

GATE EXPRESS CARWASH #7021 @ SR200 & MINER RD.

0 MINER RD.
YULEE, NASSAU COUNTY, FLORIDA

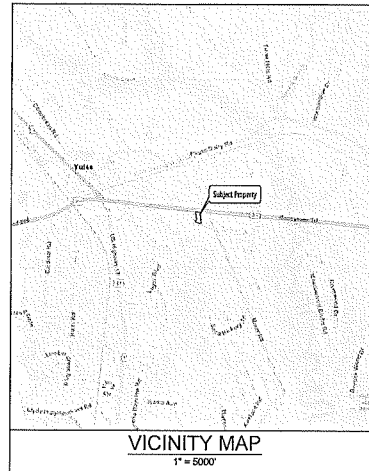
DEVELOPER:
BFC Property Holdings, Inc.
Mike Junk, VP
9540 San Jose Blvd.
Jacksonville, FL 32257

ENGINEER:
Prosser, Inc.
Matthew D. Melchiori, P.E.
13901 Sutton Park Drive South, Suite 200
Jacksonville, FL 32224-0229
(904) 739-3655

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Janet O. Whitmill, RLA, Inc.
Janet Whitmill
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Jacksonville, FL 32247
(904) 398-7688

ENVIRONMENTAL CONSULTANT:
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GEOTECHNICAL ENGINEER:
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Kirk A. McIntosh, P.E.
6256 Greenland Rd.
Jacksonville, FL 32258
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010.0	STORMWATER POLLUTION PREVENTION PLAN - CONTRACTORS CERTIFICATION

AUGUST, 2021		
NO.	DATE	REVISION
1	10/05/2021	1ST JEA/SRWMD SUBMITTAL
2	03/06/2022	2ND JEA/SRWMD SUBMITTAL
3	03/11/2022	1ST NASSAU COUNTY SEP SUBMITTAL
4	5/16/2022	2ND NASSAU COUNTY/SRWMD SUBMITTAL
Prosser Ito. 118034.01		

Prepared for:
BFC PROPERTY HOLDINGS, INC.

Prepared By:
PROSSER
Creative Visionaries. Engineering Minds™
13901 Sutton Park Drive South, Suite 200
Jacksonville, Florida 32224-0229
904.739.3655

www.prosserinc.com
Florida Certificate of Authorization Number: 00004050



ENGINEER OF RECORD:
Name: MATTHEW D. MELCHIORI, P.E. Number: 77053
Signature: _____ Date: _____

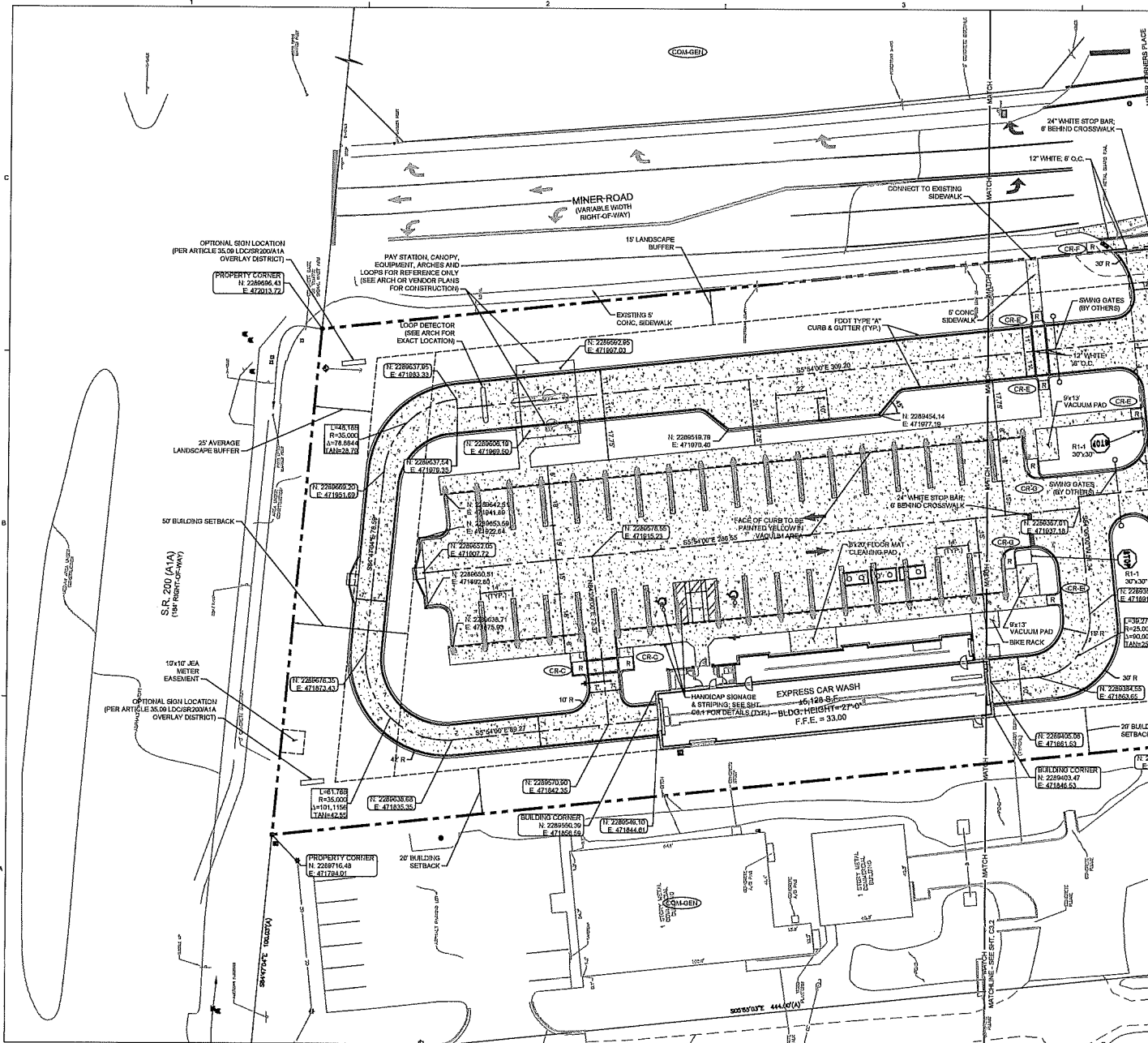
BFC PROPERTY HOLDINGS, INC.

GATE EXPRESS CARWASH #7021
@ SR200 & MINER RD.

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Jacksonville, Florida 32224-0229
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Florida Certificate of Authorization
Number: 00004050

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LEGEND

- RIGHT-OF-WAY / PROPERTY LINE
- SLT FENCE / LIMITS OF CONSTRUCTION
- 5' BUFFER
- SETBACK
- CONCRETE
- ASPHALT
- YELLOW/WHITE-SET DETECTABLE WARNING
- ZONING DESIGNATION
- NUMBER OF STD. PARKING SPACES
- NORTHING/EASTING COORDINATES
- HANDICAP RAMP (SEE FOOT STD. INDEX 502-002)
- LANDING RAMP
- TRANSITION TO ZERO REVEAL IN 5'

- NOTES**
1. DETECTABLE WARNING MUST MEET CH. 11 OF FLORIDA BUILDING CODE & THE AMERICANS WITH DISABILITIES ACT. EXPOSED AGGREGATE RIVER ROCK WITH ENCLID SUPER CLEAR DIAMOND II SEALER. SEE SHEET C1.0, GENERAL. NOTE: 2.0 FOR DETECTABLE WARNING INFORMATION IN RW. ALL STRIPING WITHIN THE PUBLIC ROW SHALL BE 6" WIDE THERMOPLASTIC UNLESS OTHERWISE NOTED. CURB STRIPING MAY BE PAINTED PER DETAIL ON SHT. C1.1.
 2. FEMA FIRM PANEL 12060C0240, FLOOD ZONE X.
 3. GUTTER PAN SHALL SLOPE IN SAME DIRECTION AS THE ADJACENT PAVEMENT.
 4. FOR GENERAL NOTES AND AS-BUILT REQUIREMENTS SEE SHEET C1.0.
 5. SEE ARCHITECTURAL PLANS FOR EXACT BUILDING LAYOUT, WALLS, UTILITY SLABS, ETC.
 6. SEE ELECTRICAL PLANS FOR LIGHT POLE LOCATIONS.
 7. ALL RAMP ARE 5' UNLESS OTHERWISE NOTED ON THESE PLANS.
 8. ALL DIMENSIONS ARE TAKEN FROM FACE OF CURB UNLESS OTHERWISE NOTED.
 9. SEE LANDSCAPE PLANS FOR LANDSCAPE AND PLANTING DETAILS.
 10. ALL NORTHING AND EASTING COORDINATES BASED OFF STATE PLANE COORDINATE SYSTEM FROM ARC SURVEYING & MAPPING INC., DATED BY 4/20/16.
 11. PLANS ARE HAYD 1988.
 12. SEE ARCH. PLANS FOR BUILDING LOCATIONS, SPECIFICATIONS & LAYOUT.

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**GATE EXPRESS
CARWASH #7021 @
SR200 & MINER RD.**

DATE: AUGUST, 2021
PROJECT NO.: 11804.01
DESIGNED BY: MDM
DRAWN BY: DPT
SCALE: SEE PLAN

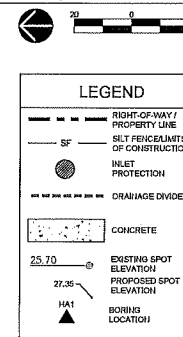
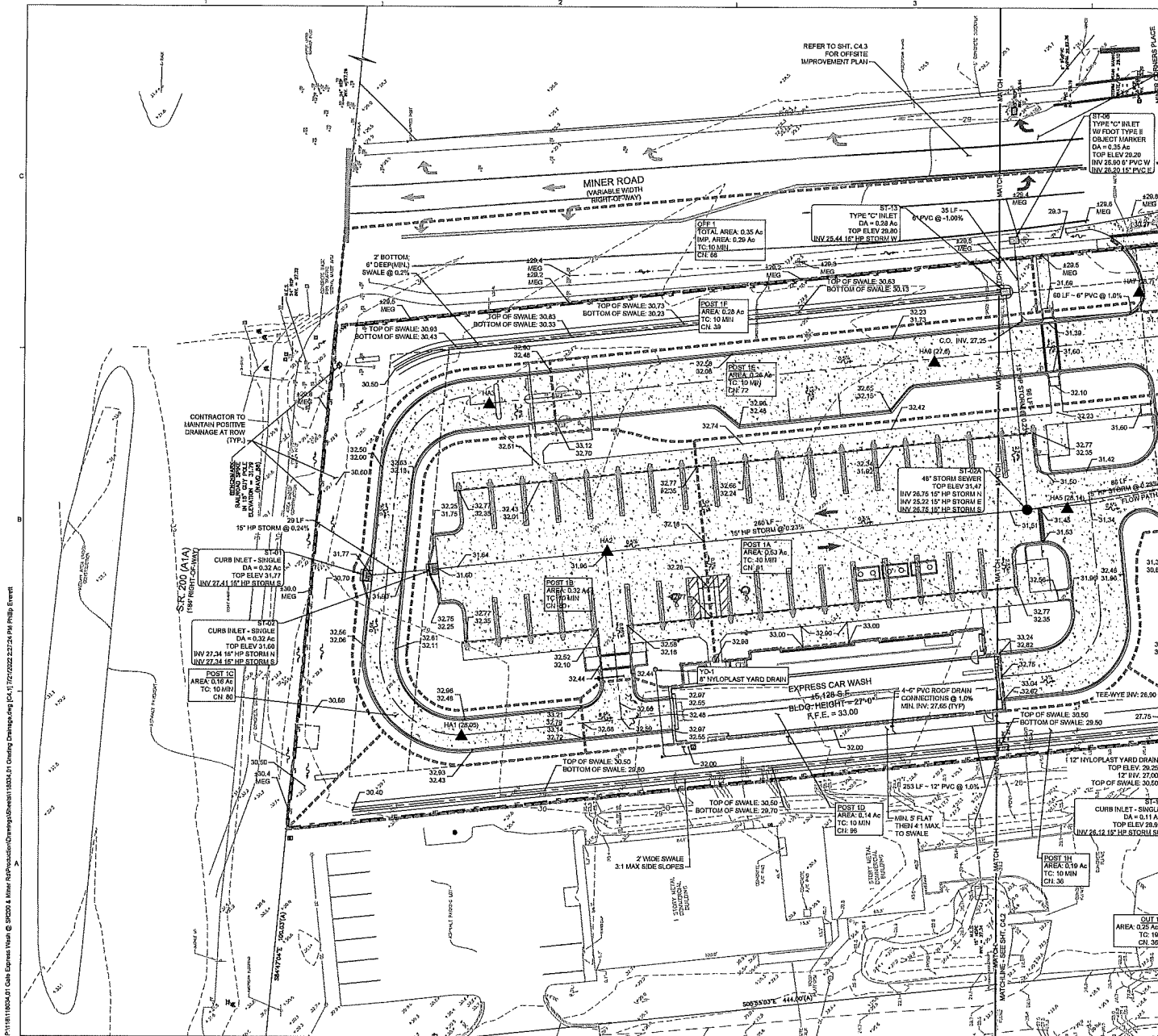
No.	Date	Revision
1	10/05/2021	1ST REVISIONS SUBMITTAL
2	03/09/2022	2ND REVISIONS SUBMITTAL
3	03/10/2023	3RD REVISIONS SUBMITTAL
4	05/19/2023	4TH REVISIONS SUBMITTAL

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SHEET TITLE

SITE LAYOUT

C3.1
SHEET

MATTHEW D. MELCHIORI, P.E.
FL. Lic. No. 77653
DATE



- NOTES:**
1. CONTRACTOR TO FIELD VERIFY EXISTING ELEVATIONS AT ALL TIEHIS AND COORDINATE WITH THE ENGINEER PRIOR TO CONSTRUCTION.
 2. CONTRACTOR TO MAINTAIN A POSITIVE SLOPE AWAY FROM PROPOSED BUILDINGS.
 3. CONTRACTOR SHALL COORDINATE W/ LANDSCAPE CONTRACTOR ON FINAL GRADING IN PLANTING AREAS.
 4. CONTRACTOR TO USE EXTREME CAUTION DURING CONSTRUCTION AND MAINTAIN MINIMUM COVER OVER EXISTING UTILITIES AT ALL TIMES.
 5. ELEVATIONS SHOWN HEREON ARE BASED UPON NORTH AMERICAN VERTICAL DATUM 1985 (NAVD 85) AS PER SURVEY PROVIDED BY AEC SURVEYING & MAPPING, INC., DATED 01/14/16.
 6. CONTRACTOR SHALL CONSTRUCT GUTTER PAVT TO MATCH DIRECTION & SLOPE OF ADJACENT PAVEMENT.
 7. ALL PEDESTRIAN PATHS SHALL COMPLY WITH FEDERAL ADA AND FLORIDA BUILDING CODE. SIDEWALKS SHALL NOT EXCEED 2% LONGITUDINAL AND 2% CROSS SLOPES. IF CONTRACTOR CANNOT ACHIEVE, THEY SHALL NOTIFY ENGINEER BEFORE MAKING IMPROVEMENTS.
 8. STORMWATER PIPE MATERIAL PER PLAN UNLESS APPROVED BY ENGINEER.
 9. ALL CONCRETE STRUCTURES SHALL BE CONSTRUCTED WITH 10 CHAMFERED EDGES. ALL BUTTING PAVEMENT SHALL BE JOINTED AND SEALED PER DETAIL ON SHEET C6.2.
 10. ALL SWALES TO BE SOEDED.

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GATE EXPRESS
CARWASH #7021 @
SR200 & MINER RD.

DATE: AUGUST, 2021
PROJECT NO.: 118034.01
DESIGNED BY: MDA
DRAWN BY: DPT
SCALE: SEE PLAN

No.	Date	Revision
1	10/02/2021	1ST JAVASOVIEN SUBMITTAL
2	03/02/2022	2ND JAVASOVIEN SUBMITTAL
3	10/10/2022	01 HANSON COUNTY EIR SUBMITTAL
4	05/18/2023	2ND HANSON COUNTY EIR SUBMITTAL

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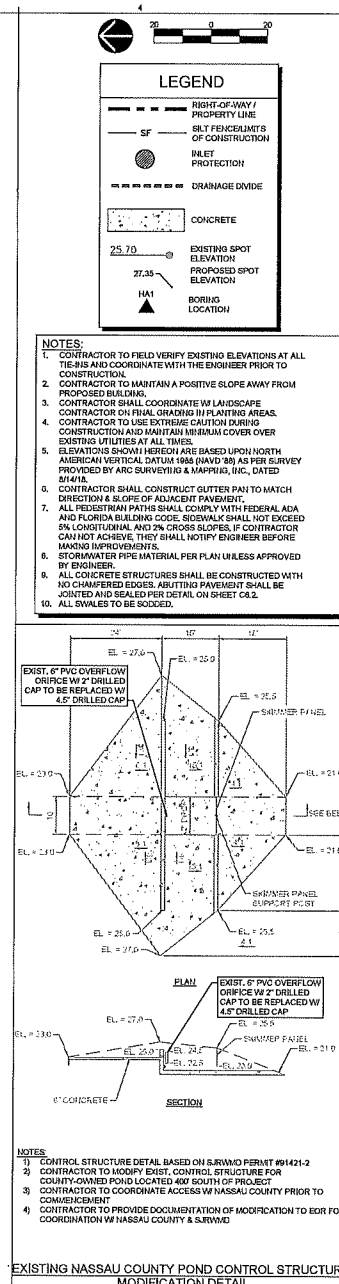
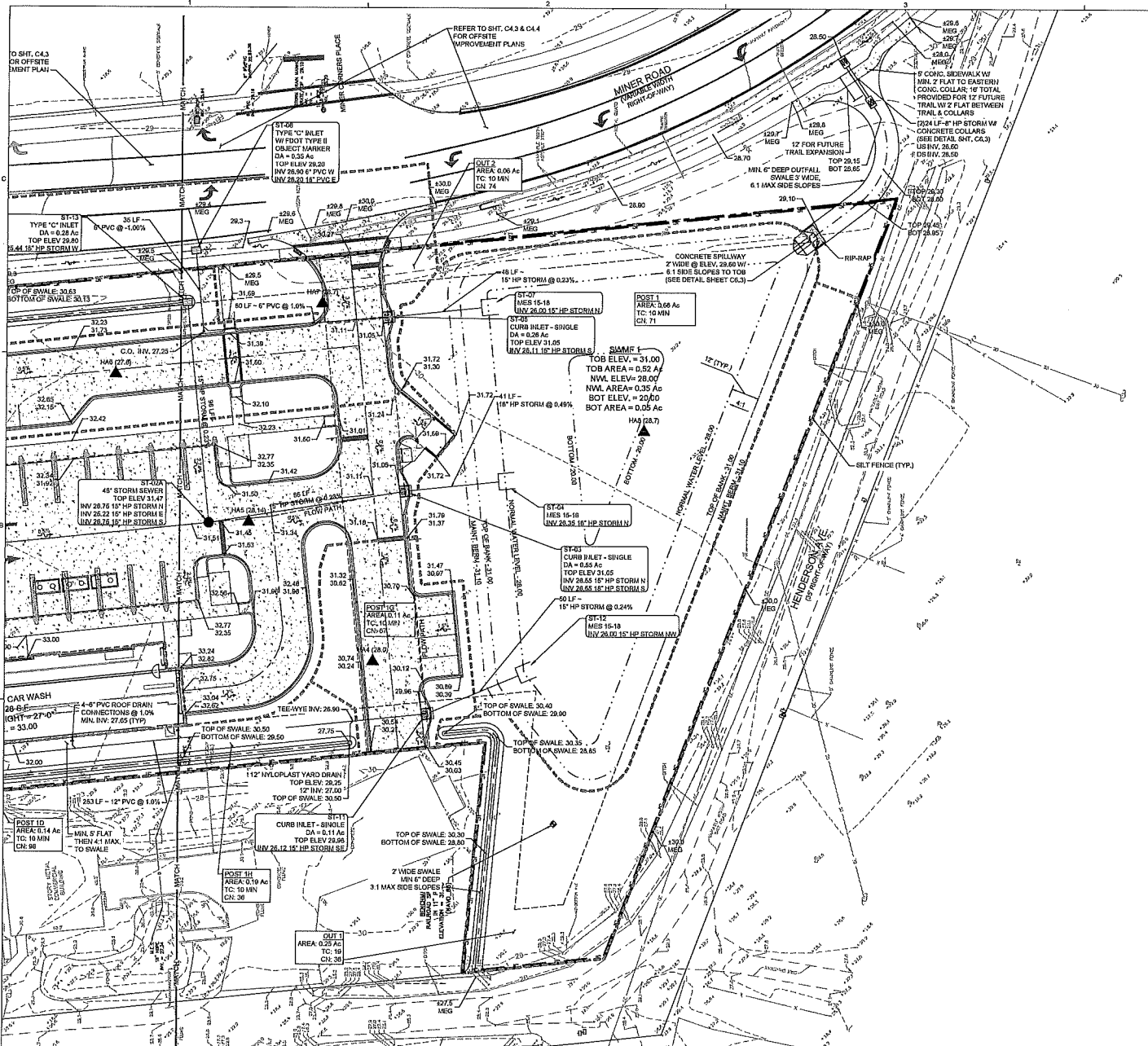
GRADING &
DRAINAGE PLAN

C4.1

MATTHEW D. MELCHIORI, P.E.
FILE NO. 77053
DATE: SHEET

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GATE EXPRESS Carwash

GATE EXPRESS
CARWASH #7021 @
SR200 & MINER RD.

DATE: AUGUST, 2021
PROJECT NO.: 110034.01
DESIGNED BY: MCM
DRAWN BY: DPT
SCALE: SEE PLAN

No.	Date	Revision
1	10/20/2021	1ST DRAFT/REVISED SUBMITTAL
2	10/20/2021	2ND DRAFT/REVISED SUBMITTAL
3	10/20/2021	3RD DRAFT/REVISED SUBMITTAL
4	10/20/2021	4TH DRAFT/REVISED SUBMITTAL

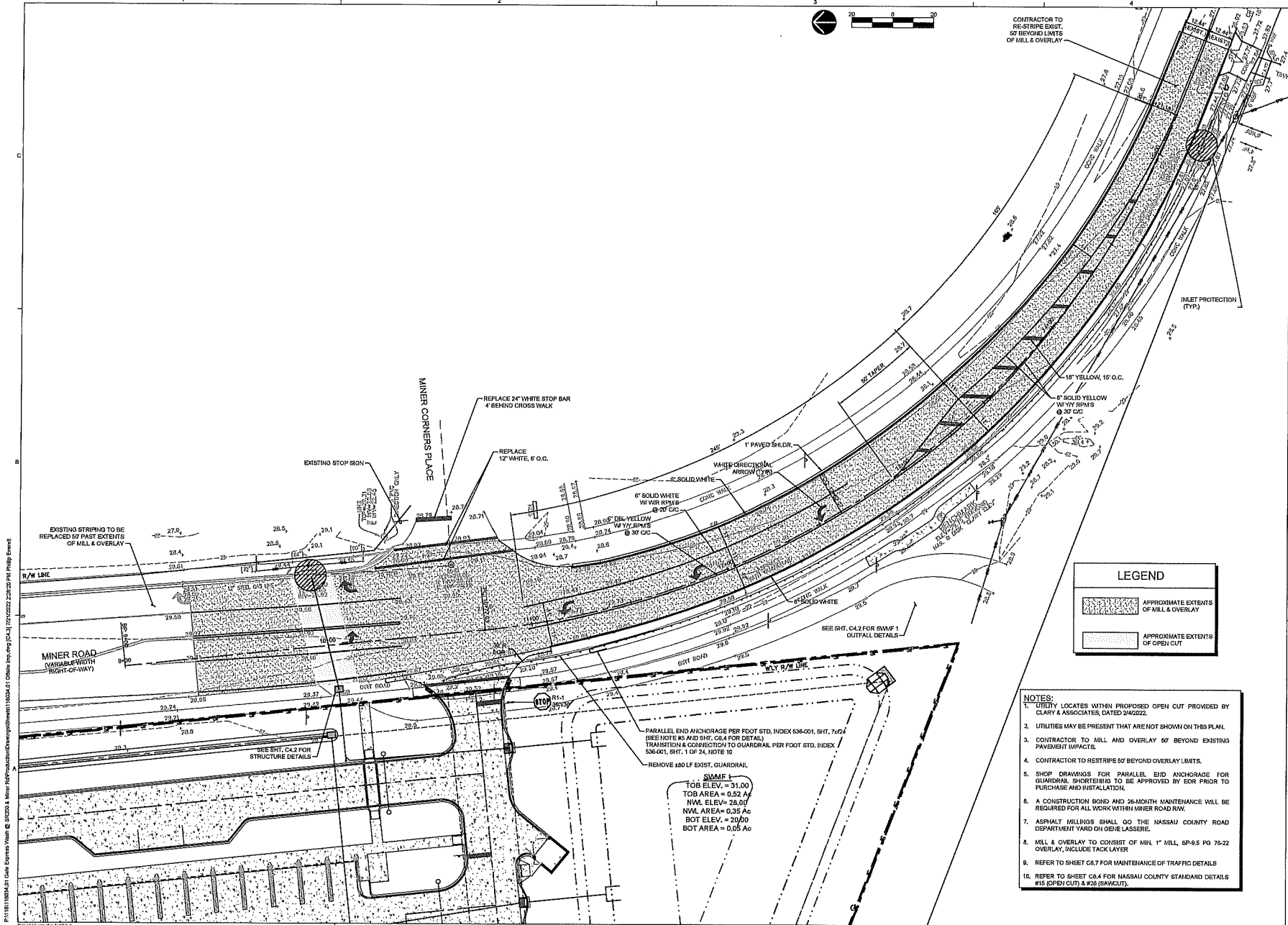
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SHEET TITLE

GRADING & DRAINAGE PLAN

C4.2

MATTHEW B. MELCHIORI, P.E.
FILE NO. 77663
DATE



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GATE EXPRESS
CARWASH #7021 @
SR200 & MINER RD.

LEGEND	
	APPROXIMATE EXTENTS OF MILL & OVERLAY
	APPROXIMATE EXTENTS OF OPEN CUT

- NOTES:**
- UTILITY LOCATES WITHIN PROPOSED OPEN CUT PROVIDED BY CLARY & ASSOCIATES, DATED 2/4/2022.
 - UTILITIES MAY BE PRESENT THAT ARE NOT SHOWN ON THIS PLAN.
 - CONTRACTOR TO MILL AND OVERLAY 50' BEYOND EXISTING PAVEMENT IMPACTS.
 - CONTRACTOR TO RESTRIPE 50' BEYOND OVERLAY LIMITS.
 - SHOP DRAWINGS FOR PARALLEL EID ANCHORAGE FOR GUARDRAIL SHORTENING TO BE APPROVED BY EOR PRIOR TO PURCHASE AND INSTALLATION.
 - A CONSTRUCTION BOND AND 24-MONTH MAINTENANCE WILL BE REQUIRED FOR ALL WORK WITHIN MINER ROAD ROW.
 - ASPHALT MILLINGS SHALL GO TO THE NASSAU COUNTY ROAD DEPARTMENT YARD ON ONE LASSERE.
 - MILL & OVERLAY TO CONSIST OF MIN. 1" MILL, SP-9.5 PG 76-22 OVERLAY, INCLUDE TACK LAYER.
 - REFER TO SHEET C4.7 FOR MAINTENANCE OF TRAFFIC DETAILS
 - REFER TO SHEET C4.4 FOR NASSAU COUNTY STANDARD DETAILS (R/S OPEN CUT) & R/S (PAVEMENT).

DATE:	AUGUST, 2021	
PROJECT NO.:	118034.01	
DESIGNED BY:	MDM	
DRAWN BY:	DPT	
SCALE:	SEE PLAN	
No.	Date	Revision
1	10/07/2021	1ST JAZZ/RVWD SUBMITTAL
2	03/09/2022	2ND JAZZ/RVWD SUBMITTAL
3	03/11/2022	1ST NASSAU COUNTY EIP SUBMITTAL
4	05/18/2022	2ND NASSAU COUNTY JAZZ/RVWD SUB

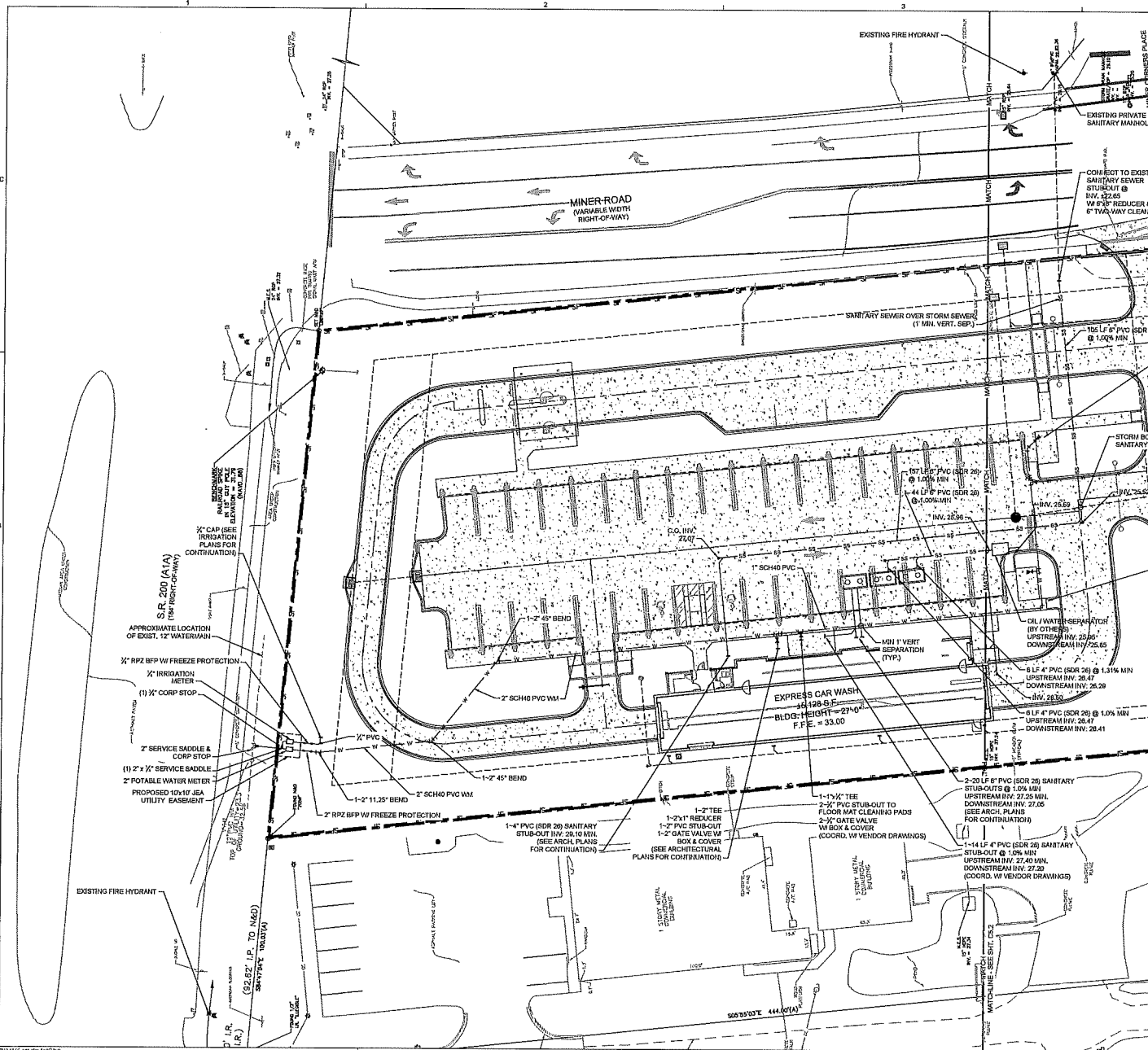
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SHEET TITLE
OFFSITE IMPROVEMENTS PLAN - STRIPING

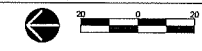
MATTHEW D. HELCHORI, P.E.
FL Lic. No. 77053
DATE

C4.3
SHEET

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- NOTES:**
1. ALL WATER MAIN VALVES SHALL BE LOCATED CLEAR OF SIDEWALKS AND/OR PARKING. CONTRACTOR SHALL ADJUST AS NECESSARY.
 2. CONTRACTOR TO LOCATE & PROTECT ALL EXIST. UTILITIES WITHIN ROW AND ON SUBJECT PROPERTY.
 3. WATER MAINS SHALL BE LAID TO PROVIDE HORIZONTAL DISTANCE OF AT LEAST THREE (3) FEET BETWEEN OUTSIDE OF ANY EXISTING OR PROPOSED STORM AND SANITARY SEWER.
 4. POTABLE WATER PIPE PENETRATIONS THROUGH CONCRETE SHALL BE SLEEVED IN ACCORDANCE WITH FBC SECTION 305.
 5. CONTRACTOR TO VERIFY LOCATION, SIZE AND INVERT OF ALL UTILITY CONNECTION POINTS PRIOR TO CONSTRUCTION AND CONTACT ENGINEER WITH ANY DISCREPANCIES.



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GATE EXPRESS
CARWASH #7021 @
SR200 & MINER RD.

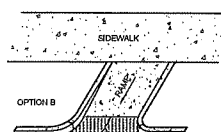
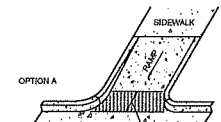
DATE: AUGUST, 2021
PROJECT NO.: 118034.01
DESIGNED BY: NDM
DRAWN BY: DPT
SCALE: SEE PLAN

No.	Date	Revision
1	08/02/2021	1ST REVISION SUBMITTAL
2	08/02/2021	2ND REVISION SUBMITTAL
3	08/10/2021	1ST HARRIS COUNTY EIP SUBMITTAL
4	05/18/2022	2ND HARRIS COUNTY EIP SUBMITTAL

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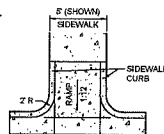
UTILITY PLAN

C5.1
MATTHEW D. WELCH/PRO, P.E.
FILE NO. 77653
DATE

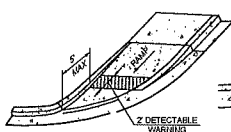
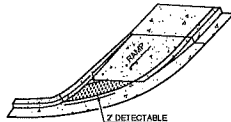


ISOMETRIC VIEW

CR-E

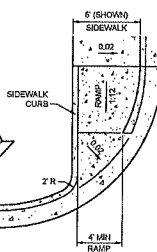


PLAN VIEW



ISOMETRIC VIEW

CR-G



PLAN VIEW

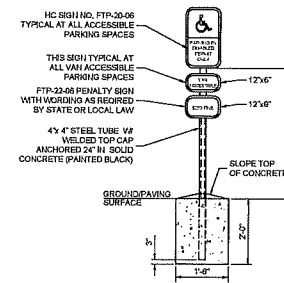
FDOT INDEX 522-002 ADA RAMP

1"=5'

FOOT DETECTABLE WARNING NOTES

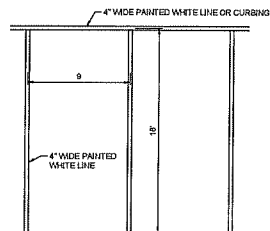
1. Detectable warnings shall be extended the full width of the ramp and to a depth of 2'. Detectable warnings shall be constructed in accordance with Specification Section 527. For the layout of detectable warnings, refer to the TYPICAL PLACEMENT OF DETECTABLE WARNING DETAILS. Detectable warnings shall not be provided on transition slopes.
2. When detectable warnings are placed on a slope greater than 5%, domes shall be aligned with the centerline of the ramp; otherwise domes are not required to be aligned.
3. Detectable warnings shall be required on sidewalks and shared use paths at:
 - a. Intersecting roads,
 - b. Median Crossings greater than or equal to 6' in width,
 - c. Railroad Crossings,
 - d. Signalized driveways.
4. Detectable Warnings - Acceptance Criteria:
 - a. Color and texture shall be complete and uniform.
 - b. 60% of individual truncated domes shall be in accordance with the Americans with Disabilities Act Standards for Transportation Facilities, Section 705.
 - c. There shall be no more than 4 non-compliant domes in any one square foot.
 - d. Non-compliant domes shall be adjacent to other non-compliant domes.
 - e. Surfaces shall not deviate more than 0.10" from a true plane.
5. Detectable warnings shall be installed no greater than 5' from the back of the curb or edge of pavement.
5. Detectable warnings shall not be installed over grade breaks.

* REFER TO FDOT STANDARD PLAN 522-002, CURRENT EDITION.



TYPICAL ADA PARKING SPACE SIGN

NOT TO SCALE



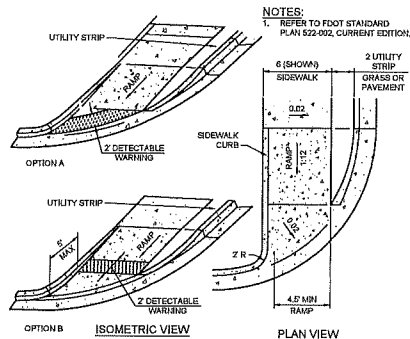
NOTE:
ALL GENERAL TRAFFIC STRIPING SHALL BE 4" WIDE PAINTED LINES USING WHITE TRAFFIC MARKING PAINT

NOTES:

1. ALL ON-SITE GENERAL TRAFFIC STRIPING SHALL BE 4" WIDE LINES USING WHITE TRAFFIC MARKING PAINT UNLESS OTHERWISE NOTED ON PLANS. CONCRETE SHALL BE PREPARED AND COATED WITH TWO-PART EPOXY SEALER AS DETAILED BELOW UNLESS MANUFACTURER'S SPECIFICATIONS DIFFER OF NOTED OTHERWISE ON PLANS.
2. ALL SURFACES MUST BE DRY, FREE OF ANY DUST AND LOOSE DEBRIS, AND AT THE PROPER TEMPERATURE (ABOVE 50°F) PRIOR TO STRIPING.
3. CONCRETE SHOULD BE ALLOWED TO CURE AT LEAST 14 DAYS. ALTHOUGH THE SURFACE MAY APPEAR DRY, SUB-SURFACE MOISTURE MAY REQUIRE TESTING TO IMPROVE BOND AND MINIMIZE MOISTURE POPPS. CHECK BY TAPPING A ONE FOOT SQUARE PIECE OF CLEAR PLASTIC DOWN ON THE ROADWAY AND OBSERVE FOR 30 MINUTES TO SEE IF MOISTURE FORMS. IF MOISTURE APPEARS, DO NOT APPLY WHEN IN DOUBT, ALWAYS CHECK ADHESION.
4. CONCRETE MAY NEED TO BE MECHANICALLY ABRADED OR WATER BLASTED TO REMOVE ANY CURING COMPOUND, SURFACE SPALLING OR POLISHING IF IT PROVES DETRIMENTAL TO ADHESION.
5. IF TWO-PART SEALER IS BEING USED, THEN STANDARD SURFACE PREPARATION WILL SUFFICE. USE TWO-PART SEALER AT MANUFACTURER'S RECOMMENDATION OR IN THE 2-3 DRY MILS RANGE. PAINT SHOULD NOT BE APPLIED UNTIL ALL TWO-PART SEALER SOLVENTS HAVE EVAPORATED SUFFICIENTLY. TRAFFIC SHOULD NOT DRIVE ON TWO-PART SEALER BEFORE APPLICATION OF PAINT.

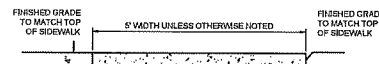
TYPICAL PARKING LOT LAYOUT & STRIPING

1"=5'



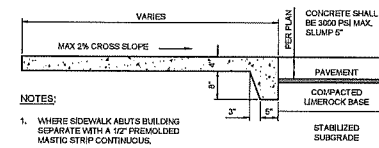
SIDEWALK RAMP CR-F

1"=5'



NOTES:

1. CONCRETE SHALL BE 3,000 PSI MAX SLUMP 5".
2. CONTROL JOINTS TO BE AT SPACING EQUAL TO WIDTH OF SIDEWALK.
3. SIDEWALK WIDTH TO BE 5' WIDE ADJACENT TO PARKING/ROADWAY.

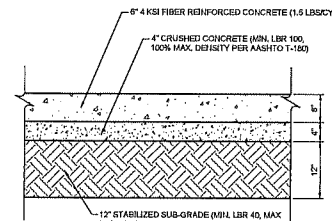


NOTES:

1. WHERE SIDEWALK ADJUTS BUILDING SEPARATE WITH A 12" PREMOLODED LASTIC STRIP CONTINUOUS.

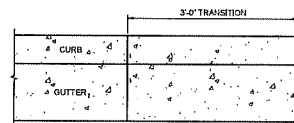
SIDEWALK SECTION

3/4"=1'-0"

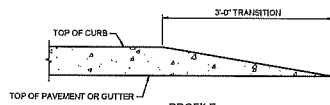


CONCRETE PAVEMENT SECTION

1"=1'-0"



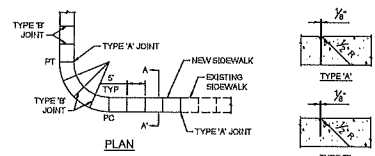
PLAN



PROFILE

CURB TRANSITION

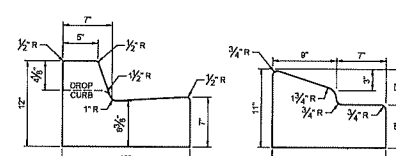
1"=1'-0"



SECTION A-A'

SIDEWALK CONSTRUCTION DETAILS

1/8"



CITY STANDARD

FDOT TYPE A

CONCRETE QUANTITIES			
LOCATION	TYPE	QUANTITY	UNIT
CITY STANDARD CURB	0.038886 CU. YD./LIN. FT.		
STANDARD DROP CURB	0.022222 CU. YD./LIN. FT.		
WEDGE CURB	0.041111 CU. YD./LIN. FT.		
MADE CURB	0.032598 CU. YD./LIN. FT.		
HEADER CURB	0.0314815 CU. YD./LIN. FT.		
HEADER DROP CURB	0.024444 CU. YD./LIN. FT.		

CURB & GUTTER TYPICAL CONSTRUCTION DETAILS

1'-1/2"=1'-0"

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Jacksonville, Florida 32224-0229
904.730.3555

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Florida Certificate of Authorization Number: 00054059



GATE EXPRESS
CARWASH #7021 @
SR200 & MINER RD.

DATE: AUGUST, 2021
PROJECT NO.: 118034.01
DESIGNED BY: MDH
DRAWN BY: DPT
SCALE: SEE PLAN

No.	Date	Revision
1	1/8/2021	1ST JAVASIRVING SUBMITTAL
2	6/5/2021	2ND JAVASIRVING SUBMITTAL
3	10/1/2021	1ST HASKINS COUNTY EEP SUBMITTAL
4	6/15/2022	2ND HASKINS COUNTY EEP SUBMITTAL

THIS DRAWING NOT RELEASED FOR CONSTRUCTION UNLESS SO NOTED ABOVE

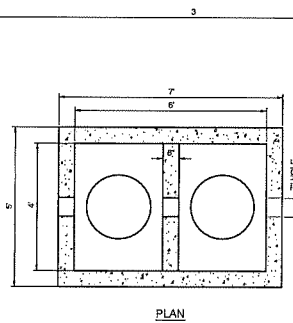
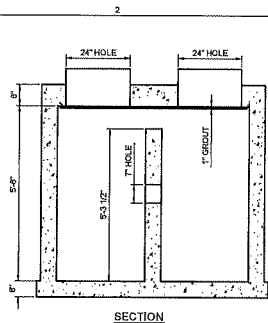
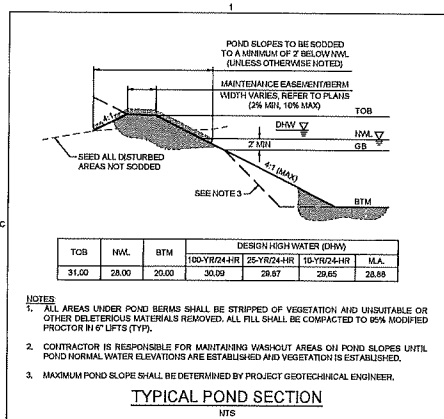
SHEET TITLE

GRADING & DRAINAGE DETAILS

C6.1

MATTHEW D. WELCHOR, P.E.
FL. LIC. No. 77053
DATE: 8/1/21

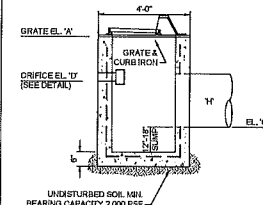
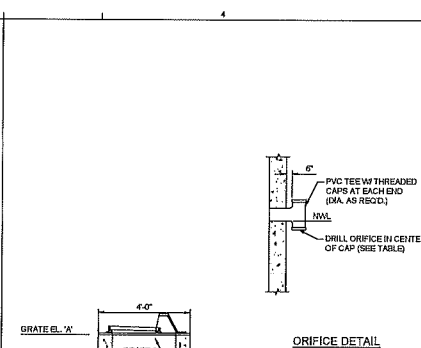
SHEET



NOTES:

- THIS DETAIL IS PROVIDED FOR REFERENCE ONLY.
- PLEASE REFER TO PLUMBING PLANS FOR DETAILS AND COORDINATE WITH PLUMBING CONTRACTOR PRIOR TO CONSTRUCTION.

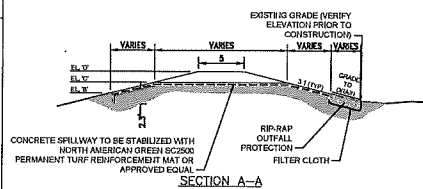
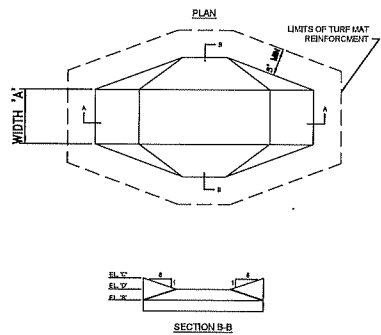
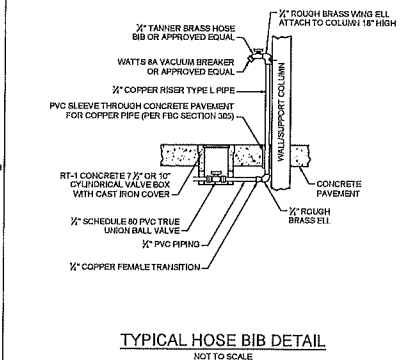
OIL - WATER SEPARATOR
NOT TO SCALE



- CONTROL STRUCTURES SHALL HAVE STEEL GRATES WITH A MIN. WEIGHT OF 215 LBS.
- PRECAST IN ACCORDANCE WITH LATEST EDITIONS OF ASTM C78 AND C478.
- 6" MIN. CLEARANCE FROM O.D. OF PIPE TO INSIDE WALL OF INLET, GROUT OR "RAMMED" JOINTS WHERE REQUIRED.
- CONCRETE 4000 P.S.I.
- SOD 15" ALL AROUND INLET
- INLETS WITH SLOTS GREATER THAN 6" SHALL BE CONSTRUCTED WITH HORIZONTAL BARS AT THE MAXIMUM VERTICAL SPACING OF 6" ONCHES. 1" DIA. GALVANIZED PIPE IMBEDDED 2" IN PRECAST STRUCTURE OR OTHER APPROVED METHOD.
- REFER TO FDOT STANDARD INDEX 232 (LATEST VERSION) FOR CONSTRUCTION DETAILS.

POND	STRUCTURE	SHEET TYPE	A'	C'	V'	Y'	ORIFICE
SWMP-1	ST-05	CURB	31.05	28.11	28.00	15'	3.35"

ST-05 CONTROL STRUCTURE
(MODIFIED STORM SEWER CURB INLET)
NTS

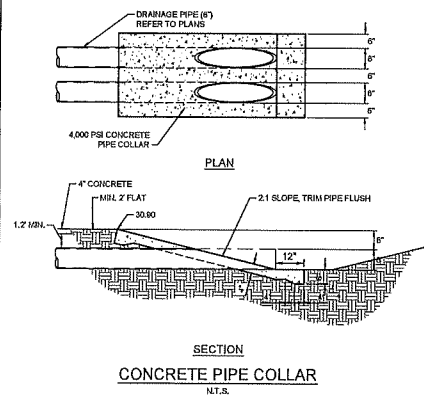


NOTES:

- ALL AREAS UNDER POND BERMS SHALL BE STRIPPED OF VEGETATION AND UNSUITABLE MATERIALS REMOVED. ALL FILL SHALL BE COMPACTED TO 95% MODIFIED PROCTOR.

POND No.	WIDTH 'A'	EL. 'B'	EL. 'C'	EL. 'D'
1	2'	28.00	29.60	31.0

CONCRETE SPILLWAY DETAIL
NTS



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GATE EXPRESS Carwash

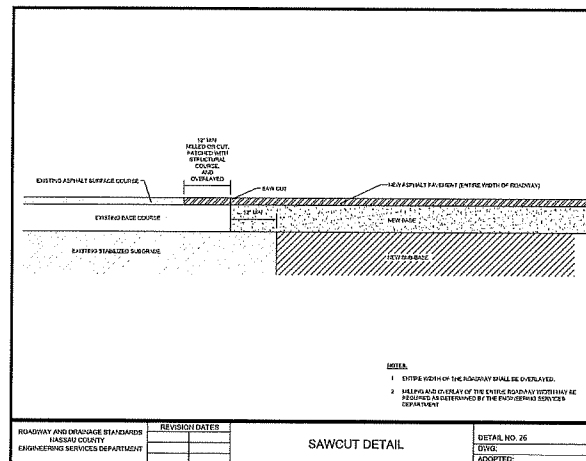
GATE EXPRESS
CARWASH #7021 @
SR200 & MINER RD.

DATE: AUGUST, 2021
PROJECT NO.: 116034.01
DESIGNED BY: MDM
DRAWN BY: DPT
SCALE: SEE PLAN

No.	Date	Revision
1	10/05/2021	1ST JEA/WRING SUBMITTAL
2	04/16/2022	2ND JEA/WRING SUBMITTAL
3	05/11/2022	1ST HARRAU COUNTY RFP SUBMITTAL
4	05/14/2022	2ND HARRAU COUNTY RFP SUBMITTAL

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SHEET TITLE

GRADING & DRAINAGE
DETAILS



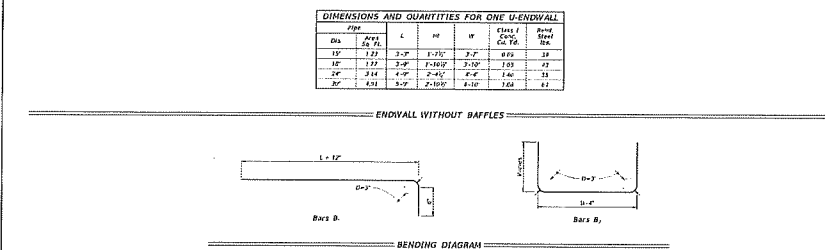
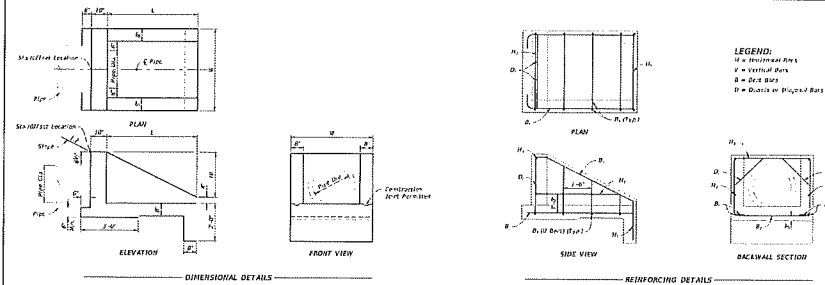
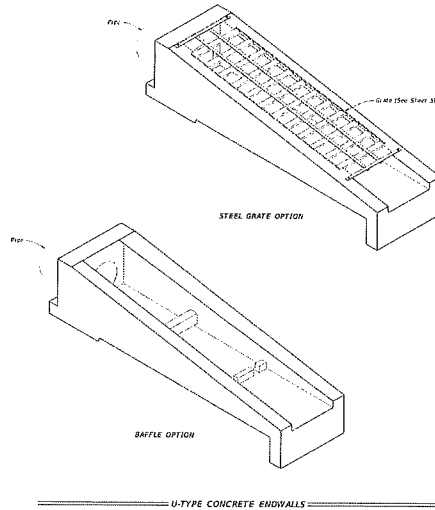
MATTHEW D. MELCHIORI, P.E.
FL Lic. No. 77053
DATE: _____

_____ SHEET

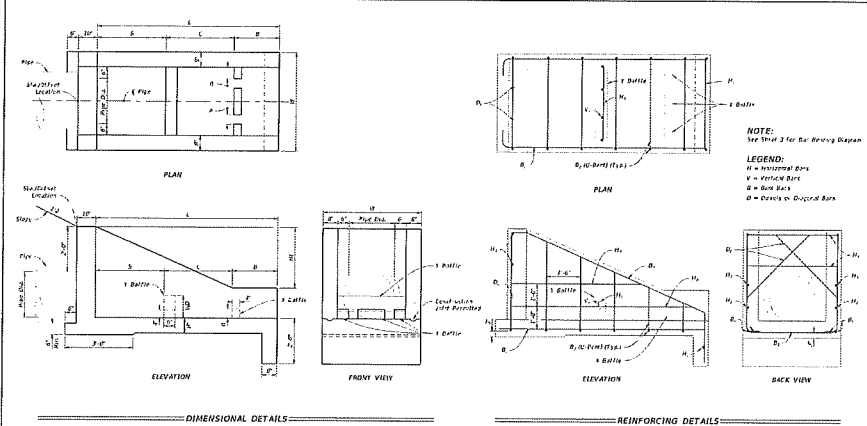
GENERAL NOTES:

1. See Class 1 concrete
2. Concrete Baffles only when noted for in Plans
3. See Sheet 3 when steel grating is required on surface
4. All reinforcing #4 bars with 2' clearance except as noted
5. Class and under C 308 may be substituted for C 408.4 shown
6. Except for the case in which the grating covering, Contractor shall provide a 6" x 6" x 1/4" steel plate, or as shown to protect the grating. Submit request for shop drawing approval to the Engineer. See Sheet 430-001 for details and general notes
7. Dimensions shown are for existing structures only.

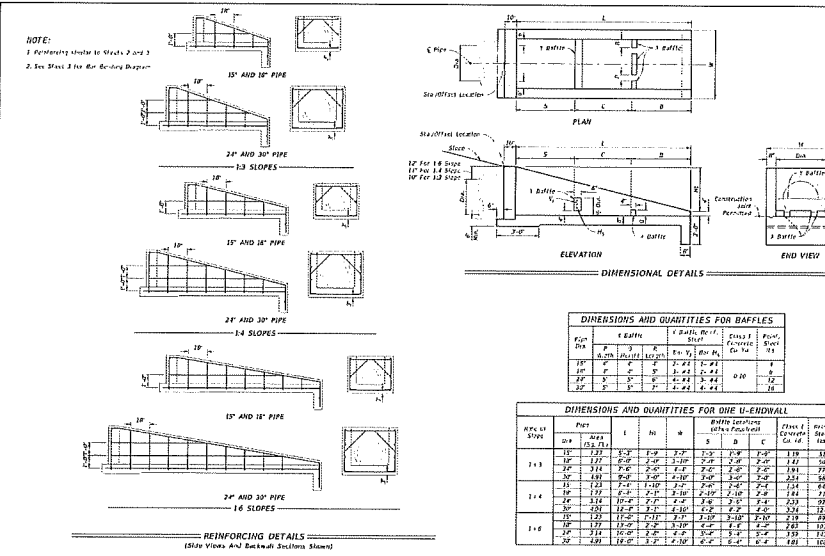
Sheet	Description
1	Steel Grate and 1/2 Slopes
2	Endwalls for 1:2 Slopes with Baffles
3	Endwalls for 1:2 Slopes with Baffles and Bar Bending Diagram
4	Endwalls for 1:2, 1:4, and 1:6 Slopes
5	Steel Grate Detail



LAST REVISION	DESCRIPTION	DATE	BY	CHKD	APP'D	INDEX	SHEET	LAST REVISION	DESCRIPTION	DATE	BY	CHKD	APP'D	INDEX	SHEET
11/01/19						430-01	1 of 5	11/01/19						430-01	3 of 5



LAST REVISION	DESCRIPTION	DATE	BY	CHKD	APP'D	INDEX	SHEET
11/01/19						430-01	2 of 5



LAST REVISION	DESCRIPTION	DATE	BY	CHKD	APP'D	INDEX	SHEET
11/01/19						430-01	4 of 5

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GATE EXPRESS Carwash

GATE EXPRESS
CARWASH #7021 @
SR200 & MINER RD.

DATE: AUGUST, 2021
PROJECT NO.: 110304.01
DESIGNED BY: MDM
DRAWN BY: DPT
SCALE: SEE PLAN

No.	Date	Revision
1	10/05/2021	1ST REVISION SUBMITTAL
2	05/06/2022	2ND REVISION SUBMITTAL
3	05/10/2023	3RD REVISION SUBMITTAL
4	05/10/2023	4TH REVISION SUBMITTAL

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SHEET TITLE

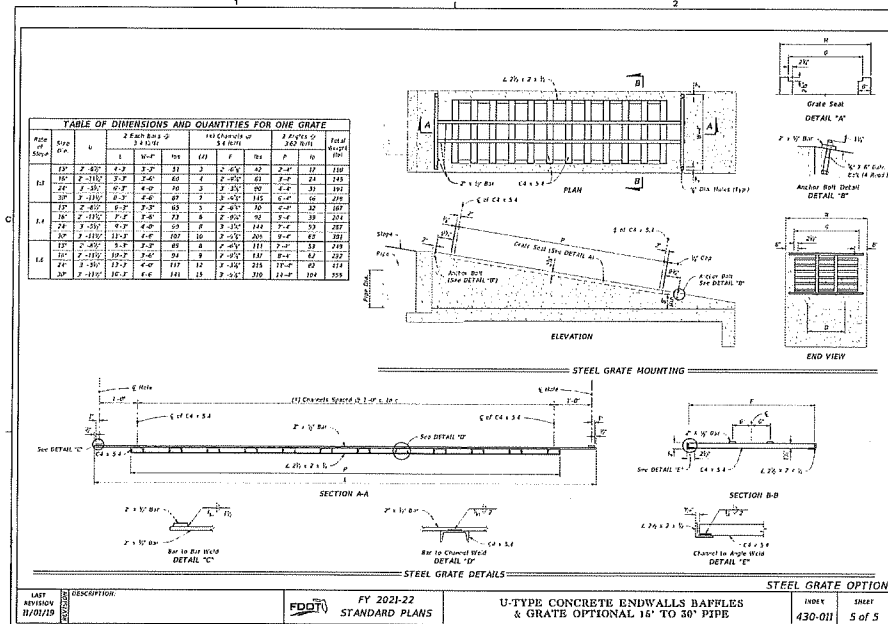
GRADING & DRAINAGE
DETAILS

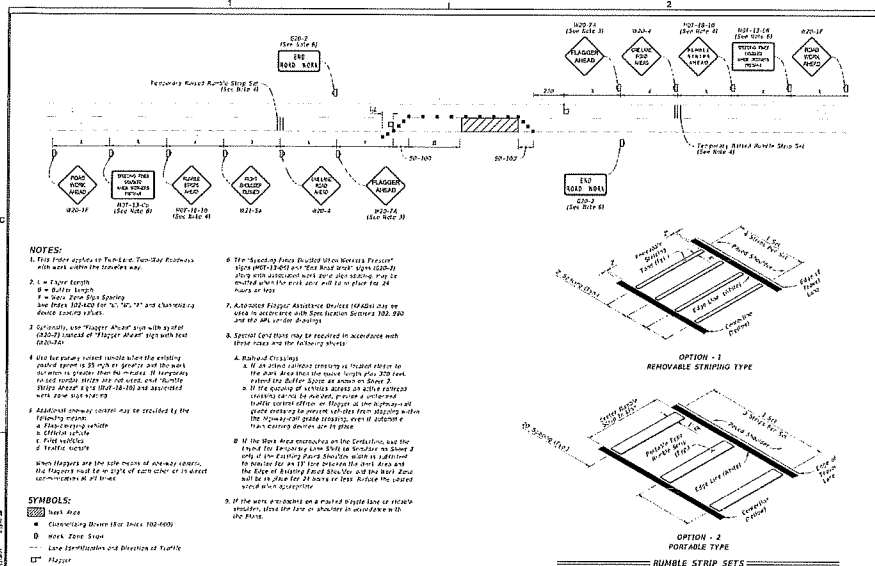
MATTHEW D. MELCHIONI, P.E.
FL Lic. No. 77053
DATE

C6.5

SHEET

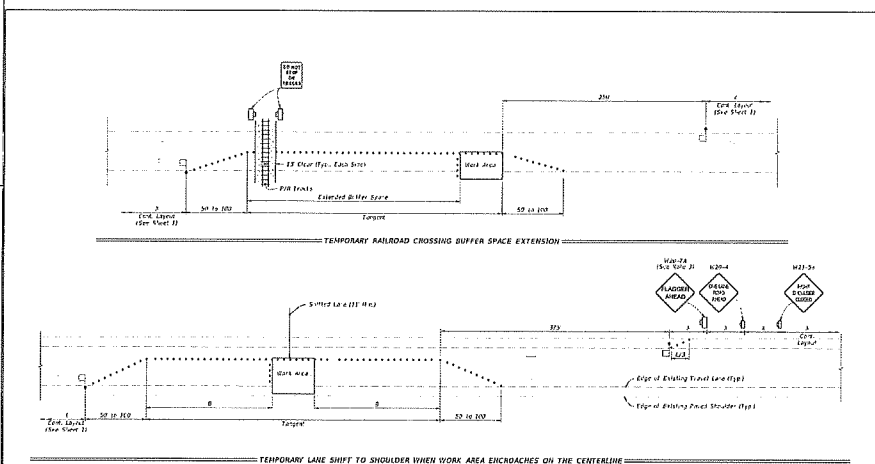
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LAST REVISION	DESCRIPTION	DATE	BY	INDEX	SHEET
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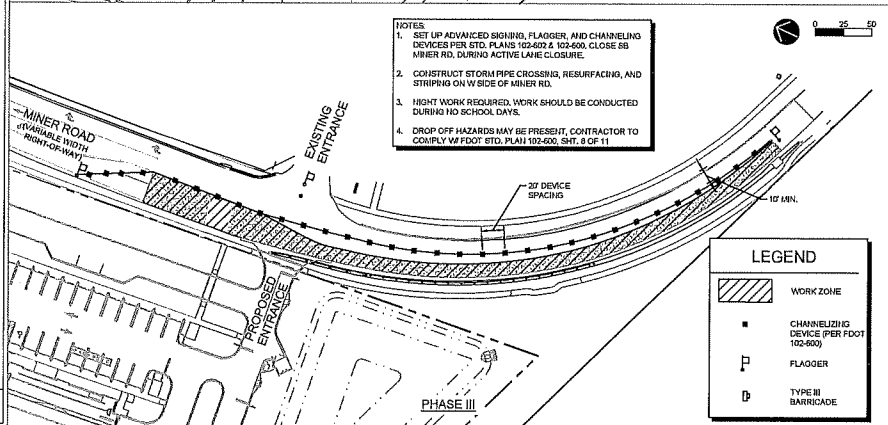
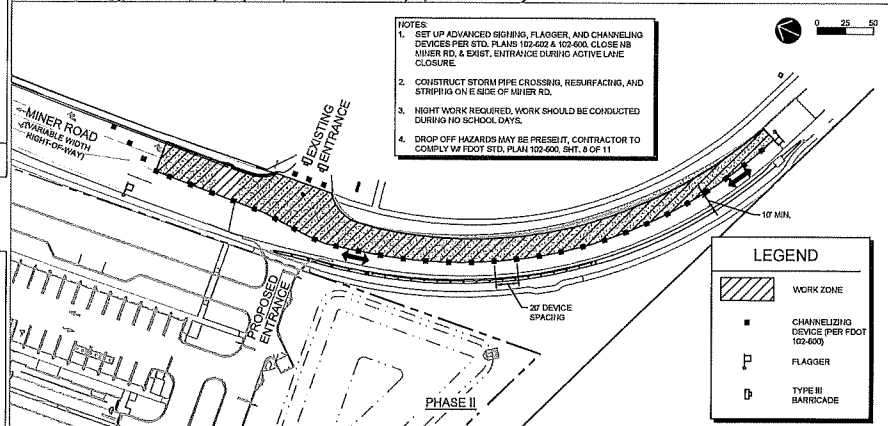
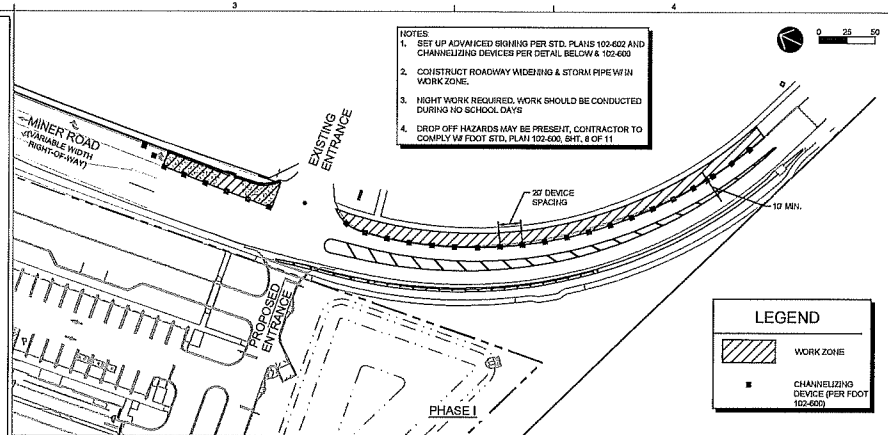
LAST REVISION	DESCRIPTION	DATE	BY	INDEX	SHEET
11/01/20	1. Standard Plans	11/01/20	11/01/20	102-603	1 of 2



LAST REVISION	DESCRIPTION	DATE	BY	INDEX	SHEET
11/01/20	1. Standard Plans	11/01/20	11/01/20	102-603	1 of 2

LAST REVISION	DESCRIPTION	DATE	BY	INDEX	SHEET
11/01/20	1. Standard Plans	11/01/20	11/01/20	102-603	1 of 2

LAST REVISION	DESCRIPTION	DATE	BY	INDEX	SHEET
11/01/20	1. Standard Plans	11/01/20	11/01/20	102-603	1 of 2



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GATE EXPRESS Carwash
GATE EXPRESS
CARWASH #7021 @
SR200 & MINER RD.

DATE: AUGUST, 2021
PROJECT NO.: 118034.01
DESIGNED BY: MDM
DRAWN BY: DPT
SCALE: SEE PLAN

No.	Date	Revision
1	10/05/2021	1ST JEA/RJWD SUBMITTAL
2	10/05/2021	2ND JEA/RJWD SUBMITTAL
3	10/11/2021	1ST HANSAU COUNTY EXP. SUBMITTAL
4	05/18/2022	2ND HANSAU COUNTY EXP. SUBMITTAL

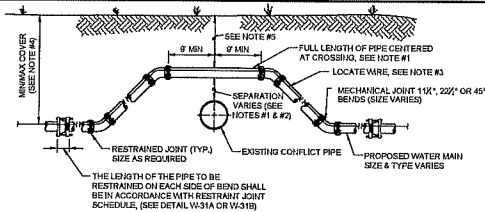
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SHEET TITLE

MOT PLAN & DETAILS

C6.7
SHEET

MATTHEW D. MELCHIORI, P.E.
FL. Lic. No. 77053
DATE

[illegible]



CASE "A" CROSSING

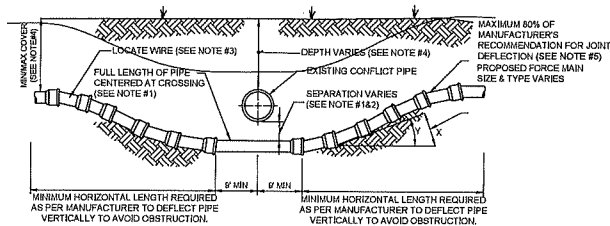
NOTES:

1. THE SOILS BETWEEN THE NEW MAIN AND THE CONFLICT PIPE SHALL BE COMPACTED TO 85% OF THE MAXIMUM DENSITY AS DETERMINED BY THE LABORATORY MODIFIED PROCTOR TEST, ASTM D 1557.
2. FOR MINIMUM VERTICAL SEPARATION REQUIREMENTS SEE DETAIL (W-10 AND W-11).
3. LOCATING WIRE REQUIRED: SEE DETAIL W-4.
4. THE COVER OVER ALL PIPING LESS THAN 24" SIZE SHALL BE 30" (MIN) IN UNPAVED AREAS, 36" (MIN) IN PAVED AREAS AND A MAXIMUM COVER OF 48" UNLESS APPROVED BY JEA. THE COVER FOR PIPING 24" SIZE AND LARGER SHALL BE 36" (MIN) IN UNPAVED AREAS AND A MAXIMUM COVER OF 48" UNLESS APPROVED BY JEA.
5. IF UTILITY CONFLICT IS LOCATED IN A NON-TRAFFIC AREA AND THE NEW PIPE IS DWP, THEN THE MINIMUM COVER MAY BE REDUCED TO 24" BENCH ONLY IN THE AREA OF THE CONFLICT.

ADJUSTMENT OVER EXISTING UTILITIES
MECHANICAL RESTRAINTS

JANUARY 2021

PLATE W-32



CASE "B" CROSSING

NOTES:

1. IF EXISTING CONFLICT PIPE IS A WATER MAIN, 12" MINIMUM SEPARATION IS REQUIRED. A FULL LENGTH OF PIPE SHALL BE CENTERED OVER EXISTING UTILITY MAIN TO PROVIDE MAXIMUM JOINT SPACING FOR ALL CROSSINGS.
2. FOR OTHER LOCATION LIMITATIONS SEE DETAIL (W-10 & W-11).
3. LOCATING WIRE REQUIRED: SEE DETAIL W-4.
4. THE COVER OVER ALL PIPING LESS THAN 24" SIZE SHALL BE A MINIMUM OF 30" IN UNPAVED AREAS AND 36" IN PAVED AREAS WITH A MAXIMUM COVER OF 48" UNLESS APPROVED OTHERWISE BY JEA. COVER FOR PIPING 24" SIZE AND LARGER SHALL BE MINIMUM OF 36" (PAVED AND UNPAVED) AND MAXIMUM OF 48" UNLESS APPROVED OTHERWISE BY JEA. THE SOILS BETWEEN THE NEW MAIN AND THE CONFLICT PIPE SHALL BE COMPACTED TO 85% OF THE MAXIMUM DENSITY AS DETERMINED BY THE LABORATORY MODIFIED PROCTOR TEST ASTM D 1557.
5. JEA ONLY ALLOWS 80% OF THE PIPE MANUFACTURER'S RECOMMENDATION FOR JOINT DEFLECTION. BENDING THE PIPE BARREL IS NOT ALLOWED, UNLESS OTHERWISE APPROVED BY JEA. THE MAXIMUM ARE LISTED IN TABLE BELOW. ONLY MANUAL FORCE CAN BE UTILIZED TO OBTAIN THESE JOINT DEFLECTION. ALL OFFSETS ARE BASED ON MINIMUM 20LF PIPE LENGTH.

MAXIMUM ALLOWED OFFSET FOR PIPE BY JOINT DEFLECTION

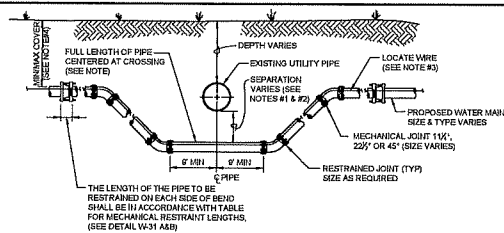
PVC PIPE	(0)	(1)	RESULTING RADIUS
PIPE SIZE (IN.)	MAX. OFFSET (IN.)	ANGLE AT ONE BELL	OF CURVE WITH 20FT. LENGTHS
2	30	7"	158 FT
4	10	2.4"	450 FT
6	10	2.4"	450 FT
8	10	2.4"	450 FT
10	10	2.4"	450 FT
12	8.5	2"	554 FT
14-24	5	1.2"	950 FT
30-48	3.25	0.8"	1477 FT

DUCTILE IRON PIPE (Mechanical Joint)	(0)	(1)	RESULTING RADIUS
PIPE SIZE (IN.)	MAX. OFFSET (IN.)	ANGLE AT ONE BELL	OF CURVE WITH 20FT. LENGTHS
-	-	-	-
4	27	8.5"	177 FT
6	24	5.7"	200 FT
8-12	17.5	4.2"	273 FT
14-18	12	3.0"	400 FT
18-20	10	2.4"	477 FT
24-30	8	1.9"	600 FT
36	7	1.7"	687 FT
42-48	6.7	1.6"	718 FT

ADJUSTMENT UNDER EXISTING UTILITIES
PIPE JOINT DEFLECTION

JANUARY 2021

PLATE W-40



CASE "B" CROSSING

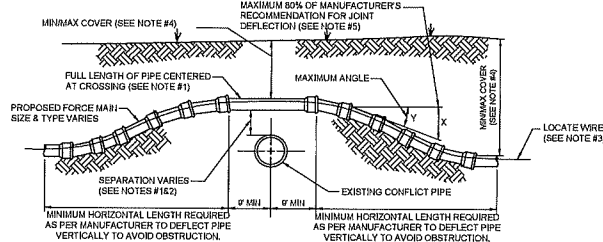
NOTES:

1. THE SOILS BETWEEN THE NEW MAIN AND THE CONFLICT PIPE SHALL BE COMPACTED TO 85% OF THE MAXIMUM DENSITY AS DETERMINED BY THE LABORATORY MODIFIED PROCTOR TEST, ASTM D 1557.
2. FOR MINIMUM VERTICAL SEPARATION REQUIREMENTS SEE DETAILS (W-10 AND W-11).
3. LOCATING WIRE REQUIRED: SEE DETAIL W-4.
4. THE COVER OVER ALL PIPING LESS THAN 24" SIZE SHALL BE 30" (MIN) IN UNPAVED AREAS, 36" (MIN) IN PAVED AREAS AND A MAXIMUM COVER OF 48" UNLESS APPROVED BY JEA. THE COVER FOR PIPING 24" SIZE AND LARGER SHALL BE 36" (MIN) IN PAVED AND UNPAVED AREAS AND A MAXIMUM COVER OF 48" UNLESS APPROVED BY JEA.
5. IN LOCATIONS WHERE WATER MAINS CROSS UNDER A BOX-CULVERT, OR 36-INCH DIAMETER AND LARGER STORM WATER MAIN, JEA WILL REQUIRE UP TO BE UTILIZED FOR THE MAIN.

ADJUSTMENT UNDER EXISTING UTILITIES
MECHANICAL RESTRAINTS

JANUARY 2021

PLATE W-34



CASE "A" CROSSING

NOTES:

1. IF EXISTING CONFLICT PIPE IS A WATER MAIN, 12" MINIMUM SEPARATION IS REQUIRED. A FULL LENGTH OF PIPE SHALL BE CENTERED OVER EXISTING UTILITY MAIN TO PROVIDE MAXIMUM JOINT SPACING FOR ALL CROSSINGS.
2. FOR OTHER LOCATION LIMITATIONS SEE DETAIL (W-10 & W-11).
3. LOCATING WIRE REQUIRED: SEE DETAIL W-4.
4. THE COVER OVER ALL PIPING LESS THAN 24" SIZE SHALL BE A MINIMUM OF 30" IN UNPAVED AREAS AND 36" IN PAVED AREAS WITH A MAXIMUM COVER OF 48" UNLESS APPROVED OTHERWISE BY JEA. COVER FOR PIPING 24" SIZE AND LARGER SHALL BE MINIMUM OF 36" (PAVED AND UNPAVED) AND MAXIMUM OF 48" UNLESS APPROVED OTHERWISE BY JEA. THE SOILS BETWEEN THE NEW MAIN AND THE CONFLICT PIPE SHALL BE COMPACTED TO 85% OF THE MAXIMUM DENSITY AS DETERMINED BY THE LABORATORY MODIFIED PROCTOR TEST ASTM D 1557.
5. JEA ONLY ALLOWS 80% OF THE PIPE MANUFACTURER'S RECOMMENDATION FOR JOINT DEFLECTION. BENDING THE PIPE BARREL IS NOT ALLOWED, UNLESS OTHERWISE APPROVED BY JEA. THE MAXIMUM ARE LISTED IN TABLE BELOW. ONLY MANUAL FORCE CAN BE UTILIZED TO OBTAIN THESE JOINT DEFLECTION. ALL OFFSETS ARE BASED ON MINIMUM 20LF PIPE LENGTH.

MAXIMUM ALLOWED OFFSET FOR PIPE BY JOINT DEFLECTION

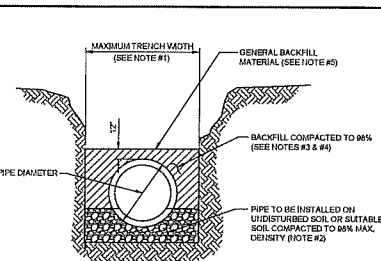
PVC PIPE	(0)	(1)	RESULTING RADIUS
PIPE SIZE (IN.)	MAX. OFFSET (IN.)	ANGLE AT ONE BELL	OF CURVE WITH 20FT. LENGTHS
2	30	7"	158 FT
4	10	2.4"	450 FT
6	10	2.4"	450 FT
8	10	2.4"	450 FT
10	10	2.4"	450 FT
12	8.5	2"	554 FT
14-24	5	1.2"	950 FT
30-48	3.25	0.8"	1477 FT

DUCTILE IRON PIPE (Mechanical Joint)	(0)	(1)	RESULTING RADIUS
PIPE SIZE (IN.)	MAX. OFFSET (IN.)	ANGLE AT ONE BELL	OF CURVE WITH 20FT. LENGTHS
-	-	-	-
4	27	8.5"	177 FT
6	24	5.7"	200 FT
8-12	17.5	4.2"	273 FT
14-18	12	3.0"	400 FT
18-20	10	2.4"	477 FT
24-30	8	1.9"	600 FT
36	7	1.7"	687 FT
42-48	6.7	1.6"	718 FT

ADJUSTMENT UNDER EXISTING UTILITIES
PIPE JOINT DEFLECTION

JANUARY 2021

PLATE W-41



TYPICAL TRENCH

NOTES:

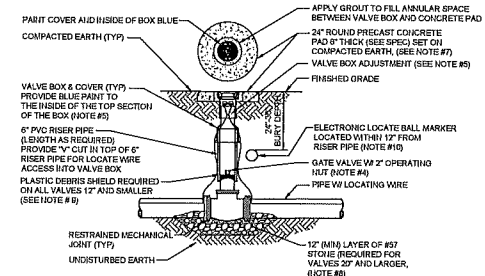
1. TRENCH SIDES SHALL BE APPROXIMATELY VERTICAL BETWEEN AN ELEVATION OF 1 FOOT ABOVE THE TOP OF THE PIPE AND THE CENTER LINE OF THE PIPE. THEREAFTER, TRENCH SIDES SHALL BE AS VERTICAL AS POSSIBLE OR AS REQUIRED BY OSHA STANDARDS. REFER TO THE SEGMENT AND PAVEMENT SECTION (SECTION #6), PARAGRAPH #4) TO DETERMINE MAXIMUM PAVEMENT WIDTHS.
2. BELL HOLES SHALL BE DUG TO PERMIT THE ENTIRE STRAIGHT BARREL OF THE PIPE TO REST ON THE UNDISTURBED TRENCH BOTTOM. BOLLARDS OR LOOSE ROCKS LARGER THAN 3/4 INCH IN SIZE WILL NOT BE PERMITTED IN BACKFILL UP TO 1 FOOT ABOVE THE TOP OF THE PIPE.
3. BACK FILL MATERIAL UP TO A LEVEL OF 1 FOOT OVER THE PIPE OR BOTTOM OF STRUCTURE SHALL BE PLACED BY 8 INCH COMPACTED THICKNESS LAYERS AND SHALL BE COMPACTED TO 95% OF ITS MAXIMUM DENSITY AS DETERMINED BY THE LABORATORY MODIFIED PROCTOR TEST, ASTM D1557.
4. SEE "SEGMENT AND PAVEMENT" SECTION #6) FOR ADDITIONAL REQUIREMENTS INCLUDING REMOVAL AND REPLACEMENT OF UNSTABLE SOIL, OVERLAYING, COMPACTION REQUIREMENTS AND DENSITY TESTING OF COMPACTED SOILS.

OPEN CUT TRENCH FOR PRESSURE PIPE

JANUARY 2021

IN CITY RIGHT OF WAY

PLATE W-42



NOTES:

1. FOR UNPAVED LOCATIONS, A PRECAST CONCRETE VALVE PAD SHALL BE PROVIDED AND INSTALLED FLUSH WITH GRADE. CONCRETE PAD IS NOT REQUIRED FOR VALVE LOCATED IN THE ROADWAY, UNLESS BENCH OR NOTED OTHERWISE.
2. LOCATING WIRE IS REQUIRED ON ALL PRESSURE PIPING (SEE DETAIL W-4).
3. A "Y" CUT SHALL BE CARVED IN THE CURB CLOSEST TO ADJACENT ASPHALT IF NO CURB IS AT ALL BELOW GRADE VALVES. THE "Y" CUT IS TO BE PAINTED BLUE WATERWORK IS INCLUDED.
4. IN PAVED AREAS, INSTALL VALVE AT A DEPTH TO ALLOW A 12" MIN. DISTANCE BETWEEN THE VALVE COVER PLATE AND THE TOP OF THE VALVE OPERATING NUT. OUTSIDE OF PAVED AREAS (GRASS), INSTALL VALVE AT A DEPTH TO ALLOW A 6" MINIMUM DISTANCE BETWEEN THE VALVE COVER AND THE TOP OF THE VALVE OPERATING NUT. OPERATING NUTS AND EXTENSION SHALL BE PROVIDED (WHERE APPLICABLE) SO THAT THE OPERATING NUT WILL BE NO MORE THAN 36 INCHES BELOW FINISHED GRADE.
5. FOR NEW CONSTRUCTION, THE VALVE BOX SHALL BE ADJUSTED TO MIDDLE TO ALLOW FOR FUTURE BOX ADJUSTMENTS. ROUTE VALVES SHALL BE INSTALLED WITH A "Y" CUT IN THE TOP OF THE 6" PVC RISER PIPE FOR LOCATE WIRE ACCESS INTO VALVE BOX. THE LOCATE WIRES WITH A 24" LONG PRO-TAG AT THE TOP SHALL BE CONNECTED TOGETHER WITH A WIRE NUT.
6. BRASS IDENTIFICATION TAGS INDICATING "WATER", VALVE SIZE, DIRECTION AND TURNS TO OPEN A VALVE TYPE. PROVIDE A 2" HOLE IN BRASS TAG AND ATTACH TAG (TWIST WIRE AROUND TAG) TO THE END OF THE LOCATE WIRE. TAGS ARE NOT REQUIRED ON VALVES INSTALLED OFF FIRE HYDRANT BRANCH LINES.
7. IN LIEU OF PRECAST CONCRETE PAD, A 6" THICK X 24" (ROUND OR SQUARE) POWERED CONCRETE PAD W/2" #4 REBAR AROUND PERIMETER, MAY BE USED.
8. GRAVEL SHALL BE PROVIDED UNDER ALL VALVES 20" AND LARGER. THE MINIMUM TRENCH LIMIT OF GRAVEL IS 12" UNDER THE VALVE UP TO THE OVERALL HEIGHT OF THE VALVE.
9. FOR VALVES 12 INCH AND SMALLER, PROVIDE A WHITE OR BLACK PLASTIC DERIS SHEILD NUTS BELOW THE OPERATING NUT. THIS SHEILD SHALL CENTER THE RISER PIPE BOX OVER THE OPERATING NUT AND MINIMIZE POLLUTION. SHEILD SHALL BE BY APC, BOLLOR OR APPROVED EQUAL.
10. ALL VALVES SHALL BE INSTALLED WITH AN ELECTRIC LOCATE MARKER. MARKER SHALL BE 4" DIA. COLOR CODED BALL MARKER (3M-1403R FOR WATER AND 1403R FOR RECLAIMED WATER).

WATER VALVE INSTALLATION DETAIL

JANUARY 2021

PLATE W-18

PROSSER
Civil Engineering

1000 S. 1st St., Suite 100
Phoenix, AZ 85004
Phone: 602.252.2222
Fax: 602.252.2222
Email: info@prossereng.com
Website: www.prossereng.com

NO. BY DATE

REVISIONS

NO. SHEETS

SHEET NO.

DATE

SCALE

AS NOTED

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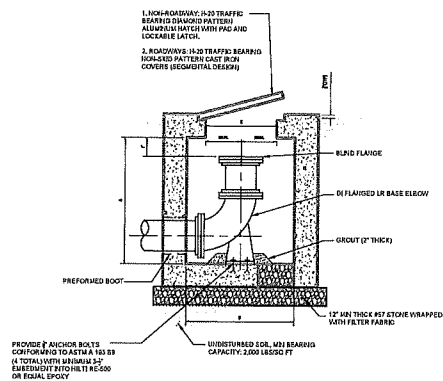
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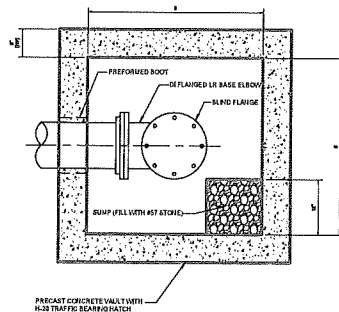
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SWABBING PORT AND CLEAN OUT VAULT DETAIL -
SECTION

JANUARY 2021

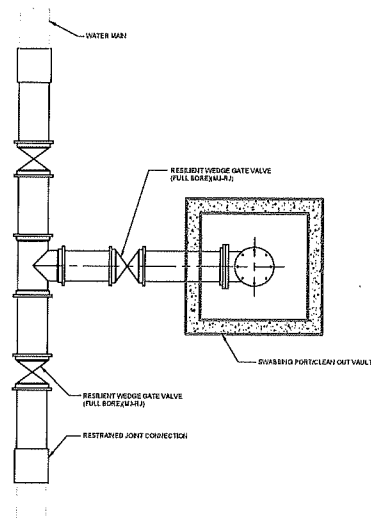
PLATE W-45



SWABBING PORT AND CLEAN OUT VAULT DETAIL -
- PLAN

JANUARY 2021

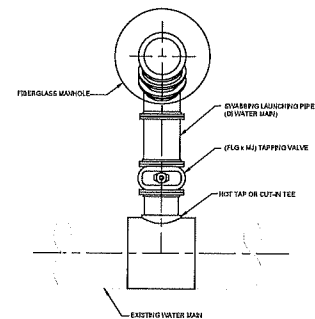
PLATE W-45A



SWABBING LAUNCHING STATION DETAIL FOR
NEW WATER MAIN UP TO 24"

JANUARY 2021

PLATE W-45B



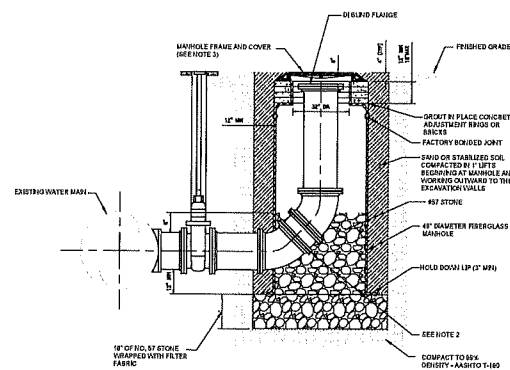
NOTES:

1. FOR HOT TAP CONNECTIONS ON EXISTING WATER MAINS 10" DIAMETER AND GREATER, DIAMETER OF TAPPING VALVE AND PIG LAUNCHING PIPE SHALL BE ONE NOMINAL SIZE LESS THAN EXISTING WATER MAIN.

SWABBING PIG LAUNCHING STATION DETAIL FOR
WATER MAINS UP TO 24" - PLAN

JANUARY 2021

PLATE W-45C



NOTES:

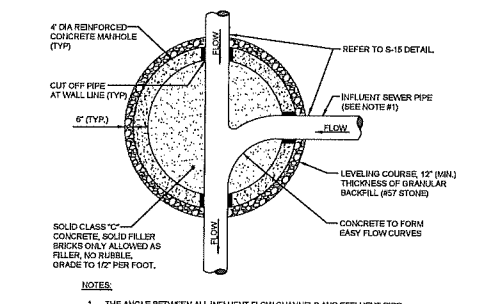
1. PROVIDE ALL MATERIALS IN ACCORDANCE TO JEA WATER AND WASTEWATER STANDARD SPECIFICATIONS.
2. USE TWO VERTICAL 45 DEGREE MJ BENDS OR LONG RADIUS 90 DEGREE MJ BEND.
3. PROVIDE STANDARD JEA FRAME AND COVER.
4. RESTRAIN ALL JOINTS.

RETROFIT SWABBING LAUNCHING STATION
DETAIL FOR WATER MAINS UP TO 24" - SECTION

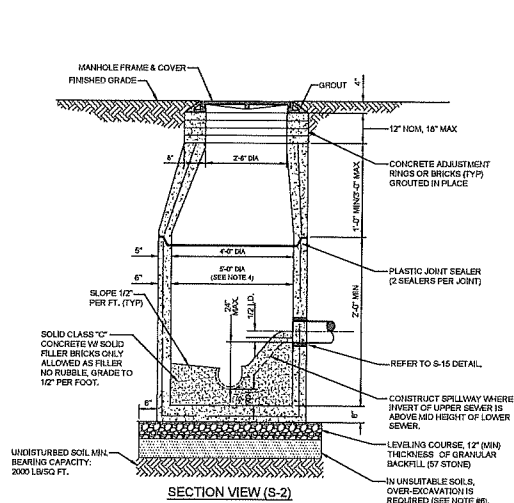
JANUARY 2021

PLATE W-45D

[illegible]



PLAN VIEW (S-3)
(FOR SECTION VIEW SEE S-2)



SECTION VIEW (S-2)
(FOR PLAN VIEW SEE S-3)

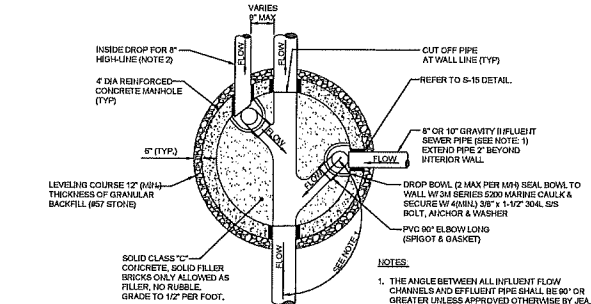
NOTES:

1. PRECAST MANHOLE SECTIONS TO BE MANUFACTURED IN ACCORDANCE WITH THE LATEST EDITIONS OF A.S.T.M. C-478 WITH 4000 LB. CONC., TYPE I CEMENT. ALL LIFTING HOLES AND OUTSIDE INSERTS SHALL BE FILLED WITH NON-SHRINK GROUT AND COATED WITH BITUMINOUS WATERPROOFING MATERIAL.
2. THE INTERIOR AND EXTERIOR OF MANHOLE AND ADJUSTING RINGS SHALL BE GIVEN TWO COATS OF BITUMINOUS WATERPROOFING MATERIAL.
3. IF SPECIALTY LINER IS TO BE INSTALLED ON INSIDE SURFACE OF MANHOLE, THE BITUMINOUS WATERPROOFING MATERIAL SHALL BE OMITTED ON THE INSIDE.
4. JUNCTION MANHOLE (CLOSEST TO WETWELL) SHALL BE 5' DIA WITH SPECIALTY LINER.
5. ALL MANHOLE JOINTS BELOW THE TOP COVER SECTION SHALL INCLUDE A 6" WIDE (MIN) EXTERIOR JOINT TAPE (W/TH PRIMER). TAPE ON THE COKE SECTION IS OPTIONAL. SEE PLATE S-17.
6. IN SILT, CLAY OR HIGHLY ORGANIC SOILS (FINE-GRAINED SOILS INCLUDING SOIL GROUPS M, CL, OL, MH, CH, OH AND PT) THE SOILS SHALL BE OVER-EXCAVATED AN ADDITIONAL 24" (AT A MIN) AND BACKFILL WITH ASPH/TO CLASS A-3 SOIL (COMPACTED TO 98%, ASTM D1557) OR OVER-EXCAVATE AN ADDITIONAL 12" (AT A MIN) AND BACKFILL WITH GRANULAR BACKFILL (87 STONE).

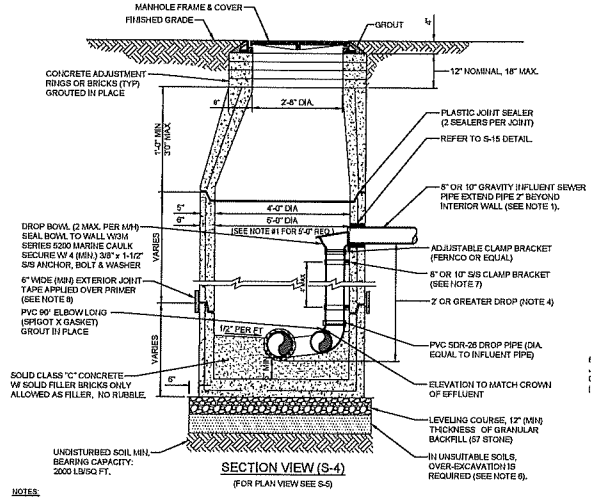
SANITARY SEWER TYPE "A" MANHOLE
8'-21' SEWERS

JANUARY 2021

PLATES S-2, S-3



PLAN VIEW (S-5)
(FOR SECTION VIEW SEE S-4)



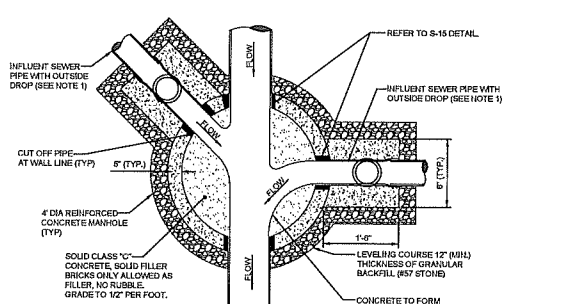
NOTES:

1. THIS ASSEMBLY IS FOR 8" OR 10" GRAVITY INFLUENT LINES ONLY. NO DROPS ALLOWED FOR FORCE MAINS. MAXIMUM OF 2 INCHES DROP IN 10' DIA. MANHOLE (6" THICK WALL) IS REQUIRED IF TWO INCHES DROP OR MORE ARE REQUIRED WITH ONE OR BOTH BEING 10' DIA. DROP BOWLS BY RELIEF OR APPROVED EQUAL REQUIRED. THE INSIDE DROP FOR AN 8" HIGH-LINE SHALL BE CONSTRUCTED UNLESS TO AVOID (SEE NOTE 6).
2. PRECAST MANHOLE SECTIONS TO BE MANUFACTURED IN ACCORDANCE WITH THE LATEST EDITIONS OF A.S.T.M. C-478 WITH 4000 LB. CONC., TYPE I CEMENT. ALL LIFTING HOLES AND OUTSIDE INSERTS SHALL BE FILLED WITH NON-SHRINK GROUT AND COATED WITH BITUMINOUS WATERPROOFING MATERIAL.
3. THE INTERIOR AND EXTERIOR OF MANHOLE AND THE INTERIOR OF ADJUSTMENT RINGS SHALL BE GIVEN TWO COATS OF BITUMINOUS WATERPROOFING MATERIAL.
4. TYPE "B" MANHOLE MUST BE USED FOR 7" OR GREATER INFLUENT PIPE DROPS.
5. THE DROP BOWL ASSEMBLY SHALL BE INSTALLED PRIOR TO APPLICATION OF SPECIALTY LINING MATERIAL.
6. A TYPE "D" MANHOLE SHALL BE UTILIZED WHEN THREE OR MORE (2" OR GREATER) DROPS ARE INVOLVED OR WHEN INFLUENT PIPES AREA LARGER THAN 10' IN SIZE.
7. ADJUSTABLE CLAMPING BRACKET (MIN. 2 PER DROP BOWL ASSEMBLY, 1-1/2" WIDE, 11 GA. W/ 3/8" DIA. 1/4" PINCH BOLTS AND NUTS, SECURE TO WALL WITH 1/2" DIA. 1/4" ANCHOR & WASHER PER BRACKET AS SHOWN. ALL DIA OR 3/16 STAINLESS STEEL MATERIAL.
8. ALL MAN JOINTS BELOW THE TOP COKE SECTION SHALL INCLUDE A 6" WIDE (MIN) EXTERIOR JOINT TAPE (W/PRIMER). TAPE ON THE COKE SECTION IS OPTIONAL.
9. IN SILT, CLAY OR HIGHLY ORGANIC SOILS (FINE-GRAINED SOILS INCLUDING SOIL GROUPS M, CL, OL, MH, CH, OH AND PT) THE SOILS SHALL BE OVER-EXCAVATED AN ADDITIONAL 24" (AT A MIN) AND BACKFILL WITH ASPH/TO CLASS A-3 SOIL (COMPACTED TO 98%, ASTM D1557) OR OVER-EXCAVATE AN ADDITIONAL 12" (AT A MIN) AND BACKFILL WITH GRANULAR BACKFILL (87 STONE).

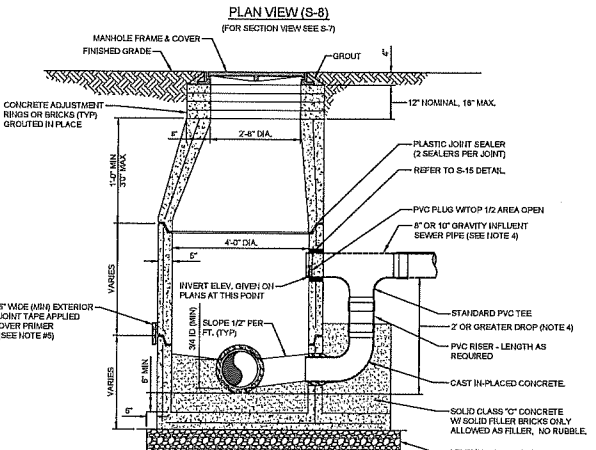
SANITARY SEWER TYPE "B" MANHOLE
8'-10' SEWERS

JANUARY 2021

PLATES S-4, S-5



PLAN VIEW (S-8)
(FOR SECTION VIEW SEE S-7)



NOTES:

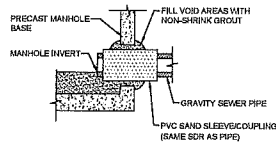
1. PRECAST MANHOLE SECTIONS TO BE MANUFACTURED IN ACCORDANCE WITH THE LATEST EDITIONS OF A.S.T.M. C-478 WITH 4000 LB. CONC., TYPE I CEMENT. ALL LIFTING HOLES AND OUTSIDE INSERTS SHALL BE FILLED WITH NON-SHRINK GROUT AND COATED WITH BITUMINOUS WATERPROOFING MATERIAL.
2. THE INTERIOR AND EXTERIOR OF MANHOLE AND THE INTERIOR OF THE ADJUSTMENT RINGS SHALL BE GIVEN TWO COATS OF BITUMINOUS WATERPROOFING MATERIAL.
3. IF SPECIALTY LINER IS TO BE INSTALLED ON INSIDE SURFACE OF MANHOLE, THE BITUMINOUS WATERPROOFING MATERIAL SHALL BE OMITTED ON THE INSIDE.
4. TYPE "D" MANHOLE SHALL BE USED FOR 12" OR LARGER INFLUENT PIPES W/ 2" OR GREATER INFLUENT DROP.
5. ALL MAN JOINTS BELOW THE TOP COKE SECTION SHALL INCLUDE A 6" WIDE (MIN) EXTERIOR JOINT TAPE (W/PRIMER). TAPE ON THE COKE SECTION IS OPTIONAL.
6. IN SILT, CLAY OR HIGHLY ORGANIC SOILS (FINE-GRAINED SOILS INCLUDING SOIL GROUPS M, CL, OL, MH, CH, OH AND PT) THE SOILS SHALL BE OVER-EXCAVATED AN ADDITIONAL 24" (AT A MIN) AND BACKFILL WITH ASPH/TO CLASS A-3 SOIL (COMPACTED TO 98%, ASTM D1557) OR OVER-EXCAVATE AN ADDITIONAL 12" (AT A MIN) AND BACKFILL WITH GRANULAR BACKFILL (87 STONE).

SANITARY SEWER TYPE "D" MANHOLE
12'-21' SEWERS

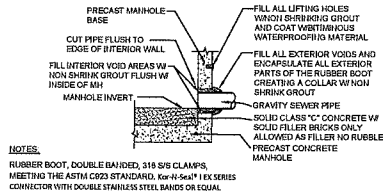
JANUARY 2021

PLATES S-7, S-8

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PVC SAND SLEEVE
(FOR EXISTING AND NEW MH CONSTRUCTION)

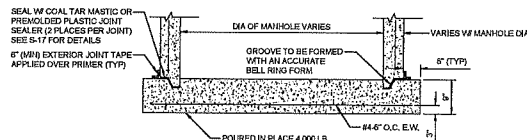


NOTES:

RUBBER BOOT, DOUBLE BAILED, 316 S/S CLAMPS, MEETING THE ASTM A572 STANDARD, for 4'-5.64' DIA SERIES CONNECTOR WITH DOUBLE STANDARD STEEL BARS OF EQUAL

RUBBER BOOT

(FOR NEW MH CONSTRUCTION ONLY, MAXIMUM DEPTH 15FT)



NOTES:

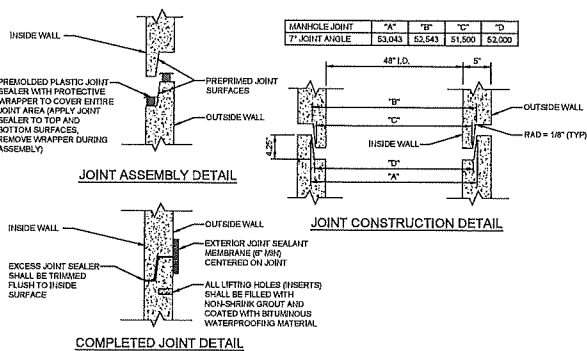
THE USE OF THE POURED IN PLACE MANHOLE BOTTOM SHALL BE MINIMIZED AND SHALL BE SPECIFICALLY APPROVED BY JEA PRIOR TO CONSTRUCTION.

MANHOLE BOTTOM

MANHOLE PIPE CONNECTION DETAIL

JANUARY 2021

PLATE S-15



JOINT ASSEMBLY DETAIL

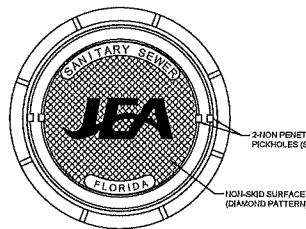
JOINT CONSTRUCTION DETAIL

COMPLETED JOINT DETAIL

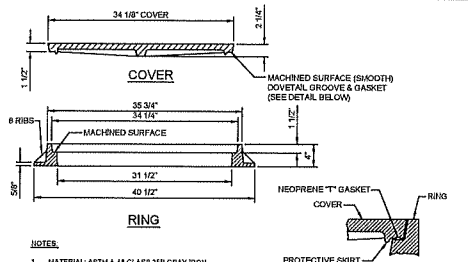
PRECAST SEWER MANHOLE JOINT DETAIL

JANUARY 2021

PLATE S-17



PICKHOLE DETAIL



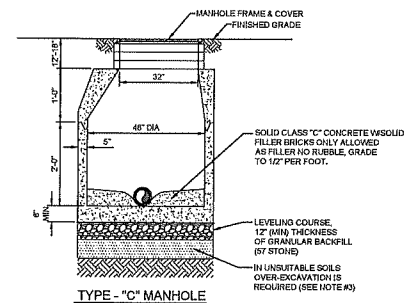
NOTES:

1. MATERIAL: ASTM A-48 CLASS 30B GRAY IRON.
2. RING WEIGHT 230 LBS APPROX.
3. COVER WEIGHT 230 LBS. APPROX.
4. ALL DIMENSIONS ARE SHOWN IN INCHES.
5. FOR MANHOLES WHICH WILL BE MAINTAINED BY JEA (INCLUDING UTILITY DEDICATION PROJECTS), THE COVER SHALL INCLUDE THE "JEA" LOGO AND A NEOPRENE GASKET.
6. FOR MANHOLES WHICH WILL BE MAINTAINED BY PARTIES OTHER THAN JEA (SUCH AS PRIVATE SEWER COLLECTION SYSTEMS, PRIVATE FORCE MAIN, PUMP OUT BOX AND EXTENS NOT MAINTAINED BY JEA), THE COVER SHALL INCLUDE "SANITARY SEWER" OR OTHER LETTERING (NO "JEA" LOGO OR NEOPRENE GASKET).

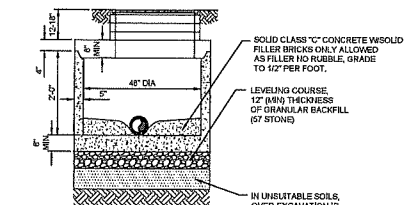
SANITARY SEWER MANHOLE FRAME AND COVER

JANUARY 2021

PLATE S-1



TYPE - "C" MANHOLE



TYPE - "C" MANHOLE WITH FLAT TOP

SECTION VIEWS

NOTES:

1. PRECAST MANHOLE SECTIONS TO BE MANUFACTURED IN ACCORDANCE WITH THE LATEST EDITIONS OF A.S.T.M. C-475/WH 4000 L.B. CONC. TYPE B CEMENT. ALL LIFTING HOLES AND OUTSIDE INSERTS SHALL BE FILLED WITH NON-SHRINK GROUT AND COATED WITH BITUMINOUS WATERPROOFING MATERIAL.
2. THE INTERIOR AND EXTERIOR OF MANHOLE AND INTERIOR OF ADJUSTMENT RINGS SHALL BE GIVEN TWO COAT OF BITUMINOUS WATERPROOFING MATERIAL.
3. IN SILTS, CLAY OR HEAVY ORGANIC SOILS (FINE-GRAINED SOILS INCLUDING SOIL GROUPS M, CL, OL, MH, CH, OH AND PT) THE SOIL SHALL BE OVER EXCAVATED AN ADDITIONAL 24\"/>

SANITARY SEWER TYPE "C" MANHOLE
8"-21" SEWERS

JANUARY 2021

PLATE S-6

PROSSER
Civil & Mechanical Engineering, Inc.
1000 South 1st Street, Suite 100
Tampa, Florida 33606
Phone: 813.255.1234
Fax: 813.255.1235
Email: info@prossereng.com
Website: www.prossereng.com

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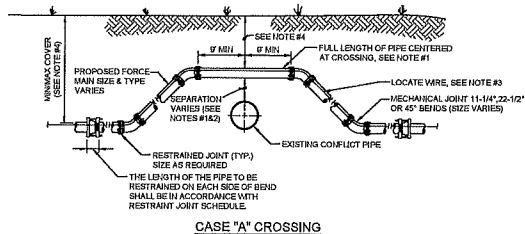
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SECTION	SCALE	
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SHEET NO.	DATE	AS NOTED
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JEA
BUILDING COMMUNITY

JEA STANDARD
SANITARY SEWER DETAILS



CASE "A" CROSSING

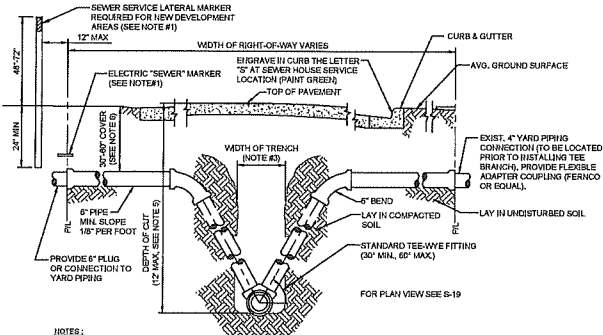
NOTES:

1. IF EXISTING CONFLICT PIPE IS A WATER OR RECLAIMED WATER MAIN, 12-INCHES OF SEPARATION IS REQUIRED, A FULL LENGTH OF PIPE SHALL BE CENTERED OVER EXISTING UTILITY MAIN TO PROVIDE MAXIMUM JOINT SPACING FOR ALL CROSSINGS.
2. FOR OTHER LOCATION LIMITATIONS SEE DETAIL (S-26 & S-27).
3. LOCATING WIRE REQUIRED. SEE DETAIL S-49.
4. THE COVER FOR PIPING LESS THAN 24" SIZE SHALL BE 36" (MIN) IN UNPAVED AREAS, 36" (MIN) IN PAVED AREAS AND A MAXIMUM COVER OF 64" UNLESS PRE-APPROVED BY JEA. THE COVER FOR PIPING 24" SIZE AND LARGER SHALL BE 36" (MIN) IN PAVED AND UNPAVED AREAS AND A MAXIMUM COVER OF 64", UNLESS APPROVED BY JEA.
5. THE SOILS BETWEEN THE MAIN AND THE CONFLICT PIPE SHALL BE COMPACTED TO 84% OF THE MAXIMUM DENSITY AS DETERMINED BY THE LABORATORY MODIFIED PROCTOR TEST ASTM D 1557.

ADJUSTMENT OVER EXISTING UTILITIES
MECHANICAL RESTRAINTS

JANUARY 2021

PLATE S-39



FOR PLAN VIEW SEE S-19

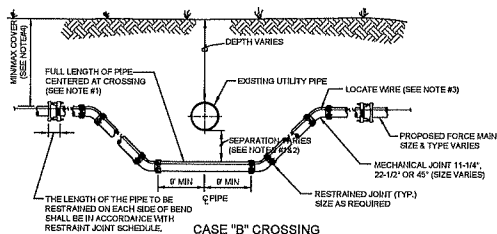
NOTES:

1. TO MARK THE LOCATION OF THE 6" PLUG FOR NEW SERVICE, FOR PROJECTS WHERE NO CONCRETE CURB EXIST, AN ELECTRONIC "SEWER" MARKER IS REQUIRED FOR ALL LATERALS WHICH ARE "NOT IN USE". FOR NEW DEVELOPMENT AREAS WHERE THE SEWER LATERAL IS "NOT IN USE", A LANDSCAPE TIERER OR 3/4 10L 2" POST (TOP PAINTED GREEN) SHALL BE INSTALLED WHERE REQUIRED BY JEA OR NO CONCRETE CURB EXIST, AN ELECTRONIC "SEWER" MARKER SHALL BE INSTALLED TO MARKER SHALL ALSO BE INSTALLED.
2. THE MINIMUM SIZE OF ALL HOUSE LATERALS SHALL BE 6" INCHES. THE MAXIMUM LENGTH OF A HOUSE LATERAL SHALL BE 60 FEET (LENGTH BETWEEN SEWER MAIN OR MANHOLE TO CUSTOMERS PROPERTY LINE).
3. SEE MEASUREMENT AND PAYMENT SECTION FOR MAXIMUM PAYMENT WIDTH.
4. ALL GRAVITY SEWER MAINS AND ASSOCIATED SEWER LATERAL PIPE AND FITTINGS (INCLUDING THE TEE-WYE FITTING) SHALL BE PVC SDP-26.
5. UNLESS APPROVED OTHERWISE BY A JEA OR JEA MANAGER, NO GRAVITY SEWER MAIN WITH SEWER SERVICE LATERALS SHALL BE CONSTRUCTED WITHIN A "DEPTH OF CUT" GREATER THAN 12 FEET.
6. SEWER SERVICE LATERALS ASSOCIATED WITH GRAVITY SEWER MAINS WHICH ARE DEEPER THAN 12 FEET, MUST BE ROUTED TO A GRAVITY SEWER HIGH-LINE, A MANHOLE OR OTHER JEA APPROVED METHOD.
7. THE SEWER SERVICE LATERAL SHALL BE CONSTRUCTED AT A DEPTH TO ALLOW A GRAVITY CONNECTION BY THE CUSTOMER, WHERE POSSIBLE. CONSTRUCTION UPON MEETING THE CUSTOMER'S ON-SITE CONDITIONS AND LOCAL CONSTRUCTION STANDARDS. A LATERAL REQUIRING MORE THAN 60' OF COVER MUST BE APPROVED, PRIOR TO CONSTRUCTION, BY JEA.

HOUSE LATERAL - SECTION VIEW

JANUARY 2021

PLATE S-20



CASE "B" CROSSING

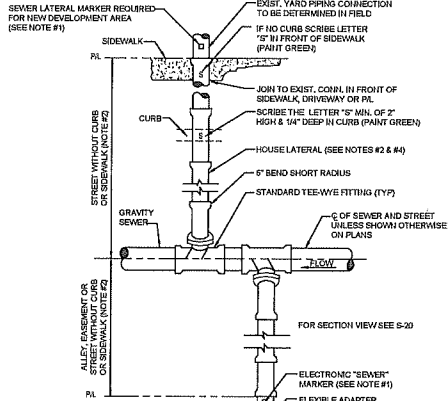
NOTES:

1. IF EXISTING CONFLICT PIPE IS A WATER OR RECLAIMED WATER MAIN, 12-INCHES OF SEPARATION IS REQUIRED, A FULL LENGTH OF PIPE SHALL BE CENTERED OVER EXISTING UTILITY MAIN TO PROVIDE MAXIMUM JOINT SPACING FOR ALL CROSSINGS.
2. FOR OTHER LOCATION LIMITATIONS SEE DETAIL (S-26 & S-27).
3. LOCATING WIRE REQUIRED. SEE DETAIL S-49.
4. THE COVER FOR PIPING LESS THAN 24" SIZE SHALL BE 36" (MIN) IN UNPAVED AREAS, 36" (MIN) IN PAVED AREAS AND A MAXIMUM COVER OF 64" UNLESS PRE-APPROVED BY JEA. THE COVER FOR PIPING 24" SIZE AND LARGER SHALL BE 36" (MIN) IN PAVED AND UNPAVED AREAS AND A MAXIMUM COVER OF 64", UNLESS APPROVED BY JEA.
5. THE SOILS BETWEEN THE MAIN AND THE CONFLICT PIPE SHALL BE COMPACTED TO 84% OF THE MAXIMUM DENSITY AS DETERMINED BY THE LABORATORY MODIFIED PROCTOR TEST ASTM D 1557.

ADJUSTMENT UNDER EXISTING UTILITIES
MECHANICAL RESTRAINTS

JANUARY 2021

PLATE S-41



FOR SECTION VIEW SEE S-20

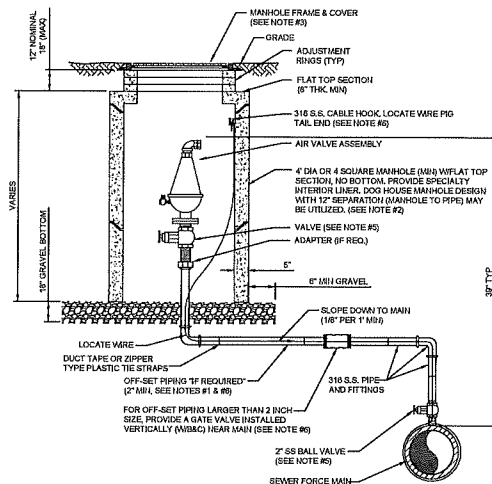
NOTES:

1. TO MARK THE LOCATION OF THE 6" PLUG FOR NEW SERVICE, FOR PROJECTS WHERE NO CONCRETE CURB EXIST, AN ELECTRONIC "SEWER" MARKER IS REQUIRED FOR ALL LATERALS WHICH ARE "NOT IN USE". FOR NEW DEVELOPMENT AREAS WHERE THE SEWER LATERAL IS "NOT IN USE", A LANDSCAPE TIERER OR 3/4 10L 2" POST (TOP PAINTED GREEN) SHALL BE INSTALLED WHERE REQUIRED BY JEA OR NO CONCRETE CURB EXIST, AN ELECTRONIC "SEWER" MARKER SHALL BE INSTALLED TO MARKER SHALL ALSO BE INSTALLED.
2. THE MINIMUM SIZE OF ALL HOUSE LATERALS SHALL BE 6" INCHES. THE MAXIMUM LENGTH OF A HOUSE LATERAL SHALL BE 60 FEET (LENGTH BETWEEN SEWER MAIN OR MANHOLE TO CUSTOMERS PROPERTY LINE).
3. NO SEWER SERVICE CONNECTIONS PERMITTED ON GRAVITY SEWER PIPE WHICH ARE 16" AND LARGER.
4. ALL GRAVITY SEWER MAINS AND ASSOCIATED SEWER LATERAL PIPE AND FITTINGS (INCLUDING THE TEE-WYE FITTING) SHALL BE PVC SDP-26.

HOUSE LATERAL - PLAN VIEW

JANUARY 2021

PLATE S-19



NOTES:

1. THE AIR ASSEMBLY MANHOLE SHALL BE LOCATED OUTSIDE OF THE ROADWAY PAVEMENT AREA (I.E. LOCATED IN NON-TRAFFIC AREAS, IF OFF-SET PRIOR IS REQUIRED, THE PIPING SHALL BE 3 INCH MINIMUM (UNLESS SEE AIR VALVE INLET), FOR PIPE SIZES 3 INCH AND SMALLER PIPING SHALL BE 316 STAINLESS STEEL SCH 40, STD GRADE, THREADED, FOR PIPE SIZES 4 INCH AND LARGER: PIPING SHALL BE 316 STAINLESS STEEL SCH 40, STD GRADE, WELDED OR PVC DR-18 PIPE AND FITTINGS RESTRAINED.
2. THE CONCRETE MANHOLE SHALL INCLUDE A POLYURETHANE SPECIALTY LINER (PER SPEC SECTION 445) TO BE INSTALLED ON THE INTERIOR SURFACES INCLUDING THE RISER SECTION TOP AND THE ADJUSTMENT RINGS. A CONTINUOUS WATERPROOFING MATERIAL SHALL BE PROVIDED ON THE OUTSIDE SURFACES OF THE MANHOLE.
3. FRAME AND COVER SHALL BE JEA STANDARD. THE COVER SHALL HAVE NO GASKET TO ALLOW AIR TO EXIST W/OUT REMOVE GASKET IF NECESSARY FROM THE UNDER SIDE OF STANDARD JEA COVER, THE COVER (WHEN FLIPPED OPEN) MUST CLEAR THE AIR VALVE ASSEMBLY AT ALL TIMES OR A SQUARE TOP WITH ALUMINUM DOOR SHALL BE PROVIDED (JUNIOR LOCATIONS ONLY).
4. FOR PIPE SIZES 3 INCH AND SMALLER, PROVIDE A STAINLESS STEEL BALL VALVE (P' VALVE), FOR PIPE SIZES 4 INCH AND LARGER, PROVIDE A FLANGE GATE VALVE (WHEEL OPERATOR) OR PLUG VALVE, LEVER ARM OPERATOR. SEE SPECIFICATION FOR ADDITIONAL REQUIREMENTS.
5. FOR A 2" AIR VALVE, PROVIDE 2" STAINLESS STEEL BALL VALVE AT THE MAIN. FOR AIR VALVES LARGER THAN 2" SIZE, PROVIDE A TAPPING GLEVE OR DUCTILE IRON TEE FITTING. ALSO, FOR OFF-SET PIPING LARGER THAN 2 INCH SIZE, PROVIDE A GATE VALVE (INSTALLED VERTICALLY NEAR MAIN), SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
6. LOCATE WIRE SHALL HAVE ENOUGH SLACK TO REACH 4' ABOVE FINAL GRADE.

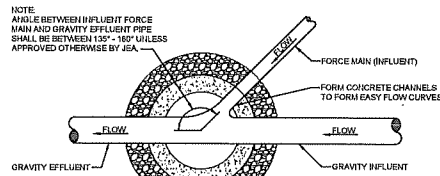
AIR VALVE ASSEMBLY INSIDE MANHOLE

JANUARY 2021

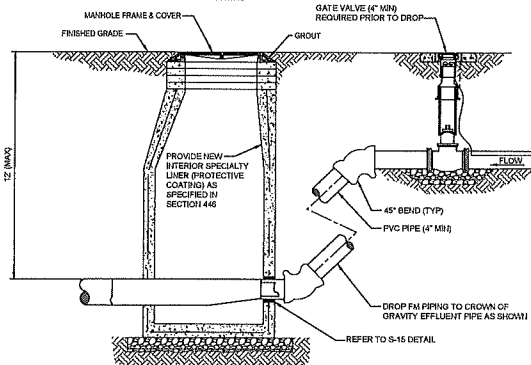
PLATE S-29

PROSSER Civil Engineering 1001 South 10th Street, Suite 200 Phoenix, AZ 85026-2020 Tel: 602.252.1410 Fax: 602.252.1411 Email: info@prosser.com Prosser Engineering, Inc.				Project: Building Community Drawing No.: Revision:			
NO.	BY	DATE	REVISIONS	DESIGN CHECKED	FLUOR REVISION NO.	DATE	BY
1	A						
2	A						
3	A						
4	A						
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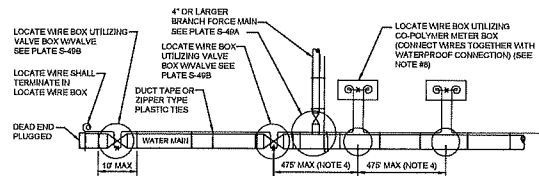
JANUARY 2021 PLATE S-38D



PLAN



SECTION



LOCATE WIRE SYSTEM

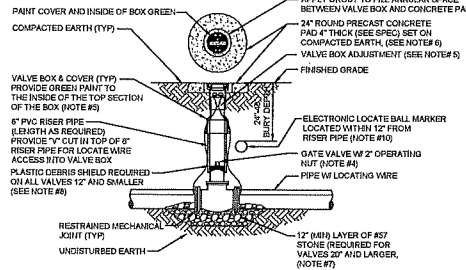
NOTES:

1. LOCATE WIRE TO BE INSTALLED IN EITHER THE ONE OR ELEVEN O'CLOCK POSITION ON ALL DUCTILE IRON OR PVC (PRESSURE MAINS). LOCATE WIRE SHALL ALSO BE INSTALLED ON ALL HDPE POLY MHD PIPING (120 OR 1100 POSITION), IF POSSIBLE.
2. SECURE LOCATING WIRE TO PVC FORCE MAIN BY USE OF DUCT TAPE OR ZIPPER TYPE PLASTIC TIE STRAPS SPACED AT A MAXIMUM DISTANCE OF TEN (10) AND AT EACH SIDE OF BELL JOINT OR FITTING.
3. THE LOCATE WIRE SYSTEM SHALL BE SUBJECT TO TESTING TO DETERMINE ITS RELIABILITY. WHERE INSTALLED UNDER PAVEMENT AREAS, TESTING SHALL BE DONE PRIOR TO THE PLACEMENT OF PAVEMENT, UNLESS APPROVED OTHERWISE BY JEA.
4. LOCATE WIRE SHALL TERMINATE WITHIN AN ACTIVE VALVE BOX (WITH A VALVE) OR A METER BOX (IF NO VALVE) AT 475' INTERVALS, SEE DETAIL PLATE S-49B. WIRE CONNECTIONS BELOW GROUND (OUTSIDE OF A BOX) SHALL BE AVOIDED.
5. LOCATE WIRE SHALL BE 12 GAUGE COPPER WIRE WITH 20 INCHES (MINIMUM) HOPE INSULATION THICKNESS, 0.141 INCHES (MINIMUM) O.D. RATED BREAK LOAD 70 LBS. IF RATED (DIRECT BURIAL) GREEN COLOR. FOR MHD INSTALLATIONS, THE LOCATE WIRE SHALL BE COPPER COATED STEEL, AS SPECIFIED IN SPEC. SECTION 702.
6. "X" INDICATES THAT THE WIRES ARE CONNECTED TOGETHER WITH WATERPROOF CONNECTION. (SEE DETAIL W-49B)
7. "Q" INDICATES A WIRE PIG-TAIL (24" LONG)
8. ALL "V" CUT SHALL BE CARVED IN THE CONCRETE CURB AND PAINTED AT ALL LOCATE WIRE BOXES.
9. FOUR LANES OF TRAFFIC (HAVING TWO LANES OF TRAFFIC IN EACH DIRECTION) OR GREATER THE LOCATE WIRE AND VALVE BOX SHALL BE OFF-SET TO THE RIGHT-OF-WAY.

LOCATE WIRE CONSTRUCTION FOR FORCE MAINS

JANUARY 2021

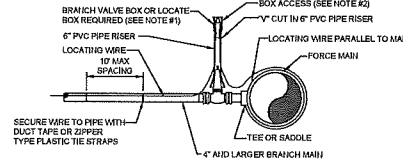
PLATE S-49



SEWER VALVE DETAIL

JANUARY 2021

PLATE S-30



BRANCH FORCE MAIN

(4" AND LARGER SEWER MAIN)

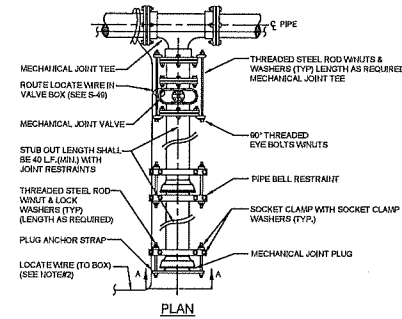
NOTE:

1. NOTE THAT THE BRANCH WIRE IS NOT CONNECTED TO THE MAIN WIRE.
2. LOCATE WIRE SHALL ENTER THE VALVE BOX THROUGH A "V" CUT IN THE 6" PVC RIGID PIPE SECTION (SEE S-30).
3. LOCATE WIRE BOX SHALL BE INSTALLED OUTSIDE OF SIDEWALKS, DRIVEWAYS AND PAVEMENT.
4. "Q" INDICATES A WIRE PIG-TAIL (4" LONG)

LOCATE WIRE FOR BRANCH MAIN

JANUARY 2021

PLATE S-49A



SECTION "A-A"

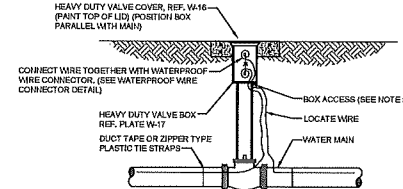
NOTES:

1. IN LIEU OF BELL/ROD RESTRAINTS, MECHANICAL JOINT RESTRAINTS MAY BE USED.
2. LOCATING WIRE REQUIRED, UTILIZING A LOCATE WIRE BOX INSTALLED AT PLUG LOCATION.
3. NUMBER OF THE RODS REQUIRED IS AS FOLLOWS:
3" - 4" DIAMETER MAIN - 2 THE RODS REQUIRED PER JOINT (3/4" ROD)
4" - 6" DIAMETER MAIN - 4 THE RODS REQUIRED PER JOINT (3/4" ROD)
6" - 8" DIAMETER MAIN - 6 THE RODS REQUIRED PER JOINT (3/4" ROD)
8" - 10" DIAMETER MAIN - 8 THE RODS REQUIRED PER JOINT (3/4" ROD)
10" - 12" DIAMETER MAIN - 10 THE RODS REQUIRED PER JOINT (3/4" ROD)
12" - 14" DIAMETER MAIN - 12 THE RODS REQUIRED PER JOINT (3/4" ROD)
14" - 16" DIAMETER MAIN - 14 THE RODS REQUIRED PER JOINT (3/4" ROD)
16" - 18" DIAMETER MAIN - 16 THE RODS REQUIRED PER JOINT (3/4" ROD)
18" - 20" DIAMETER MAIN - 18 THE RODS REQUIRED PER JOINT (3/4" ROD)
20" - 24" DIAMETER MAIN - 20 THE RODS REQUIRED PER JOINT (3/4" ROD)
24" - 30" DIAMETER MAIN - 24 THE RODS REQUIRED PER JOINT (3/4" ROD)
30" - 36" DIAMETER MAIN - 30 THE RODS REQUIRED PER JOINT (3/4" ROD)
36" - 42" DIAMETER MAIN - 36 THE RODS REQUIRED PER JOINT (3/4" ROD)
42" - 48" DIAMETER MAIN - 48 THE RODS REQUIRED PER JOINT (3/4" ROD)
48" - 54" DIAMETER MAIN - 54 THE RODS REQUIRED PER JOINT (3/4" ROD)
4. THE LOCATION OF THE DEAD END PLUG SHALL NOT BE UNDER PAVEMENT, IF POSSIBLE. THE STUB CUT SHALL EXTEND BEYOND THE INTERSECTION AREAS OR ROAD CROSSING BY 10 FEET (MIN.) WHERE POSSIBLE.

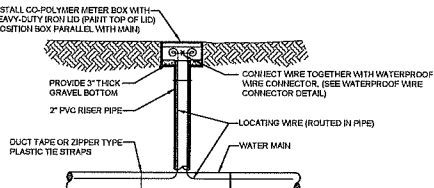
PLUGGED DEAD END USING MECHANICAL RESTRAINTS

JANUARY 2021

PLATE S-44



LOCATE WIRE BOX UTILIZING VALVE BOX



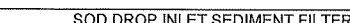
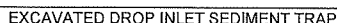
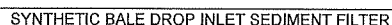
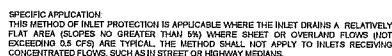
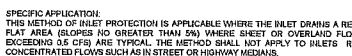
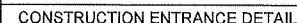
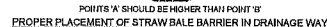
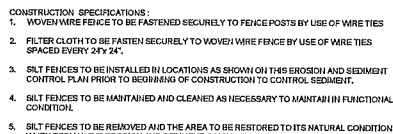
LOCATE WIRE BOX UTILIZING METER BOX

LOCATE WIRE BOX

JANUARY 2021

PLATE S-49B

PROSSER		DESIGNER		CHECKER		DATE	
1875 S. 1st Ave. Suite 100, Phoenix, AZ 85004		1875 S. 1st Ave. Suite 100, Phoenix, AZ 85004		1875 S. 1st Ave. Suite 100, Phoenix, AZ 85004		1875 S. 1st Ave. Suite 100, Phoenix, AZ 85004	
PROSSER ENGINEERING, INC.		PROSSER ENGINEERING, INC.		PROSSER ENGINEERING, INC.		PROSSER ENGINEERING, INC.	
Civil/Structural Engineering		Civil/Structural Engineering		Civil/Structural Engineering		Civil/Structural Engineering	
NO. SHEETS		SHEET NO.		DATE		SCALE	
1		1		JANUARY 2021		AS NOTED	
JEA STANDARD		SANITARY SEWER DETAILS		JEA STANDARD		SANITARY SEWER DETAILS	
JEA		Building Community		JEA		Building Community	



EROSION AND SEDIMENT CONTROL NOTES

1. The Contractor is responsible for removing silt from sites of 1/2 reusable on-site and assuring plan alignment and grade in all ditches and outlets at completion of construction.
2. The site Contractor is responsible for removing the temporary erosion and sediment control device after completion of construction and only when areas have been stabilized.
3. Additional Protection - On-site protection must be provided that will not permit silt to leave the project confines due to unforeseen conditions or accidents.
4. Contractor shall ensure that all drainage structures, pipes, etc., are cleaned out and working properly at time of acceptance.
5. Vee mesh shall be laid over the inlet slot to the vee extends a minimum of 1 foot beyond each side of the inlet structure. Hardware (ditch) or comparable vee mesh with 1/2-inch openings shall be used. If more than one strip of mesh is necessary, the strips shall be overlapped.
6. FDOT Inc. 1-tonne aggregate shall be placed over the vee mesh as indicated on plans. The depth of stone shall be at least 12 inches over the entire inlet opening. The stone shall extend beyond the inlet opening at least 10 inches on all sides.
7. If the stone filter becomes clogged with sediment so that it no longer adequately performs its function, the stones must be pulled away from the inlet, cleaned and replaced.
8. Bales shall be either wire-tied or striped with the bindings oriented around the bales rather than over and under the bales.
9. Bales shall be placed lengthwise in strips row surrounding the inlet, with the ends of adjacent bales pressed together.
10. The filter barrier shall be entrenched and backfilled. A trench shall be excavated around the inlet and width of a bale to a minimum depth of 4 inches. After the bales are stacked, the excavated soil shall be backfilled and compacted against the filter barrier.
11. Each bale shall be securely anchored and held in place by at least two chains or steel wires.
12. Loose straw should be weighed between bales to prevent water from entering between bales.
13. Close attention shall be paid to the repair of damaged bales, and runs and undetecting beneath bales.
14. Necessary repairs to barriers or replacement of bales shall be accomplished promptly.
15. Sediment deposits should be removed after each rainfall. They must be removed when the level of deposition reaches approximately one-half the height of the barrier.
16. Any sediment deposits remaining in place after the straw bale barrier is no longer required shall be dressed to conform to the existing grade, prepared and seeded.
17. Silt fences, straw bale barriers and filter barriers shall be inspected immediately after each rainfall and at least daily during prolonged rainfall. Any required repairs shall be made immediately.
18. Should the fabric on a silt fence or filter barrier decompose or become ineffective prior to the end of the expected usable life and the barrier still be necessary, the fabric shall be replaced promptly.
19. Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required shall be dressed to conform with the existing grade, prepared and seeded.
20. The Environmental Protection Agency (EPA) has issued a National Pollutant Discharge Elimination System (NPDES) General Permit for certain stormwater discharges. This NPDES program requires that if the magnitude of construction activities covered by the general permit are above certain thresholds, then a Storm Water Pollution Prevention Plan (SWPPP) is required. Also involved are certain certification, notification, inspection and record keeping in accordance with the EPA Publication EPA-823-G-90-005 dated Sept. 1992 and titled "Storm Water Management for Construction Areas-Developing Pollution Prevention Plans & Best Management Practices." It is the Contractor's responsibility to determine if the project requires an NPDES application and notification and, if necessary, prepare, submit and maintain the required documentation in compliance with the EPA regulations and criteria.
21. The structure shall be inspected after each rainfall and repairs made as needed.
22. Sediment shall be removed and the top exposed to its original orientation when the sediment has accumulated to 1/2 the design depth of the bays. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
23. The Contractor is responsible for following the best erosion and sediment control practices as outlined in the plans, specifications and St. Johns River Water Management District Permit.
24. For additional information on sediment and erosion control refer to "The Florida Development Manual - A Guide to Sound Land and Water Management from the State of Florida Department of Environmental Regulation (DER), Chapter 6.
25. Erosion and sediment control barriers shall be placed adjacent to all upland areas where there is potential for downstream water quality degradation. See detail sheet for typical construction.
26. All ditched areas shall be graded, fertilized, mulched and maintained until a permanent vegetative cover is established.
27. Soil shall be placed in areas which may require immediate erosion protection to ensure water quality standards and maintained.
28. Any discharge from diverting activity shall be filtered and conveyed to the outfall in a manner which prevents erosion and transportation of suspended solids to the receiving outfall.
29. Dewatering pumps shall not exceed the capacity of that which requires a construction use permit from the St. Johns River Water Management District.
30. All ditched areas to be stabilized through compaction, fill screens, hay bales and grouting. All fill slopes 4:1 V or steeper to receive shall be solid soil.
31. All diverting, erosion, and sediment control to remain in place after completion of construction and be removed only when areas have been stabilized.
32. This plan indicates the minimum erosion and sediment controls measures required for this project. The Contractor is responsible for meeting all applicable rules, regulations and water quality guidelines and may need to install additional controls.
33. All excavations and earthwork shall be done in a manner to minimize water runoff and pollution. Discharge shall be controlled and rerouted through hay bales, siltation ditches and sumps. The Contractor shall be responsible for the prevention, correction, control and abatement of erosion and water pollution in accordance with Chapter 17-C3, Florida Administrative Code.
34. The Contractor is responsible for the removal of any sediment that leaves the site and changes any downstream conditions by raising channel bottoms and/or dropping rock outfall controls.
35. The Contractor shall pay for any water quality control violations from any agency that results in fines being assessed to the owner because of the Contractor's failure to eliminate runoff from leaving the site and raising background levels.
36. The Contractor is responsible for obtaining all necessary permits, including any applicable NPDES permits.

Creative Visionaries. Engineering Minds™
13901 Sutton Park Drive South, Suite 200
Jacksonville, Florida 32224-0229
904.739.3655

Florida Certificate of Authorization Number: 0000405

Florida Certificate of Authorization Number: 00004054



GATE EXPRESS
CARWASH #7021 @
SR200 & MINER RD.

DATE: AUGUST 2021

PROJECT NO. : 110031.01

PROJECT NO.: 11803

DESIGNED BY: MDM

DRAWN BY: DPT

No.	Date	Revision
1	10/05/2021	1ST JAGS/JRWMD SUBMITTAL
2	03/09/2022	2nd JAGS/JRWMD SUBMITTAL
3	03/01/2022	1ST HASSAU COUNTY SEP SUBMITTAL
4	05/10/2022	2nd HASSAU COUNTY/JRWMD SUBMITTAL

THIS DRAWING NOT RELEASED FOR
CONSTRUCTION UNLESS SO NOTED ABOVE

SHEET T171.9

EROSION &
SEDIMENT CONTROL
NOTES & DETAILS

C8.0

MATHEMATICS 10011081 DE

MATTHEW D. RE
FL Lic. No. 7705

DATE: _____

PROJECT:

STORM WATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT FORM

STRUCTURAL CONTROLS

DATE _____

EARTH DIKES/SWALES

DIKE OR SWALE	FROM	TO	IS THERE EVIDENCE OF UNDERMINING, SLIDING, OR OVERSLOPING?

MAINTENANCE REQUIRED FOR EARTH DIKES/SWALE _____

TO BE PERFORMED BY: _____

ON OR BEFORE _____

CATCH BASIN/CURB INLET/OUTFALL TURBIDITY CONTROLS

STRUCTURE/ OUTFALL	ARE TURBIDITY CONTROLS IN PLACE	ANY EVIDENCE OF CORROSION AND CRACKING NOT REPAIRING IT OR BYPASSING	DOES SILT NEED TO BE REMOVED FROM AROUND CONTROL

MAINTENANCE REQUIRED FOR CATCH BASIN/CURB INLET/OUTFALLS TURBIDITY CONTROLS _____

TO BE PERFORMED BY: _____

ON OR BEFORE _____

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PROJECT:

STORM WATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT FORM

CHANGES REQUIRED TO THE POLLUTION PREVENTION PLAN:

REASONS FOR CHANGES:

SIGNATURE _____

DATE _____

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