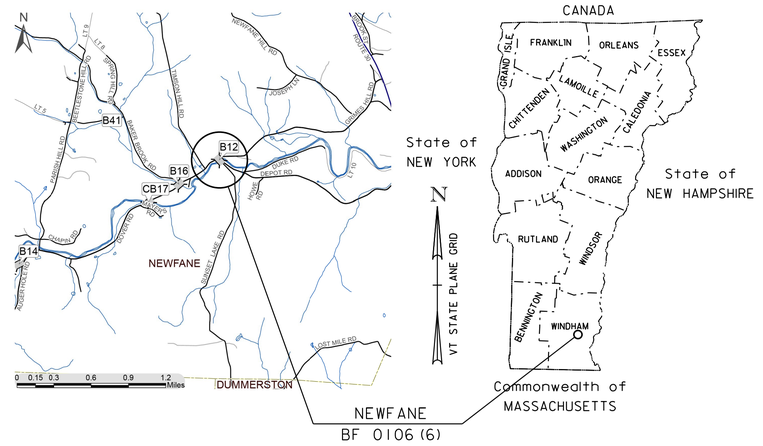
REVIEW NOTES

1) NOTE THAT DEPOT ROAD AND DOVER ROAD ARE BOTH TH 2.

2) IT IS ANTICIPATED THAT CONSTRUCTION WILL LAST ONE CONSTRUCTION SEASON. THE BRIDGE WILL BE CLOSED TO TRAFFIC DURING CONSTRUCTION BUT TRAFFIC VIA TH 2 (DOVER RD) AND TH 5 (GRIMES HILL RD) MUST BE MAINTAINED.

STATE OF VERMONT
AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT
BRIDGE PROJECT

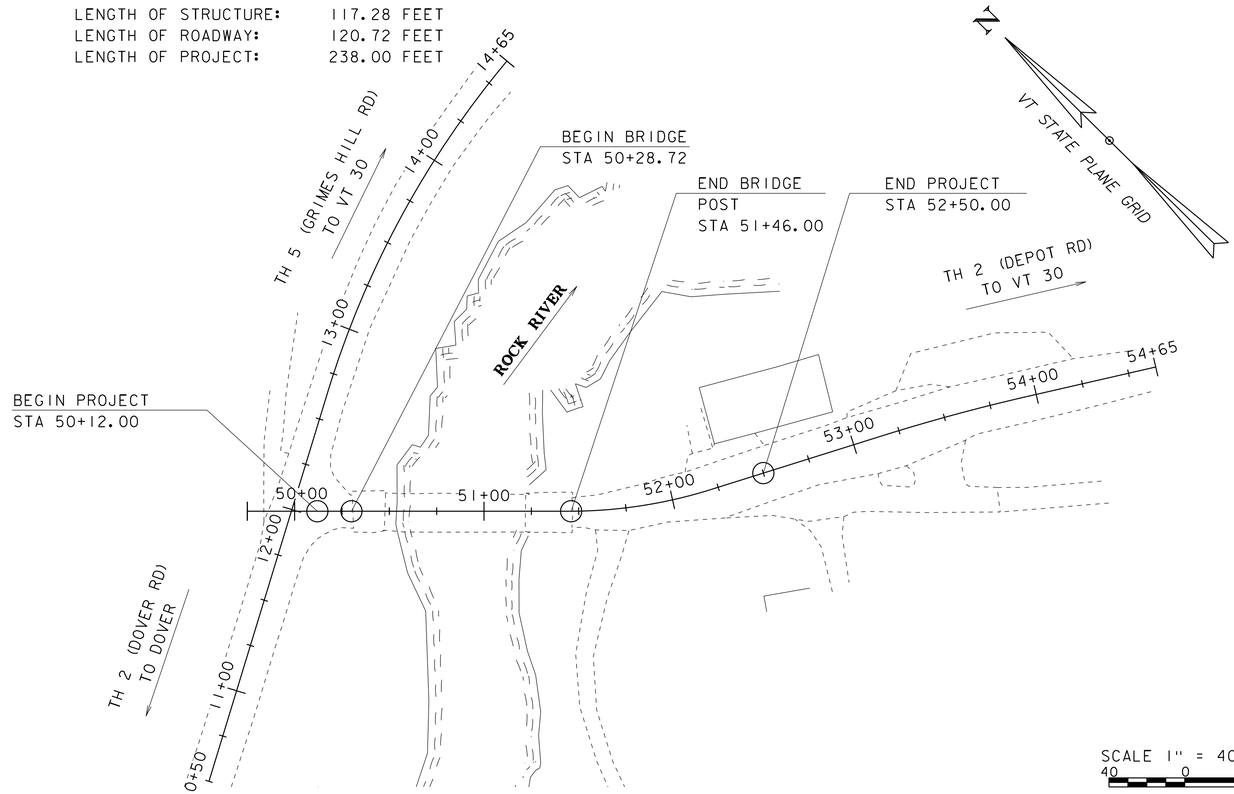
TOWN OF NEWFANE
COUNTY OF WINDHAM

ROUTE NO : FAS ROUTE 106 (TH 2 / DEPOT ROAD), MAJOR COLLECTOR (CLASS 2), BRIDGE NO : 12

PROJECT LOCATION: ON TH 2 (DEPOT ROAD) BEGINNING APPROXIMATELY 1.9 MILES WESTERLY OF THE INTERSECTION OF TH 2 & VT 30 AND EXTENDING EASTERLY APPROXIMATELY .045 MILES.

PROJECT DESCRIPTION: REMOVAL OF EXISTING CONCRETE ARCH BRIDGE AND REPLACEMENT WITH A NEW CONCRETE ARCH BRIDGE AND RELATED ROADWAY AND CHANNEL WORK.

LENGTH OF STRUCTURE: 117.28 FEET
LENGTH OF ROADWAY: 120.72 FEET
LENGTH OF PROJECT: 238.00 FEET



SCALE 1" = 40'-0"
40 0 40

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JULY 20, 2011 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

QUALITY ASSURANCE PROGRAM : LEVEL 2	
SURVEYED BY :	R. GILMAN
SURVEYED DATE :	04-22-2013
DATUM	
VERTICAL	NAVD88
HORIZONTAL	NAD83 (2011)

PRELIMINARY PLANS
05-JUN-2017

DIRECTOR OF PROJECT DELIVERY
APPROVED _____ DATE _____

PROJECT MANAGER : CAROLYN W. CARLSON, P.E.

PROJECT NAME : NEWFANE
PROJECT NUMBER : BF 0106(6)

SHEET 1 OF 39 SHEETS

STATE OF VERMONT
AGENCY OF TRANSPORTATION

PRELIMINARY INFORMATION SHEET (BRIDGE)

Version
LRFD

INDEX OF SHEETS

PLAN SHEETS

STANDARDS LIST

TO BE INCLUDED FOR FINAL PLANS

STRUCTURES & HSD DETAIL SHEETS

SD-501.00	CONCRETE DETAILS AND NOTES	2/9/2012
SD-502.00	CONCRETE DETAILS AND NOTES	10/10/2012
SD-516.10	BRIDGE JOINT ASHPALTIC PLUG	8/29/2011
HSD-400.01	SAFETY EDGE DETAILS	3/29/2016
HSD-621.06	GUARDRAIL TERMINAL LABEL DETAIL	11/3/2016

TRAFFIC DATA

YEAR	ADT	DHV	% D	% T	ADTT
2017	1500	170	70	3.9	65
2037	1600	180	70	6	110

20 year ESAL for flexible pavement from 2017 to 2037 : 227000
40 year ESAL for flexible pavement from 2017 to 2057 : 534000
Design Speed : 15 mph

AS BUILT "REBAR" DETAIL

LEVEL I	LEVEL II	LEVEL III
TYPE:	TYPE:	TYPE:
GRADE:	GRADE:	GRADE:

FINAL HYDRAULIC REPORT

HYDROLOGIC DATA

Date: October 2016

DRAINAGE AREA : 54.0 sq. mi.
CHARACTER OF TERRAIN : Mostly wooded, rurual
STREAM CHARACTERISTICS : Sinuous and alluvial
NATURE OF STREAMBED : Ledge, boulders, cobbles, gravel

PEAK FLOW DATA - ANNUAL EXCEEDANCE PROBABILITY (AEP)

43% =	2,000 cfs	2% =	7,100 cfs
10% =	4,600 cfs	1% =	8,200 cfs
4% =	6,000 cfs	0.2% =	11,500 cfs

DATE OF FLOOD OF RECORD Unknown
ESTIMATED DISCHARGE: Unknown
WATER SURFACE ELEV.: Unknown
NATURAL STREAM VELOCITY : @ 2% AEP = 15.7 fps
ICE CONDITIONS : Moderate
DEBRIS: Light
DOES THE STREAM REACH MAXIMUM HIGHWATER ELEV. RAPIDLY? No
IS ORDINARY RISE RAPID? No
IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? No
IF YES, DESCRIBE:

WATERSHED STORAGE: <2%
HEADWATERS:
UNIFORM: X
IMMEDIATELY ABOVE SITE:

EXISTING STRUCTURE INFORMATION

STRUCTURE TYPE: Concrete arch
YEAR BUILT: 1900
CLEAR SPAN(NORMAL TO STREAM): 76'
VERTICAL CLEARANCE ABOVE STREAMBED: 32'
WATERWAY OF FULL OPENING: 1970 sq. ft.
DISPOSITION OF STRUCTURE: Remove and replace
TYPE OF MATERIAL UNDER SUBSTRUCTURE: See borings

WATER SURFACE ELEVATIONS AT:

43% AEP =	491.3'	VELOCITY =	9.0 fps
10% AEP =	494.1'	"	11.4 fps
4% AEP =	495.5'	"	11.9 fps
2% AEP =	496.5'	"	12.1 fps
1% AEP =	497.5'	"	12.3 fps

LONG TERM STREAMBED CHANGES: None noted

IS THE ROADWAY OVERTOPPED BELOW 1% AEP: No
FREQUENCY: N/A
RELIEF ELEVATION: 520.7'
DISCHARGE OVER ROAD @ 1% AEP: N/A

UPSTREAM STRUCTURE

TOWN: Newfane — DISTANCE: 4140'
HIGHWAY # : TH 2 — STRUCTURE #: CB17
CLEAR SPAN: 120' — CLEAR HEIGHT:
YEAR BUILT: 1870, reconstructed 2010 — FULL WATERWAY:
STRUCTURE TYPE: Covered bridge

DOWNSTREAM STRUCTURE

TOWN: Newfane — DISTANCE: 12,480'
HIGHWAY # : VT 30 — STRUCTURE #: 9
CLEAR SPAN: — CLEAR HEIGHT:
YEAR BUILT: — FULL WATERWAY:
STRUCTURE TYPE:

LRFR LOAD RATING FACTORS

LOADING LEVELS	TRUCK						
	H-20	HL-93	3S2	6 AXLE	3A. STR.	4A. STR.	5A. SEM
TONNAGE	20	36	36	66	30	34.5	38
INVENTORY							
POSTING							
OPERATING							
COMMENTS:							

PROPOSED STRUCTURE

STRUCTURE TYPE: Concrete arch

CLEAR SPAN(NORMAL TO STREAM): 76'
VERTICAL CLEARANCE ABOVE STREAMBED: 32'
WATERWAY OF FULL OPENING: 1970 sq. ft.

WATER SURFACE ELEVATIONS AT:

43% AEP =	491.3'	VELOCITY=	9.0 fps
10% AEP =	494.1'	"	11.4 fps
4% AEP =	495.5'	"	11.9 fps
2% AEP =	496.5'	"	12.1 fps
1% AEP =	497.5'	"	12.3 fps

IS THE ROADWAY OVERTOPPED BELOW 1% AEP: No
FREQUENCY: N/A
RELIEF ELEVATION: 520.7'
DISCHARGE OVER ROAD @ 1% AEP: N/A

BRIDGE LOW CHORD ELEVATION: 517.1'
FREEBOARD: @ 2% AEP = 20.6'

SCOUR: Contraction scour = 2.0' at 0.5% AEP. Foundations to ledge or 6' below stream bottom.
REQUIRED CHANNEL PROTECTION: Stone Fill, Type IV

PERMIT INFORMATION

		DEPTH OR ELEVATION:
AVERAGE DAILY FLOW:	-	
ORDINARY LOW WATER:	-	-
ORDINARY HIGH WATER:	-	-

TEMPORARY BRIDGE REQUIREMENTS

STRUCTURE TYPE: None required
CLEAR SPAN (NORMAL TO STREAM):
VERTICAL CLEARANCE ABOVE STREAMBED:
WATERWAY AREA OF FULL OPENING:

ADDITIONAL INFORMATION

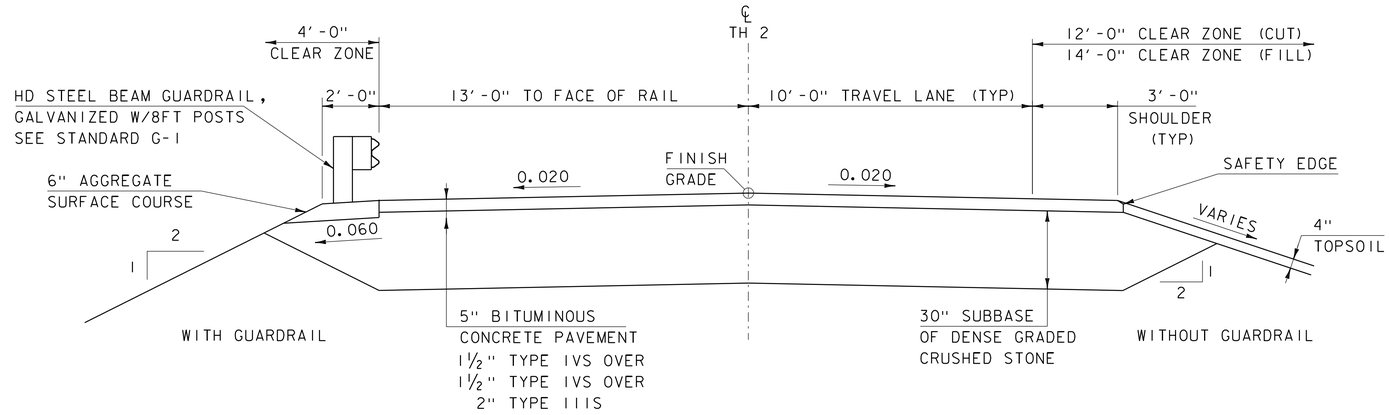
DESIGN VALUES

1.	DESIGN LIVE LOAD		HL-93
2.	FUTURE PAVEMENT	d_p:	0.0 INCH
3.	DESIGN SPAN	L:	76.00 FT
4.	MIN. MID-SPAN POS. CAMBER @ RELEASE (PRESTRESSED UNITS)	Δ:	---
5.	PRESTRESSING STRAND	f_y:	---
6.	PRESTRESSED CONCRETE STRENGTH	f'_c:	---
7.	PRESTRESSED CONCRETE RELEASE STRENGTH	f'_{ci}:	---
8.	CONCRETE, HIGH PERFORMANCE CLASS AA	f'_c:	4.0 KSI
9.	CONCRETE, HIGH PERFORMANCE CLASS A	f'_c:	4.0 KSI
10.	CONCRETE, HIGH PERFORMANCE CLASS B	f'_c:	3.5 KSI
11.	CONCRETE, CLASS C	f'_c:	3.0 KSI
12.	REINFORCING STEEL	f_y:	60 KSI
13.	STRUCTURAL STEEL AASHTO M270	f_y:	---
14.	NOMINAL BEARING RESISTANCE OF SOIL	q_n:	4.0 KSF
15.	SOIL BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD)	ϕ:	---
16.	NOMINAL BEARING RESISTANCE OF ROCK	q_n:	10.0 KSF
17.	ROCK BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD)	ϕ:	---
18.	PILE RESISTANCE FACTOR	ϕ:	---
19.	LATERAL PILE DEFLECTION	Δ:	---
20.	BASIC WIND SPEED	V_{3s}:	---
21.	MINIMUM GROUND SNOW LOAD	p_g:	---
22.	SEISMIC DATA PGA: 0	S_s:	---
		S_1:	---
23.			
24.			---
25.			---
26.			---

PROJECT NAME: **NEWFANE**
PROJECT NUMBER: **BF 0106(6)**

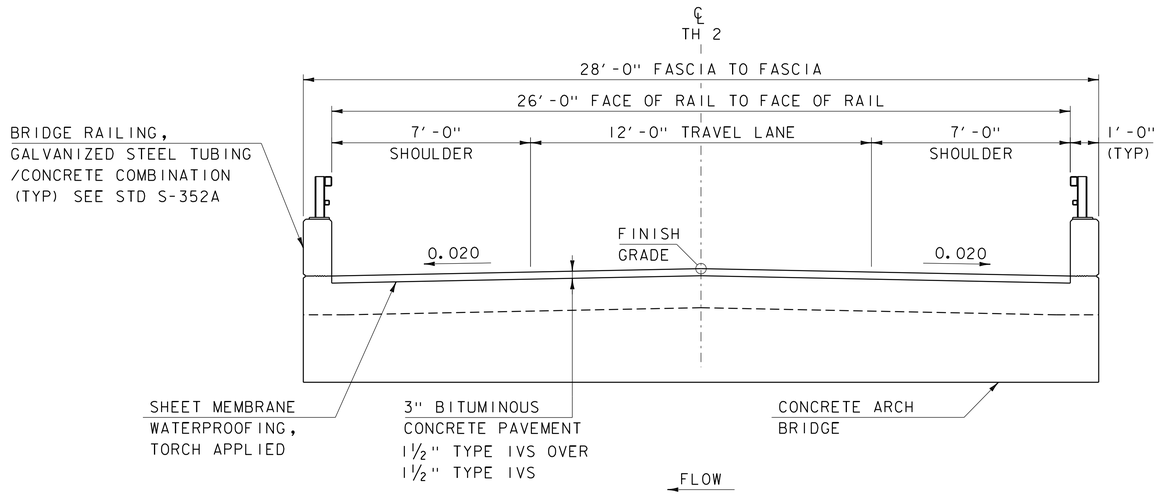
FILE NAME: **s13j306forms.dgn**
PROJECT LEADER: **C.W. CARLSON**
DESIGNED BY: **C. BURRALL**
PRELIMINARY INFORMATION SHEET

PLOT DATE: 3/5/2017
DRAWN BY: **M. LONGSTREET**
CHECKED BY: **C. BURRALL**



ROADWAY TYPICAL SECTION

SCALE 3/8" = 1'-0"



BRIDGE TYPICAL SECTION

SCALE 3/8" = 1'-0"

TACK COAT: EMULSIFIED ASPHALT IS TO BE APPLIED AT THE RATE OF 0.025 GAL/SY BETWEEN SUCCESSIVE COURSES OF PAVEMENT, 0.08 GAL/SY FOR EMULSION ON MILLED SURFACES, OR AS DIRECTED THE ENGINEER.

MATERIAL TOLERANCES

(IF USED ON PROJECT)

SURFACE	
- PAVEMENT (TOTAL THICKNESS)	+/- 1/4"
- AGGREGATE SURFACE COURSE	+/- 1/2"
SUBBASE	+/- 1"
SAND BORROW	+/- 1"

PROJECT NAME: NEWFANE
PROJECT NUMBER: BF 0106(6)

FILE NAME: sl3j306typ.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: C. BURRALL
TYPICAL SECTIONS

PLOT DATE: 05-JUN-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: C. BURRALL
SHEET 3 OF 39

GENERAL INFORMATION

SYMBOLOGY LEGEND NOTE

THE SYMBOLOGY ON THIS SHEET IS INTENDED TO COVER STANDARD CONVENTIONAL SYMBOLOGY. THE SYMBOLOGY IS USED FOR EXISTING & PROPOSED FEATURES WITH HEAVIER LINEWEIGHT, IN COMBINATION WITH PROJECT ANNOTATION, AS NOTED ON PROJECT PLAN SHEETS. THIS LEGEND SHEET COVERS THE BASICS. SYMBOLOGY ON PLANS MAY VARY, PLAN ANNOTATIONS AND NOTES SHOULD BE USED TO CLARIFY AS NEEDED.

R.O.W. ABBREVIATIONS (CODES) & SYMBOLS

POINT	CODE	DESCRIPTION
	CH	CHANNEL EASEMENT
	CONST	CONSTRUCTION EASEMENT
	CUL	CULVERT EASEMENT
	D&C	DISCONNECT & CONNECT
	DIT	DITCH EASEMENT
	DR	DRAINAGE EASEMENT
	DRIVE	DRIVEWAY EASEMENT
	EC	EROSION CONTROL
	HWY	HIGHWAY EASEMENT
	I&M	INSTALL & MAINTAIN EASEMENT
	LAND	LANDSCAPE EASEMENT
	R&RES	REMOVE & RESET
	R&REP	REMOVE & REPLACE
	SR	SLOPE RIGHT
	UE	UTILITY EASEMENT
	(P)	PERMANENT EASEMENT
	(T)	TEMPORARY EASEMENT
■	BNDNS	BOUND SET
⧈	BNDNS	BOUND TO BE SET
◎	IPNF	IRON PIN FOUND
●	IPNS	IRON PIN TO BE SET
☒	CALC	EXISTING ROW POINT
○	PROW	PROPOSED ROW POINT
[LENGTH]		LENGTH CARRIED ON NEXT SHEET

COMMON TOPOGRAPHIC POINT SYMBOLS

POINT	CODE	DESCRIPTION
	APL	BOUND APPARENT LOCATION
	BM	BENCHMARK
	BND	BOUND
	CB	CATCH BASIN
	COMB	COMBINATION POLE
	DITHR	DROP INLET THROATED DNC
	EL	ELECTRIC POWER POLE
	FPOLE	FLAGPOLE
	GASFIL	GAS FILLER
	GP	GUIDE POST
	GSO	GAS SHUT OFF
	GUY	GUY POLE
	GUYW	GUY WIRE
	GV	GATE VALVE
	H	TREE HARDWOOD
	HCTRL	CONTROL HORIZONTAL
	HVCTRL	CONTROL HORIZ. & VERTICAL
	HYD	HYDRANT
	IP	IRON PIN
	IPIPE	IRON PIPE
	LI	LIGHT - STREET OR YARD
	MB	MAILBOX
	MH	MANHOLE (MH)
	MM	MILE MARKER
	PM	PARKING METER
	PMK	PROJECT MARKER
	POST	POST STONE/WOOD
	RRSIG	RAILROAD SIGNAL
	RRSL	RAILROAD SWITCH LEVER
	S	TREE SOFTWOOD
	SAT	SATELLITE DISH
	SHRUB	SHRUB
	SIGN	SIGN
	STUMP	STUMP
	TEL	TELEPHONE POLE
	TIE	TIE
	TSIGN	SIGN W/DOUBLE POST
	VCTRL	CONTROL VERTICAL
	WELL	WELL
	WSO	WATER SHUT OFF

THESE ARE COMMON VAOT SURVEY POINT SYMBOLS FOR EXISTING FEATURES, ALSO USED FOR PROPOSED FEATURES WITH HEAVIER LINEWEIGHT, IN COMBINATION WITH PROPOSED ANNOTATION.

PROPOSED GEOMETRY CODES

CODE	DESCRIPTION
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
CC	CENTER OF CURVE
PT	POINT OF TANGENCY
PCC	POINT OF COMPOUND CURVE
PRC	POINT OF REVERSE CURVE
POB	POINT OF BEGINNING
POE	POINT OF ENDING
STA	STATION PREFIX
AH	AHEAD STATION SUFFIX
BK	BACK STATION SUFFIX
D	CURVE DEGREE OF (100FT)
R	CURVE RADUIS OF
T	CURVE TANGENT LENGTH
L	CURVE LENGTH OF
E	CURVE EXTERNAL DISTANCE

UTILITY SYMBOLOGY

UNDERGROUND UTILITIES

- UGU — UTILITY (GENERIC-UNKNOWN)
- UT — TELEPHONE
- UE — ELECTRIC
- UC — CABLE (TV)
- UEC — ELECTRIC+CABLE
- UET — ELECTRIC+TELEPHONE
- UCT — CABLE+TELEPHONE
- UECT — ELECTRIC+CABLE+TELEP.
- G — GAS LINE
- W — WATER LINE
- S — SANITARY SEWER (SEPTIC)

ABOVE GROUND UTILITIES (AERIAL)

- AGU — UTILITY (GENERIC-UNKNOWN)
- T — TELEPHONE
- E — ELECTRIC
- C — CABLE (TV)
- EC — ELECTRIC+CABLE
- ET — ELECTRIC+TELEPHONE
- AER E&T — ELECTRIC+TELEPHONE
- CT — CABLE+TELEPHONE
- ECT — ELECTRIC+CABLE+TELEP.
- UTILITY POLE GUY WIRE

PROJECT CONSTRUCTION SYMBOLOGY

PROJECT DESIGN & LAYOUT SYMBOLOGY

- CZ — CLEAR ZONE
- PLAN LAYOUT MATCHLINE

PROJECT CONSTRUCTION FEATURES

- TOP OF CUT SLOPE
- TOE OF FILL SLOPE
- STONE FILL
- BOTTOM OF DITCH ℄
- CULVERT PROPOSED
- STRUCTURE SUBSURFACE
- PDF — PDF — PROJECT DEMARCATION FENCE
- BF — BF — BARRIER FENCE
- TREE PROTECTION ZONE (TPZ)
- STRIPING LINE REMOVAL
- SHEET PILES

CONVENTIONAL BOUNDARY SYMBOLOGY

BOUNDARY LINES

- TOWN LINE — TOWN BOUNDARY LINE
- COUNTY LINE — COUNTY BOUNDARY LINE
- STATE LINE — STATE BOUNDARY LINE
- PROPOSED STATE R.O.W. (LIMITED ACCESS)
- PROPOSED STATE R.O.W.
- STATE ROW (LIMITED ACCESS)
- STATE ROW
- TOWN ROW
- PERMANENT EASEMENT LINE (P)
- TEMPORARY EASEMENT LINE (T)
- SURVEY LINE
- P/L — PROPERTY LINE (P/L)
- SR SR SR — SLOPE RIGHTS
- 6f — 6f — 6F PROPERTY BOUNDARY
- 4f — 4f — 4F PROPERTY BOUNDARY
- HAZ — HAZ — HAZARDOUS WASTE

EPSC LAYOUT PLAN SYMBOLOGY

EPSC MEASURES

- FILTER CURTAIN
- SILT FENCE
- SILT FENCE WOVEN WIRE
- CHECK DAM
- DISTURBED AREAS REQUIRING RE-VEGETATION
- EROSION MATTING

SEE EPSC DETAIL SHEETS FOR ADDITIONAL SYMBOLOGY

ENVIRONMENTAL RESOURCES

- WETLAND BOUNDARY
- RIPARIAN BUFFER ZONE
- WETLAND BUFFER ZONE
- SOIL TYPE BOUNDARY
- T&E — THREATENED & ENDANGERED SPECIES
- HAZ — HAZ — HAZARDOUS WASTE AREA
- AG — AGRICULTURAL LAND
- HABITAT — FISH & WILDLIFE HABITAT
- FLOOD PLAIN — FLOOD PLAIN
- OHW — ORDINARY HIGH WATER (OHW)
- STORM WATER
- USDA FOREST SERVICE LANDS
- WILDLIFE HABITAT SUIT/CONN

ARCHEOLOGICAL & HISTORIC

- ARCH — ARCHEOLOGICAL BOUNDARY
- HISTORIC DIST — HISTORIC DISTRICT BOUNDARY
- HISTORIC — HISTORIC AREA
- (H) HISTORIC STRUCTURE

CONVENTIONAL TOPOGRAPHIC SYMBOLOGY

EXISTING FEATURES

- ROAD EDGE PAVEMENT
- ROAD EDGE GRAVEL
- DRIVEWAY EDGE
- DITCH
- FOUNDATION
- FENCE (EXISTING)
- FENCE WOOD POST
- FENCE STEEL POST
- GARDEN
- ROAD GUARDRAIL
- RAILROAD TRACKS
- CULVERT (EXISTING)
- STONE WALL
- WALL
- WOOD LINE
- BRUSH LINE
- HEDGE
- BODY OF WATER EDGE
- LEDGE EXPOSED

PROJECT NAME: NEWFANE
PROJECT NUMBER: BF 0106(6)

FILE NAME: sl3j306forms.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: C. BURRALL
CONVENTIONAL SYMBOLOGY LEGEND

PLOT DATE: 05-JUN-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: C. BURRALL
SHEET 4 OF 39

GPS CONTROL POINTS

PT #1 SHOSKES

NORTH = 160026.0120
EAST = 1589110.8970
ELEV. = 587.330

TO REACH FROM THE INTERSECTION OF U.S. ROUTE 5 AND VERMONT ROUTE 30 NORTH IN BRATTLEBORO, GO NORTH ON VT ROUTE 30 FOR 8.8 MI (14.2 KM) TO THE INTERSECTION OF TOWN HIGHWAY 2 LEFT (ROAD LEADING TO WILLIAMSVILLE, SOUTH NEWFANE, EAST DOVER, DOVER, AND WEST DOVER). TURN LEFT AND GO NORTH AND WEST ALONG TH2 FOR 2 MI (3.2 KM) TO THE BRIDGE OVER ROCK RIVER. AT THE END OF THE BRIDGE TURN LEFT AND GO WEST ALONG TH2 FOR 0.6 MI (1.8 KM) TO THE COVERED BRIDGE OVER ROCK RIVER. CONTINUE STRAIGHT ON TH2 FOR 0.4 MI (0.6 KM) TO THE MARK ON THE LEFT. THE MARK IS SET IN THE TOP OF A 30 CM DIAMETER CONCRETE MONUMENT POURED 1.3 M (4.3 FT) DEEP. IT IS 4.8 M (15.7 FT) SOUTHEAST OF AND ABOUT 0.2 M (0.7 FT) HIGHER THAN THE CENTERLINE OF TH2, 11.8 M (38.7 FT) NORTHEAST OF THE NORTHEAST END OF A STONEWALL, 39.3 M (128.9 FT) NORTHEAST OF THE CENTERLINE OF GRAVEL DRIVE LEADING TO THE SHOSHKES RESIDENCE, AND 1.6 M (5.2 FT) SOUTHWEST OF POLE NO.39/93 AND FIBERGLASS WITNESS POST.

PT #2 SHOSKES AZ MK

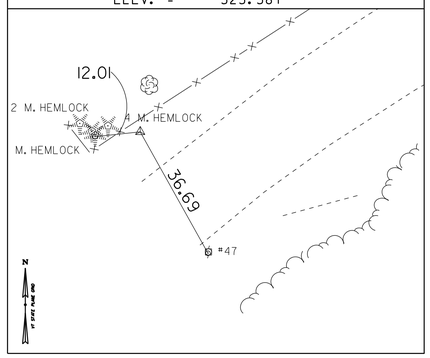
NORTH = 161007.5780
EAST = 1589488.8650
ELEV. = 565.030

TO REACH FROM THE INTERSECTION OF U.S. ROUTE 5 AND VERMONT ROUTE 30 NORTH IN BRATTLEBORO, GO NORTH ON VT ROUTE 30 FOR 8.8 MI (14.2 KM) TO THE INTERSECTION OF TOWN HIGHWAY 2 LEFT (ROAD LEADING TO WILLIAMSVILLE, SOUTH NEWFANE, EAST DOVER, DOVER, AND WEST DOVER). TURN LEFT AND GO NORTH AND WEST ALONG TH2 FOR 2 MI (3.2 KM) TO THE BRIDGE OVER ROCK RIVER. AT THE END OF THE BRIDGE TURN LEFT AND GO WEST ALONG TH2 FOR 1.1 MI (1.8 KM) TO THE COVERED BRIDGE OVER ROCK RIVER. CONTINUE STRAIGHT ON TH2 FOR 0.2 MI (0.3 KM) TO THE MARK ON THE RIGHT. THE MARK IS SET IN THE TOP OF A LARGE BOULDER ABOUT 0.5 M (1.6 FT) BELOW GROUND SURFACE ACCESSIBLE BY AN ACCESS COVER. IT IS 6.6 M (21.7 FT) NORTHWEST OF AND ABOUT 0.7 M (2.3 FT) LOWER THAN THE CENTERLINE OF TH2, 23.5 M (77.1 FT) SOUTHWEST OF POLE NO.61/86/32, 8.4 M (27.6 FT) SOUTHEAST OF A 30 CM WHITE PINE, AND 0.4 M (1.3 FT) SOUTHEAST OF A FIBERGLASS WITNESS POST.

TRAVERSE TIES

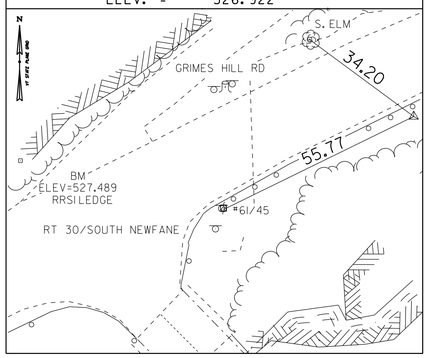
HVCTRL #9

NORTH = 163141.9040
EAST = 1592969.8010
ELEV. = 525.581



HVCTRL #10

NORTH = 163351.5730
EAST = 1593429.4060
ELEV. = 526.922



NORTH =
EAST =
ELEV. =

NORTH =
EAST =
ELEV. =

NORTH =
EAST =
ELEV. =

ALIGNMENT TIES

NORTH =
EAST =
ELEV. =

NORTH =
EAST =
ELEV. =

NORTH =
EAST =
ELEV. =

NORTH =
EAST =
ELEV. =

NORTH =
EAST =
ELEV. =

DATUM

VERTICAL NAVD88
HORIZONTAL NAD83(92)
ADJUSTMENT COMPASS

PROJECT NAME: NEWFANE
PROJECT NUMBER: BF 0106(6)

FILE NAME: x13j306tie
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: C. BURRALL
TIE SHEET

PLOT DATE: 05-JUN-2017
DRAWN BY: C. CYR
CHECKED BY: P. BEYOR
SHEET 5 OF 39

REMOVAL AND DISPOSAL OF GUARDRAIL
DOVER STA 11+33.57 RT - 12+00.08 RT
GRIMES STA 12+16.74 RT - 12+49.55 RT
DEPOT STA 51+46.85 RT - 51+56.25 RT
DEPOT STA 51+46.97 LT - 51+99.89 LT

GUARDRAIL APPROACH SECTION TO CONCRETE COMBINATION BRIDGE RAILING, TL-3
DOVER STA 11+83.97 RT - 11+94.88 RT
GRIMES STA 12+21.62 RT - 12+30.94 RT
DEPOT STA 51+46.00 RT - 51+55.87 RT
DEPOT STA 51+46.00 LT - 51+65.24 LT

BRIDGE RAILING, GALVANIZED STEEL TUBING/CONCRETE COMBINATION
DEPOT STA 50+31.11 LT - 51+46.00 LT
DEPOT STA 50+26.42 RT - 51+46.00 RT

HD STEEL BEAM GUARDRAIL
DOVER STA 11+35.89 RT - 11+83.97 RT
GRIMES STA 12+30.94 RT - 12+49.55 RT
DEPOT STA 51+52.68 RT - 51+55.87 RT
DEPOT STA 51+65.24 LT - 52+10.32 LT

CONSTRUCT DRIVE (GRAVEL APRON)
DEPOT STA 51+52.42 RT - 51+74.80 RT
DEPOT STA 52+07.67 RT - 52+70.45 RT

CONSTRUCT DRIVE (PAVED)
GRIMES STA 11+82.50 LT - 12+27.80 LT
DEPOT STA 52+10.36 LT - 52+55.13 LT

COLD PLANING, BITUMINOUS PAVEMENT
DOVER STA 11+00.00 - 11+50.00
GRIMES STA 12+50.00 - 13+00.00
DEPOT STA 52+50.00 - 53+00.00

RELOCATE MAILBOX, SINGLE SUPPORT
DEPOT STA 51+81.77 - 13.00' RT

PRECAST REINFORCED CONCRETE DROP INLET WITH CAST IRON GRATE
DEPOT STA 51+50.00 11.75' LT & RT
GRIMES STA 12+58.00 LT

CONSTRUCT GRASS LINED DITCH
GRIMES STA 12+59.00 - 12+75.00 LT

ANCHOR FOR STEEL BEAM RAIL
DOVER STA 11+50.00 RT
DEPOT STA 52+00.00 LT

N
VT STATE PLANE GRID

PI (CURVE 1)
STA 13+66.37

TH 5 CURVE (1)
DELTA = 22°55'06"
D = 11°27'33"
R = 500.00'
T = 101.36'
L = 200.00'
E = 10.17'

POE
STA 14+65.00

BEGIN BRIDGE
STA 50+28.72

END BRIDGE
POST
STA 51+46.00

END PROJECT
STA 52+50.00

END APPROACH
MATCH EXISTING
STA 53+00.00

PI (CURVE 2)
STA 53+55.50

POE
STA 54+64.75

END SIDELINE
APPROACH
MATCH EXISTING
STA 13+00.00

PC
STA 12+65.00

REMOVE EXISTING
CULVERT

BEGIN PROJECT
STA 50+12.00

TH 2 (DEPOT ROAD)
STA 49+98.29
= TH 2 (DOVER ROAD)
STA 11+99+.10

BENCHMARK
RAIL ROAD SPIKE
IN LEDGE
ELEV= 527.489

POB (TH 2)
STA 49+75.00

BEGIN SIDELINE
APPROACH
MATCH EXISTING
STA 11+00.00

POB
STA 10+50.00

TH 2 STA 51+00.00 =
CHANNEL STA 31+00.00
Δ = 90° LT

PT
STA 52+20.99

PC
STA 51+45.00

PI (CURVE 1)
STA 51+83.29

PC
STA 53+16.21

PT
STA 53+94.75

CONSTRUCTION LIMITS

USGS BENCHMARK
15 REM 1942
ELEV= 521.010

ROCK RIVER FLOW

TH 5 (GRIMES HILL ROAD) TO VT 30

TH 2 (DOVER ROAD) TO DOVER 11+00

TH 2 (DEPOT ROAD) TO VT 30

TH 42 (SUNSET LAKE ROAD)

S44°35'00"E
S57°30'00"E
S62°00'00"E
N62°23'30"E
N45°25'00"E

R 15'
R 25'
R 11'

EXISTING R.O.W.
STONE WALL
STONE FILL
ECT
PAVED DRIVE
GRAVEL DRIVE
BUILDING (GARAGE)
HOUSE PORCH
MAIL BOX
GUY POLE
GUY
ABOVE GROUND PROPANE TANK
¾" IRON PIPE UP 8"
RAIL FENCE
TIE DIST=54.20
TIE DIST=55.45
COMB 6106
COMB 6144 METER
COMB 6145
COMB 6146
COMB 6142
COMB 6143
HVCTRL 110
HVCTRL 111
HVCTRL 112
HVCTRL 113
HVCTRL 114

DRAINAGE LAYOUT LEGEND
SEE DRAINAGE PROFILE SHEET FOR DETAILS
(#) NEW 18" DIA. PIPE
(#) NEW DROP INLET

TH 2 CURVE (1)
DELTA = 17°25'00"
D = 22°55'06"
R = 250.00'
T = 38.29'
L = 75.99'
E = 2.92'

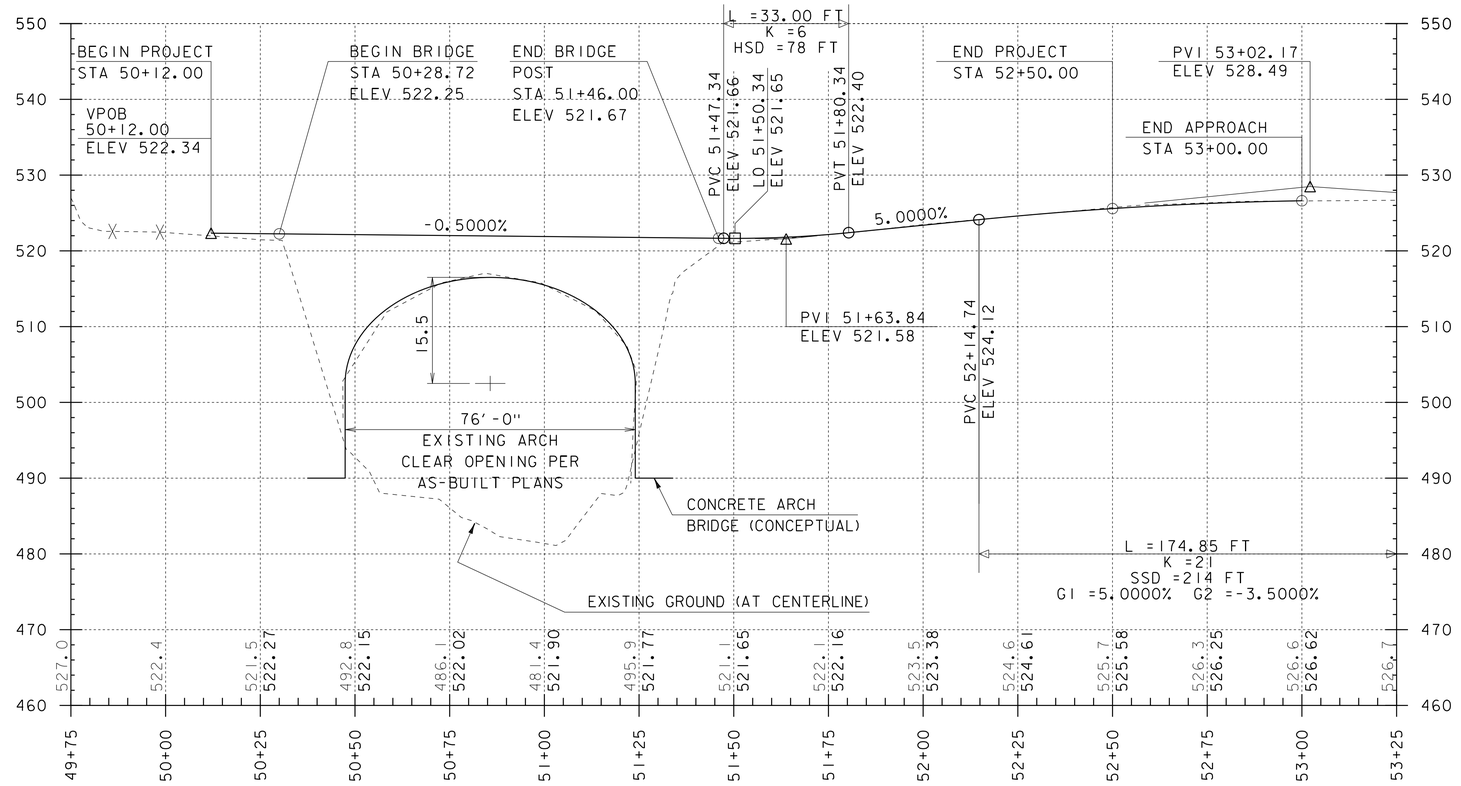
TH 2 CURVE (2)
DELTA = 4°30'00"
D = 5°43'46"
R = 1000.00'
T = 39.29'
L = 78.54'
E = 0.77'

EXISTING BRIDGE INFORMATION
76.6' CONCRETE ARCH
BUILT 1908, REHABILITATED 1934
21' FASCIA TO FASCIA

SCALE 1" = 20'-0"
20 0 20

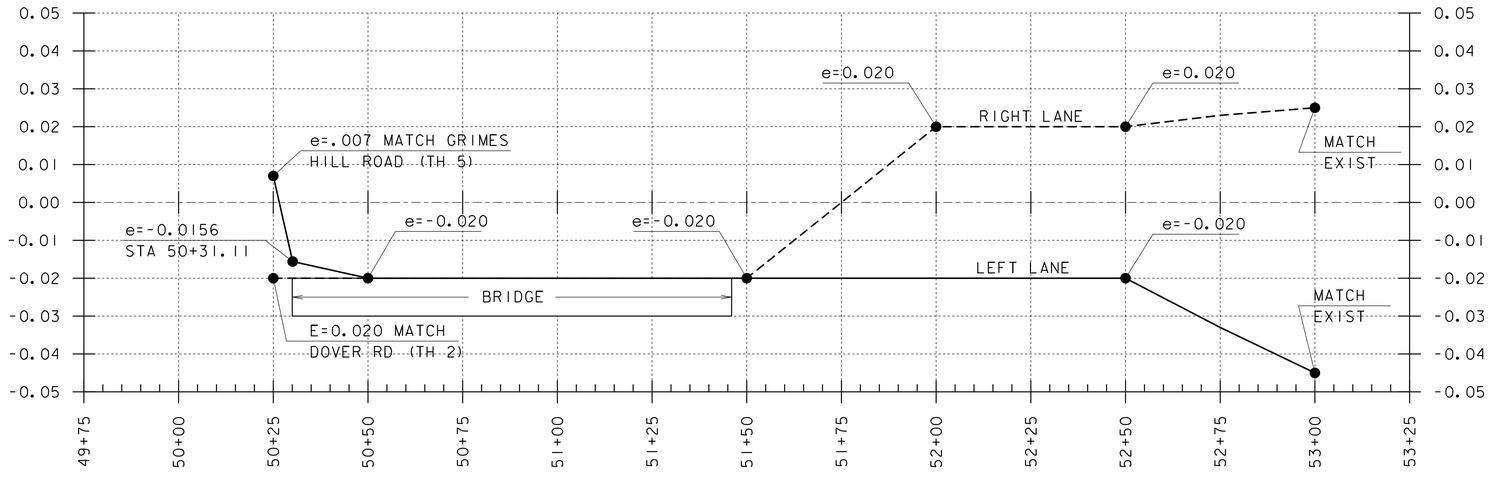
PROJECT NAME: NEWFANE
PROJECT NUMBER: BF 0106(6)

FILE NAME: sl3j306bdr.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: C. BURRALL
LAYOUT
PLOT DATE: 05-JUN-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: C. BURRALL
SHEET 6 OF 39



PROFILE ALONG DEPOT RD (TH 2)

HORIZONTAL SCALE: 1" = 20'-0" / VERTICAL SCALE: 1" = 10'-0"



DEPOT RD (TH 2) BANKING DIAGRAM

HORIZONTAL SCALE: 1" = 20'-0" / VERTICAL SCALE: 1" = e0.020

NOTE:

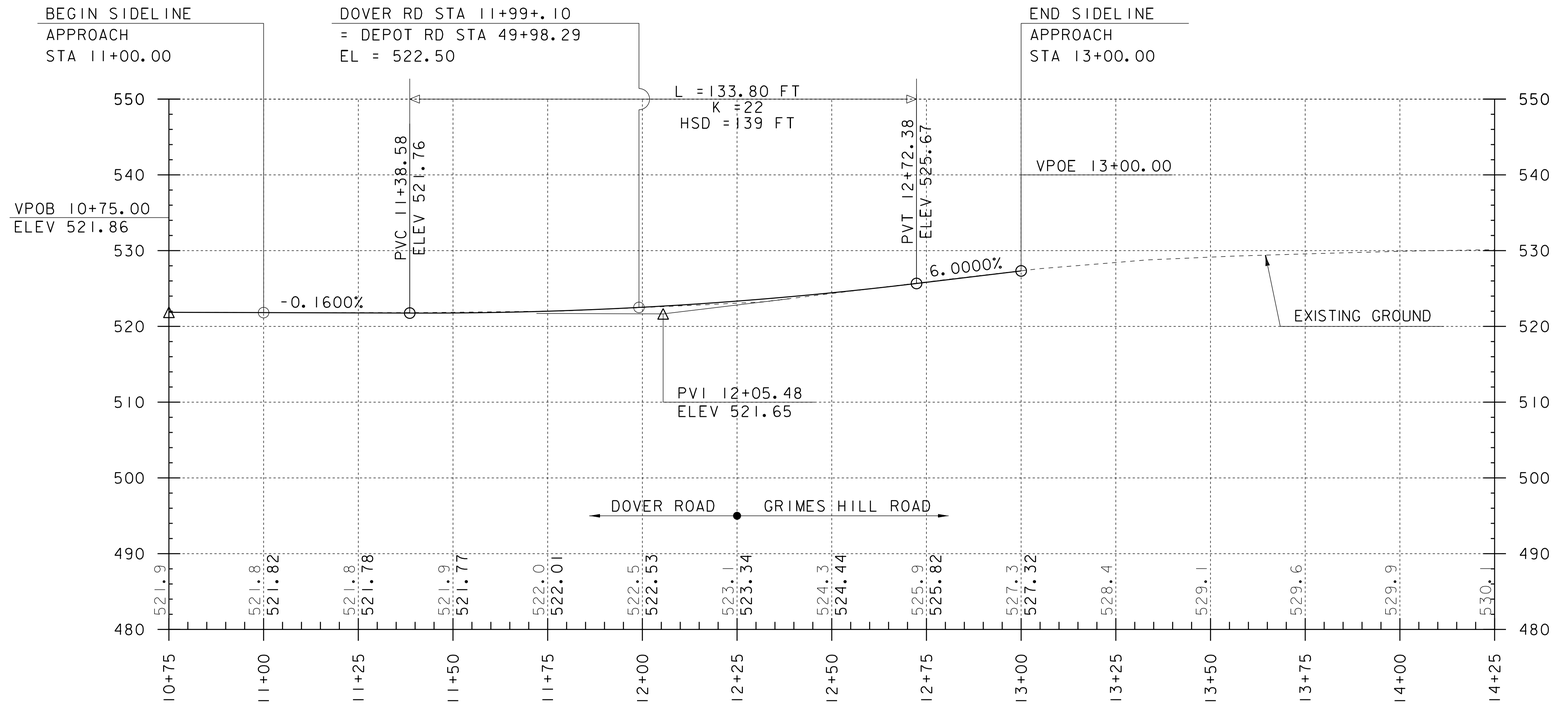
ELEVATIONS SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND ALONG PROPOSED CENTERLINE.

ELEVATIONS SHOWN TO THE NEAREST HUNDREDTH ARE FINISH GRADES ALONG PROPOSED CENTERLINE.

PROJECT NAME: NEWFANE
PROJECT NUMBER: BF 0106(6)

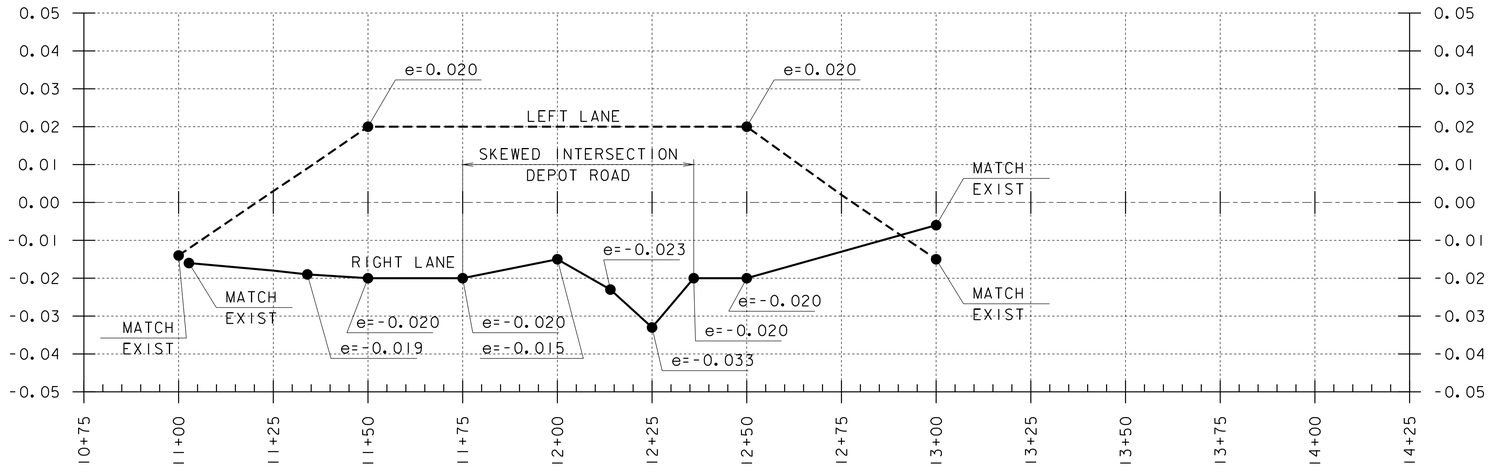
FILE NAME: sl3j306profile.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: C. BURRALL
DEPOT RD PROFILE & BANKING DIAGRAM

PLOT DATE: 05-JUN-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: C. BURRALL
SHEET 7 OF 39



PROFILE ALONG DOVER RD (TH 2) & GRIMES HILL RD (TH 5)

HORIZONTAL SCALE: 1" = 20'-0" / VERTICAL SCALE: 1" = 10'-0"



DOVER RD (TH 2) & GRIMES HILL RD (TH 5) BANKING DIAGRAM

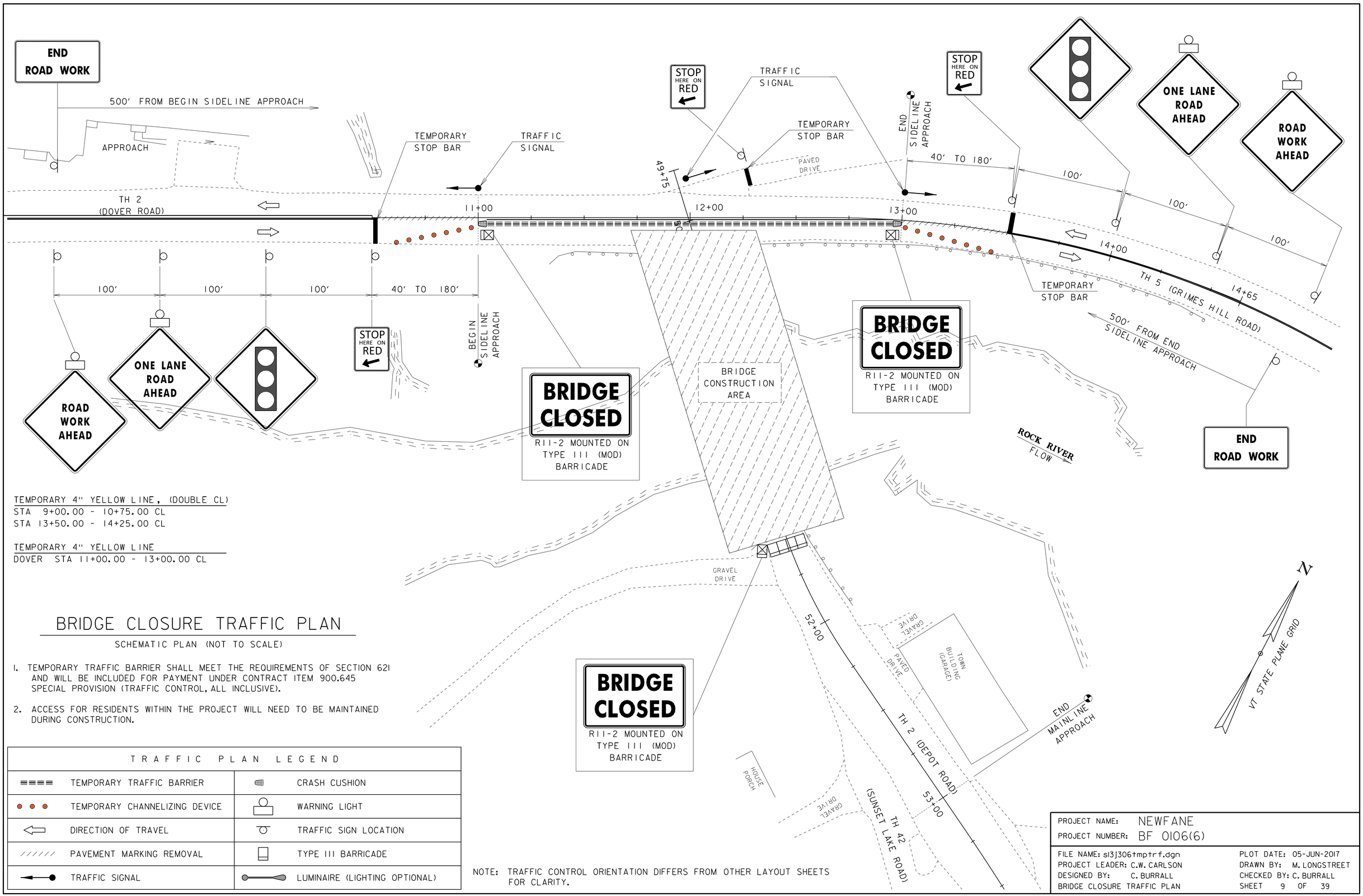
HORIZONTAL SCALE: 1" = 20'-0" / VERTICAL SCALE: 1" = 10'-0"

NOTE:

ELEVATIONS SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND ALONG PROPOSED CENTERLINE.

ELEVATIONS SHOWN TO THE NEAREST HUNDREDTH ARE FINISH GRADES ALONG PROPOSED CENTERLINE.

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BF 0106(6)
FILE NAME: sl3j306profile.dgn	PLOT DATE: 05-JUN-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: C. BURRALL	CHECKED BY: C. BURRALL
DOVER & GRIMES PROFILE & BANKING DIAGRAM	SHEET 8 OF 39



TEMPORARY 4" YELLOW LINE, (DOUBLE CL)
STA 9+00.00 - 10+75.00 CL
STA 13+50.00 - 14+25.00 CL

TEMPORARY 4" YELLOW LINE
DOVER STA 11+00.00 - 13+00.00 CL

BRIDGE CLOSURE TRAFFIC PLAN

SCHEMATIC PLAN (NOT TO SCALE)

1. TEMPORARY TRAFFIC BARRIER SHALL MEET THE REQUIREMENTS OF SECTION 621 AND WILL BE INCLUDED FOR PAYMENT UNDER CONTRACT ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL INCLUSIVE).

2. ACCESS FOR RESIDENTS WITHIN THE PROJECT WILL NEED TO BE MAINTAINED DURING CONSTRUCTION.

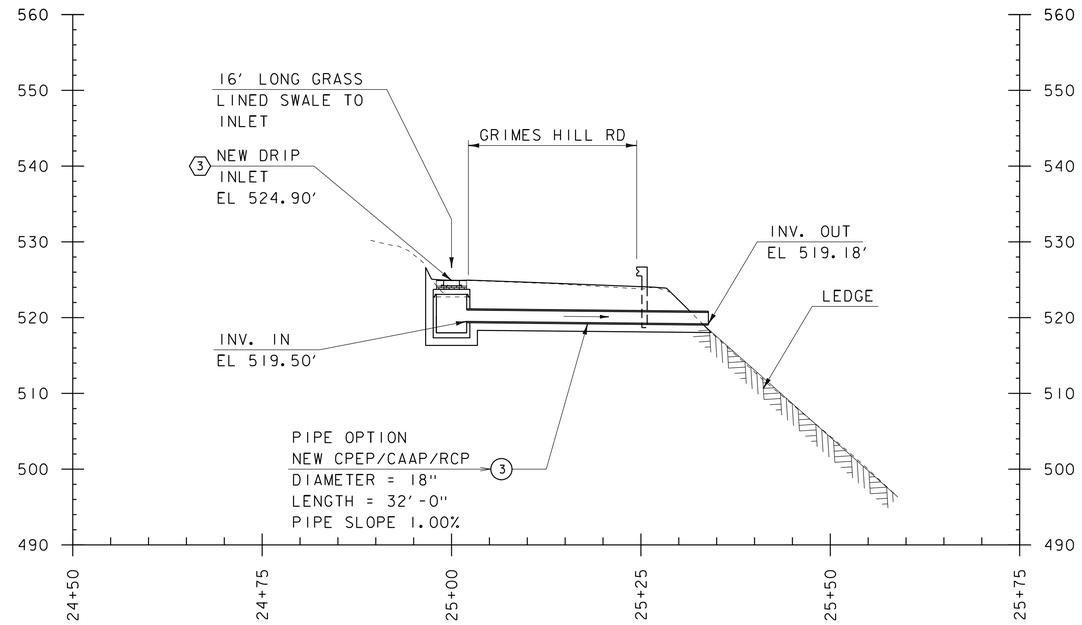
TRAFFIC PLAN LEGEND			
▬▬▬	TEMPORARY TRAFFIC BARRIER		CRASH CUSHION
• • •	TEMPORARY CHANNELIZING DEVICE		WARNING LIGHT
⇦	DIRECTION OF TRAVEL		TRAFFIC SIGN LOCATION
//////	PAVEMENT MARKING REMOVAL		TYPE III BARRICADE
●——	TRAFFIC SIGNAL	——▬	LUMINAIRE (LIGHTING OPTIONAL)

NOTE: TRAFFIC CONTROL ORIENTATION DIFFERS FROM OTHER LAYOUT SHEETS FOR CLARITY.

PROJECT NAME: NEWFANE
PROJECT NUMBER: BF 0106(6)

FILE NAME: sl3j306tmptrf.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: C. BURRALL
BRIDGE CLOSURE TRAFFIC PLAN

PLOT DATE: 05-JUN-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: C. BURRALL
SHEET 9 OF 39



GRIMES HILL RD
INLET #3 AND PIPE #3 PROFILE

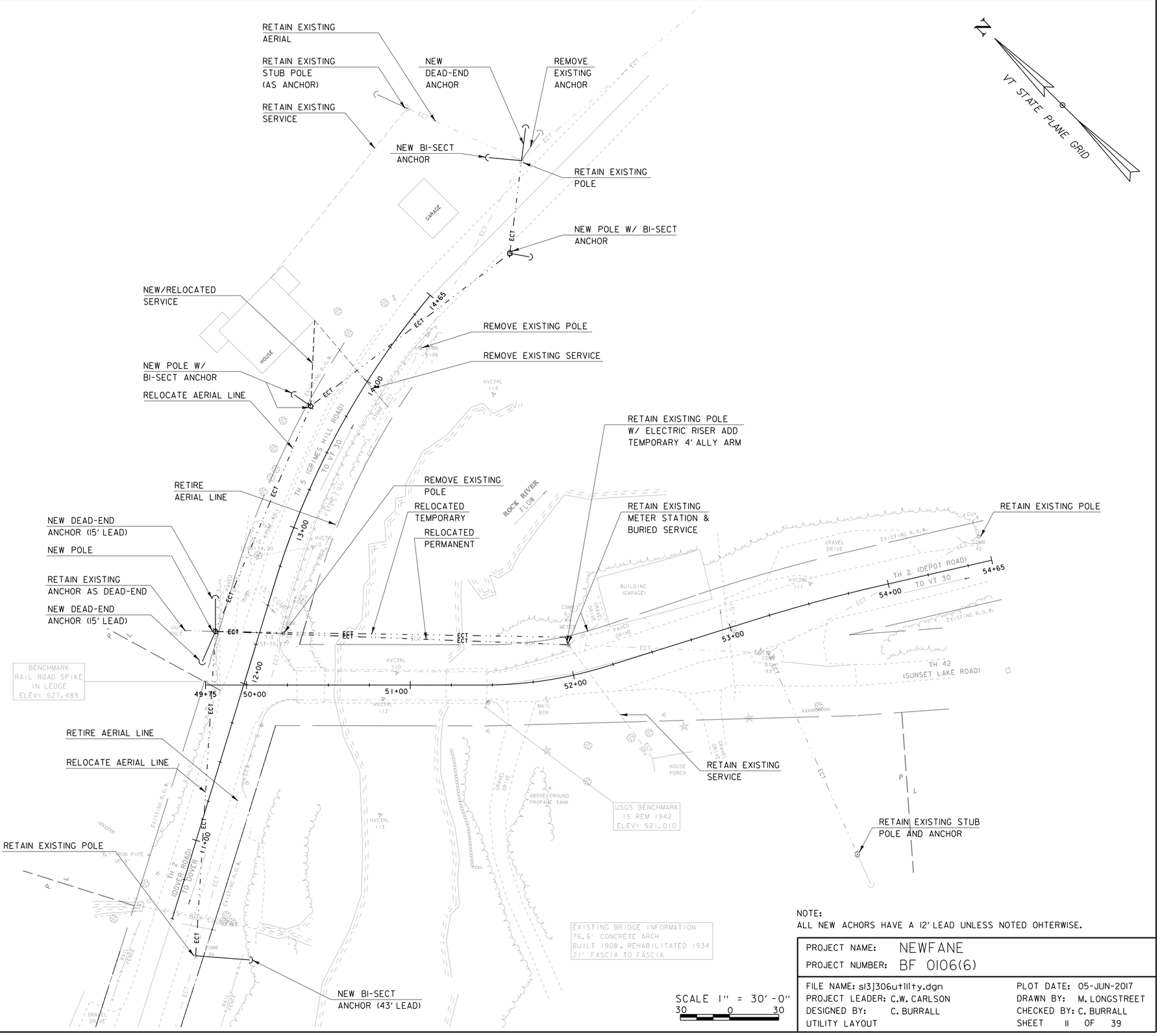
NOTE:

SEE "DEPOT ROAD CROSS SECTIONS 2" STA 51+50
FOR INLET 1-2 AND PIPE 1-2 PROFILE DETAILS.

PROJECT NAME: NEWFANE
PROJECT NUMBER: BF 0106(6)

FILE NAME: sl3j306xs.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: C. BURRALL
DRAINAGE PROFILE

PLOT DATE: 05-JUN-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: C. BURRALL
SHEET 10 OF 39



NOTE:
ALL NEW ACHORS HAVE A 12' LEAD UNLESS NOTED OHTERWISE.

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BF 0106(6)
FILE NAME: sl3j306utility.dgn	PLOT DATE: 05-JUN-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: C. BURRALL	CHECKED BY: C. BURRALL
UTILITY LAYOUT	SHEET 11 OF 39

4" YELLOW LINE, (DOUBLE CL)
DOVER STA 11+00.00 - 11+71.00 CL
GRIMES STA 12+35.00 - 13+00.00 CL
DEPOT STA 52+00.00 - 53+00.00 CL

4" WHITE LINE
DEPOT STA 50+04.33 RT - 52+00.00 RT
DEPOT STA 50+19.29 LT - 53+00.00 LT

4" WHITE LINE
(HATCHED BRIDGE SHOULDERS)
DEPOT STA 50+04.33 RT - 51+56.20 RT
DEPOT STA 50+19.29 LT - 51+56.20 LT

24" STOP BAR
GRIMES STA 12+36.00 LT
DOVER STA 11+71.00 RT

18" YEILD LINE
DEPOT STA 52+00.00 LT

N
VT STATE PLANE GRID

ONE LANE BRIDGE N (W5-3)
GRIMES 12+75

STOP N (R1-1)
GRIMES 12+54

Grimes Hill RD R

Grimes Hill RD N

STOP N (R1-1)
DOVER STA 11+67

ONE LANE BRIDGE N (W5-3)
DOVER STA 11+42

STOP R
ONE LANE BRIDGE R

ONE LANE BRIDGE R

RT 30 R
So Newfane R
Williamsville R

RT 30 N
So Newfane N
Williamsville N

YIELD N (R1-2)
TO ONCOMING TRAFFIC N (R1-2aP)
DEPOT 52+03

ONE LANE BRIDGE N (W5-3)
DEPOT 51+57

ROCK RIVER FLOW

TH 5 (GRIMES HILL ROAD) TO VT 30

TH 2 (DEPOT ROAD) TO VT 30

TH 42 (SUNSET LAKE ROAD)

49+75 50+00 51+00 52+00 53+00 54+00 54+65

11+00 12+00

TH 2 (DOVER ROAD) TO DOVER

Depot RD TH2 R
Dover RD TH2 R

Depot RD TH2 N
Dover RD TH2 N

YIELD TO BRIDGE TRAFFIC R
ONE LANE BRIDGE R

PROPERTY OWNER'S SIGN RET

TRUCKS ENTERING R

TRUCKS ENTERING N

NOTE:
ALL SIGNS OUTSIDE THE LIMITS OF CONSTRUCTION THAT ARE NOT LABELD ARE TO BE RETAINED

EXISTING SIGNS

NEW SIGNS

OPTION 2: STOP DOVER
YEILD DEPOT
STOP GRIMES

N = NEW
R = REMOVE
S = SALVAGE
RET = RETAIN
R&S = REMOVE AND SALVAGE

SCALE 1" = 20'-0"
20 0 20

PROJECT NAME: NEWFANE
PROJECT NUMBER: BF 0106(6)

FILE NAME: sl3j306bdrtraf.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: C. BURRALL
SIGNS & PAVEMENT MARKINGS OPTION 2

PLOT DATE: 05-JUN-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: C. BURRALL
SHEET 12 OF 39

SOIL CLASSIFICATION

AASHTO

A1	Gravel and Sand
A3	Fine Sand
A2	Silty or Clayey Gravel and Sand
A4	Silty Soil - Low Compressibility
A5	Silty Soil - Highly Compressible
A6	Clayey Soil - Low Compressibility
A7	Clayey Soil - Highly Compressible

ROCK QUALITY DESIGNATION

R.Q.D. (%)	ROCK DESCRIPTION
<25	Very Poor
25 to 50	Poor
51 to 75	Fair
76 to 90	Good
>90	Excellent

SHEAR STRENGTH

UNDRAINED SHEAR STRENGTH IN P.S.F.	CONSISTENCY
<250	Very Soft
250-500	Soft
500-1000	Med. Stiff
1000-2000	Stiff
2000-4000	Very Stiff
>4000	Hard

CORRELATION GUIDE OF "N" TO DENSITY/CONSISTENCY

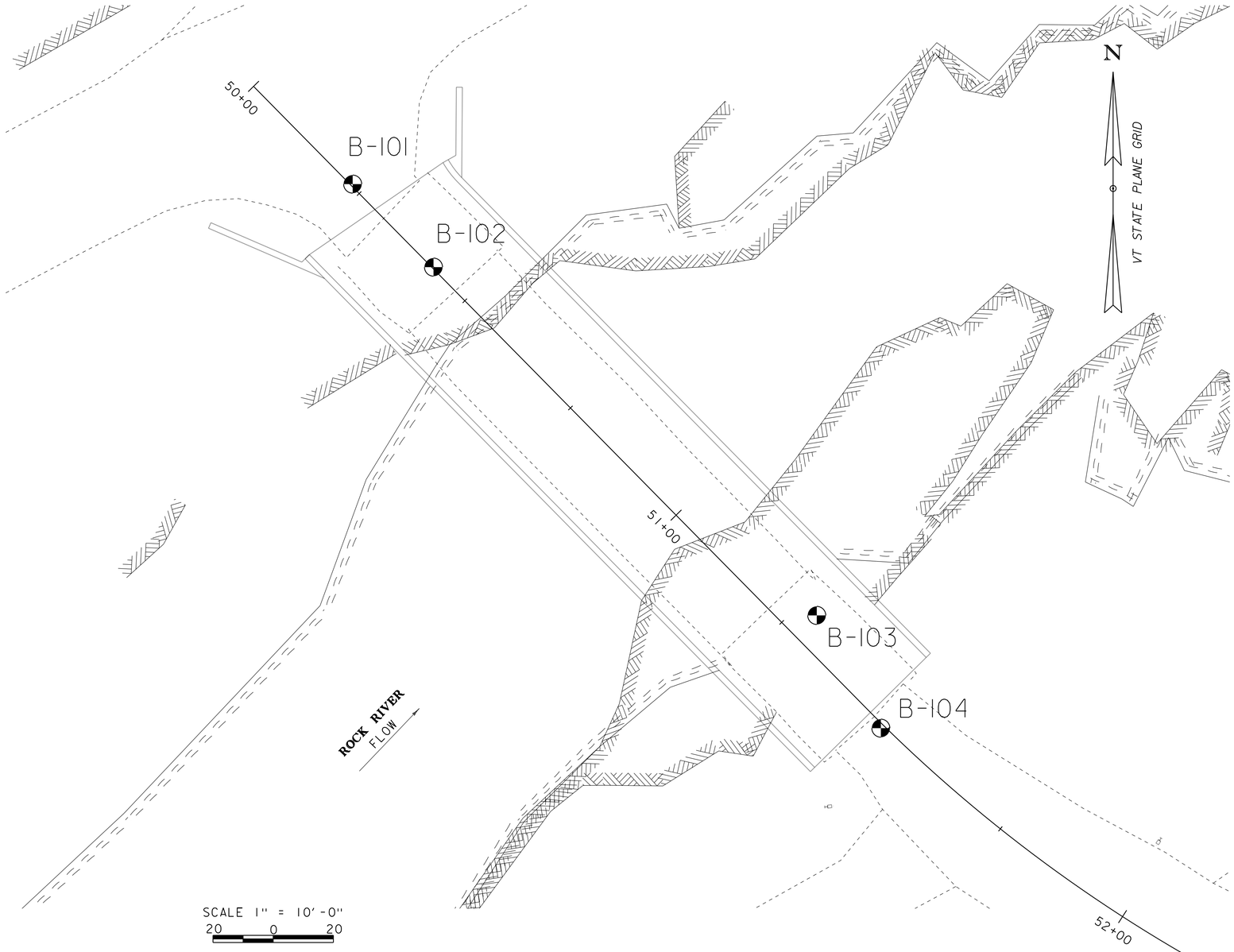
DENSITY (GRANULAR SOILS) N	DESCRIPTIVE TERM	CONSISTENCY (COHESIVE SOILS) N	DESCRIPTIVE TERM
<5	Very Loose	<2	Very Soft
5-10	Loose	2-4	Soft
11-24	Med. Dense	5-8	Med. Stiff
25-50	Dense	9-15	Stiff
>50	Very Dense	16-30	Very Stiff
		31-60	Hard
		>60	Very Hard

COMMONLY USED SYMBOLS

▼	Water Elevation
⊗	Standard Penetration Boring
⊕	Auger Boring
⊙	Rod Sounding
S	Sample
N	Standard Penetration Test Blow Count Per Foot For: 2" O.D. Sampler 1 3/8" I.D. Sampler Hammer Weight Of 140 Lbs. Hammer Fall Of 30"
VS	Field Vane Shear Test
US	Undisturbed Soil Sample
B	Blast
DC	Diamond Core
MD	Mud Drill
WA	Wash Ahead
HSA	Hollow Stem Auger
AX	Core Size 1 1/8"
BX	Core Size 1 5/8"
NX	Core Size 2 1/8"
M	Double Tube Core Barrel Used
LL	Liquid Limit
PL	Plastic Limit
PI	Plasticity Index
NP	Non Plastic
w	Moisture Content (Dry Wgt. Basis)
D	Dry
M	Moist
MTW	Moist To Wet
W	Wet
Sat	Saturated
Bo	Boulder
Gr	Gravel
Sa	Sand
Si	Silt
Cl	Clay
HP	Hardpan
Le	Ledge
NLTD	No Ledge To Depth
CNPF	Can Not Penetrate Further
TLOB	Top of Ledge Or Boulder
NR	No Recovery
Rec.	Recovery
%Rec.	Percent Recovery
RQD	Rock Quality Designation
CBR	California Bearing Ratio
<	Less Than
>	Greater Than
R	Refusal (N > 100)
VTSPG	NAD83 - See Note 7

COLOR

blk	Black	pnk	Pink
bl	Blue	pu	Purple
brn	Brown	rd	Red
dk	Dark	tn	Tan
gry	Gray	wh	White
gn	Green	yel	Yellow
lt	Light	mltc	Multicolored
or	Orange		



DEFINITIONS (AASHTO)

BEDROCK (LEDGE) - Rock in its native location of indefinite thickness.

BOULDER - A rock fragment with an average dimension > 12 inches.

COBBLE - Rock fragments with an average dimension between 3 and 12 inches.

GRAVEL - Rounded particles of rock < 3" and > 0.0787" (#10 sieve).

SAND - Particles of rock < 0.0787" (#10 sieve) and > 0.0029" (#200 sieve).

SILT - Soil < 0.0029" (#200 sieve), non or slightly plastic and exhibits no strength when air-dried.

CLAY - Fine grained soil, exhibits plasticity when moist and considerable strength when air-dried.

VARVED - Alternate layers of silt and clay.

HARDPAN - Extremely dense soil, cemented layer, not softened when wet.

MUCK - Soft organic soil (containing > 10% organic material.

MOISTURE CONTENT - Weight of water divided by dry weight of soil.

FLOWING SAND - Granular soil so saturated (loose) that it flows into drill casing during extraction of wash rod.

STRIKE - Angle from magnetic north to line of intersection of bed with a horizontal plane.

DIP - Inclination of bed with a horizontal plane.

1. The subsurface explorations shown herein were made between June 22 and June 30, 2015 by the Agency.

2. Soil and rock classifications, properties and descriptions are based on engineering interpretation from available subsurface information by the Agency and may not necessarily reflect actual variations in subsurface conditions that may be encountered between individual boring or sample locations.

3. Observed water levels and/or conditions indicated are as recorded at the time of exploration and may vary according to the prevailing rainfall, methods of exploration and other factors.

GENERAL NOTES

4. Engineering judgment was exercised in preparing the subsurface information presented herein. Analysis and interpretation of subsurface data was performed and interpreted for Agency design and estimating purposes. Presentation of the information in the Contract is intended to provide the Contractor access to the same data available to the Agency. The subsurface information is presented in good faith and is not intended as a substitute for personal investigation, independent interpretation, independent analysis or judgment by the Contractor.

5. Pictorial structure details shown on the boring plan layout or soils profile are for illustrative purposes only and may not accurately portray final contract details.

6. Terminology used on boring logs to describe the hardness, degree of weathering, and spacing of fractures, joints and other discontinuities in the bedrock is defined in the AASHTO Manual on Subsurface Investigations, 1988.

7. Northing and Easting coordinates are shown in Vermont State Plane Grid North American Datum 1983 in meters and survey feet.

BORING CHART

HOLE NUMBER	STATION	OFFSET	NORTHING	EASTING	ELEVATION
B-101	50+23.12	-0.33	163305.11	1593357.33	493.75
B-102	50+42.37	-0.22	163291.32	1593370.76	505.45
B-103	51+28.26	-4.96	163233.47	1593434.43	497.31
B-104	51+49.07	0.64	163214.74	1593445.08	506.02

PROJECT NAME: NEWFANE

PROJECT NUMBER: BF 0106(6)

FILE NAME: sl3j306bor.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: C. BURRALL
BORING INFORMATION SHEET

PLOT DATE: 05-JUN-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: C. BURRALL
SHEET 13 OF 39

STATE OF VERMONT
AGENCY OF TRANSPORTATION
CONSTRUCTION AND
MATERIALS BUREAU
CENTRAL LABORATORY

BORING LOG

NEWFANE
BF 0106(6)
TH-2 BR-12

Boring No.: **B-101**
Page No.: 1 of 1
Pin No.: 13J306
Checked By: TDE

Boring Crew: JUDKINS, HOOK
Date Started: 6/24/15 Date Finished: 6/29/15
VTSPG NAD83: N 163305.11 ft E 1593357.33 ft
Station: 40+24 Offset: 0.27LT
Ground Elevation: 521.55 ft

	Casing	Sampler
Type:	WB	SS
I.D.:	4 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig:	CME 55 TRACK	C_e = 1.46

Groundwater Observations

Date	Depth (ft)	Notes

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Asphalt Pavement, 0.0 ft - 0.75 ft								
		A-1-b, GrSa, brn, Moist, Rec. = 1.1 ft				15-22-12-8 (34)	9.0	36.6	47.4	16.0
		Field Note:, Cleaned out with roller cone								
5		Visual Description:, Broken Rock with sand, red-brn, MTW, Rec. = 0.3 ft				2-2-2-5 (4)	9.6			
		Field Note:, NXDC, Cleaned out casing. Appears to be Concrete and Broken Rock								
10		A-1-a, SaGr, Lt/gry, Moist, Rec. = 0.7 ft				19-35-R@0.0" (R)	11.5	44.4	40.5	15.1
		Field Note:, NXDC, Cleaned out casing. Appears to be Concrete and Broken Rock								
15		Field Note:, Appears to be Concrete & Broken Rock				R@1.0" (R)				
		Field Note:, NXDC, Cleaned out casing. Appears to be Concrete and Broken Rock								
20		Field Note:, No Movement				R@1.0" (R)				
		Field Note:, Cleaned out casing, NXDC								
		22.8 ft - 27.8 ft, Fill & Concrete. NXMDC	1	20	3 3 3 1 3					
25										
		27.8 ft - 32.8 ft, Dark gray, To black porphyritic AMPHIBOLITE, with rust staining on joints. Hard, Very slightly weathered, Poor rock, NXMDC, RMR = 22	2 (75)	20 (0)	2 9 6 8 5	Top of Bedrock @ 27.8 ft				
30										
		32.8 ft - 37.8 ft, Dark gray, To black porphyritic AMPHIBOLITE, with rust staining on joints. Hard, Very slightly weathered, Fair rock, NXMDC, RMR = 43	3 (75)	96 (71)	2 3 3 2 2					
35										
		Hole stopped @ 37.8 ft								

TOP OF BEDROCK
EL=493.75

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. C is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 NEWFANE BF 0106(6).GPJ VERMONT AOT.GDT 7/30/15

STATE OF VERMONT
AGENCY OF TRANSPORTATION
CONSTRUCTION AND
MATERIALS BUREAU
CENTRAL LABORATORY

BORING LOG

NEWFANE
BF 0106(6)
TH-2 BR-12

Boring No.: **B-102**
Page No.: 1 of 1
Pin No.: 13J306
Checked By: TDE

Boring Crew: JUDKINS, HOOK
Date Started: 6/25/15 Date Finished: 6/29/15
VTSPG NAD83: N 163291.32 ft E 1593370.76 ft
Station: 40+44 Offset: 0.23LT
Ground Elevation: 521.45 ft

	Casing	Sampler
Type:	WB	SS
I.D.:	4 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig:	CME 55 TRACK	C_e = 1.46

Groundwater Observations

Date	Depth (ft)	Notes

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Asphalt Pavement, 0.0 ft - 0.52 ft								
		A-1-b, GrSa, orange-brn, Moist, Rec. = 1.7 ft				30-20-18-12 (38)	6.9	45.5	40.8	13.7
		Field Note:, NXDC, Cleaned out casing								
5		Field Note:, No Recovery, Appears to be gravelly sand				6-3-2-2 (5)				
		Field Note:, NXDC, Cleaned out casing								
10		Visual Description:, Broken Rock with sand, blk-brn, Moist, Rec. = 0.2 ft				R@2.5" (R)	8.7			
		Field Note:, NXDC, Cleaned out casing. Appears to be weathered rock								
15		Visual Description:, Broken Rock with sand, gry-brn, Moist, Rec. = 0.2 ft				R@2.5" (R)	11.7			
		Field Note:, NXDC, Cleaned out casing								
		16.0 ft - 21.0 ft, Light gray, Strongly foliated amphibole-mica-SCHIST, with rust staining on joints. Medium hard, Moderately weathered, Poor rock, NXMDC, RMR = 22	1 (70)	34 (0)	2 2 3 3 3	Top of Bedrock @ 16.0 ft				
20										
		21.0 ft - 21.6 ft, Tan, Strongly foliated amphibole-mica-SCHIST, with rust on joints. Medium hard, Moderately weathered 21.6 ft - 22.8 ft, Light gray, Strongly foliated amphibole-mica-SCHIST, with rust on joints. Hard, Slightly weathered 22.8 ft - 26.0 ft, Dark gray, Porphyritic AMPHIBOLITE, with rust on joints. Hard, Very slightly weathered, Poor rock, NXMDC, RMR = 36	2 (70-75)	98 (37)	2 2 3 3 3					
25										
		Hole stopped @ 26.0 ft								

Remarks:
Hole collapsed at 14.0 ft.

TOP OF BEDROCK
EL=505.45

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. C is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 NEWFANE BF 0106(6).GPJ VERMONT AOT.GDT 7/30/15

PROJECT NAME: NEWFANE
PROJECT NUMBER: BF 0106(6)

FILE NAME: sl3j306bor.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: C. BURRALL
BORING LOGS SHEET 1

PLOT DATE: 05-JUN-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: C. BURRALL
SHEET 14 OF 39

STATE OF VERMONT
AGENCY OF TRANSPORTATION
CONSTRUCTION AND
MATERIALS BUREAU
CENTRAL LABORATORY

BORING LOG

NEWFANE
BF 0106(6)
TH-2 BR-12

Boring No.: **B-103**
Page No.: 1 of 1
Pin No.: 13J306
Checked By: TDE

Boring Crew: JUDKINS, HOOK
Date Started: 6/22/15 Date Finished: 6/25/15
VTSPG NAD83: N 163233.47 ft E 1593434.43 ft
Station: 41+25 Offset: 5.29LT
Ground Elevation: 521.01 ft

	Casing	Sampler
Type:	WB	SS
I.D.:	4 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig:	CME 55 TRACK	C_e = 1.46

Groundwater Observations

Date	Depth (ft)	Notes

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Asphalt Pavement, 0.0 ft - 0.68 ft								
		A-1-b, GrSa, brn, Moist, Rec. = 1.2 ft				12-10-22-9 (32)	7.4	43.7	44.4	11.9
		Field Note:, NXDC, Cleaned out casing								
5		Visual Description:, Broken Rock (washed), orange-brn, Moist, Rec. = 0.4 ft				5-1-2-1 (3)	5.5			
		Field Note:, Cleaned out casing, NXDC								
10		Visual Description:, Concrete & Broken Rock pieces, gry, Moist, Rec. = 0.1 ft				R@1.0" (R)				
		11.2 ft - 16.2 ft, Concrete, steel, and rock fill. NXMDC	1	82	5 2 2 5 5					
15		16.2 ft - 16.8 ft, Rock fill. NXMDC 16.8 ft - 18.2 ft, Concrete 18.2 ft - 19.3 ft, Rock fill 19.3 ft - 19.6 ft, Concrete 19.6 ft - 21.2 ft, Rock fill	2	100	3 3 4 3 5					
20		21.2 ft - 22.1 ft, Concrete & Rock								
		22.1 ft - 23.7 ft, Concrete filled joints and rock	3		2					
		NXMDC 23.7 ft - 27.1 ft, Gray, AMPHIBOLITE, with 80-85 degree dipping joints that have rust and purple staining along surface. Hard, Slightly weathered, Poor rock, RMR = 22	(-)	100 (0)	2 2 2 2	Top of Bedrock @ 23.7 ft				
25		Hole stopped @ 27.1 ft								
30		Remarks: Concrete was encountered at 9.3 ft.								

TOP OF BEDROCK EL=497.31

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. C is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 NEWFANE BF 0106(6).GPJ VERMONT AOT.GDT 7/30/15

STATE OF VERMONT
AGENCY OF TRANSPORTATION
CONSTRUCTION AND
MATERIALS BUREAU
CENTRAL LABORATORY

BORING LOG

NEWFANE
BF 0106(6)
TH-2 BR-12

Boring No.: **B-104**
Page No.: 1 of 1
Pin No.: 13J306
Checked By: TDE

Boring Crew: JUDKINS, HOOK, HULBERT
Date Started: 6/30/15 Date Finished: 6/30/15
VTSPG NAD83: N 163214.74 ft E 1593445.08 ft
Station: 41+45.3 Offset: 0.22RT
Ground Elevation: 521.12 ft

	Casing	Sampler
Type:	WB	SS
I.D.:	4 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig:	CME 55 TRACK	C_e = 1.46

Groundwater Observations

Date	Depth (ft)	Notes

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Asphalt Pavement, 0.0 ft - 0.5 ft								
		A-1-b, GrSa, brn, Moist, Rec. = 1.1 ft				14-12-8-5 (20)	10.6	38.2	48.0	13.8
		Field Note:, Cleaned out casing with roller cone								
5		A-2-4, Sa, Lt/brn, Moist, Rec. = 0.9 ft, Lab Note: Sample was orange colored.				2-2-3-4 (5)	21.4	0.7	80.4	18.9
		Field Note:, NXDC, Cleaned out casing								
10		Visual Description:, Severly weathered rock, Lt/brn, Moist, Rec. = 1.7 ft				19-18-17-22 (35)	20.2			
		Field Note:, NXDC, Cleaned out casing				R@1.0" (R)				
15		Visual Description:, Severly weathered rock, grn-blk, Moist, Rec. = 0.1 ft 15.1 ft - 20.1 ft, Dark gray, Massive AMPHIBOLITE, with vertical rust staining on joints. Hard, Very slightly weathered, Poor rock, NXMDC, RMR = 22	1 (-)	100 (0)	3 5 7 6 4	Top of Bedrock @ 15.1 ft	7.0			
20		20.1 ft - 25.1 ft, Dark gray, AMPHIBOLITE, with rust staining on joints. Hard, Slightly weathered, Poor rock, NXMDC, RMR = 29	2 (70-75)	100 (32)	2 3 8 4 4					
25		Hole stopped @ 25.1 ft								
		Remarks: Hole collapsed at 16.9 ft.								

TOP OF BEDROCK EL=506.02

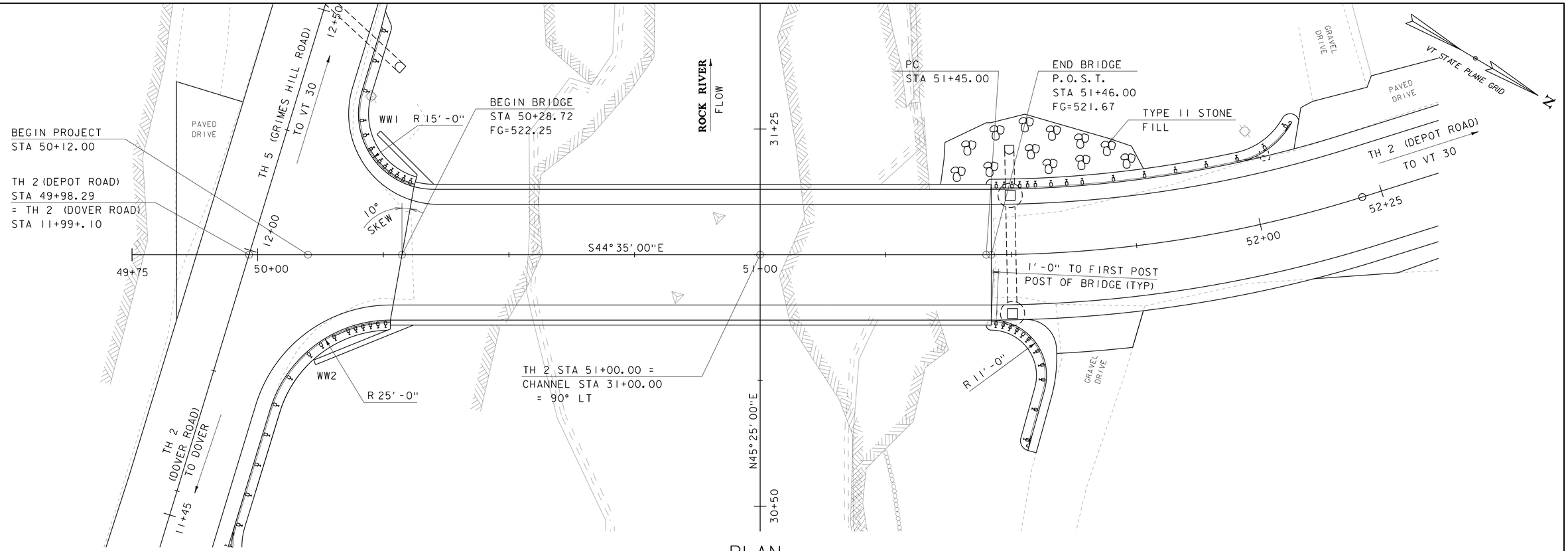
Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. C is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 NEWFANE BF 0106(6).GPJ VERMONT AOT.GDT 7/30/15

PROJECT NAME: NEWFANE
PROJECT NUMBER: BF 0106(6)

FILE NAME: sl3j306bor.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: C. BURRALL
BORING LOGS SHEET 2

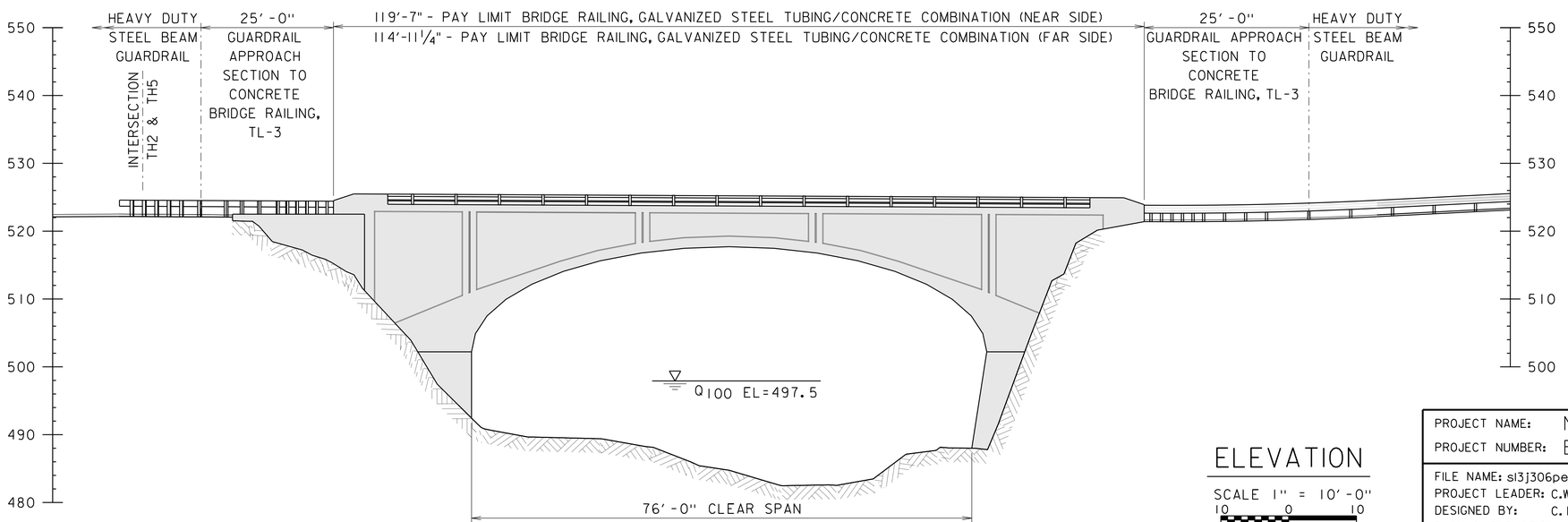
PLOT DATE: 05-JUN-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: C. BURRALL
SHEET 15 OF 39



PLAN

SCALE 1" = 10'-0"

10 0 10

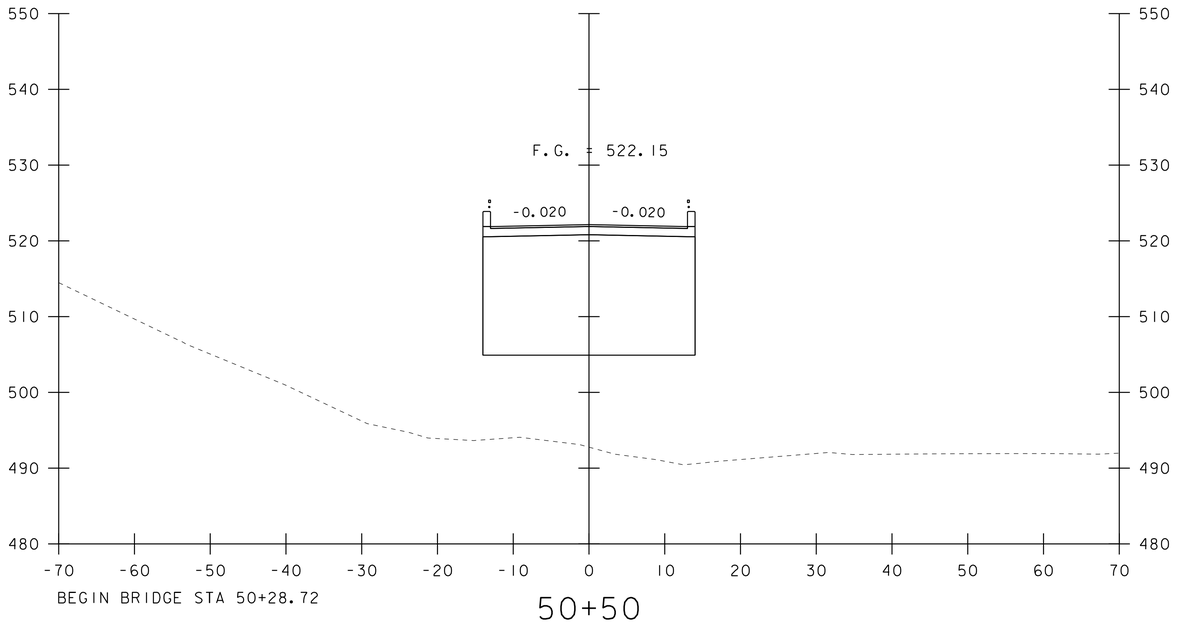


ELEVATION

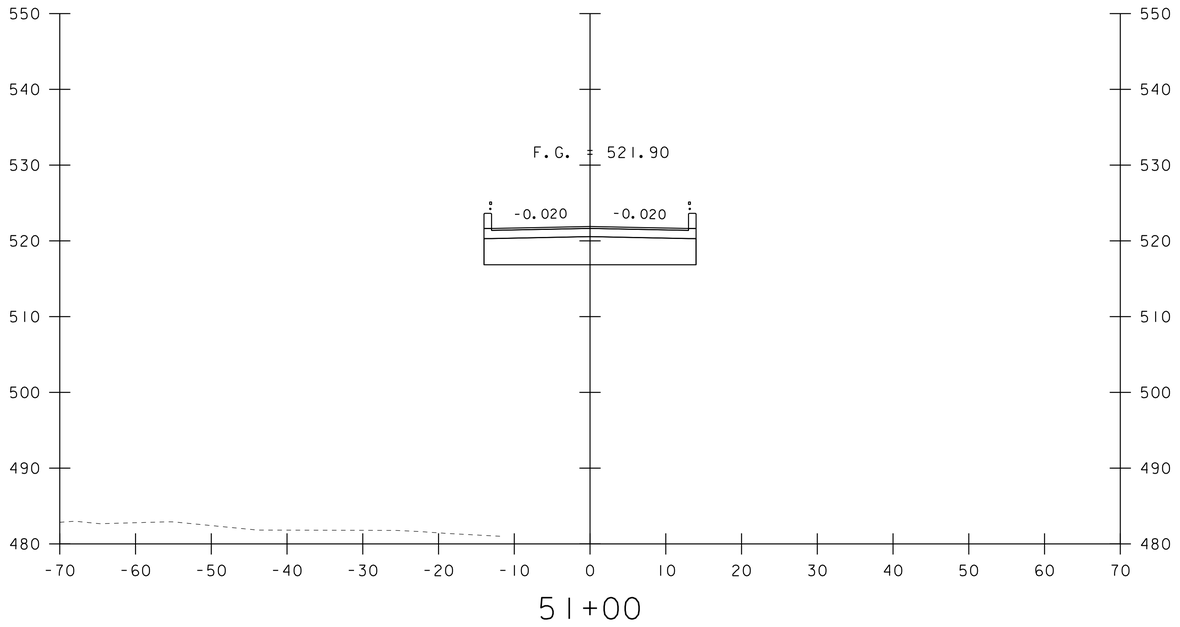
SCALE 1" = 10'-0"

10 0 10

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BF 0106(6)
FILE NAME: sl3j306pe.dgn	PLOT DATE: 05-JUN-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: C. BURRALL	CHECKED BY: C. BURRALL
PLAN & ELEVATION	SHEET 16 OF 39



50+50



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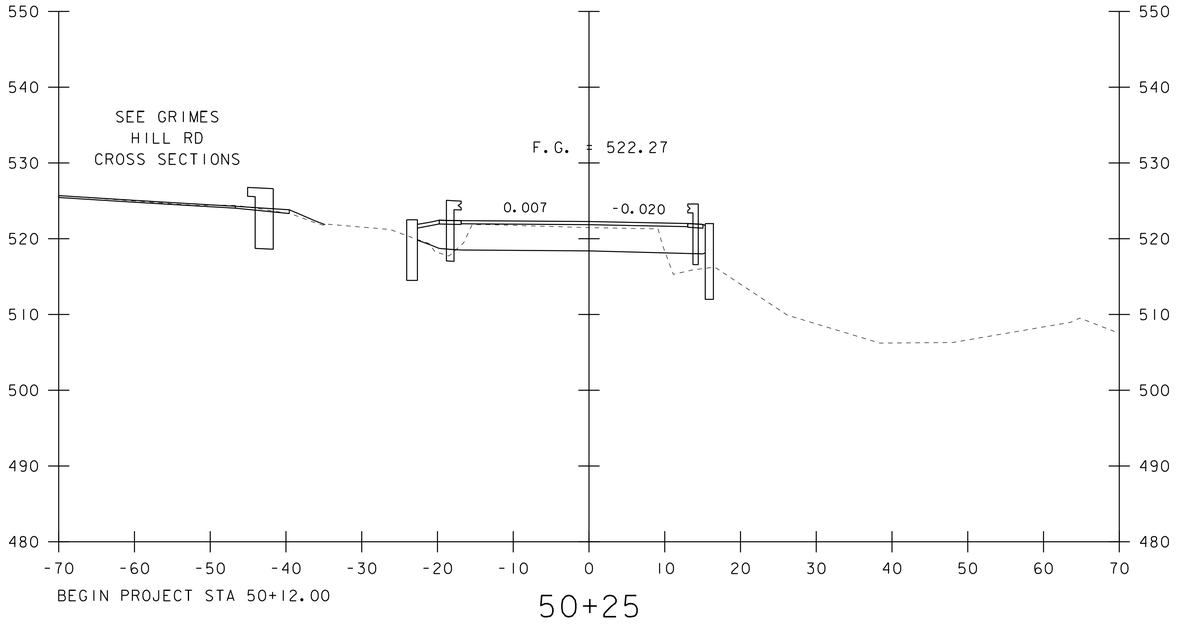

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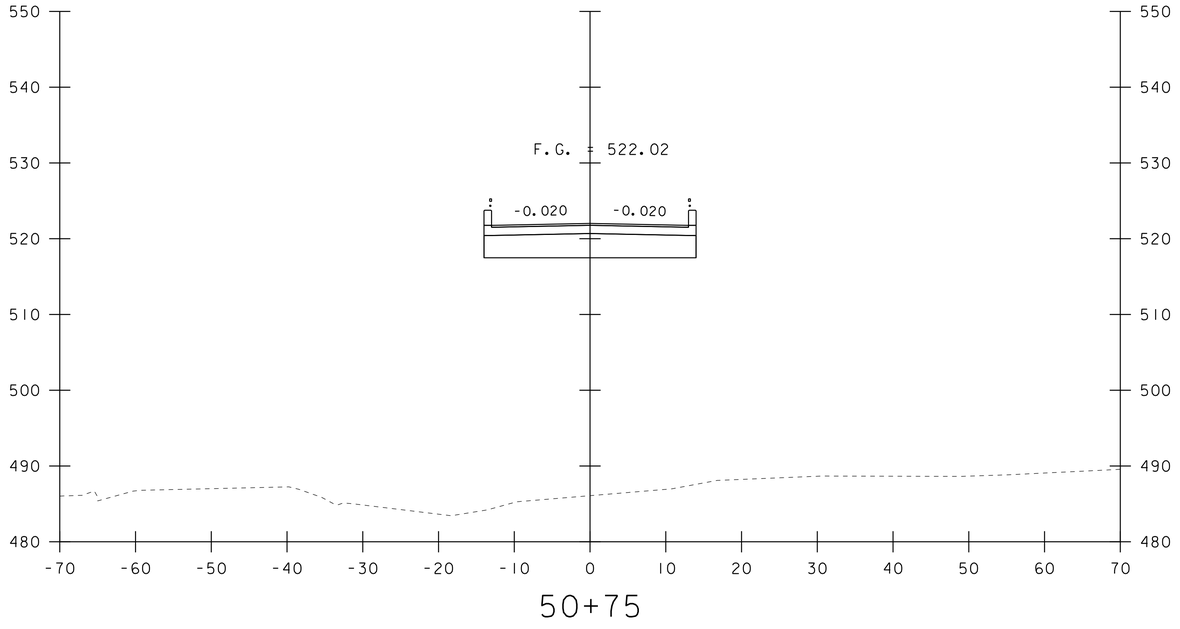


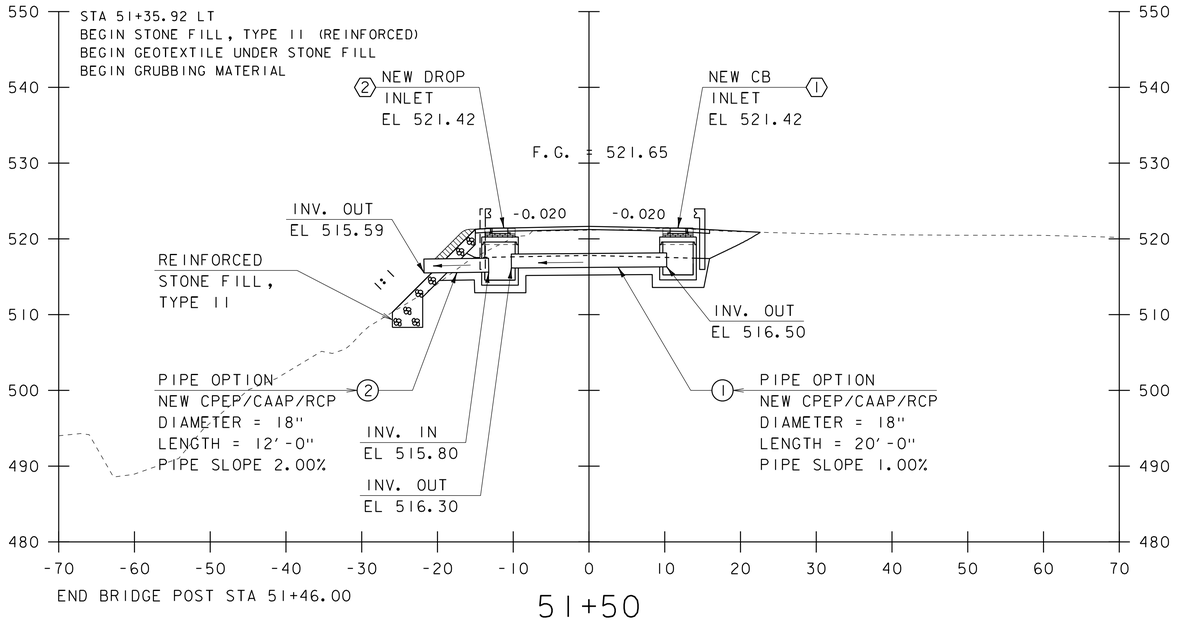
50+75

STA. 50+25 TO STA. 51+00

PROJECT NAME: NEWFANE
PROJECT NUMBER: BF 0106(6)

FILE NAME: sl3j306xs.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: C. BURRALL
DEPOT ROAD CROSS SECTIONS 1

PLOT DATE: 05-JUN-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: C. BURRALL
SHEET 17 OF 39



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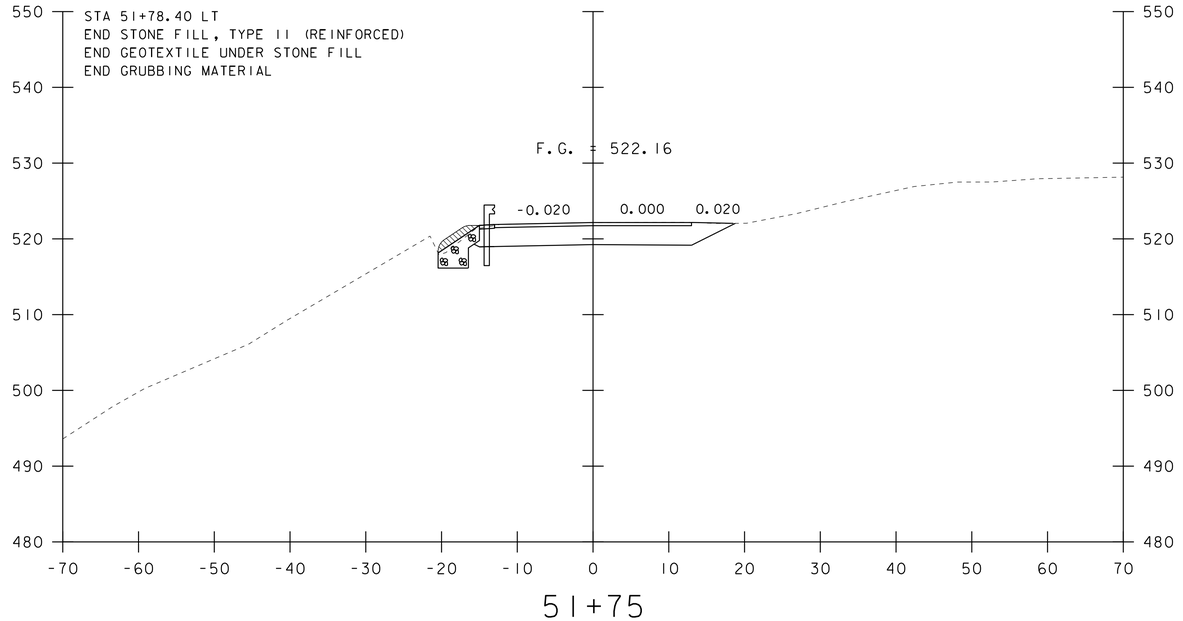

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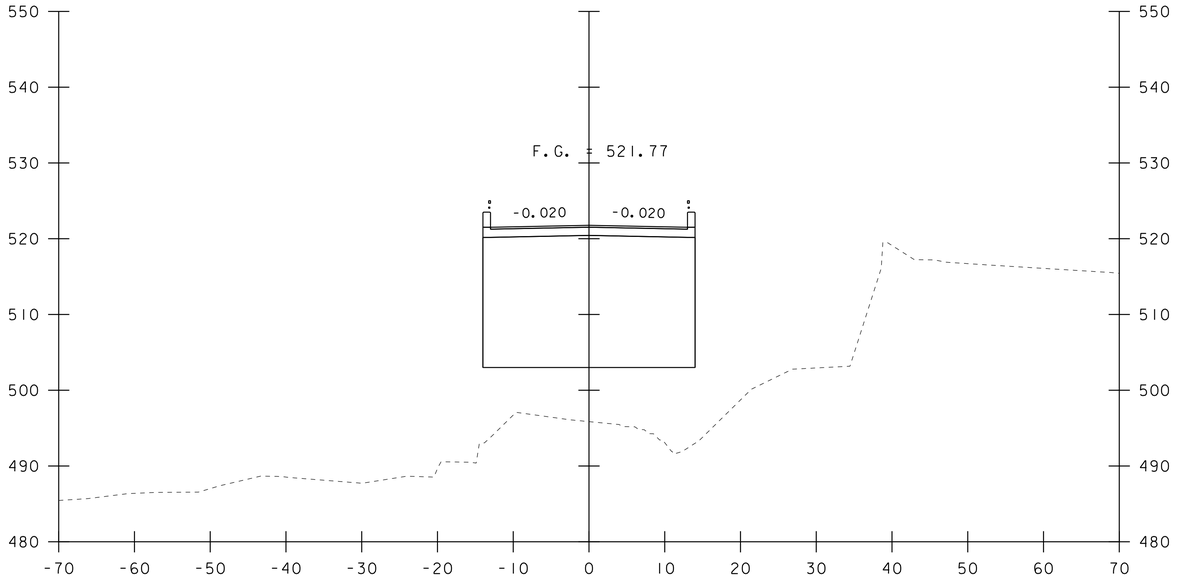

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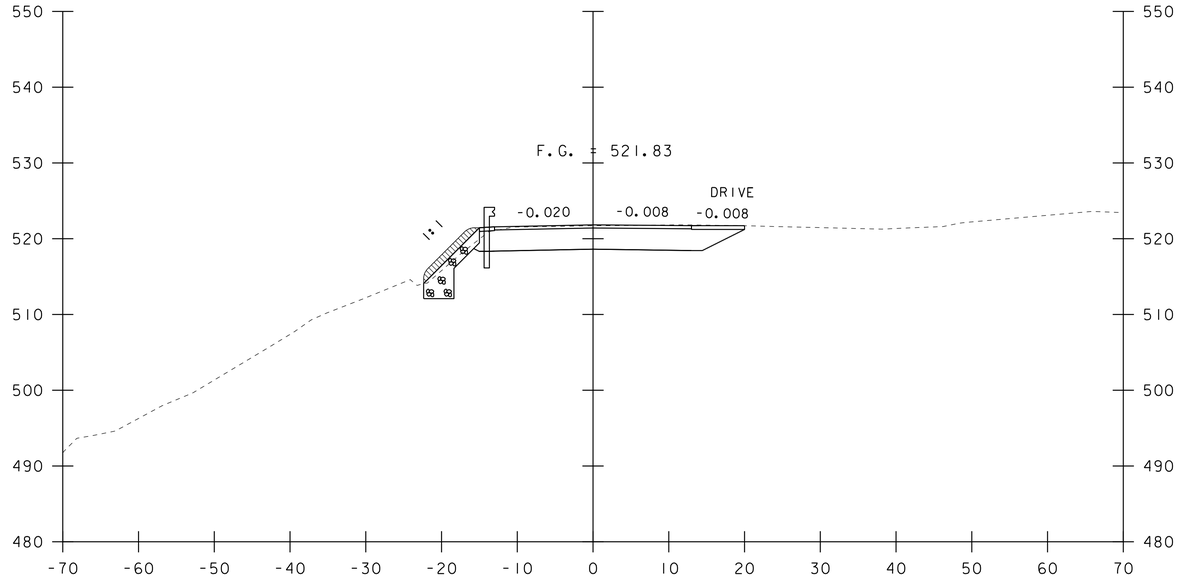
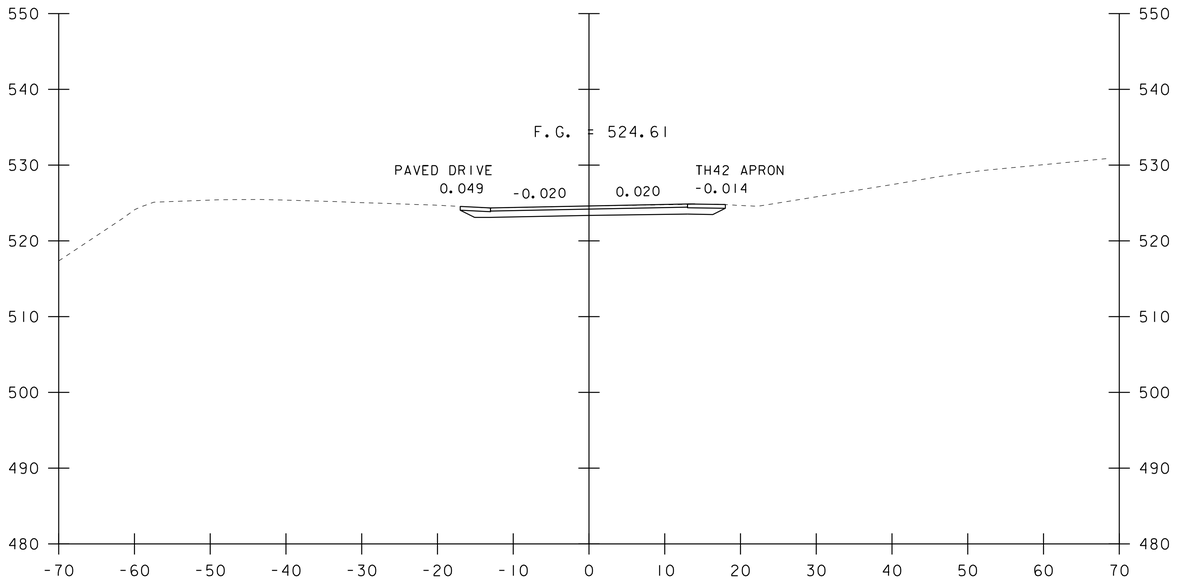


51+65

STA. 51+25 TO STA. 51+75

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BF 0106(6)
FILE NAME: sl3j306xs.dgn	PLOT DATE: 05-JUN-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: C. BURRALL	CHECKED BY: C. BURRALL
DEPOT ROAD CROSS SECTIONS 2	SHEET 18 OF 39



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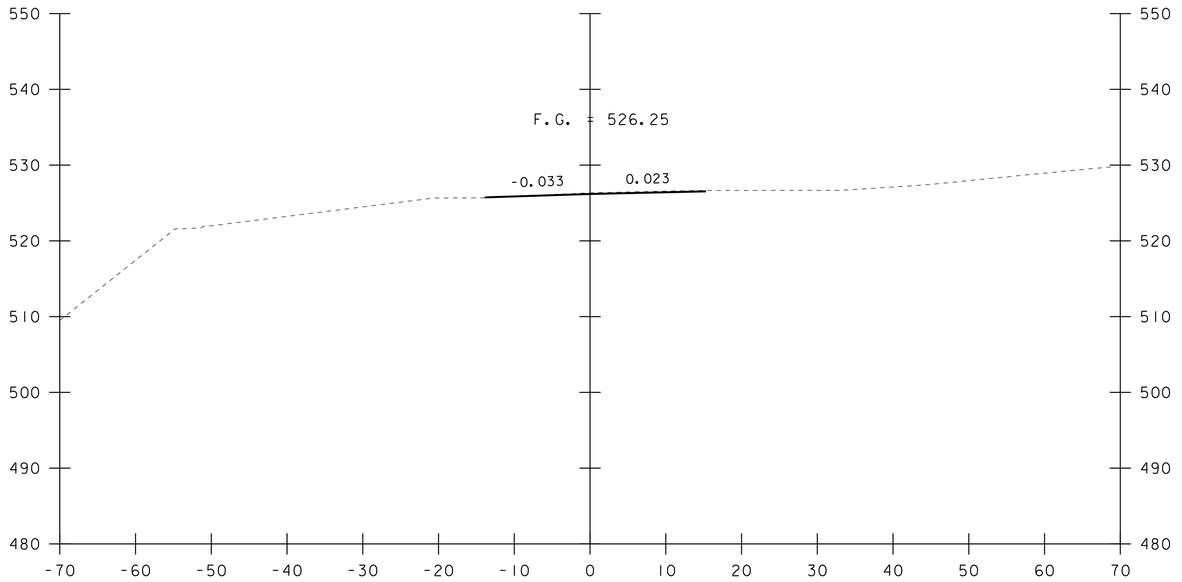

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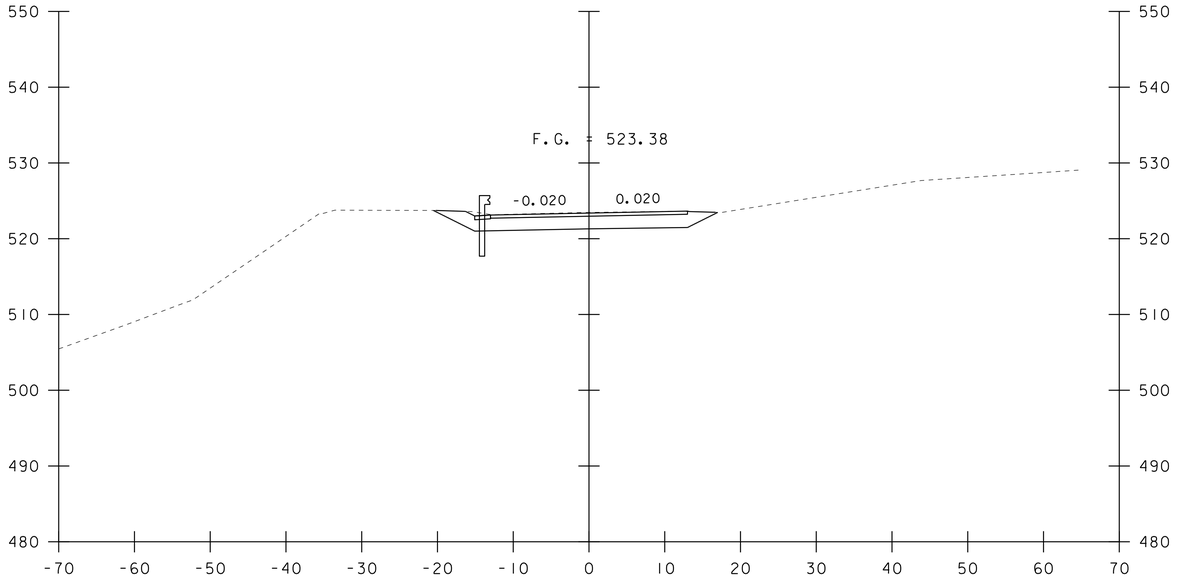

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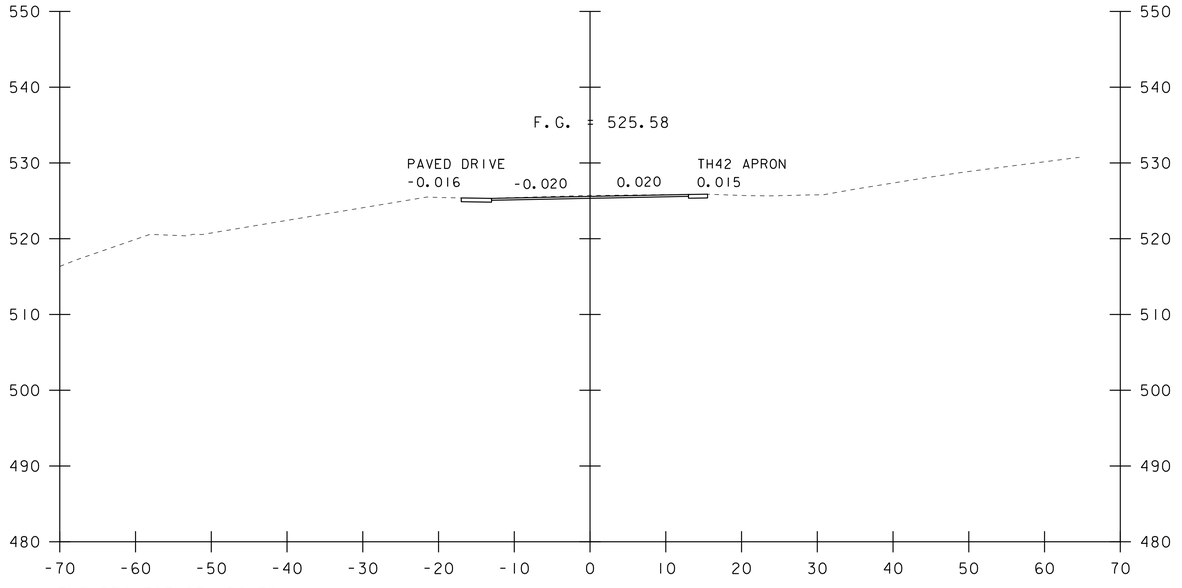


END PROJECT STA 52+50

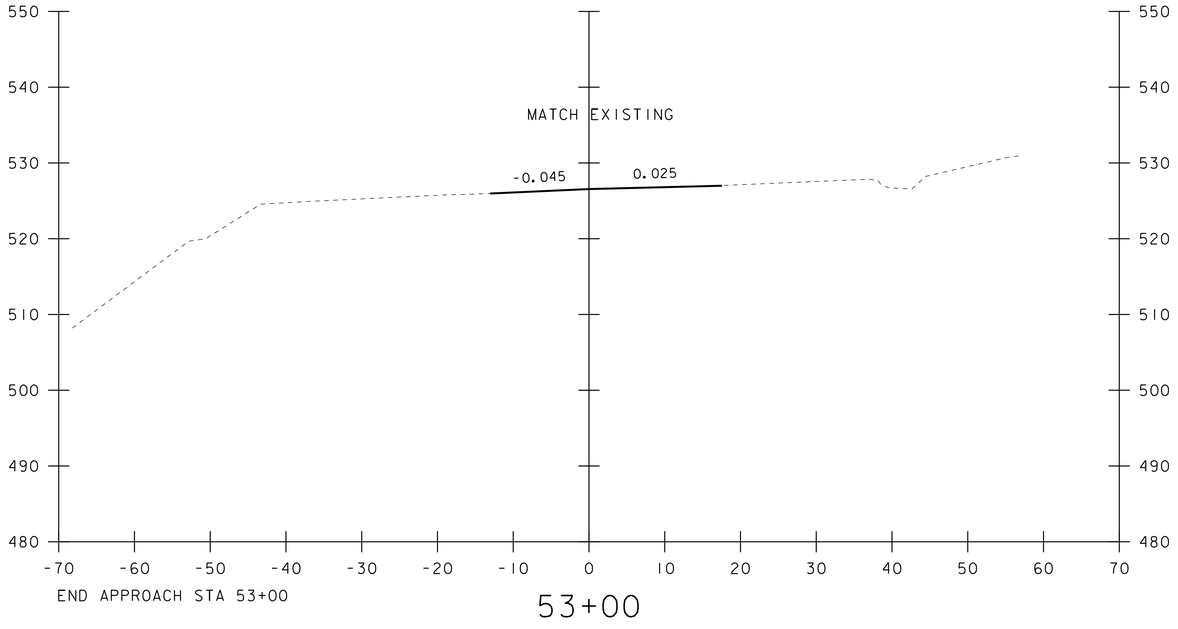
52+50

STA. 52+00 TO STA. 52+75

PROJECT NAME: NEWFANE
PROJECT NUMBER: BF 0106(6)

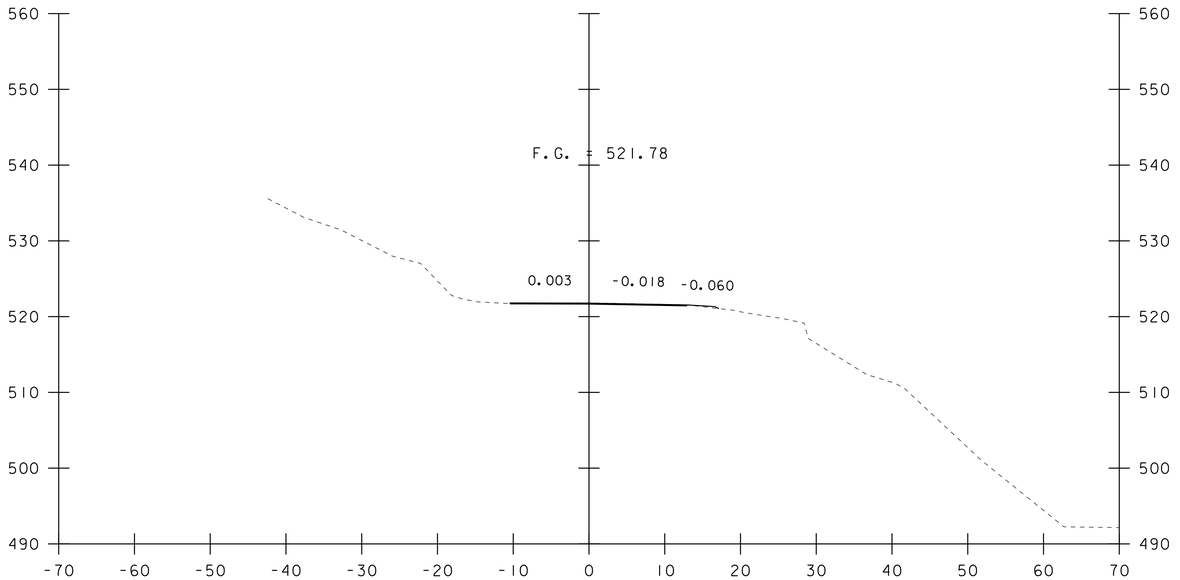
FILE NAME: sl3j306xs.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: C. BURRALL
DEPOT ROAD CROSS SECTIONS 3

PLOT DATE: 05-JUN-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: C. BURRALL
SHEET 19 OF 39

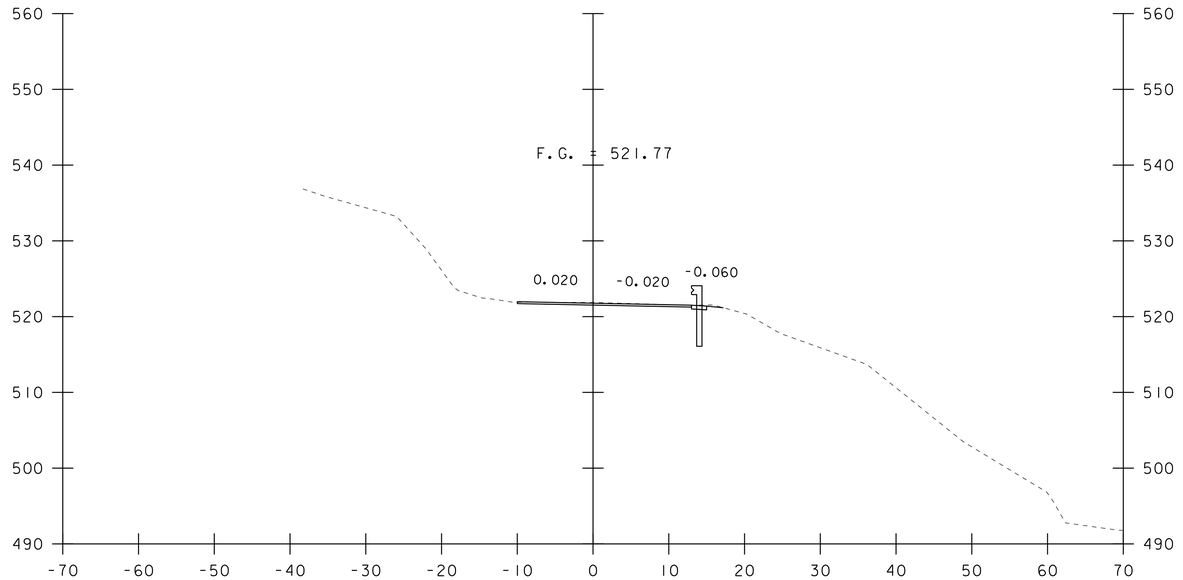


STA. 53+00 TO STA. 53+00

PROJECT NAME: NEWFANE	
PROJECT NUMBER: BF 0106(6)	
FILE NAME: sl3j306xs.dgn	PLOT DATE: 05-JUN-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: C. BURRALL	CHECKED BY: C. BURRALL
DEPOT ROAD CROSS SECTIONS 4	SHEET 20 OF 39



11+25



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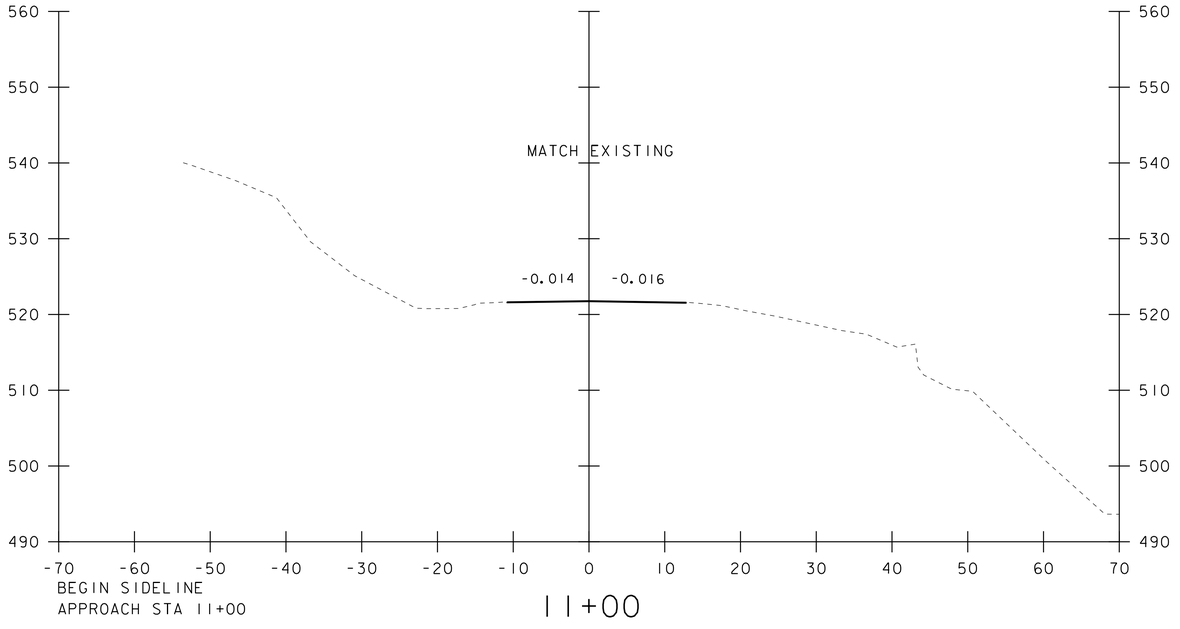
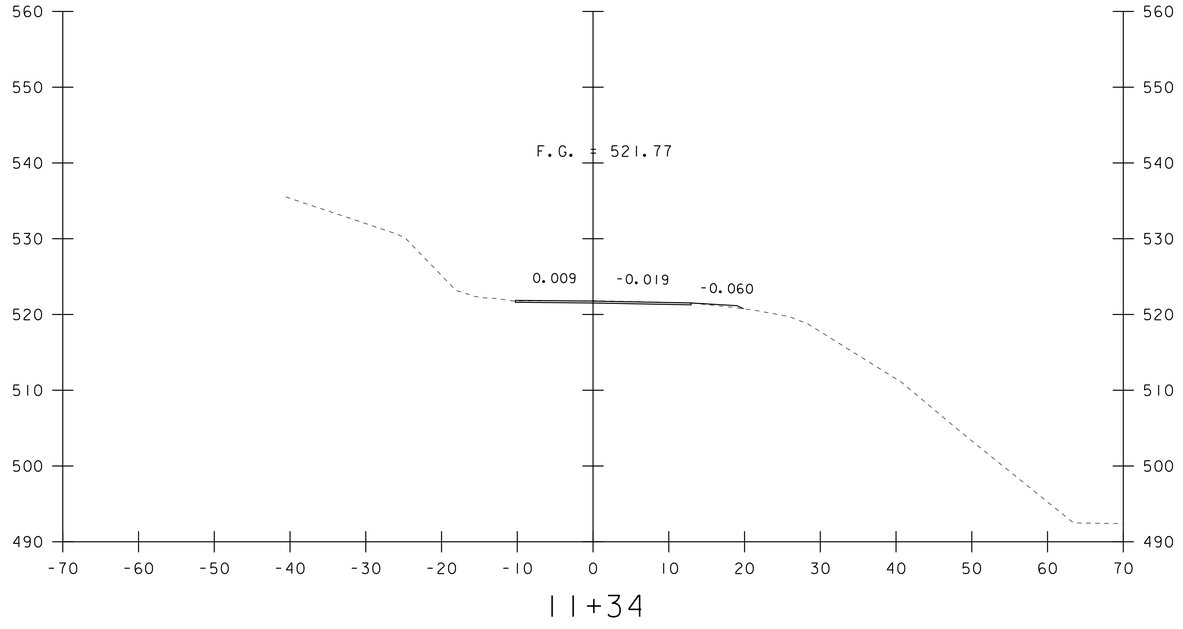


11+00



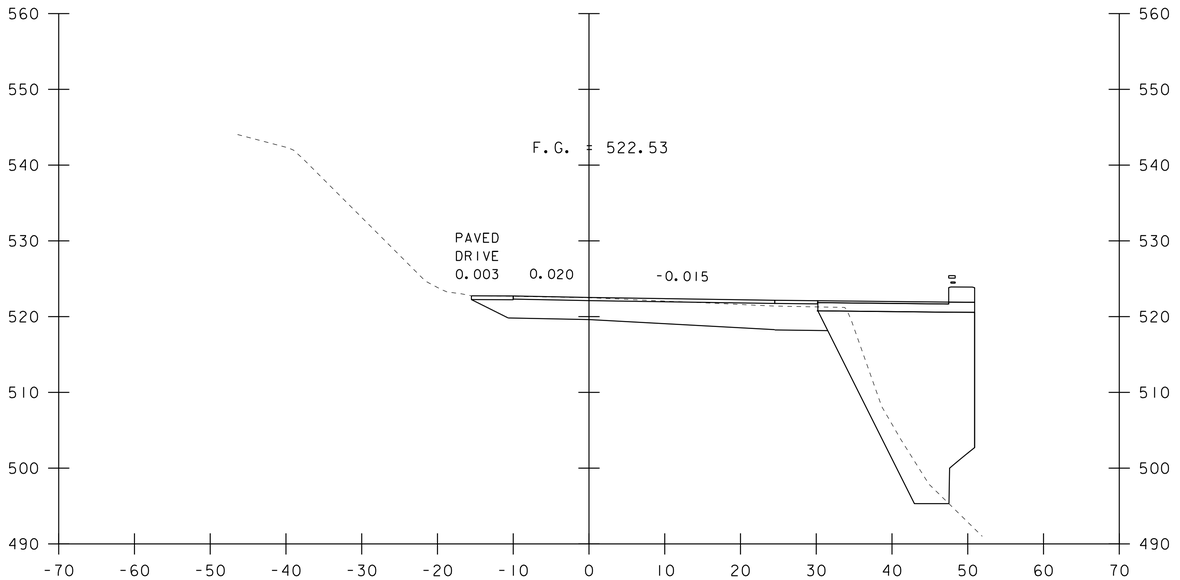
11+34

STA. 11+00 TO STA. 11+50

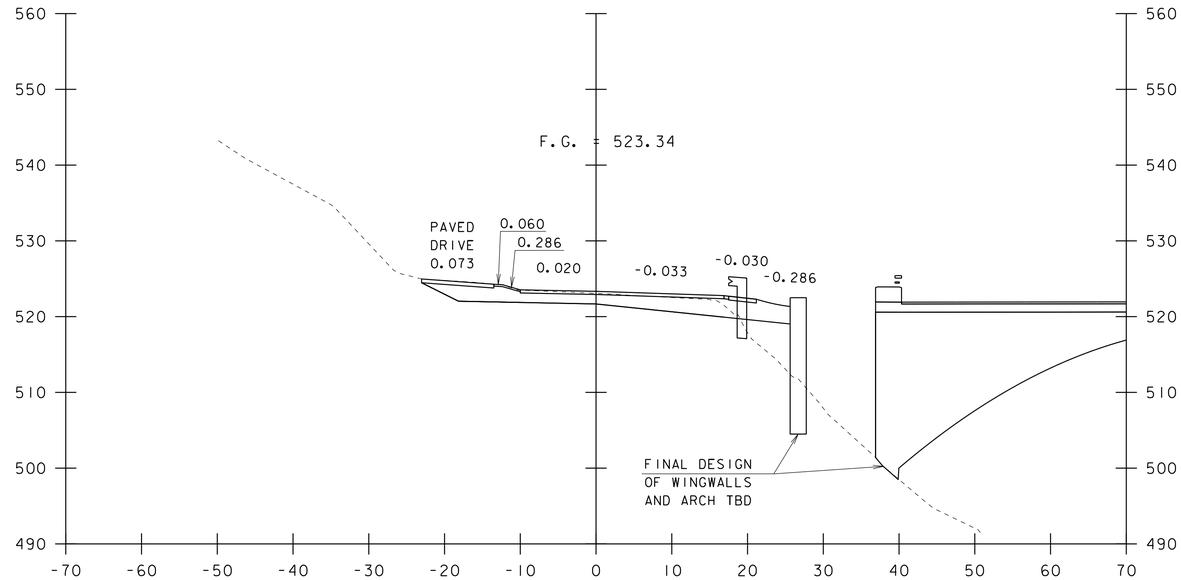
PROJECT NAME: NEWFANE
PROJECT NUMBER: BF 0106(6)

FILE NAME: sl3j306xs.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: C. BURRALL
DOVER RD & GRIMES HILL RD SECTIONS I

PLOT DATE: 05-JUN-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: C. BURRALL
SHEET 21 OF 39



12+00



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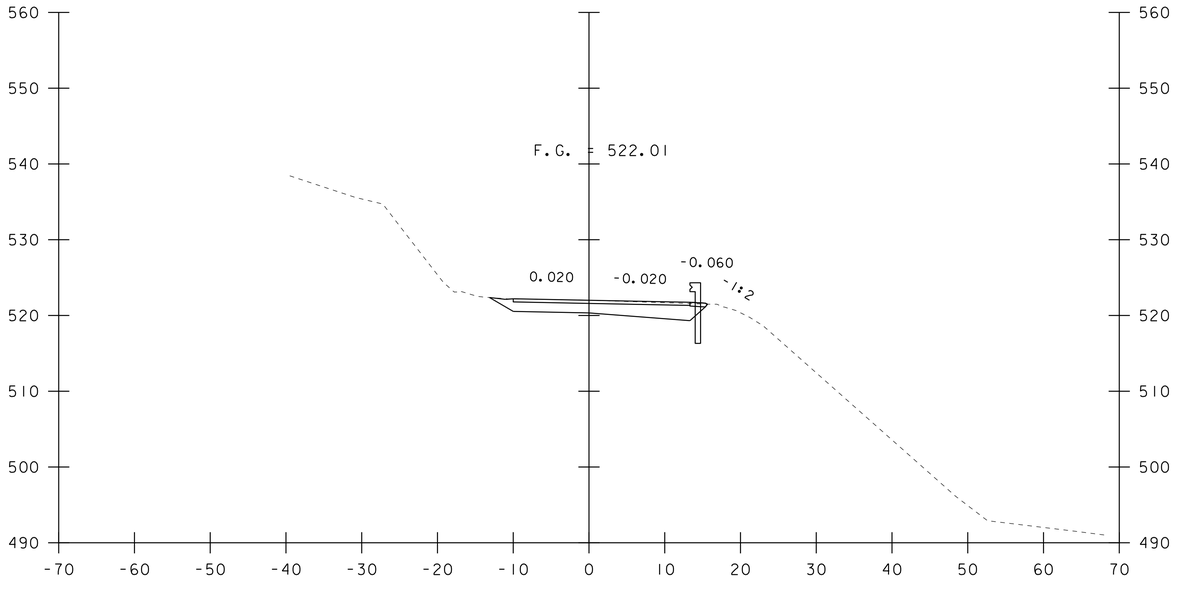
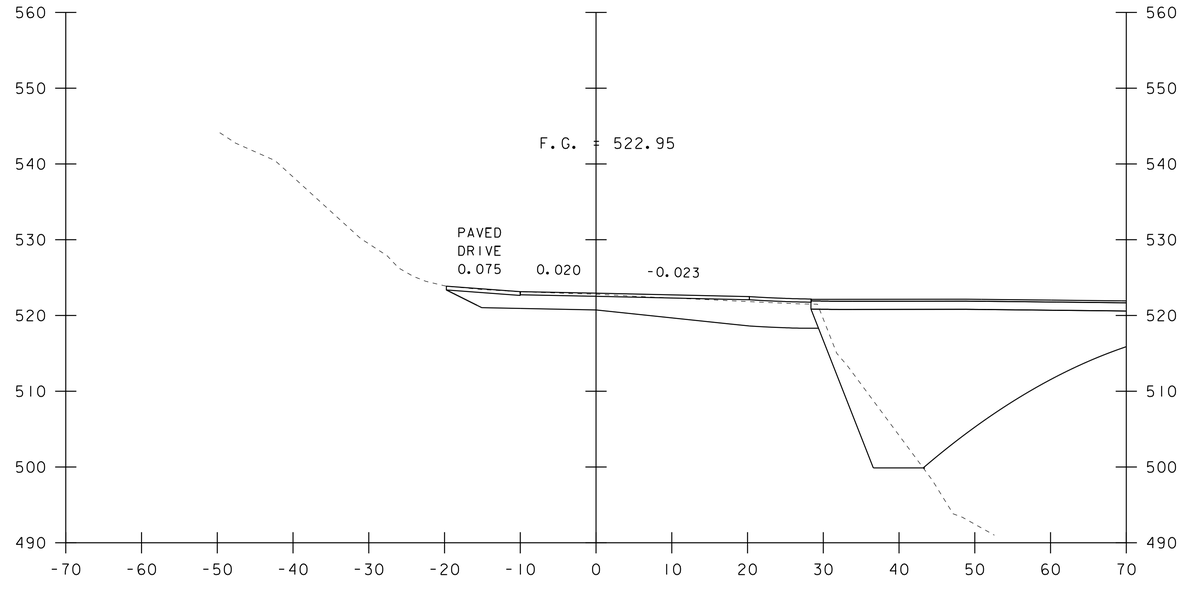


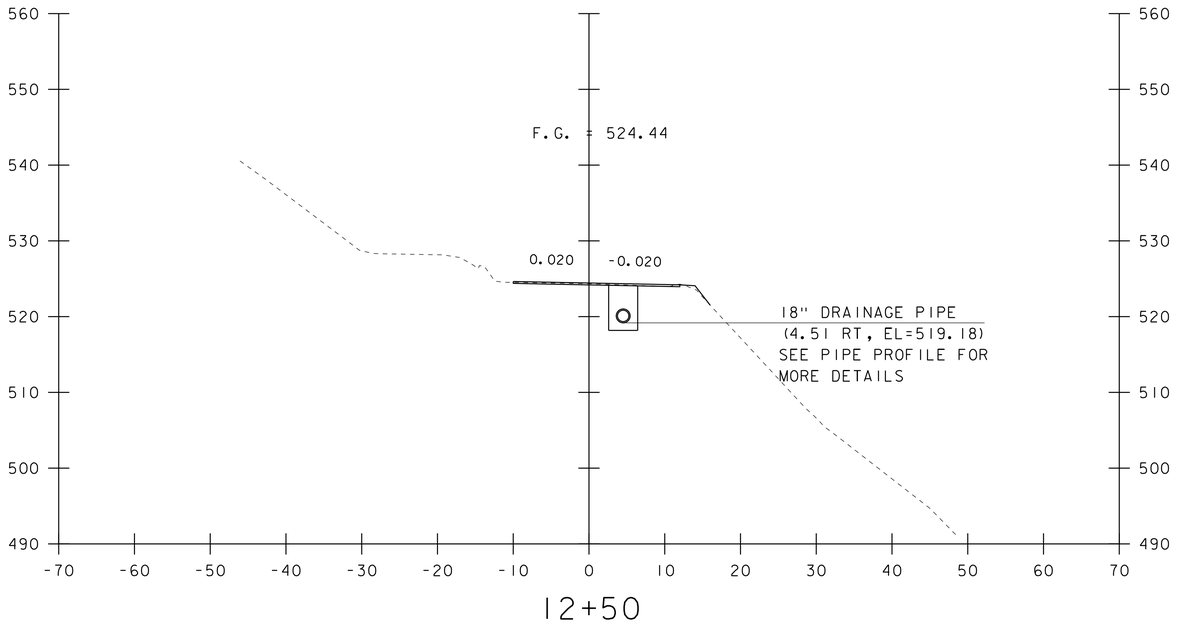
11+75



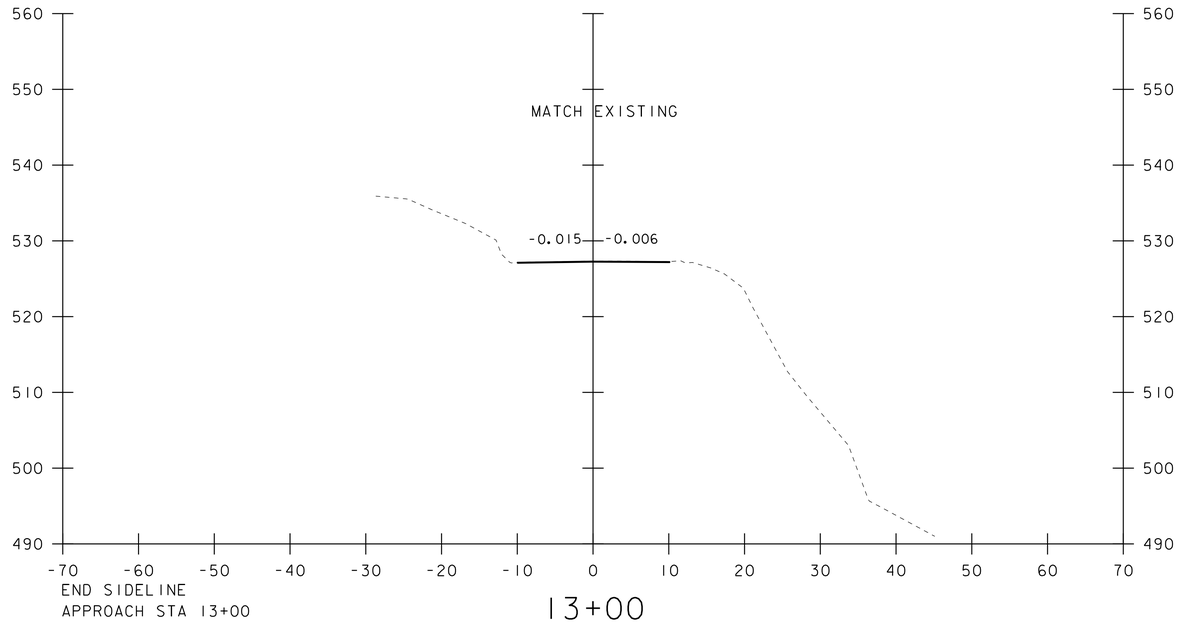
12+14

STA. 11+75 TO STA. 12+25

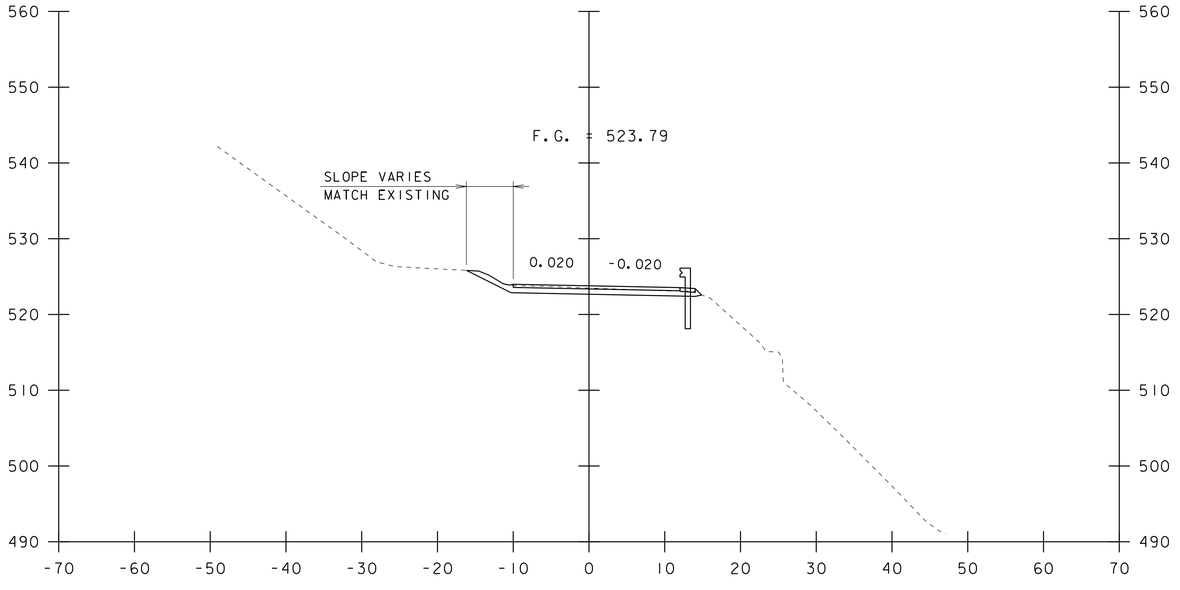
PROJECT NAME: NEWFANE	
PROJECT NUMBER: BF 0106(6)	
FILE NAME: sl3j306xs.dgn	PLOT DATE: 05-JUN-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: C. BURRALL	CHECKED BY: C. BURRALL
DOVER RD & GRIMES HILL RD SECTIONS 2	SHEET 22 OF 39



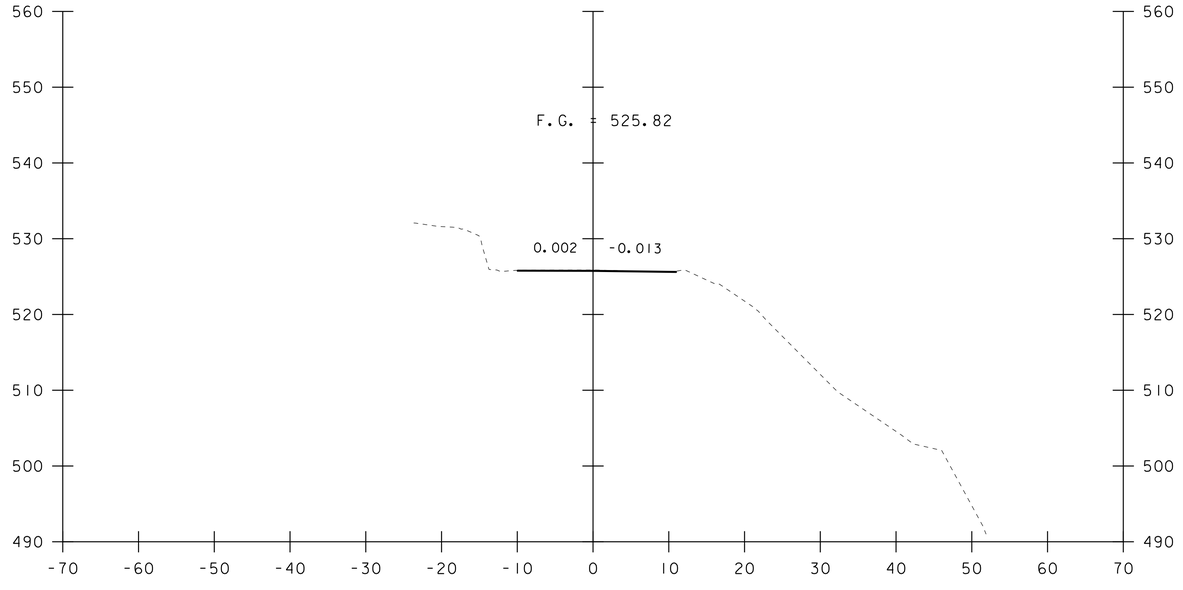
12+50



13+00



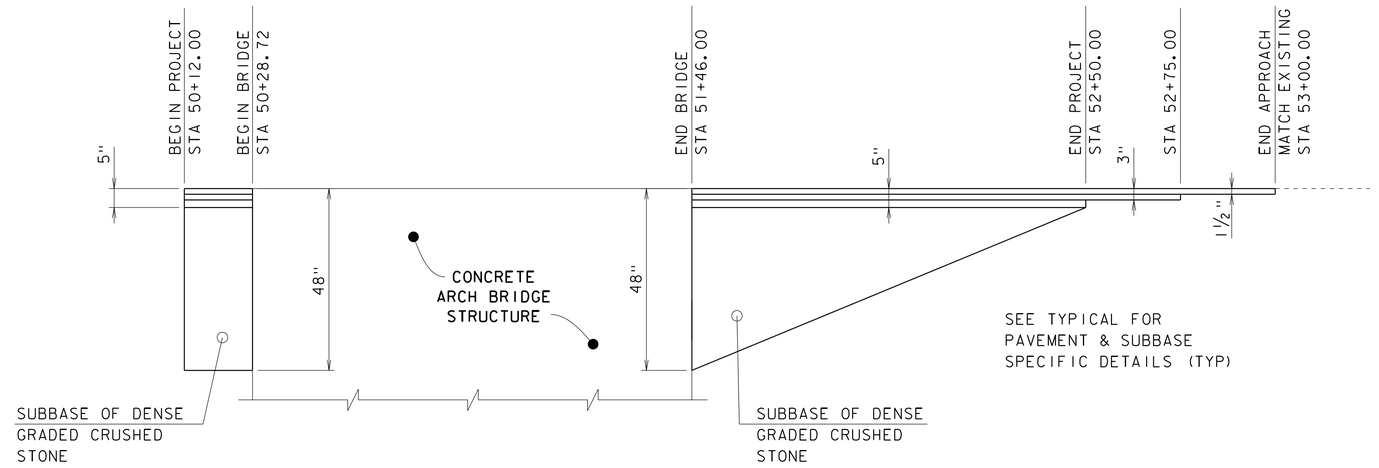
12+36



12+75

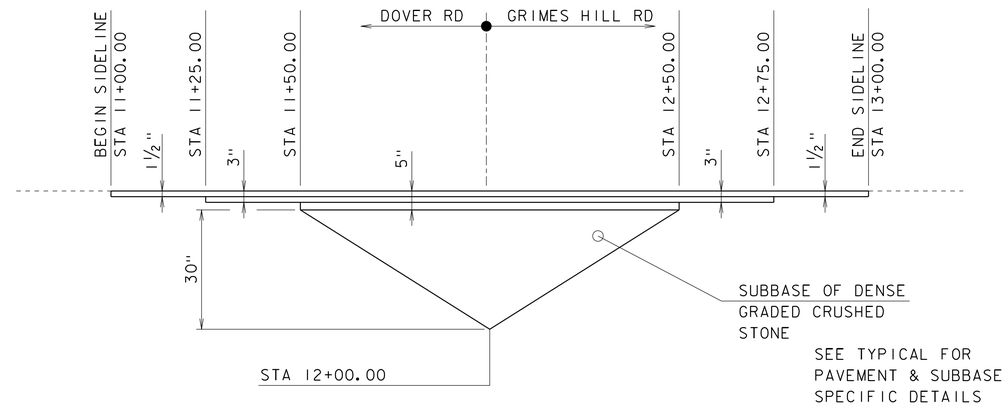
STA. 12+36 TO STA. 13+00

PROJECT NAME: NEWFANE	
PROJECT NUMBER: BF 0106(6)	
FILE NAME: sl3j306xs.dgn	PLOT DATE: 05-JUN-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: C. BURRALL	CHECKED BY: C. BURRALL
DOVER RD & GRIMES HILL RD SECTIONS 3	SHEET 23 OF 39



DEPOT RD (TH 2) MATERIAL TRANSITION DETAIL

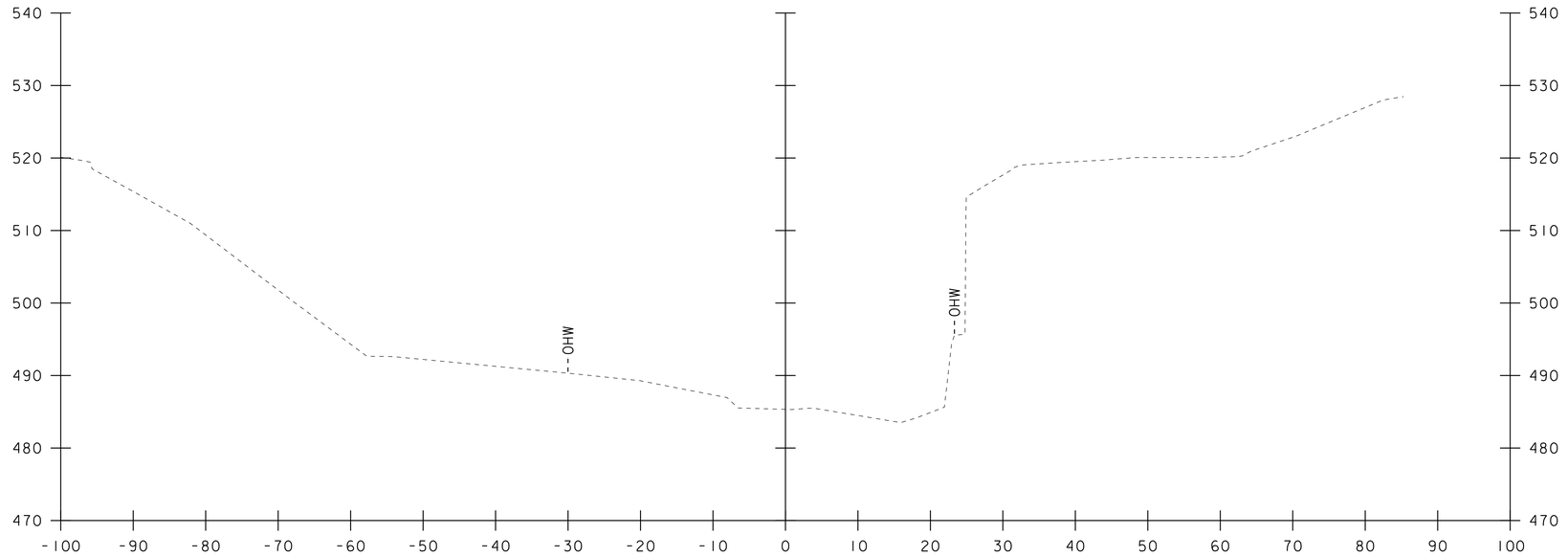
HORIZONTAL SCALE: 1" = 20'-0"
NO VERTICAL SCALE



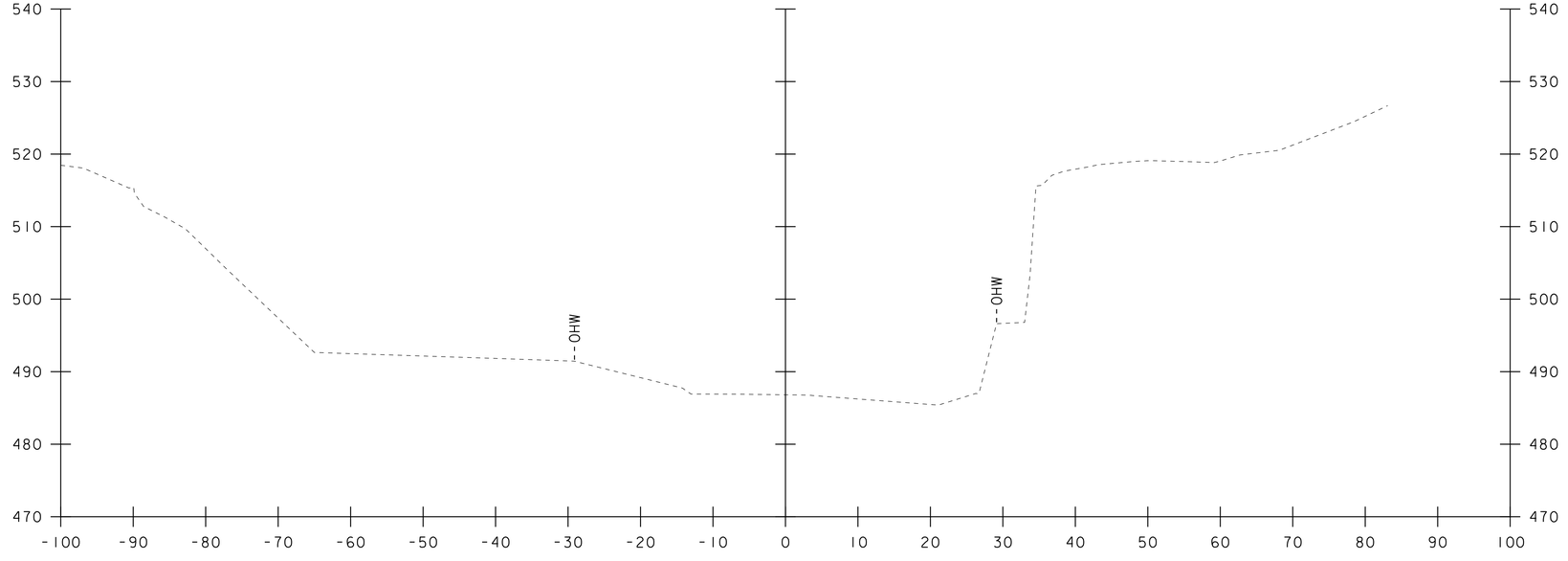
DOVER RD (TH 2) & GRIMES HILL RD (TH 5) MATERIAL TRANSITION DETAIL

HORIZONTAL SCALE: 1" = 20'-0"
NO VERTICAL SCALE

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BF 0106(6)
FILE NAME: sl3j306profile.dgn	PLOT DATE: 05-JUN-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: C. BURRALL	CHECKED BY: C. BURRALL
MATERIAL TRANSITION DETAILS	SHEET 24 OF 39



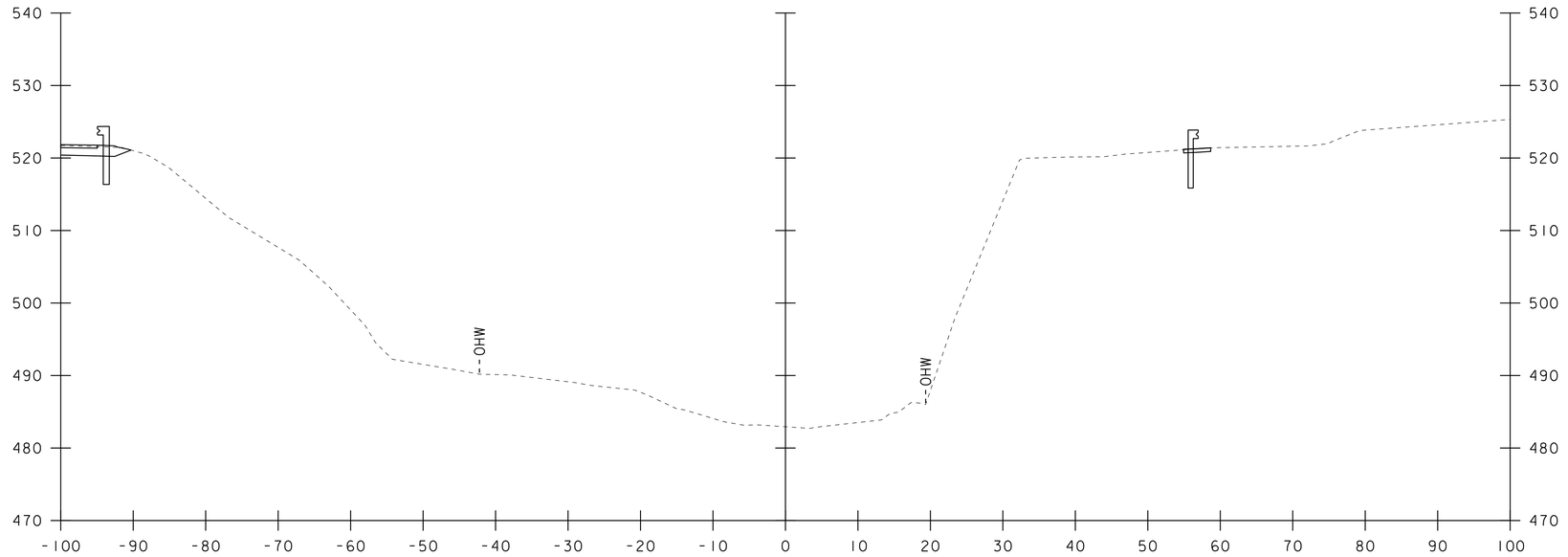
30+25



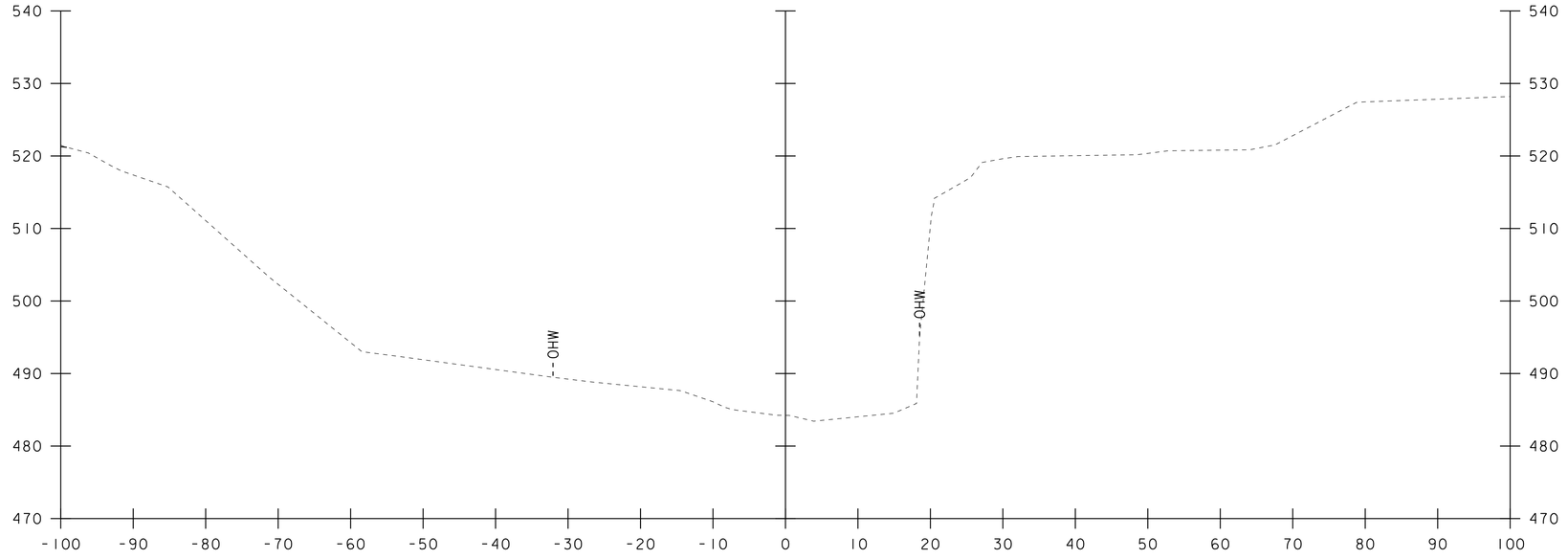
30+00

STA. 30+00 TO STA. 30+25

PROJECT NAME: NEWFANE	
PROJECT NUMBER: BF 0106(6)	
FILE NAME: sl3j306xs.dgn	PLOT DATE: 05-JUN-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: C. BURRALL	CHECKED BY: C. BURRALL
CHANNEL CROSS SECTIONS I	SHEET 25 OF 39



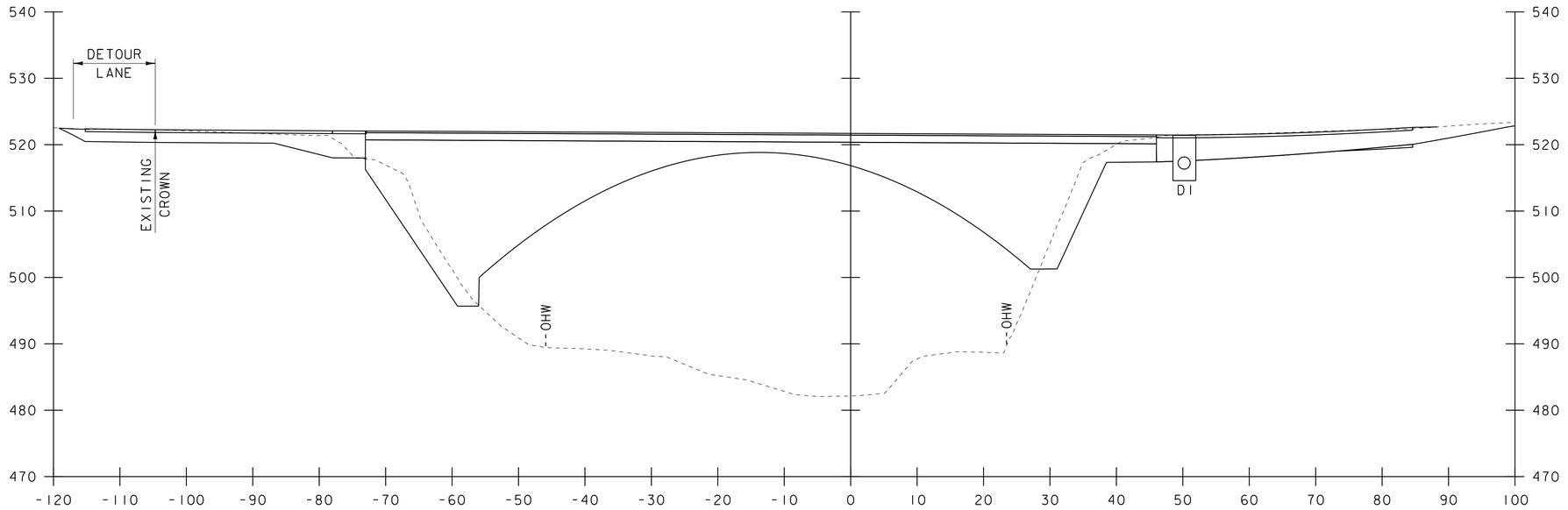
30+75



30+50

STA. 30+50 TO STA. 30+75

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BF 0106(6)
FILE NAME: sl3j306xs.dgn	PLOT DATE: 05-JUN-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: C. BURRALL	CHECKED BY: C. BURRALL
CHANNEL CROSS SECTIONS 2	SHEET 26 OF 39



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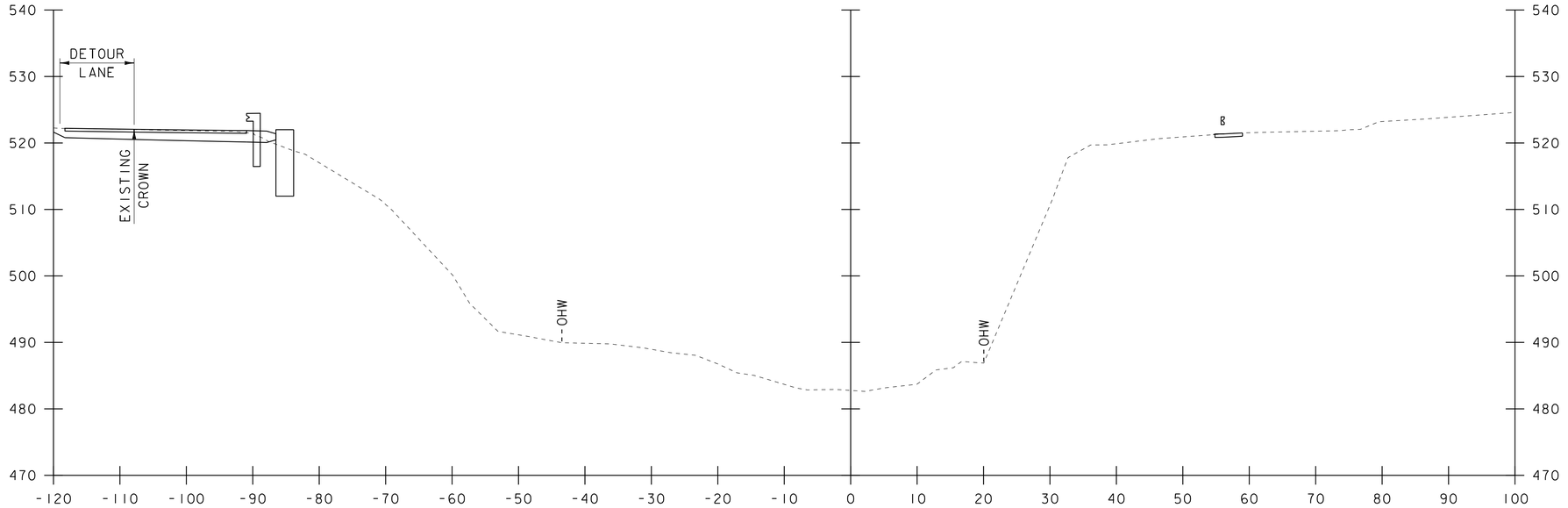
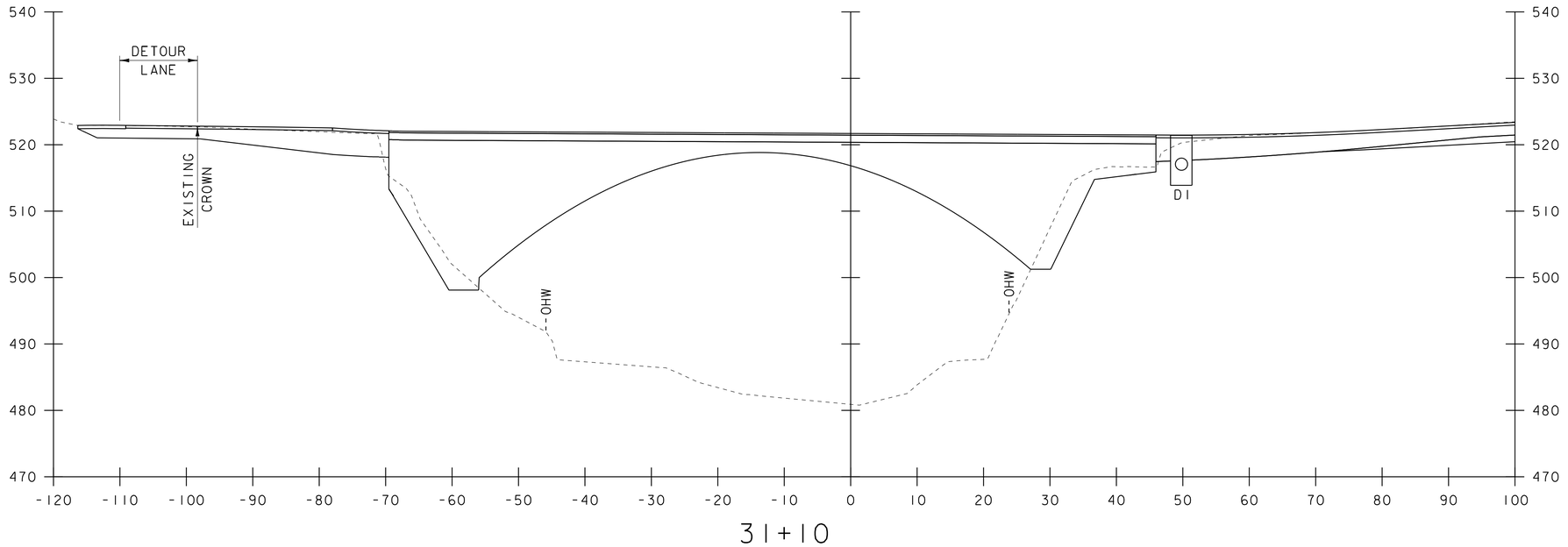


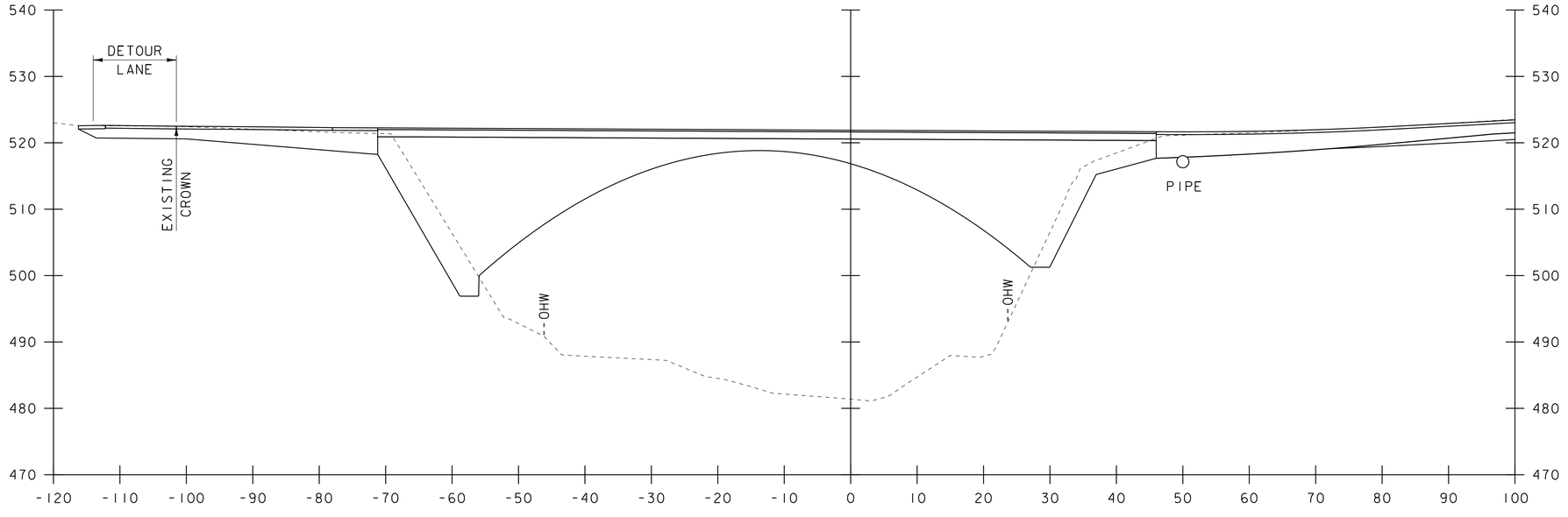
30+80

STA. 30+80 TO STA. 30+90

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BF 0106(6)
FILE NAME: sl3j306xs.dgn	PLOT DATE: 05-JUN-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: C. BURRALL	CHECKED BY: C. BURRALL
CHANNEL CROSS SECTIONS 3	SHEET 27 OF 39



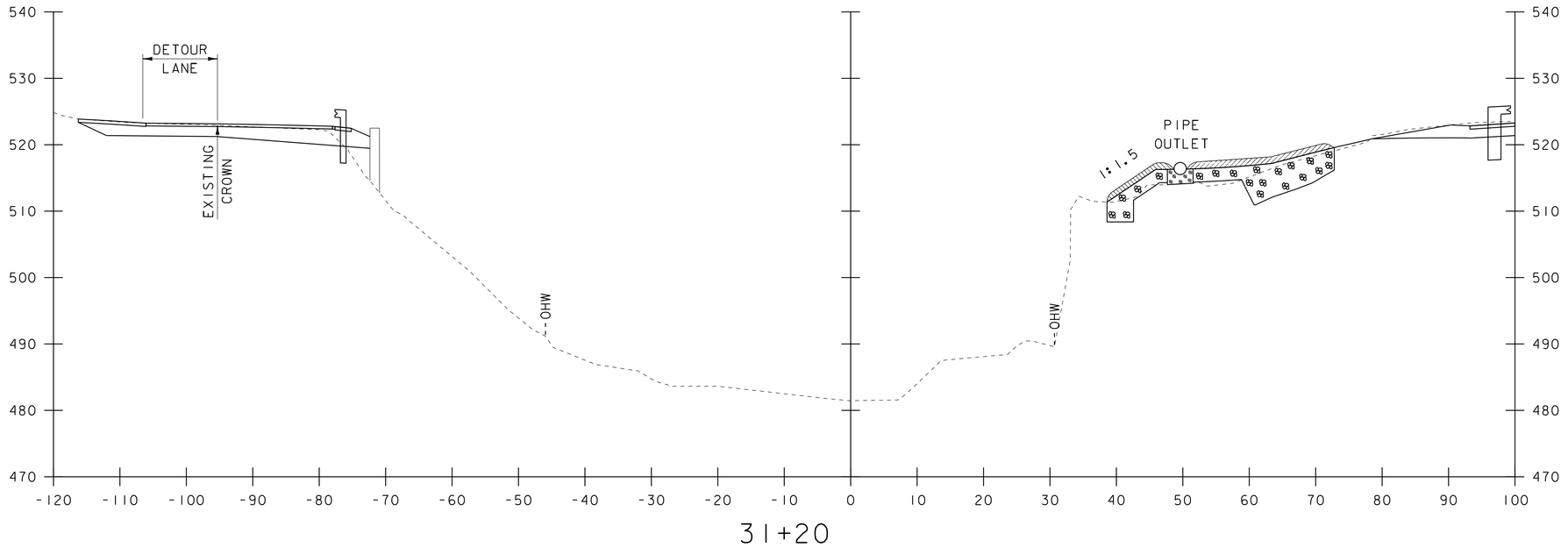
31+10



31+00

STA. 31+00 TO STA. 31+10

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BF 0106(6)
FILE NAME: sl3j306xs.dgn	PLOT DATE: 05-JUN-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: C. BURRALL	CHECKED BY: C. BURRALL
CHANNEL CROSS SECTIONS 4	SHEET 28 OF 39



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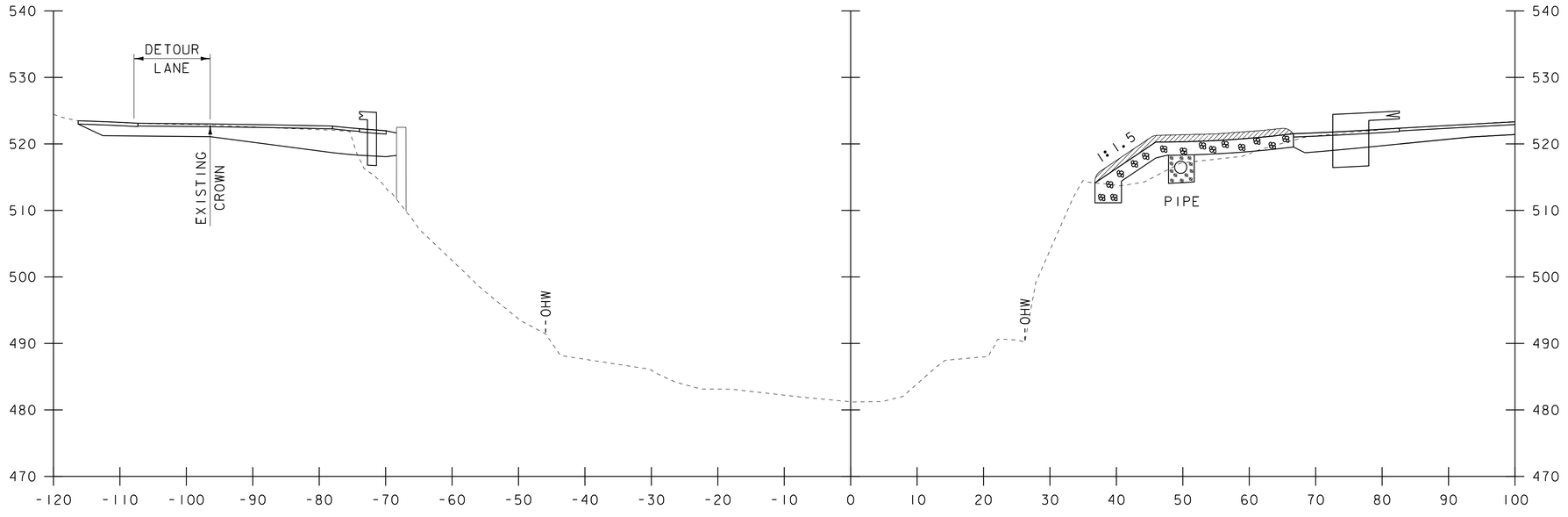

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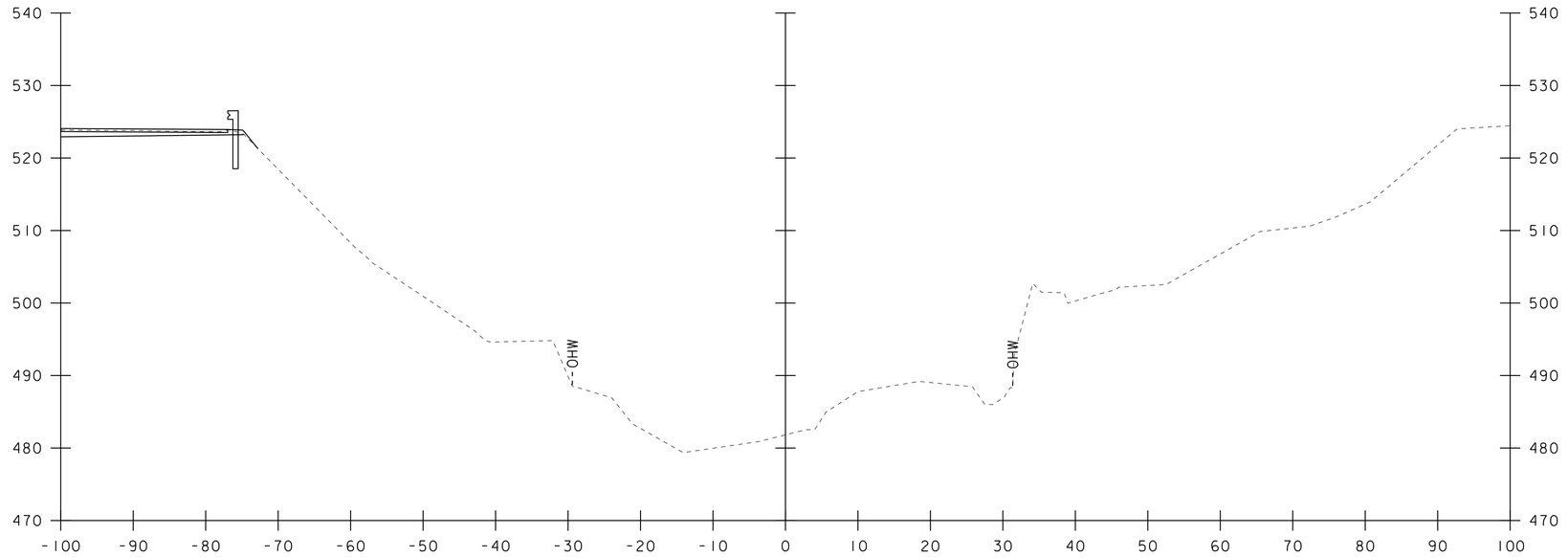
STA. 31+16 TO STA. 31+20

PROJECT NAME: NEWFANE
PROJECT NUMBER: BF 0106(6)

FILE NAME: sl3j306xs.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: C. BURRALL
CHANNEL CROSS SECTIONS 5

PLOT DATE: 05-JUN-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: C. BURRALL
SHEET 29 OF 39



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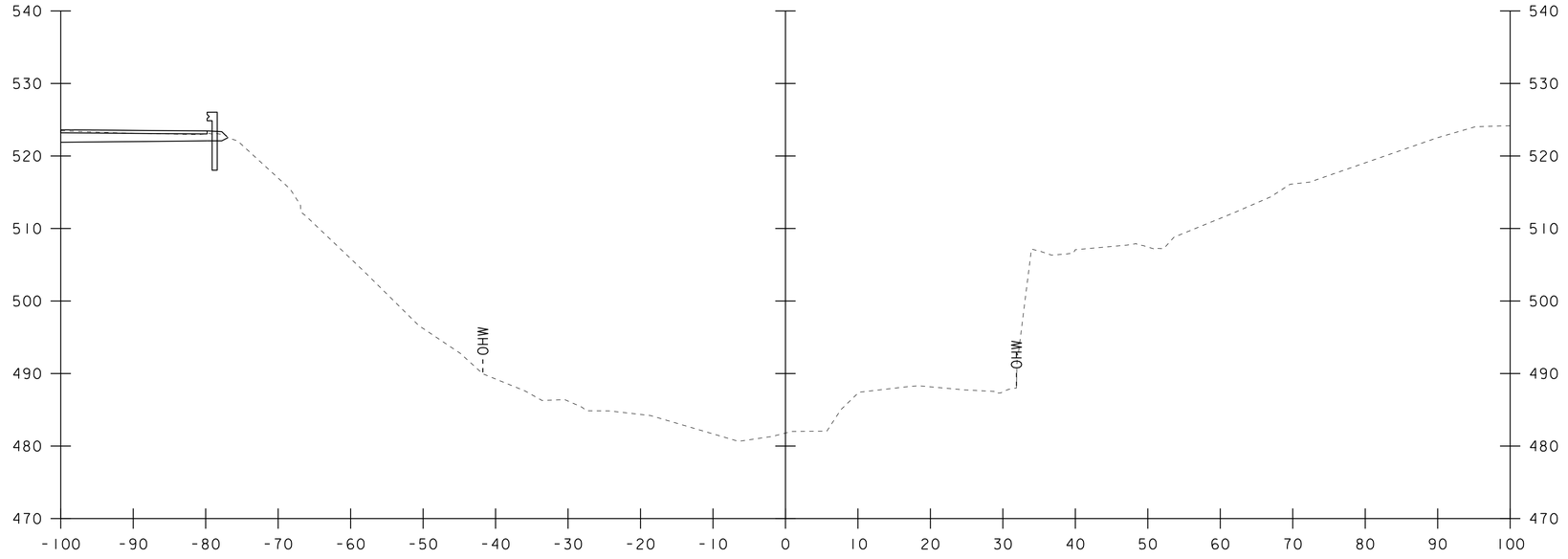
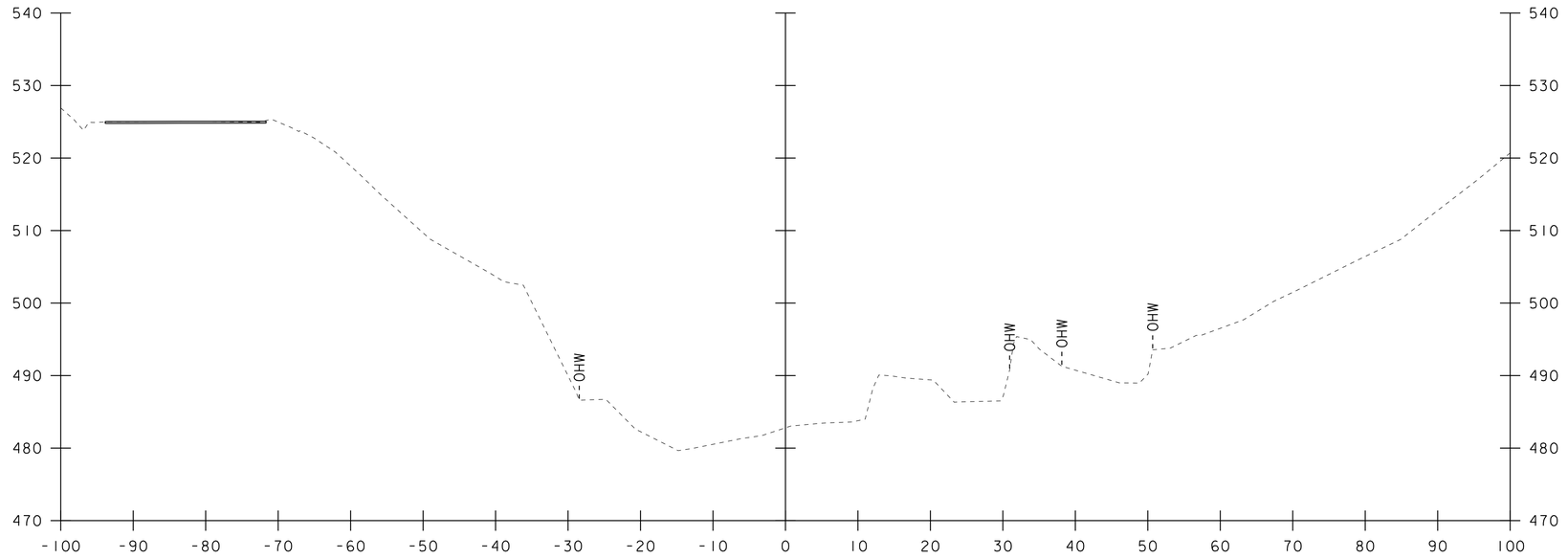


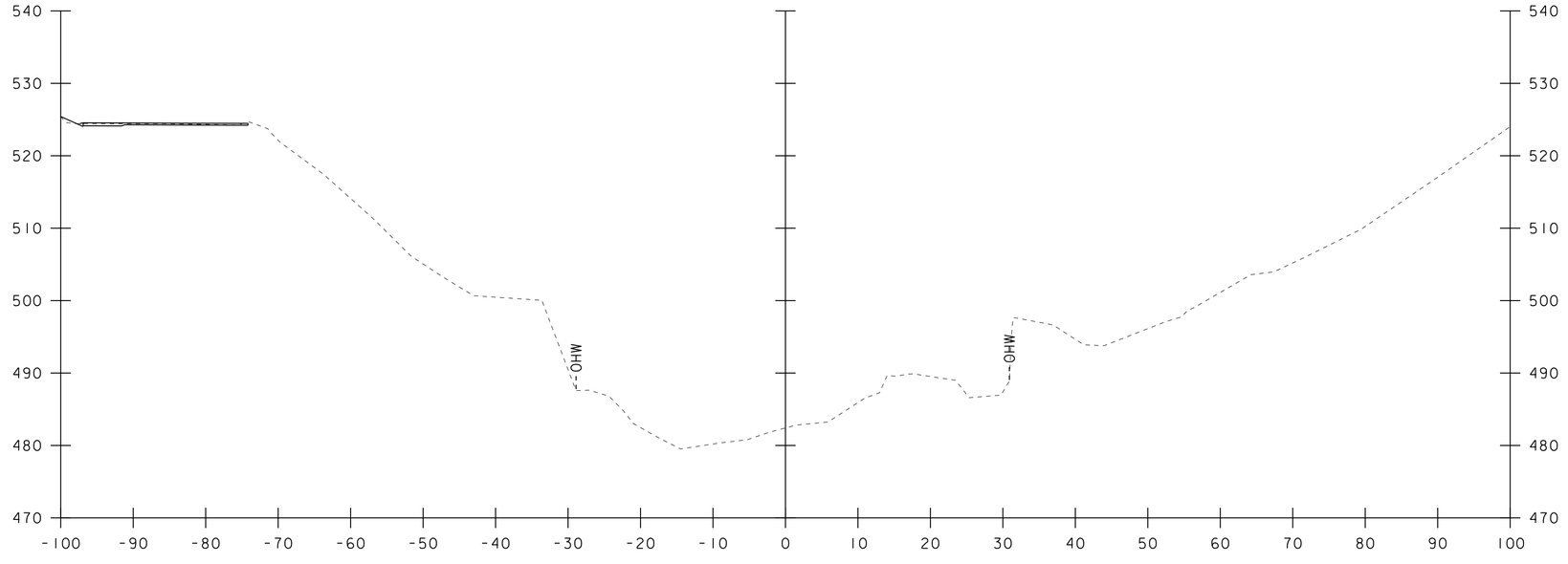
31+30

STA. 31+30 TO STA. 31+40

PROJECT NAME: NEWFANE	
PROJECT NUMBER: BF 0106(6)	
FILE NAME: sl3j306xs.dgn	PLOT DATE: 05-JUN-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: C. BURRALL	CHECKED BY: C. BURRALL
CHANNEL CROSS SECTIONS 6	SHEET 30 OF 39



31+60



31+50

STA. 31+50 TO STA. 31+60

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FILE NAME: sl3j306xs.dgn	PLOT DATE: 05-JUN-2017
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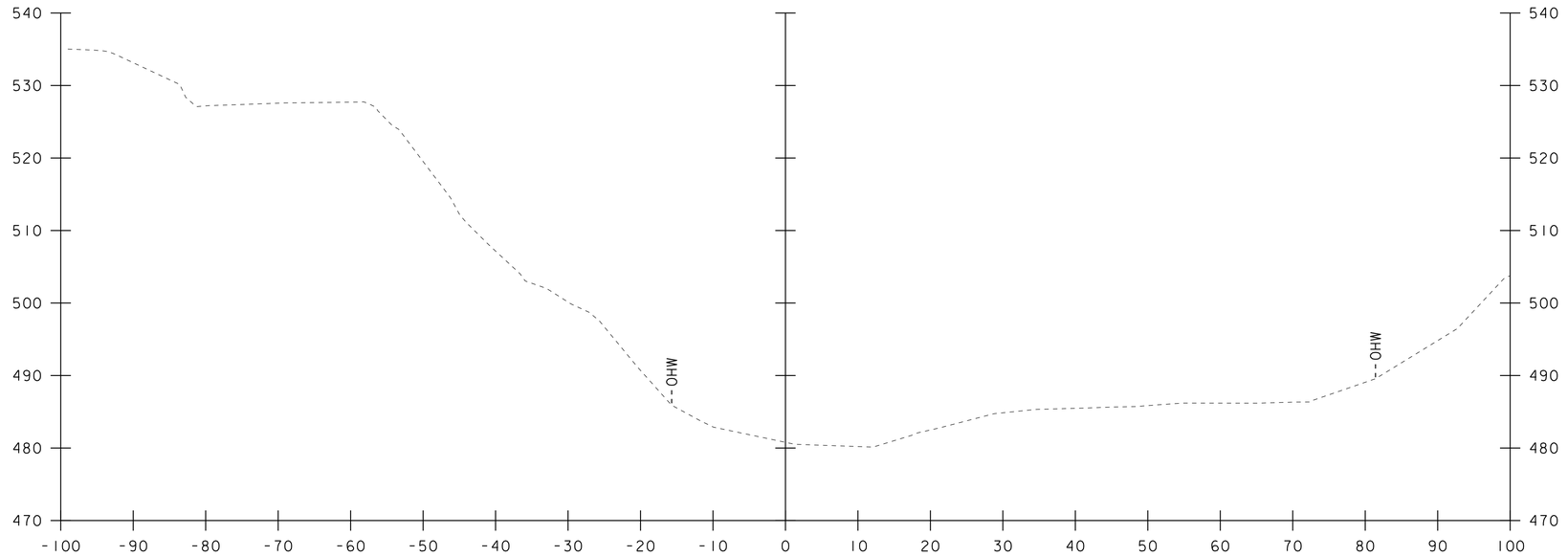
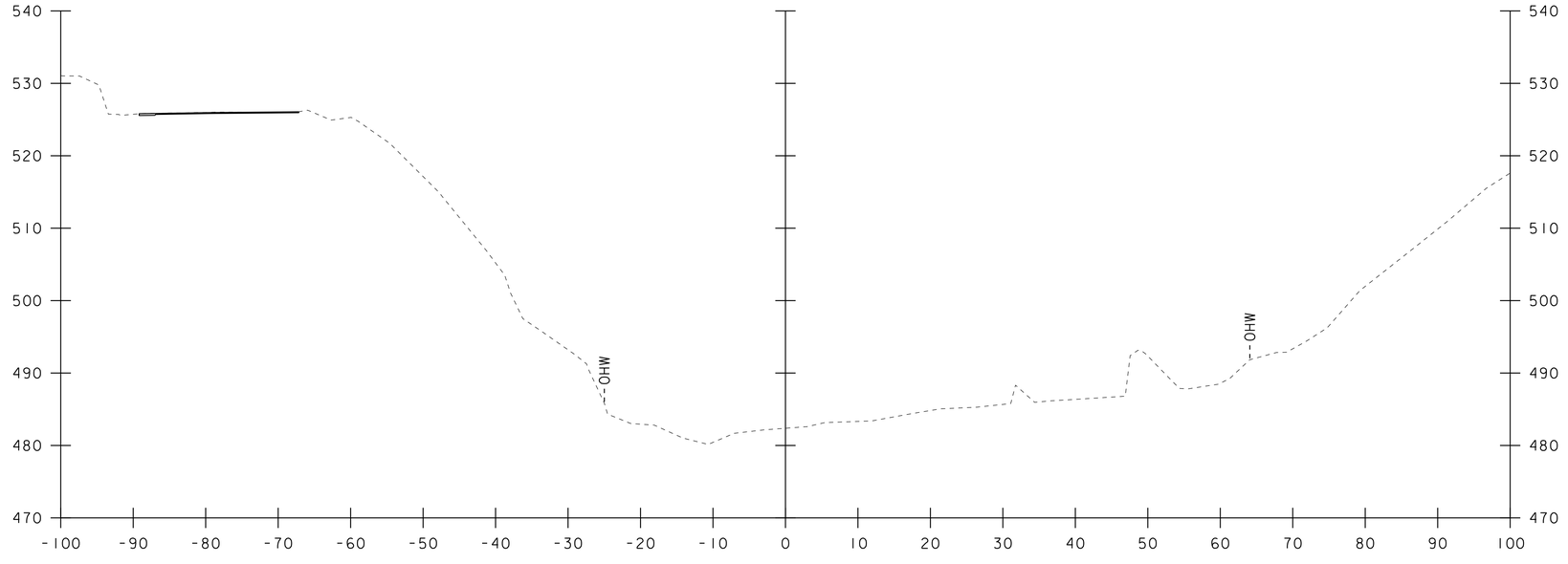
DESIGNED BY: C. BURRALL	CHECKED BY: C. BURRALL
CHANNEL CROSS SECTIONS 7	SHEET 31 OF 39



32+00



31+75

STA. 31+75 TO STA. 32+00

PROJECT NAME: NEWFANE	
PROJECT NUMBER: BF 0106(6)	
FILE NAME: sl3j306xs.dgn	PLOT DATE: 05-JUN-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: C. BURRALL	CHECKED BY: C. BURRALL
CHANNEL CROSS SECTIONS 8	SHEET 32 OF 39

EPSC PLAN NARRATIVE

1.1 PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE REPLACEMENT OF THE EXISTING BRIDGE ALONG WITH RELATED APPROACH ROADWAY AND CHANNEL WORK. BRIDGE 12 IS A SINGLE SPAN REINFORCED CONCRETE ELLIPTICAL ARCH. THE BRIDGE WILL BE REPLACED WITH A WIDER CAST-IN-PLACE CONCRETE ARCH BRIDGE MATCHING THE ORIGINAL BRIDGE AS CLOSELY AS POSSIBLE TO PRESERVE THE HISTORICAL SIGNIFICANCE. ROADWAY WORK RELATED TO THE BRIDGE REPLACEMENT WILL BE LIMITED TO JUST WHAT IS NECESSARY TO INSTALL THE NEW ARCH AND ADJUST THE APPROACHES. CHANNEL WORK RELATED TO THE BRIDGE WILL BE MINIMAL DUE TO EXPOSED LEDGE AND ROCK FACES. THE NEW ARCH WILL BE BUILT ON ALIGNMENT SPANNING APPROXIMATELY 76FT OVER THE ROCK RIVER AND IS APPROXIMATELY 25 FT ABOVE ORDINARY HIGH WATER AT THE PEAK OF THE ARCH. THE PROJECT SITE IS LOCATED IN THE TOWN OF NEWFANE, AT THE INTERSECTION OF TH 2 (DOVER RD), TH 2 (DEPOT RD), AND TH 5 (GRIMES HILL RD). THE BRIDGE IS APPROXIMATELY 1.9 MILES WESTERLY OF THE INTERSECTION OF TH 2 AND VT 30.

NOTE: AREA OF DISTURBANCE INCLUDES LIMITS OF EARTH DISTURBANCE WITHIN THE PROJECT AREA, AS WELL AS WASTE, BORROW AND STAGING AREAS, AND OTHER EARTH DISTURBING ACTIVITIES WITHIN OR DIRECTLY ADJACENT TO THE PROJECT LIMITS AS SHOWN ON THE ATTACHED EPSC PLAN.

TOTAL AREA OF DISTURBANCE AS SHOWN ON THE ATTACHED EPSC PLAN IS APPROXIMATELY 0.50 ACRES.

IT IS ANTICIPATED THAT THIS PROJECT WILL LAST ONE CONSTRUCTION SEASON.

1.2 SITE INVENTORY

1.2.1 TOPOGRAPHY

THE TOPOGRAPHY OF THE AREA IS A SADDLE THAT IS MOSTLY WELL ESTABLISHED FOREST. THERE ARE PAVED AND UNPAVED DRIVEWAYS WITHIN THE PROJECT AREA. THERE IS ONE RESIDENCE ON THE NORTH SIDE OF THE PROJECT AS WELL AS ONE RESIDENCE AND A TOWN GARAGE ON THE SOUTH.

1.2.2 DRAINAGE, WATERWAYS, BODIES OF WATER, AND PROXIMITY TO NATURAL OR MAN-MADE WATER FEATURES

THE ROCK RIVER IS THE ONLY WATER SOURCE ON THE PROJECT SITE. THE RIVER IS CLASSIFIED AS STEADY FLOW, SINUOUS, NARROW, WITH A CONFINED LEDGE AND ROCK CHANNEL BOUNDARY AT THE SITE. THE STREAM BED CONSISTS OF EXPOSED LEDGE, ROCK, AND BOULDERS. DUE TO THE NATURE OF THE SURROUNDING TERRAIN THE PROJECT SITE COULD RECEIVE RUNOFF WATER FROM A FEW NEARBY SLOPES.

1.2.3 VEGETATION

THE VEGETATION IN THE PROJECT AREA CONSISTS OF HARDWOOD TREES AND UNDERGROWTH. THE IMPACT TO VEGETATION WILL BE LIMITED TO THAT WHICH IS DIRECTLY AFFECTED BY REPLACEMENT OF THE EXISTING BRIDGE. THE SIDE SLOPES ALONG THE EASTERN CORNER OF THE BRIDGE WILL BE LINED WITH STONE FILL, TYPE II. DISTURBED VEGETATION WILL BE REESTABLISHED WITH STANDARD SEED AND MULCH PRACTICES.

1.2.4 SOILS

ALL SOIL DATA CAME FROM THE U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE FOR THE COUNTY OF WINDHAM, VERMONT. SOILS ON THE PROJECT SITE ARE BERKSHIRE / MANADNOCK AND COLTON LOAMY FINE SAND; K FACTORS, SLOPES, AND HYDROLOGICAL SOIL GROUP VARY, AS SHOWN ON THE "EPSC EXISTING LAYOUT" SHEET. THE SOILS RANGE FROM POTENTIALLY HIGHLY ERODIBLE TO HIGHLY ERODIBLE.

NOTE: K-VALUES GENERALLY INDICATE THE FOLLOWING:
0.0-0.23 = LOW EROSION POTENTIAL
0.24-0.36 = MODERATE EROSION POTENTIAL
0.37 AND HIGHER = HIGH EROSION POTENTIAL

1.2.5 SENSITIVE RESOURCE AREAS

CRITICAL HABITATS: NO
HISTORICAL OR ARCHEOLOGICAL AREAS: YES, PROJECT FEATURES ARE CONSIDERED HISTORICAL, ARCHEOLOGICAL AREA IS LOCATED ON EAST SIDE OF DOVER ROAD.
PRIME AGRICULTURAL LAND: NO
THREATENED AND ENDANGERED SPECIES: THE PROJECT AREA MAY BE A POSSIBLE HABITAT FOR THE NORTHERN LONG-EARED BAT. FURTHER INVESTIGATION WILL BE REQUIRED.
WATER RESOURCE: ROCK RIVER
WETLANDS: NO

1.3 RISK EVALUATION

THIS PROJECT DOES NOT FALL UNDER THE JURISDICTION OF GENERAL PERMIT 3-9020 FOR STORMWATER RUNOFF FROM CONSTRUCTION SITES. SHOULD CHANGES PRIOR TO OR DURING CONSTRUCTION RESULT IN

ONE OR MORE ACRES OF EARTH DISTURBANCE OR SHOULD THE PROJECT BECOME PART OF A LARGER PLAN OF DEVELOPMENT, THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY ADDITIONAL PERMITTING.

1.4 EROSION PREVENTION AND SEDIMENT CONTROL

THE EROSION CONTROL PLANS ARE MEANT AS A GUIDELINE FOR PREVENTING EROSION AND CONTROLLING SEDIMENT TRANSPORT. THE PRINCIPLES OUTLINED IN THIS NARRATIVE CONSIST OF APPLYING MEASURES THROUGHOUT CONSTRUCTION OF THE PROJECT IN ORDER TO MINIMIZE SEDIMENT TRANSPORT TO THE RECEIVING WATERS. THE MEASURES INCLUDE STABILIZATION AND STRUCTURAL PRACTICES, STORM WATER CONTROLS AND OTHER POLLUTION PREVENTION PRACTICES. THEY HAVE BEEN PROPOSED BY THE DESIGNER AS A BASIS FOR PROTECTING RESOURCES AND WILL NEED TO BE BUILT UPON BASED ON THE SPECIFIC MEANS AND METHODS OF THE CONTRACTOR. REFER TO THE LOW RISK SITE HANDBOOK AND APPROPRIATE DETAIL SHEETS FOR SPECIFIC GUIDANCE AND CONSTRUCTION DETAILING.

ALL MEASURES SHALL BE REGULARLY MAINTAINED AND SHALL BE CHECKED FOR SEDIMENT BUILD-UP. SEDIMENT SHALL BE DISPOSED OF AT AN APPROVED SITE WHERE IT WILL NOT BE SUBJECT TO EROSION.

1.4.1 MARK SITE BOUNDARIES

SITE BOUNDARIES AND AREAS CONSTRUCTION EQUIPMENT CAN ACCESS SHALL BE DELINEATED.

PROJECT DEMARCATION FENCING (PDF) SHALL BE USED TO PHYSICALLY MARK SITE BOUNDARIES.

1.4.2 LIMIT DISTURBANCE AREA

PREVENTING INITIAL SOIL EROSION BY MINIMIZING THE EXPOSED AREA IS MUCH MORE EFFECTIVE THAN TREATING ERODED SEDIMENT. EARTH DISTURBANCE CAN BE MINIMIZED THROUGH CONSTRUCTION PHASING BY ONLY OPENING UP EARTH AS NECESSARY. THIS CAN LIMIT THE AREA THAT WILL BE DISTURBED AND EXPOSED TO EROSION. EMPLOY TEMPORARY CONSTRUCTION STABILIZATION PRACTICES IN INCREMENTAL STAGES AS PHASES CHANGE. FOR PROJECTS WHICH FALL UNDER THE CONSTRUCTION GENERAL PERMIT, ONLY THE ACREAGE LISTED ON THE PERMIT AUTHORIZATION MAY BE EXPOSED AT ANY GIVEN TIME.

MAINTAINING VEGETATED BUFFERS ALONG STREAM BANKS, WETLANDS OR OTHER SENSITIVE AREAS IS A CRUCIAL EROSION AND SEDIMENT CONTROL MEASURE THAT SHOULD BE ESTABLISHED WHEREVER POSSIBLE.

1.4.3 SITE ENTRANCE/EXIT STABILIZATION

TRACKING OF SEDIMENT ONTO PUBLIC HIGHWAYS SHALL BE MINIMIZED TO REDUCE THE POTENTIAL FOR RUNOFF ENTERING RECEIVING WATERS. INSTALLATION SHALL COINCIDE WITH THE CONTRACTORS PROGRESS SCHEDULE.

STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AS PROPOSED ON THE EPSC PLAN AND ANYWHERE EQUIPMENT WILL BE GOING FROM AREAS OF EXPOSED SOILS TO PAVED SURFACES.

1.4.4 INSTALL SEDIMENT BARRIERS

SEDIMENT BARRIERS SHALL BE UTILIZED TO INTERCEPT RUNOFF AND ALLOW SUSPENDED SEDIMENT TO SETTLE OUT. THEY SHALL BE INSTALLED PRIOR TO ANY UP SLOPE WORK.

GEOTEXTILE FOR SILT FENCE WILL BE INSTALLED AS PROPOSED ON THE EPSC PLAN.

1.4.5 DIVERT UPLAND RUNOFF

DIVERSIONARY MEASURES SHALL BE USED TO INTERCEPT RUNOFF FROM ABOVE THE CONSTRUCTION AND DIRECT IT AROUND THE DISTURBED AREA SO THAT CLEAN WATER DOES NOT BECOME MUDDIED WHILE TRAVELING OVER EXPOSED SOILS ON THE CONSTRUCTION SITE.

THE PROJECT HAS A STEEP SLOPED HILL THAT COULD POTENTIALLY PRODUCE RUNOFF INTO THE PROJECT AREA AND DIVERSION MEASURES WILL LIKELY BE NEEDED. LOCATION AND TYPE TO BE DETERMINED.

1.4.6 SLOW DOWN CHANNELIZED RUNOFF

CHECK STRUCTURES SHALL BE UTILIZED TO REDUCE THE VELOCITY, AND THUS THE EROSIVE POTENTIAL, OF CONCENTRATED FLOW IN CHANNELS.

STONE CHECK DAMS WILL BE INSTALLED AS PROPOSED ON THE EPSC PLAN, AT A MINIMUM.

1.4.7 CONSTRUCT PERMANENT CONTROLS

PERMANENT STORMWATER TREATMENT DEVICES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND IN ACCORDANCE WITH PERMIT CONDITIONS. THERE ARE NO PLAN PERMANENT STORMWATER TREATMENT DEVICES

1.4.8 STABILIZE EXPOSED SOILS DURING CONSTRUCTION

ALL AREAS OF DISTURBANCE MUST HAVE TEMPORARY STABILIZATION IN PLACE WITHIN 48 HOURS OF DISTURBANCE OR IN ACCORDANCE WITH THE CONSTRUCTION GENERAL PERMIT 3-9020 AUTHORIZATION.

SURFACE ROUGHENING OF ALL EXPOSED SLOPES, COMBINED WITH TEMPORARY MULCHING, SHALL BE UTILIZED ON A REGULAR BASIS. BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED TO STABILIZE ALL SLOPES STEEPER THAN 1:3.

THE FORECAST OF RAINFALL EVENTS SHALL TRIGGER IMMEDIATE PROTECTION OF EXPOSED SOILS.

1.4.9 WINTER STABILIZATION

VARIOUS MEASURES SPECIFIC TO WINTER MAY BE NECESSARY SHOULD THE PROJECT EXTEND INTO WINTER (OCTOBER 15 THROUGH APRIL 15). REFER TO THE LOW RISK SITE HANDBOOK FOR GUIDANCE.

NONE ANTICIPATED.

1.4.10 STABILIZE SOIL AT FINAL GRADE

EXPOSED SOIL MUST BE STABILIZED WITHIN 48 HOURS OF REACHING FINAL GRADE.

SEED, MULCH, FERTILIZER AND LIME SHALL BE USED TO ESTABLISH PERMANENT VEGETATION. FOR SLOPES STEEPER THAN 1:3, BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED INSTEAD OF MULCH.

1.4.11 DE-WATERING ACTIVITIES

DISCHARGE FROM DEWATERING ACTIVITIES THAT FLOWS OFF OF THE CONSTRUCTION SITE MUST NOT CAUSE OR CONTRIBUTE TO A VIOLATION OF THE VERMONT WATER QUALITY STANDARDS.

NONE ANTICIPATED.

1.4.12 INSPECT YOUR SITE

INSPECT THE PROJECT SITE BASED ON SPECIAL PROVISION REQUIREMENTS OR CONSTRUCTION GENERAL PERMIT AUTHORIZATION STIPULATIONS.

1.5 SEQUENCE AND STAGING

THIS SECTION WILL BE DEVELOPED BY THE CONTRACTOR USING THE GUIDANCE OUTLINED IN THE VTRANS EPSC PLAN CONTRACTOR CHECKLIST.

1.5.1 CONSTRUCTION SEQUENCE

1.5.2 OFF-SITE ACTIVITIES

IN ADDITION TO THE CONTRACTOR CHECKLIST ANY ACTIVITIES OUTSIDE THE CONSTRUCTION LIMITS SHALL FOLLOW SPECIFICATION 105.25- 105.29 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION.

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BF 0106(6)
FILE NAME: sl3j306eroDetails.dgn	PLOT DATE: 05-JUN-2017
PROJECT LEADER: C. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: C. BURRALL	CHECKED BY: C. BURRALL
EPSC NARRATIVE	SHEET 33 OF 39

SOIL INFORMATION:
COLTON LOAMY FINE SAND
POTENTIALLY HIGHLY ERODIBLE
K-FACTOR = 0.17, 2%-8% SLOPES
HYDROLOGICAL SOIL GROUP: A

SOIL INFORMATION:
BERKSHIRE / MANADNOCK
FINE SANDY LOAMS, VERY STONY
HIGHLY ERODIBLE
K-FACTOR = 0.24/0.28, 25%-50% SLOPES
HYDROLOGICAL SOIL GROUP: B

SOIL INFORMATION:
COLTON LOAMY FINE SAND
POTENTIALLY HIGHLY ERODIBLE
K-FACTOR = 0.17, 2%-8% SLOPES
HYDROLOGICAL SOIL GROUP: A

SOIL INFORMATION:
COLTON LOAMY FINE SAND
POTENTIALLY HIGHLY ERODIBLE
K-FACTOR = 0.17, 2%-8% SLOPES
HYDROLOGICAL SOIL GROUP: A

SOIL INFORMATION:
COLTON LOAMY FINE SAND
HIGHLY ERODIBLE
K-FACTOR = 0.17, 15%-25% SLOPES
HYDROLOGICAL SOIL GROUP: A

N

VT STATE PLANE GRID

ROCK RIVER
FLOW

EXISTING R.O.W.

ABOVE-GROUND
PROPANE TANK

SCALE 1" = 20'-0"
20 0 20

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BF 0106(6)
FILE NAME: sl3j306bdrero.dgn	PLOT DATE: 05-JUN-2017
PROJECT LEADER: C. W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: C. BURRALL	CHECKED BY: C. BURRALL
EPSC EXISTING LAYOUT	SHEET 34 OF 39

N

VT STATE PLANE GRID

CHECK DAMS

STABILIZED CONSTRUCTION ENTRANCE

ROCK RIVER FLOW

STABILIZED CONSTRUCTION ENTRANCE

CHECK DAMS

STABILIZED CONSTRUCTION ENTRANCE

CONSTRUCTION LIMITS

CONSTRUCTION LIMITS

EXISTING R.O.W.

ABOVE GROUND PROPANE TANK

14+65
14+00
13+00
12+00
11+00
54+65
54+00
53+00
52+00
51+00
50+00
48+75

SCALE 1" = 20'-0"
20 0 20

PROJECT NAME: NEWFANE	
PROJECT NUMBER: BF 0106(6)	
FILE NAME: sl3j306bdrero.dgn	PLOT DATE: 05-JUN-2017
PROJECT LEADER: C. W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: C. BURRALL	CHECKED BY: C. BURRALL
EPSC CONSTRUCTION LAYOUT	SHEET 35 OF 39

N

VT STATE PLANE GRID

ROCK RIVER
FLOW

STONE FILL

OHW

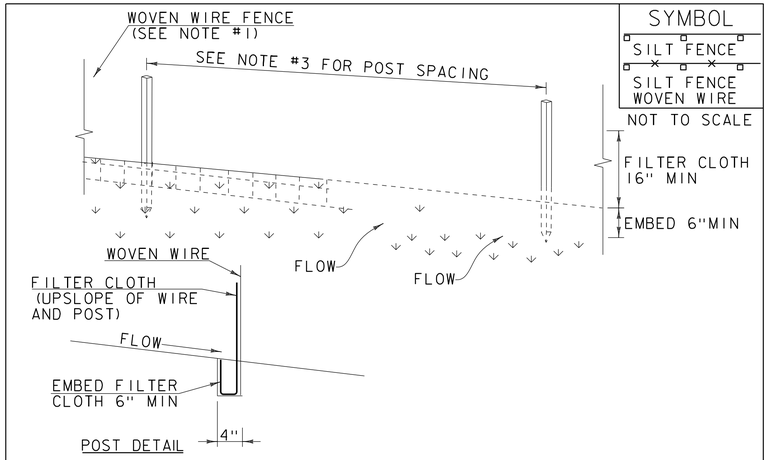
MHO

ARCH

14+65
14+00
13+00
12+00
11+00
54+65
54+00
53+00
52+00
51+00
50+00
49+75

SCALE 1" = 20'-0"
20 0 20

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BF 0106(6)
FILE NAME: sl3j306bdrero.dgn	PLOT DATE: 05-JUN-2017
PROJECT LEADER: C. W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: C. BURRALL	CHECKED BY: C. BURRALL
EPSC FINAL LAYOUT	SHEET 36 OF 39



SYMBOL

SILT FENCE

SILT FENCE WOVEN WIRE

CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE REINFORCED FENCE IS REQUIRED WITHIN 100' UPSLOPE OF RECEIVING WATERS WHEN THE PROJECT FALLS UNDER A CONSTRUCTION STORMWATER PERMIT. WOVEN WIRE SHALL BE A MIN. 14 GAUGE WITH A 6" MAX. MESH OPENING.
2. 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' AND 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 6" AND FOLDED.
6. 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.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 649 AND AS SHOWN IN THE PLANS FOR GEOTEXTILE FOR SILT FENCE (PAY ITEM 649.51) OR GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED (PAY ITEM 649.515).

REVISIONS	
MARCH 21, 2008	WHF
DECEMBER 11, 2008	WHF
JANUARY 13, 2009	WHF

VAOT LOW GROW/FINE FESCUE MIX

LBS/AC						
WEIGHT	BROADCAST	HYDROSEED	NAME	LATIN NAME	GERM	PURITY
38%	57	95	CREEPING RED FESCUE	FESTUCA RUBRA VAR. RUBRA	90%	98%
29%	43.5	72.5	HARD FESCUE	FESTUCA LONGIFOLIA	85%	95%
15%	22.5	37.5	CHEWINGS FESCUE	FESTUCA RUBRA VAR. COMMUTATA	87%	95%
15%	22.5	37.5	ANNUAL RYEGRASS	LOLIUM MULTIFLORUM	90%	95%
3%	4.5	7.5	INERTS			
100%	150	250				

VAOT RURAL AREA MIX

LBS/AC						
WEIGHT	BROADCAST	HYDROSEED	NAME	LATIN NAME	GERM	PURITY
37.5%	22.5	45	CREEPING RED FESCUE	FESTUCA RUBRA VAR. RUBRA	85%	98%
37.5%	22.5	45	TALL FESCUE	FESTUCA ARUNDINACEA	90%	95%
5.0%	3	6	RED TOP	AGROSTIS GIGANTEA	90%	95%
15.0%	9	18	WHITE FIELD CLOVER	TRIFOLIUM REPENS	85%	98%
5.0%	3	6	ANNUAL RYE GRASS	LOLIUM MULTIFLORUM	85%	95%
100%	60	120				

GENERAL AMENDMENT GUIDANCE

FERTILIZER	LIME	
10/20/10	AG LIME	PELLITIZED
500 LBS/AC	2 TONS/AC	1 TONS/AC

CONSTRUCTION GUIDANCE

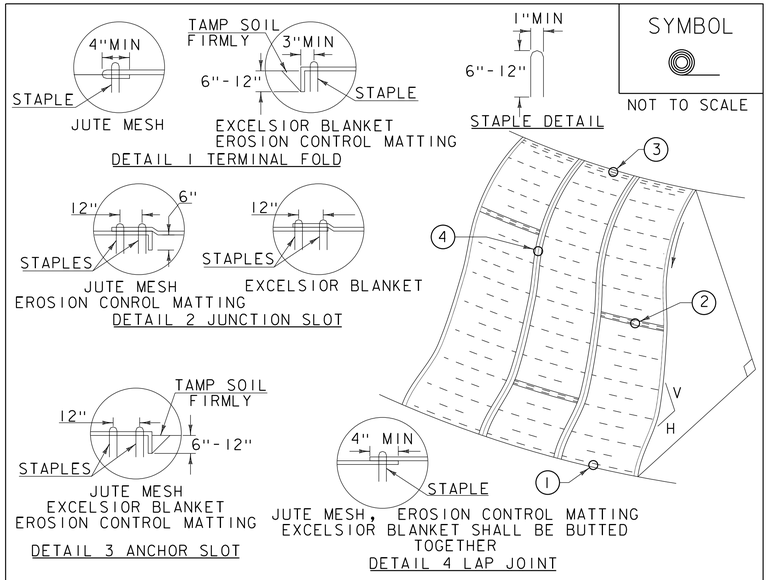
1. SEED MIX: THE CONTRACTOR SHALL COORDINATE WITH THE RESIDENT ENGINEER ON WHICH SEED MIX TO USE.
2. SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED UPLAND (NON WETLAND) AREAS DISTURBED BY THE CONTRACTOR.
3. ALL SEED MIXTURES: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.
4. FERTILIZER AND LIMESTONE: SHALL FOLLOW RATES SHOWN ON PLAN OR AS DIRECTED BY THE ENGINEER.
5. HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS/ACRE, ACHIEVE 90% GROUND COVER OR AS DIRECTED BY THE ENGINEER.
6. HYDROSEEDING: ALTHOUGH GUIDANCE IS GIVEN ABOVE THE SITE CONDITIONS AND THE TYPE OF HYDROSEED PROPOSED FOR USE WILL ULTIMATELY DICTATE THE AMOUNTS AND TYPES OF SOIL AMENDMENTS TO BE APPLIED.
7. TURF ESTABLISHMENT: PLACING SEED, FERTILIZER, LIME AND MULCH PRIOR TO SEPTEMBER 15 AND AFTER APRIL 15 CAN BETTER ENSURE A VIGOROUS GROWTH OF GRASS.

ADAPTED FROM VTRANS TECHNICAL LANDSCAPE MANUAL FOR ROADWAYS AND TRANSPORTATION FACILITIES

TURF ESTABLISHMENT

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 651 FOR SEED (PAY ITEM 651.15)

REVISIONS	
JANUARY 12, 2015	WHF



SYMBOL

NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. APPLY TO SLOPES GREATER THAN 3H:1V OR WHERE NECESSARY TO AID IN ESTABLISHING VEGETATION.
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: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

ROLLED EROSION CONTROL PRODUCT (RECP) SIDE SLOPE

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 AND AS SHOWN IN THE PLANS FOR TEMPORARY EROSION MATTING (PAY ITEM 653.20) OR PERMANENT EROSION MATTING (PAY ITEM 653.21).

REVISIONS	
APRIL 16, 2007	JMF
JANUARY 13, 2009	WHF

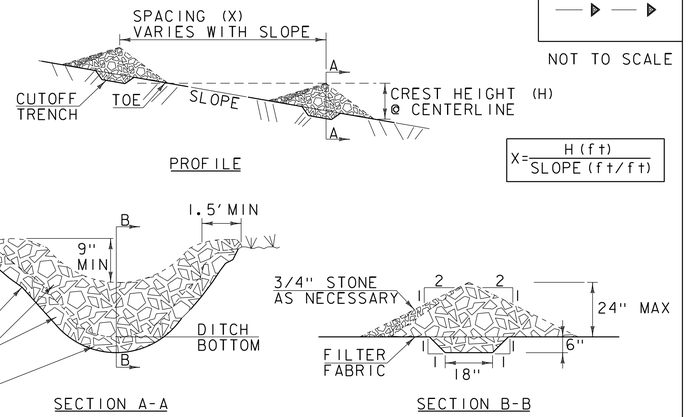
PROJECT NAME: NEWFANE
PROJECT NUMBER: BF 0106(6)

FILE NAME: sl3j306eroDetails.dgn
PROJECT LEADER: C. CARLSON
DESIGNED BY: C. BURRALL
EPSC DETAIL SHEET 1

PLOT DATE: 05-JUN-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: C. BURRALL
SHEET 37 OF 39

SYMBOL

NOT TO SCALE



CONSTRUCTION SPECIFICATIONS

1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION.
2. CHECK DAMS SHALL BE SPACED SO THAT THE ELEVATION OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION AS THE TOE OF THE UPSTREAM DAM.
3. 3/4" FILTERING STONE MAY BE ADDED TO THE FACE OF THE CHECK DAM AS NECESSARY.
4. EXTEND THE STONE A MINIMUM OF 1.5' BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
5. PROTECT CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
6. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.
7. MAXIMUM DRAINAGE AREA 2 ACRES.

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

CHECK DAM

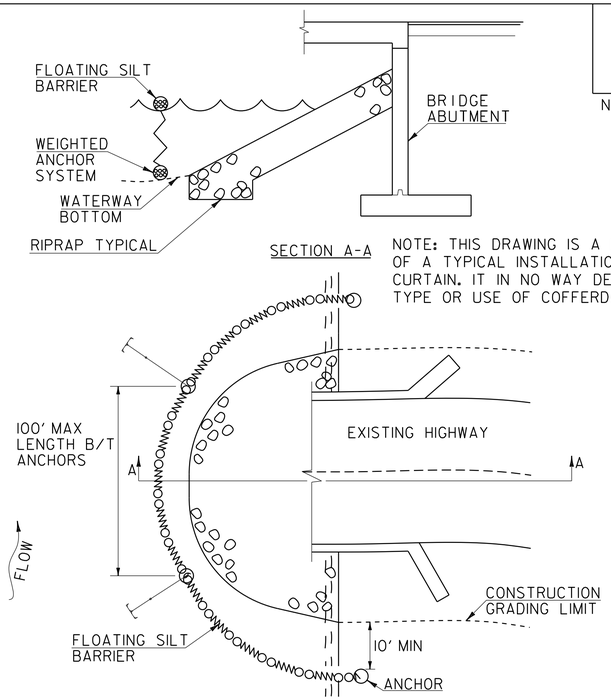
NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR TEMPORARY STONE CHECK DAM, TYPE I (PAY ITEM 653.25)

REVISIONS	
MARCH 21, 2008	WHF
JANUARY 8, 2009	WHF

SYMBOL

NOT TO SCALE



CONSTRUCTION SPECIFICATIONS

1. FILTER CURTAIN SHALL NOT BE PLACED ACROSS A FLOWING WATERWAY, OR IN A WATERWAY WITH STREAM VELOCITIES GREATER THAN 1.5 FEET/SECOND.
2. MAXIMUM 100' LENGTH BETWEEN ANCHORS.
3. LAST SECTION SHALL TERMINATE A MINIMUM OF 10' BEYOND LIMIT OF DISTURBANCE.
4. THE WEIGHTED ANCHOR SYSTEM SHALL BE A TYPE WHICH ALLOWS THE CURTAIN TO CONFORM TO THE BOTTOM OF THE WATERWAY.
5. THE CURTAIN SHALL BE REMOVED BY SLOWLY PULLING TOWARD THE SHORE MINIMIZING THE ESCAPE OF SEDIMENTS INTO WATERWAY.

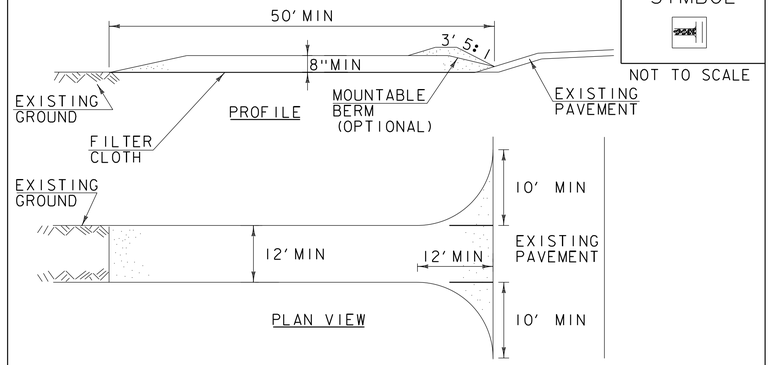
FILTER CURTAIN

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 649 FOR GEOTEXTILE FOR FILTER CURTAIN (PAY ITEM 649.61).

REVISIONS	
APRIL 1, 2008	WHF
JANUARY 13, 2009	WHF
SEPTEMBER 4, 2009	WHF

SYMBOL

NOT TO SCALE



CONSTRUCTION SPECIFICATIONS

1. STONE SIZE- USE 1-4" STONE, RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH- NOT LESS THAN 50' (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30' MINIMUM LENGTH APPLIES).
3. THICKNESS- NOT LESS THAN 8".
4. WIDTH- 12' MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. 24' IF SINGLE ENTRANCE TO SITE.
5. GEOTEXTILE MUST BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING STONE.
6. SURFACE WATER- ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED ACCORDING TO PERMIT REQUIREMENTS.

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

STABILIZED CONSTRUCTION ENTRANCE

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

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR VEHICLE TRACKING PAD (PAY ITEM 653.35) OR AS SPECIFIED IN THE CONTRACT.

REVISIONS	
MARCH 24, 2008	WHF
JANUARY 13, 2009	WHF

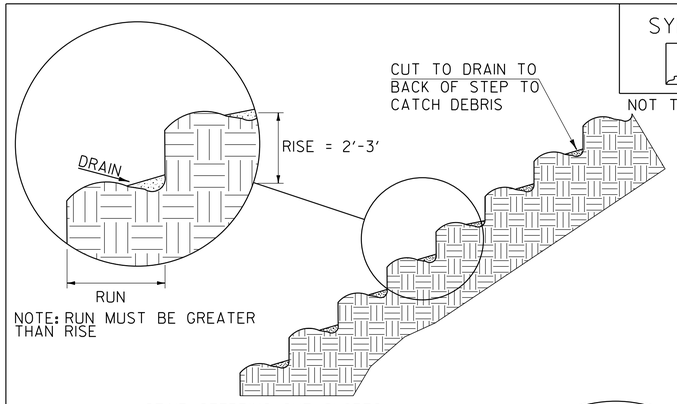
PROJECT NAME: NEWFANE
PROJECT NUMBER: BF 0106(6)

FILE NAME: si3j306eroDetails.dgn
PROJECT LEADER: C. CARLSON
DESIGNED BY: C. BURRALL
EPSC DETAIL SHEET 2

PLOT DATE: 05-JUN-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: C. BURRALL
SHEET 38 OF 39

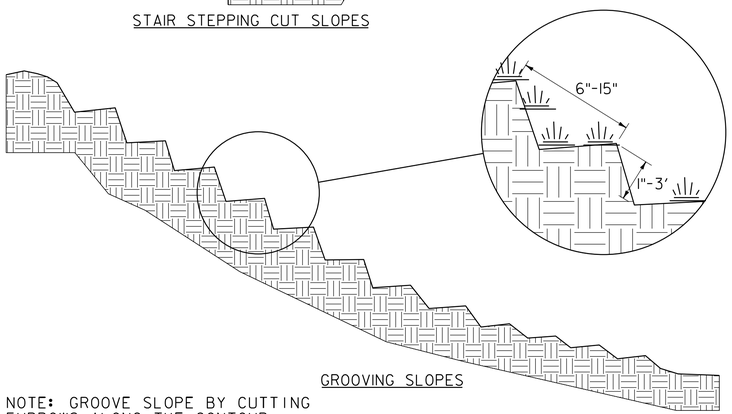
SYMBOL

NOT TO SCALE



NOTE: RUN MUST BE GREATER THAN RISE

STAIR STEPPING CUT SLOPES



GROOVING SLOPES

NOTE: GROOVE SLOPE BY CUTTING FURROWS ALONG THE CONTOUR. IRREGULARITIES IN THE SOIL SURFACE CATCH RAINWATER AND RETAIN LIME, FERTILIZER AND SEED.

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

SURFACE ROUGHENING

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

THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT

REVISIONS	
APRIL 1, 2008	WHF
JANUARY 13, 2009	WHF

PROJECT NAME:	NEWFANE
PROJECT NUMBER:	BF 0106(6)

FILE NAME: sl3j306eroDetails.dgn	PLOT DATE: 05-JUN-2017
PROJECT LEADER: C. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: C. BURRALL	CHECKED BY: C. BURRALL
EPSC DETAIL SHEET 3	SHEET 39 OF 39