# CITY OF WATERTOWN, MASSACHUSETTS

# FILPPELLO PARK SPRAY PAD RENOVATION



LOCATION PLAN
NTS

## FEBRUARY 2023



**BOSTON, MASSACHUSETTS** 

Environment

**Transportation** 

Energy

**Facilities** 



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#### **SURVEY NOTES:**

- 1. COORDINATES, IN U.S. SURVEY FEET, ARE REFERENCED TO THE NORTH AMERICAN DATUM OF 1983, (2011), Epoch 2010.00, BASED ON THE KeyNet GPS VIRTUAL REFERENCE SYSTEM (VRS).
- 2. EXISTING CONDITIONS SURVEY WAS COMPLETED ON NOVEMBER 7, 2017 BY SURVEYING AND MAPPING CONSULTANTS AT 1.781.380.7766 325 WOOD ROAD, SUITE 109 BRAINTREE, MA 02184.
- 3. ELEVATIONS, IN U.S. SURVEY FEET, ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), BASED ON SMC'S OBSERVATIONS OF THE KeyNet GPS VIRTUAL REFERENCE SYSTEM (VRS), USING TRIMBLE R8 GNSS GPS RECEIVERS.
- 4. SUBSURFACE UTILITY LINES, AS SHOWN HEREON, WERE COMPILED ACCORDING TO AVAILABLE RECORD INFORMATION FROM THE REFERENCED COMPANIES AND PUBLIC AGENCIES, AND THEIR LOCATIONS ARE APPROXIMATE ONLY. ACTUAL LOCATIONS MUST BE DETERMINED IN THE FIELD. SMC ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCURATELY SHOWN.
- GENERALLY THE LINES IN THE PUBLIC AND PRIVATE WAYS ARE SHOWN AND THE LATERAL CONNECTIONS SERVICING INDIVIDUAL USERS ARE NOT SHOWN. BEFORE DESIGNING FUTURE CONNECTIONS, THE APPROPRIATE UTILITIES MUST BE CONSULTED.
- 6. BEFORE CONSTRUCTION, ALL UTILITIES, PUBLIC AND PRIVATE MUST BE NOTIFIED (SEE MASSACHUSETTS GENERAL LAWS, CHAPTER 82 SECTION 40.) CALL "DIG SAFE" 1 (888) 344-7233 HTTP://www.digsafe.com
- 7. PARCEL LINES AND ASSESSOR INFORMATION WERE COMPILED FROM INFORMATION PROVIDED BY THE TOWN OF WATERTOWN ASSESSOR'S OFFICE.

#### SITE PREPARATION AND SOIL MANAGEMENT NOTES:

- 1. A DESIGNATED EXCAVATE DISPOSAL AREA HAS BEEN INCLUDED AS SHOWN ON THE DRAWINGS. ALL SUBGRADE MATERIALS EXCAVATED BELOW THE TOP 12 INCHES FROM FINISHED GRADE SHALL BE PLACED IN THIS AREA AND COVERED WITH 2 FEET OF COMMON FILL, 6 INCHES SANDY GRAVEL, AND 6 INCHES OF TOPSOIL FOR A TOTAL OF 3 FEET OF COVER.
- 2. REMOVAL AND LEGAL DISPOSAL MATERIALS IDENTIFIED FOR OFF-SITE REMOVAL. REMOVALS FOR OFF-SITE REMOVAL SHALL BE LIMITED TO EXISTING BOLLARDS, POURED IN PLACE SURFACING, BITUMINOUS CONCRETE, AND EXISTING CONCRETE SHALL BE REMOVED. NO SOILS SHALL BE REMOVED FROM THE SITE. SEE SPECIAL SITE CONSIDERATIONS AND SOILS EXCAVATE HANDLING IN SPECIFICATION SECTION 01010.
- 3. CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES IMPACTING WORK AND INFORM THE ENGINEER WITHIN 24 HOURS UPON DISCOVERY OF ALL PIPES, CONDUITS, AND INFRASTRUCTURE NOT NOTED ON EXISTING CONDITIONS PLAN PRIOR TO CONTINUING WITH EXCAVATION ACTIVITIES.
- 4. CONTRACTOR SHALL CALL DIG SAFE AT 1.888.344.7233 FOR NOTIFICATION AND APPROVAL OF EXCAVATION ACTIVITIES PRIOR TO CONSTRUCTION ACTIVITIES.
- 5. ALL AREAS OUTSIDE THE LIMIT OF WORK SHALL BE PROTECTED AT ALL TIMES.
- 6. INSTALL INLET PROTECTION AND SEDIMENTATION BARRIERS PRIOR TO COMMENCEMENT OF WORK.
- 7. INSPECT INLET PROTECTION AND SEDIMENTATION BARRIERS WEEKLY AND AFTER ALL STORM EVENTS OF ½ INCH OR GREATER AND REPAIR AS NEEDED AND AS DIRECTED BY THE ENGINEER.
- 8. SEDIMENTATION BARRIERS SHALL REMAIN IN PLACE UNTIL ALL DISTURBED AREAS ARE STABILIZED.
- 9. ALL EXISTING PAVEMENT AND WALKWAYS TO BE PROTECTED THAT ARE DISTURBED BY THIS CONTRACT SHALL BE PROMPTLY REPAIRED IN A MANNER APPROVED BY ENGINEER IN ACCORDANCE WITH SPECIFICATIONS
- 10. UPON COMPLETION OF CONSTRUCTION ACTIVITIES INSPECT AND CLEAN OUT DRAINAGE SYSTEMS TO THE SATISFACTION OF THE ENGINEER.
- 11. CONTRACTOR SHALL PREPARE A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) FOR REVIEW BY THE ENGINEER PRIOR TO THE BEGINNING OF ALL CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL MAINTAIN A COPY OF THE SWPPP ON SITE AT ALL TIMES. NPDES PERMIT NUMBER SHALL BE POSTED IN A POSITION TO BE PUBLICLY VISIBLE AT ALL TIMES.
- 14. REMOVE TOPSOIL IN AREAS OF WORK. TOPSOIL MAY BE UTILIZED IN LAWN AND LANDSCAPE AREAS PROVIDED IT MEETS THE REQUIREMENTS OF "LOAM" AS SPECIFIED.

#### SEQUENCE OF SITE PREPARATION

- 1. INITIATE DEMOLITIONS, REMOVALS, CLEARING, AND GRUBBING ONLY AFTER ALL SITE PREPARATION AND SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED.
- 2. ESTABLISH LOCATIONS FOR EQUIPMENT AND MATERIAL STAGING INCLUDING AREA FOR STORING AND CLEANING SALVAGED MATERIAL ON—SITE.
- 3. PREPARE AREAS TO ACCEPT FUTURE EXCAVATE MATERIAL
- 4. INSTALL TEMPORARY CONSTRUCTION FENCE AROUND DESIGNATED EXCAVATE DISPOSAL AREA.
- 5. MAINTAIN ON SITE ADDITIONAL TEMPORARY CONSTRUCTION FENCE AND STEEL PLATES FOR SECURING FOUNDATION EXCAVATIONS TO ENSURE THE SAFETY OF THE PUBLIC.

## GRADING AND DRAINAGE NOTES:

- VERTICAL DATUM BASED ON BENCHMARKS SHOWN ON C-1. CONTRACTOR SHALL FIELD VERIFY ELEVATION OF BENCHMARKS PRIOR TO STAKING FINISHED GRADES.
- 2. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY OBSTRUCTIONS ENCOUNTERED DURING EXCAVATION
- 3. ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES BEYOND THE LIMIT OF WORK SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE IN A MANNER APPROVED BY THE ENGINEER.
- 4. PATHWAYS AND WALKWAYS SHALL HAVE A MAX. CROSS SLOPE OF 2% AND MAX. LONGITUDINAL SLOPE OF 5%.
- 5. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION AND MAINTENANCE OF GRADE STAKES AS APPROVED BY THE ENGINEER. CONTRACTOR SHALL BE RESPONSIBLE FOR A FINAL FIELD CHECK OF FINISHED GRADES AS APPROVED BY THE ENGINEER PRIOR TO INSTALLATION OF FINAL
- 6. PITCH EVENLY BETWEEN SPOT GRADES. ALL PAVED AREAS MUST PITCH TO DRAIN AT A MINIMUM SLOPE OF 1/8" PER FOOT. ANY DISCREPANCIES NOT ALLOWING THIS TO OCCUR SHALL BE REPORTED TO THE ENGINEER PRIOR TO CONTINUING WORK.
- 7. WHERE NEW PAVING MEETS EXISTING PAVING, MEET LINE AND GRADE OF EXISTING WITH NEW PAVEMENT.
- CONTRACTOR SHALL PROVIDE DUST CONTROL FOR CONSTRUCTION OPERATIONS AS APPROVED BY THE ENGINEER.
- 9. ALL POINTS OF CONSTRUCTION EGRESS OR INGRESS SHALL BE MAINTAINED TO PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADS.
- 10. ADJUST ALL DRAINAGE AND SEWER STRUCTURE FRAMES AND GRATES/COVERS AS APPLICABLE TO MEET PROPOSED GRADE.
- 11. PROVIDE LOAM AND SEED AS SPECIFIED, IN ALL AREAS WITHIN LIMIT OF DISTURBANCE THAT ARE NOT PAVED, COVERED WITH STRUCTURES, OR ARE DESIGNATED PLANTING BEDS.

#### LAYOUT AND MATERIALS NOTES:

- FOR LAYOUT PURPOSES AND TO ESTABLISH THE COORDINATE SYSTEM HORIZONTAL CONTROL POINTS ARE SHOWN ON SHEETS C-1 AND C-2.
- 2. EXISTING SURVEY MONUMENTS OR CONTROL POINTS SHALL BE FLAGGED AND PROTECTED THROUGHOUT THE CONSTRUCTION CONTRACT UNLESS OTHERWISE APPROVED BY THE ENGINEER. DAMAGED OR MISSING MONUMENTS OR CONTROL POINTS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- 3. PAVEMENT LIMITS, LOCATIONS OF STRUCTURES, FENCE, WALLS, CURBS, PLANT MATERIALS ARE APPROXIMATE. FINAL LOCATIONS SHALL BE STAKED IN THE FIELD AND APPROVED BY THE ENGINEER BASED ON ACTUAL SITE CONDITIONS.
- 4. ALL DISTURBED AREAS NOT RECEIVING NEW BITUMINOUS CONCRETE, CONCRETE PAVEMENT SHALL RECEIVE 6—IN LAYER LOAM AND SEED.
- 5. PATHWAYS AND WALKWAYS SHALL HAVE A MAXIMUM LATERAL CROSS SLOPE OF 2% AND A MAXIMUM LONGITUDINAL SLOPE OF 5%.
- 6. DIMENSIONS ARE TO FACE OF WALL, FACE OF CURB, EDGE OF PAVEMENT OR TO CENTERLINES UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
- 7. LOCATION OF GRANITE SEAT BLOCKS SHALL BE MARKED IN THE FIELD BY THE CONTRACTOR FOR REVIEW AND APPROVAL BY THE ENGINEER PRIOR TO INSTALLATION.

				DESIGNED BY: G. HOWAR
				DRAWN BY: J. BRONENKAN
				SHEET CHK'D BY: G. HOWAR
				CROSS CHK'D BY: S. LANDGRE
REV. NO.	DATE	DRWN	CHKD	APPROVED BY: S. LANDGRE  DATE: FEBRUARY 20

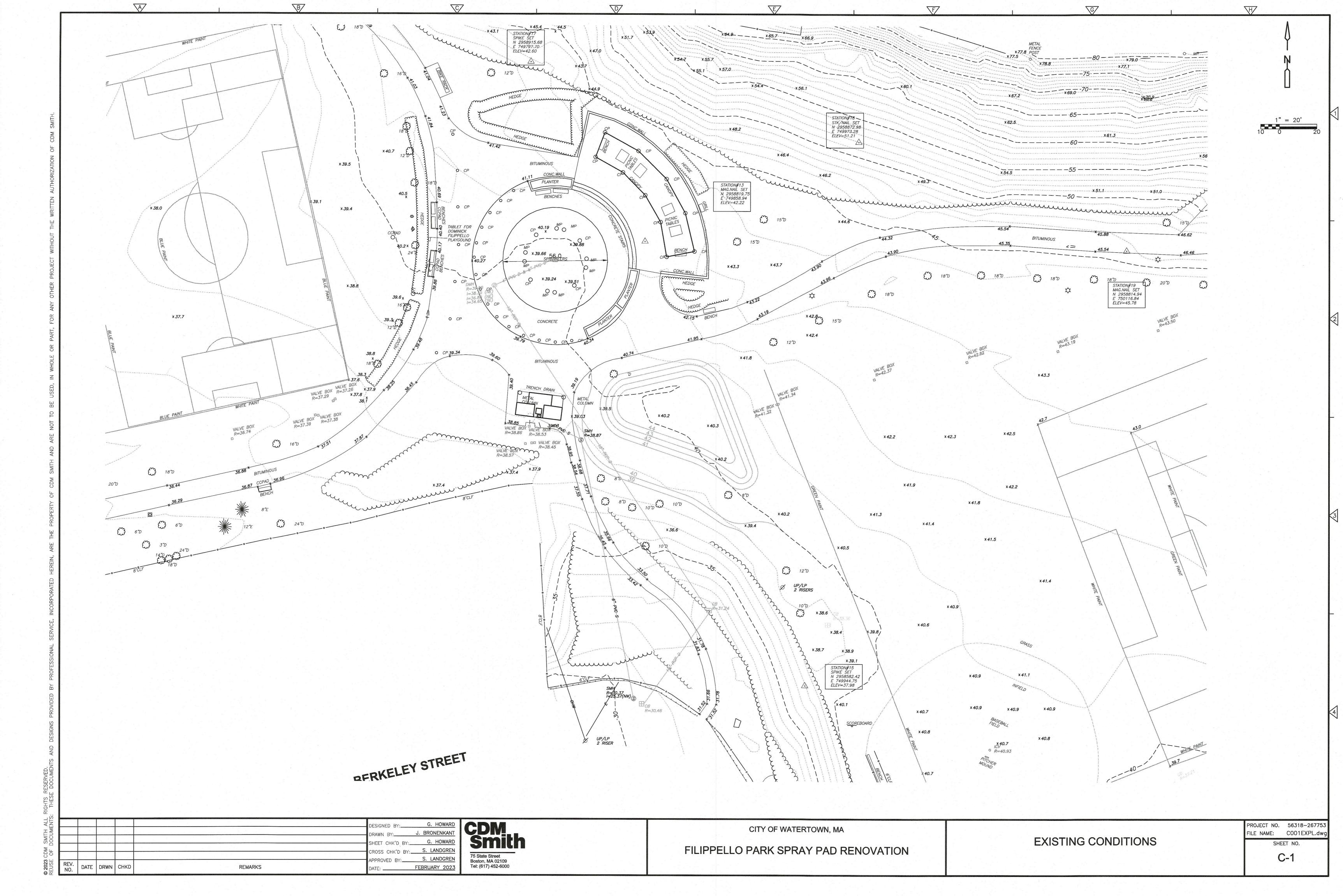


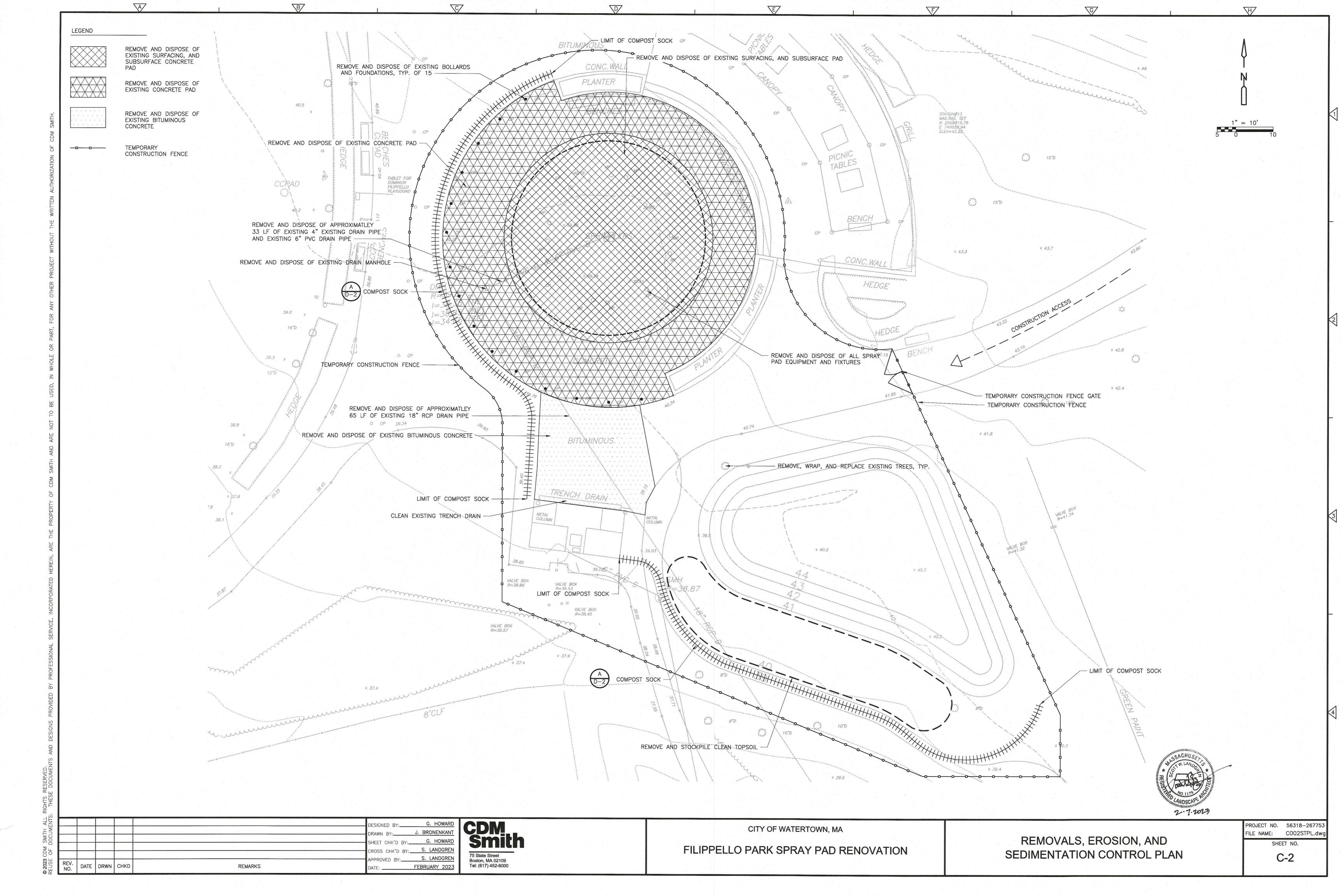
CITY OF WATERTOWN, MA

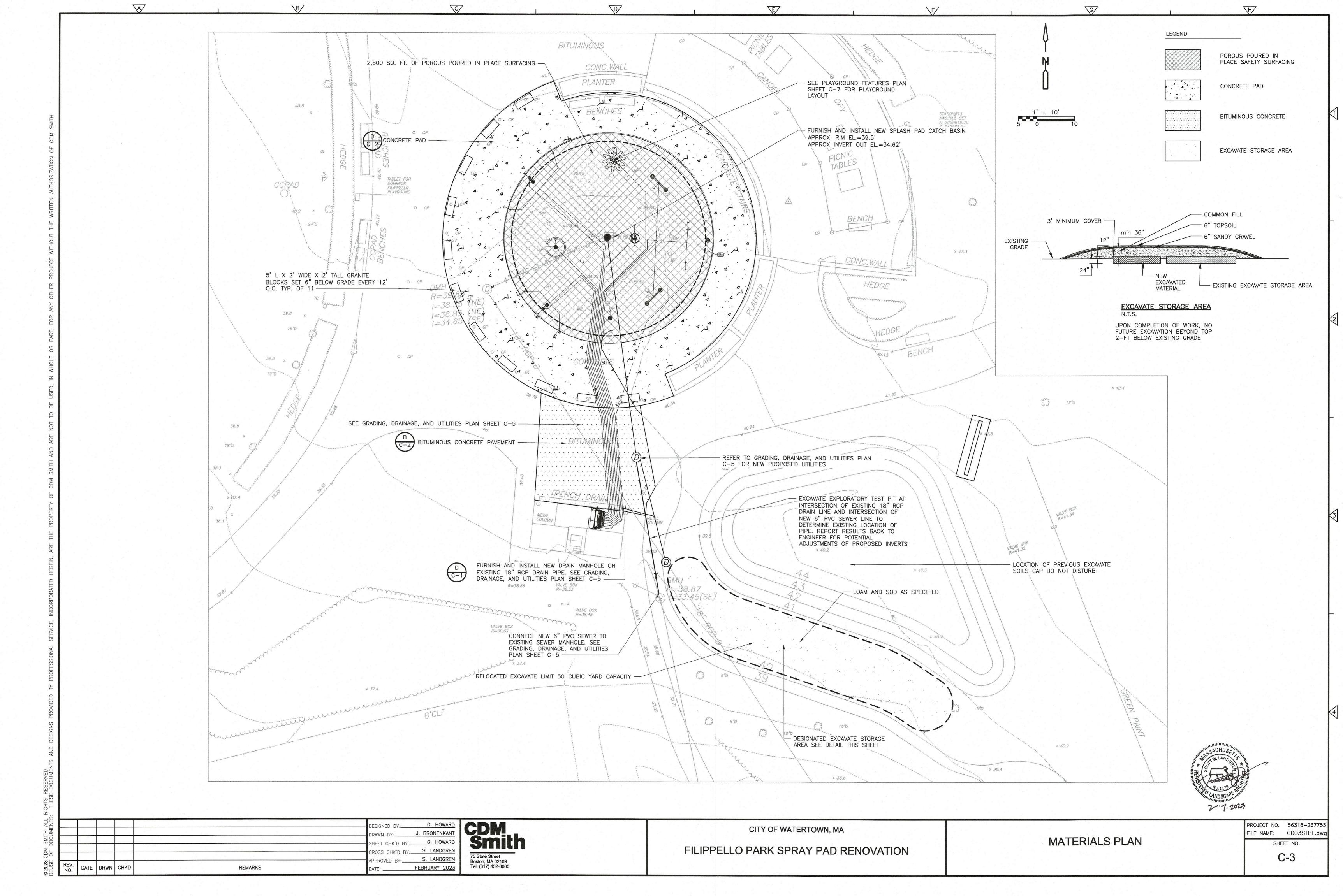
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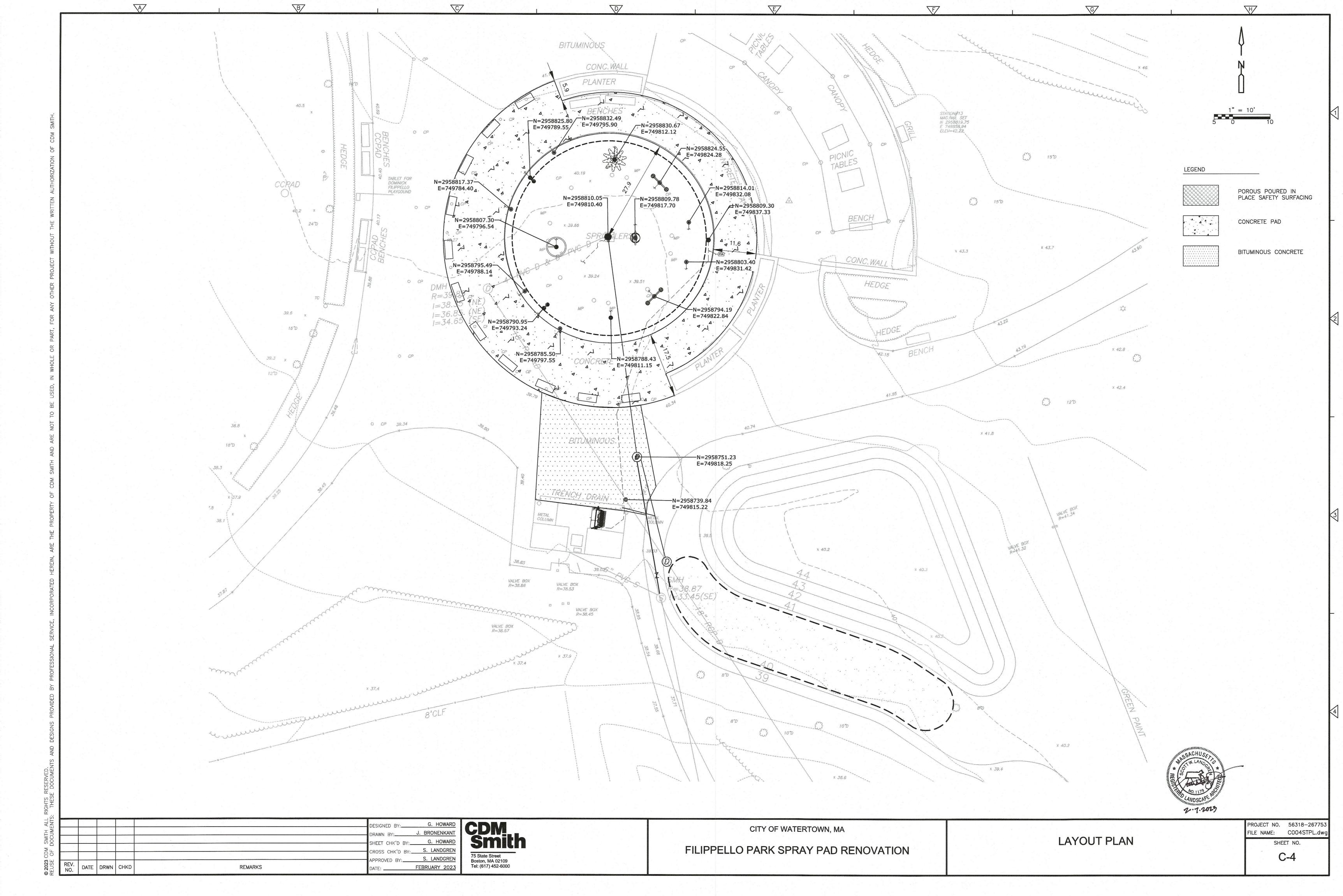
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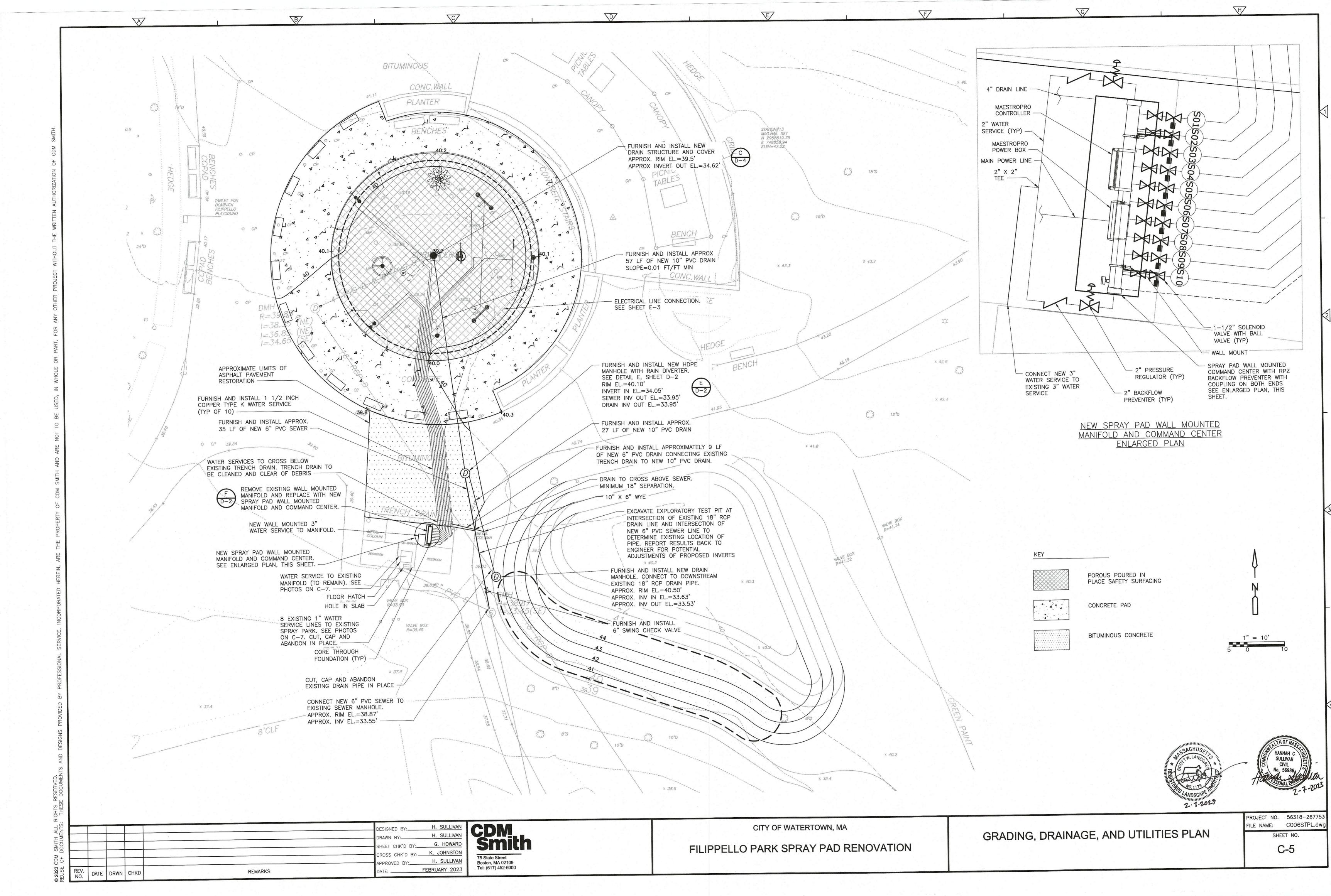
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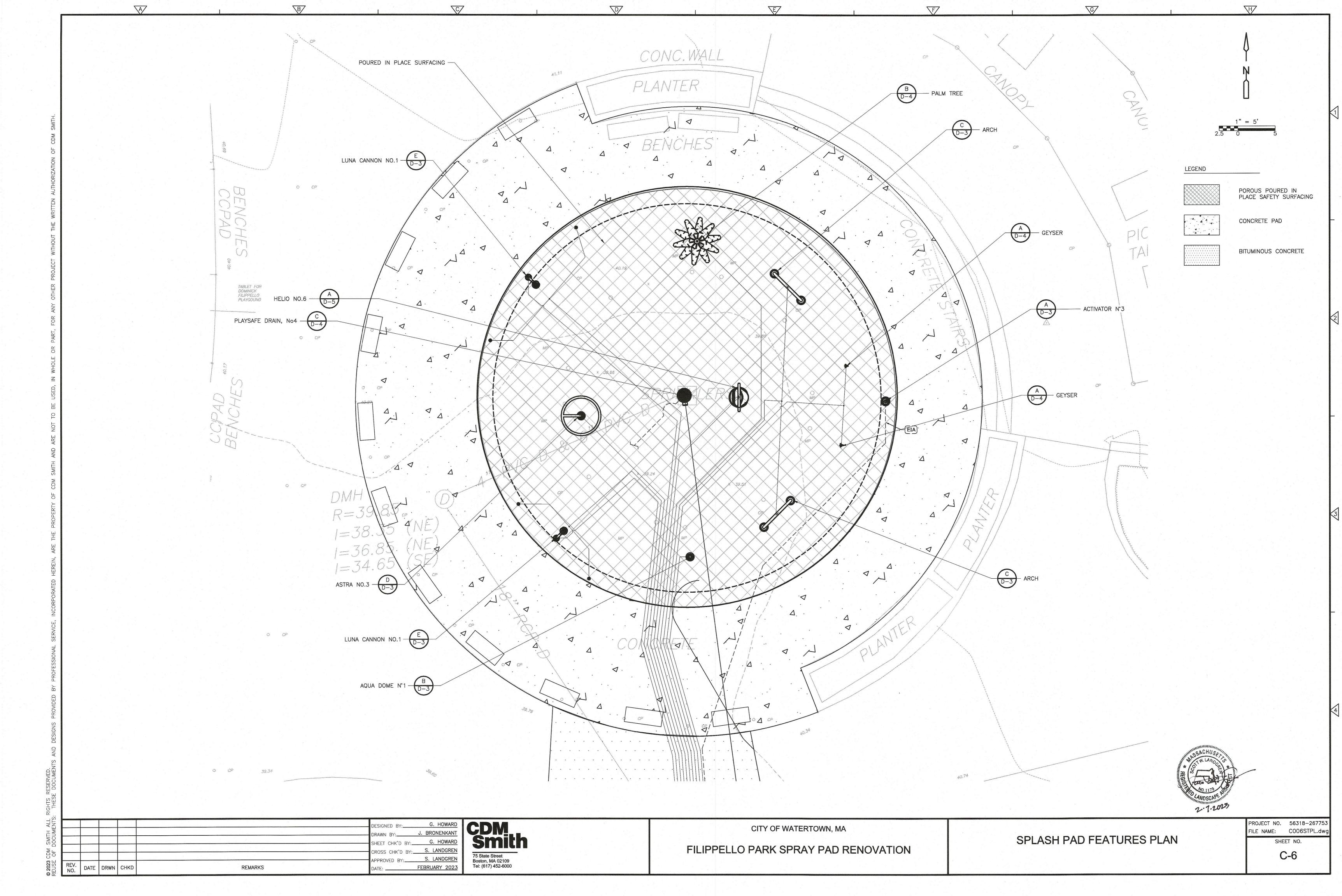












FLOOR HATCH —

REMARKS

EXISTING 8 WATER SERVICES TO SPRAY PARK FEATURES

INSIDE UTILITY BUILDING (VIEW FROM FRONT DOOR)

H. SULLIVAN

EXISTING 3" WATER SERVICE TO SPRAY PARK MANIFOLD

75 State Street Boston, MA 02109 Tel: (617) 452-6000

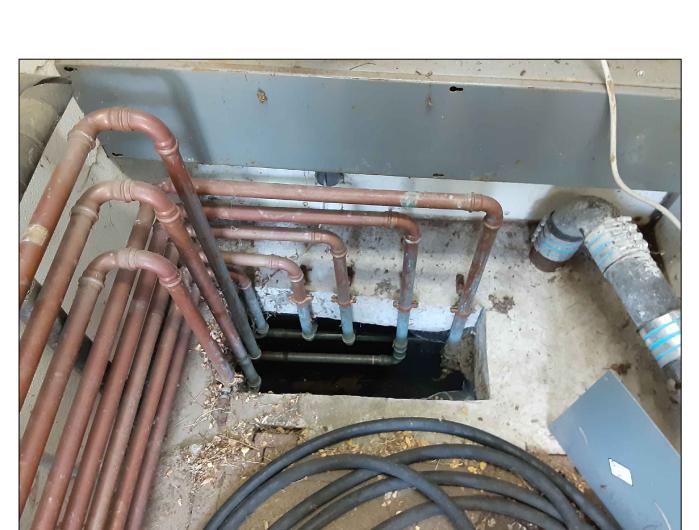
EXISTING 8 WATER SERVICES TO SPRAY

PARK FEATURES (EXITING BUILDING)

CITY OF WATERTOWN, MA

EXISTING UTILITY IMAGES

PROJECT NO. 56318-267753
FILE NAME: COO7STPL.dwg



WATER SERVICE ENTERING BUILDING (IN FLOOR HATCH)



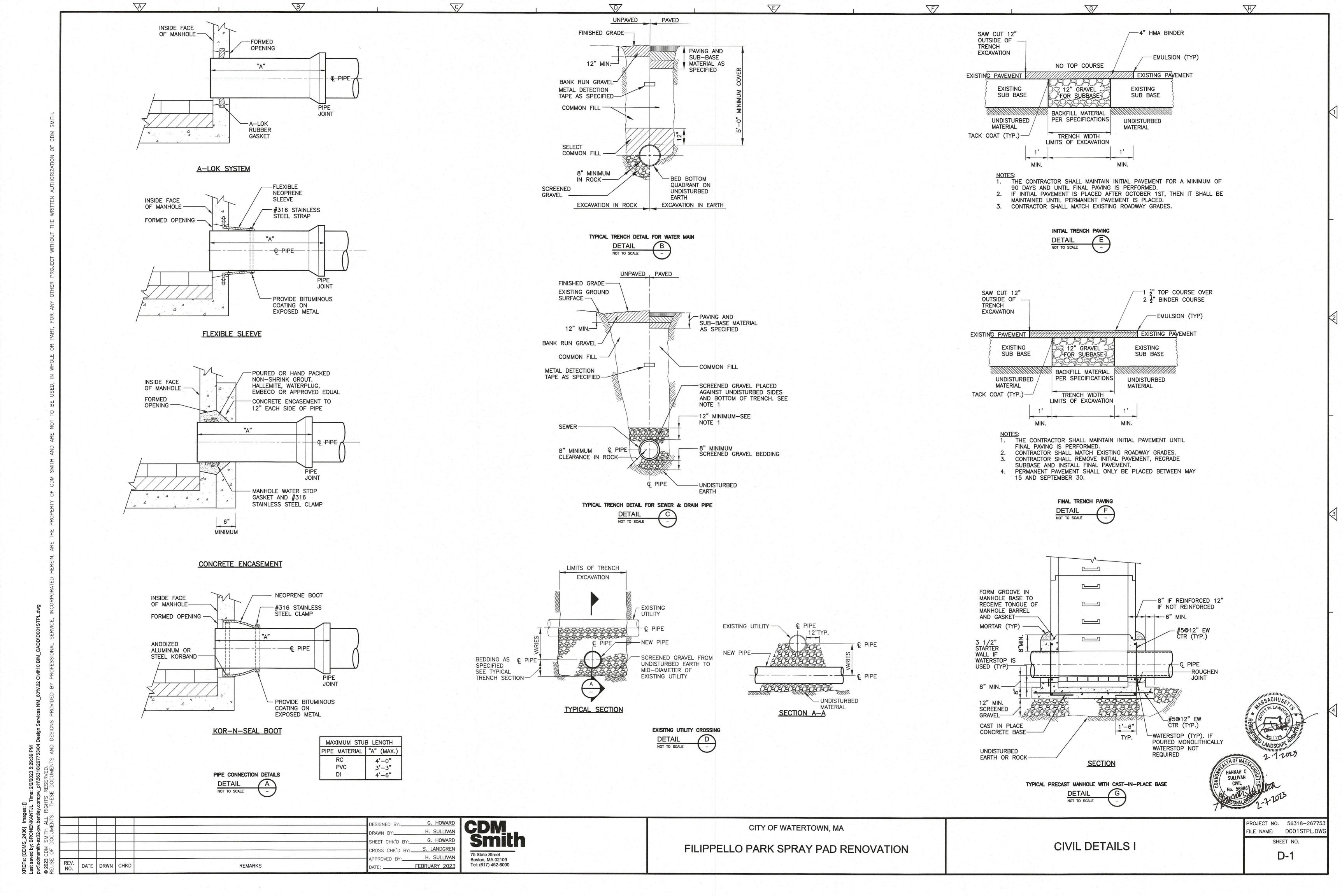
EXISTING SPRAY PARK WATER SERVICE MANIFOLD

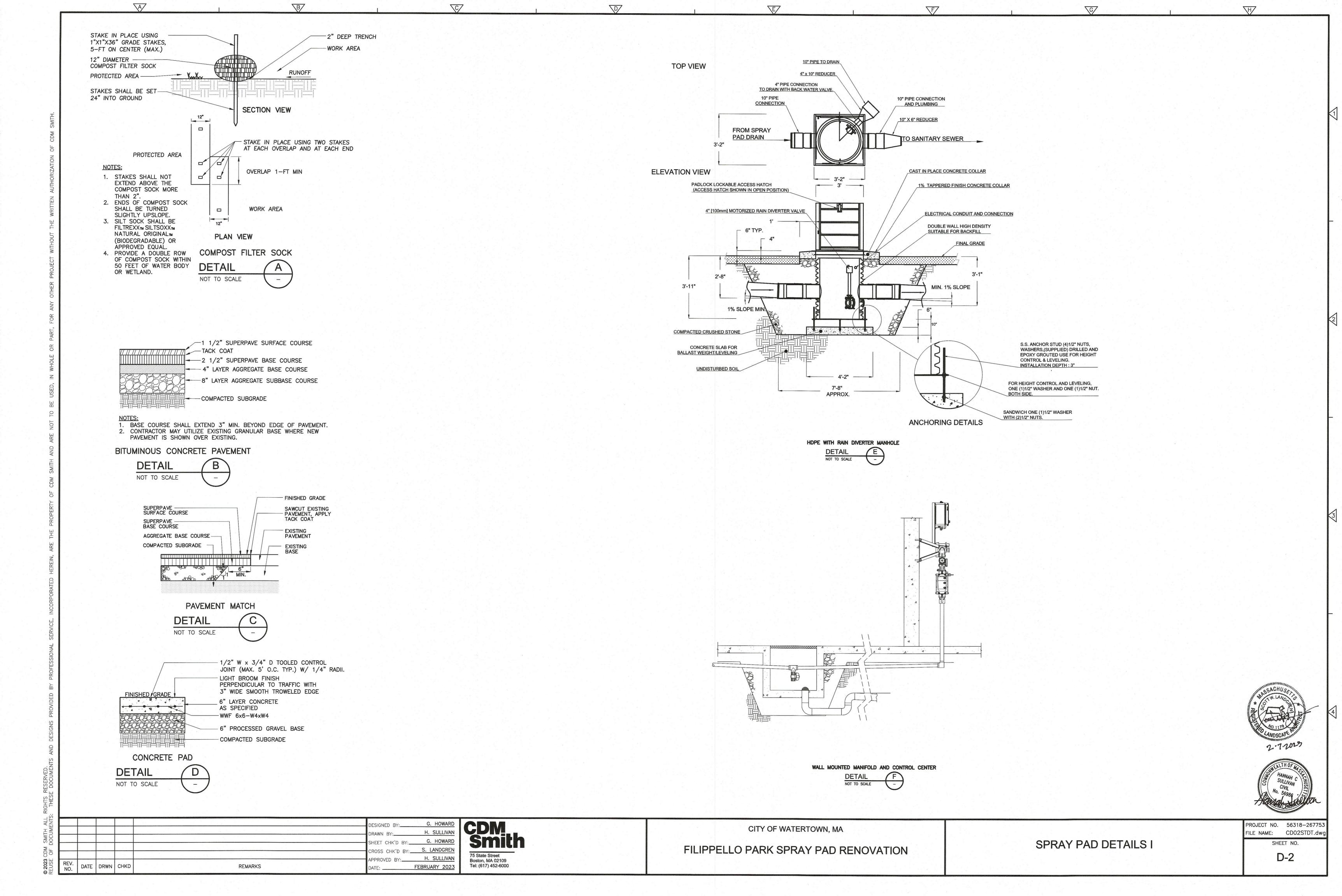


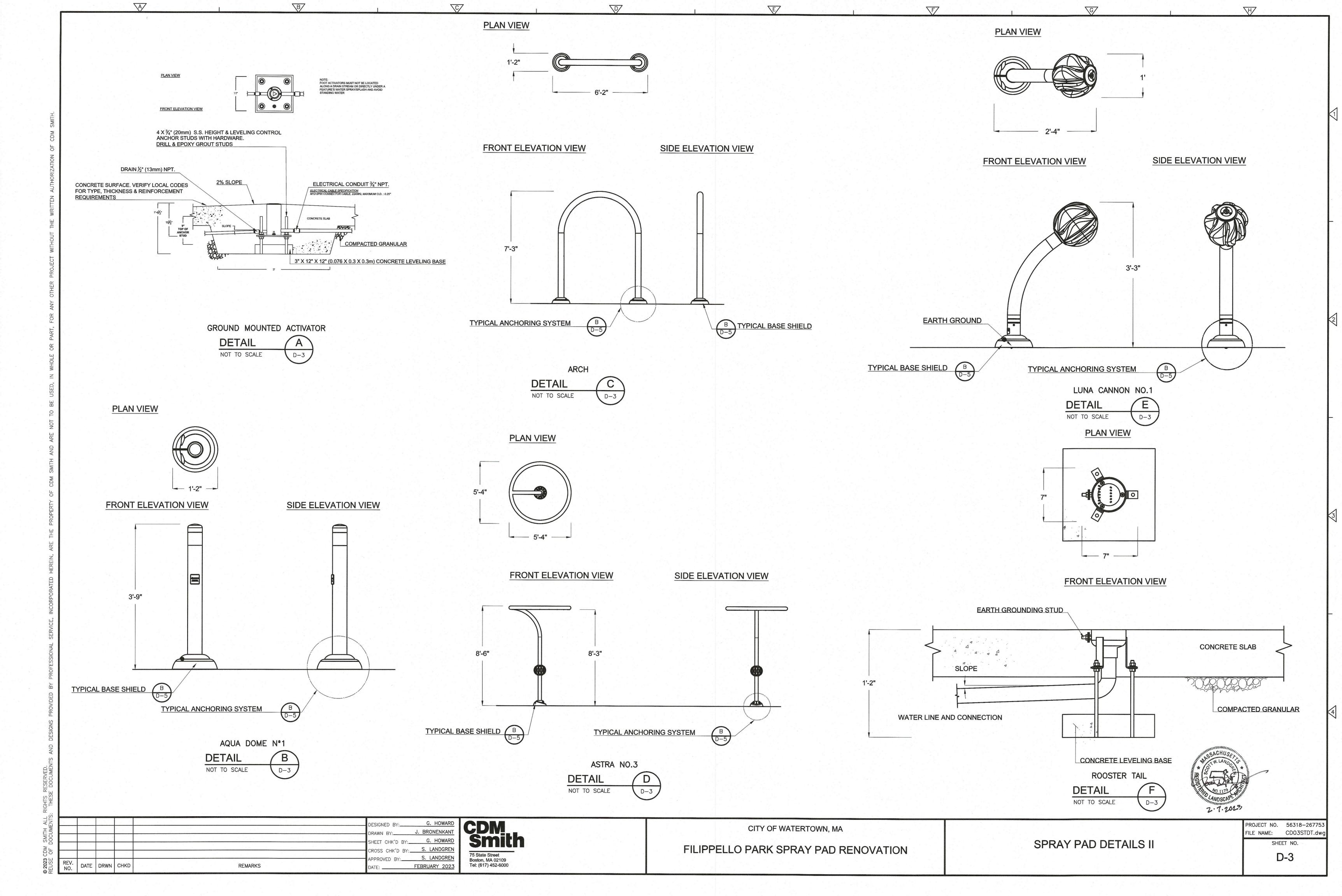
EXISTING 8 WATER SERVICES TO SPRAY PARK FEATURES

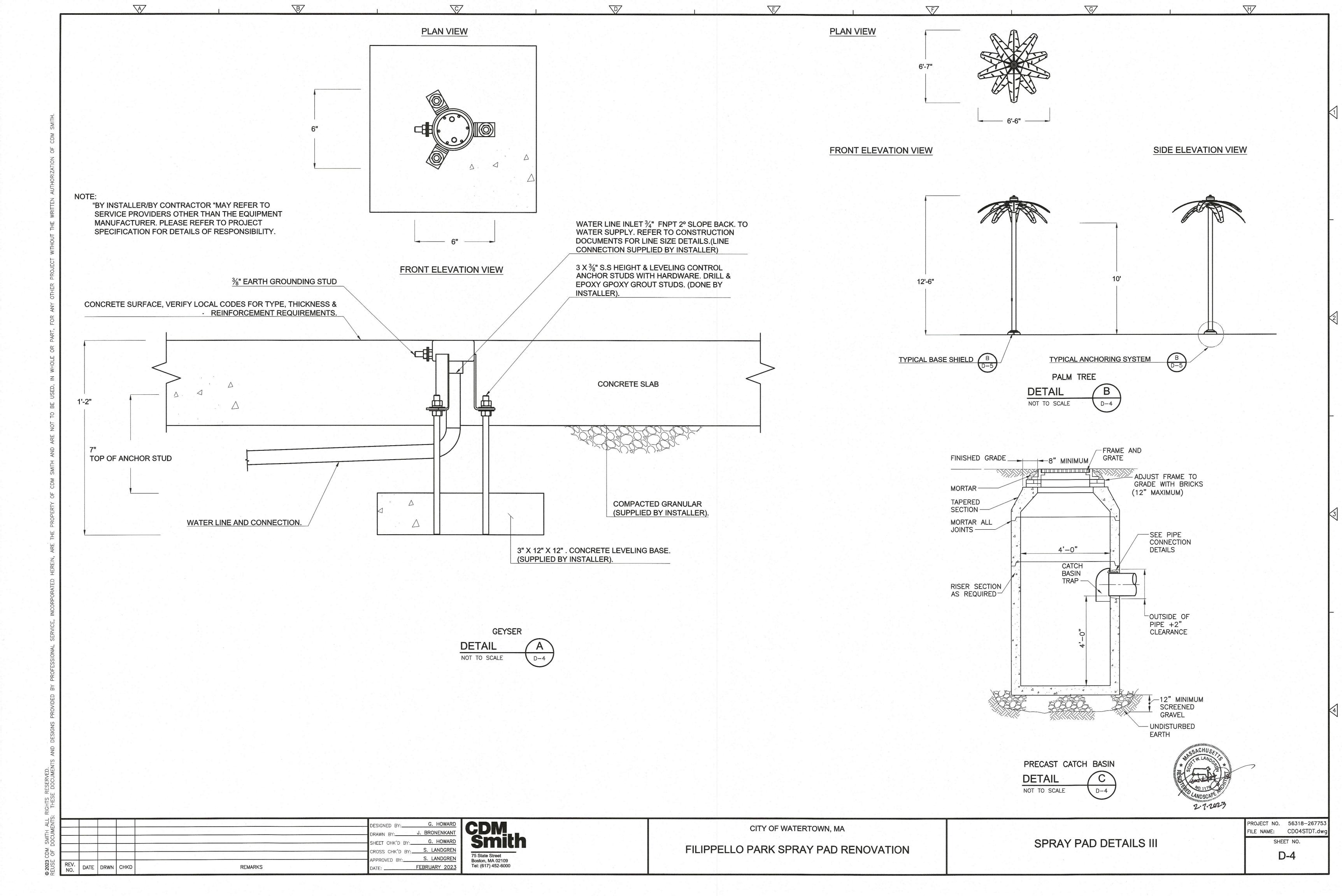
FILIPPELLO PARK SPRAY PAD RENOVATION

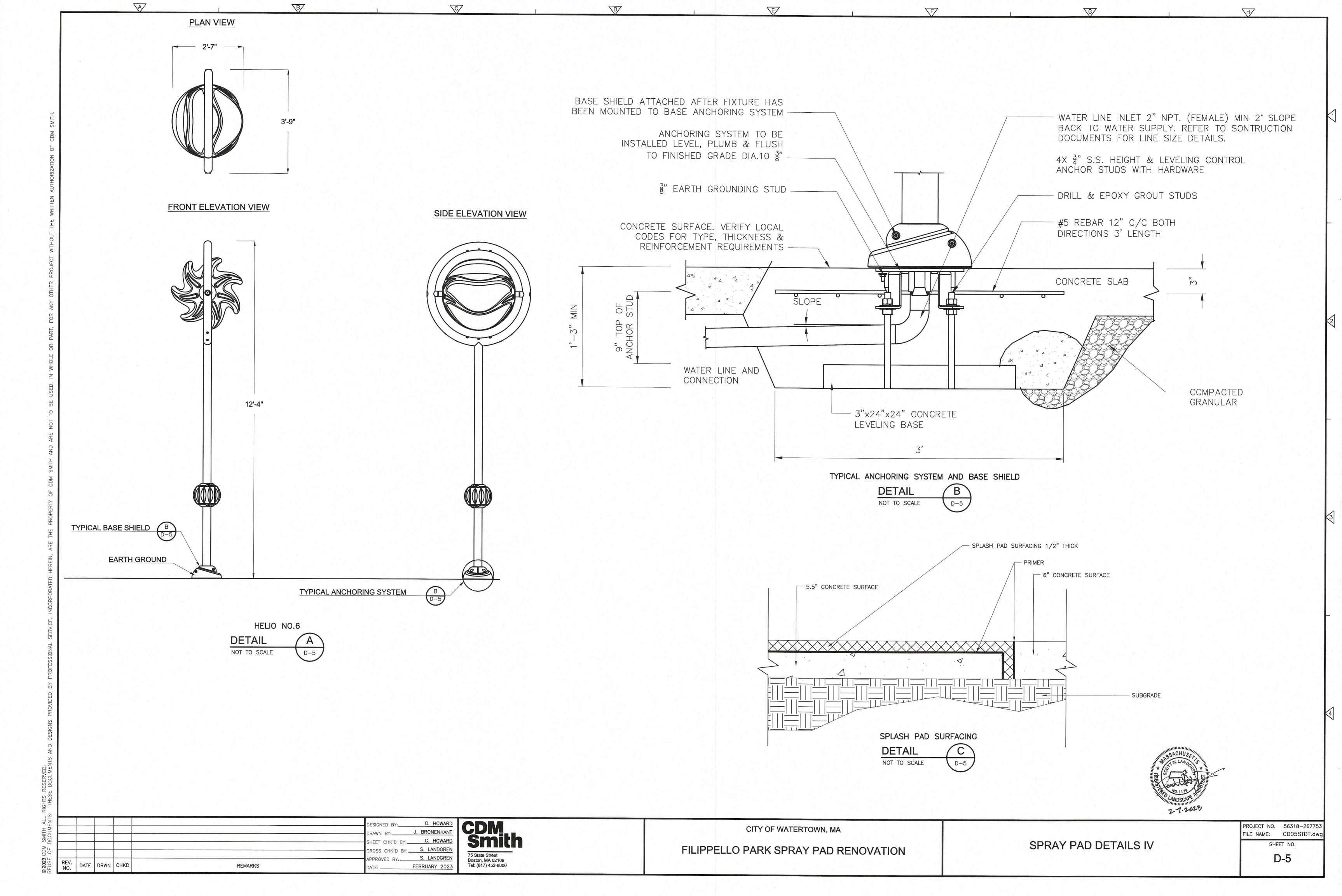
C-7











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#### **GENERAL NOTES:**

- 1. ELECTRICAL DRAWINGS ARE INTENDED TO SHOW THE GENERAL LAYOUT OF WORK TO BE INSTALLED UNDER THIS CONTRACT WITHOUT ATTEMPTING TO SHOW ALL DETAILS. FURNISH LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS REQUIRED FOR A COMPLETE AND OPERATIONAL ELECTRICAL SYSTEM AS SHOWN ON THE CONTRACT DOCUMENTS.
- 2. COORDINATE WORK WITH OTHER TRADES AND THE OWNER.
- . MAINTAIN EXISTING PROCESS OPERATIONS. POWER INTERRUPTIONS TO ELECTRICAL EQUIPMENT SHALL BE AT OWNER'S CONVENIENCE WITH 72 HOURS MINIMUM NOTICE. EACH INTERRUPTION SHALL HAVE PRIOR WRITTEN APPROVAL.
- 4. FIELD VERIFY EXISTING UNDERGROUND ELECTRICAL CONDUIT, CONCRETE DUCT BANKS, MANHOLES, PULL BOXES, ETC. AND MECHANICAL PIPING. CONTRACTOR SHALL INCLUDE IN BID COSTS ASSOCIATED WITH RELOCATION OR REMOVAL OF UNDERGROUND EQUIPMENT AS REQUIRED BY THIS CONTRACT. USE DUE CARE IN CONGESTED AREAS TO AVOID DAMAGE TO EXISTING UNDERGROUND UTILITIES.
- 5. CONTRACTOR'S WORK SHALL INCLUDE COMPLETE TESTING OF EQUIPMENT AND WIRING INCLUDING MAKING MINOR CORRECTIONS, CHANGES, OR ADJUSTMENTS NECESSARY FOR THE PROPER FUNCTIONING OF THE SYSTEM AND EQUIPMENT. WORKMANSHIP SHALL BE OF THE HIGHEST QUALITY; SUBSTANDARD WORK WILL BE REJECTED.
- 6. DO NOT SCALE ELECTRICAL DRAWINGS. REFER TO MECHANICAL, STRUCTURAL DRAWINGS, AND APPROVED MANUFACTURER'S SHOP DRAWINGS FOR EXACT LOCATION OF EQUIPMENT. EXCEPT WHERE DIMENSIONS ARE SHOWN, LOCATIONS OF EQUIPMENT, FIXTURES, OUTLETS, AND SIMILAR DEVICES ARE APPROXIMATE.
- 7. WORK SHALL COMPLY WITH NEC AND LOCAL CODES.
- 8. DO NOT SPLICE CONDUCTORS EXCEPT AS NOTED.
- 9. POWER AND CONTROL CONDUITS SHALL HAVE AN EQUIPMENT GROUNDING CONDUCTOR WIRE SIZED PER TABLE 250.122 OF THE NEC UNELSS OTHERWISE NOTED.
- 10. COORDINATE SEQUENCE OF CONSTRUCTION WITH CIVIL, MECHANICAL, AND STRUCTURAL DISCIPLINES. PROVIDE TEMPORARY POWER AND CONTROL CIRCUITS AS REQUIRED TO MAINTAIN FACILITY OPERATION. VERIFY EXISTING UTILITIES IN AREA OF CONSTRUCTION. REFER TO CIVIL DRAWINGS FOR ADDITIONAL UNDERGROUND INFORMATION.
- 11. REPAIR, IN ACCORDANCE WITH SPECIFICATIONS, SIDEWALKS, WALLS, ROADWAYS, ETC. DISTURBED BY CONSTRUCTION ACTIVITIES WHETHER OR NOT SHOWN FOR REPAIR/REPAVING ON CIVIL DRAWINGS.
- 12. CONCEAL CONDUITS TO GREATEST EXTENT PRACTICABLE. CONDUITS RUN AT EXISTING STRUCTURES SHALL BE RUN EXPOSED.
- 13. WHERE LOCAL DISCONNECTS AND CONTROL PANELS ARE SHOWN ON PLAN VIEWS, LOCATIONS ARE APPROXIMATE. ADJUST LOCATION AS REQUIRED TO COMPLY WITH NEC ARTICLE 110 FOR WORKING CLEARANCES.
- 14. DO NOT INSTALL MAJOR CONDUIT RUNS THROUGH AREAS DESIGNATED FOR FUTURE STRUCTURES.

#### **SUBMITTALS:**

- 1. SUBMIT SHOP DRAWINGS FOR EQUIPMENT, MATERIALS AND OTHER ITEMS FURNISHED UNDER DIVISION 26.
- 2. SUBMIT CONDUIT SHOP DRAWINGS FOR YARD ELECTRICAL, WITHIN AND UNDER ROADS, BUILDINGS AND STRUCTURES PRIOR TO COMMENCING WORK. DO NOT POUR CONCRETE UNTIL ENGINEER HAS APPROVED THE ASSOCIATED SHOP DRAWING.
- 3. SUBMIT OPERATION AND MAINTENANCE MANUALS FOR EQUIPMENT FURNISHED UNDER DIVISION 26.
- 4. SUBMIT STARTUP/COMMISSIONING PLANS FOR EQUIPMENT FURNISHED UNDER DIVISION 26.
- 5. SUBMIT TESTING AND SERVICE REPORTS FOR EQUIPMENT AND MATERIALS FURNISHED UNDER DIVISION 26.
- 6. SUBMIT TRAINING PLANS FOR EQUIPMENT FURNISHED UNDER DIVISION 26.
- 7. SUBMIT RECORD DOCUMENTATION TO ACCURATELY SHOW COMPLETED INSTALLATION. INCLUDE MODIFICATIONS TO CONTRACT DOCUMENTS (ONE LINE POWER DIAGRAMS, EQUIPMENT ELEVATIONS, PANEL SCHEDULES, ELEMENTARY CONTROL DIAGRAMS, RISER DIAGRAMS, PLANS, CONDUIT AND DUCTBANK ROUTING, ETC) ALONG WITH ADDITIONAL DRAWINGS OR SKETCHES CREATED TO CONVEY COMPLETED INSTALLATION.

#### INTERPRETATION OF CONTRACT DOCUMENTS:

- IF DURING PERFORMANCE OF WORK, THERE IS A CONFLICT, ERROR, OR DISCREPANCY BETWEEN OR AMONG CONTRACT DOCUMENTS AND LAWS AND REGULATIONS, PROVIDE THE HIGHER PERFORMANCE STANDARD UNLESS OTHERWISE DIRECTED BY ENGINEER.
- PRIORITY OF DOCUMENTS: FIGURED DIMENSIONS GOVERN OVER SCALED DIMENSIONS, DETAILED DRAWINGS GOVERN
  OVER GENERAL DRAWINGS, LARGER SCALE DRAWINGS TAKE PRECEDENCE OVER SMALLER SCALE DRAWINGS, CHANGE
  ORDER DRAWINGS SUPERCEDE ORIGINAL CONTRACT DRAWINGS, AND CONTRACT DRAWINGS GOVERN SHOP DRAWINGS.
- 3. IN GENERAL, DRAWINGS DO NOT SHOW CONDUIT ROUTING. PLAN AND ROUTE CONDUITS IN COMPLIANCE WITH SPECIFICATIONS AND DRAWING DETAILS. COORDINATE INSTALLATION WITH OTHER TRADES AND ACTUAL SUPPLIED FOLIPMENT.
- 4. DUCTBANK ROUTING SHOWN ON ELECTRICAL SITE PLANS IS DIAGRAMMATIC IN NATURE AND MAY NOT INCLUDE INTERFERENCES THAT MAY BE PRESENT.
- 5. SEE ADDITIONAL NOTES ON ELECTRICAL LEGEND SHEET.

### **ENCLOSURE TYPES:**

PROVIDE THE FOLLOWING NEMA TYPE ELECTRICAL ENCLOSURES, UNLESS OTHERWISE NOTED:

- 1. NEMA 1 IN DRY, NON-PROCESS INDOOR LOCATIONS.
- 2. NEMA 12 IN "DUST" LOCATIONS SHOWN ON THE DRAWINGS.
- 3. NEMA 4X IN OUTDOOR LOCATIONS, ROOMS BELOW GRADE INCLUDING BASEMENTS AND BURIED VAULTS AND "DAMP" OR "WET" LOCATIONS SHOWN ON THE DRAWINGS.

#### MATERIALS AND EQUIPMENT:

- 1. PROVIDE NEW MATERIALS AND EQUIPMENT UNLESS SPECIFICALLY NOTED OTHERWISE.
- 2. ELECTRICAL EQUIPMENT AND MATERIALS SHALL BE LISTED BY UNDERWRITER'S LABORATORIES, INC., AND SHALL BEAR APPROPRIATE UL LISTING MARK OR CLASSIFICATION MARKING. EQUIPMENT, MATERIALS, ETC. UTILIZED NOT BEARING A UL CERTIFICATION SHALL BE FIELD OR FACTORY UL CERTIFIED PRIOR TO EQUIPMENT ACCEPTANCE AND USE.
- 3. PROVIDE MAJOR ELECTRICAL EQUIPMENT BY A SINGLE MANUFACTURER: I.E. UNIT SUBSTATIONS, SWITCHGEAR, MOTOR CONTROL CENTERS, DISCONNECT SWITCHES, TRANSFORMERS, PANELBOARDS, ETC.

#### **EQUIPMENT SIZE, HANDLING AND STORAGE:**

- 1. COORDINATE WITH EQUIPMENT MANUFACTURER SHIPPING SPLITS TO PERMIT SAFE HANDLING AND PASSAGE OF EQUIPMENT TO FINAL INSTALLATION LOCATION.
- 2. COMPLY WITH MANUFACTURER'S INSTRUCTIONS FOR UPRIGHT EQUIPMENT ORIENTATION DURING TRANSPORTATION.
- 3. PROTECT EQUIPMENT FROM MECHANICAL INJURY, OR EXPOSURE TO MOISTURE, CHEMICALS, OR CORROSIVE GASES. DO NOT STORE ELECTRICAL EQUIPMENT OUTDOORS.
- 4. PROVIDE AND ENERGIZE TEMPORARY SPACE HEATERS IF REQUIRED TO CONTROL MOISTURE DURING STORAGE.

#### **CUTTING AND PATCHING:**

- 1. CUT AND PATCH IN A WORKMANLIKE MANNER AS REQUIRED TO INSTALL ELECTRICAL WORK.
- 2. CUTTING OF STRUCTURAL MEMBERS SUCH AS JOISTS, BEAMS, GIRDERS OR COLUMNS IS PROHIBITED.
- 3. PATCH SURFACES TO RESTORE TO ORIGINAL INTEGRITY (WATERPROOF OR FIREPROOF AS REQUIRED) AND APPEARANCE.

#### **DEMOLITION AND DISPOSITION OF EQUIPMENT:**

- DRAWING PLANS SHOWING REMOVAL OF MAJOR MECHANICAL AND ELECTRICAL EQUIPMENT IS NOT INTENDED TO SHOW ALL COMPONENTS TO BE DEMOLISHED. NOT ALL PIPING, CONDUITS, DUCTS, EQUIPMENT, ANCILLARY DEVICES, ETC. ARE SHOWN. THE CONTRACTOR IS TO FIELD VERIFY EXISTING CONDITIONS PRIOR TO BID.
- 2. UNLESS OTHERWISE SPECIFICALLY NOTED, REMOVE UNUSED EXPOSED CONDUIT AND SUPPORT SYSTEMS BACK TO SOURCE AND/OR POINT OF CONCEALMENT INCLUDING ABOVE ACCESSIBLE CEILING FINISHES. WIRING SHALL BE REMOVED.
- 3. CUT FLUSH WITH SLAB, CEILING, OR WALL ABANDONED CONCEALED CONDUIT. SUITABLY PLUG CONDUITS.
- 4. REPAIR AND RESTORE ADJACENT CONSTRUCTION AND FINISHES AFTER DEMOLITION IS COMPLETE.
- 5. MATERIAL AND EQUIPMENT INDICATED FOR REMOVAL OR DEMOLITION IS TO BECOME CONTRACTOR'S PROPERTY UPON REMOVAL, UNLESS NOTED OTHERWISE. REMOVED MATERIAL TO BE PROPERLY HANDLED AND DISPOSED.

#### **CLEANING:**

- 1. REMOVE ALL RUBBISH AND DEBRIS FROM INSIDE AND AROUND ELECTRICAL EQUIPMENT AND ENCLOSURES.
- 2. REMOVE DIRT, DUST OR CONCRETE SPATTER FROM INTERIOR AND EXTERIOR OF EQUIPMENT USING BRUSHES, VACUUM CLEANER OR CLEAN LINT-FREE RAGS. DO NOT USE COMPRESSED AIR.

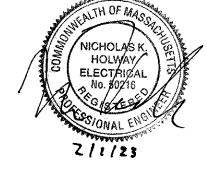
#### DELEGATED DESIGN / PROFESSIONAL ENGINEERING SERVICES:

- 1. WHEN ENGINEERING SERVICES ARE SPECIFIED TO BE PROVIDED BY CONTRACTOR, CONTRACTOR SHALL RETAIN A LICENSED PROFESSIONAL ENGINEER TO PERFORM THE SERVICES. ENGINEER SHALL BE LICENSED AT THE TIME SERVICES ARE PERFORMED AND LICENSED IN THE STATE IN WHICH PROJECT IS LOCATED. IF THE STATE ISSUES DISCIPLINE SPECIFIC LICENSES, ENGINEER SHALL BE LICENSED IN THE APPLICABLE DISCIPLINE. ENGINEER SHALL BE EXPERIENCED IN THE TYPE OF WORK BEING PERFORMED.
- 2. ENGINEERING WORK SHALL BE DONE ACCORDING TO THE APPLICABLE REGULATIONS FOR PROFESSIONAL ENGINEERS TO INCLUDE SIGNING, SEALING AND DATING DOCUMENTS.

#### NEC CLASSIFIED HAZARDOUS AREAS:

- 1. THIS PROJECT INCLUDES NEC CLASSIFIED HAZARDOUS AREA. THE FOLLOWING NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) STANDARDS APPLY:

  1.1. NFPA 820 STANDARD FOR FIRE PROTECTION IN WASTEWATER TREATMENT AND COLLECTION FACILITIES.
- 2. REFER TO SHEET E-3 FOR ADDITIONAL INFORMATION ON CLASSIFICATION BOUNDARIES.
- 3. EQUIPMENT, MATERIALS, AND INSTALLATION SHALL COMPLY WITH NEC ARTICLES 500, 501, 502, AND 503.





CITY OF WATERTOWN, MA

FILIPPELLO PARK SPRAY PAD RENOVATION

**ELECTRICAL GENERAL NOTES** 

PROJECT NO. 56318-26775.

FILE NAME: E001NFNT.DWG

SHEET NO.

E-1

ONE LINE OR CONTROL DIAGRAM	PLAN	DESCRIPTION
) FRAME TRIP	СВ	LOW VOLTAGE AIR OR MOLDED CASE CIRCUIT BREAKER, 3 POLE UNLESS OTHERWISE NOTED.
† 	<b>⊠</b> <sup>⊥</sup>	COMBINATION MOTOR CIRCUIT PROTECTOR AND MAGNETIC MOTOR STARTER, FULL VOLTAGE NON-REVERSING UNLESS OTHERWISE NOTED:  * FVR - FULL VOLTAGE REVERSING RVNR - REDUCED VOLTAGE NON-REVERSING RVAT - REDUCED VOLTAGE AUTOTRANSFORMER  RVSS - REDUCED VOLTAGE SOLID STATE 2S1W - TWO SPEED, ONE WINDING RS2W - TWO SPEED, TWO WINDING (DIAGRAMATICALLY SHOWN, CONTRACTOR SHALL FIELD LOCATE)
<b> </b> /*		NON-FUSIBLE DISCONNECT SWITCH, 600 VOLT, 3 POLE * AMPERE RATING NOTED IF OTHER THAN 30A (DIAGRAMATICALLY SHOWN, CONTRACTOR SHALL FIELD LOCATE)
*	(F)-l	FUSIBLE DISCONNECT SWITCH, 600 VOLT, 3 POLE,  * AMPERE RATING AND FUSE SIZE AS NOTED  * AMPERE RATING NOTED IF OTHER THAN 30A FUSE RATING (DIAGRAMATICALLY SHOWN, CONTRACTOR SHALL FIELD LOCATE)
480V 120/208V 3P, 4W	Т	TRANSFORMER, RATINGS AND CONNECTIONS AS NOTED. UNLESS OTHERWISE NOTED ON THE SINGLE LINE DIAGRAMS, ALL DRY TYPE TRANSFORMERS SERVICING ADMINISTRATIVE AND LABORATORY SPACES SHALL HAVE A K FACTOR OF 4. ISOLATION TRANSFORMERS SHALL HAVE A K-20 RATING
$\bigcirc$	G	GENERATOR, RATINGS AND CONNECTIONS AS NOTED
ATS S 100A	<u></u>	AUTOMATIC OR MANUAL TRANSFER SWITCH NO.1 (ATS-1), (MTS-1) "N" INDICATES NORMAL OR PREFERRED SOURCE "S" INDICATES STANDBY OR ALTERNATE SOURCE 100A INDICATES CONTINUOUS CURRENT RATING
<b>≟</b> #ĸw	Ē	UNIT HEATER — ELECTRIC HEATING COIL AND FAN # — RATING
5	M	MOTOR, NUMERAL INDICATES HORSEPOWER
STOP START	PBL	START-STOP PUSHBUTTON CONTROL STATION (MOMENTARY CONTACT) WITH LOCKOUT DEVICE ON STOP
* A TO 5		CURRENT TRANSFORMER  * QUANTITY A = PRIMARY AMPERES
— <u>*</u>		PILOT LIGHT, COLOR AS NOTED R — RED G — GREEN B — BLUE A — AMBER
A B C* (X00) (0X0) (00X)	*	3 POSITION SELECTOR SWITCH, MAINTAINED CONTACT O-OPEN X-CLOSED  POSITION TOP MIDDLE BOTTOM CONTACT A X O O B O X O C O O X  NAMEPLATE (A/B/C) HOA - HAND/OFF/AUTO
+ +		CONDUCTORS OR CONDUITS CROSSING PATHS BUT NOT CONNECTED
		CONDUCTORS ELECTRICALLY CONNECTED
~ <sup>LA</sup> 0—  I		LIGHTNING ARRESTER
<u>_</u>	•	GROUND OR GROUND ROD
30A		FUSE, AMPERE RATING AS NOTED
		CONTACT, NORMALLY OPEN (NO)
		CONTACT, NORMALLY CLOSED (NC)
		INDICATES LIMITS OF ELECTRICAL EQUIPMENT OR WIRING ENCLOSURE

REMARKS

DRWN | CHKD |

SYMBOL	DESCRIPTION
	HOME RUN TO DESIGNATED EQUIPMENT. BRANCH CIRCUIT CONDUIT WITH 2 NO. 12 AWG BRANCH CIRCUIT CONDUCTORS AND 1 NO. 12 AWG GROUND CONDUCTOR UNLESS OTHERWISE NOTED. NUMBER OF ARROWS INDICATE NUMBER OF CIRCUITS. FOR MINIMUM SIZE CONDUIT PERMITTED REFER TO THE SPECIFICATIONS.
	CONDUIT CONCEALED IN WALL, IN SLAB ABOVE, OR ABOVE CEILING.
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	CONDUIT CONCEALED IN OR BELOW FLOOR OR UNDERGROUND.
	CONDUIT RUN EXPOSED. RUN PARALLEL OR PERPENDICULAR TO STRUCTURE OR WALL.
/ <del>-</del> *-\	'X' INDICATES EXPLOSION PROOF CONDUIT SEAL FITTING.
<del></del> 3	CONDUIT STUBBED OUT AND CAPPED
(2) 3°C., 3#3/0, 1#2G	DENOTES A QUANTITY OF TWO (2) 3-INCH CONDUITS EACH CONTAINING THREE NO. 3/O AWG CONDUCTORS AND 1 NO. 2 AWG GROUND CONDUCTOR.
2-2/C#16 SH	DENOTES A QUANTITY OF TWO INSTRUMENT CABLES. EACH CABLE TO CONSIST OF TWO NO. 16 AWG CONDUCTORS TWISTED TOGETHER AND COVERED WITH A METALLIC SHIELD AND AN OVERALL PROTECTIVE JACKET. REFER TO THE SPECIFICATIONS FOR THE EXACT CABLE TO BE PROVIDED.
2-3/C#16 SH	SAME AS ABOVE EXCEPT CABLE TO CONSIST OF THREE NO. 16 AWG CONDUCTORS TWISTED, SHIELDED AND COVERED WITH AN OVERALL PROTECTIVE JACKET. REFER TO THE SPECIFICATIONS FOR THE EXACT CABLE TO BE PROVIDED.
(3) 4°C.	THREE 4-INCH CONDUITS
	'X' INDICATES CONDUIT SEAL FITTING IN OTHER THAN CODE REQUIRED LOCATIONS.
	INDICATES MOTOR STARTER AND/OR MOTOR CONTROL EQUIPMENT WITHIN THE ENCLOSURE.
	LIGHTING PANELBOARD (LP-#) SHOWN ON PLAN PER ACTUAL PANEL DIMENSIONS
	POWER PANELBOARD (PP-#) OR DISTRIBUTION PANELBOARD (DP-#) SHOWN ON PLAN PER ACTUAL PANEL DIMENSIONS
*⊕	DUPLEX RECEPTACLE, 20A, 120V, 2P, 3W  * GFCI — GROUND FAULT CIRCUIT INTERRUPTER TYPE WP — WEATHERPROOF T — TRANSIENT VOLTAGE SURGE SUPPRESSOR IC — ISOLATED GROUND 4 — CIRCUIT NUMBER
J OR 🛈	JUNCTION BOX
A 2 3 b	INCANDESCENT, COMPACT FLUORESCENT OR H.I.D. TYPE LIGHTING FIXTURE  "A" — FIXTURE TYPE (SEE LIGHTING FIXTURE SCHEDULE)  "b" — CONTROLLED BY SWITCH "b"  "3" — CIRCUIT NUMBER
AM <sub>b</sub>	WALL MOUNTED INCANDESCENT, COMPACT FLUORESCENT OR H.I.D. TYPE LIGHTING FIXTURE, NOTATIONS SAME AS ABOVE
<u>^</u> -\_3	POLE MOUNTED AREA TYPE LIGHTING FIXTURE, NOTATIONS SAME AS ABOVE
Ø <sup>-A</sup> □ <sup>3</sup>	POLE MOUNTED ROADWAY TYPE LIGHTING FIXTURE, NOTATIONS SAME AS ABOVE
C	LIGHTING CONTACTOR
EM 3 (*)	EMERGENCY LIGHTING BATTERY UNIT WITH TWO LAMP HEADS "EM" — FIXTURE TYPE (SEE LIGHTING FIXTURE SCHEDULE) "3" — SUPERVISORY CIRCUIT  * — FIXTURE TAG #
(////	INDICATED EQUIPMENT AND MATERIALS TO BE DEMOLISHED
DAMP OR WET	INDICATES THAT ALL ELECTRICAL EQUIPMENT AND MATERIALS INSTALLED WITHIN THE ROOM OR AREA IN WHICH THIS NOTATION APPEARS SHALL BE OF NEMA 4X CONSTRUCTION (OR GASKETED AND SUITABLE FOR USE IN A WET LOCATION WHERE NEMA STANDARDS DO NOT APPLY) UNLESS OTHERWISE NOTED.
CORROSIVE	INDICATES THAT ALL ELECTRICAL EQUIPMENT AND MATERIALS INSTALLED WITHIN THE ROOM OR AREA IN WHICH THIS NOTATION APPEARS SHALL BE OF NEMA 4X CONSTRUCTION (OR CORROSION RESISTANT CONSTRUCTION SUITABLE FOR USE IN A WET LOCATION WHERE NEMA STANDARDS DO NOT APPLY) UNLESS OTHERWISE NOTED.
CLASS I, DIV. 1 GROUP D	INDICATES THAT ALL ELECTRICAL EQUIPMENT AND MATERIALS INSTALLED WITHIN THE ROOM OR AREA IN WHICH THIS NOTATION APPEARS SHALL CONFORM TO N.E.C. REQUIREMENTS FOR THE HAZARDOUS AREA CLASSIFICATION SHOWN.
	GROUND SYSTEM GRID OR LOOP, 36" BELOW FINISHED GRADE UNLESS OTHERWISE NOTED.
	FIELD INSTRUMENT (SEE ABBREVIATION LIST FOR TAG DEFINITIONS)
<b>O</b>	3/4" x 10'-0" GROUND ROD. UNLESS SPECIFIED OTHERWISE.
X S	MOTOR OPERATED VALVE OR GATE

	ABBREVIATIONS
A	AMPS
AC	ALTERNATING CURRENT
AE	ANALYZER ELEMENT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AIT	ANALYZER INDICATOR TRANSMITTER
AL	ALUMINUM
AIC	AMPERE INTERRUPTING CAPACITY
AMP	AMPERE
ATS	AUTOMATIC TRANSFER SWITCH
AUTO	AUTOMATIC
AUX	AUXILIARY
AWG	AMERICAN WIRE GAUGE
BKR	BREAKER
BLDG	BUILDING
C	CONDUIT
CB	CIRCUIT BREAKER
CGD	COMBUSTIBLE GAS DETECTOR
CKT	CIRCUIT
CLB	CURRENT LIMITING BREAKER
CLF	CURRENT LIMITING FUSE
CP	CONTROL PANEL
CPT	CONTROL POWER TRANSFORMER
CR	CONTROL RELAY
CS	CONTROL SWITCH/CONTROL STATION
CT	CURRENT TRANSFORMER
CU	COPPER
CWS	CONDUIT WALL SEAL
DC	DIRECT CURRENT
DIA	DIAMETER
DMU	DIGITAL METERING UNIT
DN	DOWN
EC	EMPTY CONDUIT
ELEC	ELECTRICAL
ELEV	ELEVATION
EM	EMERGENCY
ENCL	ENCLOSURE OR ENCLOSED
EQUIP	EQUIPMENT
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
<b>EX</b>	EXISTING
FE	FLOW ELEMENT
FIT	FLOW INDICATING TRANSMITTER
FO	FIBER OPTIC

FS	FLOW SWITCH		
FU	FUSE		
GCP	GENERATOR CONTROL PANEL GENERATOR GROUND		
GEN			
G, GND			
GFI	GROUND FAULT INTERRUPTER		
GRS	GALVANIZED RIGID STEEL		
HACR	HEATING & AIR CONDITIONING RATE		
HH	HANDHOLE		
HT	HEIGHT HIGH INTENSITY DISCHARGE HORSEPOWER		
HID			
HP			
HZ	HERTZ INDIVIDUAL ADDRESSABLE MODULE		
IAM			
ID	IDENTIFICATION		
INSTR	INSTRUMENT		
ISR	INTRINSICALLY SAFE RELAY		
K	KILO (PREFIX)		
kcmil	1000 CIRCULAR MILS		
KVA	KILOVOLT AMPERES		
KW	KILOWATTS		
LA	LIGHTING ARRESTER  LEVEL ELEMENT  LEVEL INDICATING TRANSMITTER  LIGHTING		
LE			
LIT			
LTG			
LP	LIGHTING PANEL		
LV	LOW VOLTAGE		
MAX	MAXIMUM  MAIN CIRCUIT BREAKER		
MCB			
MCC	MOTOR CONTROL CENTER  MOTOR CIRCUIT PROTECTOR  MAIN DISTRIBUTION PANEL		
MCP			
MDP			
MFR	MANUFACTURER		
MH	MANHOLE		
MIN	MINIMUM		
MLO	MAIN LUGS ONLY		
MTD	MOUNTED		
MTS	MANUAL TRANSFER SWITCH		
MV	MEDIUM VOLTAGE		
N	NEUTRAL		
NC	NORMALLY CLOSED		
NO	NORMALLY OPEN OR NUMBER		
NTS	NOT TO SCALE		
OH	OVERHEAD		

OL	OVERLOAD
PB	PULL BOX
PCP	PUMP CONTROL PANEL
PH	PHASE
PMH	POWER MANHOLE
PNL	PANEL OR PANELBOARD
PLC	PROGRAMMABLE LOGIC CONTROLL
PR	PAIR
PRI	PRIMARY
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE
RECPT	RECEPTACLE
REQD	REQUIRED
QTY	QUANTITY
SA	SURGE ARRESTER
SEC	SECONDS OR SECONDARY
SH	SHIELDED OR SPACE HEATER
SHH	SIGNAL HANDHOLE
SPD	SURGE PROTECTIVE DEVICE
SS	STAINLESS STEEL
SV	SOLENOID VALVE
SW	SWITCH
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
TC	TIME TO CLOSE OR TRAY CABLE
TEL	TELEPHONE
TO	TIME TO OPEN
TVSS	TRANSIENT VOLTAGE SURGE SUPRESSOR
<b>TS</b>	TWISTED SHIELDED OR THERMAL SWITCH
TYP	TYPICAL
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTIBLE POWER SUPPLY
	VOLTS
VA	VOLT AMPS
VF	VENTILATION FAILURE
VFD	VARIABLE FREQUENCY DRIVE
W	WATTS, WIDTH, WITH, WIRE
WP	WEATHERPROOF
XP	EXPLOSION PROOF
XFMR	TRANSFORMER

- 1. IN GENERAL CONDUIT ROUTING FOR EQUIPMENT AND DEVICES IS NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ROUTING ALL CONDUITS WHICH SHALL INCLUDE CONDUITS SHOWN ON ONE-LINE AND RISER DIAGRAMS AND HOME-RUNS SHOWN ON PLAN DRAWINGS. REFER TO SPECIFICATIONS FOR MATERIALS AND INSTALLATION REQUIREMENTS.
- 2. THE WIRING DIAGRAMS AND THE QUANTITY AND SIZE OF WIRES AND CONDUITS REPRESENT A SUGGESTED ARRANGEMENT BASED UPON SELECTED STANDARD COMPONENTS OF ELECTRICAL EQUIPMENT. MODIFICATIONS ACCEPTABLE TO THE ENGINEER MAY BE MADE BY THE CONTRACTOR TO ACCOMMODATE EQUIPMENT ACTUALLY PURCHASED. THE BASIC SEQUENCE AND METHOD OF CONTROL AS INDICATED ON THE DRAWING AND/OR IN THE SPECIFICATIONS MUST BE MAINTAINED.
- 3. INSTRUMENTATION AND CONTROL RISER DIAGRAMS: POWER, CONTROL, SIGNAL, AND DATA HIGHWAY WIRING REQUIREMENTS FOR INSTRUMENTS AND CONTROL DEVICES CONTROLLED/MONITORED FROM INSTRUMENTATION AND CONTROL PANELS SUCH AS RTUs, PLCs, TERMINAL CABINETS, AND REMOTE I/O PANELS ARE TYPICALLY SHOWN ON THE INSTRUMENTATION AND CONTROL ONE LINE DIAGRAMS. THE PARAMETERS TYPICALLY IDENTIFIED ON THE ONE LINE DIAGRAMS ARE: CIRCUIT IDENTIFICATION, CIRCUIT ORIGIN AND DESTINATION, CONDUIT SIZE, WIRE SIZE, QUANTITY AND TYPE FOR COMPLETE CIRCUIT LENGTH, AND AUXILIARY DEVICES ASSOCIATED WITH THE CONTROL/PROTECTION OF THE POWERED EQUIPMENT.
- 4. FLOOR PLANS: FOR DETERMINING THE LENGTH OF CIRCUITS LOCATED WITHIN STRUCTURES, FLOOR PLANS SHOW THE LOCATION OF ELECTRICAL DISTRIBUTION EQUIPMENT, CONTROL PANELS, UTILIZATION EQUIPMENT, INSTRUMENTS, ANCILLARY EQUIPMENT AND DEVICES AND THE ANTICIPATED PENETRATION LOCATIONS WHERE CONDUITS EXIT/ENTER THE STRUCTURE. HOMERUNS MAY ALSO BE SHOWN FROM MISCELLANEOUS EQUIPMENT NOT SHOWN ON A ONE LINE OR RISER DIAGRAM.
- 5. SITE PLANS: FOR DETERMINING THE LENGTH OF CIRCUITS EXTERIOR TO STRUCTURES AND TO IDENTIFY THE SPECIFIC REQUIREMENTS OF THE UNDERGROUND CONDUITS OR DUCT BANKS, SITE PLANS SHOW THE GENERAL ROUTING OF UNDERGROUND CONDUITS AND DUCT BANKS WITH SECTIONS INDICATING THE CONDUIT SIZE, ARRANGEMENT, AND CIRCUIT ROUTING.

GENERAL NOTE

THIS IS A STANDARD LEGEND

SOME SYMBOLS MAY NOT APPEAR ON THE DRAWINGS.



- SHEET NO. WHERE DETAIL IS DRAWN

SYMBOL WHERE THERE IS A DETAIL

**DETAIL** 

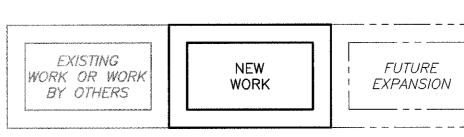
WHERE THERE IS A DETAIL

SYMBOL WHERE DETAIL IS DRAWN DETAIL SYMBOL

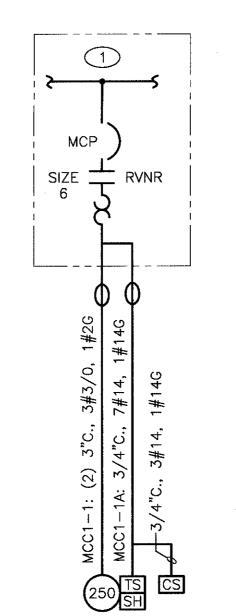
SYMBOL WHERE THERE IS A SECTION

**SECTION** WHERE SECTION IS TAKEN SYMBOL WHERE SECTION IS DRAWN

SECTION SYMBOL



#### EXISTING, NEW OR FUTURE CONDITION DESIGNATION



partially located underground. CONDUIT SIZE SHOWN INDICATES THE SIZE WITHIN STRUCTURE. UNDERGROUND CONDUIT SIZE IS SHOWN ON DUCT BANK SECTIONS.

MCC1-1: (2) 3"C., 3#3/0, 1#2G DENOTES A QUANTITY OF TWO (2) 3-INCH CONDUITS EACH CONTAINING THREE NO. 3/0 AWG CONDUCTORS AND 1 NO. 2 AWG GROUND CONDUCTOR, FROM NEMA SIZE 6 STARTER IN MCC-1 TO 250HP MOTOR LOAD.

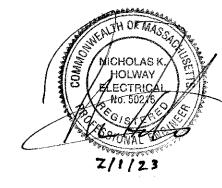
MCC1-1A: 3/4"C., 7#14, 1#14G DENOTES ONE 3/4-INCH CONDUIT CONTAINING SEVEN NO. 14 AWG CONTROL CONDUCTORS AND 1 NO. 14 AWG GROUND CONDUCTOR.

MCC1-1 AND MCC1-1A: DENOTES CONDUIT IDENTIFICATION (ID) (TYPICAL)

1. PROTECTIVE/CONTROL DEVICE AS SHOWN.

CONTROL/AUXILIARY DEVICES AT OR NEAR EQUIPMENT. EQUIPMENT SHALL BE INSTALLED AND WIRED AS REQUIRED BY EQUIPMENT FURNISHED AND/OR CONTROL DIAGRAM.

TYPICAL ONE LINE BLOCK SHOWING POWER AND CONTROL TO EQUIPMENT.



C. CASTEE J. SANCHEZ N. HOLWAY

FEBRUARY 2023

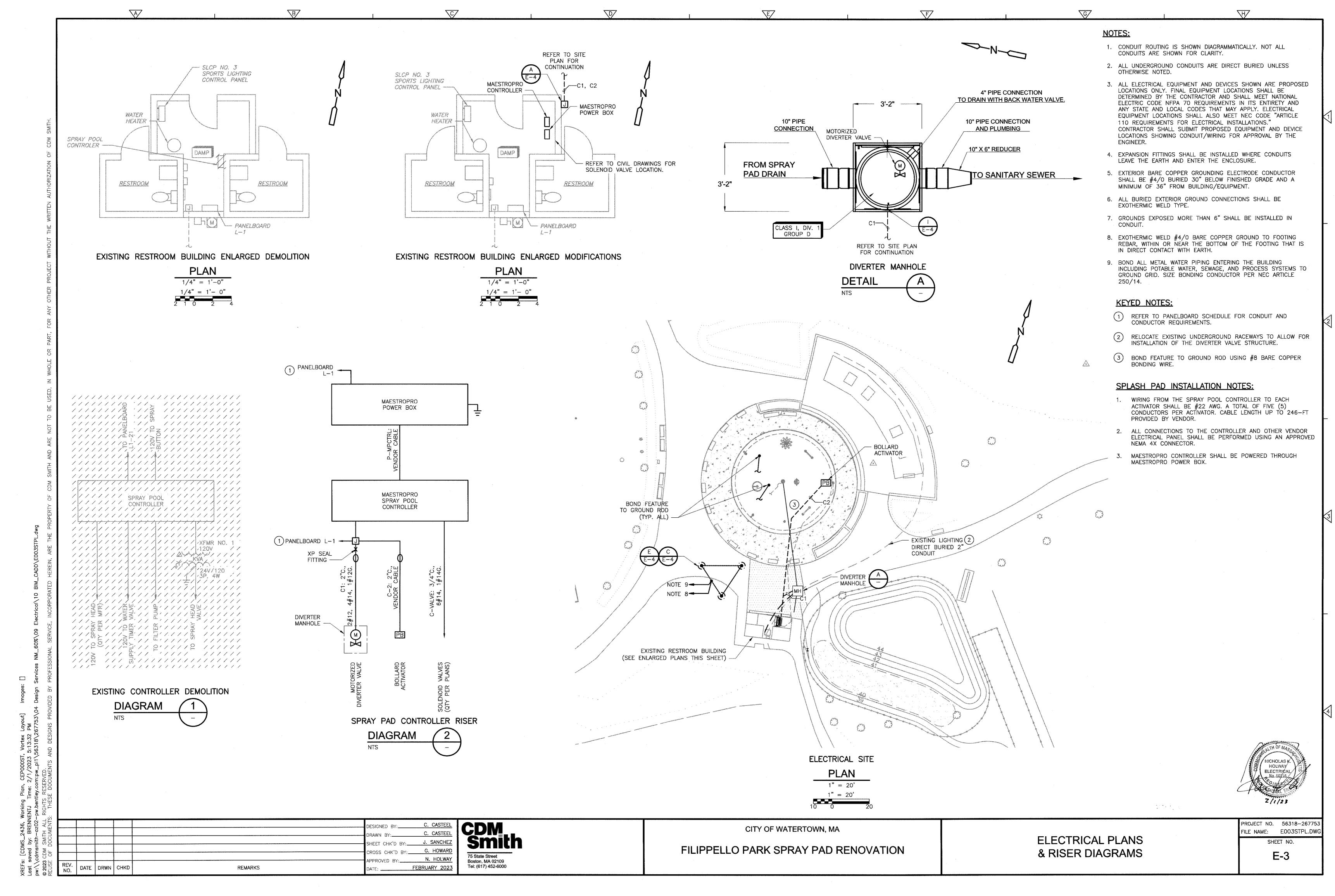
Boston, MA 02109 Tel: (617) 452-6000 CITY OF WATERTOWN, MA

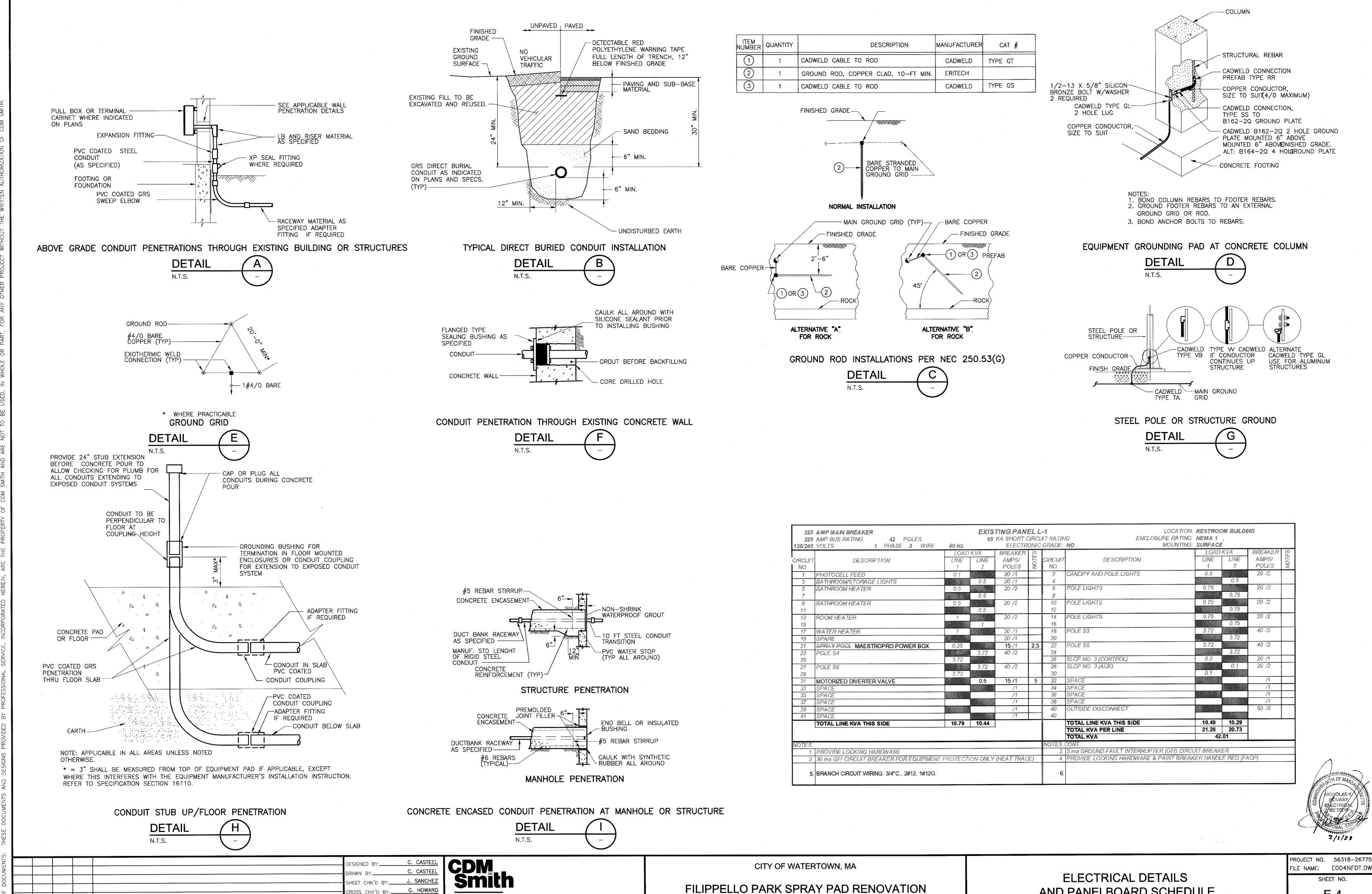
FILIPPELLO PARK SPRAY PAD RENOVATION

**ELECTRICAL LEGEND** 

PROJECT NO. 56318-267753 FILE NAME: E002NFLG.DW SHEET NO.

E-2





G. HOWARD

N. HOLWAY

FEBRUARY 2023

REMARKS

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AND PANELBOARD SCHEDULE