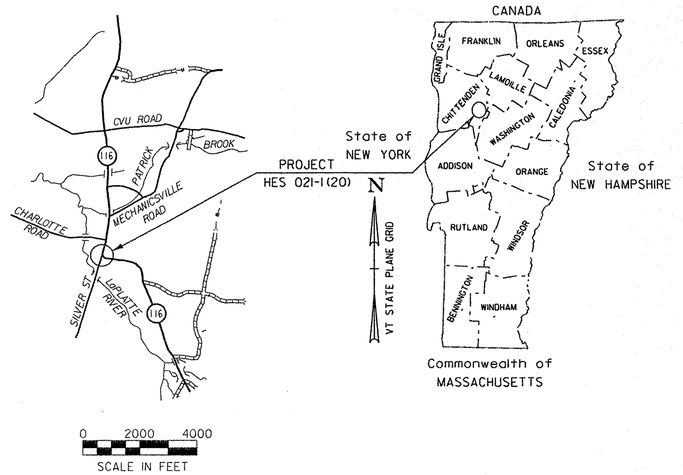
STATE OF VERMONT
AGENCY OF TRANSPORTATION

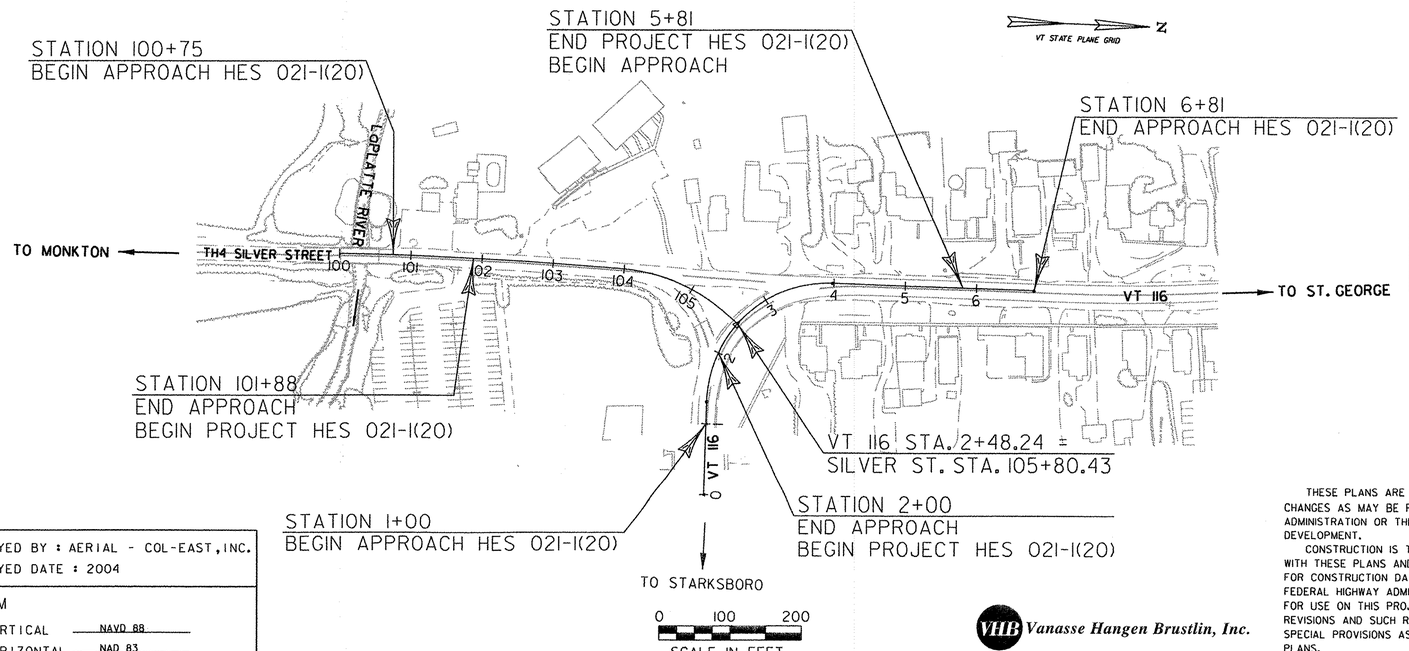


PROPOSED IMPROVEMENT
TOWN OF HINESBURG
COUNTY OF CHITTENDEN
VT 116 (MINOR ARTERIAL)
AT SILVER STREET (MAJOR T.H. COLLECTOR)

BEGINNING ON VT 116 EAST OF THE SILVER ST. INTERSECTION (MM 4.36) AND EXTENDING NORTHERLY ALONG VT 116 FOR APPROXIMATELY 580 FT (0.110 MILES).

LENGTH OF ROADWAY: 773 FT = 0.146 MILES
LENGTH OF PROJECT: 773 FT = 0.146 MILES

WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES RECONSTRUCTION OF VT 116 AND SILVER ST. WITH NEW PAVEMENT, SUBBASE, CURBING, AND DRAINAGE.



RECORD PLANS

CONTRACTOR: DON WESTON EXCAVATING, INC. – WILLISTON, VT
RESIDENT ENGINEER: DALE NORTON
CONSTRUCTION BEGAN: JULY 17, 2009
CONSTRUCTION COMPLETE: SEPTEMBER 20, 2010
RECORD PLANS BY: DALE NORTON & JENNA HYDE

I HEREBY CERTIFY THAT ALL THE CONSTUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.

BY Dale R. Norton RESIDENT ENGINEER
DATE Aug 03, 2012

NOTE: Any further information concerning final quantities, amounts or other details relative to this project may be found at Central Files in the electronic archives.

TRAFFIC DATA

VT 116 (NORTH LEG)		VT 116 (SOUTH LEG)	
ADT 2007 = 11,700	ADT 2027 = 14,700	ADT 2007 = 5,000	ADT 2027 = 6,300
2007 DHV = 1,200	2027 DHV = 1,500	2007 DHV = 560	2027 DHV = 710
2007 ADTT = 950	2027 ADTT = 1,900	2007 ADTT = 230	2027 ADTT = 470
2007 %D = 71	2027 %D = 71	2007 %D = 71	2027 %D = 71
2007 %T = 6.5	2027 %T = 10.4	2007 %T = 3.8	2027 %T = 6.3
DESIGN SPEED = 25 MPH		DESIGN SPEED = 25 MPH	
POSTED SPEED = 30 MPH		POSTED SPEED = 30 MPH	
2007-2027 ESAL'S = 6,742,000		2007-2027 ESAL'S = 885,000	
2007-2047 ESAL'S = 17,961,000		2007-2047 ESAL'S = 2,269,000	

TH4	
ADT 2007 = 6,800	ADT 2027 = 8,500
2007 DHV = 710	2027 DHV = 880
2007 ADTT = 650	2027 ADTT = 1,300
2007 %D = 74	2027 %D = 74
2007 %T = 11.2	2027 %T = 18.1
DESIGN SPEED = 40 MPH	
POSTED SPEED = 30 MPH	
2007-2027 ESAL'S = 4,106,000	
2007-2047 ESAL'S = 10,179,000	

CONVENTIONAL SYMBOLS

COUNTY LINE
TOWN LINE
LIMITS OF ACCESS
POINT OF ACCESS
FENCE LINE
STONE WALL
TRAVELED WAY
GUARD RAIL
RAILROAD
SURVEY LINE
CULVERT
POWER POLE
TELEPHONE POLE
TREES
CONTROL OF ACCESS
PROPERTY LINE
R.O.W. TAKING LINE
SLOPE RIGHTS (SR SR SR)
TOP OF CUT
TOE OF SLOPE

SURVEYED BY : AERIAL - COL-EAST, INC.
SURVEYED DATE : 2004

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83

THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROGRAM DEVELOPMENT.

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2006, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JUNE 15, 2006 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

VHB Vanasse Hangen Brustlin, Inc.

DIRECTOR OF PROGRAM DEVELOPMENT
APPROVED [signature] DATE 2/20/09

PROJECT MANAGER : KENNETH A. ROBIE, P.E.

PROJECT NAME : HINESBURG
PROJECT NUMBER : HES 021-1(20)

SHEET 1 OF 25 SHEETS

INDEX OF SHEETS

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B-5	SLOPE GRADING, EMBANKMENTS, MUCK	6/1/94
B-71	RESIDENTIAL AND COMMERCIAL DRIVES	7/8/05
C-10	CURBING	2/11/08
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D-4	FLUSHING BASINS, END SECTIONS, ELBOWS TYPICAL WATERFALL FOR CULVERTS UP TO AND INCLUDING 48" DIA EXTENSION SERVICE BOX AND CURB STOP CORRUGATED PIPE ELBOW GRANULAR BORROW AT CULVERT LOCATIONS UNDERDRAIN FLUSHING BASINS CORRUGATED STEEL PIPE END SECTION CORRUGATED STEEL PIPE ARCH END SECTION	8/13/07
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D-15	PRECAST REINF. CONC. MANHOLE GRATES (BICYCLE SAFE) CAST IRON GRATE WITH FRAME, TYPE D CAST IRON GRATE WITH FRAME, TYPE E	6/1/94
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E-100A	SIDE ROAD CONSTRUCTION - APPROACH SIGNS	1/2/04
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E-102	CONSTRUCTION SIGN DETAILS	6/30/03
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E-106	TRAFFIC CONTROL - MISCELLANEOUS DETAILS	3/1/04
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E-107A	BREAKAWAY BARRICADE DETAILS	8/8/95
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J-3	MAILBOX SUPPORT DETAIL (SINGLE AND MULTIPLE SUPPORT)	8/7/95

NOTE: TOWN HALL STAIRS TOP STEP SOUTH SIDE CH. SQ. 350.365 PER T.O.M.

Vanasse Hangen Brustlin, Inc.

PROJECT NAME: HINESBURG
PROJECT NUMBER: HES 021-1(20)

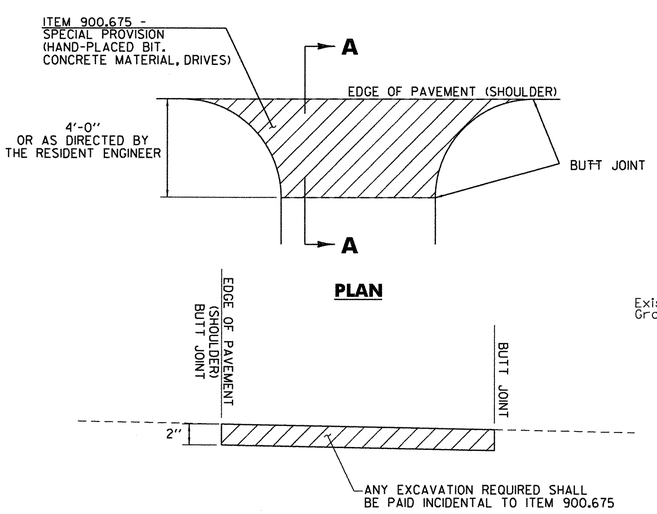
FILE NAME: z04b206ind.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
INDEX OF SHEETS

PLOT DATE: 2/18/2009
DRAWN BY: D. PECK
CHECKED BY: G. BAKOS
SHEET 2 OF 25

TYPICAL SECTIONS

MATERIAL TOLERANCES	
MATERIAL ITEM	THICKNESS TOLERANCE
PAVEMENT (TOTAL DEPTH)	¾"
SUBBASE	1"
SAND	1"

1½" SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY) (TYPE IVS WEARING COURSE)
3" SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY) (TYPE IIS BINDER COURSE)
3" SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY) (TYPE IIS BASE COURSE)
24" SUBBASE OF DENSE GRADED CRUSHED STONE
6" OF SAND BORROW (SILVER ST. WHERE SHOWN)

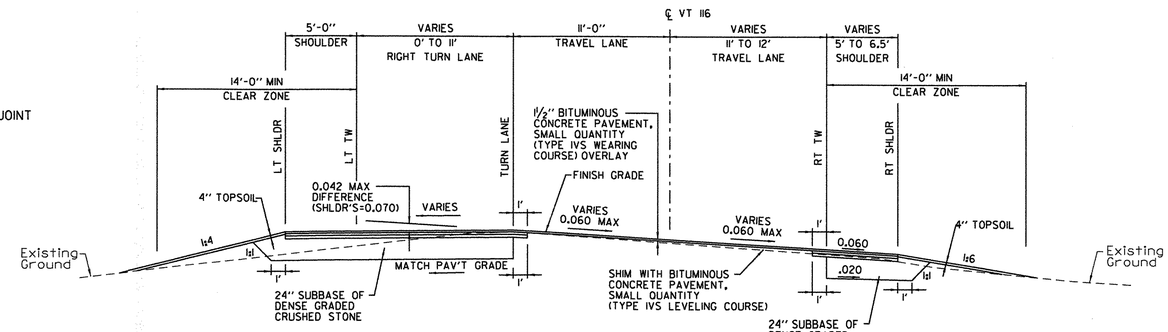


SECTION A-A

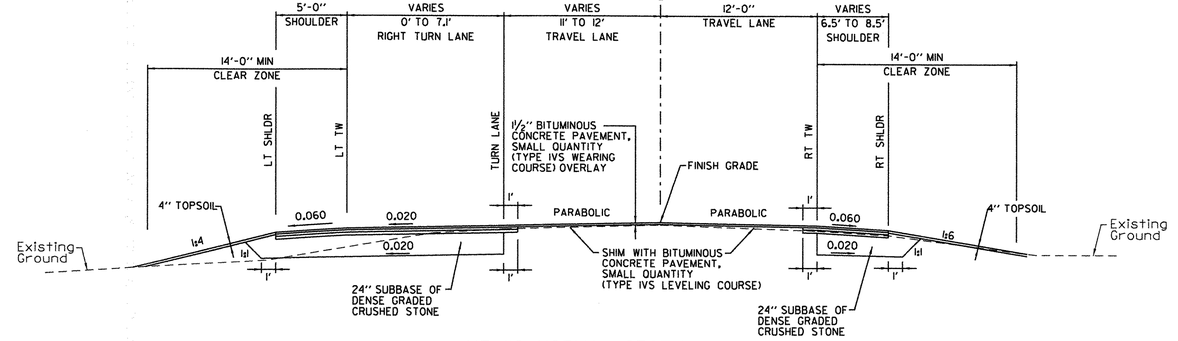
HANDWORK DETAILS FOR PAVED DRIVES

STATION	POSITION	QUANTITY* (SY)
SL 101+75	RT	92
SL 102+73	LT	106
SL 105+01	LT	102
3+35	RT	102
3+57	LT	82
4+43	LT	28
4+70	LT	26
4+73	RT	68
5+85	RT	226
6+30	LT	94

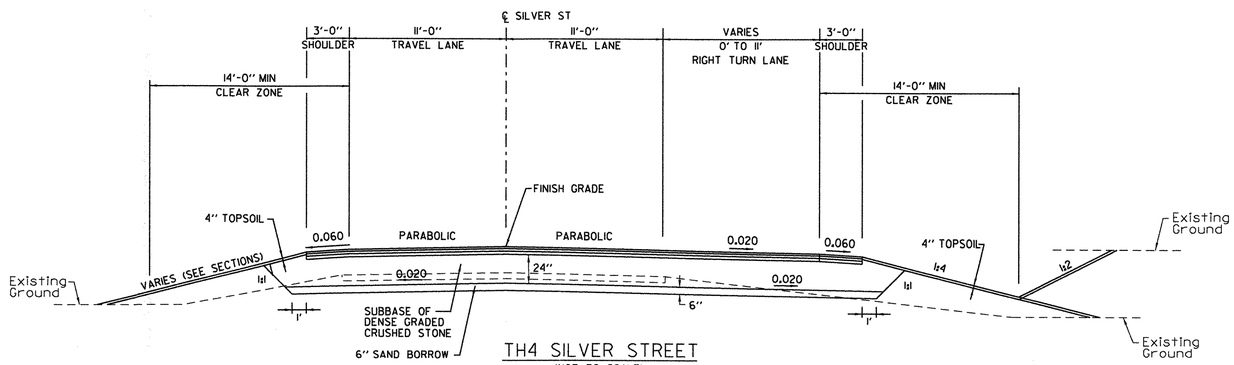
* QUANTITY INCLUDES MATERIAL FOR TEMPORARY AND PERMANENT INSTALLATIONS.



VT 116 BANKED SECTION
NOT TO SCALE
(STA. 2+00 - STA. 5+25)



VT 116 NORMAL SECTION
NOT TO SCALE
(STA. 5+25 - STA. 5+81)



TH4 SILVER STREET
(NOT TO SCALE)

SEEDING FORMULA
URBAN AREAS

% WT.	LBS./A.	NAME	PUR %	GERM %
42.5	34.0	CREEPING RED FESCUE	98	85
10.0	8.0	PERENNIAL RYE GRASS	95	90
42.5	34.0	KENTUCKY BLUE GRASS	85	85
5.0	4.0	ANNUAL RYE GRASS	95	85
100.00	80.0			

GENERAL NOTES

SEED MIXTURE: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.

SEED: TO BE APPLIED PER SEEDING FORMULAS OR AS DIRECTED BY THE ENGINEER.

FERTILIZER: FORMULA 10-20-10, TO BE USED WITH SEED, APPLIED AT THE RATE OF 500 LBS./ACRE. (HYDRO SEEDERS MAY USE 19-19-19 FORMULA).

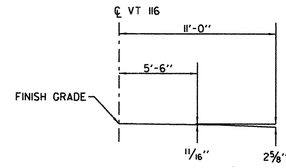
AGRICULTURAL LIMESTONE: TO BE APPLIED AT THE RATE OF 2 TONS/ACRE, OR AS DIRECTED BY THE ENGINEER.

HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS/ACRE, OR AS DIRECTED BY THE ENGINEER.

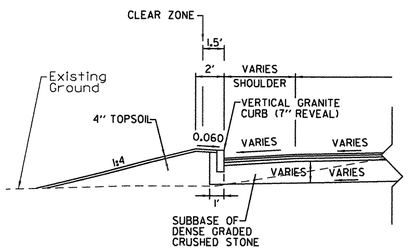
TOPSOIL: TO BE USED WITH SEED AS INDICATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.

NOTES

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW THE COMPACTION METHODS PER SUBSECTION 301.06
2. PROPOSED DRIVE APRONS SHALL INCLUDE 1½" COLD PLANED PAVEMENT.
3. TACK COAT: EMULSIFIED ASPHALT IS TO BE APPLIED AT THE RATE OF 0.025 GAL/SY BETWEEN SUCCESSIVE COURSES OF PAVEMENT AS DIRECTED BY THE ENGINEER.
4. SLOPE ROUNDING: ALL CUT SLOPES TO BE ROUNDED IN ACCORDANCE WITH STANDARD SHEET B - 5.
5. MARKER POSTS: TO BE PLACED AS INDICATED OR AS DIRECTED BY THE ENGINEER.



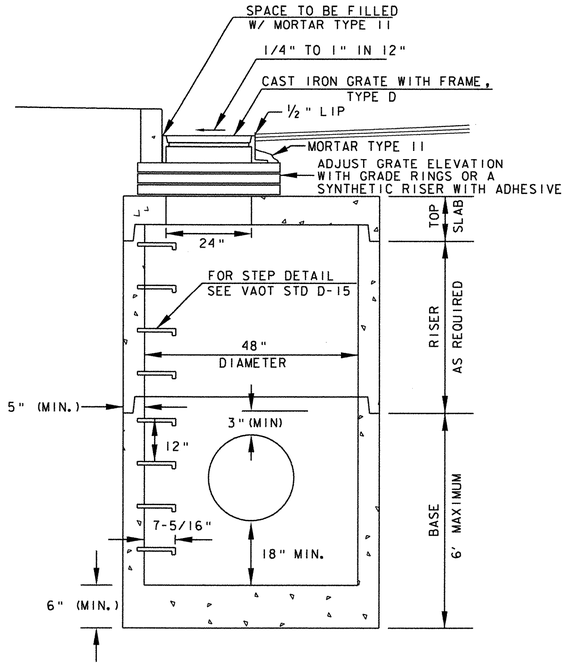
PARABOLIC DETAIL
(NOT TO SCALE)



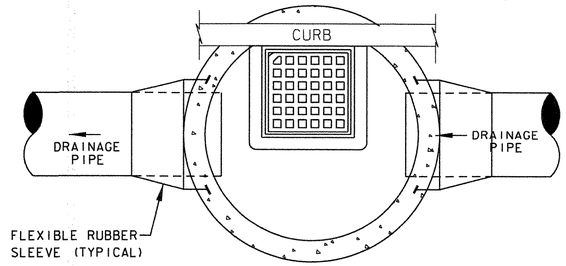
VERTICAL GRANITE CURB INSTALLATION
STA. 1+50, LT. - SL STA. 105+08, RT.
SL STA. 105+25, LT. - STA. 3+35, LT.
STA. 3+78, LT. - STA. 4+28, LT.
STA. 4+86, LT. - STA. 6+07, LT.
(NOT TO SCALE)

Vanasse Hangen Brustlin, Inc.

PROJECT NAME:	HINESBURG
PROJECT NUMBER:	HES 021-1(20)
FILE NAME: z04b206typ.dgn	PLOT DATE: 2/18/2009
PROJECT LEADER: G. BAKOS	DRAWN BY: D. PECK
DESIGNED BY: D. PECK	CHECKED BY: G. BAKOS
TYPICAL SECTIONS	SHEET 3 OF 25



ELEVATION VIEW



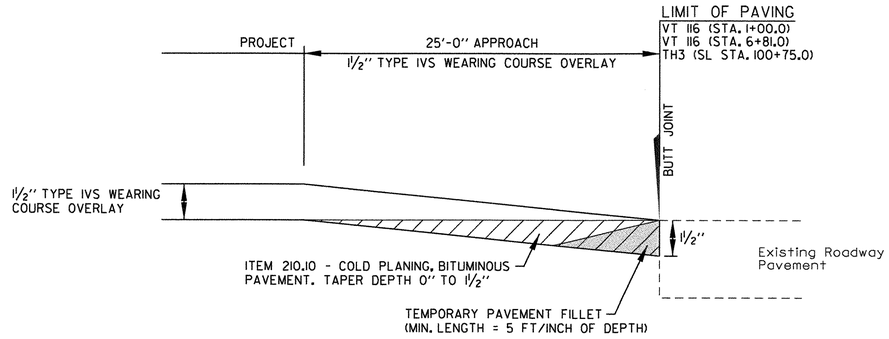
DROP INLET PLAN VIEW

TYPICAL PRECAST DROP INLET INSTALLED IN ROADWAY

NOT TO SCALE

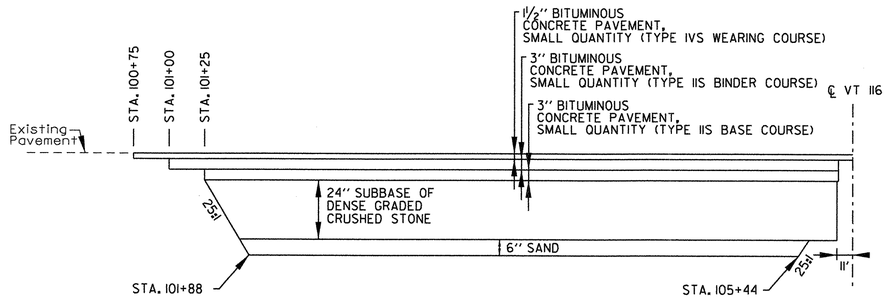
PRECAST CONCRETE DROP INLET AND MANHOLE NOTES:

1. PRECAST CONCRETE SECTIONS SHALL CONFORM TO THE STANDARD SPECIFICATIONS AND ASTM C-478.
2. MINIMUM CONCRETE COMPRESSIVE STRENGTH: 4,000 PSI AT 28-DAYS
3. STEEL REINFORCING SHALL CONFORM TO ASTM A185 OR A82 FOR HS25 LOADING.
4. MANHOLE STEPS SHALL BE 14" WIDE STEEL REINFORCED COPOLYMER POLYPROPYLENE PLASTIC CONFORMING TO ASTM C-478 AND SHALL BE CAST INTO MANHOLE SECTIONS BY THE PRECAST CONCRETE MANUFACTURER.
5. FACE OF PIPE SHALL NOT PROJECT MORE THAN 2" OR LESS THAN 1" FROM INSIDE WALL OF STRUCTURE.
6. ALL STRUCTURES WITH MULTIPLE PIPES SHALL HAVE A MINIMUM OF 12" OF OUTSIDE SURFACE BETWEEN HOLES, NO MORE THAN 75% OF A HORIZONTAL CROSS-SECTION SHALL BE HOLES, AND THERE SHALL BE NO HOLES CLOSER THAN 3" TO JOINTS.
7. FITTING FRAME TO FINAL GRADE MAY BE DONE WITH A SYNTHETIC RISER OR WITH PRECAST CONCRETE GRADE RINGS OF APPROPRIATE THICKNESS (3 COURSES MAX).
8. ALL PIPE INVERTS AND PENETRATION ANGLES SHALL BE FIELD VERIFIED PRIOR TO PRECASTING.
9. PRECAST SECTIONS SHALL HAVE A TONGUE AND GROOVE JOINT AND BE ASSEMBLED USING A BUTYL RUBBER OR APPROVED EQUAL SEALANT.
10. PROVIDE FLEXIBLE RUBBER SLEEVES CONFORMING TO ASTM C-923, RESILIENT, OF SIZE REQUIRED, FOR EACH PIPE CONNECTING TO STRUCTURE. SLEEVES SHALL BE CAST INTO PRECAST STRUCTURE BY THE MANUFACTURER FOR ALL PIPE PENETRATIONS.
11. DROP INLET GRATE ORIENTATION SHALL BE IN ACCORDANCE WITH STANDARD DRAWING D-15 FOR TYPE D GRATES.
12. INSTALLATION OF DROP INLETS OVER EXISTING PIPES SHALL INCLUDE CLEAN CUTTING OF EXISTING PIPES, PROVIDING AN EXTENSION PIPE OF SIMILAR MATERIAL AND SIZE AS THE EXISTING PIPE, COUPLINGS REQUIRED FOR THE CONNECTION BETWEEN THE EXTENSION PIPE AND THE EXISTING PIPE, AND INSTALLING FLEXIBLE RUBBER SLEEVES AS SHOWN IN DETAILS PROVIDED ON THIS SHEET.
13. PAYMENT FOR INSTALLATION OF THE DROP INLETS SHALL BE MADE UNDER PRECAST REINFORCED CONC. DROP INLET WITH CAST IRON GRATE (ITEM 604.18).



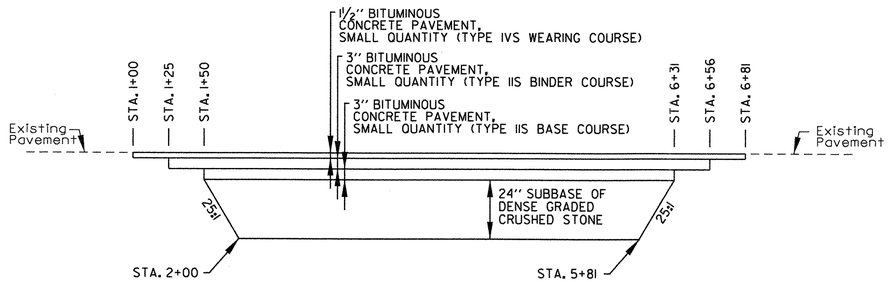
OVERLAY PAVEMENT MATCH TRANSITION DETAIL

NOT TO SCALE



TH4 SILVER STREET PAVEMENT TRANSITION DETAIL

NOT TO SCALE

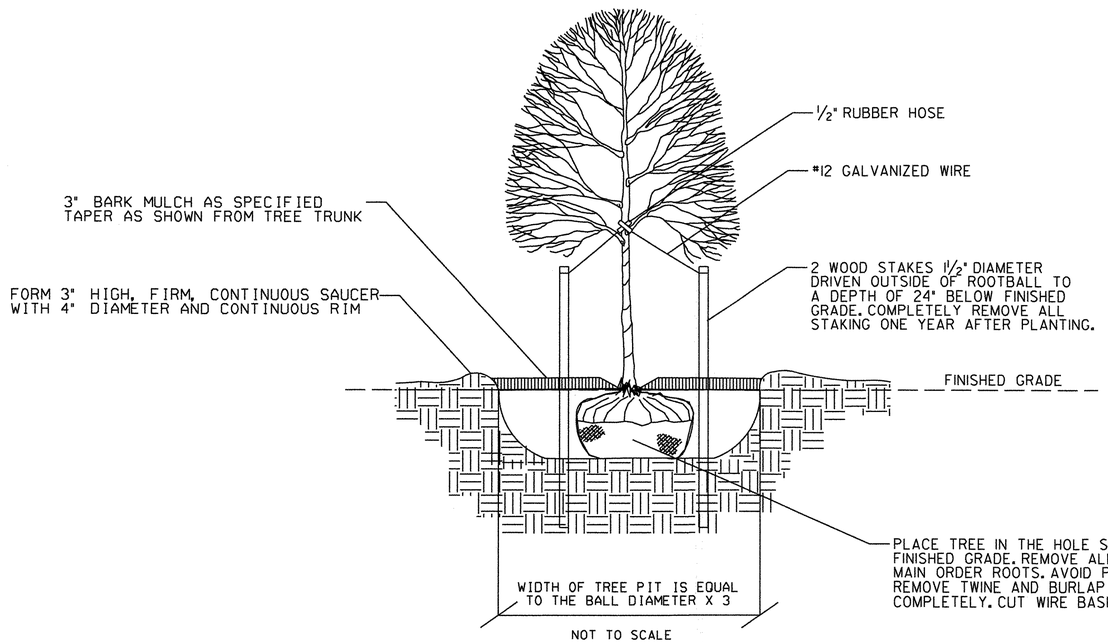


VT 116 PAVEMENT TRANSITION DETAIL

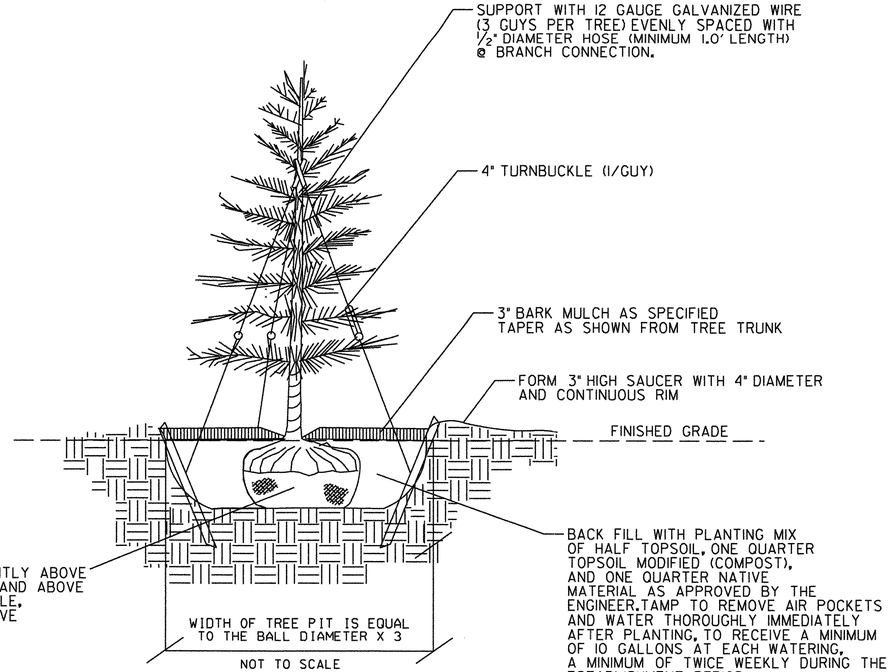
NOT TO SCALE

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME:	HINESBURG
PROJECT NUMBER:	HES 021-1(20)
FILE NAME: z04b206det.dgn	PLOT DATE: 2/18/2009
PROJECT LEADER: G. BAKOS	DRAWN BY: D. PECK
DESIGNED BY: D. PECK	CHECKED BY: G. BAKOS
DETAILS SHEET	SHEET 4 OF 25



DECIDUOUS TREE PLANTING DETAIL



EVERGREEN TREE PLANTING DETAIL

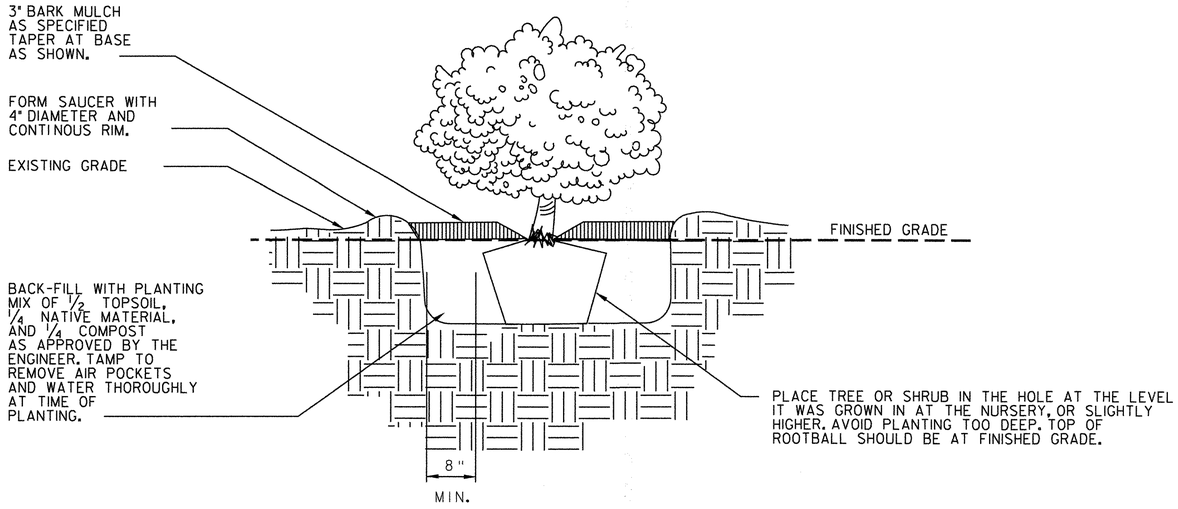
NOTES;

1. ANTI-DESICCANT SPRAY IS TO BE APPLIED TO ALL EVERGREENS PER MANUFACTURER SPECIFICATIONS.
2. COMPLETELY REMOVE ALL GUY-WIRES AND TURNBUCKEL ONE YEAR AFTER PLANTING.

GENERAL NOTES:

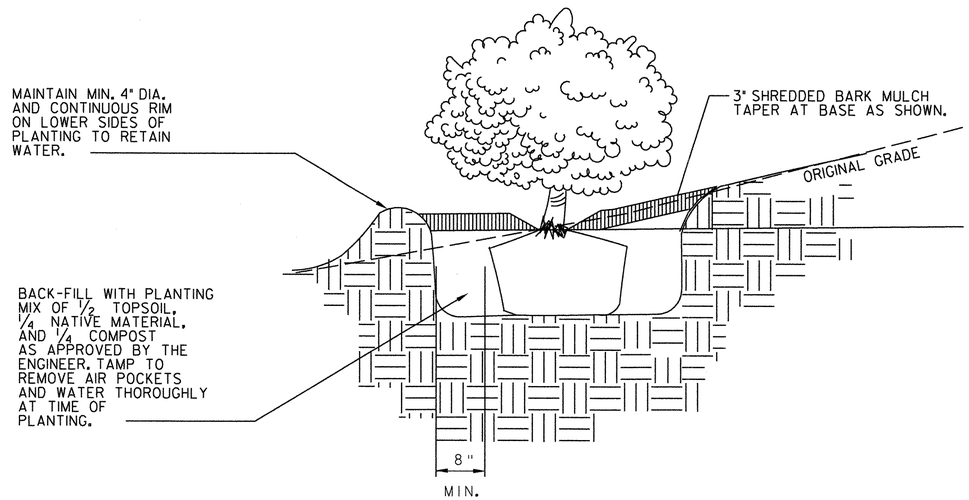
1. SECTION 656 "PLANTING TREES, SHRUBS AND VINES" SHALL BE FOLLOWED.
2. CLEAN CUT ALL ROOTS. TRANSPLANT TREES WITH TREE SPADE OF SUITABLE SIZE TO THE EXISTING TREES. IF PLANT MATERIAL IS DAMAGED AND NOT IN VIABLE CONDITION IT SHALL BE REPLACED BY THE CONTRACTOR AS DIRECTED BY THE RESIDENT ENGINEER.
3. THE NEW PLANTING HOLES SHALL BE PREPARED AND PRE-DUG SO THE TREES AND SHRUBS CAN BE TRANSPLANTED THE SAME DAY OR WITH 24 HOURS AT THE MOST.
4. IF NATIVE SOILS ARE DETERMINED TO BE UNSUITABLE THE CONTRACTOR SHALL REPLACE WITH APPROVED 3/4 TOPSOIL AND 1/4 COMPOST MIX.

PROJECT NAME:	HINESBURG
PROJECT NUMBER:	HES 021-1(20)
FILE NAME: z04b2061s det.dgn	PLOT DATE: 2/18/2009
PROJECT LEADER: G. BAKOS	DRAWN BY: D. PECK
DESIGNED BY: D. PECK	CHECKED BY: G. BAKOS
LANDSCAPING DETAILS	SHEET 5 OF 25



SHRUB PLANTING DETAIL

NOT TO SCALE



SHRUB PLANTING ON SLOPES DETAIL

NOT TO SCALE

GENERAL NOTES:

1. SECTION 656 'PLANTING TREES, SHRUBS AND VINES' SHALL BE FOLLOWED.
2. CLEAN CUT ALL ROOTS. TRANSPLANT TREES WITH TREE SPADE OF SUITABLE SIZE TO THE EXISTING TREES. IF PLANT MATERIAL IS DAMAGED AND NOT IN VIABLE CONDITION IT SHALL BE REPLACED BY THE CONTRACTOR AS DIRECTED BY THE RESIDENT ENGINEER.
3. THE NEW PLANTING HOLES SHALL BE PREPARED AND PRE-DUG SO THE TREES AND SHRUBS CAN BE TRANSPLANTED THE SAME DAY OR WITH 24 HOURS AT THE MOST.
4. IF NATIVE SOILS ARE DETERMINED TO BE UNSUITABLE THE CONTRACTOR SHALL REPLACE WITH APPROVED 3/4 TOPSOIL AND 1/4 COMPOST MIX.

PROJECT NAME:	HINESBURG
PROJECT NUMBER:	HES 021-1(20)
FILE NAME: z04b206ls det.dgn	PLOT DATE: 2/18/2009
PROJECT LEADER: G. BAKOS	DRAWN BY: D. PECK
DESIGNED BY: D. PECK	CHECKED BY: G. BAKOS
LANDSCAPING DETAILS	SHEET 6 OF 25

STATE OF VERMONT AGENCY
OF TRANSPORTATION

QUANTITY SHEET #1

SUMMARY OF ESTIMATED QUANTITIES

FULL C.E. ITEMS	EROSION CONTROL	ROADWAY	GRAND TOTAL	UNIT	DESCRIPTION	ITEM NUMBER	ROUNDING
		1700	1700	CY	COMMON EXCAVATION	203.15	31.4
		85	85	CY	SOLID ROCK EXCAVATION	203.16	EST
		70	70	CY	EXCAVATION OF SURFACES AND PAVEMENTS	203.28	4.0
		285	285	CY	SAND BORROW	203.31	4.5
		305	305	CY	TRENCH EXCAVATION OF EARTH	204.20	2.0
		25	25	CY	TRENCH EXCAVATION OF ROCK	204.21	0.4
		1	1	CY	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)	204.22	-
		690	690	SY	COLD PLANING, BITUMINOUS PAVEMENT	210.10	9.6
		2200	2200	CY	SUBBASE OF DENSE GRADED CRUSHED STONE	301.35	4.2
		11	11	CWT	EMULSIFIED ASPHALT	404.65	0.3
		1	1	LU	PRICE ADJUSTMENT, ASPHALT CEMENT (N.A.B.I.)	406.50	-
		260	260	LF	18" CPEP (SL)	601.2615	4.0
		1	1	EACH	18" CPEPES	601.7015	-
		310	310	LF	CLEANING CULV. PIPE, IN-PLACE [0-24 IN. , INCL.]	601.995	3.0
		9	9	EACH	PRECAST REINFORCED CONCRETE DROP INLET WITH CAST IRON GRATE	604.18	-
		2	2	EACH	CHANGING ELEV. OF DROP INLETS, CATCH BASINS OR MANHOLES	604.40	-
		2	2	EACH	CAST IRON COVER WITH FRAME	604.55	-
		200	200	LF	6 INCH UNDERDRAIN PIPE	605.10	EST
		80	80	HR	ROADWAY PATROL MAINTENANCE	607.10	EST
		190	190	MGAL	DUST CONTROL WITH WATER	609.10	1.5
		2	2	TON	DUST AND ICE CONTROL WITH CALCIUM CHLORIDE	609.15	0.7
		5	5	CY	STONE FILL, TYPE II	613.11	EST
		400	400	LF	VERTICAL GRANITE CURB	616.21	5.5
		8	8	EACH	RELOCATE MAILBOX, SINGLE SUPPORT	617.10	-
		1	1	EACH	RELOCATE MAILBOX, MULTIPLE SUPPORT	617.12	-
		8	8	EACH	YIELDING MARKER POSTS	619.17	-
		600	600	HR	UNIFORMED TRAFFIC OFFICERS	630.10	80.8
		1200	1200	HR	FLAGGERS	630.15	24
1			1	LS	TESTING EQUIPMENT, BITUMINOUS	631.17	-
		1	1	LS	MOBILIZATION / DEMOBILIZATION	635.11	-
		1	1	LS	TRAFFIC CONTROL	641.10	-
		3	3	EACH	PORTABLE CHANGEABLE MESSAGE SIGN	641.15	-
		2200	2200	LF	DURABLE 4 INCH WHITE LINE, THERMOPLASTIC	646.402	6
		2050	2050	LF	DURABLE 4 INCH YELLOW LINE, THERMOPLASTIC	646.412	20
		35	35	LF	DURABLE 24 INCH STOP BAR, THERMOPLASTIC	646.482	1
		33	33	EACH	DURABLE LETTER OR SYMBOL, THERMOPLASTIC	646.492	-
		400	400	LF	TEMPORARY 4 INCH WHITE LINE	646.600	32
		2050	2050	LF	TEMPORARY 4 INCH YELLOW LINE	646.610	20
		35	35	LF	TEMPORARY 24 INCH STOP BAR	646.680	1
		6	6	EACH	TEMPORARY LETTER OR SYMBOL	646.690	-

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS
		BITUMINOUS CONCRETE PAVEMENT
371.4	TON	TYPE IVS WEARING COURSE - VT 116 & SILVER STREET
503.1	TON	TYPE IIS BINDER COURSE - VT 116 & SILVER STREET
477.7	TON	TYPE IIS BASE COURSE - VT 116 & SILVER STREET
175.9	TON	TYPE IVS LEVELING COURSE - SHIMMING
21.9	TON	ROUNDING
1550	**TON**	**TOTAL**
		SUBBASE OF DENSE GRADED CRUSHED STONE
1307.1	CY	TH4 SILVER STREET
807.6	CY	VT 116
81.1	CY	DRIVES
4.2	CY	ROUNDING
2200	**CY**	**TOTAL**
		COMMON EXCAVATION
845.5	CY	VT 116
823.1	CY	TH4 SILVER STREET
31.4	CY	ROUNDING
1700	**CY**	**TOTAL**
		VERTICAL GRANITE CURB
118.6	LF	STA. 1+50, LT. - SL STA. 105+08, RT.
101.7	LF	SL STA. 105+25, LT. - STA. 3+35, LT.
52.7	LF	STA. 3+78, LT. - STA. 4+28, LT.
121.5	LF	STA. 4+86, LT. - STA. 6+07, LT.
5.5	LF	ROUNDING
400	**LF**	**TOTAL**

Vanasse Hangen Brustlin, Inc.

PROJECT NAME: **HINESBURG**
PROJECT NUMBER: **HES 021-1(20)**

FILE NAME: **04B206_Quantity_Summary.xls**
PROJECT MANAGER: **G. BAKOS**
DESIGNED BY: **D. PECK**
QUANTITY SHEET #1

PLOT DATE: **2/18/2009**
DRAWN BY: **D. PECK**
CHECKED BY:
SHEET: **7** OF **25**

STATE OF VERMONT AGENCY
OF TRANSPORTATION

QUANTITY SHEET #2

SUMMARY OF ESTIMATED QUANTITIES

FULL C.E. ITEMS	EROSION CONTROL	ROADWAY	GRAND TOTAL	UNIT	DESCRIPTION	ITEM NUMBER	ROUNDING
		320	320	EACH	LINE STRIPING TARGETS	646.76	2
	95		95	SY	GEOTEXTILE UNDER STONE FILL	649.31	2
	850		850	SY	GEOTEXTILE FOR SILT FENCE	649.51	7
	27		27	LB	SEED	651.15	0.7
	165		165	LB	FERTILIZER	651.18	0.6
	1		1	TON	AGRICULTURAL LIMESTONE	651.20	0.3
	1		1	TON	HAY MULCH	651.25	0.3
		180	180	CY	TOPSOIL	651.35	3.2
	300		300	SY	TEMPORARY EROSION MATTING	653.20	6.7
	15		15	CY	TEMPORARY STONE CHECK DAM, TYPE I	653.25	-
	5		5	EACH	INLET PROTECTION DEVICE, TYPE I	653.40	-
	760		760	FT	PROJECT DEMARCATION FENCE	653.55	1
		6	6	EACH	TRANSPLANTING TREES	656.45	-
		14	14	EACH	TRANSPLANTING SHRUBS	656.50	-
		32	32	SF	TRAFFIC SIGNS, TYPE A	675.20	-
		105	105	FT	SQUARE TUBE SIGN POSTS AND ANCHOR	675.341	-
		12	12	EACH	REMOVING SIGNS	675.50	-
		1	1	EACH	ERECTING SALVAGED SIGNS	675.60	-
		1	1	LU	PRICE ADJUSTMENT, FUEL (N.A.B.I.)	690.50	
		1	1	EACH	SPECIAL PROVISION (RELOCATE FLASHING BEACON, GROUND MOUNTED)	900.620	-
		1	1	EACH	SPECIAL PROVISION (RELOCATE SIGN, COMMERCIAL/LIGHTED)	900.620	-
		1	1	LS	SPECIAL PROVISION (FIELD OFFICE, ENGINEERS)	900.645	-
		1	1	LU	SPECIAL PROVISION (MAT DENSITY PAY ADJUSTMENT, SMALL QUANTITY) (N.A.B.I.)	900.650	-
		1	1	LU	SPECIAL PROVISION (MIXTURE PAY ADJUSTMENT) (N.A.B.I.)	900.650	-
		930	930	SY	SPECIAL PROVISION (HAND-PLACED BITUMINOUS CONCRETE MATERIAL, DRIVES)	900.675	4.0
LIN		1550	1550	TON	SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY)	900.680	21.9
9000		1	1	EA	SUPPLEMENTAL AGREEMENT SA/CO 01DTD 07-22-09 (604.18 PRCDI WITH CAST IRON GRATE (MOD.)) $967.00	900.520	
9005		1	1	LS	SUPPLEMENTAL AGREEMENT SA/CO 02 DTD 05-19-10 (EXTRA WORK, SEWER & WATERLINE CONFLICTS) $3089.00	900.545	
9010		1	1	LS	MOB/DEMOB SA/CO 03 DTD 06-29-10 (MILLER PROPERTY DRANAGE WORK) COD/SA DTD 5-18-10 $1000.00	635.11	
9015				TON	SA/CO 03 DTD 06-29-10 (WASHED STONE 1½") COD/SA DTD 621.10 $14.60/TON	900.58	
9020			1	LS	SA/CO 03 DTD 6-29-10 (CONCRETE DRY WELL (600 GAL) WITH RISER & LAWN GRALE) COD/SA DTD 6-21-10 $1330.00	900.545	

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS

Vanasse Hangen Brustlin, Inc.

PROJECT NAME: **HINESBURG**
PROJECT NUMBER: **HES 021-1(20)**

FILE NAME: **04B206_Quantity_Summary.xls**
PROJECT MANAGER: **G. BAKOS**
DESIGNED BY: **D. PECK**
QUANTITY SHEET #2

PLOT DATE: **2/18/2009**
DRAWN BY: **D. PECK**
CHECKED BY:
SHEET: **8** OF **25**

STATE OF VERMONT
AGENCY OF TRANSPORTATION

DRAINAGE DETAIL SHEET

LAYOUT CODE ⟨#⟩	STATION	STATION	POS.	ASKEW	INLET/OUTLET TYPE		DITCH		PIPE ARCH			PIPE		ALLOWABLE OPTIONS						PIPE ELBOW	ES	DMH	CB	DI	PROCD	DEPTH DI / DMH	CONC CLASS D	REINF STEEL	GRATE	CHAN ELEV	CRM	TRENCH EXCAVATION		COMM EXC	UNC CHAN EXC	STRUCT EXCAV	GRAN BKFILL STRUCT	GRAN BORR	EROS MATT	STONE FILL		MARKER POSTS		REMARKS
				NO. DEG.	INLET	OUTLET	IN	OUT	SPAN IN	RISE IN	L FT	D IN	L FT	PCCSP TH	CAAP TH	RCP CL	CSP TH	CPEP SL	PCCSP PI TH	NO. DEG.	EA	EA	EA	EA		FT	CY	LBS	TYPE	EA	CY	EARTH CY	ROCK CY	CY	CY	CY	CY	CY	SY	CY	TYPE	LT EA	RT EA	
VT 116 AT SILVER STREET																																										
1	2+15	2+13	RT		DI	MH						18	5					X					1		6			A			8.6											1	CONNECT TO EXISTING STRUCTURE
2	2+13		RT		MH																								MH												1	REMOVE DI GRATE AND FRAME / NEW MH COVER AND FRAME
3	3+71	3+54	RT		DI	MH						18	18					X					1		4			D			16.7											1	REMOVE EXISTING PRIVATE DI / REMOVE EXISTING 6" PVC
4	3+54		RT		MH																								MH												1	REMOVE DI GRATE AND FRAME / NEW MH COVER & FRAME
5	4+88	4+13	LT		DI	DI						18	72					X					1		6			D			54.4												
6	4+05	4+13	LT		DI	DI						18	14					X					1		4			A			13.6											1	
7	4+13		LT		DI																		1		6			D				10.2											REMOVE EXIST. CB / CONNECT TO EXISTING 15" RCP
8	3+00	105+25	LT		DI	DI						18	56					X					1		6			D			46.1												
9	105+10	105+25	LT		DI	DI						18	16					X					1		4			A			13.8											1	
10	105+25	105+25	LT-RT		DI	ES						18	75					X			1		1		6			D			48.9								0.74	II		1	2 X 5 X 2 STONE FILL PAD
11	103+00		LT		DI																		1		7			A			14.6										1		CONNECT TO EXISTING PIPE
R1	5+03	5+53	LT																												26.4	3.7										REMOVE 47 LF 12" RCP / REMOVE DI
R2	4+14	5+03	LT																												59.2	10.7										REMOVE 83 LF 12" RCP / REMOVE DI
DRAINAGE DETAIL SHEET SUBTOTAL:												18	256					X			1		9						5 4 2		302.3	24.6							0.74	II	3	5	TYPE D GRATES TYPE A GRATES MANHOLE COVERS

PROJECT NAME: **HINESBURG**
PROJECT NUMBER**HES 021-1(20)**

FILE NAME: 04B206_dds.xls — PLOT DATE: 2/18/2009
PROJECT LEADER: G. BAKOS — DRAWN BY: D. PECK
DESIGNED BY: D. PECK — CHECKED BY:
DRAINAGE DETAIL SHEET — SHEET 9 OF 25

VHB Vanasse Hangen Brustlin, Inc.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

EARTHWORKS

STATION	DIST FT.	TOTAL EXCAVATION EARTH AND ROCK AREA S.F.	TOTAL EXCAVATION EARTH AND ROCK VOLUME C.Y.	ROCK EXCAVATION AREA S.F.	ROCK EXCAVATION VOLUME C.Y.	EMBANKMENT AREA S.F.	EMBANKMENT VOLUME C.Y.	AREA S.F.	VOLUME C.Y.
VT 116									
1+00		0.0				0.0			
	50		20.1						
1+50		21.7				0.0			
	50		57.8				3.4		
2+00		40.7				3.6			
	50		80.6				3.8		
2+50		46.4				0.5			
	50		81.2				11.3		
3+00		41.3				11.6			
	35		54.4				12.3		
3+35		42.6				7.4			
	15		28.2				2.0		
3+50		59.1				0.0			
	7		14.7				0.1		
3+57		54.3				1.0		CUT	845.5
	43		81.5				12.5	ROCK	0
4+00		48.1				14.7		R.FAC	.495
	50		97.4				13.6	FILL	80.8
4+50		57.1				0.0		F.FAC	1.15
	21		51.2					EX. C	752.5
4+71		74.6				0.0			
	29		69.3				2.7		
5+00		54.4				5.0			
	50		97.2				7.8		
5+50		50.6				3.3			
	50		68.3				7.2		
6+00		23.1				4.5			
	50		35.1				4.1		
6+50		14.7				0.0			
	31		8.5						
6+81		0.0				0.0			
VT 116 SUBTOTAL			845.5				80.8		
TH 4 SILVER STREET									
100+75		0.0				0.0			
	25		3.7						
101+00		8.0				0.0			
	50		50.4						
101+50		46.5				0.0			
	25		60.6						
101+75		84.5				0.0			
	25		72.7						
102+00		72.6				0.0			
	50		140.2				5.4		
102+50		78.8				5.8			
	20		57.0				4.9		
102+70		75.1				7.3		CUT	823.1
	30		76.9				9.1	ROCK	0
103+00		63.3				9.0		R.FAC	.495
	50		102.8				14.8	FILL	128.3
103+50		47.7				7.0		F.FAC	1.15
	50		76.4				14.1	EX. C	675.6
104+00		34.8				8.2			
	50		58.3				26.2		
104+50		28.2				20.1			
	50		71.4				32.6		
105+00		48.9				15.1			
	50		51.2				19.9		
105+50		6.4				6.4			
	6		1.4				1.4		
105+56		6.4				6.4			
TH 4 SUBTOTAL			823.1				128.3		

SUMMARY AND BALANCES

STATION TO STATION	TOT EXC. EARTH & ROCK C.Y.	ROCK EXCAV C.Y.	EMBANK C.Y.	EXCESSES CUT	EXCESSES FILL	ACUMULATIVE EXCESSES CUT	ACUMULATIVE EXCESSES FILL
VT 116	845.5	0.0	80.8	764.7	0.0	764.7	0.0
TH4 SILVER STREET	823.1	0.0	128.3	694.8	0.0	694.8	0.0
PROJECT TOTAL	1668.6	0.0	209.1	1459.5	0.0	1459.5	0.0

REMARKS

EARTH AND ROCK EXCAVATION	1668.6	
SOLID ROCK EXCAVATION		
EARTH EXCAVATION	1668.6	
PLANIMETERED FILL	209.1	
LESS FACTORED SOLID ROCK		
LESS DISPLACEMENT OF ANY LARGE STRUCTURES		
NET PLANIMETERED FILL	209.1	
FACTOR	0.15	
PLANIMETERED FILL INCLUDING FACTOR	240.5	
MATERIALS AVAILABLE FOR FILLS		
EARTH EXCAVATION	1668.6	
CHANNEL EXCAVATION		
UNDERDRAIN EXCAVATION		
STRUCTURE EXCAVATION		
TOTAL MATERIAL AVAILABLE FOR FILL	1668.6	
TOTAL FILL INCLUDING FACTOR	240.5	
TOTAL MATERIAL FOR FILL	1668.6	
BORROW		
EXCESS EXCAVATION	1428.1	

PROJECT NAME: **HINESBURG**
PROJECT NUMBER: **HES 021-1(20)**

FILE NAME: **04B206_Earthwork.xls**
PROJECT LEADER: **G. BAKOS**
DESIGNED BY: **D. PECK**
EARTHWORK SUMMARY SHEET

PLOT DATE: **2/18/2009**
DRAWN BY: **D. PECK**
CHECKED BY: **S. FOWLER**
SHEET **10** OF **25**

VT ROUTE 116

POB 0+00.00
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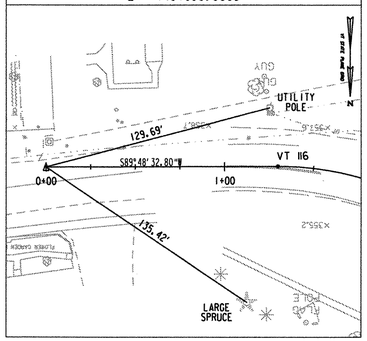
E = 1481059.9985



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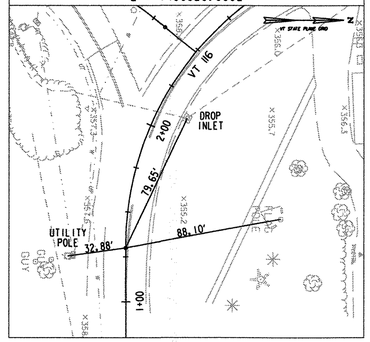

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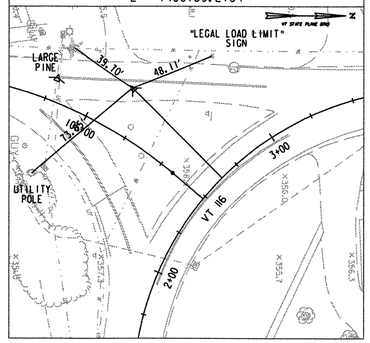

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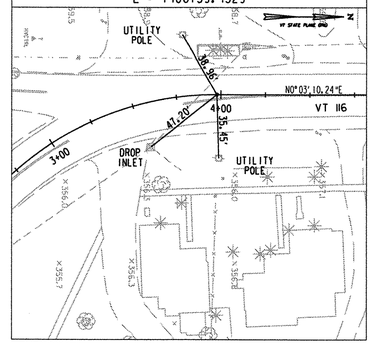

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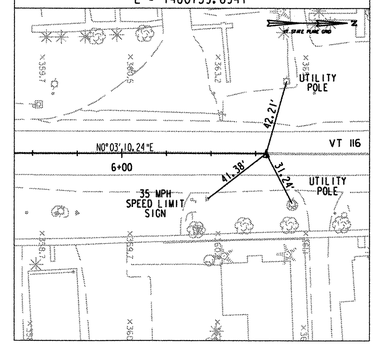

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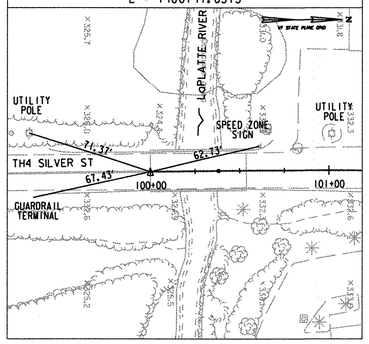

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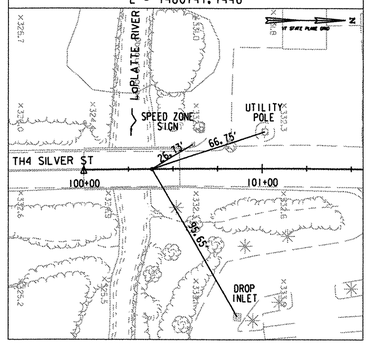

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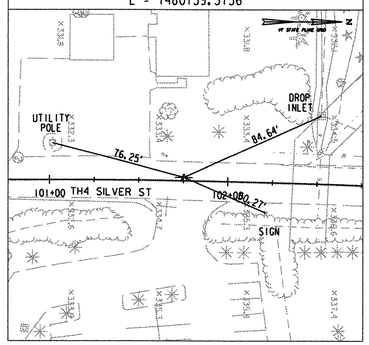

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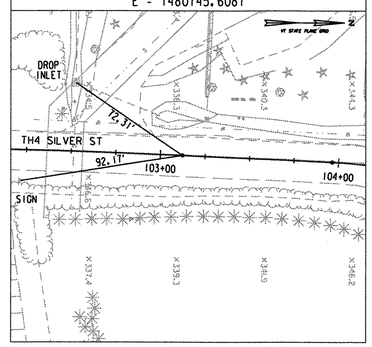

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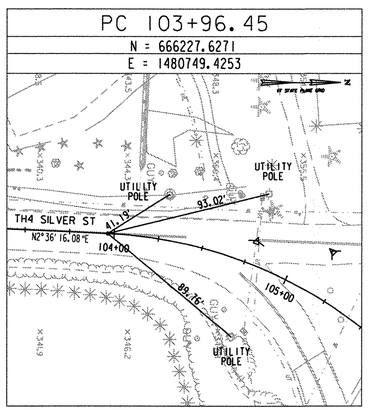

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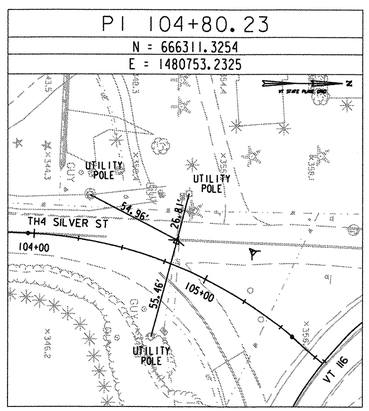

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POE 105+80.43
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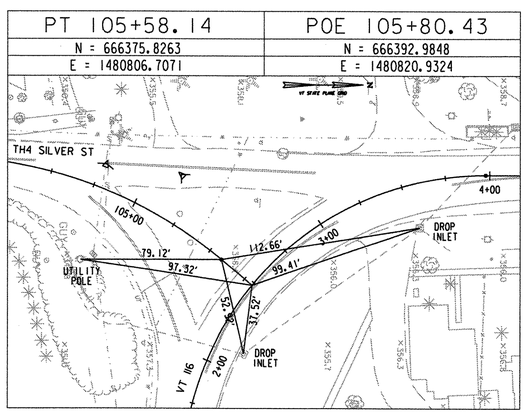


0 40 80
SCALE IN FEET

AERIAL SURVEY BY: COL-EAST, INC.
SURVEYED DATE: 2004

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83

Vanasse Hangen Brustlin, Inc.

TIE SHEET

PROJECT NAME: HINESBURG
PROJECT NUMBER: HES 021-I(20)

FILE NAME: z04b206tie.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
TIE SHEET

PLOT DATE: 2/18/2009
DRAWN BY: D. PECK
CHECKED BY: G. BAKOS
SHEET 11 OF 25

STATE OF VERMONT
AGENCY OF TRANSPORTATION

RIGHT - OF - WAY DETAIL SHEET

TABLE OF PROPERTY ACQUISITION

PARCEL NO.	PROPERTY OWNER	SHEET NO.	BEGINNING STATION	ENDING STATION	TAKE	REMAINDER	RIGHT			RECORDING DATA					REMARKS
					AREA±	AREA±	TYPE	(T)/(P)	AREA ±	TITLE	DATE	TOWN / CITY	BOOK	PAGE	
1A	TOWN OF HINESBURG	9	TH 4 103+12.46 RT.	TH 4 104+94.88 RT.	1,260 SF					QCD	05/30/08	HINESBURG	198	644-	
			TH 4 100+75 CL.	TH 4 104+81.95 RT.			APPROACH	(T)						647	TH 4
			TH 4 102+56 RT.	TH 4 105+36 RT.			CONST.	(T)	1,470 SF						INCLUDES EC & PDF
			TH 4 103+00 RT.	TH 4 104+15 RT.			LANDSCAPE	(T)							RELOCATE SHRUBS
			TH 4 104+61 RT.	TH 4 105+21 RT.			DITCH	(T)	385 SF						INCLUDES EC
			TH 4 104+76 RT.	TH 4 105+15 RT.			CONST.	(T)	248 SF						INCLUDES EC
			TH 4 104+90 RT.	TH 4 104+98 RT.			SLOPE	(T)	8 SF						
			1+97 LT.				DRAINAGE	(P)							
1B		9	3+35 RT.												29' PAVED DRIVE MM 0443
1C		9	5+60 RT.												28' PAVED DRIVE MM 0448
2	APPLIN TOMASI, LLC	9	3+20.03 RT.	3+96.80 RT.	640 SF					WD	09/22/08	HINESBURG	200	464-	
			3+35 RT.											465	29' PAVED DRIVE MM 0443
			3+62 RT.	3+81 RT.			INSTALL	(T)	24 SF						EC
			3+64 RT.	3+79 RT.			INSTALL & MAINTAIN	(P)	32 SF						DRAIN INLET
3	CARLSMITH, LAURA AND	9	3+81.36 LT.	4+30 LT.			INSTALL	(T)	93 SF	WD	10/08/08	HINESBURG	200	551-	EC
	BAST, ROBERT S., TRUSTEES OF THE		3+82 LT.	4+32 LT.			SLOPE	(T)	164 SF					553	INCLUDES EC
	LAURA CARLSMITH REVOCABLE TRUST		3+88 LT.	4+11 LT.			REMOVE	(T)							STONE PLANTER
			4+00 LT.				REMOVE & RESET	(T)							SIGN
			4+03 LT.	4+10 LT.			INSTALL & MAINTAIN	(P)							DRAIN INLET & PIPE
			4+43 LT.												20' PAVED DRIVE MM 0445
4	NOT USED														
5	GREEN STREET, LLC	9	3+57 LT.												23' PAVED DRIVE MM 0443
6	ROBINSON, REGINALD H. & SANDRA J.	9	4+73 RT.												14.5' PAVED DRIVE MM 0446
7	CORBETT, BRUCE L. & MAUREEN T.	9	4+70 LT.												13.5' PAVED DRIVE MM 0446

TABLE OF REVISIONS

REVISION NO.	SHEET NO.	DESCRIPTION	DATE
		ELECTRONIC FILES TO CONSULTANT	01/08/09

PLAN LEGEND

- EXISTING RIGHT-OF-WAY
- TAKING WITH ACCESS
- TAKING WITHOUT ACCESS
- CLEAR ZONE (CZ)
- PROPERTY LINE (P L)
- TOE OF SLOPE
- TOP OF CUT
- SLOPE RIGHT (SR (P))
- CONSTRUCTION RIGHT (CONST. (T))
- PROJECT DEMARCATION FENCE (PDF)

EC	-EROSION CONTROL
(P)	-PERMANENT
(T)	-TEMPORARY
DR.	-DRAINAGE RIGHT
DIT.	-DITCHING RIGHT
CH.	-CHANNEL RIGHT
DRIVE	-DRIVE RIGHT
CUL.	-CULVERT RIGHT
C&T	-CLEARING & TRIMMING RIGHT
SR	-SLOPE RIGHT
UE	-UTILITY EASEMENT

APPROVED: HARRY PETROVS DATE 03-06-08
CHIEF, PLANS & TITLES

PLOT DATE 02/18/09

PROJECT NAME: **HINESBURG**
PROJECT NUMBER: **HES 021-1(20)**

FILE NAME: **04b206/detail sheet.xls**
PROJECT LEADER: **G. BACKOS**
DESIGNED BY: **D. PECK**
R.O.W. SHEET 7 OF 9

PLOT DATE:
DRAWN BY: **MR**
CHECKED BY: **EP**
SHEET **12** OF **25**

STATE OF VERMONT
AGENCY OF TRANSPORTATION

RIGHT - OF - WAY DETAIL SHEET

TABLE OF PROPERTY ACQUISITION

PARCEL NO.	PROPERTY OWNER	SHEET NO.	BEGINNING STATION	ENDING STATION	TAKE	REMAINDER	RIGHT			RECORDING DATA					REMARKS
					AREA±	AREA±	TYPE	(T)/(P)	AREA ±	TITLE	DATE	TOWN / CITY	BOOK	PAGE	
8	UNITED CHURCH OF HINESBURG	9	5+40 RT.												12' PAVED DRIVE MM 0447
9	MILLER, PAUL F. & NATALIE T.	9	6+30 LT.												24' PAVED DRIVE MM 0449
10	MATANO, SALVATORE R., TRUSTEE OF THE SAINT JUDE PARISH CHARITABLE TRUST	9	6+04 RT.												60' PAVED DRIVE MM 0448
11	GREEN MOUNTAIN POWER CORPORATION														UTILITY
12	TOWN OF HINESBURG														UTILITY
13	WAITSFIELD-FAYSTON TELEPHONE COMPANY, INC.														UTILITY
	MAINTENANCE AGREEMENT ZONE #1	9	TH 4 104+74 CL	TH 4 105+58 CL											TH 4 LENGTH 84'
	RELINQUISHMENT #1	9	TH 4 103+12.46 RT.	TH 4 104+94.88 RT.											

TABLE OF REVISIONS

REVISION NO.	SHEET NO.	DESCRIPTION	DATE

PLOT DATE 02/18/09

PLAN LEGEND

- EXISTING RIGHT-OF-WAY
- TAKING WITH ACCESS
- TAKING WITHOUT ACCESS
- CLEAR ZONE (CZ)
- PROPERTY LINE (P L)
- TOE OF SLOPE
- TOP OF CUT
- SLOPE RIGHT (SR (P))
- CONSTRUCTION RIGHT (CONST.(T))
- PROJECT DEMARCATION FENCE (PDF — PDF)

EC -EROSION CONTROL
(P) -PERMANENT
(T) -TEMPORARY
DR. -DRAINAGE RIGHT
DIT. -DITCHING RIGHT
CH. -CHANNEL RIGHT
DRIVE -DRIVE RIGHT
CUL. -CULVERT RIGHT
C&T -CLEARING & TRIMMING RIGHT
SR -SLOPE RIGHT
UE -UTILITY EASEMENT

APPROVED: HARRY PETROVS DATE: 03-06-08
CHIEF, PLANS & TITLES

PROJECT NAME: **HINESBURG**
PROJECT NUMBER: **HES 021-1(20)**

FILE NAME: **04b206/detail sheet.xls**
PROJECT LEADER: **G. BACKOS**
DESIGNED BY: **D. PECK**
R.O.W. SHEET 8 OF 9

PLOT DATE:
DRAWN BY: **MR**
CHECKED BY: **EP**
SHEET **13** OF **25**

EXCAVATION OF SURFACES AND PAVEMENTS

STA. 1+50, LT. - SL STA. 105+00, RT.
SL STA. 104+50, LT. - STA. 3+40, LT.

COLD PLANING, BITUMINOUS PAVEMENT

SL STA. 100+75 - 101+25
STA. 1+00 - 1+50
STA. 6+31 - 6+81

RELOCATE MAILBOX, SINGLE SUPPORT

SL STA. 101+63, LT.
SL STA. 104+90, LT.
STA. 4+35, LT.
STA. 4+54, RT.
STA. 4+90, LT.
STA. 5+18, RT
STA. 6+39, RT.
STA. 6+55, LT.

RELOCATE MAILBOX, MULTIPLE SUPPORT

STA. 3+87, LT.

VERTICAL GRANITE CURB

STA. 1+50, LT. - SL STA. 105+08, RT.
STA. 105+25, LT. - STA. 3+35, LT.
STA. 3+78 - STA. 4+28, LT.
STA. 4+86 - STA. 6+07, LT.

CONSTRUCT DRIVES - 1½" BCP, TYPE IV

SL STA. 101+75, RT. - 28' WIDE
SL STA. 102+73, LT. - 30' WIDE
SL STA. 105+01, LT. - 10' WIDE
STA. 3+35, RT. - 29' WIDE (COMM.)
STA. 3+57, LT. - 23' WIDE
STA. 4+43, LT. - 20' WIDE (COMM.)
STA. 4+70, LT. - 13.5' WIDE
STA. 4+73, RT. - 14.5' WIDE
STA. 5+85, RT. - 99' WIDE
STA. 6+30, LT. - 24' WIDE

TRANSPLANTING SHRUBS

SL STA. 103+00 - 104+15, RT. (14 SHRUBS)

DRAINAGE NOTES

(1) STA. 2+15, RT. 25 - STA. 2+13, RT. 17
NEW PRECAST DI, TYPE A
RIM ELEV. = 355.15
NEW 18" x 5 LF CPEP(SL)
INV. OUT = 351.95

(2) STA. 2+13, RT. 17
ADJUST DI
REMOVE DI GRATE & FRAME
REPLACE WITH MH COVER & FRAME
RIM ELEV. = 356.08

(3) STA. 3+71, RT. 41
REMOVE EXIST. PRIVATE DI
NEW PRECAST DI, TYPE D
CONST. OVER EXIST. 6" PVC
RIM ELEV. = 356.00

(4) STA. 3+54, RT. 25
ADJUST DI
REMOVE DI GRATE & FRAME
REPLACE WITH MH COVER & FRAME
RIM ELEV. = 356.47

(5) STA. 4+88, LT. 25 - STA. 4+13, LT. 26
NEW PRECAST DI, TYPE D
RIM ELEV. = 359.69
NEW 18" X 72 LF CPEP(SL)
18" INV. OUT (S) = 354.25

(6) STA. 4+05, LT. 42 - STA. 4+13 LT. 26
NEW PRECAST DI, TYPE A
RIM ELEV. = 357.64
NEW 18" x 14 LF CPEP(SL)
INV. OUT = 354.43

(7) STA. 4+13, LT. 26
NEW PRECAST DI, TYPE D
RIM ELEV. = 359.27
15" INV. OUT (E) = 353.3 (Exist.)
18" INV. IN (N) = 353.55
18" INV. IN (W) = 353.65
REMOVE EXIST. CB

(8) STA. 3+00, LT. 26 - SL STA. 105+25, LT. 18
NEW PRECAST DI, TYPE D
RIM ELEV. = 358.10
NEW 18 X 56 LF CPEP(SL)
INV. OUT = 352.76

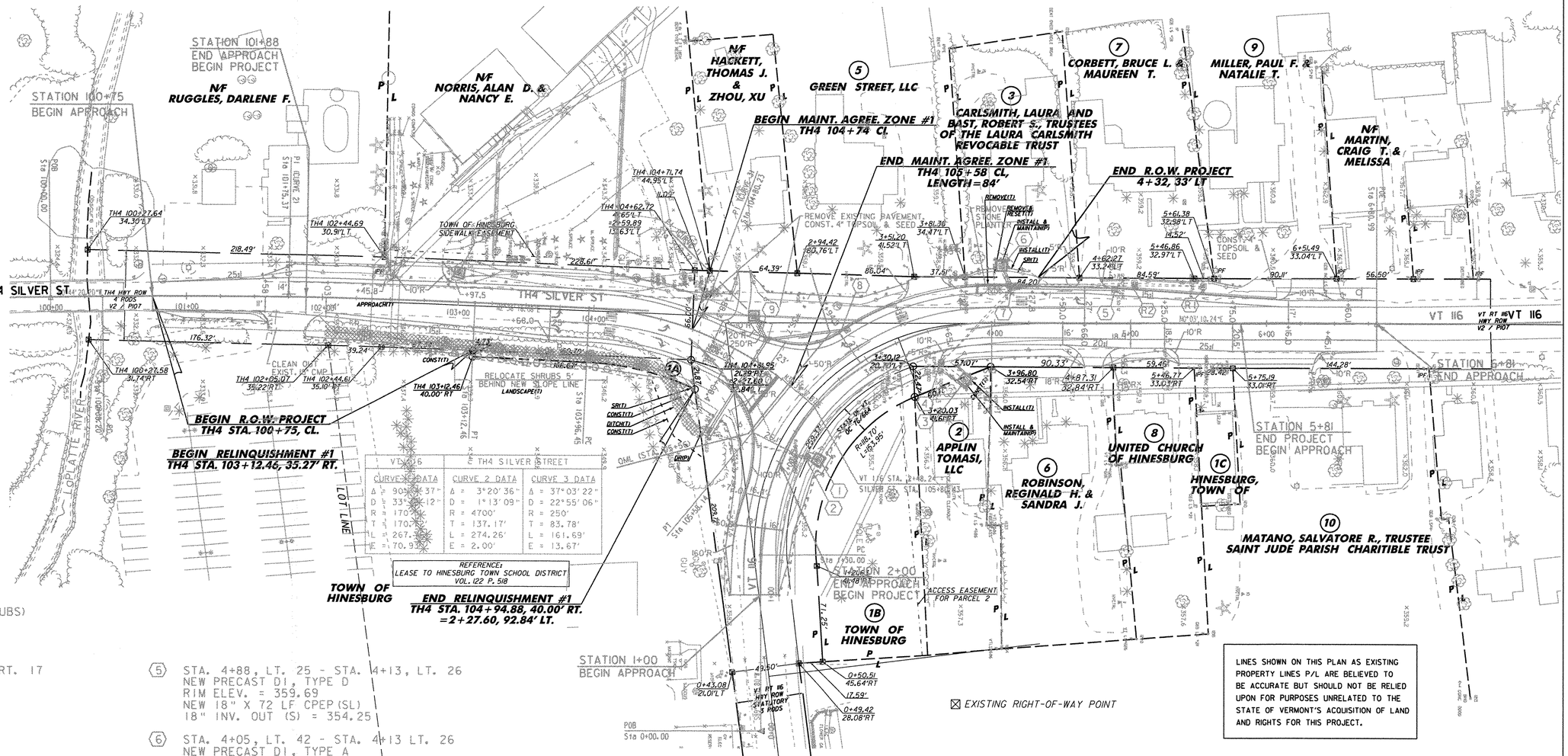
(9) STA. 105+10, LT. 28 - STA. 105+25, LT. 18
NEW PRECAST DI,TYPE A
RIM ELEV. = 353.00
NEW 18" X 16 LF CPEP(SL)
18" INV. OUT = 349.83

(10) SL STA. 105+25 LT. 18 - SL STA. 105+25, RT. 59
NEW PRECAST DI, TYPE D
RIM ELEV. = 355.05
NEW 18" X 75 LF CPEP(SL)
18" INV. OUT = 349.75
18" INV. IN (S) = 349.75
18" INV. IN (N) = 350.43
INV. AT OUTLET = 349.37
CONST. TYPE II STONE PAD (2' x 5' x 2')

(1) SL STA. 103+00, LT. 21
NEW PRECAST DI, TYPE A
RIM ELEV. = 337.50
INV. OUT = 331.10 (Exist.)

(R1) STA. 5+03, LT. 29 - STA. 5+53, LT. 27
REMOVE 47 LF X 12" RCP
REMOVE DI, STA. 5+53, LT. 27

(R2) STA. 4+14, LT. 27 - STA. 5+03, LT. 29
REMOVE 83 LF X 12" RCP
REMOVE DI, STA. 5+03, LT. 29



VT 116	TH4 SILVER STREET	
CURVE 1 DATA	CURVE 2 DATA	CURVE 3 DATA
Δ = 90° 46' 37"	Δ = 3°20' 36"	Δ = 37°03' 22"
D = 33° 42' 12"	D = 1°13' 09"	D = 22°55' 06"
R = 170'	R = 4700'	R = 250'
T = 170.7'	T = 137.17'	T = 83.78'
L = 267.4'	L = 274.26'	L = 161.69'
E = 70.93'	E = 2.00'	E = 13.67'

LINES SHOWN ON THIS PLAN AS EXISTING PROPERTY LINES P/L ARE BELIEVED TO BE ACCURATE BUT SHOULD NOT BE RELIED UPON FOR PURPOSES UNRELATED TO THE STATE OF VERMONT'S ACQUISITION OF LAND AND RIGHTS FOR THIS PROJECT.

NOTES

1. THE DRAINAGE STRUCTURE RIM AND INVERT ELEVATIONS ARE BASED ON SURVEY INFORMATION FROM AERIAL SURVEY. THE CONTRACTOR SHALL SET ACTUAL RIM ELEVATIONS ONE INCH BELOW FINISHED PAVEMENT ELEVATIONS. THE CONTRACTOR SHALL FIELD CHECK PROPOSED PIPE INVERTS BEFORE ORDERING DRAINAGE STRUCTURES.
2. THE USE OF BRICK AND MORTAR TO ADJUST THE ELEVATION OF DRAINAGE STRUCTURES IS PROHIBITED. ALL ELEVATION ADJUSTMENTS SHALL BE MADE USING EITHER GRADE RINGS OR A SYNTHETIC RISER.
3. ALL CONNECTIONS BETWEEN PRECAST DRAINAGE STRUCTURES AND DRAINAGE PIPES SHALL BE A BOOTED CONNECTION.

0 40 80
SCALE IN FEET

AERIAL SURVEY BY: COL-EAST, INC.
SURVEYED DATE: 2004

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83

DATE PLOTTED: 02/18/09

FOR R.O.W. USE ONLY

VHB Vanasse Hangen Brustlin, Inc.

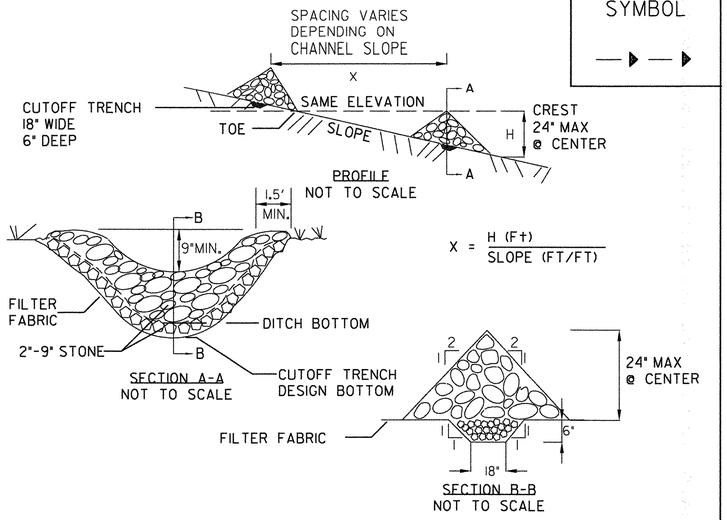
RIGHT OF WAY PLAN SHEET

PROJECT NAME: HINESBURG
PROJECT NUMBER: HES 021-1(20)

FILE NAME: R04B206ZZZ.DGN
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
R. O. W. SHEET 9 OF 9

PLOT DATE: $$$$DATE$$$
DRAWN BY: D. PECK
CHECKED BY: G. BAKOS
SHEET 14 OF 25

SYMBOL



CONSTRUCTION SPECIFICATIONS

1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION.
2. SET SPACING OF CHECK DAMS SO THAT THE ELEVATION OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION AS THE TOE OF THE UPSTREAM DAM.
3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.

MAXIMUM DRAINAGE AREA 2 ACRES.

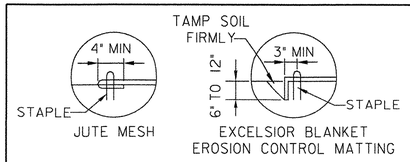
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DECORIGINALLY DEVELOPED BY USDA-NRCSVERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

CHECK DAM

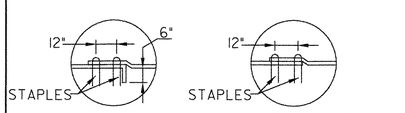
NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS ITEM SHALL BE PAID FOR UNDER ITEM
653.25 TEMPORARY STONE CHECK DAM, TYPE I

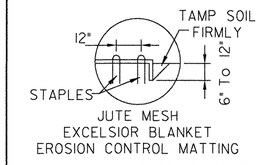
REVISIONS	
MARCH 8, 2007	JMF



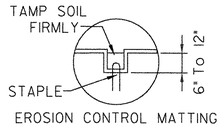
DETAIL 1 TERMINAL FOLD



DETAIL 2 JUNCTION SLOT

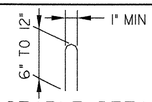


DETAIL 3 ANCHOR SLOT



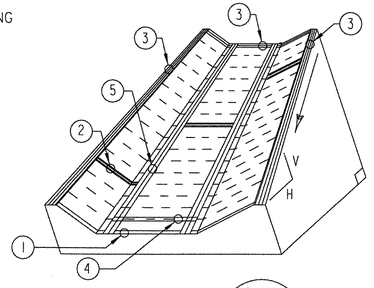
DETAIL 4 CHECK SLOT

DETAIL 5 LAP JOINT



STAPLE DETAIL

SYMBOL



CONSTRUCTION SPECIFICATIONS

1. EROSION MATTING, CHECK SLOTS, SHALL BE SPACED IN DITCH CHANNEL SO THAT ONE OCCURS WITHIN EACH 50' ON SLOPES OF MORE THAN 4% AND LESS THAN 6%. ON SLOPES OF 6% OR MORE, THEY SHALL BE SPACED SO THAT ONE OCCURS WITHIN EACH 25'.
2. APPLY FERTILIZER, LIME SEED PRIOR TO PLACING MATTING.
3. STAPLES ARE TO BE PLACED ALTERNATELY, IN COLUMNS APPROXIMATELY 2' APART AND IN ROWS APPROXIMATELY 3' APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER 4'X225' ROLL OF MATERIAL AND 125 STAPLES ARE REQUIRED PER 4'X150' ROLL OF MATERIAL.
4. DISTURBED AREAS SHALL BE SMOOTHLY GRADED. EROSION CONTROL MATERIAL SHALL BE PLACED LOOSELY OVER GROUND SURFACE. DO NOT STRETCH.
5. ALL TERMINAL ENDS AND TRANSVERSE LAPS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.

ADAPTED FROM DETAILS PROVIDED BY: ILLINOIS USDA-NRCS
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

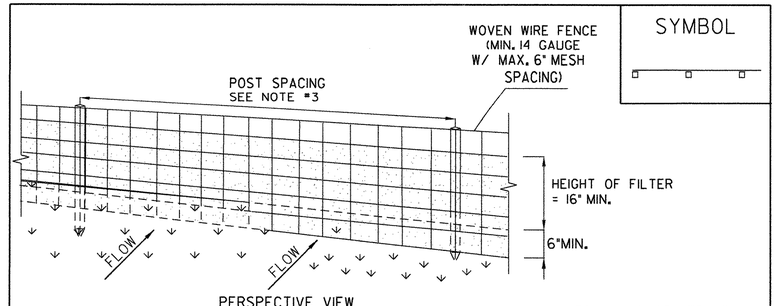
ROLLED EROSION CONTROL PRODUCT (RECP) DITCH

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS ITEM SHALL BE PAID FOR UNDER ITEM
653.20 TEMPORARY EROSION MATTING OR
653.21 PERMANENT EROSION MATTING

REVISIONS	
MARCH 8, 2007	JMF
APRIL 16, 2007	WHF

SYMBOL



CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE FENCE REINFORCEMENT IS ONLY REQUIRED WITHIN 100 FT UPSLOPE OF RECEIVING WATERS.
2. WHERE REQUIRED FENCE SHALL BE WOVEN WIRE, MIN. 14 GAUGE WITH A 6" MAXIMUM MESH OPENING. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI100X, STABILINKA T140N OR APPROVED EQUIVALENT.
3. POST SPACING FOR WIRE-BACKED FENCE SHALL BE 10' MAXIMUM. FOR FILTER-CLOTH FENCE, WHEN ELONGATION IS >50%, POST SPACING SHALL NOT EXCEED 4'. FOR FILTER-CLOTH FENCE, WHEN ELONGATION IS <50%, POST SPACING SHALL NOT EXCEED 6'.
4. WOVEN WIRE FENCE IS TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES. FILTER CLOTH IS TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED.
6. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
7. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN SEDIMENT REACHES HALF OF FABRIC HEIGHT.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

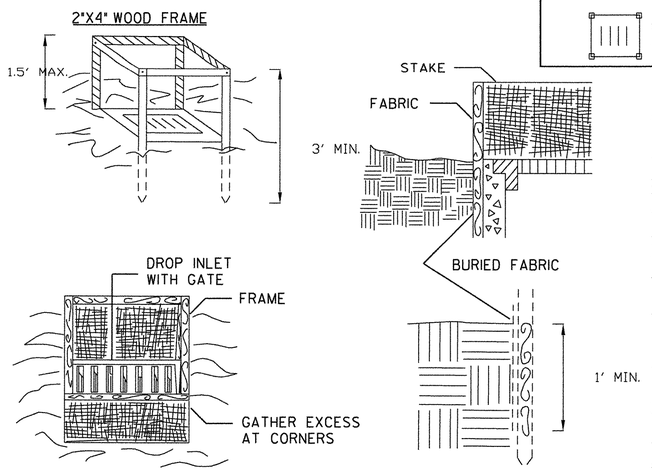
SILT FENCE

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME:	HINESBURG
PROJECT NUMBER:	HES 021-1(20)
FILE NAME: z04b206 ero-det.dgn	PLOT DATE: 2/18/2009
PROJECT LEADER: G. BAKOS	DRAWN BY: D. PECK
DESIGNED BY: D. PECK	CHECKED BY: G. BAKOS
EPSC DETAILS SHEET 1	SHEET 15 OF 25

SYMBOL



CONSTRUCTION SPECIFICATIONS

1. FILTER FABRIC SHALL HAVE AN EOS OF 40-85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
3. STAKE MATERIALS WILL BE STANDARD 2" x 4" WOOD OR EQUIVALENT METAL WITH A MINIMUM LENGTH OF 3 FEET.
4. SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM 18 INCHES DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
5. FABRIC SHALL BE EMBEDDED 1FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
6. A 2" x 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.

MAXIMUM DRAINAGE AREA 1ACRE

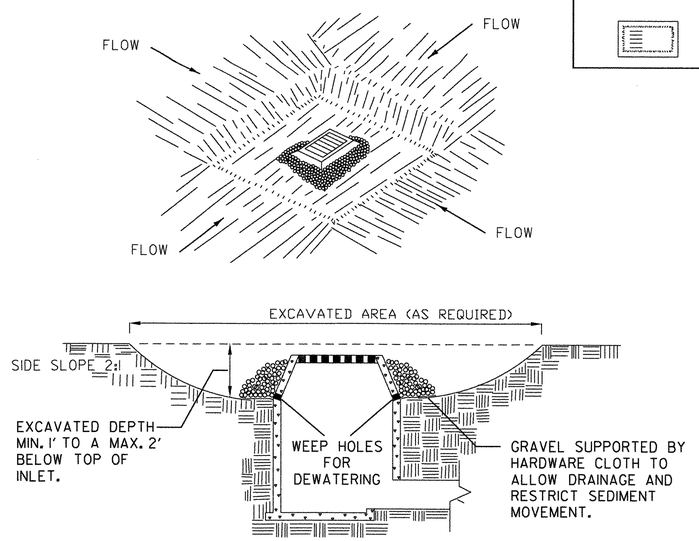
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USDA-NRCS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION	FILTER FABRIC DROP INLET PROTECTION

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS ITEM SHALL BE PAID FOR UNDER ITEM
653.40 INLET PROTECTION DEVICE, TYPE I

REVISIONS	
MARCH 8, 2007	JMF

SYMBOL



CONSTRUCTION SPECIFICATIONS

1. CLEAR THE AREA OF ALL DEBRIS THAT WILL HINDER EXCAVATION.
2. GRADE APPROACH TO THE INLET UNIFORMLY AROUND THE BASIN.
3. WEEP HOLES SHALL BE PROTECTED BY GRAVEL.
4. UPON STABILIZATION OF CONTRIBUTING DRAINAGE AREA, SEAL WEEP HOLES, FILL BASIN WITH STABLE SOIL TO FINAL GRADE, COMPACT IT PROPERLY AND STABILIZE WITH PERMANENT SEEDING.

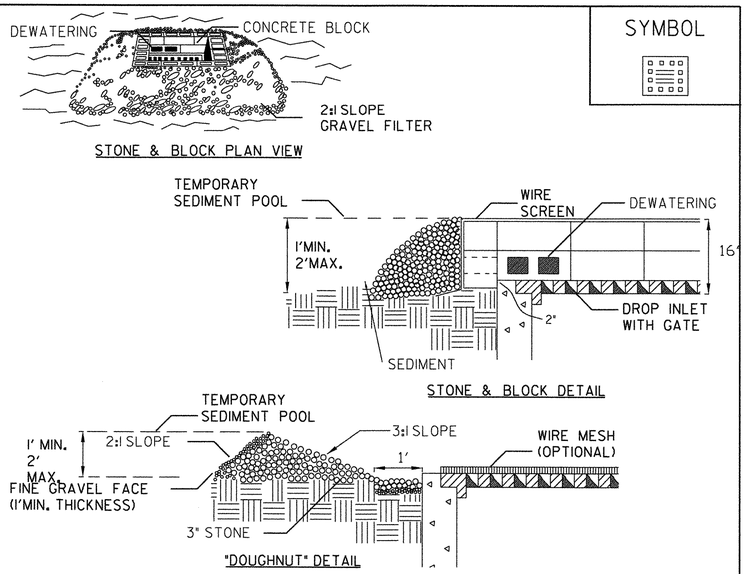
MAXIMUM DRAINAGE AREA 1ACRE

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USDA-NRCS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION	EXCAVATED DROP INLET PROTECTION

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS ITEM SHALL BE PAID FOR UNDER ITEM
653.40 INLET PROTECTION DEVICE, TYPE I

SYMBOL



CONSTRUCTION SPECIFICATIONS

1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE FOR DEWATERING. FOUNDATION SHALL BE 2 INCHES MINIMUM BELOW REST OF INLET AND BLOCKS SHALL BE PLACED AGAINST INLET FOR SUPPORT.
2. HARDWARE CLOTH OR ½" WIRE MESH SHALL BE PLACED OVER BLOCK OPENINGS TO SUPPORT STONE.
3. USE CLEAN STONE OR GRAVEL ½- ¾ INCH IN DIAMETER PLACED 2 INCHES BELOW TOP OF THE BLOCK ON A 2:1SLOPE OR FLATTER.
4. FOR STONE STRUCTURES ONLY, A 1FOOT THICK LAYER OF THE FILTER STONE WILL BE PLACED AGAINST THE 3 INCH STONE AS SHOWN ON THE DRAWINGS.

MAXIMUM DRAINAGE AREA 1ACRE

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USDA-NRCS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION	STONE & BLOCK DROP INLET PROTECTION

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS ITEM SHALL BE PAID FOR UNDER ITEM
653.40 INLET PROTECTION DEVICE, TYPE I

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME:	HINESBURG
PROJECT NUMBER:	HES 021-1(20)
FILE NAME: z04b206 ero-det.dgn	PLOT DATE: 2/18/2009
PROJECT LEADER: G. BAKOS	DRAWN BY: D. PECK
DESIGNED BY: D. PECK	CHECKED BY: G. BAKOS
EPSC DETAILS SHEET 2	SHEET 16 OF 25

EXCAVATION OF SURFACES AND PAVEMENTS

STA. 1+50, LT. - SL STA. 105+00, RT.
SL STA. 104+50, LT. - STA. 3+40, LT.

COLD PLANING, BITUMINOUS PAVEMENT

SL STA. 100+75 - 101+25
STA. 1+00 - 1+50
STA. 6+31 - 6+81

RELOCATE MAILBOX, SINGLE SUPPORT

SL STA. 101+63, LT.
SL STA. 104+90, LT.
STA. 4+35, LT.
STA. 4+54, RT.
STA. 4+90, LT.
STA. 5+18, RT
STA. 6+39, RT.
STA. 6+55, LT.

RELOCATE MAILBOX, MULTIPLE SUPPORT

STA. 3+87, LT.

VERTICAL GRANITE CURB

STA. 1+50, LT. - SL STA. 105+08, RT.
STA. 105+25, LT. - STA. 3+35, LT.
STA. 3+78 - STA. 4+28, LT.
STA. 4+86 - STA. 6+07, LT.

HAND-PLACED BITUMINOUS CONCRETE MATERIAL, DRIVES

SL STA. 101+75, RT. - 28' WIDE
SL STA. 102+73, LT. - 30' WIDE
SL STA. 105+01, LT. - 10' WIDE
STA. 3+35, RT. - 29' WIDE (COMM.)
STA. 3+57, LT. - 23' WIDE
STA. 4+43, LT. - 20' WIDE (COMM.)
STA. 4+70, LT. - 13.5' WIDE
STA. 4+73, RT. - 14.5' WIDE
STA. 5+85, RT. - 99' WIDE
STA. 6+30, LT. - 24' WIDE

TRANSPLANTING SHRUBS

SL STA. 103+00 - 104+15, RT. (14 SHRUBS)

TRANSPLANTING TREES

SL STA. 103+00 - 104+15, RT. (6 TREES)

CLEAN CULV. PIPE, IN-PLACE (0-24 IN., INCL.)

STA. 2+00, LT. - STA. 2+13, RT.
STA. 2+13, RT. - STA. 3+54, RT.
STA. 3+54, RT. - 4+13, LT.
SL STA. 101+43, RT - SL STA. 101+95, RT.

DRAINAGE NOTES

(1) STA. 2+15, RT. 25 - STA. 2+13, RT. 17
NEW PRECAST DI, TYPE A
RIM ELEV. = 355.15 (1)
NEW 18" x 5 LF CPEP (SL)
INV. OUT = 351.95

(2) STA. 2+13, RT. 17
ADJUST DI
REMOVE DI GRATE & FRAME (2)
REPLACE WITH MH COVER & FRAME
RIM ELEV. = 356.08

(3) STA. 3+71, RT. 41 - STA. 3+54, RT. 25
REMOVE EXIST. PRIVATE DI
NEW PRECAST DI, TYPE D
RIM ELEV. = 356.00 (3)
NEW 18" X 18 LF CPEP (SL)
INV. OUT = 352.00
INV AT EXIST DI = 351.73 (+54, RT. 25)
REMOVE EXIST. 6" PVC

LEGEND

- SILT FENCE
- PROJECT DEMARCATION FENCE
- LIMITS OF SOIL DISTURBANCE
- EROSION MATTING
- CHECK DAM
- INLET PROTECTION DEVICES

DRAINAGE NOTES CONT.

(4) STA. 3+54, RT. 25
ADJUST DI
REMOVE DI GRATE & FRAME
REPLACE WITH MH COVER & FRAME
RIM ELEV. = 356.47

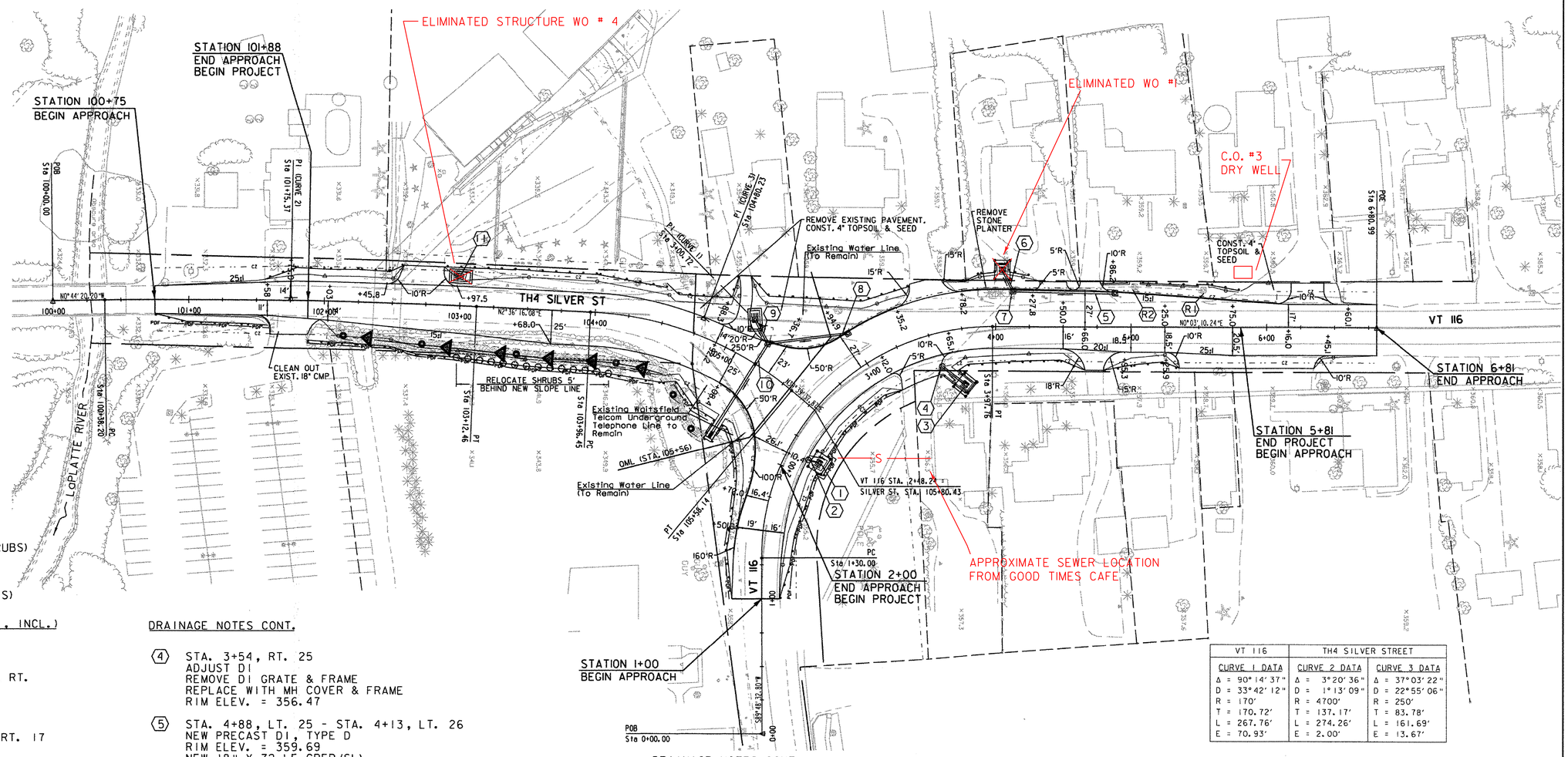
(5) STA. 4+88, LT. 25 - STA. 4+13, LT. 26
NEW PRECAST DI, TYPE D
RIM ELEV. = 359.69
NEW 18" X 72 LF CPEP (SL)
18" INV. OUT (S) = 354.25

(6) STA. 4+05, LT. 42 - STA. 4+13 LT. 26
NEW PRECAST DI, TYPE A
RIM ELEV. = 357.64
NEW 18" x 14 LF CPEP (SL)
INV. OUT = 354.43

(7) STA. 4+13, LT. 26
NEW PRECAST DI, TYPE D
RIM ELEV. = 359.27
15" INV. OUT (E) = 353.3 (Exist.)
18" INV. IN (N) = 353.55
18" INV. IN (W) = 353.65
REMOVE EXIST. CB

(8) STA. 3+00, LT. 26 - SL STA. 105+25, LT. 18
NEW PRECAST DI, TYPE D
RIM ELEV. = 358.10
NEW 18 X 56 LF CPEP (SL)
INV. OUT = 352.76

(9) STA. 105+10, LT. 28 - STA. 105+25, LT. 18
NEW PRECAST DI,TYPE A
RIM ELEV. = 353.00
NEW 18" X 16 LF CPEP (SL)
18" INV. OUT = 349.83



VT 116	TH4 SILVER STREET	
CURVE 1 DATA	CURVE 2 DATA	CURVE 3 DATA
Δ = 90°14'37"	Δ = 3°20'36"	Δ = 37°03'22"
D = 33°42'12"	D = 1°13'09"	D = 22°55'06"
R = 170'	R = 4700'	R = 250'
T = 170.72'	T = 137.17'	T = 83.78'
L = 267.76'	L = 274.26'	L = 161.69'
E = 70.93'	E = 2.00'	E = 13.67'

DRAINAGE NOTES CONT.

(10) SL STA. 105+25 LT. 18 - SL STA. 105+25, RT. 59
NEW PRECAST DI, TYPE D
RIM ELEV. = 355.05
NEW 18" X 75 LF CPEP (SL)
18" INV. OUT = 349.75
18" INV. IN (S) = 349.75
18" INV. IN (N) = 350.43
INV. AT OUTLET = 349.37
CONST. TYPE II STONE PAD (2' x 5' x 2')

(1) SL STA. 103+00, LT. 21
NEW PRECAST DI, TYPE A
RIM ELEV. = 337.50
INV. OUT = 331.0 (Exist.)

(R1) STA. 5+03, LT. 29 - STA. 5+53, LT. 27
REMOVE 47 LF X 12" RCP
REMOVE DI, STA. 5+53, LT. 27

(R2) STA. 4+14, LT. 27 - STA. 5+03, LT. 29
REMOVE 83 LF X 12" RCP
REMOVE DI, STA. 5+03, LT. 29

0 40 80
SCALE IN FEET

NOTES

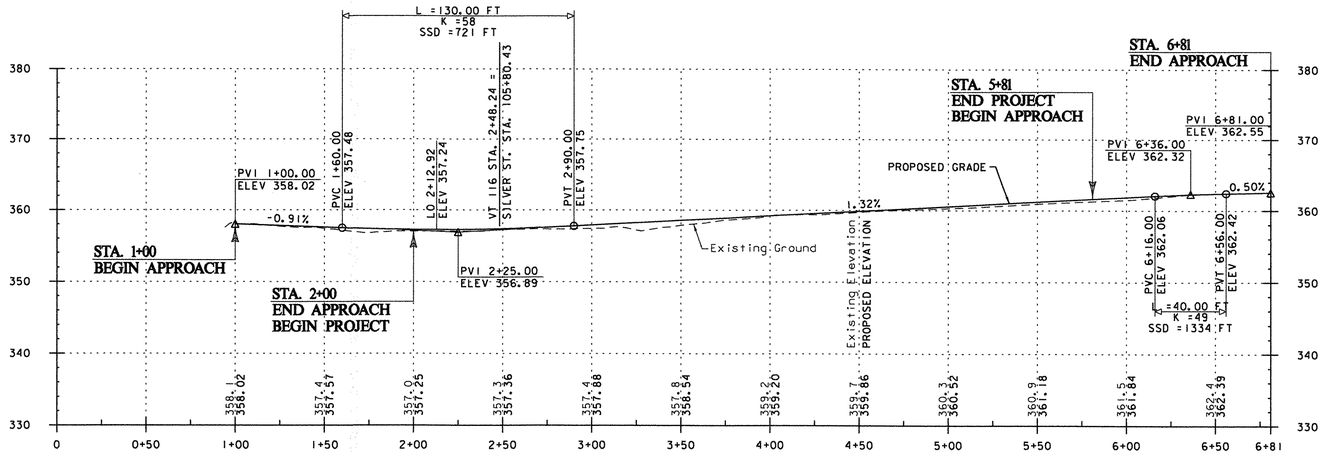
1. THE DRAINAGE STRUCTURE RIM AND INVERT ELEVATIONS ARE BASED ON SURVEY INFORMATION FROM AERIAL SURVEY. THE CONTRACTOR SHALL SET ACTUAL RIM ELEVATIONS ONE INCH BELOW FINISHED PAVEMENT ELEVATIONS. THE CONTRACTOR SHALL FIELD CHECK PROPOSED PIPE INVERTS BEFORE ORDERING DRAINAGE STRUCTURES.
2. THE USE OF BRICK AND MORTAR TO ADJUST THE ELEVATION OF DRAINAGE STRUCTURES IS PROHIBITED. ALL ELEVATION ADJUSTMENTS SHALL BE MADE USING EITHER GRADE RINGS OR A SYNTHETIC RISER WITH ADHESIVE.
3. ALL CONNECTIONS BETWEEN PRECAST DRAINAGE STRUCTURES AND DRAINAGE PIPES SHALL BE A BOOTED CONNECTION.

VHB Vanasse Hangen Brustlin, Inc.

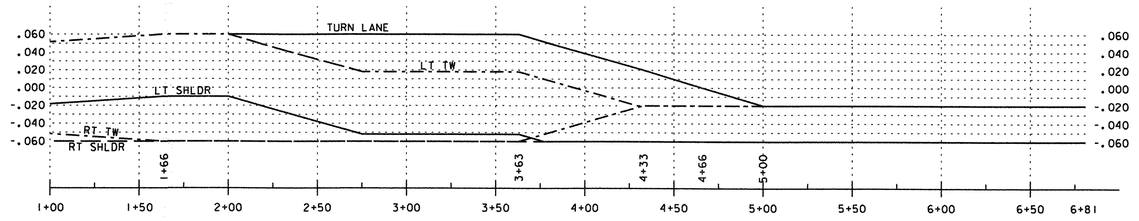
PROJECT NAME: HINESBURG
PROJECT NUMBER: HES 021-1(20)

FILE NAME: z04b206 BDR.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
GENERAL PLAN

PLOT DATE: 2/18/2009
DRAWN BY: D. PECK
CHECKED BY: G. BAKOS
SHEET 17 OF 25

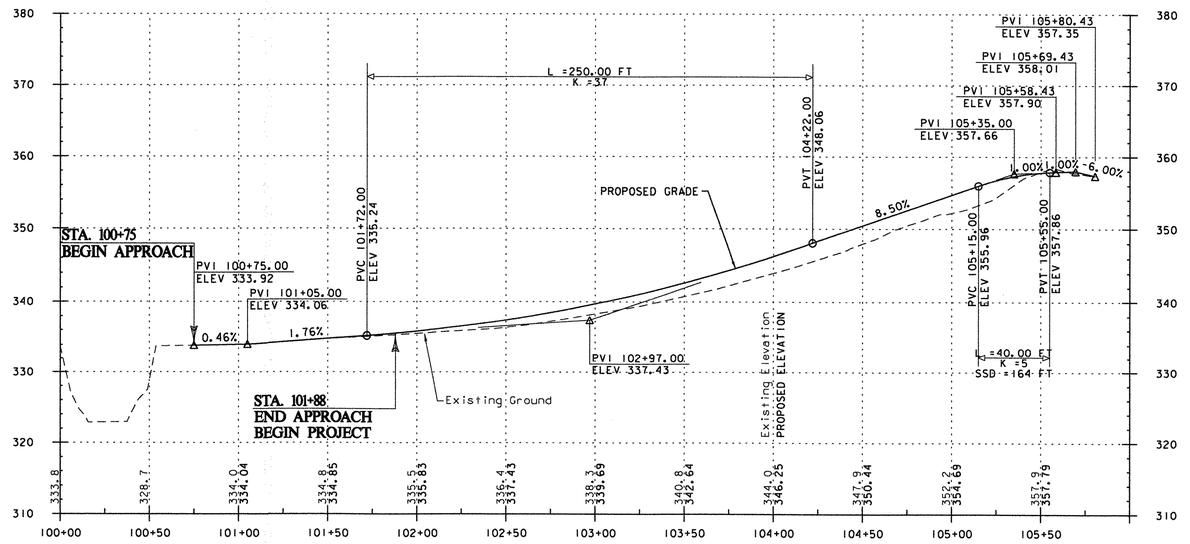


PROFILE VT ROUTE 116

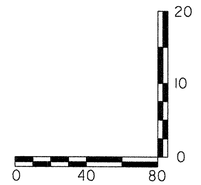


VT ROUTE 116 BANKING PROFILE

NOTE:
GRADES ARE SHOWN ALONG PROPOSED CENTERLINE.
GRADES SHOWN TO 0.1 FT ARE EXISTING GROUND.
GRADES SHOWN TO 0.10 FT ARE FINISH GRADE.



PROFILE SILVER ST



HORIZONTAL SCALE = 1"=40'
VERTICAL SCALE = 1"=10'

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME:	HINESBURG
PROJECT NUMBER:	HES 021-1(20)
FILE NAME: z04b206pro.dgn	PLOT DATE: 2/18/2009
PROJECT LEADER: G. BAKOS	DRAWN BY: D. PECK
DESIGNED BY: D. PECK	CHECKED BY: G. BAKOS
PROFILES	SHEET 18 OF 25

DURABLE 4 INCH WHITE LINE, THERMOPLASTIC

SL STA. 102+03 - STA. 105+46, RT.
SL STA. 101+75, LT. - STA. 6+81, LT.
SL STA. 103+68 - SL STA. 105+46, RT.
STA. 1+00 - STA. 2+07, LT.
STA. 1+00 - STA. 6+81, RT.
STA. 2+76 - STA. 4+66, LT.

DURABLE 4-INCH YELLOW LINE, THERMOPLASTIC

SL STA. 100+75 - SL STA. 105+48
STA. 1+00 - STA. 2+37
STA. 2+76 - STA. 6+81

DURABLE 24-INCH STOP BAR, THERMOPLASTIC

SL STA. 105+46, RT.

DURABLE LETTER OR SYMBOL, THERMOPLASTIC

SL STA. 103+69, RT. (LEFT TURN ARROW)
SL STA. 103+69, RT. (RIGHT TURN ARROW)
SL STA. 104+09, RT. ("ONLY")
SL STA. 104+09, RT. ("ONLY")
SL STA. 104+50, RT. (LEFT TURN ARROW)
SL STA. 104+50, RT. (RIGHT TURN ARROW)
SL STA. 104+91, RT. ("ONLY")
SL STA. 104+91, RT. ("ONLY")
SL STA. 105+32, RT. (LEFT TURN ARROW)
SL STA. 105+32, RT. (RIGHT TURN ARROW)
STA. 2+98, LT. (RIGHT TURN ARROW)
STA. 3+40, LT. ("ONLY")
STA. 3+82, LT. (RIGHT TURN ARROW)
STA. 4+24, LT. ("ONLY")
STA. 4+66, LT. (RIGHT TURN ARROW)

TEMPORARY 4 INCH YELLOW LINE

SL STA. 100+75 - SL STA. 105+48
STA. 1+00 - STA. 2+37
STA. 2+76 - STA. 6+81

TEMPORARY 4 INCH WHITE LINE

STA. 2+76 - STA. 4+66, LT.
SL STA. 103+68 - SL STA. 104+46, RT.

TEMPORARY 24 INCH STOP BAR

SL STA. 105+46, RT.

TEMPORARY LETTER OR SYMBOL

STA. 2+98, LT. (RIGHT TURN ARROW)
STA. 3+82, LT. ("ONLY")
STA. 4+66, LT. (RIGHT TURN ARROW)

REMOVING SIGNS

SL STA. 102+21, RT.
SL STA. 105+25, LT.
SL STA. 105+38, RT.
STA. 1+95, LT.
STA. 2+80, LT.
STA. 2+97, LT. (2 SIGNS)
STA. 4+14, LT. (3 SIGNS)
STA. 7+94, LT. (2 SIGNS)

ERECTING SALVAGED SIGNS

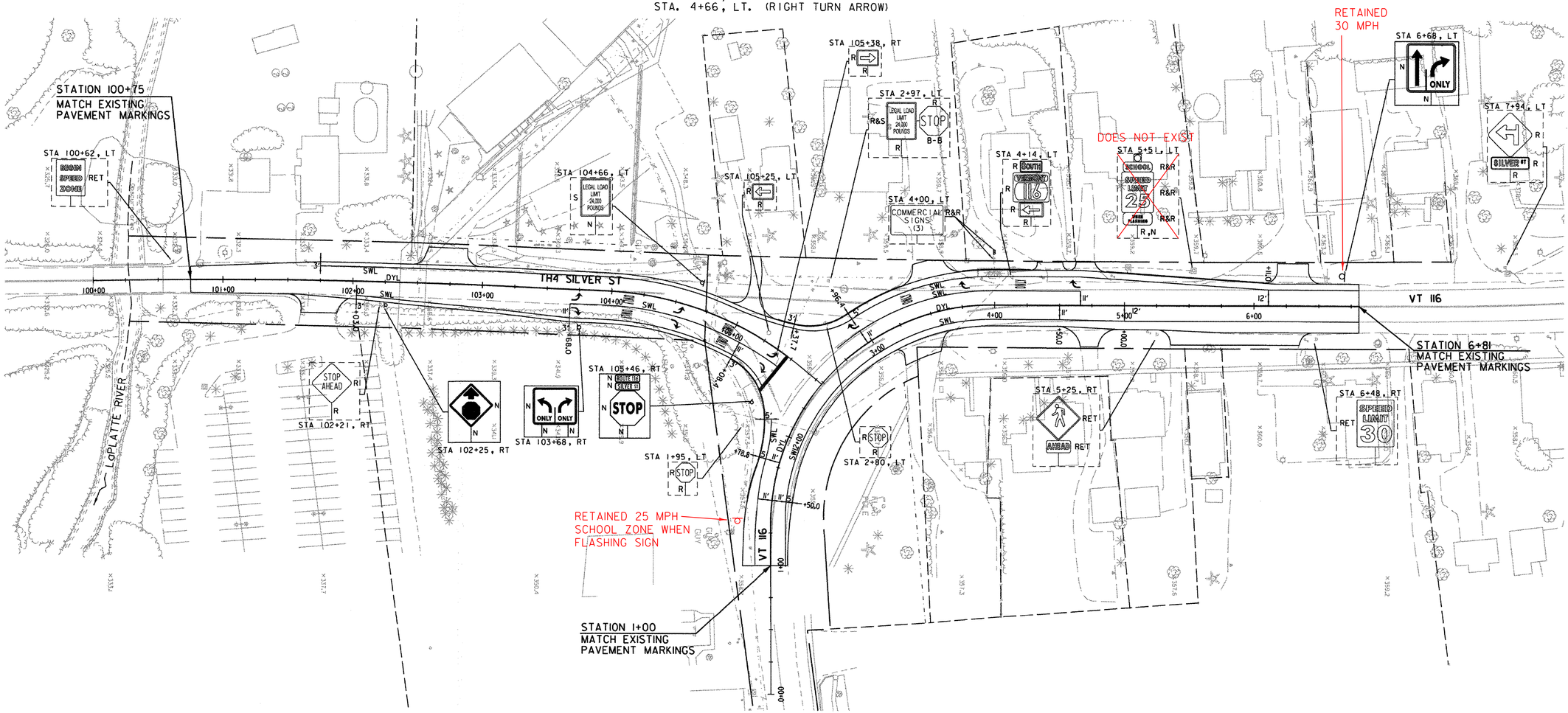
SL STA. 104+66, LT.

SPECIAL PROVISION (RELOCATE SIGN, COMMERCIAL/LIGHTED)

STA. 4+00, LT. (3 SIGNS)

SPECIAL PROVISION (RELOCATE FLASHING BEACON, GROUND MOUNTED)

STA. 5+51, LT.



SIGN LEGEND
N = NEW
R = REMOVE
S = SALVAGED SIGN
B-B = BACK TO BACK
RET = RETAIN
R&R = REMOVE & RESET
R&S = REMOVE & SALVAGE SIGN

STRIPING LEGEND
SWL = SINGLE WHITE LINE
DYL = DOUBLE YELLOW LINE

NOTE:

ALL SIGNS REMOVED AND NOT REUSED ON THE PROJECT WILL BE RETURNED TO THE DISTRICT 5 OFFICES, COLCHESTER, VT FOR REUSE.

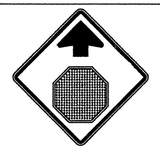
0 40 80
SCALE IN FEET

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME:	HINESBURG
PROJECT NUMBER:	HES 021-1(20)
FILE NAME: z04b206 BDR Sign.dgn	PLOT DATE: 2/18/2009
PROJECT LEADER: G. BAKOS	DRAWN BY: D. PECK
DESIGNED BY: D. PECK	CHECKED BY: G. BAKOS
SIGNING AND STRIPING PLAN	SHEET 19 OF 25

STATE OF VERMONT
AGENCY OF TRANSPORTATION

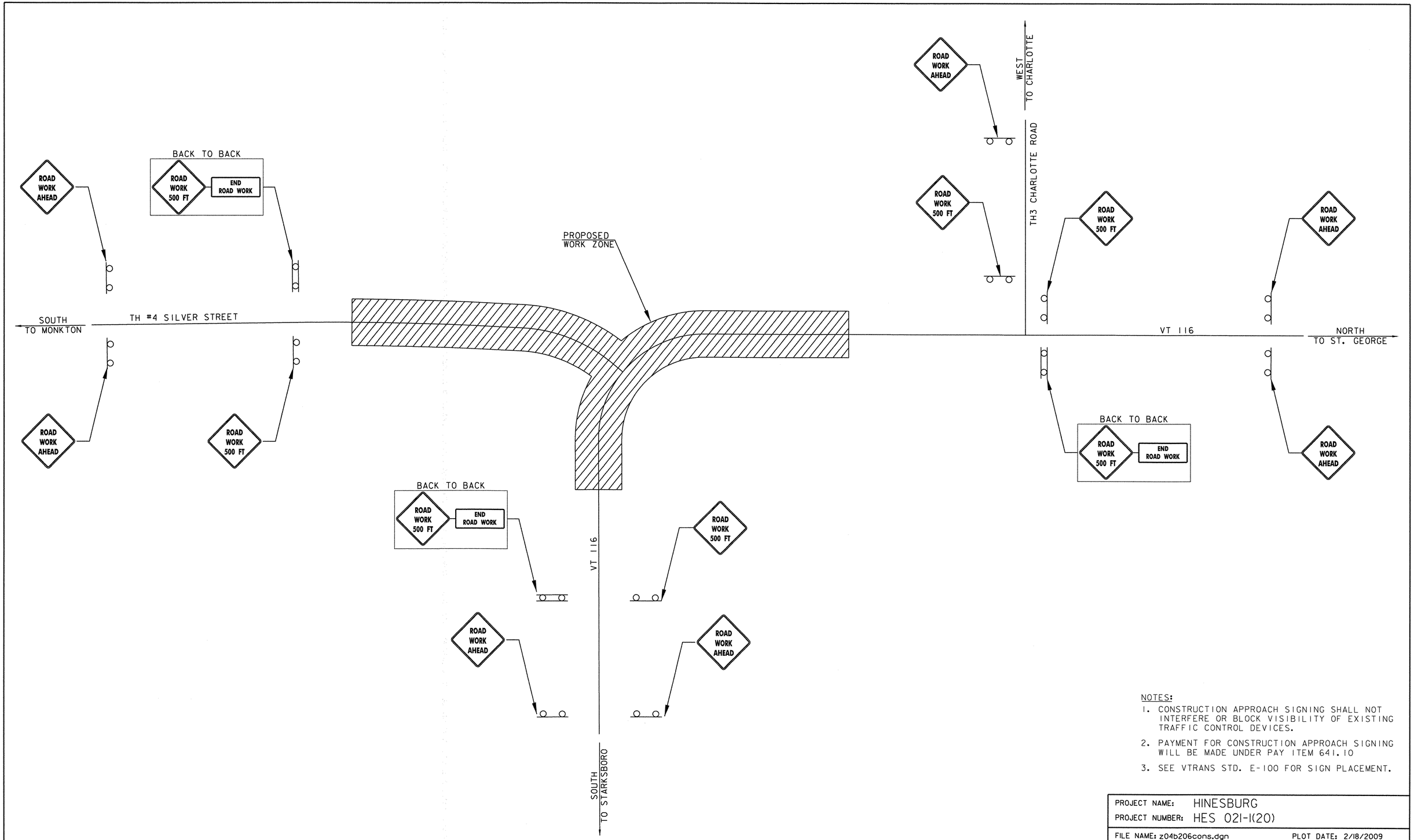
TRAFFIC SIGN SUMMARY SHEET

MILE MARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS EA	WIDTH (IN)	HEIGHT (IN)	NEW & SALVAGED SIGNS "A"	"B"	SALV SIGN	SALV TIS	EXIST POST RETAIN	SALVAGE	NEW SIGN POSTS NO. OF POSTS	FLANGED CHANNEL LB/FT 1.12	2.0	3.0	SQUARE STEEL (IN) LB/FT 1.75 1.88	2.0 2.16	2.5 3.35	ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (IN) LB/FT 3.0 1.3	4.0 1.7	4.0 MOD 1.7	FOUNDATION	TUBULAR STEEL Ø (IN) LB/FT 3.0 7.6	3.5 9.0	4.0 10.8	5.0 14.6	W-SHAPE STEEL FTG. SIZE 24"	30"	WEIGHT	POST SIZE	SIGN REMOVED	REQUIRED	REMARKS	SIGN DETAIL DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
											OPTION ITEMS																												
SILVER STREET																																						
102+25, RT		1	36	36	9.0						1					X																			W3-1A		E150
103+68, RT		1	36	30	7.5						2					X																			VR-925		E-145A
104+66, LT							1				1					X																			EXISTING SIGN REMOVE AND RESET ON NEW POST AT NEW LOCATION		
105+46, RT		1 1 1	24 24 30	9 9 30	1.50 1.50 6.25						1					X																			STREET NAME SIGNS STREET NAME SIGNS R1-1		E-123 E-123 E-143
VT 116																																						
5+51, LT											1					X																			EXISTING SIGNS WITH FLASHING BEACON REMOVE AND RESET ON NEW POST (SPECIAL PROVISON)		
6+68, LT		1	30	30	6.25						1					X																			VR-921		E-145A
FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE VTRANS "SIGN POST DESIGN GUIDELINE."												FT	FT	FT	FT	FT 105	FT		EA	LB	LB	LB		LB	LB	LB	LB									
	TOTALS				SF 32.0	SF	EA. 1	SF				FT			FT 105					LB			EA.	LB				EA.	EA.	LB						

AVERAGE POST LENGTH = 15 FT

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME:	HINESBURG
PROJECT NUMBER:	HES 021-1(20)
FILE NAME: z04b206ts.dgn	PLOT DATE: 2/18/2009
PROJECT LEADER: G. BAKOS	DRAWN BY: D. PECK
DESIGNED BY: D. PECK	CHECKED BY: G. BAKOS
TRAFFIC SIGN SUMMARY SHEET	SHEET 20 OF 25



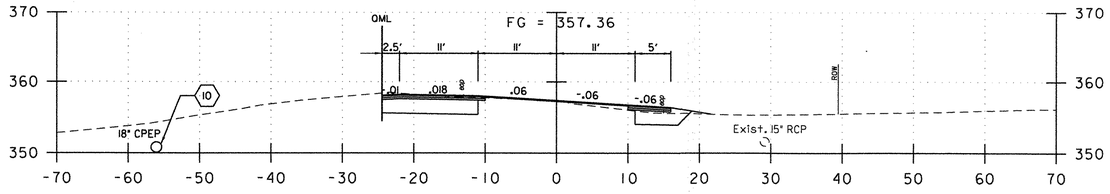
NOTES:

1. CONSTRUCTION APPROACH SIGNING SHALL NOT INTERFERE OR BLOCK VISIBILITY OF EXISTING TRAFFIC CONTROL DEVICES.
2. PAYMENT FOR CONSTRUCTION APPROACH SIGNING WILL BE MADE UNDER PAY ITEM 641.10
3. SEE VTRANS STD. E-100 FOR SIGN PLACEMENT.

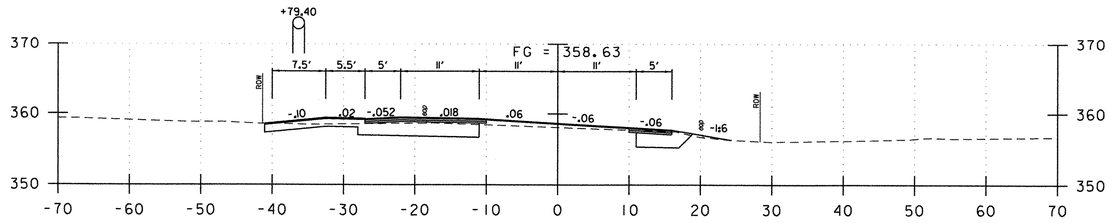
PROJECT NAME:	HINESBURG
PROJECT NUMBER:	HES 021-1(20)

FILE NAME: z04b206cons.dgn	PLOT DATE: 2/18/2009
PROJECT LEADER: G. BAKOS	DRAWN BY: D. PECK
DESIGNED BY: D. PECK	CHECKED BY: G. BAKOS
CONSTRUCTION APPROACH SIGNING	SHEET 21 OF 25

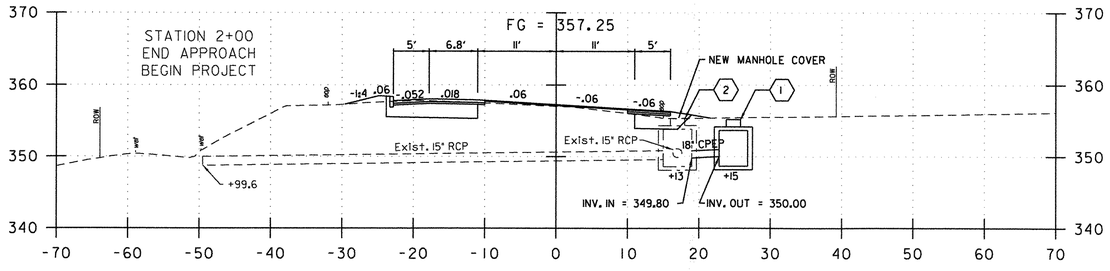
VHB *Vanasse Hangen Brustlin, Inc.*



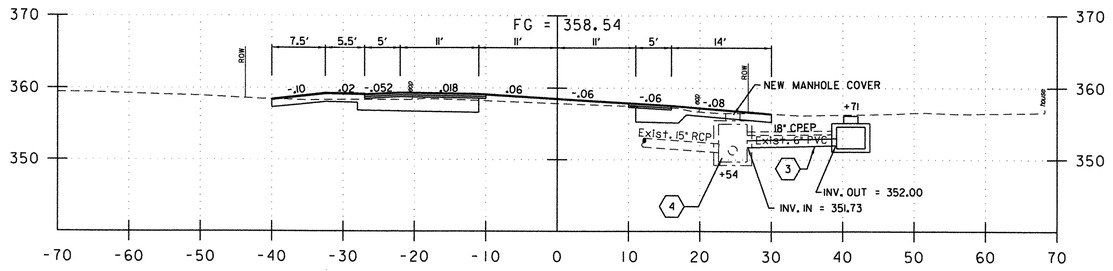
2+50



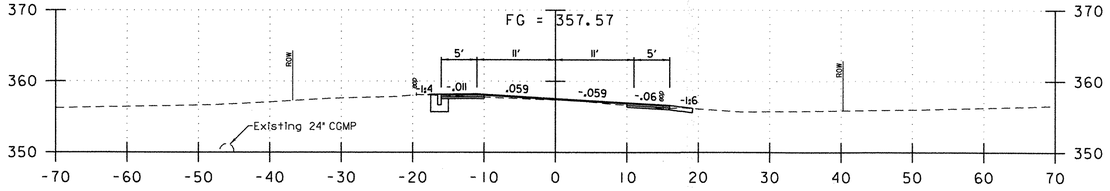
3+57



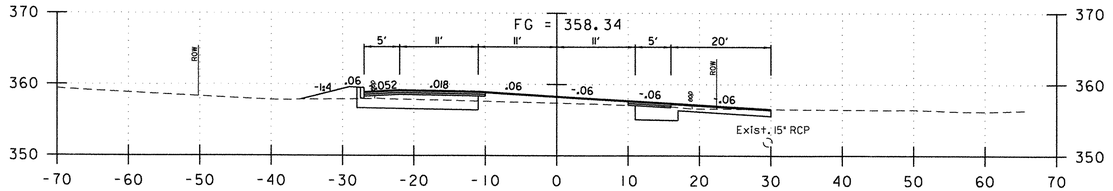
2+00



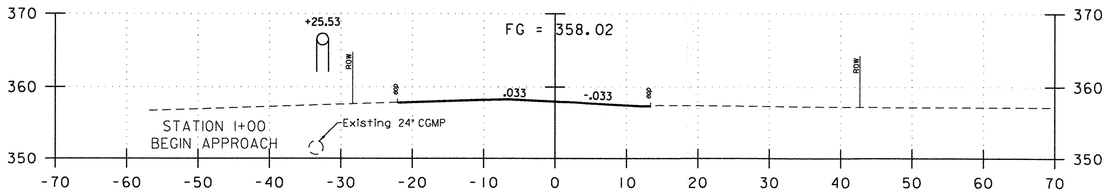
3+50



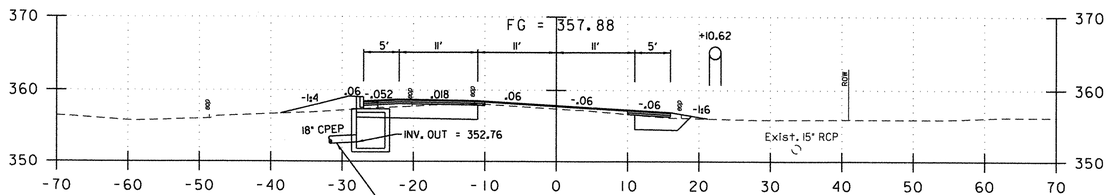
1+50



3+35



1+00



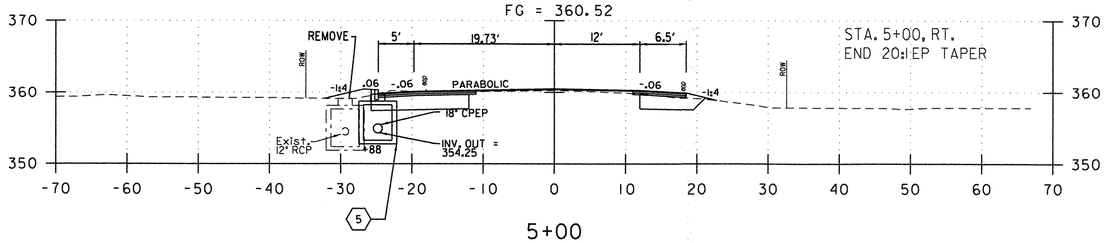
3+00

VT 116

0 10 20
SCALE IN FEET

VHB Vanasse Hangen Brustlin, Inc.

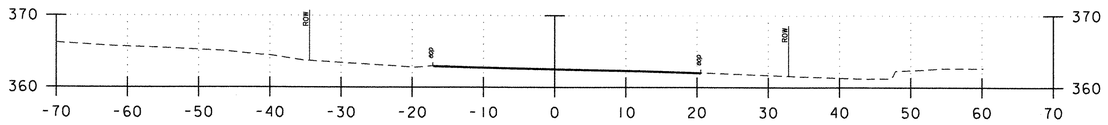
PROJECT NAME: HINESBURG	
PROJECT NUMBER: HES 021-1(20)	
FILE NAME: z04b206xsec.dgn	PLOT DATE: 2/18/2009
PROJECT LEADER: G. BAKOS	DRAWN BY: D. PECK
DESIGNED BY: D. PECK	CHECKED BY: G. BAKOS
CROSS SECTIONS 1	SHEET 22 OF 25



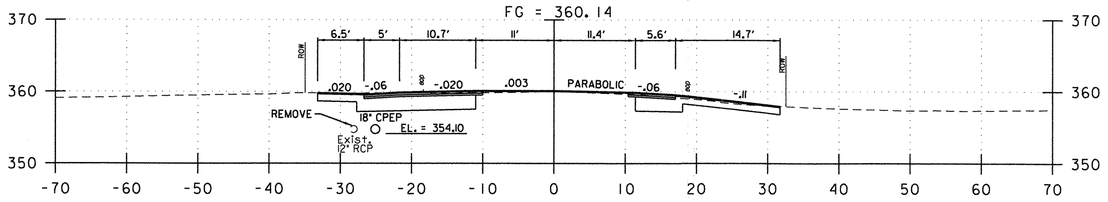
5+00

STA. 5+00, RT.
END 20:1 EP TAPER

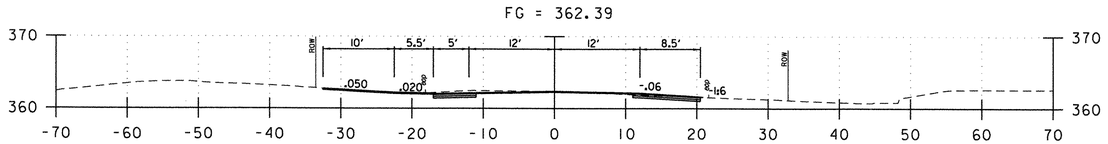
STATION 6+81
END APPROACH



6+81

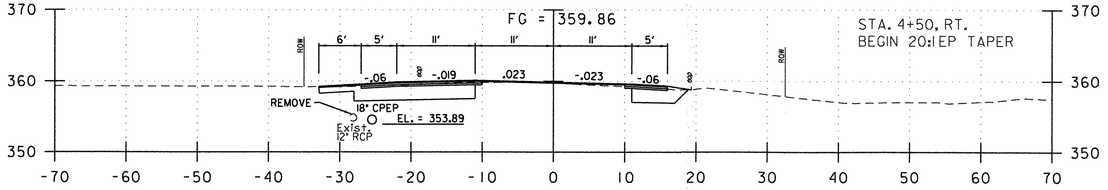


4+71



6+50

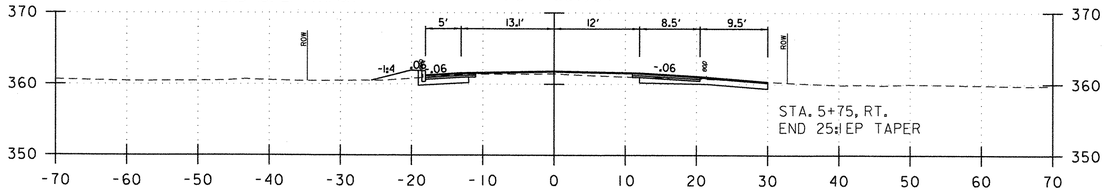
STA. 4+66, LT.
BEGIN 15:1 EP TAPER



4+50

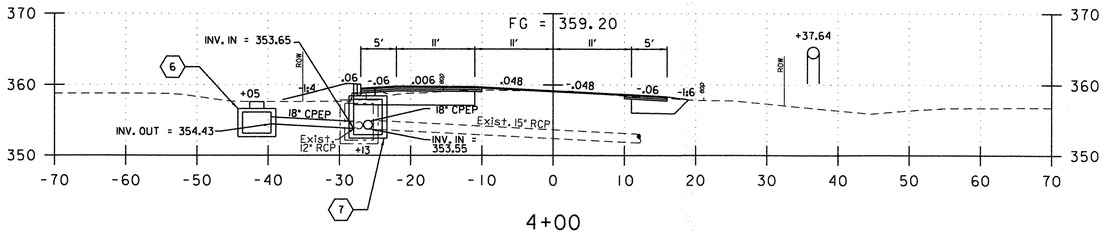
STA. 4+50, RT.
BEGIN 20:1 EP TAPER

STA. 6+16, LT.
END 15:1 EP TAPER

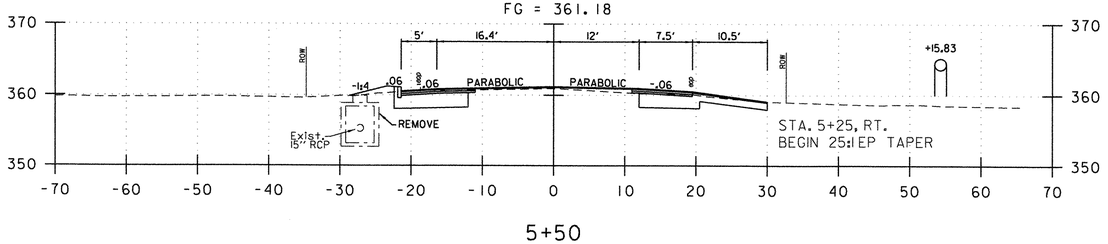


6+00

STATION 5+81
END PROJECT
BEGIN APPROACH



4+00



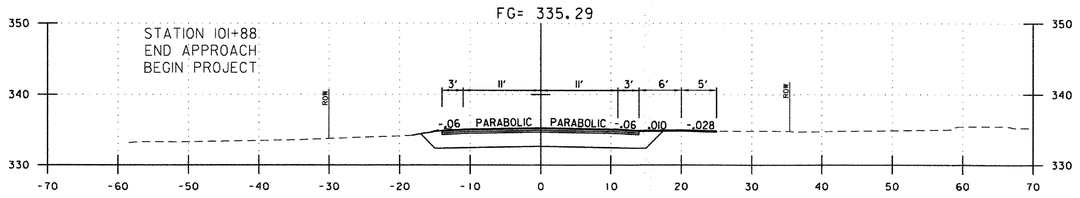
5+50

VT 116

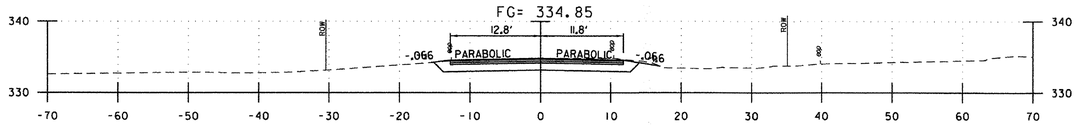
0 10 20
SCALE IN FEET

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: HINESBURG	
PROJECT NUMBER: HES 021-1(20)	
FILE NAME: z04b206xsec.dgn	PLOT DATE: 2/18/2009
PROJECT LEADER: G. BAKOS	DRAWN BY: D. PECK
DESIGNED BY: D. PECK	CHECKED BY: G. BAKOS
CROSS SECTIONS 2	SHEET 23 OF 25



101+75



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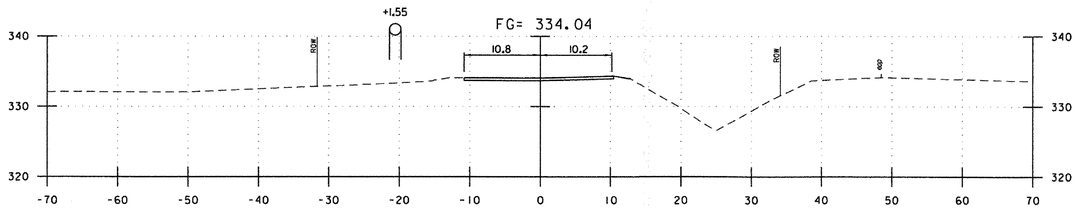
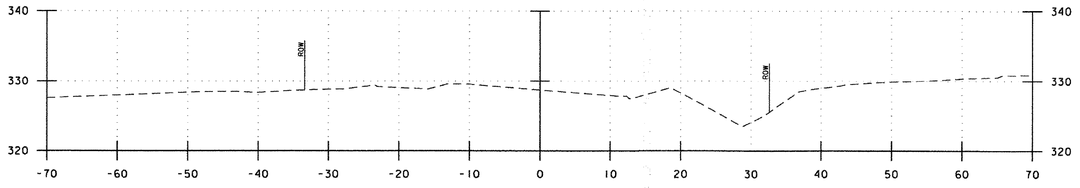
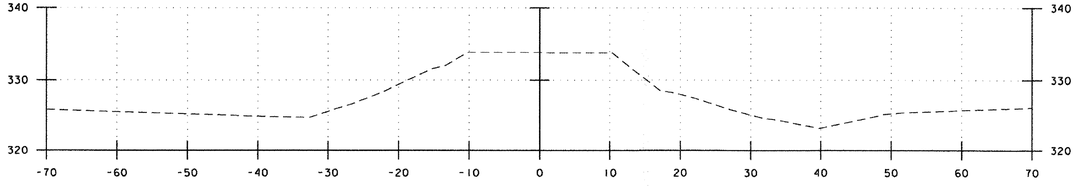


101+00

STATION 100+75
BEGIN APPROACH



100+50



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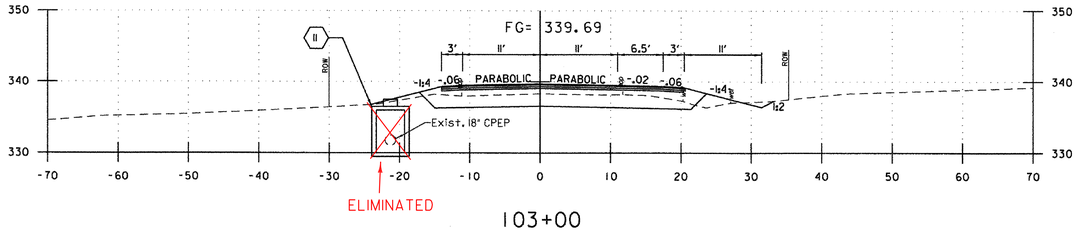
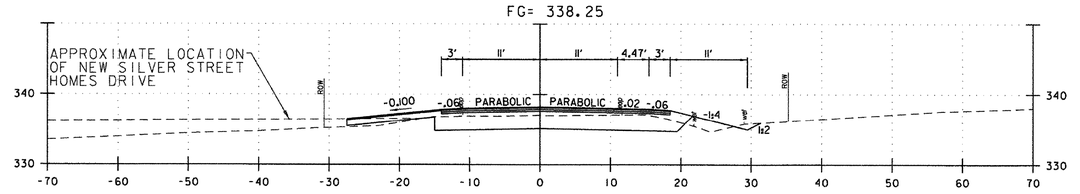
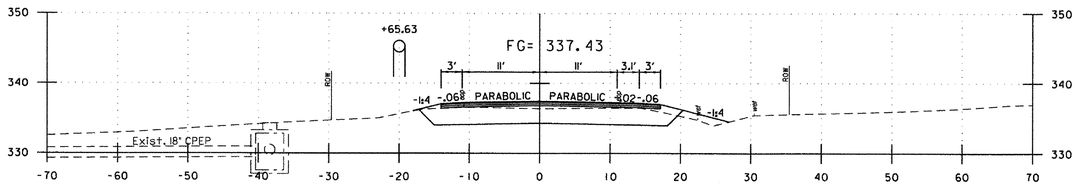


ELIMINATED

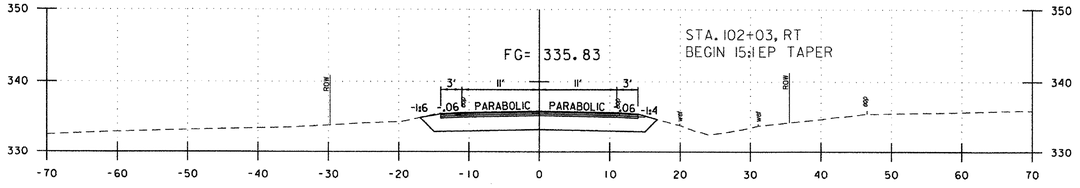
103+00



102+70



102+50



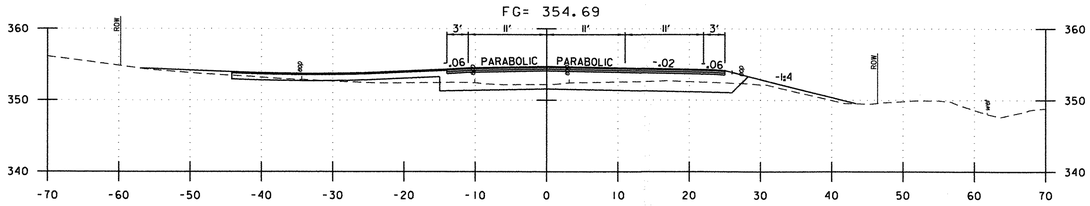
102+00

TH4 SILVER STREET

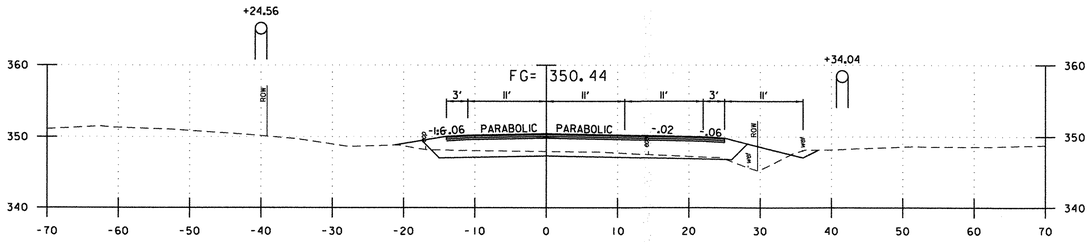
0 10 20
SCALE IN FEET

VHB Vanasse Hangen Brustlin, Inc.

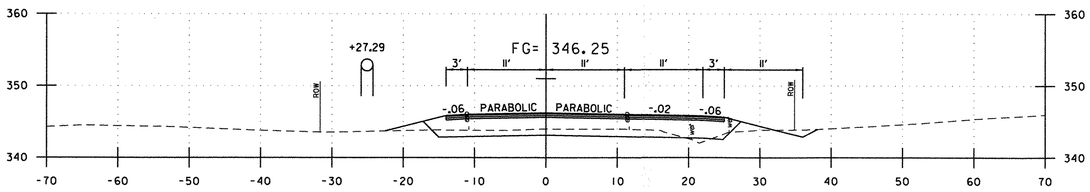
PROJECT NAME:	HINESBURG
PROJECT NUMBER:	HES 021-1(20)
FILE NAME: z04b206xsec.dgn	PLOT DATE: 2/18/2009
PROJECT LEADER: G. BAKOS	DRAWN BY: D. PECK
DESIGNED BY: D. PECK	CHECKED BY: G. BAKOS
CROSS SECTIONS 3	SHEET 24 OF 25



105+00

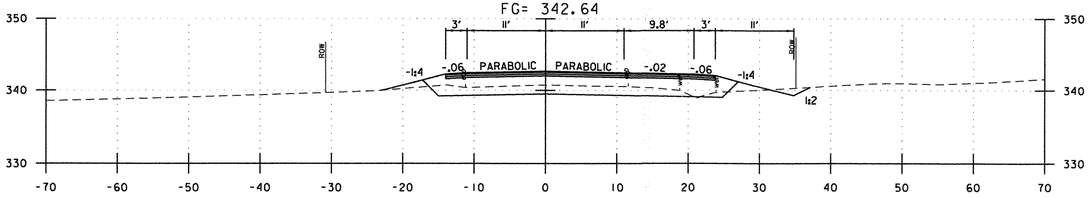


104+50



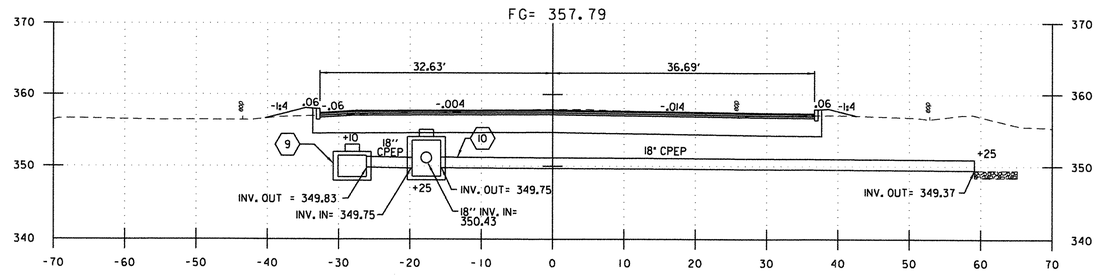
104+00

STA. 103+68, RT
END 15:1 EP TAPER



103+50

TH 4 SILVER ST STA 105+80.43 =
VT 116 STA 2+48.24



105+50

TH4 SILVER STREET

0 10 20
SCALE IN FEET

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME:	HINESBURG
PROJECT NUMBER:	HES 021-1(20)
FILE NAME: z04b206xsec.dgn	PLOT DATE: 2/18/2009
PROJECT LEADER: G. BAKOS	DRAWN BY: D. PECK
DESIGNED BY: D. PECK	CHECKED BY: G. BAKOS
CROSS SECTIONS 4	SHEET 25 OF 25