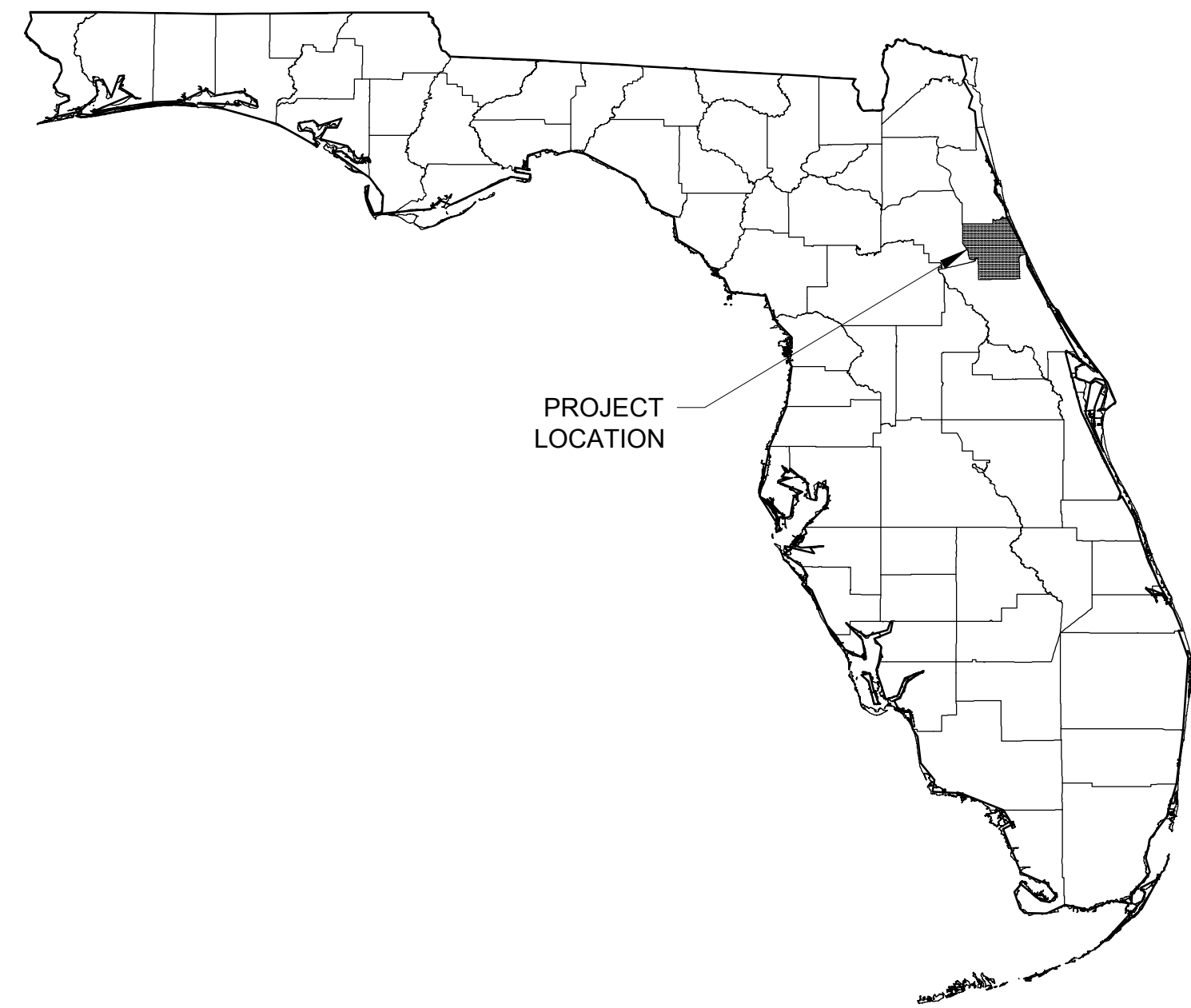


CITY OF FLAGLER BEACH S. CENTRAL WATER MAIN REPLACEMENT

BID SET
BID NO. 24-1021
OCTOBER 2024



PROJECT LOCATION

FLAGLER COUNTY



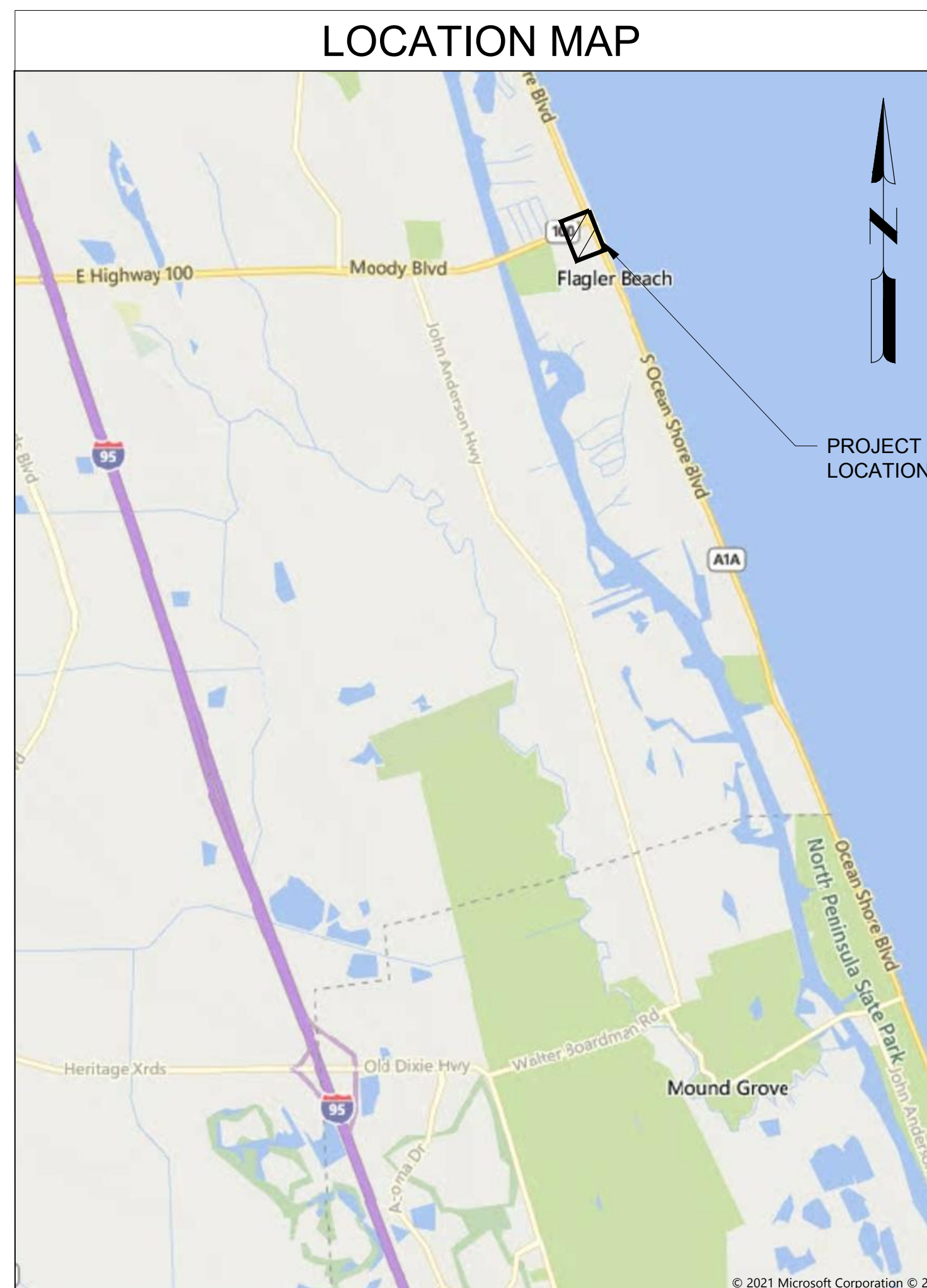
© Copyright 2024 Mead & Hunt, Inc.
This document, or any portion thereof, shall not be duplicated, disclosed, or used on any other project or extension of this project except by written agreement with Mead & Hunt, Inc. Mead & Hunt shall not be responsible for any unauthorized use of, or alteration to these documents.

CITY OF FLAGLER BEACH
S. CENTRAL WATER MAIN
REPLACEMENT
FLAGLER BEACH, FLORIDA

SHEET LIST TABLE

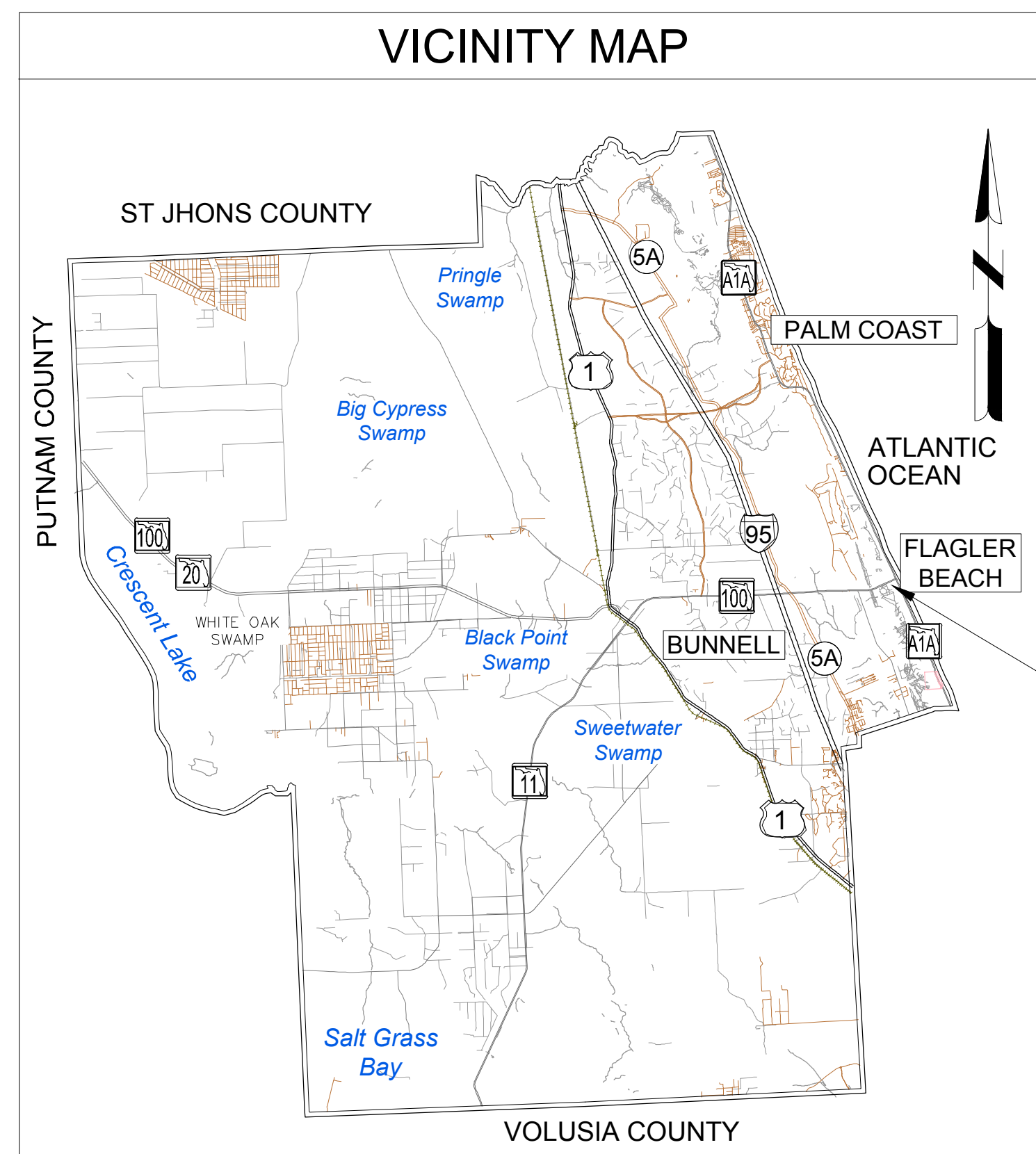
Sheet Number	Sheet Title
G-001	COVER SHEET
G-002	GENERAL NOTES
G-003	SYMBOLS & ABBREVIATIONS
G-021	KEY MAP
C-001	TRAFFIC DETAILS
C-002	TRAFFIC DETAILS
C-003	TRAFFIC DETAILS
C-101	SITE PLAN
C-501	STANDARD DETAILS
C-502	STANDARD DETAILS
C-503	STANDARD DETAILS

LOCATION MAP



PROJECT LOCATION

VICINITY MAP



PROJECT LOCATION

OWNER:

CITY OF FLAGLER BEACH
CONTACT: CHRIS NOVAK
105 S SECOND STREET
FLAGLER BEACH, FLORIDA 32136
PHONE: (386) 517-2000
FAX: (386) 517-2008

PROJECT TEAM:

CIVIL ENGINEER:

MEAD AND HUNT, INC.
CONTACT: CASSANDRA CISSELL, P.E.
4401 EASTPORT PARKWAY
PORT ORANGE, FLORIDA 32127
PHONE: (386) 761-6810
FAX: (386) 761-3977

ISSUED

M&H NO.: 1000709-231849.01
DATE: August 16, 2024
DESIGNED BY: CMC
DRAWN BY: MRM
CHECKED BY: DAK
DO NOT SCALE DRAWINGS

SHEET CONTENTS
COVER SHEET

SHEET NO.

G-001





© Copyright 2024 Mead & Hunt, Inc. This document, or any portion thereof, shall not be duplicated, disclosed, or used on any other project or extension of this project except by written agreement with Mead & Hunt, Inc. Mead & Hunt shall not be responsible for any unauthorized use of, or alteration to these documents.

ISSUED

M&H NO.: 1000709-231849.01
DATE: August 16, 2024
DESIGNED BY: CMC
DRAWN BY: MRM
CHECKED BY: DAK
DO NOT SCALE DRAWINGS

SHEET CONTENTS
GENERAL NOTES,
SYMBOLS &
ABBREVIATIONS

SHEET NO.

GENERAL NOTES

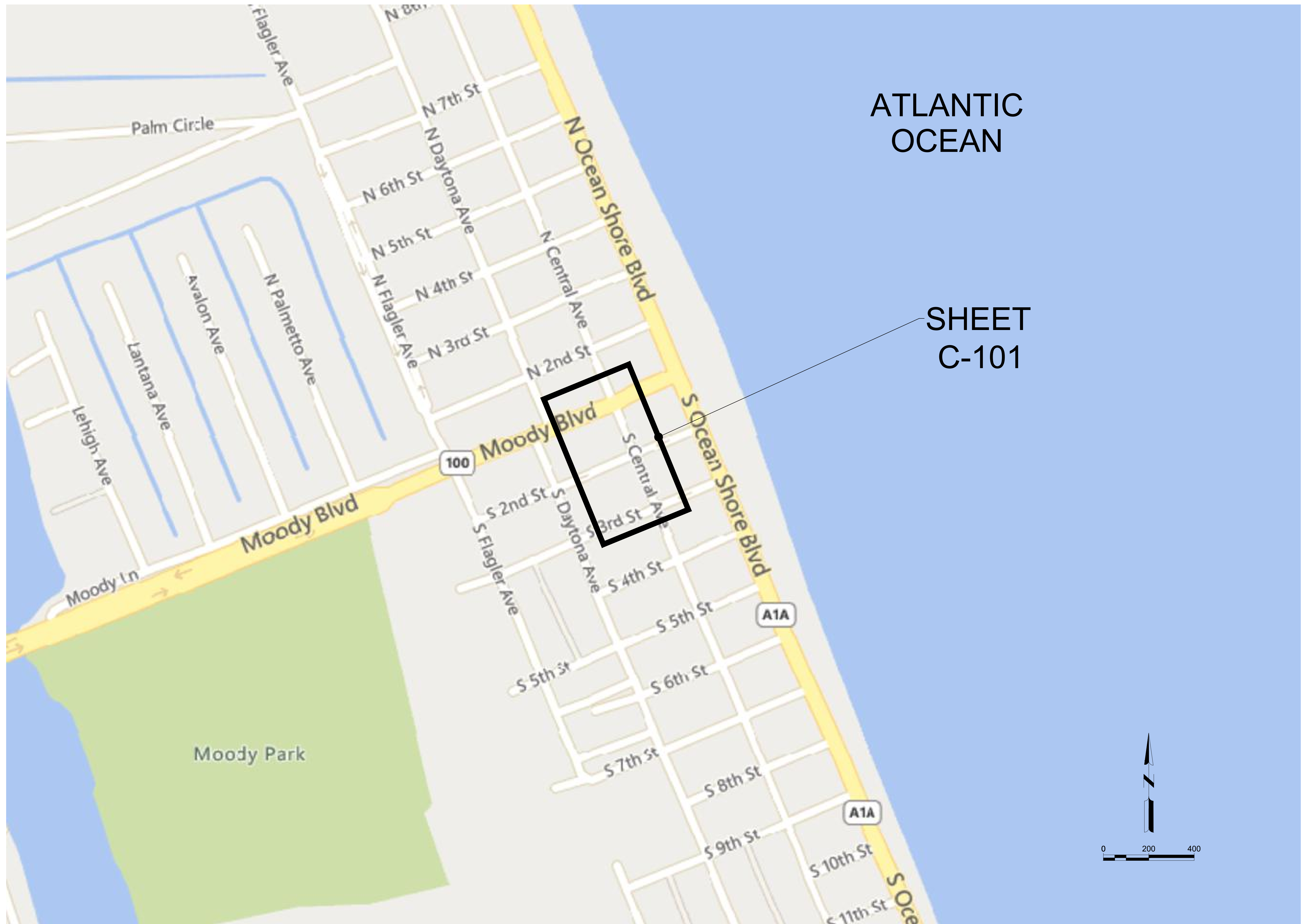
- UTILITIES & STRUCTURES AS SHOWN ON PLANS HAVE BEEN LOCATED FROM AVAILABLE RECORDS, HOWEVER IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM THE LOCATION OF ALL UTILITIES AND STRUCTURES TO BE ENCOUNTERED IN THE WORK AND TO AVOID CONFLICT WITH EXISTING FACILITIES.
- THE OWNER AND/OR THE ENGINEER SHALL NOT BE HELD RESPONSIBLE FOR INACCURACIES OR OMISSIONS IN THE LOCATION, ELEVATION AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER EXISTING FEATURES.
- THE CONTRACTOR SHALL CONTACT THE ENGINEER'S OFFICE IMMEDIATELY UPON ANY CONFLICTS ARISING DURING CONSTRUCTION OF ANY PROPOSED IMPROVEMENTS SHOWN ON THESE DRAWINGS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGE TO, AND REPLACEMENT OF, EXISTING UTILITIES. REPLACEMENT SHALL BE TO THE COMPLETE SATISFACTION OF THE ENGINEER.
- THE CONTRACTOR SHALL PRESERVE FROM DAMAGE, ALL PROPERTY ALONG THE LINE OF WORK, OR THAT IS IN THE VICINITY THEREOF, OR IS IN ANY WAY AFFECTED BY THE WORK. THE REMOVAL OF OR DESTRUCTION OF WHICH IS NOT CALLED FOR BY THE PLANS, WHEREVER SUCH PROPERTY IS DAMAGED DUE TO CONSTRUCTION ACTIVITIES OF THE CONTRACTOR, IT SHALL BE IMMEDIATELY RESTORED TO ITS ORIGINAL CONDITION BY THE CONTRACTOR AT NO COST TO THE OWNER.
- THE CONTRACTOR SHALL PROVIDE FORTY EIGHT (48) HOURS NOTICE TO THE VARIOUS UTILITY OWNERS PRIOR TO CONSTRUCTION.
- ALL UTILITY OUTAGES SHALL BE COORDINATED WITH AND APPROVED BY THE SUPERINTENDENT OF THE DEPARTMENT AFFECTED, PRIOR TO OUTAGE.
- THE CONTRACTOR SHALL CONDUCT HIS WORK AS TO INSURE LEAST POSSIBLE IMPACTS TO TRAFFIC AND INCONVENIENCE TO THE GENERAL PUBLIC AND THE RESIDENTS IN THE VICINITY OF THE WORK AND TO INSURE THE PROTECTION OF PERSONS AND PROPERTY. NO ROAD SHALL BE CLOSED TO THE PUBLIC WITHOUT PRIOR APPROVAL OF THE ENGINEER AND THE PROPER GOVERNMENTAL AUTHORITY.
- THE CONTRACTOR SHALL EMPLOY A LAND SURVEYOR, REGISTERED IN THE STATE OF FLORIDA, TO REFERENCE AND RESTORE PROPERTY CORNERS AND LAND MARKERS WHICH MAY BE DISTURBED BY CONSTRUCTION AND TO ASSURE ACCURATE HORIZONTAL AND VERTICAL CONTROLS DURING CONSTRUCTION.
- THE CONTRACTOR SHALL DO ALL THAT IS POSSIBLE TO AVOID TREES, PARTICULARLY TREES 6" DIAMETER OR LARGER. NO TREE SHALL BE REMOVED UNLESS IN DIRECT CONFLICT WITH CONSTRUCTION AND DESIGNATED FOR REMOVAL BY THE ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EFFECTIVE DRAINAGE AND EROSION CONTROL DURING CONSTRUCTION AND RESTORATION. TEMPORARY PROVISIONS SHALL BE MADE TO INSURE THE PROPER FUNCTIONING OF ALL GUTTERS, STORM INLETS AND DRAINAGE DITCHES. EROSION AND SILTATION CONTROL MEASURES ARE TO BE PROVIDED AND INSTALLED PRIOR TO COMMENCEMENT OF CONSTRUCTION. THESE MEASURES ARE TO BE MAINTAINED OR REPAIRED ON AN IMMEDIATE BASIS AS REQUIRED. REFER TO THE "FLORIDA EROSION AND SEDIMENT CONTROL MANUAL" FOR ADDITIONAL REQUIREMENTS FOR EROSION CONTROL AND SURFACE DRAINAGE.
- RIGHT-OF-WAY RESTORATION IS TO BE CONDUCTED CONCURRENTLY WITH CONSTRUCTION AS DIRECTED BY THE ENGINEER. THE ENGINEER SHALL HAVE AUTHORITY TO SUSPEND CONSTRUCTION WORK WHEN RESTORATION IS NOT BEING ADEQUATELY PERFORMED. ALL DISTURBED AREAS ARE TO BE RESTORED TO EXISTING OR BETTER CONDITION. ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE SODDED TO MATCH EXISTING SPECIES AND VARIETY OF GRASS. PIPE INSTALLATION UNIT PRICE SHALL INCLUDE RESTORATION AND SODDING TO EQUAL OR BETTER CONDITION.
- THE CONTRACTOR SHALL FURNISH, ERECT AND MAINTAIN ALL NECESSARY TRAFFIC CONTROL AND SAFETY DEVICES IN ACCORDANCE WITH THE "U.S. DEPARTMENT OF TRANSPORTATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," THE LATEST "FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS" AND CITY OF FLAGLER BEACH STANDARDS. CONTRACTOR SHALL PROVIDE CITY, F.D.O.T. AND COUNTY WITH DRAWINGS FOR APPROVAL OF TRAFFIC CONTROL PLANS. DEVICES SHALL BE IN ACCORDANCE WITH SECTION 102 (MAINTENANCE OF TRAFFIC) PER F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION).
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY AND AT THE CONTRACTOR'S EXPENSE TO PROVIDE THE CONSULTING ENGINEER WITH "AS-BUILT" DRAWINGS OF CONSTRUCTION. DRAWINGS SHALL CONTAIN SPECIFIC LOCATION OF ALL RECLAIMED WATER MAINS, VALVES, SERVICES, AND OTHER WORK PERFORMED BY THE CONTRACTOR. REFER TO THE CONTRACT DOCUMENTS FOR FURTHER INFORMATION ON THE AS-BUILT REQUIREMENTS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER APPLICATION OF THRUST RESTRAINT SYSTEM PER D.I.P.R.A. TO PREVENT MOVEMENT OF PIPE AND FITTINGS. CONCRETE THRUST BLOCKS SHALL NOT BE ALLOWED.
- NO FLANGED PIPE SHALL BE INSTALLED UNDERGROUND UNLESS SPECIFICALLY NOTED ON PLAN OR IN SPECIFICATIONS.
- PIPE BEDDING SHALL BE CLASS 1 SOIL COMPACTED IN 6" LAYERS TO A HEIGHT OF 18" ABOVE PIPE, 12" LAYERS ARE ACCEPTABLE FROM 18" ABOVE PIPE TO FINISH GRADE, COMPACTED TO 95% OF MODIFIED PROCTOR DENSITY. (AASHTO-T-180) PIPE TO BE LAID ON FIRM FOUNDATION.
- COMPACTION TEST TO BE TAKEN AT POINTS ONE (1) FOOT ABOVE PIPE AND TWO (2) FOOT VERTICAL INTERVALS TO FINISH GRADE AND AT HORIZONTAL SPACING OF THREE HUNDRED (300) FEET.
- ADEQUATE EXCAVATION, SHEETING, SHORING AND BRACING SHALL BE PROVIDED AND SHALL CONFORM TO CONSTRUCTION REQUIREMENTS AS SET FORTH BY THE FEDERAL DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (O.S.H.A.).
- PROVISIONS FOR DEWATERING SHALL BE MADE TO KEEP GROUNDWATER ELEVATION A MINIMUM OF 6" BELOW THE PIPE BEING INSTALLED.
- LENGTHS OF PIPE SHOWN IN THESE PLANS ARE APPROXIMATE. EXACT LENGTHS ARE TO BE DETERMINED IN THE FIELD.
- WATER LINE TO BE HYDROSTATICALLY TESTED AND FLUSHED.
- DOUBLE STRAP/CORPORATION STOP, POLYETHYLENE TUBING AND CURB STOP ARE REQUIRED FOR TESTING.
- ALL DRIVEWAYS TO BE REPAIRED TO EXISTING OR BETTER CONDITION. ALL ASPHALT DRIVEWAYS SHALL BE SAWCUT AND REPAIRED. OVERLAY ASPHALT DRIVES FROM EDGE OF ROAD OR BACK OF CURB TO RIGHT OF WAY LINE. ALL CONCRETE DRIVES TO BE REPLACED FROM R/W LINE AND/OR NEAREST CONSTRUCTION JOINT TO EDGE OF ROAD OR BACK OF CURB. ALL REPAIRS/OVERLAYS SHALL BE CONCRETE. CONCRETE DRIVES ARE 6" THICK 3000 PSI CONCRETE UNLESS OTHERWISE NOTED. ADDITIONAL HOUSES, DRIVEWAYS AND SIDEWALKS MAY HAVE BEEN CONSTRUCTED SINCE THE SURVEY WAS COMPLETED. NEW CONSTRUCTION IS NOT SHOWN ON THESE PLANS. PAYMENT WILL BE MADE FOR REPAIR OF DRIVEWAYS AND SIDEWALKS ACCORDING TO THE LINE ITEM AMOUNT IN THE SCHEDULE OF UNIT PRICES.
- ALL NEW WATER SERVICE LOCATIONS SHALL BE FIELD LOCATED AND THE EXACT LOCATION APPROVED BY THE PROPERTY OWNER AND/OR CITY REPRESENTATIVE.
- THE CONTRACTOR SHALL FURNISH, ERECT AND MAINTAIN ALL NECESSARY TRAFFIC CONTROL AND SAFETY DEVICES, IN ACCORDANCE WITH THE PLANS, U.S. DEPARTMENT OF TRANSPORTATION'S "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND THE FLORIDA DEPARTMENT OF TRANSPORTATION'S "STANDARD PLANS" (ALL LATEST EDITIONS). CONTRACTOR SHALL SUBMIT A DETAILED TRAFFIC CONTROL PLAN FOR REVIEW AND APPROVAL.
- THE CONTRACTOR SHALL SUBMIT A COMPREHENSIVE TRAFFIC CONTROL PLAN FOR APPROVAL PRIOR TO BEGINNING ANY WORK ON THE SITE. IF WORK WILL ADVANCE IN SECTIONS OR STAGES, THE TRAFFIC CONTROL PLAN SHALL REFLECT THE REQUIRED TRAFFIC CONTROL AND MAINTENANCE ASSOCIATED WITH EACH STAGE.
- CONTRACTOR SHALL NOTE THAT THERE ARE SIDEWALKS ADJACENT TO THIS PROJECT. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL PEDESTRIAN TRAFFIC ON THESE SIDEWALKS IS SAFELY MAINTAINED.
- THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN EFFECTIVE BARRICADES, DANGER SIGNALS, SIGNS AND PEDESTRIAN DETOURS IN ALL AREAS WHERE REQUIRED FOR THE PROTECTION OF THE WORK AND SAFETY OF THE PUBLIC.
- CAUTION SHALL BE TAKEN WHEN PLACING SIGNAGE TO AVOID BLOCKING SIGHT DISTANCES AT INTERSECTIONS OR ANY TRAFFIC CONTROL DEVICES.
- CONTRACTOR WILL BE RESPONSIBLE FOR ADEQUATELY BARRICADING AND SECURING AREAS WITHIN THE CONSTRUCTION ZONE THAT ARE HAZARDOUS FOR VEHICULAR AND PEDESTRIAN ACCESS.
- VEHICULAR AND PEDESTRIAN ACCESS SHALL BE MAINTAINED FOR ALL RESIDENTS AND EMERGENCY RESPONSE VEHICLES.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PREPARE SUBMITTALS AND OBTAIN ALL NECESSARY PERMITS RELATED TO TRAFFIC CONTROL WITHIN CITY AND COUNTY RIGHT-OF -WAYS.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE A REVIEW OF THE SITE TO DETERMINE EXISTING CONDITIONS AND ANYTHING NOT SHOWN ON THESE DRAWINGS SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND SHALL NOT CONSTITUTE AN EXTRA UNLESS APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS AND OTHER FEATURES AFFECTING THE WORK PRIOR TO CONSTRUCTION.
- STATIONING DISCLAIMER: THE BASELINE STATIONING SHOWN ON THE PROJECT PLANS IS FOR REFERENCE AND INFORMATIONAL PURPOSES ONLY AND SHOULD NOT BE USED FOR PROJECT SITE SURVEY LAYOUT OR DIMENSIONING.

LEGEND & ABBREVIATIONS:

- = IRON ROD
- = CONCRETE MONUMENT
- = NAIL & DISC
- = IRON PIPE
- AC = AIR CONDITIONING
- ◇ = POWER POLE
- ♣ = SIGN
- Ⓣ = TANK
- ~ = TREE/HEDGE LINE
- ⊙ = BUSH
- ⊙ = FIRE HYDRANT
- WV = WATER VALUE
- ⊙ = CLEANOUT
- STA = STATION
- LT = LEFT
- RT = RIGHT
- = WATER METER
- A- = VINYL FENCE
- ☎ = TELEPHONE PEDESTAL
- = SERVICE POLE
- LSA = LANDSCAPE AREA
- ∩ = GUY WIRE ANCHOR
- ⊕ = DRAINAGE MANHOLE
- ⊕ = SANITARY MANHOLE
- ♣ = TRAFFIC SIGN
- = FLAT GRATE INLET
- ⊕ = COMBINATION POLE
- ✕ = "X" CUT
- ☐ = MAIL BOX
- ⊕ = UTILITY METER
- OHL- = OVERHEAD UTILITY LINE
- X- = CHAINLINK FENCE
- O- = WOOD FENCE
- ABS = ACRYLONITRILE BUTADIENE STYRENE PIPE
- PVC = POLYVINYL CHLORIDE PIPE
- INV = INVERT
- FF = FINISH FLOOR ELEVATION
- LB = LICENSED BUSINESS
- LS = LICENSED SURVEYOR
- NAVD = NORTH AMERICAN VERTICAL DATUM
- TRAV.PT. = TRAVERSE POINT
- SSMC = SOUTHEASTERN SURVEYING & MAPPING CORPORATION
- ✳ = PALM
- C = CABBAGE
- ☁ = TREE
- = OAK

SIZE SHOWN IS TRUNK DIAMETER IN INCHES MEASURED AT CHEST HEIGHT

UTILITY INFORMATION PROVIDED TO OR COLLECTED BY MEAD & HUNT DURING DESIGN										
UTILITY TYPE	UTILITY COMPANY	CONTACT	PHONE	EMAIL	PRELIMINARY PLANS PROVIDED TO UTILITY	INFORMATION QUALITY LEVEL AND DATE RECEIVED				FINAL PLANS PROVIDED TO UTILITY
						LEVEL A/4	LEVEL B/3	LEVEL C/2	LEVEL D/1	
WATER/WASTEWATER	CITY OF FLAGLER BEACH	JENNIFER CREWS	(386)517-2000	JCrews@cityofflaglerbeach.com						
FIBER	CHARTER	KEN ROBBINS	(386) 414-5076	Kenneth.Robbins@charter.com	8/21/2024				9/5/2024	10/7/2024
FIBER	UNITI FIBER LLC	ZACH OLIVER	(251) 214-7059	ZACH.OLIVER@UNITI.COM	8/21/2024				9/20/2024	10/7/2024
ELECTRIC	FPL	JAMIE PURNELL	(386) 586-6403	JAMIE.PURNELL@FPL.COM	8/21/2024					10/7/2024
TELEPHONE	AT&T	DINO FARRUGGIO		G27895@ATT.COM	8/21/2024				9/5/2024	10/7/2024
COMMUNICATION	MCI	INVESTIGATIONS TEAM	(800) 624-9675	INVESTIGATIONS@VERIZON.COM	8/21/2024					10/7/2024
GAS	TECO PEOPLES GAS- DAYTONA	CHEYENNE THOMPSON	(813) 743-7164	CTHOMPSON@TECOENERGY.COM	8/21/2024				8/26/2024	10/7/2024



ATLANTIC
OCEAN

SHEET
C-101

**Mead
& Hunt**

Mead and Hunt, Inc.
2440 Deming Way
Middleton, WI 53562
phone: 608-273-6380
meadhunt.com



© Copyright 2024 Mead & Hunt, Inc.
This document, or any portion thereof, shall
not be duplicated, disclosed, or used on any
other project or extension of this project
except by written agreement with Mead &
Hunt, Inc. Mead & Hunt shall not be
responsible for any unauthorized use of, or
alteration to these documents.

**CITY OF FLAGLER BEACH
S. CENTRAL WATER MAIN
REPLACEMENT
FLAGLER BEACH, FLORIDA**

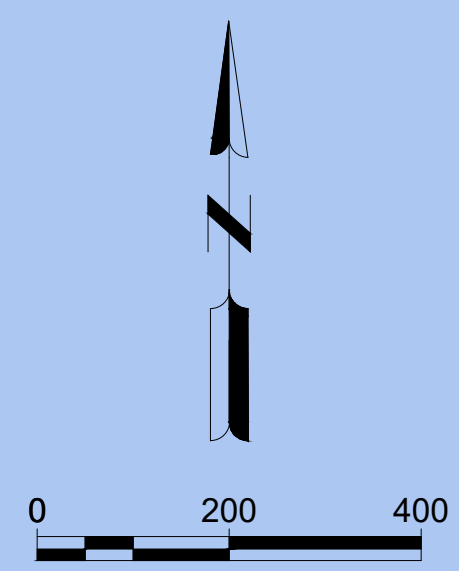
ISSUED

M&H NO: 1000709-231849.01
DATE: August 16, 2024
DESIGNED BY: CMC
DRAWN BY: MRM
CHECKED BY: DAK
DO NOT SCALE DRAWINGS

SHEET CONTENTS
KEY MAP

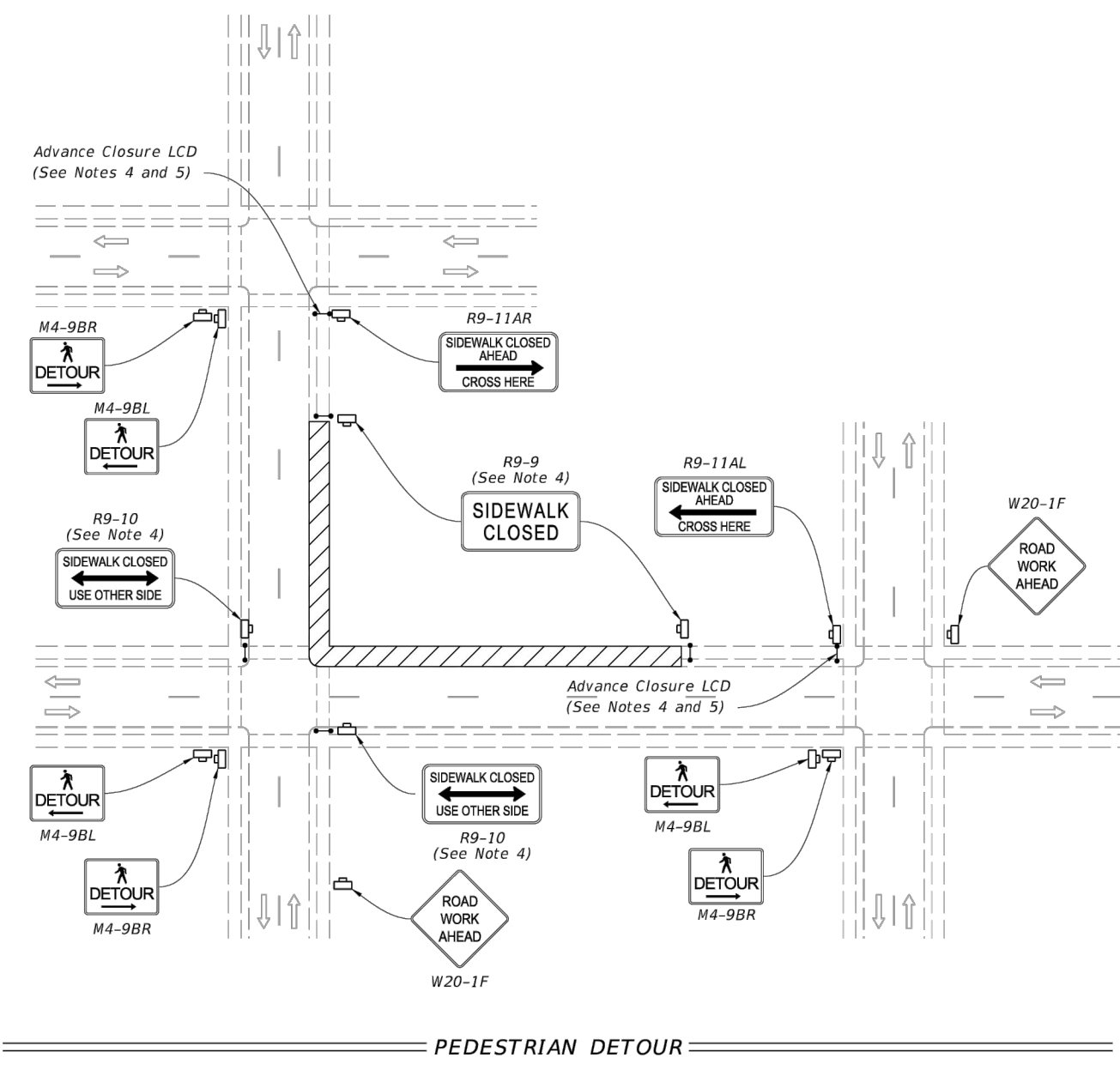
SHEET NO.

G-021



- 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).

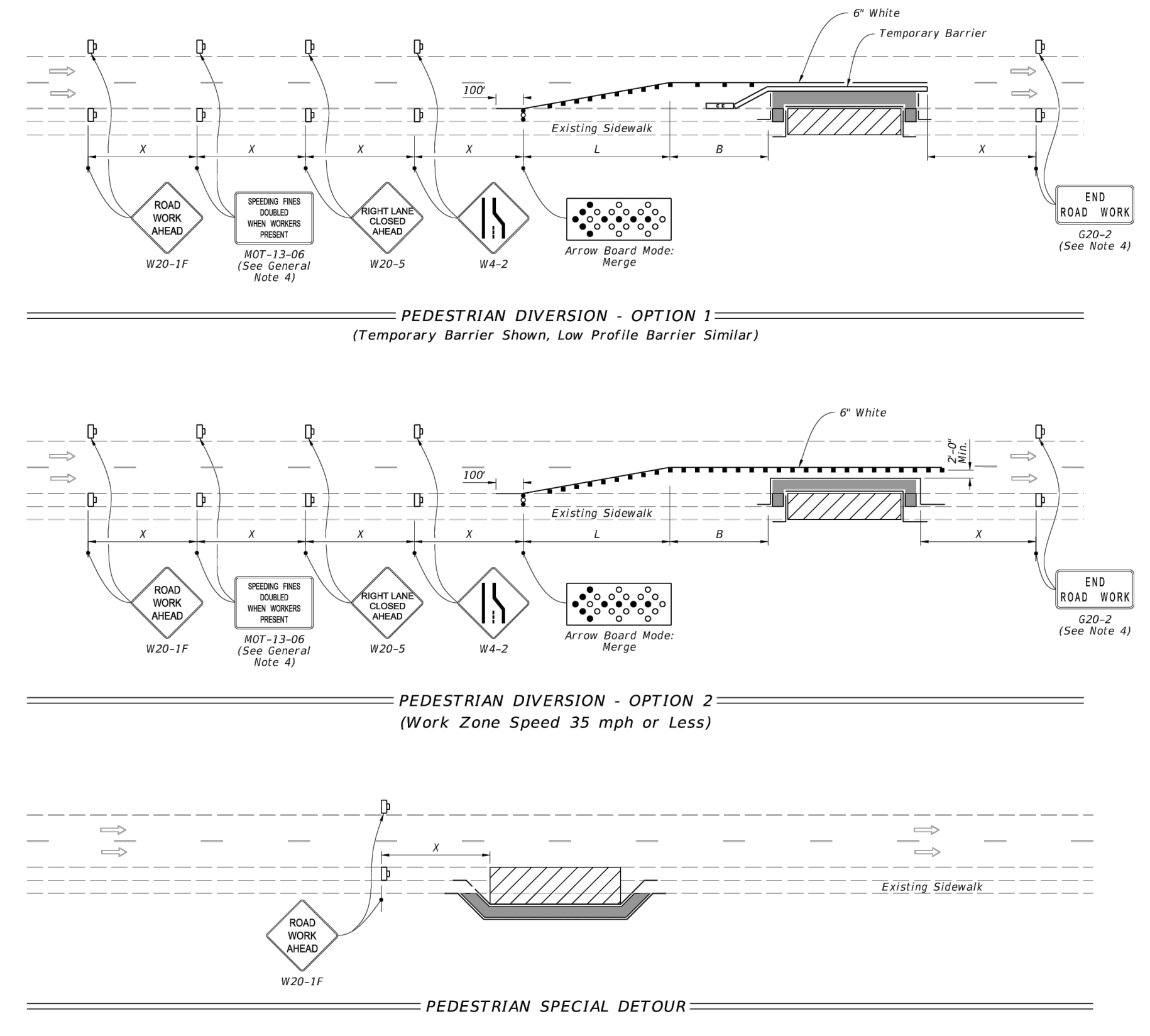
- SYMBOLS:**
- Work Area
 - Work Zone Sign
 - Pedestrian Longitudinal Channelizing Device (LCD)
 - Lane Identification and Direction of Traffic



LAST REVISION 11/01/20	DESCRIPTION: FY 2023-24 STANDARD PLANS	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 (MOT-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



LAST REVISION 11/01/21	DESCRIPTION: FY 2023-24 STANDARD PLANS	INDEX 102-660	SHEET 2 of 2
---------------------------	--	------------------	-----------------

GENERAL M.O.T. NOTES

1. ALL SIGNS AND BARRICADES SHALL BE FABRICATED IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
2. CAUTION SHALL BE EXERCISED IN SIGN PLACEMENT TO AVOID BLOCKING SIGHT DISTANCE AT INTERSECTIONS OR ANY EXISTING TRAFFIC CONTROL SIGNS OR DEVICES.
3. ALL SIGNS SHALL BE POST MOUNTED UNLESS OTHERWISE NOTED. FLASHING BEACONS TO BE INSTALLED AS SHOWN.
4. DURING LANE CLOSURE, FLAGGERS SHALL USE STOP/SLOW PADDLES. THE USE OF FLAGS IS NOT PERMITTED.
5. NO CHANGES SHALL BE MADE TO THIS TRAFFIC CONTROL PLAN WITHOUT THE PRIOR CONSENT OF THE FLAGLER COUNTY TRAFFIC ENGINEERING DEPARTMENT AND THE FDOT (AS APPLICABLE).
6. CONTRACTOR WILL BE RESPONSIBLE FOR ADEQUATELY BARRICADING ALL AREAS DEEMED HAZARDOUS FOR VEHICULAR ACCESS INSIDE CONSTRUCTION ZONE.
7. LOCAL RESIDENTS AND EMERGENCY RESPONSE VEHICLES WILL BE PERMITTED ACCESS AT ALL TIMES.

FDOT RIGHT-OF-WAY CONSTRUCTION NOTES

1. ALL CONSTRUCTION WITHIN FDOT RIGHT-OF-WAY SHALL CONFORM TO THE LATEST EDITIONS OF THE FDOT STANDARD PLANS INDICES. THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE FDOT UTILITY ACCOMMODATIONS MANUAL.
2. IF REQUIRED FOR CONSTRUCTION OR REPAIR, SAW CUT SIDEWALK(S) AT EXISTING JOINTS REMOVE AND REPLACE FULL SECTIONS.
3. ALL SIDEWALK REPLACEMENT WITHIN FDOT RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF FDOT INDEX 310.
4. CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE AND FDOT A MINIMUM OF TWO (2) BUSINESS DAYS IN ADVANCE OF WORKING WITHIN THE FDOT RIGHT-OF-WAY.

IT IS UNDERSTOOD AND AGREED THAT THE CONTRACTOR DEPLOYING THE MAINTENANCE OF TRAFFIC PLAN HEREIN WILL AT ALL TIMES, ASSUME ANY AND ALL RISK OF AND INDEMNIFY, DEFEND, AND HOLD HARMLESS THE ENGINEER AND THE OWNER FROM AND AGAINST ANY AND ALL LOSSES, DAMAGES, COSTS, AND EXPENSES ARISING IN ANY MANNER WHATSOEVER ON ACCOUNT OF IN ANY WAY RESULTING FROM THE ACTS OR OMISSIONS OF THE CONTRACTOR OR ITS OFFICERS, EMPLOYEES OR AGENTS IN IMPLEMENTING AND MAINTAINING THE MAINTENANCE OF TRAFFIC PLAN. THE CONTRACTOR AGREES TO ITS ASSUMPTIONS OF RISKS AND OBLIGATIONS TO INDEMNIFY THE ENGINEER AND THE OWNER RELATED TO CONTRACTORS ACTIVITIES.

POSTED SPEED LIMITS:

SR A1A
25 MPH

CITY WIDE
20 MPH



Mead and Hunt, Inc.
2440 Deming Way
Middleton, WI 53562
phone: 608-273-6380
meadhunt.com



© Copyright 2024 Mead & Hunt, Inc.
This document, or any portion thereof, shall not be duplicated, disclosed, or used on any other project or extension of this project except by written agreement with Mead & Hunt, Inc. Mead & Hunt shall not be responsible for any unauthorized use of, or alteration to these documents.

CITY OF FLAGLER BEACH
S. CENTRAL WATER MAIN
REPLACEMENT
FLAGLER BEACH, FLORIDA

ISSUED

M&H NO.: 1000709-231849.01
DATE: August 16, 2024
DESIGNED BY: CMC
DRAWN BY: MRM
CHECKED BY: DAK
DO NOT SCALE DRAWINGS

SHEET CONTENTS
TRAFFIC DETAILS

C-001



© Copyright 2024 Mead & Hunt, Inc. This document, or any portion thereof, shall not be duplicated, disseminated, or used on any other project or extension of this project except by written agreement with Mead & Hunt, Inc. Mead & Hunt shall not be responsible for any unauthorized use of, or alteration to these documents.

CITY OF FLAGLER BEACH S. CENTRAL WATER MAIN REPLACEMENT FLAGLER BEACH, FLORIDA

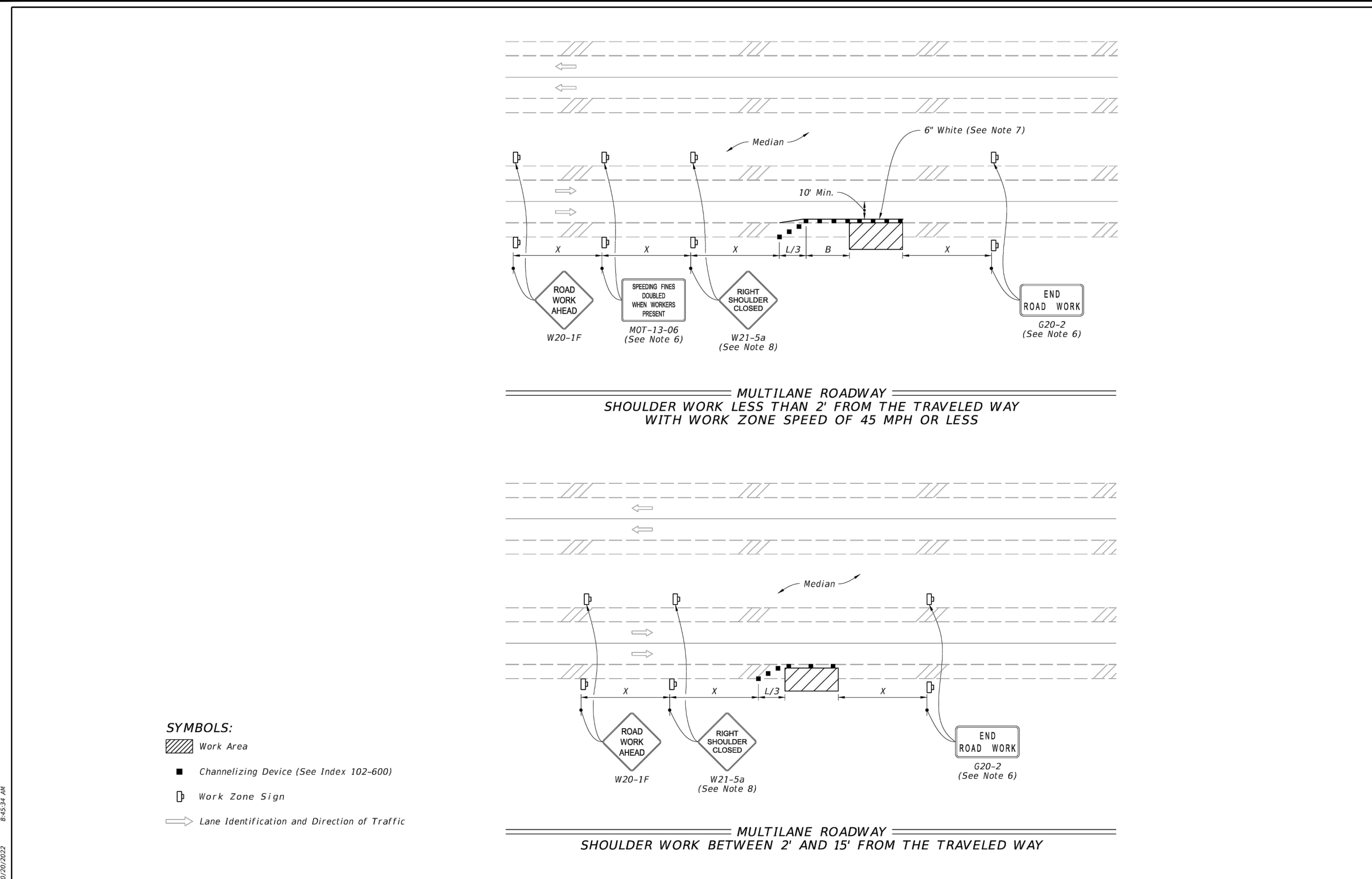
ISSUED

M&H NO.: 1000709-231849.01
DATE: August 16, 2024
DESIGNED BY: CMC
DRAWN BY: MRM
CHECKED BY: DAK
DO NOT SCALE DRAWINGS

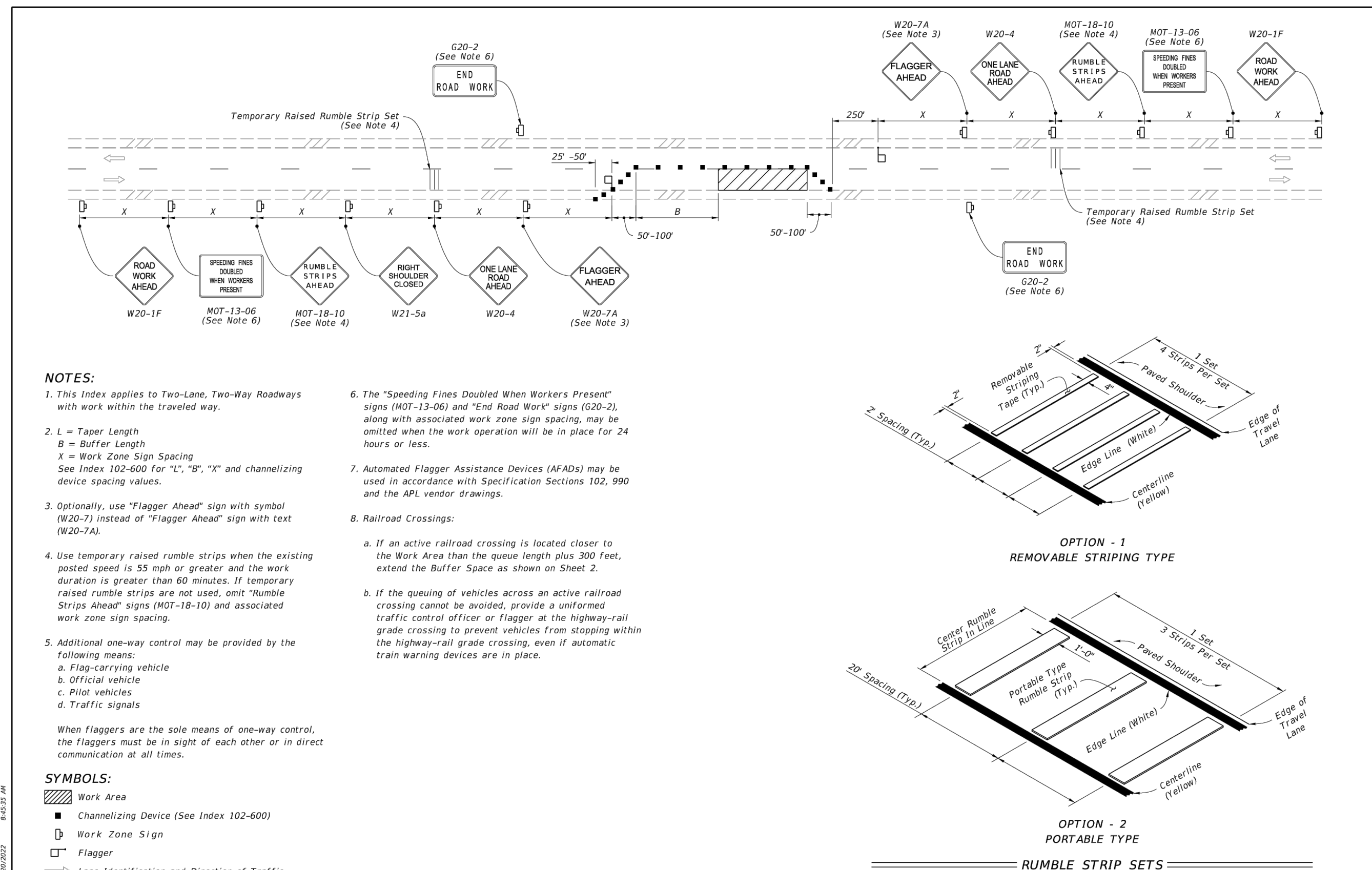
SHEET CONTENTS
TRAFFIC DETAILS

SHEET NO.

C-002



LAST REVISION 11/01/20	DESCRIPTION: FY 2023-24 STANDARD PLANS	INDEX 102-602	SHEET 2 of 2
---------------------------	--	------------------	-----------------



LAST REVISION 11/01/21	DESCRIPTION: FY 2023-24 STANDARD PLANS	INDEX 102-603	SHEET 1 of 2
---------------------------	--	------------------	-----------------

TWO-LANE, TWO-WAY WORK WITHIN THE TRAVEL WAY

INDEX 102-603 SHEET 1 of 2

10/01/2022 8:43:11 AM

10/01/2022 8:43:11 AM

10/01/2022 8:43:11 AM

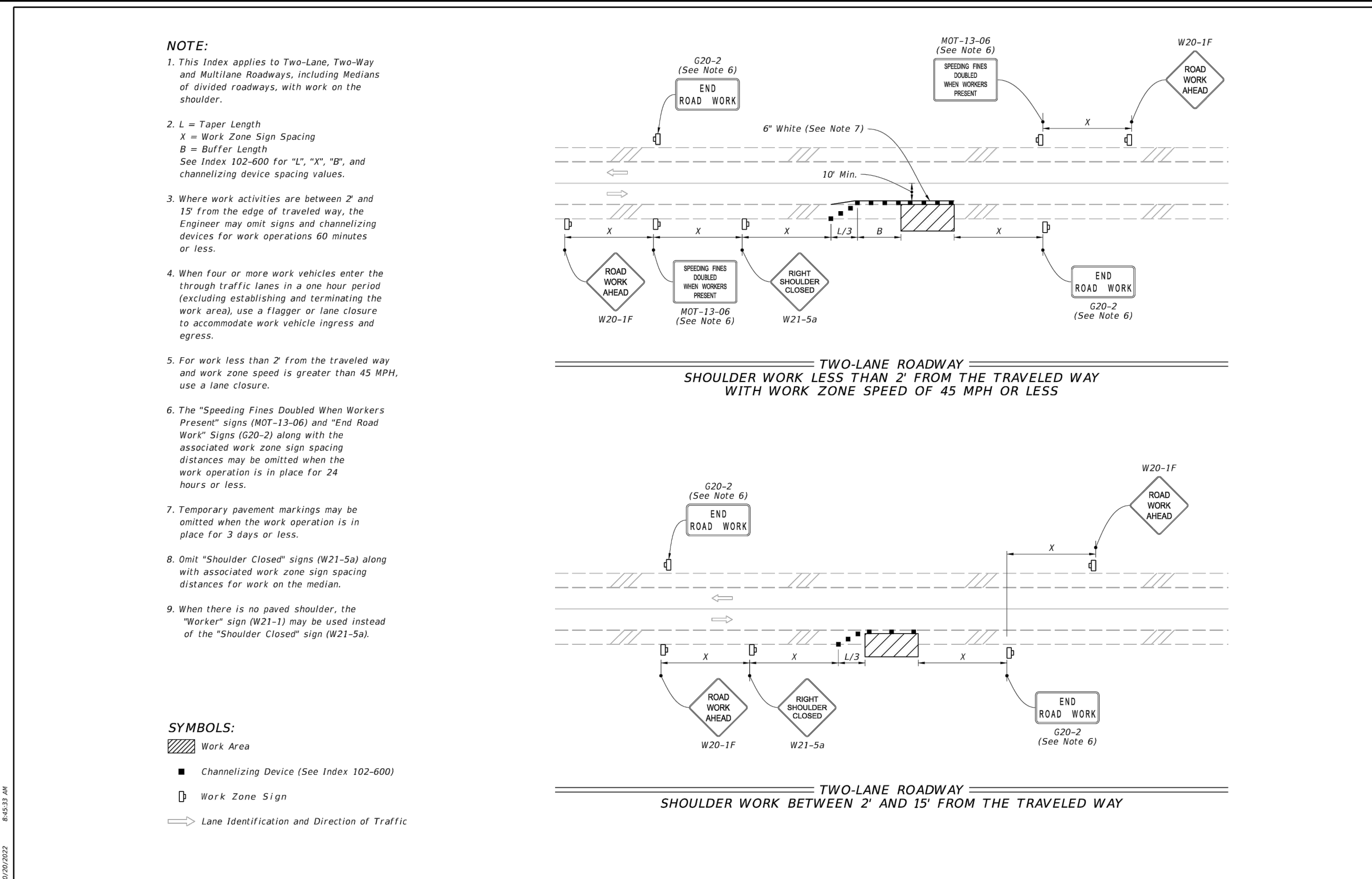
10/01/2022 8:43:11 AM

10/01/2022 8:43:11 AM

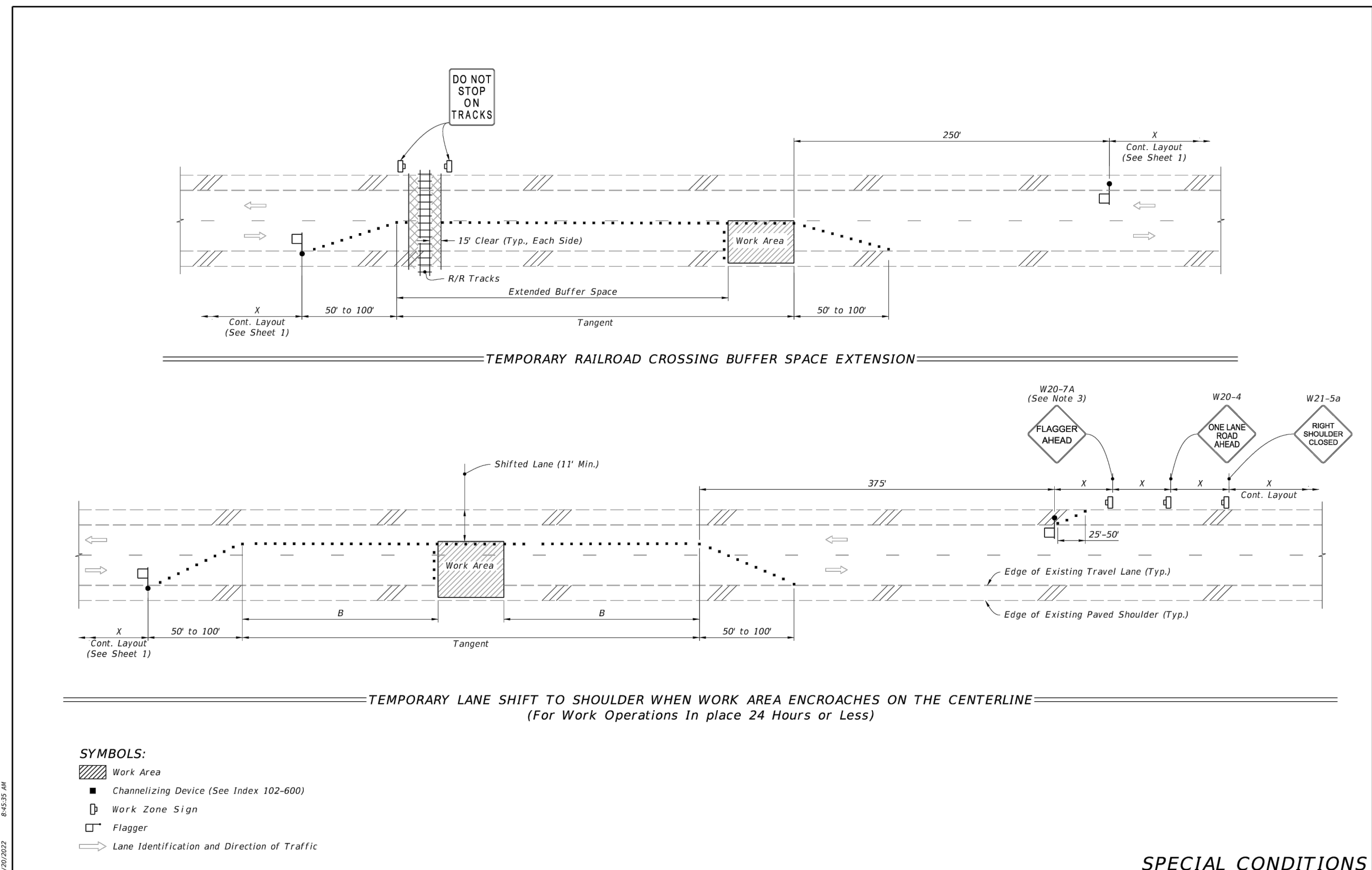
10/01/2022 8:43:11 AM

10/01/2022 8:43:11 AM

10/01/2022 8:43:11 AM



LAST REVISION 11/01/21	DESCRIPTION: FY 2023-24 STANDARD PLANS	INDEX 102-602	SHEET 1 of 2
---------------------------	--	------------------	-----------------



LAST REVISION 11/01/21	DESCRIPTION: FY 2023-24 STANDARD PLANS	INDEX 102-603	SHEET 2 of 2
---------------------------	--	------------------	-----------------

TWO-LANE, TWO-WAY WORK WITHIN THE TRAVEL WAY

INDEX 102-603 SHEET 2 of 2

10/01/2022 8:43:11 AM

10/01/2022 8:43:11 AM

10/01/2022 8:43:11 AM

10/01/2022 8:43:11 AM

10/01/2022 8:43:11 AM

10/01/2022 8:43:11 AM

10/01/2022 8:43:11 AM

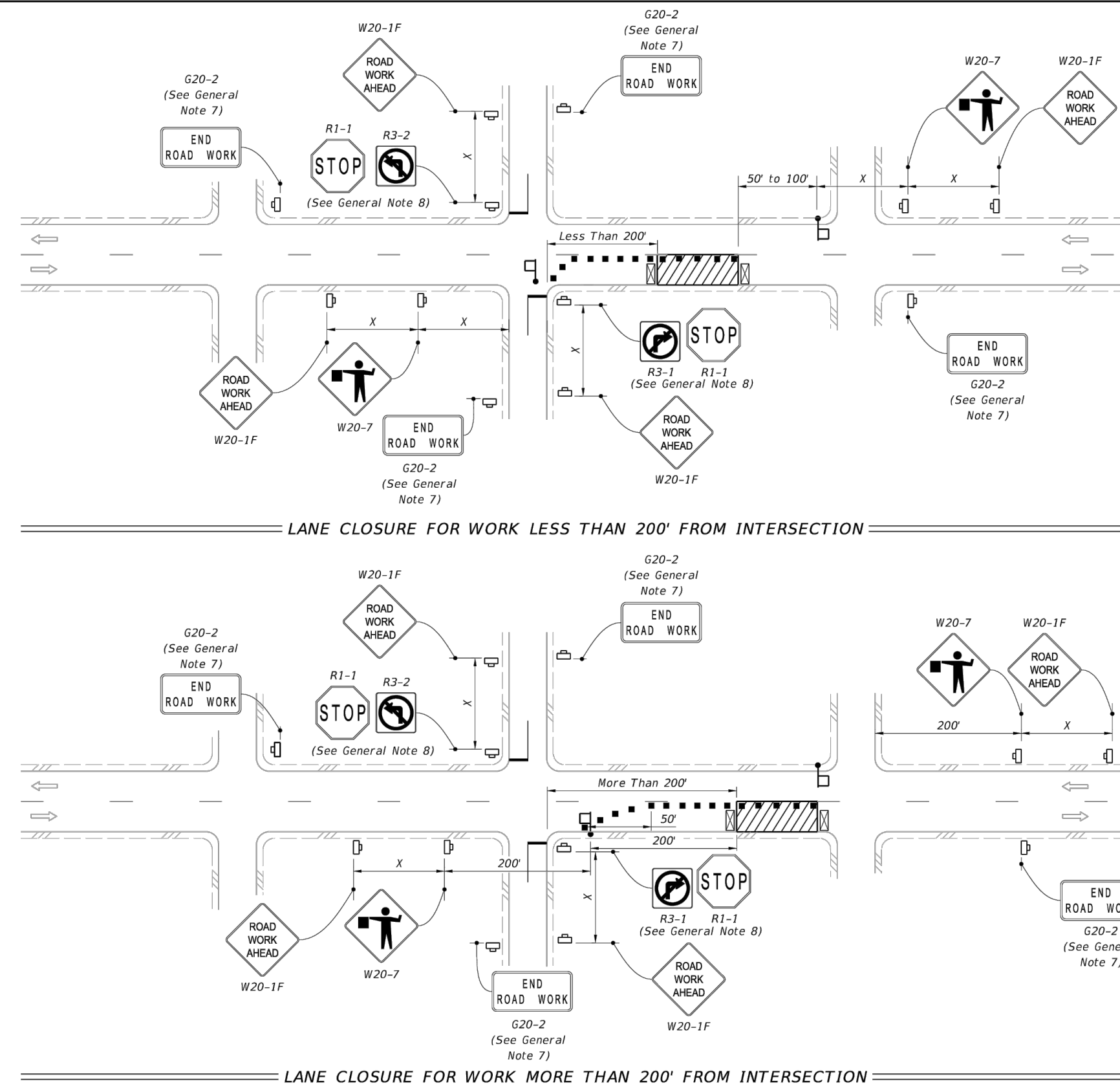
10/01/2022 8:43:11 AM

GENERAL NOTES:

1. This Index applies to two-lane, two-way roadways with work within or near the intersection.
2. X = Work Zone Sign Spacing
See Index 102-600 for "X" and channelizing device spacing values.
3. Optionally, use "Flagger Ahead" sign with text (W20-7A) instead of "Flagger Ahead" sign with symbol (W20-7).
4. If vehicles in a parking zone block the line of sight to TCZ signs, locate and post mount signs in accordance with Index 700-101.
5. If the work area extends across a crosswalk, close the crosswalk in accordance with Index 102-660.
6. For unsignalized intersections, use Temporary Raised Rumble Strips in accordance with Index 102-603. Placement of Rumble Strips and additional signs should begin at FLAGGER sign location.
7. The "End Road Work" signs (G20-2) along with the associated work zone sign distances may be omitted when the work zone will be in place for 24 hours or less.
8. As an option to the "STOP" sign (R1-1) and Restricted Left/Right Turning Movement sign (R3-1 or R3-2), the "SIDE ROAD INTERSECTING THE WORK ZONE" flagging operation from Index 102-600 may be used.

SYMBOLS:

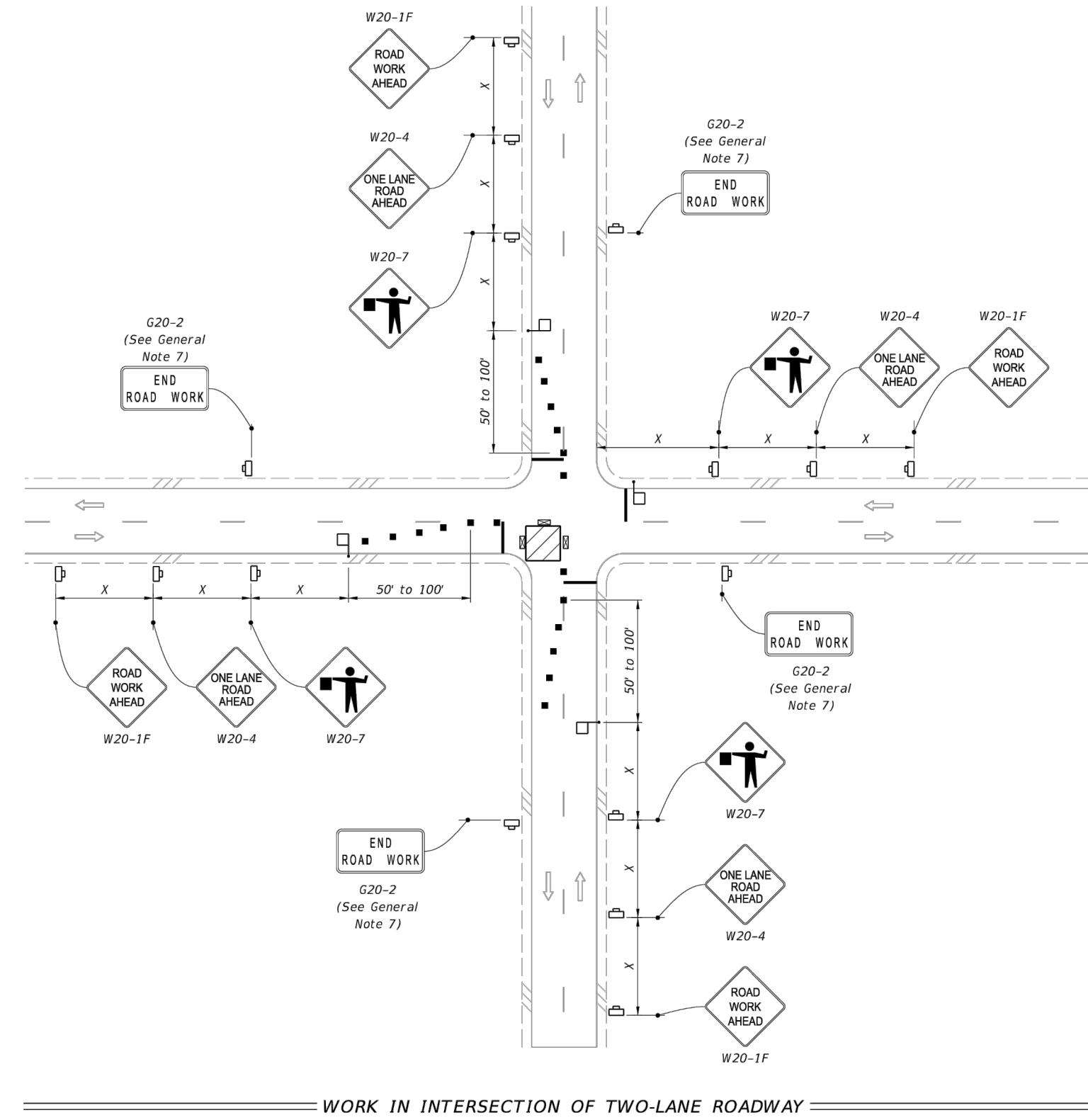
- Work Area
- Channelizing Device (See Index 102-600)
- Work Zone Sign
- Type 111 Barricade
- Stop Bar
- Flagger
- Lane Identification and Direction of Traffic



LAST REVISION 11/01/22	DESCRIPTION: FY 2023-24 STANDARD PLANS	FDOT	TWO-LANE, TWO-WAY, INTERSECTION WORK	INDEX 102-604	SHEET 1 of 2
---------------------------	--	------	--------------------------------------	------------------	-----------------

SYMBOLS:

- Work Area
- Channelizing Device (See Index 102-600)
- Work Zone Sign
- Type 111 Barricade
- Stop Bar
- Flagger
- Lane Identification and Direction of Traffic



LAST REVISION 11/01/22	DESCRIPTION: FY 2023-24 STANDARD PLANS	FDOT	TWO-LANE, TWO-WAY, INTERSECTION WORK	INDEX 102-604	SHEET 2 of 2
---------------------------	--	------	--------------------------------------	------------------	-----------------

Mead & Hunt

Mead and Hunt, Inc.
2440 Deming Way
Middleton, WI 53562
phone: 608-273-6380
meadhunt.com



© Copyright 2024 Mead & Hunt, Inc. This document, or any portion thereof, shall not be duplicated, disclosed, or used on any other project or extension of this project except by written agreement with Mead & Hunt, Inc. Mead & Hunt shall not be responsible for any unauthorized use of, or alteration to these documents.

CITY OF FLAGLER BEACH
 S. CENTRAL WATER MAIN
 REPLACEMENT
 FLAGLER BEACH, FLORIDA

ISSUED

M&H NO.: 1000709-231849.01
 DATE: August 16, 2024
 DESIGNED BY: CMC
 DRAWN BY: MRM
 CHECKED BY: DAK
 DO NOT SCALE DRAWINGS

SHEET CONTENTS
 TRAFFIC DETAILS

SHEET NO.

C-003



© Copyright 2024 Mead & Hunt, Inc. This document, or any portion thereof, shall not be duplicated, disclosed, or used on any other project or extension of this project except by written agreement with Mead & Hunt, Inc. Mead & Hunt shall not be responsible for any unauthorized use of, or alteration to these documents.

**CITY OF FLAGLER BEACH
S. CENTRAL WATER MAIN
REPLACEMENT
FLAGLER BEACH, FLORIDA**

ISSUED

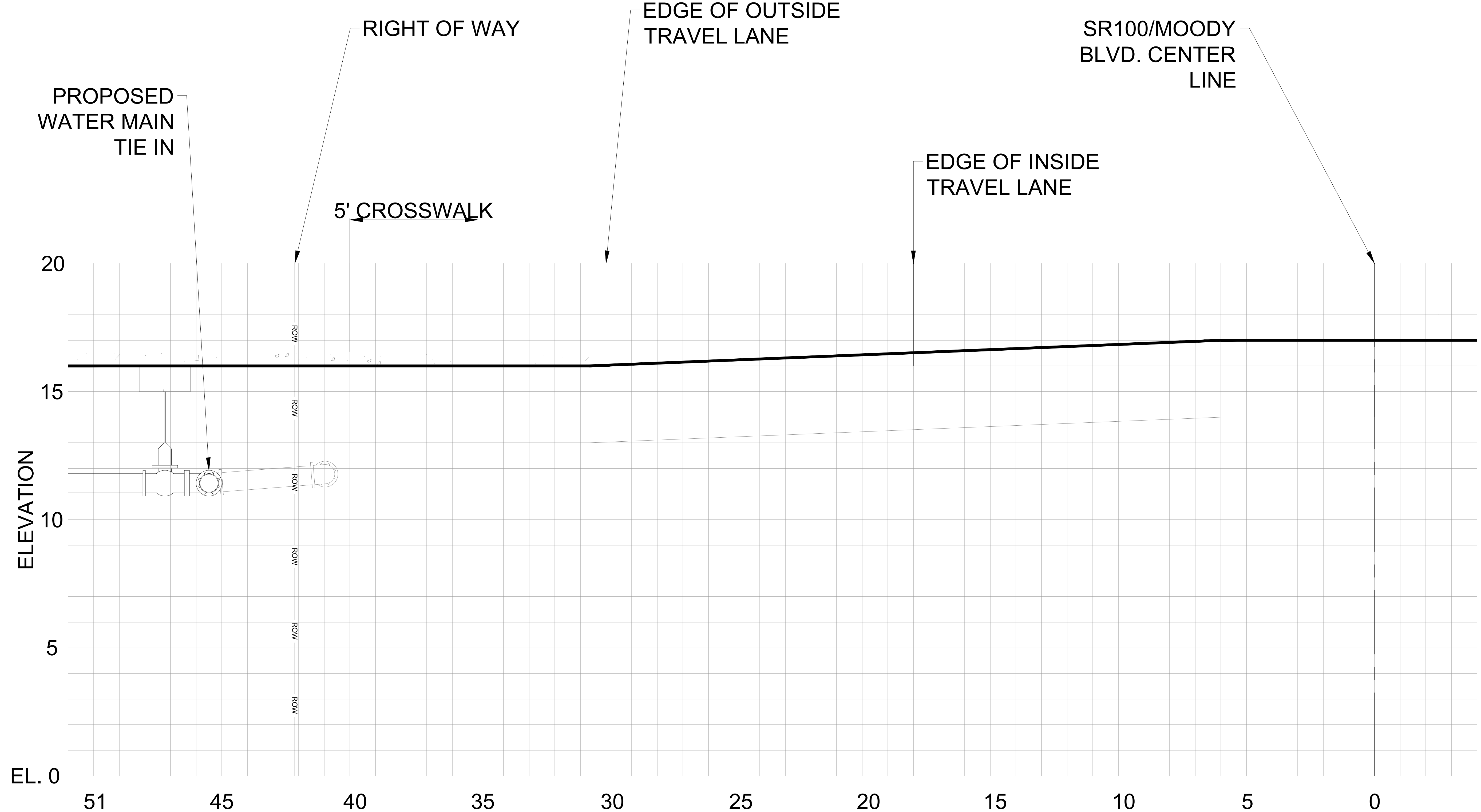
NOT FOR CONSTRUCTION

M&H NO: 1000709-231849.01
DATE: August 16, 2024
DESIGNED BY: CMC
DRAWN BY: MRM
CHECKED BY: DAK
DO NOT SCALE DRAWINGS

SHEET CONTENTS
CROSS SECTION A - A

SHEET NO.

C-102



LENGTH IN FEET FROM CENTER LINE

CROSS SECTION A - A

1" = 2'

X:\1000709\231849_01\TECH\CAD\DRAWINGS\231849_01 SITE PLAN.DWG
10/15/2024 3:46:55 PM



© Copyright 2024 Mead & Hunt, Inc.
This document, or any portion thereof, shall not be duplicated, disseminated, or used on any other project or extension of this project except by written agreement with Mead & Hunt, Inc. Mead & Hunt shall not be responsible for any unauthorized use of, or alteration to these documents.

GENERAL NOTES
WATER SYSTEM CONSTRUCTION

- THE CITY SHALL BE NOTIFIED PRIOR TO BEGINNING ANY WATER SYSTEM CONSTRUCTION.
- DEWATERING SHALL BE PROVIDED TO KEEP GROUNDWATER ELEVATION A MINIMUM OF 6 INCHES BELOW WATER MAIN BEING LAID.
- ALL WATER MAINS SHALL BE LAID ON A FIRM FOUNDATION WITH ALL UNSUITABLE MATERIAL (MUCK, ROCK, COQUINA, ETC.) REMOVED AND REPLACED WITH CLEAN GRANULAR MATERIAL.
- TRENCHES SHALL BE BACKFILLED WITH CLEAN GRANULAR MATERIAL IN MAX. 1' LIFTS WITH A MINIMUM COMPACTION OF 98 PERCENT (AASHTO-T180) IN PAVED AREAS AND 90 PERCENT IN UNPAVED AREAS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT TRENCH COMPACTION TESTS BE PROVIDED AT POINTS 1 FOOT ABOVE THE PIPE AND AT 1 FOOT VERTICAL INTERVALS TO FINISH GRADE, AT A MINIMUM SPACING OF EVERY 300 FEET, AND TO FURNISH COPIES OF TEST REPORTS PROMPTLY TO THE CITY.
- METALLIZED PIPE LOCATION TAPE SHALL BE LOCATED 15 INCHES BELOW FINISHED GRADE OR AS SPECIFIED BY MANUFACTURER FOR ALL PVC LINES. MARKER TAPE SHALL BE USED ON ALL DUCTILE IRON PIPE.
- WATER SERVICES (SINGLE 1") SHALL BE POLYETHYLENE TUBING (BLUE IN COLOR); POLYBUTYLENE SHALL NOT BE ALLOWED.
- ALL WATER SERVICE ENDINGS SHALL BE MARKED WITH 4" X 4" LUMBER (PRESSURE TREATED) EXTENDING 4 FEET ABOVE GRADE, WITH WATER SERVICES SECURED 24" ABOVE THE GROUND. WIRE TIES SHALL BE USED TO SECURE THE CURB STOPS TO SUPPORT POSTS.
- WATER VALVES SHALL BE PLACED AT ALL STREET INTERSECTIONS AND AT MAXIMUM SPACING OF 500 FEET.
- AT ALL WATER MAIN TEES AND CROSSES, VALVES SHALL BE INSTALLED ON ALL LEGS EXCEPT ONE.
- APPROVED WATER VALVE TYPES ARE THE FOLLOWING:
 - STANDARD GATE VALVES LESS THAN 48" DIAMETER RESILIENT SEAT GATE VALVES (AWWA C-509 OR C-515).
 - MECHANICAL TAPPING SLEEVE SHALL BE STAINLESS STEEL. (AWWA C-509)

MATERIALS

DIAMETER	MATERIAL	STANDARD
< 12"	DIP CLASS 350	AWWA C 150
> 12"	DIP CLASS 250	AWWA C 150
4"	PVC 1120 / SDR 21 (1)	ASTM D 2241
> 4" - 12"	PVC DR-18 (1)	AWWA C 900
> 4" - 12" DEDICATED FIRE LINE	PVC DR-14 (1)	AWWA C 900
14" - 36" (18" - 24" DR - 18) (30" - 36" DR - 21)	PVC 1120 (1)	AWWA C 905
ALL SIZES	HDPE DIPS OR 11 (2)	ASTM F 714

NOTE: (1) PVC PIPE COLOR SHALL BE BLUE FOR POTABLE WATER MAINS, BLUE WITH WHITE LOCATOR TAPE OR WHITE LOCATOR TAPE FOR RAW WATER MAIN. (2) HDPE TO BE PROVIDED IN NEXT LARGER DIAMETER IN ORDER TO HAVE REQUIRED INSIDE DIAMETER.

GENERAL NOTES
WATER SYSTEM CONSTRUCTION

- WATER SYSTEMS SHALL BE PRESSURE TESTED AT 150 PSI STATIC PRESSURE FOR A PERIOD OF 2 HOURS PER AWWA STANDARDS. TESTS SHALL BE CONDUCTED BEFORE FINAL PAVING AND IN THE PRESENCE OF THE CITY.
- ALL WATER SERVICES SHALL BE MARKED WITH A "Λ" SAW CUT INTO THE CURB OR BY METAL TABS SET INTO THE PAVEMENT.
- ALL WATER VALVES AND BLOW-OFFS SHALL BE MARKED WITH AN "X" SAW CUT INTO THE CURB OR BY METAL TABS SET INTO THE PAVEMENT. LOCATION OF METAL TABS IN INCHES FROM EDGE OF PAVEMENT SHALL BE EQUAL DISTANCE IN FEET FROM EDGE OF PAVEMENT TO VALVE.
- UNIFLANGE 1300 SERIES PIPE RESTRAINTS AS MANUFACTURED BY FORD OR APPROVED EQUAL MAY BE USED AS APPROPRIATE FOR RESTRAINING IN-LINE PRESSURE PIPE EACH SIDE OF PIPE JOINT. AS REQUIRED BY RESTRAINT TABLE.
- NO GALVANIZED PIPE, FITTINGS, ETC. ARE ACCEPTED.
- UNLESS APPROVED BY THE CITY, ALL WATER METERS SHALL BE INSTALLED AT THE RIGHT OF WAY LINE ONLY REGARDLESS OF SIZE.
- SUBMIT ASSEMBLY CERTIFICATION FOR ALL BACKFLOW PREVENTERS TO THE CITY BEFORE FINAL INSPECTION.
- PIPING FOR RAW WATER SHALL BE OLIVE GREEN FOR ABOVE GROUND PIPING, BURIED PVC PIPING SHALL BE BLUE WITH WHITE COLOR BACKGROUND LOCATOR TAPE PLACED DIRECTLY ON TOP OF THE PIPE AND AT 12" TO 18" ABOVE THE PIPE. THE TAPE SHALL CONTINUOUSLY READ "CAUTION - RAW WATER MAIN BURIED BELOW" OR WHITE WITH LOCATOR TAPE PLACED 12" TO 18" ABOVE THE TOP OF THE PIPE.
- SEE CHART BELOW FOR WATER MAIN SIZE AND MATERIALS.

MATERIALS

DIAMETER	MATERIAL	STANDARD
< 12"	DIP CLASS 350	AWWA C 150
> 12"	DIP CLASS 250	AWWA C 150
4"	PVC 1120 / SDR 21 (1)	ASTM D 2241
> 4" - 12"	PVC DR-18 (1)	AWWA C 900
> 4" - 12" DEDICATED FIRE LINE	PVC DR-14 (1)	AWWA C 900
14" - 36" (18" - 24" DR - 18) (30" - 36" DR - 21)	PVC 1120 (1)	AWWA C 905
ALL SIZES	HDPE DIPS OR 11 (2)	ASTM F 714

NOTE: (1) PVC PIPE COLOR SHALL BE BLUE FOR POTABLE WATER MAINS, BLUE WITH WHITE LOCATOR TAPE OR WHITE LOCATOR TAPE FOR RAW WATER MAIN. (2) HDPE TO BE PROVIDED IN NEXT LARGER DIAMETER IN ORDER TO HAVE REQUIRED INSIDE DIAMETER.

STANDARD CONSTRUCTION DETAIL
GENERAL NOTES
WATER SYSTEM CONSTRUCTION

INDEX
W-1A
FEB 2018

STANDARD CONSTRUCTION DETAIL
GENERAL NOTES
WATER SYSTEM CONSTRUCTION

INDEX
W-1B
FEB 2018

STANDARD CONSTRUCTION DETAIL
GENERAL NOTES
WATER SYSTEM CONSTRUCTION

INDEX
W-1C
FEB 2018

STANDARD CONSTRUCTION DETAIL
GATE VALVE AND VALVE BOX
NTS.

INDEX
W-2
FEB 2018

STANDARD CONSTRUCTION DETAIL
FIRE HYDRANT ASSEMBLY
NTS

INDEX
W-8
FEB 2018

MATERIALS

ITEM	QUANT.	DESCRIPTION
1	1	3/4", 1", 1-1/2" OR 2" BACKFLOW PREVENTER ASSEMBLY
2	2	3/4", 1", 1-1/2" OR 2" BALL VALVE
3	1	3/4", 1", 1-1/2" OR 2" x VARIES INLET - PVC, BRASS OR COPPER
4	1	3/4", 1", 1-1/2" OR 2" x VARIES OUTLET - PVC, BRASS OR COPPER
5	*	PEA GRAVEL
6	*	FILTER FABRIC

NOTE: -FIELD ADJUST AND CUT ITEM 3 AND 4 TO THE PROPER LENGTH.
-NO GALVANIZED PIPE OR FITTINGS ALLOWED.
-A COPY OF THE ASSEMBLY CERTIFICATION SHALL BE SUBMITTED TO THE CITY BEFORE FINAL INSPECTION.
-WILKINS ASSEMBLIES ARE REQUIRED FOR CITY OWNED FACILITIES.
-MAY BE PLACED WITH METER IN ONE METER BOX.

STANDARD CONSTRUCTION DETAIL
DOUBLE CHECK BACKFLOW PREVENTER
3/4", 1", 1-1/2", OR 2"
NTS.

INDEX
W-6A
FEB 2018

ACCEPTABLE MANUFACTURERS: HERSEY MODEL FDC, WILKINS MODEL 950XLT, CONBRACO (APOLLO) MODEL 40-100-A2T

MATERIALS

ITEM	QUANT.	DESCRIPTION
1	1	3/4", 1", 1-1/2" OR 2" BACKFLOW PREVENTER ASSEMBLY
2	2	3/4", 1", 1-1/2" OR 2" BALL VALVE
3	1	3/4", 1", 1-1/2" OR 2" x VARIES INLET - PVC, BRASS OR COPPER
4	1	3/4", 1", 1-1/2" OR 2" x VARIES OUTLET - PVC, BRASS OR COPPER
5	*	PEA GRAVEL
6	*	FILTER FABRIC

NOTE: -FIELD ADJUST AND CUT ITEM 3 AND 4 TO THE PROPER LENGTH.
-NO GALVANIZED PIPE OR FITTINGS ALLOWED.
-A COPY OF THE ASSEMBLY CERTIFICATION SHALL BE SUBMITTED TO THE CITY BEFORE FINAL INSPECTION.
-WILKINS ASSEMBLIES ARE REQUIRED FOR CITY OWNED FACILITIES.
-MAY BE PLACED WITH METER IN ONE METER BOX.

STANDARD CONSTRUCTION DETAIL
SCHEDULE OF LENGTHS OF RESTRAINED PVC PIPE (FT.)

FITTING	1/4 BEND	1/8 BEND	1/16 BEND	1/32 BEND	TEE OR DEAD END
4"	20	18	18	18	45
6"	28	18	18	18	63
8"	36	18	18	18	82
10"	44	28	18	18	98
12"	51	21	18	18	116
14"	57	24	18	18	132
16"	63	26	18	18	148
18"	69	29	18	18	163
20"	75	31	18	18	179
24"	87	36	18	18	208
30"	102	42	20	18	248

LENGTHS BETWEEN HEAVY LINES INDICATE ONE FULL LENGTH (18" MIN.) OF PIPE TO BE RESTRAINED.
TABLE SHOWS MINIMUM LENGTH OF PIPE EACH WAY FROM FITTING FOR WHICH RESTRAINT IS REQUIRED.

STANDARD CONSTRUCTION DETAIL
SCHEDULE OF LENGTHS OF RESTRAINED DIP (FT.)

FITTING	1/4 BEND	1/8 BEND	1/16 BEND	1/32 BEND	TEE OR DEAD END
4"	21 (26)	18 (18)	18 (18)	18 (18)	37 (55)
6"	30 (36)	18 (18)	18 (18)	18 (18)	52 (78)
8"	38 (45)	18 (18)	18 (18)	18 (18)	67 (100)
10"	45 (54)	18 (22)	18 (18)	18 (18)	81 (122)
12"	52 (63)	22 (26)	18 (18)	18 (18)	94 (141)
14"	60 (72)	25 (30)	18 (18)	18 (18)	107 (160)
16"	66 (80)	27 (33)	18 (18)	18 (18)	120 (180)
18"	74 (87)	31 (36)	18 (18)	18 (18)	132 (198)
20"	80 (94)	33 (39)	18 (18)	18 (18)	144 (216)
24"	92 (108)	38 (45)	18 (22)	18 (18)	167 (250)
30"	106 (128)	44 (53)	21 (25)	18 (18)	199 (298)
36"*	69 (82)	28 (34)	18 (18)	18 (18)	170 (204)
42"	76 (92)	31 (37)	18 (18)	18 (18)	191 (229)
48"	90 (106)	40 (46)	18 (18)	18 (18)	212 (254)

LENGTHS BETWEEN HEAVY LINES INDICATE ONE FULL LENGTH (18" MIN.) OF PIPE TO BE RESTRAINED.
TABLE SHOWS MINIMUM LENGTH OF PIPE EACH WAY FROM FITTING FOR WHICH RESTRAINT IS REQUIRED.
VALUES IN PARENTHESIS ARE FOR PIPE ENCASED IN POLYETHYLENE.

STANDARD CONSTRUCTION DETAIL
WATER LATERAL SERVICE
5/8", 3/4", 1", 1-1/2", 2" METERS
NTS.

INDEX
W-3
DEC 2015

VALVE SCHEDULE

WATER SERVICES	VALVES AT MAIN	VALVES AT METER
FORD OR EQUIVALENT	F1000-4	B94-324W BF43-777W
1 1/2"	B81-666 (REQ. C84-66 PACK JOINT COUPLING)	
2"	B81-777 (REQ. C84-77 PACK JOINT COUPLING)	

NOTES:

- CUSTOMER POINT OF SERVICE IS TYPICALLY AT THE LOCATION WHERE CUSTOMER PLUMBING IS ATTACHED TO THE YOKE NUT.
- HDPE SHALL BE 200 PSI, NSF APPROVED, SDR 9, MEETING ASTM D1248. TUBING SHALL BE ENDOTRACE (OR APPROVED EQUAL).
- REDUCED PRESSURE BACKFLOW PREVENTERS ARE REQUIRED FOR ALL COMMERCIAL SERVICES AND SHALL BE INSTALLED BY A CERTIFIED TECHNICIAN AT OWNERS EXPENSE
- ALL SERVICE TAPS SHALL BE NO CLOSER THAN 2'-0" STAGGERED INTERVAL OR WITHIN 2'-0" OF BELL OR SPOIGT ENDS.
- IN AREAS TO BE PAVED PROVIDE A 2" MIN. PVC SCHEDULE 40 SLEEVE FOR PE-TUBING. SLEEVE SHALL EXTEND A MIN. OF 2' BEHIND BACK OF CURB AT EACH SIDE OF ROAD.
- ALL RESIDENTIAL WATER METERS SHALL BE EQUIPPED WITH A DOUBLE CHECK BACKFLOW PREVENTER.
- CONTRACTOR TO PROVIDE SERVICE IN BOX WITH STAKE MARKING THE LOCATION.
- CITY TO PROVIDE METER AND BACK FLOW PREVENTER.

STANDARD CONSTRUCTION DETAIL
PVC AND D.I.P. RESTRAINED JOINT TABLE

INDEX
W-5
FEB 2018

STANDARD CONSTRUCTION DETAIL
WATER SYSTEM CONSTRUCTION

INDEX
W-4
FEB 2018

X:\1000709\231849_01\TECH\CADD\DRAWINGS\231849_01_C-501_STANDARD DETAILS.DWG
10/15/2024 3:47:02 PM



© Copyright 2024 Mead & Hunt, Inc. This document, or any portion thereof, shall not be duplicated, disseminated, or used on any other project or extension of this project except by written agreement with Mead & Hunt, Inc. Mead & Hunt shall not be responsible for any unauthorized use of, or alteration to these documents.

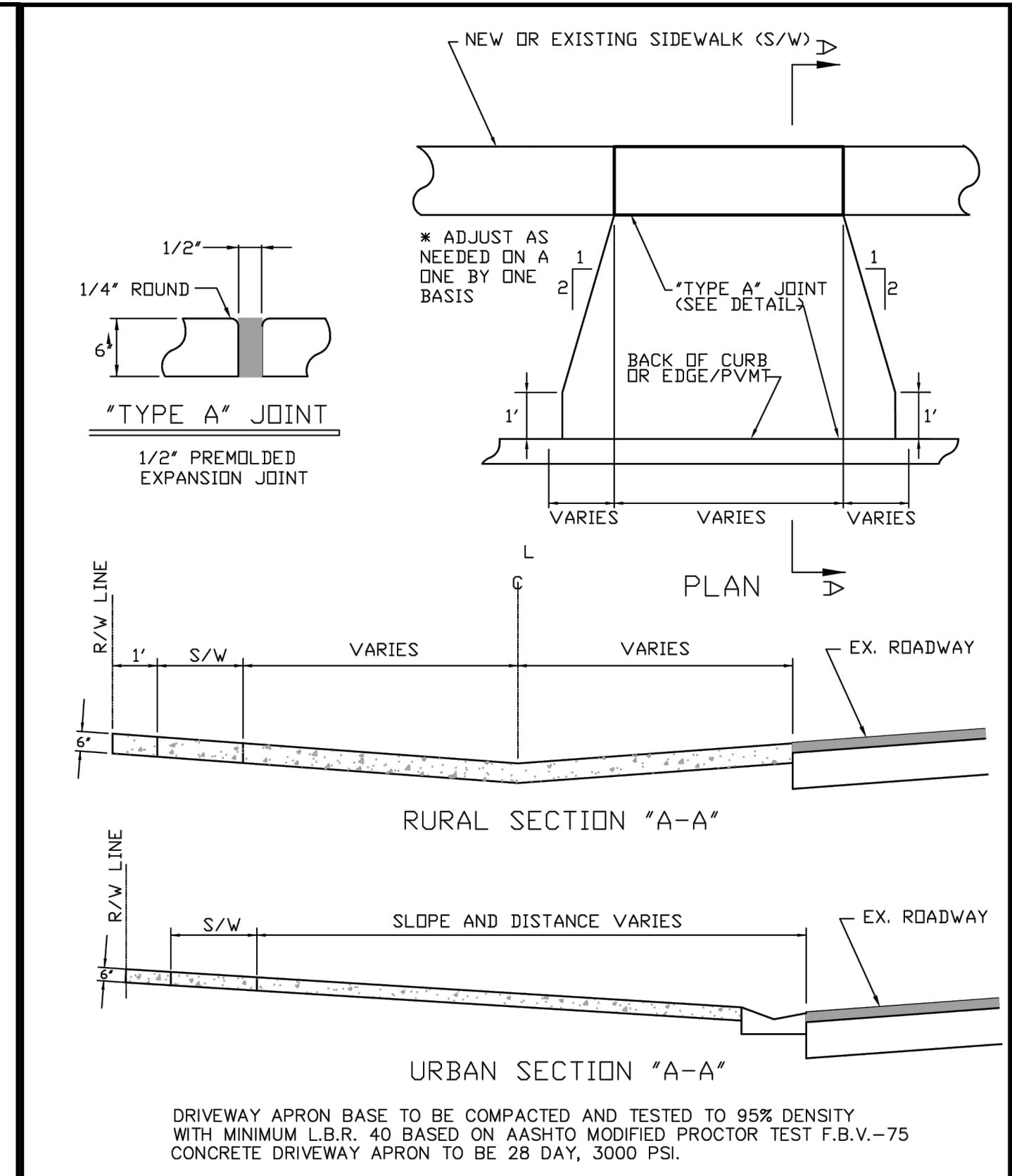
**CITY OF FLAGLER BEACH
 S. CENTRAL WATER MAIN
 REPLACEMENT**
 FLAGLER BEACH, FLORIDA

ISSUED

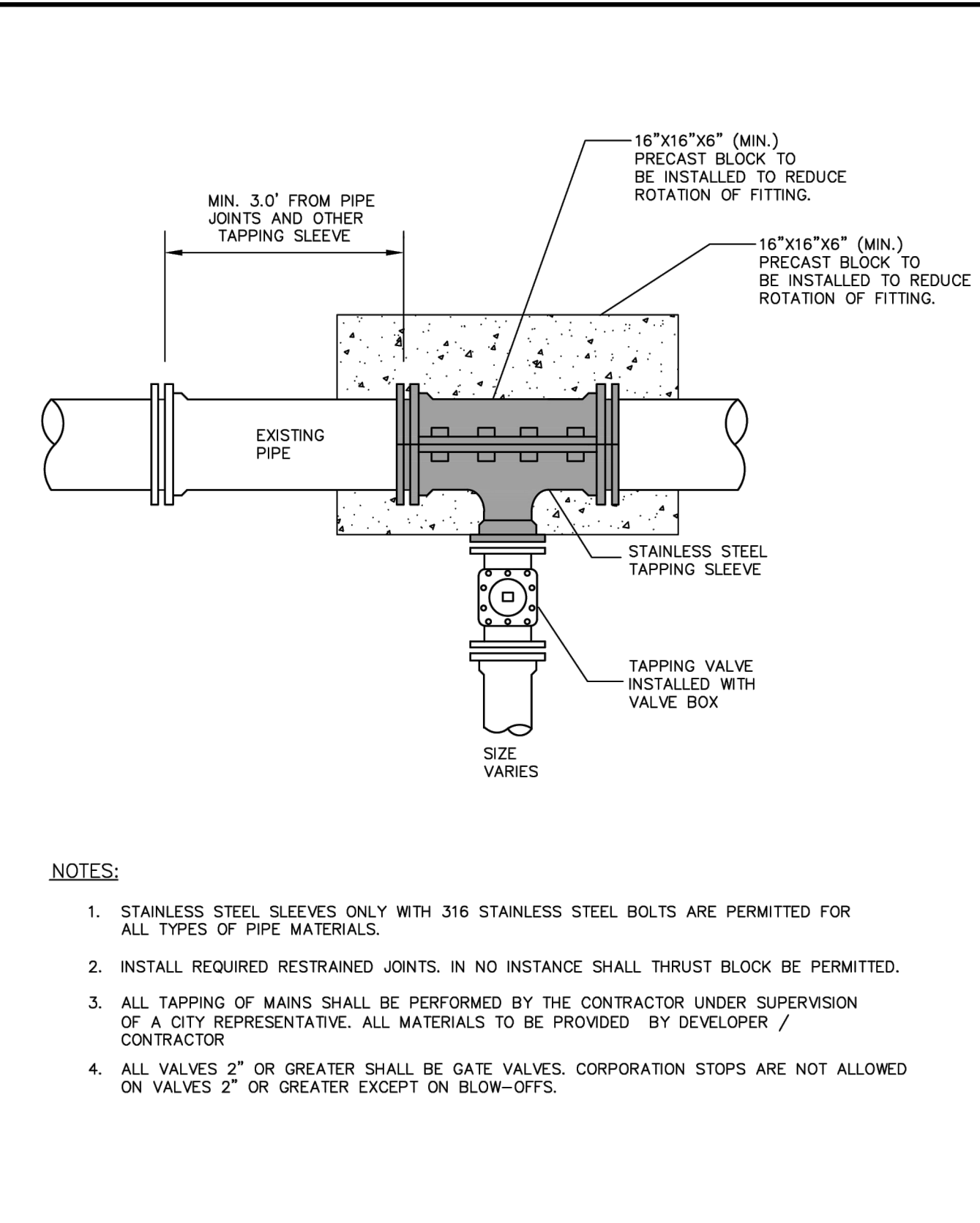
M&H NO.: 1000709-231849-01
 DATE: August 16, 2024
 DESIGNED BY: CMC
 DRAWN BY: MRM
 CHECKED BY: DAK
 DO NOT SCALE DRAWINGS

SHEET CONTENTS
STANDARD DETAILS

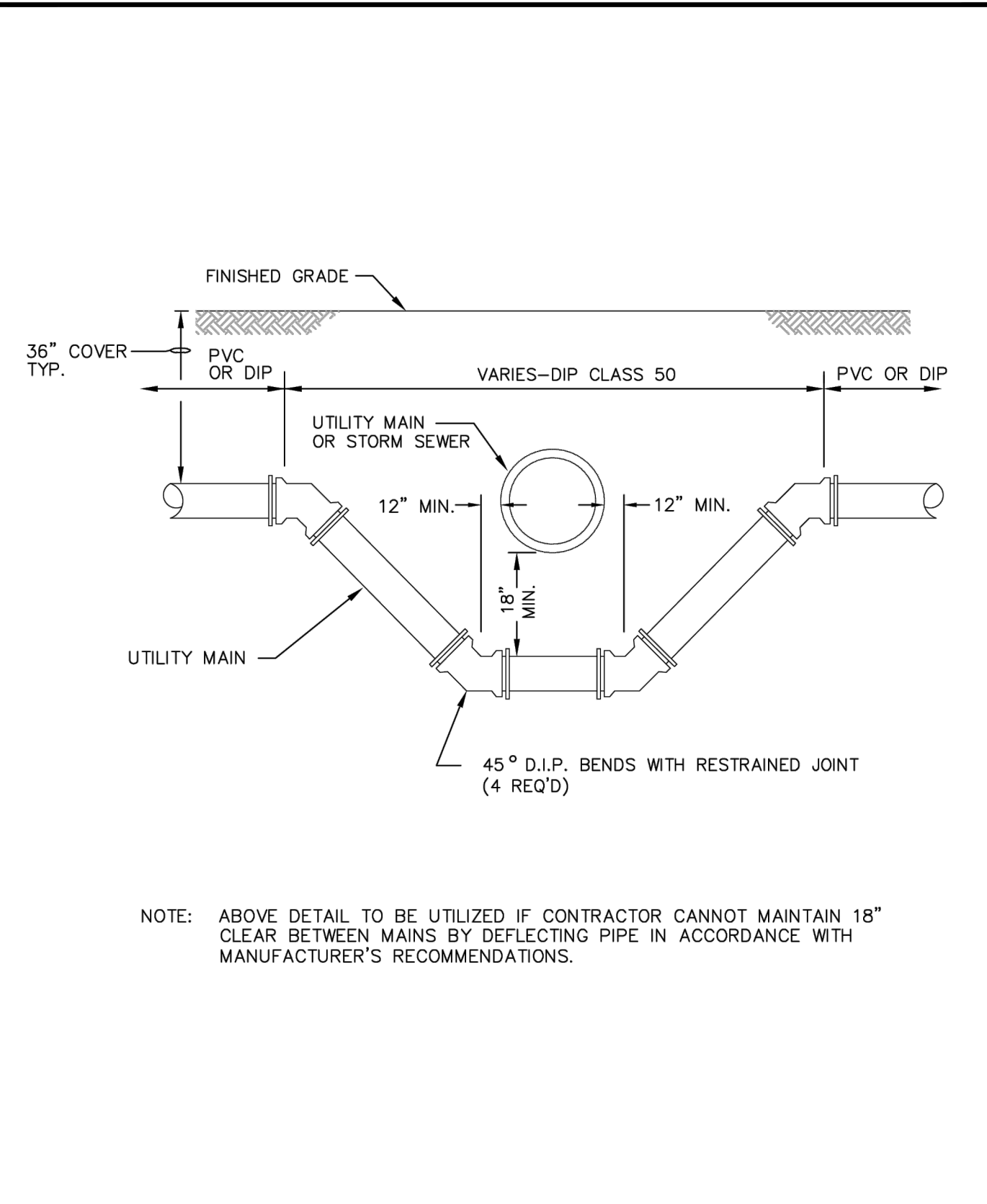
SHEET NO.



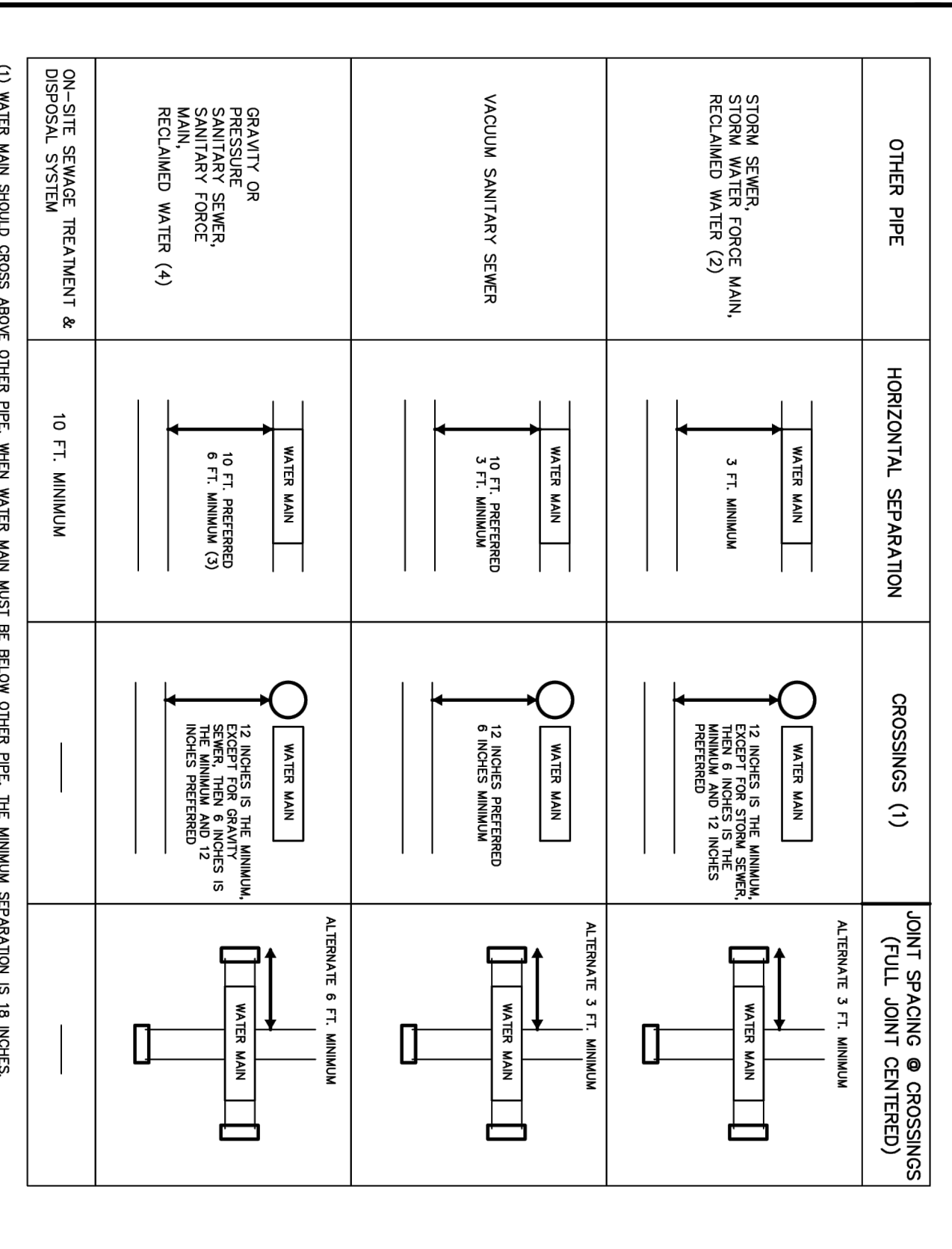
	STANDARD CONSTRUCTION DETAIL RESIDENTIAL DRIVEWAY APRON DRAWINGS NTS	INDEX M-7 FEB 2018
--	---	--------------------------



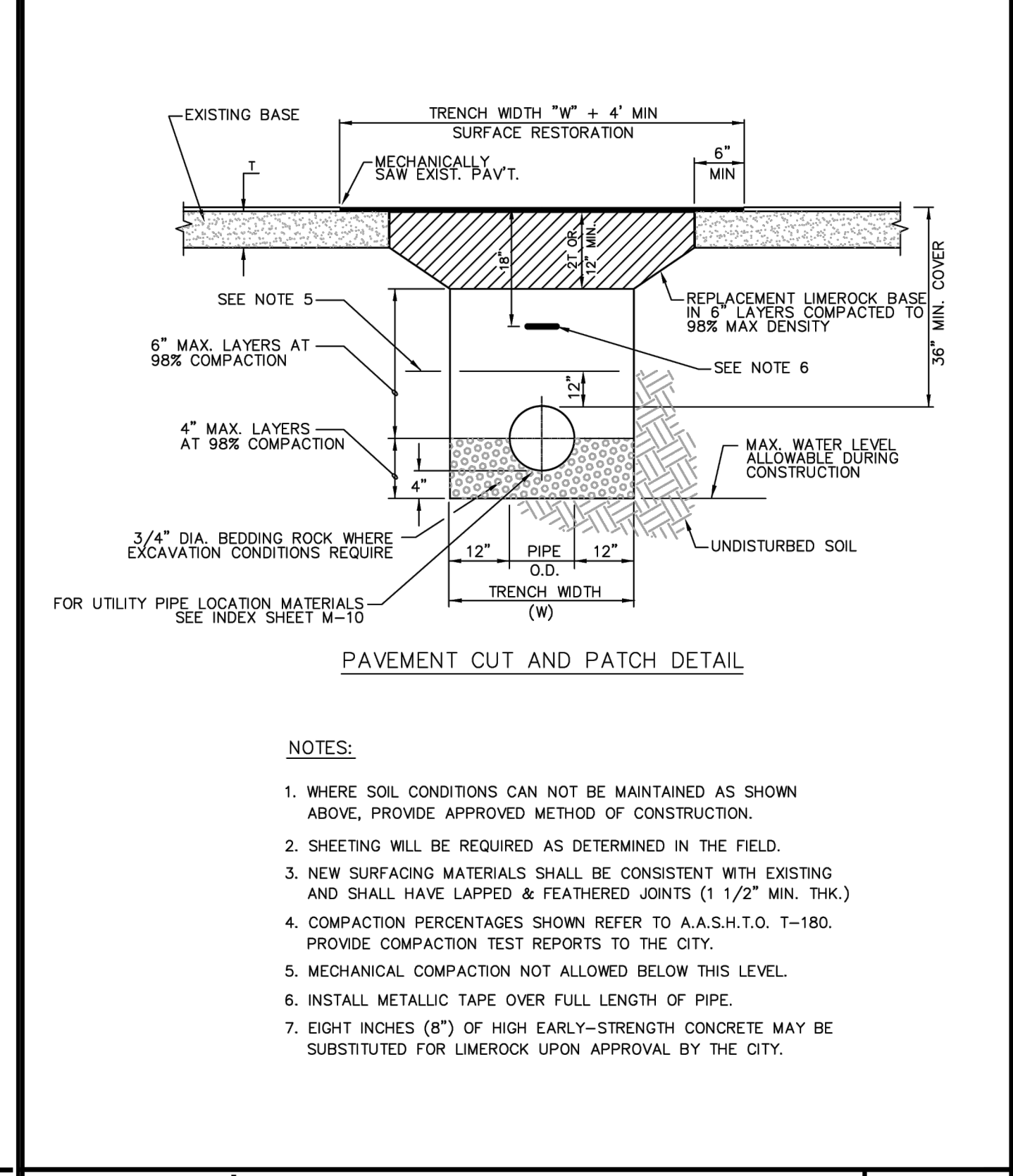
	STANDARD CONSTRUCTION DETAIL TAPPING VALVE AND SLEEVE NTS	INDEX W-17 FEB 2018
--	--	---------------------------



	STANDARD CONSTRUCTION DETAIL PIPE CROSSING NTS	INDEX W-9B FEB 2018
--	---	---------------------------



	STANDARD CONSTRUCTION DETAIL WATER MAIN SEPARATION NTS	INDEX W-9A FEB 2018
--	---	---------------------------



	STANDARD CONSTRUCTION DETAIL ROADWAY CONSTRUCTION NOTES	INDEX R-1A FEB 2018
--	---	---------------------------

ROADWAY COMPACTION AND DENSITY TESTING REQUIREMENTS

ITEM	TEST	FREQUENCY	STANDARD	TEST METHOD
ROADWAY SUBBASE (BOTTOM OF SUBBASE DOWN 1 FOOT)	IN-PLACE DENSITY	ONE (1) TEST/300 LF	95% MODIFIED PROCTOR (ASTM D-1557 OR AASHTO T-180)	ASTM D-2937 D-2922 D-1556
STABILIZED SUBBASE	IN-PLACE DENSITY	ONE (1) TEST/300 LF	95% MODIFIED PROCTOR (ASTM D-1557 OR AASHTO T-180)	ASTM D-2937 D-2922 D-1556
STABILIZED SUBBASE	FLORIDA BEARING VALUE (FBV)	ONE (1) TEST/300 LF	FBV = 75	
STABILIZED SUBBASE	LIMEROCK BEARING RATIO (LBR)	ONE (1) TEST/SOIL TYPE	LBR = 40	
LIMEROCK BASE	IN-PLACE DENSITY	ONE (1) TEST/300 LF	98% MODIFIED PROCTOR (ASTM D-1557 OR AASHTO T-180)	ASTM D-2937 D-2922 D-1556
LIMEROCK BASE	LIMEROCK BEARING RATIO (LBR)	PROVIDE CERTIFICATE FROM PLANT	LBR 100	FM 5-515
CRUSHED CONCRETE BASE	IN-PLACE DENSITY	ONE (1) TEST/300 LF	98% MODIFIED PROCTOR (ASTM D-1557 OR AASHTO T-180)	ASTM D-2937 D-1556
CRUSHED CONCRETE BASE	LIMEROCK BEARING RATIO (LBR)	(1) PER VISIBLE CHANGE IN MATERIAL BLEND	LBR 100	
ASPHALT	EXTRACTION AND GRADATION	(1) PER DAY PER MIX	PER MIX DESIGN	
ASPHALT	THICKNESS AND DENSITY	(1) PER 300 LF ROADWAY	PER MIX DESIGN AND JOB SPECS	CORING OR NUCLEAR (DENSITY ONLY)
SOIL OPTIMUM MOISTURE/DENSITY	PROCTOR TEST	(1) PER SOIL OR BASE TYPE		ASTM D-1557 (MODIFIED) ASTM D-558 (STANDARD) AASHTO T-180 (MODIFIED) AASHTO T-99 (STANDARD)
CURB SUBBASE	IN-PLACE DENSITY	ONE (1) TEST/300 LF	98% MODIFIED PROCTOR (ASTM D-1557 OR AASHTO T-180)	
CURB SUBBASE (LBR)	LIMEROCK BEARING RATIO (LBR)	(1) TEST/SOIL CHANGE	LBR 40	

	STANDARD CONSTRUCTION DETAIL TECHNICAL SPECIFICATIONS FOR TESTING REQUIREMENTS	INDEX R-6A FEB 2018
--	--	---------------------------

- DESIGN MIXES SHALL BE SUBMITTED TO THE CITY FOR THEIR APPROVAL NO LESS THAN THREE (3) WORKING DAYS PRIOR TO ANY ROADWAY CONSTRUCTION.
- ASPHALT SPECIFICATIONS SHALL BE SUBMITTED BY THE DESIGN ENGINEER WITH FINAL PLANS TO THE CITY. FLORIDA STATE CERTIFIED BATCH PLANTS MUST THEN CERTIFY THAT THESE APPROVED SPECIFICATIONS HAVE BEEN MET.
- EXTRACTION AND GRADATION TESTS ON ASPHALT MIXES SHALL BE PROVIDED TO THE CITY TO INSURE THAT DESIGN MIXES MEET THE CITY STANDARD SPECIFICATIONS.
- THE ROADWAY CROWN SHALL HAVE A STANDARD ONE QUARTER INCH (1/4") PER FOOT SLOPE.
- ALL ROADWAYS WITH CURB AND GUTTER SECTIONS SHALL HAVE AS A STANDARD A MINIMUM LONGITUDINAL SLOPE OF 0.30%.
- THE FINISHED PAVEMENT EDGE SHALL BE WITHIN ONE QUARTER INCH (1/4") OF THE ADJACENT CONCRETE CURB.
- CONCRETE CURBS SHALL BE PROVIDED ON BOTH SIDES OF ALL STREETS AND CONSTRUCTED WITH 2500 PSI CONCRETE AT 28 DAYS.
- CONCRETE CURBS SHALL BE SAW CUT TO A DEPTH EQUAL TO 1/4 OF CURB THICKNESS AT INTERVALS OF TEN FEET (10') WITH EXPANSION JOINTS AT STREET INTERSECTIONS, STRUCTURES AND ALONG CURVES AT SIXTY FEET (60') INTERVALS. ALL EXPANSION JOINT MATERIAL IS REQUIRED TO BE INSTALLED THROUGH THE ENTIRE DEPTH OF THE CONCRETE CURB.
- AN "X" SHALL BE CUT IN THE CURB TO MARK THE LOCATION OF WATER DISTRIBUTION SYSTEM VALVE.
- AN "X" SHALL BE CUT INTO THE CURB TO MARK THE LOCATION OF ALL VALVES OTHER THAN WATER DISTRIBUTION VALVES.
- A "V" SHALL BE CUT IN THE CURB TO MARK THE LOCATION OF ALL SEWER SERVICES.
- A "L" SHALL BE CUT IN THE CURB TO MARK THE LOCATION OF ALL RECLAIMED WATER SERVICES.
- A "A" SHALL BE CUT IN THE CURB TO MARK THE LOCATION OF ALL WATER SERVICES.

	STANDARD CONSTRUCTION DETAIL ROADWAY CONSTRUCTION NOTES	INDEX R-1B FEB 2018
--	---	---------------------------

ROADWAY CONSTRUCTION NOTES

- ALL RIGHT OF WAY OTHER THAN ROADWAY AREAS SHALL BE SEEDED AND MULCHED OR SODDED. ALL SLOPES GREATER THAN 6% SHALL BE SODDED. THE CITY RESERVES THE RIGHT TO REQUIRE SODDING IN SPECIAL AREAS WHERE EROSION IS A CONCERN.
- THE FOLLOWING WILL BE THE STANDARD PROTECTION FOR DITCHES UNLESS DRAINAGE CALCULATIONS INDICATE OTHERWISE:

SWALE PROFILE GRADES	PROTECTION REQUIRED
0.2% - 1.0%	SEEDING AND MULCHING
1.0% - 4.0%	SODDING
4.0% AND GREATER	DITCH PAVING
- ALL FRANCHISE UTILITY CROSSINGS, INCLUDING BUT NOT LIMITED TO FPL, BELLSOUTH AND CABLE SHALL BE INSTALLED PRIOR TO INSTALLATION AND COMPACTION OF THE ROAD SUB BASE. ANY CROSSINGS AFTER INSTALLATION OF THE SUB BASE SHALL BE BY DIRECTIONAL BORE.
- THE LIMITS OF STABILIZED SUB BASE SHALL EXTEND TO A DEPTH OF SIX INCHES (6") BELOW THE BOTTOM OF THE BASE AND OUTWARD TO TWELVE INCHES (12") BEYOND THE CURB.
- THE STABILIZING MATERIAL, IF REQUIRED, SHOULD BE A HIGH BEARING VALUE SOIL, SAND-CLAY, LIMEROCK, RECYCLED CONCRETE, SHELL OR OTHER MATERIAL AS APPROVED BY THE CITY AND A LICENSED SOILS ENGINEER.
- THE SUB BASE SHALL BE STABILIZED NOT LESS THAN FORTY (40) POUNDS LIMEROCK BEARING RATIO (LBR). A COMPACTION OF NO LESS THAN NINETY-EIGHT (98%) PERCENT DENSITY BASED ON AASHTO T-180 SHALL BE REQUIRED.
- TESTS FOR SUB BASE BEARING CAPACITY AND COMPACTION SHALL BE DONE AT A MINIMUM OF EVERY 300 FEET AND SHALL BE STAGGERED TO THE LEFT, RIGHT AND AT CENTER LINE OF THE ROADWAY.
- BASES FOR ALL STREETS SHALL HAVE A MINIMUM SIX INCH (6") DEPTH. PRIMING AND SANDING SHALL BE REQUIRED AS SOON AS BEARING CAPACITY AND COMPACTION HAS BEEN ACHIEVED.
- MAXIMUM DENSITY BASED ON AASHTO T-180 MODIFIED PROCTOR TEST. RECYCLED CONCRETE OR LIMEROCK BASES SHALL BE COMPACTED TO (98%)
- MATERIAL DELIVERY TICKETS SHALL BE PROVIDED TO THE CITY AT THE TIME OF PLACEMENT.
- TESTING OF THE IN-PLACE BASE SHALL BE DONE AT INTERVALS EQUIVALENT TO SUB BASE TESTING AND SHALL CONSIST OF, AS A MINIMUM, MOISTURE CONTENT AND COMPACTION TEST.

	STANDARD CONSTRUCTION DETAIL ROADWAY CONSTRUCTION NOTES	INDEX R-1A FEB 2018
--	---	---------------------------



© Copyright 2024 Mead & Hunt, Inc.
 This document, or any portion thereof, shall not be duplicated, disseminated, or used on any other project or extension of this project except by written agreement with Mead & Hunt, Inc. Mead & Hunt shall not be responsible for any unauthorized use of, or alteration to these documents.

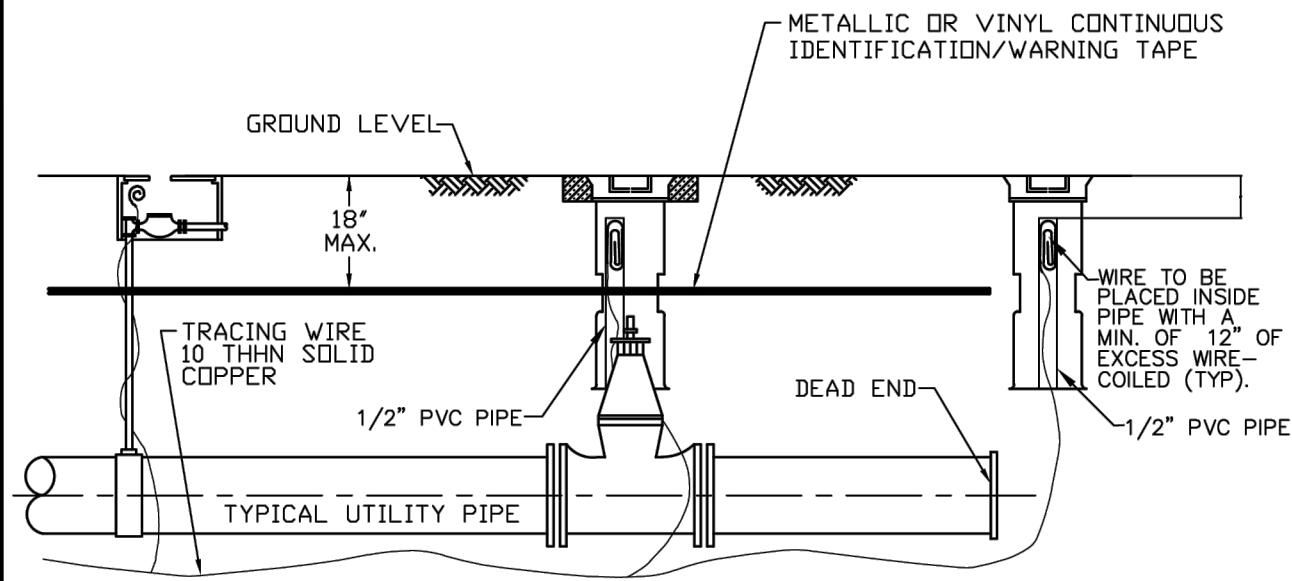
**CITY OF FLAGLER BEACH
 S. CENTRAL WATER MAIN
 REPLACEMENT**
 FLAGLER BEACH, FLORIDA

ISSUED

M&H NO.: 1000709-231849.01
 DATE: August 16, 2024
 DESIGNED BY: CMC
 DRAWN BY: MRM
 CHECKED BY: DAK
 DO NOT SCALE DRAWINGS

SHEET CONTENTS
 STANDARD DETAILS

SHEET NO.
C-503



ALL PVC PIPE, OR OTHER CITY APPROVED NONMETALLIC PIPE INSTALLED WITHIN THE CITY'S WATER, SANITARY SEWER, OR RECLAIMED WATER SYSTEMS, SHALL BE INSTALLED WITH 10 THIN SOLID COPPER TRACING WIRE. IF PIPE IS INSTALLED BY DIRECTIONAL BORE, USE (2) 10 THIN SOLID COPPER TRACING WIRE.

THE TRACING WIRE MUST BE INSTALLED DIRECTLY BELOW THE PIPE AND BROUGHT TO THE SURFACE AT 500' MINIMUM INTERVALS. WIRE SHALL EXTEND A MINIMUM OF 12" ABOVE GRADE AT EACH INTERVAL, AND BE COILED AND PLACED IN A VALVE BOX, METER BOX, MANHOLE, CLEANOUT OR OTHER APPLICABLE STRUCTURE.

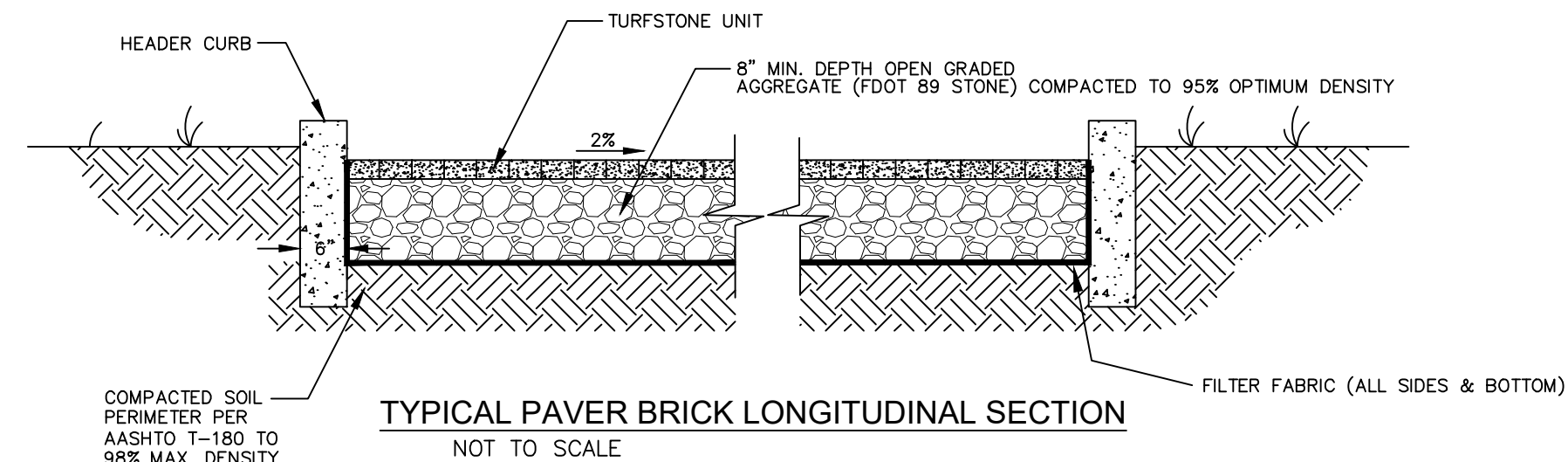
TRACING WIRE BETWEEN INTERVALS SHALL BE INSTALLED SO AS TO PROVIDE CONTINUOUS CURRENT WHEN LINE LOCATION EQUIPMENT IS CONNECTED TO THE TRACING WIRE. WIRE BRANCHING FROM MAIN LINES SHALL BE LINKED BY A CITY APPROVED CONNECTOR SUCH AS KING # 2011 SAFETY SEALED CONNECTORS OR APPROVED EQUAL.

COLOR CODING:
 POTABLE WATER SYSTEM: BLUE
 RECLAIMED WATER SYSTEM: LAVENDER
 SANITARY SEWER FORCE MAIN SYSTEM: GREEN

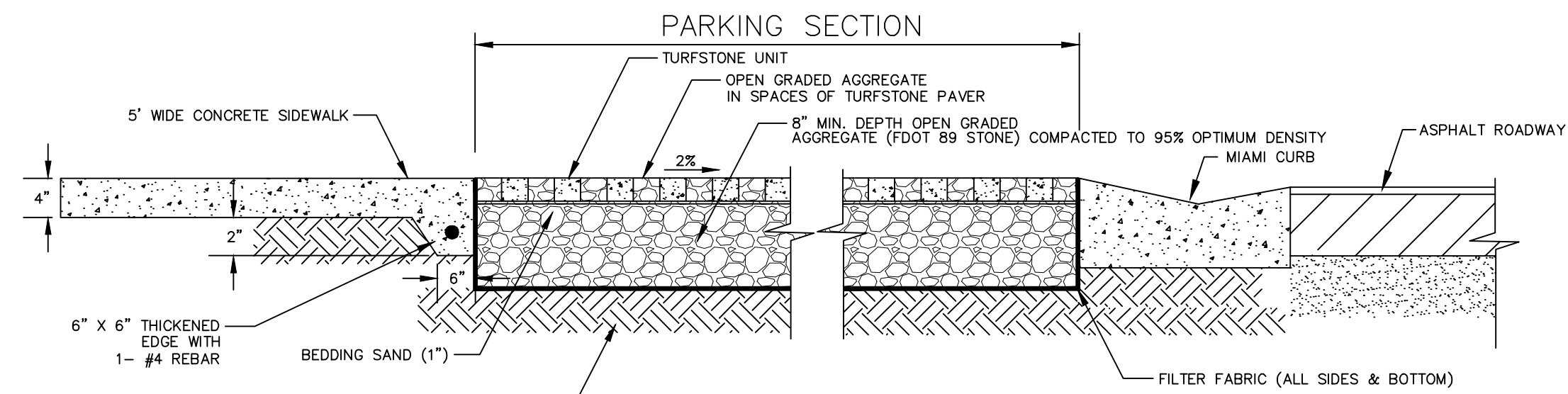
- POTABLE WATER AND RECLAIMED WATER SYSTEMS: WIRE SHALL BE INSTALLED BELOW ALL MAINS AND SERVICE LINES AND ATTACHED TO VALVES, HYDRANTS AND FITTINGS. WIRE INSTALLED WITH SERVICE LINES SHALL CONNECT TO THE WIRE INSTALLED BELOW THE MAIN AND EXTEND TO THE CURB STOP.
- FIRE SPRINKLER LINES: WIRE SHALL CONNECT TO THE WIRE INSTALLED BELOW THE MAIN AND EXTEND TO THE RISER CONNECTION.
- SANITARY SEWER FORCE MAINS: WIRE SHALL BE INSTALLED BELOW THE FORCE MAIN AND ATTACHED TO ALL VALVES AND FITTINGS AND BROUGHT TO THE SURFACE AND PLACED IN A METAL, CITY APPROVED, VALVE BOX.
- DEAD END MAINS: WIRE SHALL BE PLACED IN A PROPERLY IDENTIFIED METAL VALVE BOX AT THE END OF THE RUN.
- WIRE SHALL NOT BE FASTENED OR COILED TO VALVE OPERATING NUT.

**GENERAL NOTES
 RECLAIMED WATER SYSTEM CONSTRUCTION**

- THE CITY SHALL BE NOTIFIED PRIOR TO BEGINNING ANY RECLAIMED WATER SYSTEM CONSTRUCTION.
- DEWATERING SHALL BE PROVIDED TO KEEP GROUNDWATER ELEVATION A MINIMUM OF 6 INCHES BELOW RECLAIMED WATER MAIN BEING LAID.
- ALL RECLAIMED WATER MAINS SHALL BE LAID ON A FIRM FOUNDATION WITH ALL UNSUITABLE MATERIAL (MUCK, ROCK, COQUINA, ETC.) REMOVED AND REPLACED WITH CLEAN GRANULAR MATERIAL.
- TRENCHES SHALL BE BACKFILLED WITH CLEAN GRANULAR MATERIAL IN MAX. 1' LIFTS WITH A MINIMUM COMPACTION OF 98 PERCENT (AASHTO-T180) IN PAVED AREAS AND 90 PERCENT IN UNPAVED AREAS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT TRENCH COMPACTION TESTS BE PROVIDED AT POINTS 1 FOOT ABOVE THE PIPE AND AT 1 FOOT VERTICAL INTERVALS TO FINISH GRADE, AT A MINIMUM SPACING OF EVERY 300 FEET, AND TO FURNISH COPIES OF TEST REPORTS PROMPTLY TO THE CITY.
- METALLIZED PIPE LOCATION TAPE SHALL BE LOCATED 15 INCHES BELOW FINISHED GRADE OR AS SPECIFIED BY MANUFACTURER FOR ALL PVC LINES. MARKER TAPE SHALL BE USED ON ALL DUCTILE IRON PIPE.
- RECLAIMED WATER SERVICES (SINGLE 1") SHALL BE POLYETHYLENE TUBING (PURPLE IN COLOR); POLYBUTYLENE SHALL NOT BE ALLOWED.
- ALL RECLAIMED WATER SERVICE ENDINGS SHALL BE MARKED WITH 4" X 4" LUMBER (PRESSURE TREATED) EXTENDING 4 FEET ABOVE GRADE, WITH WATER SERVICES SECURED 24" ABOVE THE GROUND. WIRE TIES SHALL BE USED TO SECURE THE CURB STOPS TO SUPPORT POSTS.
- RECLAIMED WATER VALVES SHALL BE PLACED AT ALL STREET INTERSECTIONS AND AT MAXIMUM SPACINGS OF 1000 FEET.
- AT ALL RECLAIMED WATER MAIN TEES AND CROSSES, VALVES SHALL BE INSTALLED ON ALL LEGS EXCEPT ONE.
- APPROVED RECLAIMED WATER VALVE TYPES ARE THE FOLLOWING:
 - STANDARD GATE VALVES LESS THAN 48" DIAMETER RESILIENT SEAT GATE VALVES (AWWA C-509 OR C-515).
 - TAPPING VALVES AND MECHANICAL TAPPING SLEEVE SHALL BE STAINLESS STEEL. (AWWA C - 509)



TYPICAL PAVER BRICK LONGITUDINAL SECTION
 NOT TO SCALE



TYPICAL PAVER BRICK PAVER CROSS SECTION
 NOT TO SCALE

STANDARD CONSTRUCTION DETAIL
UTILITY PIPE LOCATION MATERIALS
 NTS
 INDEX
 M-10
 FEB 2018

STANDARD CONSTRUCTION DETAIL
GENERAL NOTES RECLAIMED WATER SYSTEM CONSTRUCTION
 INDEX
 RW-1A
 FEB 2018

**GENERAL NOTES
 RECLAIMED WATER SYSTEM CONSTRUCTION**

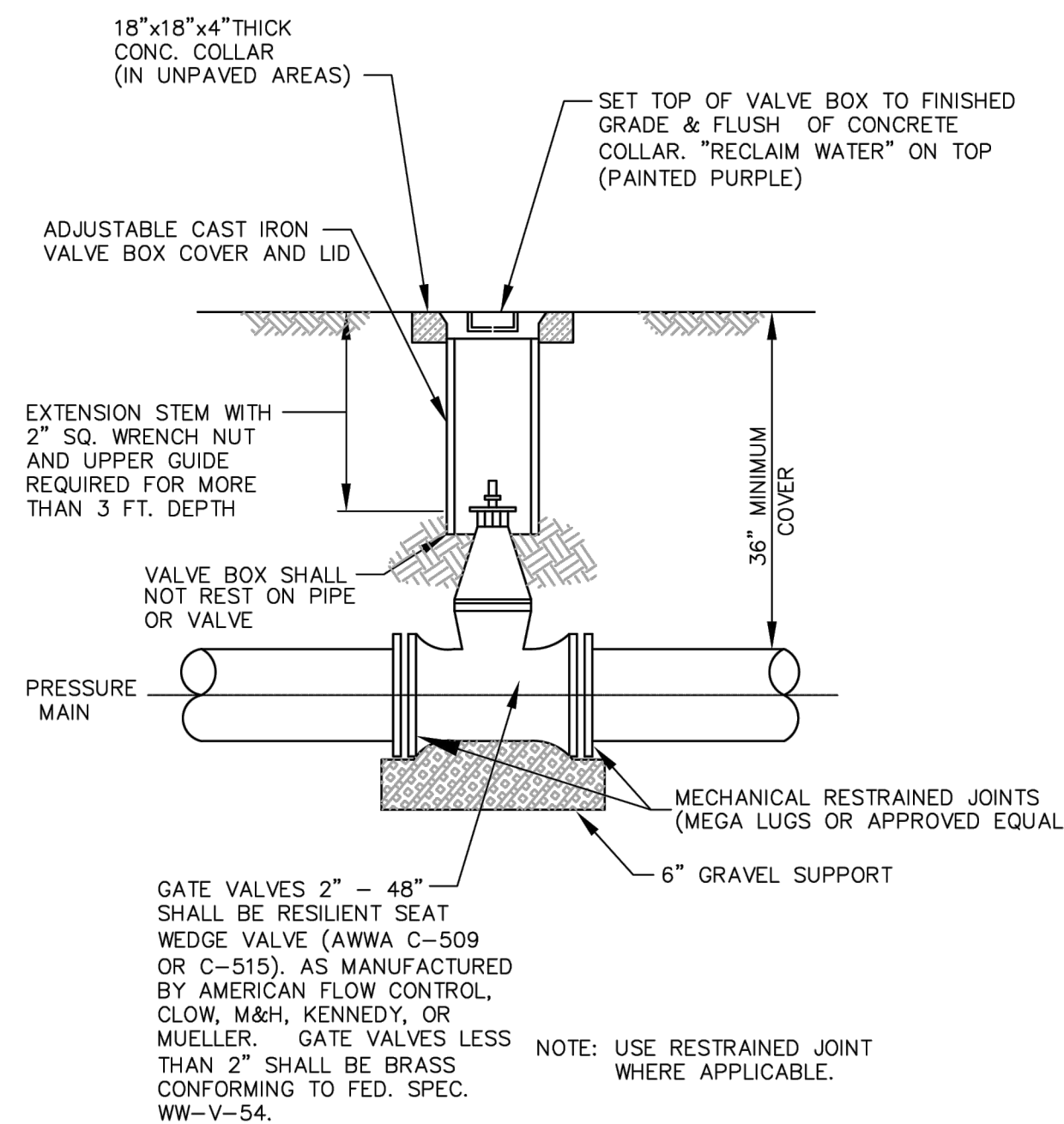
- ALL RECLAIMED WATER VALVE BOXES SHALL BE ADJUSTED TO FINISH GRADE AND THE LIDS PAINTED PURPLE TO MAKE THEM PLAINLY VISIBLE.
- RECLAIMED WATER VALVES SHALL BE COMPLETELY OPENED BY THE CONTRACTOR UPON FINAL ACCEPTANCE OF NEW RECLAIMED WATER SYSTEMS IN THE PRESENCE OF THE CITY.
- HYDRANTS SHALL BE LOCATED AS REQUIRED TO OPTIMIZE FLUSHING
 - ALL HYDRANTS SHALL BE CONSTRUCTED TO MAKE THEM EASILY ACCESSIBLE TO MAINTENANCE PERSONNEL. THE MAIN NOZZLE CONNECTION SHOULD ALWAYS FACE THE STREET AND BE 18"-24" ABOVE GRADE.
 - ALL PROPOSED RECLAIMED WATER MAINS SHALL BE FLUSHED AND CLEANED WITH A POLY PIG IN ACCORDANCE WITH LATEST AWWA STANDARDS.
- AS STANDARD PRACTICE, RECLAIMED WATER MAINS SHALL BE INSTALLED 4 FEET OFF THE BACK OF CURB ON OPPOSITE SIDE OF ROADWAY FROM WATER MAIN OR AS APPROVED BY THE CITY.
- ALL RECLAIMED WATER MAINS SHALL HAVE A MINIMUM COVER OF 36 INCHES. IN SPECIAL CASES WHERE IT IS IMPOSSIBLE OR INAPPROPRIATE TO PROVIDE ADEQUATE COVER, DUCTILE IRON CLASS 350 OR CONCRETE ENCASUREMENT MAY BE USED AS APPROVED BY THE CITY.
- RECLAIMED WATER MAINS SHALL BE AWWA C-900 CL 150, HDPE SDR-11, OR D.I.P. CLASS 350 STANDARD CEMENT LINED.
- UPON CONSTRUCTION COMPLETION PRIOR TO ACCEPTANCE OF THE SYSTEM, IT SHALL BE THE DESIGN ENGINEER'S RESPONSIBILITY TO ENSURE THAT THE SYSTEM IS PROPERLY FLUSHED, PIGGED, AND PRESSURE TESTED BEFORE PAVING.
- MEGALUG OR EQUIVALENT, RESTRAINED JOINT SYSTEM MAY BE USED ON ALL RESTRAINED FITTINGS, VALVES, ETC. MINIMUM DEPTH OF BURY ON PIPES NOT MEETING REQUIRED COVER REQUIREMENTS SHALL FOLLOW THE MOST RECENT DIPRA THRUST RESTRAINT DESIGN GUIDELINES.
- CERTIFIED AS-BUILT DRAWINGS (24"x36") SHALL BE PROVIDED TO THE CITY PRIOR TO PAVING AND ANY USE OF THE SYSTEM. PROVIDE THREE (3) BLUELINED COPIES, ONE (1) MYLAR, AND ONE (1) DIGITAL COPY OF AS-BUILT DRAWINGS.

**GENERAL NOTES
 RECLAIMED WATER SYSTEM CONSTRUCTION**

- RECLAIMED WATER SYSTEMS SHALL BE PRESSURE TESTED AT 150 PSI STATIC PRESSURE FOR A PERIOD OF 2 HOURS PER AWWA STANDARDS. TESTS SHALL BE CONDUCTED BEFORE FINAL PAVING (IF APPLICABLE) IN THE PRESENCE OF THE CITY AND CERTIFIED BY THE ENGINEER.
- ALL RECLAIMED WATER SERVICES SHALL BE MARKED WITH A "↓" SAWCUT INTO THE CURB OR BY METAL TABS SET INTO THE PAVEMENT.
- ALL RECLAIMED WATER VALVES AND BLOW-OFFS SHALL BE MARKED WITH AN "X" SAWCUT INTO THE CURB OR BY METAL TABS SET INTO THE PAVEMENT. LOCATION OF METAL TABS IN INCHES FROM EDGE OF PAVEMENT SHALL EQUAL DISTANCE IN FEET FROM EDGE OF PAVEMENT TO VALVE.
- UNIFLANG 1300 SERIES PIPE RESTRAINTS AS MANUFACTURED BY FORD OR APPROVED EQUAL MAY BE USED AS APPROPRIATE FOR RESTRAINING IN-LINE PRESSURE PIPE EACH SIDE OF PIPE JOINT. AS REQUIRED BY RESTRAINT TABLE.
- TRACING WIRE SHALL BE INSTALLED IN ACCORDANCE WITH UTILITY PIPE LOCATION MATERIALS DETAIL.
- NO GALVANIZED PIPE, FITTINGS, ETC. ARE ACCEPTED.
- ALL METER BOXES SHALL BE INSTALLED AT THE RIGHT OF WAY LINE ONLY, REGARDLESS OF SIZE.
- SEE CHART BELOW FOR WATER MAIN SIZE AND MATERIALS.

M A T E R I A L S		
DIAMETER	MATERIAL	STANDARD
2" - 4"	PVC 1120 / SDR 21	ASTM D 2241
> 4" - 12"	PVC DR-18	AWWA C 900-07
> 4" - 12" DEDICATED FIRE LINE	PVC DR-14	AWWA C 900-07
(18" - 24" - 36" DR - 18) (30" - 36" DR - 21)	PVC 1120	AWWA C 905
ALL SIZES	HDPE DIPS DR 11	ASTM F 714

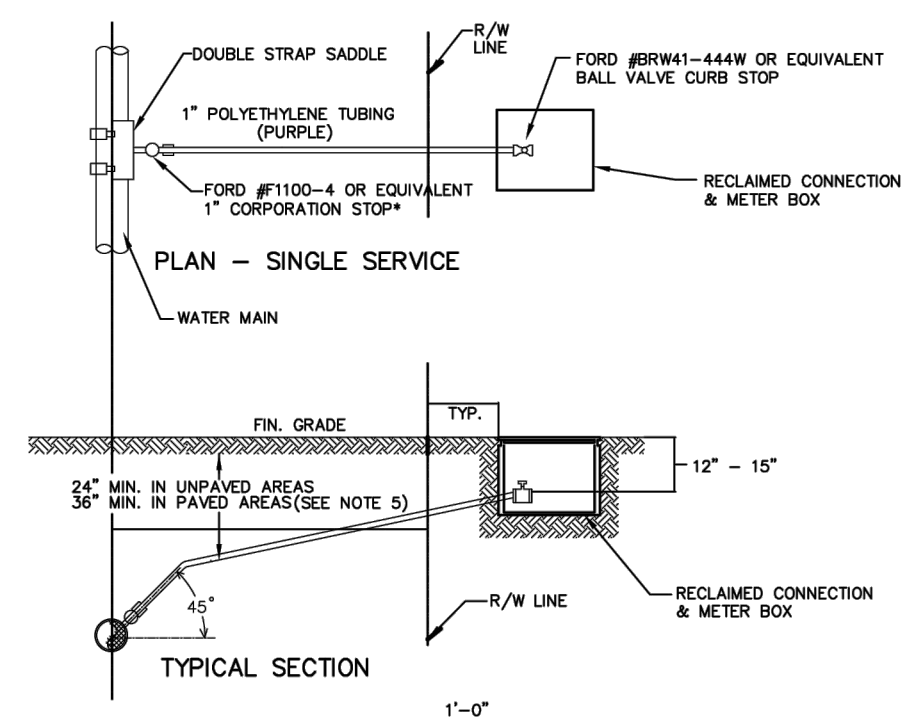
NOTE: PVC PIPE COLOR SHALL BE PURPLE, BLUE WITH PURPLE LOCATOR TAPE FOR RAW WATER MAIN.



GATE VALVES 2" - 48" SHALL BE RESILIENT SEAT WEDGE VALVE (AWWA C-509 OR C-515), AS MANUFACTURED BY AMERICAN FLOW CONTROL, CLOW, M&H, KENNEDY, OR MUELLER. GATE VALVES LESS THAN 2" SHALL BE BRASS CONFORMING TO FED. SPEC. WW-V-54.

NOTE: USE RESTRAINED JOINT WHERE APPLICABLE.

VALVE SCHEDULE	
FORD OR EQUIVALENT	
REUSE SERVICES	
VALVES AT MAIN	
1"	F1100-4
2"	FB1100-7
VALVES AT R/W LINE	
1"	BRW41-444W
2"	BRW41-777W



NOTES:

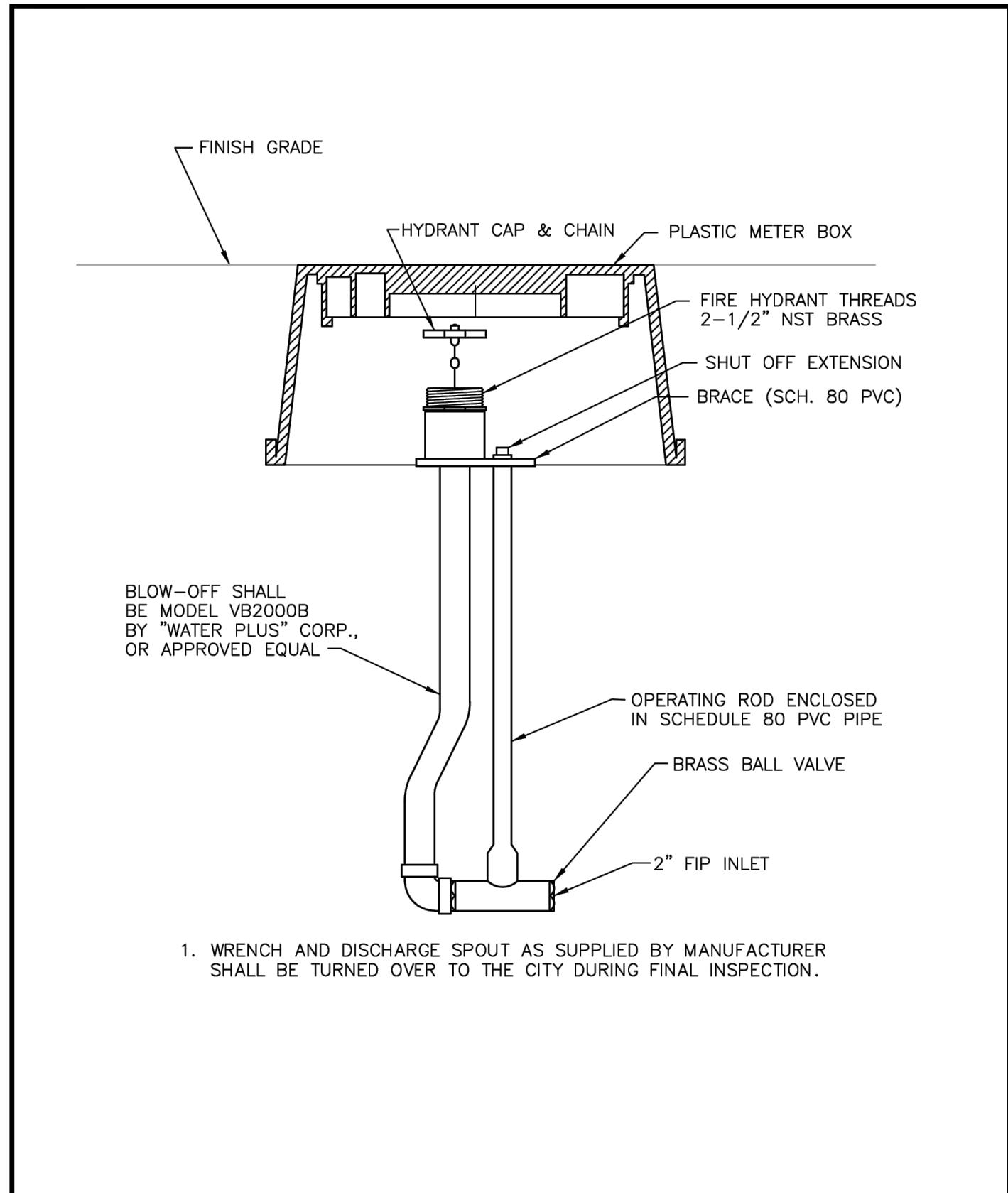
- HDPE SHALL BE 200 PSI, NSF APPROVED, SDR 9, MEETING ASTM D1248. TUBING SHALL BE ENDOT ENDOTRACE (OR APPROVED EQUAL)
- ALL SERVICE TAPS SHALL BE NO CLOSER THAN 2'-0" STAGGERED INTERVAL OR WITHIN 2'-0" OF BELL OR SPIGOT ENDS.
- IN AREAS TO BE PAVED PROVIDE A 2" MIN. PVC SCHEDULE 40 SLEEVE FOR PE-TUBING. SLEEVE SHALL EXTEND A MIN. OF 2' BEHIND BACK OF CURB AT EACH SIDE OF ROAD.

STANDARD CONSTRUCTION DETAIL
GENERAL NOTES RECLAIMED WATER SYSTEM CONSTRUCTION
 INDEX
 RW-1B
 FEB 2018

STANDARD CONSTRUCTION DETAIL
GENERAL NOTES RECLAIMED WATER SYSTEM CONSTRUCTION
 INDEX
 RW-1C
 FEB 2018

STANDARD CONSTRUCTION DETAIL
GATE VALVE AND VALVE BOX
 NTS
 INDEX
 RW-2
 FEB 2018


STANDARD CONSTRUCTION DETAIL
RECLAIMED WATER LATERAL SERVICE 1" OR 2" SERVICES
 NTS
 INDEX
 RW-3
 FEB 2018



BLOW-OFF SHALL BE MODEL VB2000B BY "WATER PLUS" CORP., OR APPROVED EQUAL

OPERATING ROD ENCLOSED IN SCHEDULE 80 PVC PIPE
BRASS BALL VALVE
2" FIP INLET

1. WRENCH AND DISCHARGE SPOUT AS SUPPLIED BY MANUFACTURER SHALL BE TURNED OVER TO THE CITY DURING FINAL INSPECTION.

	STANDARD CONSTRUCTION DETAIL	INDEX
	BLOW-OFF ASSEMBLY WITH METER BOX	W-11
	NTS.	FEB 2018

Mead & Hunt

Mead and Hunt, Inc.
2440 Deming Way
Middleton, WI 53562
phone: 608-273-6380
meadhunt.com



© Copyright 2024 Mead & Hunt, Inc. This document, or any portion thereof, shall not be duplicated, disclosed, or used on any other project or extension of this project except by written agreement with Mead & Hunt, Inc. Mead & Hunt shall not be responsible for any unauthorized use of, or alteration to these documents.

CITY OF FLAGLER BEACH
S. CENTRAL WATER MAIN
REPLACEMENT
FLAGLER BEACH, FLORIDA

ISSUED

M&H NO.: 1000709-231849.01
DATE: August 16, 2024
DESIGNED BY: CMC
DRAWN BY: MRM
CHECKED BY: DAK
DO NOT SCALE DRAWINGS

SHEET CONTENTS
STANDARD DETAILS

SHEET NO.

C-503

X:\1000709\231849_01\TECH\CAD\DRAWINGS\231849_01_C-501_STANDARD_DETAILS.DWG
10/15/2024 3:51:41 PM