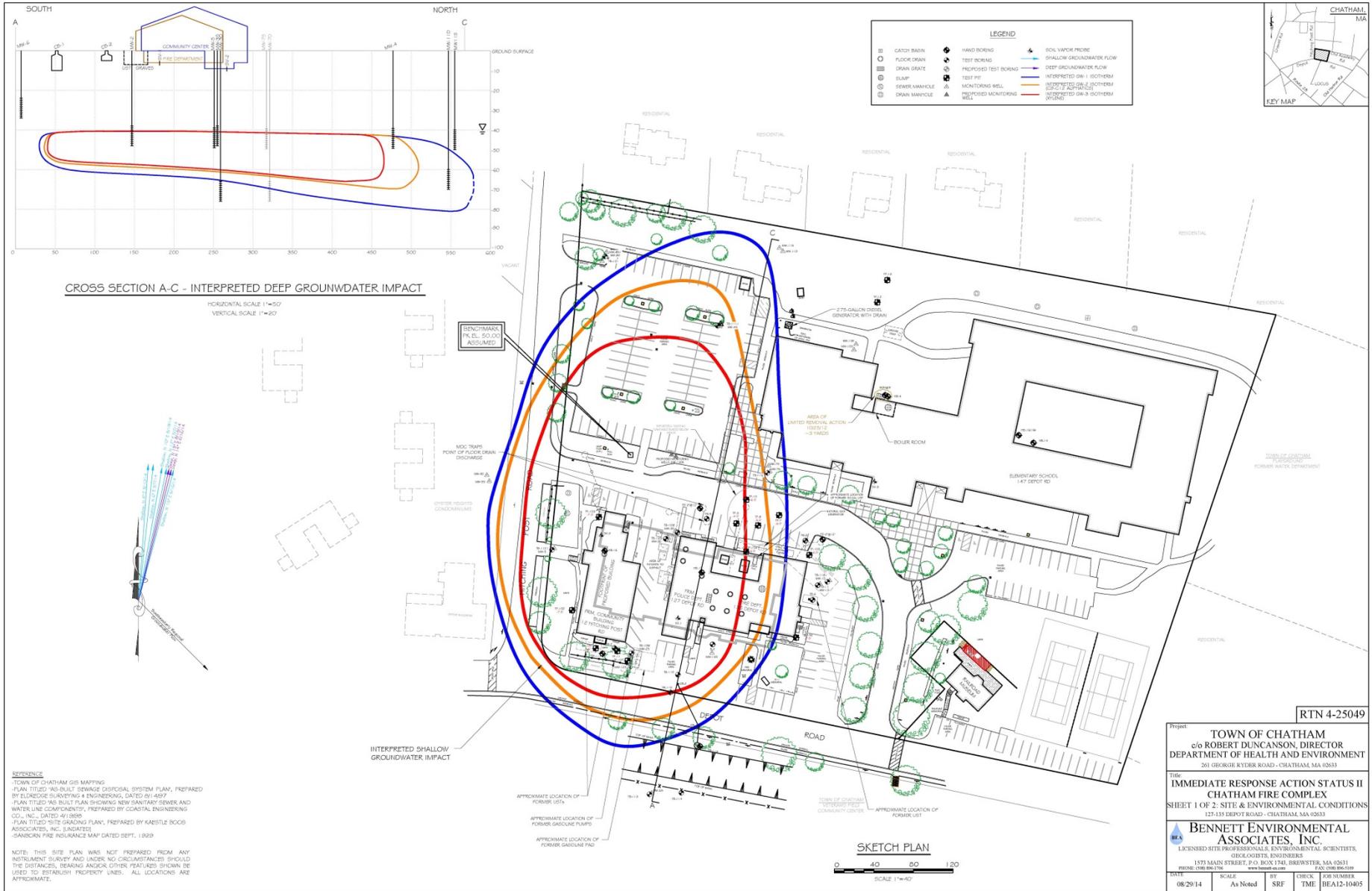


Fire Department Site Hazardous Materials Remediation





CROSS SECTION A-C - INTERPRETED DEEP GROUNDWATER IMPACT

HORIZONTAL SCALE 1"=50'
VERTICAL SCALE 1"=20'

LEGEND	
☐	CATCH BASIN
□	FLOOR DRAIN
⊖	DRAIN GRATE
⊙	SLUMP
⊕	SEWER MANHOLE
⊗	DRAIN MANHOLE
⊕	HAND BORING
⊖	TEST BORING
⊕	PROPOSED TEST BORING
⊖	TEST PIPE
⊕	MONITORING WELL
⊖	PROPOSED MONITORING WELL
—	SOIL VAPOR PROFILE
—	SHALLOW GROUNDWATER FLOW
—	DEEP GROUNDWATER FLOW
—	INTERPRETED GW-1 (ISOTHERM 100°F)
—	INTERPRETED GW-2 (ISOTHERM 110°F)
—	INTERPRETED GW-3 (ISOTHERM 120°F)



REFERENCE
 TOWN OF CHATHAM GIS MAPPING
 PLAN TITLED "AS-BUILT SEWER DISPOSAL SYSTEM PLAN, PREPARED BY ELKEDGEE SURVEYING & ENGINEERING, DATED 01/4/97"
 PLAN TITLED "AS-BUILT PLAN SHOWING NEW SANITARY SEWER AND WATER LINE COMPONENTS", PREPARED BY COASTAL ENGINEERING CO., INC., DATED 01/08/08
 PLAN TITLED "SITE GRADING PLAN, PREPARED BY KAESTLE BOOB ASSOCIATES, INC. (SARGATES)
 SANDORFF FIRE INSURANCE MAP DATED SEPT., 1929

NOTE: THIS SITE PLAN WAS NOT PREPARED FROM ANY INSTRUMENT SURVEY AND UNDER NO CIRCUMSTANCES SHOULD THE DISTANCES, BEARINGS AND/OR OTHER FEATURES SHOWN BE USED TO ESTABLISH PROPERTY LINES. ALL LOCATIONS ARE APPROXIMATE.

RTN 4-25049

Project: TOWN OF CHATHAM
 c/o ROBERT DUNCANSON, DIRECTOR
 DEPARTMENT OF HEALTH AND ENVIRONMENT
 261 GEORGE RYDER ROAD - CHATHAM, MA 02633

Title: IMMEDIATE RESPONSE ACTION STATUS II
 CHATHAM FIRE COMPLEX
 SHEET 1 OF 2: SITE & ENVIRONMENTAL CONDITIONS
 121.13 DEPOT ROAD - CHATHAM, MA 02633

BENNETT ENVIRONMENTAL ASSOCIATES, INC.
 LICENSED SITE PROFESSIONALS/ENVIRONMENTAL SCIENTISTS
 GEOLOGISTS, ENGINEERS
 1575 MAIN STREET, P.O. BOX 1340, BOSTON, MA 02631
 PHONE: (108) 896-1746 www.bennett-usa.com FAX: (108) 296-1399

DATE	08/29/14	SCALE	As Noted	DWG	SRF	CHECKED	TME	JOB NUMBER	BEA12-10405
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Full Treatment - Pilot study followed by full scale treatment over 4 months and environmental monitoring for 18 months to reach a permanent solution without restriction, GW-3 Standards are met.

Limited Treatment - Pilot study for 2 months and cost-benefit feasibility evaluation with environmental monitoring over 24 month period, GW-3 Standards are NOT met. Risk characterization of potential exposures(s) used to determine a permanent solution without restriction.

Fire Station Site HazMat Remediation		
Costs	Full Treatment	Limited Treatment
Professional Services (lab, reporting, filing fees)	\$ 152,770.00	\$ 167,500.00
Perozone Treatment	\$ 123,774.00	\$ 39,500.00
Well Drilling	\$ 60,000.00	\$ 30,000.00
Earthwork	\$ 63,000.00	\$ 34,000.00
Survey	\$ 1,500.00	\$ 1,500.00
Electrical	\$ 2,500.00	\$ 1,500.00
Subtotal	\$ 403,544.00	\$ 274,000.00
FD Project - Escalation	\$ 212,500.00	\$ 192,500.00
Coordination of treatment	\$ 33,850.00	\$ 33,850.00
Separation of Scopes	\$ 48,600.00	\$ 48,600.00
Subtotal	\$ 294,950.00	\$ 274,950.00
Total STM Request	\$ 698,494.00	\$ 548,950.00
Vapor Barrier	\$ 45,000.00	\$ 45,000.00
Add'n trailer rental	\$ 28,000.00	\$ 24,000.00
Site Difficulty	\$ 50,000.00	\$ 50,000.00
Total from Owners Contingency*, if needed	\$ 123,000.00	\$ 119,000.00
*Owners Contingency		
Normal Pre-bid @10%	\$ 984,917.00	\$ 984,917.00
Current (Pre-bid @5%)	\$ 492,459.00	\$ 492,459.00
Balance after deduction proposed above	\$ 369,459.00	\$ 373,459.00
Schedule		
Design complete and ready for bidding	Sept. 2014	Sept. 2014
Demolition Start	August 2014	August 2014
Demolition Complete	Oct. 1, 2014	Oct. 1, 2014
Site Turnover to remediation	Oct. 1, 2014	Oct. 1, 2014
Construction Bidding	Jan/Feb 2015	Dec. 2014
Construction Start	April 2015	March 2015
Construction End	May/June 2016	Feb./March 2016