

SCOTT J. CRISAFULLI HIGHWAY SURVEYOR



JANUARY, 2025

ATED APRIL

PROJECT FUNDING ASSISTANCE PROVIDED BY:

PRE-DISASTER MITIGATION GRANT PROGRAM (PDM)

"A Federal, State, and Local Partnership through the Federal Emergency Management Agency (FEMA)"

PDM GRANT NUMBER PDMC-PJ-01-MA-2019-004

Commonwealth of Massachusetts MAURA HEALEY, GOVERNOR

Massachusetts Emergency Management Agency DAWN BRANTLEY, DIRECTOR



ELIZABETH MAININI, P.E.

TOWN ENGINEER

INDEX TO PLAN SHEETS

SHEET NUMBER TITLE

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1.	 Existing Conditions Plan (West Street to Water Street)
2.	 Proposed Sediment, Erosion and Water Control Plan
3.	 Sediment, Erosion and Water Control Plan Notes and Details
4.	 Demolition Plan and Existing Channel Centerline Profile (West Street to Water Street)
5.	 Proposed Site Plan and Proposed Channel Layout Plan (West Street to Church Street)
6.	 Proposed Site Plan and Proposed Channel Layout Plan (Church Street to Water Street)
7.	 Profile - Proposed Channel Construction Baseline
8.	 Profile - Top of Proposed Cast-In-Place Channel Wall Cap
9.	 Proposed Culvert Profile and Details
10.	 Channel Details
11.	 Site Details
12.	 Wetland Resource Areas and Proposed Restoration Plan



Engineers and Scientists

GZA GeoEnvironmental, Inc.



ONE FINANCIAL PLAZA 1350 Main Street, Suite 1400 Springfield, MA 01103 413-726-2100



9. WHERE LINES OR STRUCTURES ARE ABANDONED IN PLACE, THE CONTRACTOR SHALL ENSURE THAT ALL CONNECTING PIPES, INLETS, AND OUTLETS ARE PLUGGED. ALL LIVE CONNECTIONS SHALL BE CONNECTED TO NEW WORK TO THE SATISFACTION OF THE ENGINEER.

NOTE: REFERENCES TO LEFT AND RIGHT ALONG CHANNEL ARE FACING DOWNSTREAM (SOUTH).

INV. 12"=311.17 TO UNKNOWN LOC.	$\begin{array}{c} + \frac{1}{2} \\ + \frac{1}{2} \\$
ASIND MASONRY WALLS-GRAVE/ DOLTON CONTROL OF THE SIZE	EX. [CB RIM=309.64 INV. 15" OUT=306.09 EX. SMH RIM=309.97 INV. 8"IN =303.01 EX. DMH RIM=309.87 INV. 15" IN=305.89 INV. 15" OUT=305.89
CCHURCH STREE	
EXISTING CONDITIONS	
	LEGEND ●#A20 ↓
LE FRAMES AND GRATES/COVERS SHALL HE PRECAST STRUCTURES.	* * * * *
TS ARE TO THE CENTER POINT OF THE PROP.	D D
PRIVATE WALKS AND DRIVEWAYS SHALL BE INE OR EXPANSION JOINT IN THE EXISTING Y THE ENGINEER. PROPOSED CEMENT MOVAL OF EXISTING SIDEWALK SURFACES.	S S G W
THE LATEST REQUIREMENTS OF THE	OHW

EX. SMH RIM=310.42 -

INV.=303.42

INV. 2"=308.97

SUMP PUMP TIE-IN

INV. 1.5"=311.58

EX. DMH RIM=310.11

INV. 24" IN=305.72

EXISTING CURB EXISTING FENCE EXISTING GAS LINE CONTRACT CONTRACTACT EXISTING TREE EXISTING BOLLARD EXISTING HYDRANT EXISTING GAS VALVE

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SEDIMENT	AND	EROSION CONTROL	NOTES

1. SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE. 2. THE CONTRACTOR SHALL CONSTRUCT ALL EROSION AND SEDIMENT CONTROL MEASURES PER THE SEDIMENT AND EROSION CONTROL (S&EC) PLAN PRIOR TO BEGINNING ANY LAND DISTURBANCE FOR THAT PHASE OF THE WORK. SHALL ENSURE THAT ALL RUNOFF FROM DISTURBED AREAS IS DIRECTED TO THE SEDIMENT CONTROL DEVICES. AND SHALL NOT REMOVE ANY EROSION OR SEDIMENT CONTROL MEASURES UNTIL THE AREAS DRAINING TO THEM ARE FINAL STABILIZED. THE CONTRACTOR SHALL INSPECT DAILY AND MAINTAIN CONTINUOUSLY IN EFFECTIVE OPERATING CONDITION ALL EROSION AND SEDIMENT CONTROL MEASURES UNTIL SUCH TIME AS THEY ARE REMOVED. CONDUCT INSPECTIONS AND REPORTING IN ACCORDANCE WITH ALL PERMITS. 3. ALL CATCH BASINS OR OTHER DRAIN INLETS WHICH MAY RECEIVE STORMWATER FROM DISTURBED AREAS SHALL BE PROVIDED WITH SUITABLE INLET PROTECTION CONSISTING OF AN OPEN-TOP FILTER FABRIC BAG THAT IS DESIGNED TO HANG UNDERNEATH A STORM GRATE TO FILTER SEDIMENT-LADEN STORMWATER. THE FILTER FABRIC BAGS SHALL BE INSPECTED WEEKLY AND AFTER EACH RAIN EVENT, AND CLEANED AND MAINTAINED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. ADDITIONAL INLET PROTECTION MAY BE PROVIDED AS APPROPRIATE BY SURROUNDING THE CATCH BASIN WITH STRAWBALES. 4. THE SEDIMENT AND EROSION CONTROL MEASURES AND BEST MANAGEMENT PRACTICES (BMPS) SHOWN ON THIS PLAN SHALL BE CONSIDERED AS MINIMUM REQUIREMENTS. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION. THE CONTRACTOR SHALL IMPLEMENT APPROPRIATE BMPS TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION. THE CONTRACTOR SHALL INSTALL AND MAINTAIN, AT NO ADDITIONAL COST TO THE OWNER, ANY ADDITIONAL EROSION CONTROL MEASURES DEEMED NECESSARY FOR PERMIT COMPLIANCE BY THE CONTRACTOR, THE OWNER, AND/OR THEIR REPRESENTATIVES, OR BY FEDERAL/STATE/LOCAL GOVERNMENT INSPECTORS. 5. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH APPLICABLE PUBLISHED STANDARDS AND SPECIFICATIONS AND THE "MASSACHUSETTS EROSION AND SEDIMENT CONTROL GUIDELINES FOR URBAN AND SUBURBAN AREAS: A GUIDE FOR PLANNERS, DESIGNERS, AND MUNICIPAL OFFICIALS" (MADEP, 2003). 6. CONSTRUCTION ENTRANCE(S) SHALL BE INSTALLED CONCURRENTLY WITH THE INITIATION OF CLEARING AND GRUBBING OPERATIONS. THE CONTRACTOR SHALL PROTECT ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS, INCLUDING AT STAGING AREAS, TO PREVENT THE DEPOSITION OF MATERIALS ONTO TRAVERSED PUBLIC THOROUGHFARES. ALL MATERIALS DEPOSITED ONTO PUBLIC THOROUGHFARES SHALL BE REMOVED IMMEDIATELY. ALL STAGING AREAS SHALL BE SURROUNDED BY SEDIMENT CONTROL BARRIER. 7. THE CONTRACTOR SHALL BEGIN TO APPLY SOD, SEED AND ANCHORED STRAW MULCH, OR OTHER APPROVED STABILIZATION MEASURES TO ALL DISTURBED AREAS IMMEDIATELY AFTER STRIPPING AND GRADING ACTIVITIES HAVE CEASED ON THAT AREA AND SHALL COMPLETE STABILIZATION ACTIVITIES WITHIN FOURTEEN (14) CALENDAR DAYS. MAINTENANCE SHALL BE PERFORMED TO ENSURE CONTINUED STABILIZATION. ACTIVE CONSTRUCTION AREAS, SUCH AS BORROW OR STOCKPILE AREAS, ROADWAY IMPROVEMENTS, AND AREAS WITHIN 50 FEET OF A BUILDING UNDER CONSTRUCTION MAY BE EXEMPTED FROM THIS REQUIREMENT, PROVIDED THAT OTHER APPROPRIATE SEDIMENT AND EROSION CONTROL MEASURES ARE INSTALLED AND MAINTAINED TO PROTECT AND PROVIDE SEDIMENT CONTROL FROM THOSE AREAS. 8. ALL STOCKPILES SHALL BE SURROUNDED BY SEDIMENT CONTROL BARRIER. STOCKPILES WHICH WILL NOT BE USED FOR A PERIOD OF FOURTEEN (14) OR MORE CALENDAR DAYS SHALL BE COVERED, STABILIZED THROUGH THE APPLICATION OR SOD, SEED, AND ANCHORED STRAW MULCH, COVERS, OR OTHER APPROVED STABILIZATION MEASURES. 9. EFFLUENT FROM DEWATERING OPERATIONS AND LINE FLUSHING DISCHARGES SHALL BE DIRECTED ONTO FIBER MATS, STONE/RIPRAP, NETTING, OR NATURALLY OCCURRING GROUND COVER TO MINIMIZE EROSION. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE PUMPED TO SEDIMENT TANKS, GEOTEXTILE SEDIMENT BAGS, SEDIMENT TRAPS, OR OTHER APPROVED SEDIMENT REMOVAL CONTROL MEASURE FOR SEDIMENT REMOVAL. DEWATERING SHALL BE PERFORMED IN ACCORDANCE WITH THE "MASSACHUSETTS EROSION AND SEDIMENT CONTROL GUIDELINES FOR URBAN AND SUBURBAN AREAS: A GUIDE FOR PLANNERS, DESIGNERS, AND MUNICIPAL OFFICIALS" (MADEP, 2003) AND IN A MANNER THAT DOES NOT ADVERSELY AFFECT AREAS OUTSIDE OF THE LIMIT OF WORK. 10. SEDIMENT TRAPPING/FILTERING BMPS SHALL BE CLEANED OUT WHEN THE SEDIMENT ACCUMULATES TO ONE HALF THE HEIGHT OF THE BMP, AT A MINIMUM 11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING, CALCIUM CHLORIDE, AND/OR OTHER EFFECTIVE MEANS OF CONTROL. 12. ALL WASTE MATERIALS GENERATED AT THE SITE SHALL BE IMMEDIATELY REMOVED AND DISPOSED OF OR STORED IN A SECURELY COVERED CONTAINER IN ACCORDANCE WITH PROJECT PERMITS AND LOCAL AND STATE REGULATIONS. CONTAINER SHALL BE EMPTIED ON A REGULAR BASIS AND AS NEEDED. NO CONSTRUCTION WASTE OR DEBRIS SHALL BE BURIED ONSITE. 13. PRIOR TO REMOVAL OF SEDIMENT CONTROL MEASURES, THE CONTRACTOR SHALL STABILIZE ALL CONTRIBUTORY DISTURBED AREAS USING SOD OR AN APPROVED PERMANENT SEED MIXTURE WITH REQUIRED SOIL AMENDMENTS AND AN APPROVED ANCHORED MULCH. AREAS BROUGHT TO FINISHED GRADE DURING THE SEEDING SEASON SHALL BE PERMANENTLY STABILIZED WITHIN FOURTEEN (14) CALENDAR DAYS OF COMPLETION OF WORK. AREAS BROUGHT TO GRADE DURING THE MONTHS WHEN PERMANENT STABILIZATION IS FOUND TO BE IMPRACTICAL SHALL BE STABILIZED WITH AN APPROVED TEMPORARY SEED AND ANCHORED MULCH OR OTHER ACCEPTABLE MEANS AND PERMANENTLY STABILIZED DURING THE SEEDING SEASON. 14. TEMPORARY SEDIMENT CONTROL DEVICES SHALL BE REMOVED WITHIN THIRTY (30) CALENDAR DAYS FOLLOWING ESTABLISHMENT OF PERMANENT STABILIZATION IN ALL CONTRIBUTORY DRAINAGE AREAS. STORMWATER MANAGEMENT STRUCTURES USED TEMPORARILY FOR SEDIMENT CONTROL SHALL BE CLEANED AND CONVERTED TO THEIR PERMANENT CONFIGURATION WITHIN THIS TIME PERIOD AS WELL. ALL STORM DRAINAGE STRUCTURES, SUMPS, AND PIPES SHALL BE CLEANED OF ALL SEDIMENTS PRIOR TO FINAL PAYMENT. SEDIMENT CONTROL BARRIER MAY CONSIST OF STRAWBALE SILT BARRIER, SILT FENCE, OR COMPOST FILTER TUBE, OR EQUAL ISSUE/DESCRIPTION DATE INLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT. THIS DRAWING IS THE SOLE PROPERTY OF GZA GEOENVIRONMENTAL, INC. (GZA). THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR JSE BY GZA'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSE OPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER URPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF GZA. ANY TRANSFER, REUSE, OR MODIFICATION NDREW O THE DRAWING BY THE CLIENT OR OTHERS, WITHOUT THE PRIOR WRITTEN EXPRESS CONSENT OF CIVIL gza, will be at the user's sole risk and without any risk or liability to gza GODFREY BROOK CAPACITY IMPROVEMENTS PROJECT

ROSALIE T

STARVISH

CIVIL

No. 46718

MILFORD, MASSACHUSETTS

SEDIMENT, EROSION AND WATER CONTROL PLAN NOTES AND DETAILS

	PREPARED BY:		PREPARED FOR:		
)	GZA Geo	Environmental, Inc. ww.gza.com	MILFORD TOWN HALL 52 MAIN STREET MILFORD, MA 01757		
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<u>SITE PLAN LEGE</u>	<u>ND</u>
	EXISTING EDGE OF PAVEMENT
	EXISTING CURB
	EXISTING PROPERTY LINE
	EXISTING 5 FT. CONTOUR
	EXISTING 1 FT. CONTOUR
	EXISTING FENCE
	EXISTING GUARDRAIL
D D	EXISTING STORM DRAIN LINE
S S	EXISTING SANITARY SEWER LINE
G	EXISTING GAS LINE
W	EXISTING WATER LINE
OHW	EXISTING OVERHEAD WIRES
$\frown \frown $	EXISTING TREE LINE
8	EXISTING TREE
逶	EXISTING TREE TO BE REMOVED
٠	EXISTING BOLLARD
H	EXISTING CATCH BASIN
Ø	EXISTING DRAIN MANHOL
S	EXISTING SANITARY MANHOLE
ۍ	EXISTING UTILITY POLE
žť	EXISTING HYDRANT
Ť	EXISTING WATER SERVICE SHUT OFF
by b	EXISTING WATER GATE
ev N	EXISTING GAS VALVE
زھ)	EXISTING TREE PROTECTION
	EXISTING CHANNEL WALL TO BE REMOVED TO 1-FT BELOW FINISHED GRADE
	REMOVE AND DISPOSE OF EXISTING CHANNEL WALL
	EXISTING CHANNEL CENTERLINE STATIONING







SITE PLAN LEGEND

EXISTING EDGE OF PAVEMENT	⊞	EXISTING CATCH BASIN
EXISTING CURB	\bigcirc	EXISTING DRAIN MANHOLE
	S	EXISTING SANITARY MANHOLE
EXISTING 5 FT. CONTOUR	C)	EXISTING UTILITY POLE
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W EXISTING WATER LINE		PROPOSED STORM DRAIN LINE
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	PROPOSED CHANNEL LAYOUT PLAN					
			(CHURCH STREET	TO WATER STREET)	
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	GODFREY BROOK CAPACITY IMPROVEMENTS PROJECT MILFORD, MASSACHUSETTS					
	PROFILE - TOP OF PROPOSED CAST-IN-PLACE CHANNEL WALL CAP					
PREP/	ARED BY:			PREPARED FOR:		
GZ	GZA GeoEnvironmental, Inc. www.gza.com GZA GeoEnvironmental, Inc. MILFORD TOWN HALL 52 MAIN STREET MILFORD, MA 01757					HALL ET 1757
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PROFILE LEGEND
— — — — — — EXISTING GRADE LEFT OF PROPOSED CHANNEL
EXISTING GRADE RIGHT OF PROPOSED CHANNEL

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 —
 EXISTING GRADE AT PROPOSED CHANNEL CENTERLINE

 PROPOSED CHANNEL CENTERLINE GRADE

 (TOP OF PROPOSED STREAMBED)

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