

City of East Providence Water Department System Improvements Cleaning and Lining Phase V Rebid

City of East Providence RFP #EP 23/24-26R
East Providence, Rhode Island

CIVIL ENGINEER:



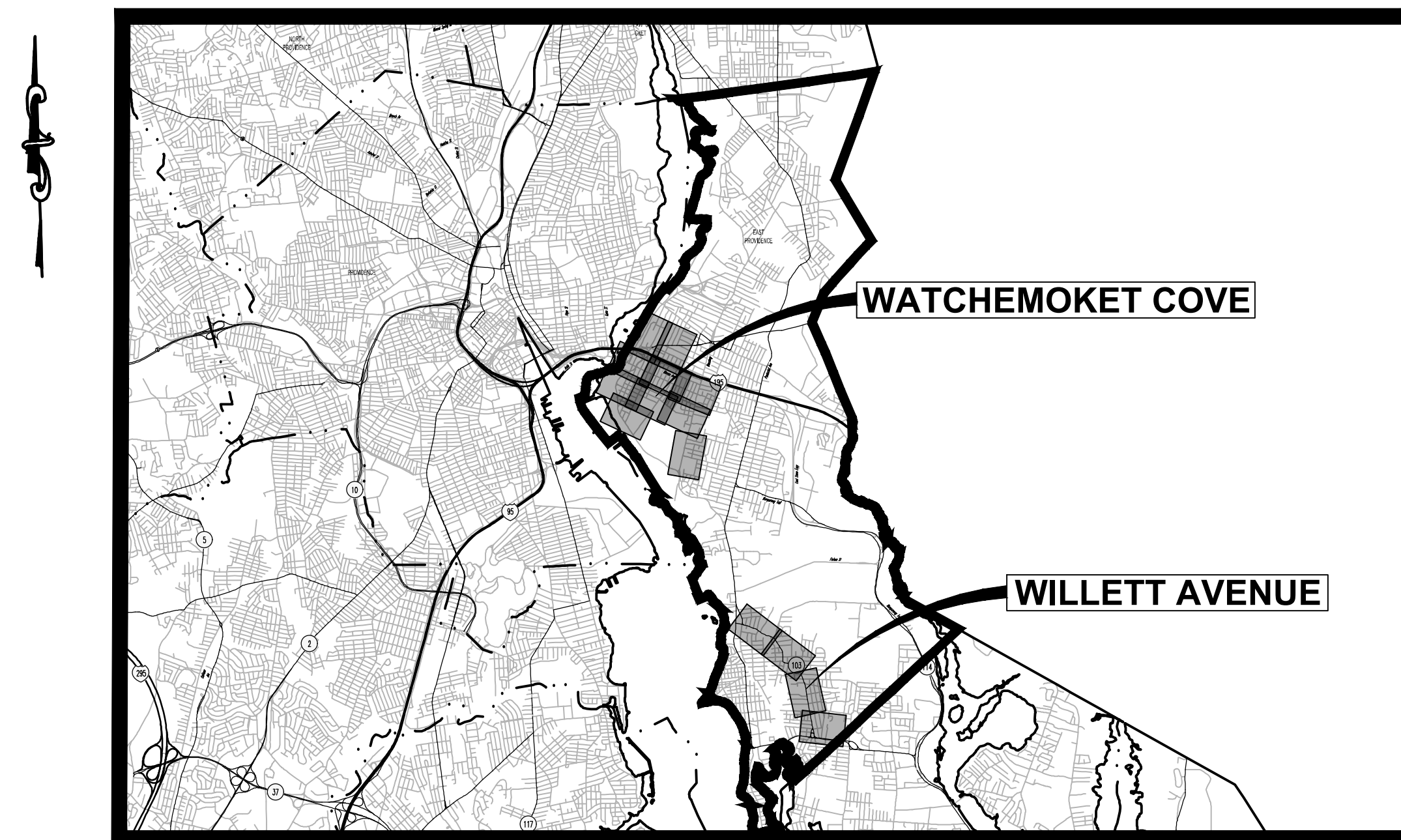
PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS

8 BLACKSTONE VALLEY PLACE LINCOLN, RI 02865 401-334-4100
10 LINCOLN ROAD, SUITE 210 FOXBORO, MA 02035 508-543-1755
14 BOBALA ROAD, SUITE 28 HOLYOKE, MA 01040 413-507-3448

OWNER / APPLICANT:



CITY OF EAST PROVIDENCE
WATER UTILITIES DIVISION
60 COMMERCIAL WAY
EAST PROVIDENCE, RI 02914



Scale : N.T.S.

INDEX OF DRAWINGS

SHEET No.	DRAWING No.	DESCRIPTION
1	-	COVER SHEET
2	C0.1	GENERAL NOTES & LEGEND
3	C1.1	PROJECT AREA PLAN
4	C2.0	WATCHEMOKET COVE KEY PLAN
5 - 13	C2.1 - C2.9	WATCHEMOKET COVE 1 - 9
14	C3.0	WILLET AVENUE KEY PLAN
15 - 18	C3.1 - C3.4	WILLET AVENUE 1 - 4
19 - 26	C4.1 - C4.8	DETAILS 1 - 8

SEPTEMBER 2024

PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF THE CLEANING, LINING, AND REPLACEMENT OF EXISTING CAST IRON WATER MAINS THROUGHOUT THE CITY OF EAST PROVIDENCE, RHODE ISLAND. THE PRIMARY WORK ITEMS INCLUDE:

- CLEANING AND LINING APPROXIMATELY 70,000 LINEAR FEET OF CAST IRON WATER MAIN.
- REPLACEMENT OF APPROXIMATELY 21,000 LINEAR FEET OF EXISTING CAST IRON WATER MAIN.
- COMPLETE REPLACEMENT OF 14 LEAD SERVICE PIPES FROM CURB STOP TO WATER METER.
- REPLACEMENT OF VALVES, HYDRANTS, AND APPURTENANCES AS SHOWN.

PLAN NOTES

INFORMATION AS SHOWN ON THE DRAWINGS RELATING TO MATERIALS, SIZES, CONDITIONS, AND/OR LOCATIONS OF EXISTING STRUCTURES AND UTILITIES HAS BEEN COMPILED FROM BEST AVAILABLE INFORMATION FROM MULTIPLE SOURCES. THOSE SOURCES INCLUDE:

- GEOGRAPHIC INFORMATION SYSTEM (GIS) DATA PROVIDED BY THE CITY OF EAST PROVIDENCE.
- RECORDS RECEIVED FROM THE CITY OF EAST PROVIDENCE

GENERAL NOTES

- CONTRACTOR SHALL NOTIFY "DIG-SAFE", AND ANY UTILITY COMPANIES NOT INCLUDED IN "DIG-SAFE" BUT KNOWN TO HAVE SERVICE IN THE AREA, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL ADHERE TO ALL REGULATIONS OF THE UTILITIES INVOLVED.
- INFORMATION AS SHOWN ON THE DRAWINGS RELATING TO MATERIALS, SIZES, CONDITIONS, AND/OR LOCATIONS OF EXISTING STRUCTURES AND UTILITIES HAS BEEN COMPILED FROM THE BEST AVAILABLE INFORMATION AND IS NOT GUARANTEED CORRECT OR COMPLETE. PRIOR TO BEGINNING WORK, CONTRACTOR SHALL VERIFY LOCATION OF ALL UTILITIES. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ANY UTILITIES IN THE IMMEDIATE AREA OF THIS PROJECT (INCLUDING THOSE TO BE CONNECTED TO) THROUGH THE PERFORMANCE OF TEST PITS OR OTHER INVESTIGATION METHODS. TO ASSURE THAT THESE UTILITIES WILL NOT IMPACT THE WORK IN THIS PROJECT. ANY SUBSTANTIAL DISCREPANCY IN UTILITY LOCATIONS, SIZES, MATERIALS, ETC., IDENTIFIED ON THE DRAWINGS SHALL BE CALLED TO THE OWNER'S ATTENTION IMMEDIATELY. ANY DAMAGE TO UTILITIES CAUSED BY THE CONTRACTOR SHALL BE THE CONTRACTOR'S RESPONSIBILITY, AND COSTS FOR REPAIR OR REPLACEMENT OF SUCH DAMAGED UTILITIES SHALL BE BORNE BY THE CONTRACTOR.
- IN THE EVENT OF DAMAGE TO EXISTING UTILITIES, THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER IMMEDIATELY AND WILL BE RESPONSIBLE FOR CONTACTING THE AGENCY RESPONSIBLE FOR MAINTAINING UTILITIES. UNDER NO CIRCUMSTANCES WILL THE CONTRACTOR BACKFILL OR CONCEAL DAMAGED UTILITIES OR ATTEMPT REPAIRS WITHOUT PRIOR APPROVAL OF THESE AGENCIES. THE CONTRACTOR SHALL ALLOW THE UTILITY COMPANY TO REPAIR THE DAMAGED UTILITY AND SHALL BE RESPONSIBLE TO RESOLVE COST OF REPAIR WITH UTILITY COMPANY. SHOULD THE UTILITY COMPANY ALLOW CONTRACTOR TO PERFORM REPAIR, THE CONTRACTOR SHALL ALLOW THE UTILITY AGENCIES THE OPPORTUNITY TO INSPECT THE REPAIRED FACILITIES PRIOR TO ANY BACKFILL OR CONCEALMENT.
- ALL EXISTING SIGNS, POLES, UTILITIES, STRUCTURES, AND MAILBOXES, BOTH ABOVE AND BELOW GROUND, SHALL BE EITHER BRACED AND PROTECTED OR TEMPORARILY REMOVED AND REPLACED TO FACILITATE CONSTRUCTION OF THIS PROJECT. CONTRACTOR SHALL COORDINATE ACTION WITH OWNER OF SIGNS, POLES, UTILITIES, AND STRUCTURES. THERE WILL BE NO SEPARATE PAYMENT FOR THIS WORK.
- UPON COMPLETION OF THE WORK, ALL DISTURBED AREAS SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THAT WHICH EXISTED PRIOR TO CONSTRUCTION.
- ALL AREAS DISTURBED BY THE CONTRACTOR OUTSIDE OF THE PAYMENT LINES SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT NO EXTRA COST TO THE OWNER. ALL ORIGINAL GRADES SHALL BE RESTORED.
- EXACT LOCATION OF NEW PIPES, VALVES, FITTINGS, AND APPURTENANCES SHALL BE DETERMINED IN THE FIELD AND MUST BE APPROVED BY ENGINEER/OWNER.
- PRIOR TO BIDDING FOR THE PROJECT, THE CONTRACTOR SHALL VISIT THE SITE TO VERIFY EXISTING CONDITIONS.
- THE CONTRACTOR SHALL MAINTAIN A SET OF FIELD RECORD DRAWINGS DURING PROGRESSION OF THE PROJECT TO BE UPDATED ON A DAILY BASIS. FINAL "RED-LINE" AS-BUILTS SHOWING ANY CHANGES SHALL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE OWNER AT COMPLETION OF THE PROJECT.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL REQUIRED PERMITS, POST REQUIRED BONDS, AND SUPPLY THE NECESSARY NOTICES REGARDING CONSTRUCTION, UTILITIES, AND INCIDENTAL WORK WITH THE OWNER AND APPLICABLE UTILITY COMPANIES.
- CONTRACTOR SHALL PROVIDE PROPER TRAFFIC CONTROL TO CONTROL AND ENSURE THE SAFETY OF PEDESTRIANS, TRAFFIC, AND WORKERS AT ALL TIMES. ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREET AND HIGHWAYS" AS AMENDED AND APPROVED BY THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION. PROVIDE ACCESS TO DRIVEWAYS AT THE END OF EACH DAY. CONTRACTOR SHALL COORDINATE ROAD CLOSURES WITH THE POLICE DEPARTMENT. CONTRACTOR SHALL KEEP AT LEAST ONE LANE OF TRAVEL OPEN IN EACH DIRECTION IN ACCORDANCE WITH RIDOT APPROVED TMP.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING AREAS REQUIRED FOR TEMPORARY PLACEMENT/STORAGE FOR STOCKPILING MATERIALS TO BE USED FOR CONSTRUCTION. ALL AREAS SHALL BE SUBJECT TO THE APPROVAL OF THE CITY OF EAST PROVIDENCE.
- THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL UNSUITABLE AND EXCESS SOIL AND MATERIALS FROM THE WORK SITE. COSTS ASSOCIATED WITH REMOVAL AND DISPOSAL OF UNSUITABLE AND EXCESS SOIL SHALL BE BORNE BY THE CONTRACTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY SHEETING, SHORING, DEWATERING, AND BRACING REQUIRED TO MAINTAIN THE STRUCTURAL STABILITY OF ADJACENT STRUCTURES AND UTILITIES DURING CONSTRUCTION. CONTRACTOR SHALL SECURE OPEN EXCAVATIONS IN ACCORDANCE WITH OSHA STANDARDS. NO EXCAVATION SHALL BE OPEN AT THE END OF THE WORK DAY, CONTRACTOR SHALL BACKFILL THE EXCAVATION OR COMPLETELY COVER WITH STEEL PLATES AT THE END OF THE WORK DAY.
- ALL PAVED SURFACES SHALL BE SWEEPED CLEAN AT THE END OF EACH WORK DAY.
- ALL WORK SHALL CONFORM TO THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (STATE STANDARDS).
- DASHED LINES, WHERE SHOWN ON THE PLAN SHEETS, GENERALLY IDENTIFY PIPE, VAULTS, FITTINGS AND APPURTENANCES WHERE REPLACEMENT IS PROPOSED AND THEY DO NOT REPRESENT PROPOSED OR ALLOWABLE LIMITS OF DISTURBANCE (LOD). CONTRACTOR SHALL MINIMIZE DISTURBANCE AT ALL TIMES AND COORDINATE WITH OWNER AND/OR THEIR DESIGNATED REPRESENTATIVE FOR ALLOWABLE LIMITS AT EACH PROJECT LOCATION.
- LENGTHS OF PIPE SECTIONS IDENTIFIED ON THE DRAWINGS ARE APPROXIMATE AND ARE PROVIDED FOR GENERAL PLANNING PURPOSES. CONTRACTOR SHALL DETERMINE ACTUAL LENGTH OF PIPE SECTIONS TO BE CLEANED AND LINED AND/OR REMOVED AND REPLACED.
- UTILITIES HAVE NOT BEEN SHOWN ON SITE PLANS FOR CLARITY. CONTRACTOR SHALL PERFORM SITE WALKS WITH OWNER AND/OR OWNER'S DESIGNATED REPRESENTATIVE ON A REGULAR BASIS TO COORDINATE THE WORK IN EACH PROJECT AREA FOLLOWING UTILITY MARKOUT BUT PRIOR TO EARTHWORK.

CONSTRUCTION SCHEDULING

- PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL SUBMIT A DETAILED CONSTRUCTION , PHASING, AND PAYMENT SCHEDULE. CONSTRUCTION, PHASING, AND PAYMENT SCHEDULES SHALL INCLUDE LINE ITEMS FOR COORDINATION WITH APPLICABLE PUBLIC AGENCIES AND PUBLIC/PRIVATE UTILITIES, WHEN NECESSARY.
- ALLOWABLE WORK HOURS WITHIN STATE ROADWAYS SHALL BE IN ACCORDANCE WITH TRANSPORTATION MANAGEMENT PLAN (TMP) APPROVED BY RIDOT. CONTRACTOR SHALL PREPARE TMP, PROVIDE TO ENGINEER AND OWNER FOR REVIEW AND ISSUE TO RIDOT FOR APPROVAL. NO WORK OF ANY KIND, INCLUDING SETUP OR BREAKDOWN OF TEMPORARY TRAFFIC CONTROLS, SHALL BE DONE OUTSIDE OF THESE ALLOWABLE HOURS. NO WORK SHALL OCCUR OUTSIDE OF THESE HOURS WITHOUT CONSENT OF CITY OF EAST PROVIDENCE AND RIDOT. FOR BIDDING PURPOSES, CONTRACTOR SHALL ASSUME ALLOWABLE WORK TIMES WILL BE 9AM TO 3PM DAILY EXCLUDING WEEKENDS AND HOLIDAYS. CONTRACTOR CAN REQUEST EXPANDED WORK HOURS BUT THIS WILL BE SUBJECT TO APPROVAL BY RIDOT AND THE CITY OF EAST PROVIDENCE.
- UNINTERRUPTED WATER SERVICE SHALL BE MAINTAINED FOR THE DURATION OF CONSTRUCTION, EXCEPT DURING SCHEDULED SHUT DOWNS WHEN APPROVED BY THE CITY OF EAST PROVIDENCE.
- CONSTRUCTION SHALL BE PHASED IN SUCH A WAY AS TO MINIMIZE WATER SHUTDOWNS. UNDER NO CIRCUMSTANCES SHALL ANY CUSTOMER BE OUT OF WATER SERVICE FOR MORE THAN 4 HOURS AT A TIME. SHUT DOWN OF ANY CUSTOMER SHALL NOT OCCUR ON CONSECUTIVE DAYS.
- THE CITY OF EAST PROVIDENCE SHALL BE NOTIFIED AT LEAST 72 HOURS IN ADVANCE PRIOR TO A SHUTDOWN. CITY OF EAST PROVIDENCE WILL NOTIFY CUSTOMERS OF SCHEDULED SHUTDOWN.
- TEMPORARY BYPASS SHALL BE REQUIRED WHEN THE WORK REQUIRES A SHUT DOWN GREATER THAN 4 HOURS. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER AND THE CITY OF EAST PROVIDENCE A TEMPORARY BYPASS LAYOUT FOR REVIEW AND APPROVAL.

ROADWAY RESTORATION

- WORK IS PROPOSED WITHIN BOTH STATE AND CITY ROADS. RESTORATION SHALL CONFORM TO RIDOT STATE STANDARDS AND REQUIREMENTS OF THE CITY OF EAST PROVIDENCE, AS REQUIRED. STATE ROADWAYS IN THIS PROJECT ARE AS FOLLOWS:
 - NEWPORT AVENUE
 - PAWTUCKET AVENUE
 - WILLETT AVENUE
- THERE WILL BE NO OPEN TRENCHES ALLOWED AT THE END OF EACH WORK DAY. ALL TRENCHES SHALL BE BACKFILLED TO GRADE EACH DAY AND SHALL BE PAVED WITH A TEMPORARY TRENCH PATCH TO EXISTING GRADE AT THE END OF EACH WORK WEEK.
- TEMPORARY TRENCH PATCH SHALL BE ALLOWED TO SETTLE FOR NO LESS THAN 90 DAYS AND NO MORE THAN 150 DAYS PRIOR TO FULL DEPTH TRENCH PATCHING. TEMPORARY TRENCH PATCH SHALL BE TAKEN UP TO PREPARE ROAD FOR FINAL RESTORATION.
- PERMANENT AND TEMPORARY TRENCH PATCHES SHALL BE PERFORMED IN ACCORDANCE WITH THEIR RESPECTIVE DETAILS AND AS CALLED FOR IN THE SPECIFICATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR RAISING OR LOWERING OF ALL CASTINGS, WHETHER EXISTING OR INSTALLED AS PART OF THIS PROJECT, TO FINISH GRADE WITH EITHER COURSES OF BRICK AND MORTAR OR RAISING OR LOWERING OF VALVE BOXES AND COVERS. INSTALLATION OF EXTENSIONS ON VALVE BOXES SHALL NOT BE ALLOWED.
- DISTURBED PAVEMENT MARKINGS, WHETHER SHOWN ON THE DRAWINGS OR NOT, SHALL BE RESTORED IN ACCORDANCE WITH RIDOT AND CITY OF EAST PROVIDENCE REQUIREMENTS.
- CONTRACTOR SHALL RESTORE EXISTING LOOP DETECTORS THAT ARE DISTURBED DURING CONSTRUCTION.
- ALL TRAVEL LANES IN STATE ROADWAYS DISTURBED DURING CONSTRUCTION WILL REQUIRE COMPLETE 1-1/2 INCH MILLING AND OVERLAY AS PART OF FINAL RESTORATION.
- CONCRETE BASE IN STATE ROADWAYS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED WITH NEW CONCRETE BASE IN ACCORDANCE WITH PROJECT DETAILS AND SPECIFICATIONS.
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING UTILITY PERMIT FROM RIDOT, ALONG WITH APPROVAL OF TRAFFIC MANAGEMENT PLAN (TMP), FOR WORK PROPOSED IN STATE ROADWAYS.

SPECIFICATION OF WATER MAIN, VALVES AND APPURTENANCES

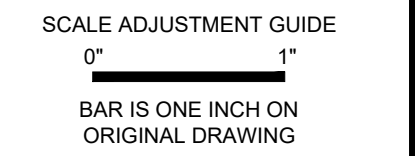
- GENERAL: ALL MATERIALS SHALL BE NEW, UNUSED, AND PURCHASED SPECIFICALLY FOR THIS PROJECT. ALL WATER MAIN, VALVES, AND APPURTENANCES SHALL BE MADE IN THE UNITED STATES OF AMERICA AND SHALL BE PROVIDED WITH DOCUMENTATION INDICATING THE LOCATION OF FOUNDRY AND/OR PLACE OF ORIGIN. UNLESS OTHERWISE APPROVED, ALL MATERIALS SHALL COMPLY WITH AMERICAN IRON AND STEEL (AISI) REQUIREMENTS. ALL HARDWARE FOR WATER MAIN PIPING, VALVES, AND APPURTENANCES SHALL BE STAINLESS STEEL FOR CORROSION RESISTANCE.
- WATER MAIN: BURIED WATER MAIN SHALL BE CLASS 52 DUCTILE IRON PIPE CONFORMING TO AWWA C150 AND C151, LATEST REVISION AS INDICATED ON THE DRAWINGS. ALL D.I. PIPE SHALL HAVE DOUBLE BITUMINOUS SEAL COATING ON ALL EXTERIOR SURFACES AND DOUBLE CEMENT-MORTAR INTERIOR LINING NOT LESS THAN 1/8" THICK FOR 3-12" PIPE AND 3/8" FOR 16-30" PIPE. D.I. JOINTS TO BE PUSH-ON EXCEPT WHERE MECHANICAL OR FLANGED JOINTS ARE SHOWN ON THE DRAWINGS. JOINTS SHALL CONFORM TO AWWA C111, LATEST REVISION.
- FITTINGS: FITTINGS TO BE USED WITH DUCTILE IRON PIPE SHALL BE DUCTILE IRON WITH A PRESSURE RATING OF NOT LESS THAN 350 PSI. FITTINGS SHALL CONFORM TO AWWA C153, LATEST REVISION. ALL D.I. FITTINGS SHALL HAVE A DOUBLE CEMENT LINING NOT LESS THAN 3/8" THICK FOR 3-12" PIPE AND SHALL BE RESTRAINED WITH MEGALUGS SERIES 1100 OR EQUIVALENT.
- GATE VALVES: RESILIENT SEATED GATE VALVES SHALL BE DUCTILE IRON-BODY, STAINLESS STEEL MOUNTED, NON-RISING STEM CONFORMING TO AWWA C-509, LATEST REVISION. GATE VALVES SHALL BE MECHANICAL JOINT AND SHALL OPEN RIGHT. ALL GATE VALVE HARDWARE SHALL BE STAINLESS STEEL FOR CORROSION RESISTANCE. GATE VALVES SIZED 3" to 12" SHALL BE SUITABLE FOR 250 PSI MAXIMUM WORKING PRESSURE AND 400 PSI TEST PRESSURE. ALL GATE VALVES SHALL BE RESTRAINED WITH MEGALUGS SERIES 1100 OR EQUIVALENT. SHOP DRAWINGS SHALL INDICATE THE NUMBER OF TURNS TO OPEN.
- VALVE BOXES & COVERS: VALVE BOXES SHALL BE CAST IRON, TWO-PIECE, ADJUSTABLE STYLE, SLIP TYPE WITH INSIDE DIAMETER OF 5-1/4". COVERS SHALL BE CAST IRON, 5-1/4" WITH WORD "WATER" INSCRIBED.
- HYDRANTS: HYDRANTS SHALL COMPLY IN ALL RESPECTS TO AWWA C-502. HYDRANTS SHALL OPEN TO THE LEFT (COUNTER-CLOCKWISE) AND HAVE A DIRECTION-TO OPEN ARROW WITH THE WORD "OPEN" IMPRINTED ON THE HYDRANT. HYDRANTS SHALL BE AVK MODEL 27-80 5 1/2" 250W OR MUELLER SUPER-CENTURION. HYDRANTS SHALL BE PAINTED "SAFETY" YELLOW WITH CAPS AND BONNET PAINTED RED. AT LEAST ONE COAT SHALL BE APPLIED AT THE FACTORY AND AT LEAST ONE COAT APPLIED IN THE FIELD AFTER INSTALLATION. WHERE HYDRANTS ARE CALLED FOR REMOVAL AND REPLACEMENT, THIS SHALL MEAN REMOVAL AND REPLACEMENT OF HYDRANT ASSEMBLY UNLESS NOTED OTHERWISE.
- BUTTERFLY VALVES

WATER MAIN & SERVICE INSTALLATION NOTES

- GENERAL: CONTRACTOR IS REQUIRED TO PROVIDE UNINTERRUPTED WATER SERVICE DURING CONSTRUCTION. IF A WATER SHUTDOWN IS REQUIRED, THE SHUTDOWN SHALL BE NO LONGER THAN 4 HOURS AND SHALL BE COORDINATED WITH THE CITY OF EAST PROVIDENCE NO LESS THAN 72 HOURS IN ADVANCE. IF THE CONTRACTOR OPTS TO WORK OUTSIDE OF THE CONSTRUCTION SHUTDOWN CONSTRAINTS, THE CONTRACTOR MUST USE BYPASS PIPING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION, DISINFECTION, TESTING, MAINTENANCE, AND BREAK DOWN TO MAINTAIN WATER SERVICE TO CUSTOMERS AS NEEDED DURING CONSTRUCTION, START-UP, AND TESTING. THE CONTRACTOR SHALL WORK WITH THE LOCAL FIRE DEPARTMENT FOR THE USE OF TEMPORARY HYDRANTS. A TESTABLE BACKFLOW PREVENTER SHALL BE PROVIDED BY CONTRACTOR ON ALL BYPASS PIPING. THE CONTRACTOR SHALL SUBMIT BYPASS PIPING PLANS, AS NECESSARY, TO THE ENGINEER FOR APPROVAL.
- INSTALLATION: WATER MAIN SHALL BE INSTALLED WITH A MINIMUM 4.5 FEET OF COVER UNLESS OTHERWISE NOTED ON THE DRAWINGS. PIPE SHALL BE INSULATED WITH APPROVED MATERIAL WHERE 4.5 FEET OF COVER IS NOT PROVIDED. PIPE SHALL BE LAID ON COMPACTED GRAVEL BORROW BEDDING AND COVERED WITH GRAVEL BORROW BEDDING MATERIAL AS INDICATED IN THE CONTRACT SPECIFICATIONS AND DRAWINGS.
- BACKFILL: BACKFILL OF EXCAVATION SHALL BE PERFORMED WITH SUITABLE MATERIAL OR REFILLS FROM SITE EXCAVATION WITH NO PARTICLE LARGER THAN 3 INCHES, AND COMPACTED IN ACCORDANCE WITH AASHTO T 180 METHOD D TO A MINIMUM DRY DENSITY OF 95% IN 6-INCH LIFTS. UNSUITABLE MATERIALS (I.E. PEAT, CLAY, ORGANIC MATTER, DEBRIS) SHALL BE REMOVED OFF SITE FOR DISPOSAL AT NO ADDITIONAL COST TO THE OWNER.
- ALIGNMENT: ALIGNMENTS OF WATER MAINS ARE DIAGRAMMATIC ONLY AND DO NOT REFLECT ALL BENDS, FITTINGS, AND APPURTENANCES THAT MAY BE REQUIRED FOR PROPER INSTALLATION.
- FLUSHING & DISINFECTION: ALL NEW WATER MAIN SHALL BE FLUSHED AND DISINFECTED IN ACCORDANCE WITH AWWA C651, LATEST REVISION AND SHALL BE SUBJECT TO THE STANDARDS OF THE CITY OF EAST PROVIDENCE. FLUSHING AND DISINFECTION SHALL BE PERFORMED IN THE PRESENCE OF ENGINEER AND THE CITY OF EAST PROVIDENCE. FORM OF CHLORINE USED FOR DISINFECTION SHALL BE APPROVED BY ENGINEER.
- TESTING: ALL NEW WATER MAIN SHALL BE SUBJECTED TO PRESSURE AND LEAKAGE TESTING PER AWWA C600, LATEST REVISION AND SHALL BE SUBJECT TO THE STANDARDS OF THE CITY OF EAST PROVIDENCE. PRESSURE TEST SHALL BE 1.5 TIMES THE NORMAL PRESSURE, BUT NO LESS THAN 150 PSI FOR 2 HOURS.
- VALVE LOCATIONS ARE SHOWN APPROXIMATELY. NEW VALVES TO BE INSTALLED AT TEE ON WATER MAIN UNLESS OTHERWISE DIRECTED.
- RESTRAINED JOINTS SHALL BE USED ON ALL VALVES AND FITTINGS, WHETHER OR NOT THEY ARE SPECIFICALLY ITEMIZED IN NOTES ON SITE PLANS.
- WHERE NEW DUCTILE IRON PIPE IS PROPOSED TO BE CONNECTED TO EXISTING DUCTILE IRON, CONTRACTOR SHALL MAKE THIS CONNECTION WITH MECHANICAL JOINT SOLID SLEEVE COUPLINGS AND MEGALUG RESTRAINT IN LIEU OF DRESSER COUPLINGS.

EROSION AND SEDIMENTATION CONTROL

- ALL EROSION AND SEDIMENT CONTROL MATERIALS AND METHODS ARE TO BE PROVIDED IN ACCORDANCE WITH THE RHODE ISLAND EROSION AND SEDIMENT CONTROL HANDBOOK AND THE RIDOT STANDARDS.
- SEDIMENT CONTROL BARRIERS ARE TO BE INSTALLED BY THE CONTRACTOR AS SHOWN ON THE PLANS AND DETAILS PRIOR TO THE COMMENCEMENT OF ANY EARTHWORK IN THOSE AREAS. CONTRACTOR SHALL ALSO PROVIDE TEMPORARY SEDIMENT PROTECTION AS SHOWN ON THE DETAILS FOR ALL AFFECTED CATCH BASIN AND DRAINAGE INLET STRUCTURES ALONG ROUTE OF CONSTRUCTION.
- ALL CONSTRUCTION PHASE EROSION CONTROLS SHALL BE INSPECTED BY THE CONTRACTOR AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN TWENTY-FOUR (24) HOURS AFTER ANY STORM EVENT WHICH GENERATES AT LEAST 0.25 INCHES OF RAIN IN A TWENTY-FOUR (24) HOUR PERIOD. THE CONTRACTOR SHALL NOTE AREAS OF EROSION AND SEDIMENT MIGRATION, AS WELL AS THE CONDITION AND EFFECTIVENESS OF THE STORMWATER CONTROLS.
- ACCUMULATED SEDIMENTS SHALL BE EXCAVATED AND PROPERLY DISPOSED OF WHEN THE HEIGHT OF THE SEDIMENT EXCEEDS ONE HALF (1/2) THE HEIGHT OF THE COMPOST FILTER SOCKS.
- COMPOST FILTER SOCKS SHALL BE REPLACED EVERY SIX (6) MONTHS, AT A MINIMUM, AND MORE FREQUENTLY IF NECESSARY. ANY DAMAGED COMPOST FILTER SOCKS SHALL BE PROMPTLY REPLACED.
- UPON COMPLETION OF EARTHWORK OUTSIDE OF THE PAVED LIMITS, PERMANENT VEGETATION SHALL BE RE-ESTABLISHED.
- UPON COMPLETION OF THE PROJECT AND PERMANENT STABILIZATION OF THE GROUND SURFACE, ALL SEDIMENT CONTROL BARRIERS SHALL BE REMOVED SO AS NOT TO IMPEDE STORM FLOW OR DRAINAGE AND SHALL BE DISPOSED OF IN AN APPROPRIATE FASHION.



**CITY OF EAST PROVIDENCE
 WATER DEPARTMENT SYSTEM IMPROVEMENTS
 CLEANING AND LINING PHASE V REBID**

REVISIONS:

NO.	DESCRIPTION	DATE

PROJECT NO.:	12200.15
DATE:	SEPTEMBER 2024
SCALE:	
DESIGNED BY:	JA
CHECKED BY:	BMB
DRAWN BY:	SP/AKL
APPROVED BY:	TPT
DRAWING TITLE:	

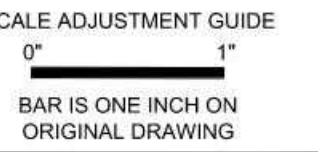
GENERAL NOTES AND LEGEND

DRAWING NO.:
C1.0

P:\A086112.dwg 12/20/24 12:50:12 PM C:\Users\j... and J... 2022-2024-01-08 09:52:01 AM & 1/23/2024 10:45



1 INCH=2,000 FEET



CITY OF EAST PROVIDENCE
WATER DEPARTMENT SYSTEM IMPROVEMENTS
CLEANING AND LINING PHASE V REBID

Legend

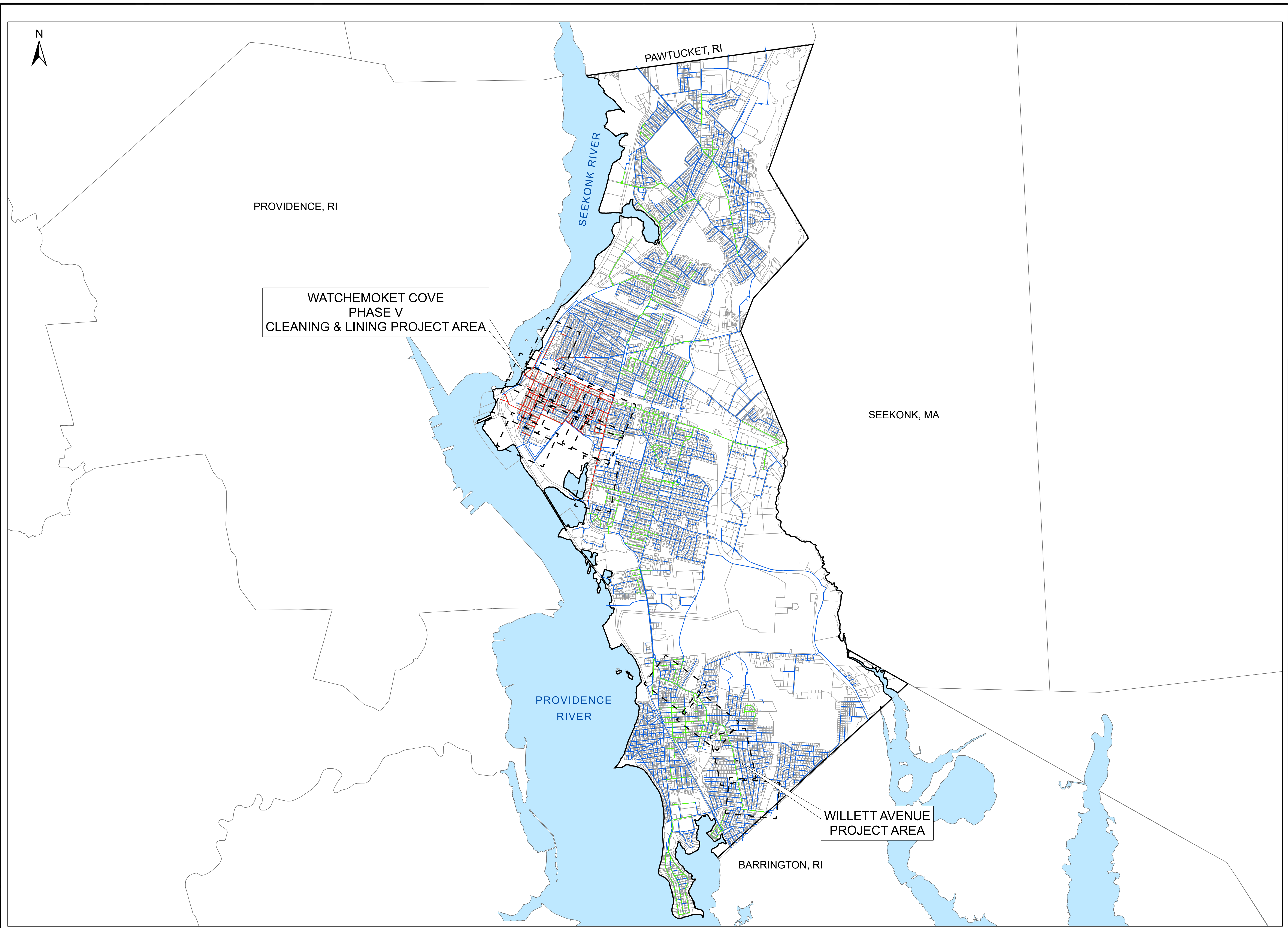
- Parcel Boundaries
- Proposed Cleaning and Lining Phase V (2024-2025)
- Water Pipes Proposed for Future Cleaning and Lining Projects
- Other Water Pipes

ACRONYMS:
 TSV: TAPPING SLEEVE AND VALVE
 RWGV: RESILIENT WEDGE GATE VALVE
 R&D: REMOVE AND DISPOSE
 R&R: REMOVE AND RESET
 SVC: SERVICE

PROJECT NO.: 12200.15
 DATE: SEPT. 2024
 SCALE: AS NOTED
 DESIGNED BY: JA
 CHECKED BY: BMB
 DRAWN BY: SP
 APPROVED BY: TPT
 DRAWING TITLE:

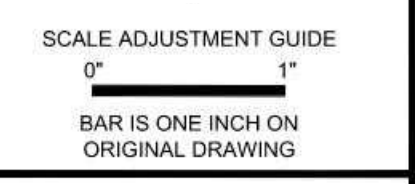
PROJECT AREA PLAN

C1.1





1 INCH=400 FEET



CITY OF EAST PROVIDENCE
WATER DEPARTMENT SYSTEM IMPROVEMENTS
CLEANING AND LINING PHASE V REBID

Legend

- Parcel Boundaries
- Road Edges
- Railroad Lines
- Easements
- Dirt Roads
- Buildings

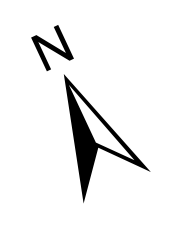
ACRONYMS:
 TSV: TAPPING SLEEVE AND VALVE
 RWGV: RESILIENT WEDGE GATE VALVE
 R&D: REMOVE AND DISPOSE
 R&R: REMOVE AND RESET
 SVC: SERVICE

PROJECT NO.: 12200.15
 DATE: SEPT. 2024
 SCALE: AS NOTED
 DESIGNED BY: JA
 CHECKED BY: BMB
 DRAWN BY: SP
 APPROVED BY: TPT

DRAWING TITLE:
**WATCHEMOKET COVE
KEY PLAN**

C2.0

SHEET NO. 4 OF 26



Sheet 5

Sheet 6

Sheet 7

Sheet 8

Sheet 9

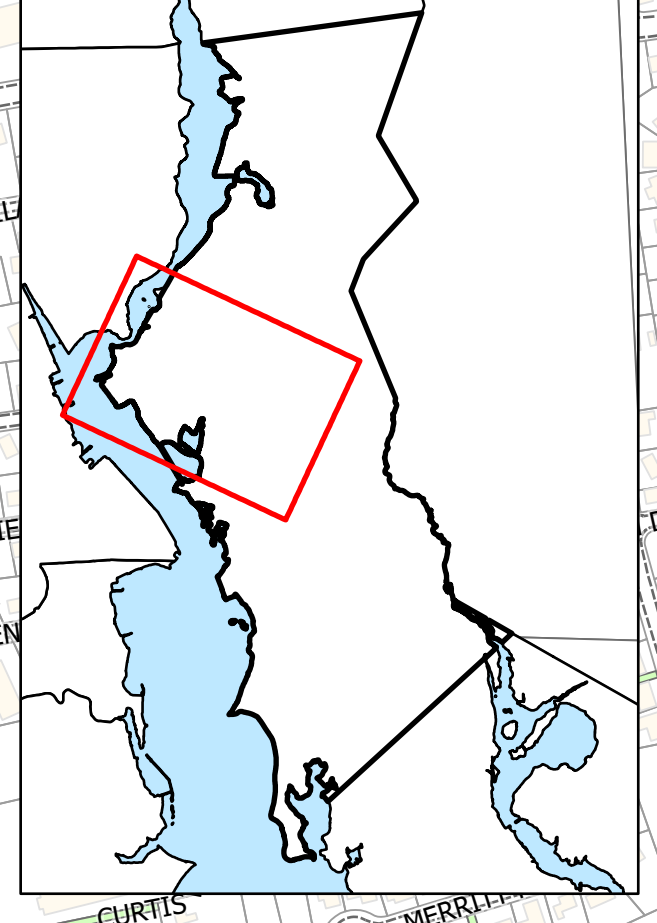
Sheet 10

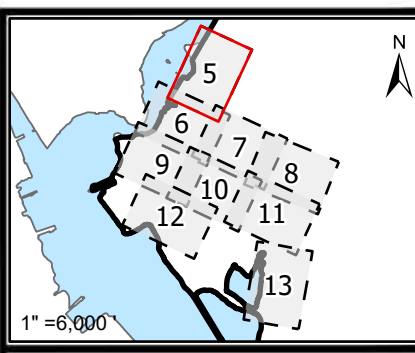
Sheet 11

Sheet 12

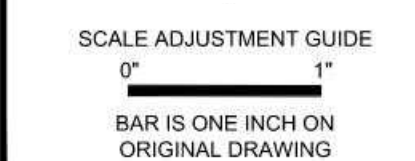
Sheet 13

LOCATION IN
EAST PROVIDENCE





1 INCH=80 FEET



CITY OF EAST PROVIDENCE WATER DEPARTMENT SYSTEM IMPROVEMENTS CLEANING AND LINING PHASE V REBID

Legend

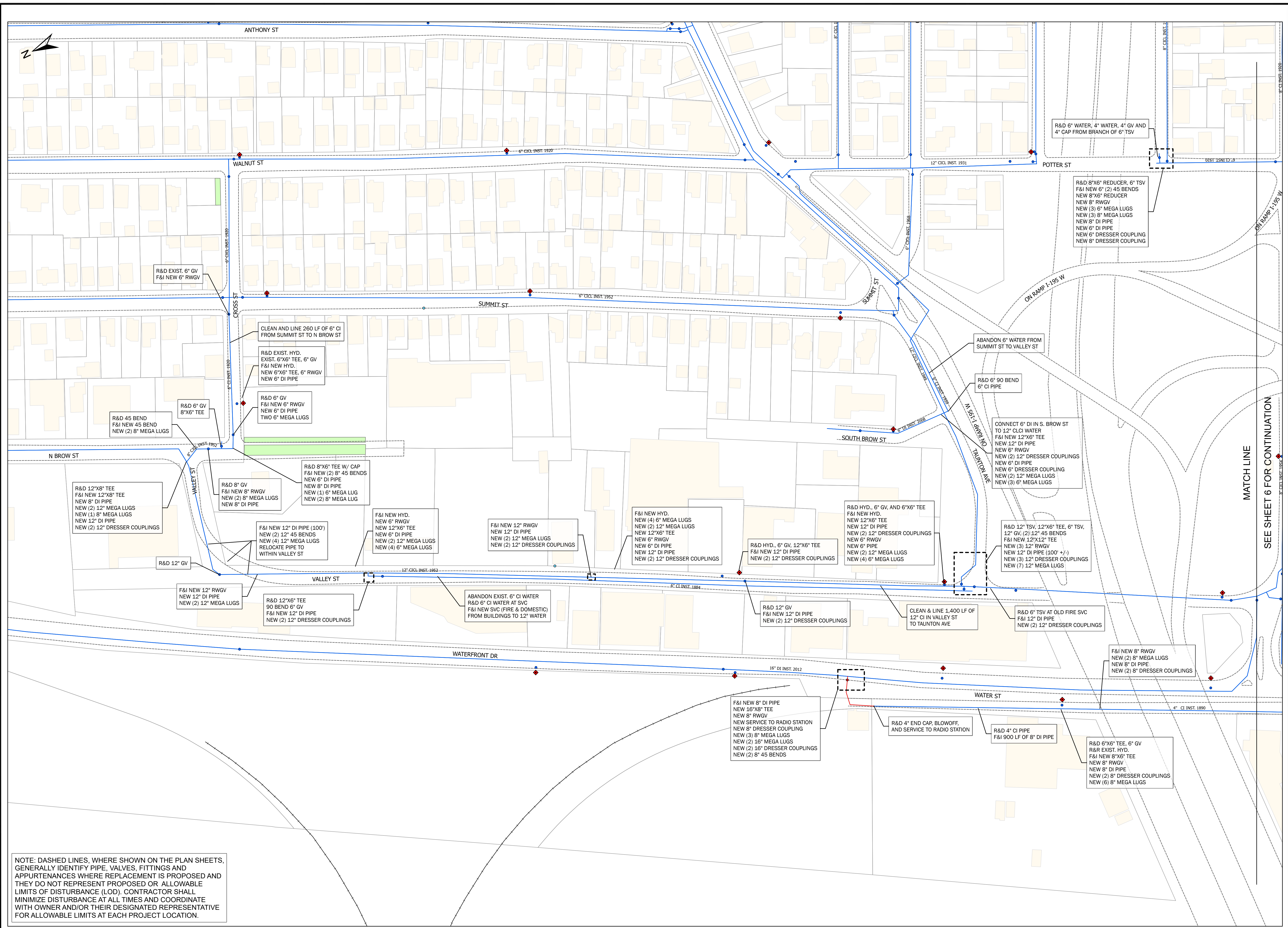
- Parcel Boundaries
- New Valve
- Water Valve
- Water Service Valve
- Water Pipe
- New Water Pipe
- Water Hydrant
- Road Edges
- Railroad Lines
- Easements
- Dirt Roads

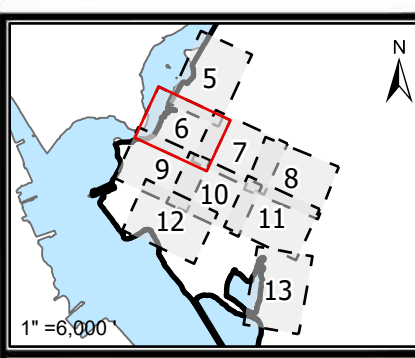
PROJECT NO.: 12200.15
 DATE: SEPT. 2024
 SCALE: AS NOTED
 DESIGNED BY: JA
 CHECKED BY: BMB
 DRAWN BY: SP
 APPROVED BY: TPT
 DRAWING TITLE:

WATCHEMOKET
COVE 1

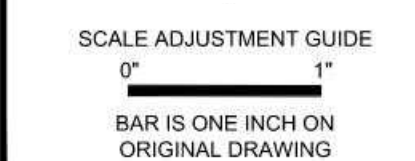
C2.1

SHEET NO. 5 OF 26





1 INCH=80 FEET



CITY OF EAST PROVIDENCE
WATER DEPARTMENT SYSTEM IMPROVEMENTS
CLEANING AND LINING PHASE V REBID

Legend

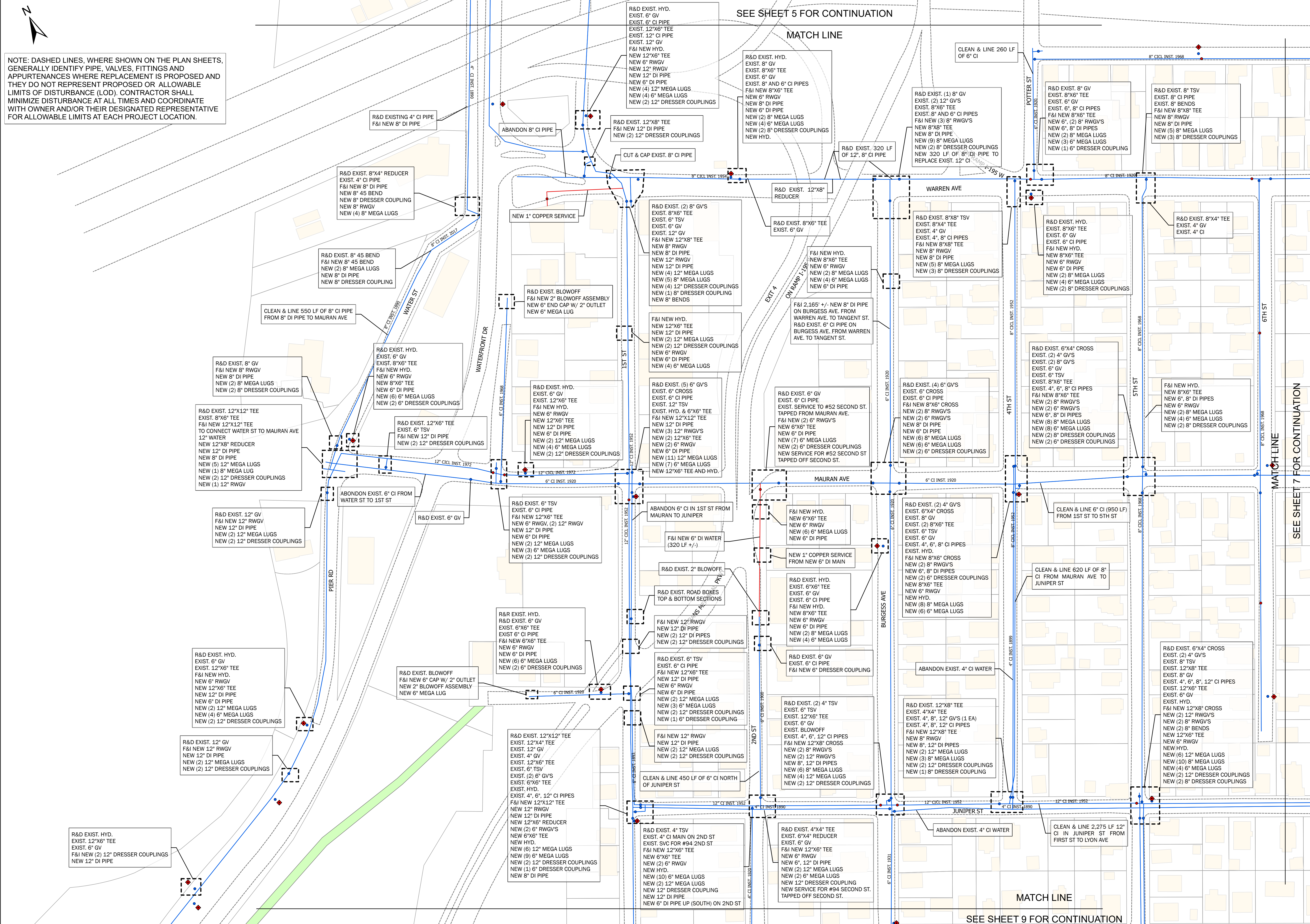
- Parcel Boundaries
- New Valve
- Water Valve
- Water Service Valve
- Water Pipe
- New Water Pipe
- Water Hydrant
- Road Edges
- Railroad Lines
- Easements
- Dirt Roads
- Buildings

PROJECT NO.: 12200.15
 DATE: SEPT. 2024
 SCALE: AS NOTED
 DESIGNED BY: JA
 CHECKED BY: BMB
 DRAWN BY: SP
 APPROVED BY: TPT
 DRAWING TITLE:

WATCHMOKET COVE 2

C2.2

SHEET NO. 6 OF 26



NOTE: DASHED LINES, WHERE SHOWN ON THE PLAN SHEETS, GENERALLY IDENTIFY PIPE, VALVES, FITTINGS AND APPURTENANCES WHERE REPLACEMENT IS PROPOSED AND THEY DO NOT REPRESENT PROPOSED OR ALLOWABLE LIMITS OF DISTURBANCE (LOD). CONTRACTOR SHALL MINIMIZE DISTURBANCE AT ALL TIMES AND COORDINATE WITH OWNER AND/OR THEIR DESIGNATED REPRESENTATIVE FOR ALLOWABLE LIMITS AT EACH PROJECT LOCATION.

SEE SHEET 5 FOR CONTINUATION

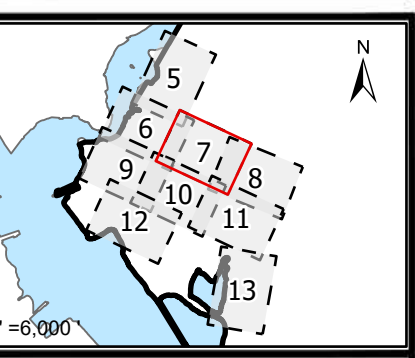
MATCH LINE

CLEAN & LINE 260 LF OF 6" CI

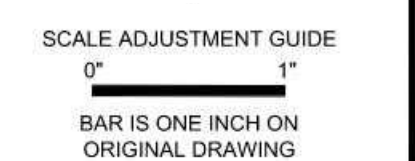
SEE SHEET 7 FOR CONTINUATION

SEE SHEET 9 FOR CONTINUATION

MATCH LINE



1 INCH=80 FEET



CITY OF EAST PROVIDENCE WATER DEPARTMENT SYSTEM IMPROVEMENTS CLEANING AND LINING PHASE V REBID

Legend

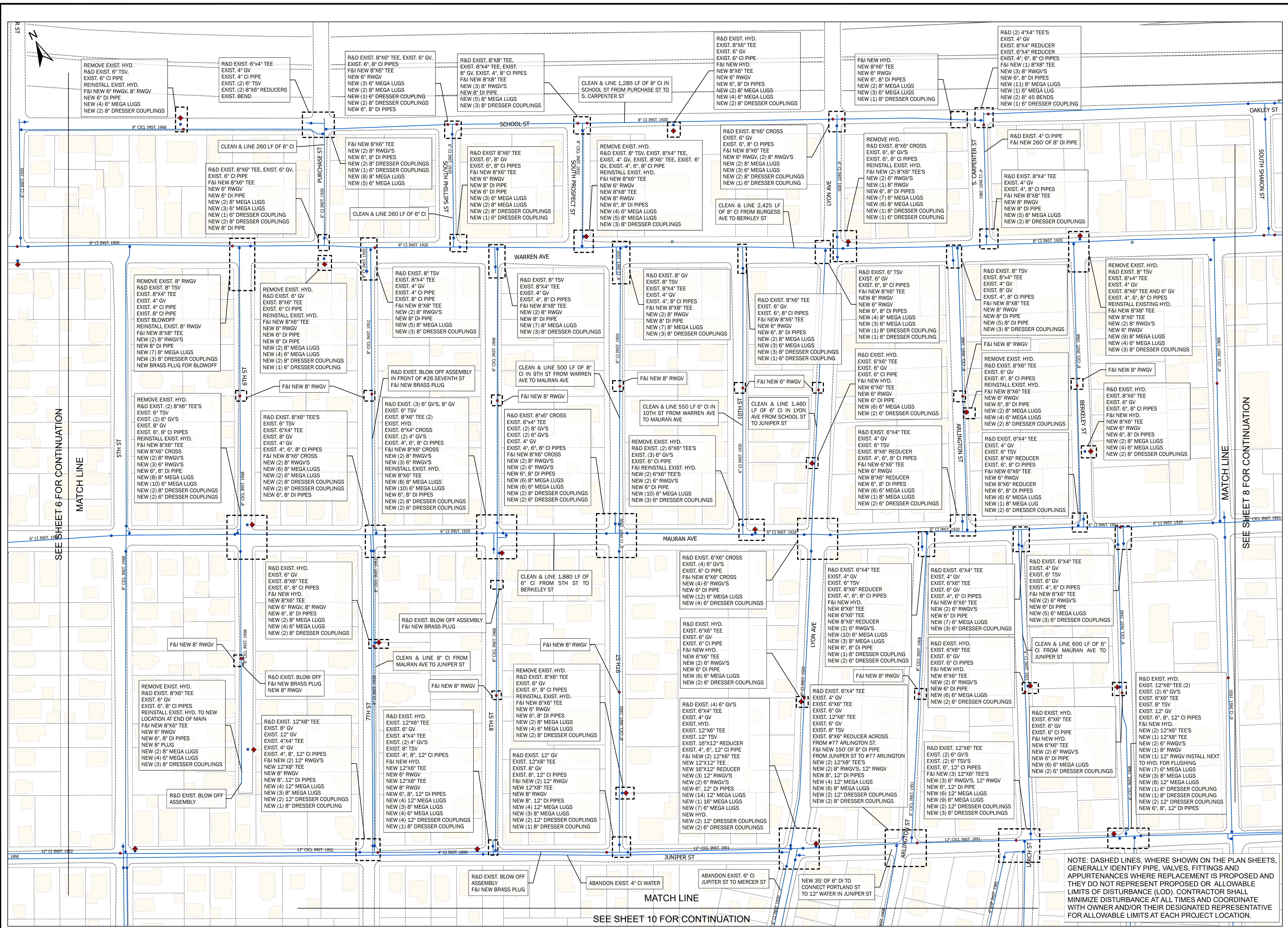
- Parcel Boundaries
- Water Valve
- Water Service Valve
- Water Pipe
- New Water Pipe
- Water Hydrant
- Road Edges
- F&I New Hydr.
- Railroad Lines
- Easements
- Dirt Roads
- Buildings

REVISED BY ADDENDUM 3
ON MAY 30, 2024
PROJECT NO.: 12200.15
DATE: SEPT. 2024
SCALE: AS NOTED
DESIGNED BY: JA
CHECKED BY: BMB
DRAWN BY: SP
APPROVED BY: TPT
DRAWING TITLE:

WATCHEMOKET
COVE 3

C2.3

SHEET NO. 7 OF 26

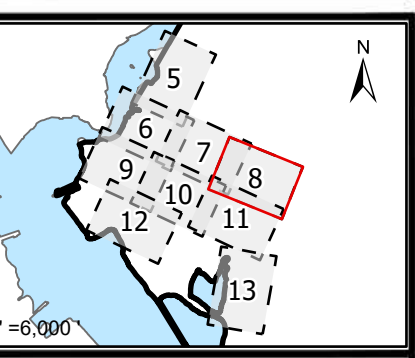


NOTE: DASHED LINES, WHERE SHOWN ON THE PLAN SHEETS, GENERALLY IDENTIFY PIPE, VALVES, FITTINGS AND APPURTENANCES WHERE REPLACEMENT IS PROPOSED AND THEY DO NOT REPRESENT PROPOSED OR ALLOWABLE LIMITS OF DISTURBANCE (LOD). CONTRACTOR SHALL MINIMIZE DISTURBANCE AT ALL TIMES AND COORDINATE WITH OWNER AND/OR THEIR DESIGNATED REPRESENTATIVE FOR ALLOWABLE LIMITS AT EACH PROJECT LOCATION.

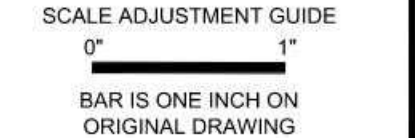
SEE SHEET 10 FOR CONTINUATION

SEE SHEET 6 FOR CONTINUATION

SEE SHEET 8 FOR CONTINUATION



1 INCH=80 FEET



CITY OF EAST PROVIDENCE WATER DEPARTMENT SYSTEM IMPROVEMENTS CLEANING AND LINING PHASE V REBID

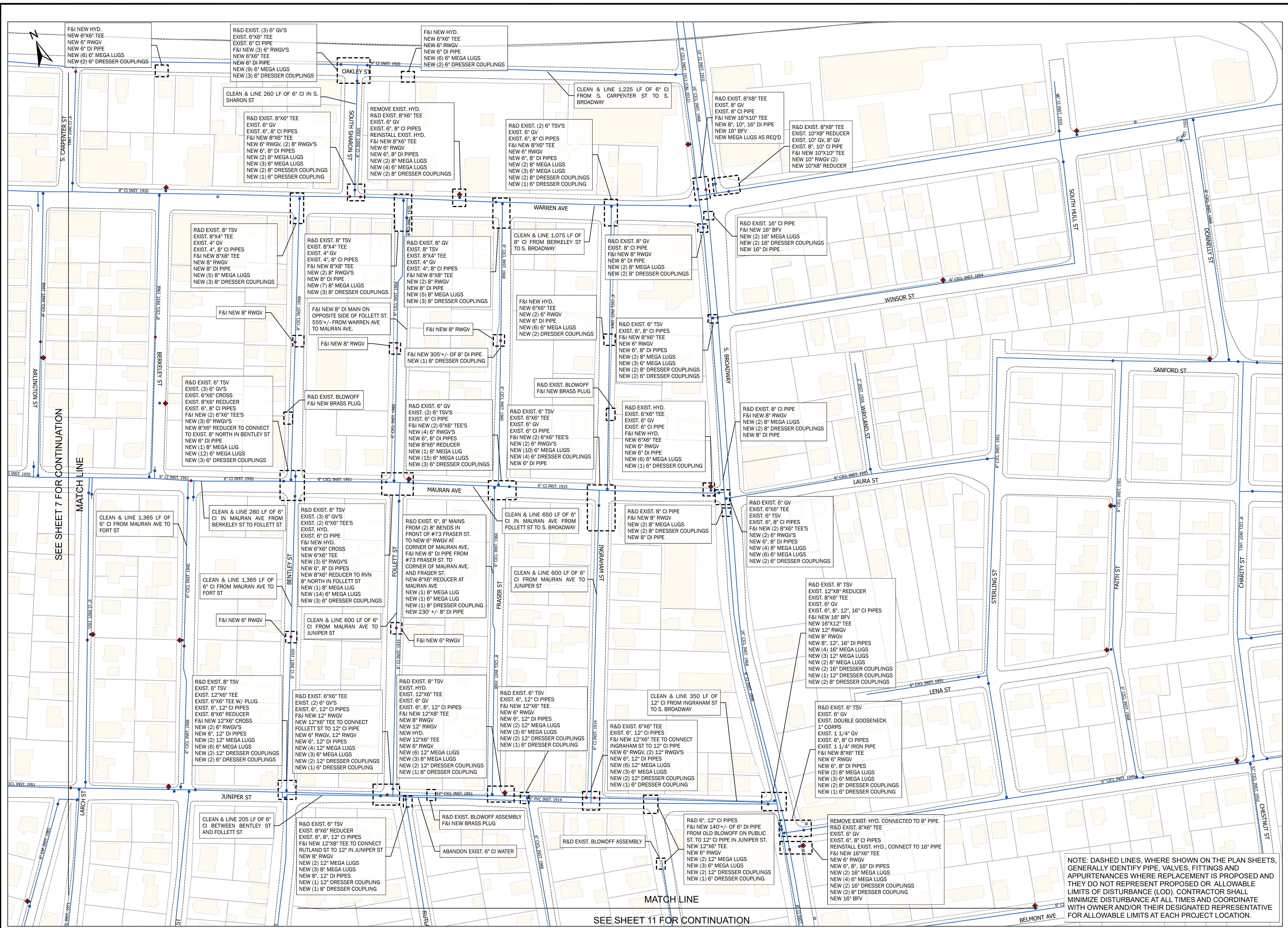
- Legend**
- Parcel Boundaries
 - New Valve
 - Water Valve
 - Water Service Valve
 - Water Pipe
 - New Water Pipe
 - Water Hydrant
 - Road Edges
 - Railroad Lines
 - Easements
 - Dirt Roads
 - Buildings

REVISED BY ADDENDUM 3
ON MAY 30, 2024
PROJECT NO.: 12200.15
DATE: SEPT. 2024
SCALE: AS NOTED
DESIGNED BY: JA
CHECKED BY: BMB
DRAWN BY: SP
APPROVED BY: TPT
DRAWING TITLE:

WATCHMOKET
COVE 4

C2.4

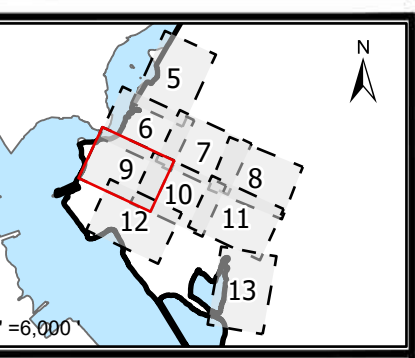
SHEET NO. 8 OF 26



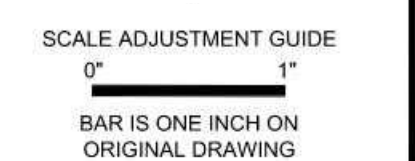
NOTE: DASHED LINES, WHERE SHOWN ON THE PLAN SHEETS, GENERALLY IDENTIFY PIPE, VALVES, FITTINGS AND APPURTENANCES WHERE REPLACEMENT IS PROPOSED AND THEY DO NOT REPRESENT PROPOSED OR ALLOWABLE LIMITS OF DISTURBANCE (LOD). CONTRACTOR SHALL MINIMIZE DISTURBANCE AT ALL TIMES AND COORDINATE WITH OWNER AND/OR THEIR DESIGNATED REPRESENTATIVE FOR ALLOWABLE LIMITS AT EACH PROJECT LOCATION.

SEE SHEET 11 FOR CONTINUATION

SEE SHEET 7 FOR CONTINUATION



1 INCH=80 FEET



CITY OF EAST PROVIDENCE
WATER DEPARTMENT SYSTEM IMPROVEMENTS
CLEANING AND LINING PHASE V REBID

Legend

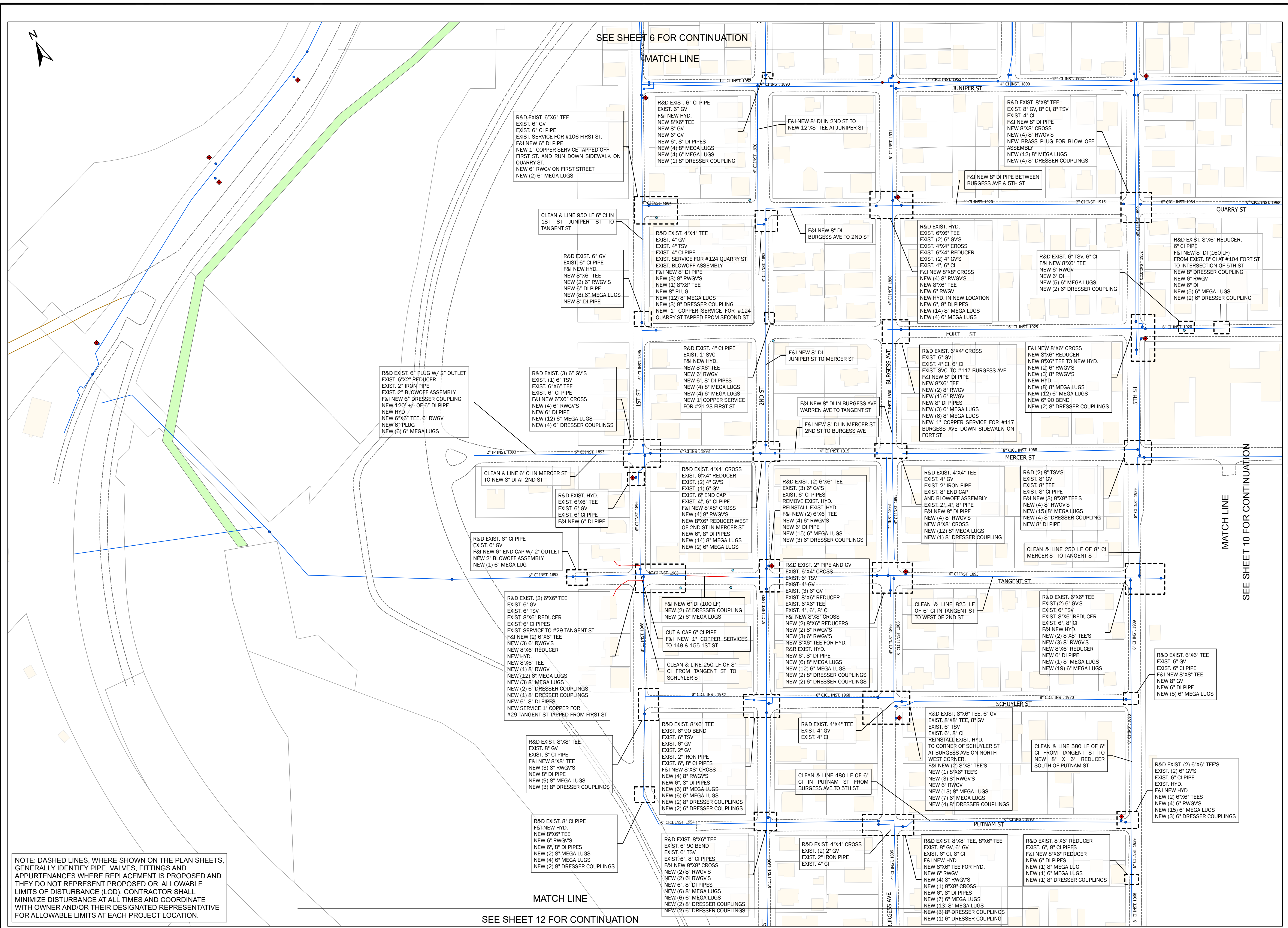
- Parcel Boundaries
- New Valve
- Water Valve
- Water Service Valve
- Water Pipe
- New Water Pipe
- Water Hydrant
- Road Edges
- Railroad Lines
- Easements
- Dirt Roads
- Buildings

PROJECT NO.: 12200.15
 DATE: SEPT. 2024
 SCALE: AS NOTED
 DESIGNED BY: JA
 CHECKED BY: BMB
 DRAWN BY: SP
 APPROVED BY: TPT
 DRAWING TITLE:

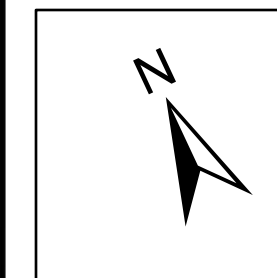
WATCHEMOKET COVE 5

C2.5

SHEET NO. 9 OF 26



NOTE: DASHED LINES, WHERE SHOWN ON THE PLAN SHEETS, GENERALLY IDENTIFY PIPE, VALVES, FITTINGS AND APPURTENANCES WHERE REPLACEMENT IS PROPOSED AND THEY DO NOT REPRESENT PROPOSED OR ALLOWABLE LIMITS OF DISTURBANCE (LOD). CONTRACTOR SHALL MINIMIZE DISTURBANCE AT ALL TIMES AND COORDINATE WITH OWNER AND/OR THEIR DESIGNATED REPRESENTATIVE FOR ALLOWABLE LIMITS AT EACH PROJECT LOCATION.



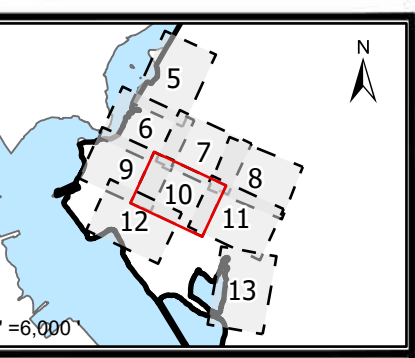
SEE SHEET 6 FOR CONTINUATION

MATCH LINE

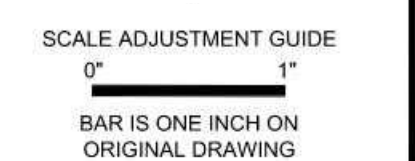
SEE SHEET 10 FOR CONTINUATION

MATCH LINE

SEE SHEET 12 FOR CONTINUATION



1 INCH=80 FEET



CITY OF EAST PROVIDENCE
WATER DEPARTMENT SYSTEM IMPROVEMENTS
CLEANING AND LINING PHASE V REBID

Legend

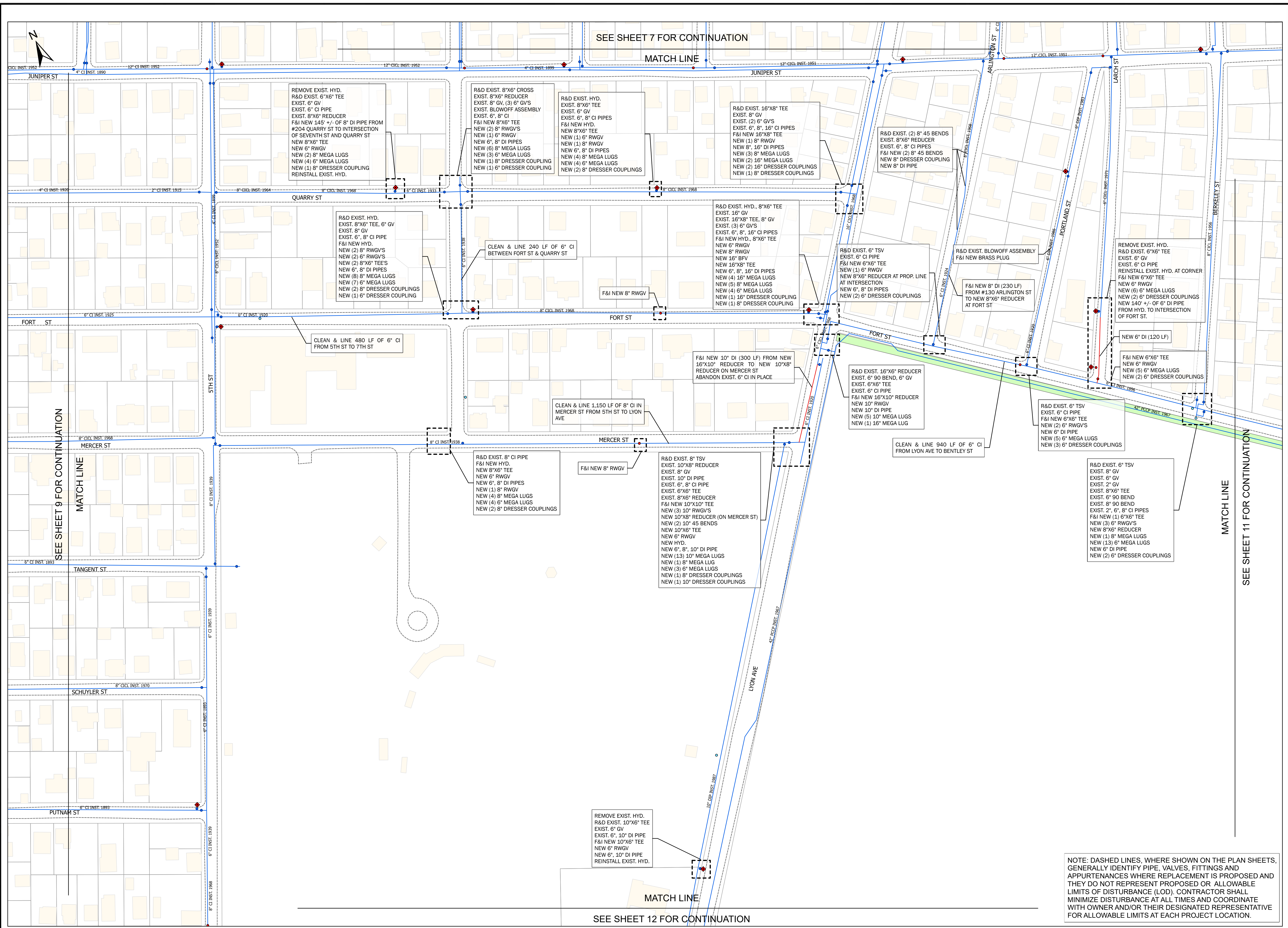
- Parcel Boundaries
- New Valve
- Water Valve
- Water Service Valve
- Water Pipe
- New Water Pipe
- Water Hydrant
- Road Edges
- Railroad Lines
- Easements
- Dirt Roads
- Buildings

PROJECT NO.: 12200.15
 DATE: SEPT. 2024
 SCALE: AS NOTED
 DESIGNED BY: JA
 CHECKED BY: BMB
 DRAWN BY: SP
 APPROVED BY: TPT
 DRAWING TITLE:

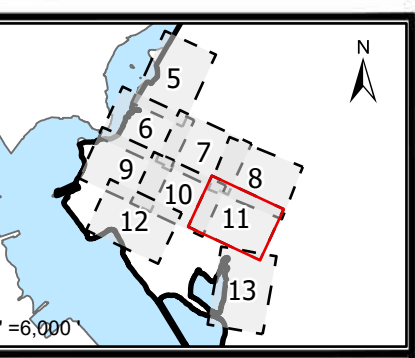
WATCHEMOKET COVE 6

C2.6

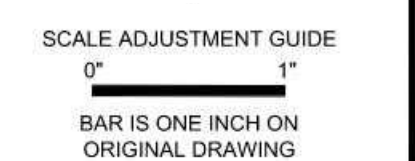
SHEET NO. 10 OF 26



NOTE: DASHED LINES, WHERE SHOWN ON THE PLAN SHEETS, GENERALLY IDENTIFY PIPE, VALVES, FITTINGS AND APPURTENANCES WHERE REPLACEMENT IS PROPOSED AND THEY DO NOT REPRESENT PROPOSED OR ALLOWABLE LIMITS OF DISTURBANCE (LOD). CONTRACTOR SHALL MINIMIZE DISTURBANCE AT ALL TIMES AND COORDINATE WITH OWNER AND/OR THEIR DESIGNATED REPRESENTATIVE FOR ALLOWABLE LIMITS AT EACH PROJECT LOCATION.



1 INCH=80 FEET



CITY OF EAST PROVIDENCE
WATER DEPARTMENT SYSTEM IMPROVEMENTS
CLEANING AND LINING PHASE V REBID

Legend

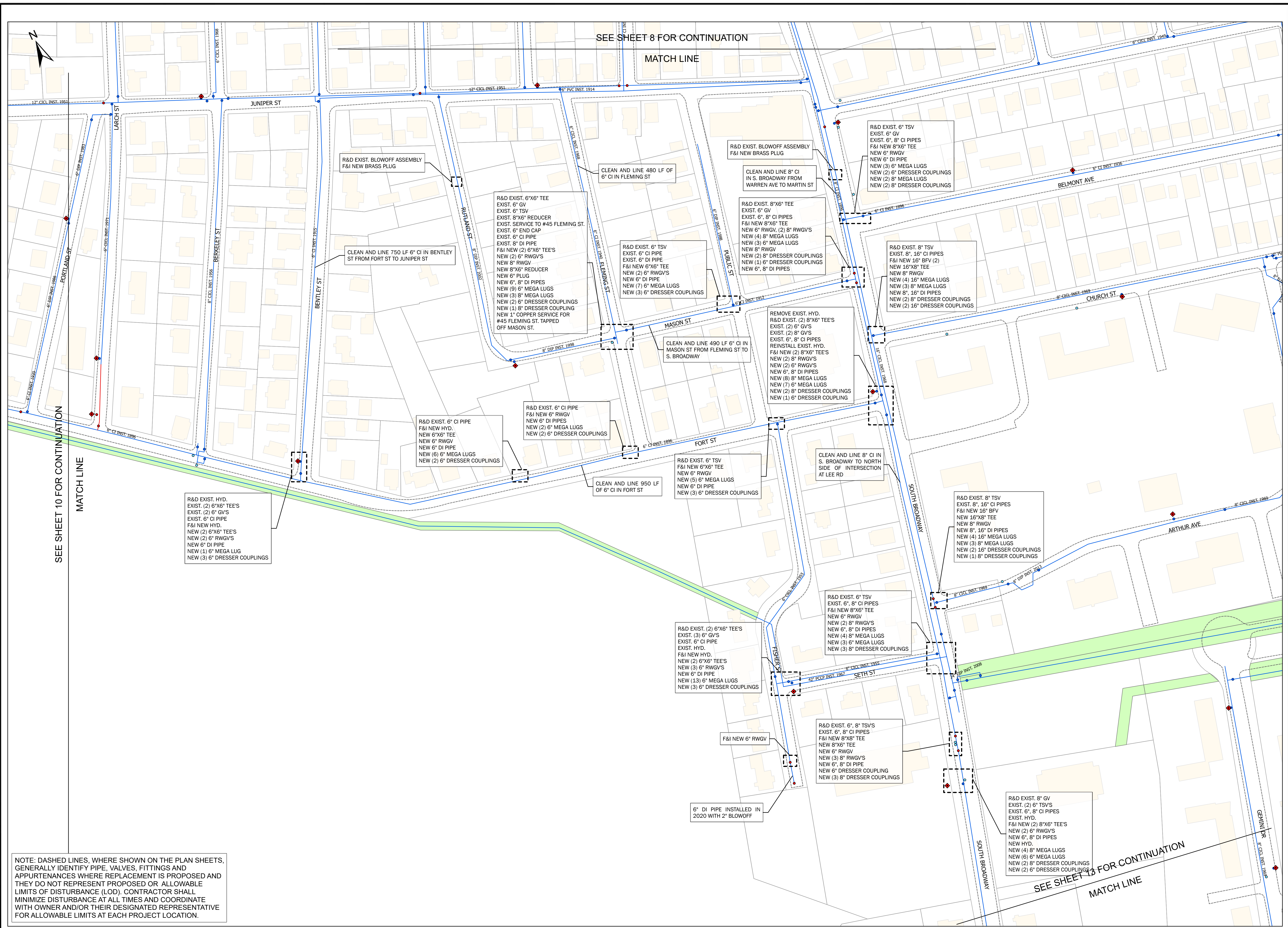
- Parcel Boundaries
- New Valve
- Water Valve
- Water Service Valve
- Water Pipe
- New Water Pipe
- Water Hydrant
- Road Edges
- Railroad Lines
- Easements
- Dirt Roads
- Buildings

REVISED BY ADDENDUM 3
ON MAY 30, 2024
PROJECT NO.: 12200.15
DATE: SEPT. 2024
SCALE: AS NOTED
DESIGNED BY: JA
CHECKED BY: BMB
DRAWN BY: SP
APPROVED BY: TPT
DRAWING TITLE:

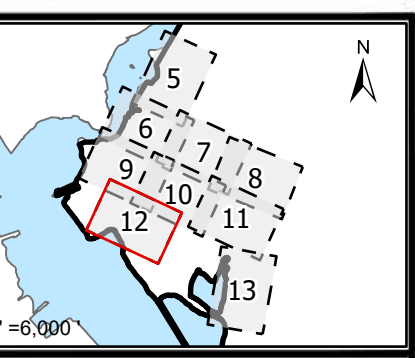
WATCHMOKET COVE 7

C2.7

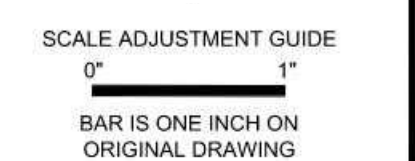
SHEET NO. 11 OF 26



NOTE: DASHED LINES, WHERE SHOWN ON THE PLAN SHEETS, GENERALLY IDENTIFY PIPE, VALVES, FITTINGS AND APPURTENANCES WHERE REPLACEMENT IS PROPOSED AND THEY DO NOT REPRESENT PROPOSED OR ALLOWABLE LIMITS OF DISTURBANCE (LOD). CONTRACTOR SHALL MINIMIZE DISTURBANCE AT ALL TIMES AND COORDINATE WITH OWNER AND/OR THEIR DESIGNATED REPRESENTATIVE FOR ALLOWABLE LIMITS AT EACH PROJECT LOCATION.



1 INCH=80 FEET



CITY OF EAST PROVIDENCE WATER DEPARTMENT SYSTEM IMPROVEMENTS CLEANING AND LINING PHASE V REBID

Legend

- Parcel Boundaries
- New Valve
- Water Valve
- Water Service Valve
- Water Pipe
- New Water Pipe
- Water Hydrant
- Road Edges
- Railroad Lines
- Easements
- Dirt Roads
- Buildings
- Water Pipes

PROJECT NO.: 12200.15
 DATE: SEPT. 2024
 SCALE: AS NOTED
 DESIGNED BY: JA
 CHECKED BY: BMB
 DRAWN BY: SP
 APPROVED BY: TPT
 DRAWING TITLE:

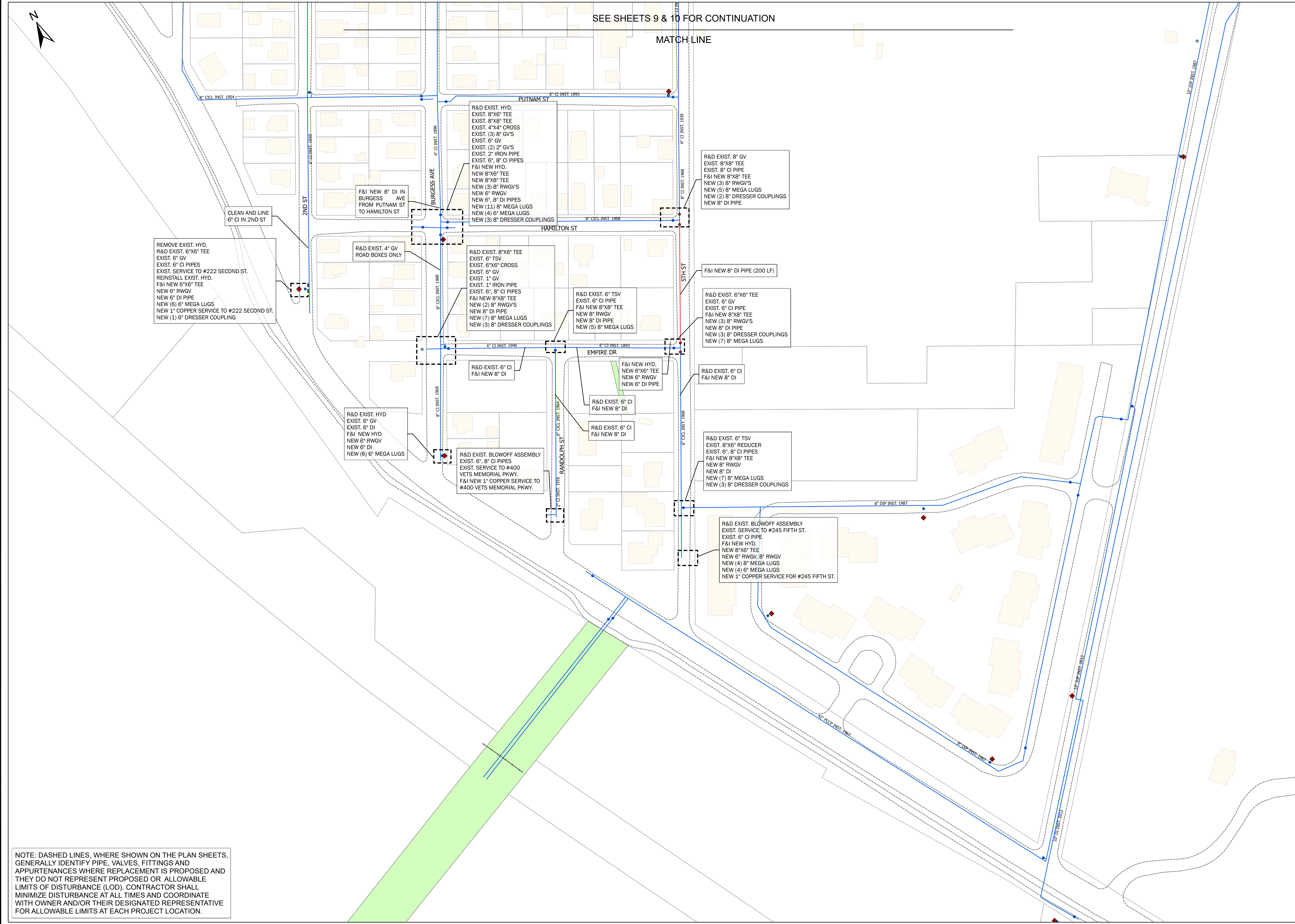
WATCHEMOKET COVE 8

C2.8

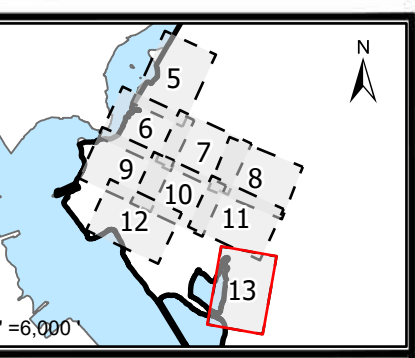
SHEET NO. 12 OF 26

SEE SHEETS 9 & 10 FOR CONTINUATION

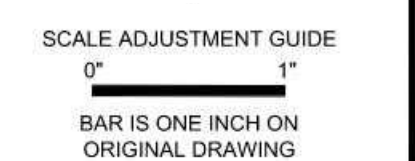
MATCH LINE



NOTE: DASHED LINES, WHERE SHOWN ON THE PLAN SHEETS, GENERALLY IDENTIFY PIPE, VALVES, FITTINGS AND APPURTENANCES WHERE REPLACEMENT IS PROPOSED AND THEY DO NOT REPRESENT PROPOSED OR ALLOWABLE LIMITS OF DISTURBANCE (LOD). CONTRACTOR SHALL MINIMIZE DISTURBANCE AT ALL TIMES AND COORDINATE WITH OWNER AND/OR THEIR DESIGNATED REPRESENTATIVE FOR ALLOWABLE LIMITS AT EACH PROJECT LOCATION.



1 INCH=80 FEET



CITY OF EAST PROVIDENCE WATER DEPARTMENT SYSTEM IMPROVEMENTS CLEANING AND LINING PHASE V REBID

Legend

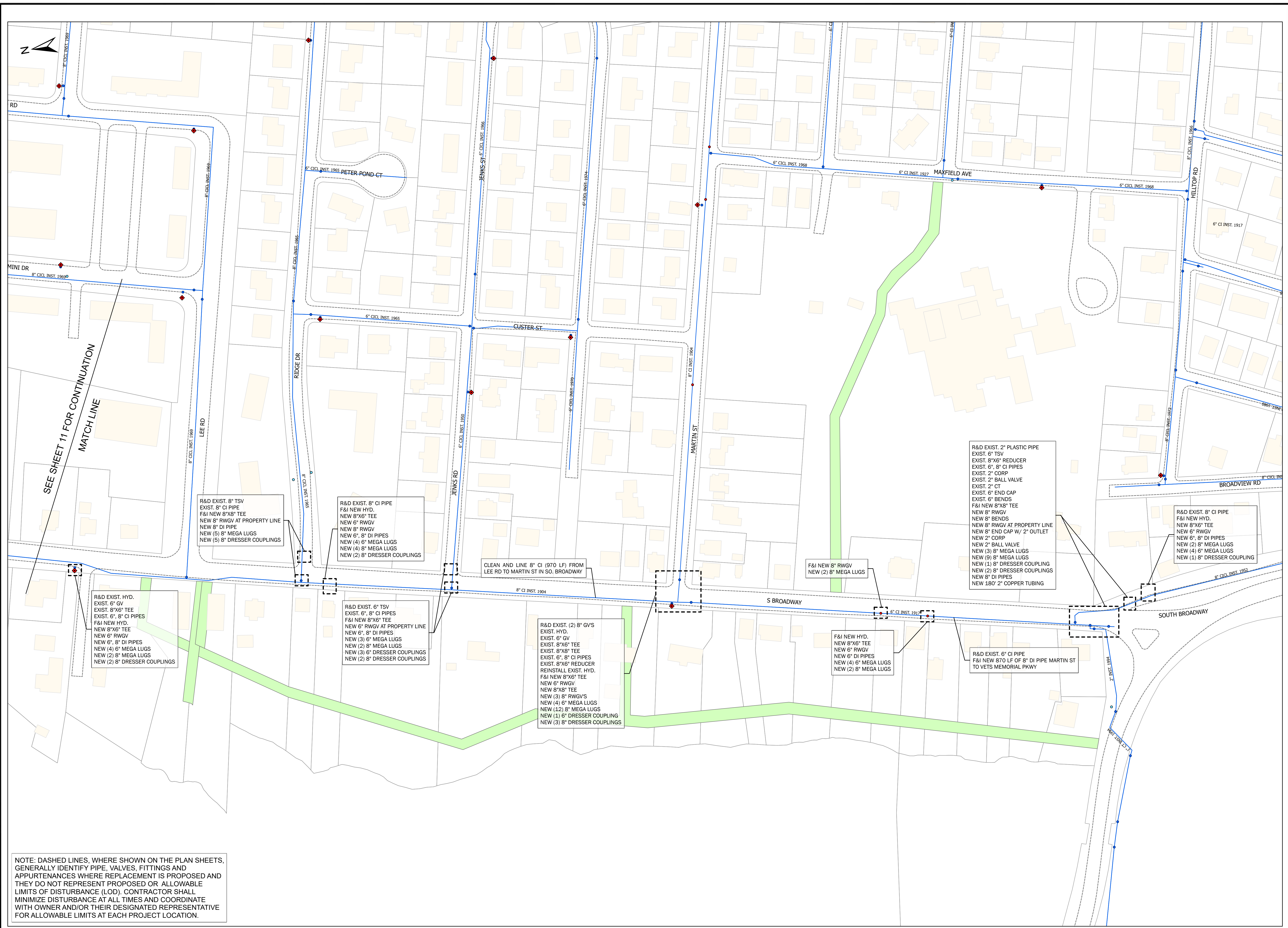
- Parcel Boundaries
- New Valve
- Water Valve
- Water Service Valve
- Water Pipe
- New Water Pipe
- Water Hydrant
- Road Edges
- Railroad Lines
- Easements
- Dirt Roads
- Buildings

PROJECT NO.: 12200.15
 DATE: SEPT. 2024
 SCALE: AS NOTED
 DESIGNED BY: JA
 CHECKED BY: BMB
 DRAWN BY: SP
 APPROVED BY: TPT
 DRAWING TITLE:

WATCHEMOKET COVE 9

C2.9

SHEET NO. 13 OF 26

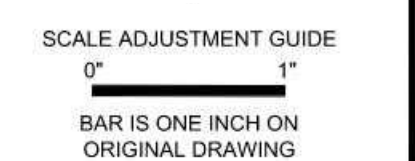


NOTE: DASHED LINES, WHERE SHOWN ON THE PLAN SHEETS, GENERALLY IDENTIFY PIPE, VALVES, FITTINGS AND APPURTENANCES WHERE REPLACEMENT IS PROPOSED AND THEY DO NOT REPRESENT PROPOSED OR ALLOWABLE LIMITS OF DISTURBANCE (LOD). CONTRACTOR SHALL MINIMIZE DISTURBANCE AT ALL TIMES AND COORDINATE WITH OWNER AND/OR THEIR DESIGNATED REPRESENTATIVE FOR ALLOWABLE LIMITS AT EACH PROJECT LOCATION.

SEE SHEET 11 FOR CONTINUATION
MATCH LINE



1 INCH=400 FEET



CITY OF EAST PROVIDENCE
WATER DEPARTMENT SYSTEM IMPROVEMENTS
CLEANING AND LINING PHASE V REBID

Legend

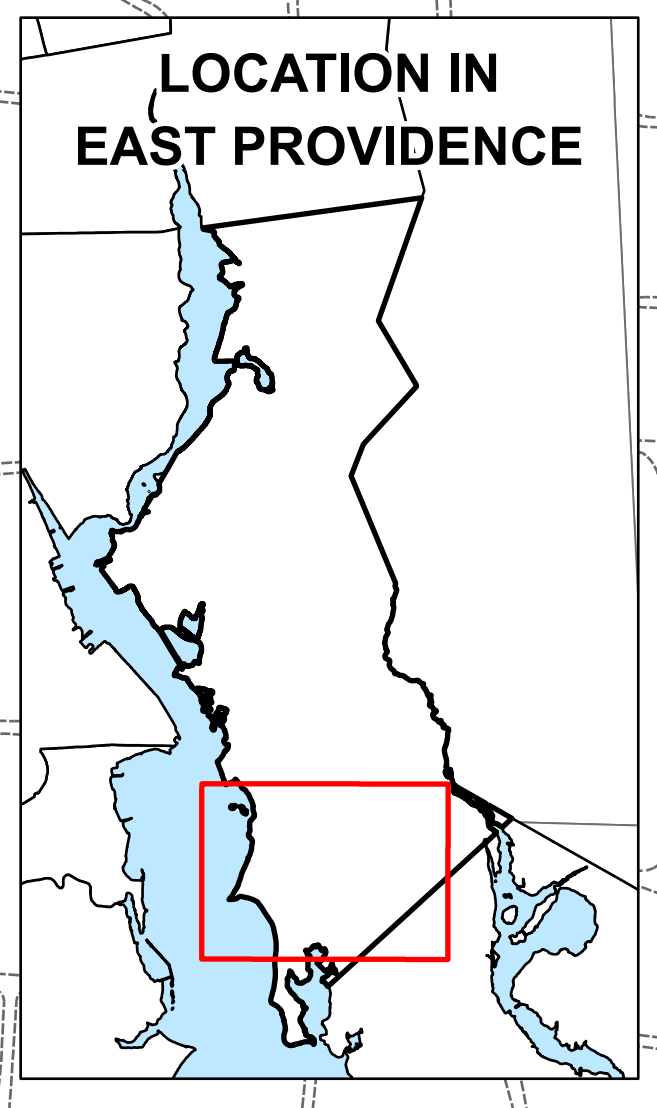
- Parcel Boundaries
- Road Edges
- Railroad Lines
- Easements
- Dirt Roads
- Buildings

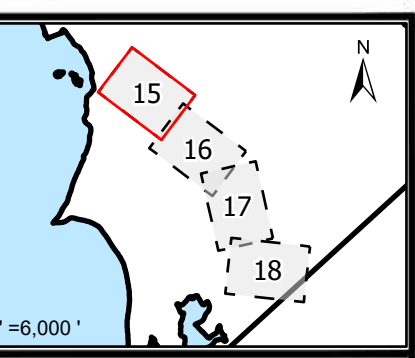
ACRONYMS:
 TSV: TAPPING SLEEVE AND VALVE
 RWGV: RESILIENT WEDGE GATE VALVE
 R&D: REMOVE AND DISPOSE
 R&R: REMOVE AND RESET
 SVC: SERVICE

PROJECT NO.: 12200.15
 DATE: SEPT. 2024
 SCALE: AS NOTED
 DESIGNED BY: JA
 CHECKED BY: BMB
 DRAWN BY: SP
 APPROVED BY: TPT

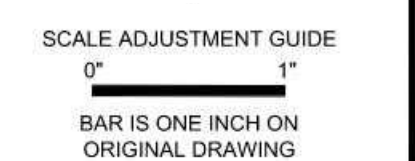
WILLET AVENUE
KEY PLAN

C3.0





1 INCH=80 FEET



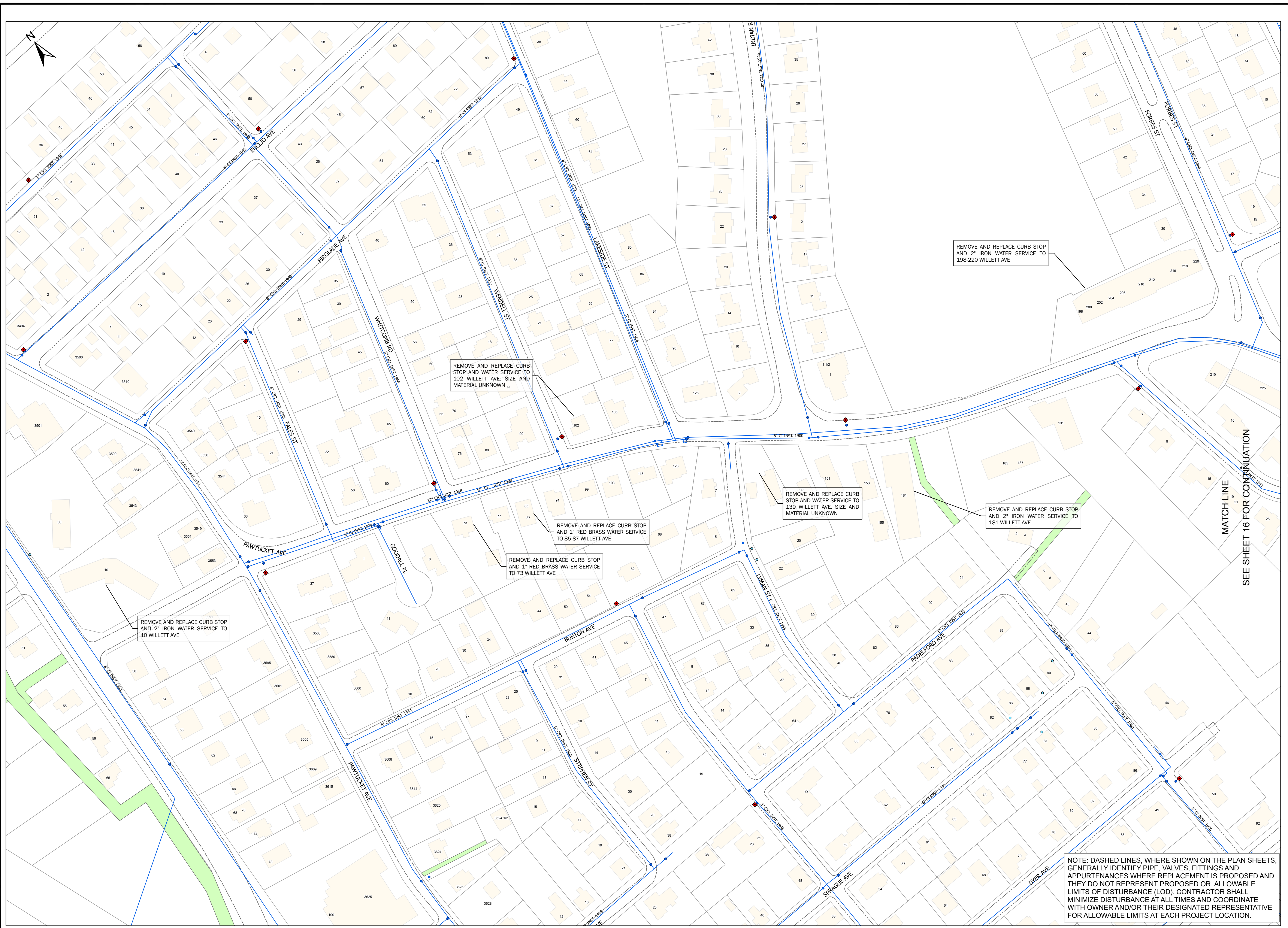
CITY OF EAST PROVIDENCE WATER DEPARTMENT SYSTEM IMPROVEMENTS CLEANING AND LINING PHASE V REBID

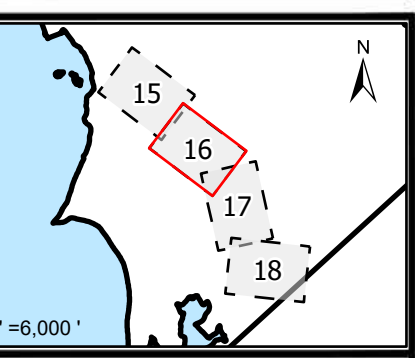
- Legend**
- Parcel Boundaries
 - Water Valve
 - Water Service Valve
 - Water Pipe
 - Water Hydrant
 - Road Edges
 - Railroad Lines
 - Easements
 - Dirt Roads
 - Buildings

PROJECT NO.: 12200.15
 DATE: SEPT. 2024
 SCALE: AS NOTED
 DESIGNED BY: JA
 CHECKED BY: BMB
 DRAWN BY: SP
 APPROVED BY: TPT
 DRAWING TITLE:

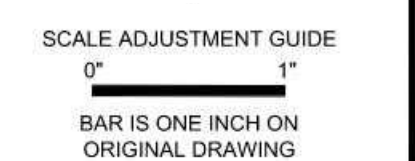
WILLETT AVENUE 1

C3.1
SHEET NO. 15 OF 26





1 INCH=80 FEET



CITY OF EAST PROVIDENCE
WATER DEPARTMENT SYSTEM IMPROVEMENTS
CLEANING AND LINING PHASE V REBID

Legend

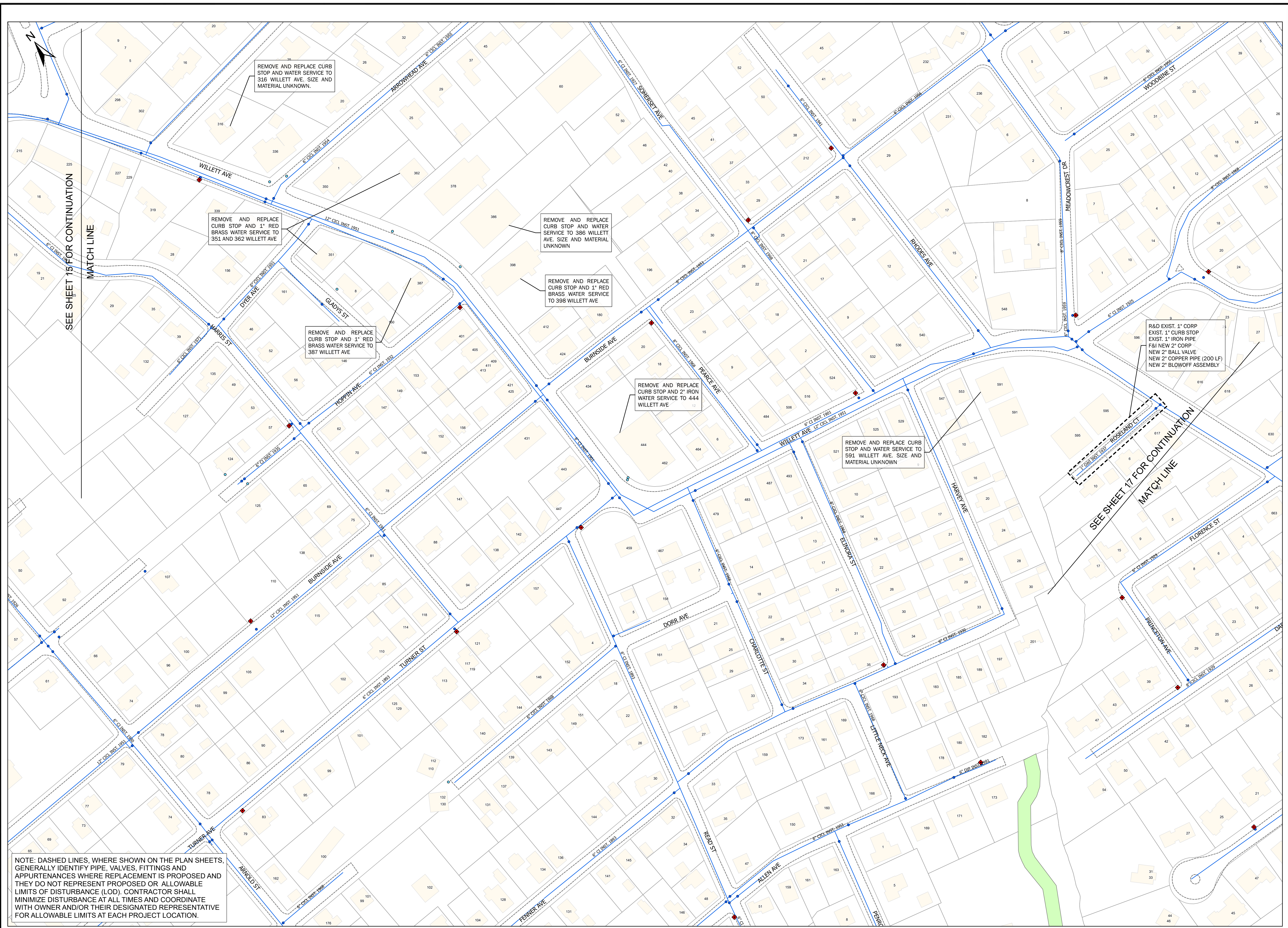
- Parcel Boundaries
- Water Valve
- Water Service Valve
- Water Pipe
- Water Hydrant
- Road Edges
- Railroad Lines
- Easements
- Dirt Roads
- Buildings

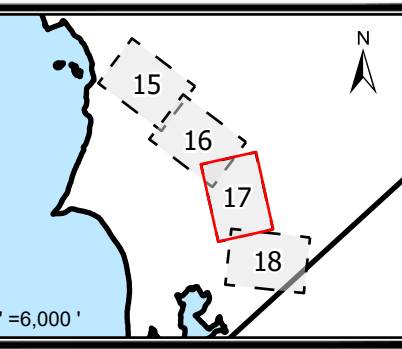
PROJECT NO.: 12200.15
 DATE: SEPT. 2024
 SCALE: AS NOTED
 DESIGNED BY: JA
 CHECKED BY: BMB
 DRAWN BY: SP
 APPROVED BY: TPT
 DRAWING TITLE:

WILLETT AVENUE 2

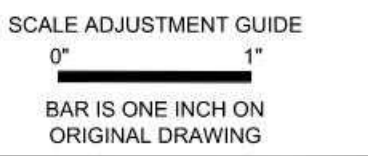
C3.2

SHEET NO. 16 OF 26





1 INCH=80 FEET



CITY OF EAST PROVIDENCE
WATER DEPARTMENT SYSTEM IMPROVEMENTS
CLEANING AND LINING PHASE V REBID

Legend

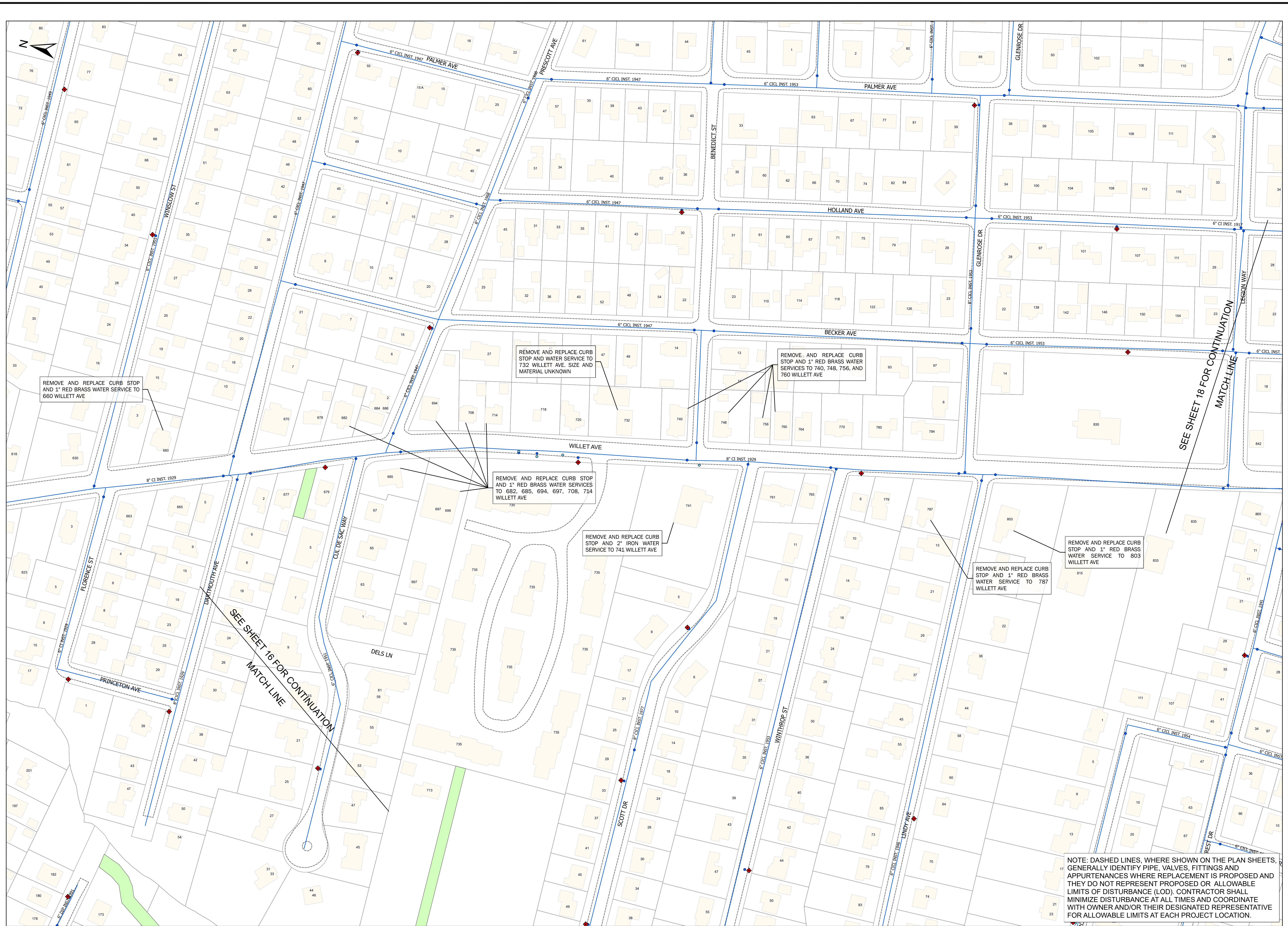
- Parcel Boundaries
- Water Valve
- Water Service Valve
- Water Pipe
- Water Hydrant
- Road Edges
- Railroad Lines
- Easements
- Dirt Roads

PROJECT NO.: 12200.15
 DATE: SEPT. 2024
 SCALE: AS NOTED
 DESIGNED BY: JA
 CHECKED BY: BMB
 DRAWN BY: SP
 APPROVED BY: TPT
 DRAWING TITLE:

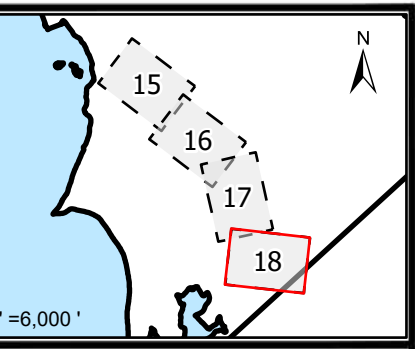
WILLETT AVENUE 3

C3.3

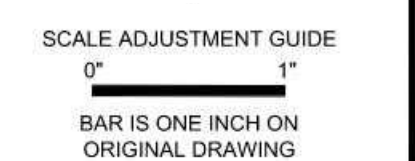
SHEET NO. 17 OF 26



NOTE: DASHED LINES, WHERE SHOWN ON THE PLAN SHEETS, GENERALLY IDENTIFY PIPE, VALVES, FITTINGS AND APPURTENANCES WHERE REPLACEMENT IS PROPOSED AND THEY DO NOT REPRESENT PROPOSED OR ALLOWABLE LIMITS OF DISTURBANCE (LOD). CONTRACTOR SHALL MINIMIZE DISTURBANCE AT ALL TIMES AND COORDINATE WITH OWNER AND/OR THEIR DESIGNATED REPRESENTATIVE FOR ALLOWABLE LIMITS AT EACH PROJECT LOCATION.



1 INCH=80 FEET



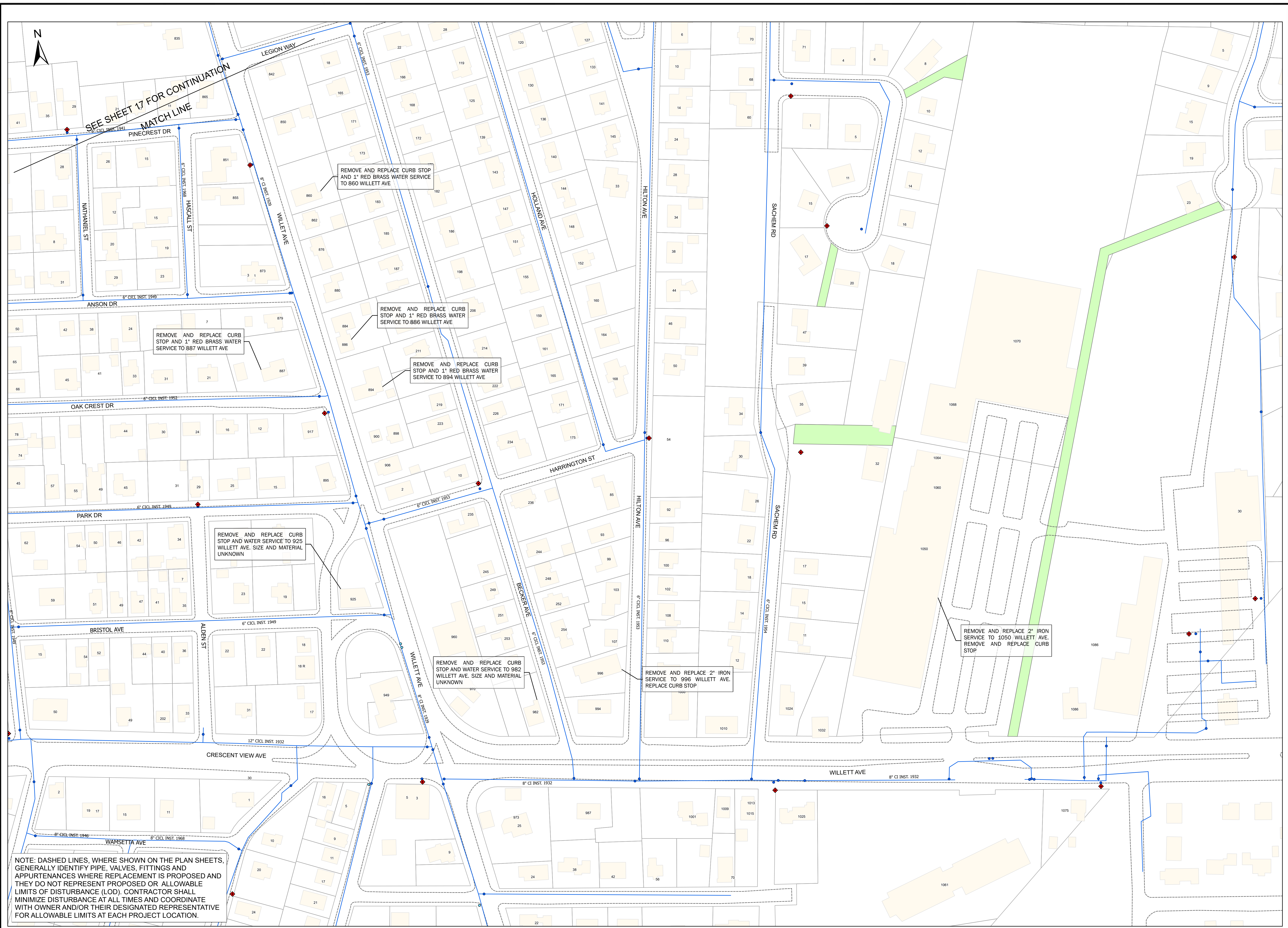
CITY OF EAST PROVIDENCE WATER DEPARTMENT SYSTEM IMPROVEMENTS CLEANING AND LINING PHASE V REBID

- Legend**
- Parcel Boundaries
 - Water Valve
 - Water Service Valve
 - Water Pipe
 - Water Hydrant
 - Road Edges
 - Railroad Lines
 - Easements
 - Dirt Roads
 - Buildings

PROJECT NO.: 12200.15
 DATE: SEPT. 2024
 SCALE: AS NOTED
 DESIGNED BY: JA
 CHECKED BY: BMB
 DRAWN BY: SP
 APPROVED BY: TPT
 DRAWING TITLE:

WILLETT AVENUE 4

C3.4
SHEET NO. 18 OF 28

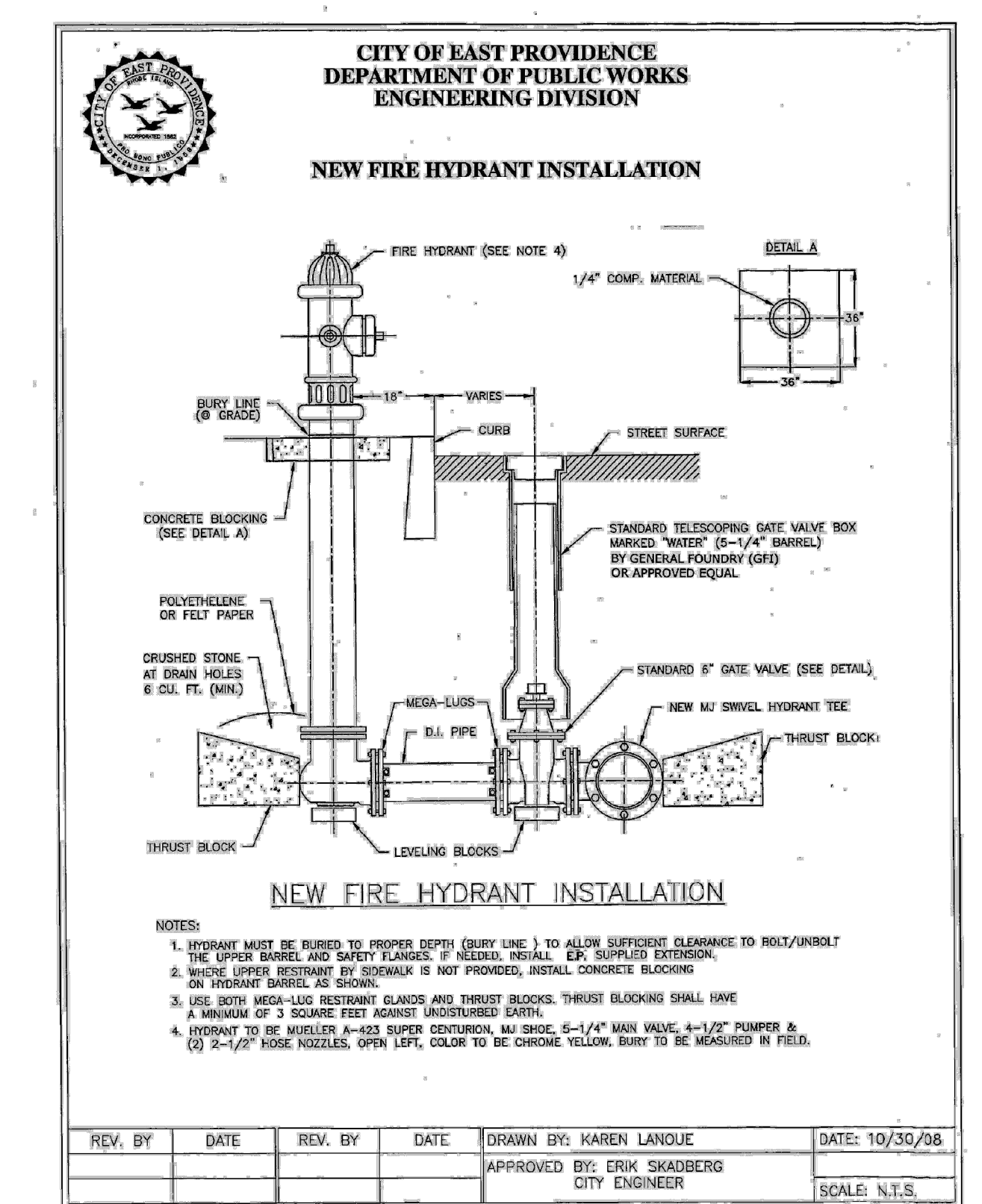
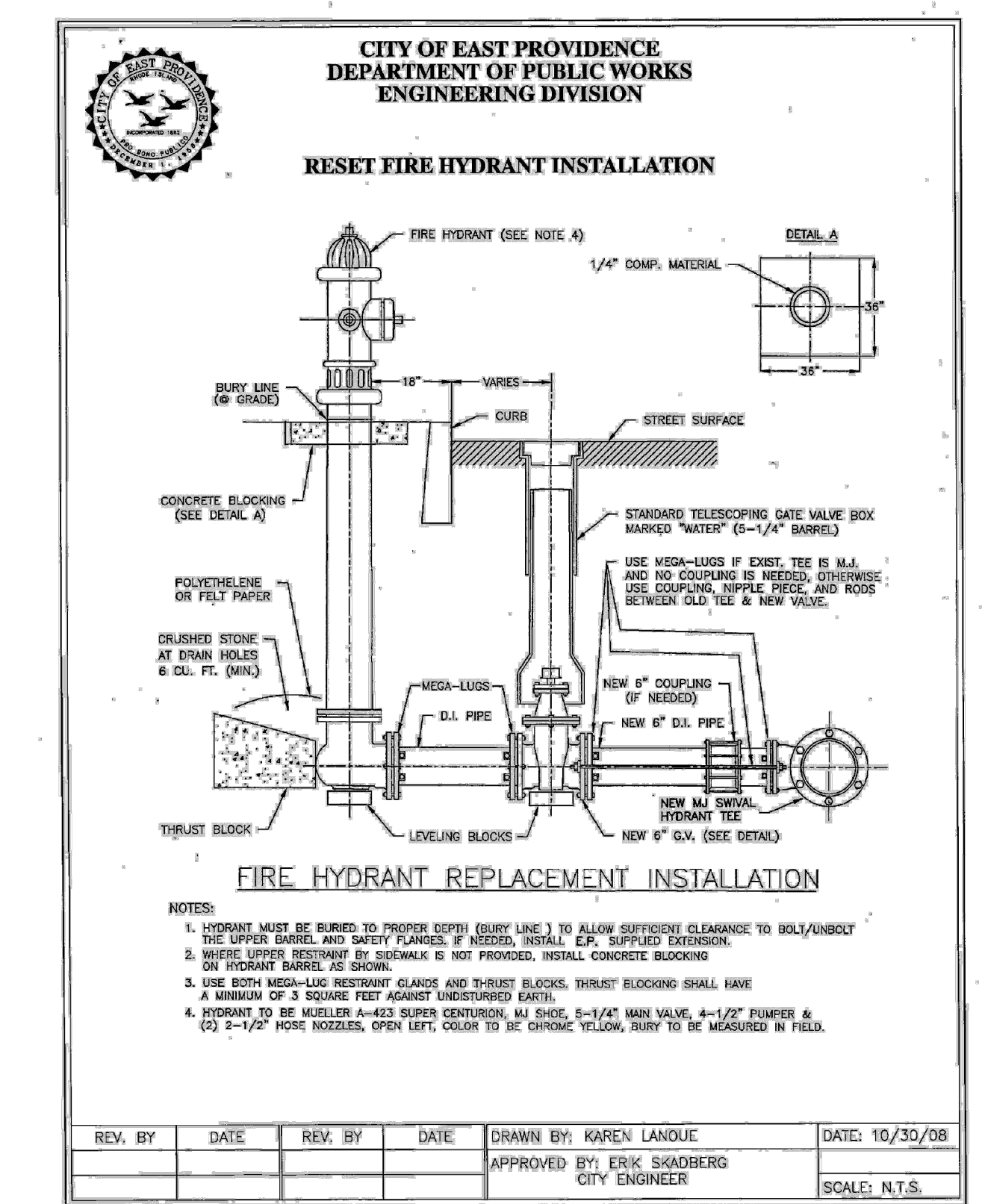
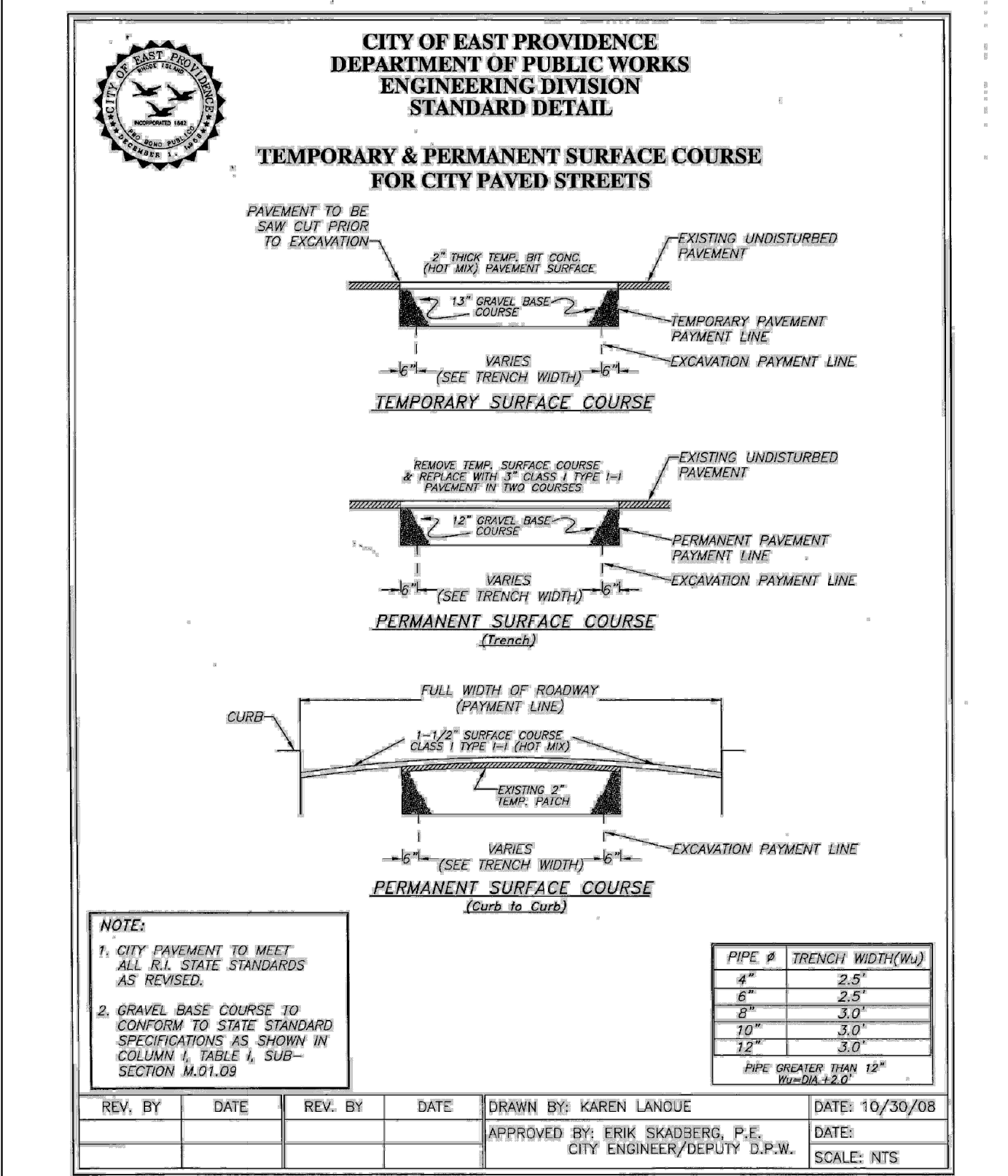
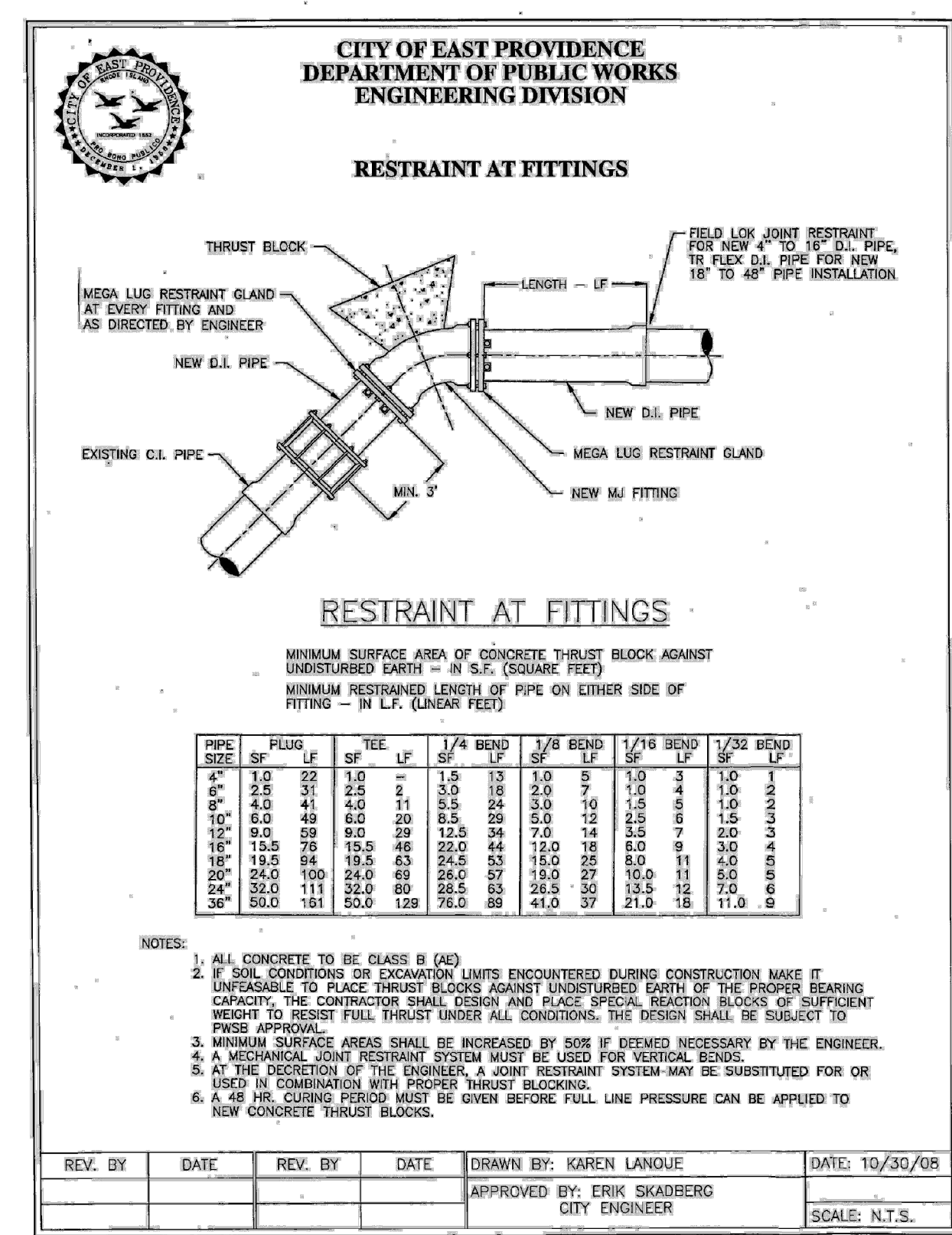
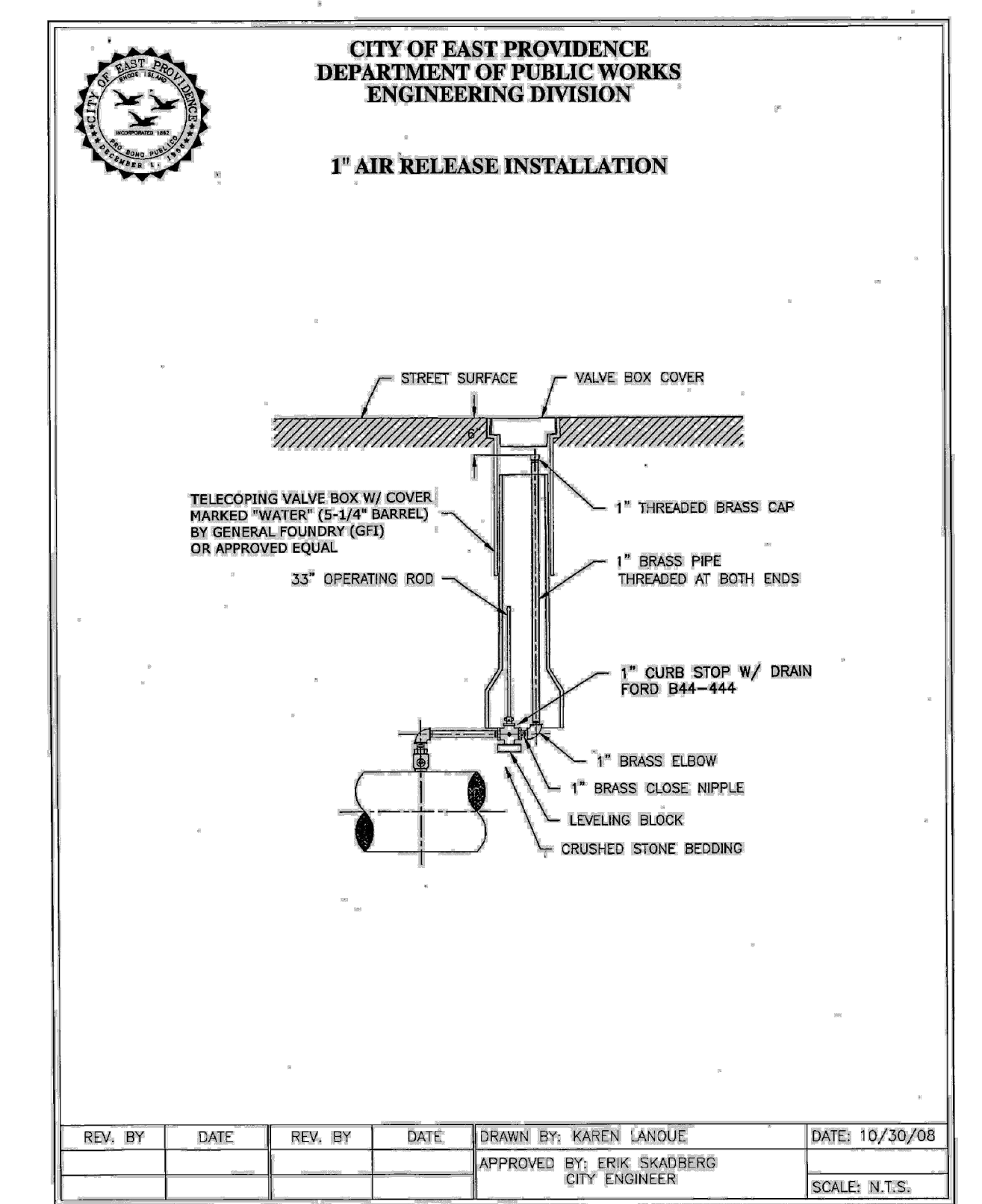
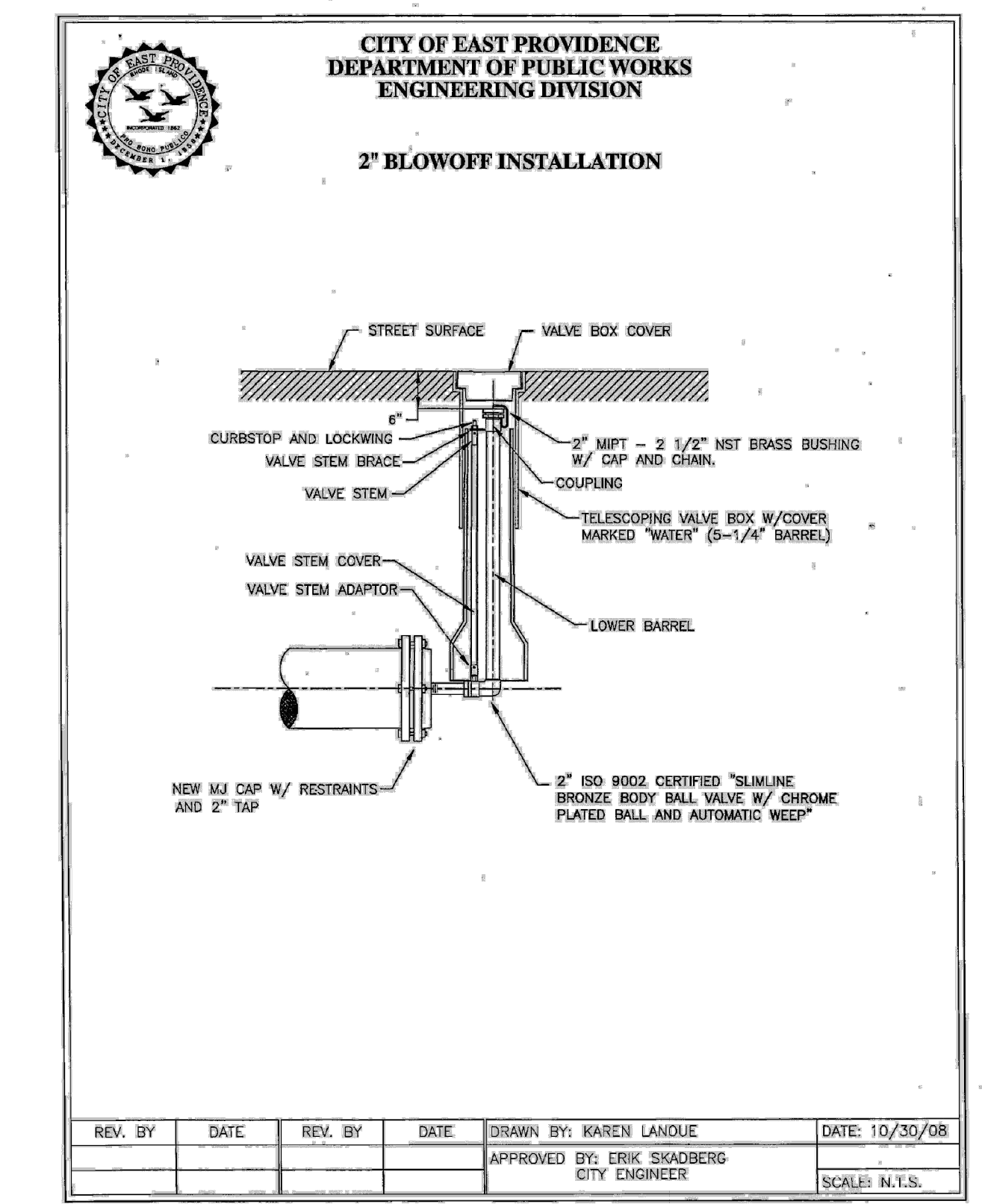
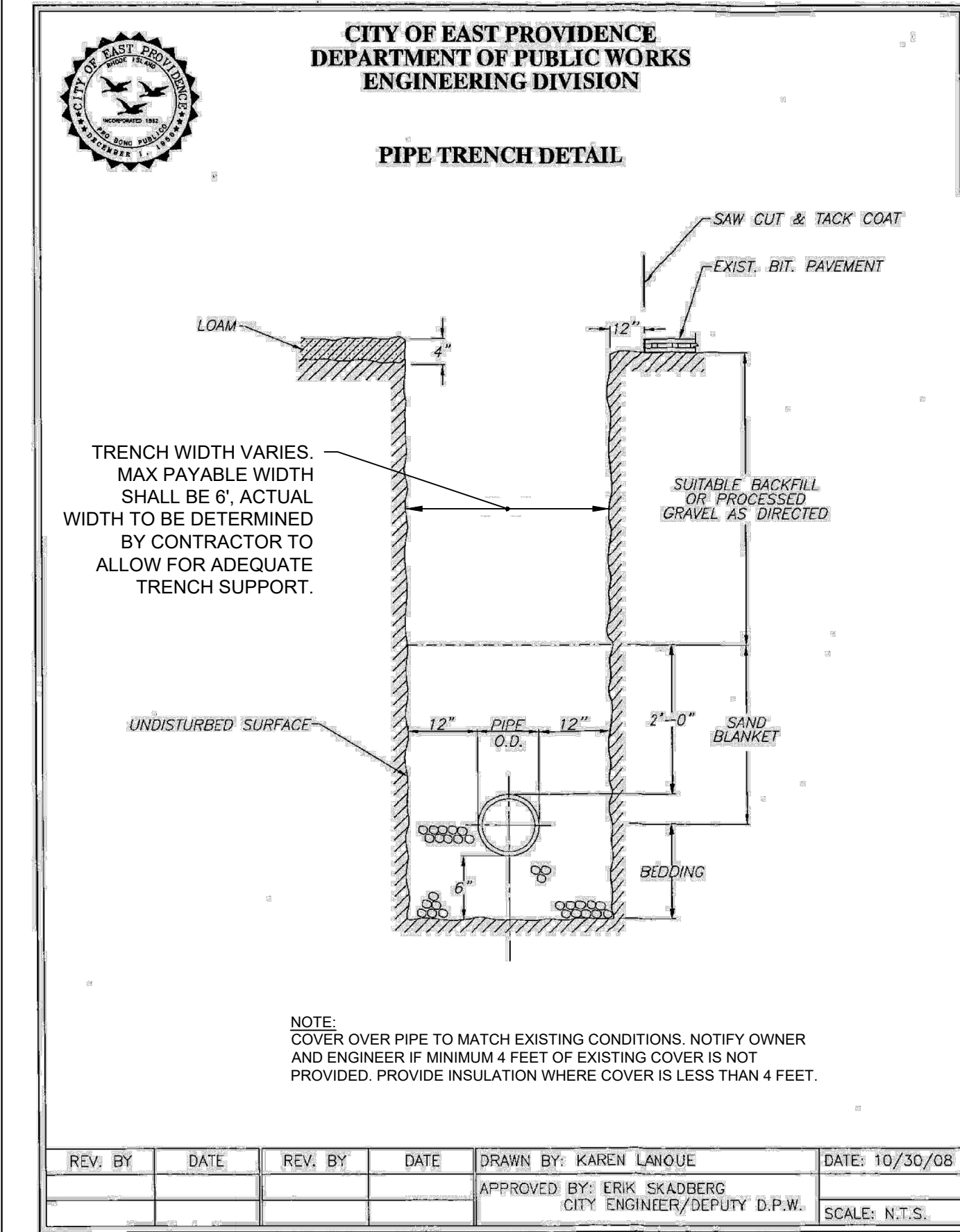
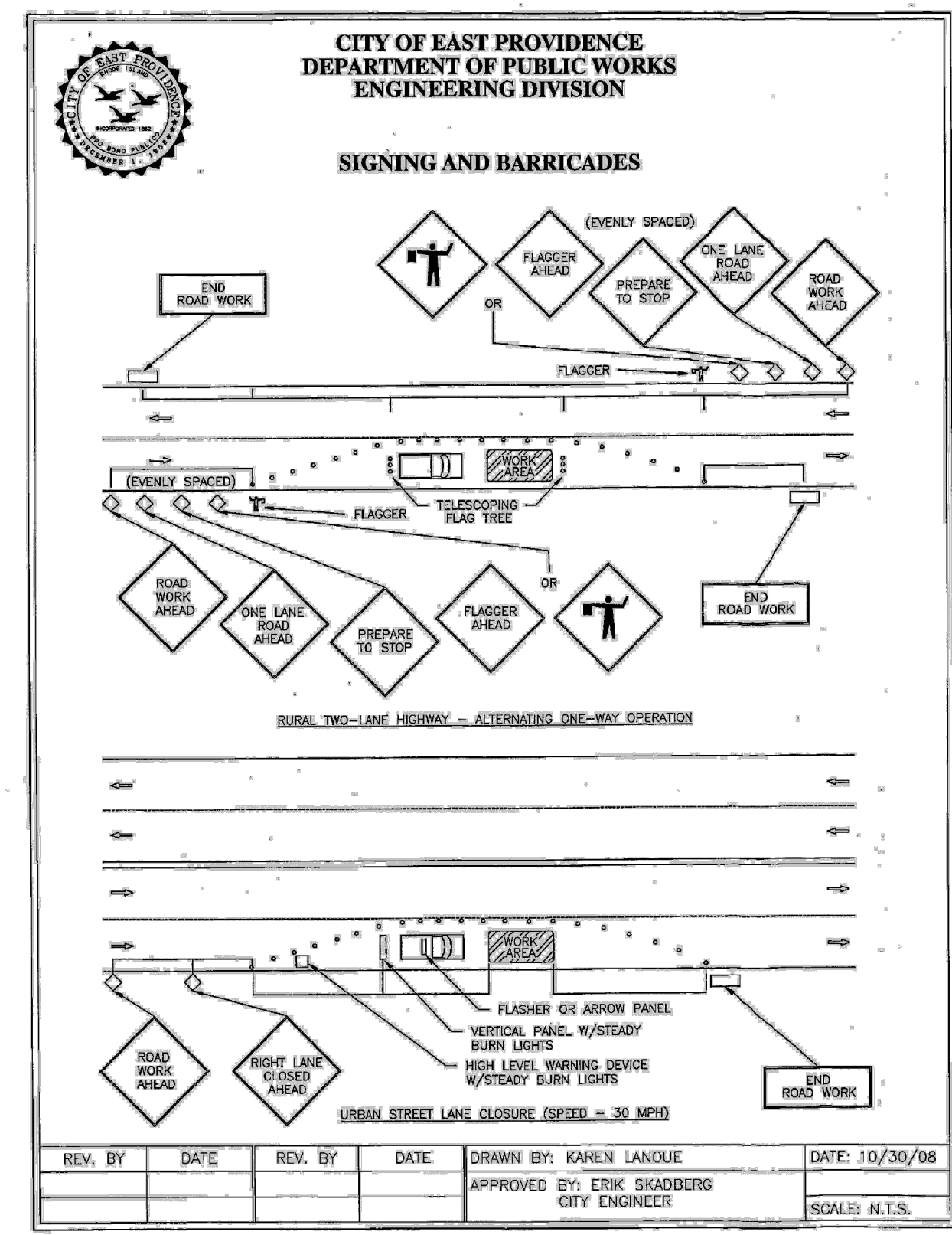


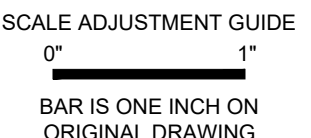
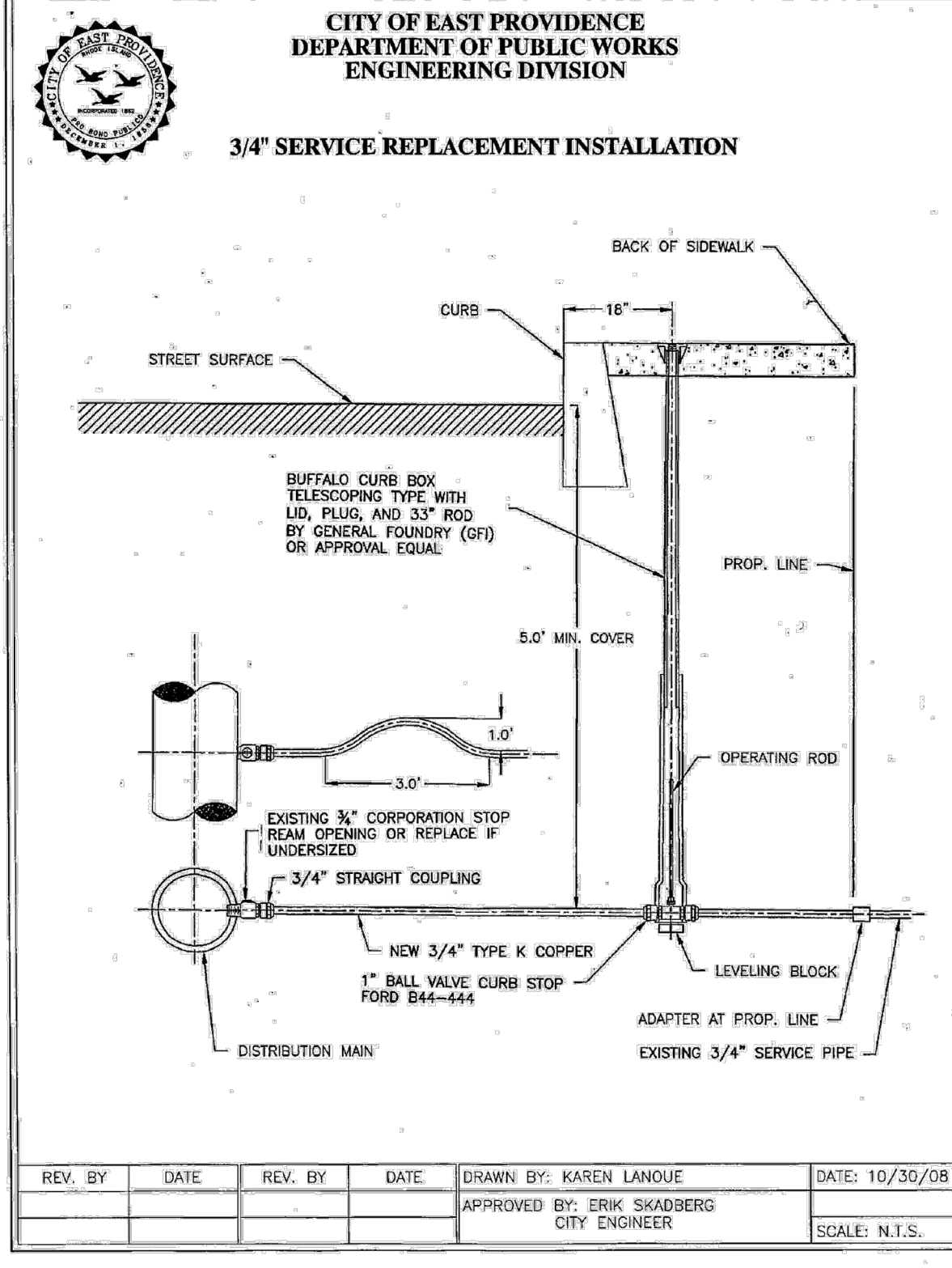
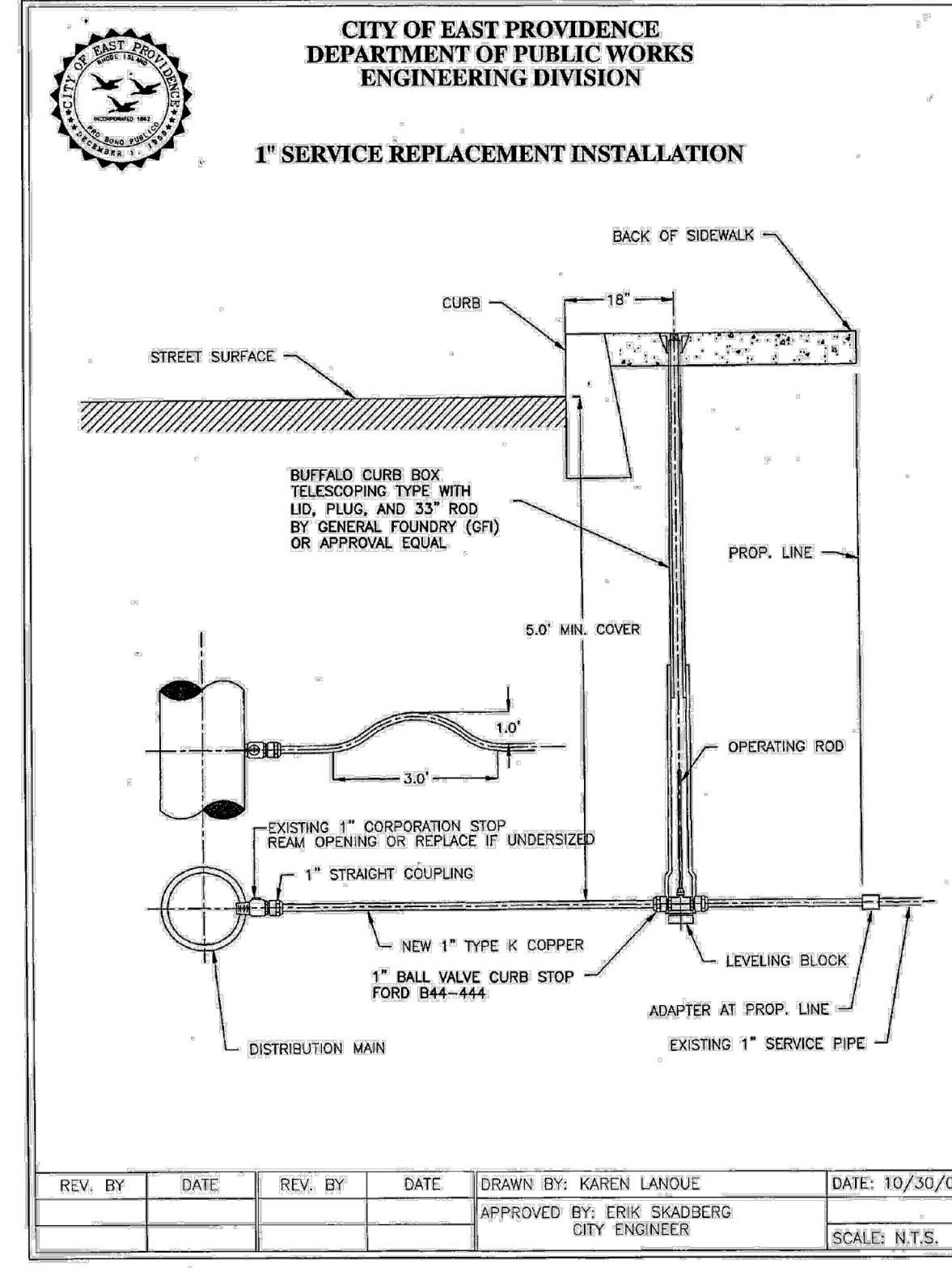
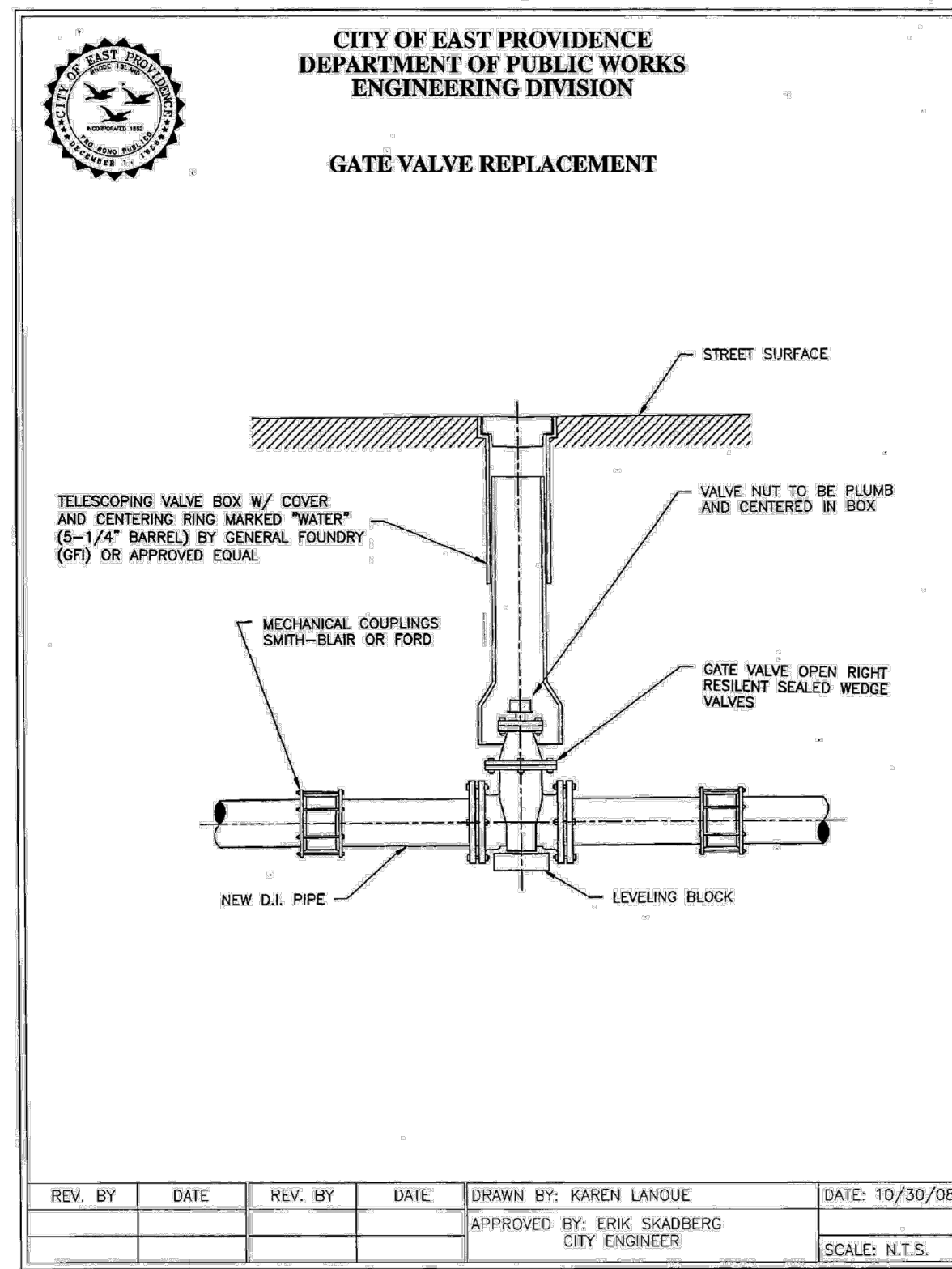
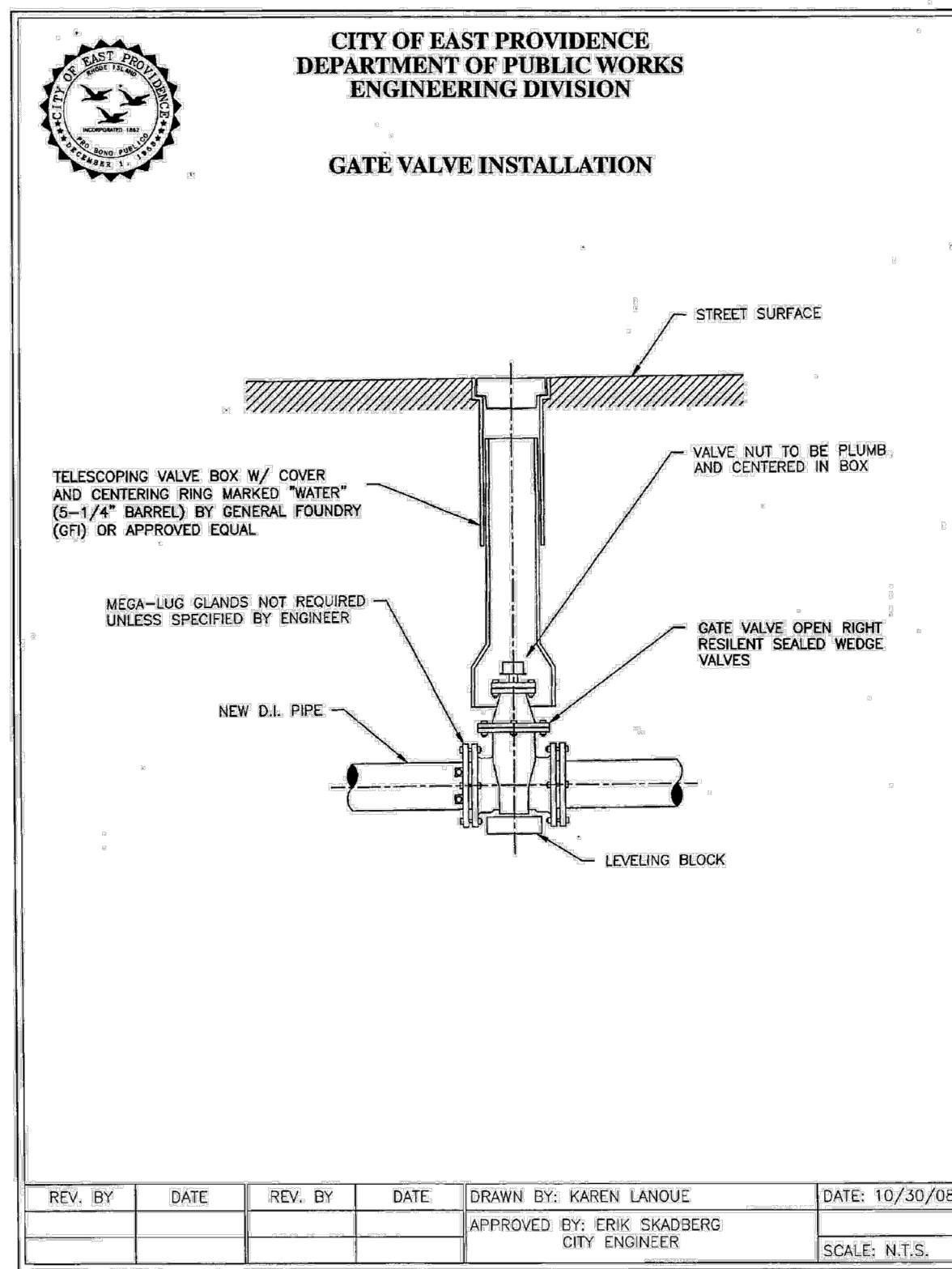
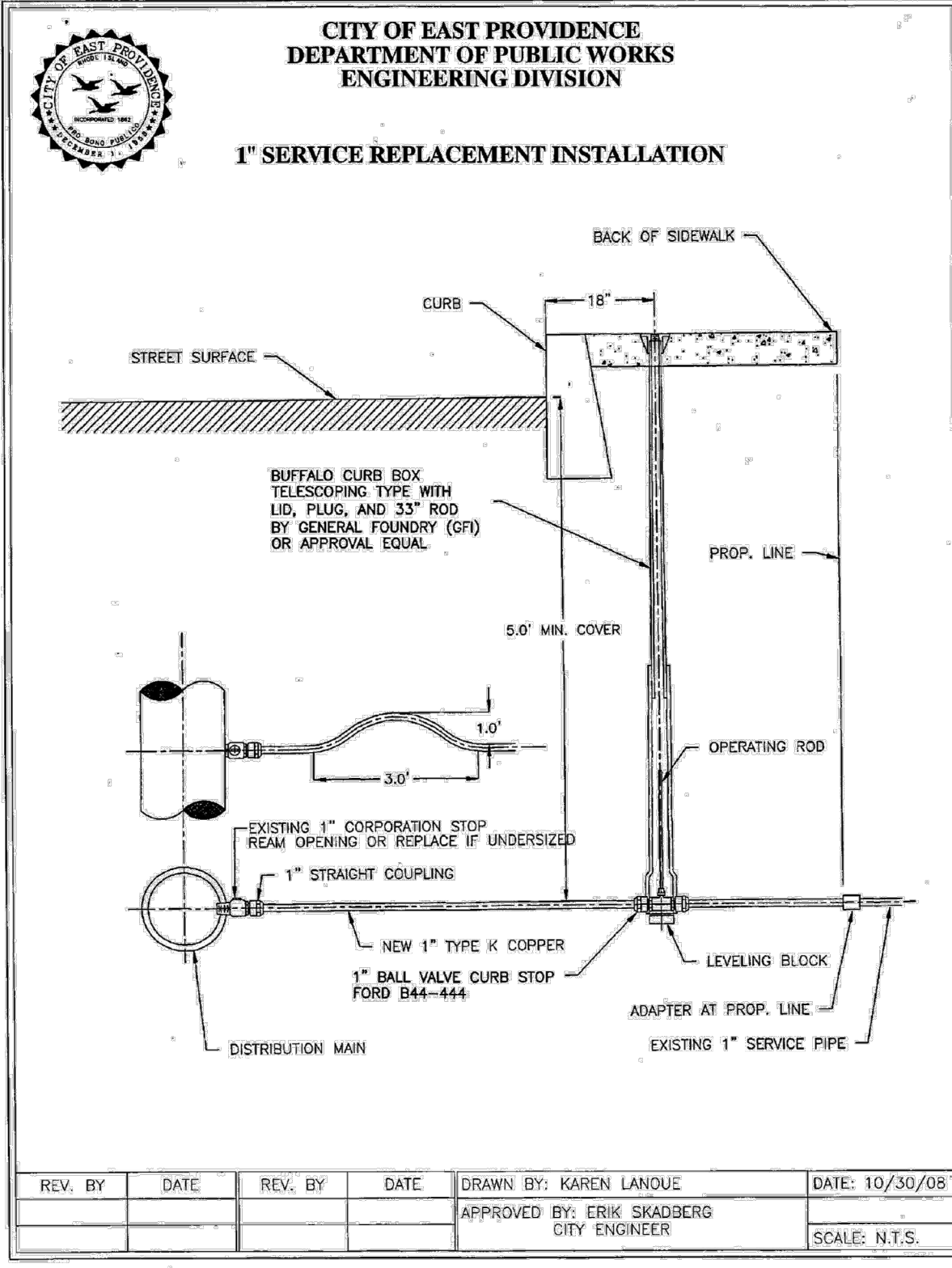
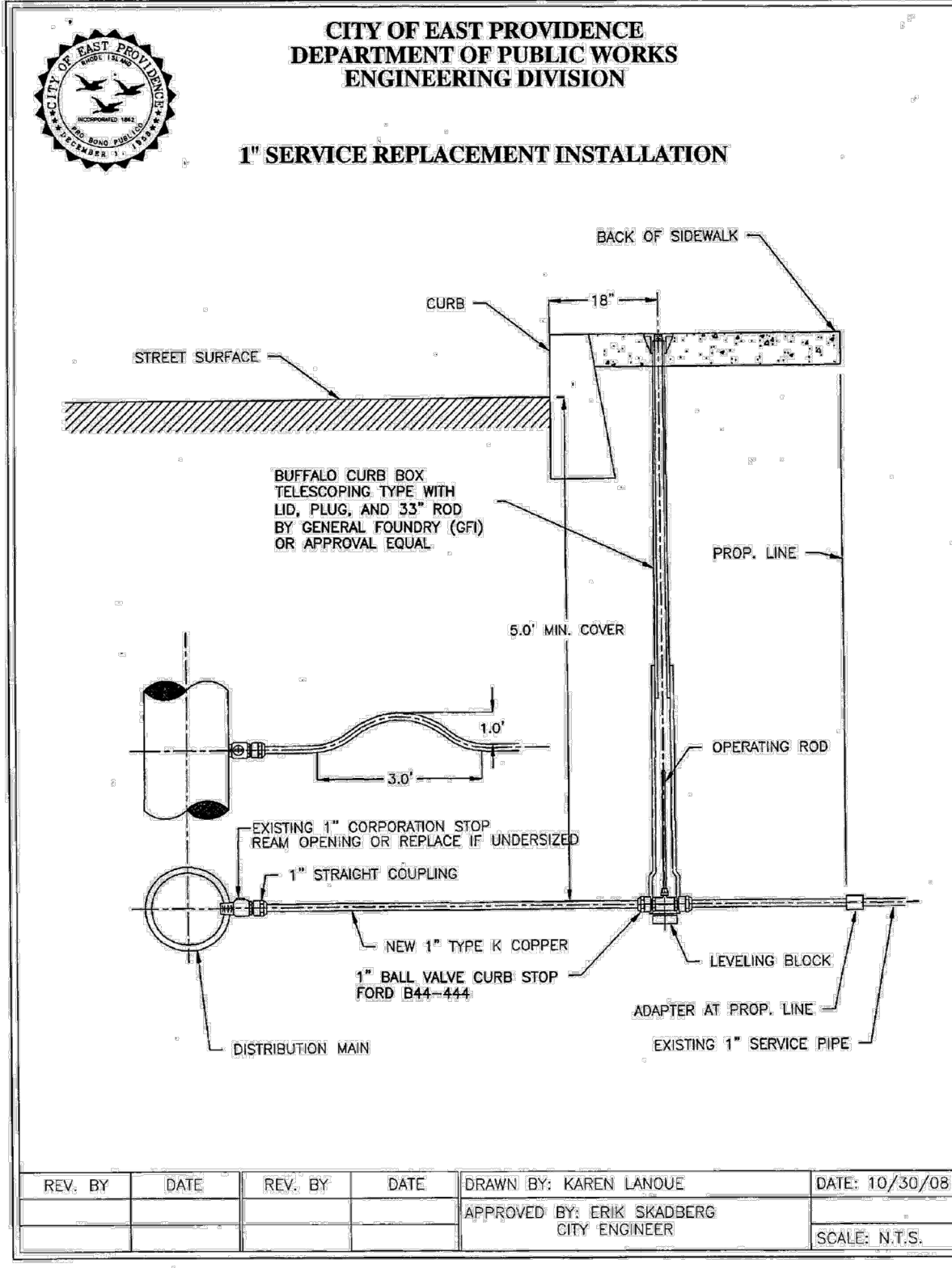
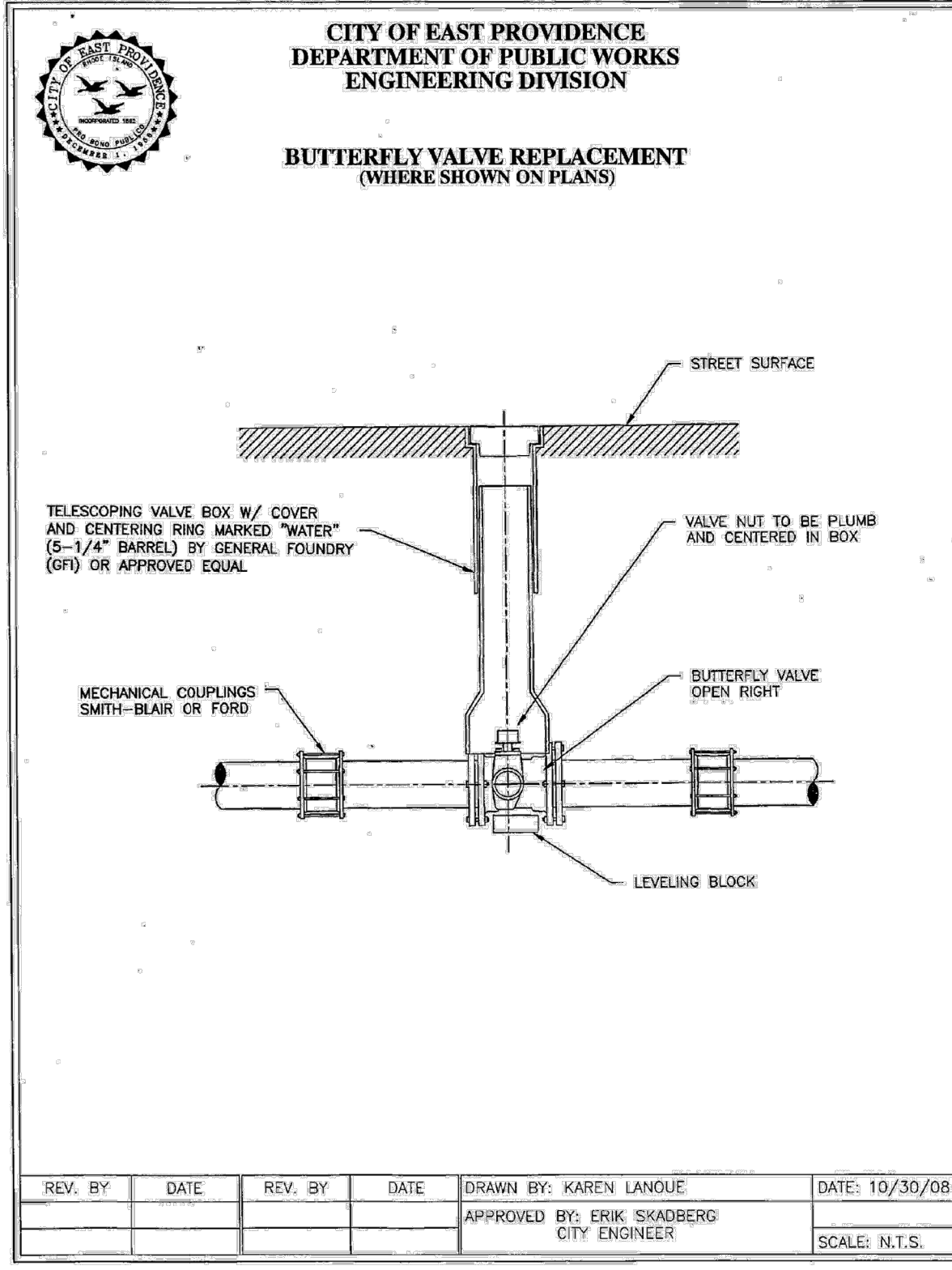
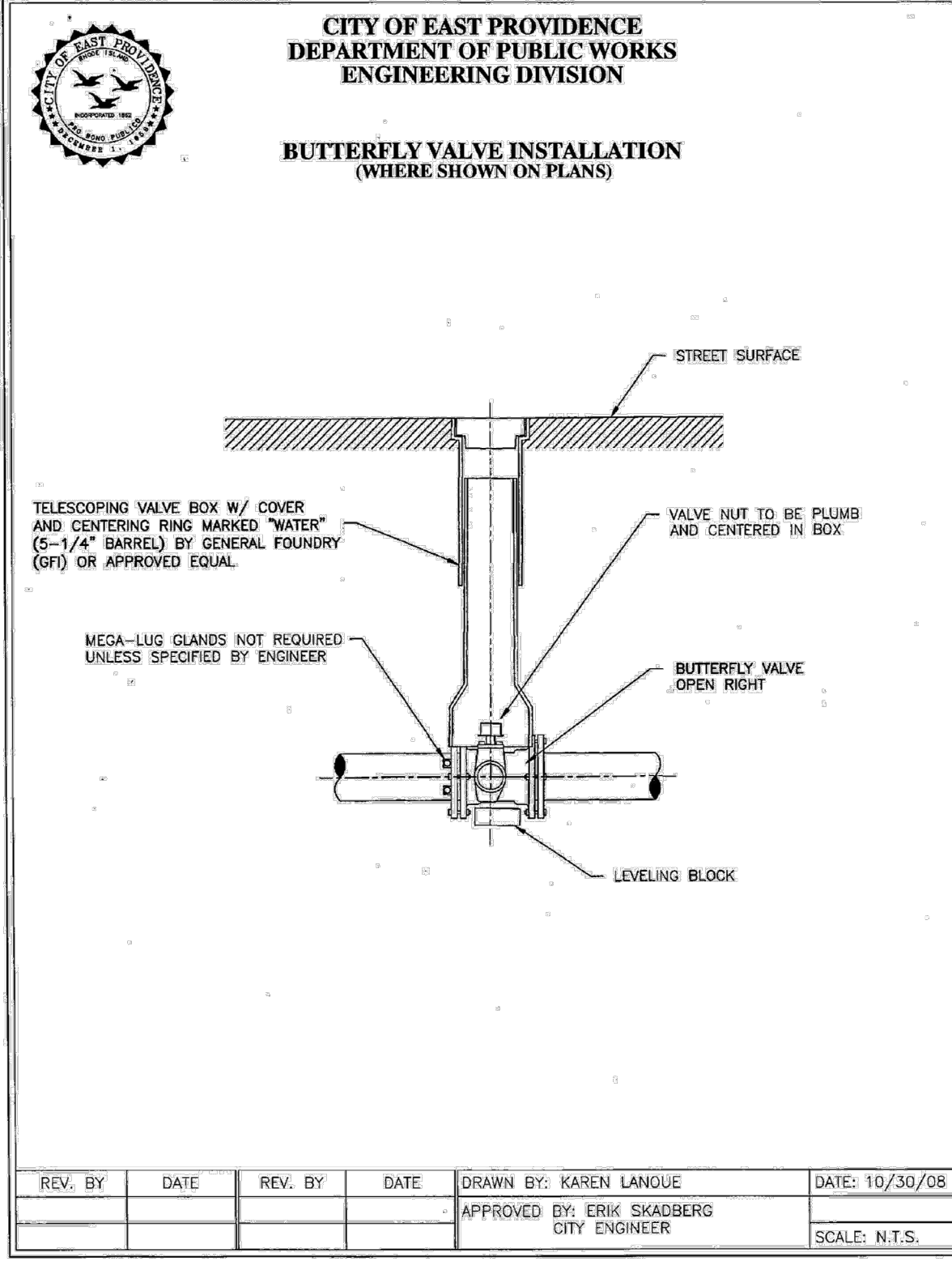
REVISIONS:

NO.	DATE	DESCRIPTION

PROJECT NO.: 12200.15
DATE: SEPTEMBER 2024
SCALE: AS NOTED
CHECKED BY: JA
DESIGNED BY: BMB
DRAWN BY: SP/AKL
APPROVED BY: TPT
DRAWING TITLE:

DETAILS 2
DRAWING NO.: C4.2
SHEET NO. 20 OF 26





CITY OF EAST PROVIDENCE
WATER DEPARTMENT SYSTEM IMPROVEMENTS
CLEANING AND LINING PHASE V REBID

REVISIONS:

NO.	DATE	DESCRIPTION

PROJECT NO.: 12200.15
DATE: SEPTEMBER 2024
SCALE: AS NOTED
DESIGNED BY: JA
CHECKED BY: BMB
DRAWN BY: SP/AKL
APPROVED BY: TPT
DRAWING TITLE:

DETAILS 3

DRAWING NO.:
C4.3
SHEET NO. 21 OF 26

REVISIONS:

PROJECT NO.: 12200.15
DATE: SEPTEMBER 2024
SCALE: AS NOTED
DESIGNED BY: JA
CHECKED BY: BMB
DRAWN BY: SP/AKL
APPROVED BY: TPT
DRAWING TITLE:

DETAILS 5

DRAWING NO.:
C4.5
SHEET NO. 23 OF 26

SCALE ADJUSTMENT GUIDE
0" 1"
BAR IS ONE INCH ON ORIGINAL DRAWING

NOTES:

- SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
- DRAWING SHOWS TRANSITION CURB FOR ONE DIRECTION, FOR OTHER DIRECTION USE OPPOSITE HAND AND INCLUDE A 1/2" x 4" EPOXY COATED DOWEL.
- EXPOSED SURFACES TO HAVE A SPONGE FLOAT FINISH.
- EXPOSED EDGES TO HAVE A 3/4" CHAMFER.
- LEFT AND RIGHT SECTIONS SHALL BE INSTALLED AS REQUIRED.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION		
NO.	BY	DATE
1	MLP	Mar 05
2	MLP	06/01/10

3'-0" PRECAST CONCRETE TRANSITION CURB

R.I. STANDARD 7.1.1

JUNE 15, 1998
ISSUE DATE

NOTES:

- SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
- DRAWING SHOWS TRANSITION CURB FOR ONE DIRECTION, FOR OTHER DIRECTION USE OPPOSITE HAND AND INCLUDE A 1/2" x 4" EPOXY COATED DOWEL.
- EXPOSED SURFACES TO HAVE A SPONGE FLOAT FINISH.
- EXPOSED EDGES TO HAVE A 3/4" CHAMFER.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION		
NO.	BY	DATE
1	MLP	Mar 05

6'-0" PRECAST CONCRETE TRANSITION CURB

R.I. STANDARD 7.1.2

JUNE 15, 1998
ISSUE DATE

TRANSITION LENGTH (FT.)	BATTER (IN.)
6.0	1.5
7.0	1.3
8.0	1.2
9.5	1.0
11.5	0.8
15.0	0.6
18.0	0.5

NOTES:

- SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
- CIRCULAR CURB IS REQUIRED ON CURVES WITH RADI OF 160'-0" OR LESS. STRAIGHT CURB TO BE USED ON CURVES OF MORE THAN 160'-0" RADIUS.
- EXPOSED EDGES TO HAVE A 3/4" CHAMFER.
- EXPOSED SURFACES TO HAVE A SPONGE FLOAT FINISH.
- MINIMUM LENGTH OF STRAIGHT OR CIRCULAR CURB FILLER PIECES TO BE 3'-0" (GREATER LENGTHS PREFERRED).

RHODE ISLAND DEPARTMENT OF TRANSPORTATION		
NO.	BY	DATE
1	MLP	Mar 05

PRECAST CONCRETE WHEELCHAIR RAMP TRANSITION CURB

R.I. STANDARD 7.1.3

JUNE 15, 1998
ISSUE DATE

NOTES:

- SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
- EXPOSED SURFACES TO HAVE A SPONGE FLOAT FINISH.
- NO REINFORCEMENT REQUIRED.
- EXPOSED EDGES TO HAVE A 3/4" CHAMFER.
- SEE STD. 7.1.0 FOR DOWEL SOCKET LOCATION.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION		
NO.	BY	DATE
1	MLP	Mar 05

PRECAST CONCRETE 2'-0" RADIUS CORNER

R.I. STANDARD 7.1.4

JUNE 15, 1998
ISSUE DATE

NOTES:

- SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
- MINIMUM LENGTH OF STRAIGHT OR CIRCULAR RAMP STONE TO BE 4'-0".
- EXPOSED SURFACES TO HAVE A SPONGE FLOAT FINISH.
- CIRCULAR RAMP STONE IS REQUIRED ON CURVES WITH RADI OF 160'-0" OR LESS. STRAIGHT RAMP STONE TO BE USED ON CURVES OF MORE THAN 160'-0" RADIUS.
- EXPOSED EDGES TO HAVE A 3/4" CHAMFER.
- RAMP STONE SHALL BE SET IN ACCORDANCE WITH STD. 43.3.0.
- 12" RAMP STONE SHALL BE SET IN CONJUNCTION WITH STD. 7.1.2.
- 18" RAMP STONE SHALL BE SET IN CONJUNCTION WITH STD. 7.1.3.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION		
NO.	BY	DATE
1	MLP	Sep 2012

PRECAST CONCRETE RAMP STONE

R.I. STANDARD 7.1.9

JUNE 27, 2008
ISSUE DATE

NOTES:

- SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
- EXPOSED SURFACES TO HAVE A SPONGE FLOAT FINISH.
- EXPOSED EDGES TO HAVE A 3/4" CHAMFER.
- DRAWING SHOWS TRANSITION CURB FOR ONE DIRECTION, FOR OTHER DIRECTION USE OPPOSITE HAND AND INCLUDE A 1/2" x 4" EPOXY COATED DOWEL.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION		
NO.	BY	DATE
1	MLP	Mar 05

PRECAST CONCRETE SLOPED FACE TRANSITION CURB

R.I. STANDARD 7.2.1

JUNE 15, 1998
ISSUE DATE

NOTES:

- SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
- EXPOSED SURFACES TO HAVE A SPONGE FLOAT FINISH.
- EXPOSED EDGES TO HAVE A 3/4" CHAMFER.
- DRAWING SHOWS TRANSITION CURB FOR ONE DIRECTION, FOR OTHER DIRECTION USE OPPOSITE HAND AND INCLUDE A 1/2" x 4" EPOXY COATED DOWEL.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION		
NO.	BY	DATE
1	MLP	Mar 05

PRECAST CONCRETE TRANSITION CURB (VERTICAL FACE TO SLOPED FACE)

R.I. STANDARD 7.2.2

JUNE 15, 1998
ISSUE DATE

NOTES:

- SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
- TOP SURFACE TO BE DRESSED BY SAW. REMAINDER MAY BE QUARRY SPLIT.
- MINIMUM LENGTH OF STRAIGHT OR CIRCULAR PIECES TO BE 3'-0".
- CIRCULAR CURB IS REQUIRED ON CURVES WITH RADI OF 160'-0" OR LESS. STRAIGHT CURB TO BE USED ON CURVES OF MORE THAN 160'-0" RADIUS.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION		
NO.	BY	DATE
1	MLP	Mar 2005
2	MLP	Sep 2012

GRANITE CURB

R.I. STANDARD 7.3.0

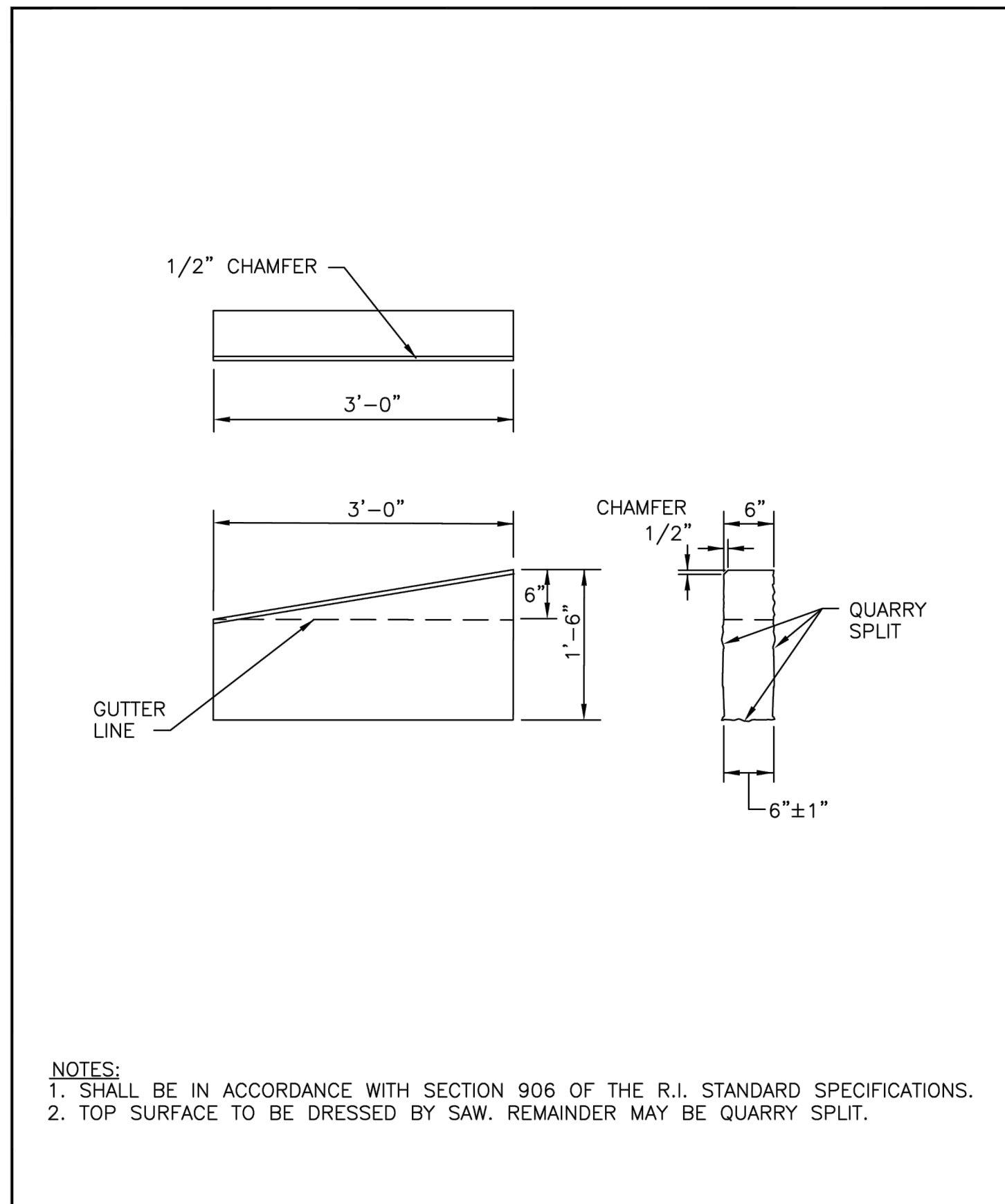
JUNE 15, 1998
ISSUE DATE

REVISIONS:

PROJECT NO.: 12200.15
DATE: SEPTEMBER 2024
SCALE: AS NOTED
DESIGNED BY: JA
CHECKED BY: BMB
DRAWN BY: SP/AKL
APPROVED BY: TPT
DRAWING TITLE:

DETAILS 6

DRAWING NO.:
C4.6
SHEET NO. 24 OF 26



RHODE ISLAND DEPARTMENT OF TRANSPORTATION

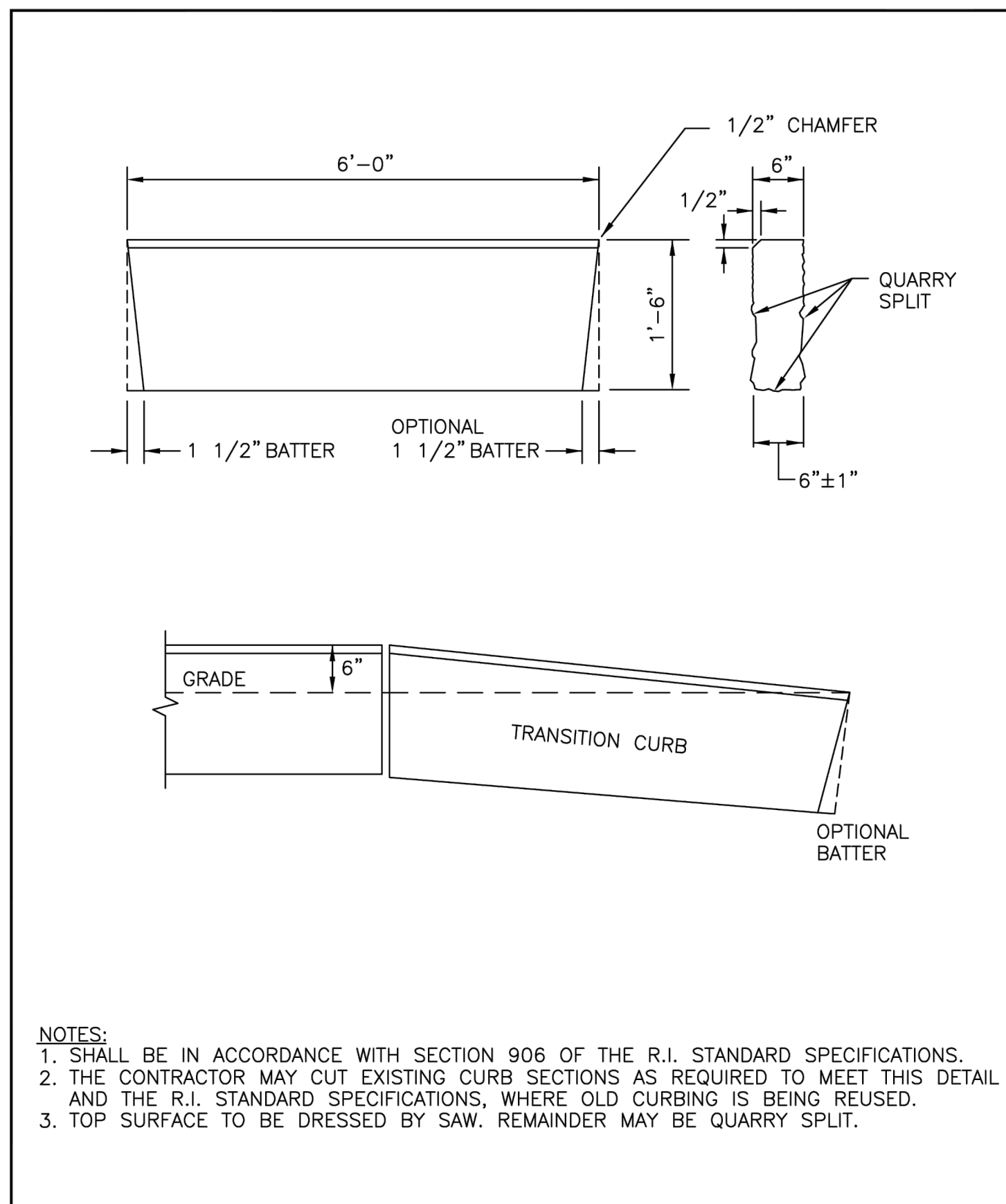
REVISIONS

NO.	BY	DATE
1	MLP	Mar 2005
2	MLP	Jun 2010
3	MLP	Sep 2012

3'-0" GRANITE TRANSITION CURB

R.I. STANDARD 7.3.1

JUNE 15, 1998



RHODE ISLAND DEPARTMENT OF TRANSPORTATION

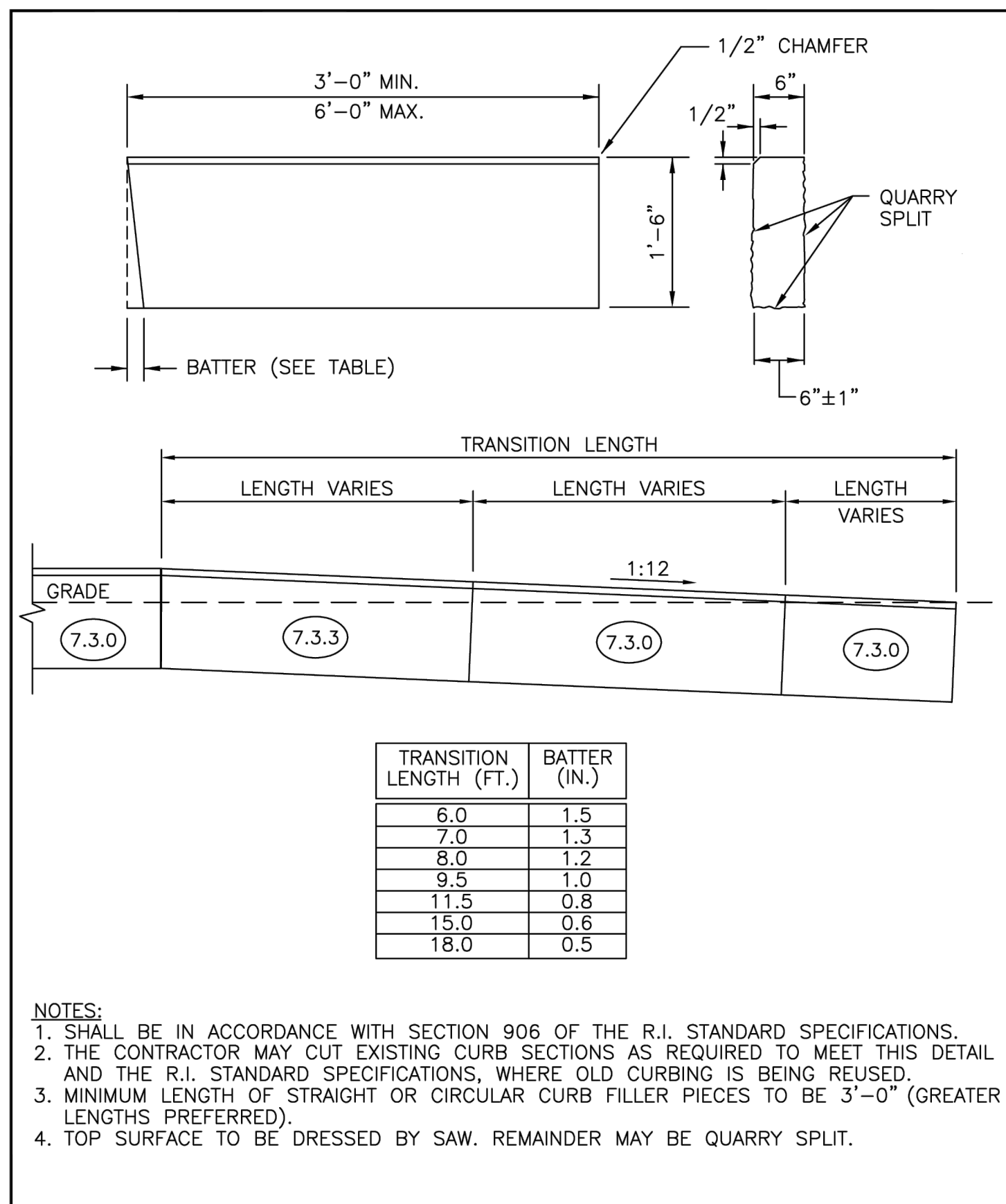
REVISIONS

NO.	BY	DATE
1	MLP	Mar 2005
2	MLP	Sep 2012

6'-0" GRANITE TRANSITION CURB

R.I. STANDARD 7.3.2

JUNE 15, 1998



RHODE ISLAND DEPARTMENT OF TRANSPORTATION

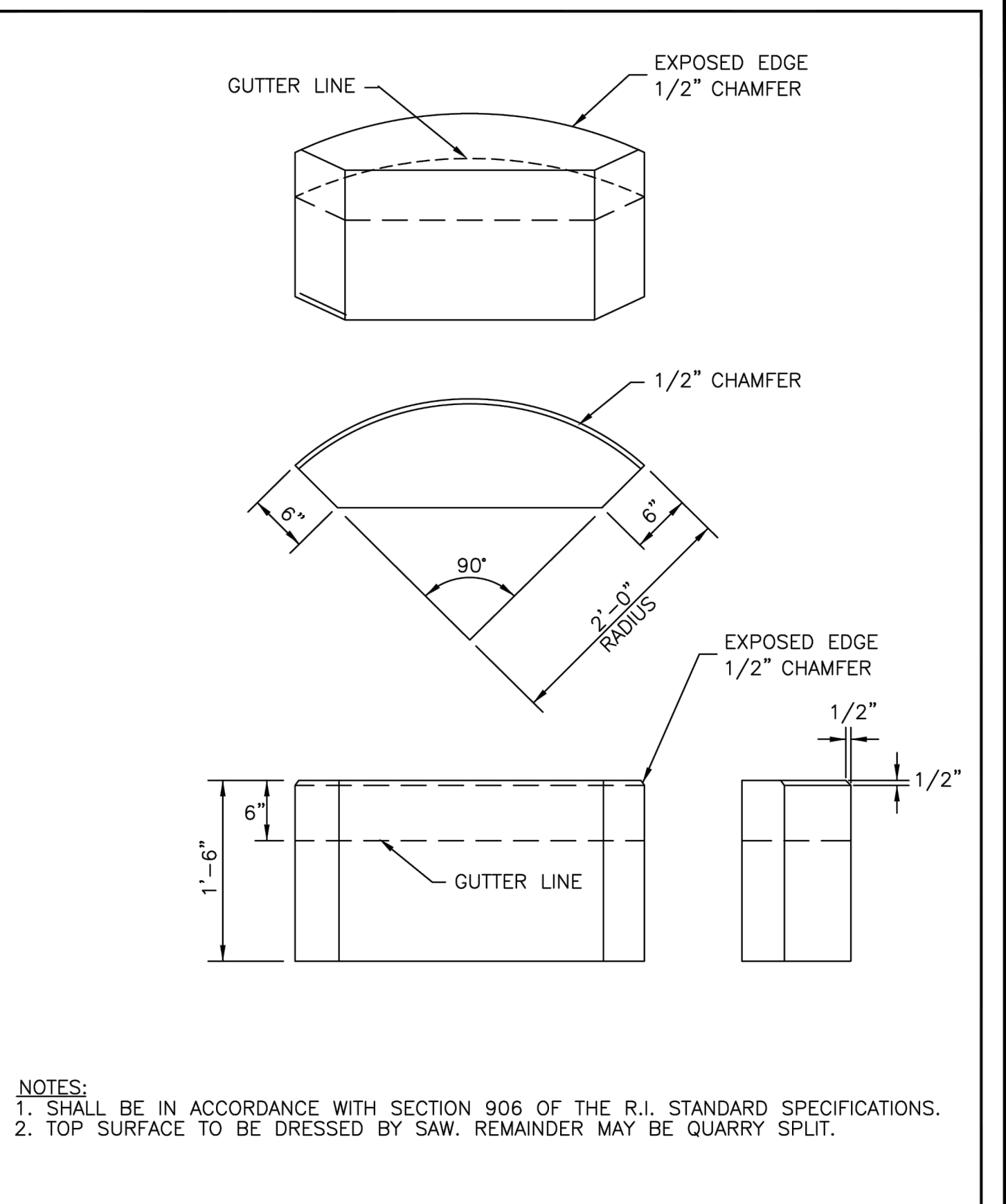
REVISIONS

NO.	BY	DATE
1	MLP	Mar 2005
2	MLP	Jun 2012

GRANITE WHEELCHAIR RAMP TRANSITION CURB

R.I. STANDARD 7.3.3

JUNE 15, 1998



RHODE ISLAND DEPARTMENT OF TRANSPORTATION

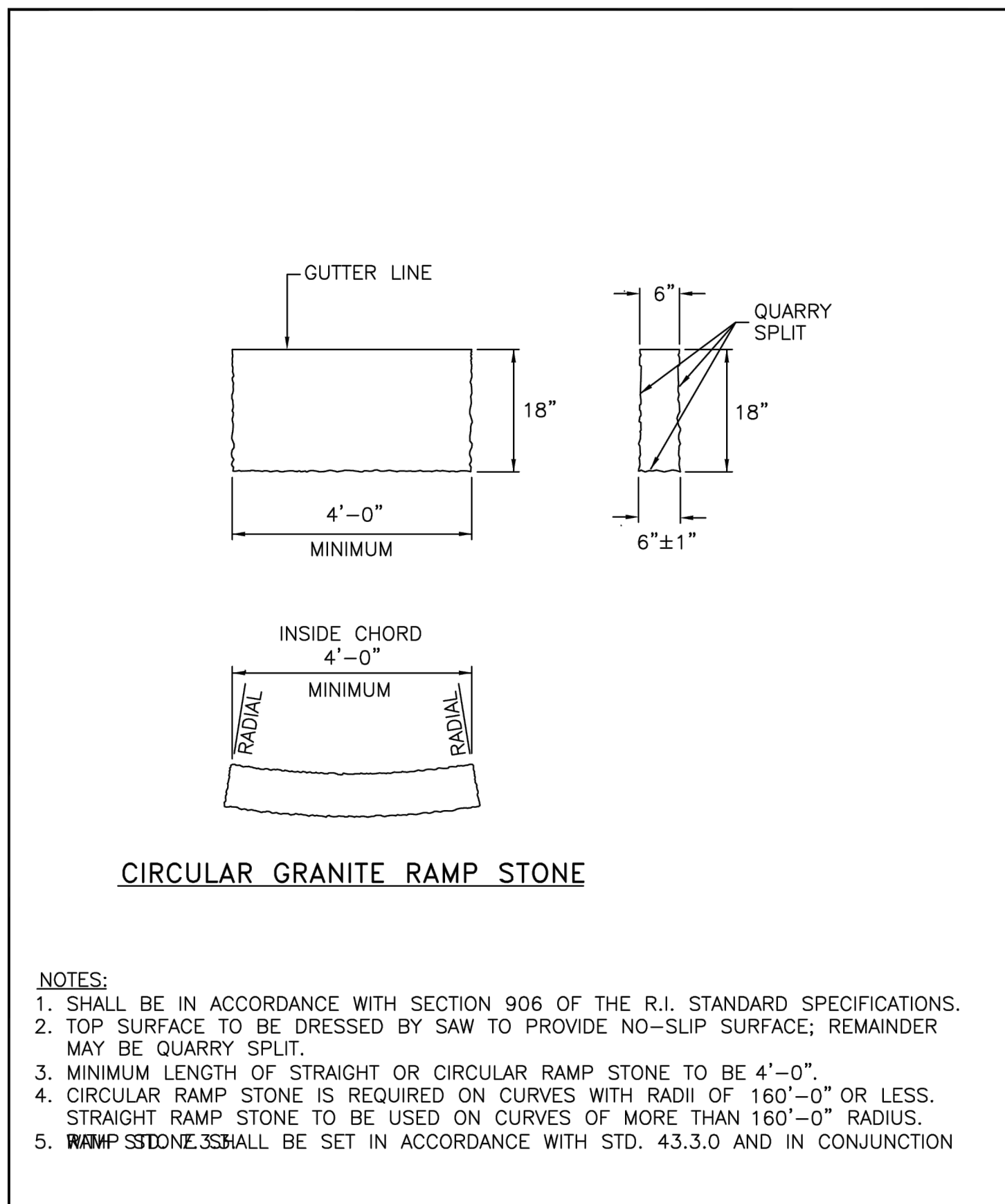
REVISIONS

NO.	BY	DATE
1	MLP	Mar 2005
2	MLP	Sep 2012

GRANITE 2'-0" RADIUS CORNER

R.I. STANDARD 7.3.4

JUNE 15, 1998



RHODE ISLAND DEPARTMENT OF TRANSPORTATION

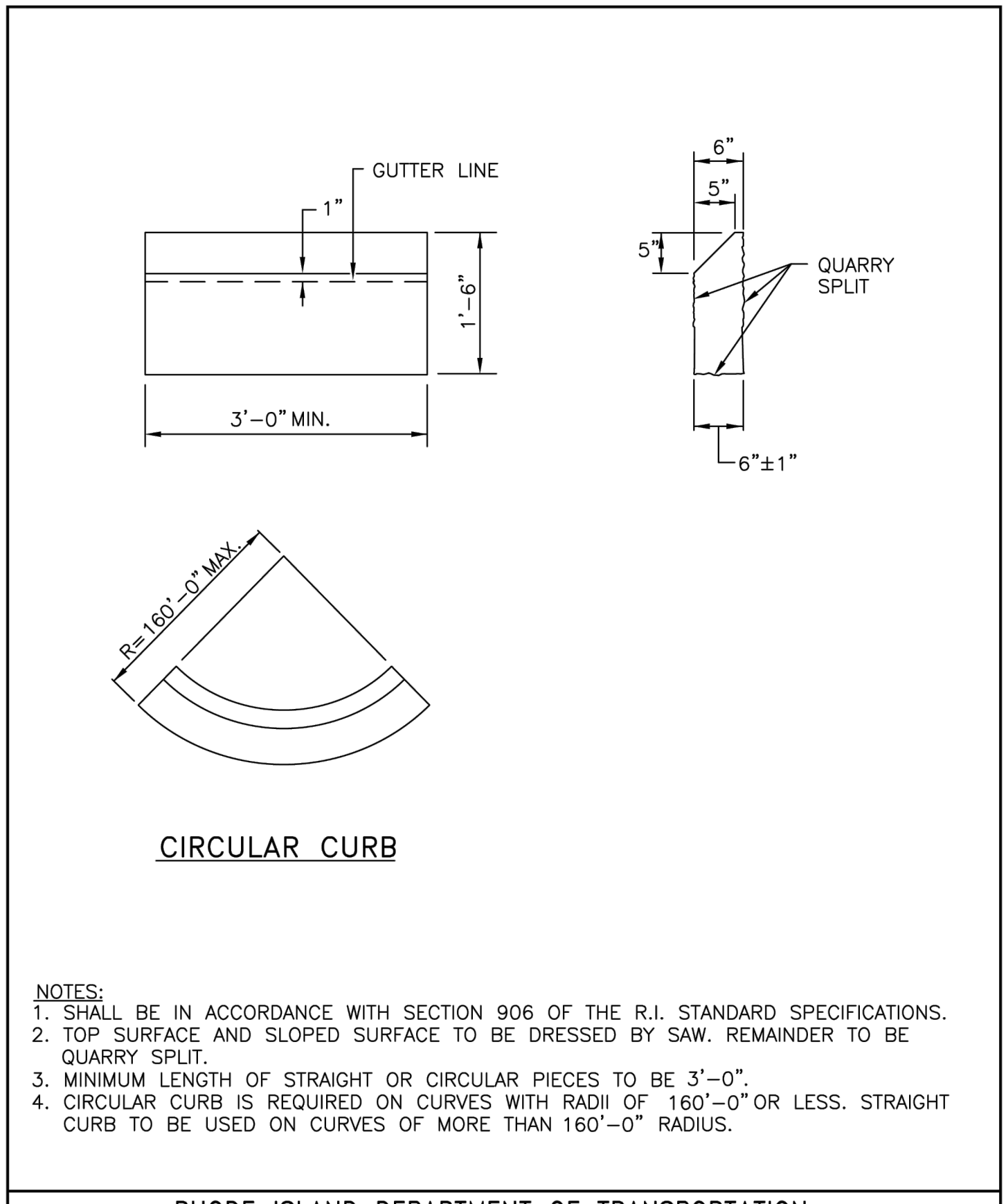
REVISIONS

NO.	BY	DATE
1	MLP	Jun 2010
2	MLP	Sep 2012

GRANITE RAMP STONE

R.I. STANDARD 7.3.9

JUNE 27, 2008



RHODE ISLAND DEPARTMENT OF TRANSPORTATION

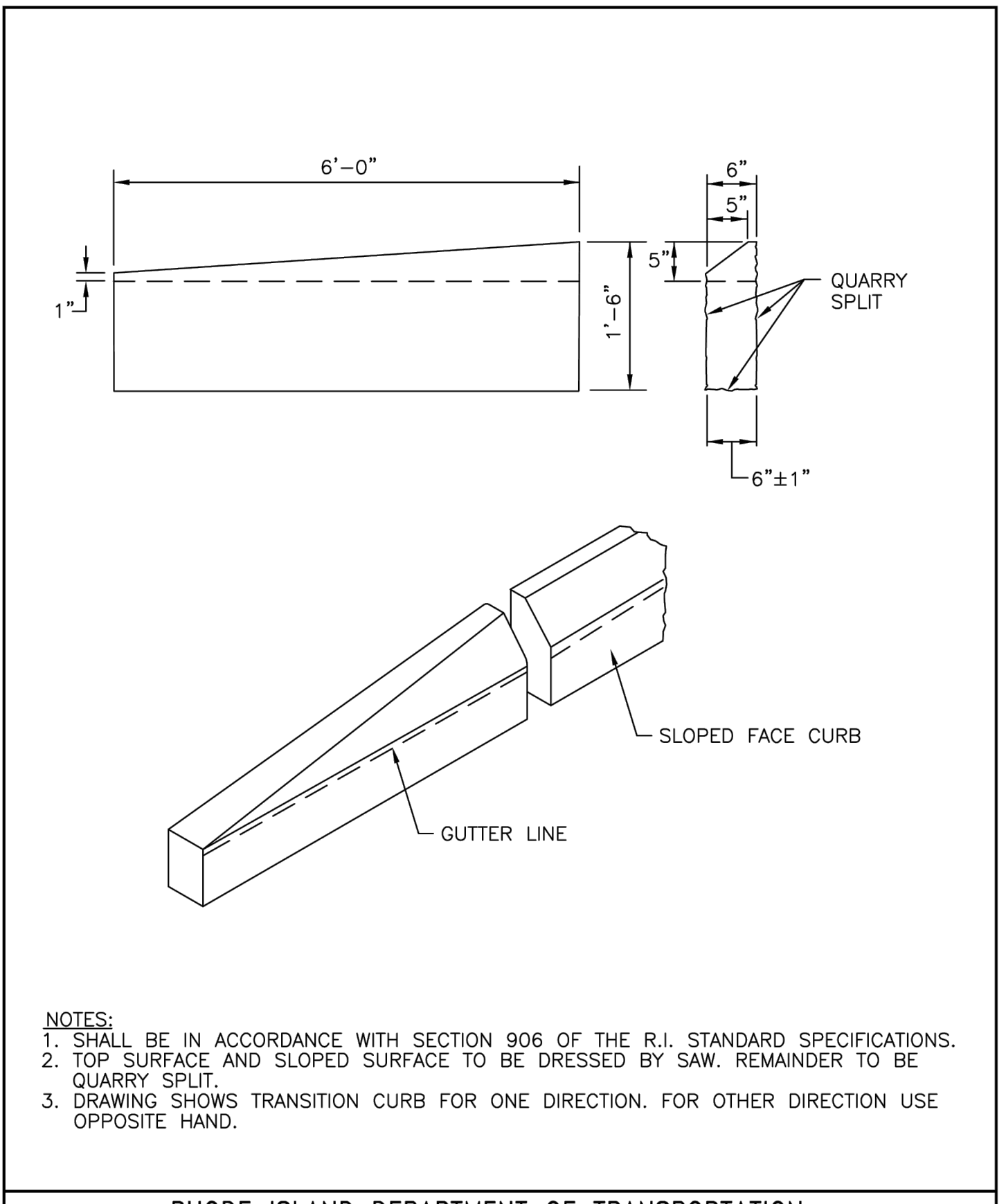
REVISIONS

NO.	BY	DATE
1	MLP	Mar 05

GRANITE SLOPED FACE CURB

R.I. STANDARD 7.4.0

JUNE 15, 1998



RHODE ISLAND DEPARTMENT OF TRANSPORTATION

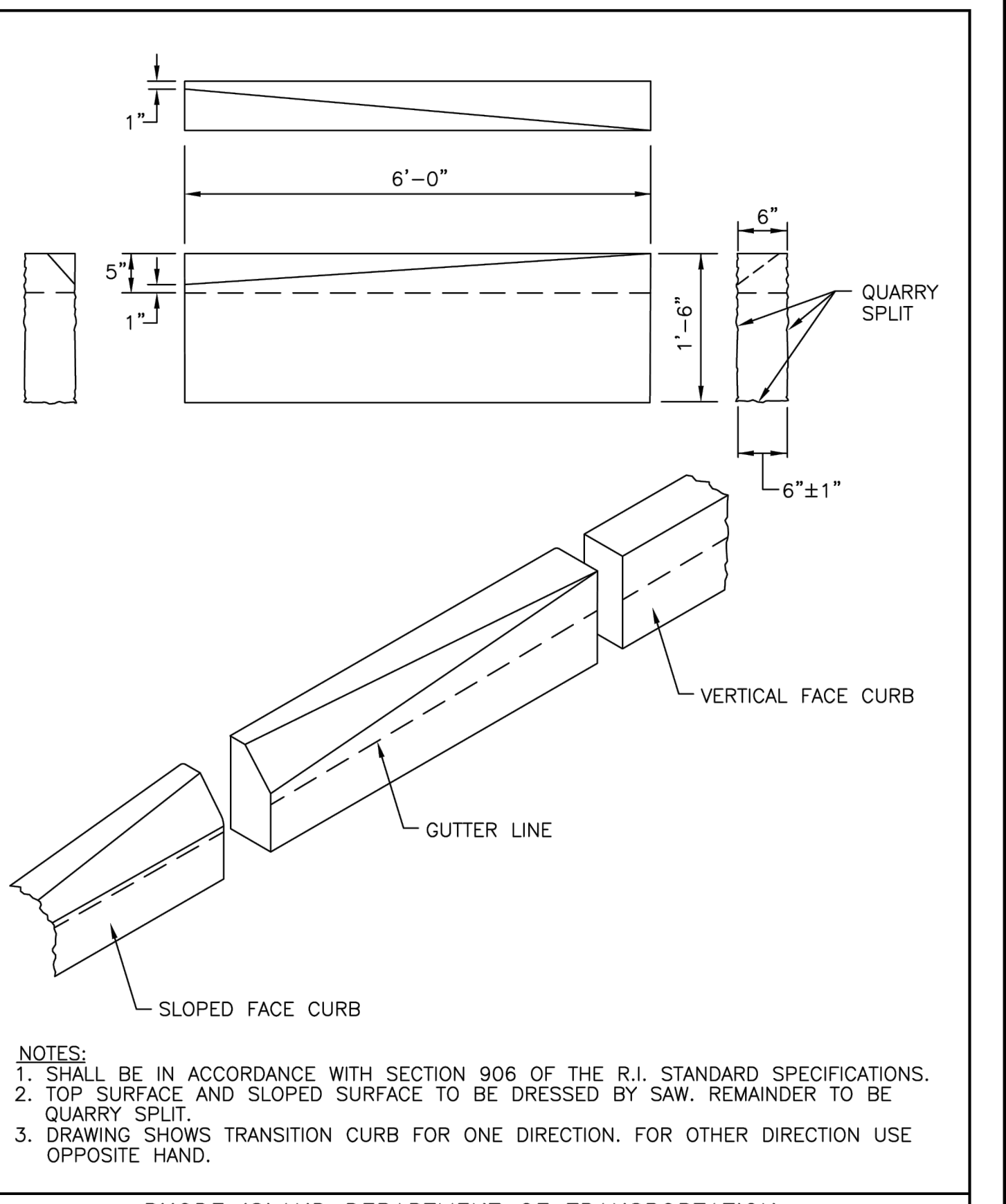
REVISIONS

NO.	BY	DATE
1	MLP	Mar 05

GRANITE SLOPED FACE TRANSITION CURB

R.I. STANDARD 7.4.1

JUNE 15, 1998



RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS

NO.	BY	DATE
1	MLP	Mar 05

GRANITE TRANSITION CURB (VERTICAL FACE TO SLOPED FACE)

R.I. STANDARD 7.4.2

JUNE 15, 1998

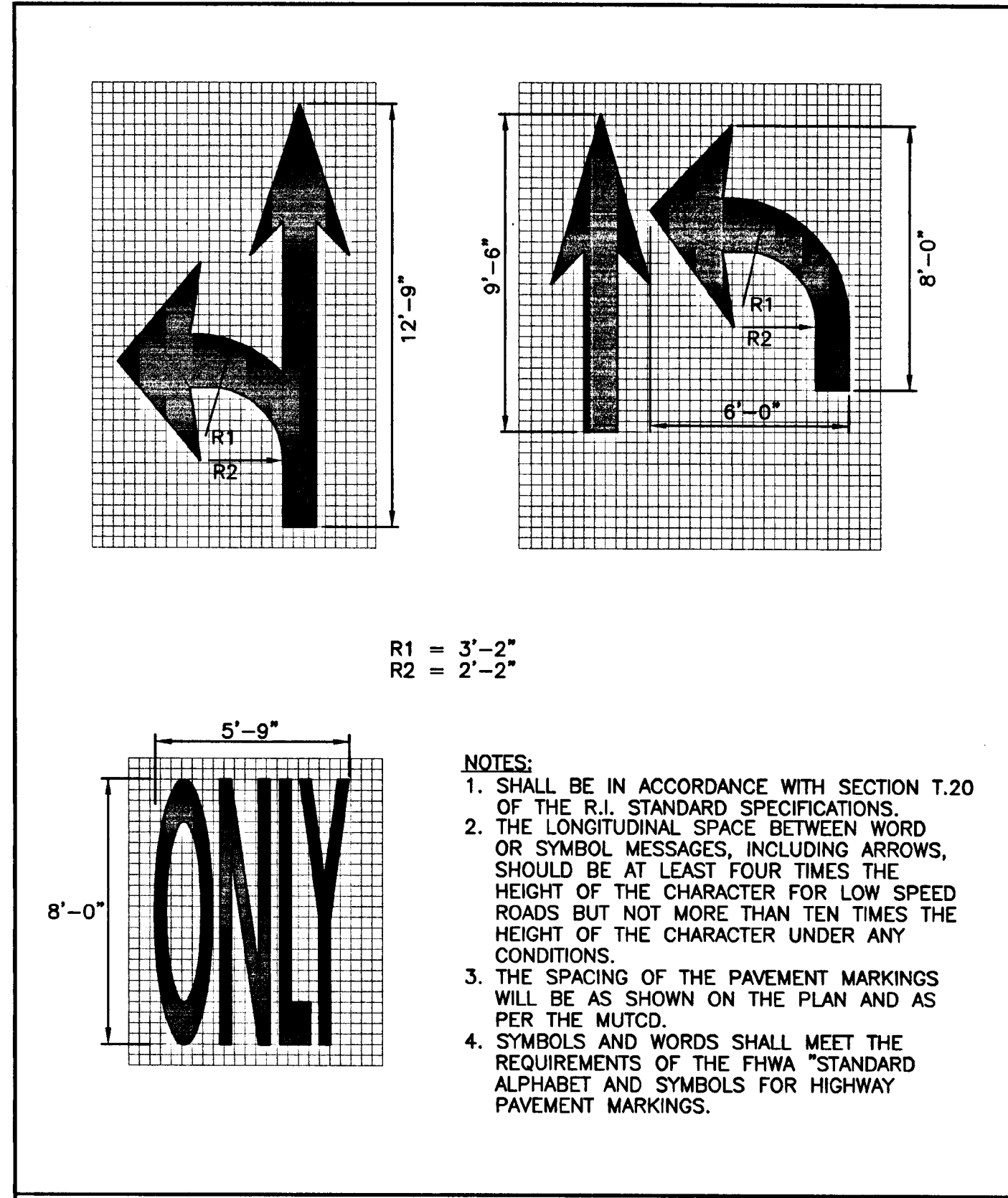
Z:\J08512.dwg 12/20/05 11:47 AM 2005-01-08 05:07:24

REVISIONS:

PROJECT NO.: 12200.15
DATE: SEPTEMBER 2024
SCALE: AS NOTED
DESIGNED BY: JA
CHECKED BY: BMB
DRAWN BY: SP/AKL
APPROVED BY: TPT
DRAWING TITLE:

DETAILS 8

DRAWING NO.: C4.8
SHEET NO. 26 OF 26



RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS

NO.	BY	DATE

PAVEMENT MARKINGS - ARROWS AND ONLY

June 15, 1998

James H. Capelli CHIEF DESIGN ENGINEER
Edward P. Kelly CHIEF DESIGN ENGINEER

R.I. STANDARD 20.1.0

