

TOWN OF CUTLER BAY

CARIBBEAN BOULEVARD ROADWAY IMPROVEMENTS

FINAL GAP (SW 87TH AVENUE TO SW 184TH STREET)

CUTLER BAY, FLORIDA

FDOT FM # 447985-1-58-01

DEVELOPED FOR:

TOWN OF CUTLER BAY



TOWN COUNCIL:

TIM MEERBOTT, MAYOR

MICHAEL P. CALLAHAN, VICE MAYOR

ROBERT DUNCAN, COUNCIL MEMBER 1

SUZY LORD, COUNCIL MEMBER 2

RICHARD RAMIREZ, COUNCIL MEMBER 3

PROJECT No. 215617296

FINAL PLANS SUBMITTAL

THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH AND ARE GOVERNED BY THE MIAMI-DADE COUNTY PUBLIC WORKS DEPARTMENT STANDARDS AND SPECIFICATIONS PARTS 1, 2 AND 3, THE MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS (2018), THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD PLANS (FY2023-2024), AND THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, AS AMENDED BY CONTRACT DOCUMENTS.

APPROVED BY

CARLOS HERDOCIA

LICENSE

No 47660

STATE OF FLORIDA

PROFESSIONAL ENGINEER

Date:  
2/25/2025

CARLOS HERDOCIA, P.E.  
No. 47660

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*FY 2024-25 FDOT STANDARD PLANS		

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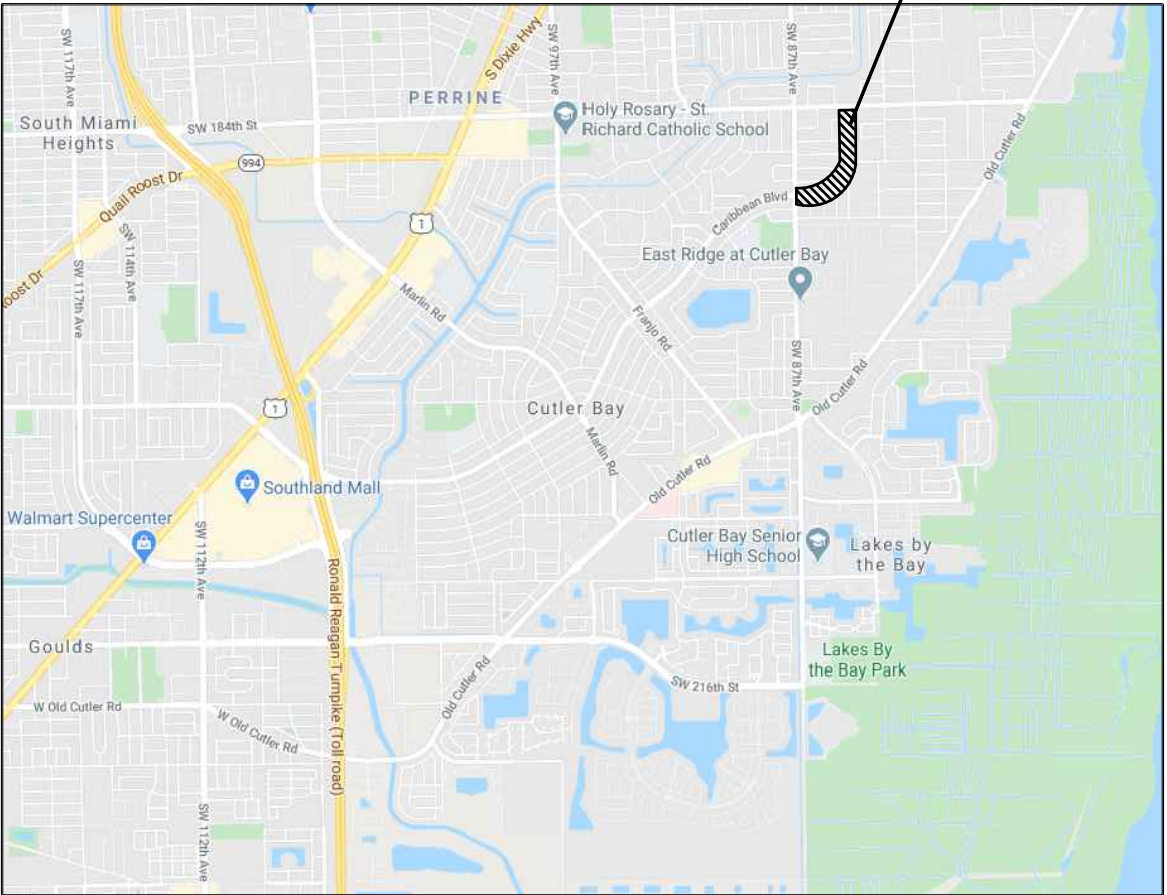
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AGENCY	SUBMITTAL DATE	APPROVAL DATE	PERMIT NUMBER



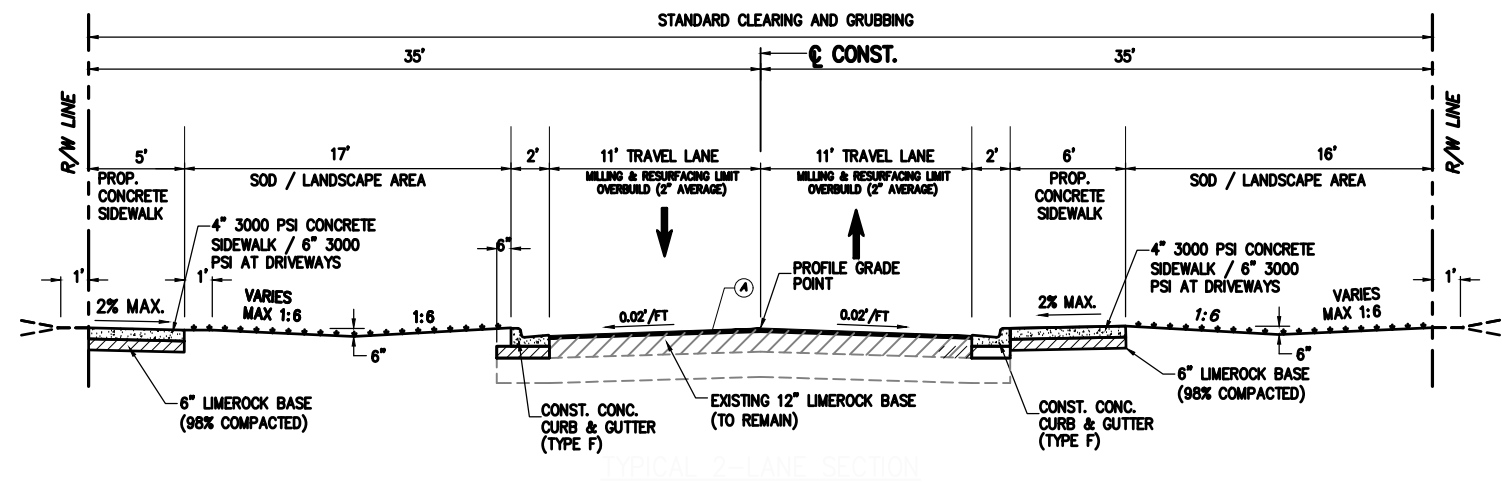
THE SCALE OF THESE DRAWINGS MAY HAVE CHANGED DUE TO REPRODUCTION

LOCATION SKETCH

Scale: NTS



PROJECT LOCATION



DESIGN SPEED= 30 MPH

- ④ MILL EXISTING ASPHALT PAVEMENT 2" AVG DEPTH)  
OVERBUILD: TYPE SP OVERBUILD (TRAFFIC C)(THICKNESS 2" AVERAGE)  
RESURFACING: FRICTION COURSE FC 9.5 (1" TRAFFIC C) (PG 76-22)

TYPE "F" CURB AND GUTTER

A

B

MATCH EXIST. ELEVATION

ASPHALT OVERLAY

EXISTING ASPHALT

EXISTING 12" LIMEROCK BASE

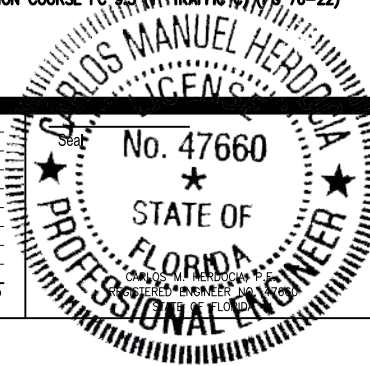
C

- (A) FRICTION COURSE FC 9.5 1" AND 2" (MIN.) TYPE SP 9TL-C
- (B) NEW LIMEROCK BASE (12" THICK) (PRIMED)
- (C) NEW 12" TYPE "B" STABILIZED SUBGRADE (LBR=40)

PAVEMENT WIDENING DETAIL  
CARIBBEAN BLVD. or SIDE STREETS  
N.T.S.



④ MILL EXISTING ASPHALT PAVEMENT (1" AVG DEPTH)  
OVERBUILD: TYPE SP OVERBUILD (TRAFFIC C)(THICKNESS 1" AVERAGE)  
RESURFACING: FRICTION COURSE FC 9.5 (1"1" TRAFFIC C) (PG. 76-22)

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## Consultants



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CARIBBEAN BLVD IMPROVEMENTS  
FINAL GAP (FROM SW 87 AVE TO SW 184 ST)  
CUTLER BAY FLORIDA

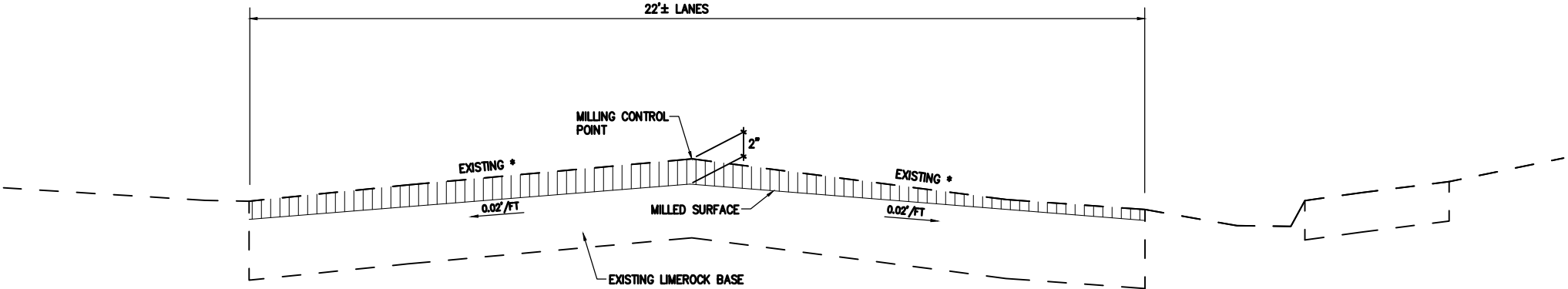
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	Dwn.	Chkd.	Dsan.	YY.MM.DD

## TYPICAL SECTIONS

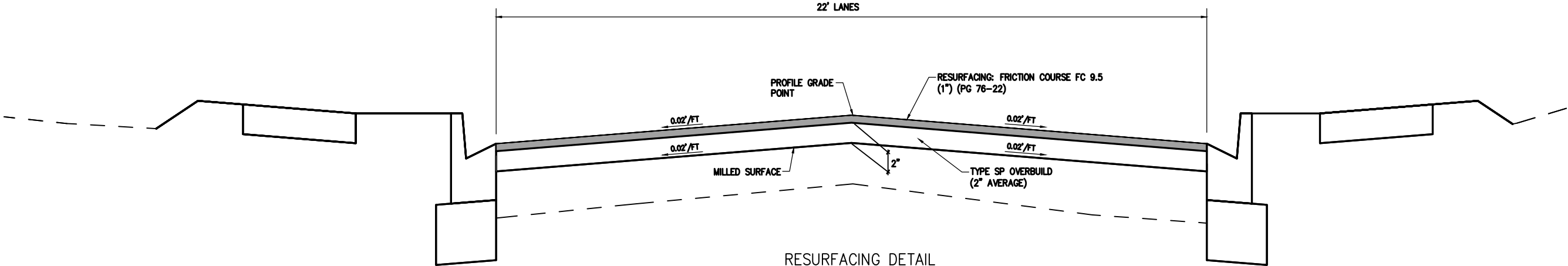
Project No.	Scale	
215617296		
Drawing No.	Sheet	Revision

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*EXISTING PAVEMENT CROSS SLOPES		
STATION	ROADWAY	
	LT	RT
10+20	0.014	0.032
11+00	0.033	0.033
12+00	0.016	0.018
13+00	0.035	0.017
14+00	0.020	0.040
15+00	0.032	0.030
16+00	0.026	0.024
17+00	0.031	0.021
18+00	0.022	0.020
19+00	0.003	0.004
20+00	0.032	0.017
21+00	0.024	0.015
22+00	0.028	0.007
23+00	0.010	0.020
24+00	0.026	0.022
25+00	0.044	0.035
26+00	0.019	0.015
27+00	0.020	0.012
28+00	0.002	0.016
29+00	0.019	0.041
30+00	0.009	0.020
31+00	0.022	0.051



VARIABLE DEPTH MILLING DETAIL  
CARIBBEAN BLVD.  
FROM STA 10+16 TO STA 31+00  
N.T.S.

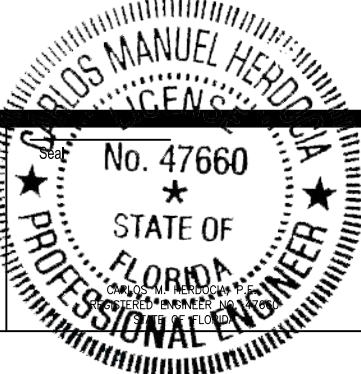


RESURFACING DETAIL  
CARIBBEAN BLVD.  
FROM STA 10+16 TO STA 31+00  
N.T.S.

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Revision	By	Appd.	YY.MM.DD

Issued	By	Appd.	YY.MM.DD



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CARIBBEAN BLVD IMPROVEMENTS FINAL GAP (FROM SW 87 AVE TO SW 184 ST) CUTLER BAY FLORIDA			
File Name:	RM	CMH	25.02.25
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Typical Section		
Project No. 215617296	Scale	
Drawing No. G-02	Sheet of 57	Revision





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FDOT Pay Item Number	Pay Item Description	Quantity	Unit
101-1	Mobilization	1	LS
102-1	Maintenance of Traffic (MOT)	371	DA
110-1	Clearing & Grubbing	1.40	AC
104-18	Inlet Protection System	4	EA
110-4-10	Removal of Existing Concrete	1330	SY
110-21	Tree Protection Barrier	2084	LF
160-4	Type "B" Stabilization (12") (Min. L.B.R. 40)	3177	SY
285-704	Optional Base, Base Group 04	3177	SY
327-70-6	Milling Existing Asphalt Pavement, 1½"Avg. Depth	14630	SY
334-1-13	Superpave Asphaltic Concrete, Traffic C	454	TN
337-7-82	Asphalt Concrete Friction Course Traffic C, Type FC-9.5, PG 76-22	804.7	TN
425-6	Valve Boxes, Adjust	2	EA
425-6-1	Meter Boxes, Adjust	2	EA
425-1-201	Inlet, Curb, Type P (42"x42") USF 5120-6167	2	EA
425-1-321	Inlet, Curb, Type P, 48" ø, USF 5129-6176	24	EA
425-1-451	Inlet, Curb, Type J, 60" ø, USF 5129-6176	13	EA
425-1-541	Inlet, Swale, Type P, 48" ø, USF 4700-6223	13	EA
425-2-71	Manholes, Type J7-T	13	EA
430-175-115	Pipe, Optional Material, Round, 15" S/CD	1116	LF
430-175-124	Pipe, Optional Material, Round, 24" S/CD	241	LF
443-70-4	French Drain, 24"	2432	LF
520-1-10	Concrete Curb & Gutter, Type "F"	7150	LF
520-2-4	Concrete Curb, Type "D"	1950	LF
522-1	Concrete Sidewalk And Driveways, 4" Thick	3330	SY
522-2	Concrete Sidewalk And Driveways, 6" Thick	2201	SY
527-2	Detectable Warning Surface	300	SF
570-1-2	Performance Turf, Sod	8710	SY
581-1-2	Relocate Trees and Palms, Palm, >=14' of Clear Trunk	3	EA
630-2-12	Conduit, Furnish & Install, Directional Bore	110	LF
635-2-11	Pull & Splice Box, Furnish & Install, 13" x 24" Cover Size	2	EA
646-1-11	Aluminum Signals Pole, Pedestal	2	EA
660-2-101	Loop Assembly - Furnish & Install, Type A	1	AS
665-1-11	Pedestrian Detector, Furnish & Install, Standard	4	EA
700-1-40	Single Post Sign, Install	27	AS
700-1-50	Single Post Sign, Relocate	11	AS
700-1-60	Single Post Sign, Remove	12	AS
706-1-3	Raised Pavement Marker, Type B	306	EA
710-12-290	Painted Pavement Markings, Durable Paint, Yellow, Island Nose	80	SF
711-11-121	Thermoplastic, White, Solid, 6"	7830	LF
711-11-123	Thermoplastic, White, Solid, 12"	1280	LF
711-11-125	Thermoplastic, White, Solid, 24"	290	LF
711-11-160	Thermoplastic, White, Message	16	EA
711-11-170	Thermoplastic, White, Arrows	2	EA
711-11-221	Thermoplastic, Yellow, Solid, 6"	6400	LF
711-11-224	Thermoplastic, Yellow, Solid, 18"	110	LF
711-11-241	Thermoplastic, Yellow, 6'-10' Skip, 6"	0.01894	GM

PAY ITEM NOTES

102-1	TO BE ACCOMPLISHED IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION INDEX 102-600, THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION (ANSI D6 1-1978), PUBLIC WORKS MANUAL OF METROPOLITAN DADE COUNTY, AND THE LATEST REVISIONS OF THE AFORE MENTIONED MANUALS. INCLUDES THE COST OF FURNISHING, INSTALLING, MAINTAINING, AND REMOVING ALL ITEMS OF MAINTENANCE OF TRAFFIC NOT PAID FOR UNDER SEPARATE ITEMS INCLUDING BUT NOT LIMITED TO SIGNS, BARRICADES, FLASHING LIGHTS, TRAFFIC SIGNAL MODIFICATION FOR TRAFFIC CONTROL, ETC.																																									
110-1	INCLUDES REMOVAL OF EXISTING PAVEMENT, CONCRETE SIDEWALK, DRIVEWAYS, CURB AND GUTTER, DRAINAGE STRUCTURES SLAB COVERED TRENCH AND PIPES, MISCELLANEOUS CONCRETE, ROCK WALL @ PROPERTY 8601, VEGETATION, TREES AND DEBRIS TO BE DISPOSED OF IN LEGAL AREAS PROVIDED BY THE CONTRACTOR. INCLUDES THE COST OF CLEANING-OUT ALL EXISTING DRAINAGE STRUCTURES WHICH ARE TO REMAIN WITHIN THE LIMITS OF CONSTRUCTION. FOR PORTIONS OF EXISTING DRAINAGE PIPE THAT ARE UNDER EXISTING TREES TO REMAIN SHALL BE PLUGGED WITH BRICK AND MORTAR AT EACH END AND ABANDONED IN PLACE																																									
425-1-451	COST OF BAFFLE, MATERIALS, METAL PIPE ENCASEMENT, INLET AND MANHOLE PAVEMENT AND BASE, LABOR & CONSTRUCTION SHALL BE INCLUDED IN COST OF STRUCTURES.																																									
425-2-71	COST OF BAFFLE, MATERIALS, METAL PIPE ENCASEMENT, INLET AND MANHOLE PAVEMENT AND BASE, LABOR & CONSTRUCTION SHALL BE INCLUDED IN COST OF STRUCTURES.																																									
425-6, 425-6-1	WITHIN PAVEMENT AREA, ALL EXISTING VALVES, MANHOLE COVERS, UTILITY BOXES ETC. ARE TO BE ADJUSTED TO FINISHED GRADE. ALL METER BOXES WITHIN SIDEWALKS SHALL BE ADJUSTED AND REPLACED AS NEEDED TO CONSTRUCT THE NEW SIDEWALK. FIRE HYDRANTS SHALL BE RELOCATED AWAY FROM THE STREET AS SHOWN ON THE PLANS. ALL MAILBOXES IN CONFLICT WITH CONSTRUCTION SHALL BE PROTECTED AND RELOCATED AS REQUIRED; THIS INCLUDES TEMPORARILY DURING CONSTRUCTION AS NEEDED. THESE ITEM ARE CONTINGENT UPON FIELD CONDITIONS AND MAY BE INCREASED, DECREASED, OR ELIMINATED BY THE ENGINEER.																																									
443-70-4	INCLUDES THE COST OF EXCAVATION TO PLAN ELEVATION, PERFORATED PIPE, PEA ROCK BALLAST ROCK, PLASTIC FILTER FABRIC AND BACKFILLING WITH SELECT FILL (SEE DETAIL OF EXFILTRATION DRAIN TO DETERMINE NON-PERFORATED PIPE QUANTITY) AND ALL APPLICABLE ITEMS REQUIRED TO CONSTRUCT EXFILTRATION DRAIN.																																									
520-1-10	INCLUDES DROP CURB AT DRIVEWAYS AND 3 FT OF CURB ENDING AS DIRECTED BY THE ENGINEER.																																									
522-1	INCLUDES REMOVAL, DISPOSAL, DEBRIS REMOVAL, ROOT PRUNING, PREPARATION & RESTORATION. ALSO INCLUDES EXCAVATION AND FILL FOR THE CONSTRUCTION OF THE NEW SIDEWALK.																																									
522-2	ESTIMATED QUANTITY FOR DRIVEWAYS TO BE CONSTRUCTED AT LOCATIONS SHOWN IN THE PLANS AND/OR AS DIRECTED BY THE ENGINEER.																																									
522-2	ALL EXISTING SIDEWALKS AND CURB RAMPS LOCATED WITHIN RETURNS AND ALL NEW DRIVEWAYS INCLUDING THE SIDEWALK SHALL BE RECONSTRUCTED TO 6" THICK CONCRETE.																																									
527-2	DETECTABLE WARNING SURFACE MUST BE SAFETY YELLOW AND IMBEDDED IN CONCRETE, AND FROM THE MOST RECENT OF TESTED PRODUCTS.  a.USE DETECTABLE WARNINGS LISTED ON THE FDOT APPROVED PRODUCTS LIST (APL) AND THAT HAVE BEEN FURTHER EVALUATED AND FOUND ACCEPTABLE BY THE DEPARTMENT. AT THE OPTION OF THE CONTRACTOR, AN 'OR EQUAL' PRODUCT EVALUATION REQUEST, FOR AN EQUIVALENT FDOT APL APPROVED PRODUCT THAT MEETS OR EXCEEDS THE SPECIFICATION STIPULATED HEREIN, MAY BE SUBMITTED IN WRITING TO THE ENGINEER FOR REVIEW AND ACCEPTANCE.  b.THE FOLLOWING PRODUCTS, SUBJECT TO CONTINUED LISTING ON THE FDOT APL, HAVE BEEN EVALUATED BY THE DEPARTMENT FOR USE ON DEPARTMENT PROJECTS: <table><tr><th colspan="3">SURFACE APPLIED DETECTABLE WARNING DEVICES</th></tr><tr><th>MANUFACTURER</th><th>PRODUCT</th><th>APL NUMBER</th></tr><tr><td>ENGINEERED PLASTICS, INC.</td><td>ARMOR-TILE SURFACE APPLIED INLINE DOME</td><td>527-000-006</td></tr></table> <table><tr><th colspan="3">EMBEDDED DETECTABLE WARNING DEVICES</th></tr><tr><th>MANUFACTURER</th><th>PRODUCT</th><th>APL NUMBER</th></tr><tr><td>ADA SOLUTIONS, INC.</td><td>CAST-IN-PLACE COMPOSITE TACTILE</td><td>527-000-003</td></tr><tr><td>ADA SOLUTIONS, INC.</td><td>REPLACEABLE WET SET COMPOSITE</td><td>527-000-018</td></tr><tr><td>ENGINEERED PLASTICS, INC</td><td>ARMOR-TILE REPLACEABLE CAST IN PLACE</td><td>527-000-026</td></tr><tr><td>ENGINEERED PLASTICS, INC.</td><td>ARMOR-TILE CAST-IN-PLACE INLINE DOME TILE</td><td>527-000-027</td></tr><tr><td>CAPE FEAR SYSTEMS, LLC</td><td>ALERTCAST (REPLACEABLE) CAST-IN-PLACE</td><td>527-000-029</td></tr><tr><td>ACCESS PRODUCTS, INC.</td><td>ACCESS TILE REPLACEABLE CAST IN PLACE</td><td>527-000-033</td></tr><tr><td>STRONGGO INDUSTRIES</td><td>TEKWAY DOME TILE</td><td>527-000-035</td></tr><tr><td>TUFTILE, INC</td><td>TUFTILE CAST IRON (WET-SET) REPLACEABLE</td><td>527-000-044</td></tr></table>			SURFACE APPLIED DETECTABLE WARNING DEVICES			MANUFACTURER	PRODUCT	APL NUMBER	ENGINEERED PLASTICS, INC.	ARMOR-TILE SURFACE APPLIED INLINE DOME	527-000-006	EMBEDDED DETECTABLE WARNING DEVICES			MANUFACTURER	PRODUCT	APL NUMBER	ADA SOLUTIONS, INC.	CAST-IN-PLACE COMPOSITE TACTILE	527-000-003	ADA SOLUTIONS, INC.	REPLACEABLE WET SET COMPOSITE	527-000-018	ENGINEERED PLASTICS, INC	ARMOR-TILE REPLACEABLE CAST IN PLACE	527-000-026	ENGINEERED PLASTICS, INC.	ARMOR-TILE CAST-IN-PLACE INLINE DOME TILE	527-000-027	CAPE FEAR SYSTEMS, LLC	ALERTCAST (REPLACEABLE) CAST-IN-PLACE	527-000-029	ACCESS PRODUCTS, INC.	ACCESS TILE REPLACEABLE CAST IN PLACE	527-000-033	STRONGGO INDUSTRIES	TEKWAY DOME TILE	527-000-035	TUFTILE, INC	TUFTILE CAST IRON (WET-SET) REPLACEABLE	527-000-044
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570-1-2	INCLUDES SOD TO BE USED IN THE RESTORATION OF LAWNS AND MAY BE INCREASED OR DECREASED AS DIRECTED BY THE ENGINEER. PENSACOLA OR TO MATCH EXISTING SOD.																																									

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Coral Gables, Florida 33134  
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File Name:	RM	CMH	CMH	25.02.25
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SUMMARY OF QUANTITIES

Project No.	Scale	
215617296	N.T.S.	
Drawing No.	Sheet	Revision

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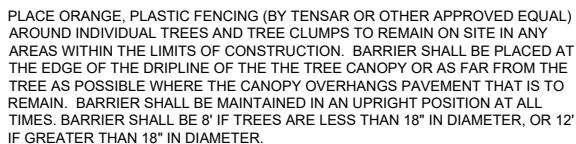
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<div>I. <u>APPLICABLE CODES:</u></div> <div><div><div>A. PRIOR TO BID, THE CONTRACTOR SHALL VISIT THE SITE AND SHALL FULLY ACQUAINT HIMSELF WITH CONDITIONS RELATING TO CONSTRUCTION, TO INCLUDE DIFFICULTIES AND RESTRICTIONS RELATED TO EXECUTION OF THE WORK, AND EXISTING CONDITIONS.</div><div>B. SHOULD THERE BE DISCREPANCIES, OMISSIONS, CONFLICTING STATEMENTS OR QUESTIONS OF INTENT IN THE CONSTRUCTION DOCUMENTS, THE CONTRACTOR SHALL NOTIFY THE TOWN/ PROJECT MANAGER IMMEDIATELY UPON DISCOVERY.</div><div>C. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD AND SHALL NOTIFY THE PROJECT MANAGER OF ANY DISCREPANCIES, OMISSIONS AND/OR ANY OTHER CONFLICTS OR IRREGULARITIES PRIOR TO THE COMMENCEMENT OF ANY WORK.</div><div>D. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF TOWN OF CUTLER BAY, MIAMI-DADE COUNTY D.E.R.M., F.D.O.T. STANDARDS PLANS (2023-2024), FLORIDA GREENBOOK 2018, FLORIDA BUILDING CODE AND ALL OTHER LOCAL, STATE AND FEDERAL CODES WHERE APPLICABLE. WHICHEVER IS MORE STRINGENT.</div><div>E. ALL CONSTRUCTION SHALL BE DONE IN A SAFE MANNER AND IN STRICT COMPLIANCE WITH ALL THE REQUIREMENTS OF FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, AND ALL STATE AND LOCAL SAFETY AND HEALTH REGULATIONS.</div><div>F. ALL ELEVATIONS SHOWN ON THE CONSTRUCTION DRAWINGS ARE BASED ON NATIONAL GEODETICAL VERTICAL DATUM OF 1929, (N.G.V.D.), UNLESS OTHERWISE NOTED.</div><div>G. REGULATORY SPEED ESTABLISHED WITHIN THE WORK ZONE TRAVEL WAYS SHALL BE 20 M.P.H. REDUCED SPEED AND REGULATORY SPEED SIGNS SHALL BE INSTALLED ON SEPARATE POSTS IN ACCORDANCE WITH THE STANDARD INDEXES AND MUTCD. COORDINATE WITH THE TOWN OF CUTLER BAY IN ADVANCE.</div></div><div>II. <u>PRECONSTRUCTION RESPONSIBILITIES:</u></div><div><div><div>A. UPON THE RECEIPT OF THE "NOTICE TO PROCEED", THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD AND ARRANGE A PRECONSTRUCTION CONFERENCE TO INCLUDE TOWN OF CUTLER BAY PROJECT REPRESENTATIVE AND THE ENGINEER OF RECORD.</div><div>B. THE CONTRACTOR SHALL OBTAIN A "SUNSHINE STATE ONE CALL FOR FLORIDA, INC." CERTIFICATION NUMBER AT LEAST 48 HOURS PRIOR TO BEGINNING AN EXCAVATION.</div><div>C. ALL UTILITY EASEMENTS TO BE SECURED PRIOR TO CONSTRUCTION. (IF REQUIRED)</div><div>D. LOCATION OF EXISTING FACILITIES AS SHOWN ON CONSTRUCTION DRAWINGS ARE DRAWN FROM AVAILABLE RECORDS. THE ENGINEER &amp; THE TOWN ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE FACILITIES SHOWN OR FOR ANY FACILITY NOT SHOWN. VERIFY THE ELEVATIONS AND LOCATION OF EXISTING FACILITIES PRIOR TO CONSTRUCTION. IF AN EXISTING CONSTRUCTION IS DISCOVERED UPON EXCAVATION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF RECORD SO THAT APPROPRIATE MEASURES CAN BE TAKEN TO RESOLVE THE PROBLEM.</div></div><div>III. <u>PERMITS:</u></div><div><div>A. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY REQUIRED PERMIT.</div></div><div>IV. <u>INSPECTIONS:</u></div><div><div>A. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD, FDOT LAP PERSONNEL &amp; THE TOWN AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION AND PRIOR TO THE INSPECTION OF THE FOLLOWING ITEMS, WHERE APPLICABLE:<div><div>1. CLEARING AND FILLING</div><div>2. SUBGRADE</div><div>3. DRAINAGE</div><div>4. ASPHALT</div><div>5. CONCRETEWORK</div><div>6. STRIPING</div><div>7. FINAL</div></div></div></div><div>V. <u>SHOP DRAWINGS:</u></div><div><div>A. PRIOR TO THEIR CONSTRUCTION OR INSTALLATION, SHOP DRAWINGS SHALL BE SUBMITTED TO AND APPROVED BY THE ENGINEER OF RECORD FOR ALL MATERIALS, EQUIPMENT, FIXTURES AND STRUCTURES.</div></div><div>VI. <u>DURING CONSTRUCTION:</u></div><div><div>A. TEMPORARY FACILITIES –<div>IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE FOR OR SUPPLY TEMPORARY WATER SERVICE, SANITARY FACILITIES, AND ELECTRICITY.</div></div><div>B. TRAFFIC REGULATION –<div><div>1. MAINTENANCE OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.), FDOT, TOWN STANDARDS AND REQUIREMENTS. REGULATORY SPEED DURING CONSTRUCTION TO BE AS EXISTING.</div><div>2. ALL OPEN TRENCHES AND HOLES ADJACENT TO ROADWAYS OR WALKWAYS SHALL BE PROPERLY MARKED AND BARRICADED TO ASSURE THE SAFETY OF BOTH VEHICULAR AND PEDESTRIAN TRAFFIC.</div></div></div></div><div><div>GENERAL NOTES AND SPECIFICATIONS</div><div>PROJECT NO. 215617296 FDOT FM#447985-1-58-01</div><div>3. NO TRENCHES OR HOLES DEEPER THAN 3 FT. ARE TO BE LEFT OPEN DURING NIGHT / NON WORKING HOURS WITHOUT EXPRESS PERMISSION OF THE TOWN'S REPRESENTATIVE.</div><div>4. CONTRACTOR TO PROVIDE A CONSTRUCTION SEQUENCE FOR APPROVAL TO THE PROJECT ENGINEER. FOR THIS FDOT STANDARDS (FY 2024-25) MAY BE REFERENCED, SUCH AS STANDARD 102-601, 102-602 AND 102-603.</div><div>VII. <u>EARTHWORK</u></div><div><div>A. ALL TOPSOIL, VEGETATION AND HEAVY ROOT MATS SHALL BE STRIPPED TO AT LEAST 5' BEYOND THE PERIMETER OF THE PROPOSED CONSTRUCTION.</div><div>B. FILL AND BACKFILL SHALL BE SAND, SAND-ROCK MIXTURE OR CRUSHED ROCK HAVING LESS THAN 10% SILT, 1% ORGANICS AND ROCK SIZES LESS THAN 3" IN DIAMETER.</div></div><div>VIII. <u>EXISTING UTILITIES:</u></div><div><div>A. GENERAL:<div><div>1. CATCH BASIN AND MH GRATES AND RIM ELEVATIONS AS SHOWN ON PLANS MAY BE ADJUSTED TO CONFORM TO NEW OR EXISTING GRADES.</div><div>2. DISTANCES AND LENGTHS SHOWN ON PLAN &amp; PROFILE DRAWINGS ARE REFERENCED TO THE CENTER OF STRUCTURES.</div><div>3. EXISTING CATCH BASINS ARE TO BE FLUSHED AND CLEANED BEFORE ACCEPTANCE OF WORK.</div></div></div><div>B. MATERIALS:<div><div>1. BASE COURSE SHALL BE CRUSHED LIMEROCK MIAMI OOLITE WITH A MINIMUM OF 70% CARBONATES OF CALCIUM AND MAGNESIUM. (60% FOR LOCAL STREETS &amp; PARKING AREAS).</div><div>2. ASPHALT SURFACES SHALL BE SP-9.5 AND FC-9.5 FOR ROADWAY, UNLESS OTHERWISE SPECIFIED ON THE PLANS.</div><div>3. REINFORCED CONCRETE SIDEWALKS SHALL BE CONSTRUCTED OF CLASS I CONCRETE WITH A MINIMUM STRENGTH OF 3,000 PSI AS PER DETAIL AND PROJECT SPECIFICATIONS.</div></div></div><div>C. INSTALLATION &amp; COMPACTION:<div><div>1. THE TOP 12" OF THE SUBGRADE FOR ROADWAY AND PARKING AREAS SHALL BE COMPACTED (AND STABILIZED, IF REQUIRED) TO A MINIMUM OF 100% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99 METHOD C.</div><div>2. BASE COURSE MATERIAL FOR PAVED AREAS SHALL BE A MINIMUM THICKNESS OF 12" PLACED ON A SINGLE LAYER.</div><div>3. BASE COURSE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180-74 PRIMED FOR THE ENTIRED AREA.</div><div>4. INSTALLATION OF THE WEARING SURFACE SHALL CONFORM WITH THE REQUIREMENTS OF THE F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION 2016 OR LATEST.</div></div></div><div>D. TESTING:<div><div>1. THE FINISHED SURFACE OF THE BASE COURSE AND THAT OF THE WEARING SURFACE SHALL NOT VARY MORE THAN 1/4" FROM THE TEMPLATE. ANY IRREGULARITIES EXCEEDING THIS LIMIT SHALL BE CORRECTED.</div><div>2. DENSITY TEST SHALL BE TAKEN BY AN INDEPENDENT TESTING LABORATORY, CERTIFIED BY THE STATE OF FLORIDA, WHERE DIRECTED BY THE ENGINEER.</div><div>3. AN INDEPENDENT TESTING POST (PAVING) SHALL BE PART OF THE CONTRACTOR OR SUBPROCESS. RESULTS MUST BE PROVIDED TO CITY. CITY CAN PERFORM QUALITY ASSURANCE TESTING AT IT'S CONVENIENCE.</div></div></div></div><div>IX. <u>PAVING:</u></div><div><div>A. GENERAL:<div><div>1. ALL UNDERGROUND UTILITIES SHALL BE COMPLETED PRIOR TO CONSTRUCTION OF LIMEROCK BASE.</div><div>2. ALL EXISTING PAVEMENT, CUT OR DAMAGED BY CONSTRUCTION SHALL BE PROPERLY RESTORED AT THE CONTRACTOR'S EXPENSE.</div><div>3. WHERE ANY PROPOSED PAVEMENT IS TO BE CONNECTED TO EXISTING PAVEMENT, THE EXISTING EDGE OF PAVEMENT SHALL BE SAW CUT.</div></div></div><div>B. MATERIALS:<div><div>1. BASE COURSE SHALL BE CRUSHED LIMEROCK MIAMI OOLITE WITH A MINIMUM OF 70% CARBONATES OF CALCIUM AND MAGNESIUM. (60% FOR LOCAL STREETS &amp; PARKING AREAS).</div><div>2. ASPHALT SURFACES SHALL BE SP-9.5 AND FC-9.5 FOR ROADWAY, UNLESS OTHERWISE SPECIFIED ON THE PLANS.</div><div>3. REINFORCED CONCRETE SIDEWALKS SHALL BE CONSTRUCTED OF CLASS I CONCRETE WITH A MINIMUM STRENGTH OF 3,000 PSI AS PER DETAIL AND PROJECT SPECIFICATIONS.</div></div></div><div>C. INSTALLATION &amp; COMPACTION:<div><div>1. THE TOP 12" OF THE SUBGRADE FOR ROADWAY AND PARKING AREAS SHALL BE COMPACTED (AND STABILIZED, IF REQUIRED) TO A MINIMUM OF 100% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99 METHOD C.</div><div>2. BASE COURSE MATERIAL FOR PAVED AREAS SHALL BE A MINIMUM THICKNESS OF 12" PLACED ON A SINGLE LAYER.</div><div>3. BASE COURSE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180-74 PRIMED FOR THE ENTIRED AREA.</div><div>4. INSTALLATION OF THE WEARING SURFACE SHALL CONFORM WITH THE REQUIREMENTS OF THE F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION 2016 OR LATEST.</div></div></div><div>D. TESTING:<div><div>1. THE FINISHED SURFACE OF THE BASE COURSE AND THAT OF THE WEARING SURFACE SHALL NOT VARY MORE THAN 1/4" FROM THE TEMPLATE. ANY IRREGULARITIES EXCEEDING THIS LIMIT SHALL BE CORRECTED.</div><div>2. DENSITY TEST SHALL BE TAKEN BY AN INDEPENDENT TESTING LABORATORY, CERTIFIED BY THE STATE OF FLORIDA, WHERE DIRECTED BY THE ENGINEER.</div><div>3. AN INDEPENDENT TESTING POST (PAVING) SHALL BE PART OF THE CONTRACTOR OR SUBPROCESS. RESULTS MUST BE PROVIDED TO CITY. CITY CAN PERFORM QUALITY ASSURANCE TESTING AT IT'S CONVENIENCE.</div></div></div></div><div>X. <u>PROJECT CLOSEOUT:</u></div><div><div>A. CLEANING UP –<div><div>1. DURING CONSTRUCTION, THE PROJECT SITE AND ALL ADJACENT AREAS SHALL BE MAINTAINED IN A NEAT AND CLEAN MANNER, AND UPON FINAL CLEAN-UP, THE PROJECT SITE SHALL BE LEFT CLEAR OF ALL SURPLUS MATERIAL OR TRASH. THE PAVED AREAS SHALL BE SWEEPED BROOM CLEAN.</div><div>2. THE CONTRACTOR SHALL RESTORE OR REPLACE, WHEN AND AS DIRECTED, ANY PUBLIC OR PRIVATE PROPERTY DAMAGED BY HIS WORK, EQUIPMENT, OR EMPLOYEES, TO A CONDITION AT LEAST EQUAL TO THAT EXISTING IMMEDIATELY PRIOR TO THE BEGINNING OF OPERATIONS. TO THAT END, THE CONTRACTORS SHALL DO AS REQUIRED, ALL NECESSARY HIGHWAY, DRIVEWAY, WALK AND LANDSCAPING WORK. SUITABLE MATERIALS AND METHODS SHALL BE USED FOR SUCH RESTORATIONS.</div><div>3. WHERE MATERIALS OR DEBRIS HAS WASHED OR FLOWED INTO, OR HAVE BEEN PLACED IN WATER COURSES, DITCHES, DRAINS, CATCH BASINS, OR ELSEWHERE AS A RESULT OF THE CONTRACTOR'S OPERATIONS, SUCH MATERIAL OR DEBRIS SHALL BE REMOVED AND SATISFACTORILY DISPOSED OR DURING THE PROGRESS OF THE WORK, AND THE AREA KEPT IN A CLEAN AND NEAT CONDITION.</div></div></div><div>B. ALL PROPERTY MONUMENTS OR PERMANENT REFERENCES, REMOVED OR DESTROYED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED BY A STATE OF FLORIDA REGISTERED LAND SURVEYOR AT THE CONTRACTORS EXPENSE.</div><div>C. ALL UNPAVED SURFACES SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THAT WHICH EXISTED BEFORE THE CONSTRUCTION.</div><div>D. PROJECT RECORD DOCUMENTS –<div><div>1. DURING THE DAILY PROGRESS OF THE JOB, THE CONTRACTOR SHALL RECORD ON HIS SET OF CONSTRUCTION DRAWINGS THE EXACT LOCATION, LENGTH AND ELEVATION OF ANY FACILITY NOT BUILT EXACTLY ACCORDING TO PLANS.</div><div>2. UPON COMPLETION OF UNDERGROUND IMPROVEMENTS AND LIMEROCK BASE CONSTRUCTION (AND BEFORE PLACING ASPHALT PAVEMENT) THE CONTRACTOR SHALL FURNISH THE ENGINEER OF RECORD "AS-BUILT" PLANS FOR THESE IMPROVEMENTS, SHOWING THE LOCATIONS AND PERTINENT GRADES OF ALL UNDERGROUND INSTALLATIONS AND THE FINISHED ROCK GRADES OF THE ROAD CROWN AND EDGES OF PAVEMENT AT 50 FEET INTERVALS. INC. LIGHTING SYSTEM INSTALLATION IN AS-BUILT SUBMITTAL.</div><div>3. UPON COMPLETION OF CONSTRUCTION, AND PRIOR TO FINAL PAYMENT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER OF RECORD ONE COMPLETE SET OF ALL "AS-BUILT" CONTRACT DRAWINGS. THESE DRAWINGS SHALL BE MARKED TO SHOW "AS-BUILT" CONSTRUCTION CHANGES AND DIMENSIONS, LOCATIONS AND ELEVATIONS OF ALL IMPROVEMENTS.</div><div>4. ALL "AS-BUILT" INFORMATION ON ELEVATIONS SHALL BE CERTIFIED BY A FLORIDA REGISTERED LAND SURVEYOR.</div></div></div></div><div>XI. <u>ENVIRONMENTAL</u></div><div><div>A. THE CONTRACTOR SHALL REVIEW ENVIRONMENTAL REQUIREMENTS OF ANY PROPOSED STAGING AREAS WITH THE PROJECT ENGINEER (ALFREDO QUINTERO 305-234-4262) AT LEAST SEVENTY TWO (72) HOURS PRIOR TO USE.</div></div><div>XII. <u>MOT NOTES:</u></div><div><div>1. TRAFFIC AND PEDESTRIAN CONTROL SHALL BE IN ACCORDANCE WITH THE PROJECT PLANS, THE CURRENT EDITION OF THE FLORIDA DOT STANDARD PLANS 2023-2024 (102-600), THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION.</div><div>2. NOTIFICATION OF LANE CLOSURES, TEMPORARY DETOURS, AND TRAFFIC DISRUPTION WHICH ARE NECESSARY TO CONSTRUCT THE PROJECT SHALL BE SUBMITTED IN WRITING TO THE ENGINEER WITH IN 14 WORKING DAYS PRIOR TO CLOSURE OR DETOUR BY SUBMITTING THE REQUIRED LANE CLOSURE FORM, CALCULATIONS, AND OTHER DATA THROUGH THE TRANSIT ENGINEER TO THE DISTRICT TRAFFIC OPERATIONS OFFICE. NO LANE CLOSURES WILL BE ALLOWED WITHOUT PRIOR CONSENT IN WRITING BY FDOT.</div><div>3. THE CONTRACTOR SHALL CONTACT THE FDOT DISTRICT 6 PUBLIC INFORMATION OFFICER, THE STATE HIGHWAY PATROL, AND MIAMI-DADE POLICE DEPARTMENT AT LEAST TEN BUSINESS DAYS PRIOR TO A LANE CLOSURE. CONTACT WITH LOCAL TOWN OF CUTLER BAY FIRE RESCUE AND AMBULANCE SERVICES 48 HOURS PRIOR TO ANY AND ALL LANE SHIFTS AND OR CLOSURES.</div><div>4. AT THE DISCRETION OF THE ENGINEER, IF A LANE CLOSURE CAUSES EXTENDED CONGESTION OR DELAY, THE CONTRACTOR SHALL BE DIRECTED TO REOPEN THE CLOSED LANES UNTIL SUCH TIME THAT THE TRAFFIC FLOW HAS RETURNED TO AN ACCEPTABLE LEVEL.</div></div><div>5. ALL LANES MUST REMAIN OPEN FOR TRAFFIC DURING AN EVACUATION NOTICE OF A HURRICANE OR OTHER CATASTROPHIC EVENT AND SHALL REMAIN OPEN FOR THE DURATION OF THE EMERGENCY AS DIRECTED BY THE ENGINEER.</div><div>6. THE TRAFFIC AND TRAVEL WAY SHALL NOT BE ALTERED BY THE CONTRACTOR TO CREATE A WORK ZONE UNTIL ALL LABOR AND MATERIAL ARE AVAILABLE FOR THE CONSTRUCTION IN THAT AREA.</div><div>7. LANE CLOSURE MODIFICATIONS INCLUDING CLOSURES BEYOND APPROVED TIMES OR ADDITIONAL LANES, WILL NEED TO REQUEST PERMISSION FROM THE ENGINEER.</div><div>8. REGULATORY SPEED ESTABLISHED WITHIN WORK ZONE TRAVEL WILL BE MAINTAINED AS THE EXISTING, REDUCED SPEED AND REGULATORY SPEED SIGNS SHALL BE INSTALLED ON SEPARATE POSTS IN ACCORDANCE WITH THE STANDARD INDEXES.</div><div>9. THE CONTRACTOR SHALL COVER WORK ZONE SIGNS WHEN CONDITIONS NO LONGER WARRANT THEIR USE. COST OF COVERING AN UNCOVERING THE SIGNS SHALL BE INCLUDED IN PAY ITEM 102-1, MAINTENANCE OF TRAFFIC.</div><div>10. CONTRACTOR SHALL REMOVE, RELOCATE OR COVER ANY EXISTING OR PROPOSED SIGNS THAT CONFLICT WITH THE TRAFFIC CONTROL PLANS, WHEN THE CONFLICT NO LONGER EXISTS, THE CONTRACTOR SHALL RESTORE THE SIGNS TO THEIR ORIGINAL POSITION. COST OF TEMPORARILY REMOVING RELOCATING, COVERING AND RESTORING THE SIGNS SHALL BE INCLUDED IN PAY ITEM 102-1, MAINTENANCE OF TRAFFIC.</div><div>11. EACH EXISTING STREET NAME AND STOP SIGN AFFECTED BY CONSTRUCTION SHALL BE RELOCATED AND MAINTAINED IN AN APPROPRIATE LOCATION FOR THE DURATION OF THE PROJECT. WHEN NO LONGER AFFECTED BY CONSTRUCTION, THESE SIGNS SHALL BE RESTORED TO THEIR ORIGINAL POSITION. COST OF TEMPORARILY RELOCATING AND RESTORING THE SIGNS SHALL BE INCLUDED IN PAY ITEM 102-1, MAINTENANCE OF TRAFFIC.</div><div>12. THE CONTRACTOR SHALL MAINTAIN SAFE VEHICULAR ACCESS TO ALL ADJACENT PROPERTY AT ALL TIMES AND SHALL MAINTAIN ACCOMMODATIONS FOR INTERSECTING AND CROSSING TRAFFIC. NO ROAD OR STREET CROSSING SHALL BE BLOCKED OR UNDULY RESTRICTED AS DETERMINED BY THE ENGINEER. COST TO BE INCLUDED UNDER PAY ITEM 102-1, MAINTENANCE OF TRAFFIC.</div><div>13. ACCESS TO BUSINESSES AND RESIDENCES SHALL BE MAINTAINED DURING CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY ALL CONCERNED UTILITY COMPANIES PRIOR TO WORKING NEAR THEIR EXISTING FACILITIES.</div></div><div><div>WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH ALL APPICABLE STATE OF FLORIDA STANDARDS, FDOT AND MIAMI DADE COUNTY DETAILS AND SPECIFICATIONS; AND IN ACCORDANCE WITH THIS PLANS AND SPECIFICATIONS; WHICHEVER IS MORE STRINGENT.</div></div></div></div>			
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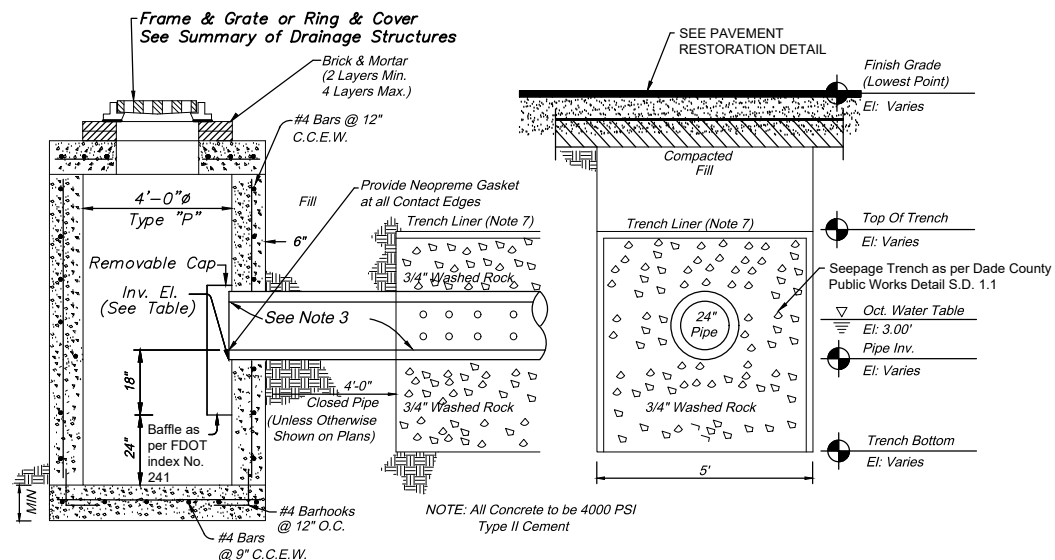




1. Provide 1/8" To 1/4" Construction Joints At 10' Intervals (Max.)
2. Subgrade Shall Be Compacted To a 95% Density AASHTO T-180C
3. Curb Shall Be Constructed in 50' Maximum Sections.

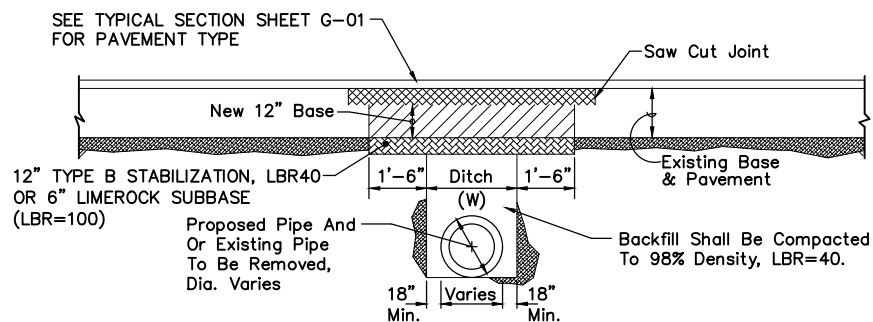


TREE PROTECTION DETAIL  
N.T.S.

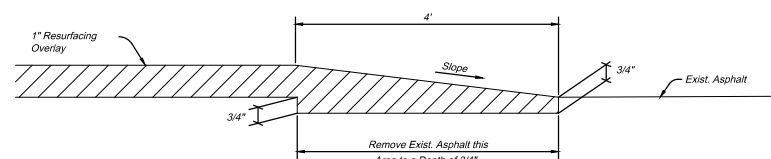


1. U.S. Precast Corp. Type "P" 4'-0" Ø Catch Basin (Unless Otherwise Specified)
2. Concrete = 4000 P.S.I. at 28-Days, Type II Cement
3. Trench Pipe Shall be 24" P.C.A.P., Perf. HDPE or Approved Equal
4. Pipes Shall Terminate 2 Feet from End of Trench or Connect to Additional Catch Basin As Required.
5. Cover Pipe Ends With No. 10 Galvanized or Aluminum Screen, Opening No Larger Than 1/2"x1/2"
6. Ballast Rock Shall be from Fresh Water Washed Free of Deleterious Matter.
7. Sides, Bottom and Top of Trench to be Lined with Mirafi 700X Filter Fabric or Equal. Overlap Trench lining material a Minimum of Three (3) Feet at Top.

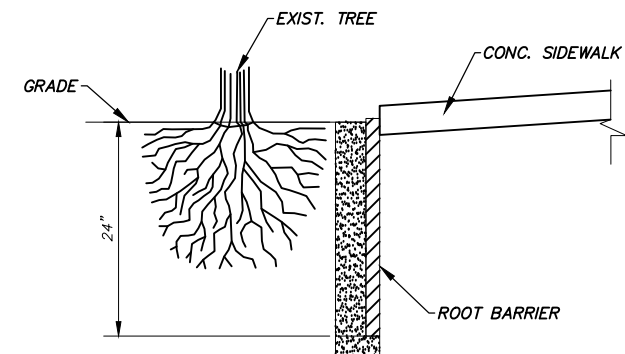
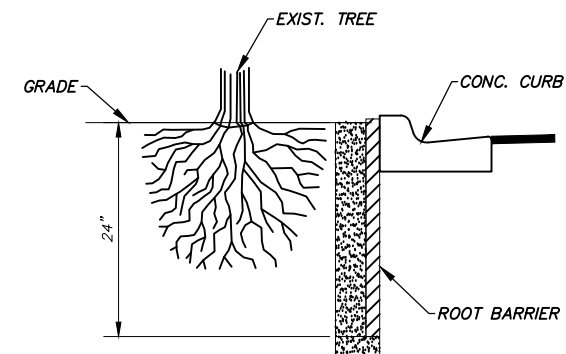
48" Ø TYPE "P" CATCH BASIN OR MH  
WITH EXFILTRATION TRENCH DETAIL  
N.T.S.



PAVEMENT RESTORATION DETAIL  
N.T.S.



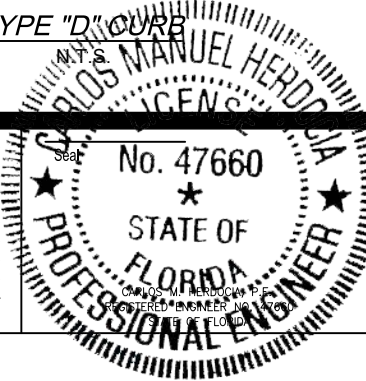
END/BEGINNING  
RESURFACING DETAIL  
N.T.S.



ROOT BARRIER DETAIL  
N.T.S.

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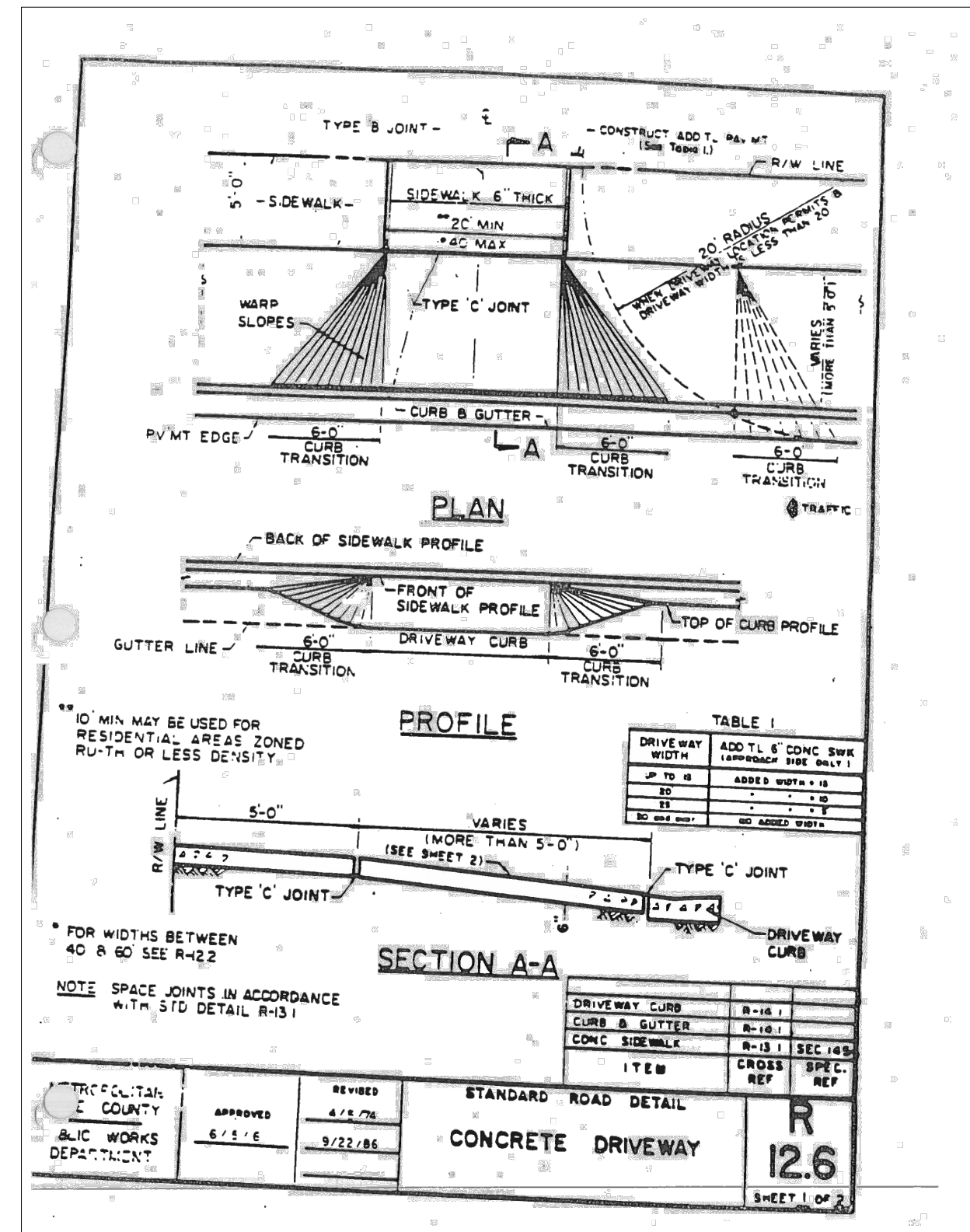
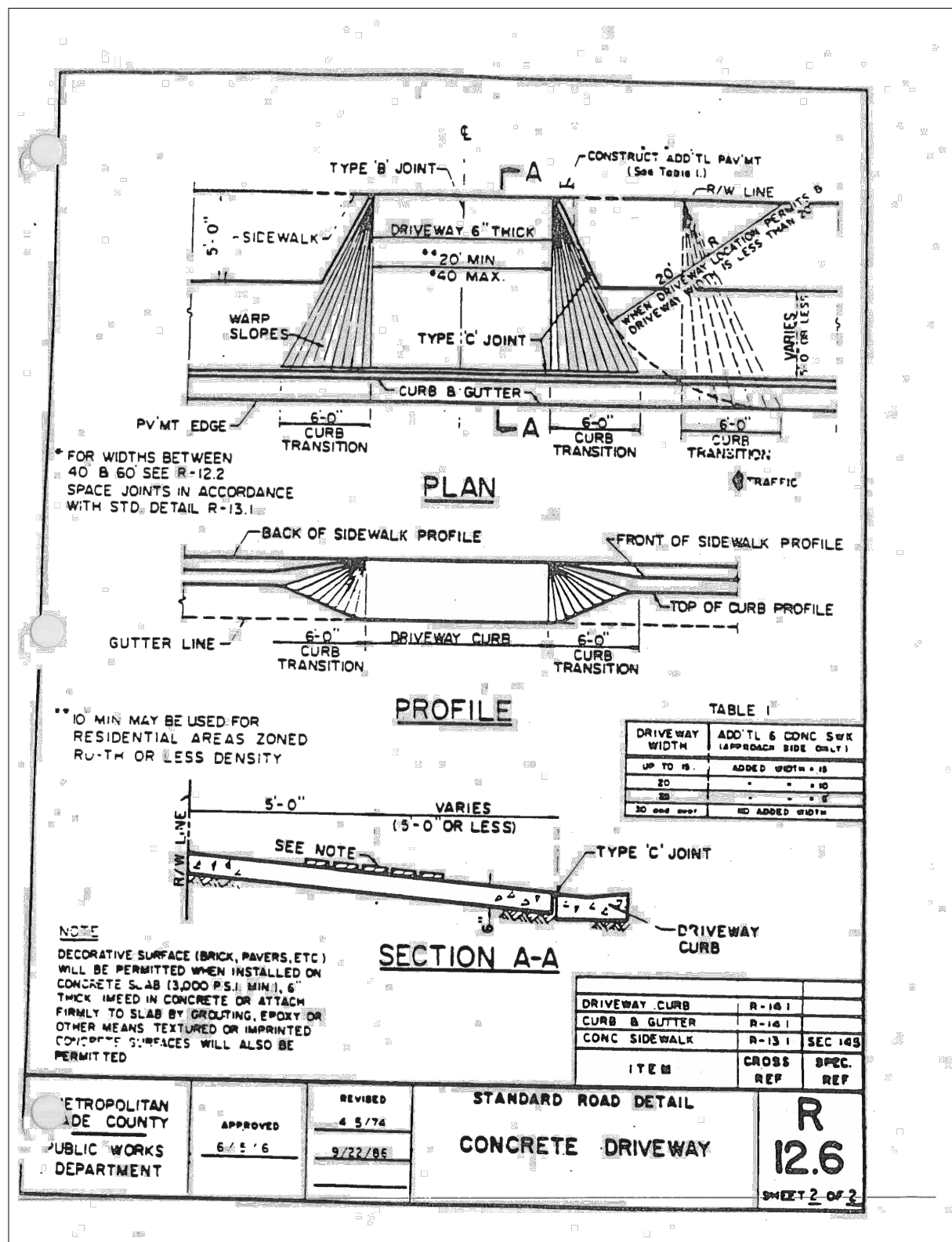
CARIBBEAN BLVD IMPROVEMENTS  
FINAL GAP (FROM SW 87 AVE TO SW 184 ST)  
CUTLER BAY FLORIDA

File Name:	RM	CMH	CMH	25.02.25
	Dwn.	Chkd.	Dsan.	YY.MM.DD

## GENERAL DETAILS

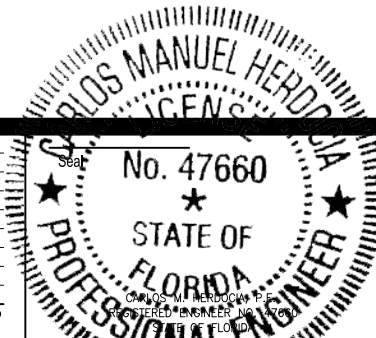
Project No.	Scale	
215617296	N.T.S.	
Drawing No.	Sheet	Revision

G-06 of 57



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Revision	By	Appd.	YY.MM.DD



Consultants

**Stantec**

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**CARIBBEAN BLVD IMPROVEMENTS**

FINAL GAP (FROM SW 87 AVE TO SW 184 ST)

CUTLER BAY, FLORIDA

File Name: RM CMH CMH 25.02.25  
Dwn. Chkd. Dsgn. YY.MM.DD

**GENERAL DETAILS**

Project No. 215617296

Scale N.T.S.

Drawing No. G-07

Sheet of 57

Revision



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SUMMARY OF DRAINAGE STRUCTURES								
Structure Number	Station	Off-set	Structure Type	FRAME & GRATE	Rim Elev.	Pipe Inverts	Bottom (Sump) Elev.	Pollution Retardant Baffle N S E W
S-01	10+67.57	17.72' L	Curb Inlet Type P (42"x42")	5120-6167	8.27	Solid Pipe (1.20) (S)	-0.80	
S-02	10+67.58	16.92' R	Curb Inlet Type J	USF 5129-6176	8.28	Solid Pipe (1.10) (N) Perforated Pipe (3.50) (E)	-0.90	
S-03	12+42.45	18.70' L	Swale Inlet Type P	4700-6223	8.88	Solid Pipe (1.60) (S)	-0.40	
S-04	12+42.45	11.86' R	Curb Inlet Type J	USF 5129-6176	8.89	Perforated Pipe (3.50) (W) Perforated Pipe (3.50) (E) Solid Pipe (1.50) (N)	-0.50	
S-05	49+50.29	18.36' R	Swale Inlet Type P	4700-6223	8.62	Solid Pipe (2.30) (W)	0.30	
S-06	49+50.29	11.00' L	Curb Inlet Type P	5129-6176	8.57	Solid Pipe (2.20) (E) Solid Pipe (2.20) (N)	0.20	
S-07	13+20.40	11.85' R	Manhole Type J7-T	310A	9.24	Perforated Pipe (3.50) (W) Perforated Pipe (3.50) (E) Solid Pipe (2.10) (S)	0.00	
S-08	14+09.51	18.29' L	Swale Inlet Type P	4700-6223	8.69	Solid Pipe (1.60) (S)	-0.40	
S-09	14+09.51	11.84' R	Curb Inlet Type J	5129-6176	8.69	Perforated Pipe (3.50) (W) Solid Pipe (1.50) (N) Perforated Pipe (3.50) (E)	-0.50	
S-10	15+36.57	18.43' L	Swale Inlet Type P	USF 4700-6223	9.07	Solid Pipe (1.70) (SE)	-0.30	
S-11	15+45.50	12.15' R	Curb Inlet Type P	USF 5129-6176	9.10	Solid Pipe (5.50) (NW)	3.50	
S-12	15+43.51	5.50' R	Manhole Type J7-T	310A	9.33	Solid Pipe (1.60) (NW) Solid Pipe (5.40) (SE) Perforated Pipe (3.50) (W) Perforated Pipe (3.50) (E)	-0.40	
S-13	59+31.21	11.05' R	Curb Inlet Type P	USF 5129-6176	8.74	Solid Pipe (3.60) (W)	1.60	
S-14	59+32.37	10.92' L	Curb Inlet Type P	USF 5129-6176	8.81	Solid Pipe (3.50) (E) Solid Pipe (3.50) (N)	1.50	
S-15	16+22.10	5.76' R	Manhole Type J7-T	310A	9.57	Perforated Pipe (3.50) (W) Perforated Pipe (3.50) (E) Solid Pipe (3.40) (S)	0.00	
S-16	16+82.79	18.00' L	Swale Inlet Type P	USF 4700-6223	9.23	Solid Pipe (2.10) (S)	0.10	
S-17	16+83.37	11.89' R	Curb Inlet Type J	USF 5129-6176	9.36	Solid Pipe (2.00) (N) Perforated Pipe (3.50) (W) Perforated Pipe (3.50) (NE)	0.00	
S-18	18+44.12	19.04' L	Swale Inlet Type P	USF 4700-6223	9.77	Solid Pipe (2.60) (SE)	0.60	
S-19	18+44.43	11.49' R	Curb Inlet Type P (42"x42")	5129-6176	9.77	Solid Pipe (6.00) (NW)	4.00	
S-20	18+44.66	4.57' R	Manhole Type J7-T	310A	10.03	Solid Pipe (2.50) (NW) Solid Pipe (6.00) (SE) Perforated Pipe (3.50) (NE) Perforated Pipe (3.50) (SW)	0.00	
S-21	69+40.15	13.96' R	Swale Inlet Type P	USF 4700-6223	9.64	Solid Pipe (6.10) (SW)	4.10	
S-22	69+39.80	12.97' L	Curb Inlet Type P	USF 5129-6176	9.57	Solid Pipe (6.00) (NE) Solid Pipe (6.00) (NW)	4.00	
S-23	70+58.79	10.94' R	Curb Inlet Type P	USF 5129-6176	9.28	Solid Pipe (6.00) (SW)	4.00	
S-24	70+58.83	10.94' L	Curb Inlet Type P	USF 5129-6176	9.43	Solid Pipe (5.90) (NE) Solid Pipe (2.60) (SE)	0.60	
S-25	18+91.41	5.43' R	Manhole Type J7-T	310A	10.17	Perforated Pipe (3.50) (SW) Perforated Pipe (3.50) (NE) Solid Pipe (5.90) (SE) Solid Pipe (2.50) (NW)	0.00	
S-26	20+49.29	20.66' L	Swale Inlet Type P	USF 4700-6223	9.14	Solid Pipe (6.00) (SE)	4.00	
S-27	20+48.98	15.66' R	Swale Inlet Type P	USF 4700-6223	9.22	Solid Pipe (6.00) (NW)	4.00	
S-28	20+49.06	5.75' R	Manhole Type J7-T	310A	9.41	Solid Pipe (5.90) (NW) Solid Pipe (5.90) (SE) Perforated Pipe (3.50) (SW) Perforated Pipe (3.50) (NE)	-0.25	
S-29	79+32.17	10.96' R	Curb Inlet Type P	USF 5129-6176	9.12	Solid Pipe (5.70) (SW)	3.70	
S-30	79+33.85	10.98' L	Curb Inlet Type P	USF 5129-6176	9.12	Solid Pipe (5.60) (NE) Solid Pipe (5.60) (NW)	3.60	
S-31	21+63.37	0.46' L	Manhole Type J7-T	310A	9.86	Perforated Pipe (3.50) (SW) Perforated Pipe (3.50) (NE) Solid Pipe (5.50) (SE)	0.37	
S-32	22+39.80	5.37' R	Manhole Type P7-T	310A	9.63	Perforated Pipe (3.50) (SW) Perforated Pipe (3.50) (N)	2.09	
S-33	90+53.02	10.50' R	Curb Inlet Type P	USF 5129-6176	8.87	Solid Pipe (4.40) (S)	2.50	

SUMMARY OF DRAINAGE STRUCTURES								
Structure Number	Station	Off-set	Structure Type	FRAME & GRATE	Rim Elev.	Pipe Inverts	Bottom (Sump) Elev.	Pollution Retardant Baffle N S E W
S-34	90+53.08	11.50' L	Curb Inlet Type P	USF 5129-6176	8.57	Solid Pipe (4.40) (N) Solid Pipe (2.00) (E)	0.00	
S-35	23+40.00	0.00'	Manhole Type J7-T	310A	9.35	Perforated Pipe (3.50) (S) Perforated Pipe (3.50) (N) Solid Pipe (1.90) (W)	0.16	
S-36	24+07.24	20.74' L	Swale Inlet Type P	USF 4700-6223	8.71	Solid Pipe (1.50) (E)	-0.50	
S-37	24+07.33	11.93' R	Curb Inlet Type P	USF 5129-6176	8.75	Solid Pipe (1.50) (W)	-0.50	
S-38	24+07.31	4.10' R	Manhole Type J7-T	310A	9.01	Solid Pipe (1.40) (W) Solid Pipe (1.40) (E) Perforated Pipe (3.50) (S) Perforated Pipe (3.50) (N)	-0.60	
S-39	25+29.04	19.92' L	Swale Inlet Type P	USF 4700-6223	8.25	Solid Pipe (1.50) (E)	-0.50	
S-40	25+29.49	11.93' R	Manhole Type J7-T	USF 5129-6176	8.27	Solid Pipe (1.40) (W) Perforated Pipe (3.50) (S) Perforated Pipe (3.50) (N)	-0.60	
S-41	89+47.62	17.89' R	Swale Inlet Type P	USF 4700-6223	8.29	Solid Pipe (0.00) (S)	-2.00	
S-42	89+47.62	10.99' L	Curb Inlet Type P	USF 5129-6176	8.27	Solid Pipe (0.00) (N) Solid Pipe (0.00) (W)	-2.00	
S-43	25+97.00	9.42' R	Manhole Type J7-T	310A	8.65	Solid Pipe (0.00) (N) Perforated Pipe (3.50) (S) Solid Pipe (0.00) (E)	-2.02	
S-43A	26+29.83	10.06' R	Manhole Type J7-T	310A	8.60	Perforated Pipe (3.50) (N) Solid Pipe (0.00) (S)	-2.10	
S-44	27+18.31	20.48' L	Swale Inlet Type P	USF 4700-6223	8.15	Solid Pipe (0.70) (E)	-1.30	
S-45	27+18.36	11.94' R	Curb Inlet Type J	USF 5129-6176	8.18	Solid Pipe (0.00) (N) Perforated Pipe (3.50) (S) Solid Pipe (0.60) (W)	-2.00	
S-46	100+51.15	11.01' L	Curb Inlet Type P	USF 5129-6176	8.42	Solid Pipe (5.30) (N)	3.30	
S-47	100+51.18	11.00' R	Curb Inlet Type P	USF 5129-6176	8.37	Solid Pipe (5.20) (S) Solid Pipe (1.70) (E)	-0.30	
S-48	28+01.03	12.04' R	Curb Inlet Type J	USF 5129-6176	8.56	Perforated Pipe (3.50) (N) Solid Pipe (0.00) (S) Solid Pipe (1.60) (W)	-2.00	
S-49	29+48.49	13.42' L	Curb Inlet Type P	USF 5129-6176	9.61	Solid Pipe (6.20) (E)	4.20	
S-50	29+48.38	13.34' R	Curb Inlet Type J	USF 5129-6176	9.61	Perforated Pipe (3.50) (S) Solid Pipe (0.00) (N) Solid Pipe (6.10) (W)	-2.00	
S-51	110+57.06	10.50' R	Curb Inlet Type P	USF 5129-6176	10.27	Solid Pipe (6.70) (S)	4.70	
S-52	110+57.06	11.49' L	Curb Inlet Type P	USF 5129-6176	10.22	Solid Pipe (6.60) (N) Solid Pipe (3.50) (E)	1.50	
S-53	30+75.28	19.04' R	Curb Inlet Type J	USF 5129-6176	10.41	Perforated Pipe (3.50) (N) Solid Pipe (0.00) (S) Solid Pipe (3.40) (W)	-2.00	
S-54	32+14.14	19.38' L	Curb Inlet Type P	USF 5129-6176	10.03	Solid Pipe (6.70) (E)	4.70	
S-55	32+25.14	19.19' R	Curb Inlet Type J	USF 5129-6176	10.03	Solid Pipe (6.60) (W) Perforated Pipe (3.50) (N) Perforated Pipe (3.50) (S)	0.00	
S-56	35+08.83	19.37' L	Curb Inlet Type P	USF 5129-6176	9.15	Solid Pipe (5.70) (E)	3.70	
S-57	35+08.74	19.18' R	Curb Inlet Type J	USF 5129-6176	9.18	Solid Pipe (5.60) (W) Solid Pipe (3.50) (N) Perforated Pipe (3.50) (S)	0.00	
S-58	120+57.06	11.00' R	Curb Inlet Type P	USF 5129-6176	9.02	Solid Pipe (5.70) (S)	3.70	
S-59	120+57.04	11.01' L	Curb Inlet Type P	USF 5129-6176	9.02	Solid Pipe (5.60) (N) Solid Pipe (2.50) (E)	0.50	
S-60	35+43.27	19.16' R	Curb Inlet Type J	USF 5129-6176	9.29	Perforated Pipe (3.50) (N) Solid Pipe (3.50) (S) Solid Pipe (2.40) (W)	0.00	
S-61	36+43.65	19.18' R	Curb Inlet Type J	USF 5129-6176	8.78	Perforated Pipe (3.50) (N) Perforated Pipe (3.50) (S) Pipe Culvert SD (5.00) (W)	0.00	
S-62	36+43.75	19.37' L	Curb Inlet Type P	USF 5129-6176	8.97	Pipe Culvert SD (5.10) (E)	3.10	
S-63	37+87.18	19.20' R	Curb Inlet Type J	USF 5129-6176	8.85	Solid Pipe (5.60) (W) Perforated Pipe (3.50) (S)	0.00	
S-64	37+87.48	19.38' L	Curb Inlet Type P	USF 5129-6176	8.82	Solid Pipe (5.70) (E)	3.70	

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CARIBBEAN BLVD IMPROVEMENTS  
FINAL GAP (FROM SW 87 AVE TO SW 184 ST)  
CUTLER BAY FLORIDA

File Name: RM CMH CMH 25.02.25  
Dwn. Chkd. Dsgn. YY.MM.DD

DRAIN STRUCT TABLE

Project No. 215617296  
Drawing No. C-01  
Scale Sheet Revision

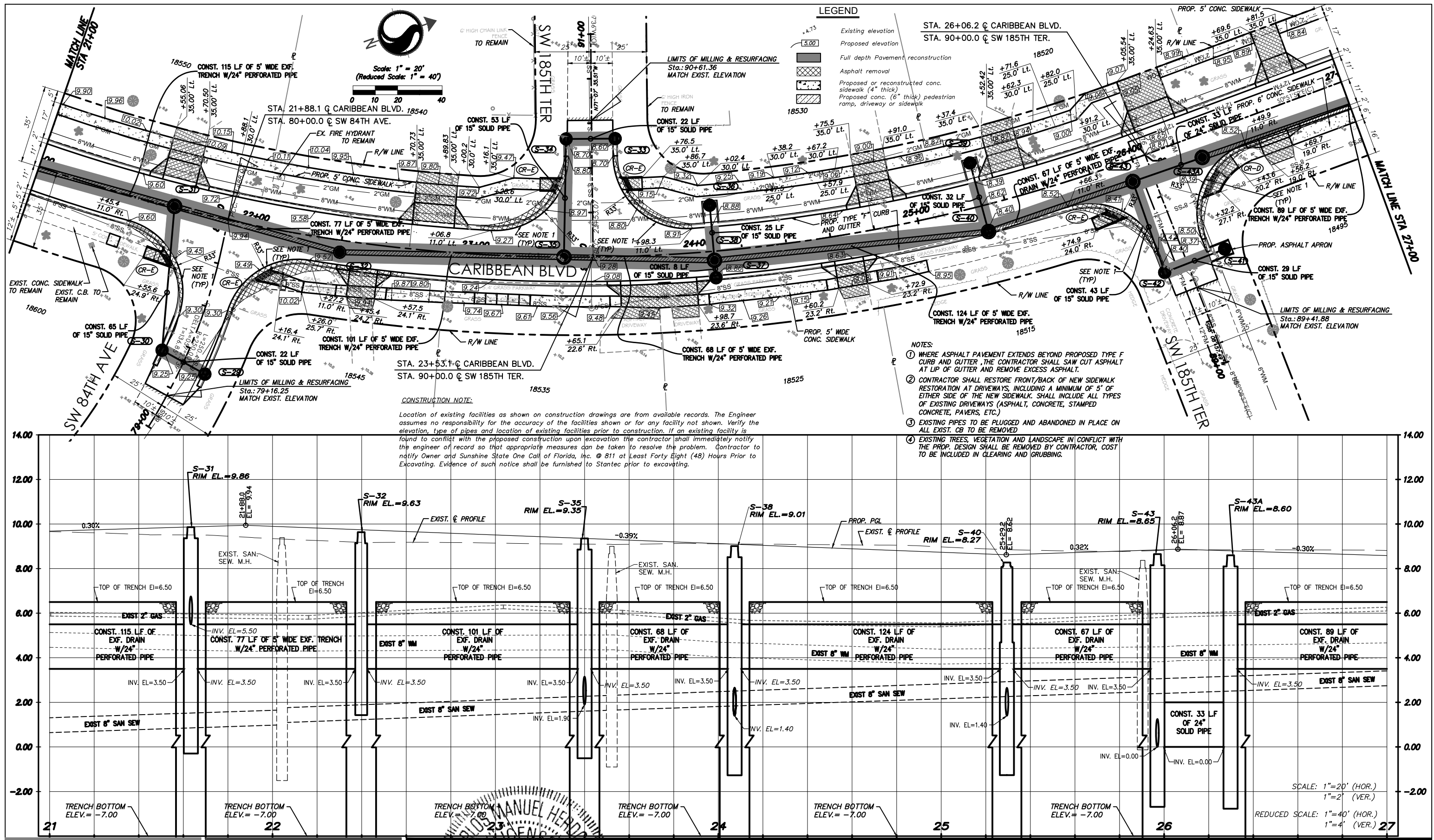
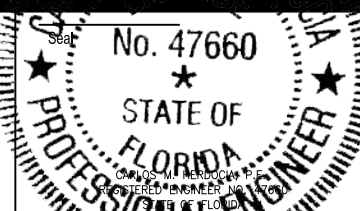
of 57









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FINAL GAP (FROM SW 87 AVE TO SW 184 ST)  
CUTLER BAY FLORIDA

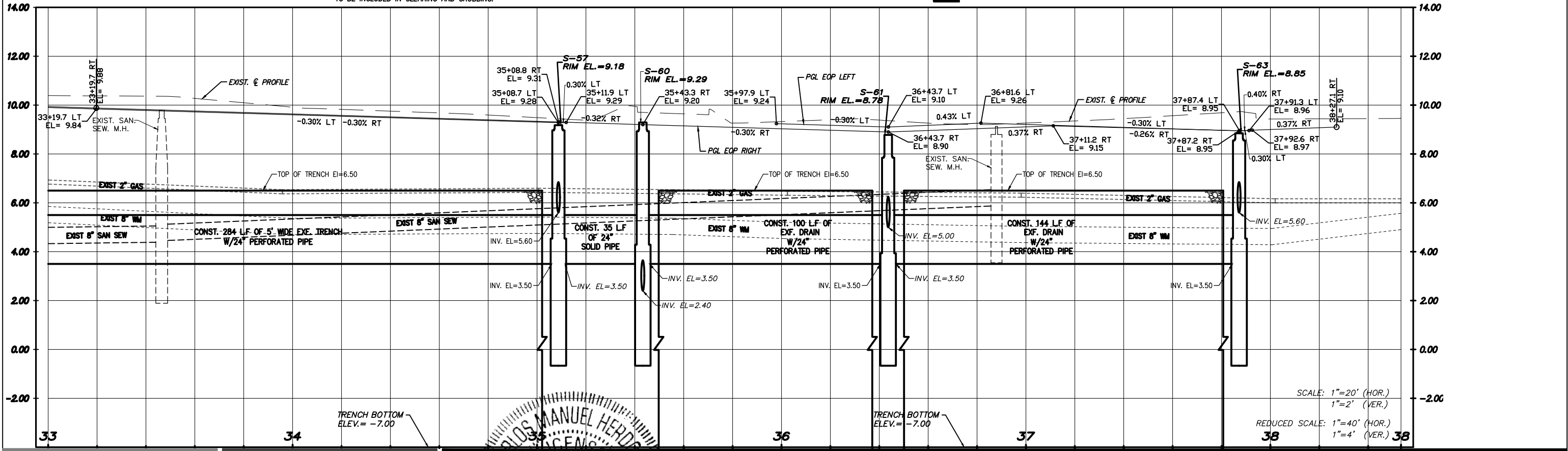
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	Dwn.	Chkd.	Dsgn.	YY.MM.DD

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Drawing No. <div style="border-bottom: 1px solid black; height: 20px; margin-top: 5px;"></div>	Sheet <div style="border-bottom: 1px solid black; height: 20px; margin-top: 5px;"></div>	
<b>C-04</b>	of <b>57</b>	







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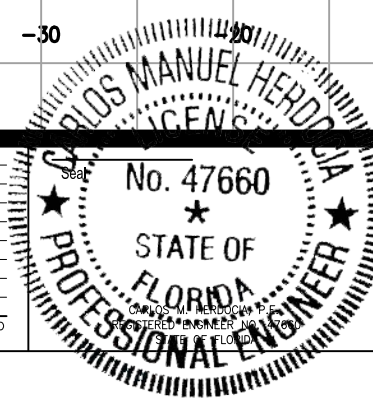
RIM ELEV. REFERS TO TOP OF INLET HOOD  
ON INLETS USING USF 5129-6176.

Revision

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FINAL GAP (FROM SW 87 AVE TO SW 184 ST)  
CUTLER BAY FLORIDA

File Name: RM CMH CMH 25.02.25  
Dwn. Chkd. Dsgn. YY.MM.DD

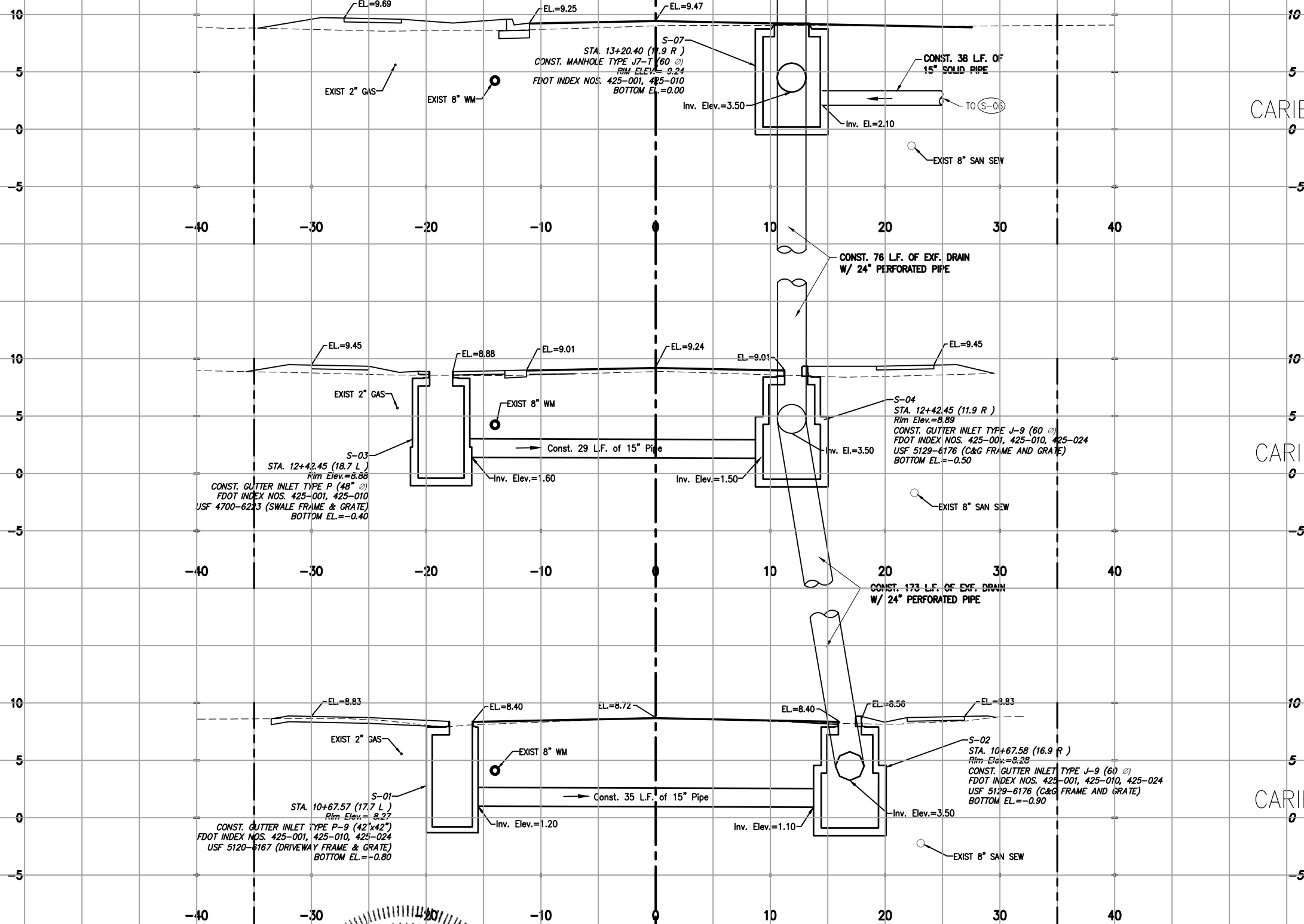
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Project No. 215617296  
Drawing No. C-07  
Scale Sheet Revision

of 57

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1"=5' (VER.)

REDUCED SCALE: 1"=10' (HOR.)  
1"=10' (VER.)



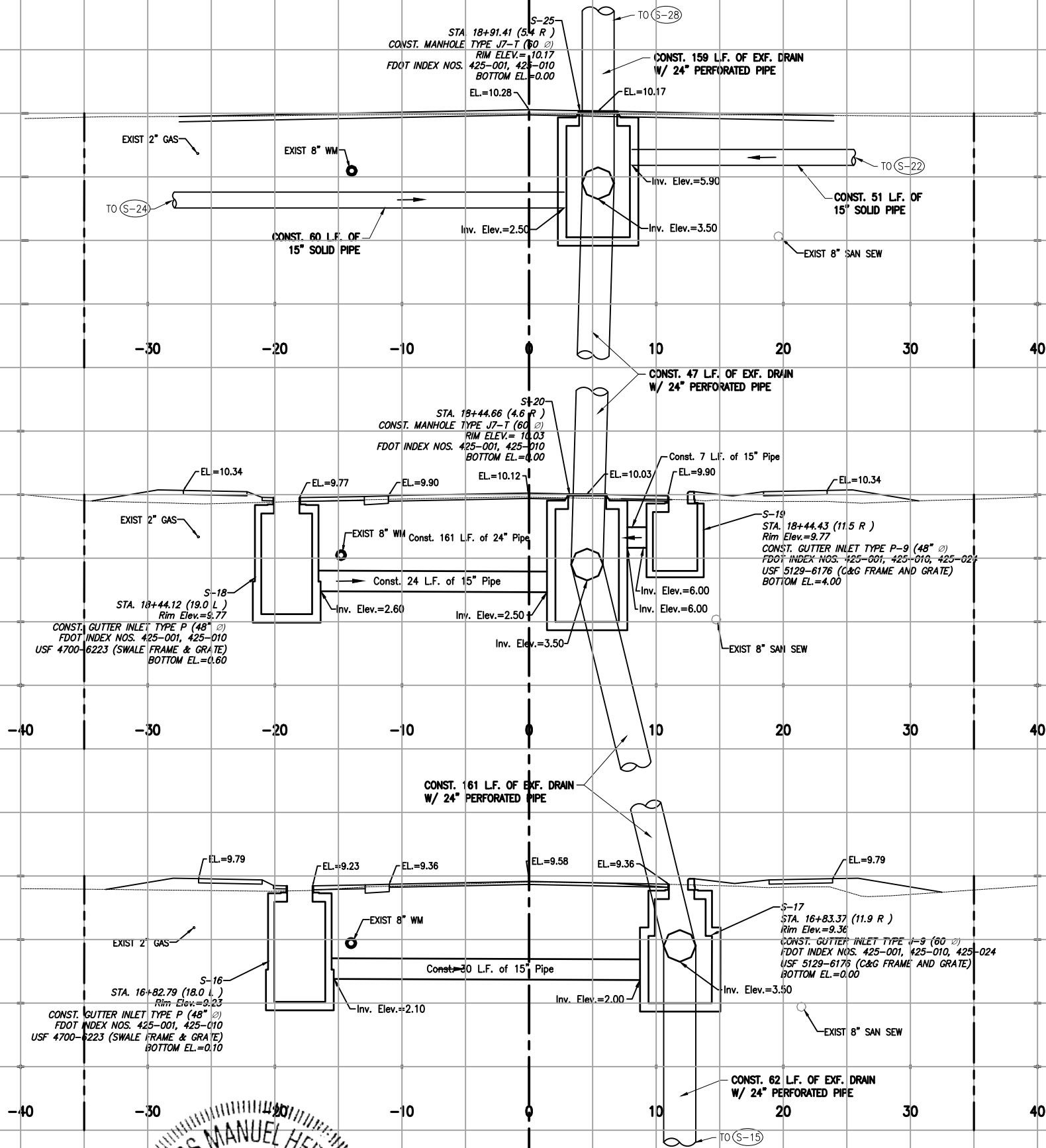




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ALL PROPOSED DRAINAGE PIPES  
TO BE POLYPROPYLENE PIPES

RIM ELEV. REFERS TO TOP OF INLET HOOD  
ON INLETS USING USF 5129-6176.



18+91.5  
S-25  
CARIBBEAN BLVD.

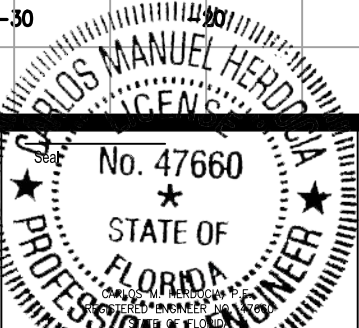
18+44.5  
S-18 S-19 S-20  
CARIBBEAN BLVD.

16+83.1  
S-16 S-17  
CARIBBEAN BLVD.

SCALE: 1"=5' (HOR.)  
1"=5' (VER.)  
REDUCED SCALE: 1"=10' (HOR.)  
1"=10' (VER.)

Revision	By	Appd.	YY.MM.DD

Issued	By	Appd.	YY.MM.DD



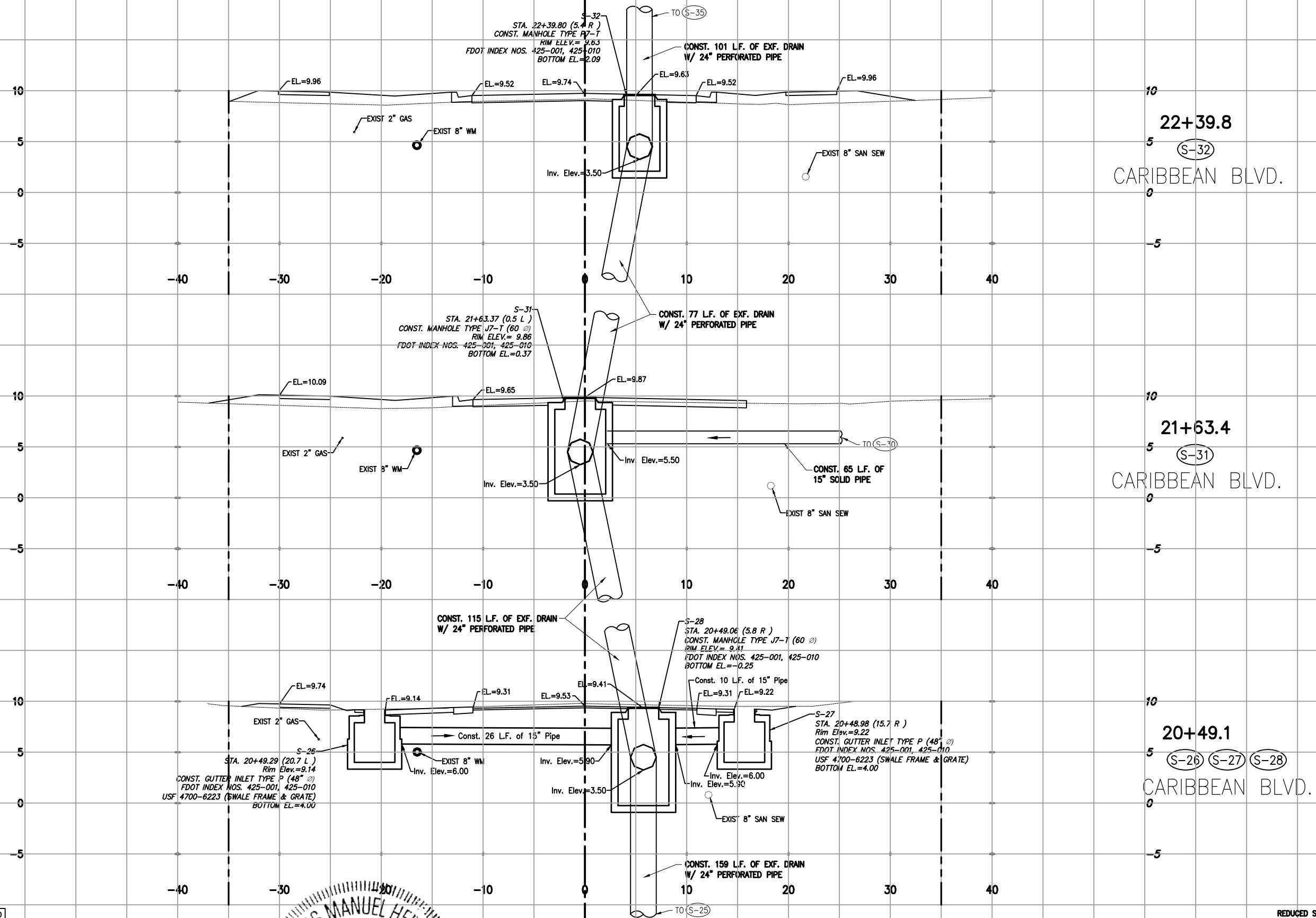
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File Name:	RM	CMH	CMH	25.02.25
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

DRAINAGE STRUCTURES	
Project No.	Scale
215617296	
Drawing No.	Sheet
C-09	57



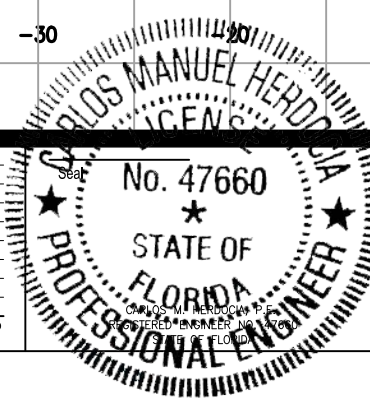
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RIM ELEV. ON INLETS	REFERS TO USF	TOP OF INLET HOOD 5129-6176.
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	SCALE: 1"=5' (HOR.) 1"=5' (VER.)
REDUCED SCALE:	1"=10' (HOR.) 1"=10' (VER.)

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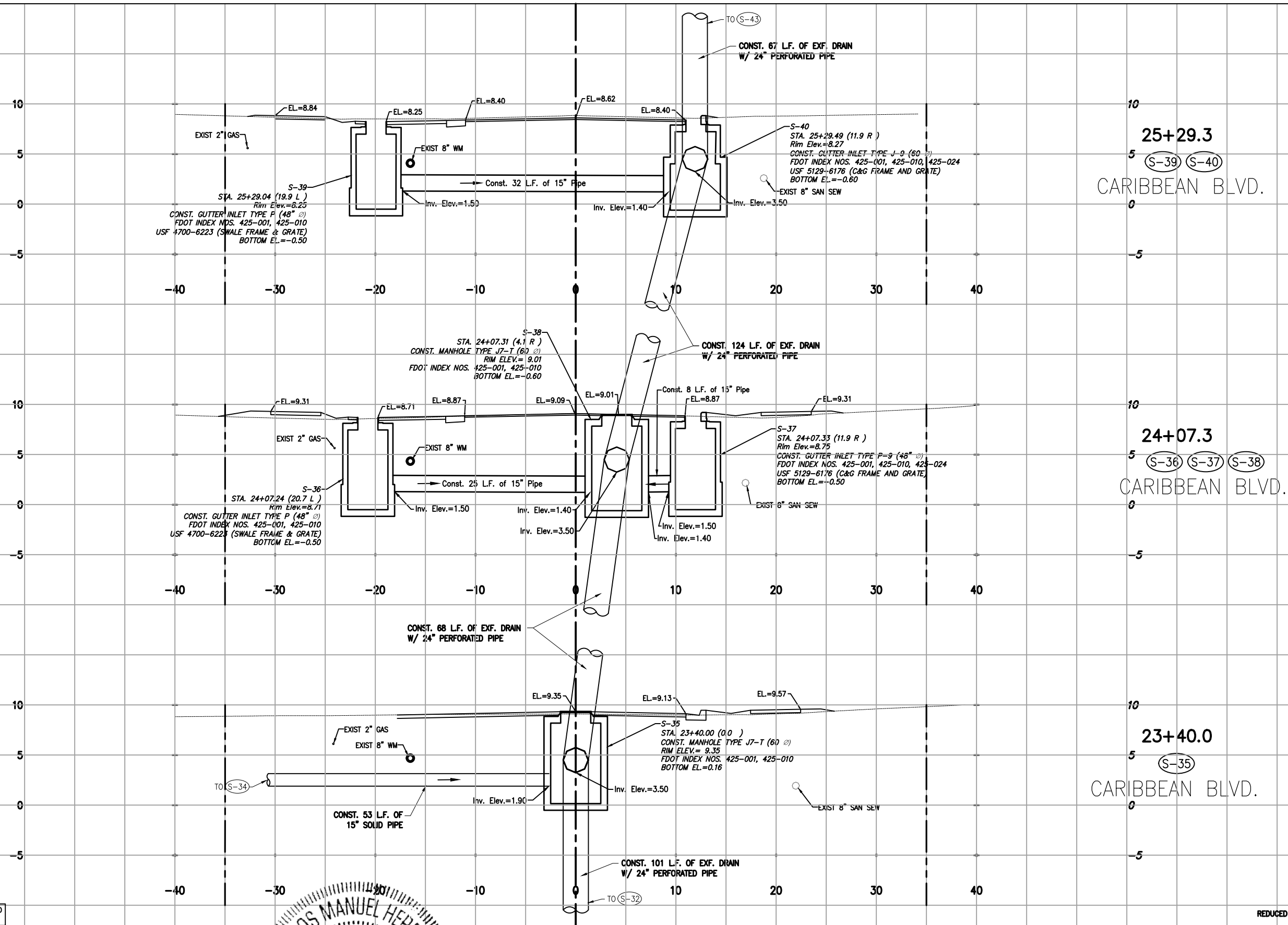
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CARIBBEAN BLVD IMPROVEMENTS  
FINAL GAP (FROM SW 87 AVE TO SW 184 ST)  
CUTLER BAY FLORIDA

File Name:	RM	CMH	CMH	25.02.25
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

## DRAINAGE STRUCTURES

Project No. 215617296	Scale	
Drawing No.	Sheet	Revision
C-10	of 57	



ALL PROPOSED DRAINAGE PIPES  
TO BE POLYPROPYLENE PIPES

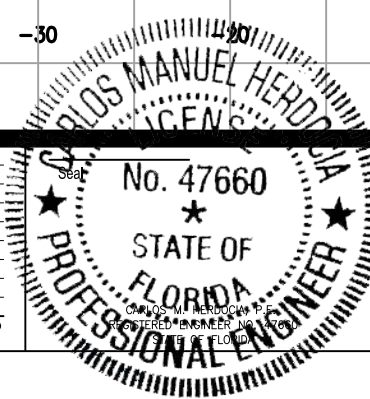
RIM ELEV. ON INLETS	REFERS TO TOP OF INLET HOOD USING USF 5129-6176.
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SCALE: 1"=5' (HOR.)  
1"=5' (VER.)

REDUCED SCALE: 1"=10' (HOR.)  
1"=10' (VER.)

Revision	By	Appd.	YY.MM.DD

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CARIBBEAN BLVD IMPROVEMENTS  
FINAL GAP (FROM SW 87 AVE TO SW 184 ST)  
CUTLER BAY FLORIDA

File Name:	RM	CMH	CMH	25.02.25
	Dwn.	Chkd.	Dsan.	YY.MM.DD

## DRAINAGE STRUCTURES

Project No.	Scale	
215617296		
Drawing No.	Sheet	Revision

C-11 of 57

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ALL PROPOSED DRAINAGE PIPES  
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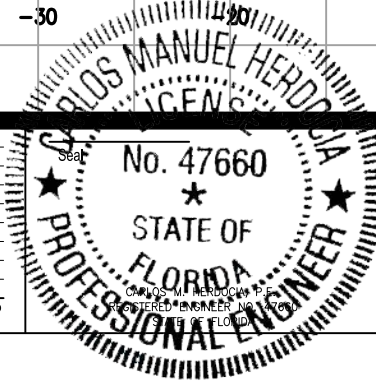
RIM ELEV. REFERS TO TOP OF INLET HOOD  
ON INLETS USING USF 5129-6176.

Revision

By Appd. YY.MM.DD

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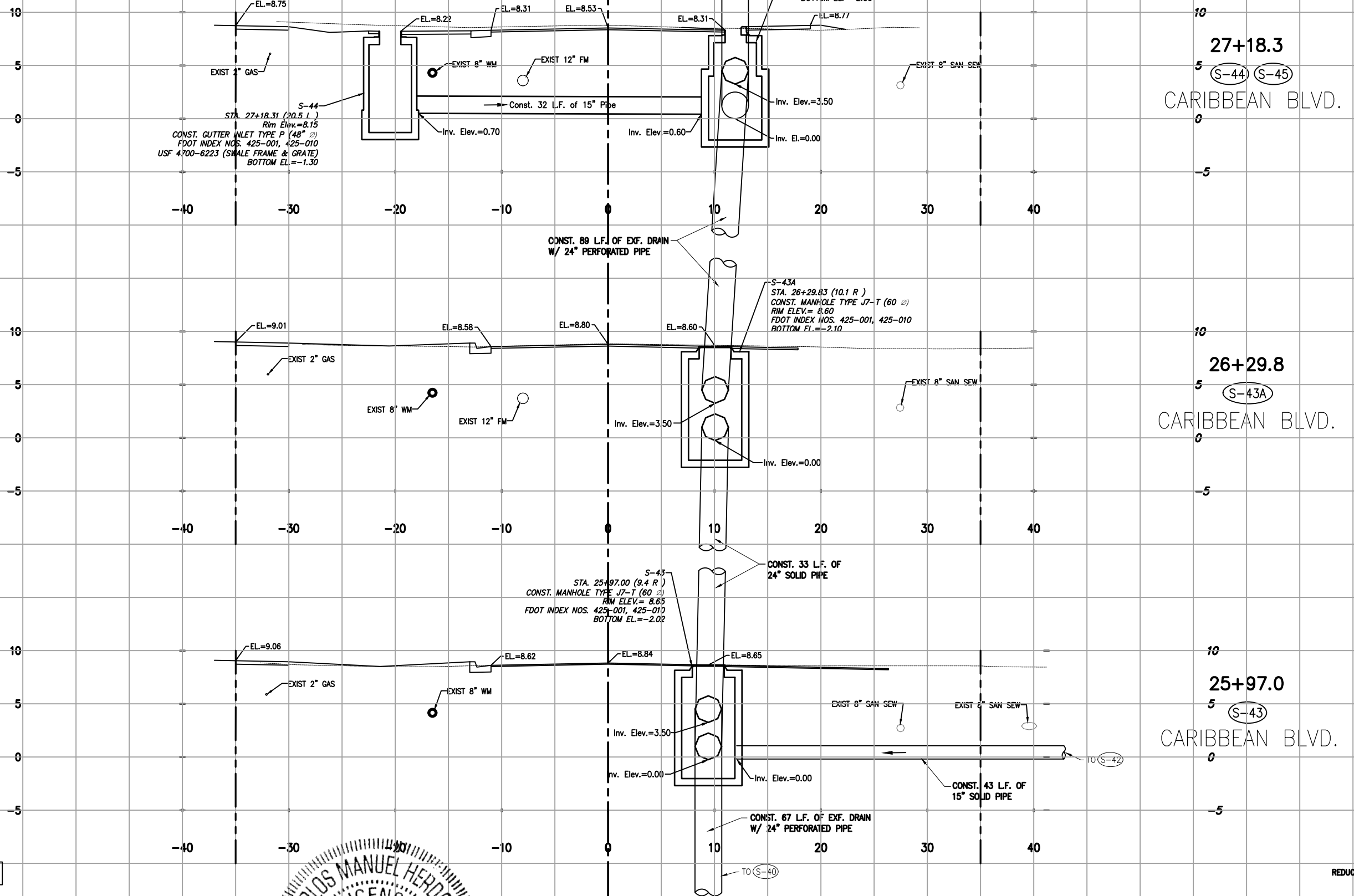
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FINAL GAP (FROM SW 87 AVE TO SW 184 ST)  
CUTLER BAY FLORIDA

File Name: RM CMH CMH 25.02.25  
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DRAINAGE STRUCTURES

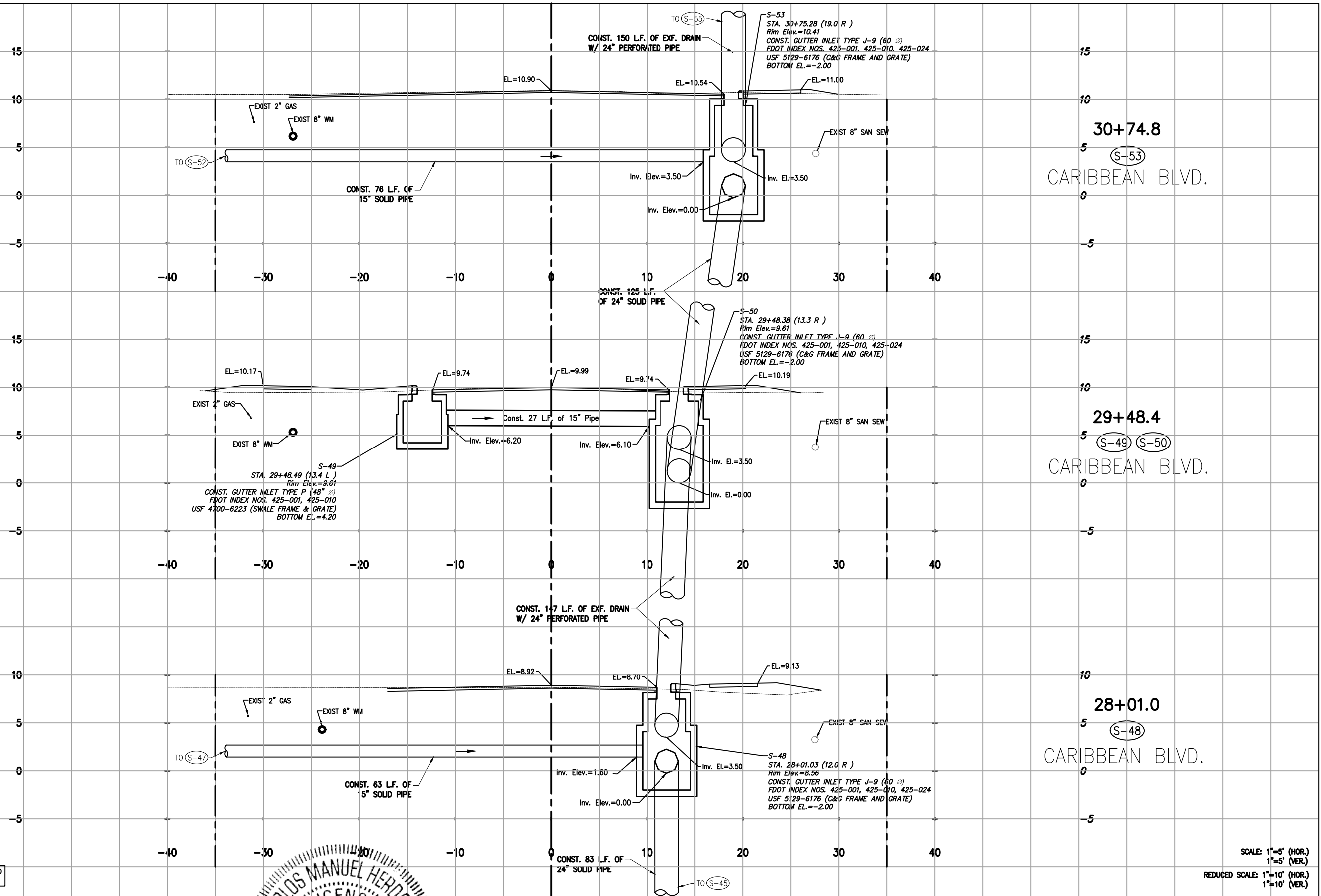
Project No. 215617296  
Drawing No. C-12  
Scale Sheet  
Revision

of 57



SCALE: 1"=5' (HOR.)  
1"=5' (VER.)  
REDUCED SCALE: 1"=10' (HOR.)  
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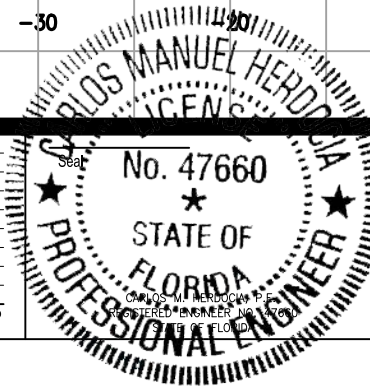
ALL PROPOSED DRAINAGE PIPES  
TO BE POLYPROPYLENE PIPES

RIM ELEV. ON INLETS	REFERS TO USF	TOP OF INLET HOOD 5129-6176.
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	SCALE: 1"=5' (HOR.) 1"=5' (VER.)
REDUCED SCALE:	1"=10' (HOR.) 1"=10' (VER.)

Revision	By	Appd.	YY.MM.DD

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FINAL GAP (FROM SW 87 AVE TO SW 184 ST)  
CUTLER BAY FLORIDA

File Name:	RM	CMH	CMH	25.02.25
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

## DRAINAGE STRUCTURES

Project No.	Scale	
215617296		
Drawing No.	Sheet	Revision

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ALL PROPOSED DRAINAGE PIPES  
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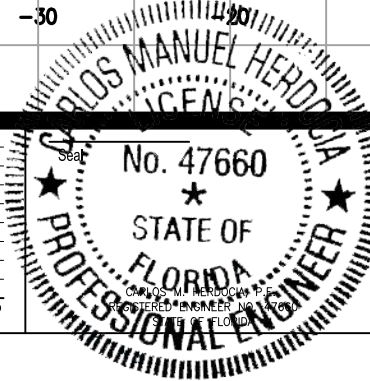
RIM ELEV. REFERS TO TOP OF INLET HOOD  
ON INLETS USING USF 5129-6176.

Revision

By Appd. YY.MM.DD

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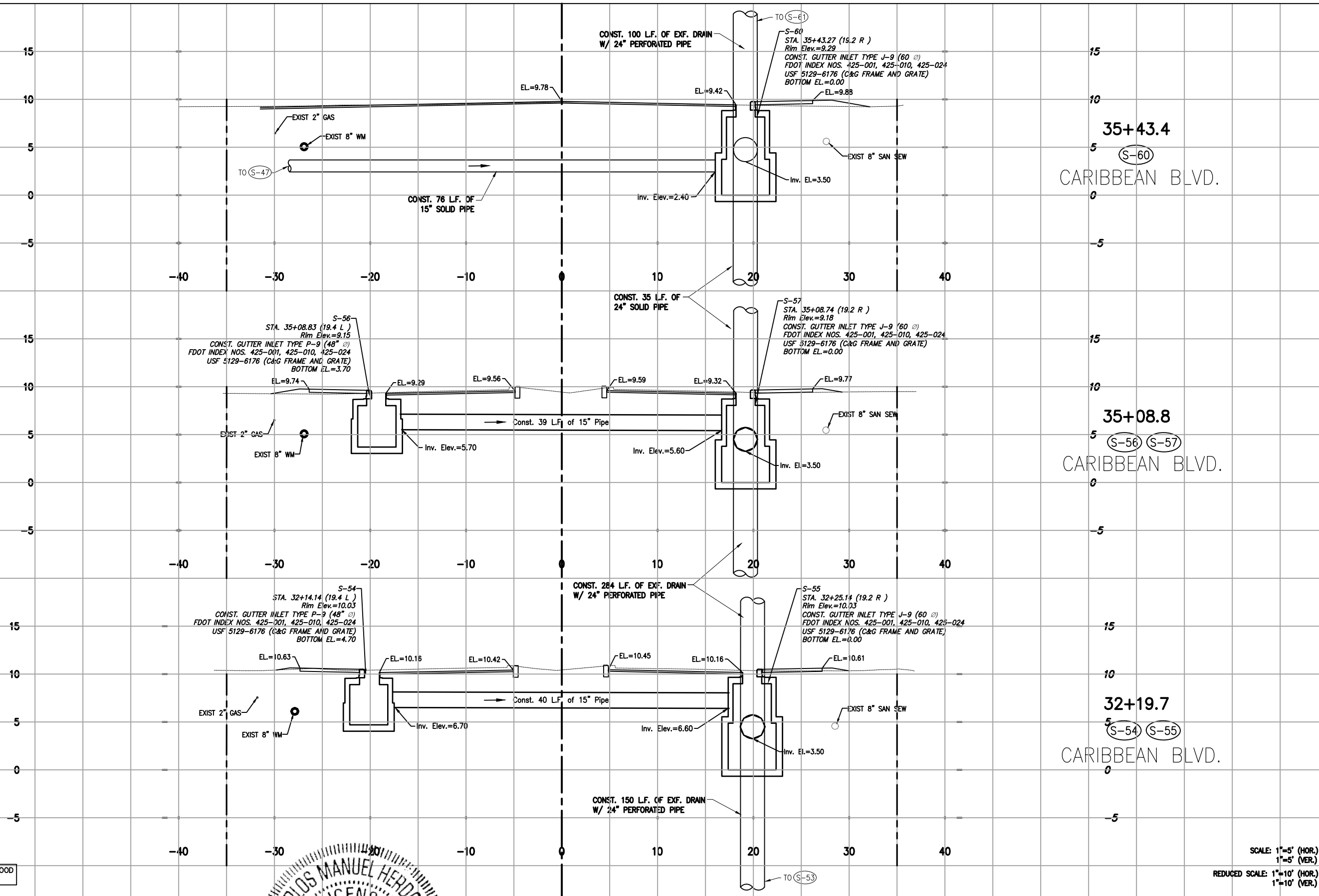
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FINAL GAP (FROM SW 87 AVE TO SW 184 ST)  
CUTLER BAY FLORIDA

File Name: RM CMH CMH 25.02.25  
Dwn. Chkd. Dsgn. YY.MM.DD

DRAINAGE STRUCTURES

Project No. 215617296 Scale  
Drawing No. Sheet Revision

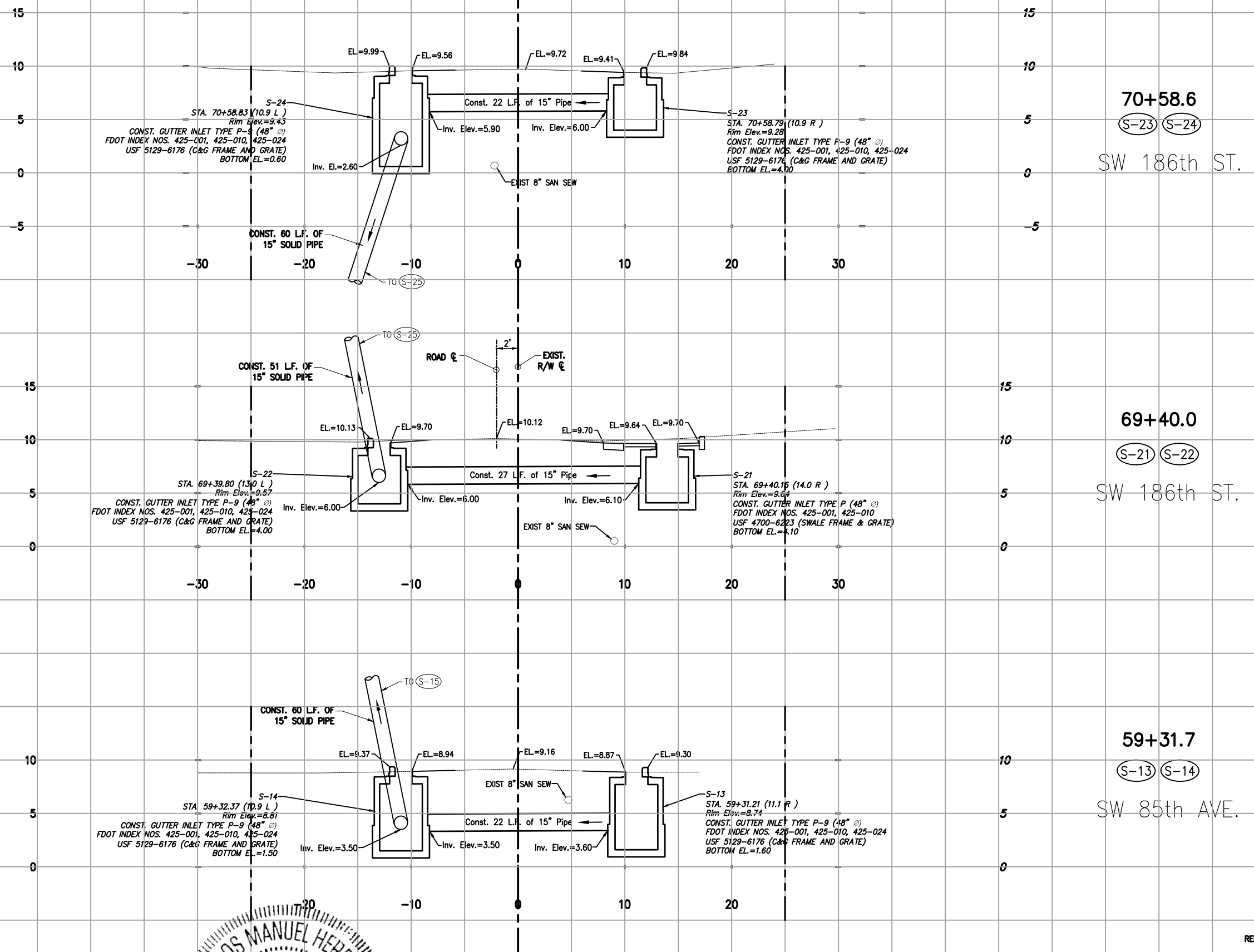
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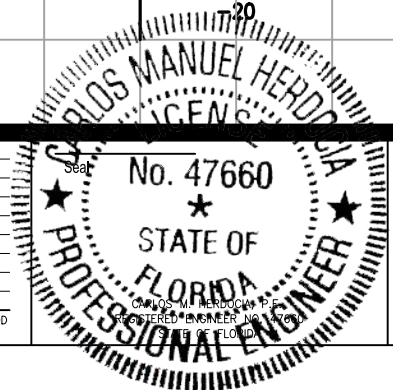




ALL PROPOSED DRAINAGE PIPES TO BE POLYPROPYLENE PIPES			
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RIM ELEV. REFERS TO TOP OF INLET HOOD  
ON INLETS USING USF 5129-6176.

SCALE: 1"=5' (HOR.)  
1"=5' (VER.)  
REDUCED SCALE: 1"=10' (HOR.)  
1"=10' (VER.)

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FINAL GAP (FROM SW 87 AVE TO SW 184 ST)  
CUTLER BAY FLORIDA

File Name:	RM	CMH	CMH	25.02.25
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

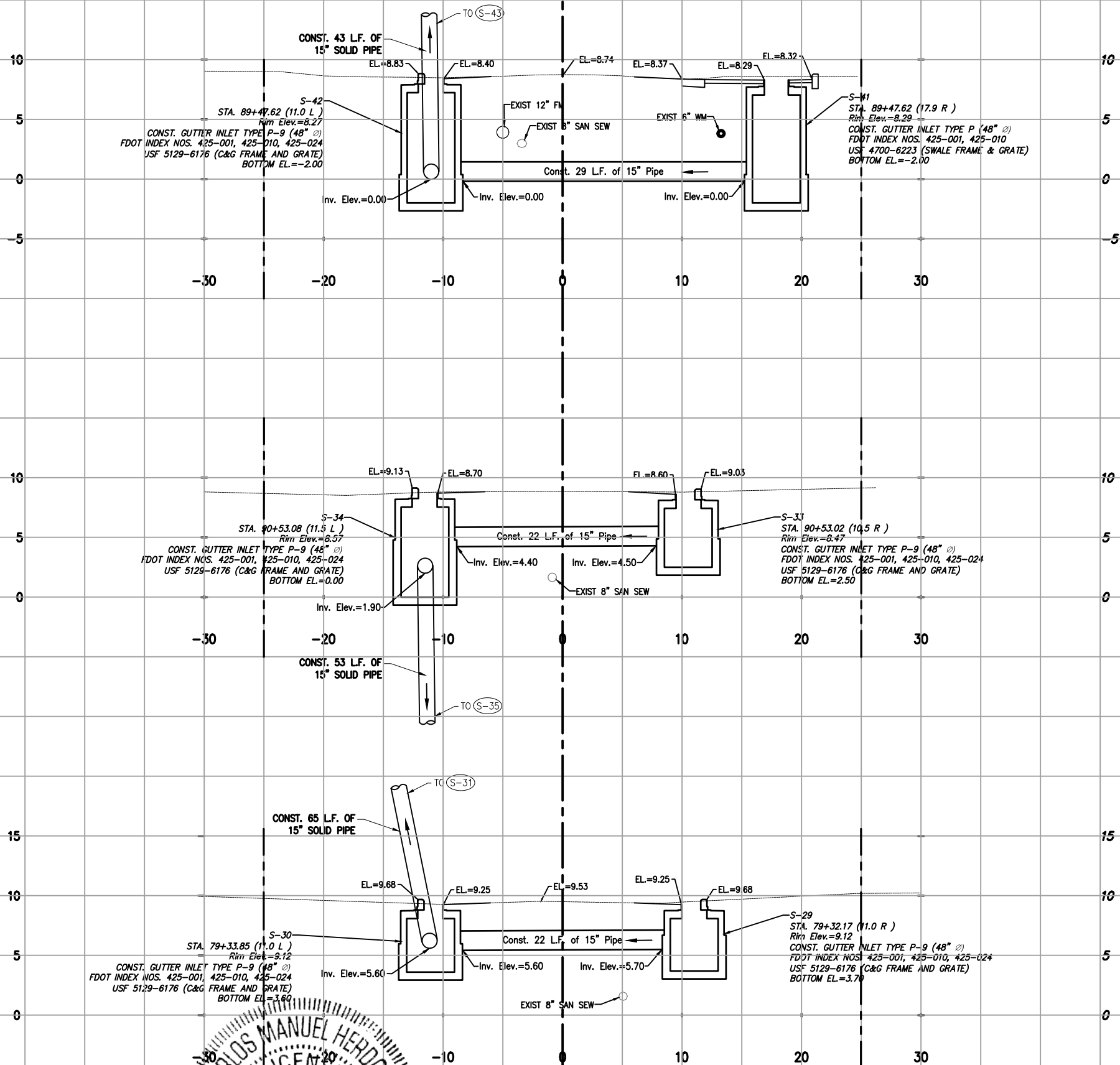
## DRAINAGE STRUCTURES

Project No. 215617296	Scale	
Drawing No.	Sheet	Revision
<b>C-16</b>	of <b>57</b>	

V:\215617296\215617296.dwg (17296) Structures.dwg  
2/2/2025 10:51 AM By: [redacted]

ALL PROPOSED DRAINAGE PIPES  
TO BE POLYPROPYLENE PIPES

RIM ELEV. REFERS TO TOP OF INLET HOOD  
ON INLETS USING USF 5129-6176.



89+47.6  
S-41 S-42  
SW 185th TER.

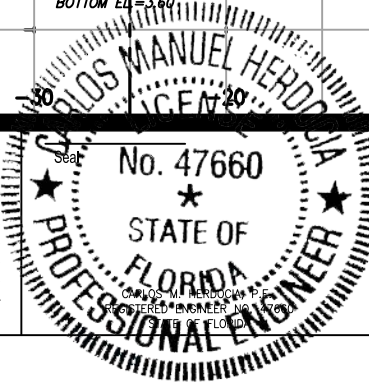
90+53.0  
S-33 S-34  
SW 185th TER.

79+33.0  
S-29 S-30  
SW 84th AVE.

SCALE: 1"=5' (HOR.)  
1"=5' (VER.)  
REDUCED SCALE: 1"=10' (HOR.)  
1"=10' (VER.)

Revision	By	Appd.	YY.MM.DD

A -	Issued	By	Appd.	YY.MM.DD



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CARIBBEAN BLVD IMPROVEMENTS  
FINAL GAP (FROM SW 87 AVE TO SW 184 ST)  
CUTLER BAY FLORIDA

File Name: RM CMH CMH 25.02.25  
Dwn. Chkd. Dsgn. YY.MM.DD

### DRAINAGE STRUCTURES

Project No. 215617296  
Drawing No. C-17  
Scale Sheet Revision

of 57

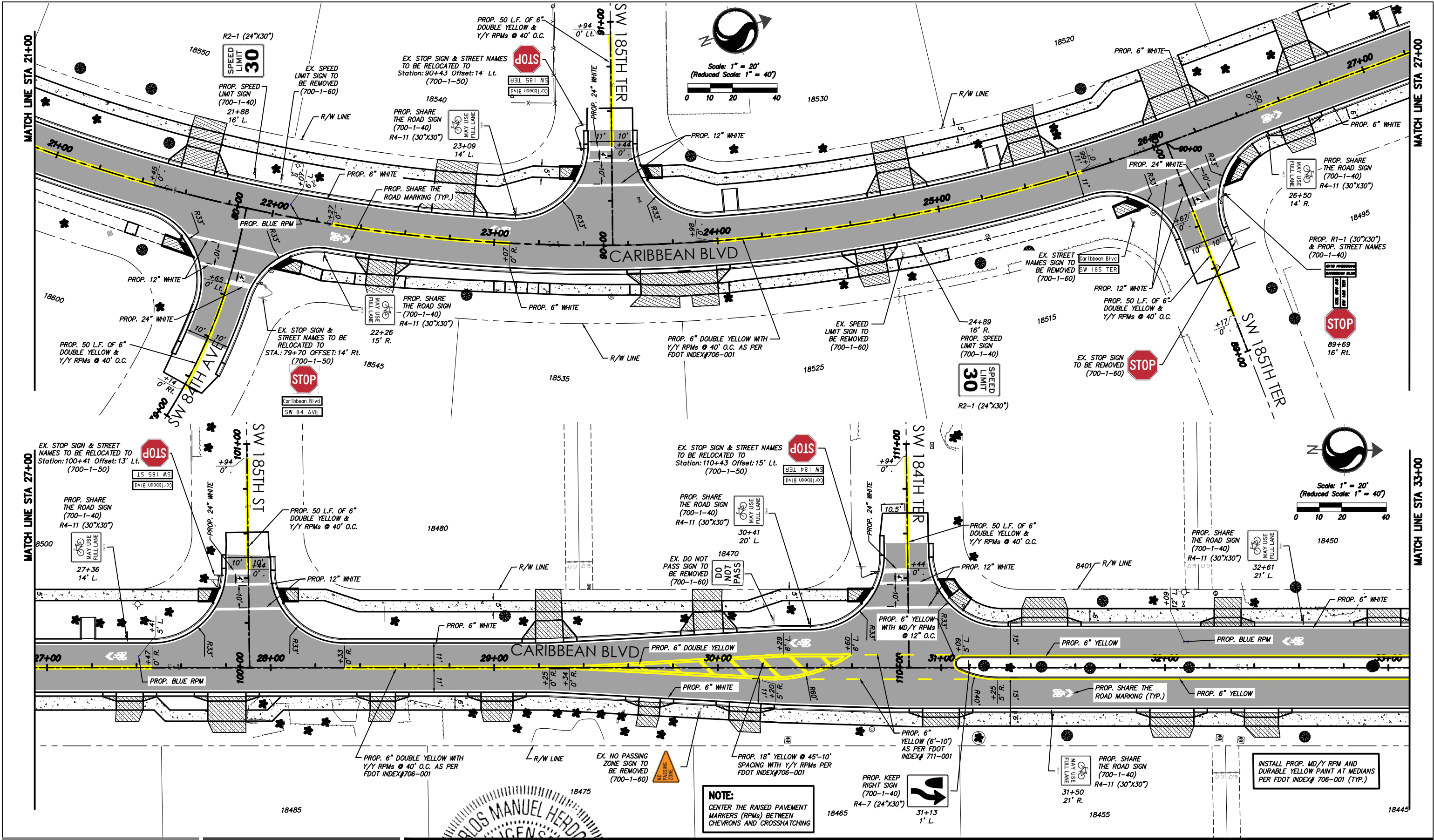




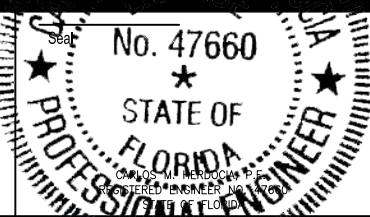




\\s155\drive\17296\17296.dwg (17296) 1/25/2012 10:32 AM By: [redacted]



Revision	By	Appd.	YY.MM.DD



Consultants

**Stantec**

901 Ponce de Leon Blvd, Suite 900  
Coral Gables, Florida 33134  
www.stantec.com

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CARIBBEAN BLVD IMPROVEMENTS  
FINAL GAP (FROM SW 87 AVE TO SW 184 ST)  
CUTLER BAY, FLORIDA

File Name:	RM	CMH	CMH	25.02.25
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

PAVEMENT MARKINGS		Project No.	Scale
		215617296	
Drawing No.	Sheet	Revision	
C-20	of 57		





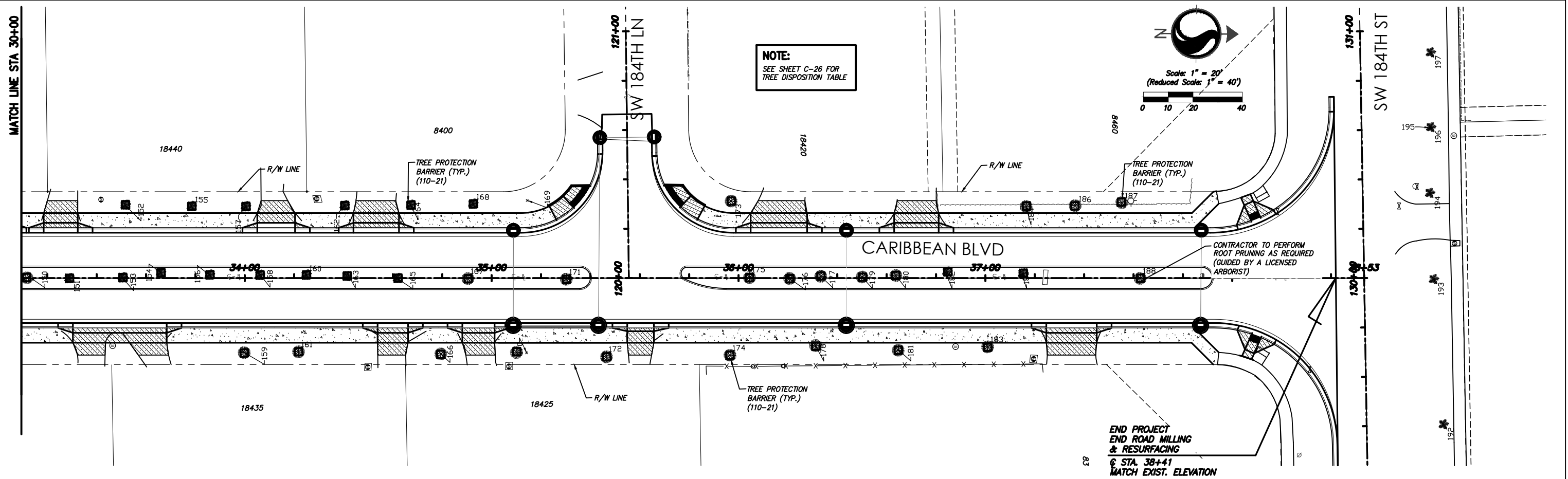
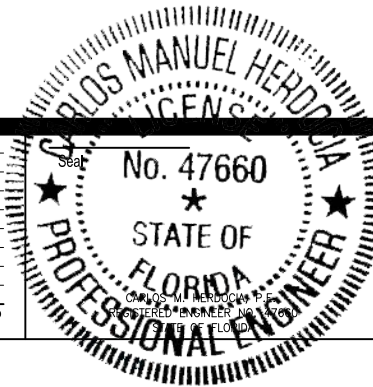
(4 EXISTING TO REMAIN)









[illegible]

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CARIBBEAN BLVD IMPROVEMENTS  
FINAL GAP (FROM SW 87 AVE TO SW 184 ST)  
CUTLER BAY FLORIDA

File Name:	RM	CMH	CMH	25.02.25
	Dwn.	Chkd.	Dsqn.	YY.MM.DD

## TREE DISPOSITION PLAN

Project No.	Scale	
215617296		
Drawing No.	Sheet	Revision

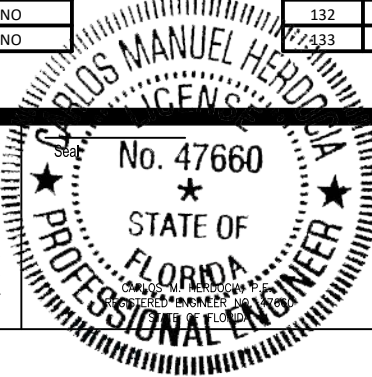
C-25 of

\\p155\55\active\215617296\civil\design\drawing\17296 TREE DISPOSITION PLAN.dwg  
2/23/2025 10:55 AM by: Veronica, Veronica

No	COMMON NAME	WIDTH	CANOPY	HEIGHT	REMOVE
1	PALM	15"	12'	25'	NO
2	PALM	15"	12'	25'	NO
3	PALM	15"	12'	25'	NO
4	PALM	15"	12'	25'	NO
5	TREE	10"	12'	2'	NO
6	PALM	15"	12'	25'	NO
7	PALM	10"	10'	25'	NO
8	PALM	15"	12'	25'	NO
9	TREE	10"	15'	30'	NO
10	PALM	15"	10'	25'	NO
11	PALM	15"	10'	25'	NO
12	PALM	15"	10'	25'	NO
13	PALM	15"	10'	20'	NO
14	PALM	12"	12'	25'	NO
15	COCO PALM	12"	12'	25'	NO
16	PALM	12"	12'	25'	NO
17	PALM	12"	12'	25'	NO
18	PALM	12"	12'	25'	NO
19	PALM	12"	12'	25'	NO
20	PALM	12"	12'	25'	NO
21	PALM	12"	12'	25'	NO
22	PALM	12"	12'	25'	NO
23	OAK TREE	15"	20'	30'	NO
24	TREE	12"	15'	30'	NO
25	PALM	15"	12'	20'	NO
26	GIMBOLIMBO	18"	25'	30'	NO
27	PALM	18"	12'	40'	NO
28	PALM	18"	12'	35'	NO
29	OAK TREE	12"	10'	25'	NO
30	PALM	15"	12'	35'	NO
31	OAK TREE	15"	25'	35'	NO
32	PALM	15"	12'	45'	NO
33	PALM	15"	12'	45'	NO
34	PALM	12"	12'	35'	NO
35	PALM	12"	12'	35'	TO RELOCATE
36	PALM	15"	12'	45'	NO
37	OAK TREE	18"	30'	40'	NO
38	OAK TREE	24"	30'	40'	NO
39	PALM	18"	15'	50'	NO
40	PALM	18"	15'	50'	NO
41	OAK TREE	15"	20'	45'	NO
42	OAK TREE	3'	30'	45'	NO
43	PALM	1.35'	15'	40'	NO
44	PALM	18"	12'	40'	NO
45	OAK TREE	0.60"	18'	15'	NO
46	PALM	0.60"	12'	14'	NO
47	PALM	18"	18'	50'	NO
48	PALM	18"	12'	50'	NO
49	PALM	18"	18'	50'	NO
50	OAK TREE	0.4'	10'	15'	NO
51	PALM	15"	15'	45'	NO
52	PALM	15"	15'	45'	NO
53	PALM	15"	12'	40'	NO
54	PALM	18"	12'	50'	NO
55	PALM	15"	10'	50'	NO
56	PALM	15"	18'	45'	NO
57	PALM	0.60'	12'	14'	NO
58	PALM	15"	12'	45'	NO
59	PALM	0.75'	10'	15'	NO
60	PALM	15"	12'	40'	NO
61	TREE	18"	15'	40'	NO
62	FI US TREE	1.8"	10'	50'	NO
63	SABAL PALM	0.5'	8'	8'	NO
64	PALM	1.50'	18'	40'	NO
65	TREE OAK	1.25'	30'	30'	NO
66	SABAL PALM	1.20'	16'	25'	NO

67	AVOCADO TREE	0.6'	15'	20'	NO
68	PALM	1.35'	15'	40'	NO
69	PALM	0.90'	10'	20'	NO
70	PALM	0.90'	18'	25'	NO
71	OAK TREE	1.00	20'	25'	NO
72	PALM	0.90'	18'	25'	NO
73	TREE	0.45'	10'	18'	NO
74	PALM	1.50'	18'	40'	NO
75	OAK TREE	2'	30'	30'	NO
76	OAK TREE	0.90'	28'	25'	NO
77	PALM	0.45'	10'	18'	NO
78	PALM	1'	18'	35'	NO
79	OAK TREE	1'	25'	25'	NO
80	TREE	1'	30'	25'	NO
81	TREE	1'	45'	30'	NO
82	PALM	1'	15'	30'	NO
83	O O PALM	0.65'	16'	25'	NO
84	PALM	0.90'	15'	30'	NO
85	PALM	0.45'	10'	18'	NO
86	PALM	1'	15'	30'	NO
87	TREE	0.45'	10'	18'	NO
88	PALM	0.75'	15'	18'	NO
89	OAK TREE	0.45'	12'	18'	NO
90	PALM	18"	10'	45'	NO
91	PALM	1'	15'	30'	NO
92	TREE	1"	35'	22'	NO
93	PALM	18"	10'	45'	NO
94	ARAMBOLA TREE	0.35'	12'	12'	NO
95	TREE	1.50'	15'	15'	NO
96	PALM	30'	8"	10'	NO
97	PALM	30'	8"	10'	NO
98	PALM	10"	8'	25'	NO
99	PALM	10"	8'	25'	NO
100	PALM	10"	8'	25'	NO
101	PALM	10"	8'	25"	NO
102	PALM	10"	8'	25'	NO
103	PALM	10"	8'	25'	NO
104	PALM	10"	8'	20'	NO
105	PALM	8"	8'	20'	NO
106	COCO PALM	10"	10'	30'	NO
107	COCO PALM	10"	12'	30'	NO
108	PALM	18"	12'	45'	NO
109	PALM	15"	12'	45'	NO
110	PALM	18"	15'	50'	NO
111	PALM	18"	12'	45'	NO
112	PALM	10"	12'	25'	NO
113	COCO PALM	8"	13'	30'	TO RELOCATE
114	COCO PALM	8"	13'	30'	NO
115	PALM	18"	12'	45'	NO
116	PALM	8"	12'	30'	NO
117	PALM	10"	12'	25'	NO
118	PALM	10"	12'	30'	NO
119	PALM	18"	12'	18'	NO
120	PALM	10"	12'	30'	NO
121	PALM	8"	12'	30'	NO
122	PALM	8"	12'	30'	NO
123	PALM	8"	12'	30'	NO
124	PALM	8"	10'	25'	NO
125	PALM	8"	12'	30'	NO
126	PALM	12"	12'	45'	NO
127	PALM	18"	12'	45'	NO
128	PALM	15"	12'	45'	NO
129	PALM	12"	12'	45'	TO RELOCATE
130	PALM	12"	12'	45'	NO
131	PALM	12"	10'	30'	NO
132	PALM	12"	10'	30'	NO
433	PALM	15"	6'	25'	NO

134	PALM	18"	6'	25'	NO
135	OAK TREE	18"	20'	25'	NO
136	PALM	4"	10'	30'	NO
137	PALM	4"	6'	20'	NO
138	OAK TREE	18"	20'	25'	NO
139	OAK TREE	15"	25'	30'	NO
140	OAK TREE	15"	20'	25'	NO
141	OAK TREE	15"	25'	30'	NO
142	PALM	15"	12'	43'	NO
143	OAK TREE	15"	20'	25'	NO
144	PALM	15"	15'	45'	NO
145	OAK TREE	18"	35'	45'	NO
146	OAK TREE	15"	25'	30'	NO
147	OAK TREE	15"	20'	25'	NO
148	OAK TREE	15"	20'	35'	NO
149	OAK TREE	15"	20'	25'	NO
150	OAK TREE	15"	20'	35'	NO
151	PALM	12"	12'	30'	NO
152	PALM	18"	12'	45'	NO
153	PALM	0.50"	10'	30'	NO
154	PALM	15"	10'	15'	NO
155	PALM	18"	12'	45'	NO
156	PALM	12"	10'	15'	NO
157	PALM	18"	12'	45'	NO
158	PALM	12"	10'	15'	NO
159	OAK TREE	15"	15'	35'	NO
160	PALM	15"	12'	40'	NO
161	OAK TREE	15"	15'	35'	NO
162	PALM	18"	12'	45'	NO
163	PALM	12"	10'	45'	NO
164	PALM	18"	12'	45'	NO
165	PALM	12"	15'	20'	NO
166	OAK TREE	15"	15'	35'	NO
167	OAK TREE	10"	15'	20'	NO
168	PALM	18"	12'	45'	NO
169	PALM	18"	12'	45'	NO
170	OAK TREE	18"	20'	35'	NO
171	OAK TREE	10"	15'	20'	NO
172	OAK TREE	12"	12'	25'	NO
173	TREE	18"	30'	30'	NO
174	OAK TREE	15"	25'	35'	NO
175	TREE	0.50	20'	40'	NO
176	TREE	0.50	20'	40'	NO
177	TREE	.5"	15'	40'	NO
178	OAK TREE	.50"	10'	20'	NO
179	TREE	.50"	18'	40'	NO
180	TREE	18"	18'	40'	NO
181	OAK TREE	.50"	10'	30'	NO
182	PALM	5"	10'	25'	NO
183	OAK TREE	.5"	10'	10'	NO
184	GUIMBOLINBO TREE	15"	15'	35'	NO
185	PALM	12"	12'	20'	NO
186	GUIMBOLINBO TREE	15"	15'	35'	NO
187	GUIMBOLINBO	15"	15'	35'	NO
188	TREE	1'	20	35'	NO
189	PALM	10"	8'	25'	NO
190	PALM	15"	12'	38'	NO
191	PALM	15"	15'	45'	NO
192	PALM	18"	12'	45'	NO
193	PALM	18"	12'	45'	NO
194	PALM	18"	10'	45'	NO
195	PALM	18"	15'	40'	NO
196	PALM	18"	15'	45'	NO
197	PALM	15"	12'	38'	NO
198	PALM	15"	12'	38'	NO



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CARIBBEAN BLVD IMPROVEMENTS  
FINAL GAP (FROM SW 87 AVE TO SW 184 ST)  
CUTLER BAY FLORIDA

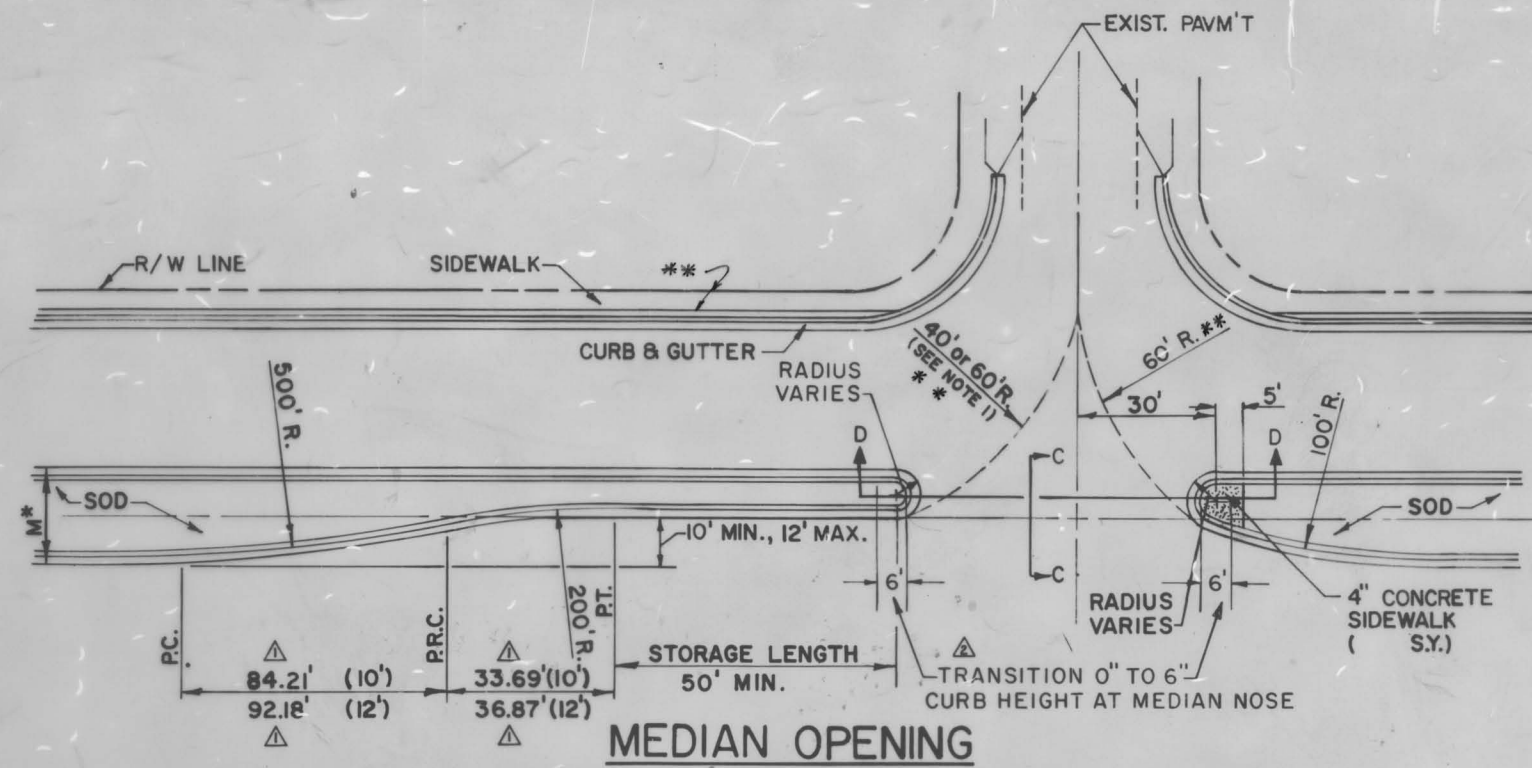
File Name: RM Dwn. CMH Chkd. CMH Dsgn. 25.02.25 YY.MM.DD

TREE DISPOSITION TABLE

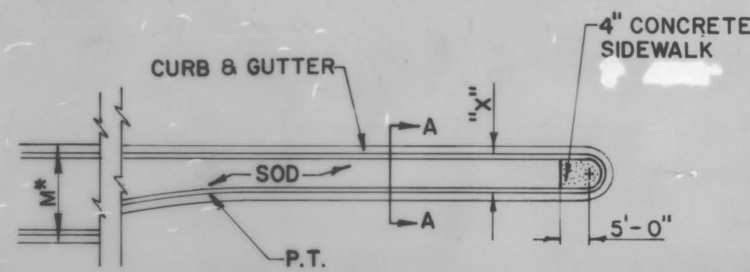
Project No. 215617296  
Drawing No. C-26  
Scale Sheet Revision

of

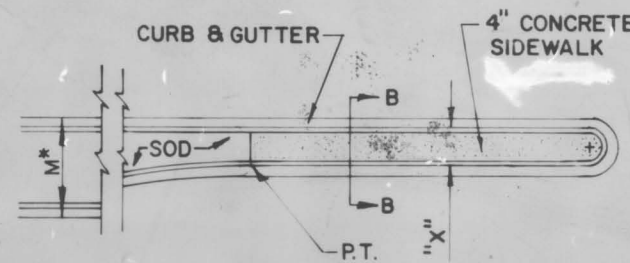




### MEDIAN OPENING



DETAIL 'A'



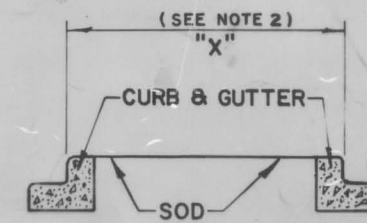
DETAIL 'B'

### NOTES:

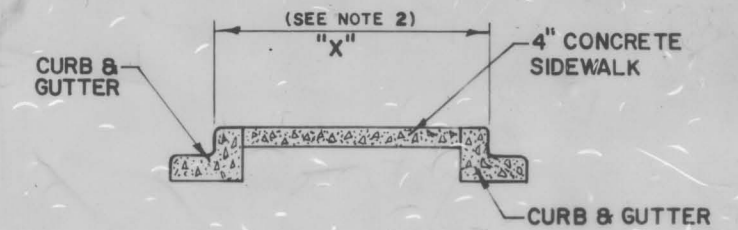
1. MINOR INTERSECTIONS 40' R. (LOCAL STREETS)  
MAJOR INTERSECTIONS 60' R. (ARTERIAL STREETS)
2. WHEN DIMENSION "X" IS MORE THAN 6'-0"  
USE DETAIL A; WHEN LESS THAN 6'-0" USE DETAIL B

\* M=TOTAL EFFECTIVE MEDIAN WIDTH

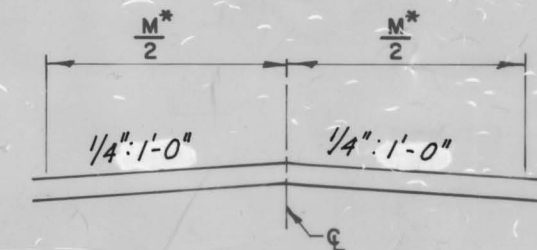
\*\* THESE ITEMS MAY NOT BE TYPICAL,  
SEE CONSTRUCTION PLANS FOR PROPER  
DETAILING.



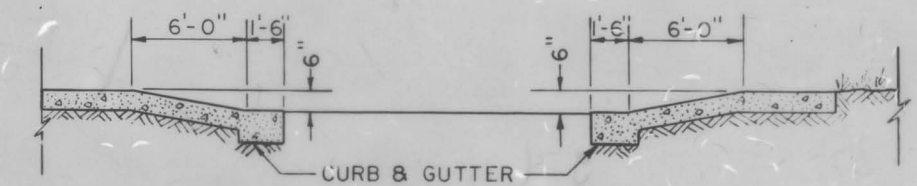
SECTION A-A



SECTION B-B

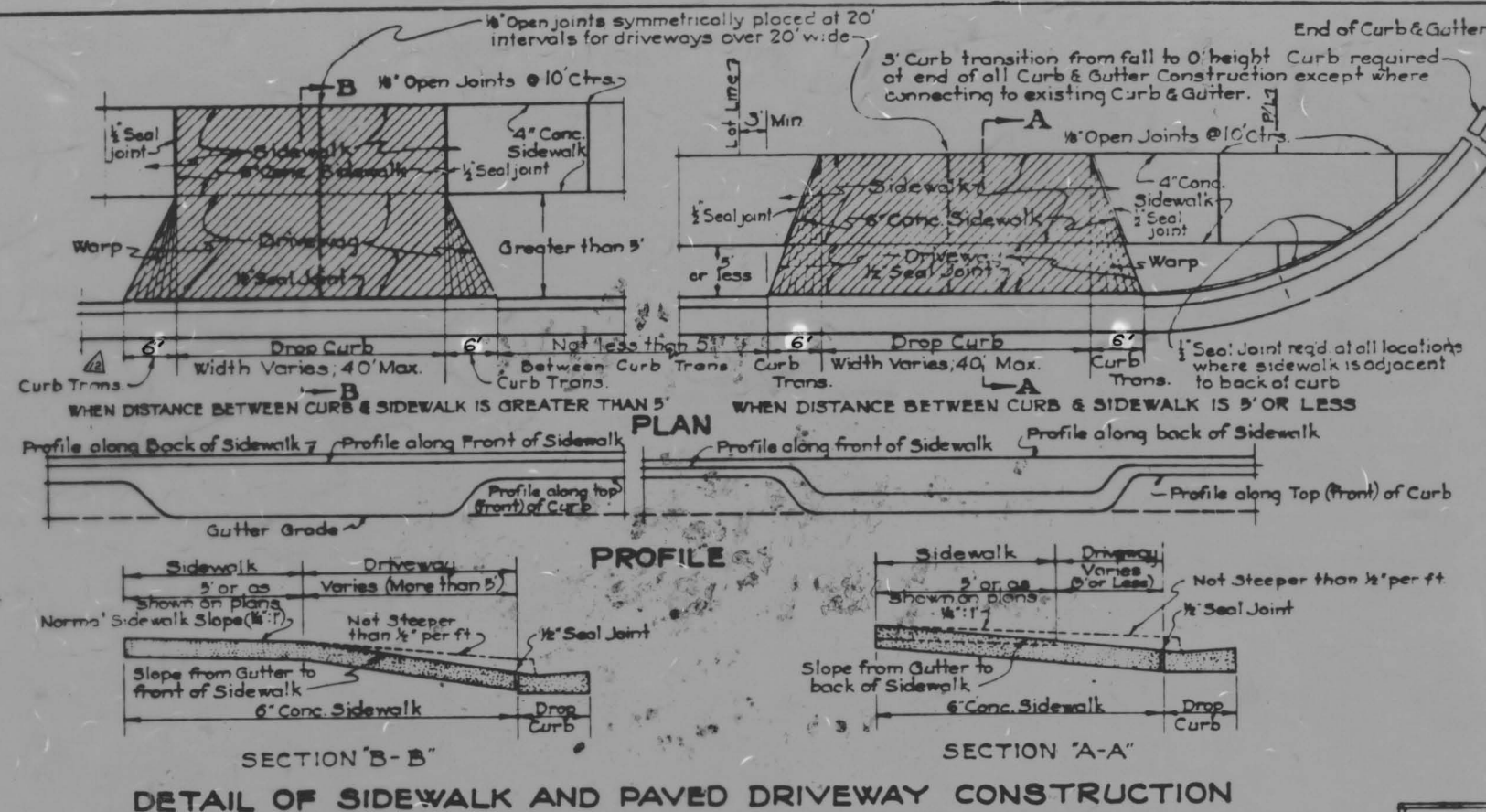


SECTION C-C

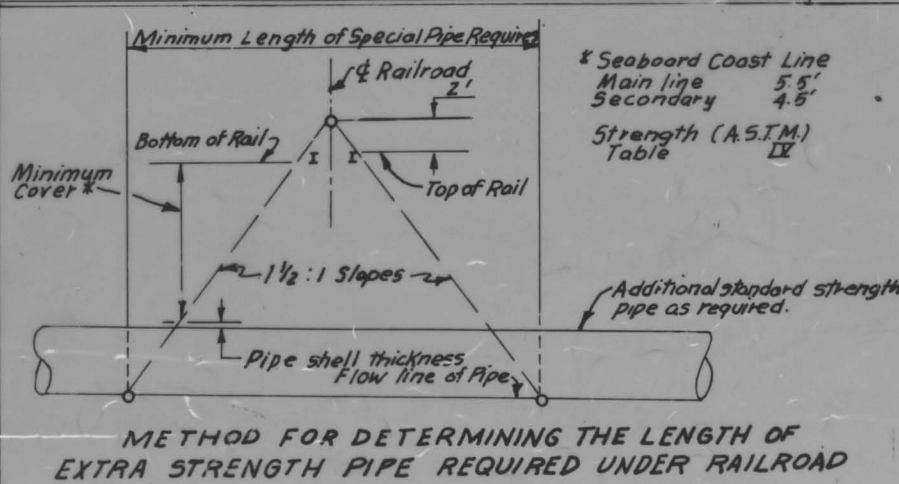
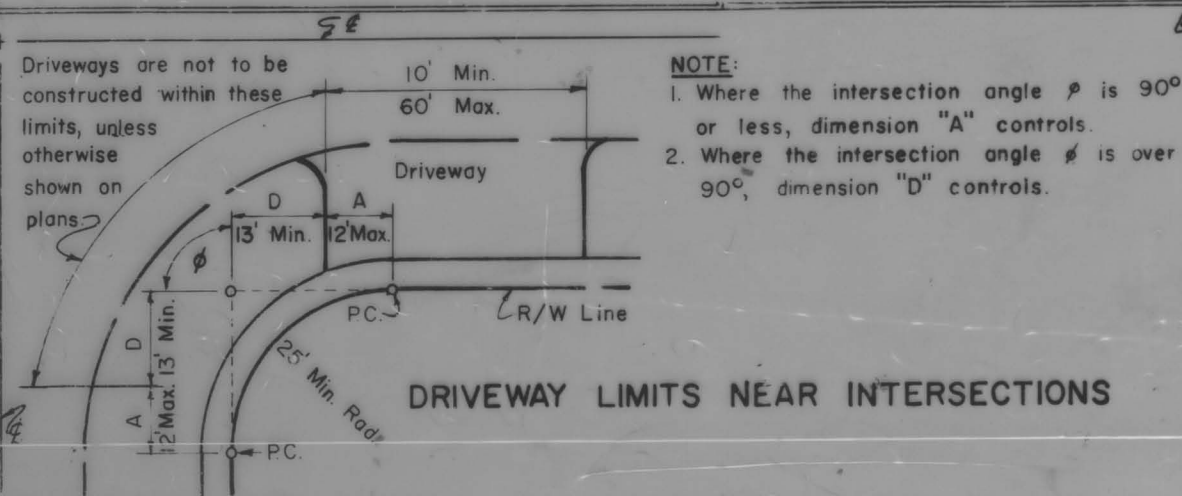
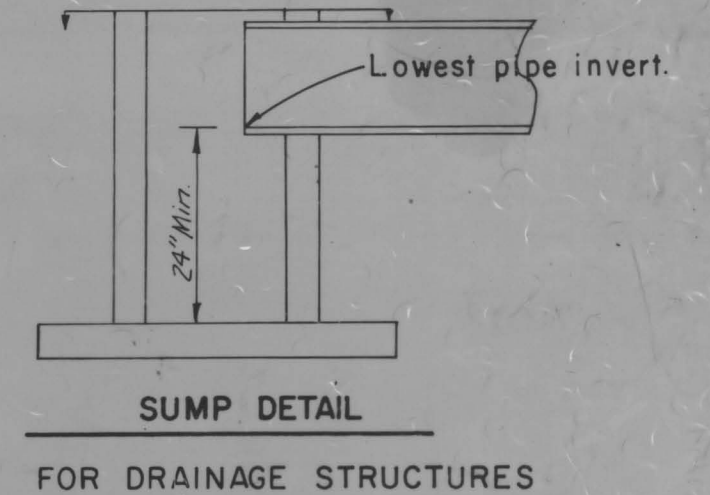
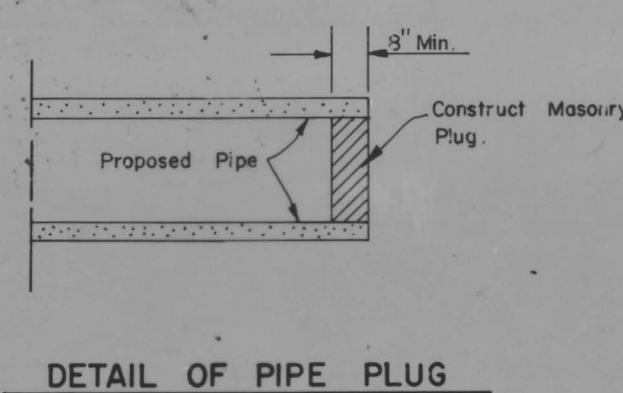
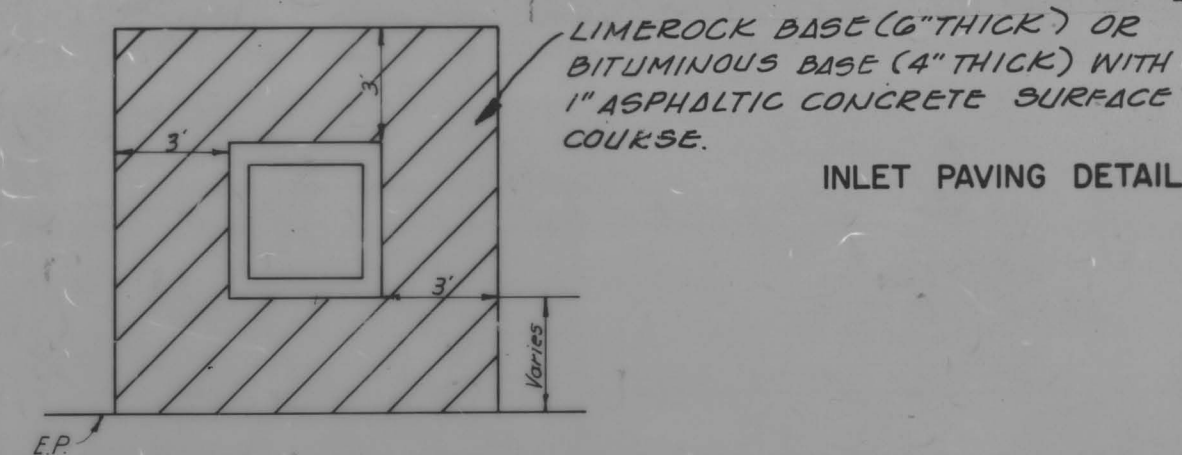
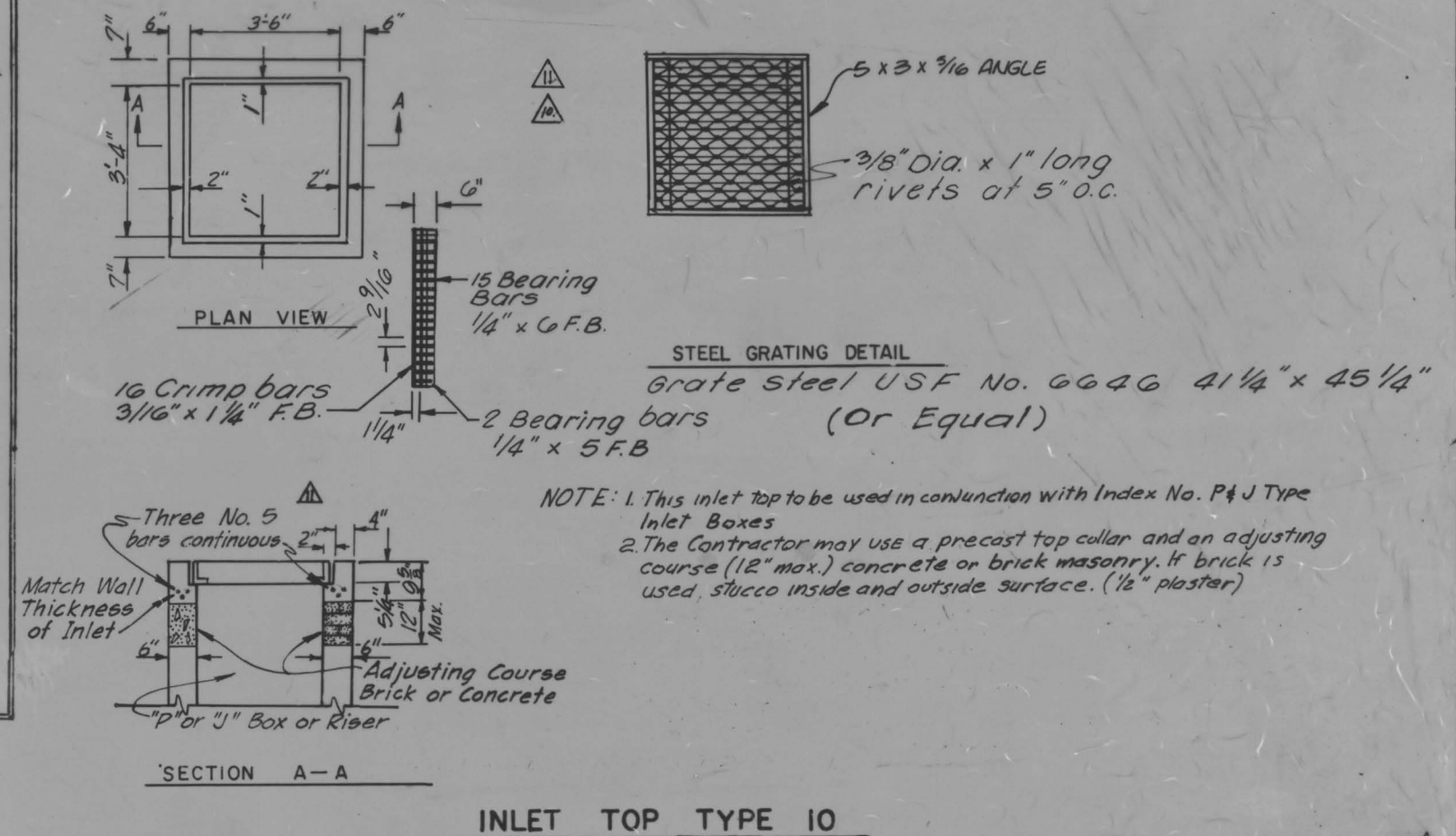


SECTION D-D

DADE COUNTY PUBLIC WORKS DEPARTMENT	
HIGHWAY DIVISION	
DESIGN K. W. N.	MEDIAN OPENING
DRAWN S.L.	ON DIVIDED ROADWAYS
CHECK R. Young	15-B
PROPOSED K. W. N.	
REVISION	DATE
2-2-75	Curb Height Transition
2-15-74	Distance, P.C., P.P.C. & P.T.
BY	DATE
L.C.	2-15-74
S.L.	
APPROVED	92



No paved driveways are to be constructed without compensation for materials from the owner except for replacement of driveways existing at the time of beginning of construction of the project and if desired by the owner, and at all other locations where the need becomes evident prior to the completion of the construction of the curb and gutter and sidewalk at a particular location. All new or reconstructed driveways must conform to the size limits as indicated above.



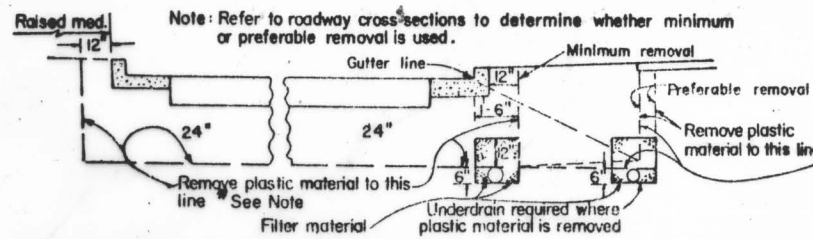
12/73	Add 6' Curb Transition	R.M.
9-15	Dimensions of Grating and Box	JWB
5-71	Dimensions of Grating	R.M.
11-68	2' Sump Detail	C.G.
10-68	Special Pipe Detail	A.R.
10-68	Added Pipe Plug	C.G.
9-68	Added Inlet Top Type #10	C.G.
9-68	Added Inlet Paving Detail	C.G.
8-68	Remove A & B	CG
2-67	Adjust for Flexible Pavement	M.J.A.
3-65	Added Driveway Limits Near Intersect	JAN
10-64	Added Detail of 9" Curb and Gutter	R.C.

DESIGN S. R. D.	MISCELLANEOUS DETAILS
DRAWN —	
CHECK M.J.A.	
PROPOSED M.J.A.	

SUBMITTED John V. McCue	RECOMMENDED John V. McCue	APPROVED John V. McCue
----------------------------	------------------------------	---------------------------

REVISION	DATE	DESCRIPTION	BY	DATE	PROJ.	SHEET	OF
	6-6-1961						



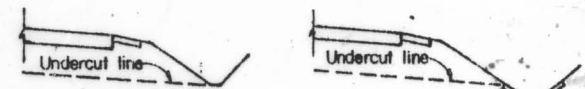


Note: Refer to roadway cross sections to determine whether minimum or preferable removal is used.

Where preferable method of removal governs and it is impossible to place the underdrain at the outer cut limit due to conflict with storm sewer mains, remove to these limits and place underdrain at location shown for minimum removal.

\* NOTE: Where frequency of median breaks indicates that it is impractical to leave plastic material in the median, the designer may elect to indicate total removal of this material. If during construction it becomes apparent, due to normal required construction procedures, that it is impractical to leave the plastic material in the median, the project engineer, may authorize total removal of this material after clearing this change thru the Asst. Dist. Engr. - Const.

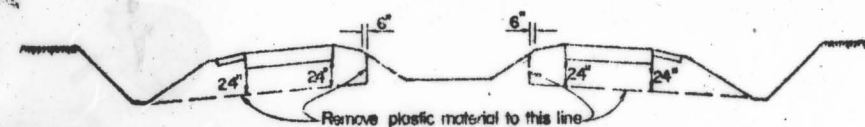
HALF SECTION SHOWING REMOVAL OF PLASTIC MATERIAL AND LOCATION OF UNDERDRAIN IN MUNICIPAL CONST.



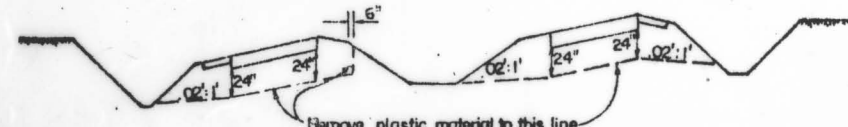
At locations where plastic material is being removed, the side ditches must be at least as deep as the undercut plane.

Where paved side ditches are used in areas of removal of plastic material, the top of the ditch pavement must be no higher than the undercut plane.

MISCELLANEOUS DETAILS

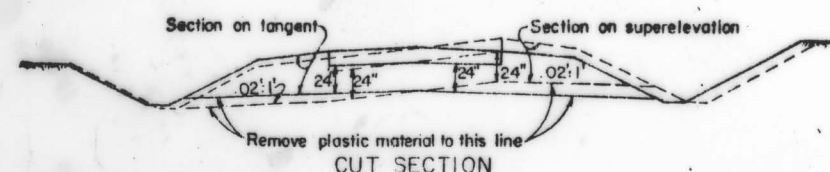


TYPICAL CUT SECTION ON TANGENT

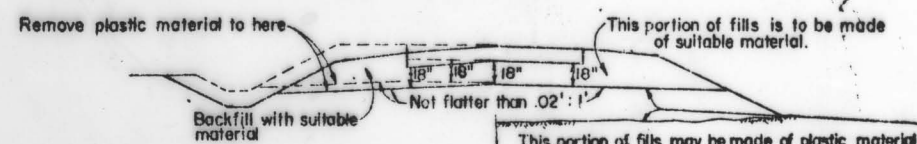


TYPICAL CUT SECTION ON SUPERELEVATION

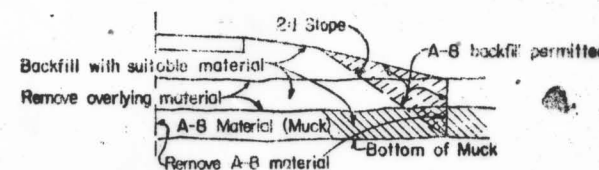
TYPICAL SECTIONS FOR REMOVAL OF PLASTIC MATERIAL ON INTERSTATE AND PRIMARY SYSTEM HAVING DEPRESSED MEDIAN



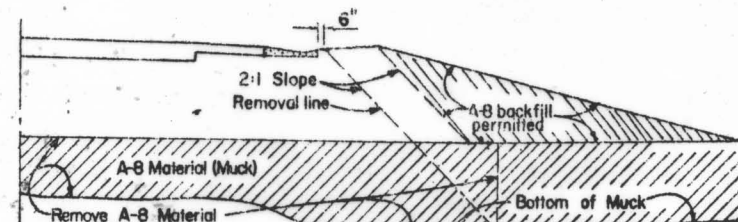
TYPICAL SECTION FOR REMOVAL OF PLASTIC MATERIAL ON MAJOR PRIMARY SYSTEM ROADS



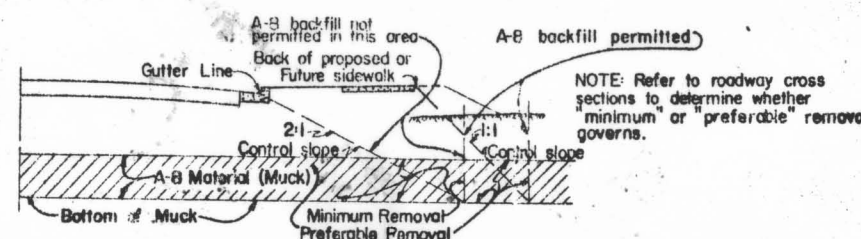
HALF SECTION SHOWING REMOVAL AND DISPOSAL OF PLASTIC MATERIAL FOR SECONDARY AND MINOR PRIMARY SYSTEM ROADS



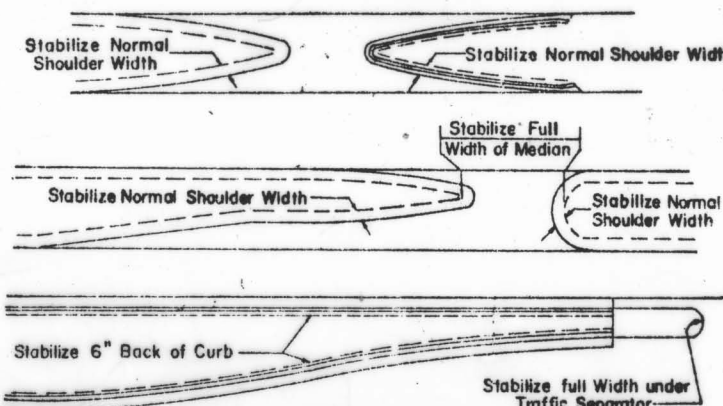
HALF SECTION SHOWING REMOVAL AND DISPOSAL OF A-B MATERIAL IN RURAL CONSTRUCTION



HALF SECTION SHOWING MUCK REMOVAL WHERE SHOULDER GUTTER IS CONSTRUCTED



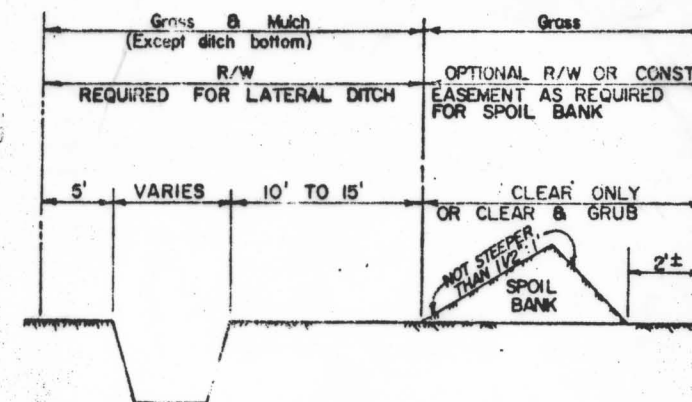
HALF SECTION SHOWING REMOVAL AND DISPOSAL OF A-B MATERIAL IN MUNICIPAL CONSTRUCTION



MEDIAN STABILIZING DETAILS

#### GENERAL STABILIZING NOTES:

- (1) When typical section has curb or curb and gutter in median stabilize 6" back of curb.
- (2) When typical section has shoulder with no curb or curb and gutter in median stabilize to normal shoulder width.
- (3) Stabilize entire area under all paved traffic islands.
- (4) Stabilize full width under all traffic separators.



#### NOTE.

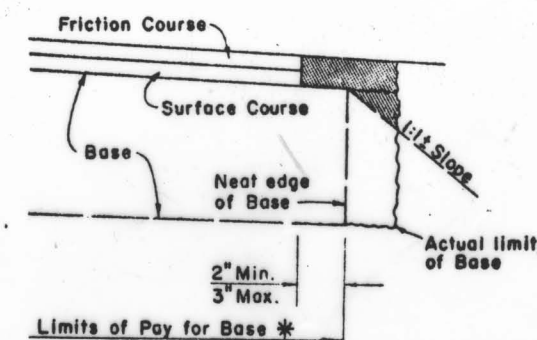
1. Where no spoil is anticipated or when a large ditch or Canal is involved and spoil is anticipated on both sides, R/W should be adjusted accordingly.
2. Clearing and Grubbing is to extend 200' beyond the end of the ditch if necessary.
3. The bottom width of Lateral Ditches is to be 2' wider than the span of the Structure they drain or as shown on Plans.
4. No Spoil Bank will be permitted within 300' of the E. of the Project, measured at right angles thereto. Waste materials in this section shall be either hauled and deposited in areas approved by the Engineer, or spread on adjacent areas to the depth designated by the Engineer.
5. All excavation from Lateral Ditches shall be wasted unless otherwise shown on Lateral Ditch Sheets.

#### TYPICAL SECTION

LATERAL DITCH SHOWING SPOIL BANK

#### GENERAL NOTES

1. Minimum grade on underdrain pipe shall be 0.2%.
2. Gradation of the filter material shall conform to standard specifications.
3. In rural projects, where underdrain is to be constructed beneath the proposed pavement, the grade of the underdrain is to be such that the underdrain filter material will not extend above the bottom of the stabilized section of the subgrade.
4. All details shown on this sheet for the removal and disposal of unsuitable materials apply unless otherwise shown on the plans.
5. Where plastic material is undercut, backfill shall be made of suitable material.
6. The term "plastic material" used in this drawing in conjunction with removal of plastic material is defined as any material of the soils classifications of A-2-6, A-2-7, A-4, A-5, A-6 and A-7.
7. The normal depth of side ditches for Interstate and major Primary System roads shall be 3.5' below the shoulder point except in special cases.
8. On Primary and Interstate highways where plastic material is permitted for use in roadway fill, the material may be placed above the existing water level (at the time of Construction) to within 4' of the proposed base. It should be placed uniformly in the lower portion of the embankment for some distance along the Project rather than full depth for short distances.



DETAIL FOR REMOVAL OF EXCESS BASE MATERIAL

#### NOTES:

1. All surplus material in shaded area to be removed.
2. Payment for removal is included in the Base item.
3. \* Area of base for payment will be calculated using the nominal width (3" Overhang).

FHWA Approved: 7-7-75

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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY PLANS SECTION			
MISC. ROADWAY CONSTRUCTION DETAILS			
ROAD NO.	COUNTY	PROJECT NO.	
10-74	Redrawn Index NP Changed	Designed by	Checked by
8-76	Added Detail For Removal of Excess Base Material	Quantity by	Checked by
Reviewed by		Approved by:	
1 of 2		GRC-01-1	



SHEET	TABLE OF CONTENTS
1	General Notes, TTC Tables
2	Definitions Temporary Traffic Control Devices Overhead Work Railroads Sight Distance Above Ground Hazard
3	Clear Zone Widths For Work Zones Superelevation Length Of Lane Closures Overweight/Oversize Vehicles Lane Widths High-Visibility Safety Apparel Speed Reduction Signing
4	Flagger Control Survey Work Zones Signs
5	Work Zone Sign Supports
6	Commonly Used Warning and Regulatory Signs In Work Zones
7	Manholes/Crosswalks/Joints Truck Mounted Attenuators Signals Channelizing Devices Channelizing Devices Consistency Advanced Warning Arrow Boards
8	Drop-Offs In Work Zones
9	Business Entrance Temporary Asphalt Separator
10	Channelizing Devices Notes Temporary Barrier Notes
11	Pavement Markings

GENERAL NOTES:

1. This Index contains information specific to the Federal and State guidelines and standards for the preparation of traffic control plans and for the execution of traffic control in work zones, for construction and maintenance operations and utility work on highways, roads and streets on the State Highway System. Certain requirements in this Index are based on the high volume nature of State Highways. For highways, roads and streets off the State Highway System, the local agency (City/County) having jurisdiction may adopt requirements based on the minimum requirements provided in the MUTCD.
2. Use this Index in accordance with the Plans and Indexes 102-601 through 102-680. Indexes 102-601 through 102-680 are Department-specific typical applications of commonly encountered situations. Adjust device location or number thereof as recommended by the Worksite Traffic Supervisor and approved by the Engineer. Devices include, but are not limited to, flaggers, portable temporary signals, signs, pavement markings, and channelizing devices. Comply with MUTCD or applicable Department criteria for any changes and document the reason for the change.
3. Except for emergencies, any road closure on State Highway System must comply with Section 335.15, F.S.


TABLE 1 CHANNELIZING DEVICE SPACING				
Work Zone Speed (mph)	Max. Spacing (feet)			
	Cones or Temporary Tubular Markers		Type I Barricades, Type II Barricades, Vertical Panels, or Drums	
	Taper	Tangent	Taper	Tangent
≤ 45	25	50	25	50
≥ 50	25	50	50	100


TABLE 2 TAPER LENGTH "L"	
Work Zone Speed (mph)	Min. Length (feet)
≤ 40	$L = \frac{WS^2}{60}$
≥ 45	$L = WS$
Where: W = width of offset in feet S = speed in mph	


TABLE 3 WORK ZONE SIGN SPACING "X"	
Road Type	Min. Spacing (feet)
Arterials and Collectors with Work Zone Speed ≤ 40 mph	200
Arterials and Collectors with Work Zone Speed ≥ 45 mph	500
Limited Access Roadways *	1,500
* For Limited access roadways with work zone speed ≤ 55 mph, the minimum spacing may be reduced in accordance with the MUTCD and as approved by the Engineer.	


TABLE 4 BUFFER LENGTH "B"	
Work Zone Speed (mph)	Min. Length (feet)
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645
70	730
Note: When Buffer Length "B" cannot be attained due to geometric constraints, use the greatest length possible, but not less than 155 feet.	


SYMBOLS:

 Work Area

 Channelizing Device

 Work Zone Sign

 Type III Barricade

 Lane Identification and Direction of Traffic

10/3/2023 10:53:44 AM

10/3/2023 10:53:50 AM

DEFINITIONS:

Regulatory Speed (In Work Zones)

The maximum permitted travel speed posted for the work zone is indicated by the regulatory speed limit signs. The work zone speed must be shown or noted in the plans. This speed should be used as the minimum design speed to determine runout lengths, departure rates, flare rates, lengths of need, clear zone widths, taper lengths, crash cushion requirements, marker spacings, superelevation and other similar features.

Advisory Speed

The maximum recommended travel speed through a curve or a hazardous area.

Travel Way

The portion of the roadway for the movement of vehicles. For traffic control through work zones, travel way may include the temporary use of shoulders and any other permanent or temporary surface intended for use as a lane for the movement of vehicular traffic.

- a. Travel Lane: The designated widths of roadway pavement marked to carry through traffic and to separate it from opposing traffic or traffic occupying other traffic lanes.
- b. Auxiliary Lane: The designated widths of roadway pavement marked to separate speed change, turning, passing and climbing maneuvers from through traffic.

Detour, Lane Shift, and Diversion

A detour is the redirection of traffic onto another roadway to bypass the temporary traffic control zone. A lane shift is the redirection of traffic onto a different section of the permanent pavement. A diversion is the redirection of traffic onto a temporary roadway, usually adjacent to the permanent roadway and within the limits of the right of way.

Aboveground Hazard

An aboveground hazard is any object, material or equipment other than traffic control devices that encroaches upon the travel way or that is located within the clear zone which does not meet the Department's safety criteria, i.e., anything that is greater than 4" in height and is firm and unyielding or doesn't meet breakaway requirements.

TEMPORARY TRAFFIC CONTROL DEVICES:

1. All temporary traffic control devices shall be ON the Department's Approved Products List (APL). Ensure the appropriate APL number is permanently marked on the device in a readily visible location.
2. All temporary traffic control devices shall be removed as soon as practical when they are no longer needed. When work is suspended for short periods of time, temporary traffic control devices that are no longer appropriate shall be removed or covered. Do not store temporary traffic control devices on the shoulder, sidewalk, or other roadway facility not affected by the work when work is suspended.
3. Arrow Boards, Portable Changeable Message Signs, Radar Speed Display Trailer, Portable Regulatory Signs, and any other trailer mounted device shall be delineated with a channelizing device placed at each corner when in use and shall be moved outside the travel way and clear zone or be shielded by a barrier or crash cushion when not in use.

OVERHEAD WORK:

Work is only allowed over a traffic lane when one of the following options is used:

OPTION 1 (OVERHEAD WORK USING A MODIFIED LANE CLOSURE)

Overhead work using a modified lane closure is allowed if all of the following conditions are met:

- a. Work operation is located in a signalized intersection and limited to signals, signs, lighting and utilities.
- b. Work operations are 60 minutes or less.
- c. Speed limit is 45 mph or less.
- d. Aerial lift equipment in the work area has high-intensity, rotating, flashing, oscillating, or strobe lights operating.
- e. Aerial lift equipment is placed directly below the work area to close the lane.
- f. Traffic control devices are placed in advance of the vehicle/equipment closing the lane using a minimum 100 foot taper.
- g. Volume or complexity of the roadway may dictate additional devices, signs, flagmen and/or a traffic control officer.

OPTION 2 (OVERHEAD WORK ABOVE AN OPEN TRAFFIC LANE)

Overhead work above a open traffic lane is allowed if all of the following conditions are met:

- a. Work operation is located on a utility pole, light pole, signal pole, or their appurtenances.
- b. Work operations are 60 minutes or less.
- c. Speed limit is 45 mph or less.
- d. No encroachment by any part of the work activities and equipment within an area bounded by 2 feet outside the edge of travel way and 18 feet high.
- e. Aerial lift equipment in the work area has high-intensity, rotating, flashing, oscillating, or strobe lights operating.
- f. Volume or complexity of the roadway may dictate additional devices, signs, flagmen and/or a traffic control officer.
- g. Adequate precautions are taken to prevent parts, tools, equipment and other objects from falling into open lanes of traffic.
- h. Other Governmental Agencies, Rail facilities, or Codes may require a greater clearance. The greater clearance required prevails as the rule.

OPTION 3 (OVERHEAD WORK ADJACENT TO AN OPEN TRAFFIC LANE)

Overhead work adjacent to an open traffic lane is allowed if all of the following conditions are met:

- a. Work operation is located on a utility pole, light pole, signal pole, or their appurtenances.
- b. Work operations are 1 day or less.
- c. Speed limit is 45 mph or less.
- d. No encroachment by any part of the work activities and equipment within 2 foot from the edge of travel way up to 18' height. Above 18' in height, no encroachment by any part of the work activities and equipment over the open traffic lane (except as allowed in Option 2 for work operations of 60 minutes or less).
- e. Aerial lift equipment in the work area has high-intensity, rotating, flashing, oscillating, or strobe lights operating.
- f. Volume or complexity of the roadway may dictate additional devices, signs, flagmen and/or a traffic control officer.
- g. Adequate precautions are taken to prevent parts, tools, equipment and other objects from falling into open lanes of traffic.
- h. Other Governmental Agencies, Rail facilities, or Codes may require a greater clearance. The greater clearance required prevails as the rule.

OVERHEAD WORK: (Cont.)

OPTION 4 (OVERHEAD WORK MAINTAINING TRAFFIC WITH NO ENCROACHMENT BELOW THE OVERHEAD WORK AREA)

Traffic shall be detoured, shifted, diverted or paced as to not encroach in the area directly below the overhead work operations in accordance with the appropriate index drawing or detailed in the plans. This option applies to, but not limited to, the following construction activities:

- a. Beam, girder, segment, and bent/pier cap placement.
- b. Form and falsework placement and removal.
- c. Concrete placement.
- d. Railing construction located at edge of deck.
- e. Structure demolition.

OPTION 5 (CONDUCTOR/CABLE PULLING ABOVE AN OPEN TRAFFIC LANE)

Overhead cable and/or de-energized conductor installations initial pull to proper tension shall be done in accordance with the appropriate Index or temporary traffic control plan.

Continuous pulling operations of secured cable and/or conductors are allowed over open lane(s) of traffic with no encroachment by any part of the work activities, materials or equipment within the minimal vertical clearance above the travel way. The utility shall take precautions to ensure that pull ropes and conductors/cables at no time fall below the minimum vertical clearance.

On Limited Access facilities, a site specific temporary traffic control plan is required. The temporary traffic control plan shall include:

- a. The temporary traffic control set up for the initial pulling of the pull rope across the roadway.
- b. During pulling operations, advance warning consisting of no less than a Changeable Message Sign upstream of the work area with alternating messages, "Overhead Work Ahead" and "Be Prepared to Stop" followed by a traffic control officer and police vehicle with blue lights flashing during the pulling operation.

RAILROADS:

Railroad crossings affected by a construction project should be evaluated for traffic controls to reduce queuing on the tracks. The evaluation should include as a minimum: traffic volumes, distance from the tracks to the intersections, lane closure or taper locations, signal timing, etc.

SIGHT DISTANCE:

1. Tapers: Transition tapers should be obvious to drivers. If restricted sight distance is a problem (e.g., a sharp vertical or horizontal curve), the taper should begin well in advance of the view obstruction. The beginning of tapers should not be hidden behind curves.
2. Intersections: Traffic control devices at intersections must provide sight distances for the road user to perceive potential conflicts and to traverse the intersection safely. Construction equipment and materials shall not restrict intersection sight distance.

ABOVEGROUND HAZARD:

1. Aboveground hazards (see definitions) are to be considered work areas during working hours and treated with appropriate work zone traffic control procedures. During nonworking hours, all objects, materials and equipment that constitute an aboveground hazard must be stored/placed outside the travel way and clear zone or be shielded by a barrier or crash cushion.
2. For aboveground hazards within a work zone the clear zone required should be based on the regulatory speed posted during construction.

LAST REVISION 11/01/20	REVISION	DESCRIPTION:	 <b>FY 2024-25 STANDARD PLANS</b>	<b>GENERAL INFORMATION FOR TRAFFIC CONTROL THROUGH WORK ZONES</b>	<b>INDEX</b>  <b>102-600</b>	<b>SHEET</b>  <b>2 of 11</b>

CLEAR ZONE WIDTHS FOR WORK ZONES:

The term 'clear zone' describes the unobstructed relatively flat area, impacted by construction, extending outward from the edge of the traffic lane. The table below gives clear zone widths in work zones for medians and roadside conditions other than for roadside canals; where roadside canals are present, clear zone widths are to conform with the distances to canals as described in the FDOT Design Manual 215.2.

TABLE 5 CLEAR ZONE WIDTHS FOR WORK ZONES		
WORK ZONE SPEED (MPH)	TRAVEL LANES & MULTILANE RAMPS (feet)	AUXILIARY LANES & SINGLE LANE RAMPS (feet)
60-70	30	18
55	24	14
45-50	18	10
30-40	14	10
ALL SPEEDS CURB & GUTTER	4' BEHIND FACE OF CURB	4' BEHIND FACE OF CURB
NOTE: For temporary conditions where existing curb has been removed but not reconstructed, curb and gutter values may be used.		

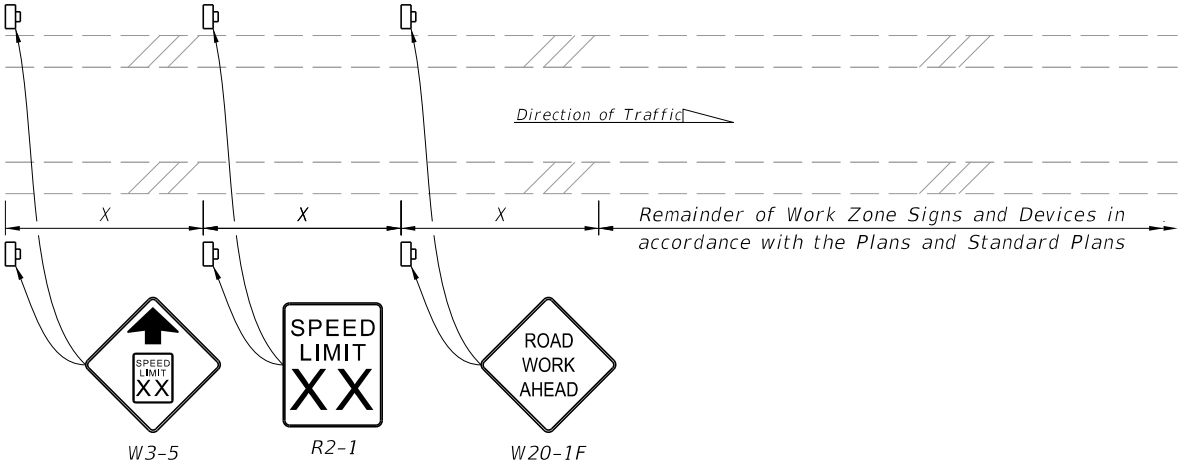
SUPERELEVATION:

Horizontal curves constructed in conjunction with work zone traffic control should have the required superelevation applied to the design radii. Under conditions where normal crown controls curvature, the minimum radii that can be applied are listed in the table below.

TABLE 6 MINIMUM RADII FOR NORMAL CROWN	
WORK ZONE POSTED SPEED	MINIMUM RADIUS
MPH	feet
70	4090
65	3130
60	2400
55	1840
50	1390
45	1080
40	820
35	610
30	430
Superelevate When Smaller Radii is Used	

LENGTH OF LANE CLOSURES:

For interstates and state highways with a posted speed of 55MPH or greater, lane closures must not exceed 3 miles (includes taper, buffer, and work zone) in any given direction and must not close two consecutive interchanges.



NOTES:

1. X = Work Zone Sign Spacing
2. When called for in the Plans, use this detail in accordance with the Plans and Standard Plans. Place the speed reduction signs (W3-5 and R2-1) in advance of the "Road Work Ahead" sign (W20-1F) as shown.
3. Do not use this detail in conjunction with the Motorist Awareness System.
4. For speed reductions greater than 10 MPH, reduce the speed in 10 MPH increments of 'X' distance. Do not reduce the speed below the minimum statutory speed for the class of facility.
5. Place additional "Speed Limit" signs (R2-1) at intervals of no more than one mile for rural conditions and 1,000 feet for urban conditions.
6. For undivided roadways, omit the signs shown in the median.
7. Remove temporary regulatory speed signs as soon as the conditions requiring the reduced speed no longer exist. Once the work zone regulatory speeds are removed, the regulatory speed existing prior to construction will automatically go back into effect.

SPEED REDUCTION SIGNING

OVERWEIGHT/OVERSIZE VEHICLES:

Restrictions to Lane Widths, Heights or Load Capacity can greatly impact the movement of over dimensioned loads. The Contractor shall notify the Engineer who in turn shall notify the State Permits Office, phone no. (850) 410-5777, at least seven calendar days in advance of implementing a maintenance of traffic plan which will impact the flow of overweight/oversized vehicles. Information provided shall include location, type of restriction (height, width or weight) and restriction time frames. When the roadway is restored to normal service the State Permits Office shall be notified immediately.

LANE WIDTHS:

Lane widths of through roadways should be maintained through work zone travel ways wherever practical. Provide minimum widths for work zone travel lanes as follows: 11' for Interstate with at least one 12' lane provided in each direction, unless formally excepted by the Federal Highway Administration; 11' for all other limited access roadways; and 10' for all other facilities.

HIGH-VISIBILITY SAFETY APPAREL:


All high-visibility safety apparel shall meet the requirements of the International Safety Equipment Association (ISEA) and the American National Standards Institute (ANSI) for "High-Visibility Safety Apparel", and labeled as ANSI/ISEA 107-2004 or newer. The apparel background (outer) material color shall be either fluorescent orange-red or fluorescent yellow-green as defined by the standard. The retroreflective material shall be orange, yellow, white, silver, yellow-green, or a fluorescent version of these colors, and shall be visible at a minimum distance of 1,000 feet. Class 3 apparel may be substituted for Class 2 apparel. Replace apparel that is not visible at 1,000 feet.

**WORKERS:** All workers within the right-of-way shall wear ANSI/ISEA Class 2 apparel. Workers operating machinery or equipment in which loose clothing could become entangled during operation shall wear fitted high-visibility safety apparel. Workers inside the bucket of a bucket truck are not required to wear high-visibility safety apparel.

**UTILITIES:** When other industry apparel safety standards require utility workers to wear apparel that is inconsistent with FDOT requirements such as NFPA, OSHA, ANSI, etc., the other standards for apparel may prevail.

**FLAGGERS:** For daytime activities, Flaggers shall wear ANSI/ISEA Class 2 apparel. For nighttime activities, Flaggers shall wear ANSI/ISEA Class 3 apparel.

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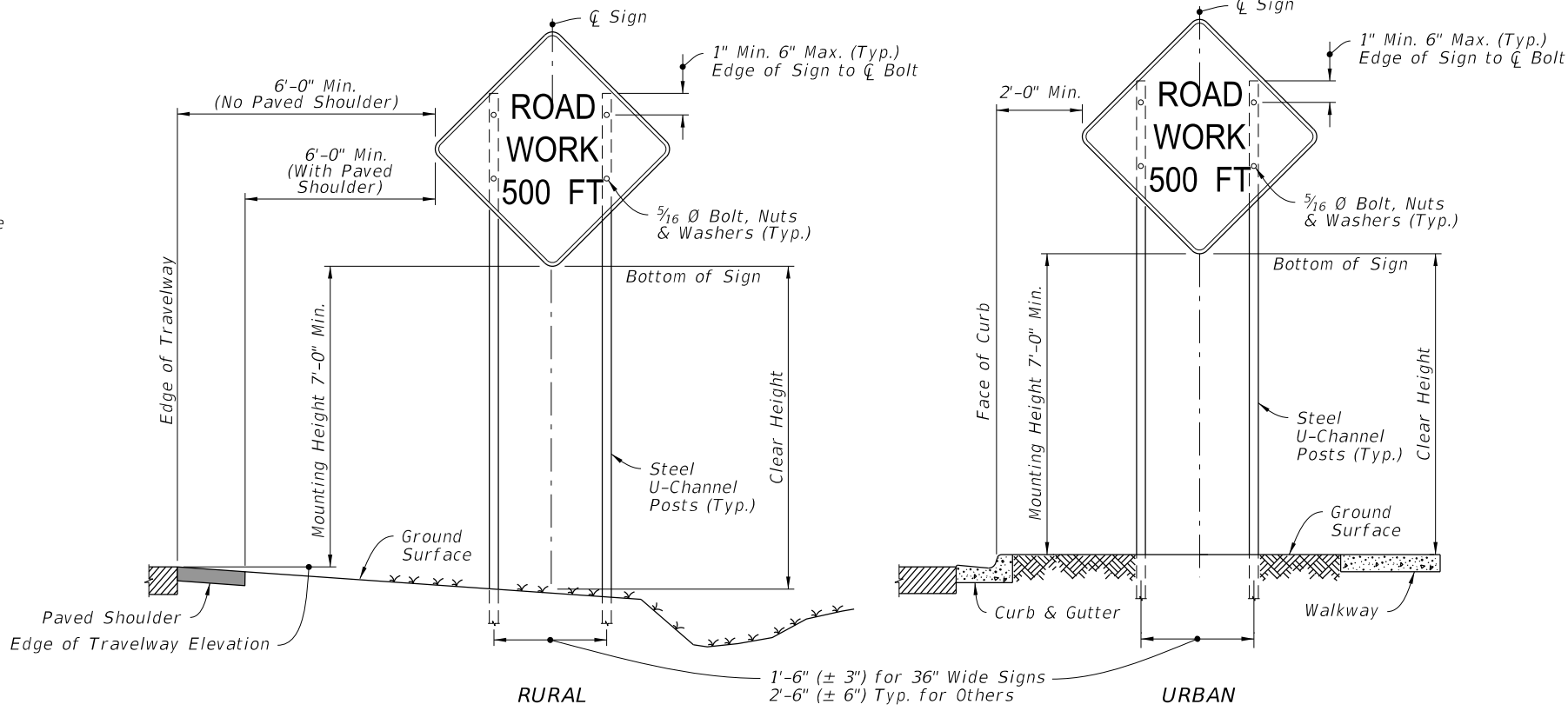
LAST REVISION 11/01/20	DESCRIPTION:	 FY 2024-25 STANDARD PLANS	GENERAL INFORMATION FOR TRAFFIC CONTROL THROUGH WORK ZONES	INDEX 102-600	SHEET 3 of 11
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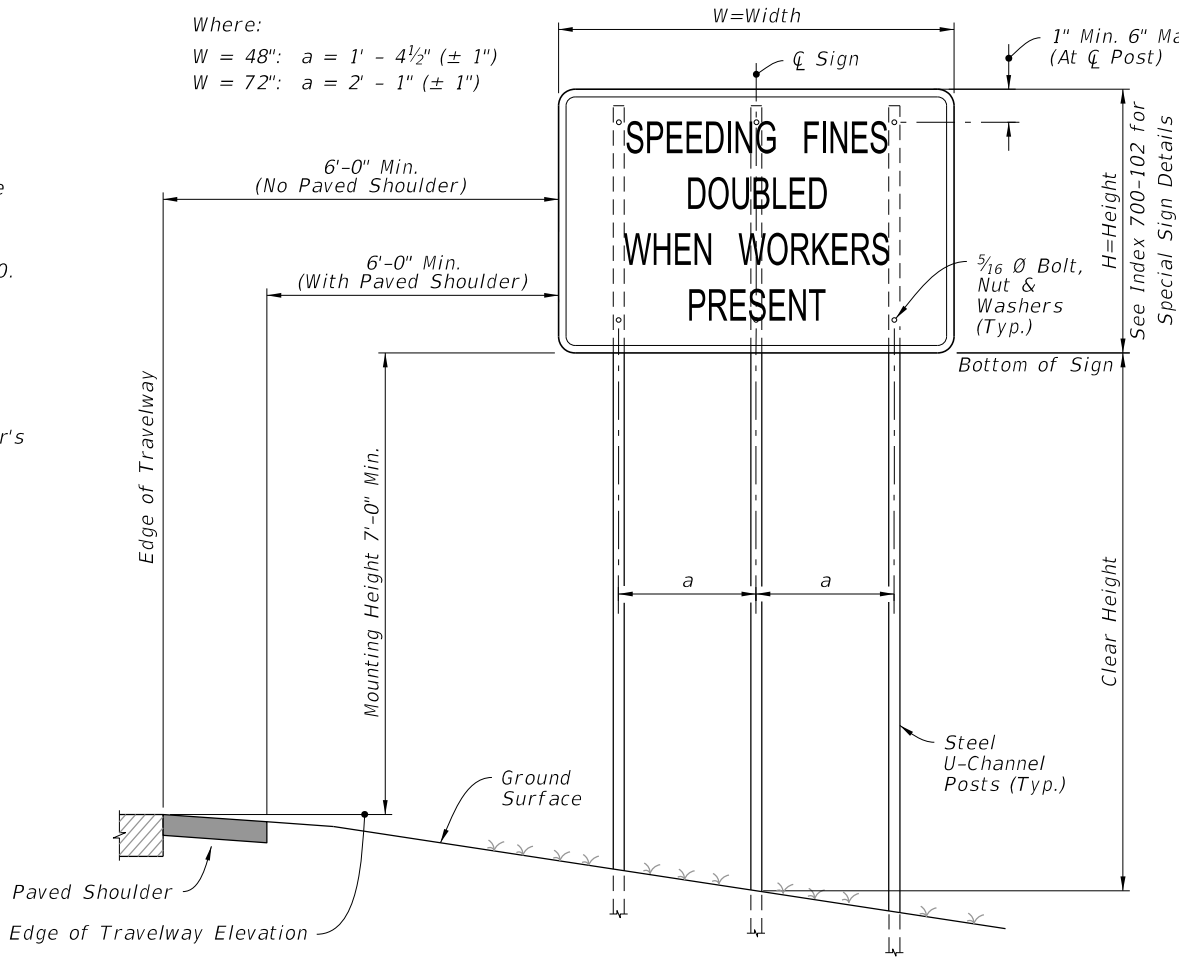


NOTES:

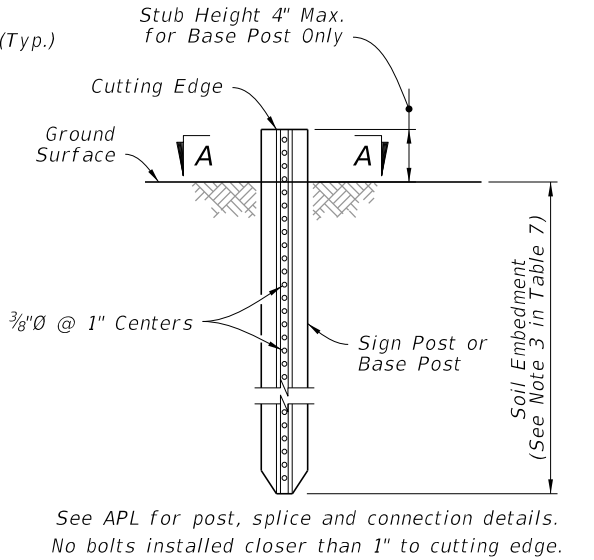
- All signs shall be post mounted when work operations exceed one day except for:
  - Road closure signs mounted in accordance with the vendor drawing for the Type III Barricade shown on the APL.
  - Pedestrian and bicycle advanced warning or pedestrian regulatory signs mounted on sign supports in accordance with the vendor drawing shown on the APL.
  - Median barrier mounted signs per Index 700-013.
  - Bridge mounted signs per Index 700-012.
- Unless shielded with barrier or outside of the Clear Zone, signs mounted on temporary supports or barricades, and barricade/sign combination must be crashworthy in accordance with NCHRP 350 requirements and included on the Approved Products List (APL).
- Use only approved systems listed on the Department's Approved Products List (APL).
- Manufacturers seeking approval of U-Channel and steel square tube sign support assemblies for inclusion on the Approved Products List (APL) must submit a APL application, design calculations (for square tube only), and detailed drawings showing the product meets all the requirements of this Index.
- Provide 3 lb/ft Steel U-Channel Posts with a minimum section modulus of 0.43 in<sup>3</sup> for 60 ksi steel, a minimum section modulus of 0.37 in<sup>3</sup> for 70 ksi steel, or a minimum section modulus of 0.34 in<sup>3</sup> for 80 ksi steel.
- Provide 4 lb/ft Steel U-Channel Posts with a minimum section modulus of 0.56 in<sup>3</sup> for 60 ksi steel, or a minimum section modulus of 0.47 in<sup>3</sup> for 70 ksi or 80 ksi steel.
- U-channel posts shall conform with ASTM A 499, Grade 60, or ASTM A 576, Grade 1080 (with a minimum yield strength of 60 ksi). Square tube posts shall conform with ASTM A 653, Grade 50, or ASTM A 1011, Grade 50.
- Sign attachment bolts, washers, nuts, and spacers shall conform with ASTM A307 or A 36.
- Install 4 lb/ft Steel U-Channel Posts with approved breakaway splice in accordance with the manufacturer's detail shown on the APL.
- The contractor may install 3 lb/ft Steel U-Channel Posts with approved breakaway splice in accordance with the manufacturer's detail shown on the APL.
- Install all posts plumb.
- The contractor may set posts in preformed holes to the specified depth with suitable backfill tamped securely on all sides, or drive 3 lb/ft sign posts and any size base post in accordance with the manufacturer's detail shown on the APL.



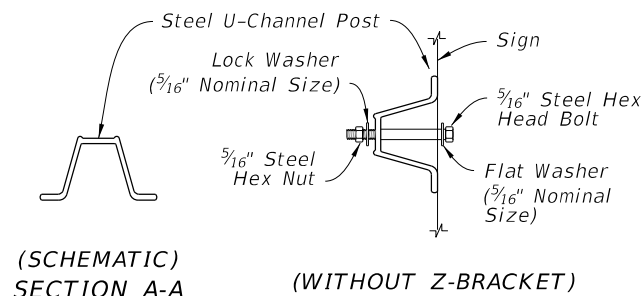
2 POST SIGN SUPPORT MOUNTING DETAILS  
(SINGLE POST SIMILAR)



3 POST SIGN SUPPORT MOUNTING DETAILS



FOUNDATION DETAIL




SIGN ATTACHMENT DETAIL

TABLE 7  
POST AND FOUNDATION  
TABLE FOR  
WORK ZONE SIGNS


SIGN SHAPE	SIGN SIZE (inches)	NUMBER OF STEEL U CHANNEL POSTS
Octagon	30x30	1
	36x36x36	1
	48x48x48	1
Triangle	48x48x48	1
	60x60x60	2
Rectangle (W x H)	24x18	1
	24x30	1
	30x24	1
	36x18	1
	36x24	1
	48x18	1
	48x24	1
	36x48	2
	48x30	2
	48x36	2
	54x36	2
	48x60	3
Square	30x30	1
	36x36	2
	48x48	2
Diamond	48x48	2
Circle	36Ø	2

- Notes For Table:
- Use 3 lb/ft posts for Clear Height up to 10' and 4 lb/ft posts for Clear Height up to 12'.
  - Minimum foundation depth is 4.0' for 3 lb/ft posts and 4.5' for 4 lb/ft posts.
  - For both 3 lb/ft and 4 lb/ft base or sign posts installed in rock, a minimum cumulative depth of 2' of rock layer is required.
  - The soil plate as shown on the APL vendor drawing is not required for base posts or sign posts installed in existing rock (as defined in Note 3), asphalt roadway, shoulder pavement or soil under sidewalk.
  - For diamond warning signs with supplement plaque (up to 5 ft<sup>2</sup> in area), use 4 lb/ft posts for up to 10 ft Clear Height (measure to the bottom of diamond warning sign).

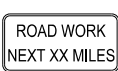
WORK ZONE SIGN SUPPORTS



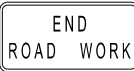
E5-2  
B/O




E5-2a  
B/O




G20-1  
B/O




G20-2  
B/O




G20-4  
B/O




M4-8  
B/O




M4-8A  
B/O




M4-9L  
B/O




M4-9R  
B/O




M4-10L  
O/B




M4-10R  
O/B




OM-3R  
B/Y




R1-1  
W/R




R1-2  
RW/R




R2-1  
B/W




R4-1  
B/W




R4-2  
B/W




R4-5  
B/W




R4-7  
B/W




R4-8  
B/W




R4-7AL  
B/W




R4-7AR  
B/W




R4-7BL  
B/W




R4-7BR  
B/W




R4-11  
B/W




R5-1  
WR/W




R9-8  
B/W



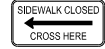
R9-9  
B/W




R9-10  
B/W




R9-11  
B/W




R9-11a  
B/W




R11-2  
B/W




W1-1R  
B/O




W1-2R  
B/O




W1-3R  
B/O




W1-4R  
B/O




W1-4b  
B/O




W1-4c  
B/O




W1-6  
B/O




W1-7  
B/O




W1-8  
B/O




W3-1  
RB/O




W3-2  
RB/O




W3-3  
B(RYG)/O



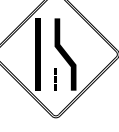
W3-4  
B/O




W3-5  
B/O




W4-1  
B/O




W4-2  
B/O




W5-1  
B/O




W5-2  
B/O



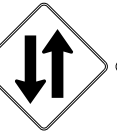
W5-3  
B/O




W6-1  
B/O




W6-2  
B/O




W6-3  
B/O



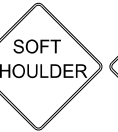
W8-1  
B/O



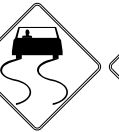
W8-2  
B/O



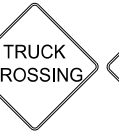
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B/O



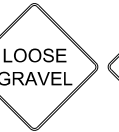
W8-4  
B/O




W8-5  
B/O




W8-6  
B/O




W8-7  
B/O




W8-8  
B/O




W8-9  
B/O




W8-9a  
B/O




W8-11  
B/O




W8-15P  
B/O




W9-1L  
B/O




W9-1R  
B/O




W9-2L  
B/O




W9-2R  
B/O



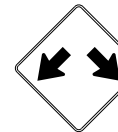
W10-1  
B/O



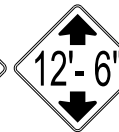
W11-1  
B/O



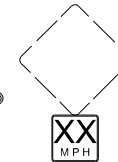
W11-2  
B/O




W12-1  
B/O




W12-2  
B/O




W13-1  
B/O




W16-1P  
B/O




W16-2P  
B/O




W16-7P  
B/O




W20-1A  
B/O




W20-1B  
B/O




W20-1C  
B/O




W20-1D  
B/O




W20-1E  
B/O




W20-1F  
B/O




W20-2A  
B/O




W20-2B  
B/O




W20-2C  
B/O




W20-2D  
B/O




W20-2E  
B/O




W20-3  
B/O




W20-4  
B/O




W20-5a  
B/O



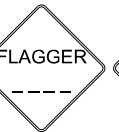
W20-5L  
B/O



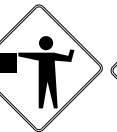
W20-5R  
B/O




W20-5C  
B/O




W20-7A  
B/O



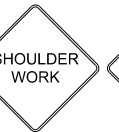
W20-7  
B/O



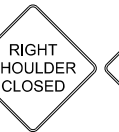
W21-1A  
B/O




W21-1  
B/O




W21-5  
B/O




W21-5a  
B/O




W21-6  
B/O




W21-7  
B/O



W22-1  
B/O



W22-2  
B/O



W22-3  
B/O

NOTES:

1. The size of diamond shaped Temporary Traffic Control (TTC) warning signs shall be a minimum of 48" X 48".
2. Fluorescent orange shall be used for all orange colored work zone signs.
3. The sign shields, symbols and messages contained on this sheet are provided for ready reference to those signs used in the development of the 102 Series of Indexes and are commonly used in the development of traffic control plans. For additional signs and sign detail information refer to the STANDARD HIGHWAY SIGNS MANUAL as specified in the MUTCD. Special signs for traffic control plans will be as approved by the State Traffic Plans Engineer.

The sign codes shown on this sheet are for the purpose of identifying cell names found in the Traffic Control Cell Library (TCZ.Cel).

The STANDARD HIGHWAY SIGNS MANUAL should be referenced for the official sign codes for use in the development of traffic control plans.

See Index 700-102 for MOT sign details.

COLOR CODES:

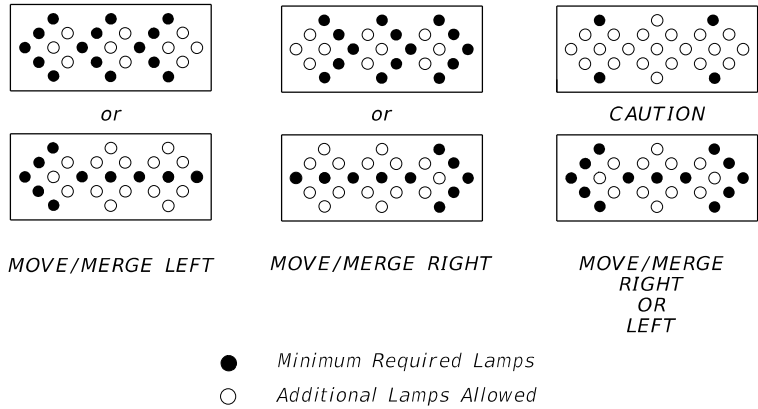
Legend and/or  
Symbol Background

R-Red (Reflectorized)  
Y-Yellow (Reflectorized)  
G-Green (Reflectorized)  
O-Orange (Reflectorized)  
B-Black (Non-Reflectorized)  
W-White (Reflectorized)

COMMONLY USED WARNING AND REGULATORY SIGNS IN WORK ZONES

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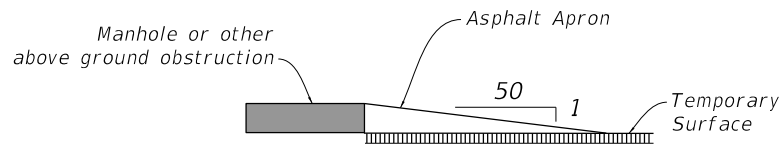
**NOTES:**  
An arrow board in the arrow or chevron mode shall be used only for stationary or moving lane closures on multilane roadways.

For shoulder work, blocking the shoulder, for roadside work near the shoulder, or for temporarily closing one lane on a two-lane, two-way roadway, an arrow board shall be used only in the caution mode.

A single arrow board shall not be used to merge traffic laterally more than one lane. When arrow boards are used to close multiple lanes, a single board shall be used at the merging taper for each closed lane.

When Advance Warning Arrow Boards are used at night, the intensity of the flashers shall be reduced during darkness when lower intensities are desirable.

ADVANCE WARNING ARROW BOARDS

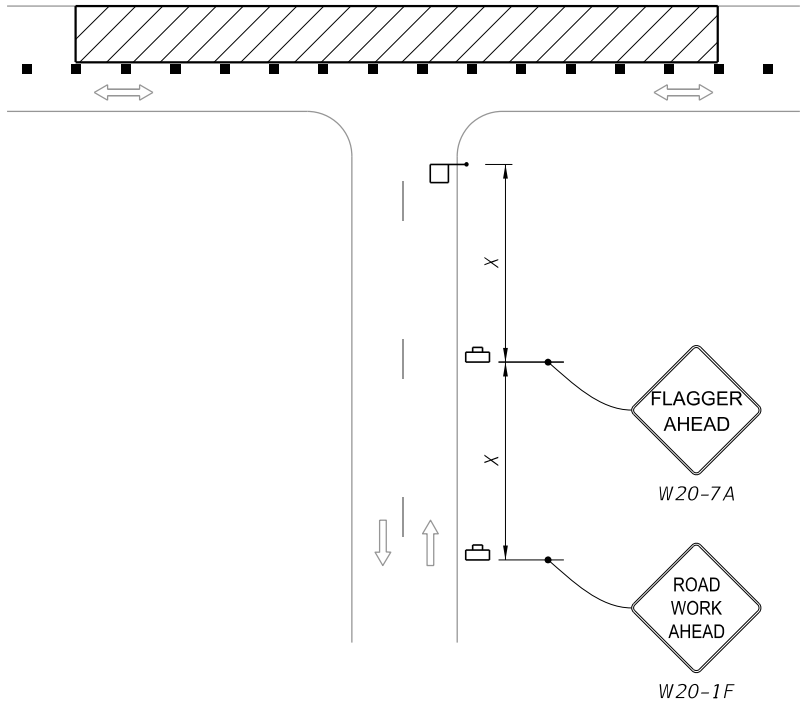


**NOTES:**  
Manholes extending 1" or more above the travel lane and crosswalks having an uneven surface greater than 1/4" shall have a temporary asphalt apron constructed as shown above.

All transverse joints that have a difference in elevation of 1" or more shall have a temporary asphalt apron constructed as shown above.

The apron is to be removed prior to constructing the next lift of asphalt. The cost of the temporary asphalt shall be included in the contract unit price for Maintenance of Traffic, LS.

MANHOLES/CROSSWALKS/JOINTS



**NOTE:**  
Optionally, use "Flagger Ahead" sign with text (W20-7A) instead of "Flagger Ahead" sign with symbol (W20-7).

SIDE ROAD INTERSECTING THE WORK ZONE

**SIGNALS:**  
Existing traffic signal operations that require modification in order to carry out work zone traffic control shall be included in the Plans and be approved by the District Traffic Operations Engineer.


Refer to Specification 102-9 for additional information.

**CHANNELIZING DEVICES:**  
Channelizing devices for work zone traffic control shall be as prescribed in Part VI of the MUTCD, subject to supplemental revisions provided in the contract documents and the 102 Series of Indexes. Lighting Devices must not be used to supplement channelization. Omit tapers and channelizing devices for paved shoulders less than 4' in width.

**CHANNELIZING DEVICE CONSISTENCY:**  
Barricades, vertical panels, cones, tubular markers and drums shall not be intermixed within either the lateral transition or within the tangent alignment.

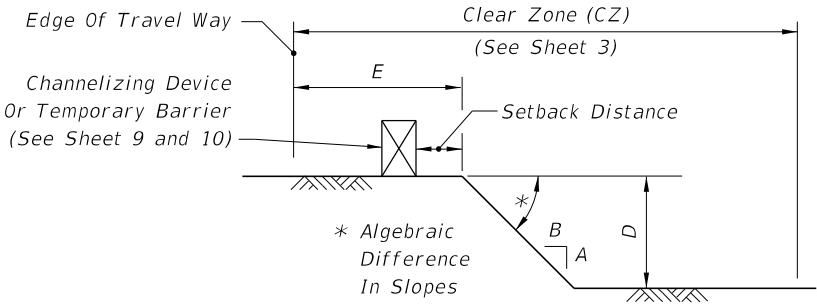
**TRUCK/TRAILER-MOUNTED ATTENUATORS:**  
Truck/Trailer-mounted attenuators (TMA) can be used for moving operations and short-term stationary operations. For moving operations, see Index 102-607. For short-term, stationary operations, see Part VI of the MUTCD.

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DROP-OFF CONDITION NOTES

1. These conditions and treatments can be applied only in work areas that fall within a properly signed work zone.
2. When drop-offs occur within the clear zone due to construction or maintenance activities, protection devices are required (See Table 8). A drop-off is defined as a drop in elevation, parallel to the adjacent travel lanes, greater than 3" with slope (A:B) steeper than 1:4. In superelevated sections, the algebraic difference in slopes should not exceed 0.25 (See Drop-off Condition Detail).
3. Drop-offs may be mitigated by placement of slopes with optional base material per Specifications Section 285. Slopes shallower than 1:4 may be required to avoid algebraic difference in slopes greater than 0.25. Include the cost for the placement and removal of the material in Maintenance of Traffic, LS. Use of this treatment in lieu of a temporary barrier is not eligible for CSIP consideration. Conduct daily inspections for deficiencies related to erosion, excessive slopes, rutting or other adverse conditions. Repair any deficiencies immediately.
4. For Setback Distance, refer to the Index or Approved Products List (APL) drawing of the selected barrier.
5. For Conditions 1 and 3 provided in Table 8, any drop-off condition that is created and restored within the same work period will not be subject to use of temporary barriers; however, channelizing devices will be required.
6. When permanent curb heights are ≥ 6", no channelizing device will be required. For curb heights < 6", see Table 8.

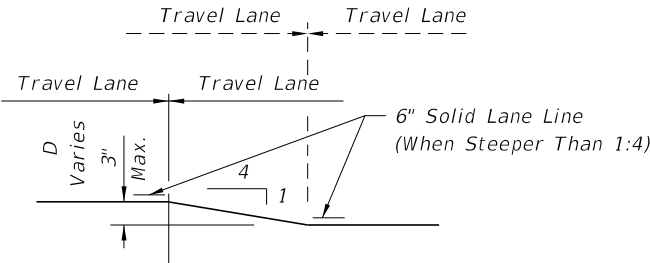


DROP-OFF CONDITION DETAIL

Table 8 Drop-off Protection Requirements			
Condition	E (ft)	D (in.)	Device Required
1	0-12	> 3	Temporary Barrier
2	> 12-CZ	> 3 to ≤ 5	Channelizing Device
3	0-CZ	> 5	Temporary Barrier
4	Removal of Bridge or Retaining Wall Barrier		Temporary Barrier
5	Removal of portions of Bridge Deck		Temporary Barrier

TRAVEL LANE TREATMENT FOR MILLING OR RESURFACING NOTES

1. This treatment applies to resurfacing or milling operations between adjacent travel lanes.
2. Whenever there is a difference in elevation between adjacent travel lanes, the W8-11 sign with "UNEVEN LANES" is required at intervals of ½ mile maximum.
3. If D is 1½" or less, no treatment is required.
4. Treatment allowed only when D is 3" or less.
5. If the slope is steeper than 1:4 (not to be steeper than 1:1), the R4-1 and MOT-1-06 signs shall be used as a supplement to the W8-11; this condition should never exceed 3 miles in length.



TRAVEL LANE TREATMENT FOR MILLING OR RESURFACING DETAIL

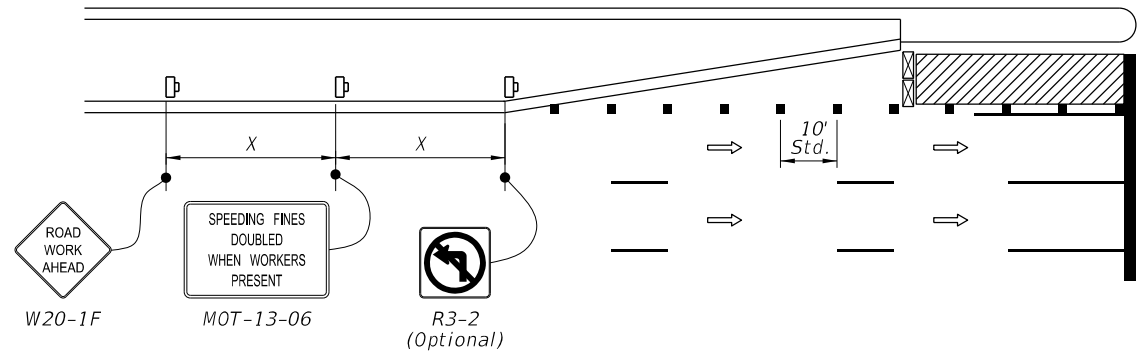
PEDESTRIAN WAY DROP-OFF CONDITION NOTES

1. A pedestrian way drop-off is defined as:

a. a drop in elevation greater than 10" that is closer than 2' from the edge of the pedestrian way

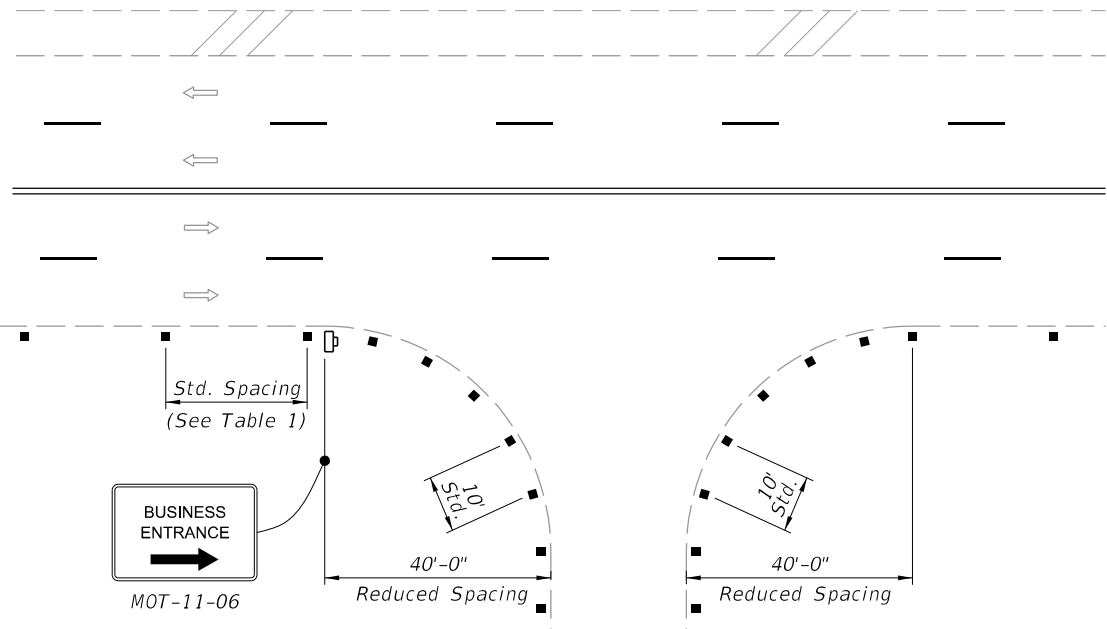
b. a slope steeper than 1:2 that begins closer than 2' from the edge of the pedestrian way when the total drop-off is greater than 60"
2. Protect any drop-off adjacent to a pedestrian way with pedestrian longitudinal channelizing devices, temporary barrier wall, or approved handrail.

DROP-OFFS IN WORK ZONES



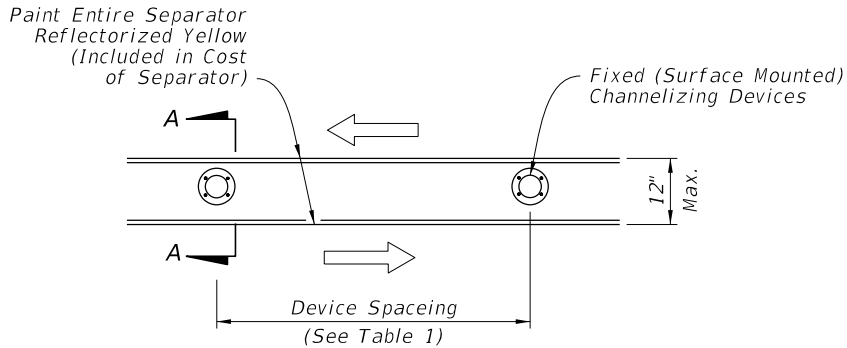
- NOTES:**
- 1. X = Work Zone Sign Spacing (See Table 3).
  - 2. The *SPEEDING FINES DOUBLE WHEN WORKERS PRESENT* sign (MOT-13-06) may be omitted when work operation will be in place for 24 hours or less.

**AUXILIARY LANE CLOSURE**

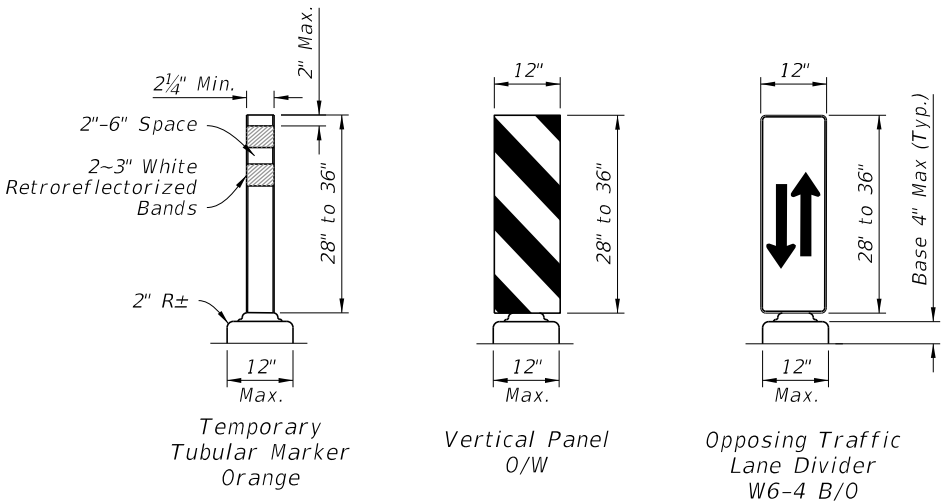


- NOTES:**
- 1. For single business entrances, place one 24" x 36" *BUSINESS ENTRANCE* sign (MOT-11-06) showing the specific business name for each affected driveway entrance. Logos may be provided by business owners. Standard *BUSINESS ENTRANCE* sign (MOT-11-06) may be used when approved by the Engineer.
  - 2. When several businesses share a common driveway entrance, place one 24" x 36" standard *BUSINESS ENTRANCE* sign (MOT-11-06) in accordance with Index 700-102 at the common driveway entrance.
  - 3. Channelizing devices shall be placed at a reduced spacing on each side of the driveway entrance, but shall not restrict sight distance for the driveway users.
  - 4. Business entrance signs are intended to guide motorist to business entrances moved/modified or disturbed during construction projects. Business entrance signs are not required where there is minimal disruption to business driveways which is often the case with resurfacing type projects.

**BUSINESS ENTRANCE SIGNS AND CHANNELIZING DEVICES PLACEMENT AT BUSINESS ENTRANCE**



**PLAN**



**SECTION A-A**

- NOTES:**
- 1. Temporary lane separators shall be supplemented with any of the following approved fixed (surface mounted) channelizing devices: temporary tubular markers, vertical panels, or opposing traffic lane divider panels. Opposing traffic lane divider panels (W6-4) shall only be used as center lane dividers to separate opposing vehicular traffic on a two-lane, two-way operation. Temporary Tubular Markers, Vertical Panels and Opposing Traffic Lane Divider panels shall not be intermixed within the limits where the temporary lane separator is used. The connection between the channelizing device and the temporary lane separator curb shall hold the channelizing device in a vertical position.
  - 2. ReflectORIZED materials shall have a smooth sealed outer surface which will display the same approximate color day and night. Furnish channelizing devices having retroreflective sheeting meeting the requirements of Section 990.
  - 3. 12" openings for drainage shall be constructed in the asphalt and portable temporary lane separator at a maximum spacing of 25' in areas with grades of 1% or less or 50' in areas with grades over 1% as directed by the Engineer.
  - 4. Tapered ends shall be used at the beginning and end of each run of the temporary lane separator to form a gradual increase in height from the pavement level to the top of the temporary lane separator.
  - 5. The Contractor has the option of using portable temporary lane separators containing fixed channelizing devices in lieu of the temporary asphalt separator and channelizing devices detailed on this sheet. The portable temporary lane separator shall come in portable sections that can be connected to maintain continuous alignment between the separate curb sections. Each temporary lane separator section shall be 36 inches to 48 inches in total length. Portable temporary lane separators shall duplicate the color of the pavement marking. Portable temporary lane separators shall be one of those listed on the Approved Products List.

**FIXED CHANNELIZING DEVICES (Temporary Lane Separators)**

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FY 2024-25  
STANDARD PLANS

GENERAL INFORMATION FOR TRAFFIC  
CONTROL THROUGH WORK ZONES

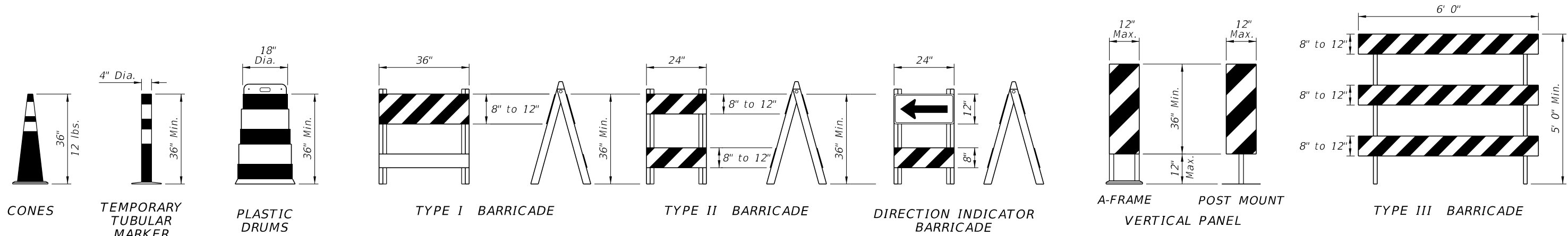
INDEX  
102-600

SHEET  
9 of 11

LAST  
REVISION  
11/01/23

DESCRIPTION:

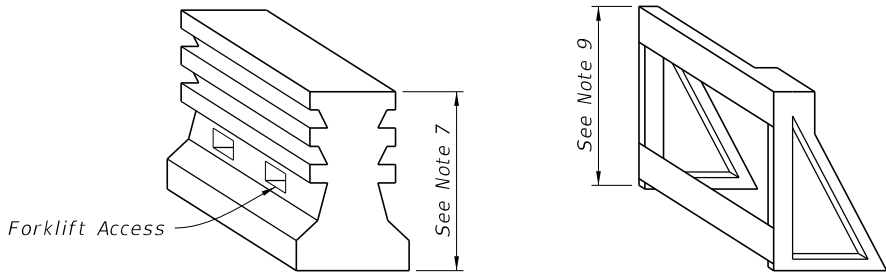




CHANNELIZING DEVICES

CHANNELIZING DEVICE NOTES:

- The details shown on this sheet are for the following purposes:
  - For ease of identification and
  - To provide information that supplements or supersedes that provided by the MUTCD.
- The Type III Barricade shall have a unit length of 6'-0" only. When barricades of greater lengths are required those lengths shall be in multiples of the 6'-0" unit.
- No sign panel should be mounted on any channelizing device unless the channelizing device/sign combination was found to be crashworthy and the sign panel is mounted in accordance with the vendor drawing for the channelizing device shown on the Approved Products List (APL).
- Ballast shall not be placed on top rails or any striped rails or higher than 13" above the driving surface.
- The direction indicator barricade may be used in tapers and transitions where specific directional guidance to drivers is necessary. If used, direction indicator barricades shall be used in series to direct the driver through the transition and into the intended travel lane.
- The splicing of sheeting is not permitted on channelizing devices or MOT signs.
- For rails less than 3'-0" long, 4" stripes shall be used.
- Cones shall:
  - Be used only in active work zones where workers are present.
  - Be reflectorized as per the MUTCD with Department-approved reflective collars when used at night.
- For pedestrian longitudinal channelizing devices, the device shall have a minimum of 8" continuous detectable edging above the walkway. A gap not exceeding a height of 2" is allowed to facilitate drainage. The top surface of the device shall be a minimum height of 32" and have a 1/8" or less difference in any plane at all connection points between the devices to facilitate hand trailing. The bottom and the top surface of the device shall be in the same vertical plane. If pedestrian drop-off protection is required, the device shall have a footprint or offset of at least 2', otherwise the device must be at least 42" in height above the walkway and be anchored or ballasted to withstand a 200 lb lateral point load at the top of the device.




PEDESTRIAN LONGITUDINAL CHANNELIZING DEVICES

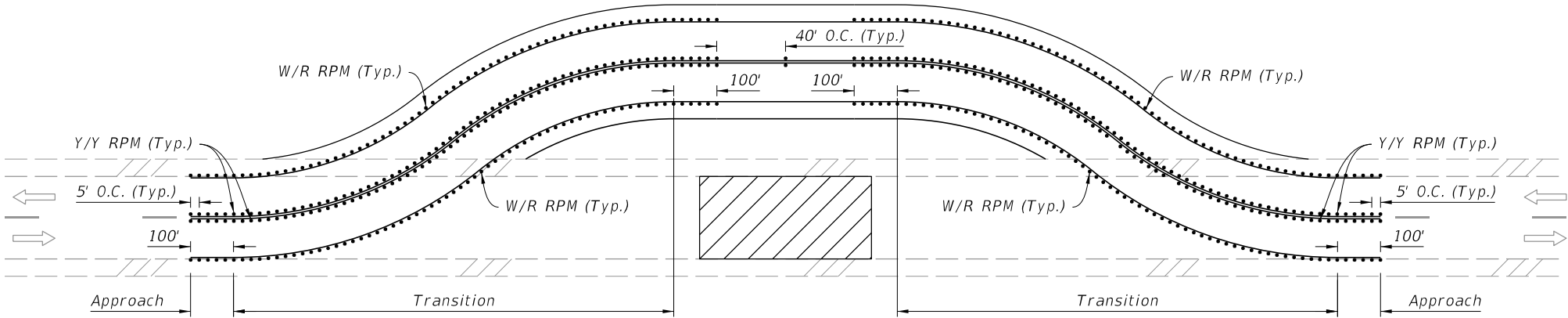
TEMPORARY BARRIER NOTES:

- Where a barrier is specified, any of the types below may be used in accordance with the applicable Index:

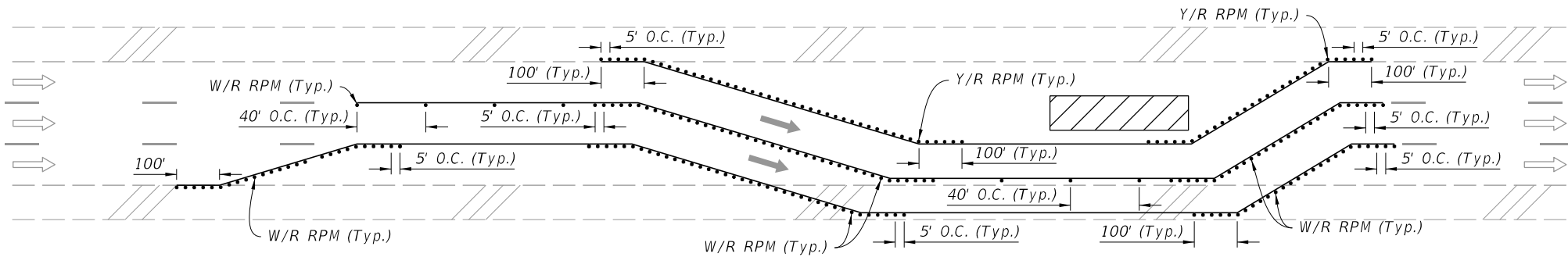
Index	Description
102-100	Temporary Barrier
102-120	Low Profile Barrier
536-001	Guardrail
- Trailer Mounted Barriers may be used to provide positive protection for workers within the work areas. APL drawings may be used as a guide to develop project specific Temporary Traffic Control Plans that are signed and sealed by the Contractor's Engineer.

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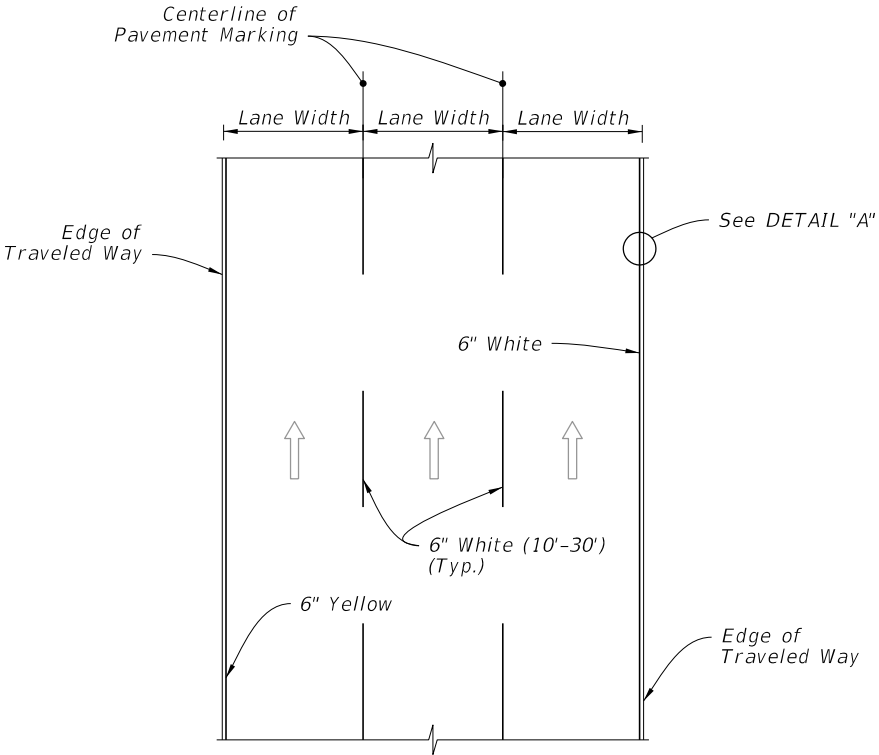


RPM PLACEMENT ON TWO-LANE ROADWAYS

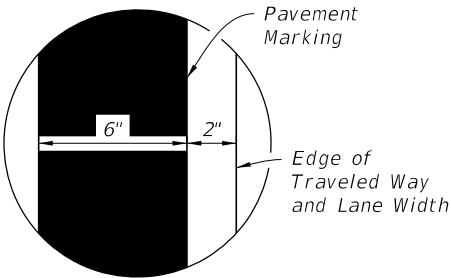


RPM PLACEMENT ON MULTILANE ROADWAYS  
(Lane Shift Shown, Other Multilane Typical Applications Similar)

- NOTES:**
- 1. Install RPMs as a supplement to:
    - a. All lane lines
    - b. Edge lines in transitions (e.g., merges, diversions, lane shifts)
    - c. Edge lines of gore areas
  - 2. Extend pavement marking and 5' RPM spacing by 100' in each direction for all transitions regardless of the line type.
  - 3. Place RPMs in accordance with this detail and Index 706-001.



PLAN VIEW




DETAIL "A"

RPM PLACEMENT IN WORK ZONES

PAVEMENT MARKINGS PLACEMENT

WORK ZONE PAVEMENT MARKINGS





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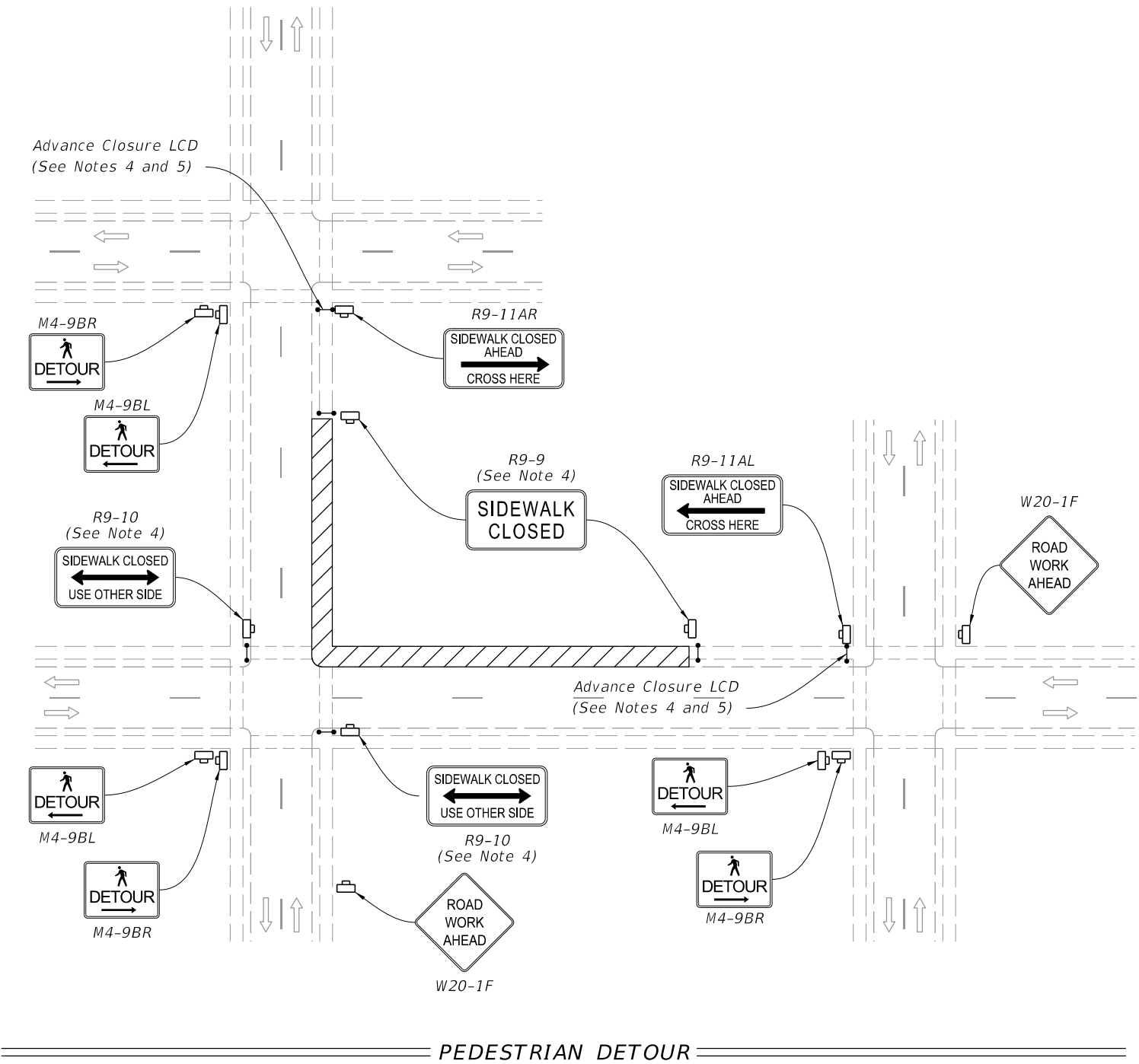


NOTES:


- 1. Cover or deactivate pedestrian traffic signal display(s) controlling closed crosswalks.
- 2. Place pedestrian LCDs across the full width of the closed sidewalk.
- 3. For post mounted signs located near or adjacent to a sidewalk, maintain a minimum 7' clearance from the bottom of the sign panel to the surface of the sidewalk.
- 4. "Sidewalk Closed" signs (R9-XX) may be mounted on pedestrian LCDs in accordance with the manufacturer's instructions.
- 5. Omit the Advance Closure LCD if it blocks access to other pedestrian facilities (e.g., transit stops, residences, or business entrances).

SYMBOLS:

-  Work Area
-  Work Zone Sign
-  Pedestrian Longitudinal Channelizing Device (LCD)
-  Lane Identification and Direction of Traffic



10/3/2023 10:59:04 AM

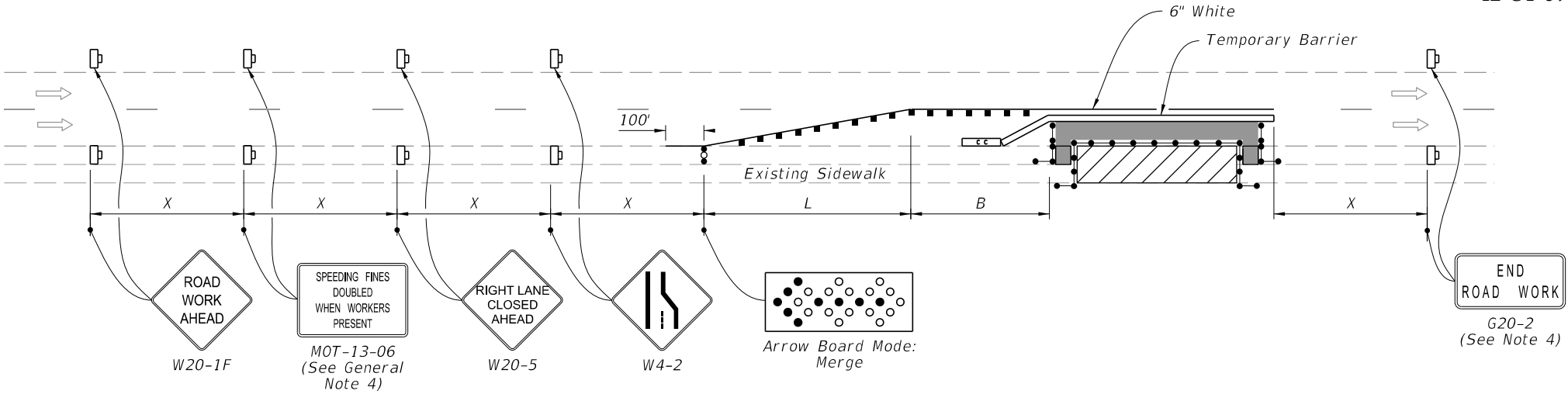
LAST REVISION 11/01/20	REVISION DESCRIPTION:	 FY 2024-25 STANDARD PLANS	SIDEWALK CLOSURE	INDEX 102-660	SHEET 1 of 2
------------------------------	--------------------------	--	------------------	------------------	-----------------

NOTES:

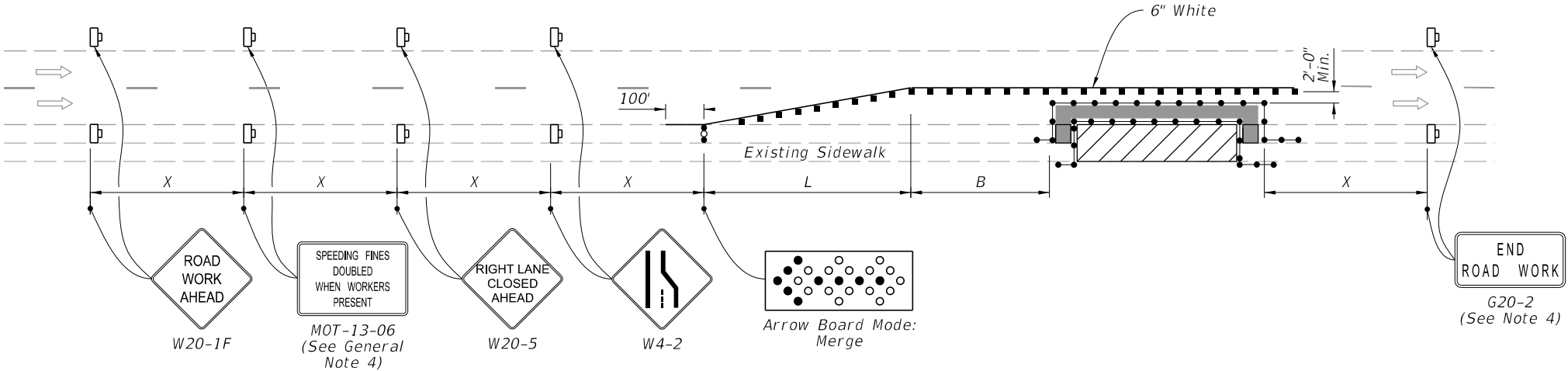
- 1. L = Taper Length  
B = Buffer Length  
X = Work Zone Sign Distance  
See Index 102-600 for "L", "B", "X", channelizing device spacing values.
- 2. Provide a 5' wide temporary pedestrian way with a maximum cross-slope of 0.02, except where space restrictions warrant a minimum width of 4'. Provide a 5' x 5' passing space for temporary pedestrian ways less than 5' in width at intervals not to exceed 200'.
- 3. When temporary pedestrian ways require curb ramps, meet the requirements of Index 522-002. Detectable warnings are not required for curb ramps diverting pedestrian traffic into a closed lane.
- 4. The "Speeding Fines Doubled When Workers Present" signs (M0T-13-06) and "End Road Work" signs (G20-2), along with associated work zone sign distances, may be omitted when the work operation will be in place for 24 hours or less.
- 5. Pedestrian Diversion Option 2 may only be used when called for in the Plans or as approved by an Engineer.

SYMBOLS:

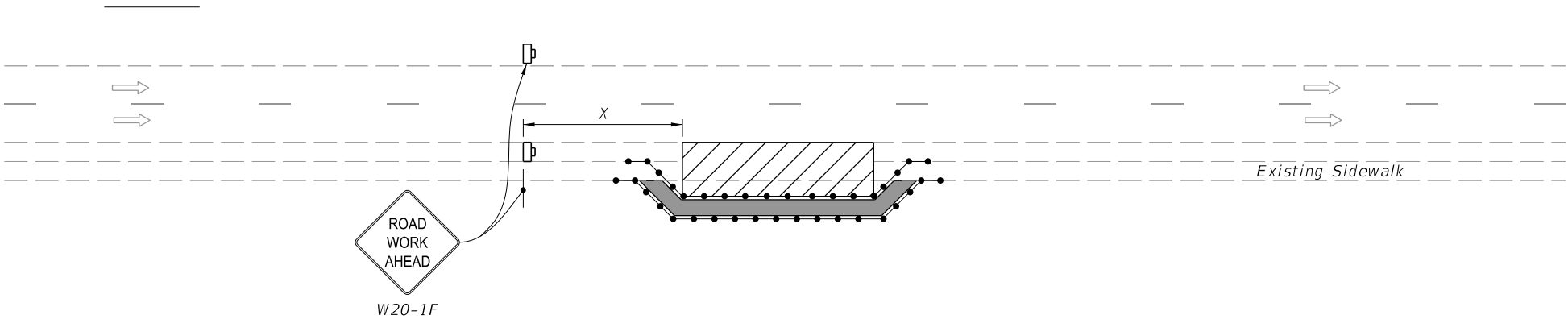
- Work Area
- Temporary Pedestrian Way
- Channelizing Device (See Index 102-600)
- Pedestrian Longitudinal Channelizing Device (LCD)
- Work Zone Sign
- Arrow Board
- Crash Cushion
- Lane Identification and Direction of Traffic



PEDESTRIAN DIVERSION - OPTION 1  
(Temporary Barrier Shown, Low Profile Barrier Similar)



PEDESTRIAN DIVERSION - OPTION 2  
(Work Zone Speed 45 mph or Less)



PEDESTRIAN SPECIAL DETOUR

10/3/2023 10:59:10 AM

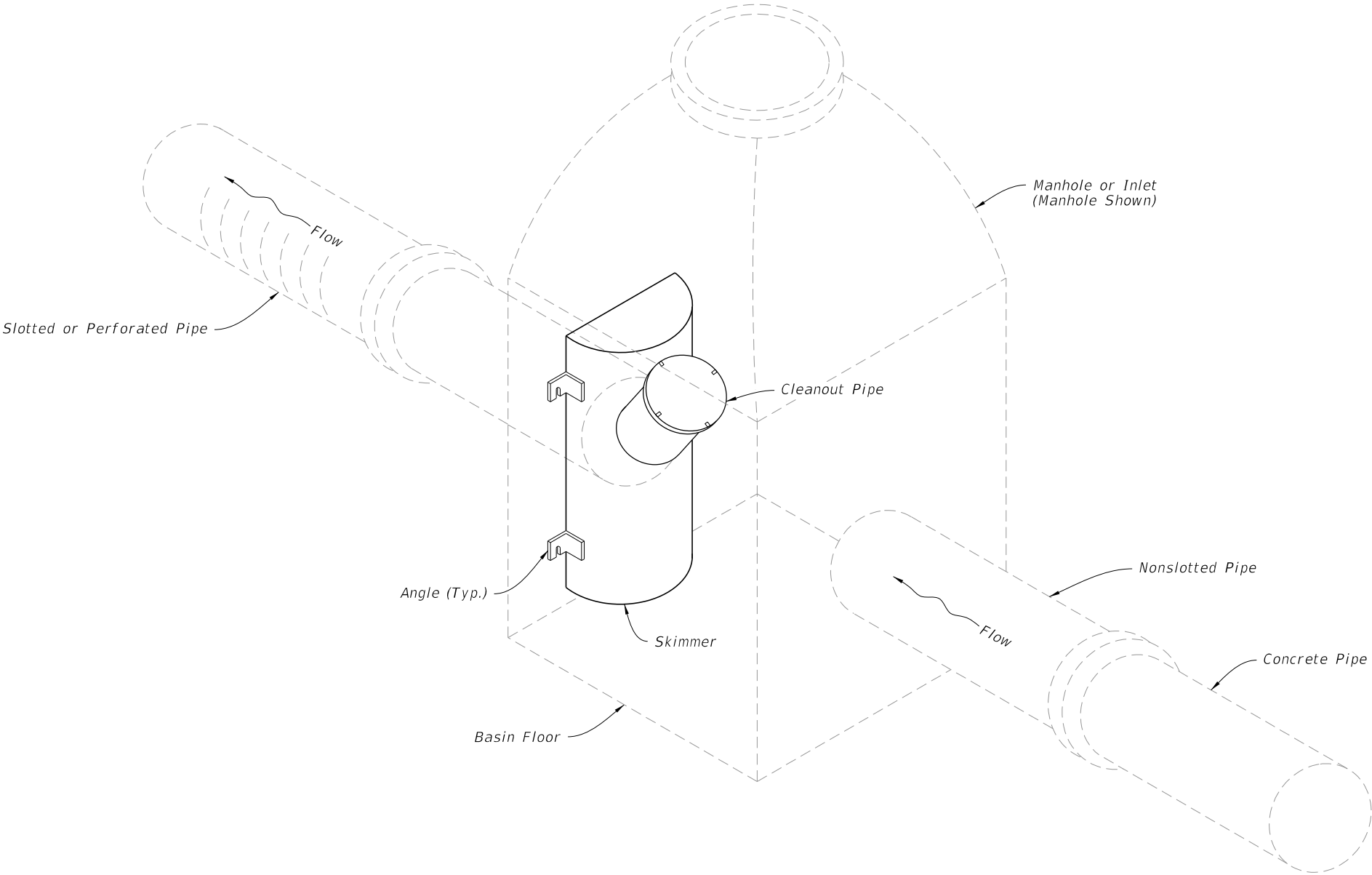
LAST REVISION		DESCRIPTION:	FY 2024-25 STANDARD PLANS	SIDEWALK CLOSURE	INDEX 102-660	SHEET 2 of 2
11/01/23	REVISION					

GENERAL NOTES:

- 1. The French Drain Skimmer is a hooded cover, mounted over an outlet in a catchbasin, that prevents oil and floating debris from exiting the basin.
- 2. Place neoprene gasket material between the skimmer and the catchbasin at all points of contact. Trim the gasket to extend 1/2 inch beyond the joint on all sides.
- 3. Provide skimmer baffle, cleanout pipe and angles constructed of either galvanized steel, aluminum, polyvinyl chloride, polyethylene, fiberglass or acrylonitrile butadiene styrene. Provide hot-dip galvanized steel components, unless stainless.
- 4. Use Mounting hardware, hinges and latches made of stainless steel. Loss prevention device can use either stainless steel chain or riveted nylon strap.
- 5. Provide skimmer bodies (baffles) and cleanout pipe meeting Specification 943 for steel, 945 for aluminum or 948 for plastics.
- 6. Work this Index in accordance with Specification 425.

TABLE OF CONTENTS:

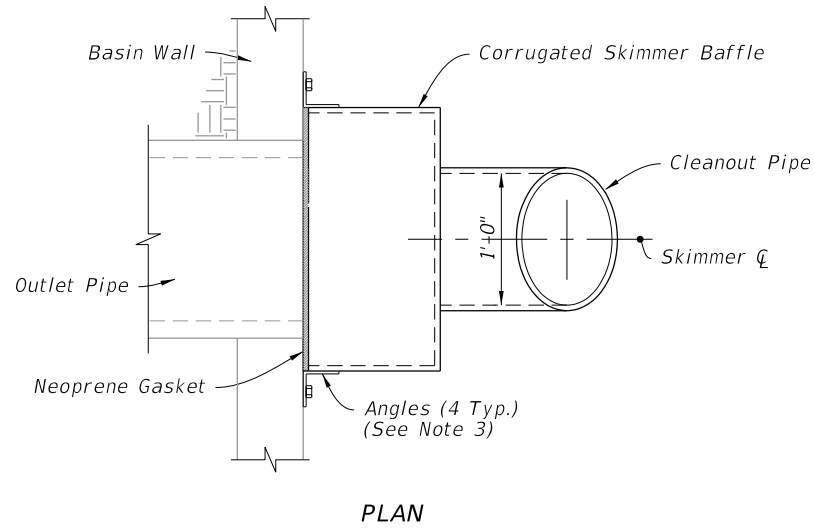
Sheet	Description
1	General Notes and Contents
2	Type I Skimmers
3	Type II Skimmers



SKIMMER FOR FRENCH DRAIN OUTLETS ASSEMBLY

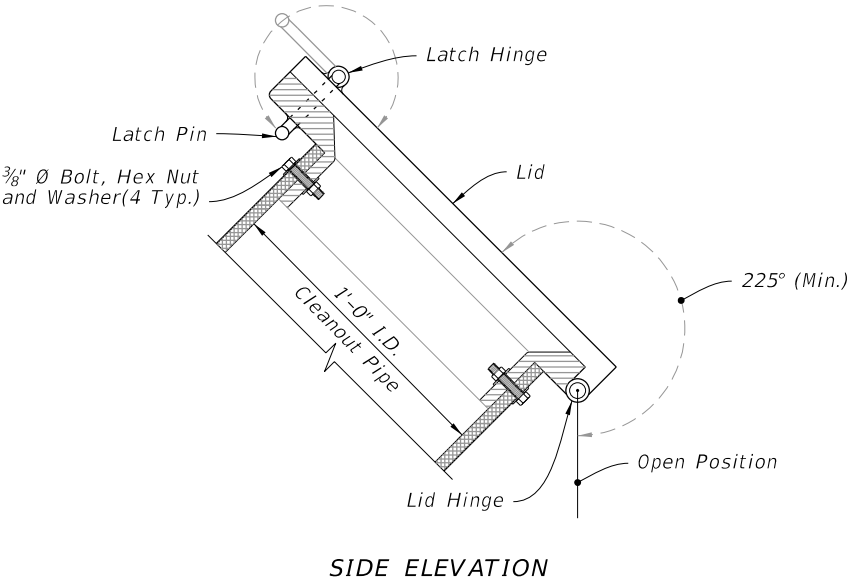
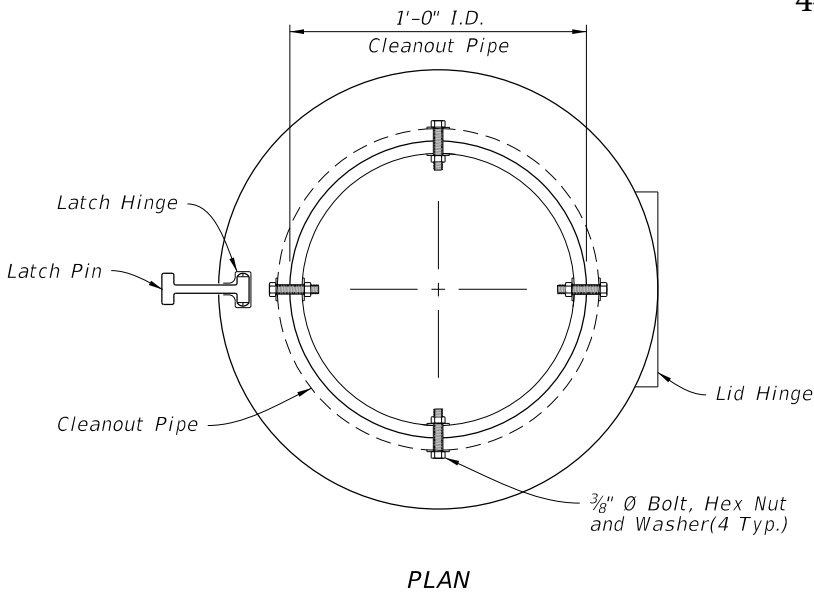
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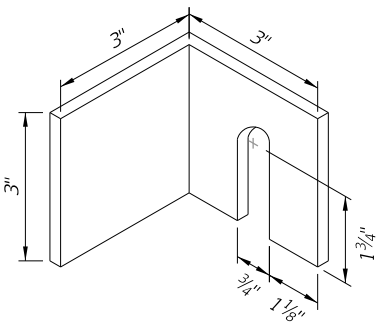
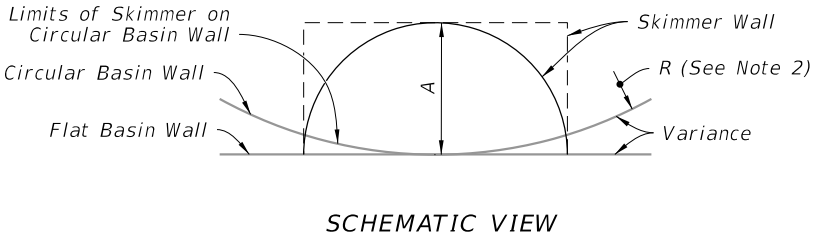
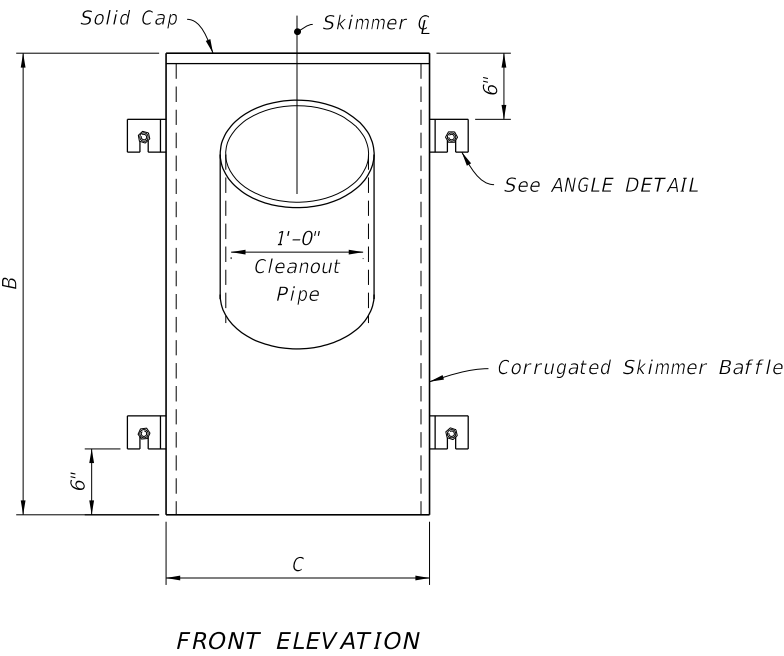
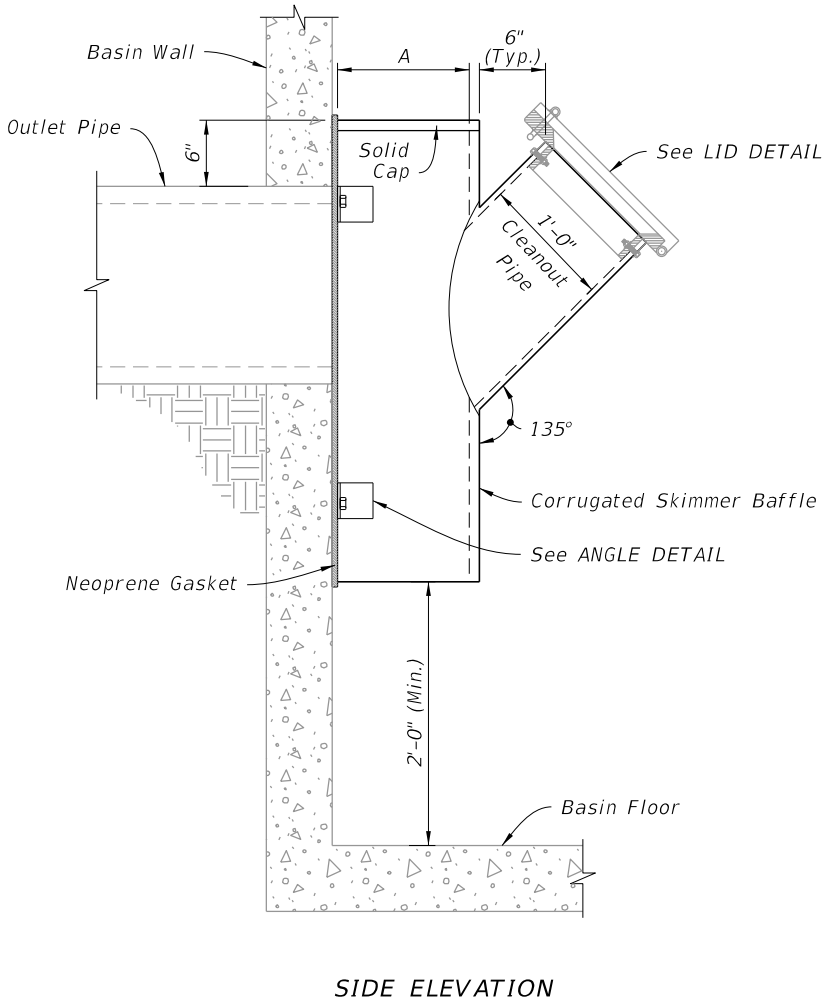


- NOTES:**
1. Conform the backs of skimmers to the shape of the basin walls on which they are mounted.
  2. "R" is the radii required for curved back skimmers. Applies to both skimmer types. See Plans.
  3. Weld Angles at all points of contact with skimmer.

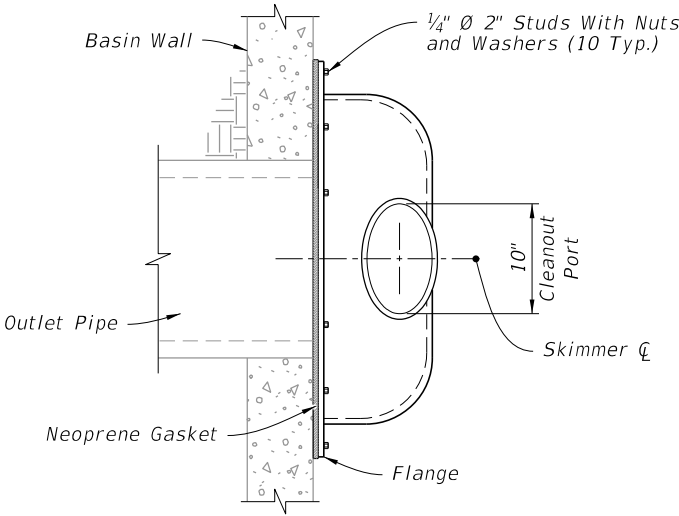
DIMENSION TABLE			
OUTLET PIPE	A	B	C
18"	12"	42"	24"
24"	15"	48"	30"
30"	18"	54"	36"
36"	21"	60"	42"



LID DETAIL



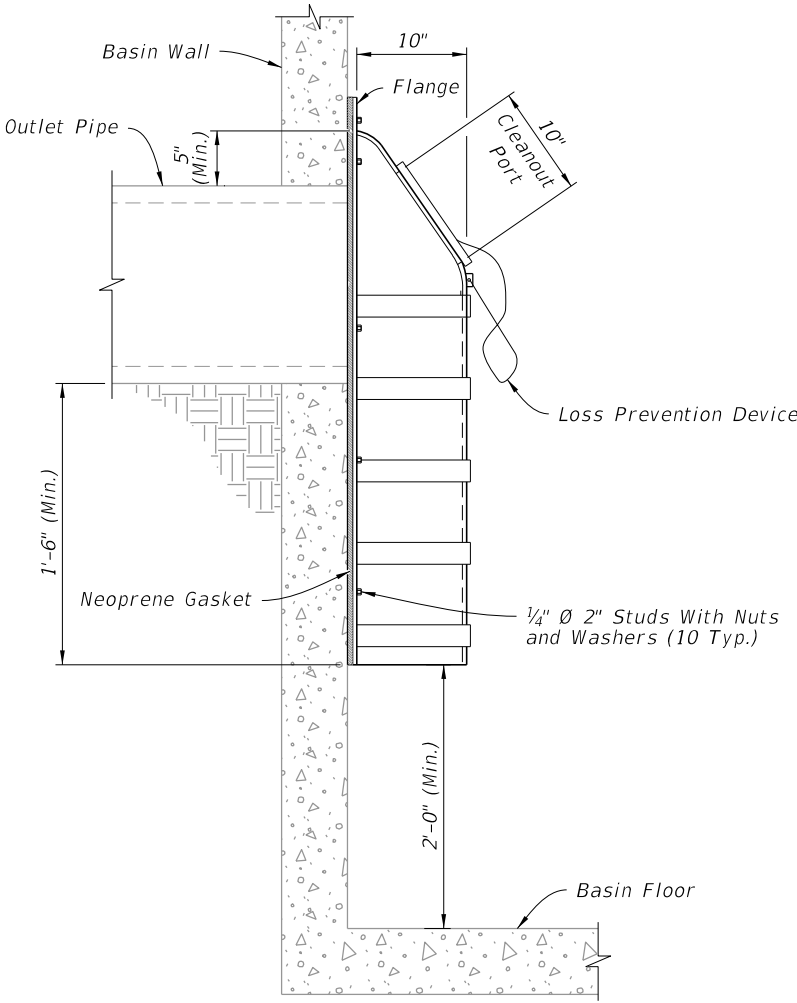
TYPE I SKIMMERS



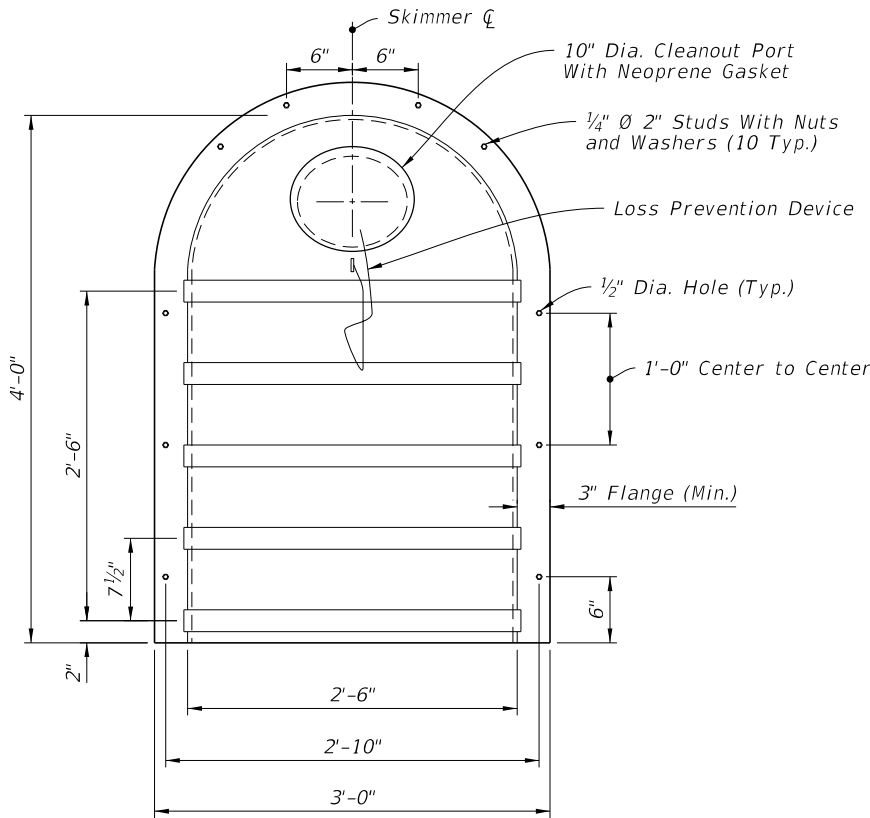
PLAN

NOTE:

Install a gasket for the cleanout with either a threaded screw-in lid or a lid secured by four stainless steel quick-release latches.



SIDE ELEVATION



FRONT ELEVATION

TYPE II DETAILS

TYPE II SKIMMERS



FY 2024-25  
STANDARD PLANS

SKIMMERS FOR FRENCH DRAIN OUTLETS

INDEX  
443-002

SHEET  
3 of 3

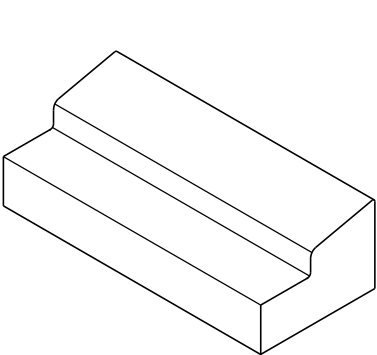
LAST  
REVISION  
11/01/19

REVISION  
DESCRIPTION:

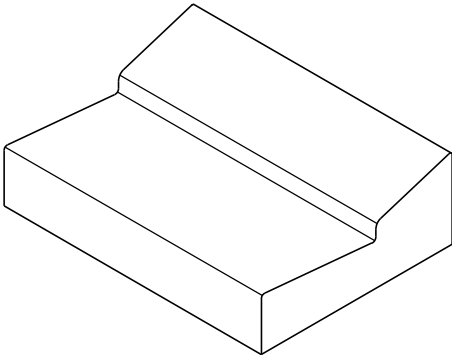
GENERAL NOTES:

- 1. For curb, gutter and curb & gutter provide 1/8" - 1/4" contraction joints at 10' centers (max.). Contraction joints adjacent to concrete pavement on tangents and flat curves are to match the pavement joints, with intermediate joints not to exceed 10' centers.
- 2. Locate expansion joints for curb, gutter and curb & gutter in accordance with Specification 520.

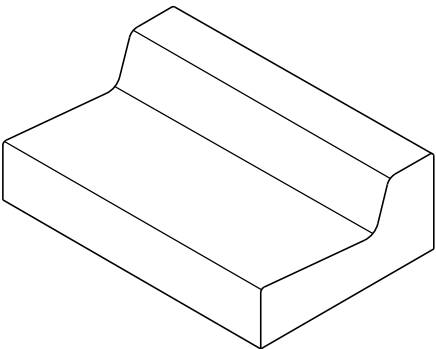
TABLE OF CONTENTS:	
Sheet	Description
1	General Notes and Contents
2	Concrete Curb and Gutter
3	Curb and Gutter Joints and Endings, Concrete Bumper Guard, and Asphaltic Concrete Curb



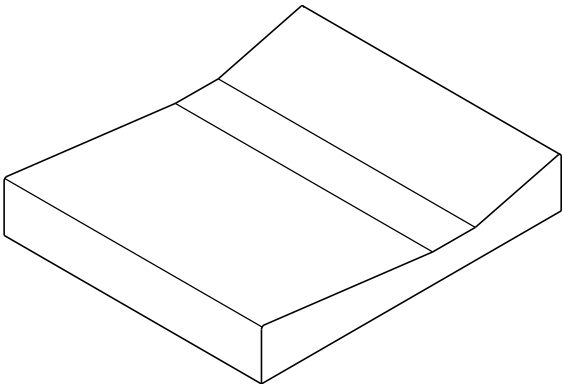
TYPE A



TYPE E

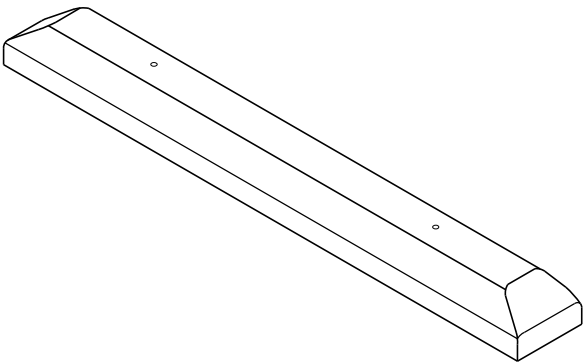


TYPE F



SHOULDER GUTTER

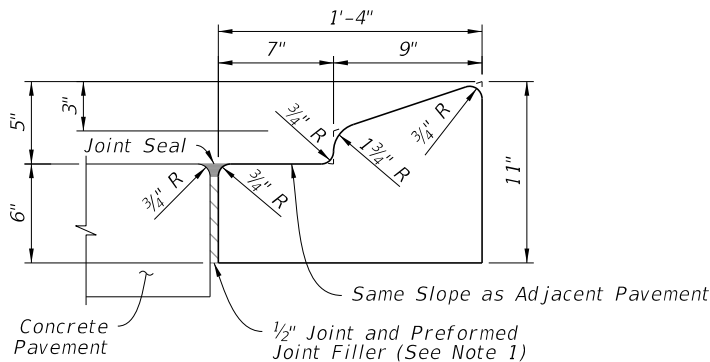
===== TYPE A, TYPE E, TYPE F, AND SHOULDER GUTTER =====  
(Other Types Similar)



===== CONCRETE BUMPER GUARD =====

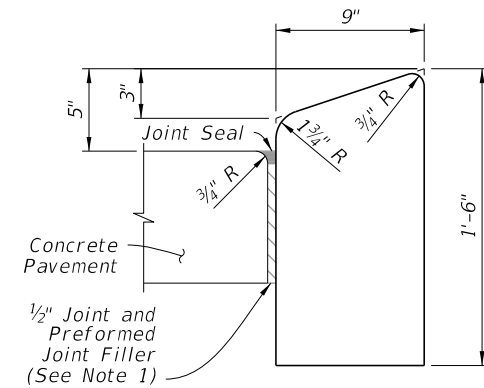
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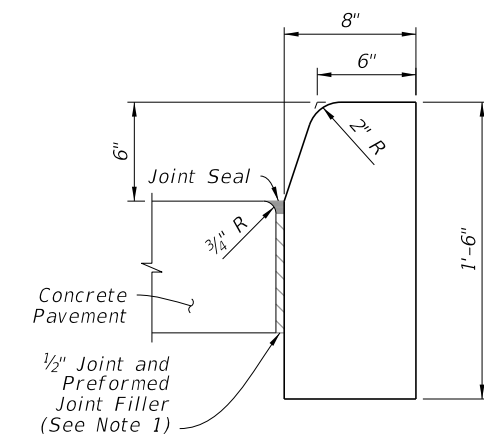
**NOTE:** For use adjacent to concrete or flexible pavement, concrete shown (See Note 4).

**TYPE A**



**NOTE:** For use adjacent to concrete or flexible pavement, concrete shown.

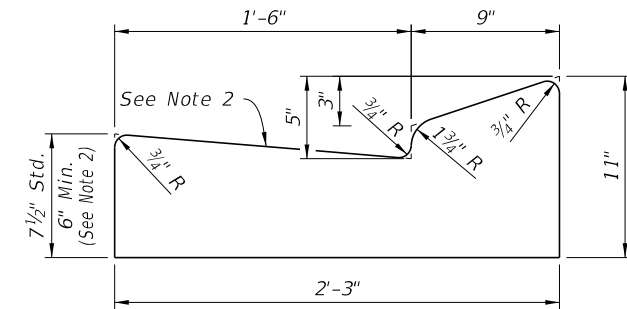
**TYPE B**



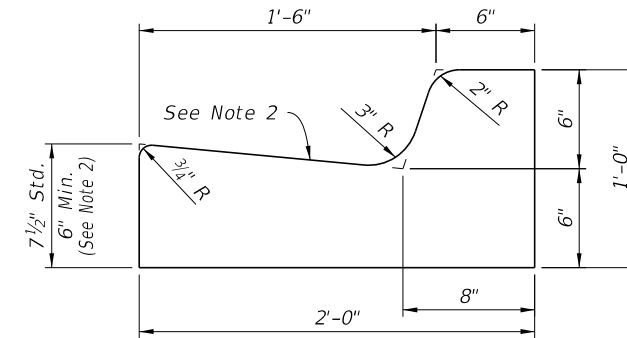
**NOTE:** For use adjacent to concrete or flexible pavement, concrete shown.

**TYPE D**

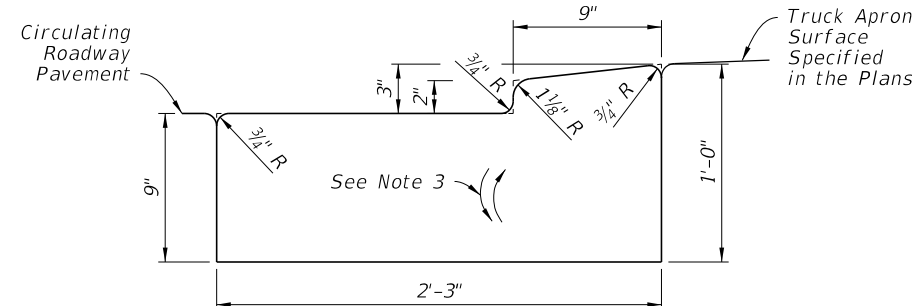
- NOTES:**
- For Type A, Type B, and Type D Curb: Expansion joint, preformed joint filler and joint seal are required between curbs and concrete pavement only, see Sheet 3.
  - For Type E, Type F, Drop Curb, and Valley Gutter: When used on high side of roadways, match the cross slope of the gutter to the cross slope of the adjacent pavement. The thickness of the lip is 6", unless otherwise shown on Plans.
  - For Type RA, rotate entire section so that gutter cross slope matches slope of adjacent circulating roadway pavement.
  - For details depicting usage of Type A Curb adjacent to flexible pavement see Sheet 3.



**TYPE E**

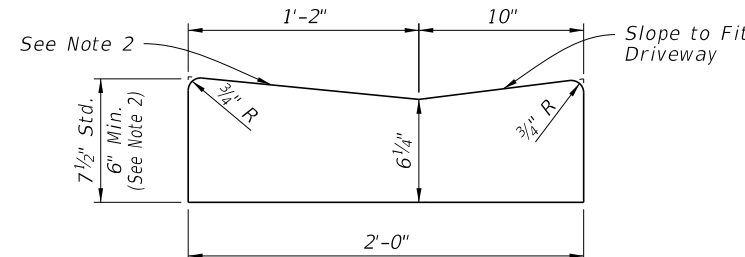


**TYPE F**

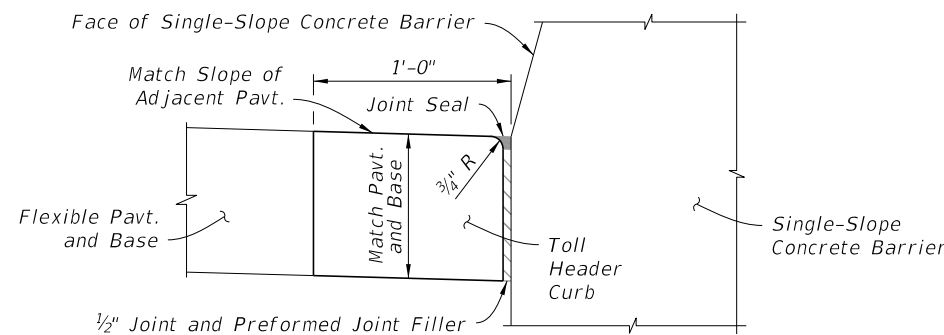


**NOTE:** Traffic Bearing Sections for use in Roundabout Central Island Construction.

**TYPE RA**

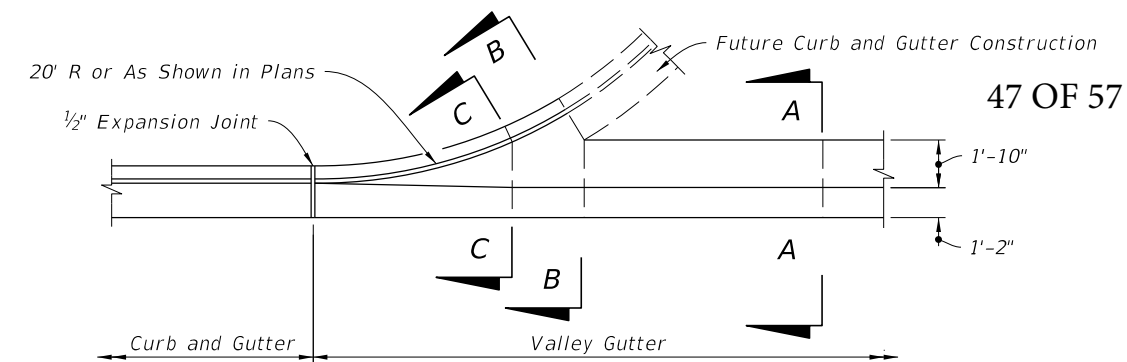


**DROP CURB**

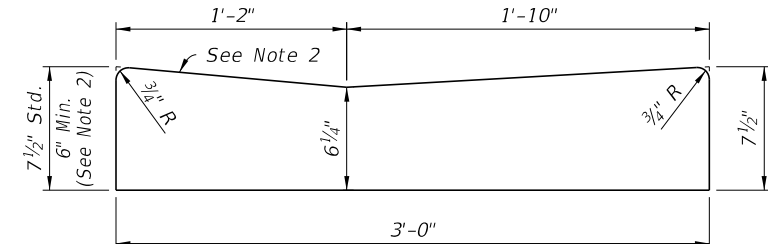


**NOTE:** See the toll site details for conduit requirements.

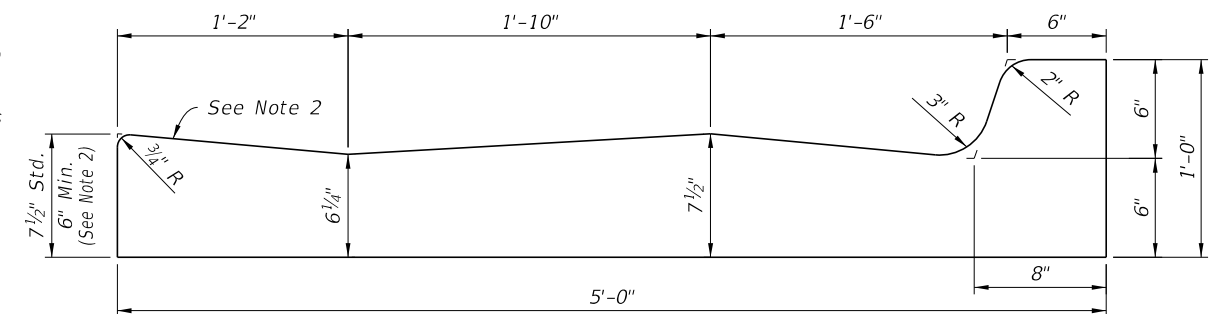
**TOLL HEADER CURB**



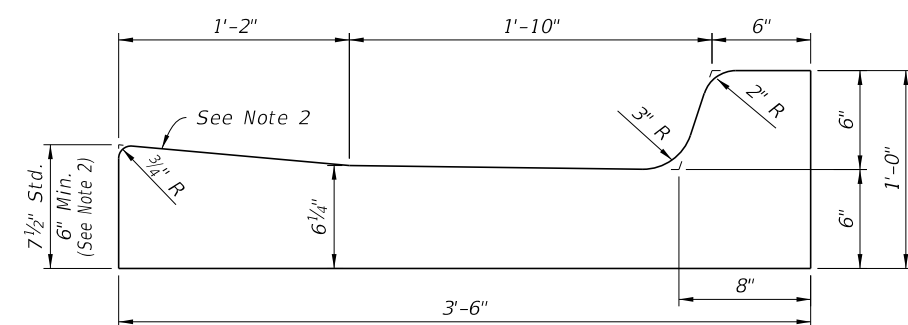
**PLAN VIEW**



**SECTION A-A**

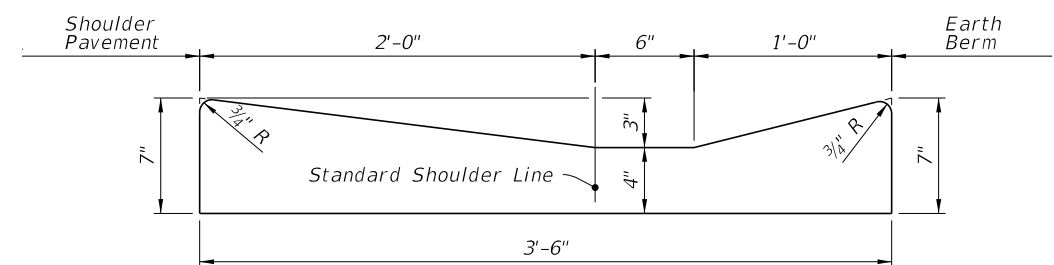


**SECTION B-B**



**SECTION C-C**

**VALLEY GUTTER**



**SHOULDER GUTTER**

**CONCRETE CURB AND GUTTER**

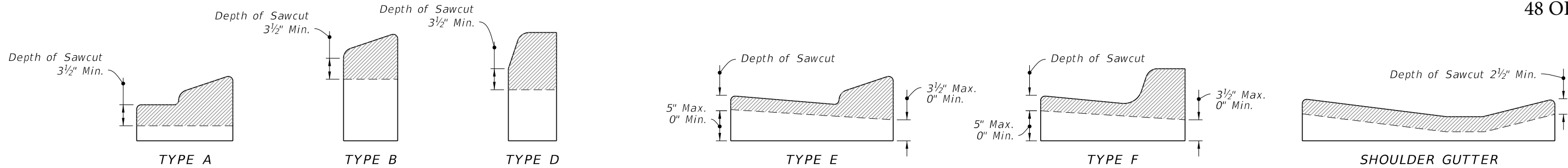


**FY 2024-25  
STANDARD PLANS**

**CURB AND GUTTER**

**INDEX  
520-001**

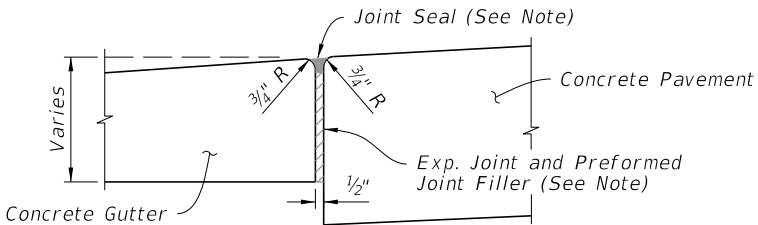
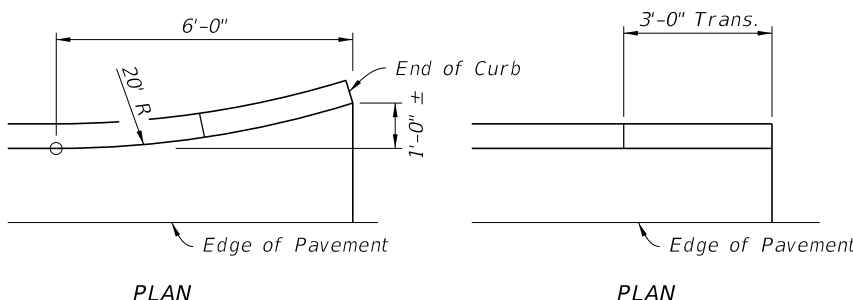
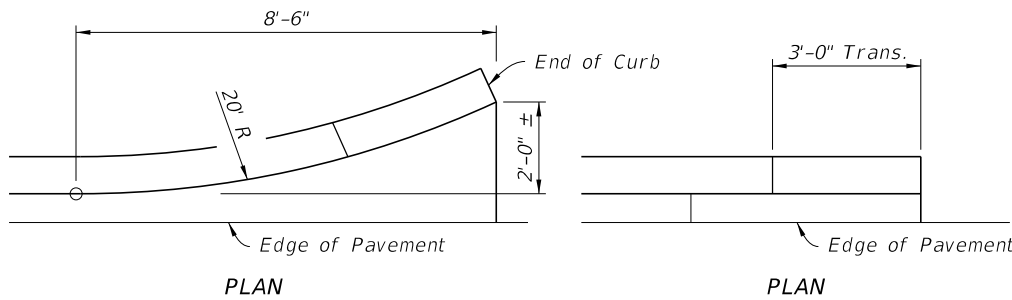
**SHEET  
2 of 3**



NOTE: Sawcuts should be avoided within valley gutter and within curb and gutter endings.

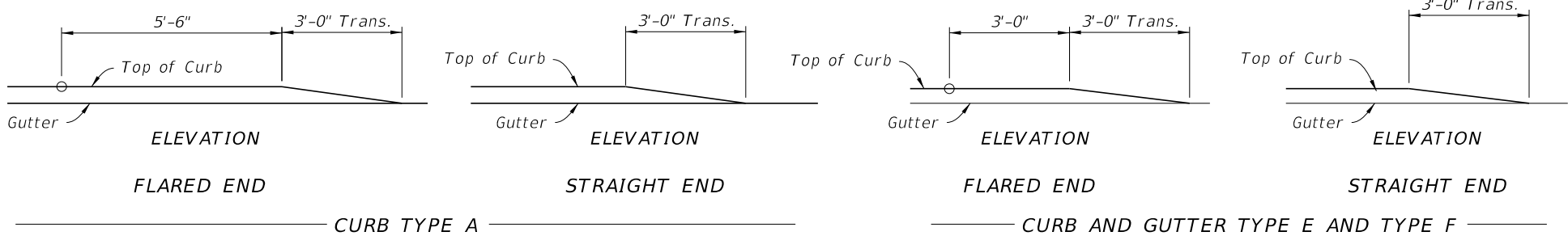
CONTRACTION JOINTS IN CURB

CONTRACTION JOINTS IN CURB & GUTTER



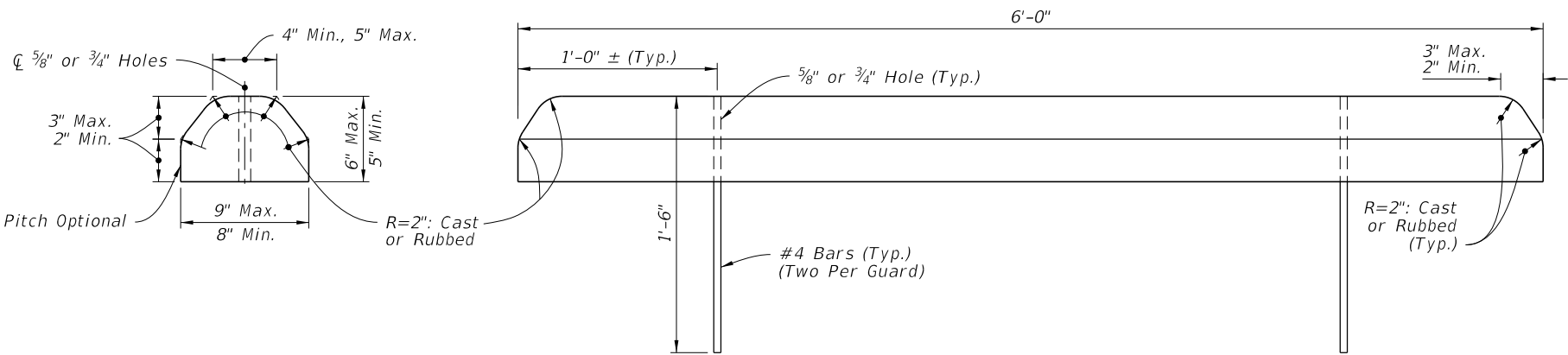
NOTE: Joint Seal application applies to both high and low sides of pavement, low side shown.

EXPANSION JOINT BETWEEN GUTTER AND CONCRETE PAVEMENT

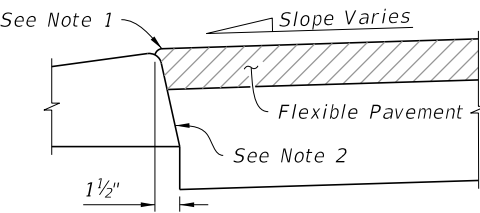


NOTE: Ends of Type B and D Curb transition from full to zero heights in 3 ft.

CURB AND CURB & GUTTER ENDINGS



CONCRETE BUMPER GUARD



ASPHALTIC CONCRETE CURB

- NOTES:
- Surface on Low Side of Pavement to be  $\frac{1}{4}$ " Above Lip of Gutter. Surface on High Side to be Flush With Lip of Curb or Curb & Gutter.
  - Applies to both high and low sides of pavement, low side shown. Applies to shoulder gutter only where adjoining traffic lanes.

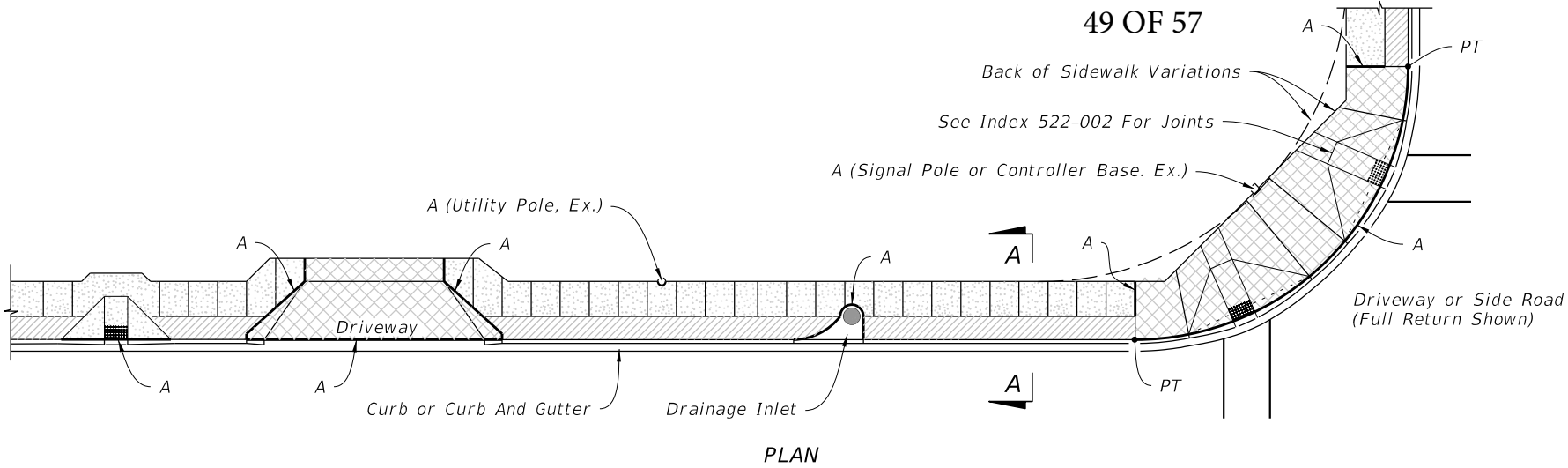
CURB AND GUTTER AND TYPE A CURB ADJACENT TO FLEXIBLE PAVEMENT

CURB AND GUTTER JOINTS AND ENDINGS, CONCRETE BUMPER GUARD, AND ASPHALTIC CONCRETE CURB

LAST REVISION 11/01/21	REVISION	DESCRIPTION:	FDOT FY 2024-25 STANDARD PLANS	CURB AND GUTTER	INDEX 520-001	SHEET 3 of 3
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GENERAL NOTES:

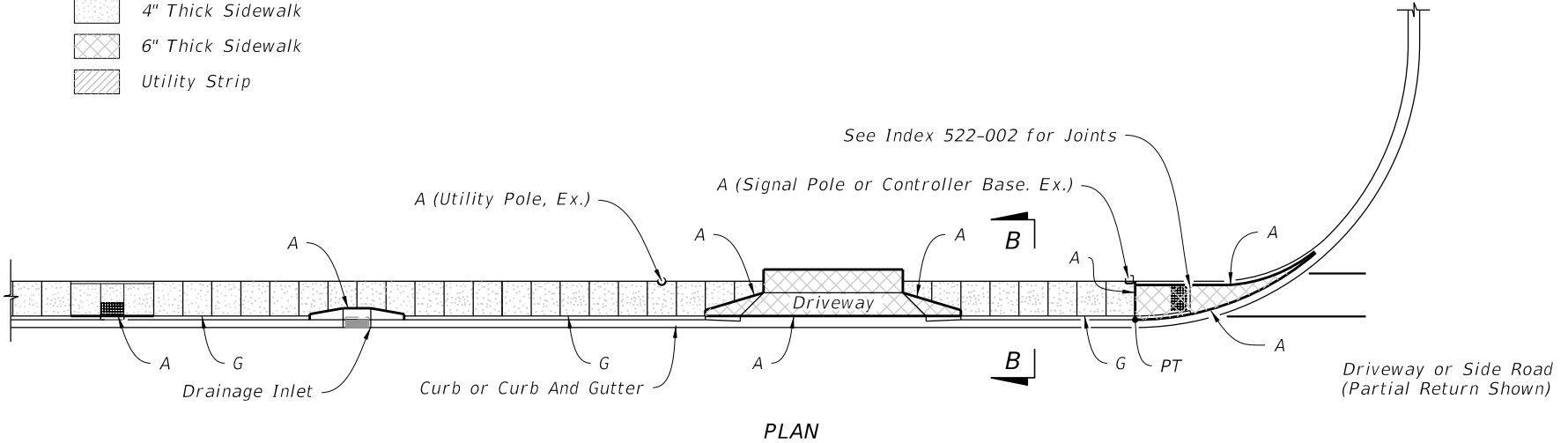
- 1. Construct sidewalks in accordance with Specification 522. Use 6" concrete for Sidewalks and Curb Ramps Located within Curb Returns (See Plan View). Install all other concrete with thickness as shown, unless otherwise detailed in the Plans.
- 2. Include detectable warnings on sidewalk curb ramps in accordance with Index 522-002.
- 3. For Driveways see Index 522-003.
- 4. Bond breaker material can be any impermeable coated or sheet membrane or preformed material having a thickness of not less than 6 mils and not more than 1/2".
- 5. Construct sidewalks with Edge Beam through the limits of any surface mounted Pedestrian/Bicycle Railing or Pipe Guiderail shown in the plans. (See RAILING DETAIL)



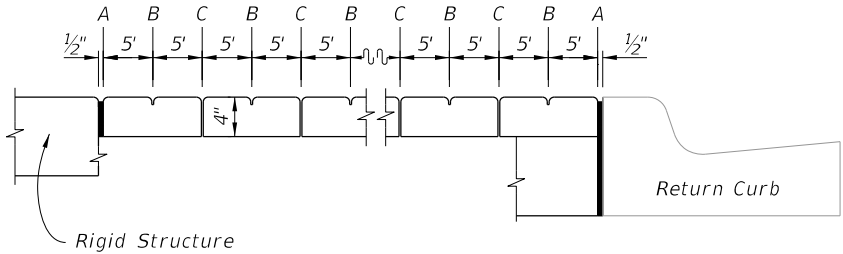
SIDEWALK WITH UTILITY STRIP

LEGEND:

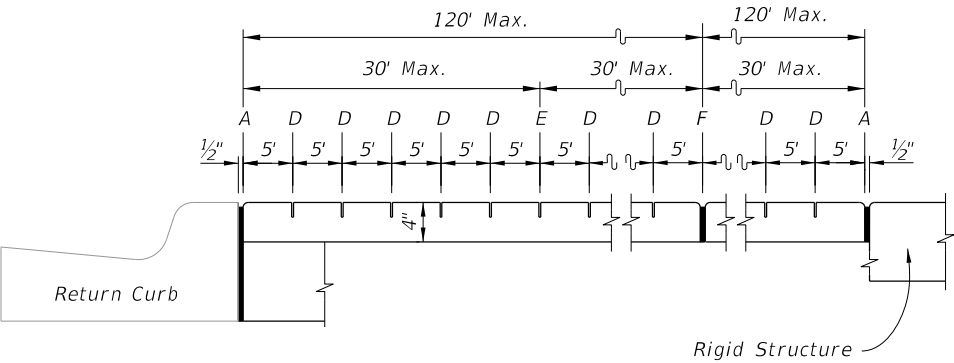
- 4" Thick Sidewalk
- 6" Thick Sidewalk
- Utility Strip



SIDEWALK WITHOUT UTILITY STRIP



OPEN JOINTS



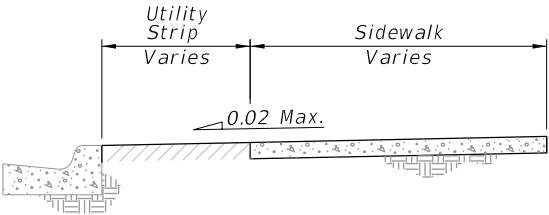
SAWED JOINTS

LONGITUDINAL SECTION

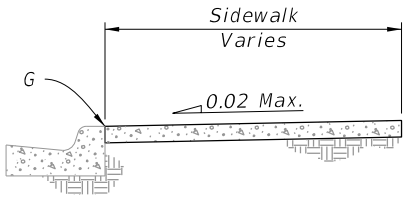
LEGEND:

- A- 1/2" Expansion Joints (Preformed Joint Filler) between the sidewalk and; driveways, sidewalk-intersections, and all other fixed objects (e.g. drainage inlets and utility poles).
- B- 1/8" Dummy Joints, Tooled
- C- 1/8" Formed Open Joints
- D- 3/16" Saw Cut Joints, 1 1/2" Deep (within 96 hours) Max. 5' Centers
- E- 3/16" Saw Cut Joints, 1 1/2" Deep (within 12 hours) Max. 30' Centers Joint(s) Required When Length Exceeds 30'
- F- 1/2" Expansion Joint When Run Of Sidewalk Exceeds 120', Intermediate locations when called for in the plans or at locations as directed by the Engineer.
- G- Cold Joint With Bond Breaker, Tooled

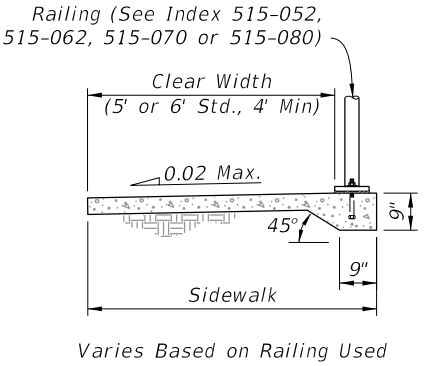
SIDEWALK JOINTS



SECTION A-A



SECTION B-B

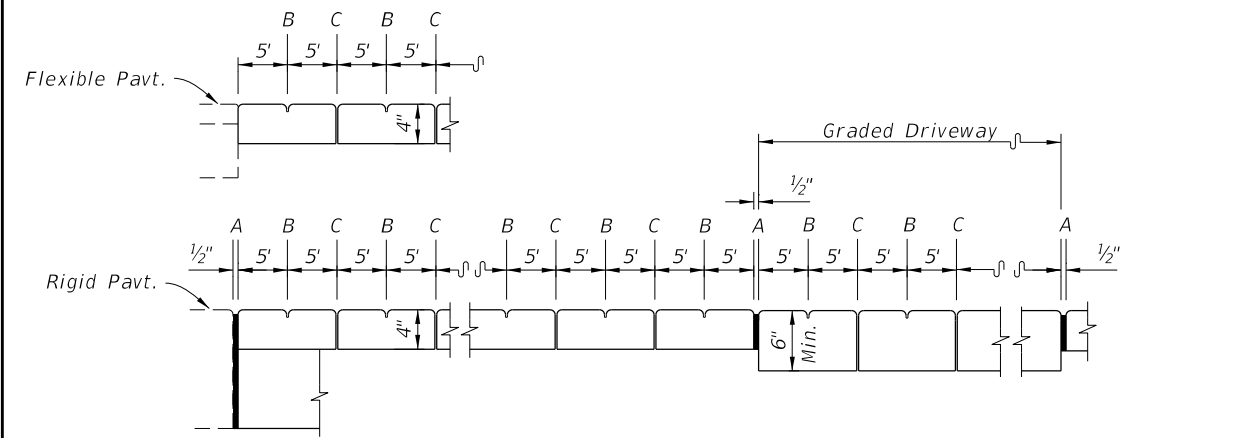


RAILING DETAIL

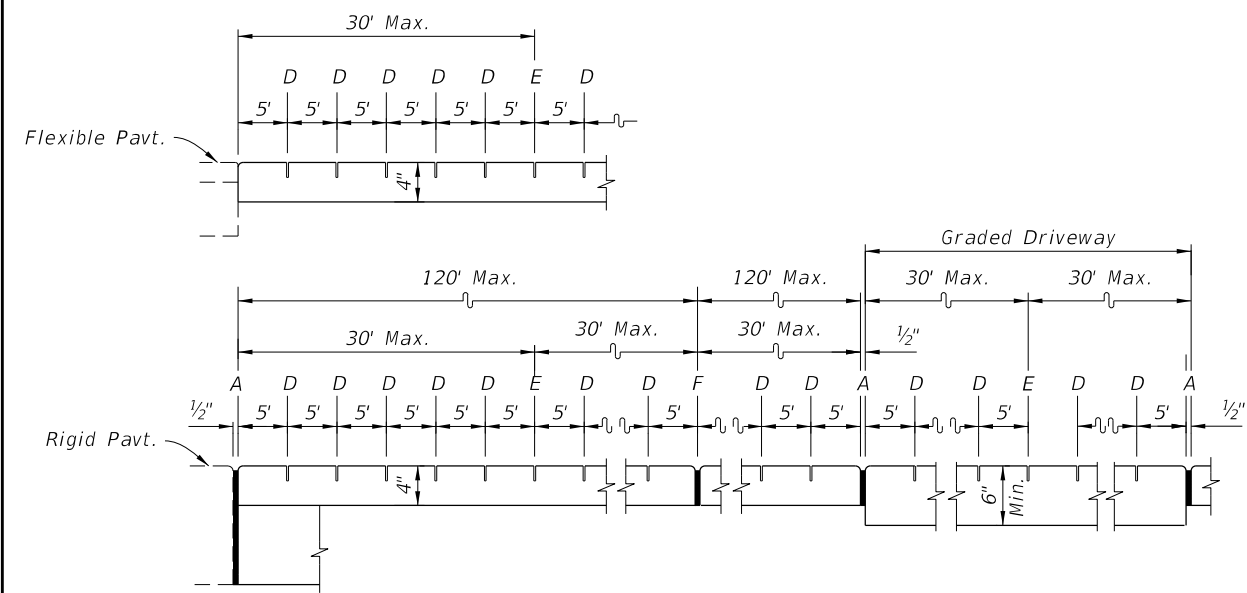
GENERAL NOTES AND CONCRETE SIDEWALK ON CURBED ROADWAYS

LAST REVISION	DESCRIPTION:	FDOT	FY 2024-25 STANDARD PLANS	CONCRETE SIDEWALK	INDEX	SHEET
11/01/18					522-001	1 of 2





OPEN JOINTS

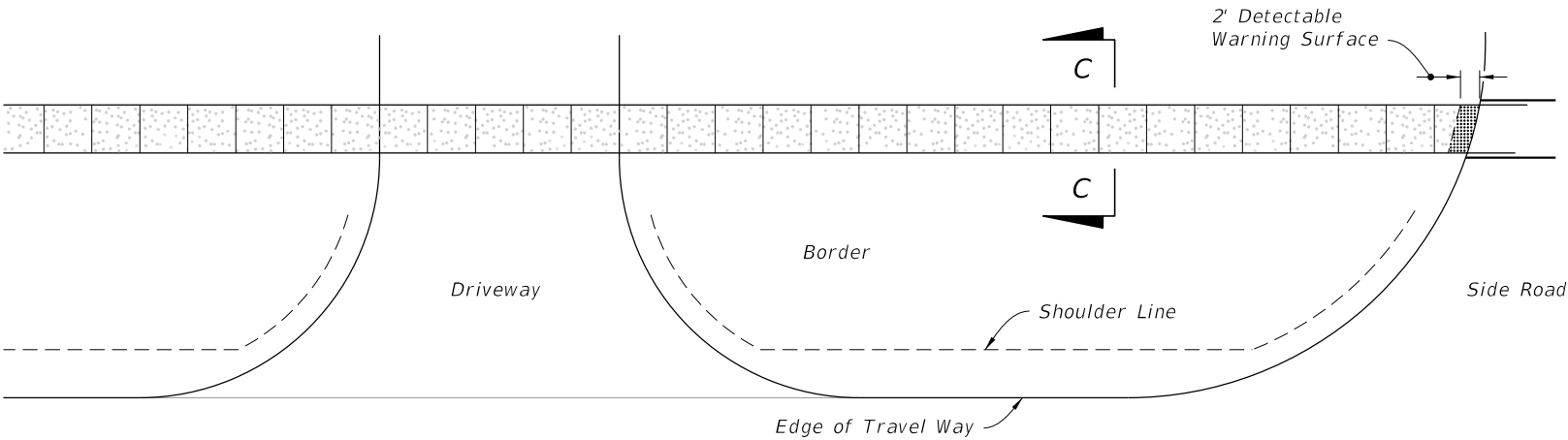


SAWED JOINTS

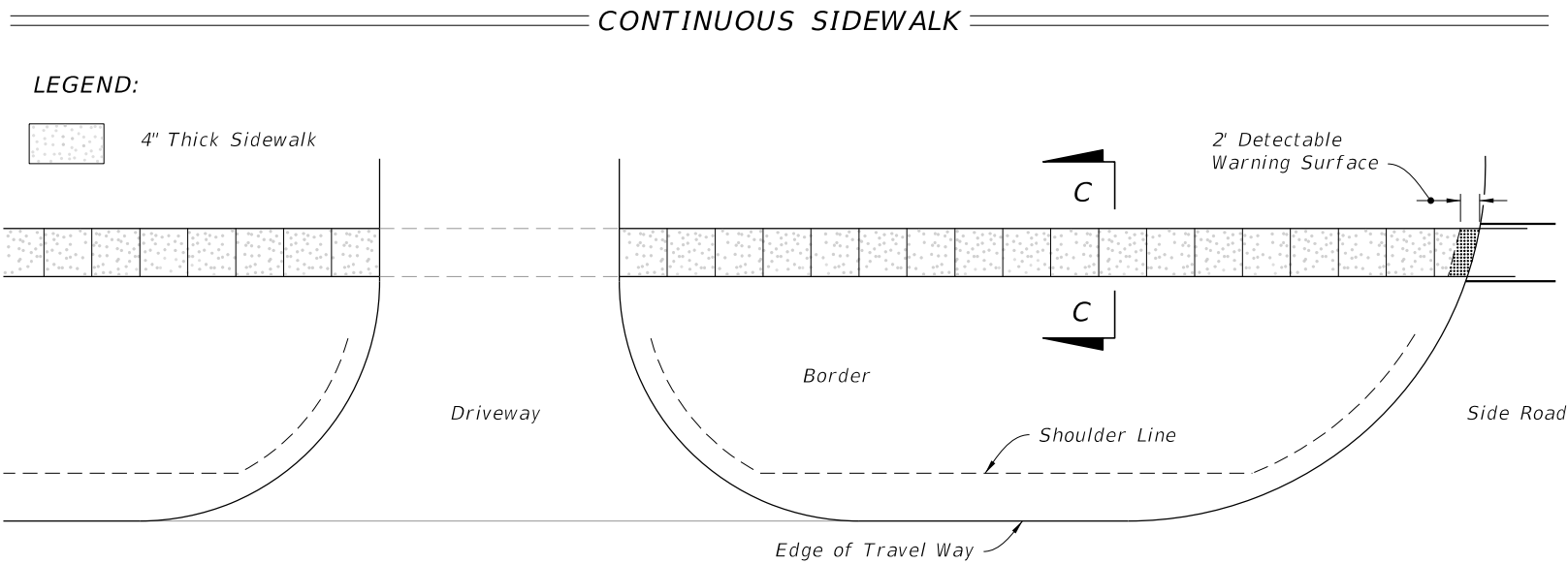
LONGITUDINAL SECTION

- LEGEND:**
- A- 1/2" Expansion Joints (Preformed Joint Filler) between the sidewalk and driveways, sidewalk-intersections, and all other fixed objects (e.g. drainage inlets and utility poles).
  - B- 1/8" Dummy Joints, Tooled
  - C- 1/8" Formed Open Joints
  - D- 3/16" Saw Cut Joints, 1 1/2" Deep (within 96 hours) Max. 5' Centers
  - E- 3/16" Saw Cut Joints, 1 1/2" Deep (within 12 hours) Max. 30' Centers Joint(s) Required When Length Exceeds 30'
  - F- 1/2" Expansion Joint When Run Of Sidewalk Exceeds 120'. Intermediate locations when called for in the plans or at locations as directed by the Engineer.

SIDEWALK JOINTS

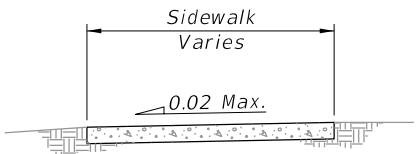


PLAN




PLAN

- LEGEND:**
- 4" Thick Sidewalk



SECTION C-C

CONCRETE SIDEWALK ON FLUSH SHOULDER ROADWAYS

LAST REVISION 11/01/18	REVISION	DESCRIPTION:	 <b>FY 2024-25 STANDARD PLANS</b>	CONCRETE SIDEWALK	INDEX 522-001	SHEET 2 of 2
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GENERAL NOTES:

1. Cross Slopes and Grades:

A. Sidewalk, ramp, and landing slopes (i.e. 0.02, 0.05, and 1:12) shown in this Index are maximums. With approval of the Engineer, provide the minimum feasible slope where the requirements cannot be met.

B. Landings must have cross-slopes less than or equal to 0.02 in any direction.

C. Maintain a single longitudinal slope along each side of the curb ramp. Ramp slopes are not required to exceed 15 feet in length.

D. Joints permitted at the location of Slope Breaks. Otherwise locate joints in accordance with Index 522-001. No joints are permitted within the ramp portion of the Curb Ramp.
2. Curb, Curb and Gutter and/or Sidewalk:

A. Refer to Index 522-001 for concrete thickness and sidewalk details.

B. Remove any existing curb, curb and gutter, or sidewalk to the nearest joint beyond the curb transition or to the extent that no remaining section is less than 5 feet long.

C. Width of Curb Ramp is 4'-0" minimum. Match sidewalk or Shared Use Path width as shown in the Plans.
3. Curb Ramp Alpha-Identification:

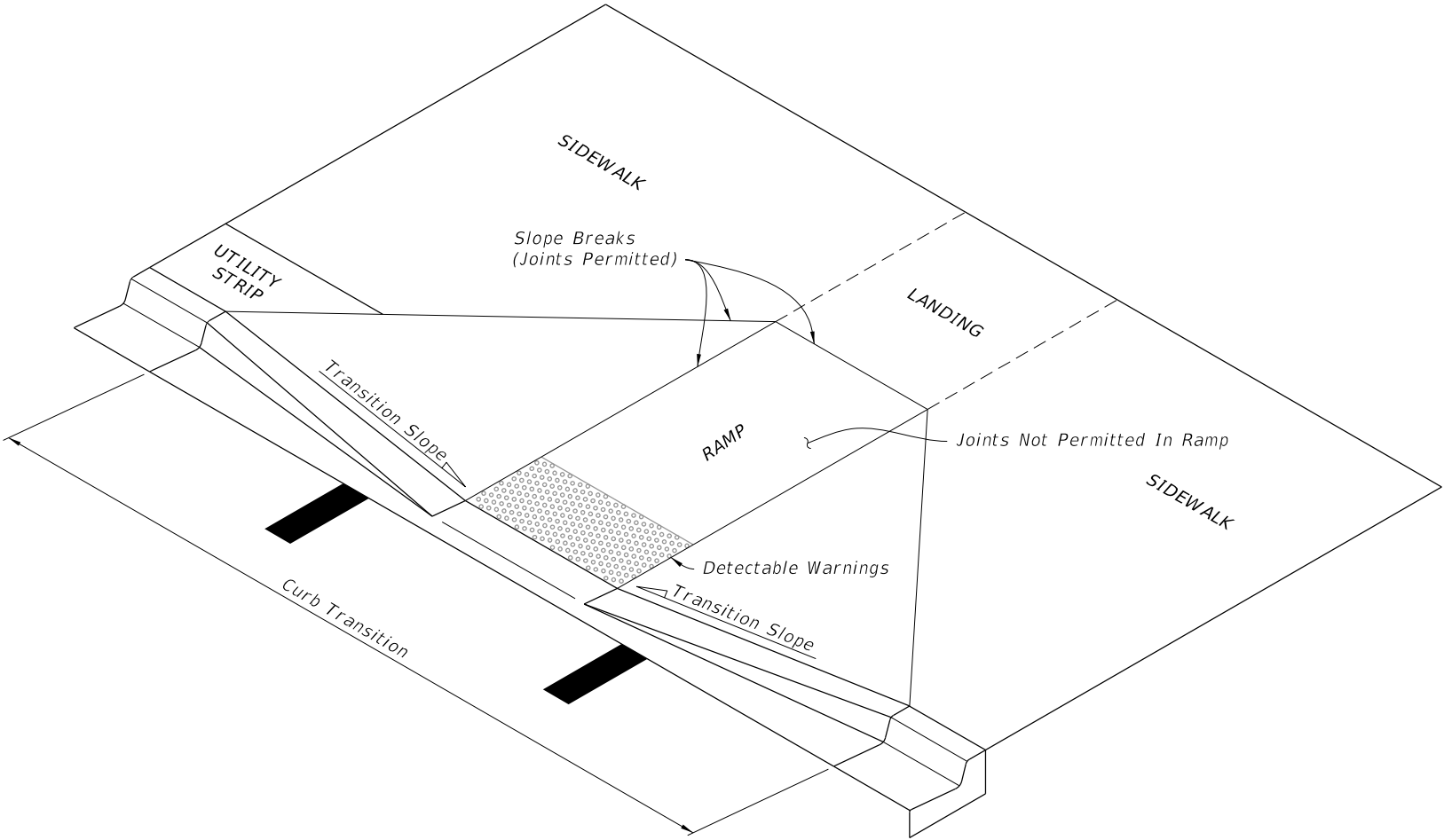
A. Sidewalk curb ramp alpha-identifications (e.g. CR-A) are provided for reference purposes in the Plans.

B. Alpha-identifications CR-I and CR-J are intentionally omitted.
4. Detectable Warnings:

A. Install detectable warnings in accordance with Specification 527.


B. Place detectable warnings across the full width of the ramp or landing, to a minimum depth of 2 feet measured perpendicular to the curb line and no greater than 5 feet from the back of the curb or edge of pavement.

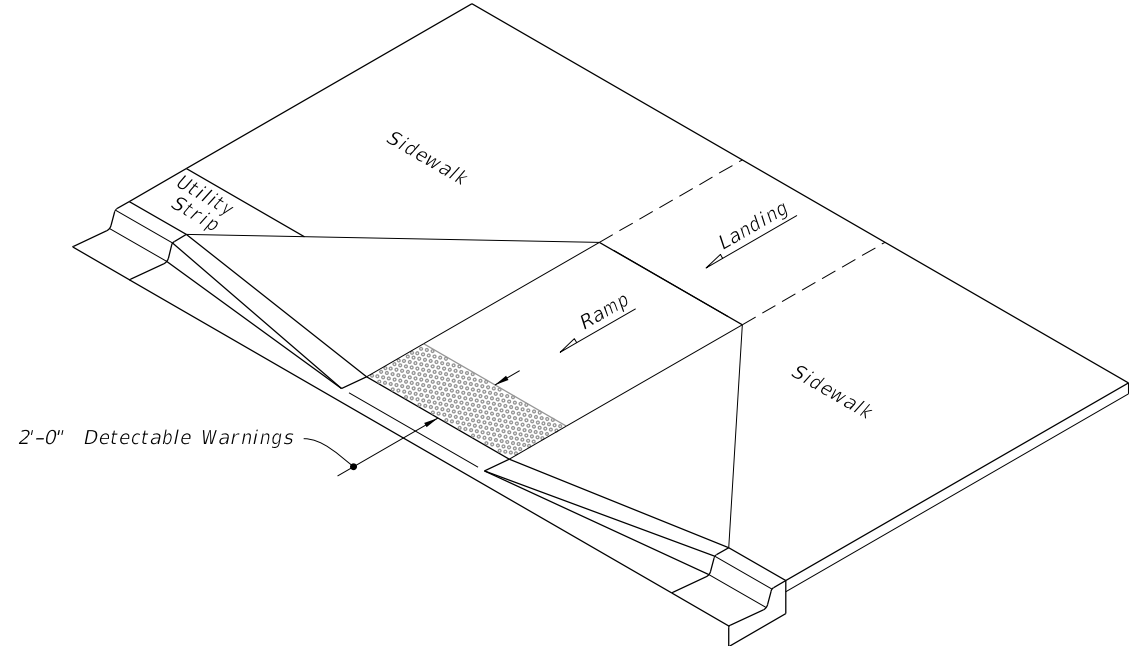
C. If detectable warnings are shown in the Plans on slopes greater than 5%, align the truncated domes with the centerline of the ramp; otherwise, the truncated domes are not required to be aligned.



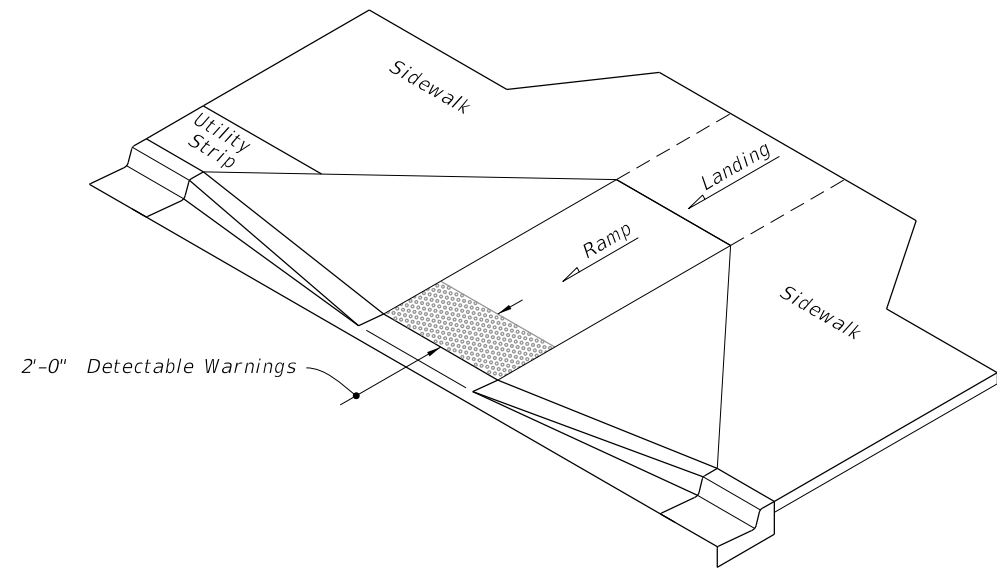
CURB RAMP NOMENCLATURE

10/3/2023 1:19:57 PM

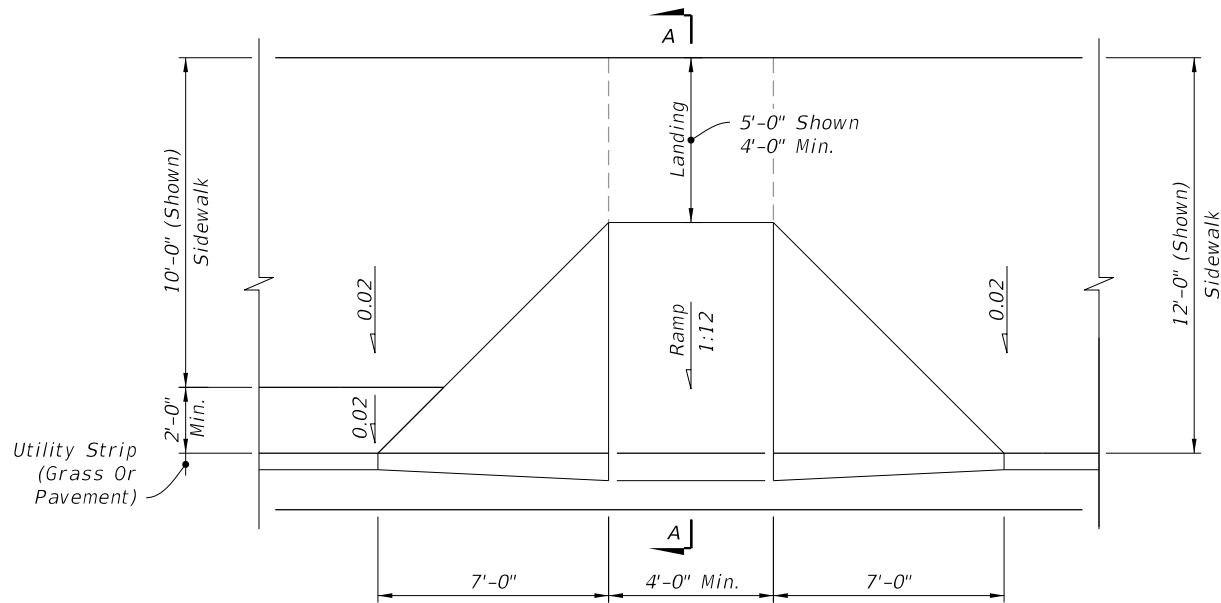
LAST REVISION 11/01/21	REVISION	DESCRIPTION:	<div><div></div><div>FY 2024-25 STANDARD PLANS</div></div>	DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	INDEX 522-002	SHEET 1 of 7
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ISOMETRIC VIEW



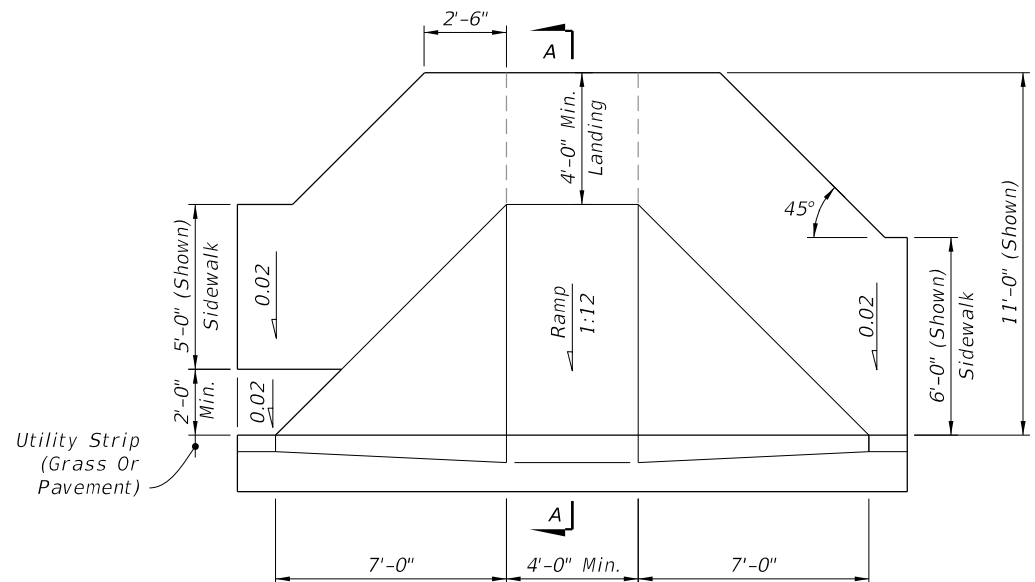
ISOMETRIC VIEW



PLAN VIEW

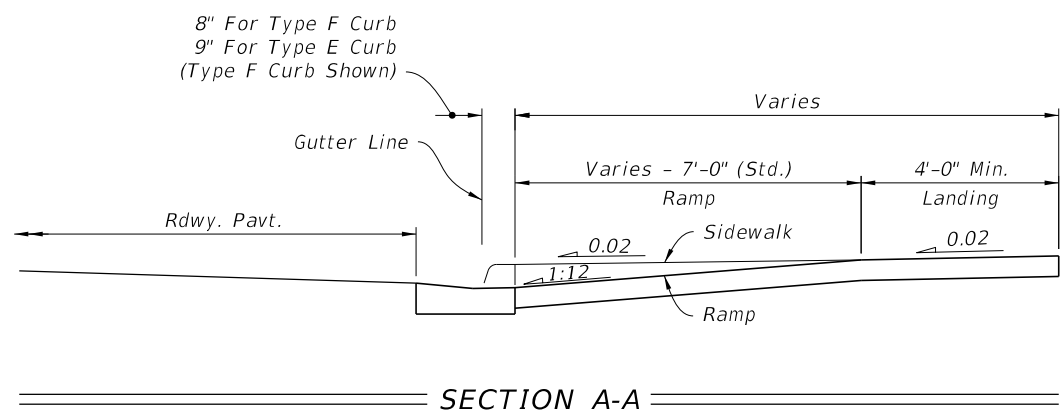
NOTE: For Example of CR-A used in Radial Curb Returns, See Sheet 8.

CR-A



PLAN VIEW

CR-B

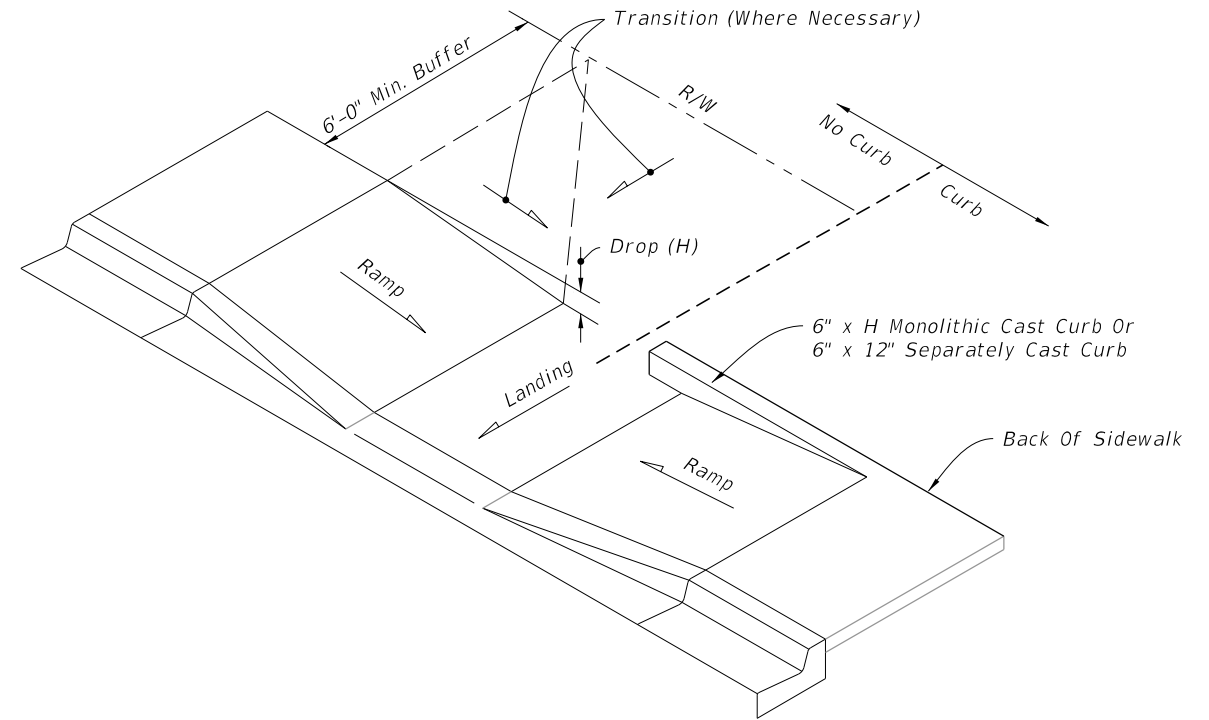
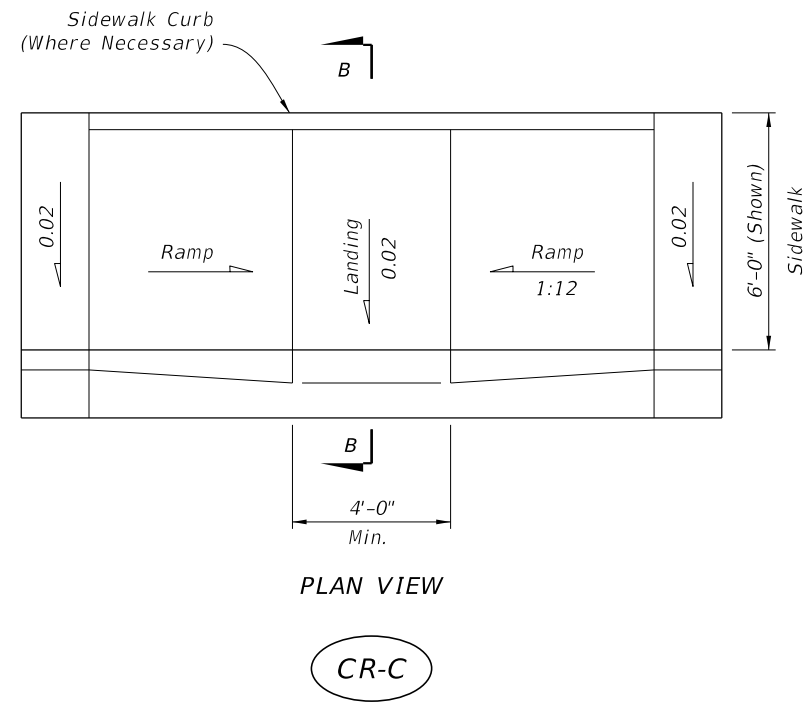


SIDEWALK CURB RAMPS CR-A AND CR-B

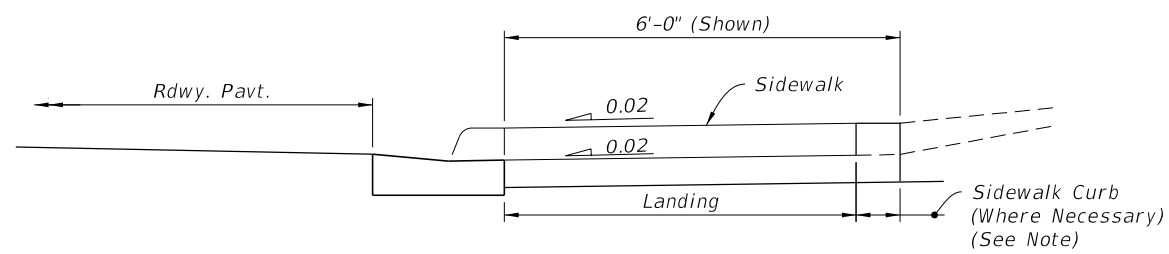
LAST REVISION 11/01/20	REVISION	DESCRIPTION:	 FY 2024-25 STANDARD PLANS	DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	INDEX 522-002	SHEET 2 of 7
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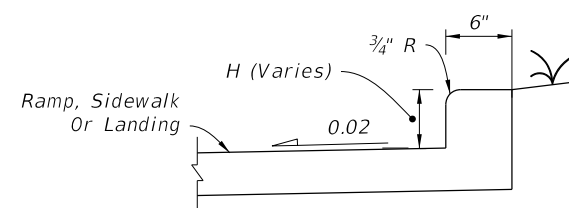


CONSTRUCTION OF SIDEWALK CURB IN CUT SECTIONS

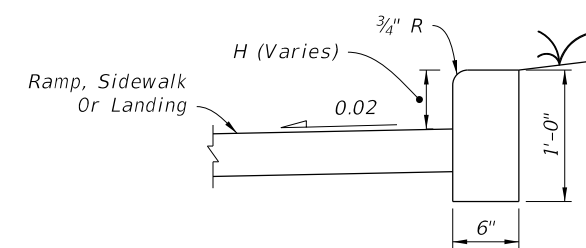


NOTE: For additional information on sidewalk curb construction, see SIDEWALK CURB OPTIONS details.

SECTION B-B



MONOLITHIC CAST CURB

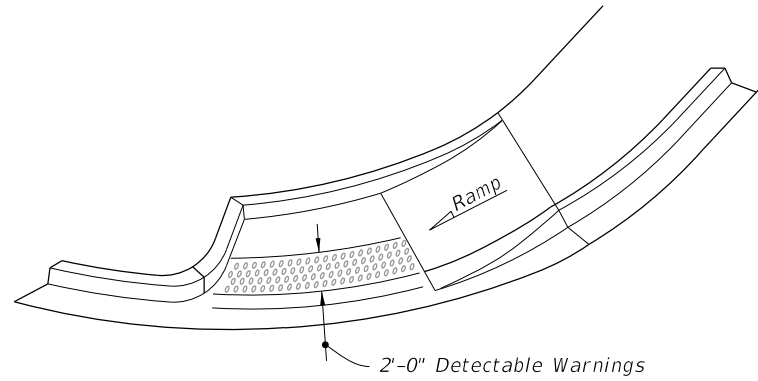


SEPARATELY CAST CURB

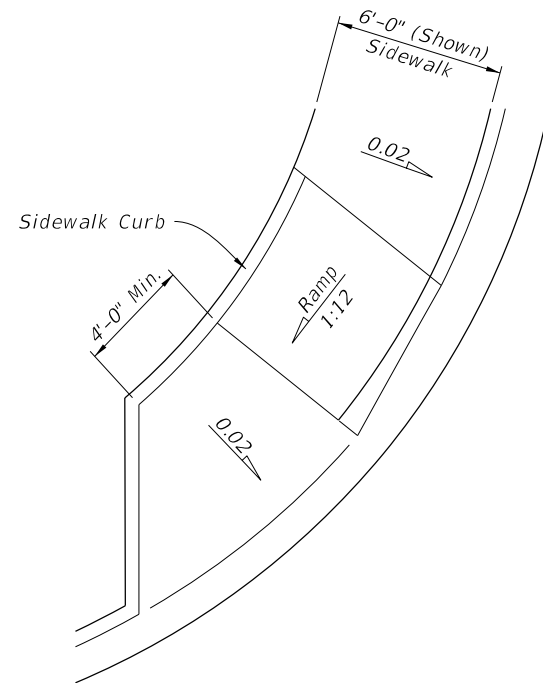
SIDEWALK CURB OPTIONS

SIDEWALK CURB RAMPS CR-C AND SIDEWALK CURB

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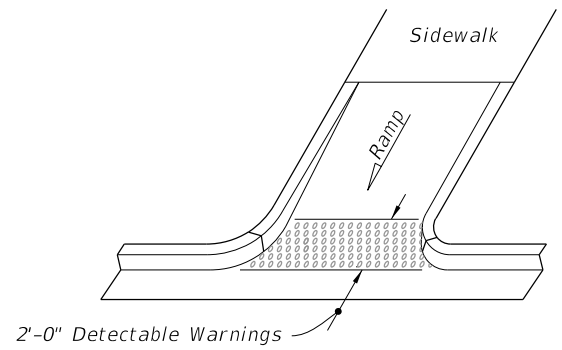


ISOMETRIC VIEW

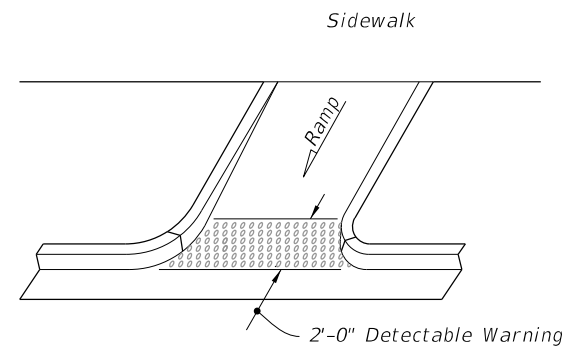


PLAN VIEW

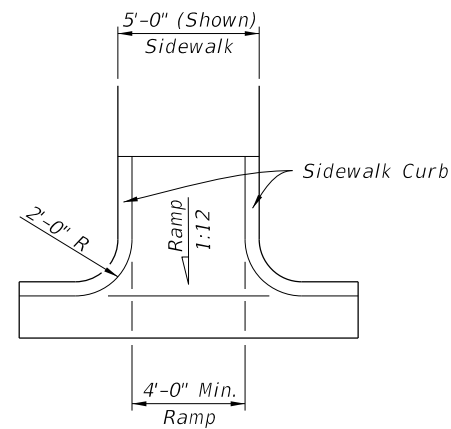
CR-D



OPTION A

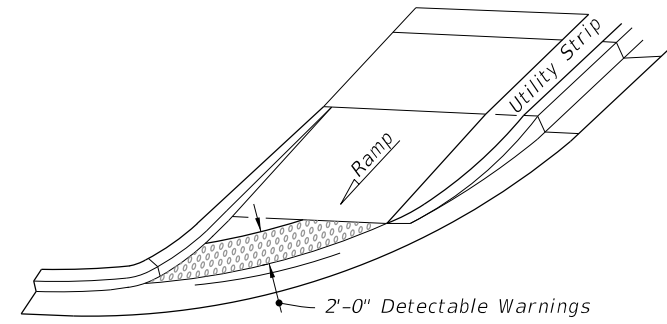


OPTION B  
ISOMETRIC VIEW

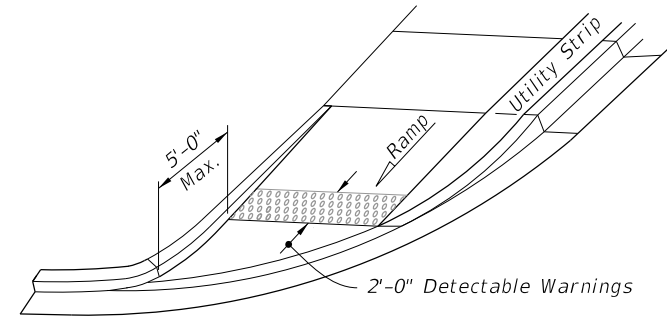


PLAN VIEW

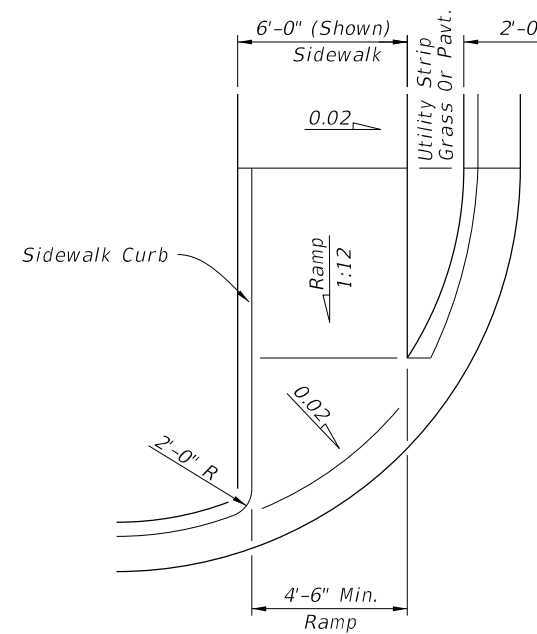
CR-E



OPTION A

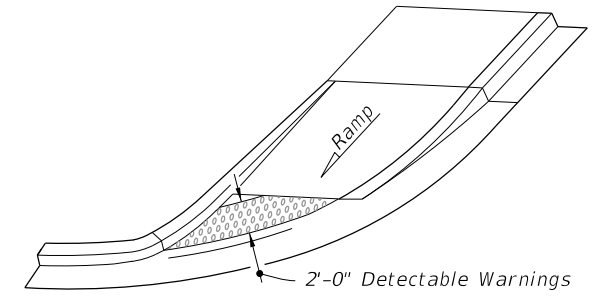


OPTION B  
ISOMETRIC VIEW

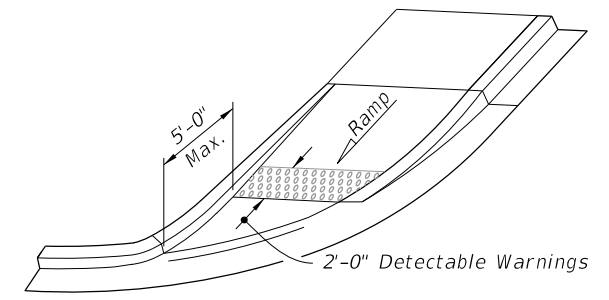


PLAN VIEW

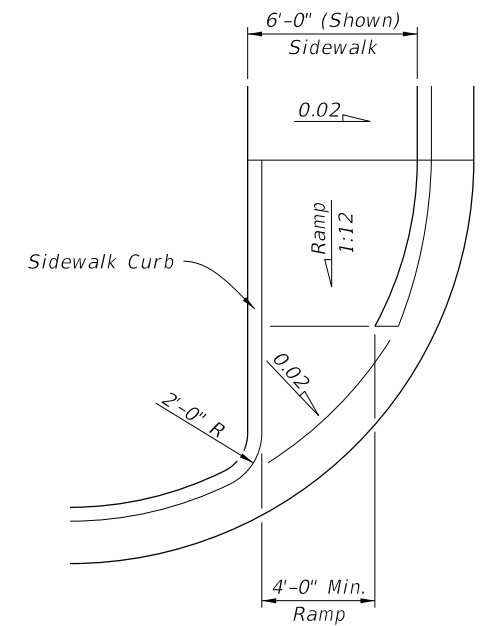
CR-F



OPTION A



OPTION B  
ISOMETRIC VIEW



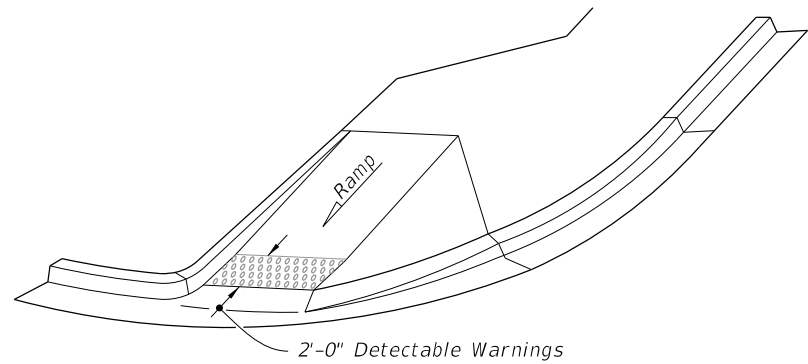
PLAN VIEW

CR-G

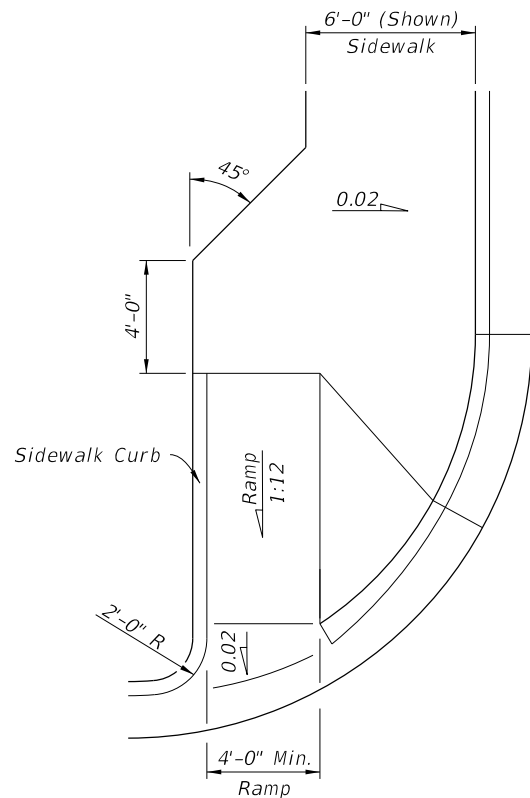
SIDEWALK CURB RAMPS CR-D, CR-E, CR-F & CR-G

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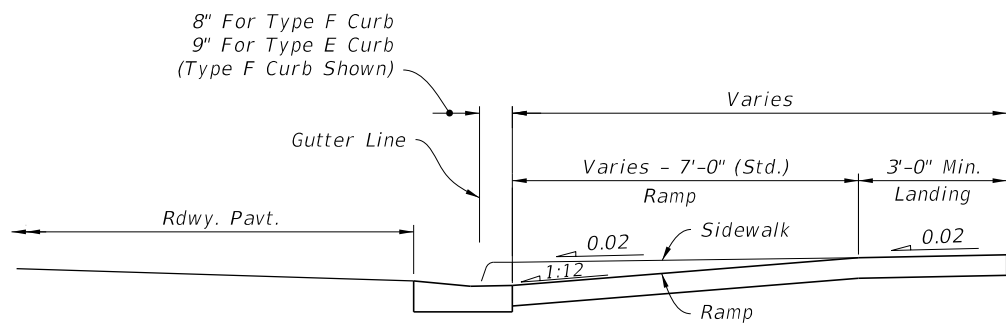


ISOMETRIC VIEW

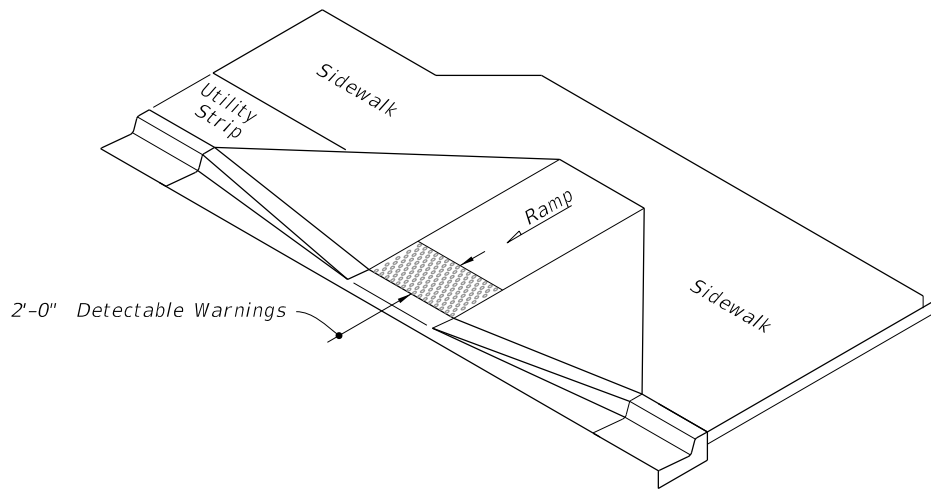


PLAN VIEW

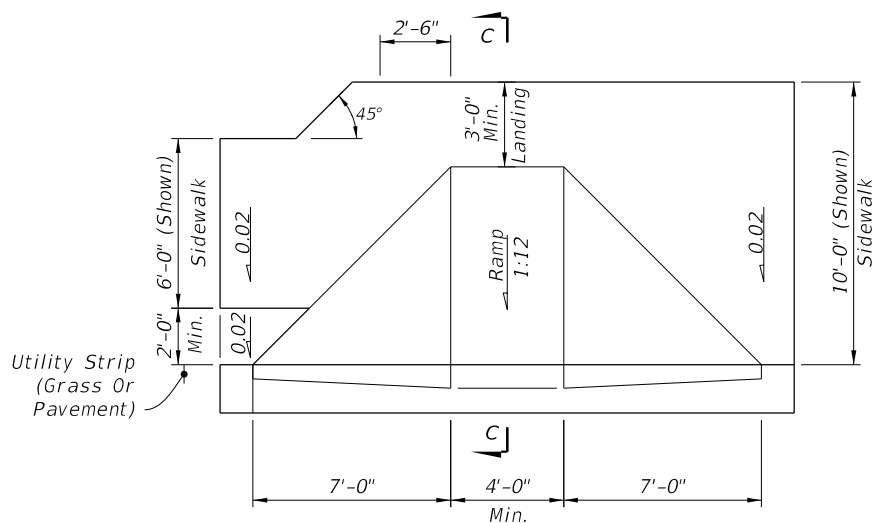
CR-H



SECTION C-C

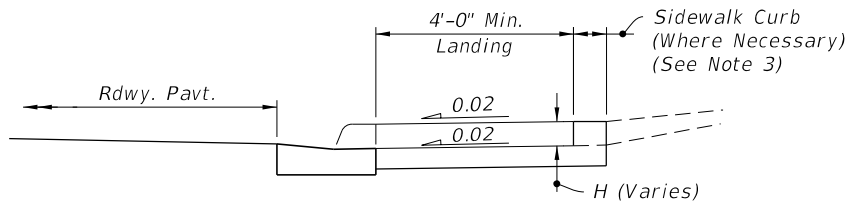


ISOMETRIC VIEW

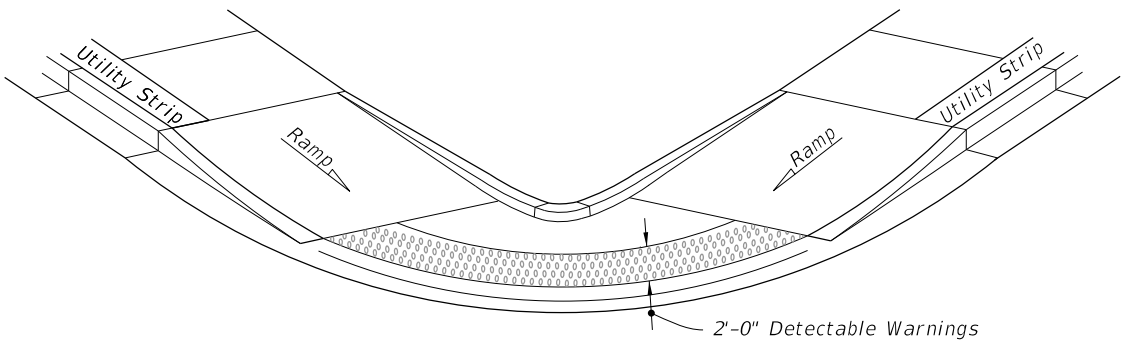


PLAN VIEW

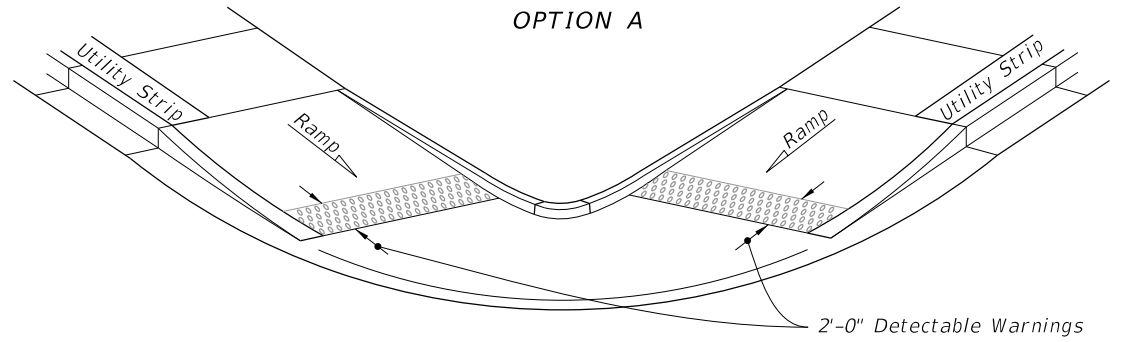
CR-K



SECTION D-D

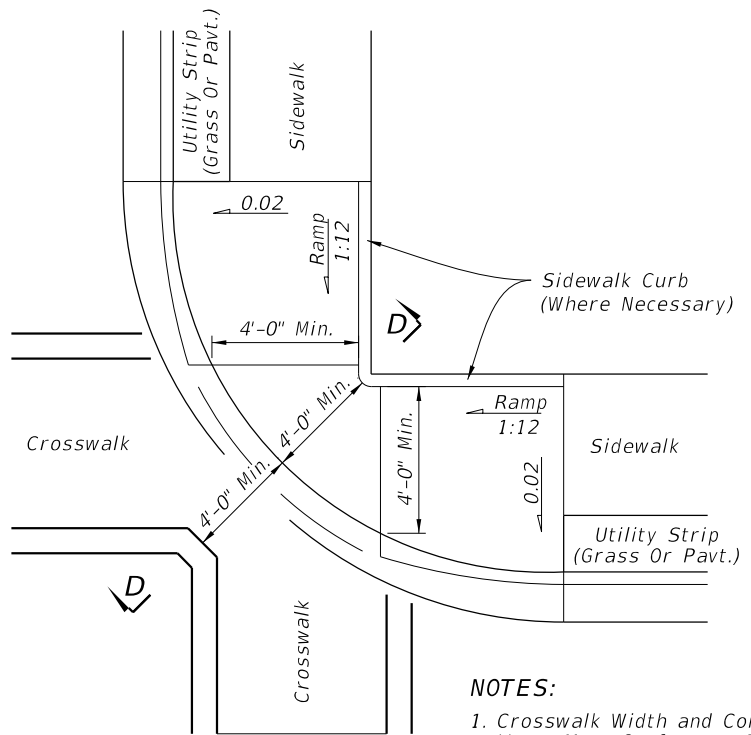


OPTION A



OPTION B

ISOMETRIC VIEW



PLAN VIEW

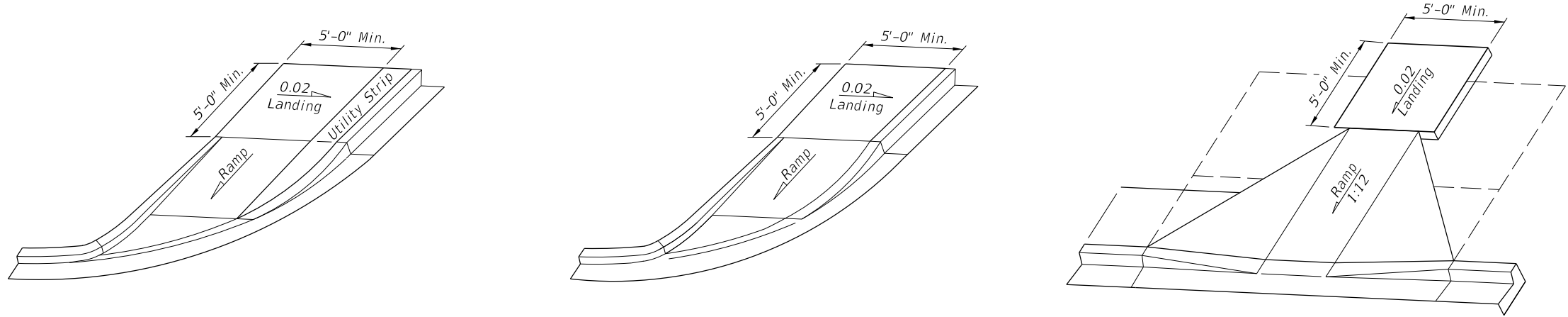
CR-L

- NOTES:
- 1. Crosswalk Width and Configuration Vary; Must Conform to Index 711-001.
  - 2. 15' Radius Curve Shown for CR-L.
  - 3. For additional information on sidewalk curb construction, see SIDEWALK CURB OPTIONS details, on Sheet 3.

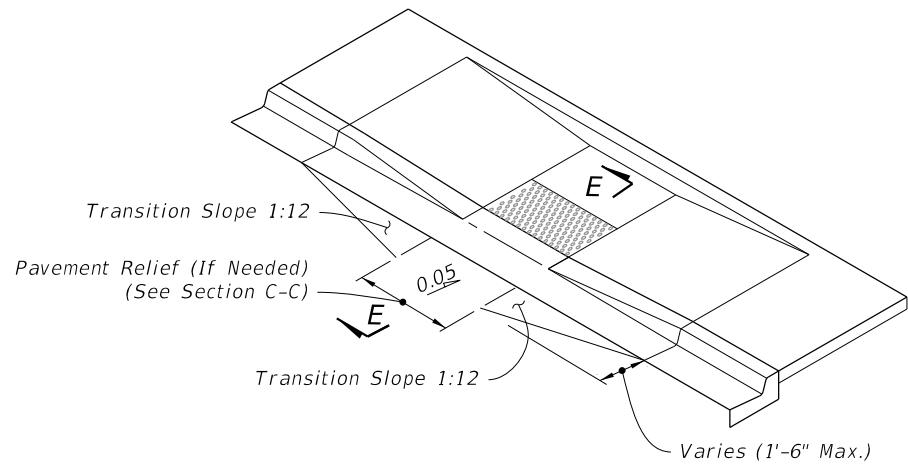
SIDEWALK CURB RAMPS CR-H, CR-K & CR-L

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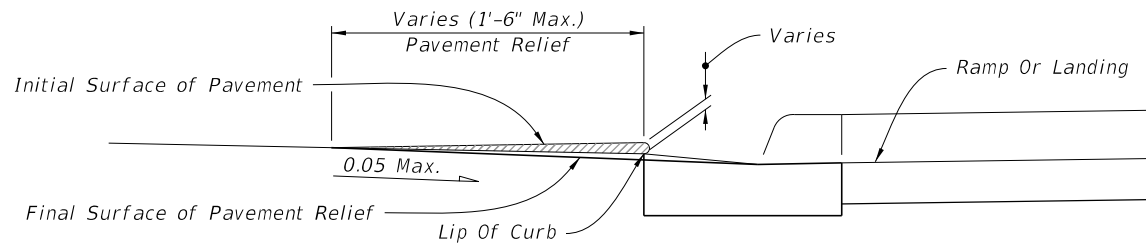




LANDINGS FOR CURB RAMPS WITHOUT SIDEWALKS  
(See CR-F, CR-G & CR-K Respectively For Detectable Warning Details/Options)



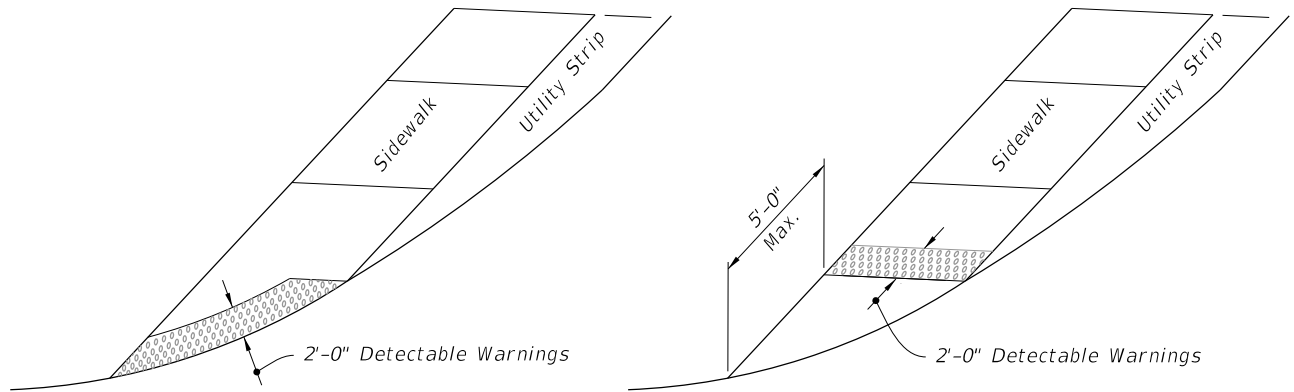
ISOMETRIC VIEW  
(CR-C Shown, Other Similar)



NOTE: Remove Elevated Pavement By Spading And Rolling, Smooth Milling, or Grinding.

SECTION E-E

PAVEMENT RELIEF DETAILS




OPTION A

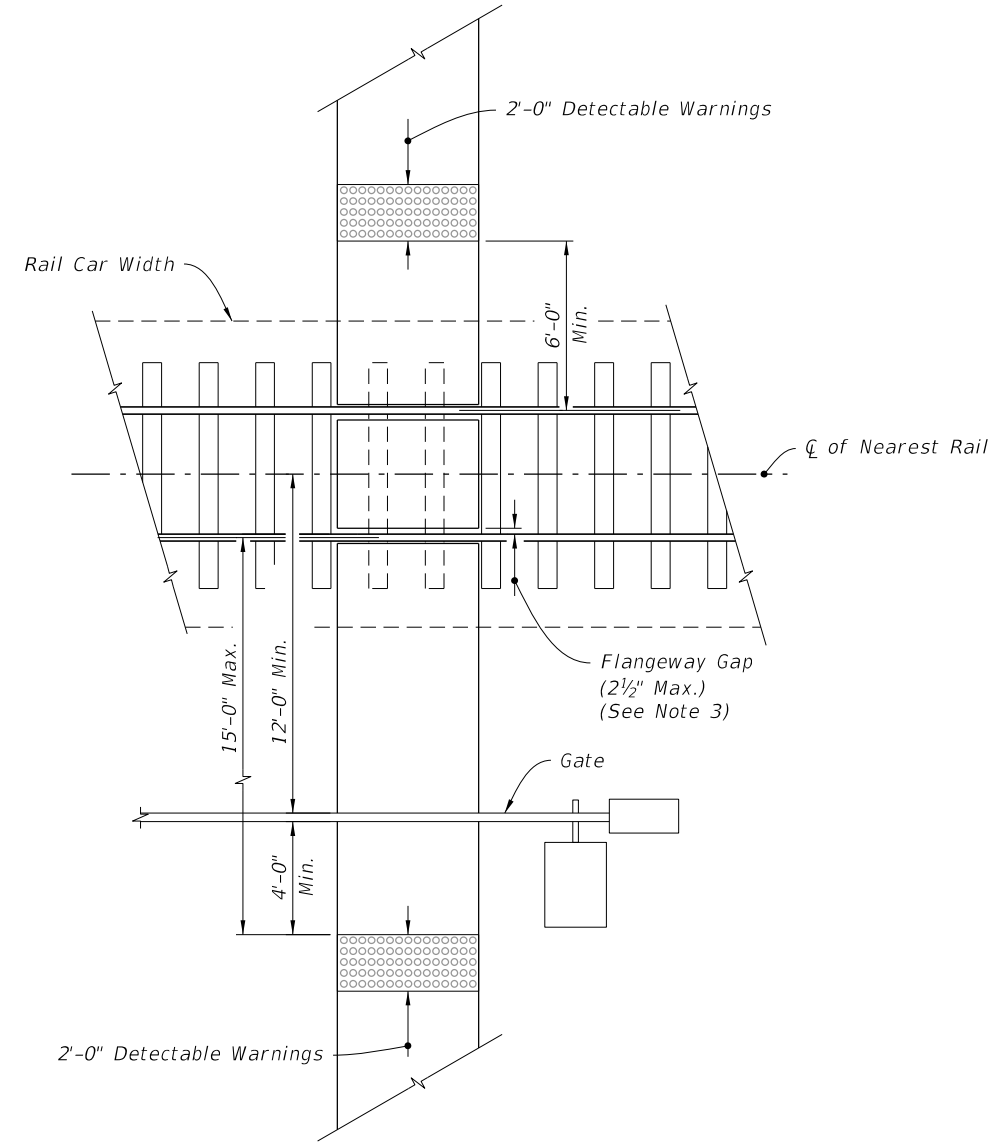
OPTION B

DETECTABLE WARNING ON FLUSH SHOULDER SIDEWALKS

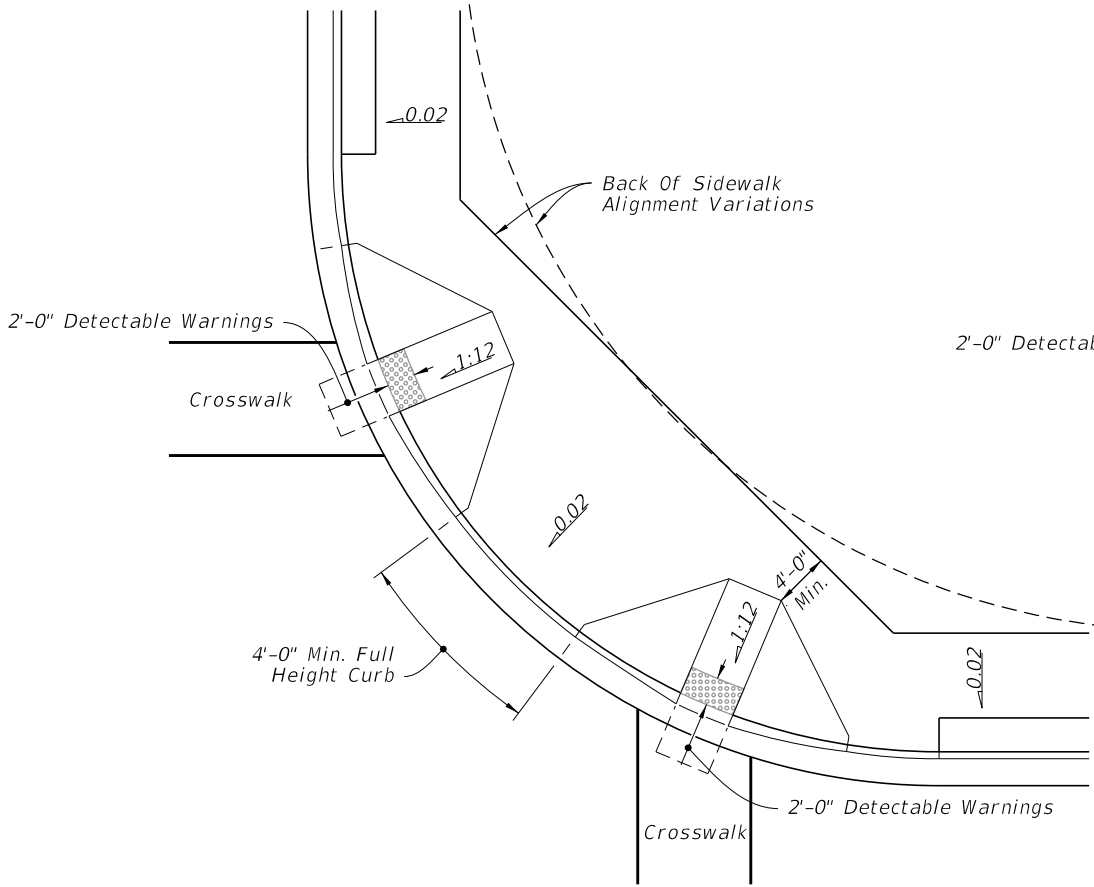
CURB RAMPS WITHOUT SIDEWALKS AND FLUSH SHOULDER SIDEWALKS

LAST REVISION 11/01/20	REVISION	DESCRIPTION:	 FY 2024-25 STANDARD PLANS	DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	INDEX 522-002	SHEET 6 of 7
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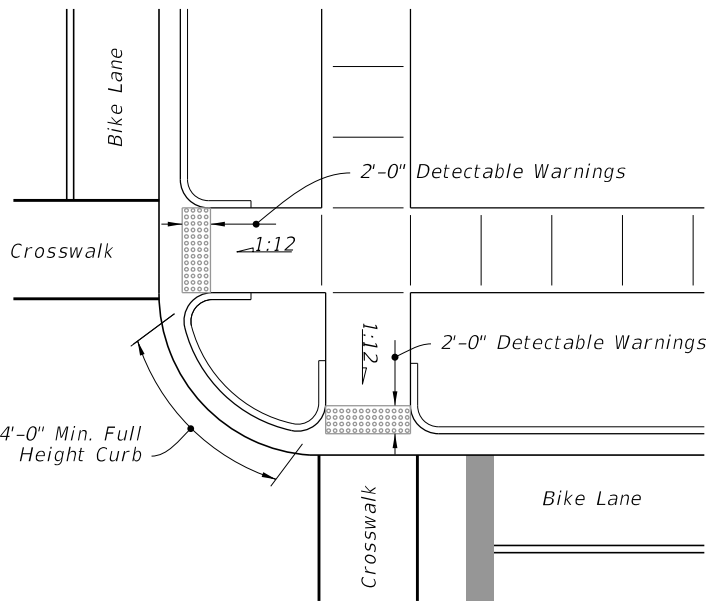
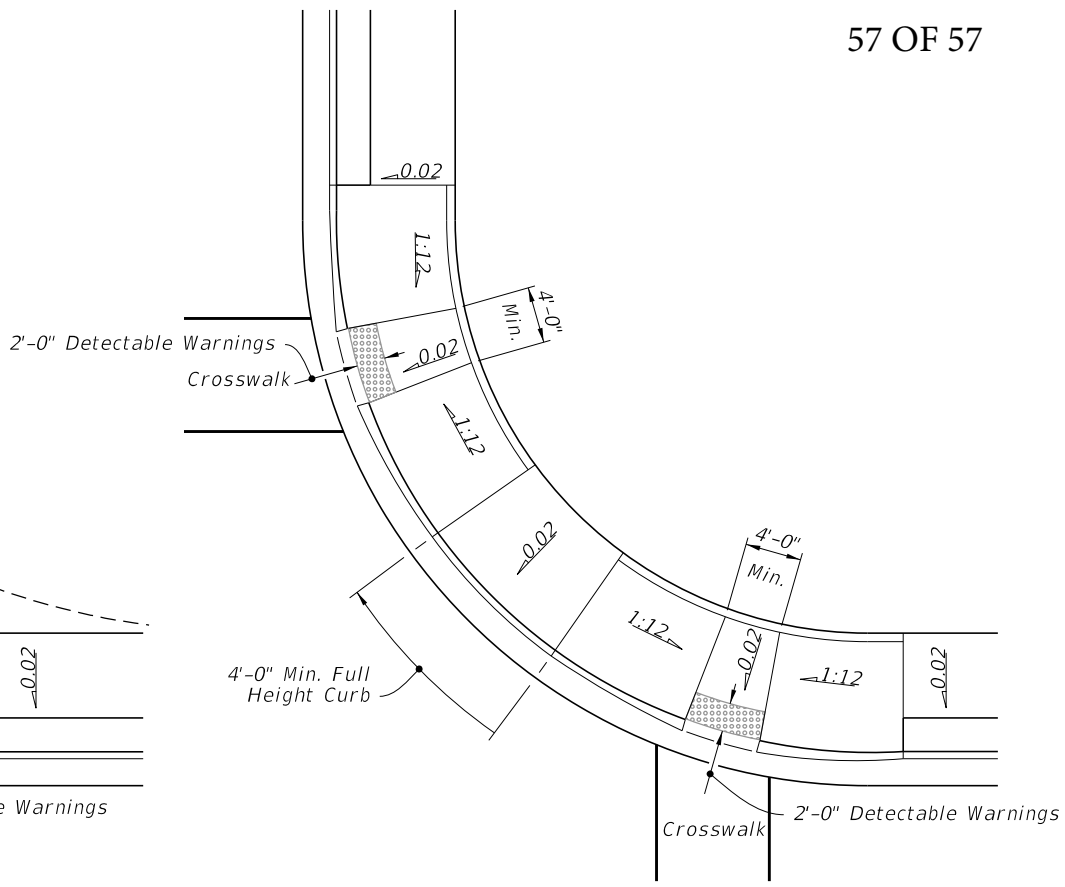
- NOTES:**
- 1. Where crosswalk markings are used, ramps must fall within the crosswalk limits. A clear space of 48" minimum is required at the bottom of the ramp within a marked crosswalk. If crosswalk markings are not present, a clear space of 48" minimum is required at the bottom of the ramp outside of active travel lanes.
  - 2. Crosswalk widths and configurations vary; must conform to Index 711-001.
  - 3. Flangeway Gap may be up to 3" for Freight-only Railways.



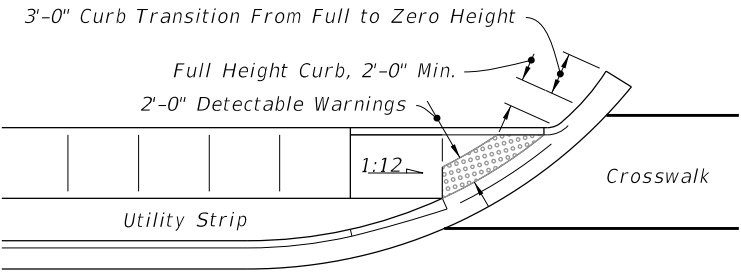
RAILROAD CROSSING



CURB RAMPS WITHIN RADIAL RETURN



CURB RAMPS OUTSIDE RADIAL RETURN



LINEAR SIDEWALK RAMPS

PLACEMENT OF SIDEWALK CURB RAMPS AT CURBED RETURNS (TYP.)

RAILROAD CROSSING AND CURB RAMPS AT CURBED RETURNS

LAST REVISION 11/01/20	REVISION	DESCRIPTION:	 <b>FY 2024-25 STANDARD PLANS</b>	<b>DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS</b>	INDEX 522-002	SHEET 7 of 7
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