES 948, OR EQUAL.
6. CERAMIC JIGGLE BARS SHALL BE FERRO CORPORATION PENMARK P-6, OR EQUAL. ADHESIVE SHALL BE PER MANUFACTUROR'S SPECIFICATIONS.
7. CERAMIC CHANNEL MARKERS SHALL BE FERRO CORPORATION PENMARK P-18, OR EQUAL. ADHESIVE SHALL BE PER MANUFACTUROR'S SPECIFICATIONS.
8. COLORS FOR ALL RAISED PAVEMENT MARKERS SHALL BE AS SPECIFIED IN THE PLANS.

T-15C

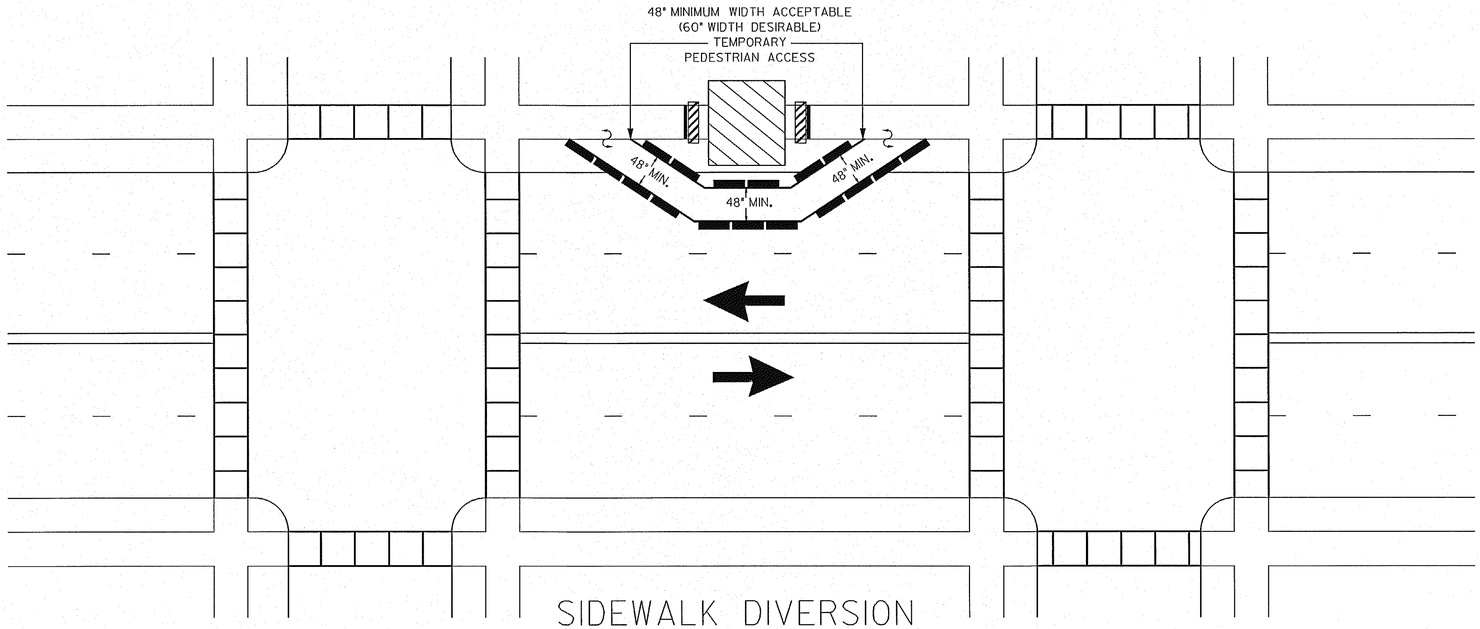
DATE	REVISIONS

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF TRAFFIC SAFETY & DESIGN

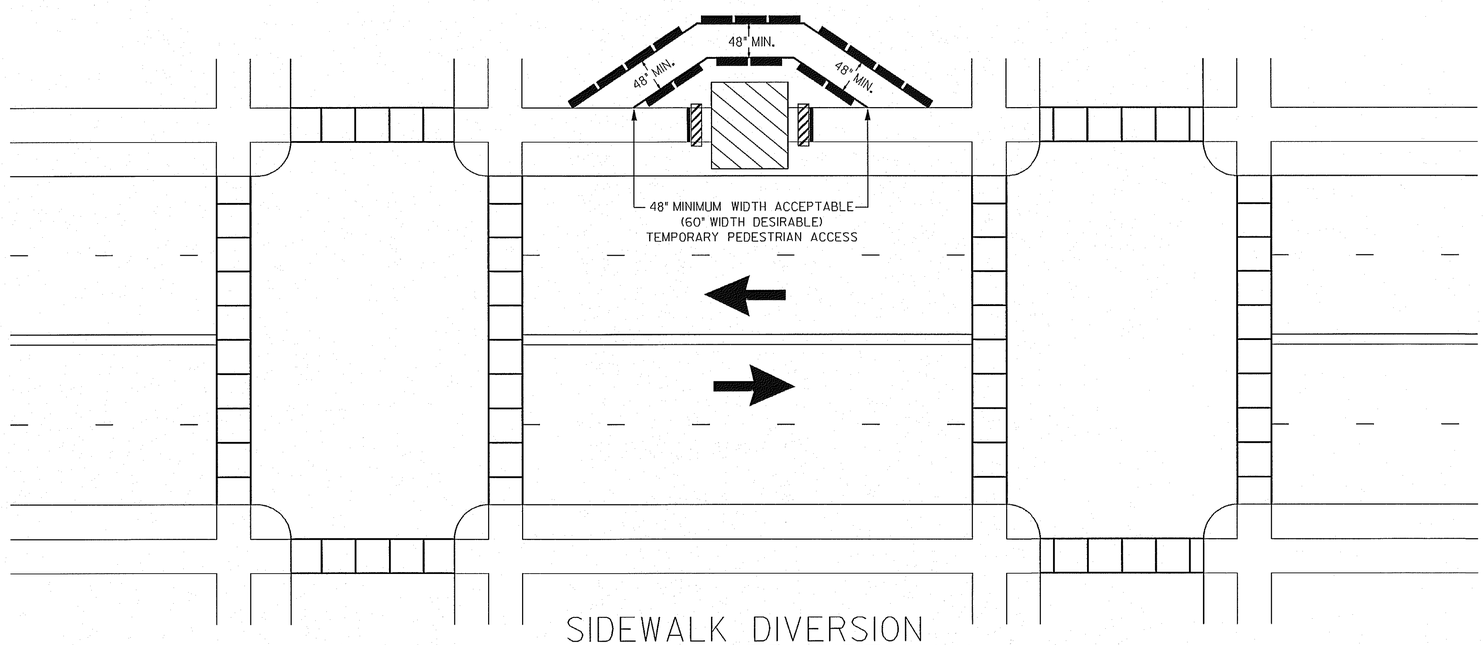
DETAILS OF
RAISED PAVEMENT MARKERS

NO SCALE JANUARY 2000

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	CSSTP-0006-00(869)	257	370



SIDEWALK DIVERSION
THROUGH ON-STREET PAVEMENT



SIDEWALK DIVERSION
BEHIND CLOSED SIDEWALK

GENERAL NOTES:

1. CLOSURES OF EXISTING PEDESTRIAN FACILITIES SHALL HAVE PRIOR WRITTEN APPROVAL OF THE ENGINEER.
2. ALL TRAFFIC CONTROL DEVICES SHALL BE MADE AND ERECTED IN ACCORDANCE WITH THE DETAILS SHOWN ON THE PLANS, THE MUTCD, THE GEORGIA STANDARD SPECIFICATIONS, AND/OR SPECIAL PROVISIONS. (SEE SECTION 150) DETECTABLE EDGING AND DETECTABLE BARRIERS SHALL BE IN COMPLIANCE WITH THE MUTCD AND ADA REGULATIONS.
3. SIGNS AND OTHER DEVICES SHALL BE PLACED SUCH THAT THEY DO NOT NARROW OR RESTRICT ANY PEDESTRIAN PASSAGE TO LESS THAN 48 INCHES (4 FT) IN WIDTH. SIGNS AND OTHER DEVICES MOUNTED LOWER THAN SEVEN (7) FEET ABOVE THE TEMPORARY PEDESTRIAN WALKWAY SHALL NOT PROJECT MORE THAN FOUR (4) INCHES INTO THE ACCESSIBLE PEDESTRIAN FACILITIES.
4. NO PAYMENT WILL BE MADE FOR TEMPORARY WALKWAYS WITH DETECTABLE EDGING WHERE EXISTING PAVEMENTS OR EXISTING EDGING (THAT MEETS THE REQUIREMENTS OF MUTCD) ARE UTILIZED FOR THE TEMPORARY WALKWAY. PAYMENT FOR TEMPORARY DETECTABLE EDGING, INCLUDING APPROVED BARRIERS AND CHANNELIZING DEVICES, THAT ARE INSTALLED ON EXISTING PAVEMENTS SHALL BE INCLUDED IN TRAFFIC CONTROL-LUMP SUM.
5. REGARDLESS OF THE MATERIALS USED, THE CONTRACTOR SHALL CONSTRUCT TEMPORARY WALKWAYS (WITH DETECTABLE EDGING) OF SUFFICIENT THICKNESS AND DURABILITY TO WITHSTAND THE INTENDED USE FOR THE DURATION OF THE CONSTRUCTION PROJECT (SEE SECTION 150 FOR MINIMUM DESIGN PARAMETERS). THE USE OF COMPACTED SOILS, SANDS, CRUSHED STONE, OR ASPHALTIC PAVEMENT MILLINGS SHALL NOT BE USED AS A SURFACE COURSE FOR TEMPORARY PEDESTRIAN WALKWAYS.
6. A 60-INCH MINIMUM WIDTH PEDESTRIAN FACILITY SHOULD BE MAINTAINED WHEN POSSIBLE. WHEN A 60-INCH MINIMUM WIDTH CANNOT BE ACHIEVED, A MINIMUM WIDTH OF 48 INCHES SHALL BE PROVIDED WITH PASSING ZONES (60 INCHES BY 60 INCHES) AT LEAST EVERY 200 FEET.
7. TEMPORARY AUDIBLE INFORMATION DEVICES SHOULD BE USED WHERE MIDBLOCK CLOSINGS AND CHANGED CROSSWALK AREAS CAUSE INADEQUATE COMMUNICATION TO BE PROVIDED TO PEDESTRIANS WHO HAVE VISUAL DISABILITIES.
8. WHEN CURB CUT RAMP IS NOT PRESENT, TEMPORARY OR PERMANENT CURB CUT RAMP WILL BE PROVIDED BY CONTRACTOR.

STANDARD LEGEND

DETECTABLE BARRIER	CURB CUT RAMP WITH DETECTABLE SURFACE WARNING
DETECTABLE EDGING	SIGN
WORK SITE	DIRECTION OF TRAFFIC LANE(S)

GLO	REVISED TITLE BLOCK	10-16-08	DATE
BY	REVISION		

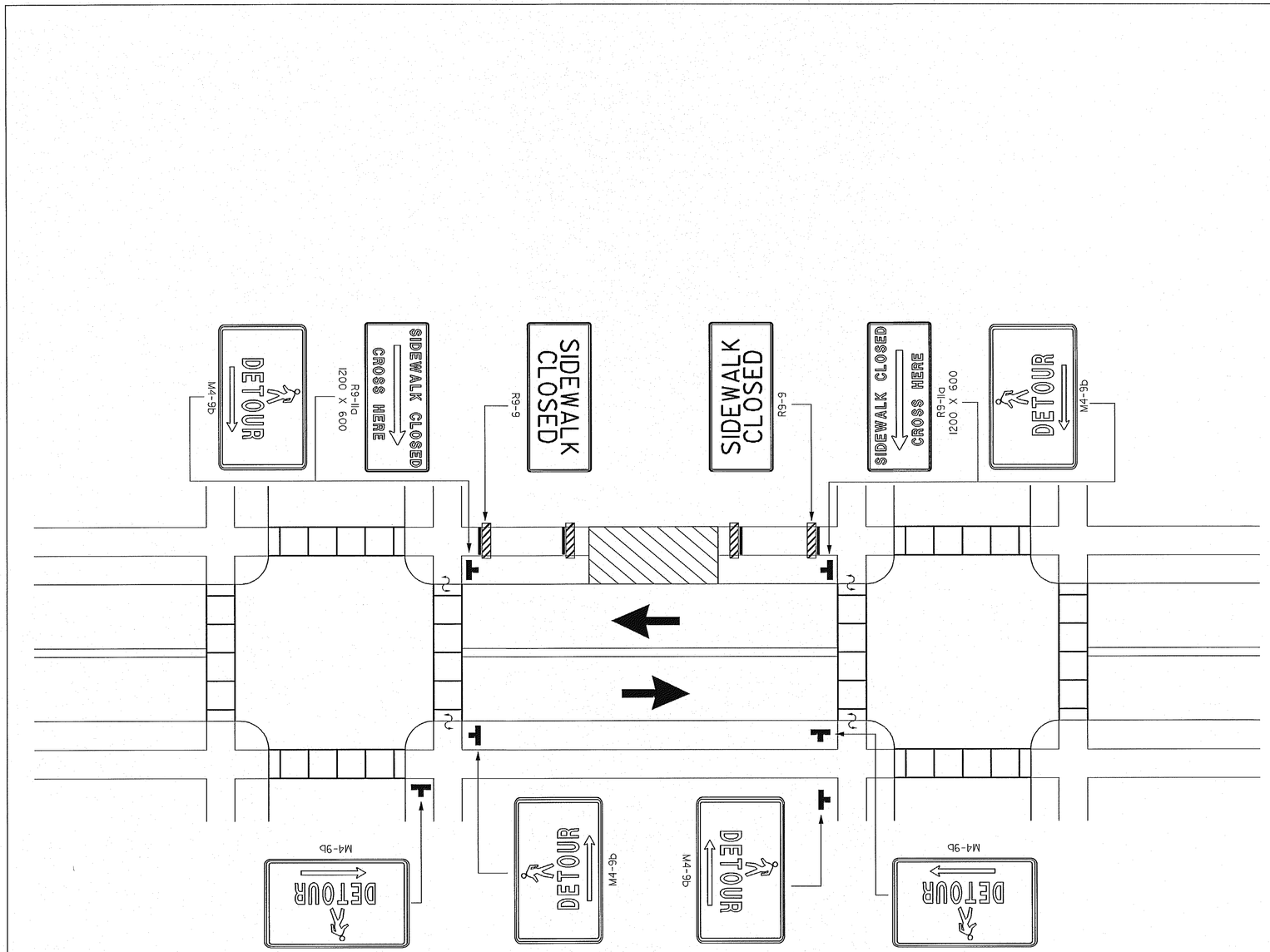
DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

CONSTRUCTION DETAIL
TRAFFIC CONTROL
PEDESTRIAN ACCESSIBILITY
AROUND WORKZONE -
SIDEWALK DIVERSION

NO SCALE SEPTEMBER 2008

T-20

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	CSSTP-0006-00(869)	258	370



SIDEWALK DETOUR

GENERAL NOTES:

1. CLOSURES OF EXISTING PEDESTRIAN FACILITIES SHALL HAVE PRIOR WRITTEN APPROVAL OF THE ENGINEER.

2. ALL TRAFFIC CONTROL DEVICES SHALL BE MADE AND ERECTED IN ACCORDANCE WITH THE DETAILS SHOWN ON THE PLANS, THE MUTCD, THE GEORGIA STANDARD SPECIFICATIONS, AND/OR SPECIAL PROVISIONS. (SEE SECTION 150) DETECTABLE EDGING AND DETECTABLE BARRIERS SHALL BE IN COMPLIANCE WITH THE MUTCD AND ADA REGULATIONS.

3. SIGNS AND OTHER DEVICES SHALL BE PLACED SUCH THAT THEY DO NOT NARROW OR RESTRICT ANY PEDESTRIAN PASSAGE TO LESS THAN 1200 mm IN WIDTH. SIGNS AND OTHER DEVICES MOUNTED LOWER THAN 2100 mm ABOVE THE TEMPORARY PEDESTRIAN WALKWAY SHALL NOT PROJECT MORE THAN 100 mm INTO THE ACCESSIBLE PEDESTRIAN FACILITIES.

4. NO PAYMENT WILL BE MADE FOR TEMPORARY WALKWAYS WITH DETECTABLE EDGING WHERE EXISTING PAVEMENTS OR EXISTING EDGING (THAT MEETS THE REQUIREMENTS OF MUTCD) ARE UTILIZED FOR THE TEMPORARY WALKWAY. PAYMENT FOR TEMPORARY DETECTABLE EDGING, INCLUDING APPROVED BARRIERS AND CHANNELIZING DEVICES, THAT ARE INSTALLED ON EXISTING PAVEMENTS SHALL BE INCLUDED IN TRAFFIC CONTROL-LUMP SUM.

5. REGARDLESS OF THE MATERIALS USED, THE CONTRACTOR SHALL CONSTRUCT TEMPORARY WALKWAYS (WITH DETECTABLE EDGING) OF SUFFICIENT THICKNESS AND DURABILITY TO WITHSTAND THE INTENDED USE FOR THE DURATION OF THE CONSTRUCTION PROJECT (SEE SECTION 150 FOR MINIMUM DESIGN PARAMETERS). THE USE OF COMPACTED SOILS, SANDS, CRUSHED STONE, OR ASPHALTIC PAVEMENT MILLINGS SHALL NOT BE USED AS A SURFACE COURSE FOR TEMPORARY PEDESTRIAN WALKWAYS.

6. A 1500 mm MINIMUM WIDTH PEDESTRIAN FACILITY SHOULD BE MAINTAINED WHEN POSSIBLE. WHEN A 1500 mm MINIMUM WIDTH CANNOT BE ACHIEVED, A MINIMUM WIDTH OF 1200 mm SHALL BE PROVIDED WITH PASSING ZONES (1500 mm BY 1500 mm) AT LEAST EVERY 66 METERS.

7. TEMPORARY AUDIBLE INFORMATION DEVICES SHOULD BE USED WHERE MIDBLOCK CLOSINGS AND CHANGED CROSSWALK AREAS CAUSE INADEQUATE COMMUNICATION TO BE PROVIDED TO PEDESTRIANS WHO HAVE VISUAL DISABILITIES.

8. WHEN CURB CUT RAMP IS NOT PRESENT, TEMPORARY OR PERMANENT CURB CUT RAMP WILL BE PROVIDED BY CONTRACTOR.

STANDARD LEGEND	
DETECTABLE BARRIER	CURB CUT RAMP WITH DETECTABLE SURFACE WARNING
DETECTABLE EDGING	SIGN
WORK SITE	DIRECTION OF TRAFFIC LANE(S)

NOTE: DIMENSIONS ARE IN MILLIMETERS UNLESS SPECIFIED OTHERWISE.

REVISED TITLE BLOCK	10-16-08
REVISION	DATE
GLO	
BY	

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

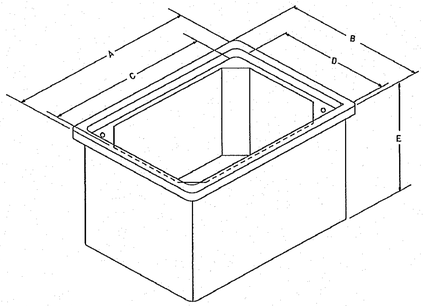
CONSTRUCTION DETAIL

TRAFFIC CONTROL
PEDESTRIAN ACCESSIBILITY
AROUND WORKZONE - SIDEWALK DETOUR
(METRIC)

NO SCALE — SEPTEMBER 2008

T-21

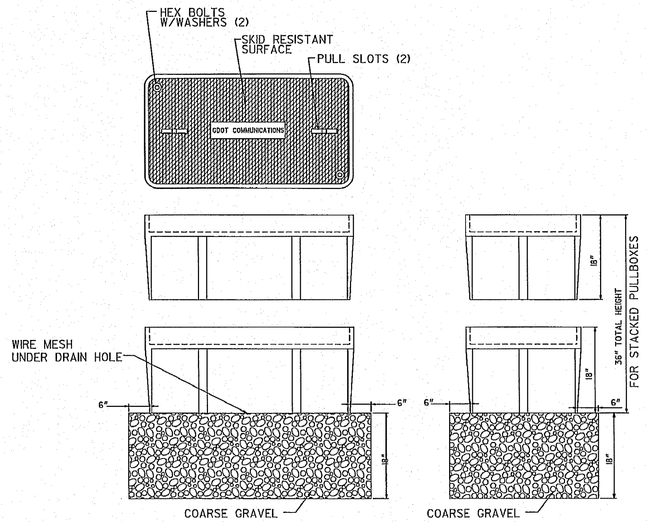
PULLBOX DIMENSIONS



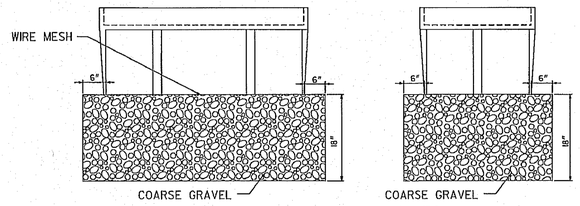
PULL BOX TYPE	* SIZE (IN.)				
	A	B	C	D	E
1	14	14	12	12	12
2	21	14	18	11	12
3	33	20	30	17	12
4S	38	26	36	24	18
4	38	26	36	24	36
5S	50	32	48	30	18
5	50	32	48	30	36
6	38	26	36	24	36
7	50	32	48	30	36

* SIZES SHOWN ARE MINIMUM TRADE SIZES. DIMENSIONS C AND D ARE MINIMUM REQUIREMENTS WITH A TOLERANCE OF NO MORE THAN - 0.50 IN/+2.0 IN.

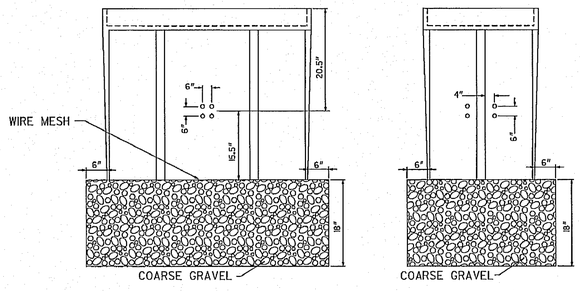
TYPE 4, 5, 4S, 5S, 6, AND 7 PULLBOX ASSEMBLIES



TYPE 4 AND 5

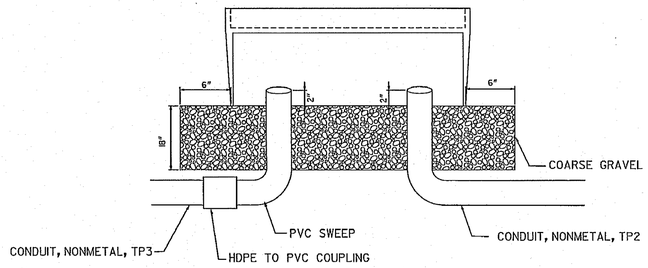


TYPE 4S AND 5S

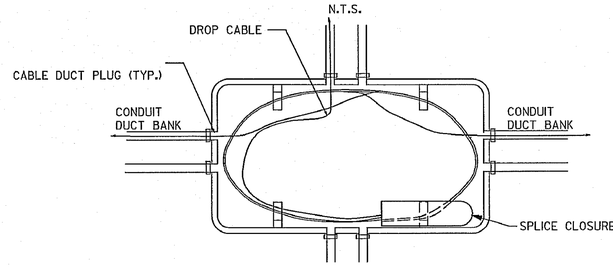


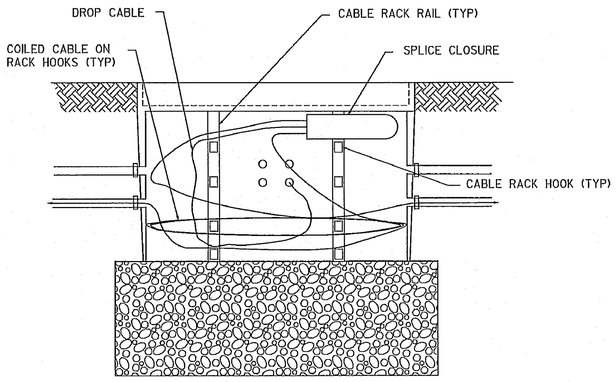
TYPE 6 AND 7

TYPICAL CONDUIT ENTRANCE DETAILS
TYPE 1,2,3,4S & 5S



FIBER OPTIC CABLE MANAGEMENT IN TYPE 4,5,6 & 7 PULL BOX





FIBER TRUNK AND DROP CABLE IN CLOSURE SHALL BE COILED TOGETHER. SEPARATE FIBER CABLES SHALL BE COILED SEPARATELY AND SUPPORTED ON SEPARATE RACK HOOKS.

Guidelines For Usage On Metric Projects

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GEORGIA
DEPARTMENT OF TRANSPORTATION

-NO SCALE-

REVISION DATES		
11/02/2000		
07/27/2004		
08/11/2006		

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: TRAFFIC OPERATIONS
SIGNAL PLANS

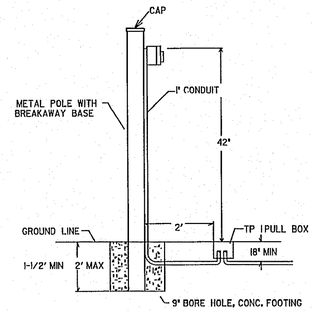
TS-02

PULL BOX ASSEMBLY AND INSTALLATION

DRAWING No.

3/1/2007 GPLN

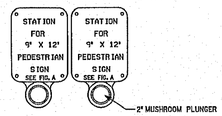
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	CSSTP-0006-00(869)	260	370



PED. PUSH BUTTON POST

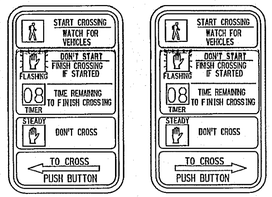
FOR USE WHEN DITCHES OR UNEVEN TERRAIN IS BETWEEN POLE AND EDGE OF PAVEMENT.

PED PUSH BUTTON WITH SIGN (FIG "A")



DETAIL "A"
THE TERM PUSH BUTTON SHALL MEAN A PUSH BUTTON STATION WITH AN INTEGRATED BUTTON AND SIGN ASSEMBLY AS SHOWN ON DETAIL "A"

PEDESTRIAN SIGNS

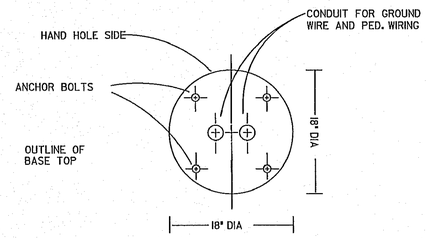


R1Ø-3E(L) 9" X 12"

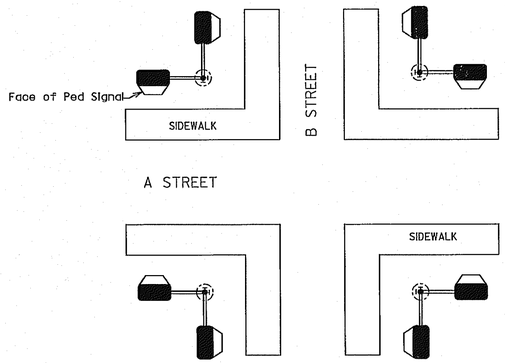
R1Ø-3E(R) 9" X 12"

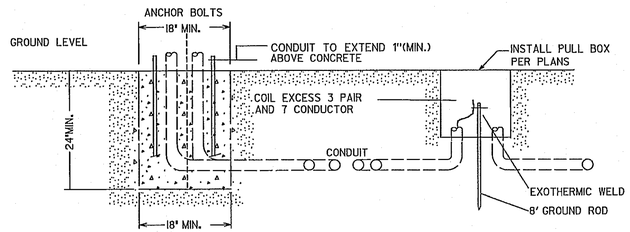
FIG. A

PEDESTRIAN SIGNAL HEAD ORIENTATION

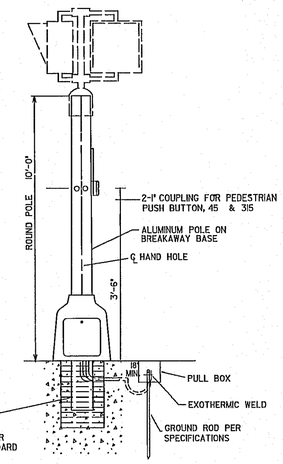


PED POLE BASE
(TOP VIEW)



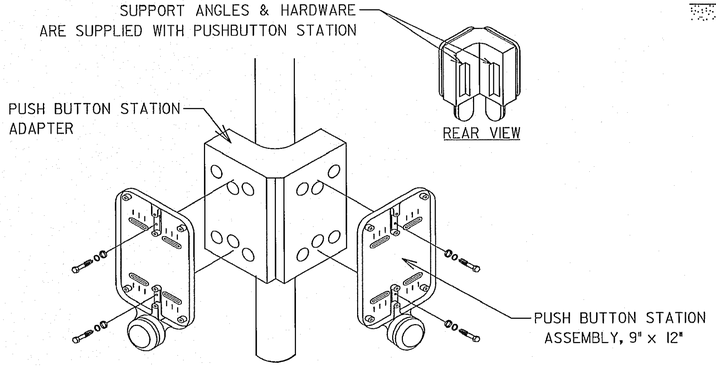


PED. POLE BASE



TYPICAL DETAIL FOR PEDESTRIAN SIGNAL POLES

SUPPORT ANGLES & HARDWARE ARE SUPPLIED WITH PUSHBUTTON STATION



DOUBLE PUSH BUTTON STATION ADAPTER FOR 4" DIA. PEDESTRIAN POLE

Guidelines For Usage On Metric Projects

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GEORGIA
DEPARTMENT OF TRANSPORTATION

-NO SCALE -

REVISION DATES		
3/31/2002	3/5/2007	
10/31/2002		
2/15/2003		
7/27/2004		
3/04/2005		
8/8/2006		

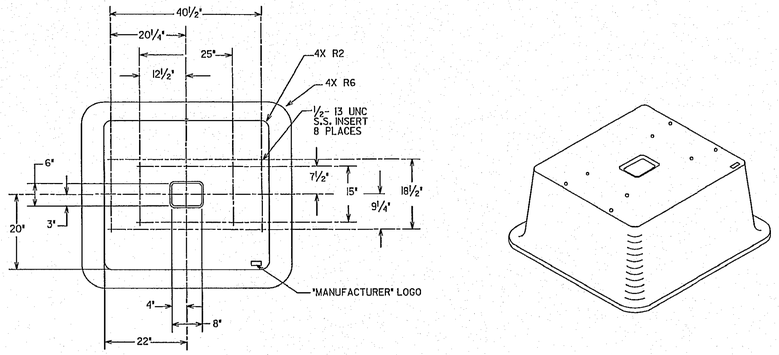
STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: TRAFFIC OPERATIONS
SIGNAL PLANS

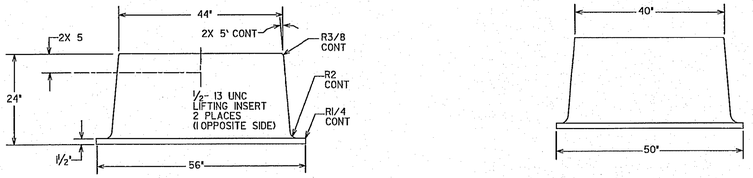
DETAILS OF PEDESTRIAN FACILITIES

DECEMBER 1998

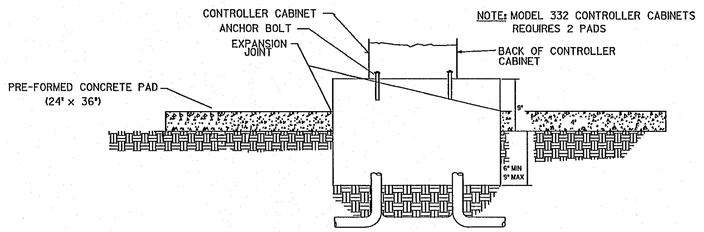
DRAWING No. TS-03a

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	CSSTP-0006-00(869)	261	370



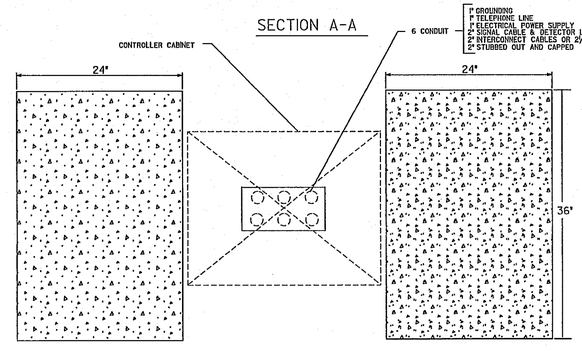


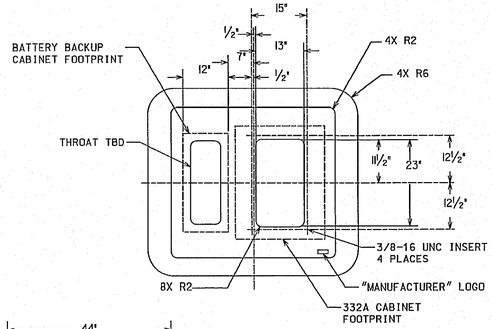
PREFABRICATED 332 CONTROLLER BASE

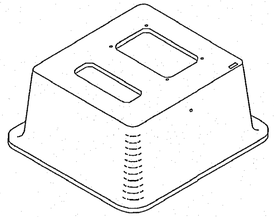


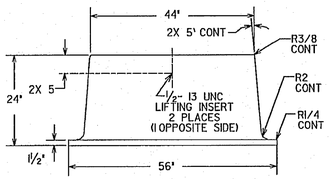
NOTE: MODEL 332 CONTROLLER CABINETS REQUIRES 2 PADS

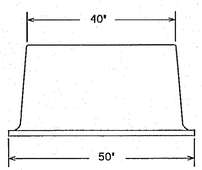
SECTION A-A



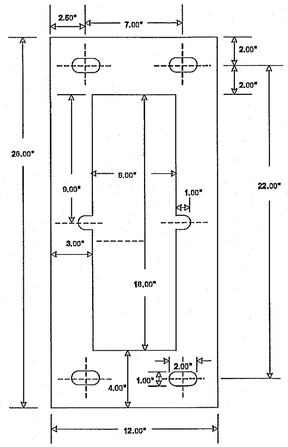








PREFABRICATED CONTROLLER BASE
WITH BATTERY BACKUP BASE MOUNT EXTENSION



BATTERY BACKUP BASE MOUNT
CABINET ANCHOR BOLT PATTER

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GEORGIA
DEPARTMENT OF TRANSPORTATION

- NO SCALE -

REVISION DATES		
3/5/2007		

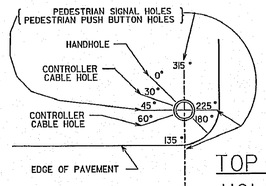
STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: TRAFFIC OPERATIONS

SIGNAL DETAILS

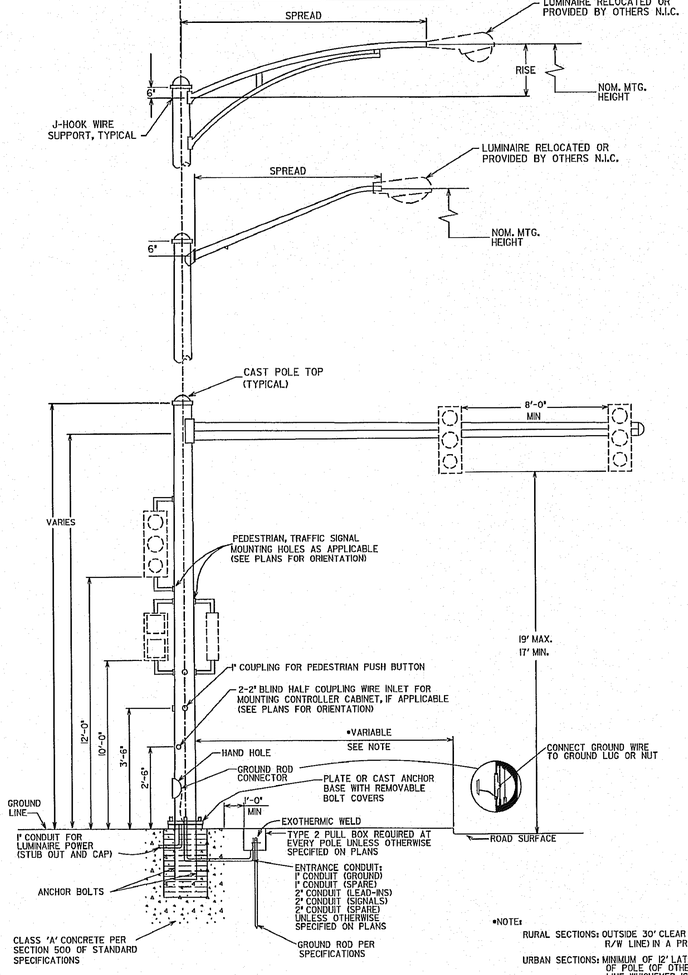
DETAILS OF CONTROLLER CABINET EQUIPMENT DECEMBER 1998

TS-03b
DRAWING No.

3/1/2007 GPLN

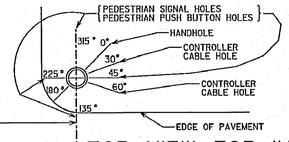


TOP VIEW FOR INLET HOLES ORIENTATION

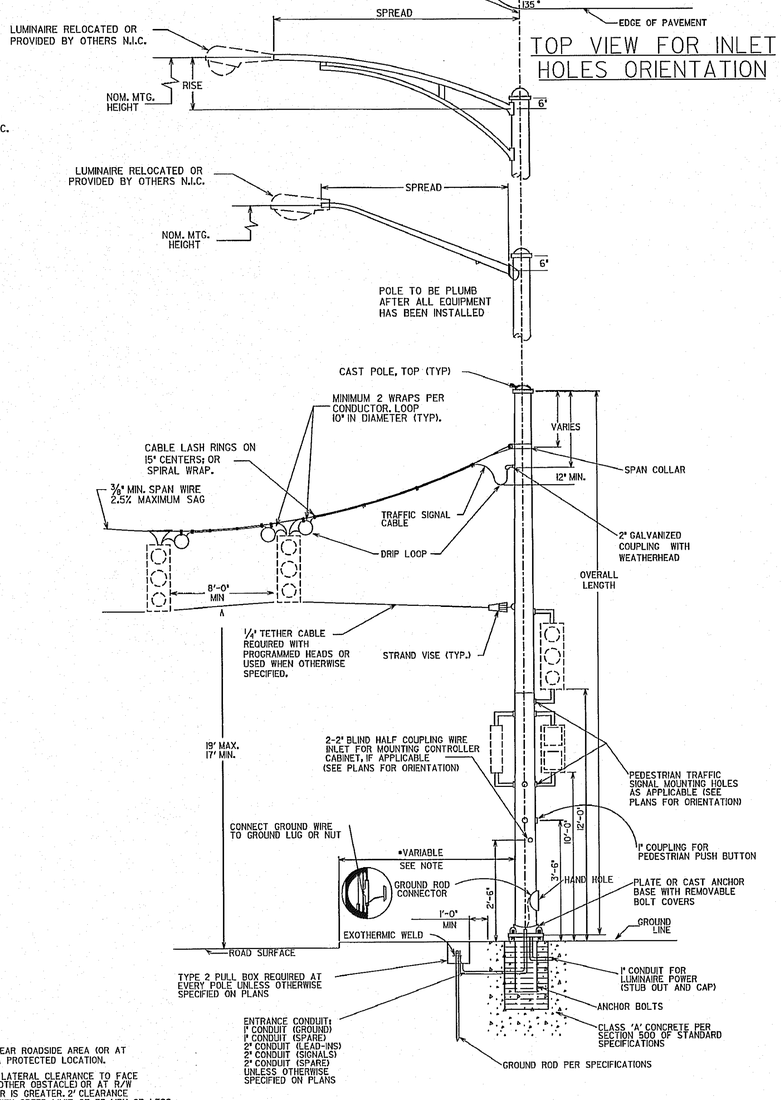


*NOTE:
RURAL SECTIONS: OUTSIDE 30' CLEAR ROADSIDE AREA (OR AT R/W LINE) IN A PROTECTED LOCATION.
URBAN SECTIONS: MINIMUM OF 12' LATERAL CLEARANCE TO FACE OF POLE (OF OTHER OBSTACLE) OR AT R/W LINE WHICHEVER IS GREATER, 2' CLEARANCE ACCEPTABLE WITH SPEED LIMIT OF 35 MPH OR LESS.

TYPICAL MAST ARM POLE DETAIL



TOP VIEW FOR INLET HOLES ORIENTATION



TYPICAL STEEL STRAIN POLE DETAIL

NOTES:

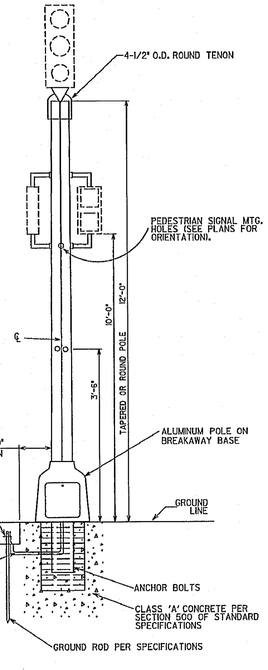
DRAWINGS AND OTHER DATA INDICATING POLE DIMENSIONS AND DESIGN TOGETHER WITH DESIGN OF BASE SHALL BE PREPARED BY THE CONTRACTOR AND APPROVED BY THE DEPT. ENGINEER, PER SPECIFICATIONS AND DETAILS.

FOUNDATION SIZE AND REINFORCING SHALL BE DETERMINED FROM THE 'STRAIN POLE FOUNDATIONS' SHEET WITH THE USE OF THE BENDING MOMENT AT YIELD PROVIDED BY POLE MANUFACTURER.

ALL HOLES IN MAST ARMS MUST BE FABRICATED BY THE MANUFACTURER. SEE SECTION 925 OF STANDARD SPECIFICATIONS REGARDING RIGID MOUNTING HARDWARE FOR SIGNAL HEADS.

WHEN POLES ARE LOCATED ON ALL CORNERS, LUMINARIES ARE TO BE INSTALLED PERPENDICULAR TO THE FAR SIDE APPROACHING TRAFFIC.

WHEN LUMINARIES ARE ONLY BEING INSTALLED ON TWO CORNERS, THEY SHOULD BE INSTALLED PERPENDICULAR TO THE FAR SIDE APPROACHING TRAFFIC ON THE MAJOR APPROACH.



PEDESTAL POLE MOUNTED SIGNAL HEAD

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GEORGIA
DEPARTMENT OF TRANSPORTATION

-NO SCALE-

REVISION DATES		
06/2000		
09/2001		
07/2004		

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: TRAFFIC OPERATIONS

SIGNAL PLANS

DETAILS OF METAL TRAFFIC SIGNAL SUPPORT STRUCTURES

TS-04
DRAWING No.

DECEMBER 1998

3/1/2007 GPLN