

INTRODUCED: February 13, 2023

AN ORDINANCE No. 2023-054

To authorize the Chief Administrative Officer, for and on behalf of the City of Richmond, to execute an Agreement between City of Richmond and Commonwealth of Virginia, Department of Transportation for Adjustment of Water and Sanitary Sewer Facilities, for the purpose of setting forth the water and sanitary sewer facilities adjustments associated with improvements to the intersection located at U.S. Route 1 and Hopkins Road.

Patrons – Mayor Stoney and Ms. Robertson

Approved as to form and legality
by the City Attorney

PUBLIC HEARING: FEB 27 2023 AT 6 P.M.

THE CITY OF RICHMOND HEREBY ORDAINS:

§ 1. That the Chief Administrative Officer, for and on behalf of the City of Richmond, be and is hereby authorized to execute an Agreement between City of Richmond and Commonwealth of Virginia, Department of Transportation for Adjustment of Water and Sanitary Sewer Facilities, for the purpose of setting forth the water and sanitary sewer facilities adjustments associated with improvements to the intersection located at U.S. Route 1 and Hopkins Road. The Agreement between City of Richmond and Commonwealth of Virginia, Department of Transportation for Adjustment of Water and Sanitary Sewer Facilities shall be approved as to form

AYES: 9 NOES: 0 ABSTAIN: _____

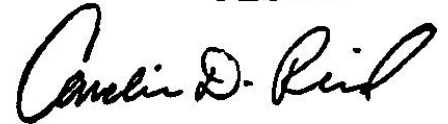
ADOPTED: FEB 27 2023 REJECTED: _____ STRICKEN: _____

by the City Attorney and shall be substantially in the form of the document attached to this ordinance.

§ 2. This ordinance shall be in force and effect upon adoption.

A TRUE COPY:

TESTE:

A handwritten signature in black ink, appearing to read "Carlin D. Reil". The signature is written in a cursive, flowing style.

City Clerk



City of Richmond

Intracity Correspondence

O&R REQUEST

DATE: November 28, 2022

EDITION: 1

TO: The Honorable Members of City Council

THROUGH: The Honorable Levar M. Stoney, Mayor

THROUGH: J.E. Lincoln Saunders, Chief Administrative Officer

THROUGH: Robert C. Steidel, Deputy Chief Administrative Officer, Operations

THROUGH: April N. Bingham, Director, Department of Public Utilities

FROM: Jonathan M. Cosby, Interim Engineering Manager, Department of Public Utilities

12/12/22

RE: City of Richmond – Virginia Department of Transportation Adjustment of Water and Sanitary Sewer Facilities Agreement

ORD. OR RES. No. _____

PURPOSE: To authorize the Chief Administrative Officer to execute an agreement with the Virginia Department of Transportation ("VDOT") concerning water and sewer utility improvements associated with a project to improve the Route 1 & Hopkins Road intersection.

REASON: VDOT is proposing to construct a section of highway designated as the Route 1 Jefferson Davis Highway, Project: 0001-127-108, C-501 (UPC#15955). This project will require changes in the City's water and sanitary sewer facilities. VDOT, through its contractor, will relocate and adjust the City's water and sanitary sewer facilities according to plans attached to the Agreement. The City needs to execute the Agreement in order to enable VDOT to make these changes.

RECOMMENDATION: Approval of the Agreement.

BACKGROUND: As part of the Route 1 Jefferson Davis Highway project, existing water and sewer facilities impacted by the proposed roadway project must be adjusted to accommodate the proposed roadway improvements. Additionally, betterment will be performed by VDOT's contractor to replace existing aging cast-iron water mains.

FISCAL IMPACT / COST: The City is responsible to pay the actual cost of the utility betterment work plus 10% for construction oversight. The actual cost of the utility betterment work is calculated as follows: The City shall pay 96.6% of the cost of the water adjustments and 10% for construction oversight. The City shall pay 0% of the cost of the sanitary sewer adjustments. The estimated betterment portion is \$1,916,995.00, and the construction oversight portion is \$191,699.50 for a total of \$2,108,694.50 which is funded in the FY23 Water Utility Capital Improvement budget.

FISCAL IMPLICATIONS: Performing the betterment work as part of the VDOT project will reduce the overall project cost to the Water Utility as well as the impact to the surrounding area.

BUDGET AMENDMENT NECESSARY: N/A.

REVENUE TO CITY: N/A.

DESIRED EFFECTIVE DATE: Upon adoption.

REQUESTED INTRODUCTION DATE: January 9, 2022.

CITY COUNCIL PUBLIC HEARING DATE: January 23, 2023.

REQUESTED AGENDA: Consent.

RECOMMENDED COUNCIL COMMITTEE: Land Use, Housing, and Transportation; Government Operations.

CONSIDERATION BY OTHER GOVERNMENTAL ENTITIES: N/A.

AFFECTED AGENCIES: Department of Public Utilities.

RELATIONSHIP TO EXISTING ORD. OR RES.: N/A.

REQUIRED CHANGES TO WORK PROGRAM(S): N/A.

ATTACHMENTS: City of Richmond – Virginia Department of Transportation Adjustment of Water and Sanitary Sewer Facilities Agreement.

STAFF: Jonathan Cosby, Interim Engineering Manager, Department of Public Utilities, 804-646-7849.

AGREEMENT
between
CITY OF RICHMOND
and
COMMONWEALTH OF VIRGINIA, DEPARTMENT OF TRANSPORTATION
for
ADJUSTMENT OF WATER and SANITARY SEWER FACILITIES

THIS AGREEMENT, made and entered into as of the _____ day of _____, 20__, by and between the CITY OF RICHMOND (hereinafter called MUNICIPALITY), and the COMMONWEALTH OF VIRGINIA, DEPARTMENT OF TRANSPORTATION, (hereinafter called the STATE), acting by its Commissioner;

WITNESSETH

WHEREAS, the STATE is proposing to construct a section of highway designated as, Route 1 Jefferson Davis Highway, Project: 0001-127-108, C-501 (UPC#15955), which will necessitate changes in the MUNICIPALITY'S water and sanitary sewer facilities: and,

WHEREAS, the MUNICIPALITY appropriated funds for its costs described in SECTION II of this Agreement in the City of Richmond, Virginia, Fiscal Year 2023 Water Utility Capital Budget;

WHEREAS, the STATE and MUNICIPALITY wish to agree upon the terms and conditions under which the necessary changes will be made as hereinafter set forth:

NOW THEREFORE, for and in consideration of the premises and of the mutual covenants herein contained, the parties hereto agree as follows:

SECTION I

(a) It will be to the best interest of the STATE and the MUNICIPALITY to have the adjustment of the water and sanitary sewer facilities included in the highway contract to be adjusted by the highway contractor.

(b) The STATE through its highway contractor, will relocate and adjust the MUNICIPALITY'S water and sanitary sewer facilities in accordance with attached plans and the STATE'S Road and Bridge Specifications; said plans being identified as Sixteen (16) one-half size plans sheets numbered 10(1) through 10(15) of the STATE'S construction plans for Project: 0001- 127-108, C-501, as attached.

SECTION II

- (a) It has been determined that the project is responsible for bearing 3.4% of the cost of the water adjustments indicated in SECTION I(b).
- (b) It has been determined that the MUNICIPALITY is responsible for bearing 96.6% of the project cost of the water adjustments.
- (c) It has been determined that the project is responsible for bearing 100% of the cost of the sanitary sewer adjustments indicated in SECTION I(b).
- (d) It has been determined that the MUNICIPALITY is responsible for bearing 0.0% of the project cost of the sanitary sewer adjustments.
- (e) Appendix A attached to this Agreement is hereby incorporated into this Agreement.

SECTION III

In the event, at any time hereafter that the water and sanitary sewer facilities indicated in SECTION I (b) be altered, rebuilt or relocated due to highway construction, the applicable cost incurred by the MUNICIPALITY in connection with such alteration, rebuilding or relocation of its facilities will be paid in accordance with the prevailing laws or rules and regulations in effect at the time the work is performed.

SECTION IV

The MUNICIPALITY agrees that the existing facilities, which are to be abandoned, will become the property of the STATE's highway contractor with exceptions as noted in the attached plans. Any salvage value derived therefrom will accrue to the STATE'S highway contractor.

In WITNESS WHEREOF, each party has caused this agreement to be executed in duplicate in its name and on its behalf by its duly authorized officer as of the day and year first written.

SECTION V

Nothing in this Agreement shall obligate the parties hereto to expend or provide any funds in excess of funds agreed upon in this Agreement or as shall have been included in an annual or other lawful appropriation.

SIGNATURES

In the presence of:

CITY OF RICHMOND

As to the City of Richmond

By: _____
Title: _____

In the presence of:

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF
TRANSPORTATION

As to the Commonwealth

By: _____
State Right of Way & Utilities Director

APPROVED AS TO FORM


Assistant City Attorney

Appendix A

This Appendix A is a part of the agreement for utility adjustment work for Project 0001-127-108, C-501, UPC#15955, dated , 20 between the CITY OF RICHMOND and the COMMONWEALTH OF VIRGINIA, DEPARTMENT OF TRANSPORTATION.

The parties further agree that the cost of utility betterment work will be paid by the MUNICIPALITY to the STATE based on the actual cost plus 10% for construction oversight. The actual cost shall be determined by:

- The pro-rated percentage of 96.6% representing the MUNICIPALITY'S portion of additional water installation applied to the unit bid prices received for the contract award by the STATE plus 10% for construction oversight. The estimated betterment portion is \$1,916,995.00 and construction oversight is \$191,699.50 for a total of \$2,108,694.50.

Payment by MUNICIPALITY to the STATE shall be promptly made in accordance with the following schedule:

- Lump Sum payments of the estimated cost in the amount described above with reconciliation between estimated and actual cost upon completion of the project. Payment shall be due within 30 days upon execution of this agreement by all parties.

Whenever the MUNICIPALITY'S payment is backed on unit bid process a final cost will be determined based upon the actual quantities of each unit paid to the contractor by the STATE. The STATE will provide the MUNICIPALITY with the final unit quantities and final cost with its final bill to the Utility. The cost of construction oversight will be applied as described above.

In the event the betterment work requires a construction change order during the life of the contract this reimbursement and payment plan shall be adjusted to reflect the change in costs.

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- G1. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM WHERE APPLICABLE, TO THE CURRENT EDITION OF THE VICTORIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE SPECIFICATIONS, AS WELL AS PLAN NOTES AND DETAILS.
- G2. ALL CONCRETE SHALL BE CLASS A3 F CASH-IN-PLACE AND CLASS A4 PRECAST.
- G3. THE LOCATIONS, DEPTHS AND SIZES OF EXISTING UTILITIES SHOWN ON THESE PLANS HAVE BEEN OBTAINED FROM AVAILABLE UTILITY RECORDS AND FIELD SURVEY. CONTRACTOR SHALL VERIFY ALL UTILITIES SHOWN AND FIELD VERIFY WITH TEST HOLES ON OTHER MATERIAL. THE EXACT LOCATION, ELEVATION, TYPE, DEPTH/ACCESS, AND SIZE OF ALL EXISTING UNDERGROUND UTILITIES AT POINTS OF CONNECTION FOR CROSSING PRIOR TO ORDERING OF UNDERGROUND INSTALLATION FOR THE PROJECT.
- G4. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES AND SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE ENGINEER AND UTILITY OWNER, AND AT NO EXPENSE TO THE DEPARTMENT. THE CONTRACTOR SHALL BE REQUIRED TO NOTIFY THE CITY OF VICTORIA IMMEDIATELY TO THE CITY OF RECORDING DEPT. OF PUBLIC UTILITIES AT (604) 648-6848, OR RESPECTIVE UTILITY OWNER.
- G5. PLAN LOCATIONS AND DIMENSIONS SHALL BE ADHERED TO.
- G6. ALL PIPE ELEVATIONS AND DIMENSIONS SHALL BE INVERT UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS.
- G7. THE CONTRACTOR SHALL CONTACT THE CITY OF RECORDING DEPARTMENT OF PUBLIC UTILITIES AT (604) 648-6848 PRIOR TO ORDERING OF ANY WORK TO COMMENCING UTILITY ADJUSTMENT WORK. IN ADDITION, THE CONTRACTOR SHALL CONTACT MR. ANDREW PARRIS AT (604) 648-6848 OR (604) 133-1091 AT THE CITY OF VICTORIA TO THE UTILITY ADJUSTMENT WORK TO SCHEDULE A MEETING TO DISCUSS THE PROJECT.

WATER MATERIAL / CONSTRUCTION NOTES

- ALL NEW MAINS FOR PROPOSED ADJUSTMENTS/RELOCATIONS OF WATER FACILITIES SHALL BE SUBMITTED FOR APPROVAL BY THE VIRGINIA DEPARTMENT OF TRANSPORTATION AND THE CITY OF RICHMOND, DEPARTMENT OF PUBLIC UTILITIES (DPU), PRIOR TO ORDERING MATERIALS.
- ADJUSTMENTS OF EXISTING WATER FACILITIES SHALL BE IN ACCORDANCE WITH SECTION 320 OF THE CURRENT VIRGINIA WATER AND SEWER SPECIFICATIONS. ALL ADJUSTMENTS OF NEW FACILITIES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE CURRENT VIRGINIA WATER AND SEWER SPECIFICATIONS. ALL ADJUSTMENTS TO FINAL PROPOSED GRADE.
- CLEANERS TO FINAL UTILITIES SHALL CONFORM TO THE DIMENSIONS SHOWN ON THE PLANS, CLEANANCES REQUIRED BY THE VIRGINIA DEPARTMENT OF HEALTH AND SHALL BE MAINTAINED BETWEEN THE WATER MAINS AND SANITARY SEWERS.
- TO THE EXTENT POSSIBLE, WHERE A NEW WATER MAIN CROSSES A SANITARY SEWER, LOCATE THE JOINTS IN THE WATER MAIN AT AN EQUAL DISTANCE ON EITHER SIDE OF THE SEWER. THE MINIMUM CLEARANCE BETWEEN THE MAINS SHALL PROVIDE A 18" X 18" X 1' FOOT BENTONITE CLAY SEAL BETWEEN THE WATER MAIN AND THE SEWER LINE.
- THE MINIMUM DEPTH OF FINAL COVER FOR ALL NEW WATER MAINS SHALL BE 42" MOLES, UNLESS SHOWN OTHERWISE ON THE PLANS. THE MINIMUM TEMPORARY COVER FOR ALL WATER MAINS DURING CONSTRUCTION SHALL BE 24" MOLES.
- THE CONTRACTOR SHALL REQUEST EXISTING VALVE OPERATION BY CITY ENGINEERS. IF LESS THAN 60% OF THE EXISTING VALVES ARE OPERATIONAL, THE CONTRACTOR SHALL ADVISE THE CITY ENGINEERS AND SHALL BE SOON DIRECTED BY THE OWNER, CONTRACT RICHMOND DPU AT 601-641-6136.
- THE UTILITY OWNER DOES NOT GUARANTEE A 60 PERCENT SHUTDOWN OF ITS EXISTING WATER MAINS. THE CONTRACTOR SHALL PROVIDE ALL PLUGS AND DRAINING EQUIPMENT NECESSARY TO PERFORM THE PROPOSED WORK.
- PRESSURE AND LEAKAGE TESTING, FLOODING AND DISINFECTION OF NEW WATER MAINS SHALL BE IN ACCORDANCE WITH SECTION 320 OF THE CURRENT VIRGINIA WATER AND SEWER SPECIFICATIONS AS WELL AS AMERICAN STANDARDS FOR TESTING MATERIALS (ASTM) AND THE CITY OF RICHMOND, DEPARTMENT OF PUBLIC UTILITIES, WITH THREE (3) DAYS ADVANCE NOTICE PRIOR TO UNDERTAKING ANY TESTS. CONTRACTOR SHALL USE TEMPORARY TESTING/FLOODING ASSEMBLIES FOR THE PORTALS ON UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF THE PORTALS ON UTILITIES. THE CONTRACTOR SHALL REQUIRE A PORTABLE WATER METER WITH BACKFLOW PREVENTER.
- PIPE RECORDING AND BACKFILL FOR NEW WATER MAIN INSTALLATIONS SHALL BE IN ACCORDANCE WITH VDOT STANDARD L-1119.2.

NOTES

1. REACTION BLENDING IN ACCORDANCE WITH THE DETAILS ON UTILITY SHEET 11.

NOTES (CONT'D)

[illegible]

NOTE: THE UTILITY ADJUSTMENT SHEETS HAVE A BASE SHEET NUMBER WITH A SUFFIX NUMBER IN PARENTHESES (EXAMPLE - B111, B122, ETC.). SHEET NUMBER REFERENCES WITHIN THE PLANS REFER TO THE SUFFIX NUMBER ONLY.

LEGEND

[illegible]

UTILITY ADJUSTMENT PLANS

WATER AND SANITARY SEWER FACILITIES
HOPKINS ROAD RTE 647 AT ROUTE 1
CITY OF RICHMOND VIRGINIA

PREPARED BY
WHITMAN, REQUARDT AND ASSOCIATES, LLP
8030 STONY POINT PARKWAY, SUITE 220
RICHMOND, VIRGINIA 23235

5/20/20	31918	1	000H127-108, P.E.-10H.	10121
9/10/20	31919	1	000H127-108, P.E.-10H.	10121

NOTES (OPTIONAL)

58. ACCEPTANCE TESTING OF PROPOSED SANITARY SEWER NON-PRESSURE PIPE AND SEWER MANHOLES SHALL BE IN ACCORDANCE WITH SECTION 502.04 OF THE CURRENT VDOT ROAD AND BRIDGE SPECIFICATIONS. BOTH A WATER LEAKAGE TEST AND A LOW PRESSURE AIR TEST SHALL BE PERFORMED ON THE PIPE AFTER BACKFILL. SEWER MANHOLES SHALL BE TESTED BY EXPLORATION. THE CONTRACTOR SHALL PROVIDE REMOVAL DPU WITH THREE (3) DAYS ADVANCE NOTICE PRIOR TO UNDERGOING ANY TESTS.

19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SEWAGE OVERFLOWS AND THE CLEANUP OF ANY SPILLAGE DURING THE SANITARY SEWER RELOCATION AND CONSTRUCTION. THIS IS TO INCLUDE ALL EXPENSES FOR FUEL, ENGINEERING FEES AND ADDITIONAL OPERATIONAL EXPENSES INCURRED BY MC-MORNO DPL.

- EXISTING SANITARY SEWER PIPE, 8 INCHES AND LARGER, TO BE ADJACED UNDER PAVEMENT SHALL BE BACKFILLED WITH FLOWABLE FILL PRIOR TO BEING CAPPED OR PLUGGED. FLOWABLE BACKFILL SHALL BE MEASURED IN CUBIC YARDS (CY) AND SHALL BE IN ACCORDANCE WITH THE VDOT FLOWABLE BACKFILL SPECIAL PROVISIONS.

- THE CONTRACTOR SHALL MAINTAIN ALL EXISTING SANITARY SEWER SERVICES WITHOUT INTERRUPTION OR PROVIDE TEMPORARY SERVICES (PUMP AROUND) AS APPROVED BY THE REQUIRED ADOPTING AGENCY. TEMPORARY SERVICES SHALL INCLUDE PROVIDING THE REQUIRED PUMPING CAPABILITY TO MAINTAIN CONTINUOUS FULL PIPE FLOW. IN ADDITION, THE CONTRACTOR MUST PROVIDE A STAMBOY BACKUP PUMP OF EQUAL CAPACITY BOTH PUMPS SHALL BE AUTOMATIC SELF-STARTING AND SHALL BE PROVIDED WITH A PROTECTION THAT PREVENTS THE PUMP FROM RUNNING AT HIGH OIL LEVELS. THE PROTECTION SHALL BE FULLY MAINTAINED DURING THE Bypass IMPLEMENTATION.

- FOR FLOW IN ADDITION, THE CONTRACTOR MUST PROVIDE A STAND-BY BACK-UP PUMP OF EQUAL CAPACITY. BOTH PUMPS SHALL BE AUTOMATIC, SELF-PRIMING, REQUIRING NO FAIL-SAFE PROTECTION, FLOAT-OPERATED, OR ANY ADJUSTING AT HIGH OR LOW SUCTION LIFTS. THE PUMPS SHALL BE FULLY MAINTAINED DURING THE BYPASS REQUIREMENT.

VDOT PROJECT 0001-127-108, C501
PAY ITEM SUMMARY OF WATER FACILITIES[illegible]

MAIL TO: DIRECTOR, FBI, 400 ANDREWS BLVD., WASHINGTON, D.C. 20535

VDOT PROJECT 0001-127-108, C501
ITEM SUMMARY OF SAN. SEWER FACILITIES

SHEET NO.	SHEET NO.				SHEET NO.
	18" PVC SANITARY SEWER PIPE	SANITARY SEWER MANHOLE	MANHOLE FRAME & COVER (A/C)	ADJUST EXIST. FRAME & COVER	
3	L.F.	L.F.	E.A.	E.A.	3
4	84	37	3	3	4
4C					4C
5				3	5
6				1	6
TOTAL	84	37	3	9	TOTAL

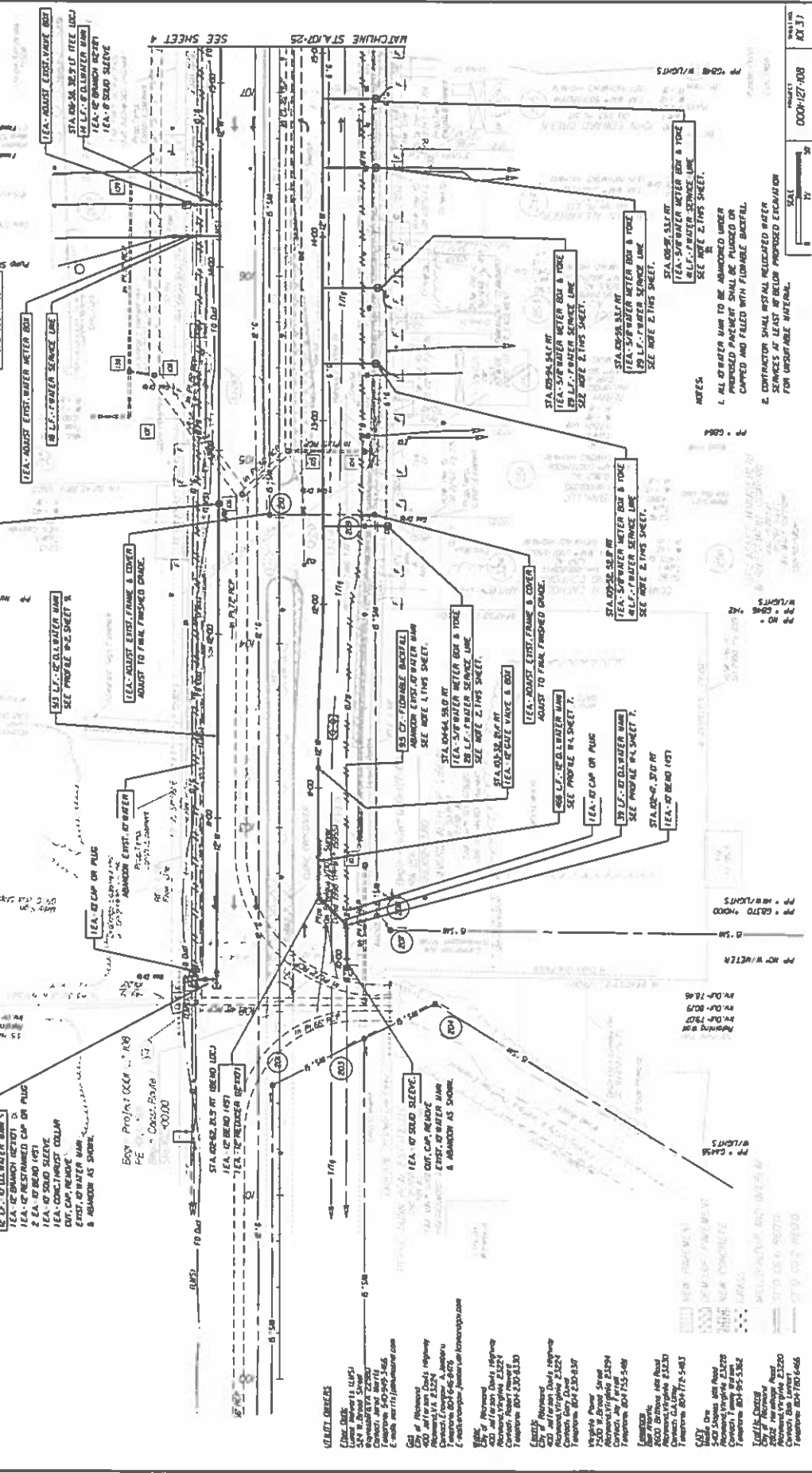
THIS SHEET FOR UTILITY ADJUSTMENT/RELOCATION ONLY

DATE	5/20/20	BY	VA	PROJECT	000H-127-108 PE-101, (KJ3)
DESIGN	DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC OR TO THE PROTECTION OF THE PUBLIC ARE NOT NECESSARY BY THE DEPARTMENT	DATE	5/20/20	BY	VA
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DESIGN	DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC OR TO THE PROTECTION OF THE PUBLIC ARE NOT NECESSARY BY THE DEPARTMENT	DATE	5/20/20	BY	VA

DESIGN	DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC OR TO THE PROTECTION OF THE PUBLIC ARE NOT NECESSARY BY THE DEPARTMENT	DATE	5/20/20	BY	VA
DESIGN	DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC OR TO THE PROTECTION OF THE PUBLIC ARE NOT NECESSARY BY THE DEPARTMENT	DATE	5/20/20	BY	VA
DESIGN	DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC OR TO THE PROTECTION OF THE PUBLIC ARE NOT NECESSARY BY THE DEPARTMENT	DATE	5/20/20	BY	VA



DATE	5/20/20	BY	VA	PROJECT	000H-127-108 PE-101, (KJ3)
DESIGN	DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC OR TO THE PROTECTION OF THE PUBLIC ARE NOT NECESSARY BY THE DEPARTMENT	DATE	5/20/20	BY	VA
DESIGN	DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC OR TO THE PROTECTION OF THE PUBLIC ARE NOT NECESSARY BY THE DEPARTMENT	DATE	5/20/20	BY	VA

THIS SHEET FOR UTILITY ADJUSTMENT/RELOCATION ONLY

PROJECT NO.	000-127-001-PE-001	DATE	08/14/20
DESIGN NO.	000-127-001-PE-001	DATE	08/14/20
DESIGNER	VA	DATE	08/14/20
CHECKER	VA	DATE	08/14/20
APPROVED	VA	DATE	08/14/20

DESIGN (TAKING RELATIVE TO CONSTRUCTION) ON TO RELOCATION AND CONTROL OF TRAFFIC NECESSARY BY THE DEPARTMENT

DATE: 08/14/20

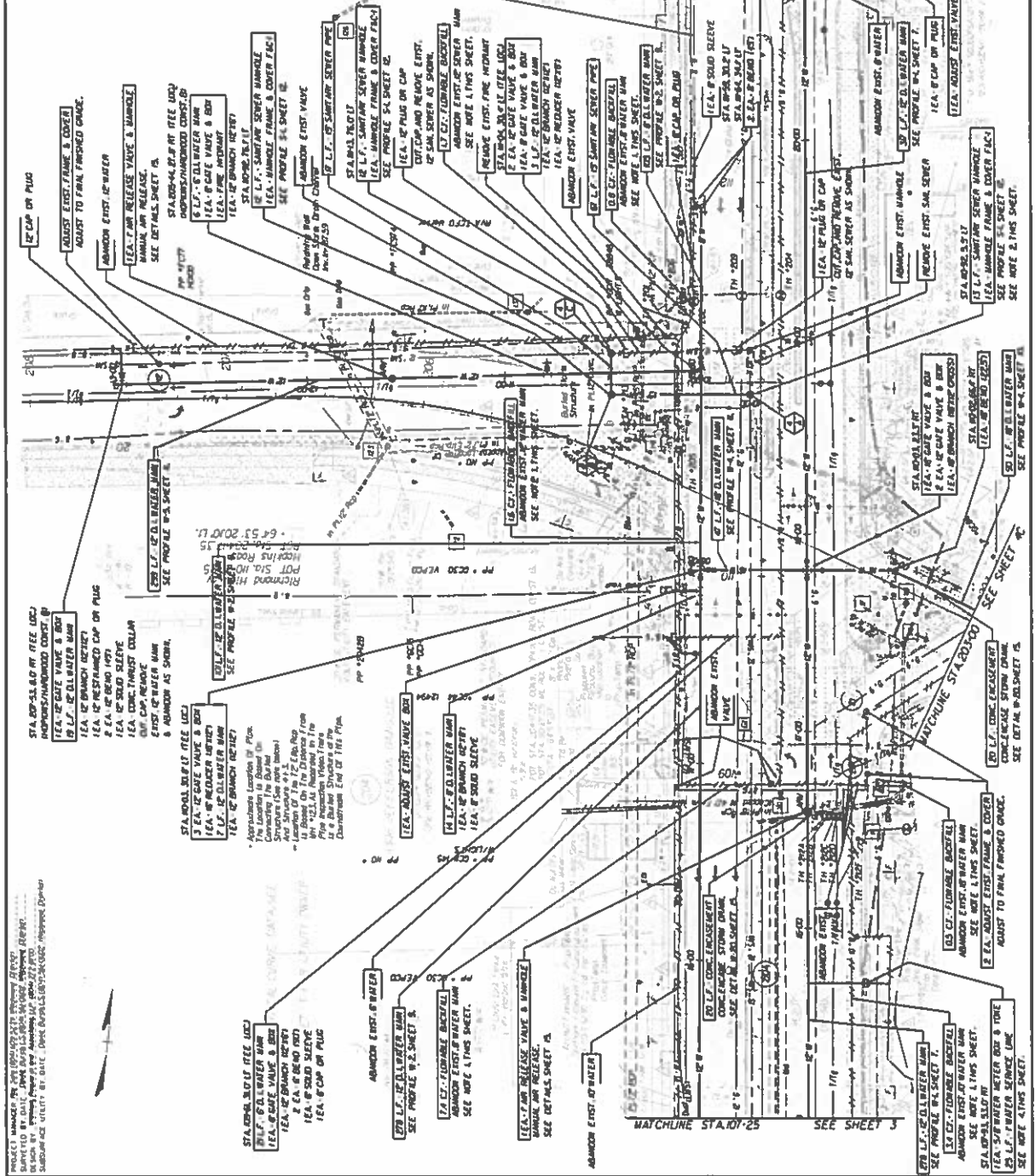
BY: VA

FOR: 000-127-001-PE-001

SCALE: 1" = 10'

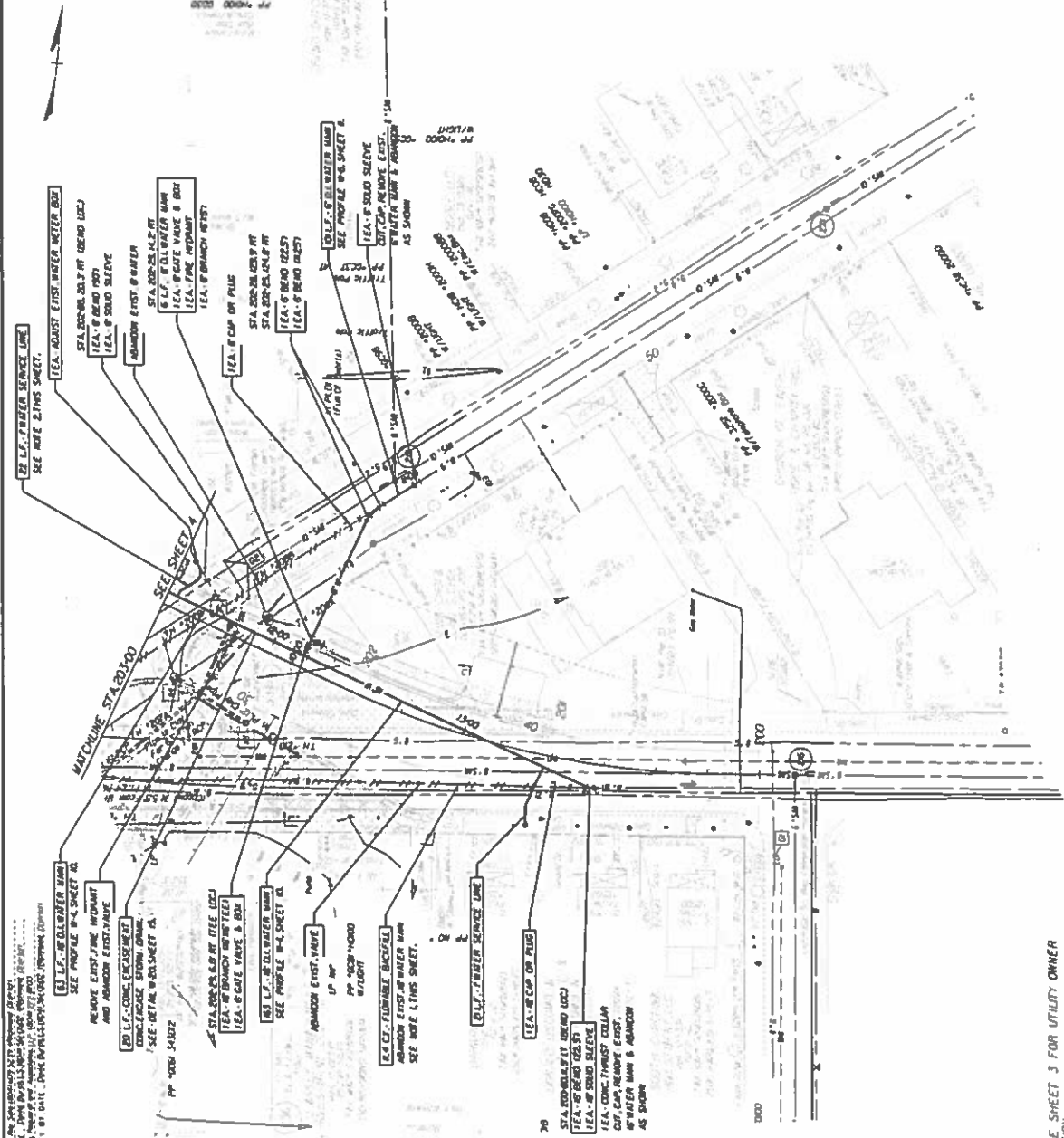
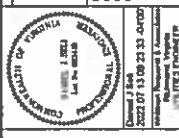
NOTES:

1. ALL 8" & 12" & 18" SEWER AND WATER MAINS TO BE ADJUSTED UNDER PROPOSED PAVEMENT SHALL BE PLACED ON CAPPED AND FILLED WITH FURNISHABLE BACKFILL.
2. CONTRACTOR TO INSTALL EXISTING MANHOLE AND PLACE CONCRETE UNDER PAVEMENT SO THAT FRAME AND COVER DOES NOT CONFLICT WITH CURB.
3. DEFLECT PIPE JOINTS TO MAKE 72" IN WITH 22.5' BEAM.
4. CONTRACTOR SHALL INSTALL RELOCATED WATER SERVICES AT LEAST 18" BELOW PROPOSED GRADE FOR UNSUITABLE MATERIAL.



THIS SHEET FOR UTILITY ADJUSTMENT/RELOCATION ONLY

DATE	5/20/20	BY	VA	PROJECT	0004127-008 PE-01
DATE	5/6/20	BY	VA	PROJECT	RW-201-C-501
<p>DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC OR TO THE PROTECTION OF THE PUBLIC ARE THE RESPONSIBILITY OF THE DEPARTMENT</p> <p>Checked J. B. [Signature] 2022 07 13 09 23 33 ADJUST Engineering Department & Administration UTILITY ENGINEERING</p>					



NOTES

1. ALL WATER MAIN TO BE ABANDONED UNDER PROPOSED PAVEMENT SHALL BE PLUGGED OR CAPPED AND FILLED WITH FURNACE GRAPPL.
2. CONTRACTOR SHALL INSTALL RELOCATED WATER SERVICES AT LEAST 18\"/>

- NEW PAVEMENT
- DEVELOP PAVEMENT
- NEW CONCRETE
- GRASS
- WALL BUILDUP AND OVERLAY
- STD 66 REVD

NOTE: SEE SHEET 3 FOR UTILITY OWNER INFORMATION.

SCALE	1\"/>
DATE	0004127-008
PROJECT	0004127-008

[illegible]

CORRECTION

DONALD M.
JAMES
SINCE WILL BE IN AND OVERNIGHT

3

1

1. \mathbb{R}^n 2. \mathbb{R}^n 3. \mathbb{R}^n 4. \mathbb{R}^n 5. \mathbb{R}^n 6. \mathbb{R}^n 7. \mathbb{R}^n 8. \mathbb{R}^n 9. \mathbb{R}^n 10. \mathbb{R}^n

[illegible]

The following information is being furnished to you for your information only. It is not intended to be used for any other purpose. It is not to be used for any other purpose. It is not to be used for any other purpose.

DATE OF SURVEYED BY DATE
DE SIGN BY SURVEY
SURVEYED BY DATE

NOTE: SEE SHEET 3 FOR UTILITY OWNER INFORMATION

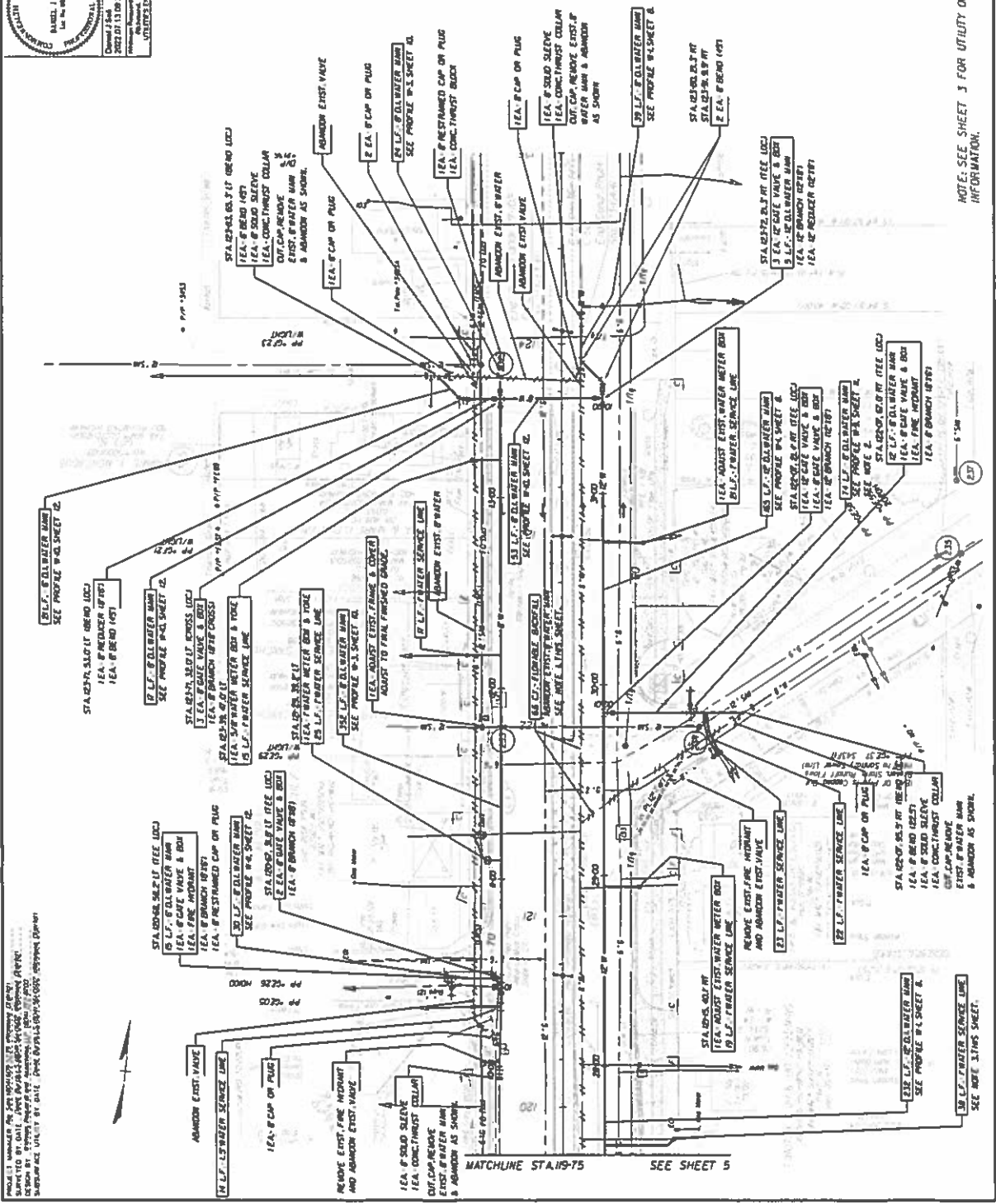
NOTE: SEE SHEET 3 FOR UTILITY OWNER INFORMATION.

5/20/20	1	0000-127-108, P.E.-NOV, RW-20N.C-50H	10161
7/15/20			

THE FOLLOWING INFORMATION IS FOR THE INFORMATION OF THE DIRECTOR OF THE FBI AND THE ATTORNEY GENERAL:



NEW PATENT
DESIGN PATENT
NEW PATENT
NEW PATENT



1. ALL B PROPO CAPS

NOTE: SEE SHEET 3 FOR UTILITY OWNER INFORMATION.

9241	PROJECT	PROJECT NO.
0004-27-108		10161

THIS SHEET FOR UTILITY ADJUSTMENT/RELOCATION ONLY

PROJECT NUMBER	000427-108-PC-R01
DATE	5/20/20
PROJECT	VA
NO.	1
PROJECT	RM 201, C-501
NO.	10171



DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC OR TO THE LOCATION OF ANY STRUCTURE NECESSARY BY THE DEPARTMENT

PROJECT NUMBER: 000427-108-PC-R01
 DATE: 5/20/20
 PROJECT: VA
 NO.: 1
 PROJECT: RM 201, C-501
 NO.: 10171



PROJECT NUMBER	000427-108-PC-R01
DATE	5/20/20
PROJECT	VA
NO.	1
PROJECT	RM 201, C-501
NO.	10171



DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC OR TO THE LOCATION OF ANY STRUCTURE NECESSARY BY THE DEPARTMENT

FROM: HQ AFMPC 14 APR 71 10 00 AM	AFMPC	5/20/70	01449	1	000-427-408, PE-HOI	01712	000-427-408, PE-HOI	01712	000-427-408, PE-HOI
				VA					

[illegible]

THIS SHEET FOR UTILITY ADJUSTMENT/RELOCATION ONLY

DATE	5/20/20	BY	VA	PROJECT NO.	000427-A06-PE-001	DATE	10/9/19
REVISION					REV 201-C-501		

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC ARE NOT TO BE CONSIDERED NECESSARY BY THE CONTRACTOR

APPROVED FOR THE CITY OF VIRGINIA
DATE: 1/23/20
BY: [Signature]

APPROVED FOR THE CITY OF VIRGINIA
DATE: 1/23/20
BY: [Signature]

APPROVED FOR THE CITY OF VIRGINIA
DATE: 1/23/20
BY: [Signature]

APPROVED FOR THE CITY OF VIRGINIA
DATE: 1/23/20
BY: [Signature]

APPROVED FOR THE CITY OF VIRGINIA
DATE: 1/23/20
BY: [Signature]

APPROVED FOR THE CITY OF VIRGINIA
DATE: 1/23/20
BY: [Signature]

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DATE: 1/23/20
BY: [Signature]

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DATE: 1/23/20
BY: [Signature]

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DATE: 1/23/20
BY: [Signature]

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DATE: 1/23/20
BY: [Signature]

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DATE: 1/23/20
BY: [Signature]

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DATE: 1/23/20
BY: [Signature]

APPROVED FOR THE CITY OF VIRGINIA
DATE: 1/23/20
BY: [Signature]

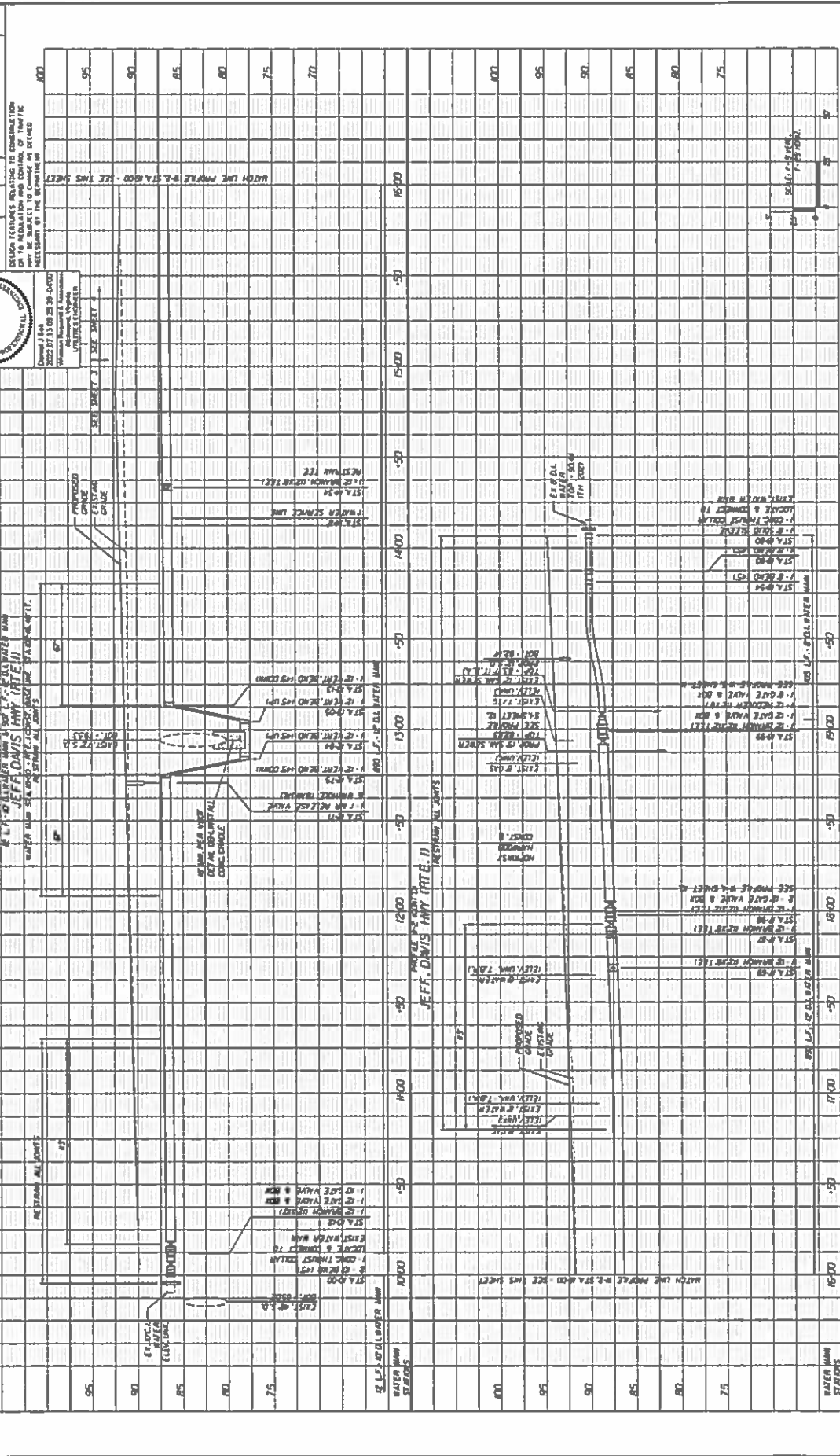
APPROVED FOR THE CITY OF VIRGINIA
DATE: 1/23/20
BY: [Signature]

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DATE: 1/23/20
BY: [Signature]

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DATE: 1/23/20
BY: [Signature]

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DATE: 1/23/20
BY: [Signature]

APPROVED FOR THE CITY OF VIRGINIA
DATE: 1/23/20
BY: [Signature]



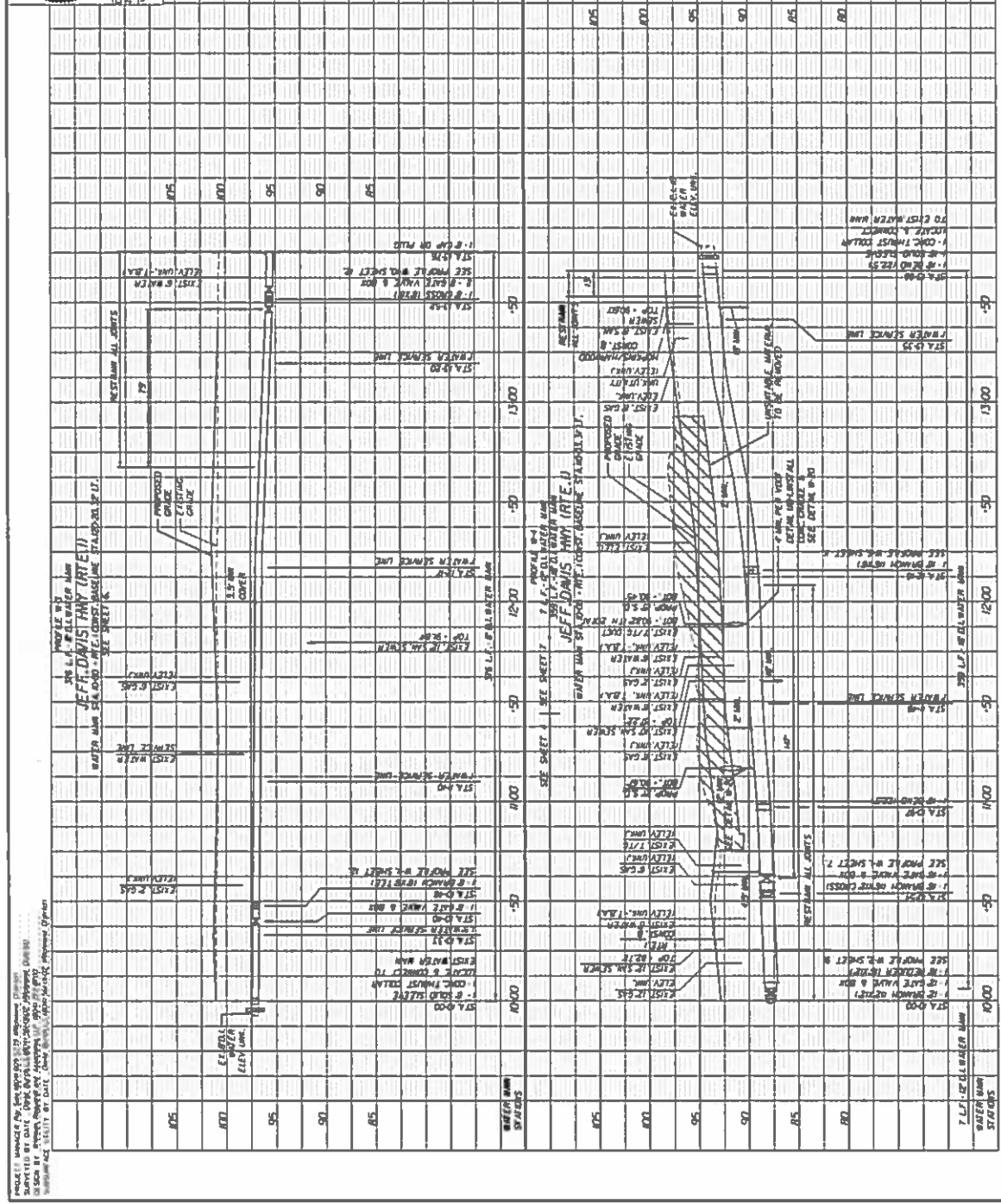
THIS SHEET FOR UTILITY ADJUSTMENT/RELOCATION ONLY

DATE	BY	CHKD	PROJECT	SHEET NO.
5/20/20	VA	1	000-427-001 PE-101 RW-201-C-501	101/101



DESIGN FEATURES RELATING TO CONSTRUCTION
ON TO REGULATION AND CONTROL OF FLOW
NECESSARY BY THE DEPARTMENT

Drawn: J. B. Smith
Checked: J. B. Smith
Date: 5/20/20
Project: 000-427-001 PE-101
Sheet: RW-201-C-501



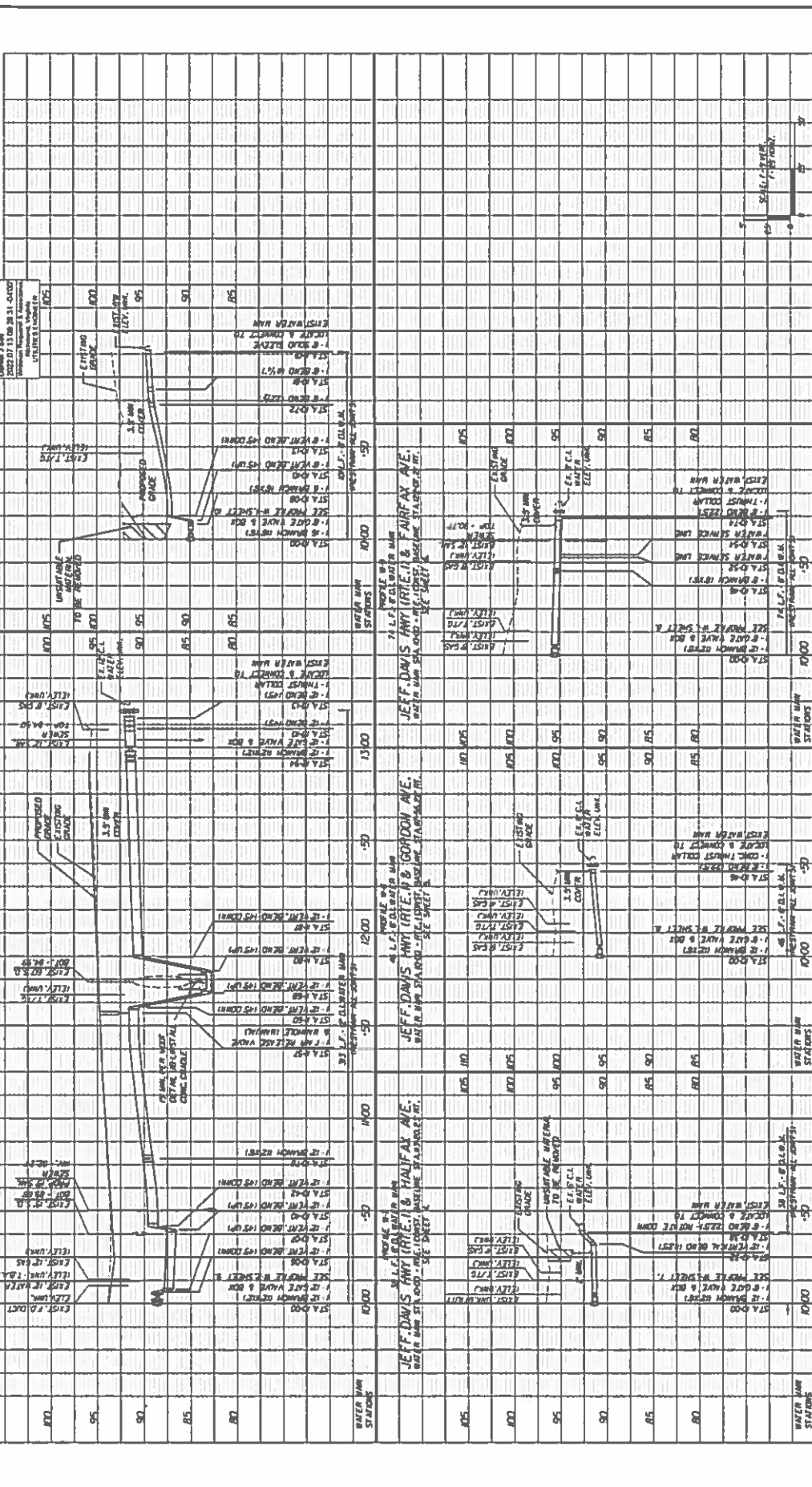
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1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	

3 LF. OF OLIVE WOOD
HAY RITELLI & HAWOOD ST.
CO. RITELLI COMPT. BASELINE ST. WOOD RITE.
SEE SHEET 4.

Jeff Davis
Waterbury, CT

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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THIS SHEET FOR UTILITY ADJUSTMENT/RELOCATION ONLY

PROJECT NUMBER		SHEET NO.	
000-127-106 PE-101		10121	
DATE		DATE	
5/20/20		5/20/20	
STATE		COUNTY	
VA		VA	
PROJECT		PROJECT	
000-127-106 PE-101		000-127-106 PE-101	
DATE		DATE	
5/20/20		5/20/20	

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC NECESSARY BY THE DEPARTMENT



2022 07 15 08 27 03 0407
Daniel J. Bell
Mechanical Engineering
UTILITY ENGINEER

PROJECT NUMBER

000-127-106 PE-101

DATE

5/20/20

STATE

VA

COUNTY

VA

PROJECT

000-127-106 PE-101

DATE

5/20/20

STATE

VA

COUNTY

VA

PROJECT

000-127-106 PE-101

DATE

5/20/20

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DATE

5/20/20

STATE

VA

COUNTY

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DATE

5/20/20

STATE

VA

COUNTY

VA

PROJECT

000-127-106 PE-101

DATE

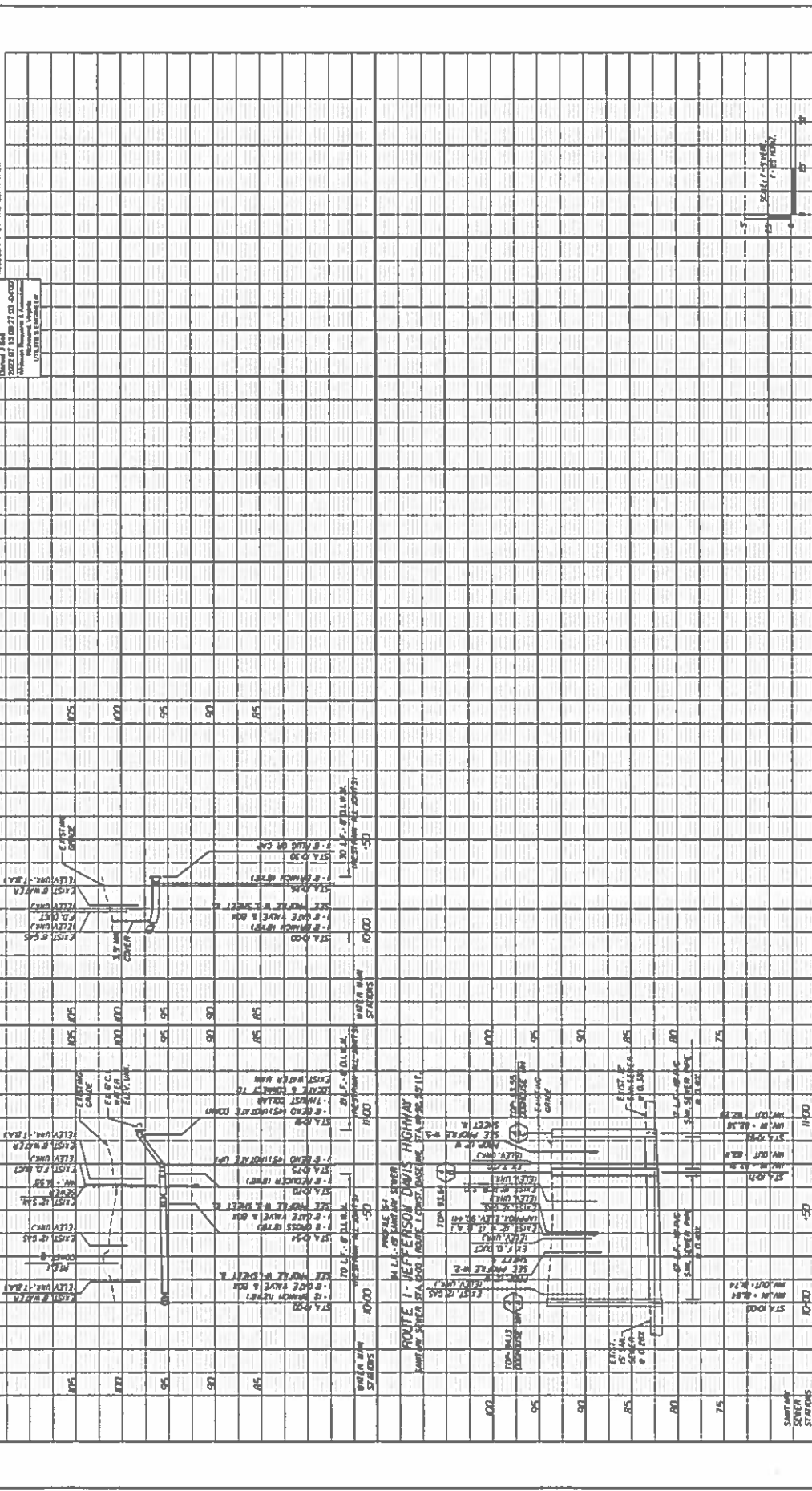
5/20/20

STATE

VA

COUNTY

VA

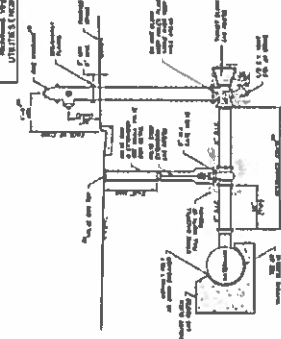
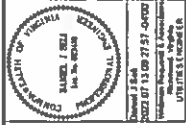


PROJECT NUMBER		SHEET NO.	
000-127-106		10121	
DATE		DATE	
5/20/20		5/20/20	
STATE		COUNTY	
VA		VA	
PROJECT		PROJECT	
000-127-106		000-127-106	
DATE		DATE	
5/20/20		5/20/20	

THIS SHEET FOR UTILITY ADJUSTMENT/RELOCATION ONLY

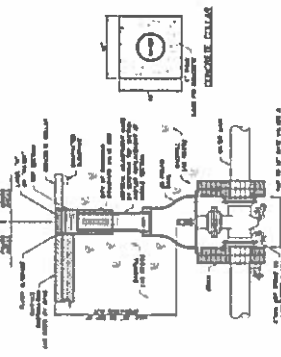
REVISION	DATE	BY	PROJECT	SHEETING
5/20/20	VA	1	0004-27-028 PE-04, RW-204-C-500	40141

DESIGN FEATURES RELATIVE TO CONSTRUCTION
ON TO REGULATION AND CONTROL OF TRAFFIC
MAY BE SUBJECT TO CHANGE AS DEEMED
NECESSARY BY THE DEPARTMENT



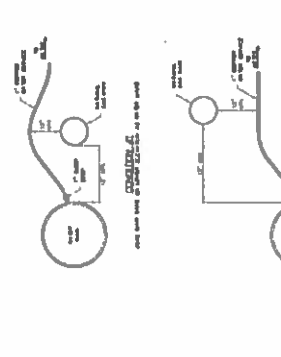
- NOTES:**
1. ALL HYDRANTS SHALL BE INSTALLED WITH THE MAIN LINE ON THE LEFT SIDE.
 2. THE HYDRANT SHALL BE INSTALLED WITH THE MAIN LINE ON THE LEFT SIDE.
 3. THE HYDRANT SHALL BE INSTALLED WITH THE MAIN LINE ON THE LEFT SIDE.
 4. THE HYDRANT SHALL BE INSTALLED WITH THE MAIN LINE ON THE LEFT SIDE.
 5. THE HYDRANT SHALL BE INSTALLED WITH THE MAIN LINE ON THE LEFT SIDE.
 6. THE HYDRANT SHALL BE INSTALLED WITH THE MAIN LINE ON THE LEFT SIDE.

FIRE HYDRANT DETAIL (W-27)
NO SCALE



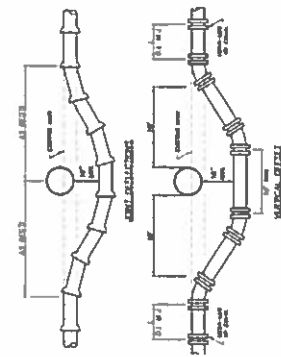
- NOTES:**
1. THE METER SHALL BE INSTALLED WITH THE INLET ON THE LEFT SIDE.
 2. THE METER SHALL BE INSTALLED WITH THE INLET ON THE LEFT SIDE.
 3. THE METER SHALL BE INSTALLED WITH THE INLET ON THE LEFT SIDE.
 4. THE METER SHALL BE INSTALLED WITH THE INLET ON THE LEFT SIDE.
 5. THE METER SHALL BE INSTALLED WITH THE INLET ON THE LEFT SIDE.
 6. THE METER SHALL BE INSTALLED WITH THE INLET ON THE LEFT SIDE.

**SMALL METER BOX
INSTALLATION (W-24)**
NO SCALE



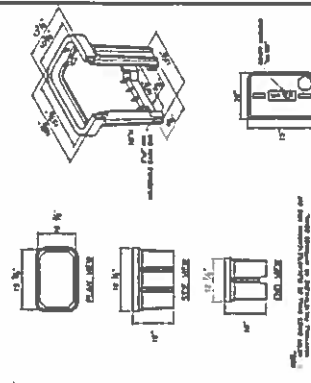
- NOTES:**
1. THE WATER SERVICE SHALL BE INSTALLED WITH THE WATER SERVICE ON THE LEFT SIDE.
 2. THE WATER SERVICE SHALL BE INSTALLED WITH THE WATER SERVICE ON THE LEFT SIDE.
 3. THE WATER SERVICE SHALL BE INSTALLED WITH THE WATER SERVICE ON THE LEFT SIDE.
 4. THE WATER SERVICE SHALL BE INSTALLED WITH THE WATER SERVICE ON THE LEFT SIDE.
 5. THE WATER SERVICE SHALL BE INSTALLED WITH THE WATER SERVICE ON THE LEFT SIDE.
 6. THE WATER SERVICE SHALL BE INSTALLED WITH THE WATER SERVICE ON THE LEFT SIDE.

**SMALL WATER SERVICE
SEPARATION FROM GAS (W-23)**
NO SCALE



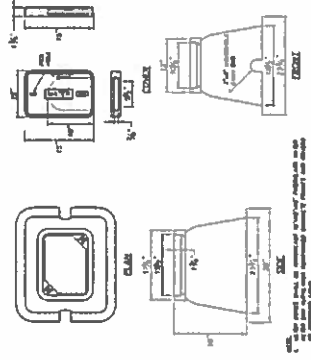
- NOTES:**
1. THE EXISTING MAIN SHALL BE INSTALLED WITH THE EXISTING MAIN ON THE LEFT SIDE.
 2. THE EXISTING MAIN SHALL BE INSTALLED WITH THE EXISTING MAIN ON THE LEFT SIDE.
 3. THE EXISTING MAIN SHALL BE INSTALLED WITH THE EXISTING MAIN ON THE LEFT SIDE.
 4. THE EXISTING MAIN SHALL BE INSTALLED WITH THE EXISTING MAIN ON THE LEFT SIDE.
 5. THE EXISTING MAIN SHALL BE INSTALLED WITH THE EXISTING MAIN ON THE LEFT SIDE.
 6. THE EXISTING MAIN SHALL BE INSTALLED WITH THE EXISTING MAIN ON THE LEFT SIDE.

**LOWERING WATER MAIN EXISTING
OR NEW INSTALLATION (W-19)**
NO SCALE



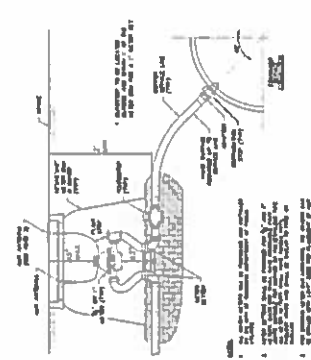
- NOTES:**
1. THE WATER MAIN SHALL BE INSTALLED WITH THE WATER MAIN ON THE LEFT SIDE.
 2. THE WATER MAIN SHALL BE INSTALLED WITH THE WATER MAIN ON THE LEFT SIDE.
 3. THE WATER MAIN SHALL BE INSTALLED WITH THE WATER MAIN ON THE LEFT SIDE.
 4. THE WATER MAIN SHALL BE INSTALLED WITH THE WATER MAIN ON THE LEFT SIDE.
 5. THE WATER MAIN SHALL BE INSTALLED WITH THE WATER MAIN ON THE LEFT SIDE.
 6. THE WATER MAIN SHALL BE INSTALLED WITH THE WATER MAIN ON THE LEFT SIDE.

**WATER MAIN CROSSING UNDER
SEWER/STORM DRAIN (W-20)**
NO SCALE



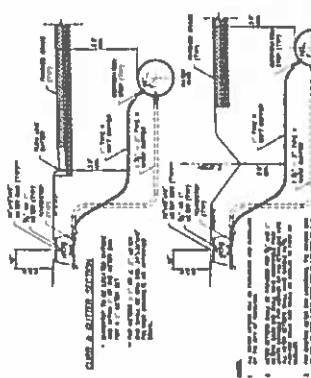
- NOTES:**
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 2. THE METER SHALL BE INSTALLED WITH THE INLET ON THE LEFT SIDE.
 3. THE METER SHALL BE INSTALLED WITH THE INLET ON THE LEFT SIDE.
 4. THE METER SHALL BE INSTALLED WITH THE INLET ON THE LEFT SIDE.
 5. THE METER SHALL BE INSTALLED WITH THE INLET ON THE LEFT SIDE.
 6. THE METER SHALL BE INSTALLED WITH THE INLET ON THE LEFT SIDE.

**SMALL METER BOX (10"x15"x18")
HDPE (W-39)**
NO SCALE



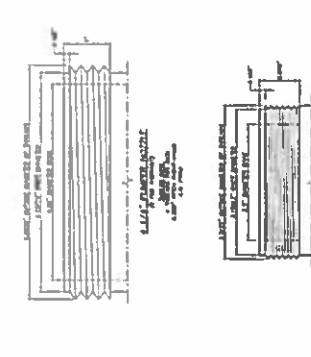
- NOTES:**
1. THE METER SHALL BE INSTALLED WITH THE INLET ON THE LEFT SIDE.
 2. THE METER SHALL BE INSTALLED WITH THE INLET ON THE LEFT SIDE.
 3. THE METER SHALL BE INSTALLED WITH THE INLET ON THE LEFT SIDE.
 4. THE METER SHALL BE INSTALLED WITH THE INLET ON THE LEFT SIDE.
 5. THE METER SHALL BE INSTALLED WITH THE INLET ON THE LEFT SIDE.
 6. THE METER SHALL BE INSTALLED WITH THE INLET ON THE LEFT SIDE.

**SMALL METER BOX (10"x15"x18")
FIBERGLASS (W-38)**
NO SCALE



- NOTES:**
1. THE METER SHALL BE INSTALLED WITH THE INLET ON THE LEFT SIDE.
 2. THE METER SHALL BE INSTALLED WITH THE INLET ON THE LEFT SIDE.
 3. THE METER SHALL BE INSTALLED WITH THE INLET ON THE LEFT SIDE.
 4. THE METER SHALL BE INSTALLED WITH THE INLET ON THE LEFT SIDE.
 5. THE METER SHALL BE INSTALLED WITH THE INLET ON THE LEFT SIDE.
 6. THE METER SHALL BE INSTALLED WITH THE INLET ON THE LEFT SIDE.

**SMALL METER BOX
INSTALLATION (W-37)**
NO SCALE



- NOTES:**
1. THE WATER SERVICE SHALL BE INSTALLED WITH THE WATER SERVICE ON THE LEFT SIDE.
 2. THE WATER SERVICE SHALL BE INSTALLED WITH THE WATER SERVICE ON THE LEFT SIDE.
 3. THE WATER SERVICE SHALL BE INSTALLED WITH THE WATER SERVICE ON THE LEFT SIDE.
 4. THE WATER SERVICE SHALL BE INSTALLED WITH THE WATER SERVICE ON THE LEFT SIDE.
 5. THE WATER SERVICE SHALL BE INSTALLED WITH THE WATER SERVICE ON THE LEFT SIDE.
 6. THE WATER SERVICE SHALL BE INSTALLED WITH THE WATER SERVICE ON THE LEFT SIDE.

**SMALL WATER SERVICE
CONNECTION (W-36)**
NO SCALE



- NOTES:**
1. THE NOZZLE SHALL BE INSTALLED WITH THE NOZZLE ON THE LEFT SIDE.
 2. THE NOZZLE SHALL BE INSTALLED WITH THE NOZZLE ON THE LEFT SIDE.
 3. THE NOZZLE SHALL BE INSTALLED WITH THE NOZZLE ON THE LEFT SIDE.
 4. THE NOZZLE SHALL BE INSTALLED WITH THE NOZZLE ON THE LEFT SIDE.
 5. THE NOZZLE SHALL BE INSTALLED WITH THE NOZZLE ON THE LEFT SIDE.
 6. THE NOZZLE SHALL BE INSTALLED WITH THE NOZZLE ON THE LEFT SIDE.

**CITY OF RICHMOND FIRE HYDRANT
NOZZLE THREADS (W-28)**
NO SCALE

REVISION	DATE	BY	PROJECT	SHEETING
0004-27-028	VA	1	0004-27-028 PE-04, RW-204-C-500	40141

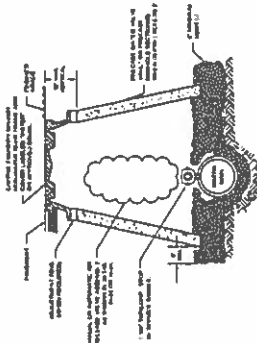
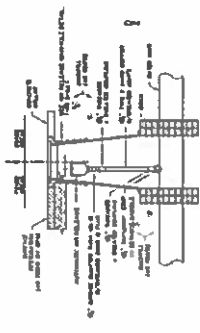
REVISION	DATE	BY	PROJECT	SHEETING
0004-27-028	VA	1	0004-27-028 PE-04, RW-204-C-500	40141

REVISION	DATE	BY	PROJECT	SHEETING
0004-27-028	VA	1	0004-27-028 PE-04, RW-204-C-500	40141

REVISION	DATE	BY	PROJECT	SHEETING
0004-27-028	VA	1	0004-27-028 PE-04, RW-204-C-500	40141

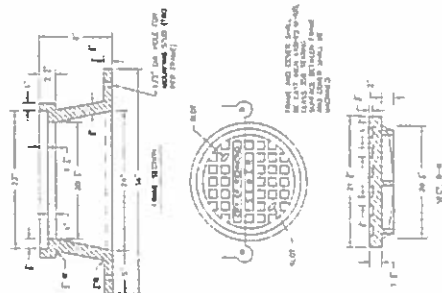
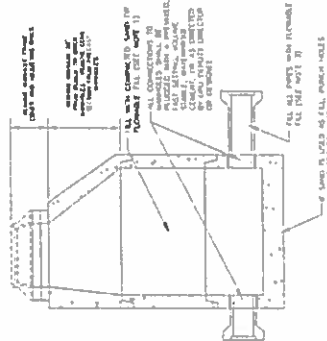
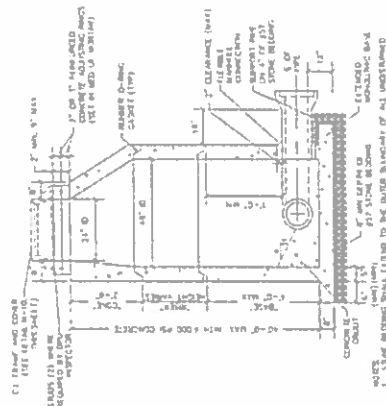
REVISION	DATE	BY	PROJECT	SHEETING
0004-27-028	VA	1	0004-27-028 PE-04, RW-204-C-500	40141

REVISION	DATE	BY	PROJECT	SHEETING
0004-27-028	VA	1	0004-27-028 PE-04, RW-204-C-500	40141

[illegible]

AUTOMATIC AIR RELEASE
VALVE (W-34)
NO SCALE

MANUAL/AUTOMATIC AIR RELEASE MANHOLE
NOT TO SCALE



MANHOLE ABANDONMENT DETAIL (M-8)
NO SCALE

**STANDARD MANHOLE
FRAME & COVER (M-10)**
NO SCALE