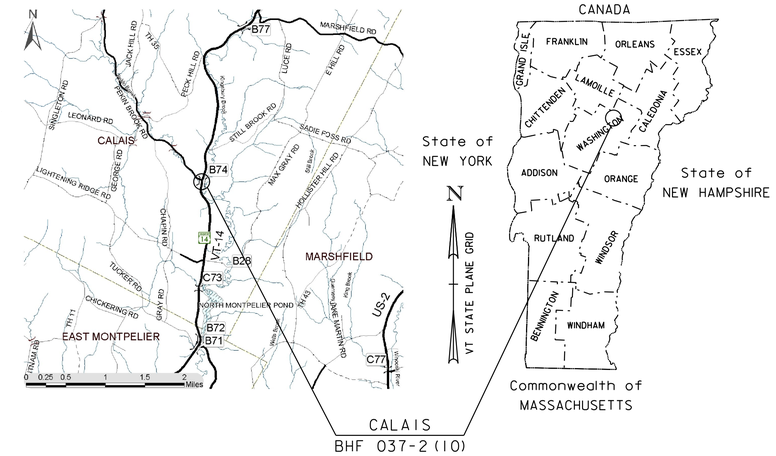
REVIEWER NOTES

1. THIS WILL BE A PHASED PROJECT.
2. IT IS ANTICIPATED THAT ALL WORK WILL STAY WITHIN THE RIGHT OF WAY.
3. A SIMPLIFIED PAVEMENT DESIGN HAS BEEN DONE FOR THIS PROJECT.

# STATE OF VERMONT
# AGENCY OF TRANSPORTATION




# PROPOSED IMPROVEMENT
# BRIDGE PROJECT

TOWN OF CALAIS
COUNTY OF WASHINGTON

ROUTE NO : VT RTE 14, RURAL MINOR ARTERIAL  BRIDGE NO : 74

PROJECT LOCATION: 5.2 MILES NORTH OF JUNCTION WITH US ROUTE 2

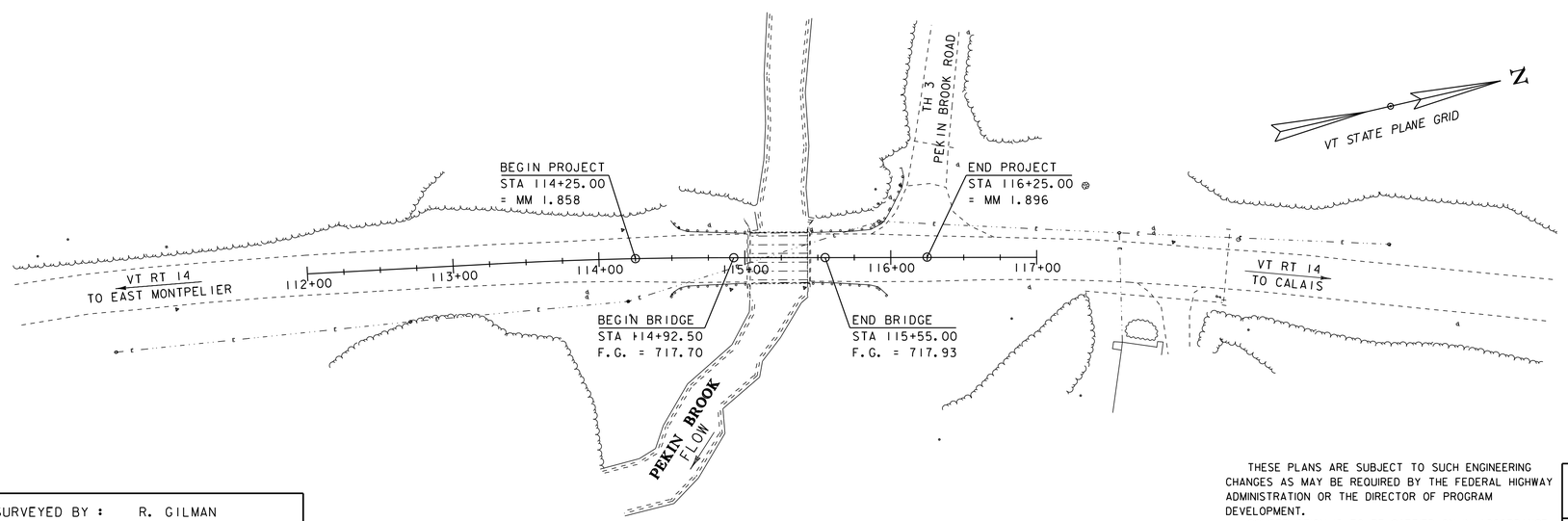
PROJECT DESCRIPTION: PHASED REMOVAL OF EXISTING STRUCTURE, AND PHASED REPLACEMENT WITH NEW STRUCTURE

LENGTH OF STRUCTURE: 62.50 FEET
LENGTH OF ROADWAY: 137.50 FEET
LENGTH OF PROJECT: 200.00 FEET

QUALITY ASSURANCE PROGRAM: LEVEL 2

## 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)
TOP OF CUT
TOE OF SLOPE




SURVEYED BY : R. GILMAN
SURVEYED DATE : 05-30-2012

DATUM
VERTICAL NAVD88
HORIZONTAL NAD83 (2007)

SCALE 1" = 50'-0"
50 0 50

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 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.

**CONCEPTUAL PLANS**
**21-MAR-2013**

DIRECTOR OF PROGRAM DEVELOPMENT
APPROVED _____ DATE _____

PROJECT MANAGER : C.P. WILLIAMS

PROJECT NAME : CALAIS
PROJECT NUMBER : BHF 037-2 (10)

SHEET 1 OF 18 SHEETS

STATE OF VERMONT
AGENCY OF TRANSPORTATION

# PRELIMINARY INFORMATION SHEET (BRIDGE)

Version 12.09.13

**LRFD**

## INDEX OF SHEETS

### PLAN SHEETS


| | |
|---|---|
| 1 | TITLE SHEET |
| 2 | PRELIMINARY INFORMATION SHEET |
| 3 | TYPICAL SECTIONS |
| 4 | LEGEND SHEET |
| 5 | LAYOUT SHEET |
| 6 | PROFILE SHEET |
| 7 | PHASING TYPICAL SECTIONS |
| 8 - 9 | PHASING LAYOUT SHEETS |
| 10 - 14 | MAINLINE CROSS SECTIONS |
| 15 - 17 | CHANNEL CROSS SECTIONS |
| 18 | EXISTING CONDITIONS SHEET |


### STANDARDS LIST

## FINAL HYDRAULIC REPORT

### LRFR LOAD RATING FACTORS

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

### DESIGN VALUES

| | | |
|---|---|---|
| 1. DESIGN LIVE LOAD | | HL-93 |
| 2. FUTURE PAVEMENT | $d_p$: | 3.0 INCH |
| 3. DESIGN SPAN | $L$: | 62.50 FT |
| 4. MIN. MID-SPAN POS. CAMBER @ RELEASE (PRESTRESSED UNITS) | $\Delta$: | - - - |
| 5. PRESTRESSING STRAND (0.60 INCH DIAMETER - LOW RELAX) | $f_y$: | 270 KSI |
| 6. PRESTRESSED CONCRETE STRENGTH | $f'_c$: | 6.0 KSI |
| 7. PRESTRESSED CONCRETE RELEASE STRENGTH | $f'_{ci}$: | 5.0 KSI |
| 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. SOIL UNIT WEIGHT | $\gamma$: | 0.140 KCF |
| 15. NOMINAL BEARING RESISTANCE OF SOIL | $q_n$: | 4.0 KSF |
| 16. SOIL BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD) | $\phi$: | - - - |
| 17. NOMINAL BEARING RESISTANCE OF ROCK | $q_n$: | 10.0 KSF |
| 18. ROCK BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD) | $\phi$: | - - - |
| 19. NOMINAL AXIAL PILE RESISTANCE | $q_p$: | - - - |
| 20. PILE YIELD STRENGTH ASTM A572 | $f_y$: | - - - |
| 21. PILE SIZE | | - - - |
| 22. EST. PILE LENGTH | $L_p$: | |
| 23. PILE RESISTANCE FACTOR | $\phi$: | - - - |
| 24. LATERAL PILE DEFLECTION | $\Delta$: | - - - |
| 25. BASIC WIND SPEED | $V_{3s}$: | - - - |
| 26. MINIMUM GROUND SNOW LOAD | $p_g$: | - - - |
| 27. SEISMIC DATA PGA: - - - | $S_s$: | - - - |
| | $S_1$: | - - - |

### AS BUILT "REBAR" DETAIL

| LEVEL I | LEVEL II | LEVEL III |
|---|---|---|
| TYPE: | TYPE: | TYPE: |
| GRADE: | GRADE: | GRADE: |

### TRAFFIC DATA

| YEAR | ADT | DHV | % D | % T | ADTT |
|---|---|---|---|---|---|
| 2015 | 3300 | 390 | 76 | 2.4 | 190 |
| 2035 | 3500 | 410 | 76 | 3.2 | 270 |

20 year ESAL for flexible pavement from 2015 to 2035 : 2411000

40 year ESAL for flexible pavement from 2015 to 2055 : 5686000

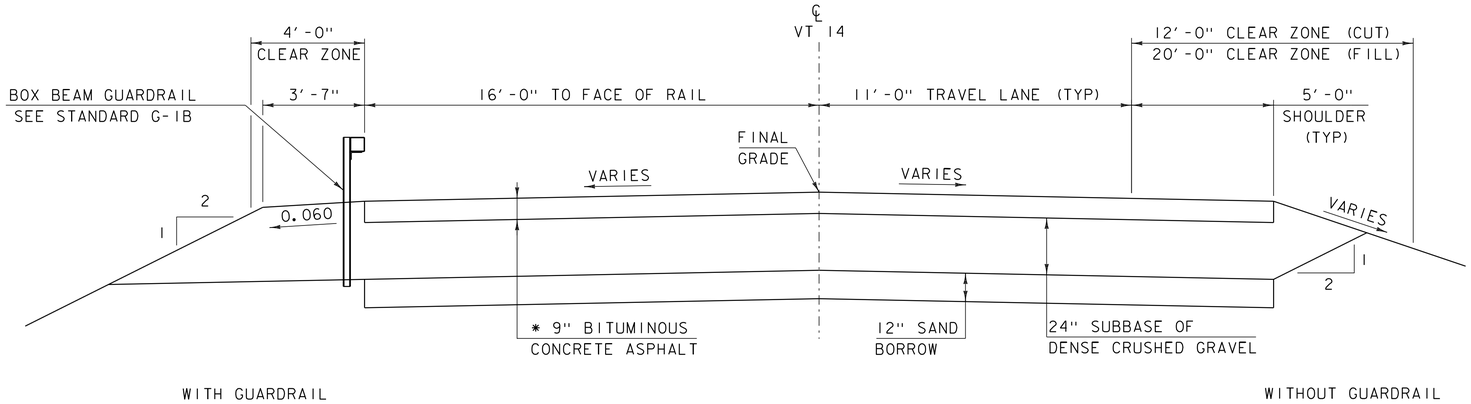
Design Speed : 50 mph

PROJECT NAME: **CALAIS**

PROJECT NUMBER: **BHF 037-2(10)**

FILE NAME: **12b144/s12b144excel.dgn**
PROJECT LEADER: **C.P.WILLIAMS**
DESIGNED BY: **T.FILLBACH**
**PRELIMINARY INFORMATION SHEET 1**

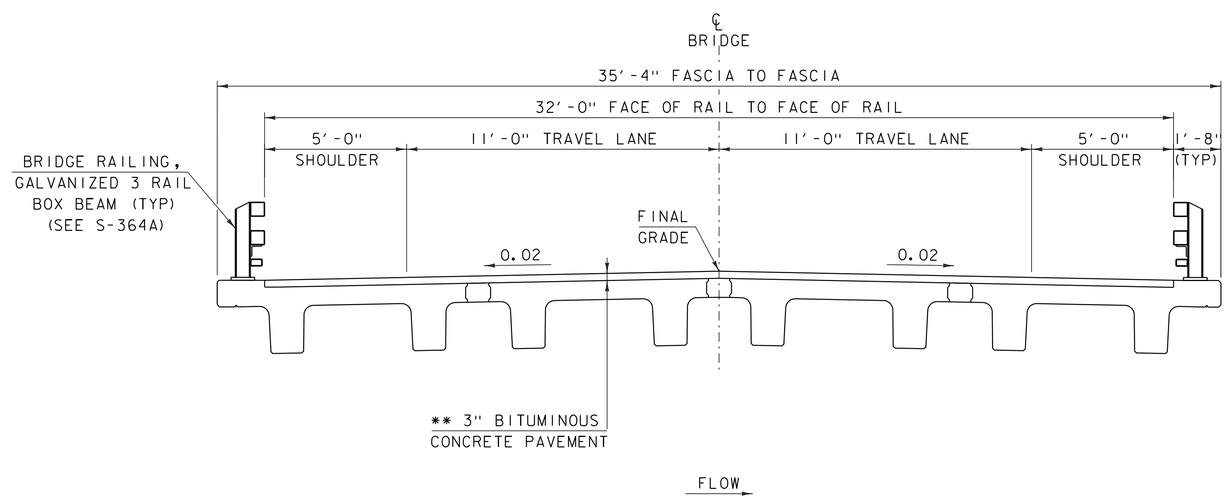
PLOT DATE: 3/15/2013
DRAWN BY: **L.E.GALIHER**
CHECKED BY:




* 1½" TYPE III OR IV OVER
1½" TYPE III OR IV OVER
3" TYPE I OR II OVER
3" TYPE I OR II

## PROPOSED VT 14 TYPICAL SECTION

SCALE ⅜" = 1'-0"




** 1½" TYPE III OR IV OVER
1½" TYPE III OR IV

## PROPOSED BRIDGE TYPICAL SECTION

SCALE ⅜" = 1'-0"

NOTE: SUPERSTRUCTURE NOT DESIGNED.
NEXT D BEAMS SHOWN FOR EXAMPLE.

## MATERIAL TOLERANCES

(IF USED ON PROJECT)

| | |
|---|---|
| SURFACE | |
| - PAVEMENT (TOTAL THICKNESS) | +/- ¼" |
| - AGGREGATE SURFACE COURSE | +/- ½" |
| SUBBASE | +/- 1" |
| SAND BORROW | +/- 1" |

PROJECT NAME: CALAIS
PROJECT NUMBER: BHF 037-2(10)

FILE NAME: 12b144/s12b144typical.dgn
PROJECT LEADER: C.P.WILLIAMS
DESIGNED BY: T.FILLBACH
TYPICAL SECTIONS

PLOT DATE: 21-MAR-2013
DRAWN BY: D.D.BEARD
CHECKED BY: ------
SHEET 3 OF 18

## 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 |
| | I&M | INSTALL & MAINTAIN EASEMENT |
| | LAND | LANDSCAPE EASEMENT |
| | SR | SLOPE RIGHT |
| | UE | UTILITY EASEMENT |
| | (P) | PERMANENT EASEMENT |
| | (T) | TEMPORARY EASEMENT |
| ■ | BNDNS | BOUND SET |
| ⊡ | BNDNS | BOUND TO BE SET |
| ● | IPNS | IRON PIN SET |
| ◎ | IPNS | IRON PIN TO BE SET |
| ⊠ | CALC | CALCULATED ROW POINT |
| [DISTANCE] | | DISTANCE CARRIED ON NEXT SHEET |

## COMMON TOPOGRAPHIC POINT SYMBOLS

| POINT | CODE | DESCRIPTION |
|---|---|---|
| | APL | BOUND APPARENT LOCATION |
| | BM | BENCH MARK |
| | 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 VALUE |
| | 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

| | |
|---|---|
| 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)

| | |
|---|---|
| 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

| | |
|---|---|
| | CLEAR ZONE |
| | PLAN LAYOUT MATCHLINE |

### PROJECT CONSTRUCTION FEATURES

| | |
|---|---|
| | TOP OF CUT SLOPE |
| | TOE OF FILL SLOPE |
| | STONE FILL |
| | BOTTOM OF DITCH 'L |
| | 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 |
| | 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 |

### ENVIRONMENTAL RESOURCES

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

### ARCHEOLOGICAL & HISTORIC

| | |
|---|---|
| | ARCHEOLOGICAL BOUNDARY |
| | HISTORIC DISTRICT BOUNDARY |
| | HISTORIC AREA |
| H | HISTORIC STRUCTURE |

## CONVENTIONAL TOPOGRAPHIC SYMBOLOGY

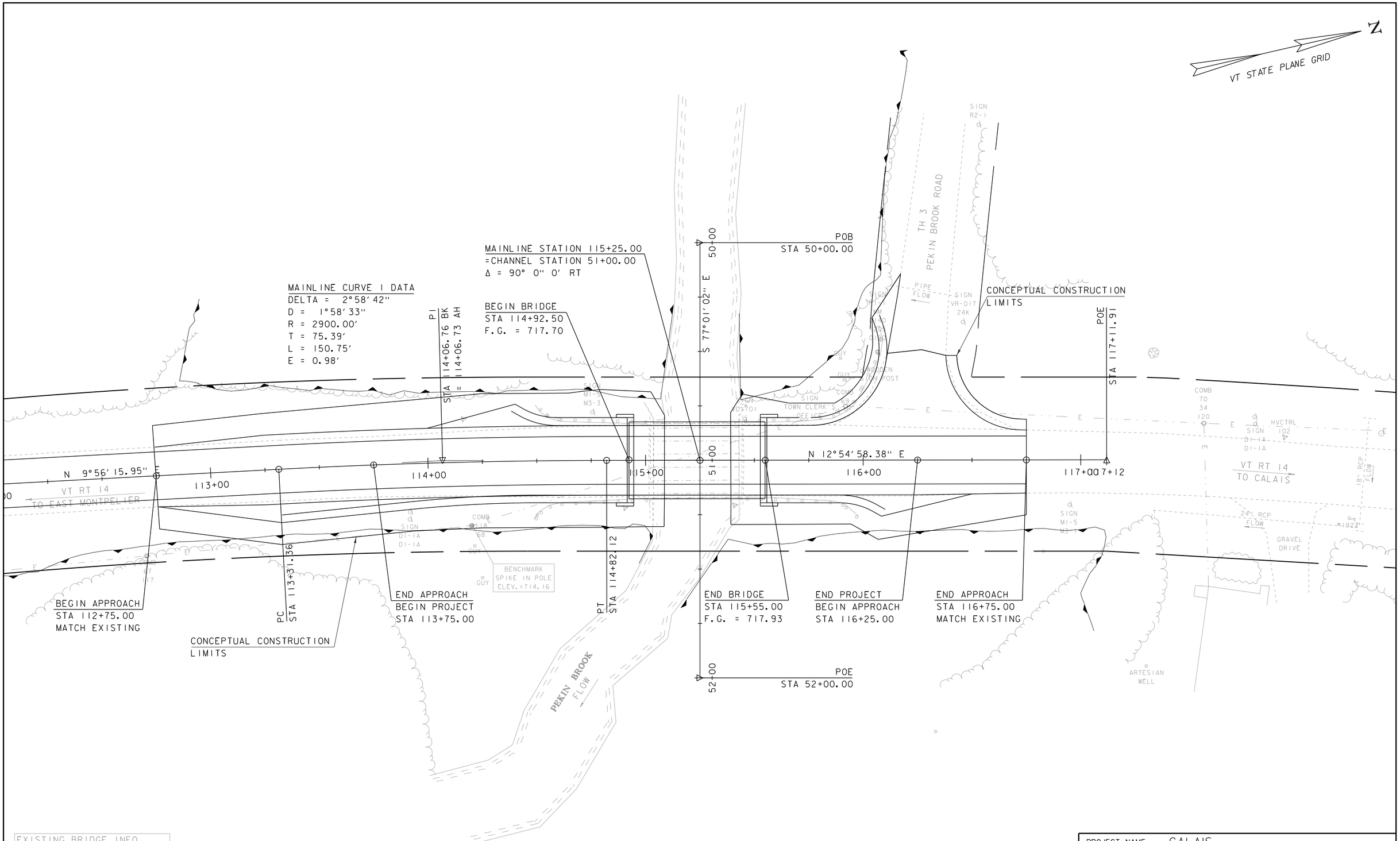
### EXISTING FEATURES

| | |
|---|---|
| | 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: CALAIS
PROJECT NUMBER: BRF 037-2(10)

FILE NAME: s12b144excel.dgn
PROJECT LEADER: C.P.WILLIAMS
DESIGNED BY: T.FILLBACH
LEGEND SHEET

PLOT DATE: 21-MAR-2013
DRAWN BY: L.E.GALIHER
CHECKED BY: ------

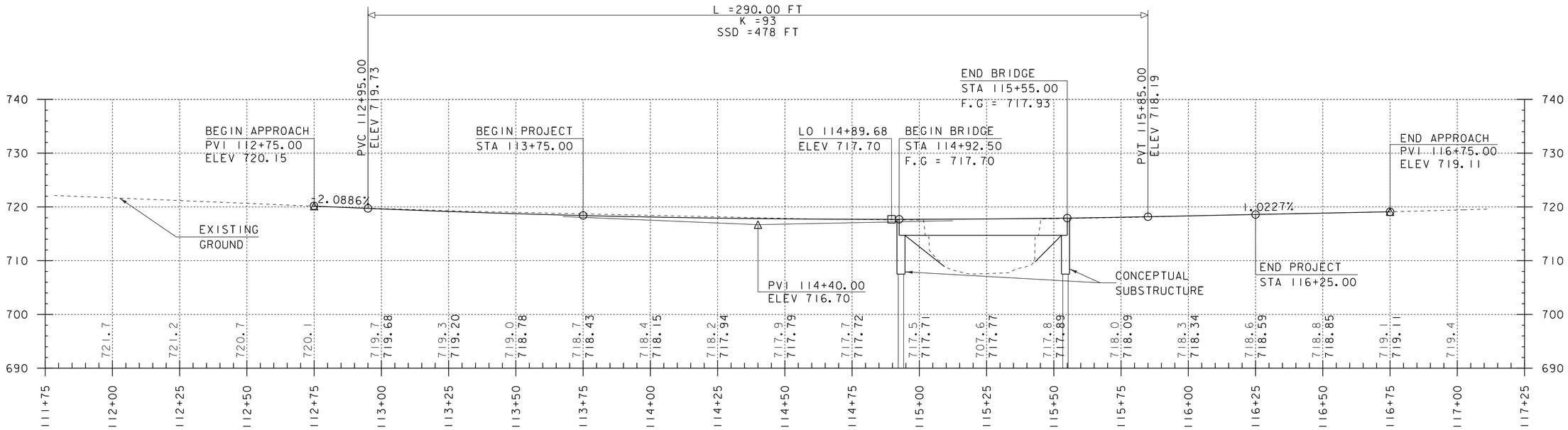



EXISTING BRIDGE INFO
CONCRETE T-BEAM STRUCTURE
BUILT IN 1928,
RECONSTRUCTED IN 1981.
LENGTH = 44′-0″
WIDTH = 30′-0″

## LAYOUT SHEET

SCALE 1″ = 20′-0″
20 0 20

| | |
|---|---|
| PROJECT NAME: CALAIS | |
| PROJECT NUMBER: BHF 037-2(10) | |
| FILE NAME: s12b144bdr.dgn | PLOT DATE: 21-MAR-2013 |
| PROJECT LEADER: C.P.WILLIAMS | DRAWN BY: L.E.GALIHER |
| DESIGNED BY: ------ | CHECKED BY: ------ |
| LAYOUT SHEET | SHEET 5 OF 18 |




## VT ROUTE 14 PROFILE

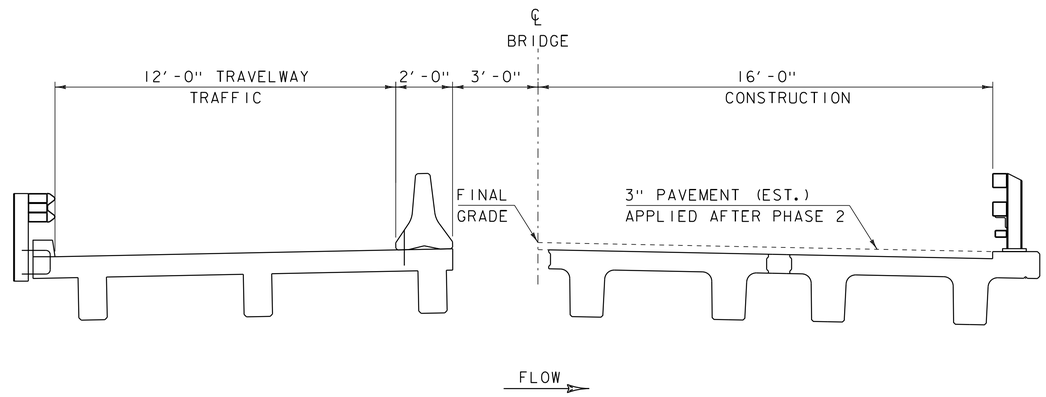
SCALE: HORIZONTAL 1"=20'
VERTICAL 1"=10'

NOTE:

GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND ALONG ℄

GRADES SHOWN TO THE NEAREST HUNDREDTH ARE FINISH GRADE ALONG ℄

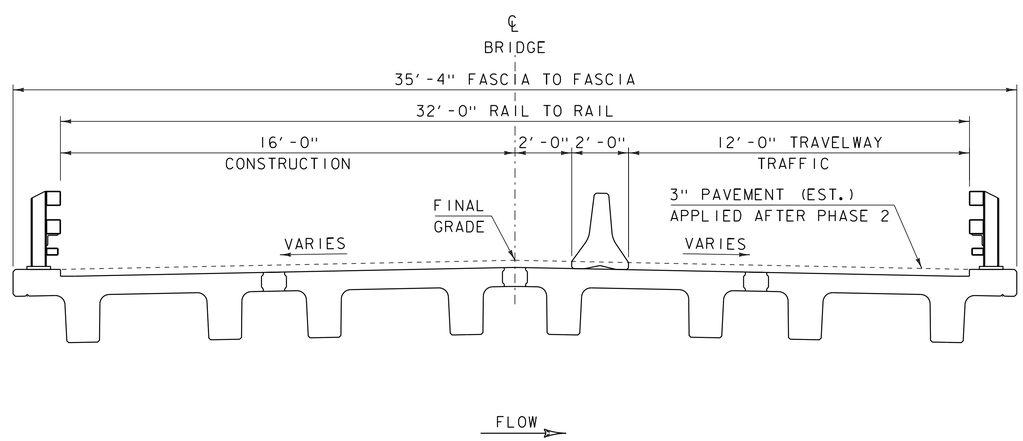
| | |
|---|---|
| PROJECT NAME: CALAIS | |
| PROJECT NUMBER: BHF 037-2(10) | |
| FILE NAME: s12b144profile.dgn | PLOT DATE: 21-MAR-2013 |
| PROJECT LEADER: C.P.WILLIAMS | DRAWN BY: D.D.BEARD |
| DESIGNED BY: ------ | CHECKED BY: ------ |
| PROFILE SHEET | SHEET 6 OF 18 |




## BRIDGE REPLACEMENT PHASE #1 TYPICAL SECTION

SCALE 3/8" = 1'-0"

NOTE: TRAVEL SURFACE WILL BE BARE DECK UNTIL PAVING OPERATIONS

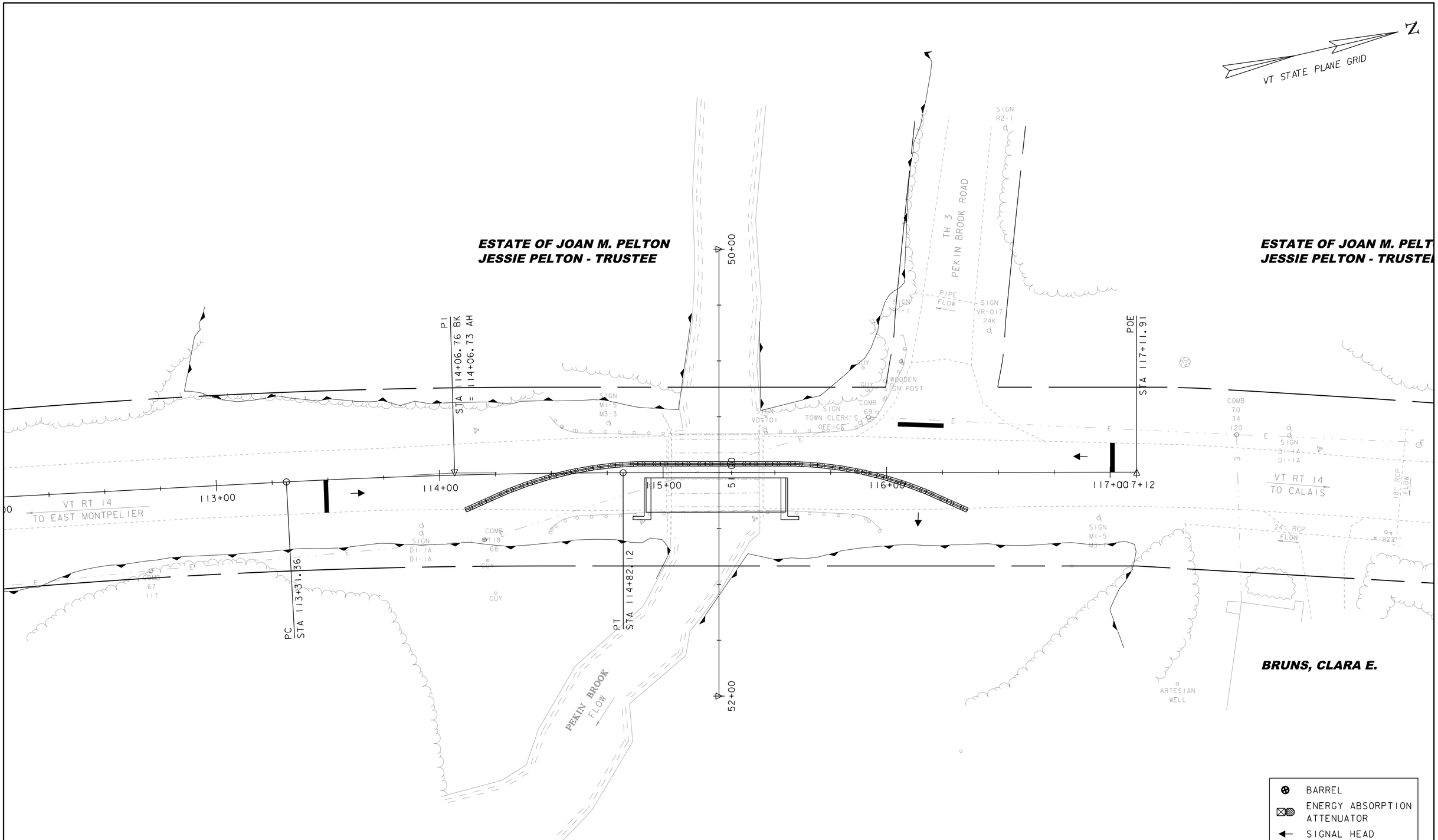



## BRIDGE REPLACEMENT PHASE #2 TYPICAL SECTION

SCALE 3/8" = 1'-0"

NOTE: TRAVEL SURFACE WILL BE BARE DECK UNTIL PAVING OPERATIONS

| | |
|---|---|
| PROJECT NAME: CALAIS | |
| PROJECT NUMBER: BHF 037-2(10) | |
| FILE NAME: 12b144/s12b144typical.dgn | PLOT DATE: 21-MAR-2013 |
| PROJECT LEADER: C.P.WILLIAMS | DRAWN BY: D.D.BEARD |
| DESIGNED BY: ------ | CHECKED BY: ------ |
| PHASING TYPICAL SECTIONS | SHEET 7 OF 18 |



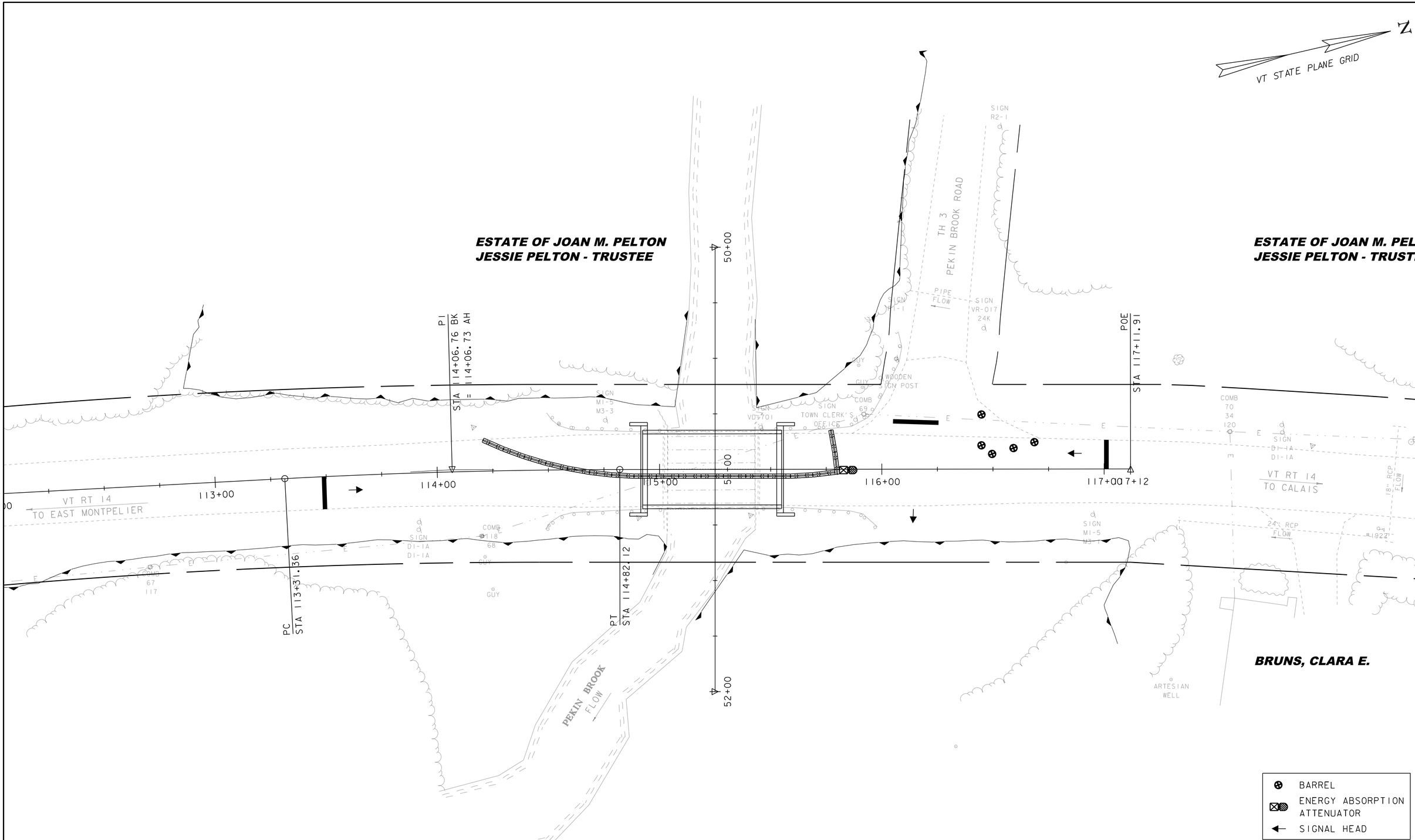

EXISTING BRIDGE INFO
CONCRETE T-BEAM STRUCTURE
BUILT IN 1928,
RECONSTRUCTED IN 1981.
LENGTH = 44'-0"
WIDTH = 30'-0"

PHASE I LAYOUT

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

ESTATE OF JOAN M. PELTON
ELTON - TRUSTEE

| | |
|---|---|
| PROJECT NAME: CALAIS BR 74 | |
| PROJECT NUMBER: BHF 037-2(10) | |
| FILE NAME: 12b144/s12b144bdr.dgn | PLOT DATE: 21-MAR-2013 |
| PROJECT LEADER: C.P.WILLIAMS | DRAWN BY: L.E.GALIHER |
| DESIGNED BY: L.E.GALIHER | CHECKED BY: ------ |
| PHASE I LAYOUT | SHEET 8 OF 18 |

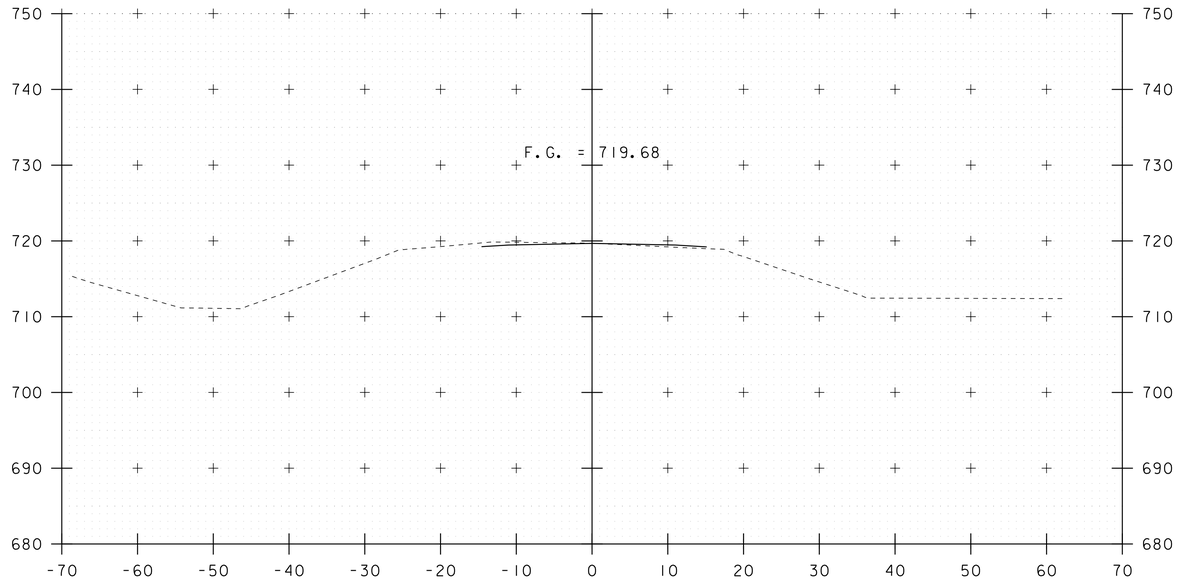



EXISTING BRIDGE INFO
CONCRETE T-BEAM STRUCTURE
BUILT IN 1928,
RECONSTRUCTED IN 1981.
LENGTH = 44'-0"
WIDTH = 30'-0"

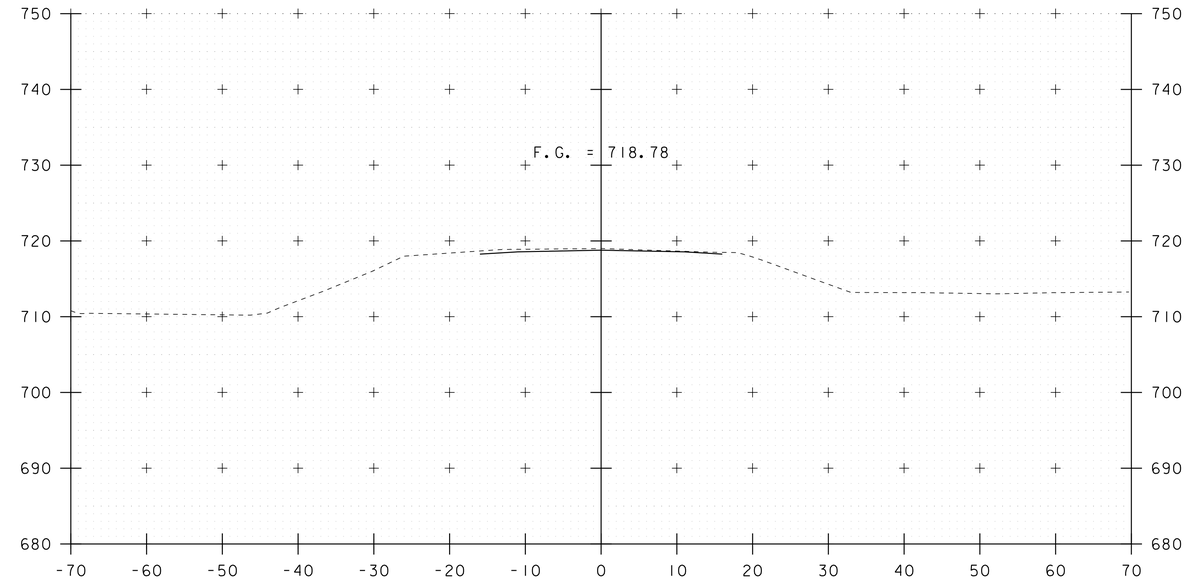
PHASE 2 LAYOUT

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

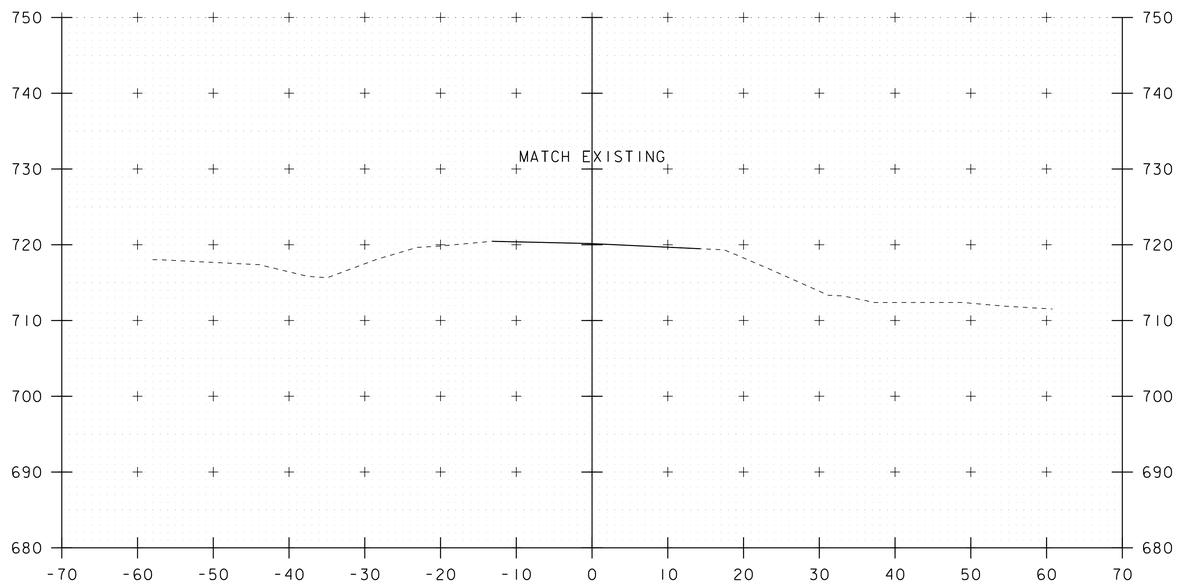
| | |
|---|---|
| PROJECT NAME: CALAIS BR 74 | |
| PROJECT NUMBER: BHF 037-2(10) | |
| FILE NAME: 12B144/S12b144bdr.dgn | PLOT DATE: 21-MAR-2013 |
| PROJECT LEADER: C.P.WILLIAMS | DRAWN BY: L.E.GALIHER |
| DESIGNED BY: L.E.GALIHER | CHECKED BY: ------ |
| PHASE 2 LAYOUT | SHEET 9 OF 18 |




113+00

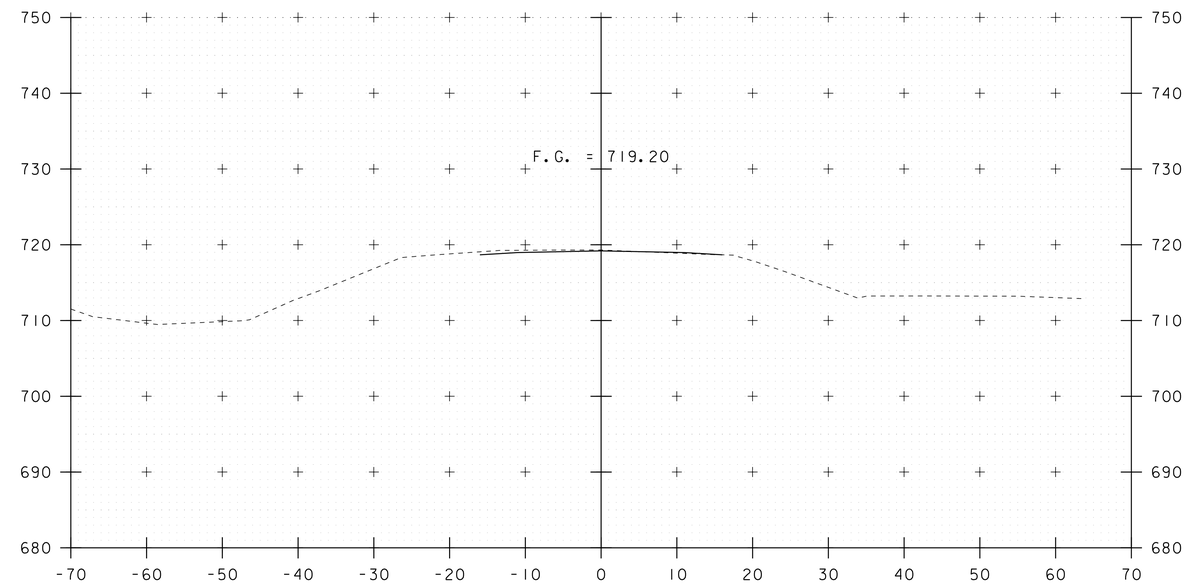



113+50




STA 112+75.00
BEGIN APPROACH

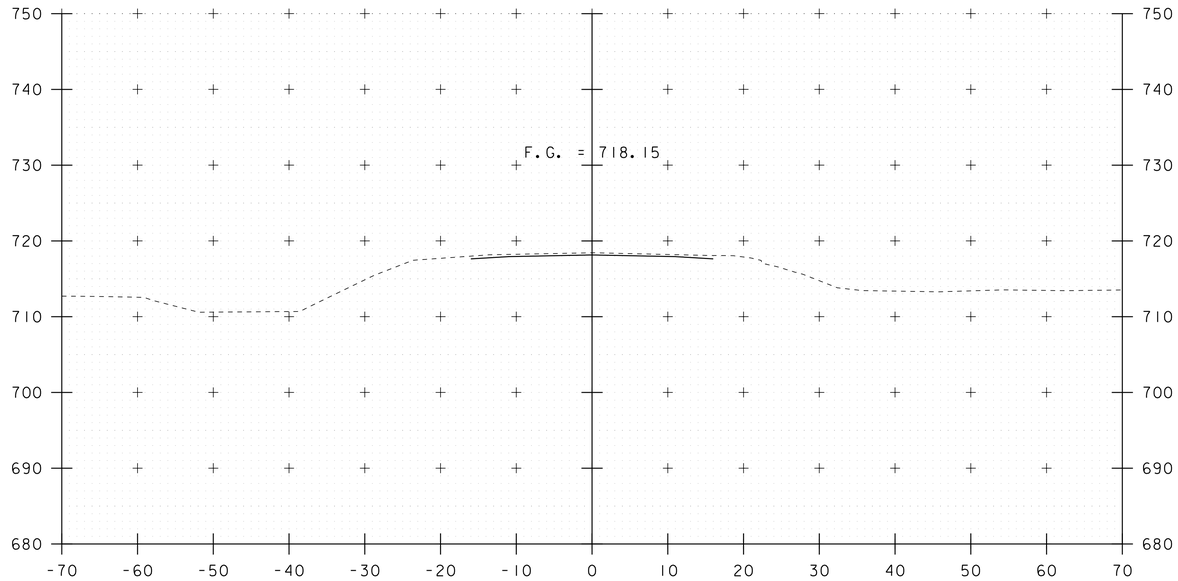
112+75



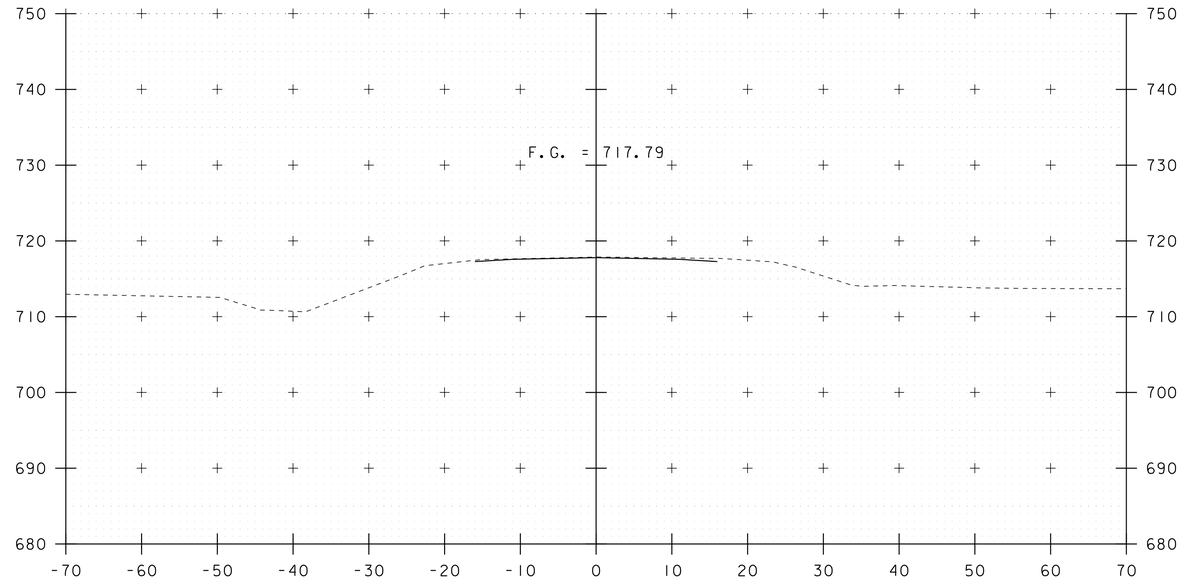

113+25

STA. 112+75 TO STA. 113+50

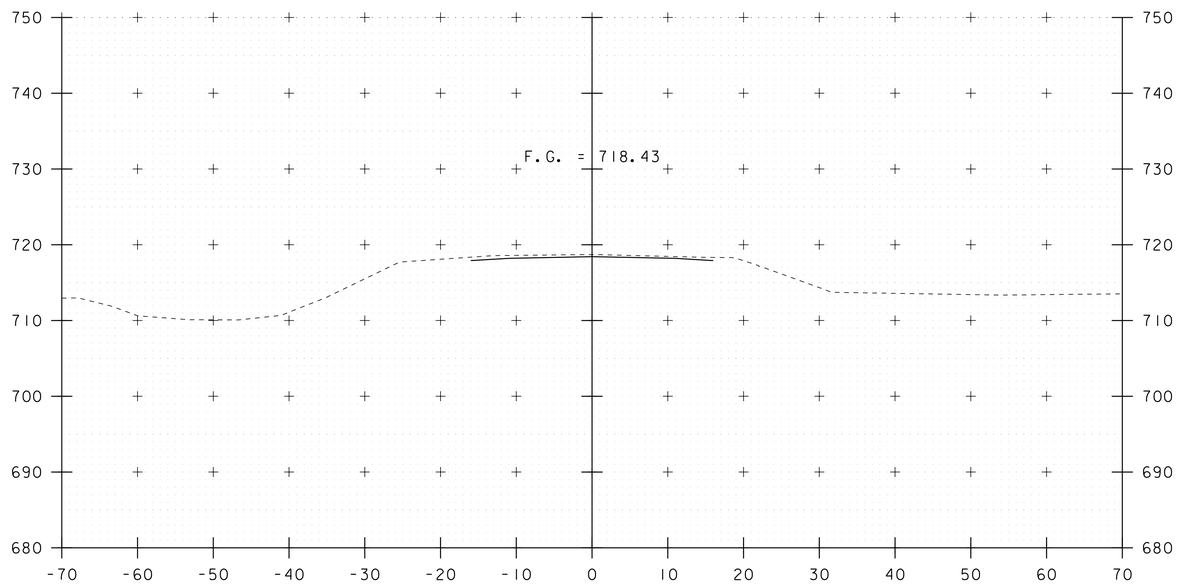
| | |
|---|---|
| PROJECT NAME: CALAIS | |
| PROJECT NUMBER: BHF 037-2(10) | |
| FILE NAME: s12b144xs.dgn | PLOT DATE: 21-MAR-2013 |
| PROJECT LEADER: C.P.WILLIAMS | DRAWN BY: L.E.GALIHER |
| DESIGNED BY: L.E.GALIHER | CHECKED BY: ------ |
| MAINLINE CROSS SECTIONS 1 | SHEET 10 OF 18 |




114+00

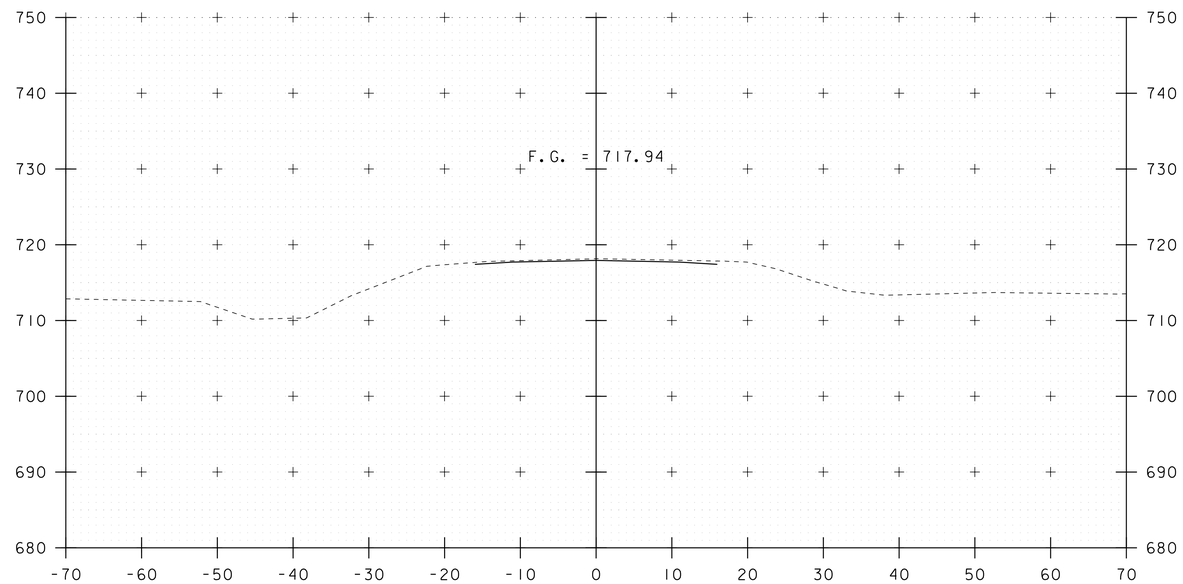



114+50




STA 113+75.00
BEGIN PROJECT

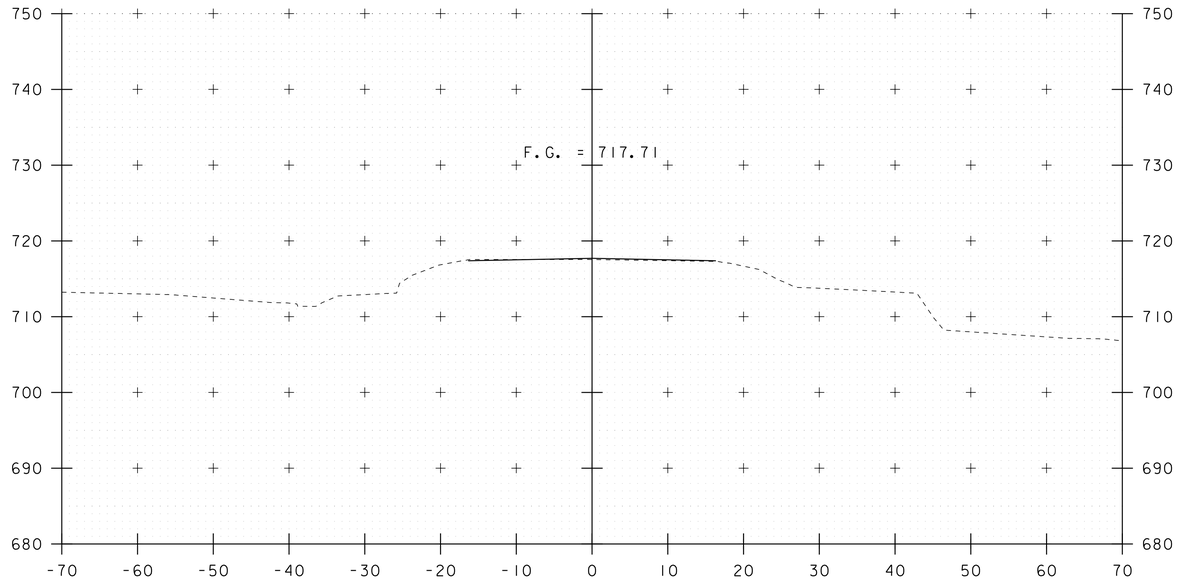
113+75



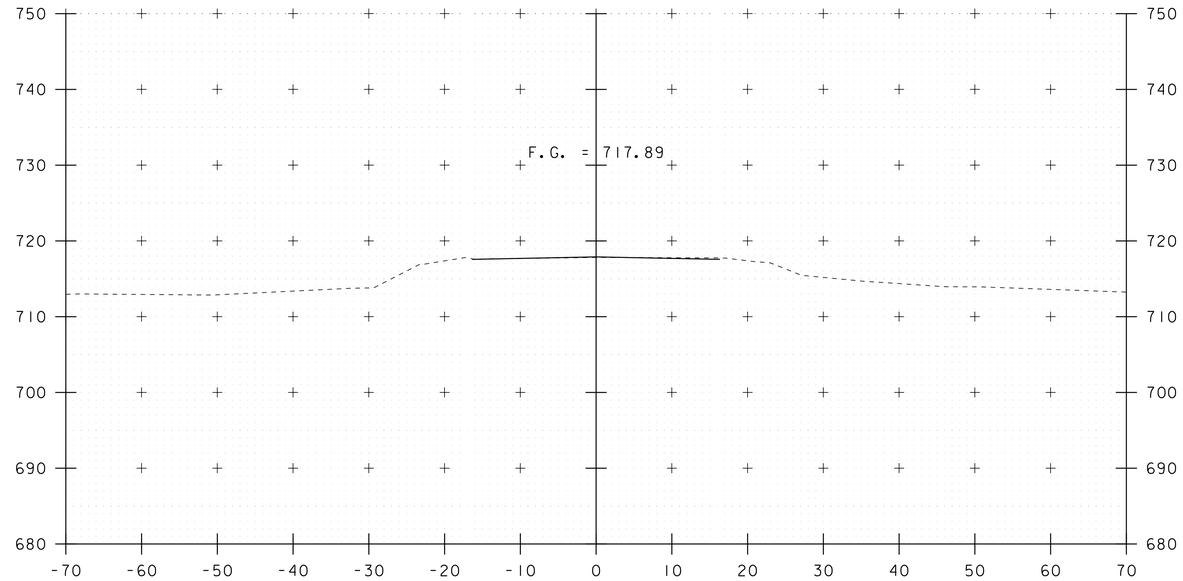

114+25

STA. 113+75 TO STA. 114+50

| | |
|---|---|
| PROJECT NAME: CALAIS | |
| PROJECT NUMBER: BHF 037-2(10) | |
| FILE NAME: s12b144xs.dgn | PLOT DATE: 21-MAR-2013 |
| PROJECT LEADER: C.P.WILLIAMS | DRAWN BY: L.E.GALIHER |
| DESIGNED BY: L.E.GALIHER | CHECKED BY: ------ |
| MAINLINE CROSS SECTIONS 2 | SHEET 11 OF 18 |

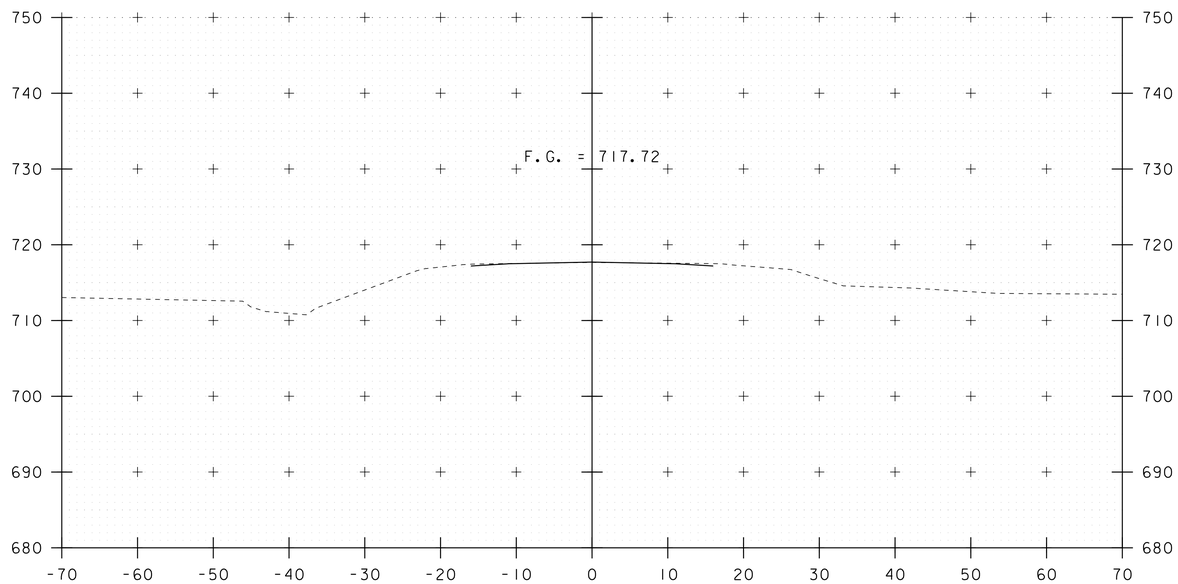



115+00



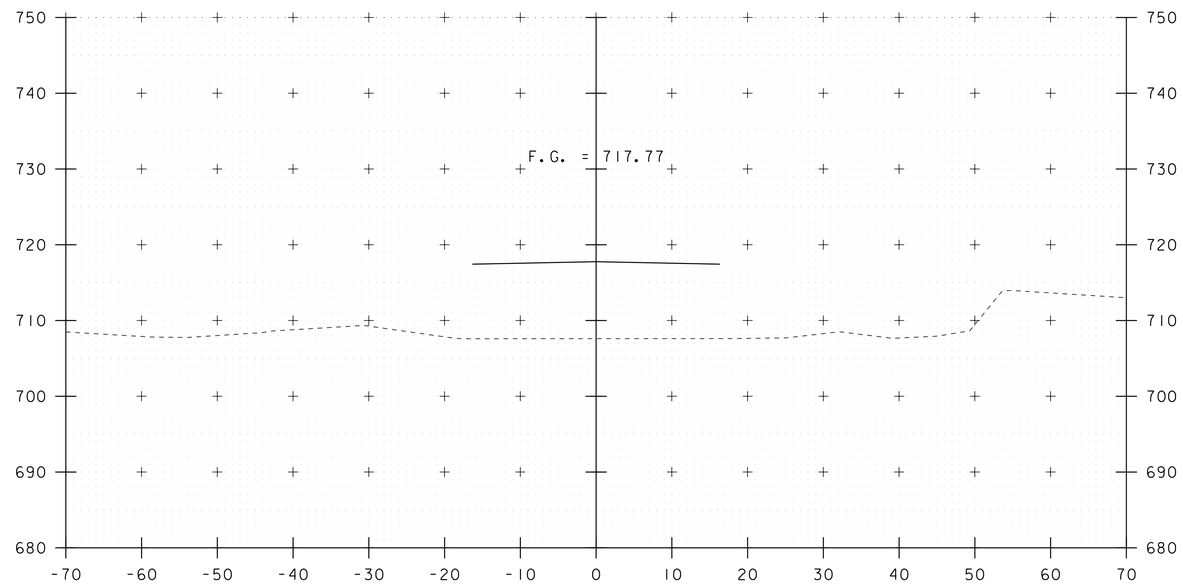

STA 115+55.00
END BRIDGE

115+50




STA 114+92.50
BEGIN BRIDGE

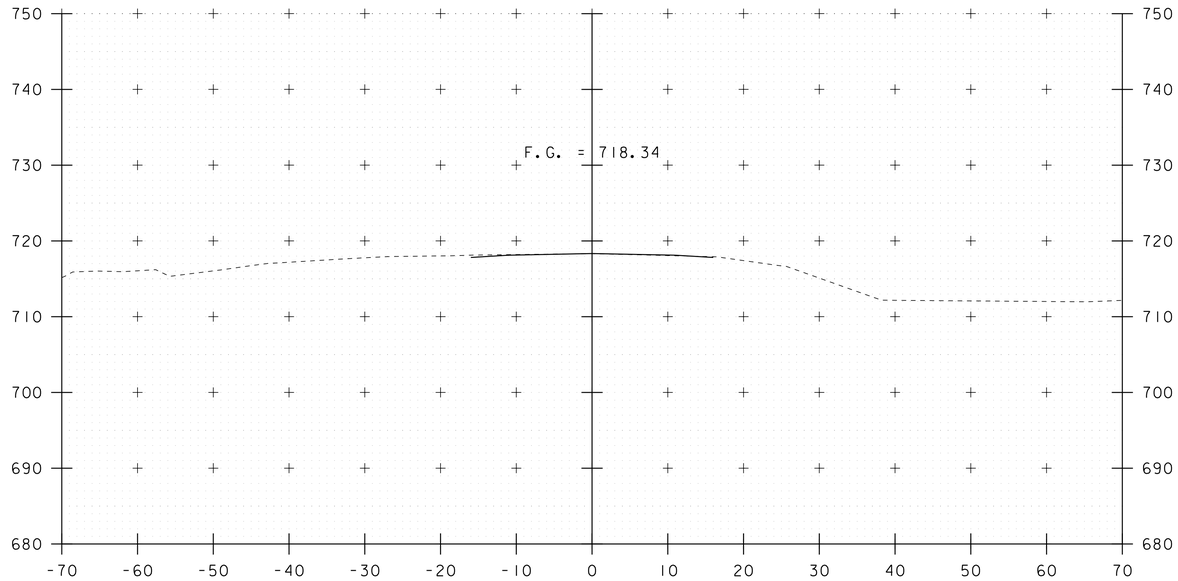
114+75



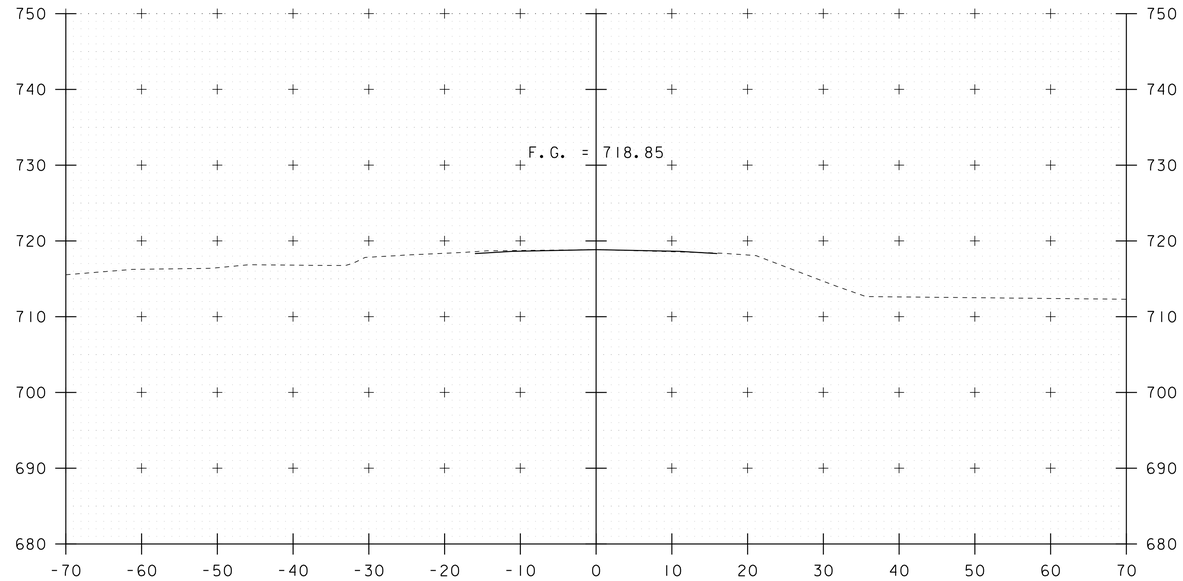

115+25

STA. 114+75 TO STA. 115+50

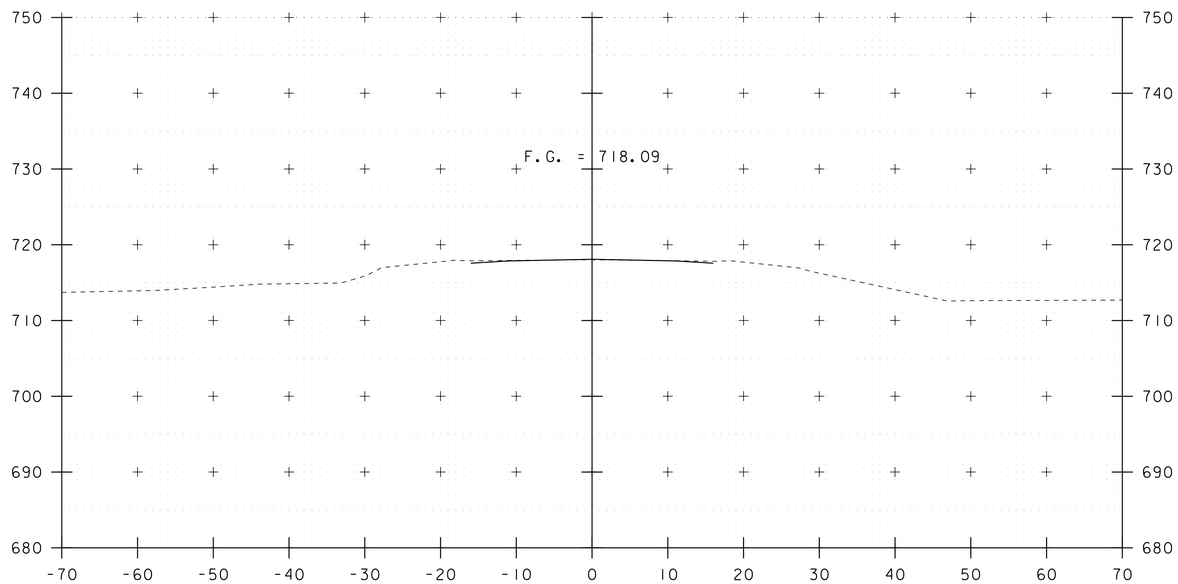
| | |
|---|---|
| PROJECT NAME: CALAIS | |
| PROJECT NUMBER: BHF 037-2(10) | |
| FILE NAME: s12b144xs.dgn | PLOT DATE: 21-MAR-2013 |
| PROJECT LEADER: C.P.WILLIAMS | DRAWN BY: L.E.GALIHER |
| DESIGNED BY: L.E.GALIHER | CHECKED BY: ------ |
| MAINLINE CROSS SECTIONS 3 | SHEET 12 OF 18 |



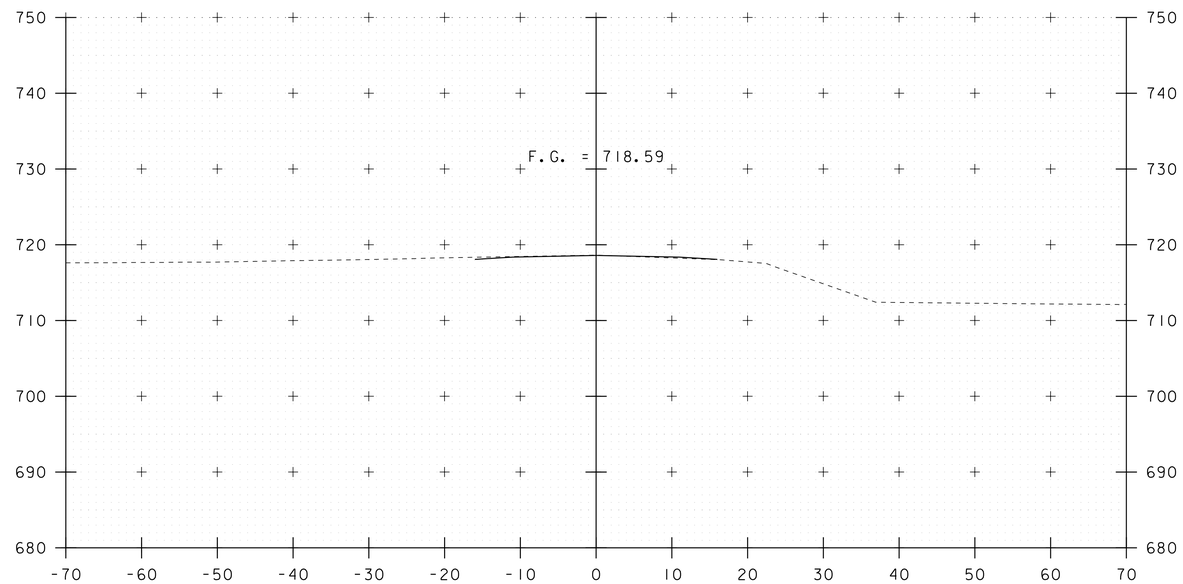

116+00




116+50




115+75

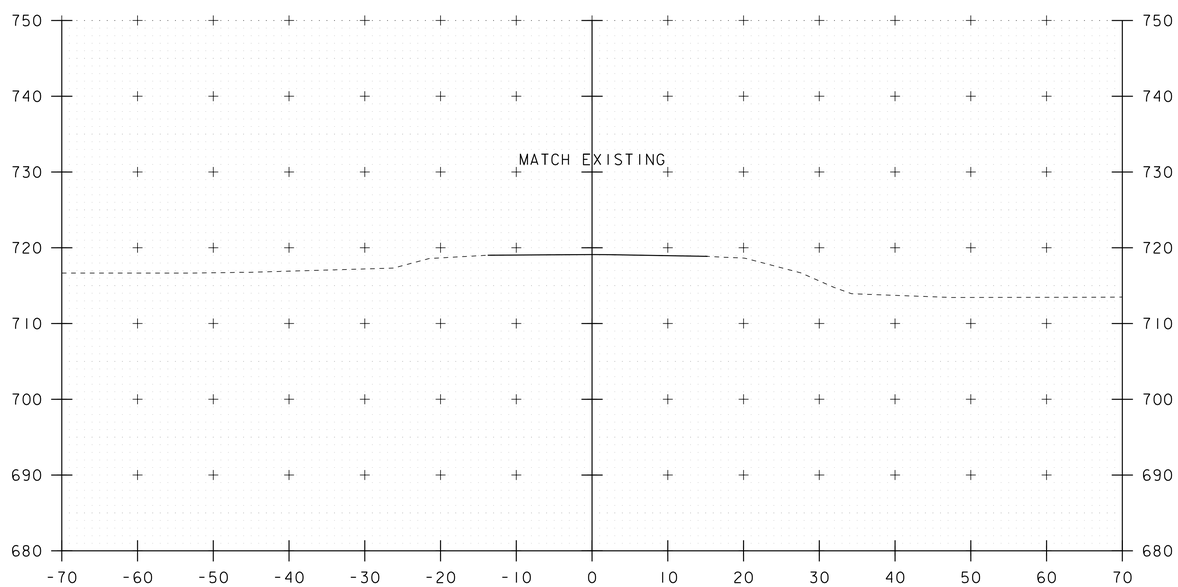



STA 116+25.00
END PROJECT

116+25

STA. 115+75 TO STA. 116+50

| | |
|---|---|
| PROJECT NAME: CALAIS | |
| PROJECT NUMBER: BHF 037-2(10) | |
| FILE NAME: s12b144xs.dgn | PLOT DATE: 21-MAR-2013 |
| PROJECT LEADER: C.P.WILLIAMS | DRAWN BY: L.E.GALIHER |
| DESIGNED BY: L.E.GALIHER | CHECKED BY: ------ |
| MAINLINE CROSS SECTIONS 4 | SHEET 13 OF 18 |

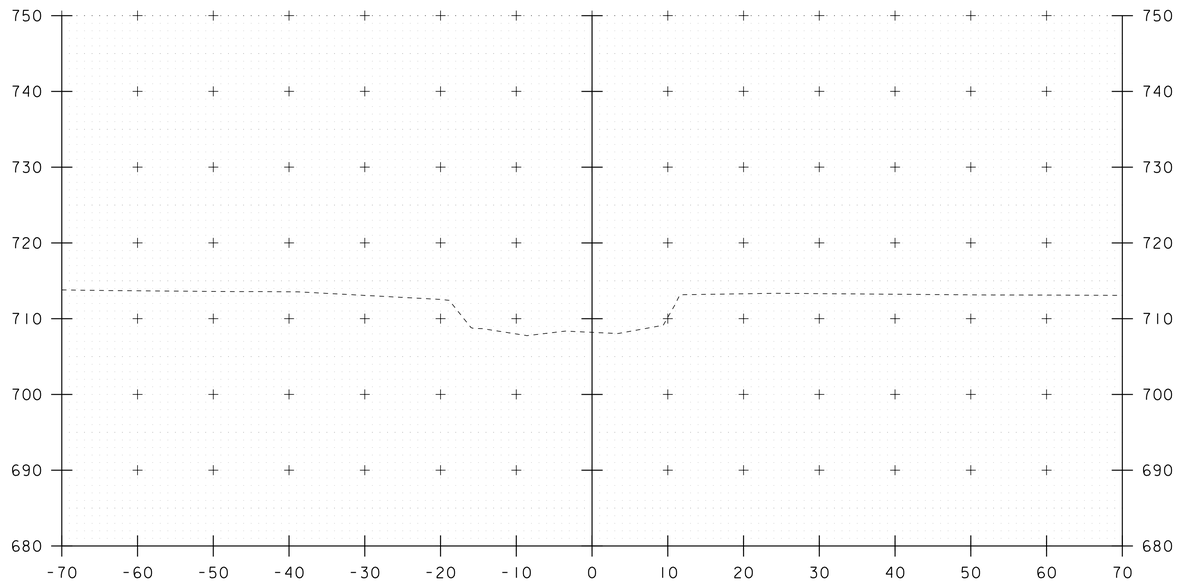



STA 116+75.00
END APPROACH

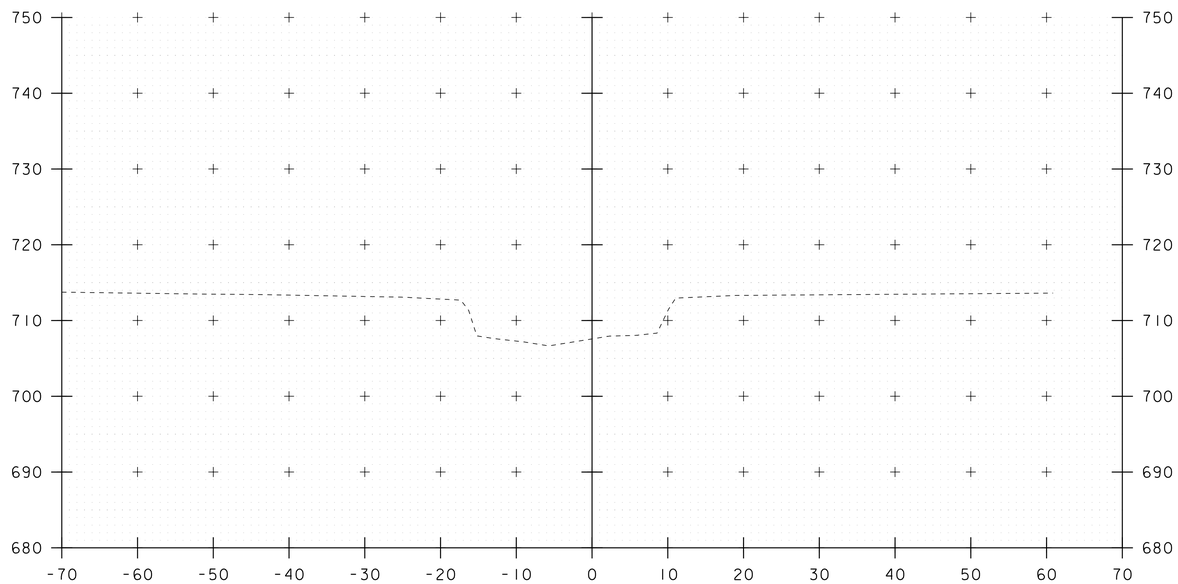
116+75

STA. 116+75 TO STA. 116+75

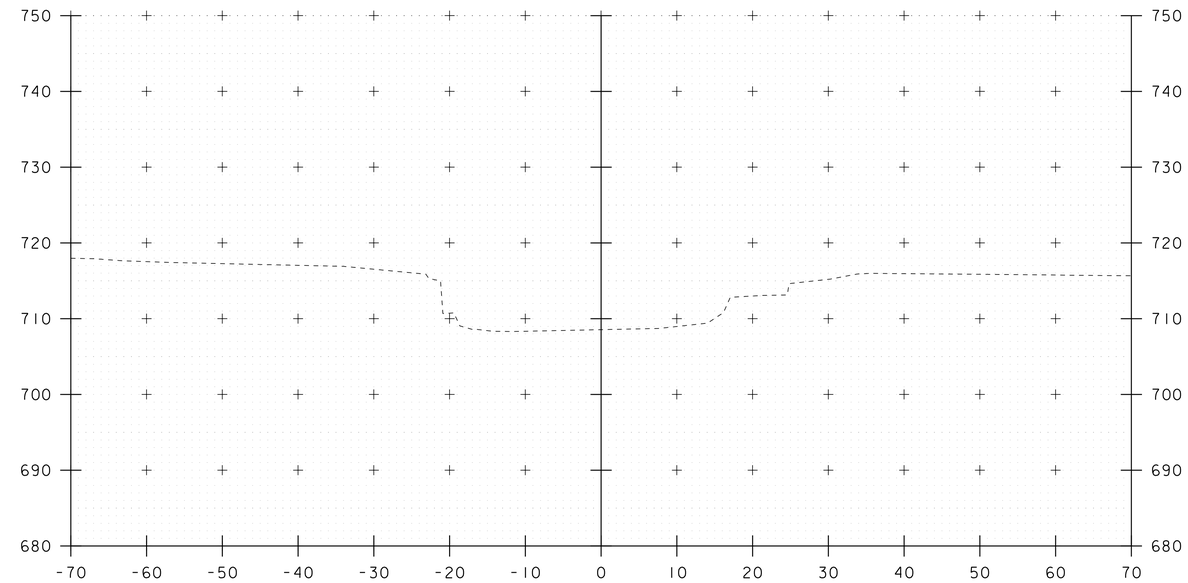
| | |
|---|---|
| PROJECT NAME: CALAIS | |
| PROJECT NUMBER: BHF 037-2(10) | |
| FILE NAME: s12b144xs.dgn | PLOT DATE: 21-MAR-2013 |
| PROJECT LEADER: C.P.WILLIAMS | DRAWN BY: L.E.GALIHER |
| DESIGNED BY: L.E.GALIHER | CHECKED BY: ------ |
| MAINLINE CROSS SECTIONS 5 | SHEET 14 OF 18 |



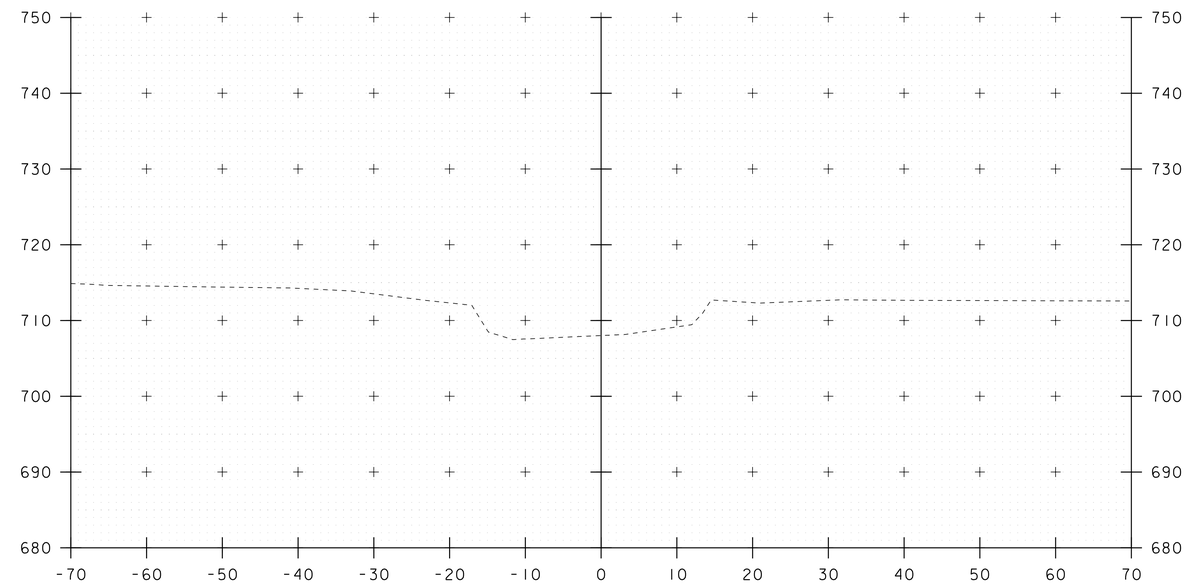

50+25




50+00



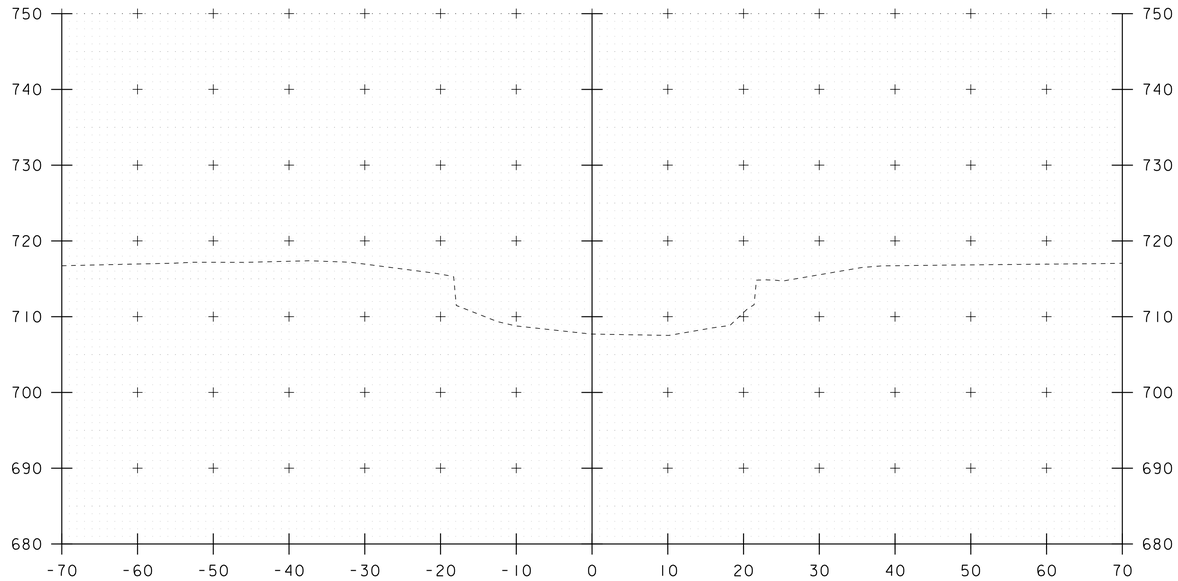

50+75



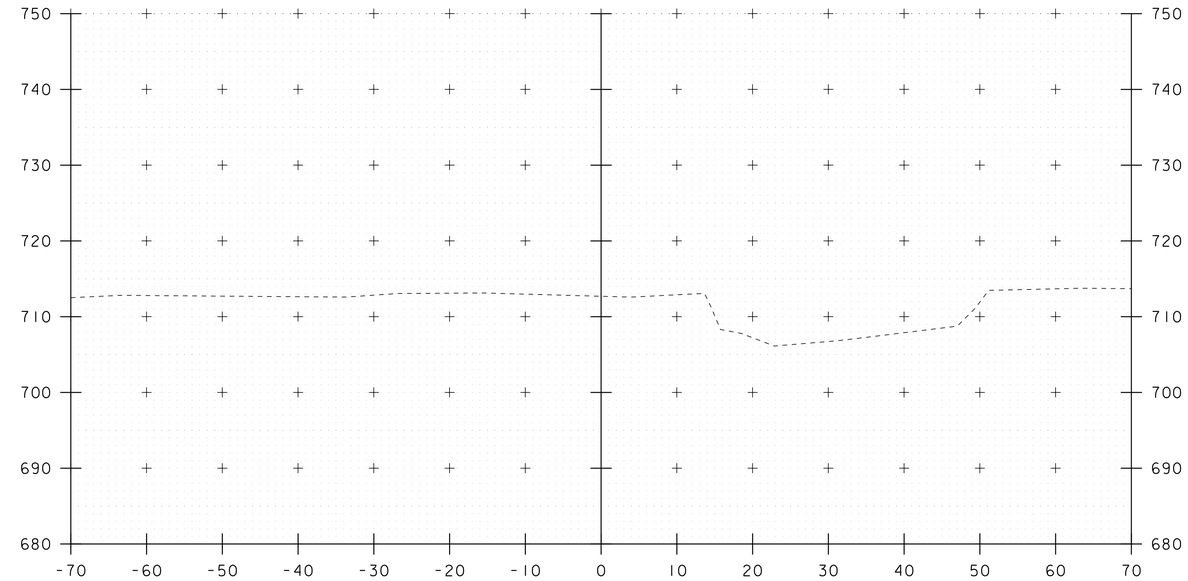

50+50

STA. 50+00 TO STA. 50+75

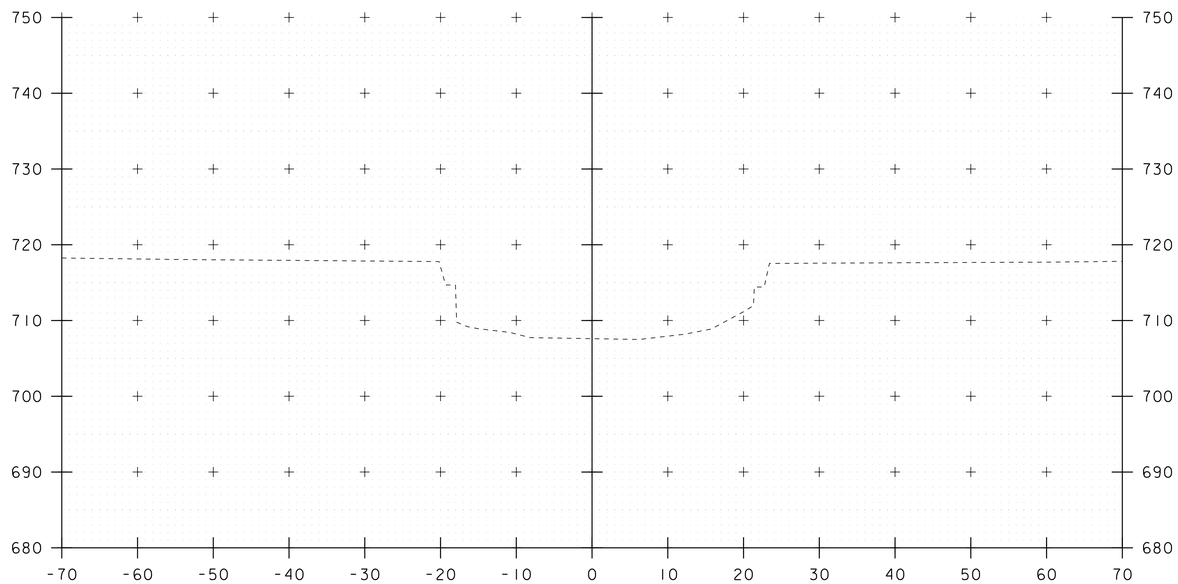
| | |
|---|---|
| PROJECT NAME: CALAIS | |
| PROJECT NUMBER: BHF 037-2(10) | |
| FILE NAME: s12b144xs.dgn | PLOT DATE: 21-MAR-2013 |
| PROJECT LEADER: C.P.WILLIAMS | DRAWN BY: L.E.GALIHER |
| DESIGNED BY: ------ | CHECKED BY: ------ |
| CHANNEL CROSS SECTIONS 1 | SHEET 15 OF 18 |



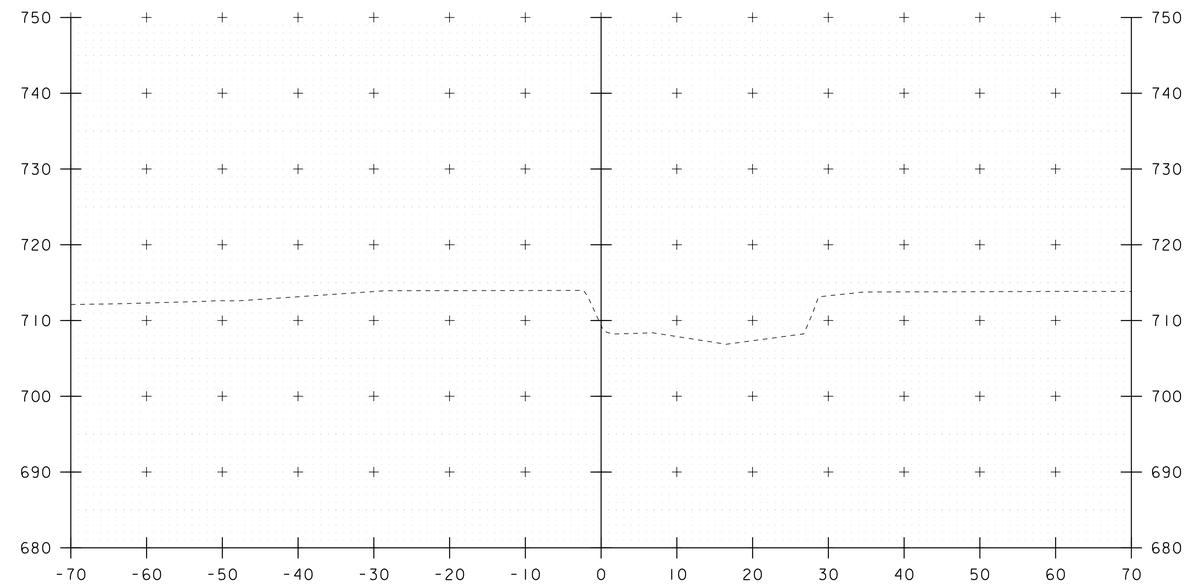

51+25




51+75



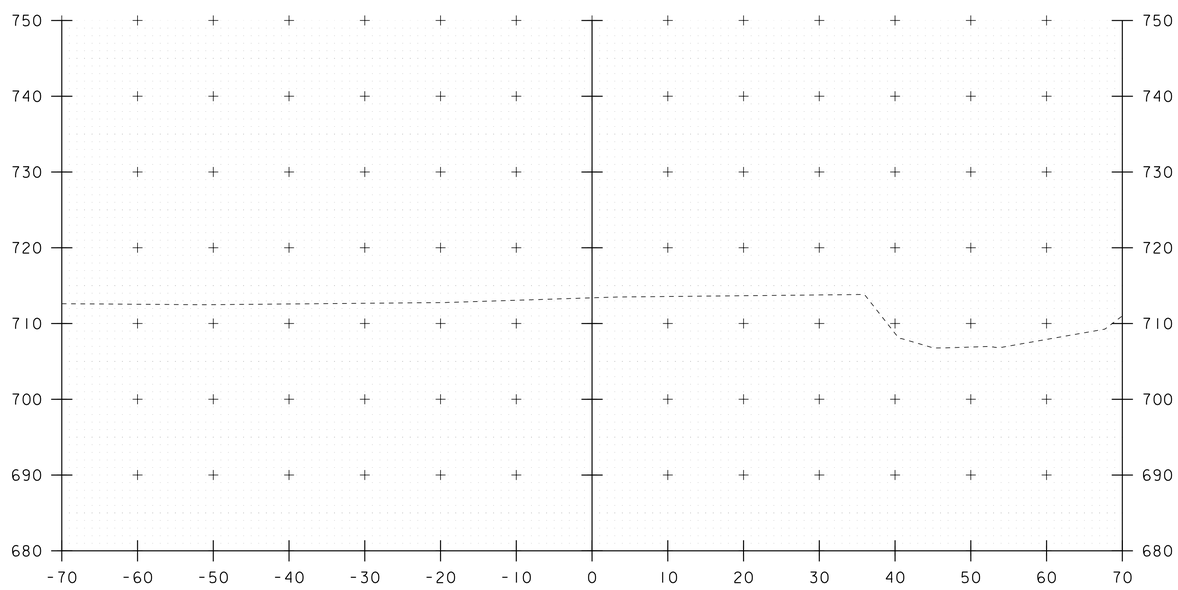

51+00




51+50

STA. 51+00 TO STA. 51+75

| | |
|---|---|
| PROJECT NAME: CALAIS | |
| PROJECT NUMBER: BHF 037-2(10) | |
| FILE NAME: s12b144xs.dgn | PLOT DATE: 21-MAR-2013 |
| PROJECT LEADER: C.P.WILLIAMS | DRAWN BY: L.E.GALIHER |
| DESIGNED BY: ------ | CHECKED BY: ------ |
| CHANNEL CROSS SECTIONS 2 | SHEET 16 OF 18 |




52+00

STA. 52+00 TO STA. 52+00

| | |
|---|---|
| PROJECT NAME: CALAIS | |
| PROJECT NUMBER: BHF 037-2(10) | |
| FILE NAME: s12b144xs.dgn | PLOT DATE: 21-MAR-2013 |
| PROJECT LEADER: C.P.WILLIAMS | DRAWN BY: L.E.GALIHER |
| DESIGNED BY: ------ | CHECKED BY: ------ |
| CHANNEL CROSS SECTIONS 3 | SHEET 17 OF 18 |

SALMON VERY FINE SANDY LOAM
25-50% SLOPE
TYPE C SOIL
K VALUE = 0.49
HIGHLY ERODIBLE

SUNNY SILT LOAM
0-2% SLOPE
TYPE C SOIL
K VALUE = 0.32
NOT HIGHLY ERODIBLE

NICHOLVILLE SILT LOAM
3-8% SLOPE
TYPE C SOIL
K = 0.49
POTENTIALLY HIGHLY ERODIBLE

VT STATE PLANE GRID

**ESTATE OF JOAN M. PELTON**
**JESSIE PELTON - TRUSTEE**

**ESTATE OF JOAN M. PELT**
**JESSIE PELTON - TRUSTE**

TH 3
PEKIN BROOK ROAD

SIGN
R2-1

PIPE
FLOW

SIGN
VR-017
24K

SIGN
R1-1
MM
0140
205
0120

GUY

WOODEN
SIGN POST

SIGN
M1-5
M3-3

SIGN
VD-701

SIGN
TOWN CLERK'S
OFFICE

COMB
69
95

COMB
70
34
120

HVCTRL
102

SIGN
D1-1A
D1-1A

VT RT 14
TO CALAIS

18" RCP
FLOW

24" RCP
FLOW

GRAVEL
DRIVE

VT RT 14
TO EAST MONTPELIER

113+00

114+00

115+00

116+00

117+00

117+12

50+00

51+00

52+00

SIGN
D1-1A
D1-1A

COMB
118
68

GUY

BENCHMARK
SPIKE IN POLE
ELEV.=714.16

COMB
67
117

SIGN
M1-5
M3-1

5/8 REBAR
UP 8" W/ CAP

**BRUNS, CLARA E.**

ARTESIAN
WELL

PEKIN BROOK
FLOW

5/8 REBAR
UP 8" W/ CAP

EXISTING BRIDGE INFO
CONCRETE T-BEAM STRUCTURE
BUILT IN 1928,
RECONSTRUCTED IN 1981.
LENGTH = 44'-0"
WIDTH = 30'-0"

EXISTING CONDITIONS

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

**ESTATE OF JOAN M. PELTON**
**ELTON - TRUSTEE**

| | |
|---|---|
| PROJECT NAME: CALAIS | |
| PROJECT NUMBER: BHF 037-2(10) | |
| FILE NAME: s12b144bdr.dgn | PLOT DATE: 21-MAR-2013 |
| PROJECT LEADER: C.P.WILLIAMS | DRAWN BY: D.D.BEARD |
| DESIGNED BY: ------ | CHECKED BY: ------ |
| EXISTING CONDITIONS SHEET | SHEET 18 OF 18 |