October 25, 2013

Town of Monkton
Attn: John Phillips, Selectboard Member
P.O. Box 12
Monkton, Vermont 05469

Dear John,

Per your previous discussion with Brendan Kearns (CHA), we are currently working with Vermont Gas Systems (VGS) on the Addison Natural Gas Project. The proposed transmission alignment crosses or parallels several existing infrastructure systems within the Town of Monkton. We have completed the following to help facilitate your review of the proposed project:

1. Addison Natural Gas Project (ANGP) Executive Summary and Town of Monkton Impacts
2. Town of Monkton – Right-of-Way Permit Application
3. Partial set of drawings titled "Vermont Gas – Proposed 12" Pipeline – Addison Natural Gas Project" sheets G-001 to G-0010, C-0049 to C-065 for supplemental information to the Right-of-Way Permit Application.

It is understood that the Town of Monkton does not require permitting fees. After you have had the opportunity to review the enclosed materials, please feel free to contact me with any questions or concerns.

Sincerely,

Tyler Billingsley, P.E.
Project Engineer

Cc: Charlie Pughe, VGS
CHA Project File 24381

Enclosures

ADDISON NATURAL GAS PROJECT

EXECUTIVE SUMMARY

Vermont Gas Systems, Inc. (VGS, applicant) has retained Clough Harbour & Associates (CHA), to assist in the planning, design, and permitting of the Addison County Natural Gas Project (ANGP, project). During the feasibility phase of the project, CHA has identified a requirement to file for and obtain Town permits for areas impacted during the construction of the project.

The project consists of approximately 41.2 miles of natural gas transmission pipeline, 3 meter and regulating stations, 5 miles of distribution mainline, 5 miles of distribution network and appurtenances to increase supply and distribution to the greater Vermont area.

The Transmission Mainline is new 12-inch diameter natural gas transmission-pressure pipeline with a Maximum Allowable Operating Pressure (MAOP) of 1,440 psi(g). The transmission mainline will extend from an interconnection with an existing 10-inch transmission pipeline on the north side of Severance Road in Colchester, Vermont to a new distribution meter and regulating station on Route 7 in Middlebury, Vermont.

To optimize the alignment of the Transmission Mainline corridor, Vermont Gas has co-located it within or adjacent to other utility and transportation corridors, where possible, to minimize environmental resources, infrastructure, and community impacts. The northern segment of the Transmission Mainline, from Colchester to the Interstate I-89 crossing, will generally be located within or directly parallel to the right-of-way of Interstate 289 (also referred to as the Circumferential Highway or "CIRC"). This segment of the Project corridor runs approximately 11.5 miles from the Colchester tie-in, and extends though portions of the Towns of Colchester, Essex and Williston, to a point east of the Interstate 89 crossing in Williston, which is located approximately 1,550 feet east of the St George Road/Route 2A interchange (Exit 12).

Near the intersections of I-89 and Route 2 in Williston, the Transmission Mainline will leave the CIRC and generally run parallel to the Vermont Electric Power Company, Inc. ("VELCO") existing 115 kV electric transmission line corridor that extends between Williston and Middlebury, Vermont. This segment of the Transmission Mainline extends about 31 miles and crosses through portions of the Towns of Williston, St. George, Hinesburg, Monkton, New Haven and Middlebury. The Transmission Mainline will terminate at the Middlebury M&R Station located adjacent to Route 7.

The gas transmission pipeline is primarily contained within a 50’ wide permanent easement, with supplementary 25’ wide temporary and additional temporary workspace easements for construction purposes. Vermont Gas has studied the entire 75-five foot area for purposes of conducting its environmental resource impact analysis. In most areas, the entire 75-foot width will be cleared of vegetation in order to allow for construction. After completion of construction, the easement area will be restored to its original condition, or as negotiated with landowners.

The meter and regulating stations are placed on lots that will be purchased outright and/or subdivided and purchased in fee simple. The gas distribution mainline and distribution network piping will generally be located in, or adjacent to, existing Town and State road right-of-ways.

TOWN OF MONKTON IMPACTS

Through the Town of Monkton, the majority of the 12-inch transmission main is located in, or directly adjacent to the VELCO corridor. However, there are several areas that cross or are parallel to Town roads. There are also several temporary construction access roads, which utilize existing Town roads as entrances.

ANGP Metering and Regulation Stations as well as Distribution Mainline/Network piping are not located in the Town of Monkton.

TOWN OF MONKTON

RIGHT-OF-WAY PERMIT APPLICATION

APPLICANT INFORMATION:

Applicant: Vermont Gas Systems, Inc.

Business Name: Vermont Gas Systems, Inc.

Address: 85 Swift Street, South Burlington, VT 05403

Telephone Number: (802)863-4511 Fax Number: _____

Signature: _____

Work to be done by: To Be Determined

Telephone Number: To Be Determined Emergency Number To Be Determined

1. EXCAVATION DESCRIPTION:

A. **Sketch** – provide a sketch of the excavation area including the excavation dimensions and area. Refer to attached plans.

B. **Location** – provide the street address or other description of the excavation location.
Refer to attached Plans.

C. **Purpose** – briefly explain the need to excavate.
Addison Natural Gas Project (ANGP) - 12" natural gas main.

2. Other (Description of work to be performed)

Refer to attached plans.

(Use back side of form if more room is needed.)

A. **Work to begin:** 2014

B. **Work to be completed:** 2014

(Minimum 5 day review time required to process application)

Approved: _____ **Denied:** _____ **Date:** _____

Road commissioner Signature: _____
Select Board Approval: _____

Public Works Director

PERMIT CONDITIONS:

- Insurance – A Certificate of Insurance shall accompany this application naming the Town of Monkton as an additional insured.

- Safety and Utility Notice – The applicant shall comply with all applicable federal and state health and safety regulations (VOSHA, etc.). The applicant is responsible for notifying utility companies (Dig Safe – Phone No. 800-225-4977) of the internet to excavate. This notification will give utility companies a chance to mark their underground utilities near excavation area.

- Excavation Repairs – The applicant is responsible for repairing all excavated surfaces to its original condition or better. These repairs shall be made as specified by the Road Commissioner and or Selectboard.

- Special Restrictions/Conditions – **See Attached List**

    a. Discuss the method of excavation
    b. Schedule a site inspection prior to excavating
    c. Schedule a site inspection once the excavation is repaired

REASON FOR DENIAL:

_____

_____

Special Restrictions/Conditions

For Office Use Only

_____ All excavations shall be repaired on a daily basis to include asphalt patch.

_____ Flagpersons will be provided to control traffic.

_____ Uniformed Police Officers shall be utilized for traffic control.

_____ One-way traffic will provided at minimum.

_____ Proper (per A.O.T. Standards) construction signage will be provided.

_____ Full restoration of the property will occur concurrent with the installation.

_____ Notify Public Works 48 hours prior to excavation at .

_____ Monkton Town Hall: 453-3800

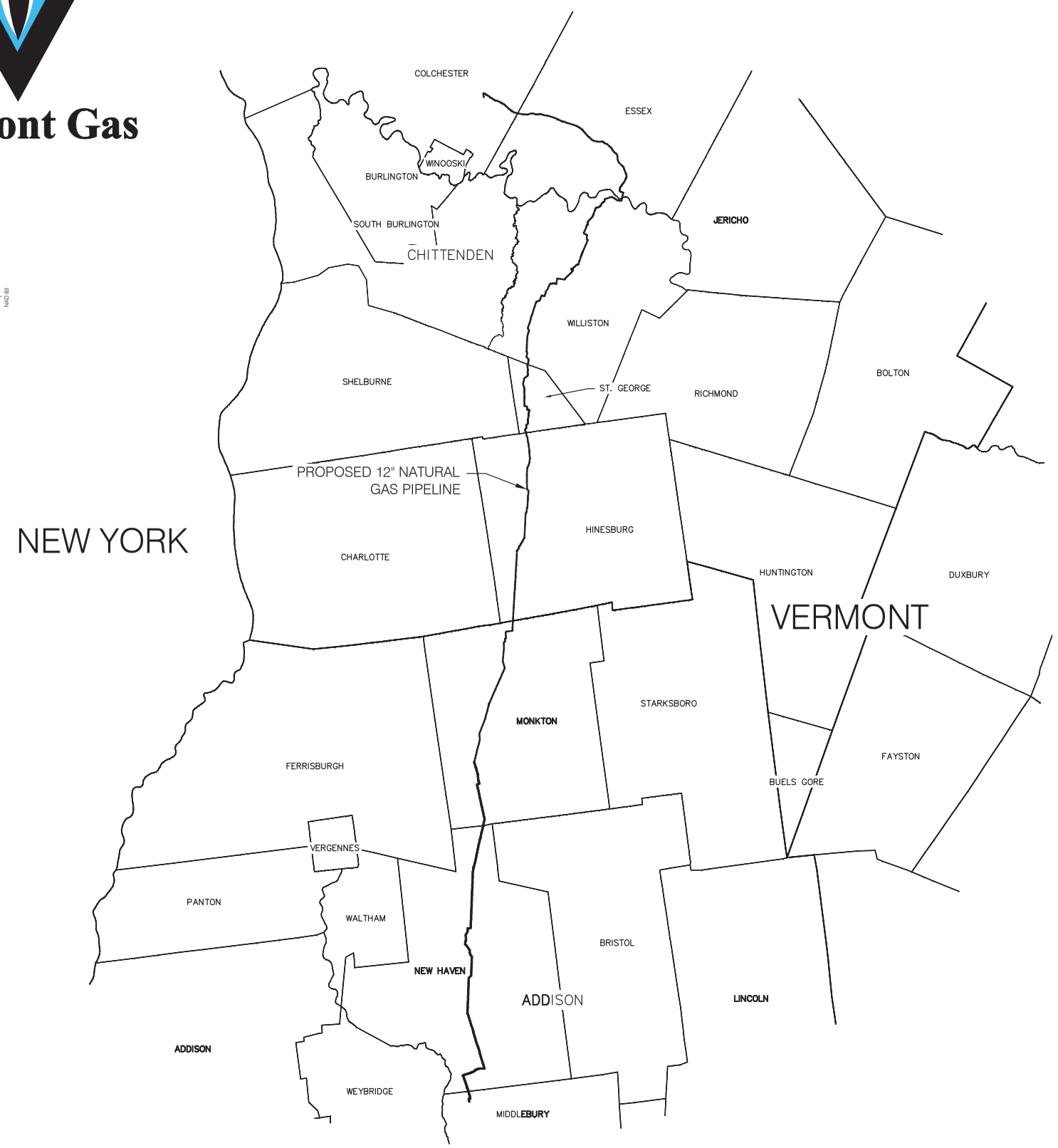
_____ Monkton Town Garage: 453-3263

_____ No excavation will occur within traveled portion of roadway.

CHITTENDEN AND ADDISON COUNTIES
VERMONT

ADDISON NATURAL GAS PROJECT
TRANSMISSION MAINLINE

Vermont Gas



SCALE 1" = 12,000'

DRAWING INDEX

DRAWING NUMBER	DRAWING TITLE
ANGP-T-G-001	COVER SHEET
ANGP-T-G-002	INDEX SHEET
ANGP-T-G-003	LEGEND & NOTES
ANGP-T-G-004 TO 006	CONSTRUCTION CONFIGURATION DETAILS
ANGP-T-G-007 TO 010	ACCESS ROAD DETAILS
ANGP-T-G-011	NOT INCLUDED
ANGP-T-G-012 TO 020	CONSTRUCTION DETAILS
ANGP-T-G-021	STATION AND VALVE DETAILS
ANGP-T-G-022	WILLISTON PIPEYARD
ANGP-T-G-023	PLANK ROAD PIPEYARD

DRAWING #	DRAWING TITLE	DRAWING #	DRAWING TITLE
ANGP-T-C-001A	ALIGNMENT SHEET	ANGP-T-C-042	ALIGNMENT SHEET
ANGP-T-C-001B	ALIGNMENT SHEET	ANGP-T-C-043	ALIGNMENT SHEET
ANGP-T-C-002	ALIGNMENT SHEET	ANGP-T-C-044	ALIGNMENT SHEET
ANGP-T-C-003	ALIGNMENT SHEET	ANGP-T-C-045	ALIGNMENT SHEET
ANGP-T-C-003A	HDD DETAIL	ANGP-T-C-046	ALIGNMENT SHEET
ANGP-T-C-004	ALIGNMENT SHEET	ANGP-T-C-047	ALIGNMENT SHEET
ANGP-T-C-005	ALIGNMENT SHEET	ANGP-T-C-048	ALIGNMENT SHEET
ANGP-T-C-005A	RR X-ING DETAIL	ANGP-T-C-049	ALIGNMENT SHEET
ANGP-T-C-006	ALIGNMENT SHEET	ANGP-T-C-050	ALIGNMENT SHEET
ANGP-T-C-007	ALIGNMENT SHEET	ANGP-T-C-051	ALIGNMENT SHEET
ANGP-T-C-008	ALIGNMENT SHEET	ANGP-T-C-052	ALIGNMENT SHEET
ANGP-T-C-009	ALIGNMENT SHEET	ANGP-T-C-053	ALIGNMENT SHEET
ANGP-T-C-010	ALIGNMENT SHEET	ANGP-T-C-054	ALIGNMENT SHEET
ANGP-T-C-011	ALIGNMENT SHEET	ANGP-T-C-055	ALIGNMENT SHEET
ANGP-T-C-012	ALIGNMENT SHEET	ANGP-T-C-056	ALIGNMENT SHEET
ANGP-T-C-013	ALIGNMENT SHEET	ANGP-T-C-057	ALIGNMENT SHEET
ANGP-T-C-014	ALIGNMENT SHEET	ANGP-T-C-058	ALIGNMENT SHEET
ANGP-T-C-014A	HDD DETAIL	ANGP-T-C-059	ALIGNMENT SHEET
ANGP-T-C-015	ALIGNMENT SHEET	ANGP-T-C-060	ALIGNMENT SHEET
ANGP-T-C-015A	RR X-ING DETAIL	ANGP-T-C-061A	ALIGNMENT SHEET
ANGP-T-C-016	ALIGNMENT SHEET	ANGP-T-C-061B	ALIGNMENT SHEET
ANGP-T-C-017	ALIGNMENT SHEET	ANGP-T-C-062	ALIGNMENT SHEET
ANGP-T-C-018	ALIGNMENT SHEET	ANGP-T-C-063	ALIGNMENT SHEET
ANGP-T-C-019	ALIGNMENT SHEET	ANGP-T-C-064	ALIGNMENT SHEET
ANGP-T-C-020	ALIGNMENT SHEET	ANGP-T-C-065	ALIGNMENT SHEET
ANGP-T-C-021	ALIGNMENT SHEET	ANGP-T-C-066	ALIGNMENT SHEET
ANGP-T-C-022	ALIGNMENT SHEET	ANGP-T-C-067	ALIGNMENT SHEET
ANGP-T-C-023A	ALIGNMENT SHEET (OMITTED)	ANGP-T-C-068	ALIGNMENT SHEET
ANGP-T-C-023B	ALIGNMENT SHEET	ANGP-T-C-069	ALIGNMENT SHEET
ANGP-T-C-023C	HDD DETAIL	ANGP-T-C-070	ALIGNMENT SHEET
ANGP-T-C-024	ALIGNMENT SHEET	ANGP-T-C-071	ALIGNMENT SHEET
ANGP-T-C-025	ALIGNMENT SHEET	ANGP-T-C-072	ALIGNMENT SHEET
ANGP-T-C-026	ALIGNMENT SHEET	ANGP-T-C-073	ALIGNMENT SHEET
ANGP-T-C-027	ALIGNMENT SHEET	ANGP-T-C-074	ALIGNMENT SHEET
ANGP-T-C-028	ALIGNMENT SHEET	ANGP-T-C-075	ALIGNMENT SHEET
ANGP-T-C-029	ALIGNMENT SHEET	ANGP-T-C-076	ALIGNMENT SHEET
ANGP-T-C-030	ALIGNMENT SHEET	ANGP-T-C-077	ALIGNMENT SHEET
ANGP-T-C-031	ALIGNMENT SHEET	ANGP-T-C-078	ALIGNMENT SHEET
ANGP-T-C-032	ALIGNMENT SHEET	ANGP-T-C-079	ALIGNMENT SHEET
ANGP-T-C-033	ALIGNMENT SHEET	ANGP-T-C-080	ALIGNMENT SHEET
ANGP-T-C-034	ALIGNMENT SHEET	ANGP-T-C-081	ALIGNMENT SHEET
ANGP-T-C-035	ALIGNMENT SHEET	ANGP-T-C-082A	ALIGNMENT SHEET
ANGP-T-C-036	ALIGNMENT SHEET	ANGP-T-C-082B	ALIGNMENT SHEET
ANGP-T-C-037	ALIGNMENT SHEET	ANGP-T-C-083A	ALIGNMENT SHEET
ANGP-T-C-038	ALIGNMENT SHEET	ANGP-T-C-083B	ALIGNMENT SHEET
ANGP-T-C-039	ALIGNMENT SHEET	ANGP-T-C-084A	ALIGNMENT SHEET
ANGP-T-C-040	ALIGNMENT SHEET	ANGP-T-C-084B	ALIGNMENT SHEET
ANGP-T-C-041	ALIGNMENT SHEET	ANGP-T-C-085	ALIGNMENT SHEET

VHB Vanasse Hangen Brustlin, Inc.

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
						ENVIRONMENTAL	JLS	06/28/13		
						DRAFTING DESIGNER	GIL	06/28/13		
						DRAFTING SUPERVISOR	BZD	06/28/13		
						DESIGN ENGINEER	MDF	06/28/13		
		0	MDF	SAB	ISSUED FOR CONSTRUCTION	DESIGN MANAGER	SAB	06/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
COVER SHEET

LOC. CHITTENDEN & ADDISON COUNTIES

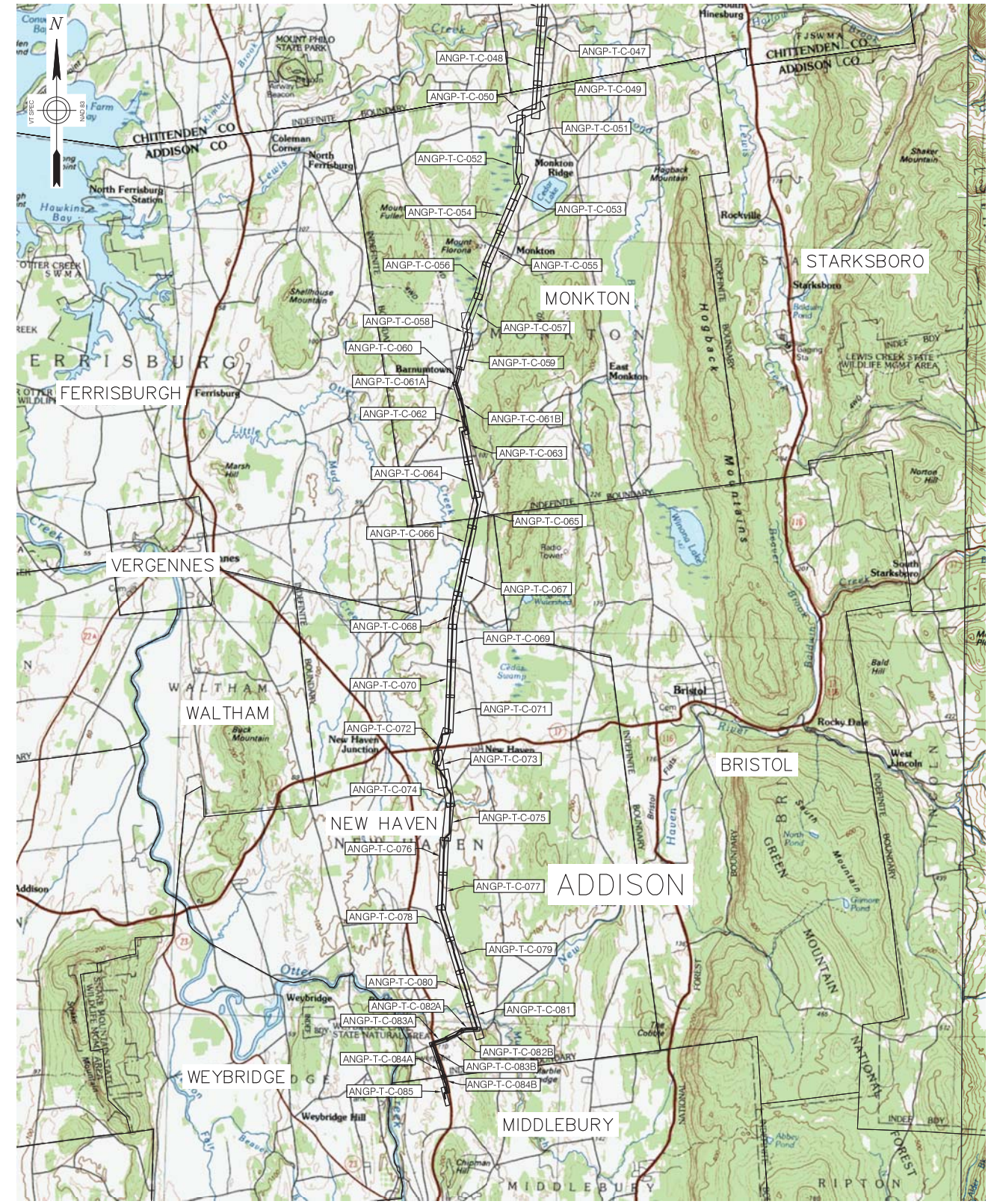
Vermont Gas

CHA
36 Cordage Park Circle, Suites 321, 326, 329, 336
Plymouth, MA 02360
Main: (781) 982-7700 · www.chacompanies.com

YEAR: 2013 | W.O. | SCALE: NOTED | DWG. ANGP-T-G-001 | REV. 0

CHITTENDEN AND ADDISON COUNTIES
VERMONT

SCALE 1" = 500'



SCALE 1" = 500'

								BID		CONSTRUCTION	
							ENVIRONMENTAL	JLS	06/28/13		
							DRAFTING DESIGNER	GIL	06/28/13		
							DRAFTING SUPERVISOR	BZD	06/28/13		
							DESIGN ENGINEER	MDF	06/28/13		
		0	MDF	SAB		ISSUED FOR CONSTRUCTION	DESIGN MANAGER	SAB	06/28/13		
DWG. NO.	REFERENCE DWG.	REV	DSN	CK		DESCRIPTION		INITIALS	DATE	INITIALS	DATE

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
INDEX SHEET

LOC. CHITTENDEN & ADDISON COUNTIES

YEAR: 2013 | W.O. | SCALE: 1"=500' | DWG. ANGP-T-G-002 | REV. 0

Vermont Gas

VHB Vanasse Hangen Brustlin, Inc.

CHA
36 Cordage Park Circle, Suites 321, 326, 329, 336
Plymouth, MA 02360
Main: (781) 982-7700 · www.chacompanies.com

CHITTENDEN AND ADDISON COUNTIES
VERMONT

QUANTITIES

MATERIAL QUANTITIES (FT)

SHEET NUMBERS	PIPE: 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2, AND ADDITIONAL SPECIFICATIONS IN 192.112 (1)	PIPE: 20" O.D. X 0.375" WT, API-5L, GR. B (2)	COATING: EPOXY POLYETHYLENE 10/40 (A)	COATING: ABRASION RESISTANT COATING, 40 MILS, FBE W/ POWERCRETE OVERCOAT (B)	COATING: EPOXY POLYETHYLENE 10/40, W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT³ (C)		PIPE: 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2, AND ADDITIONAL SPECIFICATIONS IN 192.112 (1)	PIPE: 20" O.D. X 0.375" WT, API-5L, GR. B (2)	COATING: EPOXY POLYETHYLENE 10/40 (A)	COATING: ABRASION RESISTANT COATING, 40 MILS, FBE W/ POWERCRETE OVERCOAT (B)	COATING: EPOXY POLYETHYLENE 10/40, W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT³ (C)
ANGP-T-C-001A	577'	0'	156'	0'	421'	ANGP-T-C-045	2700'	0'	2685'	0'	15'
ANGP-T-C-001B	1950'	0'	1637'	0'	313'	ANGP-T-C-046	2350'	0'	485'	1245'	620'
ANGP-T-C-002	2950'	0'	1385'	896'	669'	ANGP-T-C-047	2561'	0'	326'	2235'	0'
ANGP-T-C-003	2706'	0'	99'	2607'	0'	ANGP-T-C-048	2700'	0'	1971'	380'	349'
ANGP-T-C-004	2700'	0'	2090'	510'	100'	ANGP-T-C-049	2450'	0'	1450'	0'	1000'
ANGP-T-C-005	2658'	117'	2433'	0'	225'	ANGP-T-C-050	1400'	0'	813'	0'	587'
ANGP-T-C-006	2857'	0'	2857'	0'	0'	ANGP-T-C-051	2800'	0'	1370'	0'	1430'
ANGP-T-C-007	2750'	0'	1689'	0'	1061'	ANGP-T-C-052	2800'	0'	2187'	0'	613'
ANGP-T-C-008	2697'	0'	2122'	0'	575'	ANGP-T-C-053	2000'	0'	1773'	0'	227'
ANGP-T-C-009	2806'	0'	2631'	0'	175'	ANGP-T-C-054	2637'	0'	2369'	0'	268'
ANGP-T-C-010	2250'	0'	1953'	0'	297'	ANGP-T-C-055	2900'	0'	2671'	0'	229'
ANGP-T-C-011	2600'	0'	2600'	0'	0'	ANGP-T-C-056	2700'	0'	1281'	250'	1169'
ANGP-T-C-012	2900'	0'	2782'	0'	118'	ANGP-T-C-057	2500'	0'	0'	2500'	0'
ANGP-T-C-013	3000'	0'	2507'	0'	493'	ANGP-T-C-058	1000'	0'	575'	175'	250'
ANGP-T-C-014	2160'	0'	757'	940'	463'	ANGP-T-C-059	2837'	0'	1396'	990'	451'
ANGP-T-C-015	2750'	121'	1788'	0'	962'	ANGP-T-C-060	1400'	0'	1275'	125'	0'
ANGP-T-C-016	3000'	0'	2618'	0'	382'	ANGP-T-C-061A	1300'	0'	980'	0'	320'
ANGP-T-C-017	2667'	0'	2165'	0'	502'	ANGP-T-C-061B	1500'	0'	1500'	0'	0'
ANGP-T-C-018	2495'	0'	2148'	0'	347'	ANGP-T-C-062	1250'	0'	1200'	0'	50'
ANGP-T-C-019	2800'	0'	2714'	0'	86'	ANGP-T-C-063	2942'	0'	2493'	0'	449'
ANGP-T-C-020	2550'	0'	2031'	0'	519'	ANGP-T-C-064	2850'	0'	1159'	0'	1691'
ANGP-T-C-021	2927'	0'	1962'	0'	965'	ANGP-T-C-065	2650'	0'	955'	0'	1695'
ANGP-T-C-022	2438'	0'	1315'	0'	1123'	ANGP-T-C-066	2900'	0'	604'	0'	2296'
ANGP-T-C-023B	1604'	0'	456'	880'	268'	ANGP-T-C-067	2850'	0'	1462'	0'	1388'
ANGP-T-C-024	2350'	0'	2318'	0'	32'	ANGP-T-C-068	2767'	0'	1952'	0'	815'
ANGP-T-C-025	2995'	0'	2636'	0'	359'	ANGP-T-C-069	2949'	0'	2269'	680'	0'
ANGP-T-C-026	2900'	0'	2900'	0'	0'	ANGP-T-C-070	2900'	0'	1464'	740'	696'
ANGP-T-C-027	2971'	0'	2842'	0'	129'	ANGP-T-C-071	3000'	0'	2952'	0'	48'
ANGP-T-C-028	2650'	0'	2350'	0'	300'	ANGP-T-C-072	2834'	0'	2764'	0'	70'
ANGP-T-C-029	3000'	0'	2572'	0'	428'	ANGP-T-C-073	1600'	0'	1398'	0'	202'
ANGP-T-C-030	2437'	0'	1977'	0'	460'	ANGP-T-C-074	2734'	0'	1824'	615'	295'
ANGP-T-C-031	2887'	0'	2887'	0'	0'	ANGP-T-C-075	2950'	0'	1208'	950'	792'
ANGP-T-C-032	1950'	0'	1507'	0'	443'	ANGP-T-C-076	2900'	0'	0'	0'	2900'
ANGP-T-C-033	2050'	0'	1982'	0'	68'	ANGP-T-C-077	2900'	0'	981'	0'	1919'
ANGP-T-C-034	1887'	0'	1813'	0'	74'	ANGP-T-C-078	2700'	0'	2342'	0'	358'
ANGP-T-C-035	1900'	0'	1264'	0'	636'	ANGP-T-C-079	2860'	0'	2556'	0'	304'
ANGP-T-C-036	2850'	0'	2799'	0'	51'	ANGP-T-C-080	2879'	0'	2871'	0'	8'
ANGP-T-C-037	2579'	0'	2431'	0'	148'	ANGP-T-C-081	2240'	0'	1144'	530'	566'
ANGP-T-C-038	2900'	0'	2863'	0'	37'	ANGP-T-C-082A	1200'	0'	888'	0'	312'
ANGP-T-C-039	2961'	0'	1553'	0'	1408'	ANGP-T-C-082B	1450'	0'	1218'	0'	232'
ANGP-T-C-040	2427'	0'	1200'	675'	552'	ANGP-T-C-083A	1496'	0'	1078'	0'	418'
ANGP-T-C-041	2550'	0'	1407'	0'	1143'	ANGP-T-C-083B	1450'	0'	1429'	0'	21'
ANGP-T-C-042	2400'	0'	1770'	0'	630'	ANGP-T-C-084A	1400'	0'	1400'	0'	0'
ANGP-T-C-043	2500'	0'	1655'	0'	845'	ANGP-T-C-084B	1500'	0'	1395'	0'	105'
ANGP-T-C-044	2150'	0'	1947'	0'	203'	ANGP-T-C-085	588'	0'	588'	0'	0'
						TOTAL =	217360'	238'	156269'	17923'	43168'

2

LEGEND

PROPOSED GAS LINE
GAS LINE STATIONING (314+00)
PROPERTY LINE
TOWN LINE
EDGE OF PAVEMENT
RAILROAD
CONTOUR (10-FOOT INT.) (510)
CONTOUR (2-FOOT INT.)
FENCE
GUARDRAIL
OVERHEAD WIRES
DRAIN LINE
DRAIN LINE > 12' Ø
SEWER LINE
WATER LINE
GAS LINE
ELECTRICAL LINE
TELEPHONE LINE
STONEWALL
BRUSH LINE
TREE LINE
IRON PIN
CONCRETE/GRANITE BOUND
UTILITY MANHOLE
CATCH BASIN (CTB)
ELECTRIC POLE STRUCTURES (53)
UTILITY POLE
LIGHT POST
GUY ANCHOR
WATER GATE (WV)
WELL
GAS GATE (GV)
HYDRANT
MAIL BOX (MB)
TRAFFIC SIGN
TRAFFIC SIGNAL
GATE POST / BOLLARD
MARKER POST (MP)
VENT
DECIDUOUS TREE
CONIFEROUS TREE
EXISTING STRUCTURE
DITCH LINE
PROPOSED TEST STATION (3) (S)
PROPOSED GAS VALVE (GV)
SPOT GRADE (546)
SAND BAG
GEOTECHNICAL SOIL BORINGS (SB-1)
MILE POST (M.P. MILE)
LINE LIST (XXXXXX)
TEST LEAD (TL)
WATER SURFACE INDICATOR
PERMANENT EASEMENT
TEMPORARY WORKSPACE
FEMA BLSF ZONE
CENTERLINE OF STREAM
TEMPORARY STREAM IMPACT
50' WETLAND BUFFER
TEMPORARY WETLAND IMPACT
TEMPORARY WETLAND BUFFER IMPACT
WETLAND AREA
PROPOSED EROSION AND SEDIMENT CONTROLS
WETLAND FLAG (WF1)

ABBREVIATIONS

A.	ASSUMED	ELFC	ELECTRIC FENCE	PCCSP	POLYMER COATED CORRUGATED STEEL PIPE
ABD.	ABANDON	EXIST. (OR EX.)	EXISTING	(P)	PROPOSED
ADJ.	ADJUST	FEMA	FEDERAL EMERGENCY MANAGEMENT AGENCY	R	RADIUS OF CURVATURE/RIGHT
AG, AGR	AGRICULTURAL	FOMK	FIBER OPTIC MARK	(R)	RECORD
APPROX.	APPROXIMATE	FB	FLUSHING BASIN	RCP	REINFORCED CONCRETE PIPE
ARCH.	ARCHAEOLOGICAL	GG	GAS GATE	RD.	ROAD
ATWS	ADDITIONAL TEMPORARY WORKSPACE	GMK	GAS LINE – MARKED	REC.	RECORD LOCATION
BWF	BARBED WIRE FENCE	GMP	GREEN MOUNTAIN POWER	REM.	REMOVE
BND.	BOUND	GSO	GAS SHUT OFF	RET.	RETAIN
BCC	BITUMINOUS CONCRETE CURB	GRAN.	GRANITE	RET. WALL	RETAINING WALL
BIT. CONC.	BITUMINOUS CONCRETE	GC	GRANITE CURB	RMDL	REMODEL
℄	BASELINE	GRV	GRAVEL	RT	RIGHT
BLDG.	BUILDING	GDWY	GRAVEL DRIVEWAY	R.O.W., R/W	RIGHT–OF–WAY
BLSF	BORDERING LAND SUBJECT TO FLOODING	GRL	GUARDRAIL	RR	RAILROAD
B.O.	BY OTHERS	HDPE	HIGH DENSITY POLYETHYLENE PIPE	R&R	REMOVE AND RESET
B.W.	BOTTOM OF WALL	HDD	HORIZONTAL DIRECTIONAL DRILL	R&S	REMOVE AND STACK
BWLL	BROKEN WHITE LANE LINE	HMA	HOT MIX ASPHALT	S.B.	STONE BOUND
CHH	CABLE HANDHOLE	HOR.	HORIZONTAL	SMH	SEWER MANHOLE
CMK	CABLE MARK	HSE	HOUSE	SMK	SEWER LINE – MARKED
CPED	CABLE PEDESTAL	HYD.	HYDRANT	S.W.	SIDEWALK
C/O	CARE OF	I. (OR INV.)	INVERT	ST.	STREET
CTB	CATCH BASIN	IPL	INTERNATIONAL PAPER LATERAL	STA.	STATION
CTB/DI	CATCH BASIN WITH DROP INLET	IPX	INTERNATIONAL PAPER EXTENTION	SWEL	SOLID WHITE EDGE LINE
CEM.	CEMENT	LT	LEFT	SWLL	SOLID WHITE LANE LINE
CLDI	CEMENT LINED DUCTILE IRON PIPE	L	LENGTH OF CURVE/LEFT	SYCL	SINGLE YELLOW CENTERLINE
CLFC	CHAIN LINK FENCE	LBS	POUNDS	SYLL	SINGLE YELLOW LANE LINE
C.I.	CURB INLET	L.P.	LIGHT POLE	SHW	STONE HEADWALL
℄	CENTERLINE	L.F.	LINEAR FEET	STPL	STOP LINE
℄ CONST.	CENTERLINE OF CONSTRUCTION	MH	MANHOLE	T	TANGENT/TRUCK PERCENTAGE
CONC.	CONCRETE	MLV	MAIN LINE VALVE	TAN.	TANGENT DISTANCE OF CURVE
CC	CONCRETE CURB	M.P.	MILE POST	TEMP.	TEMPORARY
CDWY	CONCRETE DRIVEWAY	MHD	MASS HIGHWAY BOUND	TMH	TELEPHONE MANHOLE
CHW	CONCRETE HEADWALL	MSE	MECHANICALLY STABILIZED EARTH	TMK	TELEPHONE LINE – MARKED
CPD	CONCRETE PAD	MPOST	METAL POST	TPED	TELEPHONE PEDESTAL
CON	CONIFEROUS TREE	MWELL	MONITORING WELL	TL	TEST LEAD
CONST.	CONSTRUCT(ION)	NAD	NORTH AMERICAN DATUM	TWR	TOWER
CU	CONTINUATION UNKNOWN	NTS	NOT TO SCALE	TWY	TRAVELED WAY
CMP	CORRUGATED METAL PIPE	N/F	NOW OR FORMERLY	TSP	TRAFFIC SIGNAL POLE
CPP	CORRUGATED PLASTIC PIPE	ODWY	OTHER DIRT DRIVEWAY	T.W.	TOP OF WALL
DSWL	DASHED SINGLE WHITE LINE	OTFC	OTHER FENCE	TYP.	TYPICAL
DSYL	DASHED SINGLE YELLOW LINE	PAVT.	PAVEMENT	UTC	UTILITY COVER
DEC	DECIDUOUS TREE	PED	PEDESTRIAN	UTP, UP	UTILITY POLE
DDWY	DIRT DRIVEWAY	PDWY	PAVED DRIVEWAY	VT SPC	VERMONT STATE PLANE COORDINATE
DDYL	DOUBLE DASHED YELLOW LINE	P.C.	POINT OF CURVATURE	VEC	VERMONT ELECTRIC COOPERATIVE
D	DRAIN	P.C.C.	POINT OF COMPOUND CURVATURE	VELCO	VERMONT ELECTRIC POWER COMPANY
DMH	DRAINAGE MANHOLE	PGL	PROFILE GRADE LINE	VERT.	VERTICAL
DTWY	DIRT TRAVELED WAY	P.I.	POINT OF INTERSECTION	WMK	WATER LINE – MARKED
DWY	DRIVEWAY	(PAS)	PRIME AGRICULTURAL SOIL	W.M.	WATER METER/WATER MAIN
DYCL	DOUBLE YELLOW CENTERLINE	ℙ, P/L	PROPERTY LINE	WSO	WATER SHUT OFF
EOP	EDGE OF PAVEMENT	PM	PARKING METER	WV	WATER VALVE
E	ELECTRIC	PWWY	PAVED WALKWAY	WIF	WIRE FENCE
EBOX	ELECTRIC BOX	P.R.C.	POINT OF REVERSE CURVATURE	WDFC	WOOD FENCE
EHH	ELECTRIC HANDHOLE	P.C.	POINT OF CURVATURE	WPOST	WOOD POST
EMK	ELECTRIC LINE – MARKED	PLA	PLANTER	X–ING	CROSSING
ELEV. (OR EL)	ELEVATION	P.T.	POINT OF TANGENCY		

CONSTRUCTION NOTES

1. PROPOSED PIPE IS 12.75" O.D. ITS WALL THICKNESS AND PROTECTIVE COATINGS VARY DEPENDING ON CLASS DETERMINATION AND SITE CONDITIONS.

2. AREAS WHERE THE PIPE IS INSTALLED IN ROCK TRENCH SHALL REQUIRE THE EPOXY POLYETHYLENE 10/40 COATED PIPE TO BE WRAPPED WITH TUFF N NUFF ROCK SHIELD. CONTRACTOR TO IDENTIFY AND DOCUMENT THESE AREAS DURING INSTALLATION.

3. ALL CONSTRUCTION MUST CONFORM TO FEDERAL SPECIFICATIONS, PART 192 IN TITLE 49 CFR AND APPLICABLE, STATE AND LOCAL REGULATIONS.

4. ALL CONSTRUCTION SIGNING, DRUMS, BARRICADES AND OTHER DEVICES SHALL CONFORM WITH PART VI OF THE 2003 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) REVISION 3 AND AS AMENDED.

5. ALL VEHICLES ARE TO BE HIGHLY VISIBLE USING ROTATING BEACONS AND BE MARKED BY USE OF TRAFFIC CONES.

6. VERMONT GAS SYSTEMS SHALL NOTIFY EACH ABUTTER AT LEAST 48 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY OBSTRUCTION OF ACCESS.

7. CONTRACTOR SHALL MAINTAIN 1–FOOT MINIMUM CLEARANCE BETWEEN PROPOSED PIPELINES AND OTHER UTILITIES.

8. CONTRACTOR SHALL REMOVE AND REPLACE EXISTING RIGHT OF WAY FENCE AS NECESSARY.

9. CONTRACTOR SHALL SUPPLY TEMPORARY ROAD SIGNS AS NECESSARY.

10. ALL TRENCH EXCAVATION PROTECTION SYSTEMS SHALL BE IN COMPLIANCE WITH OSHA SPECIFICATIONS.

GENERAL NOTES

1.TOPOGRAPHICAL DETAIL SHOWN HEREON IS THE RESULT OF SURVEY CONDUCTED BY CHA IN THE SUMMER AND FALL OF 2012 AND THE COMPILATION OF EXISTING TOPOGRAPHIC DATA PROVIDED BY THE VERMONT AGENCY OF TRANSPORTATION (VTRANS) AND THE VERMONT TRANSMISSION COMPANY (VELCO).

2. PROPERTY LINES SHOWN HEREON ARE BASED ON TAX MAP AND DO NOT REPRESENT A PROPERTY LINE RETRACEMENT SURVEY EFFORT.

3. LOCATION OF ANY IDENTIFIED UNDERGROUND UTILITIES IS APPROXIMATE ONLY, AND IS NOT WARRANTED TO BE CORRECT. ADDITIONAL UTILITIES MAY EXIST WHICH ARE NOT INDICATED ON THESE PLANS. ALL EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR FOR SERVICE, SIZE, INVERT ELEVATIONS, LOCATION, ETC. CONTRACTOR MUST NOTIFY DIG–SAFE VERMONT AT 811 AT LEAST 72 HOURS PRIOR TO ANY CONSTRUCTION.

4. SURVEY WAS CONDUCTED IN VERMONT ZONE, NAD83 HORIZONTAL COORDINATE SYSTEM. ELEVATIONS ARE BASED ON NAVD 88 AND REFERENCED TO TEMPORARY BENCHMARKS AS SHOWN ON THE PLANS.

5. ENVIRONMENTAL CONDITIONS INFORMATION SHOWN IS THE RESULT OF SURVEY CONDUCTED BY VHB IN THE SPRING, SUMMER AND FALL OF 2013.

6. THE LOCUS LIES IN VARIOUS FIRM ZONES, DESCRIBED ON THE FOLLOWING COMMUNITY PANEL NUMBERS:
5007C0143 D, 5007C0144 D, 5007C0163 D, 5007C0164 D, 5007C0277 D, 5007C0281 D, 5007C0279 D, 5007C0290 D, 5001670005 A, 5001670010 A, 5000090002 A, 5000090004 A, AND 5000080003 A

7. THE PURPOSE OF THIS PLAN SET IS TO IDENTIFY TO THE APPROPRIATE PERMITTING AGENCIES THE PROPOSED LOCATION FOR A NATURAL GAS PIPELINE AND ITS LOCATION RELATIVE TO TOPOGRAPHICAL FEATURES, EXISTING, AND PROPOSED UTILITIES.

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
						ENVIRONMENTAL	JLS	06/28/13		
						DRAFTING DESIGNER	GIL	06/28/13		
		2	MDF	TDB	ISSUED FOR CONSTRUCTION (10/08/13)	DRAFTING SUPERVISOR	BZD	06/28/13		
		1	MDF	TDB	ISSUED FOR ADDITIONAL PERMIT REVIEW (9/20/13)	DESIGN ENGINEER	MDF	06/28/13		
		0	MDF	SAB	ISSUED FOR CONSTRUCTION	DESIGN MANAGER	SAB	06/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
LEGEND & NOTES

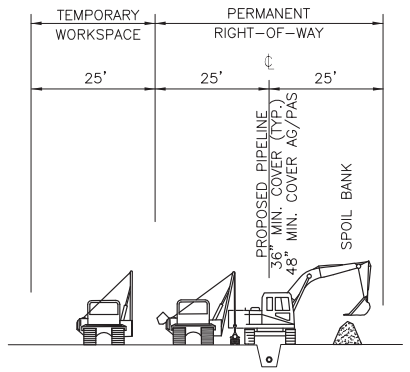
LOC. CHITTENDEN & ADDISON COUNTIES

YEAR: 2013 | W.O. | SCALE: N/A | DWG. ANGP–T–G–003 | REV. 2

Vermont Gas

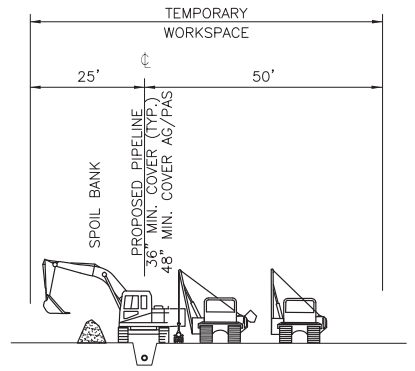
VHB Vanasse Hangen Brustlin, Inc.

CHA
36 Cordage Park Circle, Suites 321, 326, 329, 336
Plymouth, MA 02360
Main: (781) 952-7700 · www.chacompanies.com



CONSTRUCTION TYPE 1A
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR 75' CONSTRUCTION SPACE AND DOES NOT DEPICT ADDITIONAL TEMP. WORKSPACE.
2. ADDITIONAL TEMP. WORKSPACE HAS BEEN TYPICALLY INCORPORATED ON THE ALIGNMENT SHEETS FOR AREAS SUCH AS ROAD, RIVER/STREAM/WATERBODY, AND ARCHEOLOGICAL SITE CROSSINGS WHERE HORIZONTAL DIRECTIONAL DRILL CONSTRUCTION HAS BEEN PROPOSED.
3. FOR AREAS DESIGNATED AS PRIME AGRICULTURAL SOILS (PAS) IN THE SOIL TYPE BAND OF THE EPSC SHEETS, SEE "CONSTRUCTION WITHIN PRIME AGRICULTURAL SOILS (PAS) AREAS" FOR SOIL SEGREGATION AND ASSOCIATED CONSTRUCTION PROCEDURES.
4. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.



CONSTRUCTION TYPE 1B
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR 75' CONSTRUCTION SPACE AND DOES NOT DEPICT ADDITIONAL TEMP. WORKSPACE.
2. ADDITIONAL TEMP. WORKSPACE HAS BEEN TYPICALLY INCORPORATED ON THE ALIGNMENT SHEETS FOR AREAS SUCH AS ROAD, RIVER/STREAM/WATERBODY, AND ARCHEOLOGICAL SITE CROSSINGS WHERE HORIZONTAL DIRECTIONAL DRILL CONSTRUCTION HAS BEEN PROPOSED.
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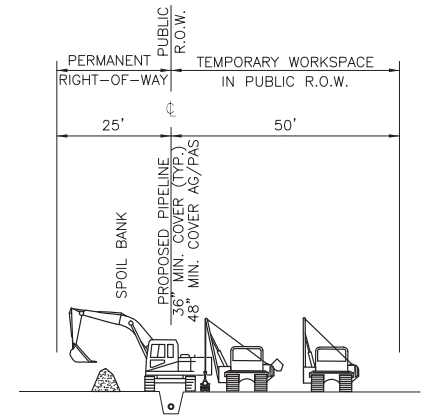
4. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.



CONSTRUCTION TYPE 1C
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR 75' CONSTRUCTION SPACE AND DOES NOT DEPICT ADDITIONAL TEMP. WORKSPACE.
2. ADDITIONAL TEMP. WORKSPACE HAS BEEN TYPICALLY INCORPORATED ON THE ALIGNMENT SHEETS FOR AREAS SUCH AS ROAD, RIVER/STREAM/WATERBODY, AND ARCHEOLOGICAL SITE CROSSINGS WHERE HORIZONTAL DIRECTIONAL DRILL CONSTRUCTION HAS BEEN PROPOSED.
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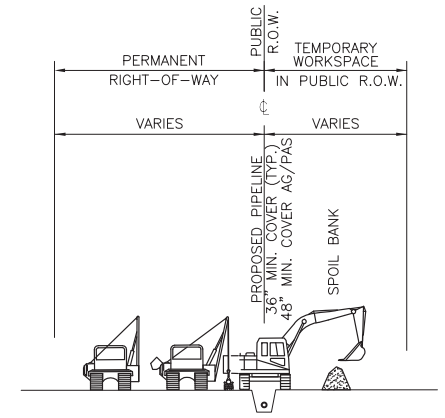
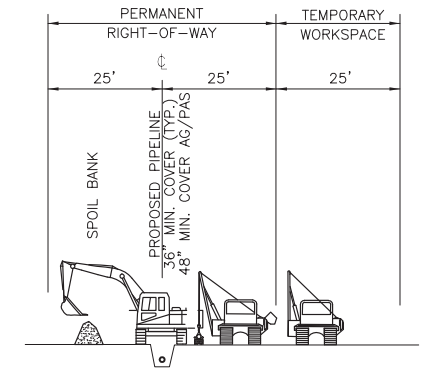
4. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.



CONSTRUCTION TYPE 1D
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR VARIABLE CONSTRUCTION SPACE AND DOES NOT DEPICT ADDITIONAL TEMP. WORKSPACE.
2. ADDITIONAL TEMP. WORKSPACE HAS BEEN TYPICALLY INCORPORATED ON THE ALIGNMENT SHEETS FOR AREAS SUCH AS ROAD, RIVER/STREAM/WATERBODY, AND ARCHEOLOGICAL SITE CROSSINGS WHERE HORIZONTAL DIRECTIONAL DRILL CONSTRUCTION HAS BEEN PROPOSED.
3. FOR AREAS DESIGNATED AS PRIME AGRICULTURAL SOILS (PAS) IN THE SOIL TYPE BAND OF THE EPSC SHEETS, SEE "CONSTRUCTION WITHIN PRIME AGRICULTURAL SOILS (PAS) AREAS" FOR SOIL SEGREGATION AND ASSOCIATED CONSTRUCTION PROCEDURES.
4. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.



CONSTRUCTION TYPE 1E
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR 75' CONSTRUCTION SPACE AND DOES NOT DEPICT ADDITIONAL TEMP. WORKSPACE.
2. ADDITIONAL TEMP. WORKSPACE HAS BEEN TYPICALLY INCORPORATED ON THE ALIGNMENT SHEETS FOR AREAS SUCH AS ROAD, RIVER/STREAM/WATERBODY, AND ARCHEOLOGICAL SITE CROSSINGS WHERE HORIZONTAL DIRECTIONAL DRILL CONSTRUCTION HAS BEEN PROPOSED.
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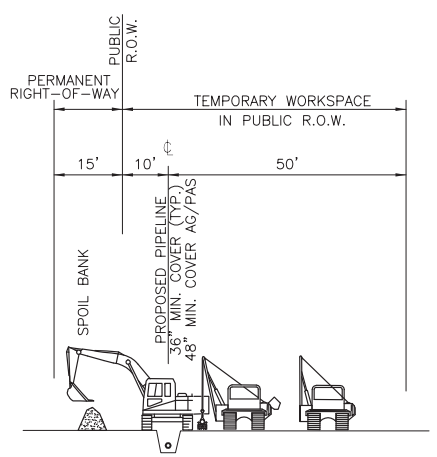
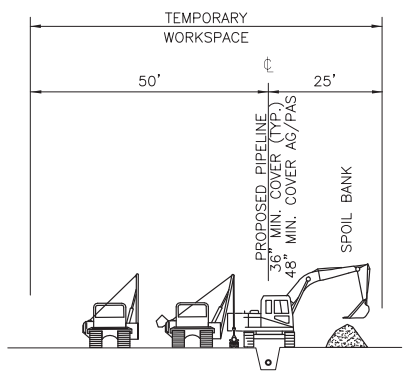
4. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.



CONSTRUCTION TYPE 1F
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR 75' CONSTRUCTION SPACE AND DOES NOT DEPICT ADDITIONAL TEMP. WORKSPACE.
2. ADDITIONAL TEMP. WORKSPACE HAS BEEN TYPICALLY INCORPORATED ON THE ALIGNMENT SHEETS FOR AREAS SUCH AS ROAD, RIVER/STREAM/WATERBODY, AND ARCHEOLOGICAL SITE CROSSINGS WHERE HORIZONTAL DIRECTIONAL DRILL CONSTRUCTION HAS BEEN PROPOSED.
3. FOR AREAS DESIGNATED AS PRIME AGRICULTURAL SOILS (PAS) IN THE SOIL TYPE BAND OF THE EPSC SHEETS, SEE "CONSTRUCTION WITHIN PRIME AGRICULTURAL SOILS (PAS) AREAS" FOR SOIL SEGREGATION AND ASSOCIATED CONSTRUCTION PROCEDURES.
4. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.



CONSTRUCTION TYPE 1G
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR 75' CONSTRUCTION SPACE AND DOES NOT DEPICT ADDITIONAL TEMP. WORKSPACE.
2. ADDITIONAL TEMP. WORKSPACE HAS BEEN TYPICALLY INCORPORATED ON THE ALIGNMENT SHEETS FOR AREAS SUCH AS ROAD, RIVER/STREAM/WATERBODY, AND ARCHEOLOGICAL SITE CROSSINGS WHERE HORIZONTAL DIRECTIONAL DRILL CONSTRUCTION HAS BEEN PROPOSED.
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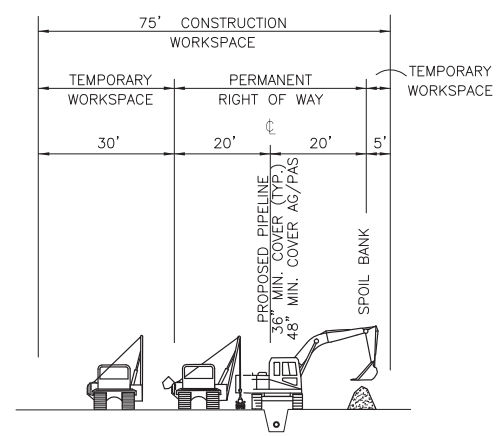
4. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.



CONSTRUCTION TYPE 1H
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR 75' CONSTRUCTION SPACE AND DOES NOT DEPICT ADDITIONAL TEMP. WORKSPACE.
2. ADDITIONAL TEMP. WORKSPACE HAS BEEN TYPICALLY INCORPORATED ON THE ALIGNMENT SHEETS FOR AREAS SUCH AS ROAD, RIVER/STREAM/WATERBODY, AND ARCHEOLOGICAL SITE CROSSINGS WHERE HORIZONTAL DIRECTIONAL DRILL CONSTRUCTION HAS BEEN PROPOSED.
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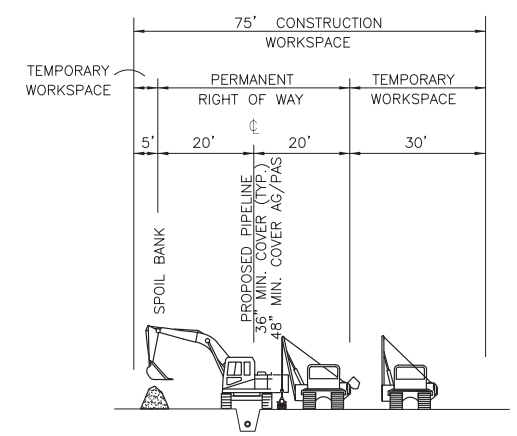
4. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.



CONSTRUCTION TYPE 1J
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR 75' CONSTRUCTION SPACE AND DOES NOT DEPICT ADDITIONAL TEMP. WORKSPACE.
2. ADDITIONAL TEMP. WORKSPACE HAS BEEN TYPICALLY INCORPORATED ON THE ALIGNMENT SHEETS FOR AREAS SUCH AS ROAD, RIVER/STREAM/WATERBODY, AND ARCHEOLOGICAL SITE CROSSINGS WHERE HORIZONTAL DIRECTIONAL DRILL CONSTRUCTION HAS BEEN PROPOSED.
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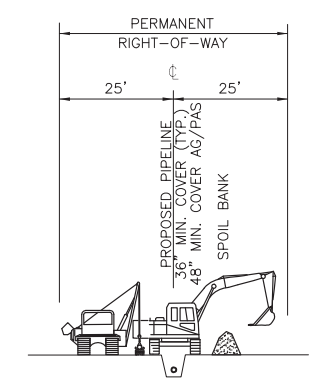
4. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.



CONSTRUCTION TYPE 2A
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR 50' CONSTRUCTION SPACE AND DOES NOT DEPICT ADDITIONAL TEMP. WORKSPACE.
2. ADDITIONAL TEMP. WORKSPACE HAS BEEN TYPICALLY INCORPORATED ON THE ALIGNMENT SHEETS FOR AREAS SUCH AS ROAD, RIVER/STREAM/WATERBODY, AND ARCHEOLOGICAL SITE CROSSINGS WHERE HORIZONTAL DIRECTIONAL DRILL CONSTRUCTION HAS BEEN PROPOSED.
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4. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		INITIALS	DATE	INITIALS	DATE
							BID		CONSTRUCTION	
						ENVIRONMENTAL	JLS	06/28/13		
						DRAFTING DESIGNER	GIL	06/28/13		
						DRAFTING SUPERVISOR	BZD	06/28/13		
						DESIGN ENGINEER	MDF	06/28/13		
		0	MDF	SAB	ISSUED FOR CONSTRUCTION	DESIGN MANAGER	SAB	06/28/13		

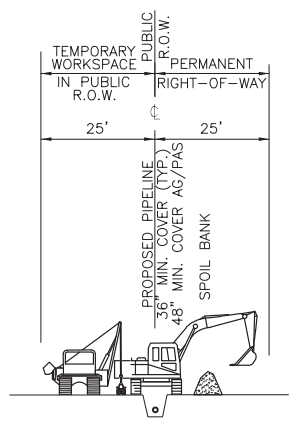
VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
CONSTRUCTION CONFIGURATION DETAILS
LOC. CHITTENDEN & ADDISON COUNTIES

Vermont Gas

VHB Vanasse Hangen Brustlin, Inc.

CHA
36 Cordage Park Circle, Suites 321, 326, 329, 336
Plymouth, MA 02360
Main: (781) 982-7700 · www.chacompanies.com

YEAR: 2013	W.O.	SCALE: NOTED	DWG.	ANGP–T–G–004	REV. 0



CONSTRUCTION TYPE 2B
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR 50' CONSTRUCTION SPACE AND DOES NOT DEPICT ADDITIONAL TEMP. WORKSPACE.
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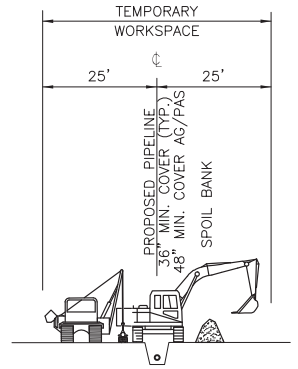
4. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.



CONSTRUCTION TYPE 2C
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR 50' CONSTRUCTION SPACE AND DOES NOT DEPICT ADDITIONAL TEMP. WORKSPACE.
2. ADDITIONAL TEMP. WORKSPACE HAS BEEN TYPICALLY INCORPORATED ON THE ALIGNMENT SHEETS FOR AREAS SUCH AS ROAD, RIVER/STREAM/WATERBODY, AND ARCHEOLOGICAL SITE CROSSINGS WHERE HORIZONTAL DIRECTIONAL DRILL CONSTRUCTION HAS BEEN PROPOSED.
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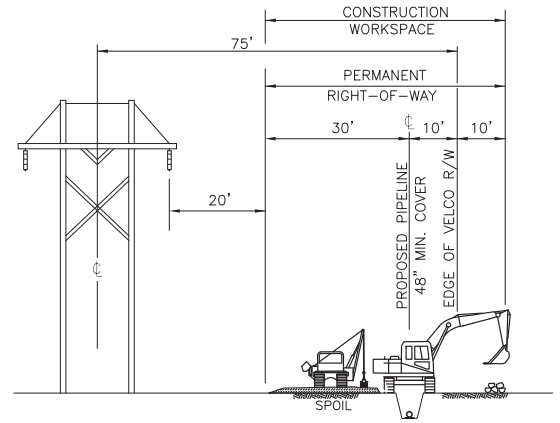
4. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.



CONSTRUCTION TYPE 2D
NOT TO SCALE

NOTE:
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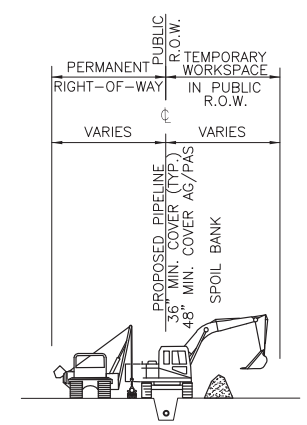
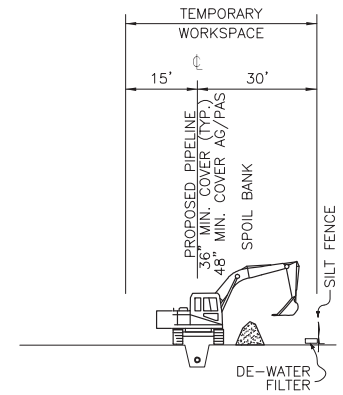
4. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.
5. 10-FOOT TEMPORARY WORKSPACE TO THE WEST OF VELCO ROW REPLACED BY 20-FOOT WORKROAD CORRIDOR LOCATED TO THE EAST OF VELCO STRUCTURES FROM STATION 1639+90 TO 1666+50.

1



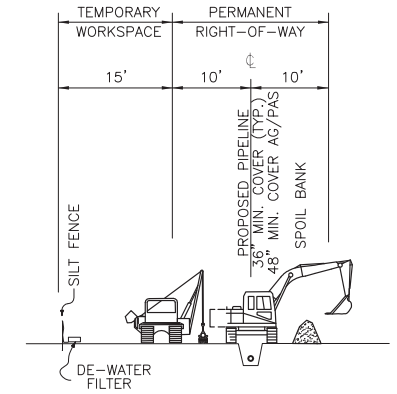
CONSTRUCTION TYPE 2E
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR VARIABLE CONSTRUCTION SPACE AND DOES NOT DEPICT ADDITIONAL TEMP. WORKSPACE.
2. ADDITIONAL TEMP. WORKSPACE HAS BEEN TYPICALLY INCORPORATED ON THE ALIGNMENT SHEETS FOR AREAS SUCH AS ROAD, RIVER/STREAM/WATERBODY, AND ARCHEOLOGICAL SITE CROSSINGS WHERE HORIZONTAL DIRECTIONAL DRILL CONSTRUCTION HAS BEEN PROPOSED.
3. FOR AREAS DESIGNATED AS PRIME AGRICULTURAL SOILS (PAS) IN THE SOIL TYPE BAND OF THE EPSC SHEETS, SEE "CONSTRUCTION WITHIN PRIME AGRICULTURAL SOILS (PAS) AREAS" FOR SOIL SEGREGATION AND ASSOCIATED CONSTRUCTION PROCEDURES.
4. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.



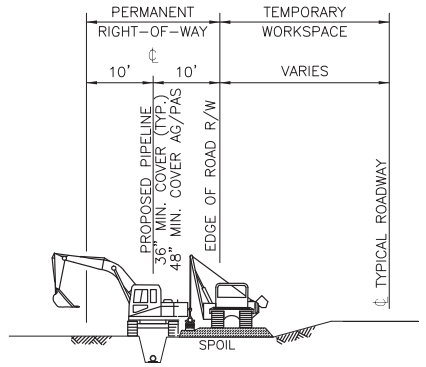
CONSTRUCTION TYPE 3
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR ROADSIDE CONSTRUCTION SPACE AND DOES NOT DEPICT ADDITIONAL TEMP. WORKSPACE.
2. ADDITIONAL TEMP. WORKSPACE HAS BEEN TYPICALLY INCORPORATED ON THE ALIGNMENT SHEETS FOR AREAS SUCH AS ROAD, RIVER/STREAM/WATERBODY, AND ARCHEOLOGICAL SITE CROSSINGS WHERE HORIZONTAL DIRECTIONAL DRILL CONSTRUCTION HAS BEEN PROPOSED.
3. FOR AREAS DESIGNATED AS PRIME AGRICULTURAL SOILS (PAS) IN THE SOIL TYPE BAND OF THE EPSC SHEETS, SEE "CONSTRUCTION WITHIN PRIME AGRICULTURAL SOILS (PAS) AREAS" FOR SOIL SEGREGATION AND ASSOCIATED CONSTRUCTION PROCEDURES.
4. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.



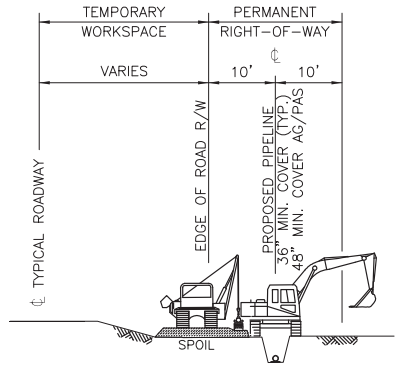
CONSTRUCTION TYPE 3A
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR ROADSIDE CONSTRUCTION SPACE AND DOES NOT DEPICT ADDITIONAL TEMP. WORKSPACE.
2. ADDITIONAL TEMP. WORKSPACE HAS BEEN TYPICALLY INCORPORATED ON THE ALIGNMENT SHEETS FOR AREAS SUCH AS ROAD, RIVER/STREAM/WATERBODY, AND ARCHEOLOGICAL SITE CROSSINGS WHERE HORIZONTAL DIRECTIONAL DRILL CONSTRUCTION HAS BEEN PROPOSED.
3. FOR AREAS DESIGNATED AS PRIME AGRICULTURAL SOILS (PAS) IN THE SOIL TYPE BAND OF THE EPSC SHEETS, SEE "CONSTRUCTION WITHIN PRIME AGRICULTURAL SOILS (PAS) AREAS" FOR SOIL SEGREGATION AND ASSOCIATED CONSTRUCTION PROCEDURES.
4. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.



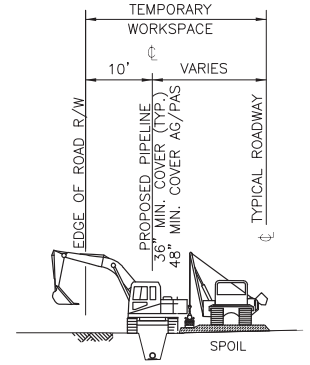
CONSTRUCTION TYPE 4A
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR ROADSIDE CONSTRUCTION SPACE AND DOES NOT DEPICT ADDITIONAL TEMP. WORKSPACE.
2. ADDITIONAL TEMP. WORKSPACE HAS BEEN TYPICALLY INCORPORATED ON THE ALIGNMENT SHEETS FOR AREAS SUCH AS ROAD, RIVER/STREAM/WATERBODY, AND ARCHEOLOGICAL SITE CROSSINGS WHERE HORIZONTAL DIRECTIONAL DRILL CONSTRUCTION HAS BEEN PROPOSED.
3. FOR AREAS DESIGNATED AS PRIME AGRICULTURAL SOILS (PAS) IN THE SOIL TYPE BAND OF THE EPSC SHEETS, SEE "CONSTRUCTION WITHIN PRIME AGRICULTURAL SOILS (PAS) AREAS" FOR SOIL SEGREGATION AND ASSOCIATED CONSTRUCTION PROCEDURES.
4. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.



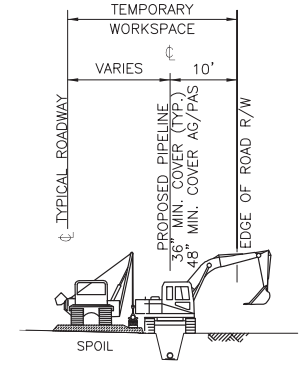
CONSTRUCTION TYPE 4B
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR ROADSIDE CONSTRUCTION SPACE AND DOES NOT DEPICT ADDITIONAL TEMP. WORKSPACE.
2. ADDITIONAL TEMP. WORKSPACE HAS BEEN TYPICALLY INCORPORATED ON THE ALIGNMENT SHEETS FOR AREAS SUCH AS ROAD, RIVER/STREAM/WATERBODY, AND ARCHEOLOGICAL SITE CROSSINGS WHERE HORIZONTAL DIRECTIONAL DRILL CONSTRUCTION HAS BEEN PROPOSED.
3. FOR AREAS DESIGNATED AS PRIME AGRICULTURAL SOILS (PAS) IN THE SOIL TYPE BAND OF THE EPSC SHEETS, SEE "CONSTRUCTION WITHIN PRIME AGRICULTURAL SOILS (PAS) AREAS" FOR SOIL SEGREGATION AND ASSOCIATED CONSTRUCTION PROCEDURES.
4. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.



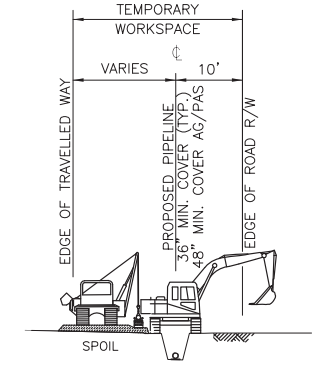
CONSTRUCTION TYPE 4C
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR ROADSIDE CONSTRUCTION SPACE AND DOES NOT DEPICT ADDITIONAL TEMP. WORKSPACE.
2. ADDITIONAL TEMP. WORKSPACE HAS BEEN TYPICALLY INCORPORATED ON THE ALIGNMENT SHEETS FOR AREAS SUCH AS ROAD, RIVER/STREAM/WATERBODY, AND ARCHEOLOGICAL SITE CROSSINGS WHERE HORIZONTAL DIRECTIONAL DRILL CONSTRUCTION HAS BEEN PROPOSED.
3. FOR AREAS DESIGNATED AS PRIME AGRICULTURAL SOILS (PAS) IN THE SOIL TYPE BAND OF THE EPSC SHEETS, SEE "CONSTRUCTION WITHIN PRIME AGRICULTURAL SOILS (PAS) AREAS" FOR SOIL SEGREGATION AND ASSOCIATED CONSTRUCTION PROCEDURES.
4. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.



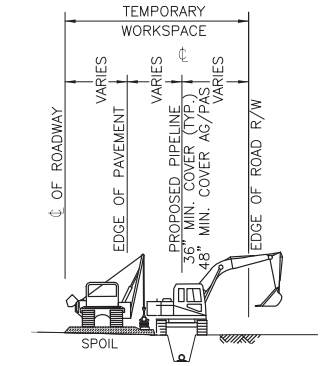
CONSTRUCTION TYPE 4D
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR ROADSIDE CONSTRUCTION SPACE AND DOES NOT DEPICT ADDITIONAL TEMP. WORKSPACE.
2. ADDITIONAL TEMP. WORKSPACE HAS BEEN TYPICALLY INCORPORATED ON THE ALIGNMENT SHEETS FOR AREAS SUCH AS ROAD, RIVER/STREAM/WATERBODY, AND ARCHEOLOGICAL SITE CROSSINGS WHERE HORIZONTAL DIRECTIONAL DRILL CONSTRUCTION HAS BEEN PROPOSED.
3. FOR AREAS DESIGNATED AS PRIME AGRICULTURAL SOILS (PAS) IN THE SOIL TYPE BAND OF THE EPSC SHEETS, SEE "CONSTRUCTION WITHIN PRIME AGRICULTURAL SOILS (PAS) AREAS" FOR SOIL SEGREGATION AND ASSOCIATED CONSTRUCTION PROCEDURES.
4. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.



CONSTRUCTION TYPE 4E
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR ROADSIDE CONSTRUCTION SPACE AND DOES NOT DEPICT ADDITIONAL TEMP. WORKSPACE.
2. ADDITIONAL TEMP. WORKSPACE HAS BEEN TYPICALLY INCORPORATED ON THE ALIGNMENT SHEETS FOR AREAS SUCH AS ROAD, RIVER/STREAM/WATERBODY, AND ARCHEOLOGICAL SITE CROSSINGS WHERE HORIZONTAL DIRECTIONAL DRILL CONSTRUCTION HAS BEEN PROPOSED.
3. FOR AREAS DESIGNATED AS PRIME AGRICULTURAL SOILS (PAS) IN THE SOIL TYPE BAND OF THE EPSC SHEETS, SEE "CONSTRUCTION WITHIN PRIME AGRICULTURAL SOILS (PAS) AREAS" FOR SOIL SEGREGATION AND ASSOCIATED CONSTRUCTION PROCEDURES.
4. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.



CONSTRUCTION TYPE 4F
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR ROADSIDE CONSTRUCTION SPACE AND DOES NOT DEPICT ADDITIONAL TEMP. WORKSPACE.
2. ADDITIONAL TEMP. WORKSPACE HAS BEEN TYPICALLY INCORPORATED ON THE ALIGNMENT SHEETS FOR AREAS SUCH AS ROAD, RIVER/STREAM/WATERBODY, AND ARCHEOLOGICAL SITE CROSSINGS WHERE HORIZONTAL DIRECTIONAL DRILL CONSTRUCTION HAS BEEN PROPOSED.
3. FOR AREAS DESIGNATED AS PRIME AGRICULTURAL SOILS (PAS) IN THE SOIL TYPE BAND OF THE EPSC SHEETS, SEE "CONSTRUCTION WITHIN PRIME AGRICULTURAL SOILS (PAS) AREAS" FOR SOIL SEGREGATION AND ASSOCIATED CONSTRUCTION PROCEDURES.
4. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		INITIALS	BID DATE	INITIALS	CONSTRUCTION DATE
						ENVIRONMENTAL	JLS	06/28/13		
						DRAFTING DESIGNER	GIL	06/28/13		
						DRAFTING SUPERVISOR	BZD	06/28/13		
		1	MDF	TDB	ISSUED FOR ADDITIONAL PERMIT REVIEW (9/20/13)	DESIGN ENGINEER	MDF	06/28/13		
		0	MDF	SAB	ISSUED FOR CONSTRUCTION	DESIGN MANAGER	SAB	06/28/13		

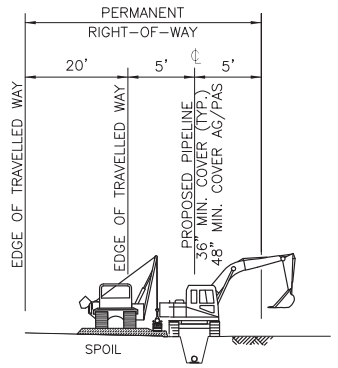
VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
CONSTRUCTION CONFIGURATION DETAILS
LOC. CHITTENDEN & ADDISON COUNTIES

Vermont Gas

VHB Vanasse Hangen Brustlin, Inc.

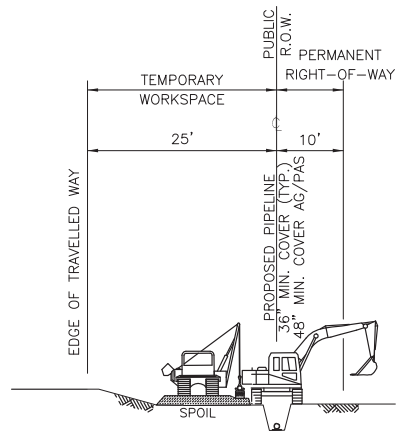
CHA
36 Cordage Park Circle, Suites 321, 326, 329, 336
Plymouth, MA 02360
Main: (781) 952-7700 · www.chacompanies.com

YEAR: 2013	W.O.	SCALE: NOTED	DWG.	ANGP-T-G-005	REV. 1



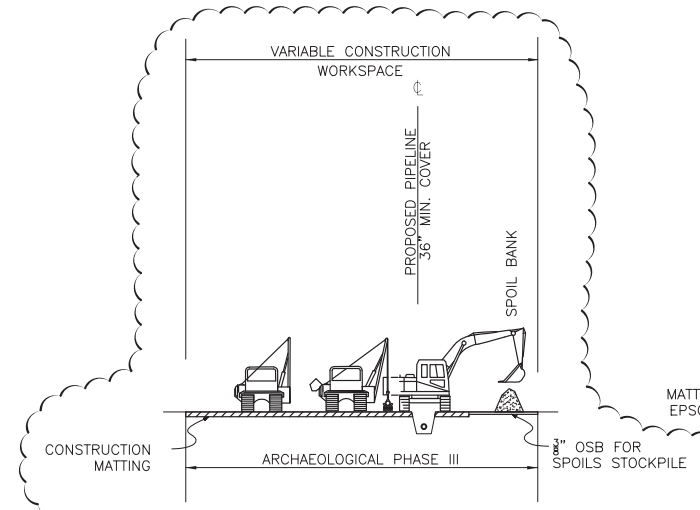
CONSTRUCTION TYPE 4G
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR ROADSIDE CONSTRUCTION SPACE AND DOES NOT DEPICT ADDITIONAL TEMP. WORKSPACE.
2. ADDITIONAL TEMP. WORKSPACE HAS BEEN TYPICALLY INCORPORATED ON THE ALIGNMENT SHEETS FOR AREAS SUCH AS ROAD, RIVER/STREAM/WATERBODY, AND ARCHEOLOGICAL SITE CROSSINGS WHERE HORIZONTAL DIRECTIONAL DRILL CONSTRUCTION HAS BEEN PROPOSED.
3. FOR AREAS DESIGNATED AS PRIME AGRICULTURAL SOILS (PAS) IN THE SOIL TYPE BAND OF THE EPSC SHEETS, SEE "CONSTRUCTION WITHIN PRIME AGRICULTURAL SOILS (PAS) AREAS" FOR SOIL SEGREGATION AND ASSOCIATED CONSTRUCTION PROCEDURES.
4. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.



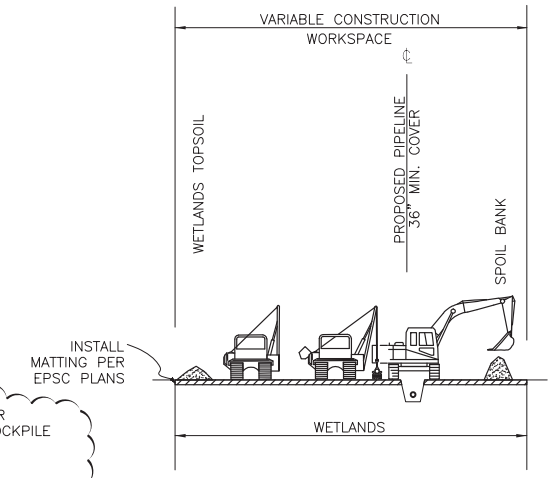
CONSTRUCTION TYPE 4H
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR ROADSIDE CONSTRUCTION SPACE AND DOES NOT DEPICT ADDITIONAL TEMP. WORKSPACE.
2. ADDITIONAL TEMP. WORKSPACE HAS BEEN TYPICALLY INCORPORATED ON THE ALIGNMENT SHEETS FOR AREAS SUCH AS ROAD, RIVER/STREAM/WATERBODY, AND ARCHEOLOGICAL SITE CROSSINGS WHERE HORIZONTAL DIRECTIONAL DRILL CONSTRUCTION HAS BEEN PROPOSED.
3. FOR AREAS DESIGNATED AS PRIME AGRICULTURAL SOILS (PAS) IN THE SOIL TYPE BAND OF THE EPSC SHEETS, SEE "CONSTRUCTION WITHIN PRIME AGRICULTURAL SOILS (PAS) AREAS" FOR SOIL SEGREGATION AND ASSOCIATED CONSTRUCTION PROCEDURES.
4. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.



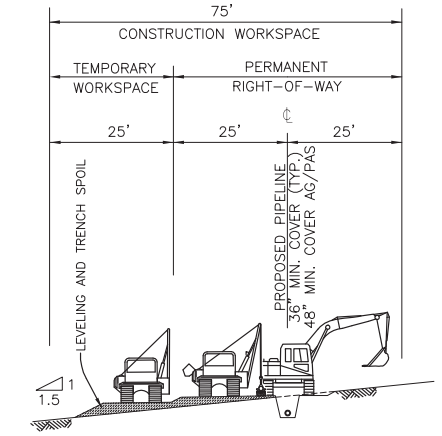
CONSTRUCTION TYPE A
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR VARIABLE CONSTRUCTION SPACE IN "ARCHAEOLOGICAL PHASE III" AREAS AND DOES NOT DEPICT ADDITIONAL TEMP. WORKSPACE. THE PHASE III AREAS ARE AS FOLLOWS: VT-AD-483, LOCUS 2 (8/14/2013), VT-CH-414 (8/14/2013), VT-AD-456, LOCUS 3, VT-AD-1559, VT-AD-138, LOCUS 2 (8/14/2013), VT-AD-87, LOCUS 2 (8/14/2013).
2. ADDITIONAL TEMP. WORKSPACE HAS BEEN TYPICALLY INCORPORATED ON THE ALIGNMENT & EPSC SHEETS FOR AREAS SUCH AS ROAD, RIVER/STREAM/WATERBODY, AND ARCHEOLOGICAL SITE CROSSINGS WHERE HORIZONTAL DIRECTIONAL DRILL CONSTRUCTION HAS BEEN PROPOSED.
3. SEE ALIGNMENT & EPSC SHEETS FOR LOCATIONS OF THIS CONSTRUCTION CONFIGURATION.
4. WHEN BACKFILLING, SOILS SHALL BE REPLACED IN ORDER THEY WERE EXCAVATED, WITH TOPSOIL AS UPPER LAYER FILL AND COMPACT SUBSOIL TO DEPTH OF ADJACENT NATIVE SUBSOIL/TOPSOIL INTERFACE. REPLACE TOPSOIL AS UPPER LAYER AND BLEND TO EXISTING GRADE OF UNDISTURBED SOILS. DISPOSE OF EXCESS SUBSOIL AT SUITABLE LOCATION AS APPROVED BY THE OSPC.
5. SEE EPSC PLAN "ADDITIONAL ENVIRONMENTAL NOTES" FOR ADDITIONAL INSTRUCTIONS RELATED TO CONSTRUCTION IN "ARCHAEOLOGICAL PHASE III" AREAS, INCLUDING FINAL STABILIZATION NOTES. 1



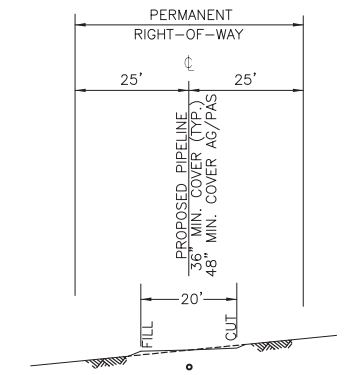
CONSTRUCTION TYPE W
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR VARIABLE CONSTRUCTION SPACE IN WETLANDS AND DOES NOT DEPICT ADDITIONAL TEMP. WORKSPACE.
2. ADDITIONAL TEMP. WORKSPACE HAS BEEN TYPICALLY INCORPORATED ON THE ALIGNMENT & EPSC SHEETS FOR AREAS SUCH AS ROAD, RIVER/STREAM/WATERBODY, AND ARCHEOLOGICAL SITE CROSSINGS WHERE HORIZONTAL DIRECTIONAL DRILL CONSTRUCTION HAS BEEN PROPOSED.
3. SEE ALIGNMENT & EPSC SHEETS FOR LOCATIONS OF THIS CONFIGURATION.
4. WHEN BACK-PILING, SOILS SHALL BE REPLACED IN ORDER THEY WERE EXCAVATED, WITH TOPSOIL AS UPPER LAYER FILL AND COMPACT SUBSOIL TO DEPTH OF ADJACENT NATIVE SUBSOIL/TOPSOIL INTERFACE. REPLACE TOPSOIL AS UPPER LAYER AND BLEND TO EXISTING GRADE OF UNDISTURBED SOILS. DISPOSE OF EXCESS SUBSOIL AT SUITABLE LOCATION AS APPROVED BY THE OSPC.
5. SEE EPSC PLAN "ADDITIONAL ENVIRONMENTAL NOTES" FOR ADDITIONAL INSTRUCTIONS RELATED TO CONSTRUCTION IN WETLANDS, INCLUDING FINAL STABILIZATION NOTES.



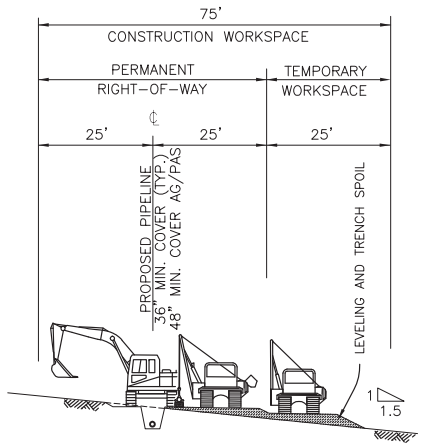
CONSTRUCTION TYPE 6A
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR SIDE HILL SLOPE CONSTRUCTION AND DOES NOT DEPICT ADDITIONAL TEMP. WORKSPACE.
2. ADDITIONAL TEMP. WORKSPACE HAS BEEN TYPICALLY INCORPORATED ON THE ALIGNMENT SHEETS FOR AREAS SUCH AS ROAD, RIVER/STREAM/WATERBODY, AND ARCHEOLOGICAL SITE CROSSINGS WHERE HORIZONTAL DIRECTIONAL DRILL CONSTRUCTION HAS BEEN PROPOSED.
3. FOR AREAS DESIGNATED AS PRIME AGRICULTURAL SOILS (PAS) IN THE SOIL TYPE BAND OF THE EPSC SHEETS, SEE "CONSTRUCTION WITHIN PRIME AGRICULTURAL SOILS (PAS) AREAS" FOR SOIL SEGREGATION AND ASSOCIATED CONSTRUCTION PROCEDURES.
4. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.



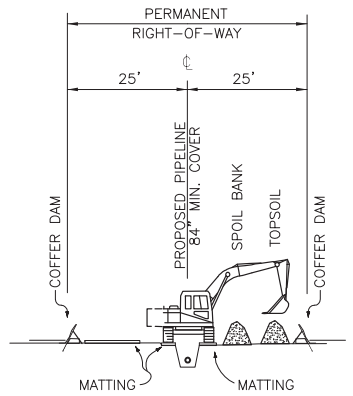
CONSTRUCTION TYPE 6B
NOT TO SCALE
POST CONSTRUCTION

NOTE:
1. THIS CONFIGURATION IS FOR SIDE HILL SLOPE CONSTRUCTION AND DOES NOT DEPICT ADDITIONAL TEMP. WORKSPACE.
2. ADDITIONAL TEMP. WORKSPACE HAS BEEN TYPICALLY INCORPORATED ON THE ALIGNMENT SHEETS FOR AREAS SUCH AS ROAD, RIVER/STREAM/WATERBODY, AND ARCHEOLOGICAL SITE CROSSINGS WHERE HORIZONTAL DIRECTIONAL DRILL CONSTRUCTION HAS BEEN PROPOSED.



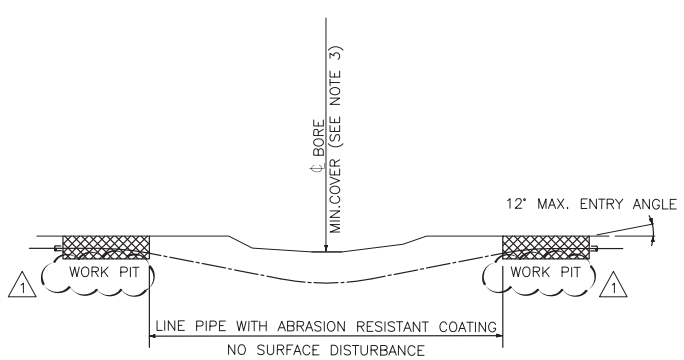
CONSTRUCTION TYPE 6C
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR SIDE HILL SLOPE CONSTRUCTION AND DOES NOT DEPICT ADDITIONAL TEMP. WORKSPACE.
2. ADDITIONAL TEMP. WORKSPACE HAS BEEN TYPICALLY INCORPORATED ON THE ALIGNMENT SHEETS FOR AREAS SUCH AS ROAD, RIVER/STREAM/WATERBODY, AND ARCHEOLOGICAL SITE CROSSINGS WHERE HORIZONTAL DIRECTIONAL DRILL CONSTRUCTION HAS BEEN PROPOSED.
3. FOR AREAS DESIGNATED AS PRIME AGRICULTURAL SOILS (PAS) IN THE SOIL TYPE BAND OF THE EPSC SHEETS, SEE "CONSTRUCTION WITHIN PRIME AGRICULTURAL SOILS (PAS) AREAS" FOR SOIL SEGREGATION AND ASSOCIATED CONSTRUCTION PROCEDURES.
4. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.



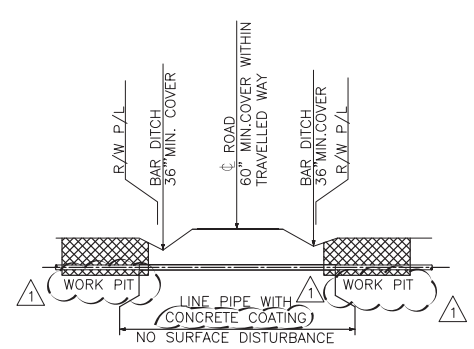
CONSTRUCTION TYPE 7
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR STREAM CROSSING AND DOES NOT DEPICT ADDITIONAL TEMP. WORKSPACE.
2. ADDITIONAL TEMP. WORKSPACE HAS BEEN TYPICALLY INCORPORATED ON THE ALIGNMENT SHEETS FOR AREAS SUCH AS ROAD, RIVER/STREAM/WATERBODY, AND ARCHEOLOGICAL SITE CROSSINGS WHERE HORIZONTAL DIRECTIONAL DRILL CONSTRUCTION HAS BEEN PROPOSED.
3. FOR AREAS DESIGNATED AS PRIME AGRICULTURAL SOILS (PAS) IN THE SOIL TYPE BAND OF THE EPSC SHEETS, SEE "CONSTRUCTION WITHIN PRIME AGRICULTURAL SOILS (PAS) AREAS" FOR SOIL SEGREGATION AND ASSOCIATED CONSTRUCTION PROCEDURES.
4. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.



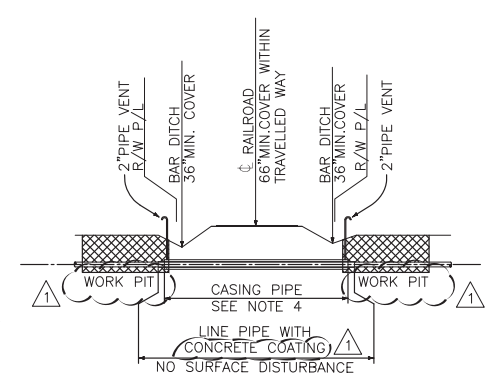
CONSTRUCTION TYPE 8
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR OPTIONAL STREAM OR ROAD CROSSING HORIZONTAL DIRECTIONAL DRILL.
2. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.
3. SEE TABLE ON ANGP-T-G-020 FOR COVER REQUIREMENTS.



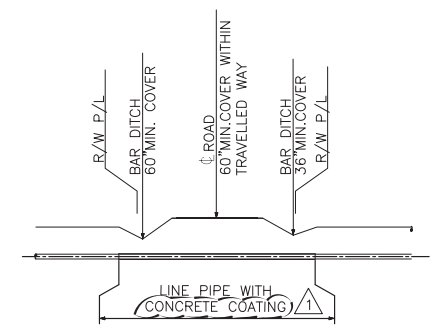
CONSTRUCTION TYPE 9
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR UNCASED ROAD CROSSING CONSTRUCTION.
2. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION AND MATERIAL SPECIFICATIONS.
3. SEE SITE SPECIFIC SOIL BORING DETAILS FOR ADDITIONAL INFORMATION.



CONSTRUCTION TYPE 10
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR CASED ROAD AND RAILROAD CROSSING CONSTRUCTION.
2. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION AND MATERIAL SPECIFICATIONS.
3. SEE SITE SPECIFIC SOIL BORING DETAILS FOR ADDITIONAL INFORMATION.
4. ANNULUS FILLED WITH DIELECTRIC MATERIAL PER VT GAS SPECIFICATIONS FOR ABRASION RESISTANT COATED CARRYING PIPE ONLY. DIELECTRIC MATERIAL SHALL NOT FILL THE ANNULUS SPACE WHERE CONCRETE COATED CARRYING PIPE IS SPECIFIED.



CONSTRUCTION TYPE 11
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR OPEN CUT ROAD CROSSING CONSTRUCTION.
2. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION AND MATERIAL SPECIFICATIONS.
3. SEE SITE SPECIFIC SOIL BORING DETAILS FOR ADDITIONAL INFORMATION.
4. COMPACTION AND RESTORATION TO TOWN AND VT GAS SPECIFICATIONS.

NOTE:
1. CONSTRUCTION TYPE 5 NOT USED.

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
		1	MDF	TDB	ISSUED FOR ADDITIONAL PERMIT REVIEW (9/20/13)	ENVIRONMENTAL	JLS	06/28/13		
		0	MDF	SAB	ISSUED FOR CONSTRUCTION	DRAFTING DESIGNER	GIL	06/28/13		
						DRAFTING SUPERVISOR	BZD	06/28/13		
						DESIGN ENGINEER	MDF	06/28/13		
						DESIGN MANAGER	SAB	06/28/13		

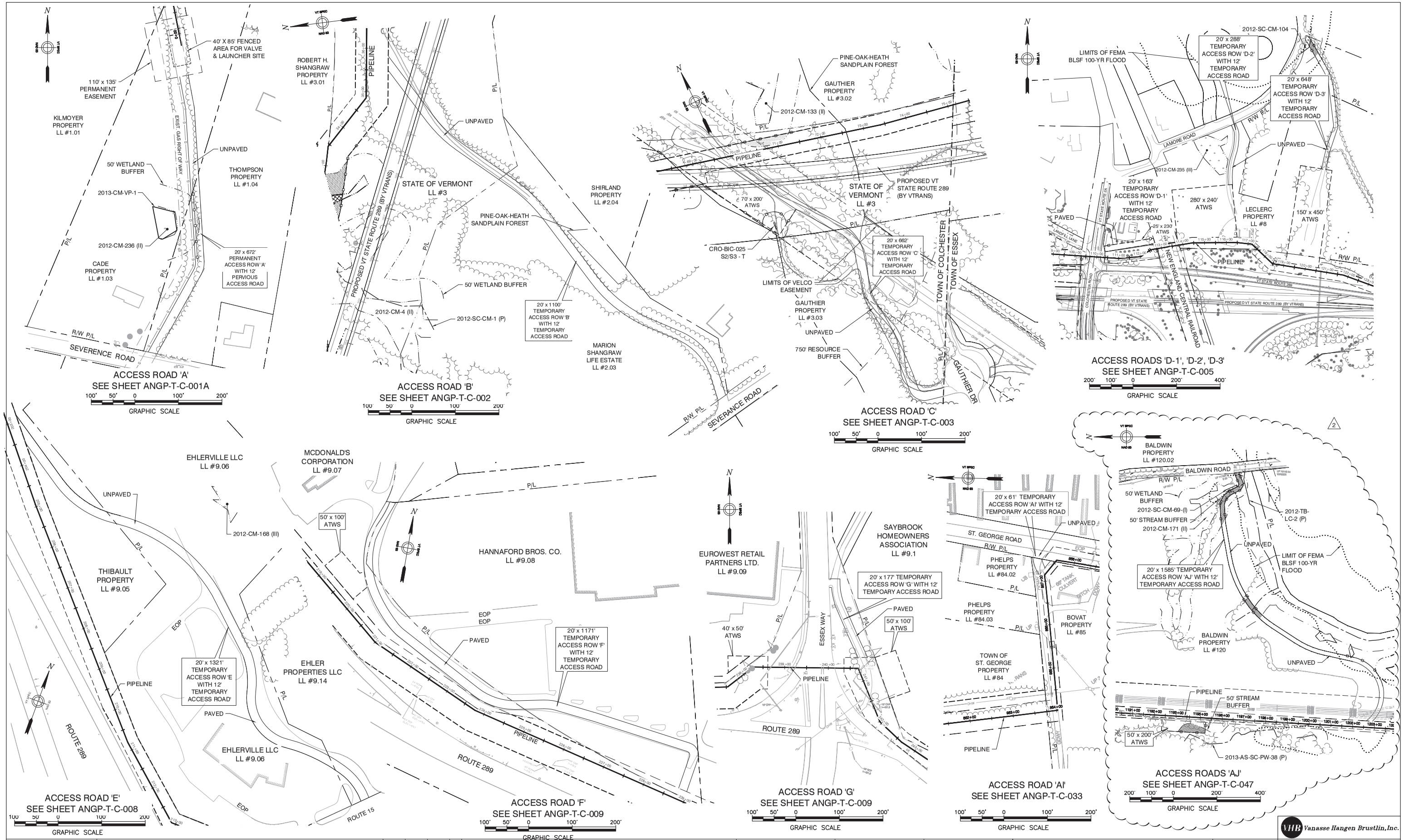
VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
CONSTRUCTION CONFIGURATION DETAILS
LOC. CHITTENDEN & ADDISON COUNTIES

Vermont Gas

VHB Vanasse Hangen Brustlin, Inc.

CHA
36 Cordage Park Circle, Suites 321, 326, 329, 336
Plymouth, MA 02360
Main: (781) 982-7700 · www.chacompanies.com

YEAR: 2013 | W.O. | SCALE: NOTED | DWG. ANGP-T-G-006 | REV. 1



DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
						ENVIRONMENTAL	JLS	06/28/13		
						DRAFTING DESIGNER	GIL	06/28/13		
		2	MDF	TDB	ISSUED FOR CONSTRUCTION (10/08/13)	DRAFTING SUPERVISOR	BZD	06/28/13		
		1	MDF	TDB	ISSUED FOR ADDITIONAL PERMIT REVIEW (9/20/13)	DESIGN ENGINEER	MDF	06/28/13		
		0	MDF	SAB	ISSUED FOR CONSTRUCTION	DESIGN MANAGER	SAB	06/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ACCESS ROAD DETAILS

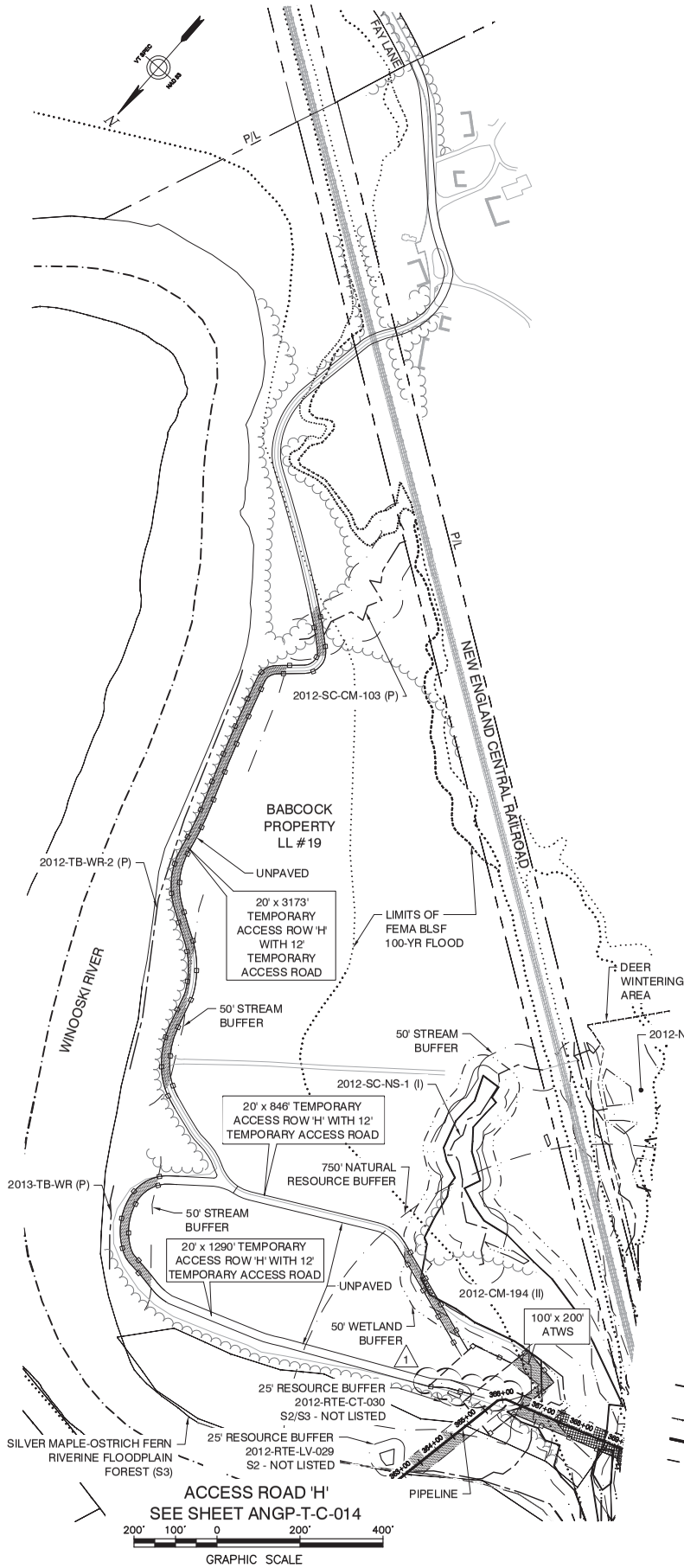
LOC. CHITTENDEN & ADDISON COUNTIES

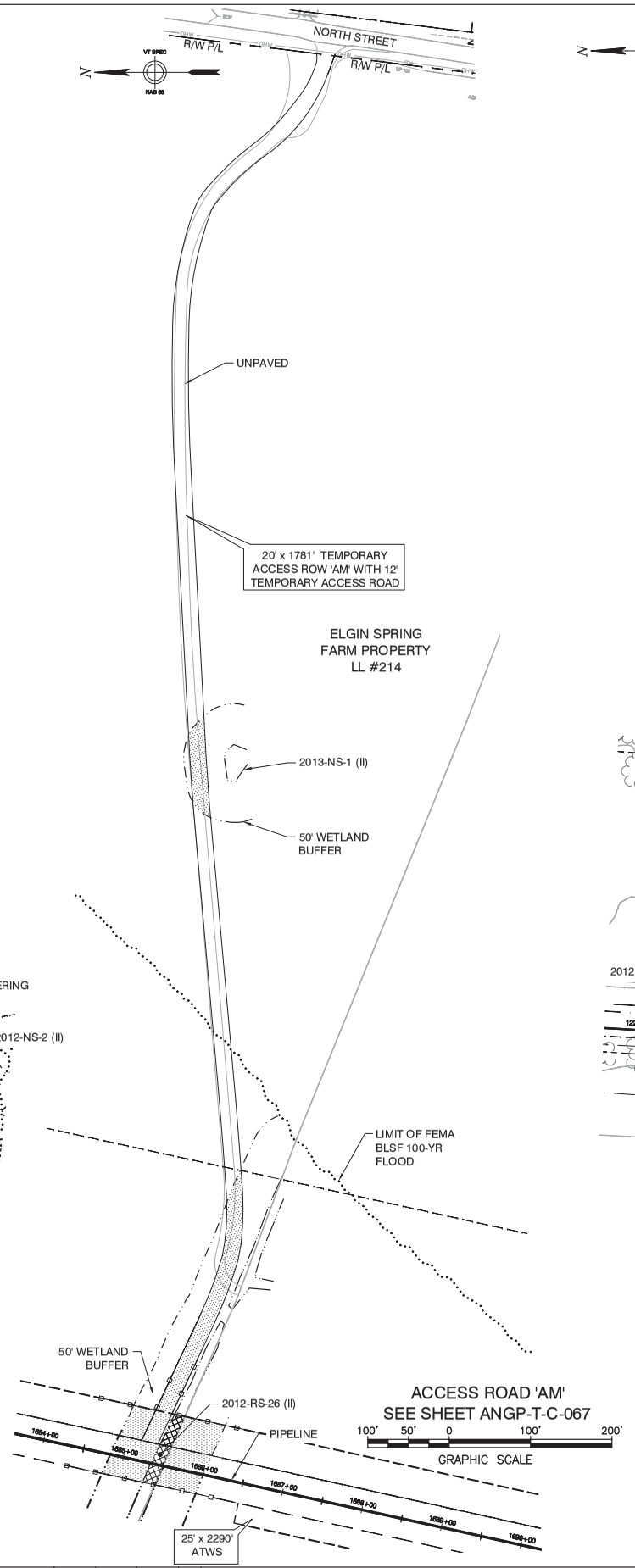
YEAR: 2013 | W.O. | SCALE: AS NOTED | DWG. ANGP-T-G-007A | REV. 2

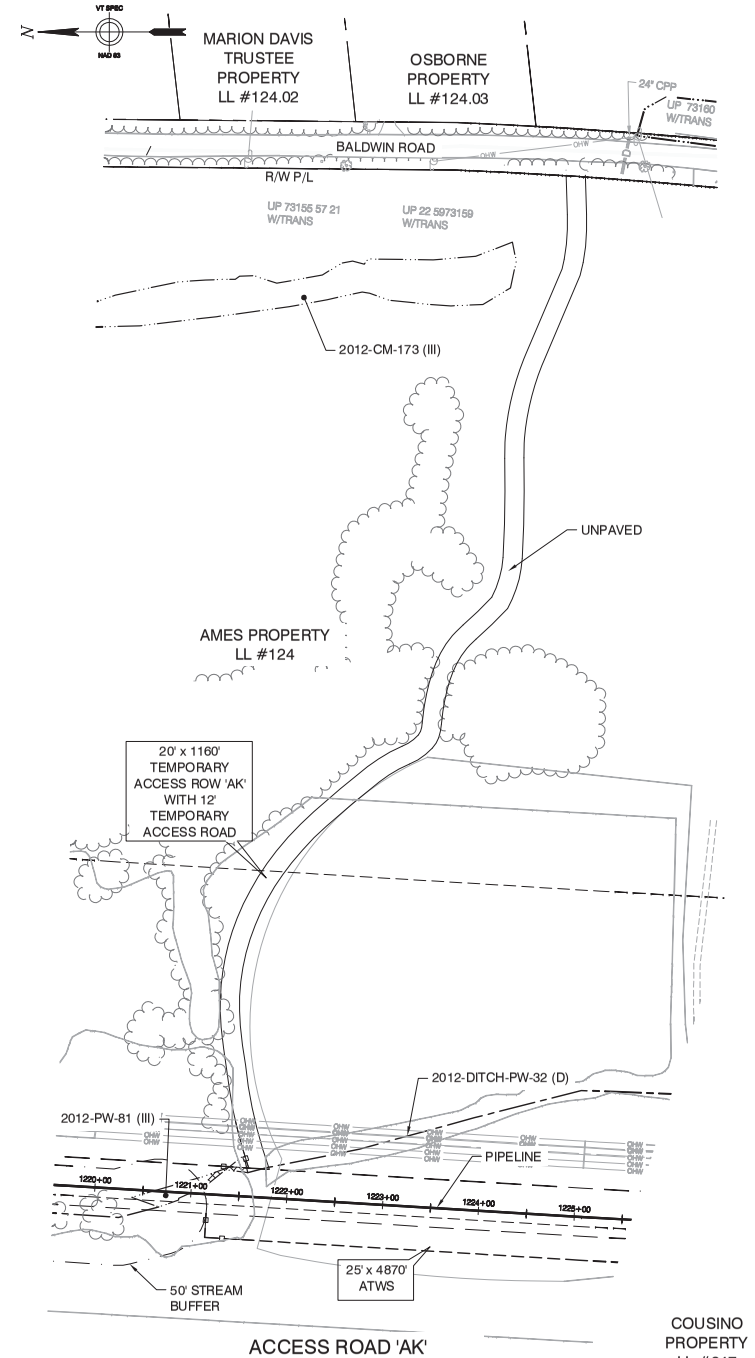
Vermont Gas

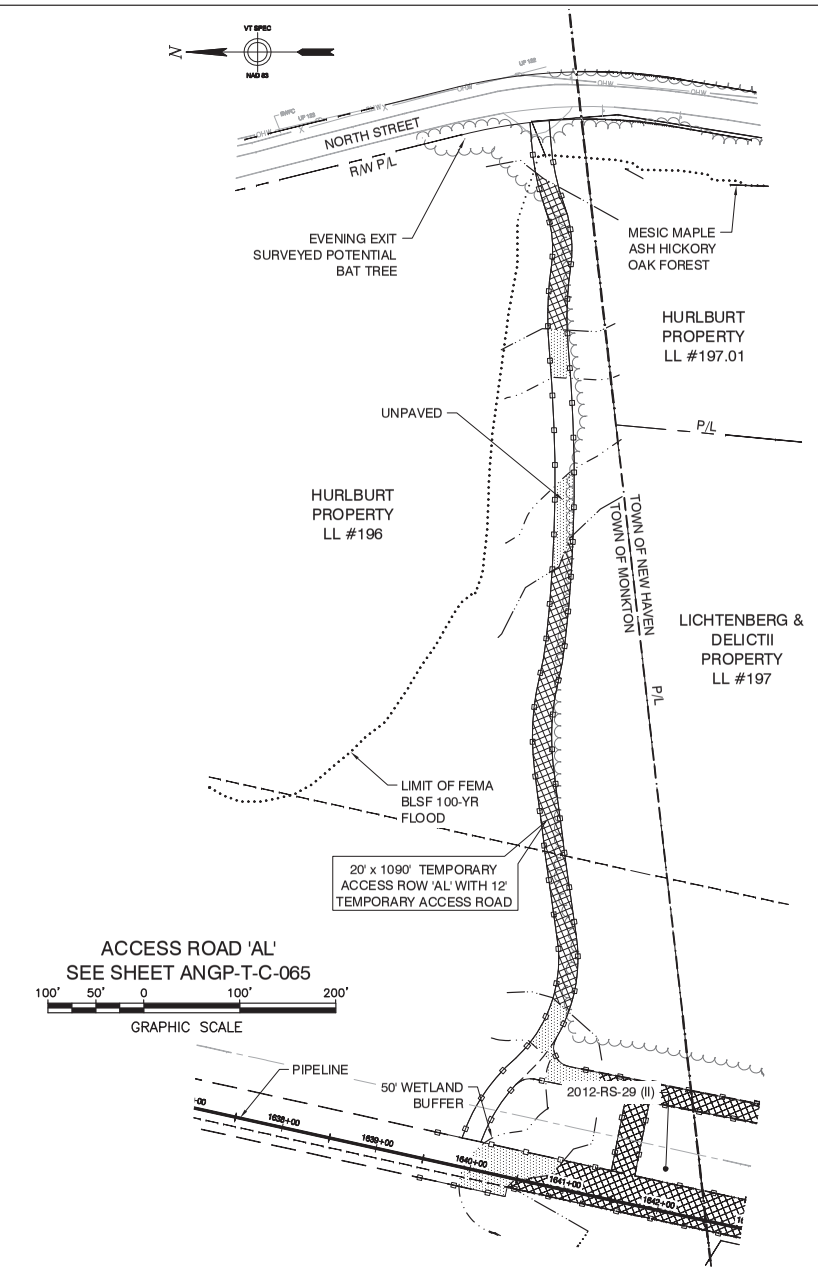
VHB Vanasse Hangen Brustlin, Inc.

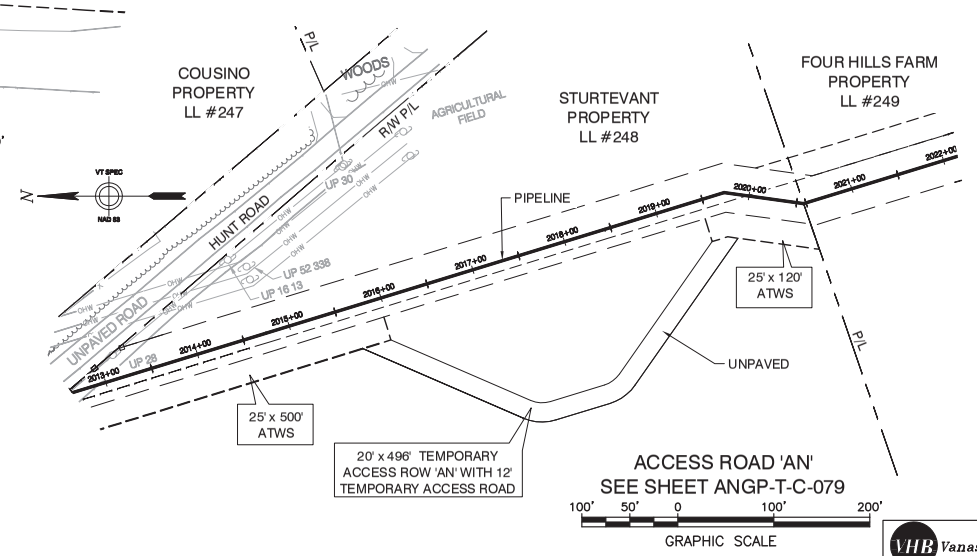
CHA
36 Cordage Park Circle , Suites 321, 326, 329, 336
Plymouth, MA 02360
Main: (781) 982-7700 · www.chacompanies.com











DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
		1	MDF	TDB	ISSUED FOR ADDITIONAL PERMIT REVIEW (9/20/13)
		0	MDF	SAB	ISSUED FOR CONSTRUCTION

	INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL	JLS	06/28/13		
DRAFTING DESIGNER	GIL	06/28/13		
DRAFTING SUPERVISOR	BZD	06/28/13		
DESIGN ENGINEER	MDF	06/28/13		
DESIGN MANAGER	SAB	06/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ACCESS ROAD DETAILS

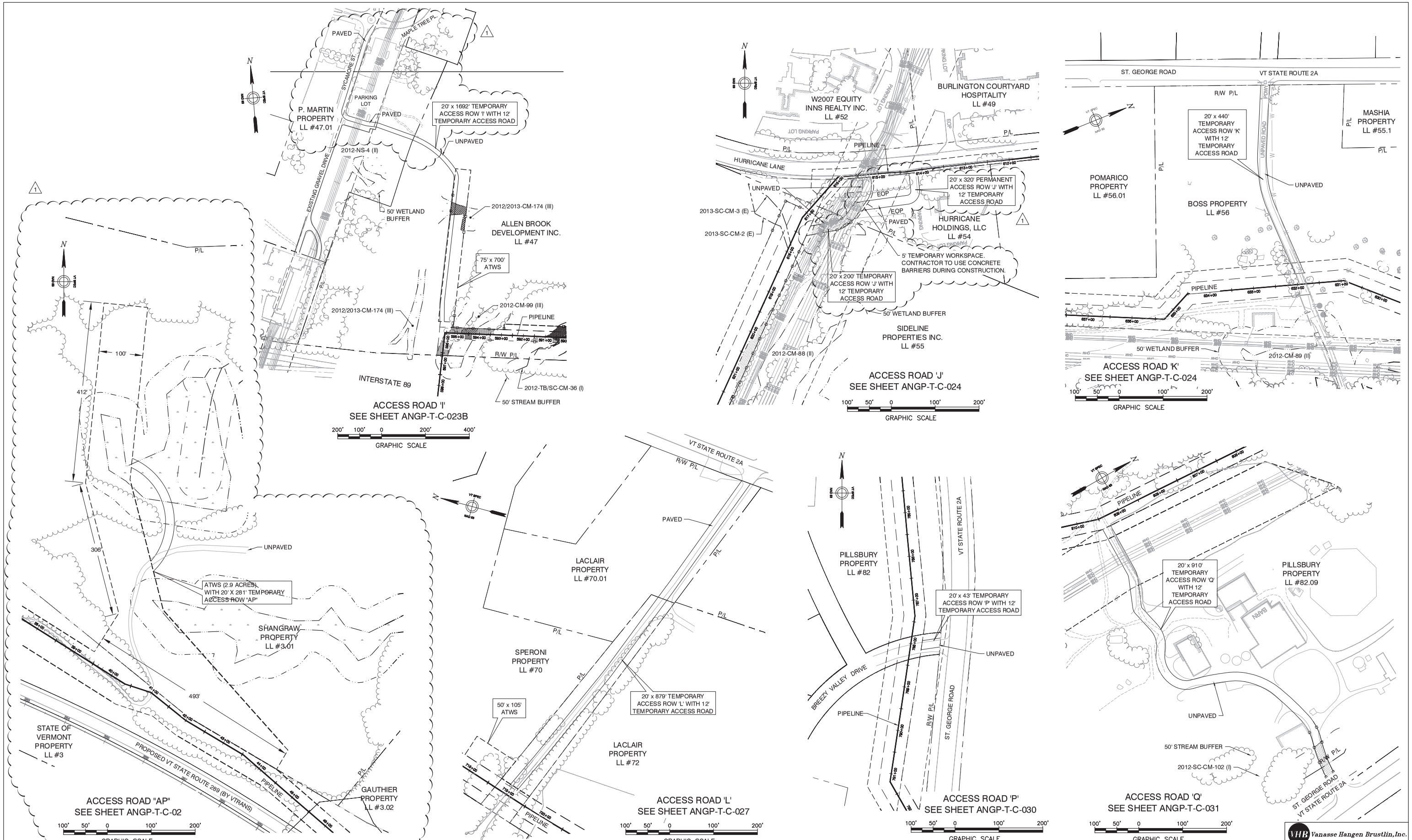
LOC. CHITTENDEN & ADDISON COUNTIES

Vermont Gas

VHB Vanasse Hangen Brustlin, Inc.

CHA
36 Cordage Park Circle, Suites 321, 326, 329, 336
Plymouth, MA 02360
Main: (781) 952-7700 · www.chacompanies.com

YEAR: 2013 | W.O. | SCALE: AS NOTED | DWG. ANGP–T–G–007B | REV. 1



DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
		1	MDF	TDB	ISSUED FOR ADDITIONAL PERMIT REVIEW (9/20/13)
		0	MDF	SAB	ISSUED FOR CONSTRUCTION

	INITIALS	BID DATE	INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL	JLS	06/28/13		
DRAFTING DESIGNER	GIL	06/28/13		
DRAFTING SUPERVISOR	BZD	06/28/13		
DESIGN ENGINEER	MDF	06/28/13		
DESIGN MANAGER	SAB	06/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ACCESS ROAD DETAILS

LOC. CHITTENDEN & ADDISON COUNTIES

Vermont Gas

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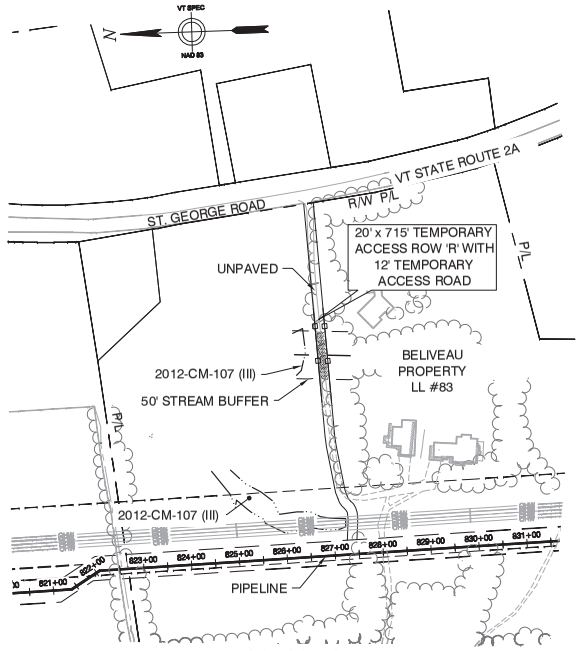
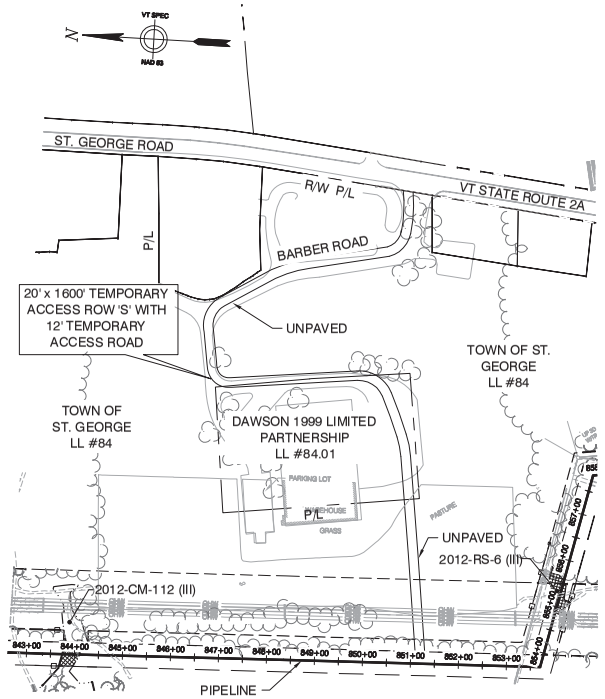
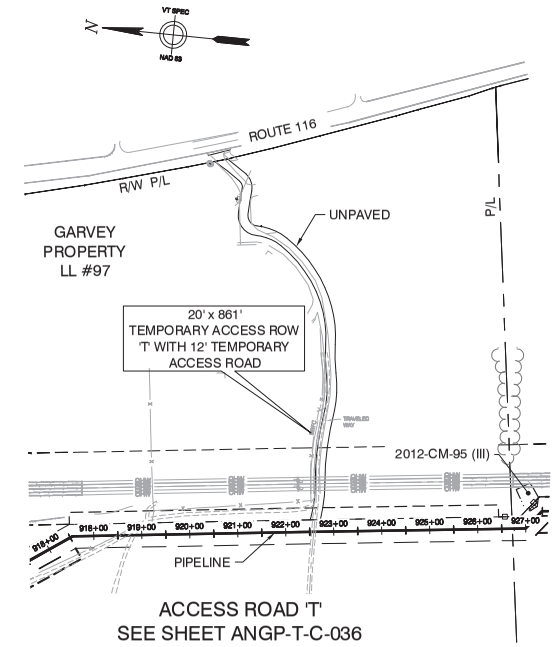
YEAR: 2013 | W.O. | SCALE: AS NOTED | DWG. ANGP-T-G-008 | REV. 1



ACCESS ROAD 'R'
SEE SHEET ANGP-T-C-031
200' 100' 0 200' 400'
GRAPHIC SCALE



ACCESS ROAD 'S'
SEE SHEET ANGP-T-C-033
200' 100' 0 200' 400'
GRAPHIC SCALE



ACCESS ROAD 'T'
SEE SHEET ANGP-T-C-036
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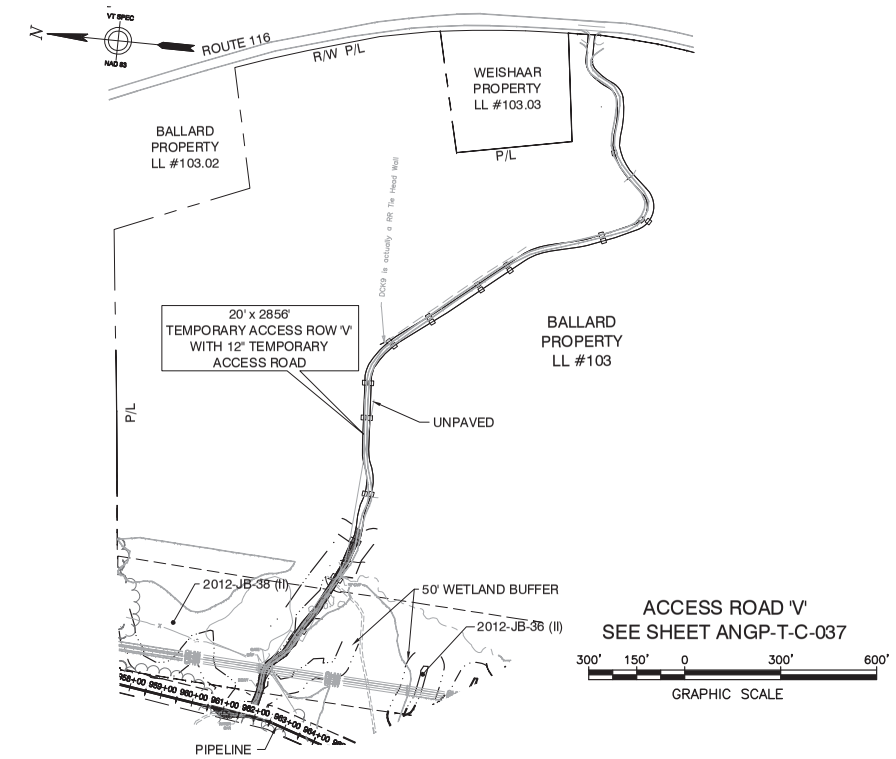
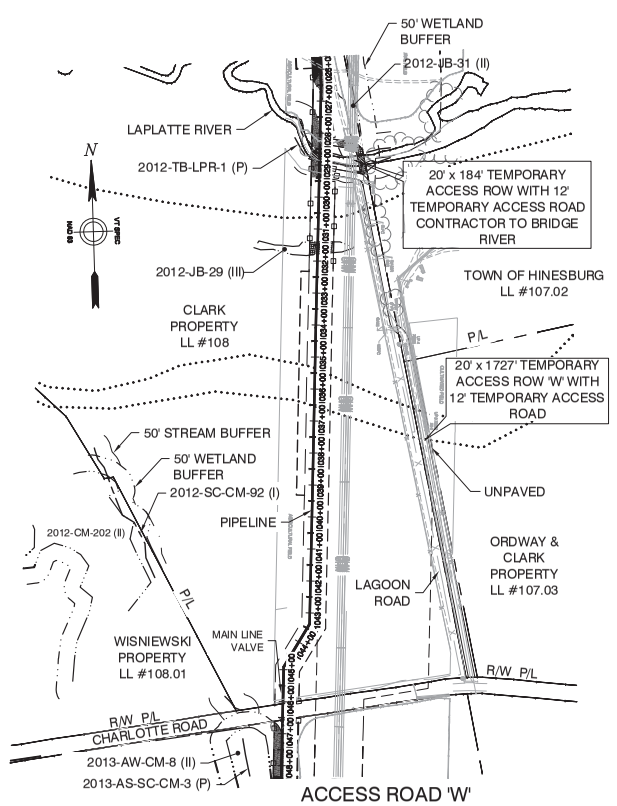
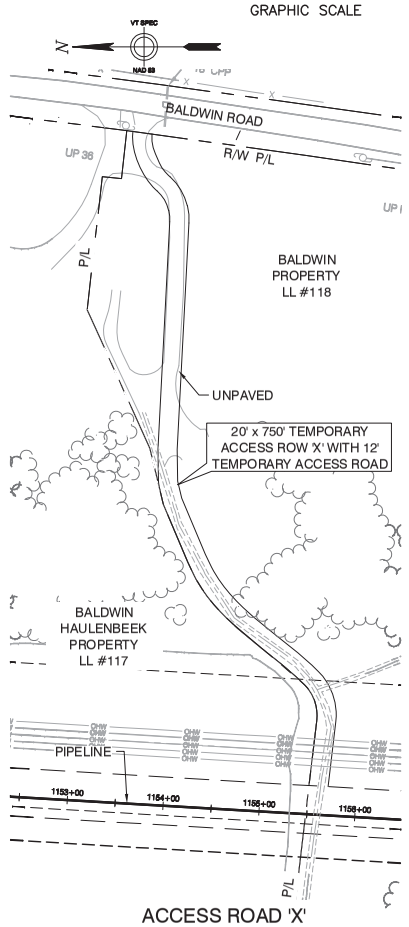
GRAPHIC SCALE



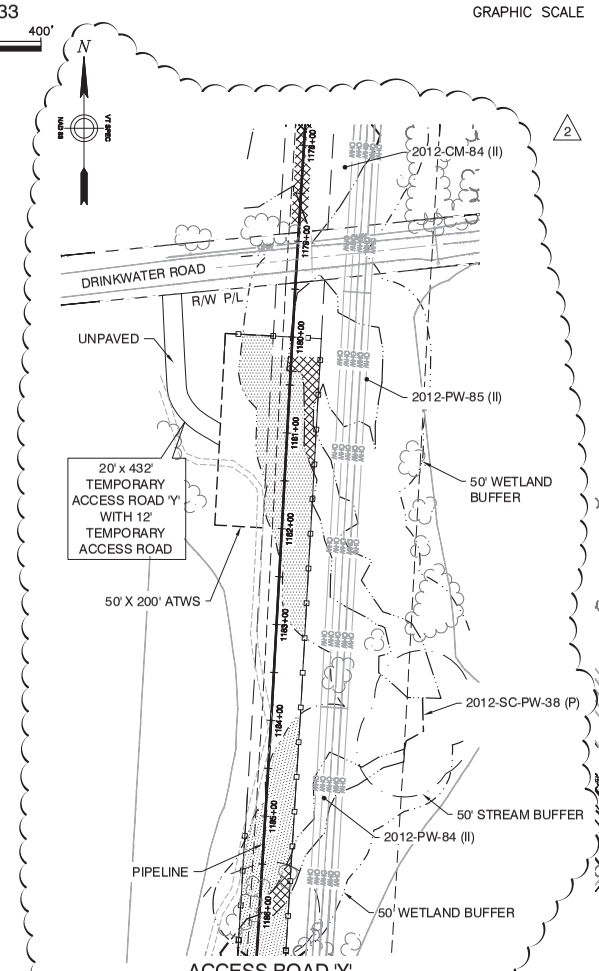
ACCESS ROAD 'V'
SEE SHEET ANGP-T-C-037
300' 150' 0 300' 600'
GRAPHIC SCALE



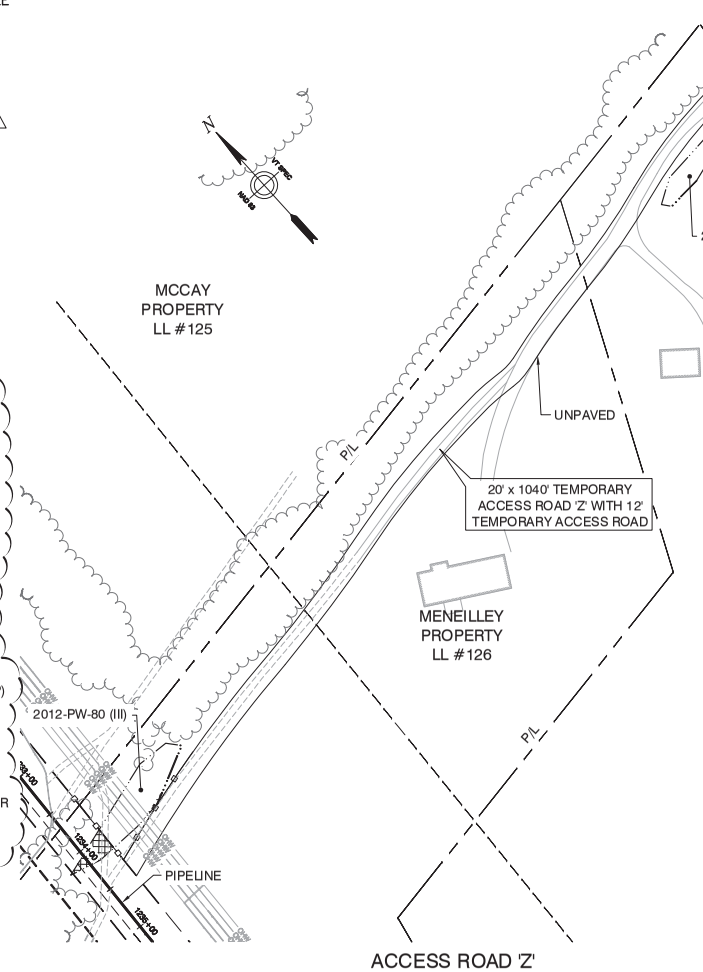
ACCESS ROAD 'W'
SEE SHEET ANGP-T-C-040
300' 150' 0 300' 600'
GRAPHIC SCALE



ACCESS ROAD 'X'
SEE SHEET ANGP-T-C-045
100' 50' 0 100' 200'
GRAPHIC SCALE



ACCESS ROAD 'Y'
SEE SHEET ANGP-T-C-046
100' 50' 0 100' 200'
GRAPHIC SCALE



ACCESS ROAD 'Z'
SEE SHEET ANGP-T-C-048
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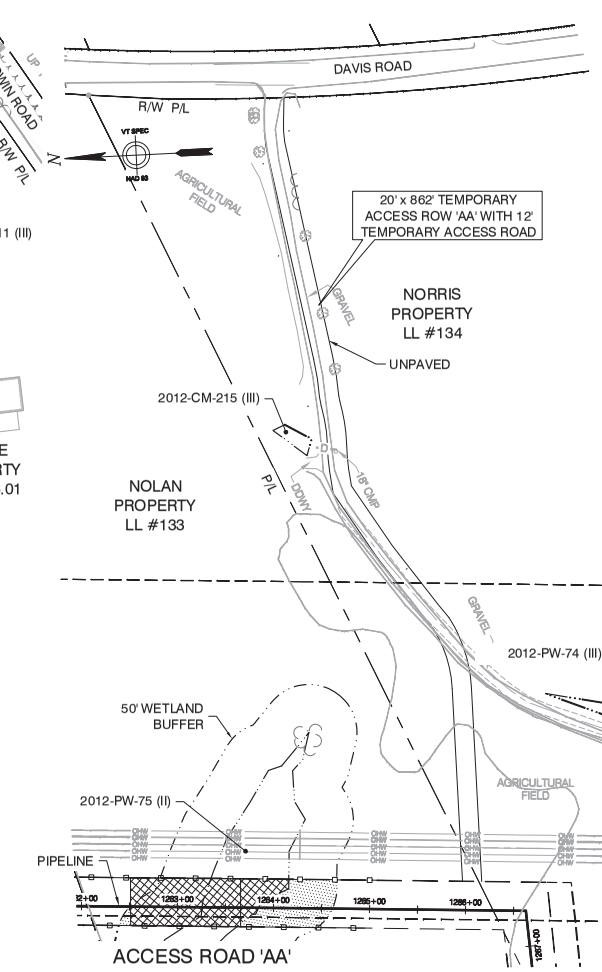
GRAPHIC SCALE



ACCESS ROAD 'AA'
SEE SHEET ANGP-T-C-049
100' 50' 0 100' 200'
GRAPHIC SCALE

VHB Vanasse Hangen Brustlin, Inc.

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		INITIALS	DATE	INITIALS	DATE
							BID		CONSTRUCTION	
						ENVIRONMENTAL	JLS	06/28/13		
						DRAFTING DESIGNER	GIL	06/28/13		
		2	MDF	TDB	ISSUED FOR CONSTRUCTION (10/08/13)	DRAFTING SUPERVISOR	BZD	06/28/13		
		1	MDF	TDB	ISSUED FOR ADDITIONAL PERMIT REVIEW (9/20/13)	DESIGN ENGINEER	MDF	06/28/13		
		0	MDF	SAB	ISSUED FOR CONSTRUCTION	DESIGN MANAGER	SAB	06/28/13		

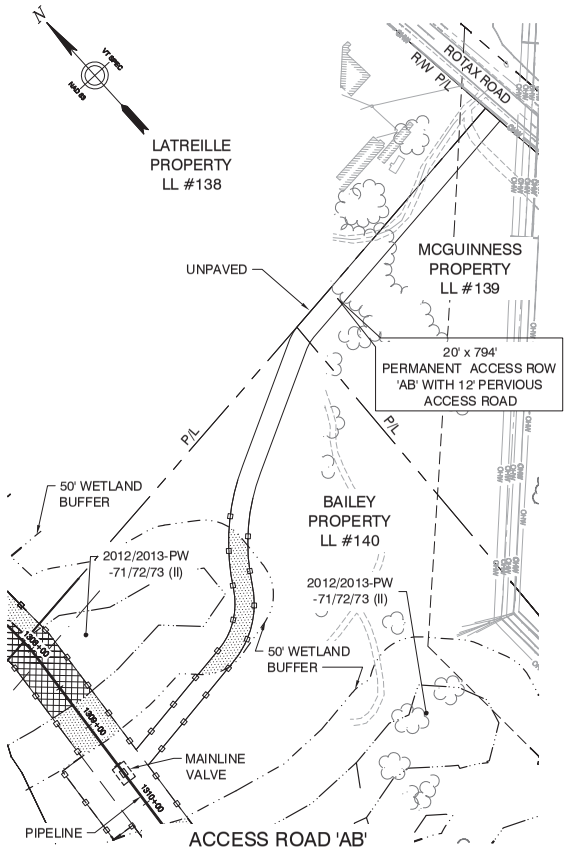
VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ACCESS ROAD DETAILS

LOC. CHITTENDEN & ADDISON COUNTIES

Vermont Gas

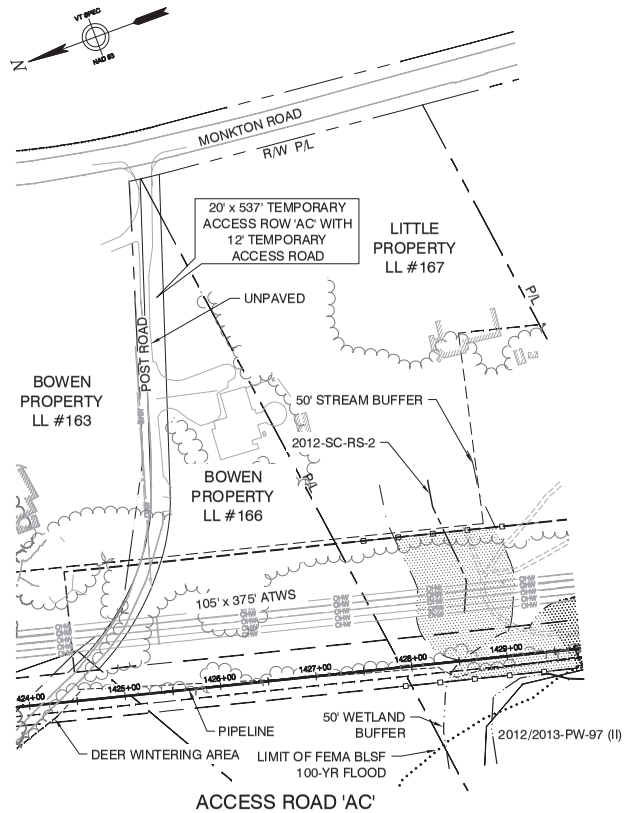
YEAR: 2013 | W.O. | SCALE: AS NOTED | DWG. ANGP–T–G–009 | REV. 2

CHA
36 Cordage Park Circle , Suite 321, 326, 329, 336
Plymouth, MA 02360
Main: (781) 982-7700 · www.chacompanies.com



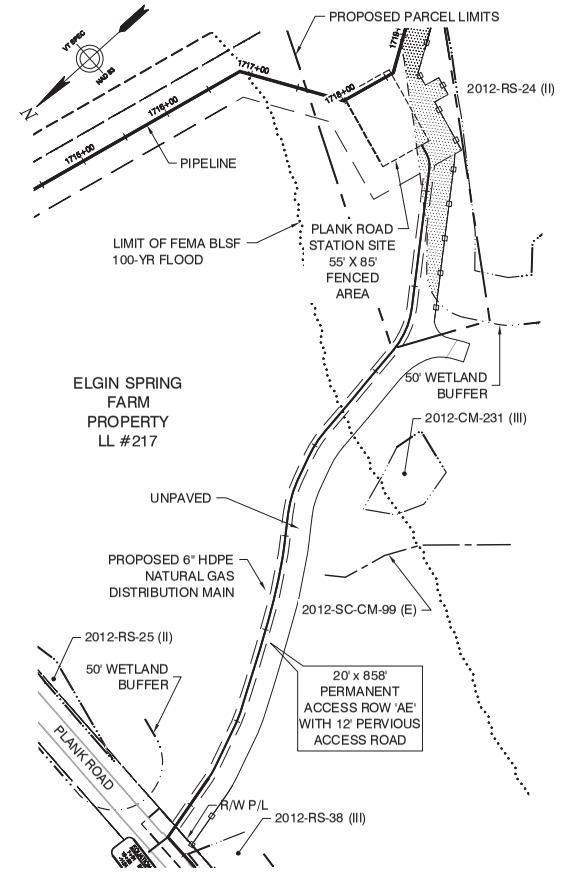
ACCESS ROAD 'AB'
SEE SHEET ANGP-T-C-051

100' 50' 0 100' 200'
GRAPHIC SCALE



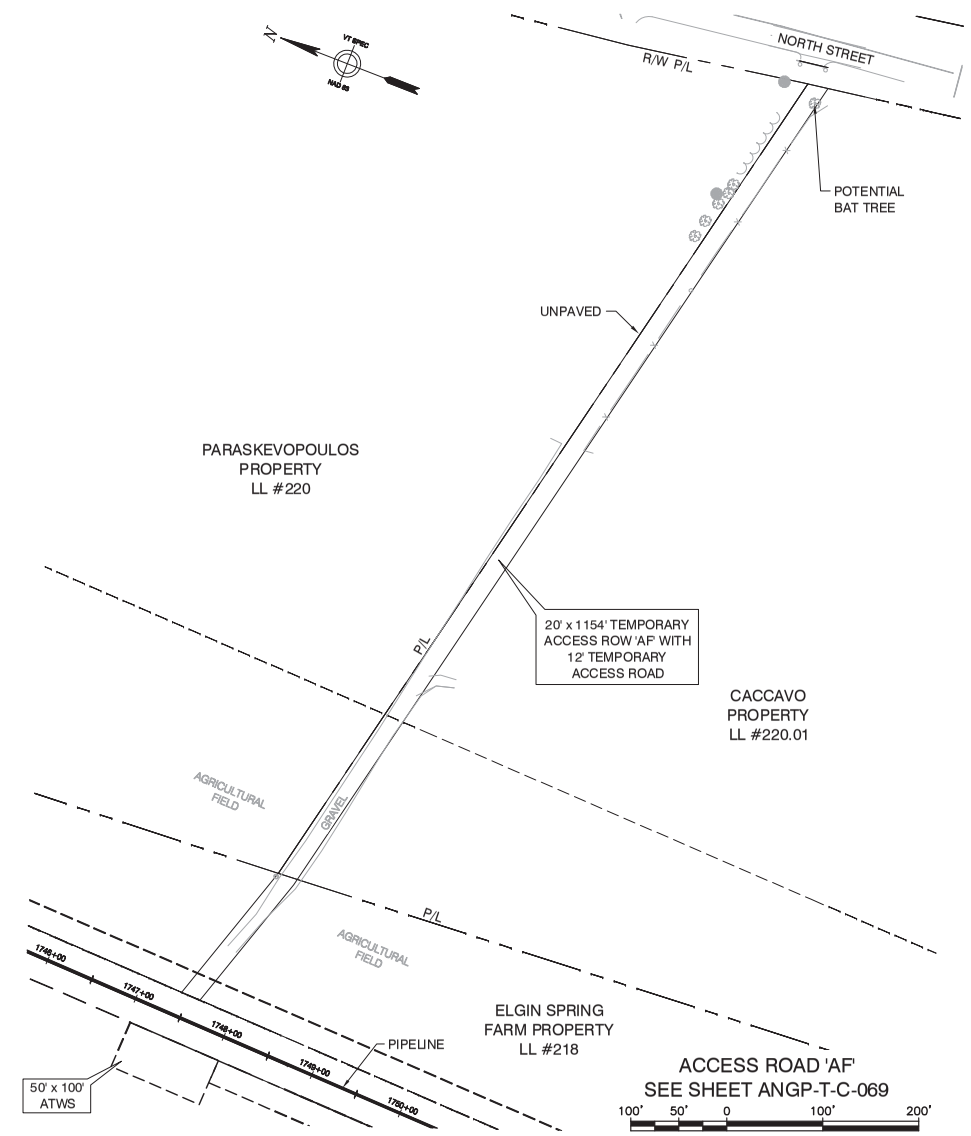
ACCESS ROAD 'AC'
SEE SHEET ANGP-T-C-056

100' 50' 0 100' 200'
GRAPHIC SCALE



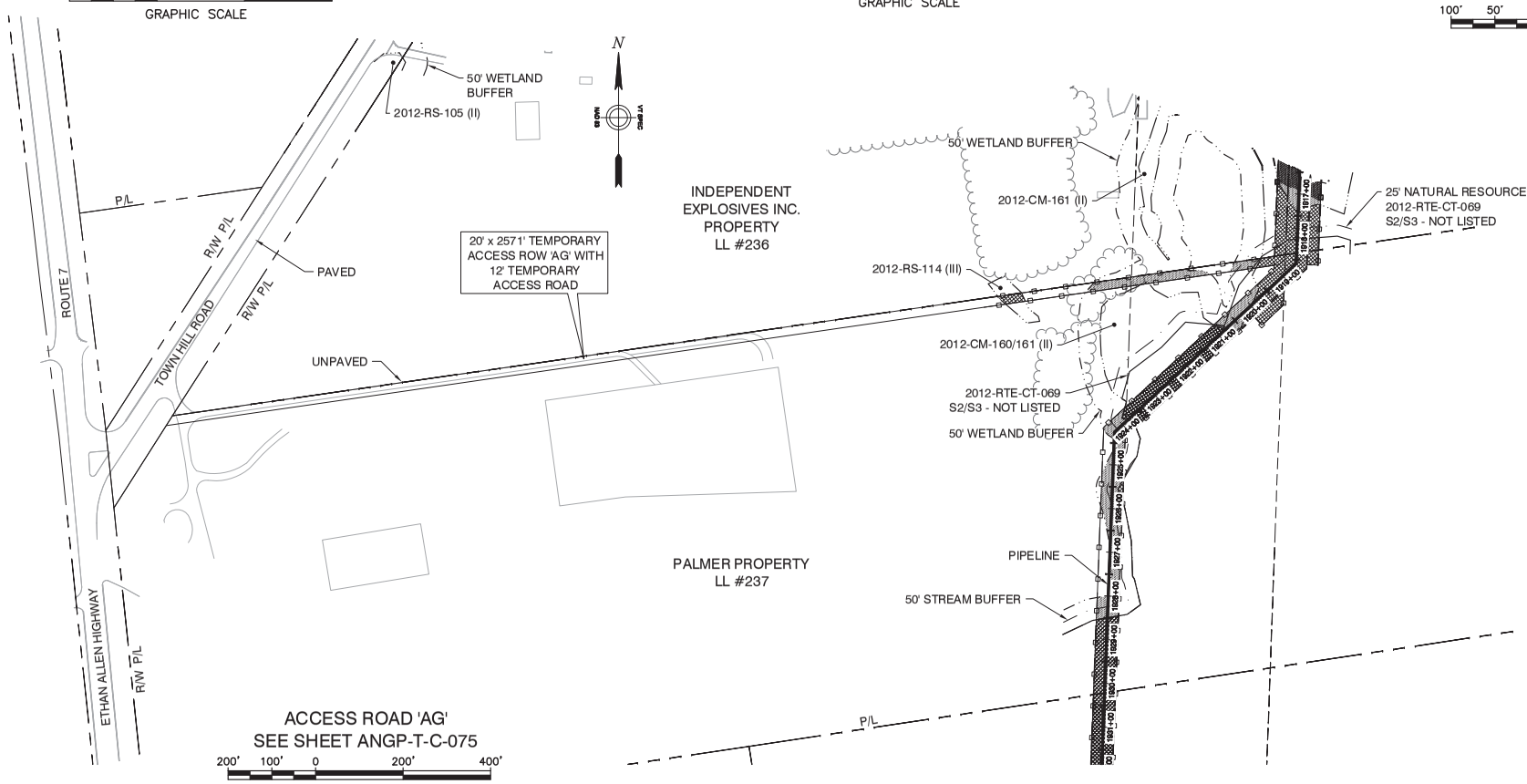
ACCESS ROAD 'AE'
SEE SHEETS ANGP-T-C-068 & ANGP-D-C-001

100' 50' 0 100' 200'
GRAPHIC SCALE



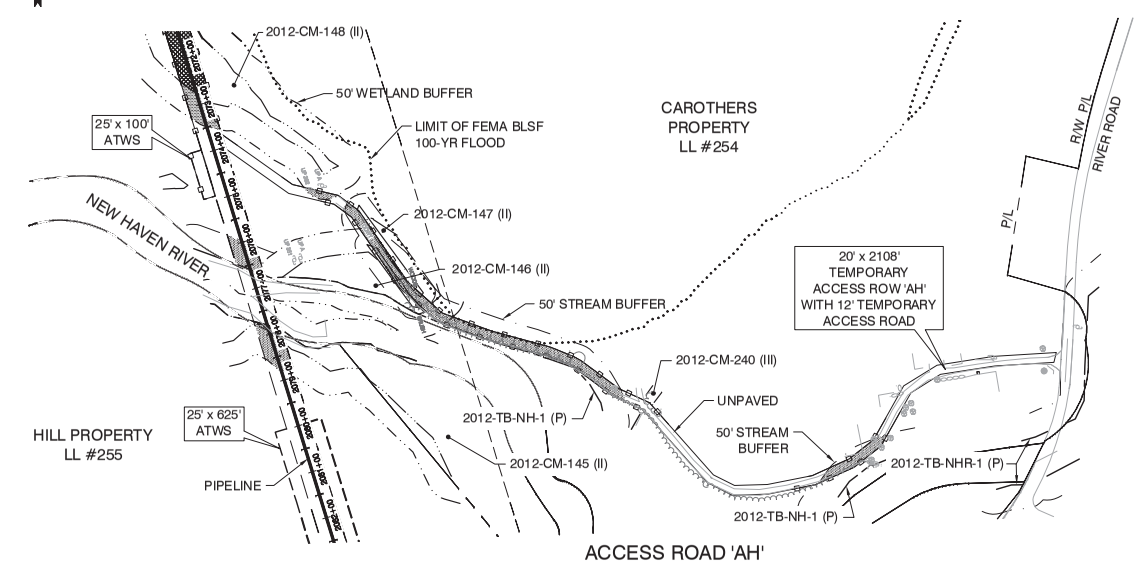
ACCESS ROAD 'AF'
SEE SHEET ANGP-T-C-069

100' 50' 0 100' 200'
GRAPHIC SCALE



ACCESS ROAD 'AG'
SEE SHEET ANGP-T-C-075

200' 100' 0 200' 400'
GRAPHIC SCALE



ACCESS ROAD 'AH'
SEE SHEET ANGP-T-C-081

200' 100' 0 200' 400'
GRAPHIC SCALE

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		INITIALS	DATE	INITIALS	DATE
							BID		CONSTRUCTION	
						ENVIRONMENTAL	JLS	06/28/13		
						DRAFTING DESIGNER	GIL	06/28/13		
						DRAFTING SUPERVISOR	BZD	06/28/13		
						DESIGN ENGINEER	MDF	06/28/13		
		0	MDF	SAB	ISSUED FOR CONSTRUCTION	DESIGN MANAGER	SAB	06/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ACCESS ROAD DETAILS

LOC. CHITTENDEN & ADDISON COUNTIES

YEAR: 2013 | W.O. | SCALE: AS NOTED | DWG. ANGP–T–G–010 | REV. 0

Vermont Gas

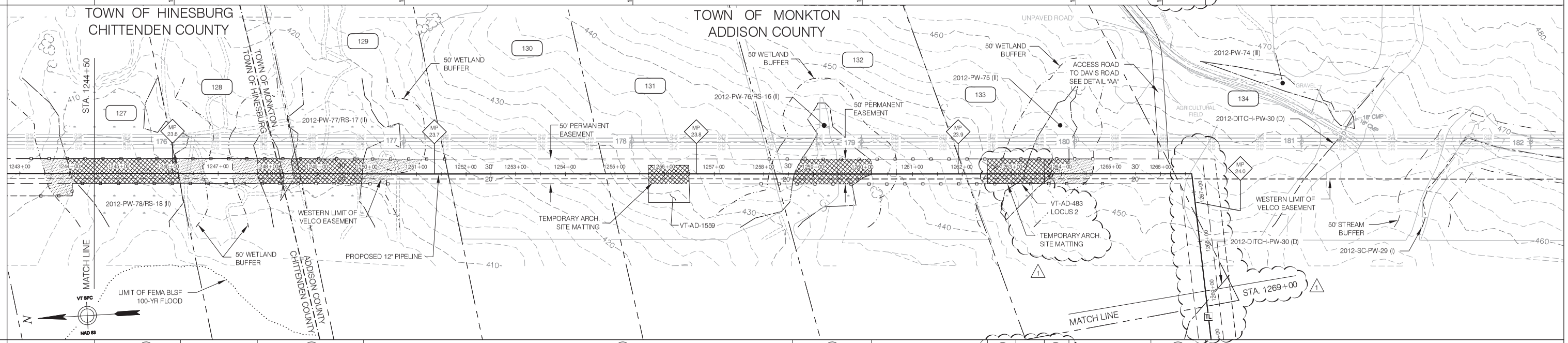
VHB Vanasse Hangen Brustlin, Inc.

CHA
36 Cordage Park Circle, Suites 321, 326, 329, 336
Plymouth, MA 02360
Main: (781) 982-7700 · www.chacompanies.com

RIGHT-OF-WAY								
MATCH LINE	127 N/F LEUSCHNER, EDWARD T. JR. & DAWN	128 N/F DERRICK, DIANE M.	TOWN OF HINESBURG / TOWN OF MONKTON	129 N/F WEAVER, TODD & TAMMY	130 N/F ALMOND, DAIVD	131 N/F STEIN, PHILIP J.	132 N/F MAY, PETER M. & SANDRA	133 N/F NOLAN, KATHLEEN	134 N/F NORRIS, NORMA	MATCH LINE

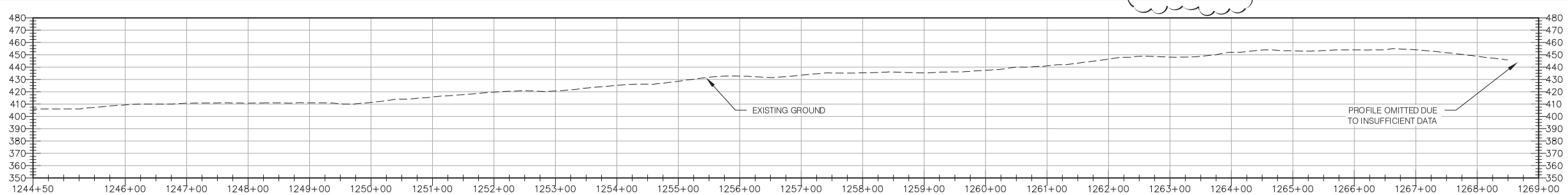
SURVEY DATA							
S 03° 18' W	S 03° 31' W	S 03° 19' W	S 03° 25' W	S 03° 17' W	S 03° 26' W	S 86° 40' W	
1246+09	00°12' RT	00°11' LT	1250+75	00°05' RT	1255+35	00°07' LT	1259+97	00°08' RT	1264+28	96°46' RT	1266+64	1

ALIGNMENT DETAIL



CONST. TYPE								
W	W	2D	W	A	W	1	1A	

PROFILE



MATERIALS

MATERIALS								
MATCH LINE	1	1	1	1	1	1	1	1
	220 FT	58 FT	312 FT	770 FT	257 FT	183 FT	211 FT	389 FT
COATING	C	A	C	A	C	A	C	A
CLASSIFICATION				1				
DESIGN FACTOR				0.5				

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
100 50 0 100 200 300 feet
VERTICAL SCALE
50 25 0 50 100 150 feet

1

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2, AND ADDITIONAL SPECIFICATIONS IN 192.112 — 2,450 FT
2 20" O.D. X 0.375" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40 — 1,450 FT
B ABRASION RESISTANT COATING, 40 MILS, FBE W/ POWERCRETE OVERCOAT — 0 FT
C EPOXY POLYETHYLENE 10/40, W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT³ — 1,000 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-T-G-07-010	ACCESS ROAD DETAILS				
ANGP-EPSC-049	EPSC PLAN	1	MDF	TDB	ISSUED FOR CONSTRUCTION (10/8/13)
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	MDF	SAB	ISSUED FOR CONSTRUCTION

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL	JLS	6/28/13		
DRAFTING DESIGNER	GIL	6/28/13		
DRAFTING SUPERVISOR	BZD	6/28/13		
DESIGN ENGINEER	MDF	6/28/13		
DESIGN MANAGER	SAB	6/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-049 | REV. 1

Vermont Gas

VHB Vanasse Hangen Brustlin, Inc.

CHA
36 Cordage Park Circle, Suites 321, 326, 329, 336
Plymouth, MA 02360
Main: (781) 982-7700 · www.chacompanies.com

RIGHT-OF-WAY

MATCH LINE | 133 N/F NOLAN, KATHLEEN | 134 N/F NORRIS, NORMA | 134.05 N/F PALMER, NATHAN & JANE | MATCH LINE

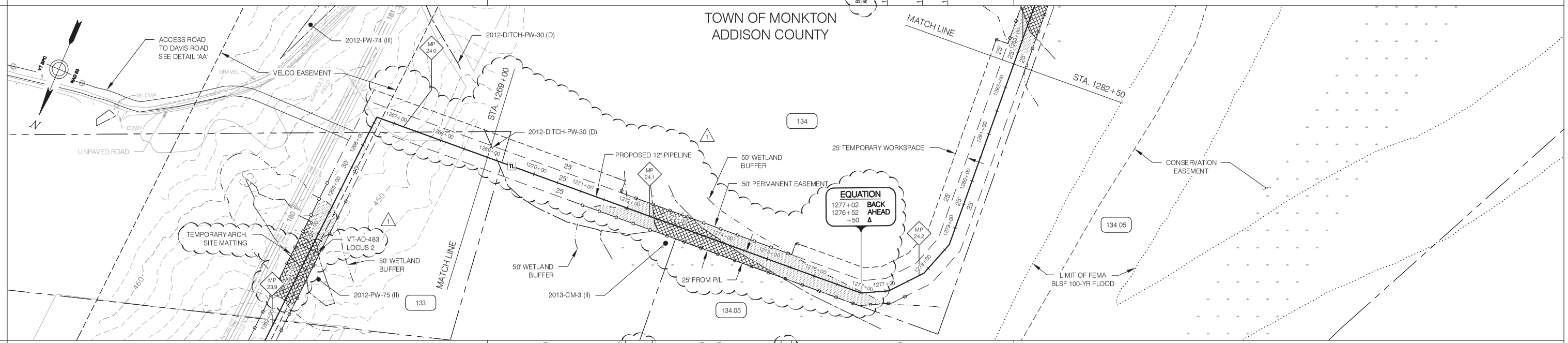
SURVEY DATA

S 86° 40' W | S 61° 56' W | S 40° 07' W | S 18° 18' W | S 03° 35' E

24+43' LT +50.0 ft. | 21+49' LT | 21+49' LT | 21+52' LT

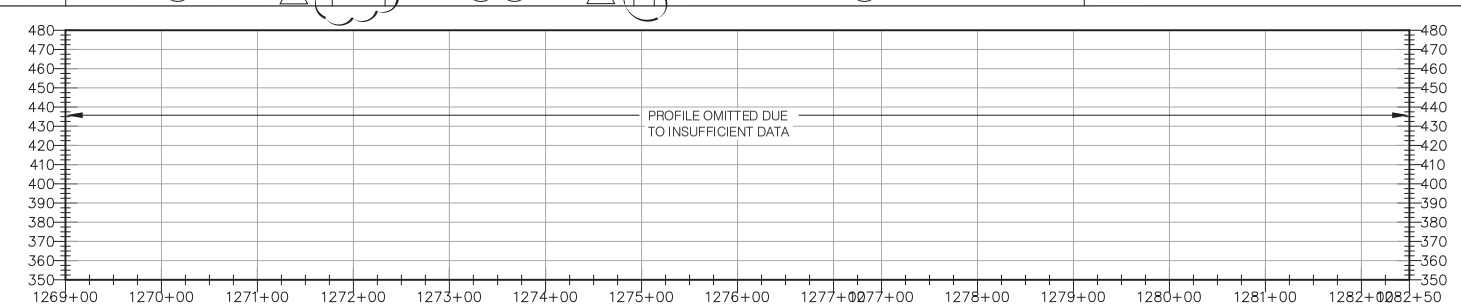
Beg. 1277+02 End: 1276+52 | 1277+08 | 1277+87 | 1278+64

ALIGNMENT DETAIL



CONST. TYPE: 1A | 2A W | 1A

PROFILE



MATERIALS

MATCH LINE	1	1	1	MATCH LINE
	220 FT	587 FT	593 FT	
COATING	A	C	A	
CLASSIFICATION	1			
DESIGN FACTOR	0.5			

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
!	ROAD CROSSING : CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 50 0 100 200 300 feet

VERTICAL SCALE: 50 25 0 50 100 150 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2, AND ADDITIONAL SPECIFICATIONS IN 192.112 — 1,400 FT
2 20" O.D. X 0.375" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40 — 813 FT
B ABRASION RESISTANT COATING, 40 MILS, FBE W/ POWERCRETE OVERCOAT — 0 FT
C EPOXY POLYETHYLENE 10/40, W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT³ — 587 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
						ENVIRONMENTAL	JLS	6/28/13		
						DRAFTING DESIGNER	GIL	6/28/13		
						DRAFTING SUPERVISOR	BZD	6/28/13		
ANGP-EPSC-050	EPSC PLAN	1	MDF	TDB	ISSUED FOR CONSTRUCTION (10/8/13)	DESIGN ENGINEER	MDF	6/28/13		
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	MDF	SAB	ISSUED FOR CONSTRUCTION	DESIGN MANAGER	SAB	6/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-050 | REV. 1

Vermont Gas

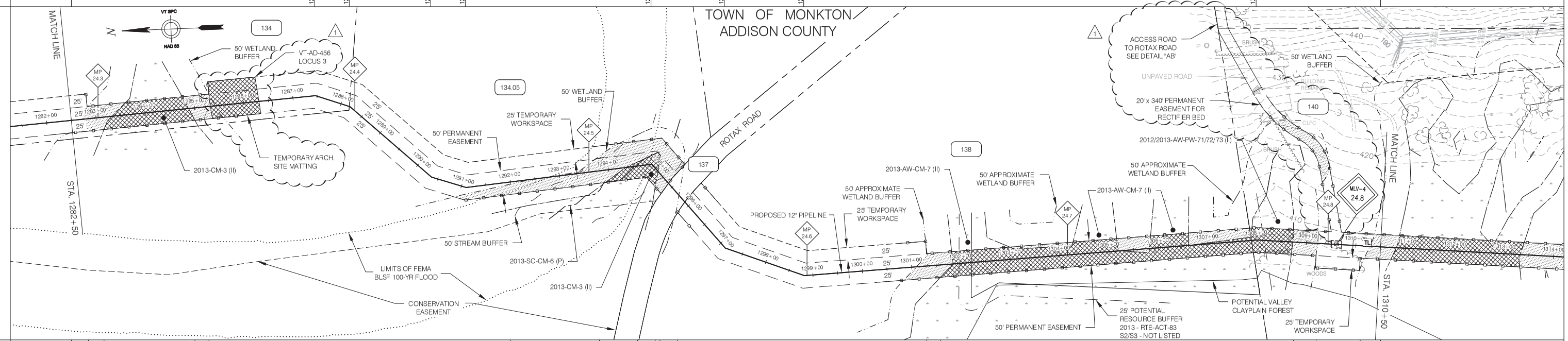
VHB Vanasse Hangen Brustlin, Inc.

CHA
36 Cordage Park Circle, Suites 321, 328, 329, 336
Plymouth, MA 02360
Main: (781) 982-7700 · www.chacompanies.com

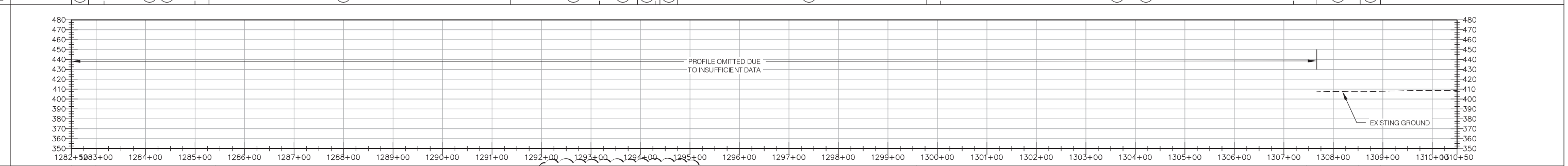
RIGHT-OF-WAY	MATCH LINE	134 N/F NORRIS, NORMA	134.05 N/F PALMER, NATHAN & JANE	137 ROTAX ROAD	138 N/F LATRIELLE, LEONARD & BEVERLY	140 N/F BAILEY, GEORGE	MATCH LINE

SURVEY DATA													
	S 03° 35' E	23°20' RT	S 19° 45' W	23°17' RT	S 43° 03' W	24°00' LT	S 19° 02' W	24°00' LT	S 04° 58' E	55°55' RT	S 50° 58' W	29°31' LT	S 21° 27' W
		1287+46		1288+19		1290+37		1291+10		1294+88		1297+13	

SURVEY DATA									
	23°45' LT	S 02° 19' E	07°41' RT	S 05° 22' W					
			1308+00						



CONST. TYPE	1A	W	2A	1A	7	W	1A	11	1A	W	2A	1E	2A



MATERIALS	MATCH LINE	1	1	1	1	1	1	1	MATCH LINE
		20 FT	272 FT	725 FT	322 FT	520 FT	814 FT	105 FT	22 FT
COATING		A	C	A	C	A	C	A	C
CLASSIFICATION						1			
DESIGN FACTOR						0.5			

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
⇩	ROAD CROSSING : CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
100 50 0 100 200 300 feet
50 25 0 50 100 150 feet
VERTICAL SCALE

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2, AND ADDITIONAL SPECIFICATIONS IN 192.112 — 2,800 FT
2 20" O.D. X 0.375" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40 — 1,370 FT
B ABRASION RESISTANT COATING, 40 MILS, FBE W/ POWERCRETE OVERCOAT — 0 FT
C EPOXY POLYETHYLENE 10/40, W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT³ — 1,430 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-051	EPSC PLAN	1	MDF	TDB	ISSUED FOR CONSTRUCTION (10/8/13)
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	MDF	SAB	ISSUED FOR CONSTRUCTION

	INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL	JLS	6/28/13		
DRAFTING DESIGNER	GIL	6/28/13		
DRAFTING SUPERVISOR	BZD	6/28/13		
DESIGN ENGINEER	MDF	6/28/13		
DESIGN MANAGER	SAB	6/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-051 | REV. 1

Vermont Gas

VHB Vanasse Hangen Brustlin, Inc.

CHA
36 Cordage Park Circle, Suites 321, 326, 329, 336
Plymouth, MA 02360
Main: (781) 982-7700 · www.chacompanies.com

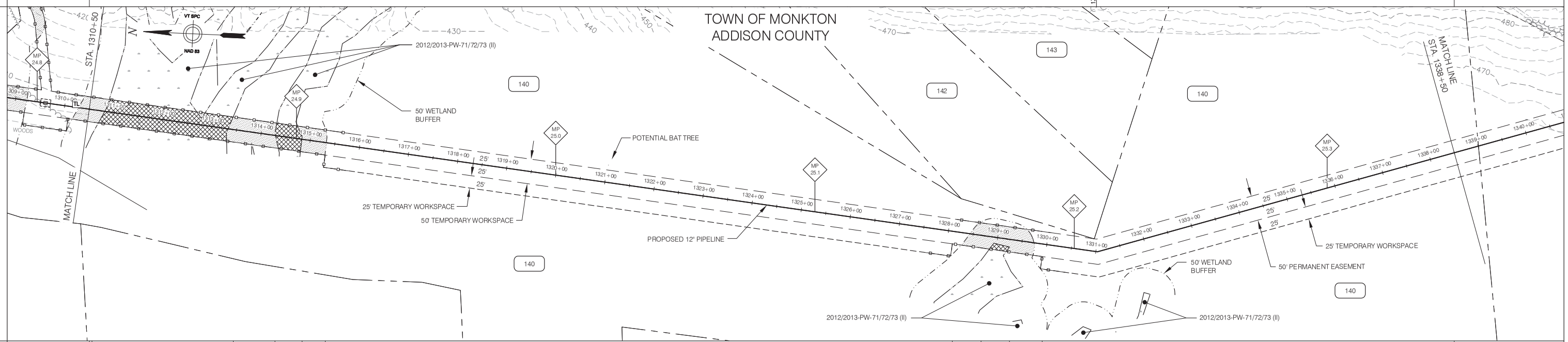
RIGHT-OF-WAY

MATCH LINE | 140 N/F BAILEY, GEORGE | 142 N/F ADAMS, ERIC H. & HEATHER | MATCH LINE

SURVEY DATA

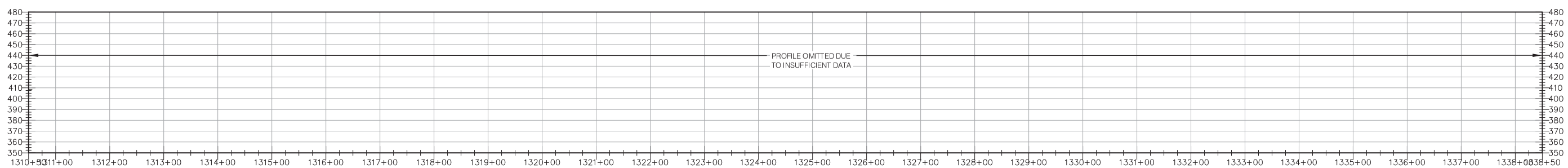
S 05° 22' W | 25°33' LT 1331+03 | S 18° 11' E

ALIGNMENT DETAIL



CONST. TYPE: W | 2A | W | 1E | W | 2A | 1E

PROFILE



MATERIALS

	MATCH LINE	1	1	1	1	MATCH LINE
		483 FT	1,313 FT	130 FT	874 FT	
COATING		C	A	C	A	
CLASSIFICATION			1 △1			
DESIGN FACTOR			0.5			

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
⇩	ROAD CROSSING : CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 50 0 100 200 300 feet

VERTICAL SCALE: 50 25 0 50 100 150 feet

△1

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2, AND ADDITIONAL SPECIFICATIONS IN 192.112 — 2,800 FT
2 20" O.D. X 0.375" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40 — 2,187 FT
B ABRASION RESISTANT COATING, 40 MILS, FBE W/ POWERCRETE OVERCOAT — 0 FT
C EPOXY POLYETHYLENE 10/40, W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT³ — 613 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-052	EPSC PLAN	1	MDF	TDB	ISSUED FOR CONSTRUCTION (10/8/13)
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	MDF	SAB	ISSUED FOR CONSTRUCTION

	INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL	JLS	6/28/13		
DRAFTING DESIGNER	GIL	6/28/13		
DRAFTING SUPERVISOR	BZD	6/28/13		
DESIGN ENGINEER	MDF	6/28/13		
DESIGN MANAGER	SAB	6/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-052 | REV. 1

Vermont Gas

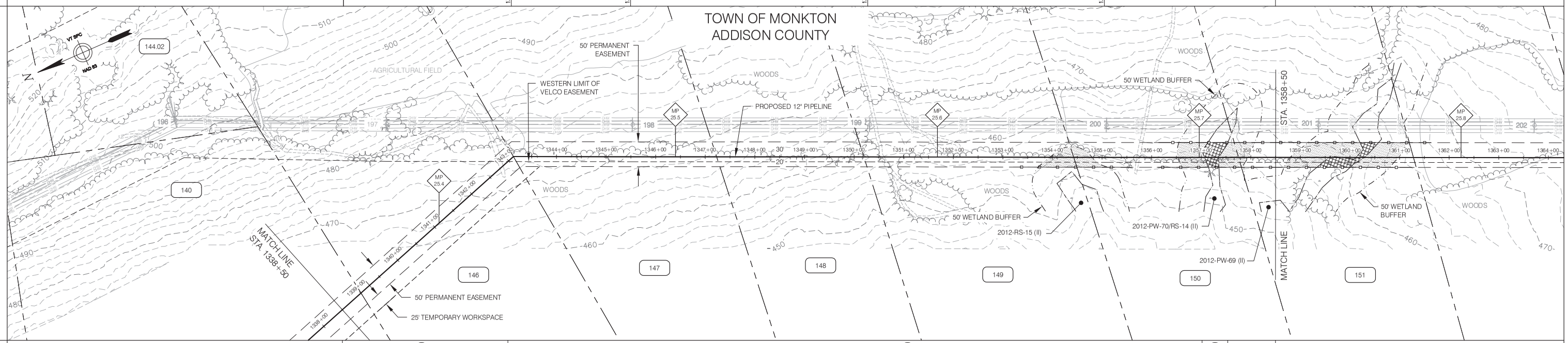
VHB Vanasse Hangen Brustlin, Inc.

CHA
36 Cordage Park Circle, Suites 321, 326, 329, 336
Plymouth, MA 02360
Main: (781) 982-7700 · www.chacompanies.com

RIGHT-OF-WAY	MATCH LINE	140 N/F BAILEY, GEORGE	146 N/F MALZAC, PAUL E. & KATHY	147 N/F BURRITT, MARK A. & MICHELLE	148 N/F NICOLAY, WILLIAM & HELENA	149 N/F BROUGHTON, CLAIRE TRUSTEE	150 N/F MORROW, JAMES F.	151 N/F MEJIA, JOHNY; LAUER, JESSE	MATCH LINE

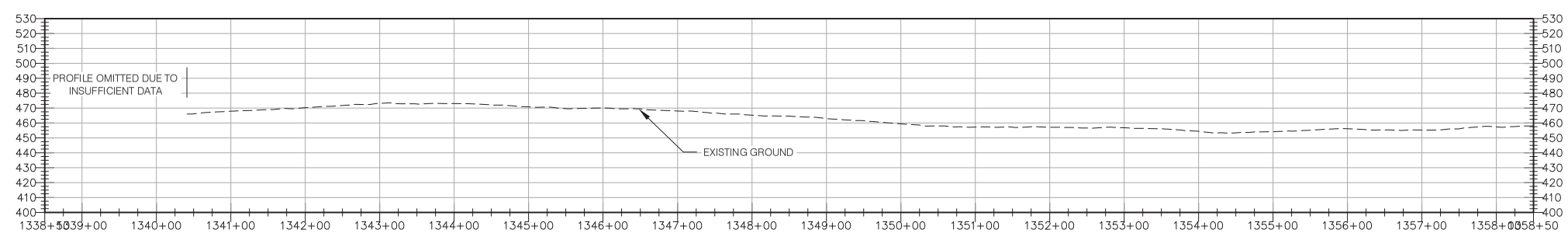
SURVEY DATA							
	S 18° 11' E	41°55' RT 1343+13	S 23° 44' W	00°03' LT 1345+54	S 23° 41' W	00°05' RT 1350+32	S 23° 47' W	00°06' LT 1355+09	S 23° 40' W

ALIGNMENT DETAIL



CONST. TYPE	1E	2D	W

PROFILE



MATERIALS

	MATCH LINE	1	1	1	1	1	MATCH LINE
		1,545 FT	85 FT	173 FT	142 FT	55 FT	
COATING		A	C	A	C	A	
CLASSIFICATION		1 △1					
DESIGN FACTOR		0.5					

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
⚠	ROAD CROSSING : CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
100 50 0 100 200 300 feet
50 25 0 50 100 150 feet
VERTICAL SCALE

△1

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2, AND ADDITIONAL SPECIFICATIONS IN 192.112 — 2,000 FT
2 20" O.D. X 0.375" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40 — 1,773 FT
B ABRASION RESISTANT COATING, 40 MILS, FBE W/ POWERCRETE OVERCOAT — 0 FT
C EPOXY POLYETHYLENE 10/40, W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT³ — 227 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-053	EPSC PLAN	1	MDF	TDB	ISSUED FOR CONSTRUCTION (10/8/13)
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	MDF	SAB	ISSUED FOR CONSTRUCTION

	INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL	JLS	6/28/13		
DRAFTING DESIGNER	GIL	6/28/13		
DRAFTING SUPERVISOR	BZD	6/28/13		
DESIGN ENGINEER	MDF	6/28/13		
DESIGN MANAGER	SAB	6/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-053 | REV. 1

Vermont Gas

VHB Vanasse Hangen Brustlin, Inc.

CHA
36 Cordage Park Circle, Suites 321, 328, 329, 336
Plymouth, MA 02360
Main: (781) 982-7700 · www.chacompanies.com

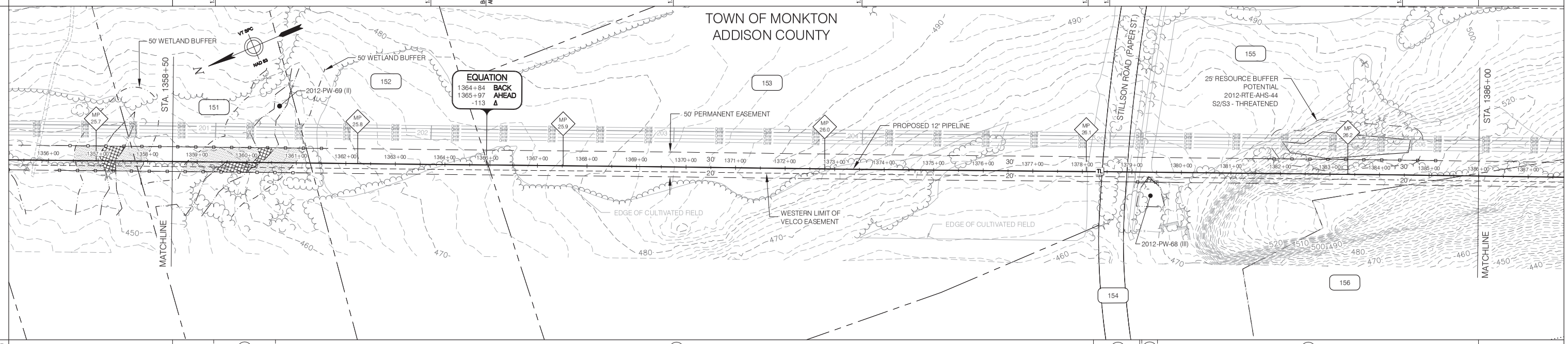
RIGHT–OF–WAY

MATCHLINE | 151 N/F MEJIA, JOHNY & LAUER, JESSE | 152 N/F LESAGE, RICHARD L.; RICHARD E. LESAGE REVOCABLE LIVING TRUST | 153 N/F PEYSER, LOUISE SELINA | 154 STILLSON ROAD | 155 N/F PEYSER, LOUISE SELINA | 156 N/F MENARD, GERALD & NANCY | MATCH LINE

SURVEY DATA

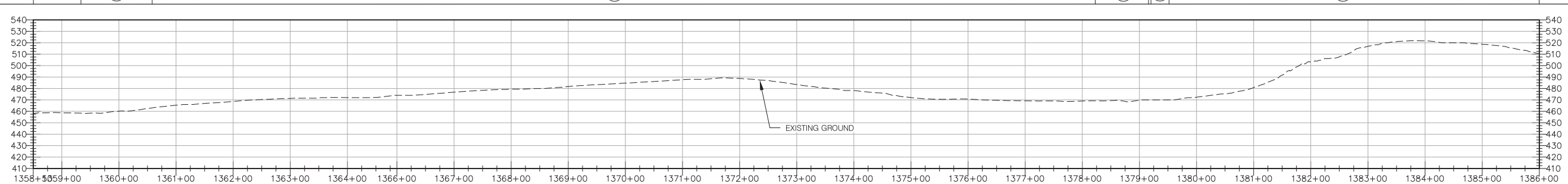
S 23° 40' W 00°02' RT 1359+37 | S 23° 43' W 00°01' LT 1363+72 | S 23° 41' W −113.3 ft. Bck: 1364+84 Ahd: 1365+97 | S 23° 41' W 00°08' RT 1369+75 | S 23° 49' W 00°10' LT 1373+56 | S 23° 39' W 00°10' LT 1378+13 | S 23° 28' W 00°15' RT 1378+56 | S 23° 43' W 00°07' RT 1384+47 | S 23° 51' W

ALIGNMENT DETAIL



CONST. TYPE: W | 2D | 11 | W | 2D

PROFILE



MATERIALS

	29 FT	218 FT	1,630 FT	50 FT	710 FT
COATING	A	C	A	C	A
CLASSIFICATION			1	1	
DESIGN FACTOR			0.5		

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
⚠	ROAD CROSSING : CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
100 50 0 100 200 300 feet
50 25 0 50 100 150 feet
VERTICAL SCALE

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API–5L, GR. X65, PSL–2, AND ADDITIONAL SPECIFICATIONS IN 192.112 — 2,637 FT
2 20" O.D. X 0.375" WT, API–5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40 — 2,369 FT
B ABRASION RESISTANT COATING, 40 MILS, FBE W/ POWERCRETE OVERCOAT — 0 FT
C EPOXY POLYETHYLENE 10/40, W/ 1–1/2" REINFORCED CONCRETE W/ 140 LBS/FT³ — 268 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP–EPSC–054	EPSC PLAN	1	MDF	TDB	ISSUED FOR CONSTRUCTION (10/8/13)
G–001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	MDF	SAB	ISSUED FOR CONSTRUCTION

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL	JLS	6/28/13		
DRAFTING DESIGNER	GIL	6/28/13		
DRAFTING SUPERVISOR	BZD	6/28/13		
DESIGN ENGINEER	MDF	6/28/13		
DESIGN MANAGER	SAB	6/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

Vermont Gas

VHB Vanasse Hangen Brustlin, Inc.

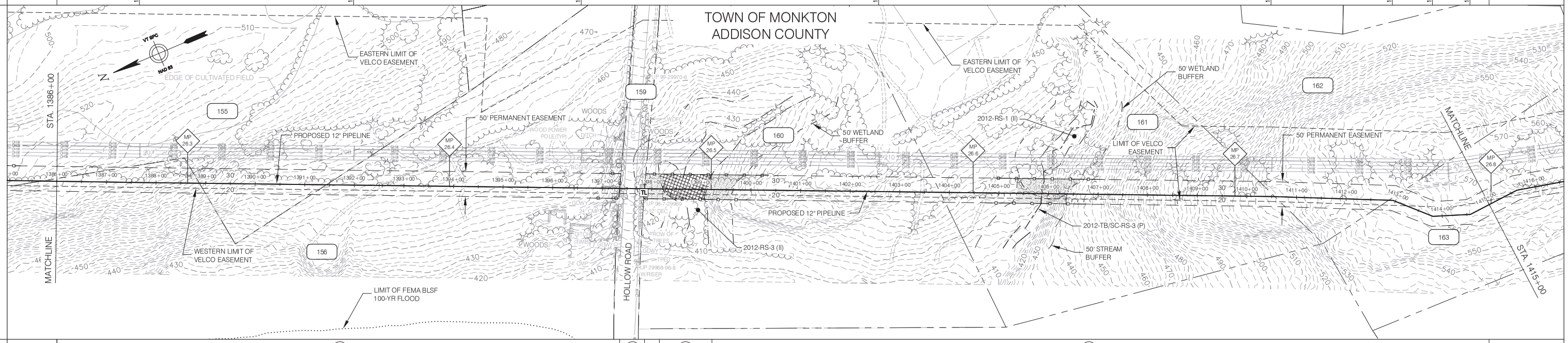
CHA
36 Cordage Park Circle, Suites 321, 326, 329, 336
Plymouth, MA 02360
Main: (781) 982-7700 · www.chacompanies.com

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP–T–C–054 | REV. 1

RIGHT-OF-WAY									
MATCHLINE	155 N/F PEYSER, LOUISE SELINA; 156 N/F MENARD, GERALD, NANCY	155 N/F PEYSER, LOUISE SELINA	156 N/F MENARD, GERALD & NANCY	159 HOLLOW ROAD	160 N/F COUSINO, VICKI A.	161 N/F WAGEMAN, EDWIN J. & CAROLE	162 N/F BEAUPRE, MARC & GRETCHEN	163 N/F HENDRY, MARTHA M.	MATCH LINE

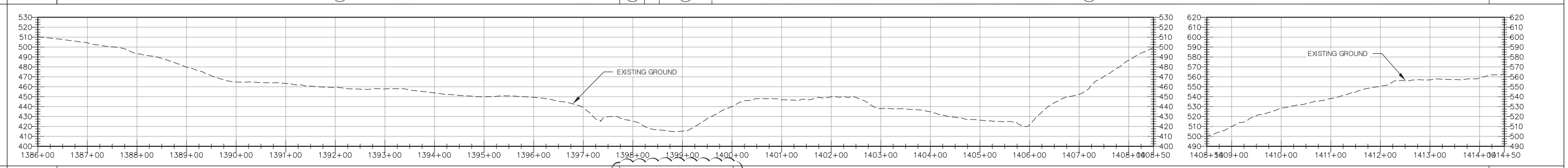
SURVEY DATA									
S 23° 51' W	00°08" LT 1387+67	S 23° 42' W	00°01" RT 1391+99	S 23° 43' W	00°01" LT 1396+58	S 23° 42' W	00°01" RT 1402+58	S 23° 43' W	01°08" RT 1410+50
S 24° 51' W	19°36" RT 1412+95	S 44° 47' W	24°52" LT 1413+81	S 19° 55' W	24°27" LT 1414+57	S 04° 33' E			

ALIGNMENT DETAIL



CONST. TYPE						
	2D	9	W	2D		

PROFILE



MATERIALS

	MATCHLINE							MATCHLINE
		1	1	1				
		1,135 FT	229 FT	1,536 FT				
COATING		A	C	A				
CLASSIFICATION			1 1			2 1		
DESIGN FACTOR		0.5						

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
100 50 0 100 200 300 feet
50 25 0 50 100 150 feet
VERTICAL SCALE

1

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2, AND ADDITIONAL SPECIFICATIONS IN 192.112 — 2,900 FT
2 20" O.D. X 0.375" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40 — 2,671 FT
B ABRASION RESISTANT COATING, 40 MILS, FBE W/ POWERCRETE OVERCOAT — 0 FT
C EPOXY POLYETHYLENE 10/40, W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT³ — 229 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-055	EPSC PLAN	1	MDF	TDB	ISSUED FOR CONSTRUCTION (10/8/13)
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	MDF	SAB	ISSUED FOR CONSTRUCTION

	INITIALS	BID DATE	INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL	JLS	6/28/13		
DRAFTING DESIGNER	GIL	6/28/13		
DRAFTING SUPERVISOR	BZD	6/28/13		
DESIGN ENGINEER	MDF	6/28/13		
DESIGN MANAGER	SAB	6/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-055 | REV. 1

Vermont Gas

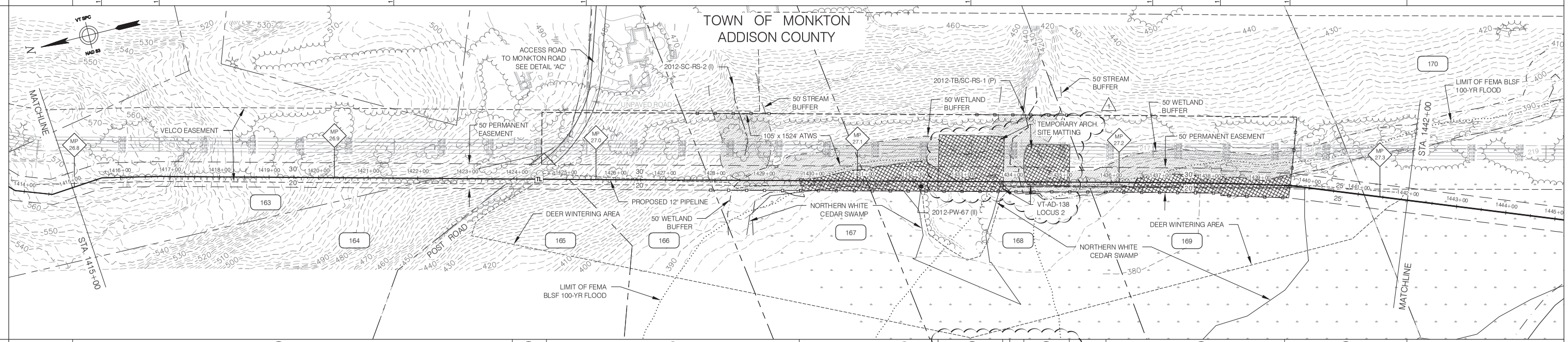
VHB Vanasse Hangen Brustlin, Inc.

CHA
36 Cordage Park Circle, Suites 321, 326, 329, 336
Plymouth, MA 02360
Main: (781) 982-7700 · www.chacompanies.com

RIGHT-OF-WAY	MATCHLINE	163 N/F HENDRY, MARTHA M.	164 N/F RADLER, ROBERT & BUSCAGLIA, CATHIE M.	165 N/F CHARNLEY, JACQUELINE & THOMAS A.	POST ROAD	166 N/F BOWEN, MICHAEL H. & ELLEN L.	167 N/F LITTLE, ROBERT A. & FAITH E.	168 N/F COTA, ROGER & ALYSON	169 N/F CLARK, RICKY D. & MAREN E.	170 N/F ALDERMAN, MICHAEL J.	MATCH LINE

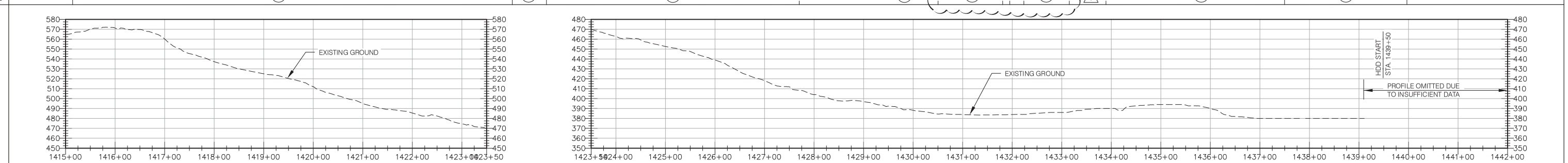
SURVEY DATA	
S 04° 33' E	1715+63
17'08" RT	
S 12° 36' W	1416+79
01'46" RT	
S 14° 22' W	1421+53
00'03" RT	
S 14° 26' W	1425+42
00'10" LT	
S 14° 15' W	1433+18
00'02" RT	
S 14° 18' W	1436+85
00'14" RT	
S 14° 32' W	1438+22
01'25" RT	
S 15° 58' W	1439+62
05'10" RT	
S 21° 08' W	

ALIGNMENT DETAIL



CONST. TYPE	2D	11	2D	W	A	A	1	W	8

PROFILE



MATERIALS

	MATCHLINE	1	1	1	1	1	MATCHLINE
		891 FT	68 FT	390 FT	1,101 FT	250 FT	
COATING		A	C	A	C	B	
CLASSIFICATION			1	2 1			
DESIGN FACTOR				0.5			

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
⊥	ROAD CROSSING : CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
100 50 0 100 200 300 feet
50 25 0 50 100 150 feet
VERTICAL SCALE

1

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2, AND ADDITIONAL SPECIFICATIONS IN 192.112 — 2,700 FT
2 20" O.D. X 0.375" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40 — 1,281 FT
B ABRASION RESISTANT COATING, 40 MILS, FBE W/ POWERCRETE OVERCOAT — 250 FT
C EPOXY POLYETHYLENE 10/40, W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT³ — 1,169 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-T-G-07-010	ACCESS ROAD DETAILS				
ANGP-EPSC-056	EPSC PLAN	1	MDF	TDB	ISSUED FOR CONSTRUCTION (10/8/13)
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	MDF	SAB	ISSUED FOR CONSTRUCTION

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL	JLS	6/28/13		
DRAFTING DESIGNER	GIL	6/28/13		
DRAFTING SUPERVISOR	BZD	6/28/13		
DESIGN ENGINEER	MDF	6/28/13		
DESIGN MANAGER	SAB	6/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-056 | REV. 1

Vermont Gas

VHB Vanasse Hangen Brustlin, Inc.

CHA
36 Cordage Park Circle, Suites 321, 328, 329, 336
Plymouth, MA 02360
Main: (781) 982-7700 · www.chacompanies.com

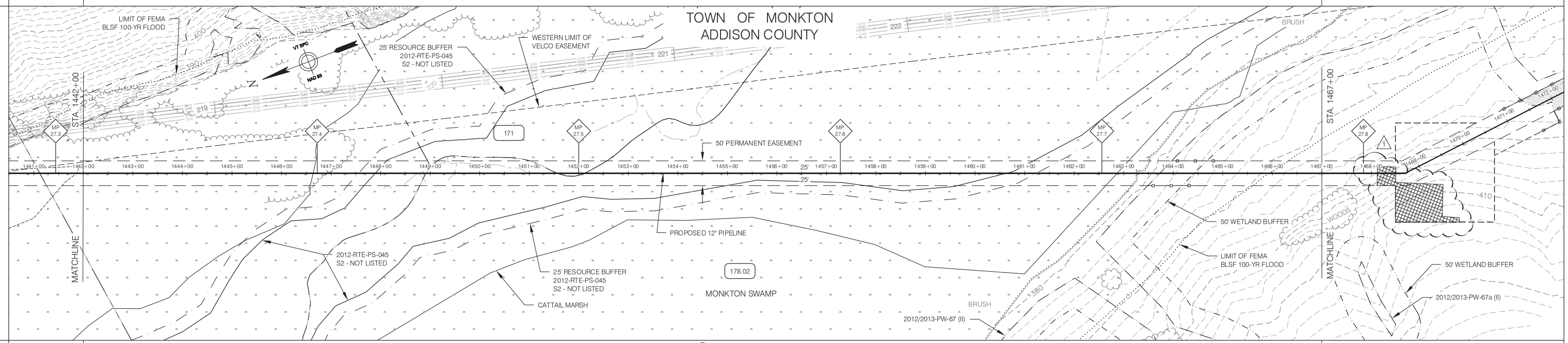
RIGHT–OF–WAY

MATCH LINE | 170 N/F ALDERMAN, MICHAEL J. | 171 N/F BOISSE, HENRY | 171 N/F BOISSE, HENRY | 178.02 N/F BOISSE, JOSEPH A.; WILLIAMS, DAVID L. | MATCH LINE

SURVEY DATA

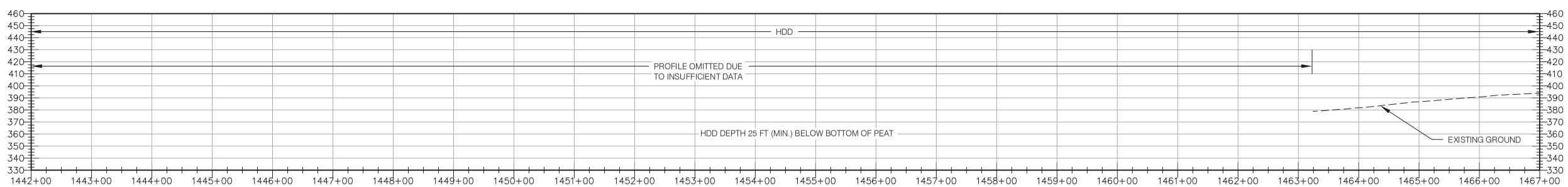
S 21° 08' W

ALIGNMENT DETAIL



CONST. TYPE: 8

PROFILE



MATERIALS: MATCHLINE — 1 — 2,500 FT — MATCHLINE

COATING	B	
CLASSIFICATION	2 △1	1 △1
DESIGN FACTOR	0.5	

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 50 0 100 200 300 feet

VERTICAL SCALE: 50 25 0 50 100 150 feet

△1

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API–5L, GR. X65, PSL–2, AND ADDITIONAL SPECIFICATIONS IN 192.112 — 2,500 FT
2 20" O.D. X 0.375" WT, API–5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40 — 0 FT
B ABRASION RESISTANT COATING, 40 MILS, FBE W/ POWERCRETE OVERCOAT — 2,500 FT
C EPOXY POLYETHYLENE 10/40, W/ 1–1/2" REINFORCED CONCRETE W/ 140 LBS/FT³ — 0 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP–EPSC–057	EPSC PLAN	1	MDF	TDB	ISSUED FOR CONSTRUCTION (10/8/13)
G–001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	MDF	SAB	ISSUED FOR CONSTRUCTION

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL	JLS	6/28/13		
DRAFTING DESIGNER	GIL	6/28/13		
DRAFTING SUPERVISOR	BZD	6/28/13		
DESIGN ENGINEER	MDF	6/28/13		
DESIGN MANAGER	SAB	6/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP–T–C–057 | REV. 1

Vermont Gas

VHB Vanasse Hangen Brustlin, Inc.

CHA
36 Cordage Park Circle, Suites 321, 328, 329, 336
Plymouth, MA 02360
Main: (781) 982-7700 · www.chacompanies.com

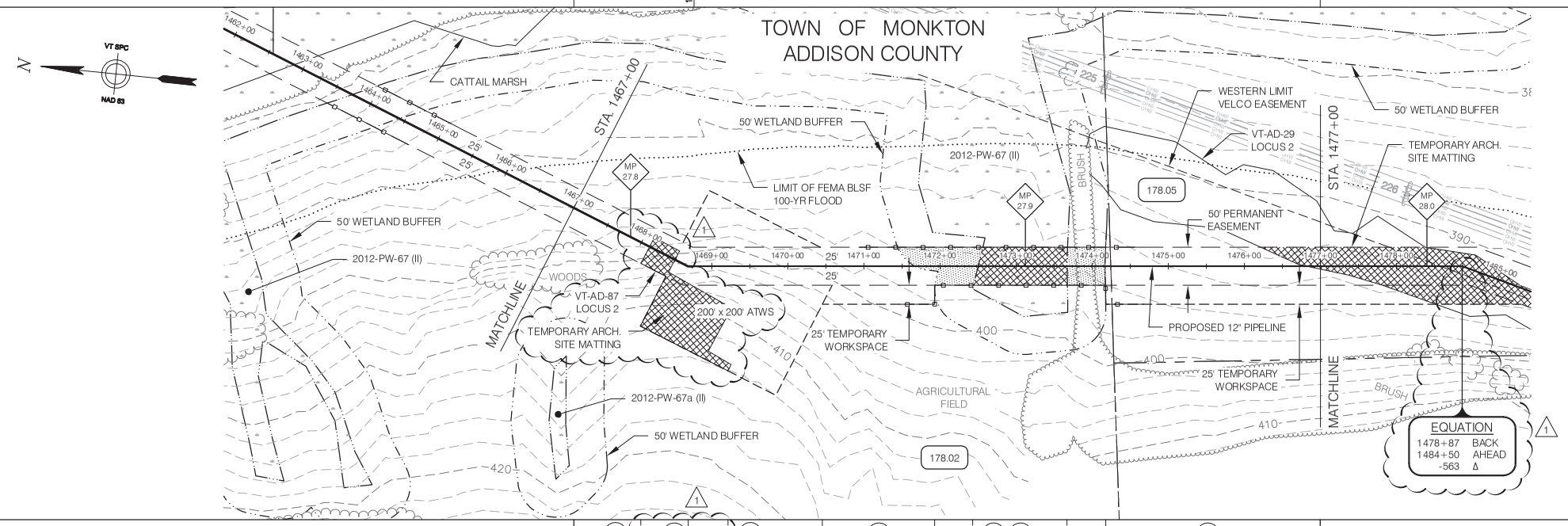
RIGHT–OF–WAY

MATCHLINE | 178.02 N/F BOISSE, JOSEPH A. & WILLIAMS, DAVID L. | 178.05 N/F HUIZENGA, RAYMOND J. & BONITA | MATCH LINE

SURVEY DATA

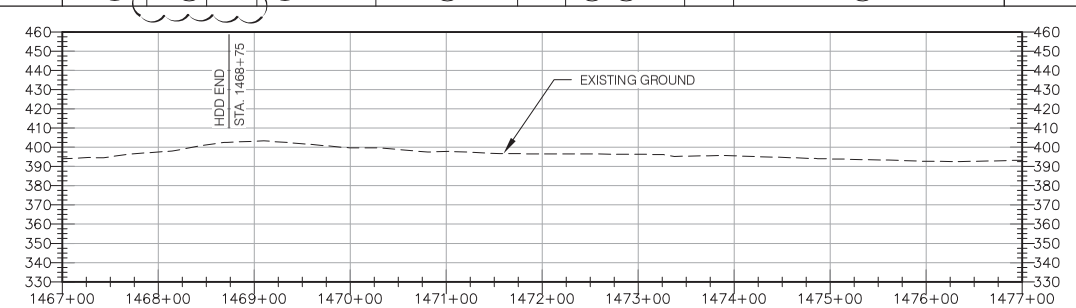
S 21° 08' W | 1468+69 | 27'05" LT | S 05° 57' E

ALIGNMENT DETAIL



CONST. TYPE: 8 | A | 2A | 1E | 2A W | 1E

PROFILE



MATERIALS

MATCHLINE	1	1	1	1	MATCHLINE
	175 FT	292 FT	250 FT	283 FT	
COATING	B	A	C	A	
CLASSIFICATION		1 △1			
DESIGN FACTOR		0.5			

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
100 50 0 100 200 300 feet
50 25 0 50 100 150 feet
VERTICAL SCALE

△1

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API–5L, GR. X65, PSL–2, AND ADDITIONAL SPECIFICATIONS IN 192.112 — 1,000 FT
2 20" O.D. X 0.375" WT, API–5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40 — 575 FT
B ABRASION RESISTANT COATING, 40 MILS, FBE W/ POWERCRETE OVERCOAT — 175 FT
C EPOXY POLYETHYLENE 10/40, W/ 1–1/2" REINFORCED CONCRETE W/ 140 LBS/FT³ — 250 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP–EPSC–058	EPSC PLAN	1	MDF	TDB	ISSUED FOR CONSTRUCTION (10/8/13)
G–001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	MDF	SAB	ISSUED FOR CONSTRUCTION

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL	JLS	6/28/13		
DRAFTING DESIGNER	GIL	6/28/13		
DRAFTING SUPERVISOR	BZD	6/28/13		
DESIGN ENGINEER	MDF	6/28/13		
DESIGN MANAGER	SAB	6/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP–T–C–058 | REV. 1

Vermont Gas

VHB Vanasse Hangen Brustlin, Inc.

CHA
36 Cordage Park Circle, Suites 321, 326, 329, 336
Plymouth, MA 02360
Main: (781) 982-7700 · www.chacompanies.com

RIGHT-OF-WAY

MATCHLINE | 178.05 N/F HUIZENGA, RAYMOND J. & BONITA | 178.04 N/F HUIZENGA, RAYMOND J. & BONITA | 182 MONKTON ROAD | 176 N/F HUIZENGA, CHARLES & RAYMOND | MATCH LINE

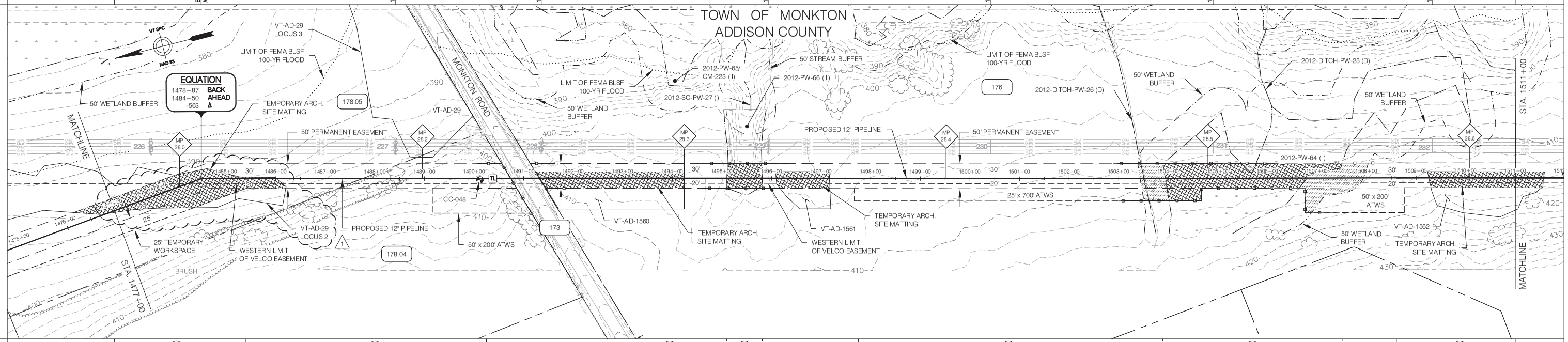
SURVEY DATA

S 05° 57' E | S 14° 22' W | S 14° 12' W | S 14° 20' W | S 14° 25' W | S 14° 13' W | S 14° 10' W | S 14° 23' W

-563.4 ft. Bck. 1478+87 Ahd. 1484+50 20°19' RT

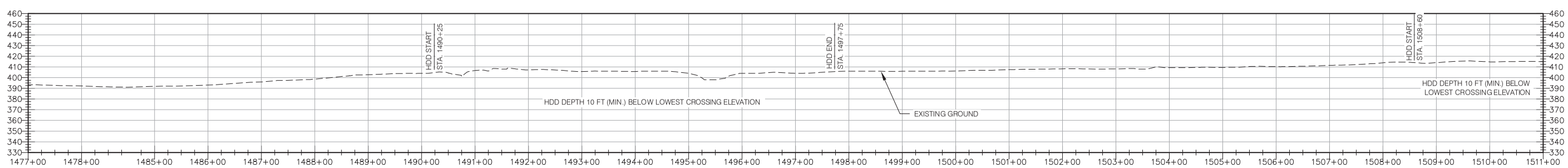
00°10' LT 1488+42 | 00°08' RT 1491+38 | 00°04' RT 1495+95 | 00°11' LT 1500+43 | 00°02' LT 1504+91 | 00°12' RT 1509+34

ALIGNMENT DETAIL



CONST. TYPE: 1E | 2D | 8 | W | 2D | W | 8

PROFILE



MATERIALS

MATCHLINE	1	1	1	1	1	1	MATCHLINE
	762 FT	750 FT	568 FT	451 FT	66 FT	240 FT	
COATING	A	B	A	C	A	B	
CLASSIFICATION	1 △1						
DESIGN FACTOR	0.5						

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
!	ROAD CROSSING : CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 50 0 100 200 300 feet

VERTICAL SCALE: 50 25 0 50 100 150 feet

△1

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2, AND ADDITIONAL SPECIFICATIONS IN 192.112 — 2,837 FT
2 20" O.D. X 0.375" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40 — 1,396 FT
B ABRASION RESISTANT COATING, 40 MILS, FBE W/ POWERCRETE OVERCOAT — 990 FT
C EPOXY POLYETHYLENE 10/40, W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT³ — 451 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-059	EPSC PLAN	1	MDF	TDB	ISSUED FOR CONSTRUCTION (10/8/13)
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	MDF	SAB	ISSUED FOR CONSTRUCTION

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL	JLS	6/28/13		
DRAFTING DESIGNER	GIL	6/28/13		
DRAFTING SUPERVISOR	BZD	6/28/13		
DESIGN ENGINEER	MDF	6/28/13		
DESIGN MANAGER	SAB	6/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-059 | REV. 1

Vermont Gas

VHB Vanasse Hangen Brustlin, Inc.

CHA
36 Cordage Park Circle, Suites 321, 328, 329, 336
Plymouth, MA 02360
Main: (781) 982-7700 · www.chacompanies.com

RIGHT-OF-WAY

MATCHLINE

176
N/F
HUZIENGA, CHARLES;
HUZIENGA, RAYMOND

181
N/F
HURLBURT, HERRICK & CHARLOTTE

MATCH LINE

SURVEY DATA

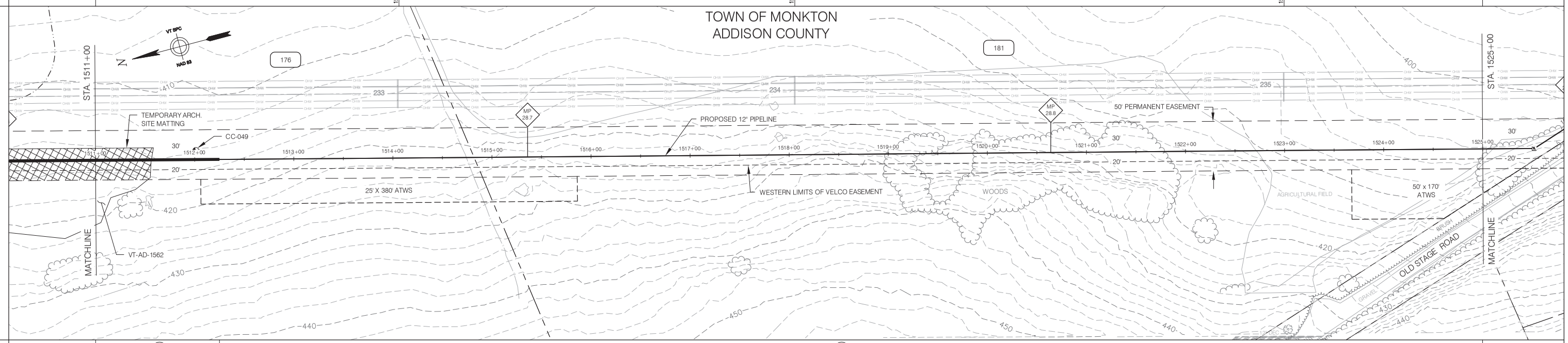
S 14° 23' W | 00°03' LT | 1514+07

S 14° 20' W | 00°01' LT | 1518+06

S 14° 18' W | 00°03' RT | 1523+00

S 14° 22' W

ALIGNMENT DETAIL

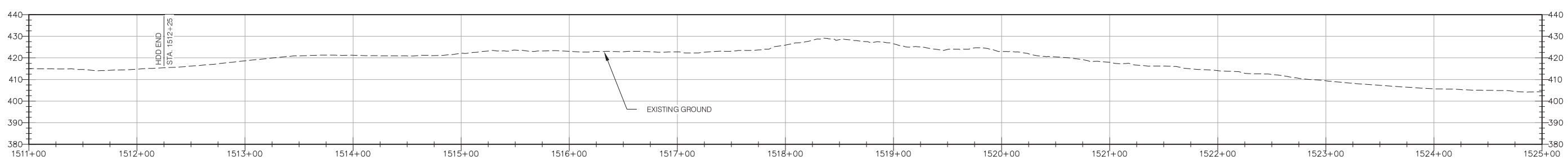


CONST. TYPE

8

2D

PROFILE



MATERIALS

MATCHLINE

1 — 125 FT

1 — 1,275 FT

MATCHLINE

COATING	B	A
CLASSIFICATION		1 △1
DESIGN FACTOR		0.5

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
⚠	ROAD CROSSING : CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE

50 25 0 50 100 150 feet

25 12.5 0 25 50 75 feet

VERTICAL SCALE

△1

PIPE MATERIAL:

1	12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2, AND ADDITIONAL SPECIFICATIONS IN 192.112	1,400 FT
2	20" O.D. X 0.375" WT, API-5L, GR. B	0 FT

PIPE COATING:

A	EPOXY POLYETHYLENE 10/40	1,275 FT
B	ABRASION RESISTANT COATING, 40 MILS, FBE W/ POWERCRETE OVERCOAT	125 FT
C	EPOXY POLYETHYLENE 10/40, W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT³	0 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-060	EPSC PLAN	1	MDF	TDB	ISSUED FOR CONSTRUCTION (10/8/13)
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	MDF	SAB	ISSUED FOR CONSTRUCTION

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL	JLS	6/28/13		
DRAFTING DESIGNER	GIL	6/28/13		
DRAFTING SUPERVISOR	BZD	6/28/13		
DESIGN ENGINEER	MDF	6/28/13		
DESIGN MANAGER	SAB	6/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 50' | DWG. ANGP-T-C-060 | REV. 1

Vermont Gas

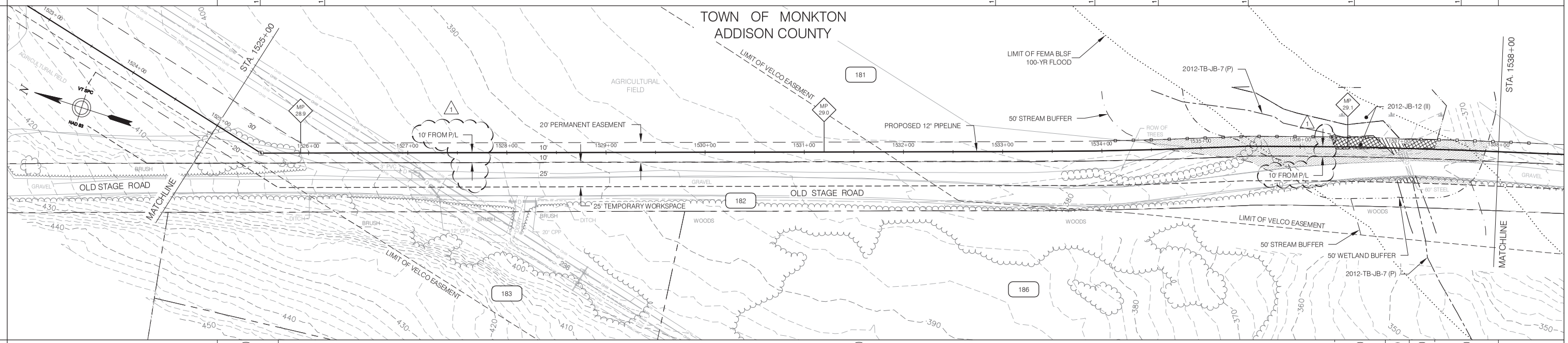
VHB Vanasse Hangen Brustlin, Inc.

CHA
36 Cordage Park Circle, Suites 321, 328, 329, 336
Plymouth, MA 02360
Main: (781) 982-7700 · www.chacompanies.com

RIGHT-OF-WAY	MATCHLINE	181 N/F HURLBURT, HERRICK & CHARLOTTE	182 OLD STAGE ROAD	MATCH LINE

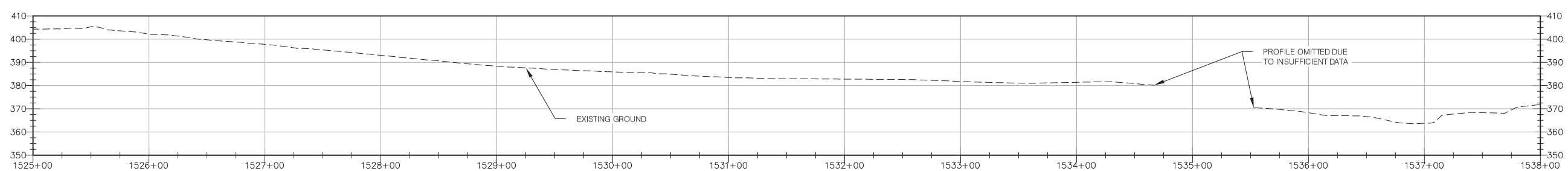
SURVEY DATA												
S 14° 22' W	32'22" LT	S 18° 01' E	00'00" LT	S 18° 01' E	00'17" LT	S 18° 18' E	00'52" LT	S 19° 11' E	00'52" LT	S 20° 03' E	02'32" RT	S 17° 31' E	01'21" RT	S 16° 10' E	00'40" RT	S 15° 29' E
1525+52		1526+17			1532+93		1533+94		1534+58		1535+48		1536+55		1537+63	

ALIGNMENT DETAIL



CONST. TYPE	2D	4A	W	7	W	4A

PROFILE



MATERIALS

	MATCHLINE	1	1	1	MATCHLINE
		967 FT	320 FT	13 FT	
COATING		A	C	A	
CLASSIFICATION		1			
DESIGN FACTOR		0.5			

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
!	ROAD CROSSING : CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
50 25 0 50 100 150 feet
25 12.5 0 25 50 75 feet
VERTICAL SCALE

△1

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2, AND ADDITIONAL SPECIFICATIONS IN 192.112 — 1,300 FT
2 20" O.D. X 0.375" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40 — 980 FT
B ABRASION RESISTANT COATING, 40 MILS, FBE W/ POWERCRETE OVERCOAT — 0 FT
C EPOXY POLYETHYLENE 10/40, W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT³ — 320 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-061A	EPSC PLAN	1	MDF	TDB	ISSUED FOR CONSTRUCTION (10/8/13)
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	MDF	SAB	ISSUED FOR CONSTRUCTION

	INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL	JLS	6/28/13		
DRAFTING DESIGNER	GIL	6/28/13		
DRAFTING SUPERVISOR	BZD	6/28/13		
DESIGN ENGINEER	MDF	6/28/13		
DESIGN MANAGER	SAB	6/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 50' | DWG. ANGP-T-C-061A | REV. 1

Vermont Gas

VHB Vanasse Hangen Brustlin, Inc.

CHA
36 Cordage Park Circle, Suites 321, 328, 329, 336
Plymouth, MA 02360
Main: (781) 982-7700 · www.chacompanies.com

RIGHT-OF-WAY

MATCHLINE

181
N/F
HURLBURT, HERRICK & CHARLOTTE

182
OLD STAGE ROAD

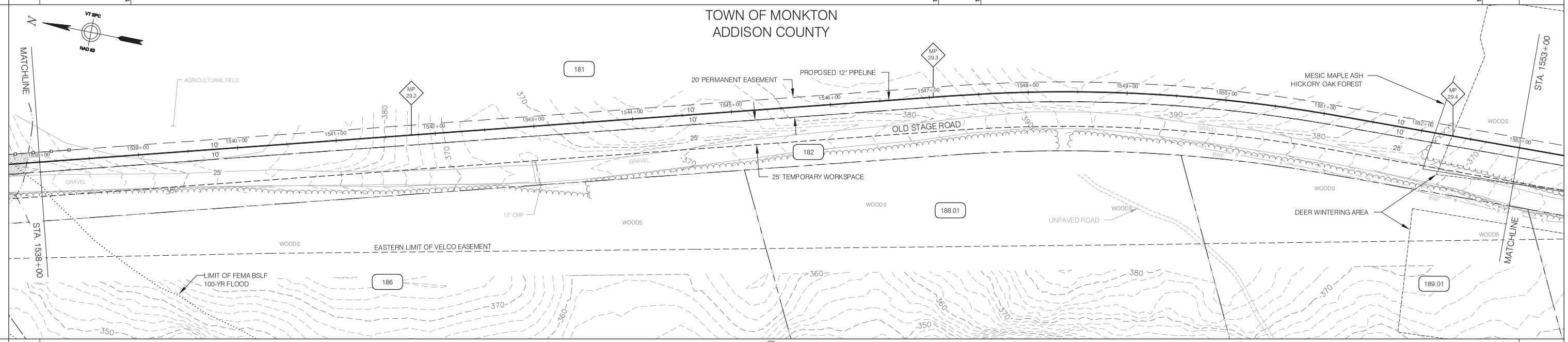
MATCH LINE

SURVEY DATA

S 15° 29' E | 00'00" LT | 1538+92 | S 15° 29' E | 00'46" RT | 1547+22 | S 14° 42' E | 01'04" RT | 1547+65 | 00'26" RT | 1551+13 | S 01° 21' E

ALIGNMENT DETAIL

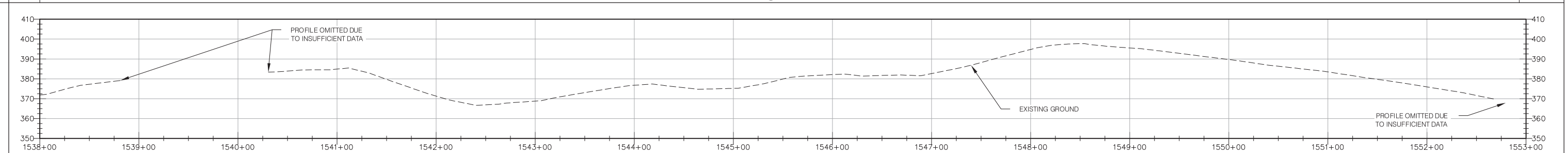
TOWN OF MONKTON
ADDISON COUNTY



CONST. TYPE

4A

PROFILE



MATERIALS

MATCHLINE

1
1,500 FT

COATING: A

CLASSIFICATION: 1 △1

DESIGN FACTOR: 0.5

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
⚠	ROAD CROSSING : CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
50 25 0 50 100 150 feet
25 12.5 0 25 50 75 feet
VERTICAL SCALE

△1

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2, AND ADDITIONAL SPECIFICATIONS IN 192.112 — 1,500 FT
2 20" O.D. X 0.375" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40 — 1,500 FT
B ABRASION RESISTANT COATING, 40 MILS, FBE W/ POWERCRETE OVERCOAT — 0 FT
C EPOXY POLYETHYLENE 10/40, W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT³ — 0 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		INITIALS	DATE	INITIALS	DATE
						ENVIRONMENTAL	JLS	6/28/13		
						DRAFTING DESIGNER	GIL	6/28/13		
						DRAFTING SUPERVISOR	BZD	6/28/13		
ANGP-EPSC-061B	EPSC PLAN	1	MDF	TDB	ISSUED FOR CONSTRUCTION (10/8/13)	DESIGN ENGINEER	MDF	6/28/13		
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	MDF	SAB	ISSUED FOR CONSTRUCTION	DESIGN MANAGER	SAB	6/28/13		

BID | CONSTRUCTION

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 50' | DWG. ANGP-T-C-061B | REV. 1

Vermont Gas

VHB Vanasse Hangen Brustlin, Inc.

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RIGHT-OF-WAY

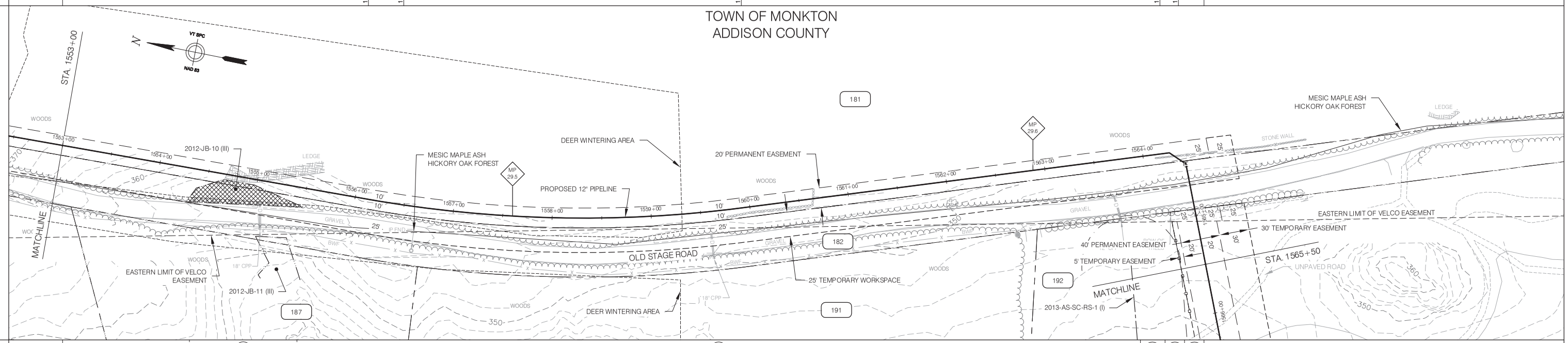
MATCHLINE | 181 N/F HURLBURT, HERRICK & CHARLOTTE | 182 OLD STAGE ROAD | 192 N/F HURLBURT, HERRICK & CHARLOTTE | MATCH LINE

SURVEY DATA

S 01° 21' E | 1556+14 | 00°49' LT | S 20° 10' E | 1556+50 | 01°26' LT | S 18° 39' E | 1559+91 | 00°41' LT | 1564+27 | 41°11' RT | S 22° 32' W | 1564+47 | 45°00' RT | S 67° 32' W

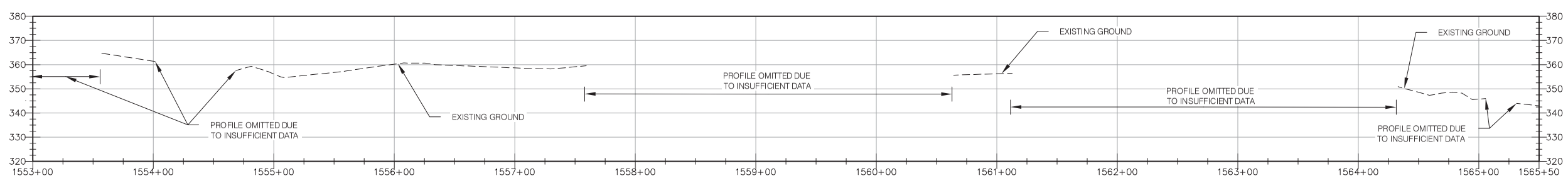
ALIGNMENT DETAIL

TOWN OF MONKTON
ADDISON COUNTY



CONST. TYPE: W | 4A | 11 | 1A | 1H

PROFILE



MATERIALS

	MATCHLINE				MATCHLINE
	1	1	1		
	1,151 FT	50 FT	49 FT		
COATING	A	C	A		
CLASSIFICATION	1 △1	△1			
DESIGN FACTOR	0.5				

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
!	ROAD CROSSING : CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
50 25 0 50 100 150 feet
25 12.5 0 25 50 75 feet
VERTICAL SCALE

△1

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2, AND ADDITIONAL SPECIFICATIONS IN 192.112 — 1,250 FT
2 20" O.D. X 0.375" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40 — 1,200 FT
B ABRASION RESISTANT COATING, 40 MILS, FBE W/ POWERCRETE OVERCOAT — 0 FT
C EPOXY POLYETHYLENE 10/40, W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT³ — 50 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-062	EPSC PLAN	1	MDF	TDB	ISSUED FOR CONSTRUCTION (10/8/13)
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	MDF	SAB	ISSUED FOR CONSTRUCTION

	INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL	JLS	6/28/13		
DRAFTING DESIGNER	GIL	6/28/13		
DRAFTING SUPERVISOR	BZD	6/28/13		
DESIGN ENGINEER	MDF	6/28/13		
DESIGN MANAGER	SAB	6/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 50' | DWG. ANGP-T-C-062 | REV. 1

Vermont Gas

VHB Vanasse Hangen Brustlin, Inc.

CHA
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Plymouth, MA 02360
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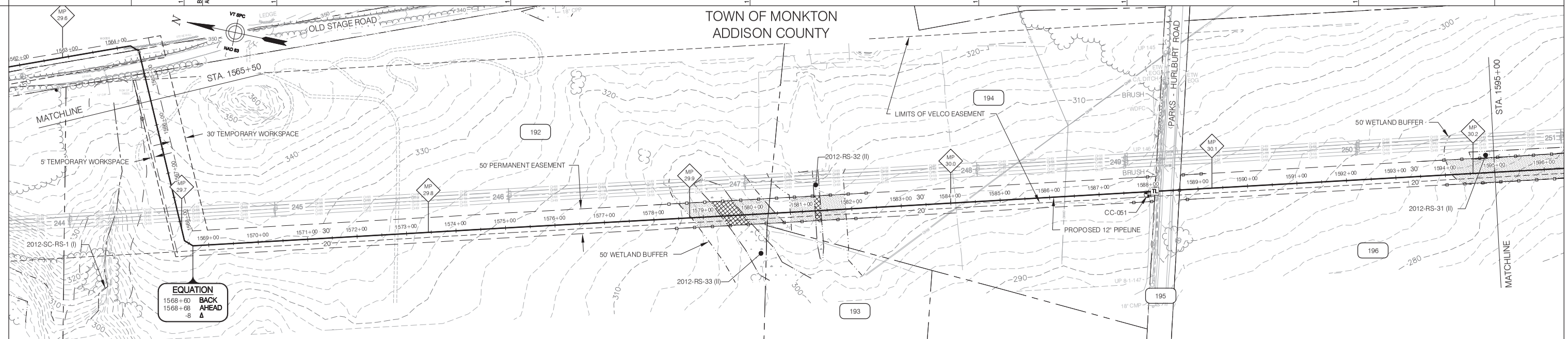
RIGHT-OF-WAY	MATCHLINE	192 N/F HURLBURT, HERRICK & CHARLOTTE	194 N/F GRACE, LAWRENCE JR. & SANDRA L.	195 PARKS - HURLBURT ROAD	196 N/F HURLBURT, HERRICK & CHARLOTTE	MATCH LINE

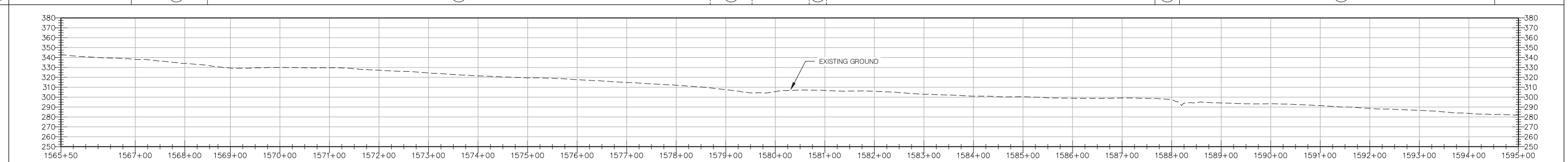
SURVEY DATA										
	S 67° 32' W	S 22° 32' W	S 12° 09' E	S 12° 10' E	S 12° 03' E	S 12° 08' E	S 12° 13' E	S 12° 09' E	S 12° 06' E	
	1568+40	Bcs: 1568+60 Ahd: 1568+68 34°40' LT	1570+39	1575+12	1579+95	1584+58	1587+58	1592+26		
	45°00' LT	-8.2 ft.	00°01' LT	00°07' RT	00°05' LT	00°04' LT	00°03' RT	00°03' RT		

ALIGNMENT DETAIL



CONST. TYPE	1H	2D	W	W	11	2D

PROFILE



MATERIALS

	MATCHLINE	1	1	1	1	1	1	MATCHLINE
		1,317 FT	313 FT	625 FT	50 FT	551 FT	86 FT	
COATING		A	C	A	C	A	C	
CLASSIFICATION			1					
DESIGN FACTOR			0.5					

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
⇧	ROAD CROSSING : CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
100 50 0 100 200 300 feet
VERTICAL SCALE
50 25 0 50 100 150 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2, AND ADDITIONAL SPECIFICATIONS IN 192.112 — 2,942 FT
2 20" O.D. X 0.375" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40 — 2,493 FT
B ABRASION RESISTANT COATING, 40 MILS, FBE W/ POWERCRETE OVERCOAT — 0 FT
C EPOXY POLYETHYLENE 10/40, W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT³ — 449 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-063	EPSC PLAN	1	MDF	TDB	ISSUED FOR CONSTRUCTION (10/8/13)
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	MDF	SAB	ISSUED FOR CONSTRUCTION

	INITIALS	BID DATE	INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL	JLS	6/28/13		
DRAFTING DESIGNER	GIL	6/28/13		
DRAFTING SUPERVISOR	BZD	6/28/13		
DESIGN ENGINEER	MDF	6/28/13		
DESIGN MANAGER	SAB	6/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-063 | REV. 1

Vermont Gas

VHB Vanasse Hangen Brustlin, Inc.

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36 Cordage Park Circle, Suites 321, 326, 329, 336
Plymouth, MA 02360
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RIGHT-OF-WAY

MATCHLINE

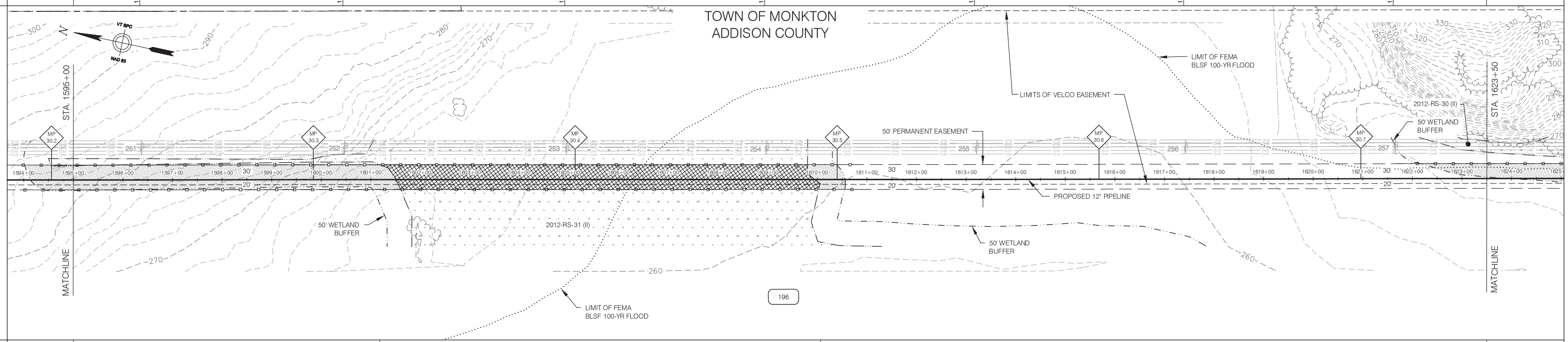
196
N/F
HURLBURT, HERRICK & CHARLOTTE

MATCH LINE

SURVEY DATA

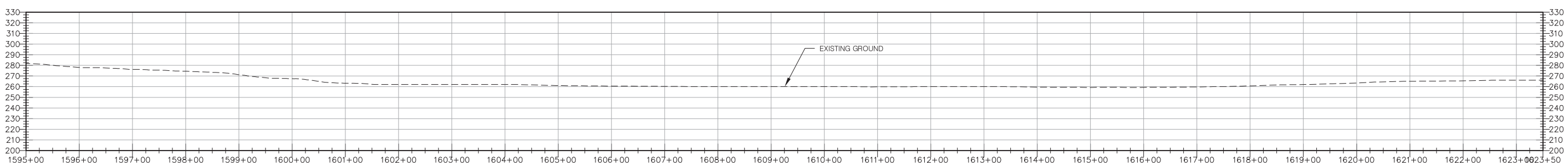
S 12° 06' E	00°06' LT 1596+39	S 12° 12' E	00°08' RT 1600+48	S 12° 04' E	00°03' LT 1604+96	S 12° 08' E	00°01' RT 1608+99	S 12° 06' E
S 12° 12' E	00°05' LT 1613+22	S 12° 14' E	00°01' LT 1617+44	S 12° 08' E	00°05' RT 1621+67			

ALIGNMENT DETAIL



CONST. TYPE: W | 2D

PROFILE



MATERIALS

1	1	1
1,557 FT	1,159 FT	134 FT
C	A	C

COATING: C | A | C

CLASSIFICATION: 1 (1)

DESIGN FACTOR: 0.5

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
⚠	ROAD CROSSING : CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
100 50 0 100 200 300 feet
50 25 0 50 100 150 feet
VERTICAL SCALE

(1)

PIPE MATERIAL:

1	12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2, AND ADDITIONAL SPECIFICATIONS IN 192.112	2,850 FT
2	20" O.D. X 0.375" WT, API-5L, GR. B	0 FT

PIPE COATING:

A	EPOXY POLYETHYLENE 10/40	1,159 FT
B	ABRASION RESISTANT COATING, 40 MILS, FBE W/ POWERCRETE OVERCOAT	0 FT
C	EPOXY POLYETHYLENE 10/40, W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT³	1,691 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-064	EPSC PLAN	1	MDF	TDB	ISSUED FOR CONSTRUCTION (10/8/13)
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	MDF	SAB	ISSUED FOR CONSTRUCTION

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL	JLS	6/28/13		
DRAFTING DESIGNER	GIL	6/28/13		
DRAFTING SUPERVISOR	BZD	6/28/13		
DESIGN ENGINEER	MDF	6/28/13		
DESIGN MANAGER	SAB	6/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

Vermont Gas

VHB Vanasse Hangen Brustlin, Inc.

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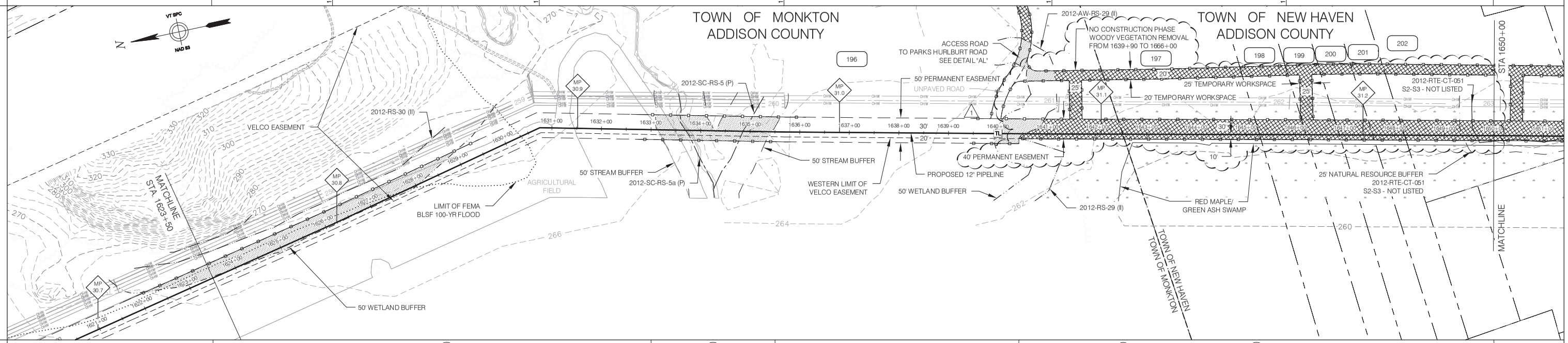
YEAR: 2013	W.O.	SCALE: 1" = 100'	DWG.	ANGP-T-C-064	REV. 1

RIGHT-OF-WAY										
MATCHLINE	196 N/F HURLBERT, HERRICK; & CHARLOTTE	TOWN OF MONKTON / TOWN OF NEW HAVEN	197 N/F MERRITT, MARGARET	198 N/F MERRITT, MARGARET	199 N/F MERRITT, MARGARET	200 N/F MERRITT, MARGARET	201 N/F MERRITT, MARGARET	202 N/F EVEREST, DOUGLAS A.	MATCH LINE

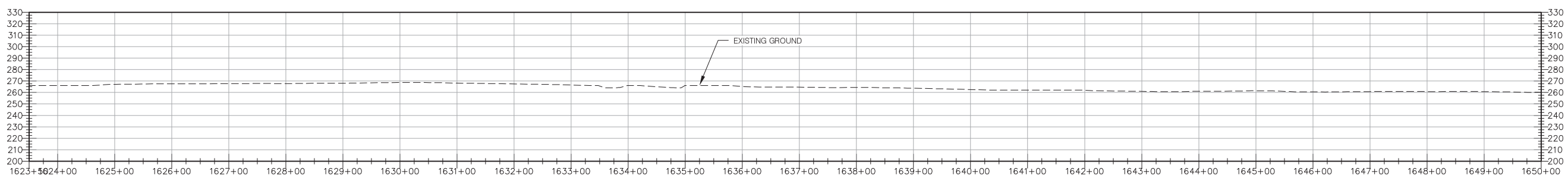
SURVEY DATA							
S 12° 08' E	00°49' LT 1626+16	S 12° 57' E	26°00' RT 1630+76	S 13° 03' W	00°34' LT 1635+69	S 12° 29' W	00°17' LT 1641+10	S 12° 12' W	00°08' RT 1645+82	S 12° 21' W

ALIGNMENT DETAIL



CONST. TYPE	2D	7	2D	W

PROFILE



MATERIALS

	MATCHLINE	1	1	1	1	1	MATCHLINE
		455 FT	506 FT	233 FT	449 FT	1,007 FT	
COATING		C	A	C	A	C	
CLASSIFICATION					1 / 1		
DESIGN FACTOR					0.5		

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
!	ROAD CROSSING : CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
100 50 0 100 200 300 feet
50 25 0 50 100 150 feet
VERTICAL SCALE

1

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2, AND ADDITIONAL SPECIFICATIONS IN 192.112 — 2,650 FT
2 20" O.D. X 0.375" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40 — 955 FT
B ABRASION RESISTANT COATING, 40 MILS, FBE W/ POWERCRETE OVERCOAT — 0 FT
C EPOXY POLYETHYLENE 10/40, W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT³ — 1,695 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
						ENVIRONMENTAL	JLS	6/28/13		
						DRAFTING DESIGNER	GIL	6/28/13		
ANGP-T-G-07-010	ACCESS ROAD DETAILS					DRAFTING SUPERVISOR	BZD	6/28/13		
ANGP-EPSC-065	EPSC PLAN	1	MDF	TDB	ISSUED FOR CONSTRUCTION (10/8/13)	DESIGN ENGINEER	MDF	6/28/13		
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	MDF	SAB	ISSUED FOR CONSTRUCTION	DESIGN MANAGER	SAB	6/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-065 | REV. 1

Vermont Gas

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