REVIEWERS NOTES:

1: PRELIMINARY ANALYSIS OF PIER CAPS INDICATES THAT IN THE AS-BUILT CONDITION, THE CAPS HAVE AN INVENTORY CAPACITY OF APPROXIMATELY HS-20. THIS IS CONSISTENT WITH THE DESIGN LOADING, BUT DOES NOT MEET THE CURRENT HL-93 STANDARD. BASED ON THIS RESULT, THE CONCEPTUAL COST ESTIMATE INCLUDES AN ALLOWANCE FOR STRENGTHENING THE CAPS, VS. JUST REPAIRING THEM. A MORE REFINED ANALYSIS OF THE CAPS WILL BE PERFORMED DURING PRELIMINARY DESIGN TO VERIFY THE NEED FOR STRENGHTENING THE CAPS.

2. ADDITIONAL GROUND SURVEY HAS BEEN REQUESTED TO SUPPLEMENT THE LIDAR SURVEY INFORMATION. ORDINARY HIGH WATER WILL BE REVISED ONCE THE ADDITIONAL GROUND SURVEY HAS BEEN COMPLETED.

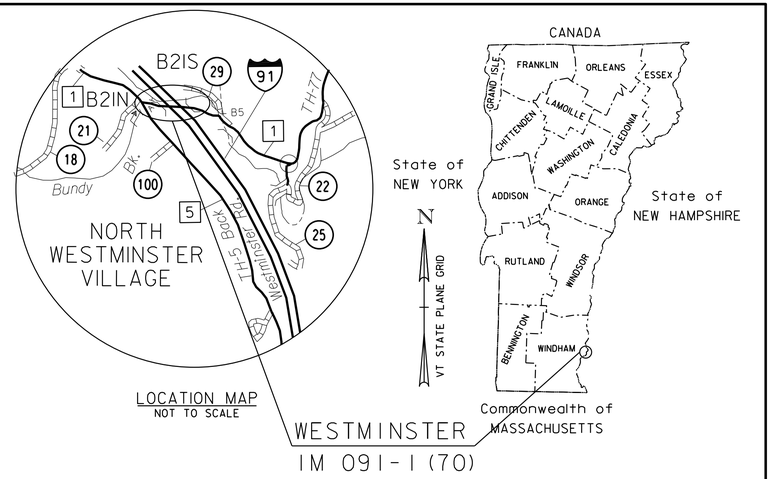
3. TEMPORARY LIMITS OF ACCESS FOR INSTALLATION OF PIER SCOUR COUNTERMEASURES ARE SHOWN ON THE LAYOUT SHEETS. THESE LIMITS WILL BE REVIEWED AND REVISED AS NECESSARY, ONCE THE ADDITIONAL GROUND SURVEY HAS BEEN COMPLETED.

4. GIVEN THE POOR CONDITION OF THE EXISTING PIER CAPS, WE ARE CONSIDERING PHASING THE TRAFFIC TO CLOSE THE SHOULDERS OF THE NORTHBOUND BRIDGE IN ORDER TO COMPLETE REPAIRS TO THE PIER CANTILEVERS BEFORE CROSSING SOUTHBOUND TRAFFIC ONTO THE BRIDGE TO RE-DECK AND REPAIR THE SOUTHBOUND BRIDGE.

5. CORROSION PROTECTION OF THE REPAIRED SUBSTRUCTURES IS BEING CONSIDERED WITH THE USE OF SACRIFICIAL ANODE SYSTEMS.

6. RIGHT-OF-WAY ACQUISITIONS ARE NOT ANTICIPATED TO BE REQUIRED FOR THIS PROJECT.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

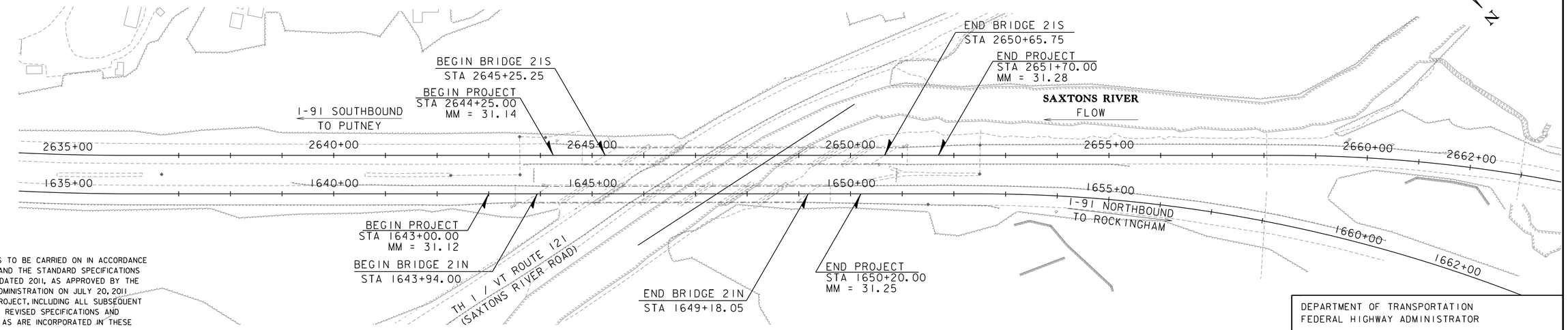


PROPOSED IMPROVEMENT
BRIDGE PROJECT
TOWN OF WESTMINSTER
COUNTY OF WINDHAM
ROUTE NO: I-91 BRIDGES 21N & 21S OVER THE SAXTONS RIVER AND SAXTONS RIVER RD (VT 121)
(PRINCIPLE ARTERIAL - NHS)

PROJECT LOCATION: 2.4 MILES NORTH OF EXIT 5 ALONG INTERSTATE 91 (I-91)

PROJECT DESCRIPTION: REMOVAL AND REPLACEMENT OF EXISTING CONCRETE BRIDGE DECKS, REPAIRS TO THE EXISTING SUBSTRUCTURES, CONSTRUCTION OF TEMPORARY CROSSOVERS, ALONG WITH RELATED ROADWAY AND CHANNEL WORK.

BR21N		BR21S		TOTALS	
LENGTH OF STRUCTURE:	524.05 FEET	LENGTH OF STRUCTURE:	540.50 FEET	LENGTH OF STRUCTURE:	1064.55 FEET
LENGTH OF ROADWAY:	195.95 FEET	LENGTH OF ROADWAY:	204.50 FEET	LENGTH OF ROADWAY:	400.45 FEET
LENGTH OF PROJECT:	720.00 FEET	LENGTH OF PROJECT:	745.00 FEET	LENGTH OF PROJECT:	1465.00 FEET



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 :

SURVEYED DATE :

DATUM

VERTICAL

HORIZONTAL

SCALE 1" = 100'-0"

100 0 100

CONCEPTUAL PLANS
9/2/2015

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATOR

APPROVED _____ DATE _____

DIRECTOR OF PROJECT DELIVERY

APPROVED _____ DATE _____

PROJECT MANAGER : WENDY PELLETIER, P.E.

PROJECT NAME : WESTMINSTER

PROJECT NUMBER : IM 091-1(70)

SHEET 1 OF 48 SHEETS

Stantec

Stantec Consulting Services Inc.
55 Green Mountain Drive
South Burlington VT U.S.A. 05403
Phone: (802) 864-0223
Fax: (802) 864-0165
www.stantec.com

STATE OF VERMONT
AGENCY OF TRANSPORTATION

PRELIMINARY INFORMATION SHEET (BRIDGE)

Version
LRFD

INDEX OF SHEETS

PLAN SHEETS

STANDARDS LIST

STRUCTURES DETAIL SHEETS

SD-501.00	CONCRETE DETAILS AND NOTES	5/7/2010
SD-502.00	CONCRETE DETAILS AND NOTES	5/7/2010
SD-516.10	BRIDGE JOINT ASHPALTIC PLUG	5/7/2010
SD-601.00	STRUCTURAL STEEL DETAILS AND NOTES	5/7/2010
SD-602.00	STRUCTURAL STEEL PLATE GIRDER DETAILS AND NOTES	5/7/2010

FINAL HYDRAULIC REPORT

TRAFFIC MAINTENANCE NOTES

1. MAINTAIN TRAFFIC ON EXISTING BRIDGE WITH CROSS OVERS.
2. TRAFFIC SIGNALS ARE NOT NECESSARY.
3. SIDEWALKS ARE NOT NECESSARY

DESIGN VALUES

1. DESIGN LIVE LOAD		HL-93
2. FUTURE PAVEMENT	d_p:	0.0 INCH
3. DESIGN SPAN	L:	VARIES 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:	- - -
15. SOIL BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD)	ϕ:	- - -
16. NOMINAL BEARING RESISTANCE OF ROCK	q_n:	- - -
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.		- - -

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:							

NOTE: DATA FOR ADTT BASED ON NORTHBOUND LANES

TRAFFIC DATA

YEAR	ADT	DHV	% D	% T	ADTT
2016	6400	1300	100	15.8	1400
2036	7400	1500	100	22.2	2300

20 year ESAL for flexible pavement from 2016 to 2036 : 11614000

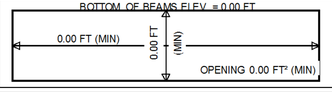
40 year ESAL for flexible pavement from 2016 to 2056 : 27454000

Design Speed : 70 mph

AS BUILT "REBAR" DETAIL

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

TEMPORARY BRIDGE PROFILE ALONG TEMP CL

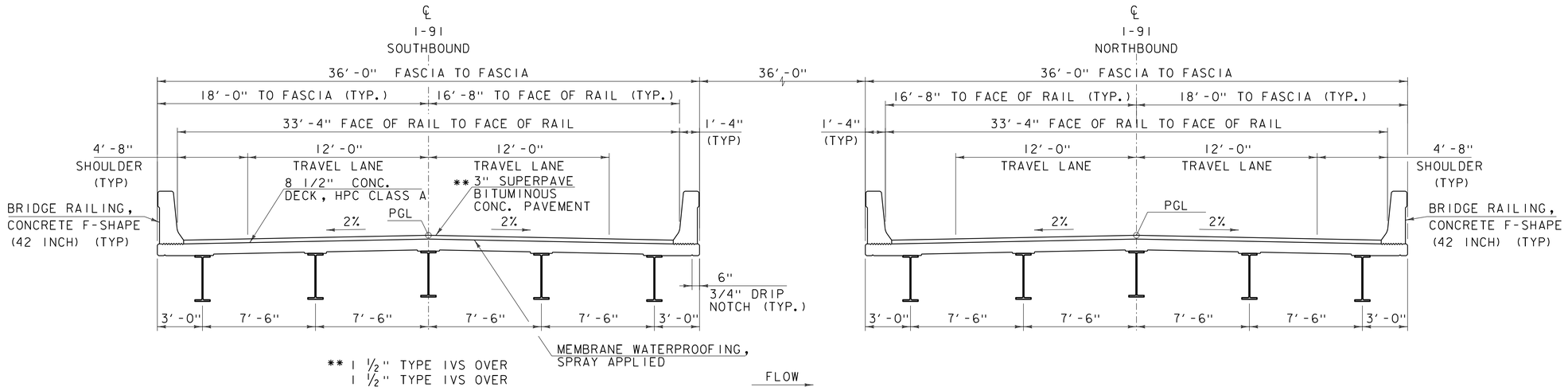


PROJECT NAME: **WESTMINSTER**

PROJECT NUMBER: **IM 091-1(70)**

FILE NAME: **Westminster PI _sht.xls**
PROJECT LEADER: **M. Chenette**
DESIGNED BY: **T. Knight**
PRELIMINARY INFORMATION SHEET 1

PLOT DATE: 3/27/2015
DRAWN BY: **L. Buxton**
CHECKED BY: **G. Bogue**
SHEET 2 OF 48



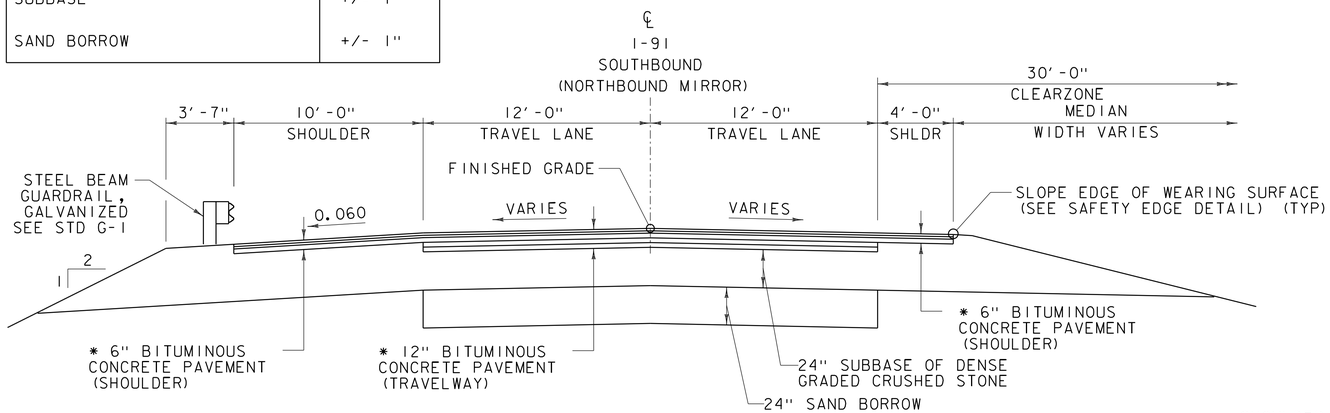
BRIDGE PROPOSED TYPICAL SECTION

SCALE 1/4" = 1'-0"

MATERIAL TOLERANCES

(IF USED ON PROJECT)

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

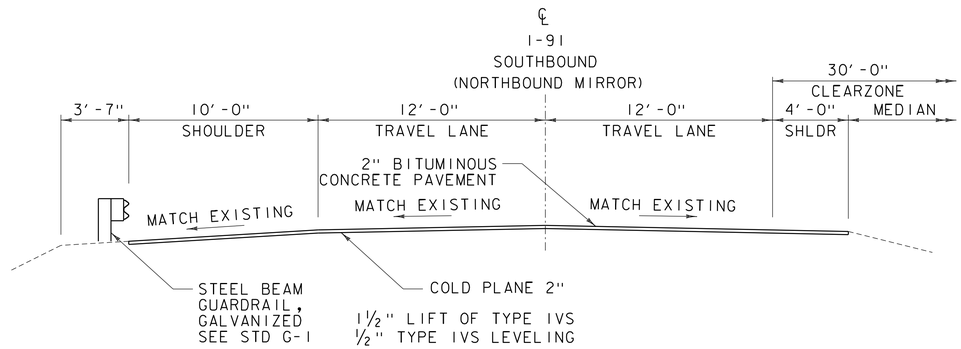


I-91 SOUTHBOUND FULL CONSTRUCTION
NORTHBOUND (MIRROR)

SCALE 1/4" = 1'-0"

* TRAVELWAY PAVEMENT
1 1/2" TYPE IVS OVER
1 1/2" TYPE IVS OVER
3" TYPE IIS OVER
3" OF TYPE IIS OVER
3" OF TYPE IIS

** SHOULDER PAVEMENT
1 1/2" LIFT OF TYPE IVS OVER
1 1/2" LIFT OF TYPE IVS OVER
3" LIFT OF TYPE IIS

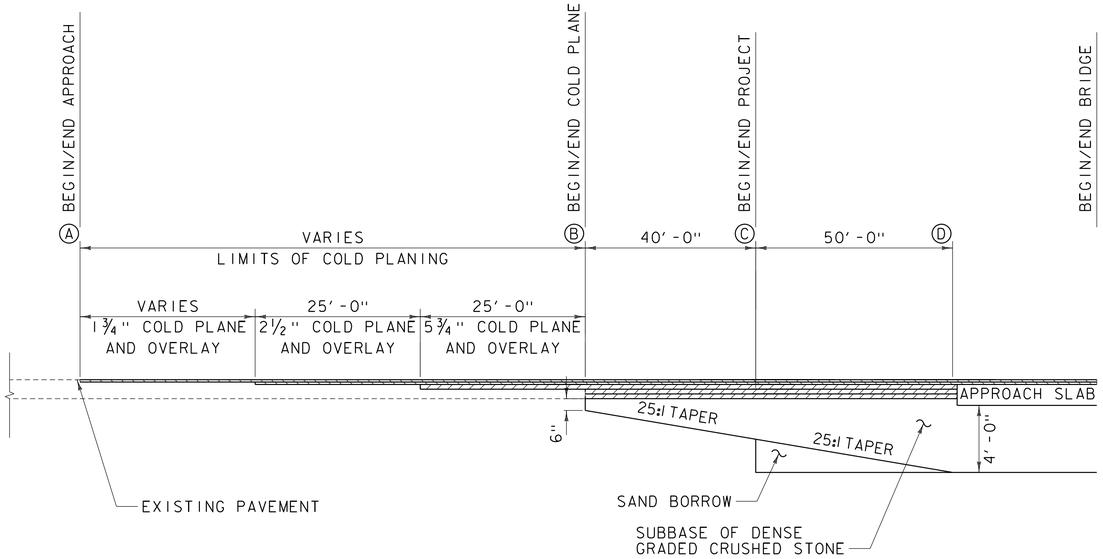


I-91 SOUTHBOUND COLD PLANE/OVERLAY
NORTHBOUND (MIRROR)

SCALE 1/4" = 1'-0"

Stantec

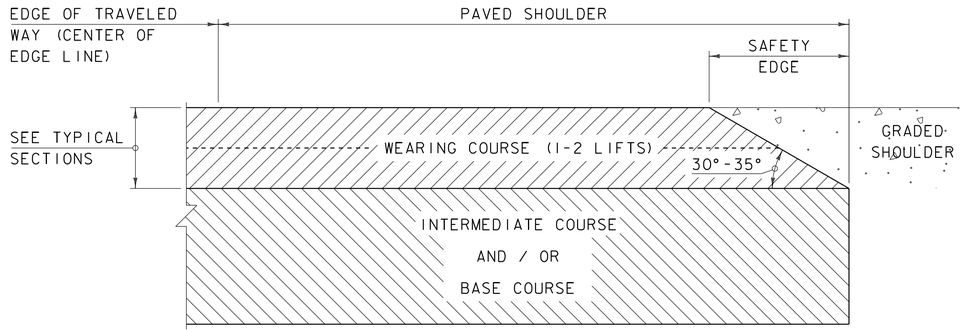
PROJECT NAME:	WESTMINSTER
PROJECT NUMBER:	IM 091-1(70)
FILE NAME: z13a098typical.dgn	PLOT DATE: 9/2/2015
PROJECT LEADER: M. CHENETTE	DRAWN BY: L. BUXTON
DESIGNED BY: N. TIRK	CHECKED BY: X. XXXX
TYPICAL SECTIONS - TYP 1	SHEET 3 OF 48



	Ⓐ	Ⓑ	Ⓒ	Ⓓ
NORTHBOUND				
NORTH APPROACH	1635+00.00	1642+60.00	1643+00.00	1643+50.00
SOUTH APPROACH	1661+00.00	1650+60.00	1650+20.00	1649+70.00
SOUTHBOUND				
NORTH APPROACH	2635+00.00	2643+85.00	2644+25.00	2644+75.00
SOUTH APPROACH	2661+50.00	2652+10.00	2651+70.00	2651+20.00

TYPICAL APPROACH SECTION

NOT TO SCALE

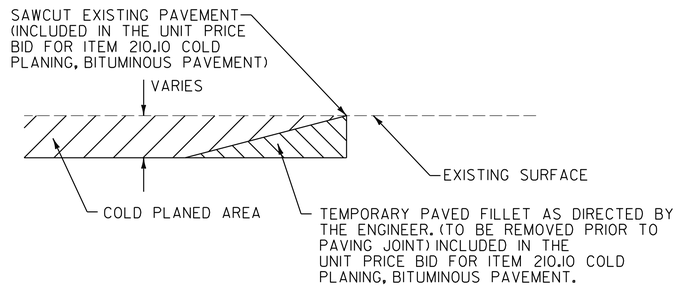


SAFETY EDGE DETAIL

NOT TO SCALE

1. THE EDGE OF PAVEMENT SHALL BE FORMED IN SUCH A WAY THAT THE BITUMINOUS CONCRETE PAVEMENT IS EXTRUDED OR COMPRESSED TO FORM THE 30 TO 35 DEGREE ANGLE. DEVICES THAT SIMPLY STRIKE-OFF THE MIX WITHOUT PROVIDING ANY COMPACTIVE EFFORT WILL NOT BE ALLOWED.

2. THE PAVED SHOULDER EXTENDS FROM THE EDGE OF TRAVELED WAY TO THE EDGE OF THE WEARING COURSE, INCLUDING THE "SAFETY EDGE".



DETAIL AT VERTICAL COLD PLANE JOINTS

NOTE: THIS DETAIL SHALL BE USED AT THE LOCATIONS SHOWN ABOVE AS DIRECTED BY THE ENGINEER.

Stantec

PROJECT NAME: WESTMINSTER	
PROJECT NUMBER: IM 091-1(70)	
FILE NAME: z13a098typical.dgn	PLOT DATE: 9/2/2015
PROJECT LEADER: M. CHENETTE	DRAWN BY: L. BUXTON
DESIGNED BY: I. MAYNARD	CHECKED BY: X. XXXX
TYPICAL SECTIONS - TYP 2	SHEET 4 OF 48

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
●	IPNS	IRON PIN SET
◎	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 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

- 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 — PROJECT DEMARCATION FENCE
- 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 PROPERTY BOUNDARY
- 4f — 4F PROPERTY BOUNDARY
- 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
- 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
- Ⓗ — 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

Stantec

PROJECT NAME:	WESTMINSTER
PROJECT NUMBER:	IM 091-1(70)
FILE NAME: z13a098legend.dgn	PLOT DATE: 9/2/2015
PROJECT LEADER: M. CHENETTE	DRAWN BY: VTRANS
DESIGNED BY: VTRANS	CHECKED BY: VTRANS
CONVENTIONAL SYMBOLOGY LEGEND	SHEET 5 OF 48

VT STATE PLANE GRID

EXISTING R.O.W.

I-91 SOUTHBOUND
EXISTING CURVE 1
Δ = 23°08'41"
D = 1°15'53"
R = 4530.00'
T = 927.60'
L = 1829.90'
E = 94.00'

BEGIN APPROACH
STA. 2635+00.00

PT
STA 2636+02.26

ARCH -

2633+00
2634+00
2635+00
2636+00
2637+00
2638+00

I-91 SOUTHBOUND
TO PUTNEY
N 46°38'50.97" W

10'-0"
12'-0"
12'-0"
4'-0"

MATCHLINE STA. 2638+50

PT
STA 1636+16.76

DI

PROPOSED NORTHBOUND CROSSOVER ALIGNMENT
PROPOSED SOUTHBOUND CROSSOVER ALIGNMENT

1633+00
1634+00
1635+00
1636+00
1637+00
1638+00

I-91 NORTHBOUND
TO ROCKINGHAM
N 46°38'50.97" W

4'-0"
12'-0"
12'-0"
10'-0"

MATCHLINE STA. 1638+50

SIGN
WX-X

BEGIN APPROACH
STA. 1635+00.00

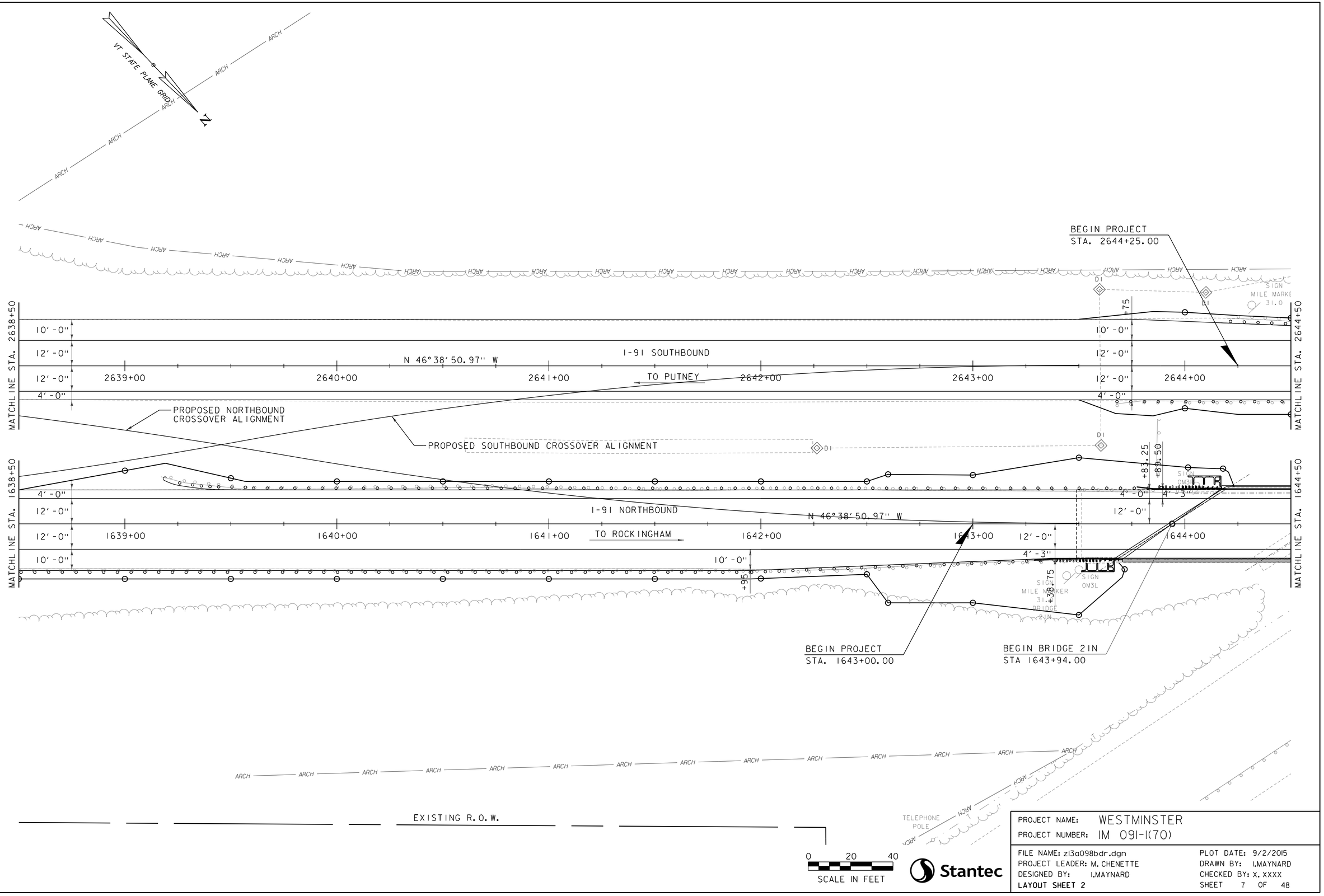
I-91 NORTHBOUND
CURVE 1
Δ = 23°11'50"
D = 1°13'32"
R = 4675.00'
T = 959.53'
L = 1892.77'
E = 97.45'

EXISTING R.O.W.

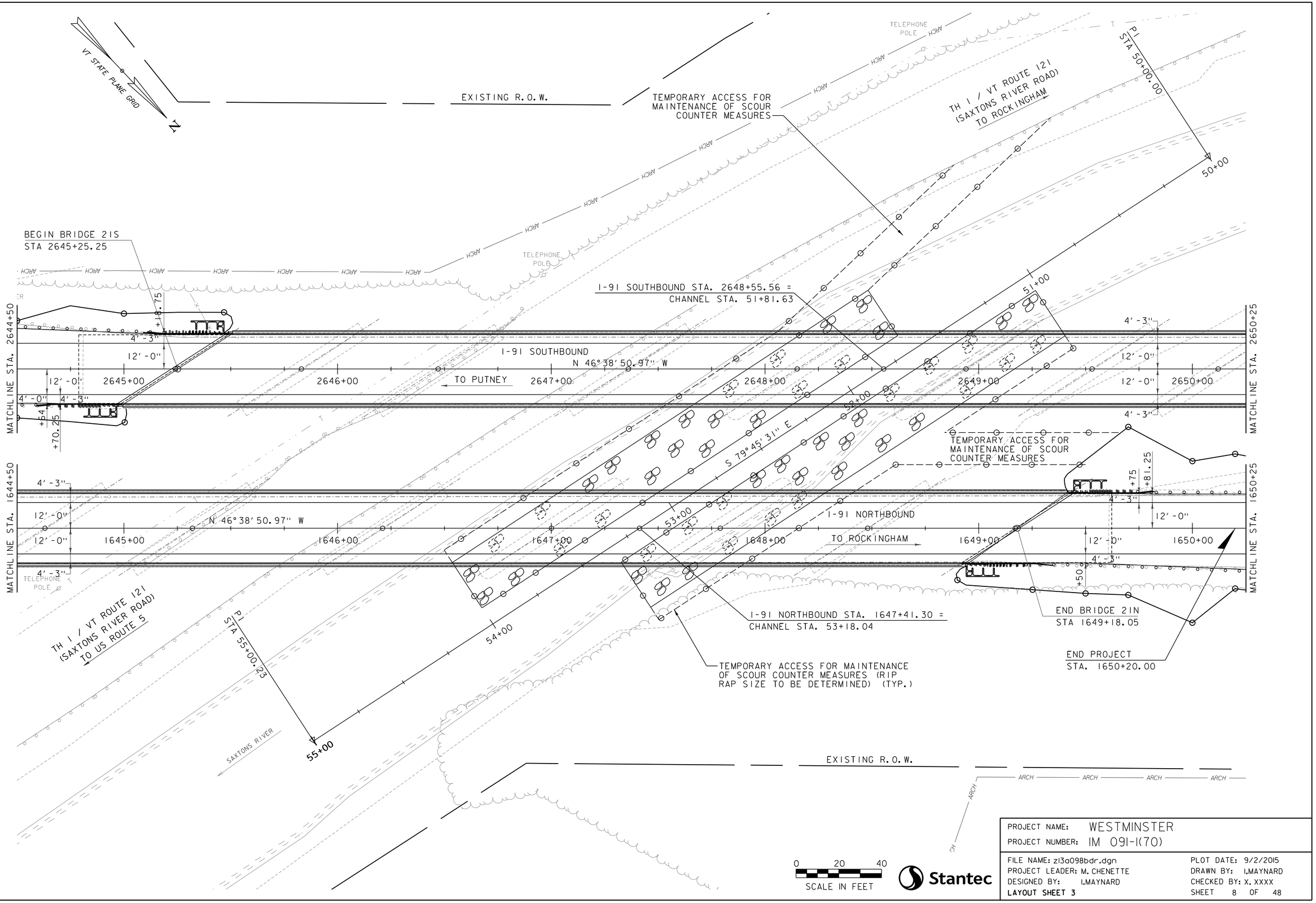
0 20 40
SCALE IN FEET

Stantec

PROJECT NAME: WESTMINSTER	
PROJECT NUMBER: IM 091-1(70)	
FILE NAME: z13a098bdr.dgn	PLOT DATE: 9/2/2015
PROJECT LEADER: M. CHENETTE	DRAWN BY: I.MAYNARD
DESIGNED BY: I.MAYNARD	CHECKED BY: X. XXXX
LAYOUT SHEET 1	SHEET 6 OF 48

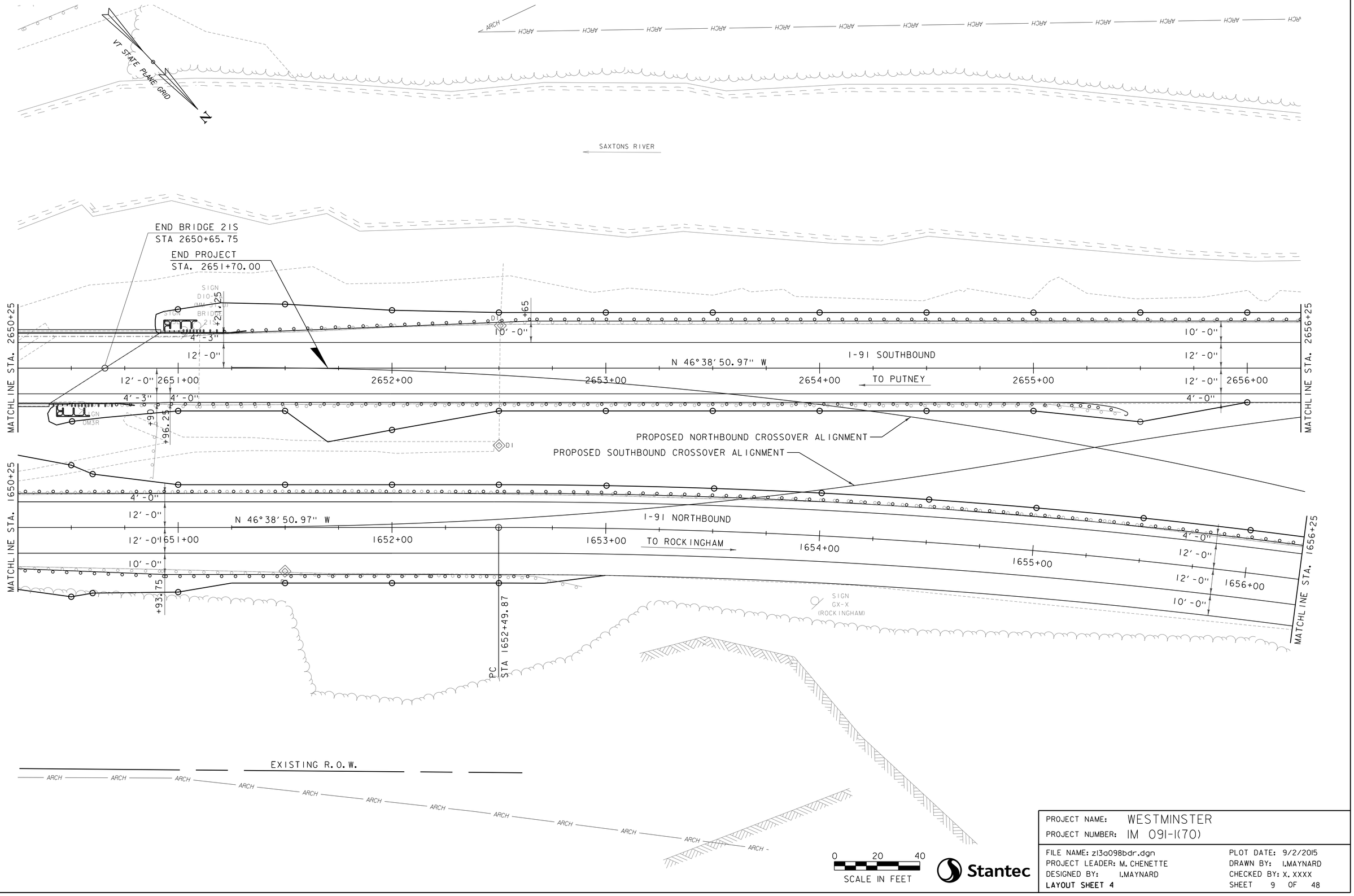


PROJECT NAME: WESTMINSTER	
PROJECT NUMBER: IM 091-1(70)	
FILE NAME: z13a098bdr.dgn	PLOT DATE: 9/2/2015
PROJECT LEADER: M. CHENETTE	DRAWN BY: I.MAYNARD
DESIGNED BY: I.MAYNARD	CHECKED BY: X. XXXX
LAYOUT SHEET 2	SHEET 7 OF 48

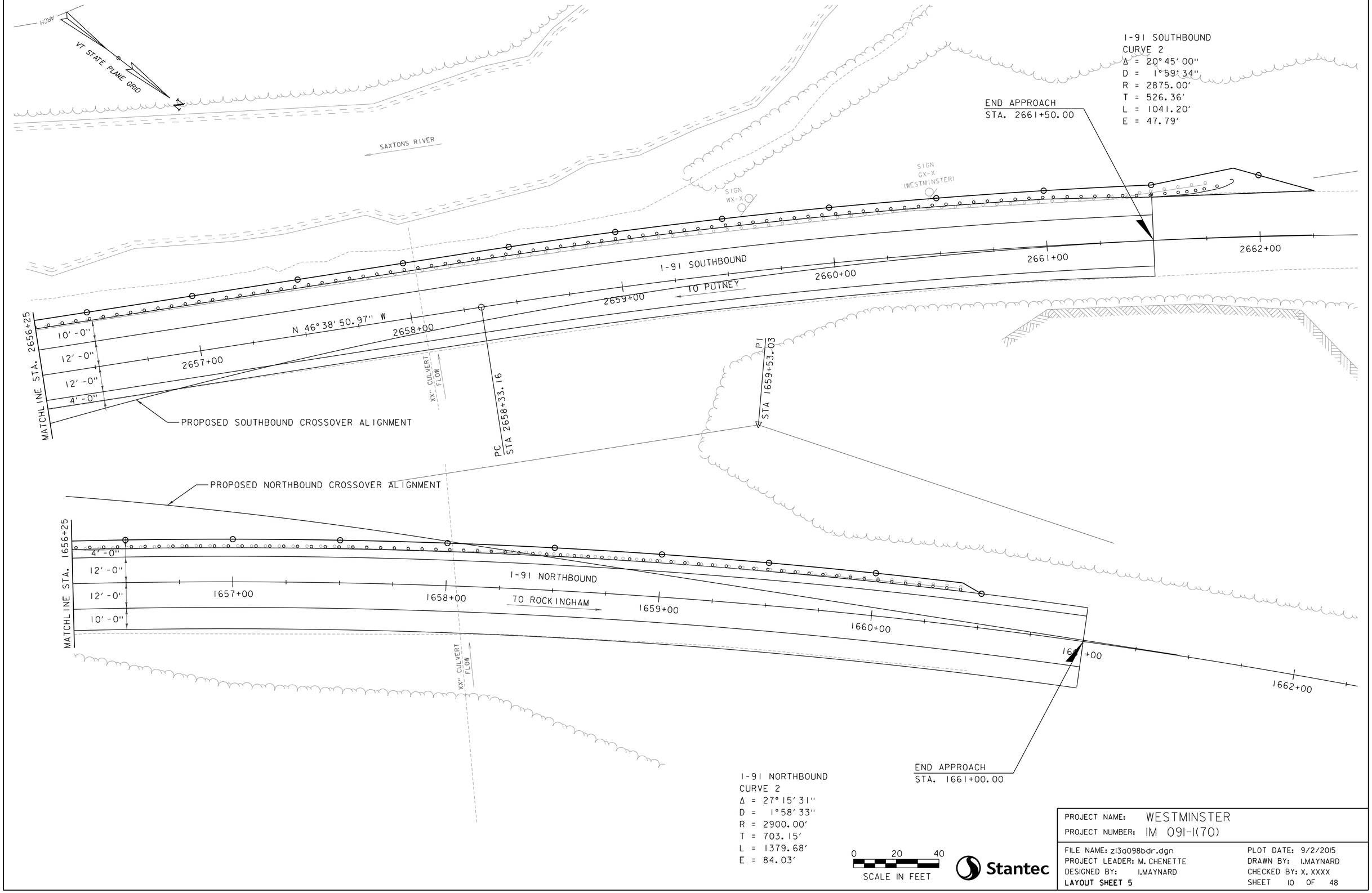


Stantec

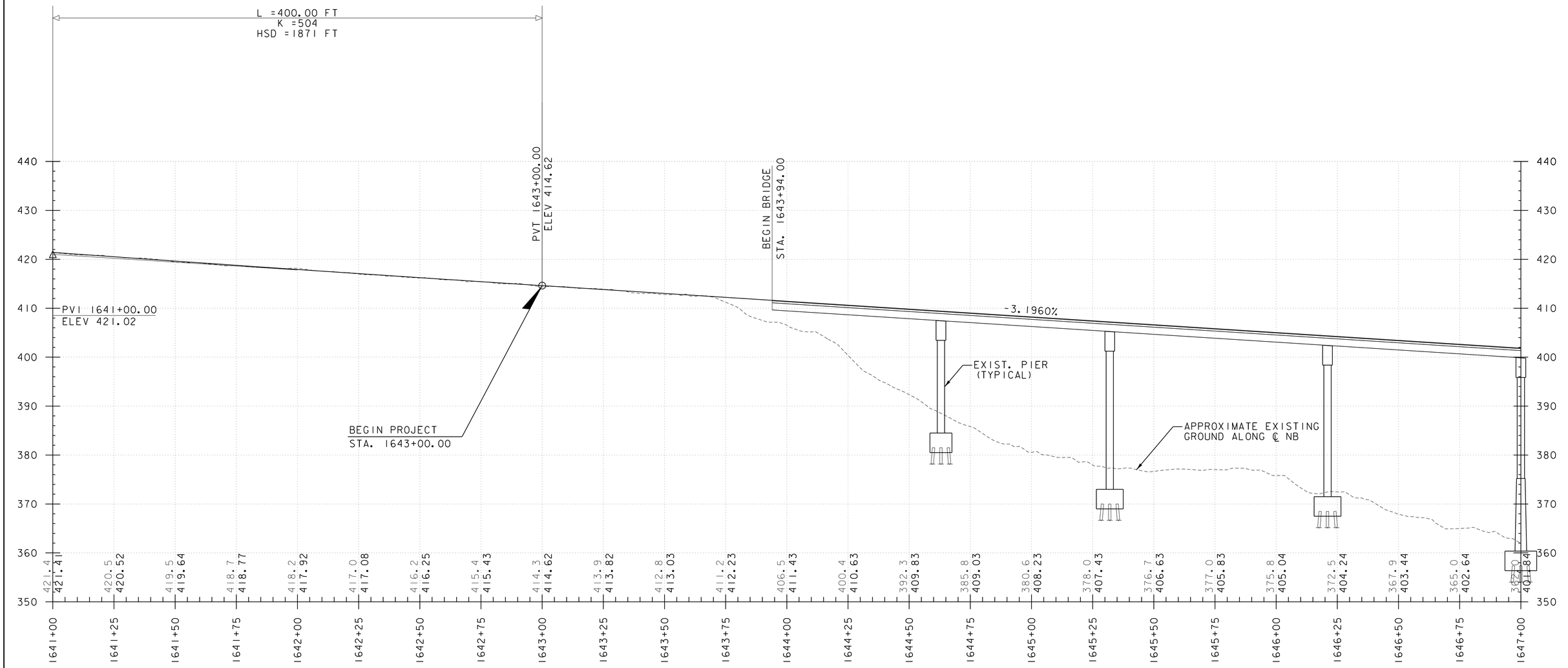
PROJECT NAME:	WESTMINSTER
PROJECT NUMBER:	IM 091-1(70)
FILE NAME: z13a098bdr.dgn	PLOT DATE: 9/2/2015
PROJECT LEADER: M. CHENETTE	DRAWN BY: I.MAYNARD
DESIGNED BY: I.MAYNARD	CHECKED BY: X. XXXX
LAYOUT SHEET 3	SHEET 8 OF 48



PROJECT NAME:	WESTMINSTER
PROJECT NUMBER:	IM 091-1(70)
FILE NAME: zl3a098bdr.dgn	PLOT DATE: 9/2/2015
PROJECT LEADER: M. CHENETTE	DRAWN BY: I.MAYNARD
DESIGNED BY: I.MAYNARD	CHECKED BY: X. XXXX
LAYOUT SHEET 4	SHEET 9 OF 48



PROJECT NAME:	WESTMINSTER
PROJECT NUMBER:	IM 091-1(70)
FILE NAME: zl3a098bdr.dgn	PLOT DATE: 9/2/2015
PROJECT LEADER: M. CHENETTE	DRAWN BY: I.MAYNARD
DESIGNED BY: I.MAYNARD	CHECKED BY: X. XXXX
LAYOUT SHEET 5	SHEET 10 OF 48



I-91 NORTHBOUND PROFILE

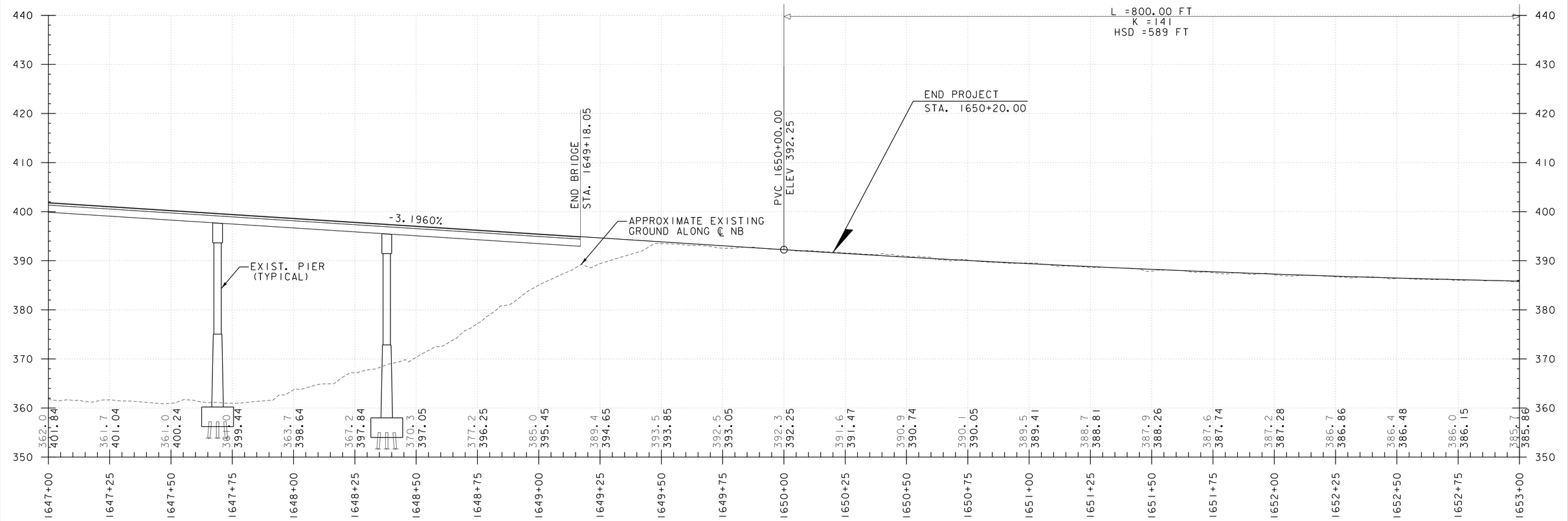
HORZONTAL SCALE: 1" = 20' VERTICAL SCALE 1" = 10'

GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND

GRADES SHOWN TO THE NEAREST HUNDREDTH ARE FINISH GRADE

Stantec

PROJECT NAME:	WESTMINSTER
PROJECT NUMBER:	IM 091-1(70)
FILE NAME: zl3a098pro.dgn	PLOT DATE: 9/2/2015
PROJECT LEADER: M. CHENETTE	DRAWN BY: I. MAYNARD
DESIGNED BY: I. MAYNARD	CHECKED BY: X. XXXX
I-91 NORTHBOUND PROFILE SHEET 1	SHEET 11 OF 48



I-91 NORTHBOUND PROFILE

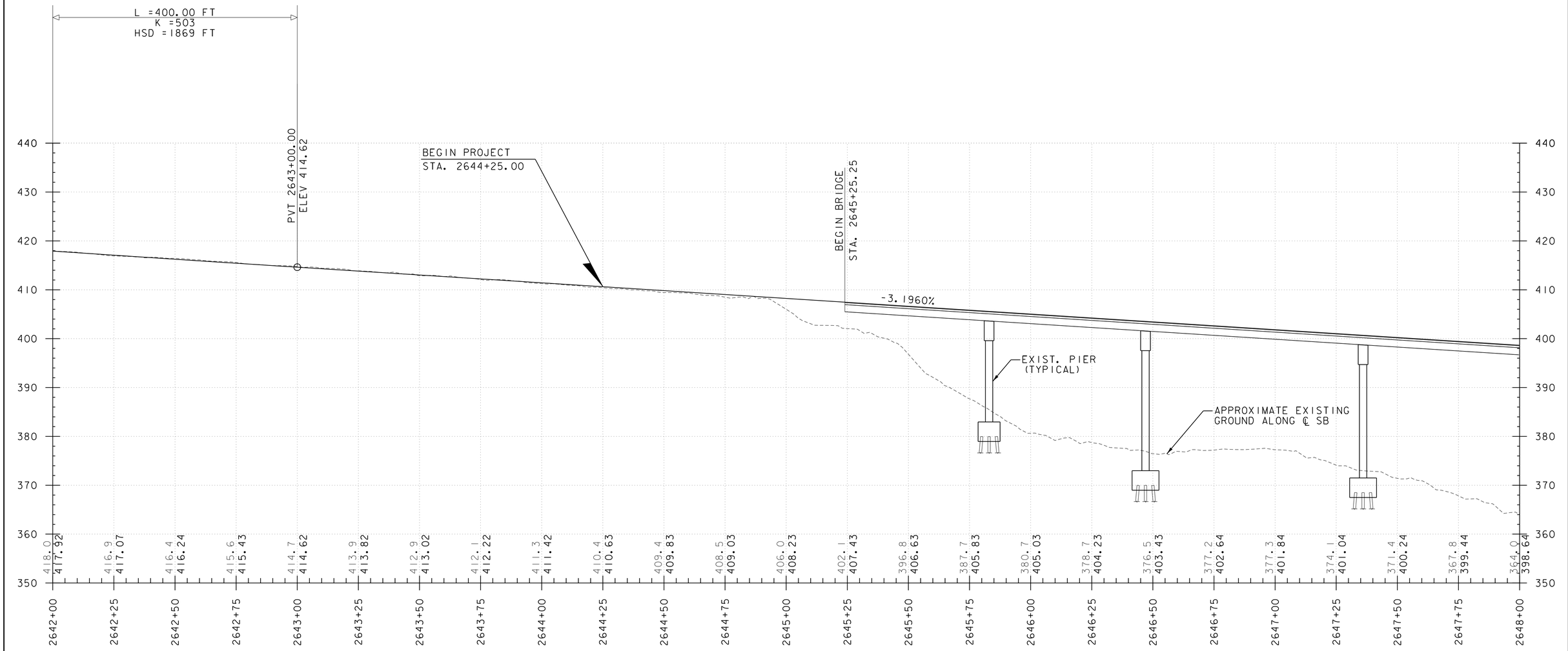
HORZONTAL SCALE: 1" = 20' VERTICAL SCALE 1" = 10'

GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND

GRADES SHOWN TO THE NEAREST HUNDREDTH ARE FINISH GRADE

Stantec

PROJECT NAME:	WESTMINSTER
PROJECT NUMBER:	IM 091-1(70)
FILE NAME: zl3a098pro.dgn	PLOT DATE: 9/2/2015
PROJECT LEADER: M. CHENETTE	DRAWN BY: I. MAYNARD
DESIGNED BY: I. MAYNARD	CHECKED BY: X. XXXX
I-91 NORTHBOUND PROFILE SHEET 2	SHEET 12 OF 48



I-91 SOUTHBOUND PROFILE

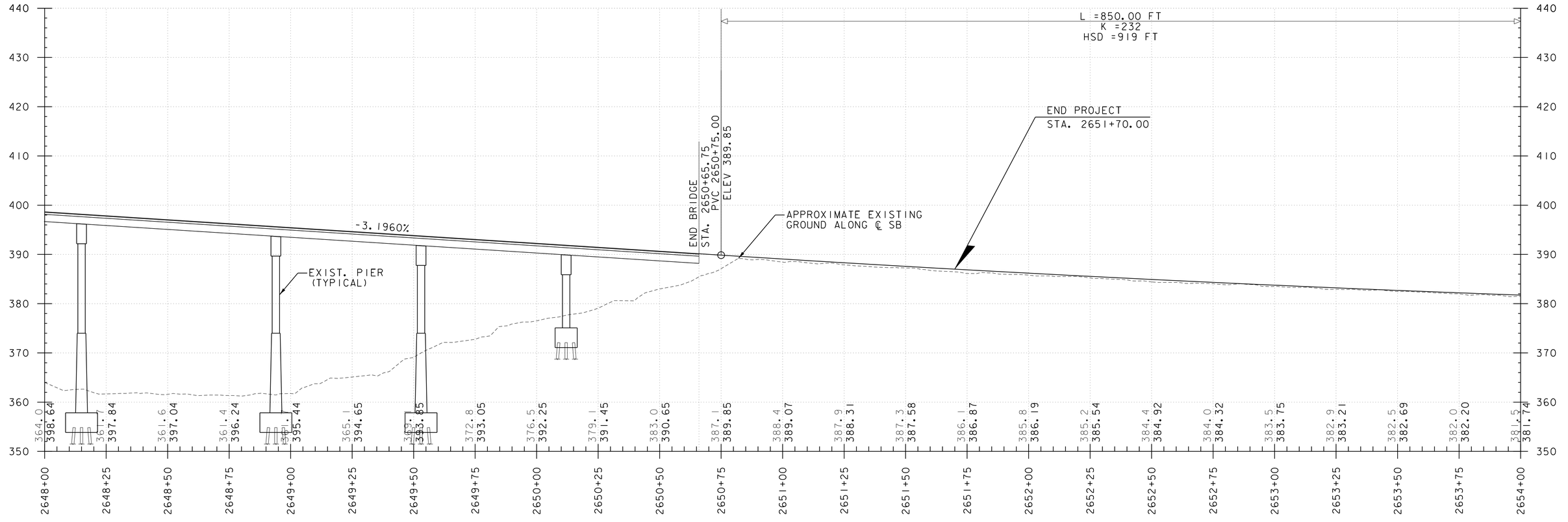
HORZONTAL SCALE: 1" = 20' VERTICAL SCALE 1" = 10'

GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND

GRADES SHOWN TO THE NEAREST HUNDREDTH ARE FINISH GRADE

Stantec

PROJECT NAME: WESTMINSTER	
PROJECT NUMBER: IM 091-1(70)	
FILE NAME: z13a098pro.dgn	PLOT DATE: 9/2/2015
PROJECT LEADER: M. CHENETTE	DRAWN BY: I. MAYNARD
DESIGNED BY: I. MAYNARD	CHECKED BY: X. XXXX
I-91 SOUTHBOUND PROFILE SHEET 1	SHEET 13 OF 48



I-91 SOUTHBOUND PROFILE

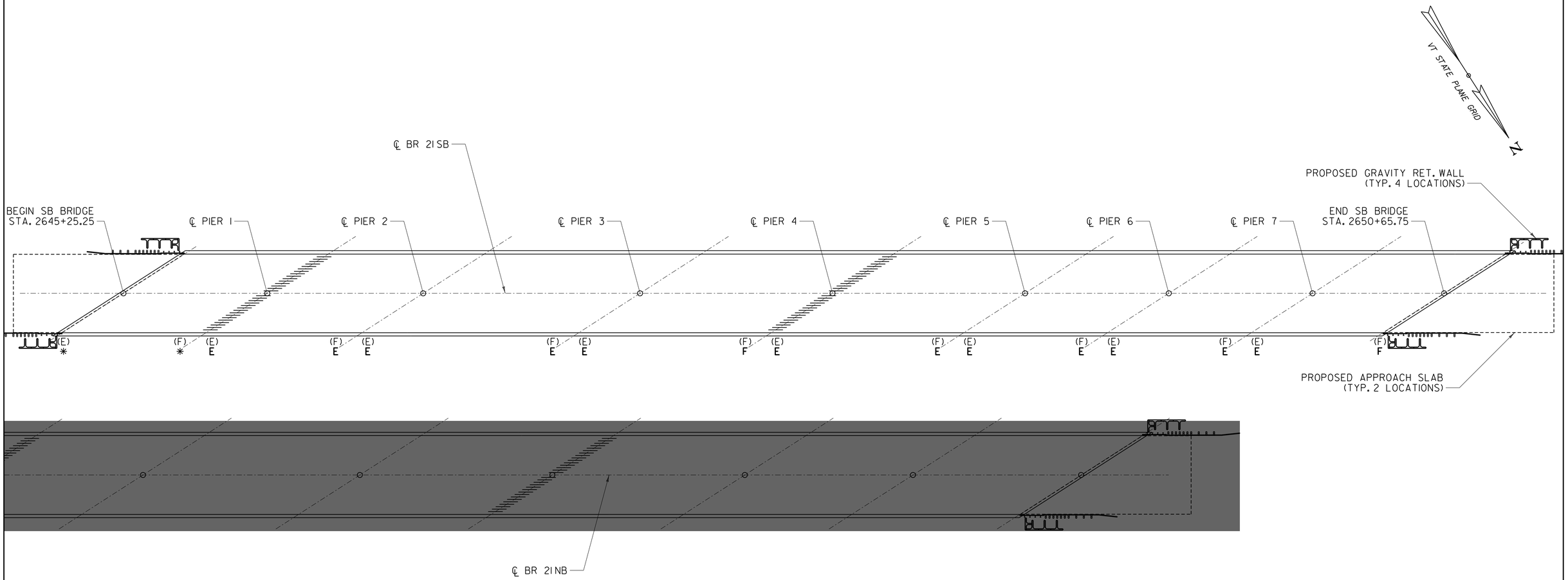
HORZONTAL SCALE: 1" = 20' VERTICAL SCALE 1" = 10'

GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND

GRADES SHOWN TO THE NEAREST HUNDREDTH ARE FINISH GRADE

Stantec

PROJECT NAME: WESTMINSTER	
PROJECT NUMBER: IM 091-1(70)	
FILE NAME: z13a098pro.dgn	PLOT DATE: 9/2/2015
PROJECT LEADER: M. CHENETTE	DRAWN BY: I. MAYNARD
DESIGNED BY: I. MAYNARD	CHECKED BY: X. XXXX
I-91 SOUTHBOUND PROFILE SHEET 2	SHEET 14 OF 48



WESTMINSTER BR 21 SOUTHBOUND - SUPERSTRUCTURE REHABILITATION PLAN

SCALE: 1" = 20'-0"

WESTMINSTER BR 21S - SUPERSTRUCTURE REHABILITATION SUMMARY									
	ABUT 1	P1	P2	P3	P4	P5	P6	P7	ABUT 2
BRIDGE JT., ASPHALTIC PLUG	36 LF								
CONSTRUCT LINK SLAB			✓	✓		✓	✓	✓	
BRIDGE EXP. JOINT, FINGER		42 LF			42 LF				
NEW STEEL DIAPHRAGMS		8	8	8	8	8	8	8	
NEW EXPANSION BEARINGS		5	10	10	5	10	10	10	
NEW FIXED BEARINGS					5				5
SAWED PAVEMENT JOINT	36 LF								72 LF
PROPOSED APPROACH SLABS	✓								✓
PRECAST GRAVITY RETAIN. WALL	625 SF								500 SF
SCOUR COUNTER MEASURES					✓	✓			

LEGEND

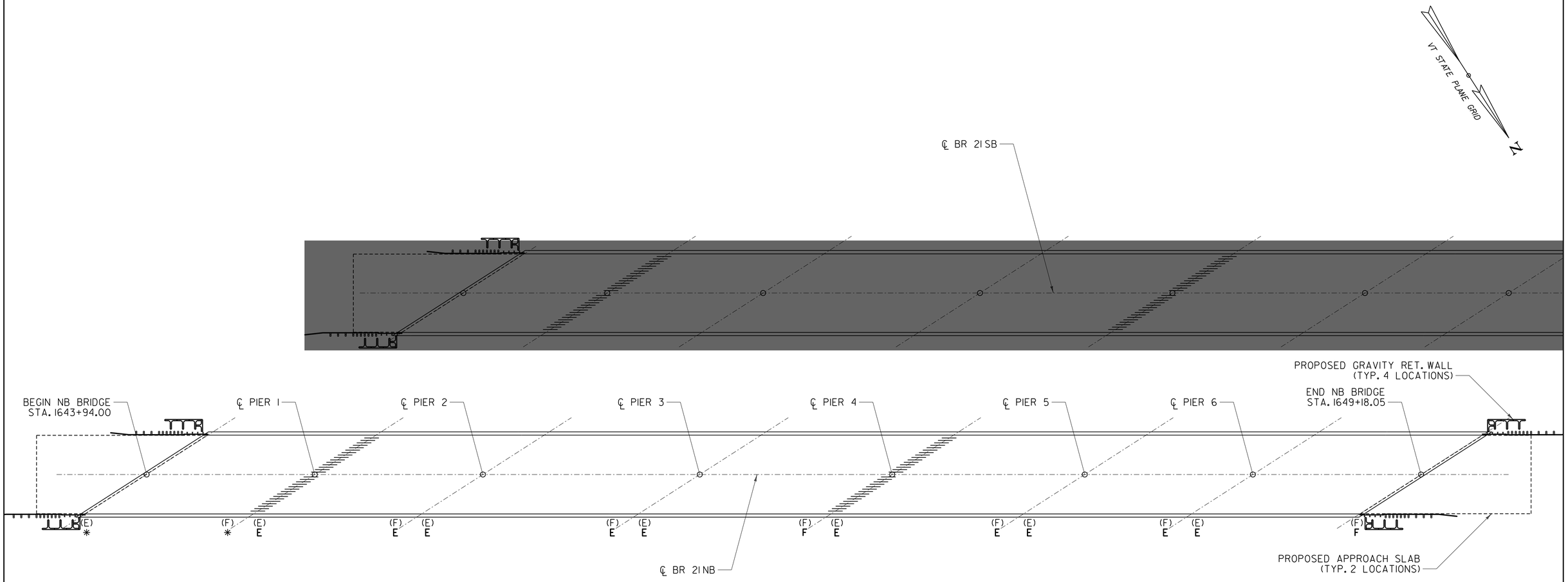
(F) - EXISTING FIXED BEARING
(E) - EXISTING EXPANSION BEARING
F - PROPOSED FIXED BEARING
E - PROPOSED EXPANSION BEARING
* - RETAIN EXISTING BEARING

Stantec

PROJECT NAME: WESTMINSTER
PROJECT NUMBER: IM 091-1(70)

FILE NAME: z13a098rehab_summ.dgn
PROJECT LEADER: M. CHENETTE
DESIGNED BY: N. TIRK
SOUTHBOUND REHABILITATION PLAN

PLOT DATE: 9/2/2015
DRAWN BY: J. SOTER
CHECKED BY: T. KNIGHT
SHEET 15 OF 48



WESTMINSTER BR 21 NORTHBOUND - SUPERSTRUCTURE REHABILITATION PLAN

SCALE: 1" = 20'-0"

WESTMINSTER BR 21N - SUPERSTRUCTURE REHABILITATION SUMMARY

	ABUT 1	P1	P2	P3	P4	P5	P6	ABUT 2
BRIDGE JT., ASPHALTIC PLUG	36 LF							
CONSTRUCT LINK SLAB			✓	✓		✓	✓	
BRIDGE EXP. JOINT, FINGER		42 LF			42 LF			
NEW STEEL DIAPHRAGMS		8	8	8	8	8	8	
NEW EXPANSION BEARINGS		5	10	10	5	10	10	
NEW FIXED BEARINGS					5			5
SAWED PAVEMENT JOINT	36 LF							72 LF
PROPOSED APPROACH SLABS	✓							✓
PRECAST GRAVITY RETAIN. WALL	625 SF							500 SF
SCOUR COUNTER MEASURES					✓	✓		

LEGEND

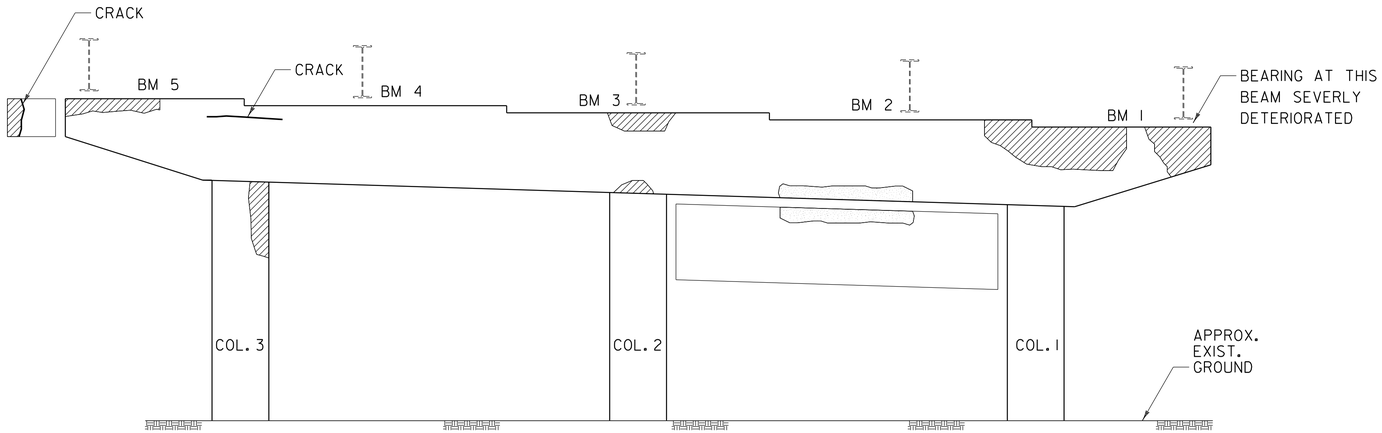
(F) - EXISTING FIXED BEARING
(E) - EXISTING EXPANSION BEARING
F - PROPOSED FIXED BEARING
E - PROPOSED EXPANSION BEARING
✳ - RETAIN EXISTING BEARING

Stantec

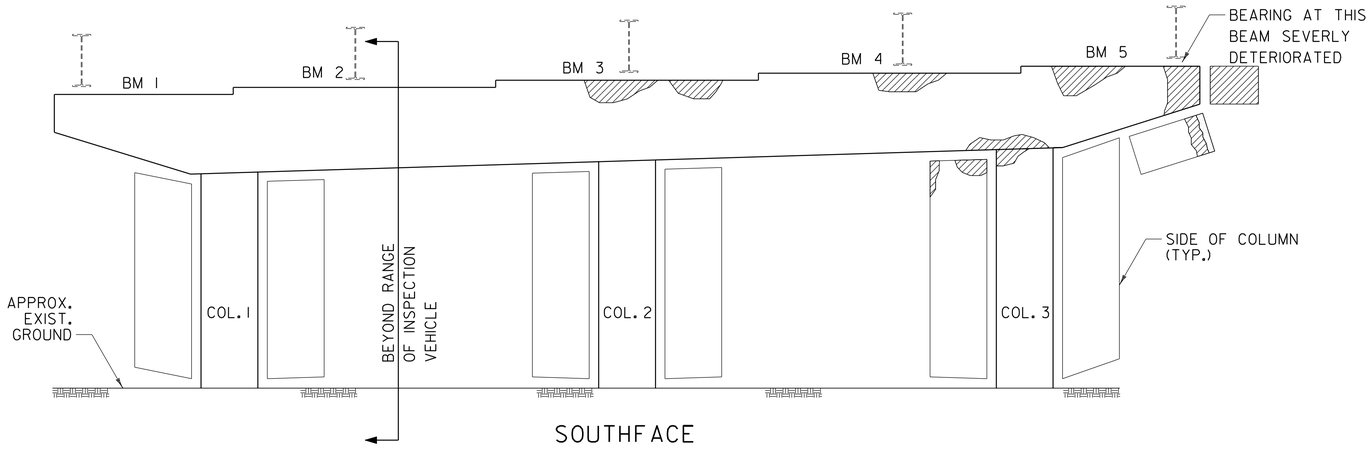
PROJECT NAME: WESTMINSTER
PROJECT NUMBER: IM 091-1(70)

FILE NAME: z13a098rehab_summ.dgn
PROJECT LEADER: M. CHENETTE
DESIGNED BY: N. TIRK
NORTHBOUND REHABILITATION PLAN

PLOT DATE: 9/2/2015
DRAWN BY: J. SOTER
CHECKED BY: T. KNIGHT
SHEET 16 OF 48



NORTHFACE



SOUTHFACE

PIER NO. 1 NORTHBOUND

SCALE 1/4" = 1'-0"

NOTE:
DETERIORATED AREAS SHOWN ARE BASED ON INSPECTIONS CONDUCTED IN JULY 2015. ACTUAL LIMITS, DEPTH AND CLASS OF REPAIR TO BE DETERMINED BY THE ENGINEER.

NOTE:

ALL REPAIRS ARE ESTIMATED.

LEGEND

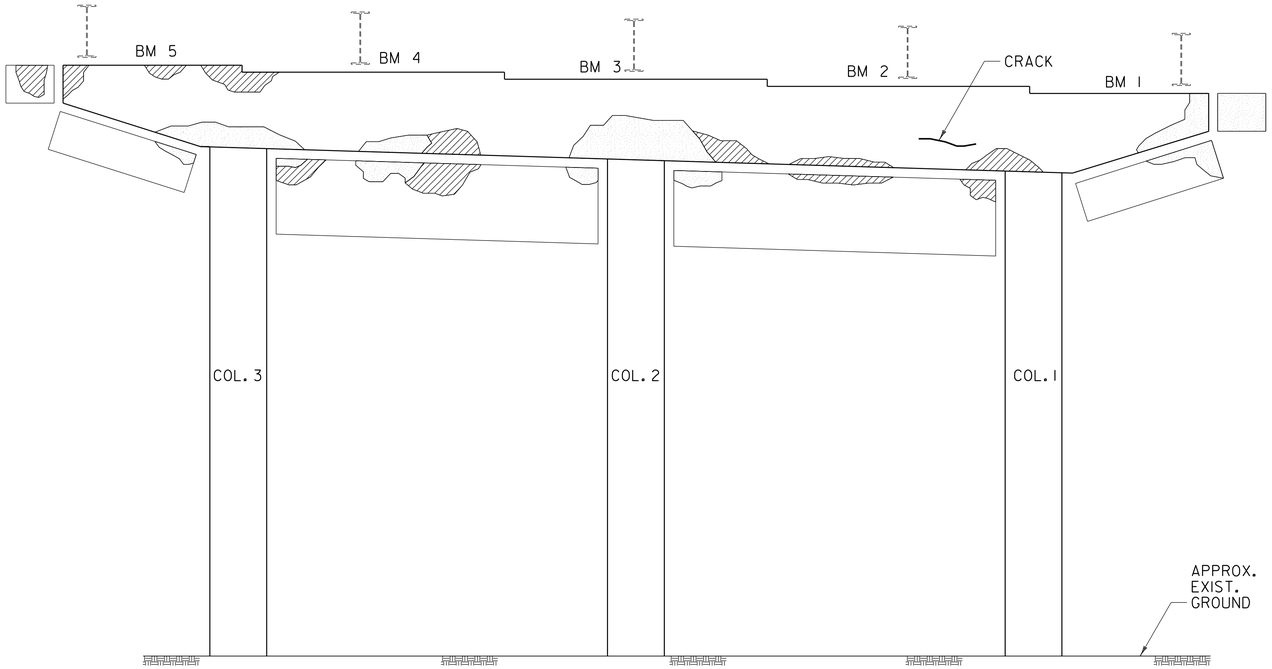
- CRACK
- DEEPLY SPALLED WITH EXPOSED REBAR
- DELAMINATED AREA

Stantec

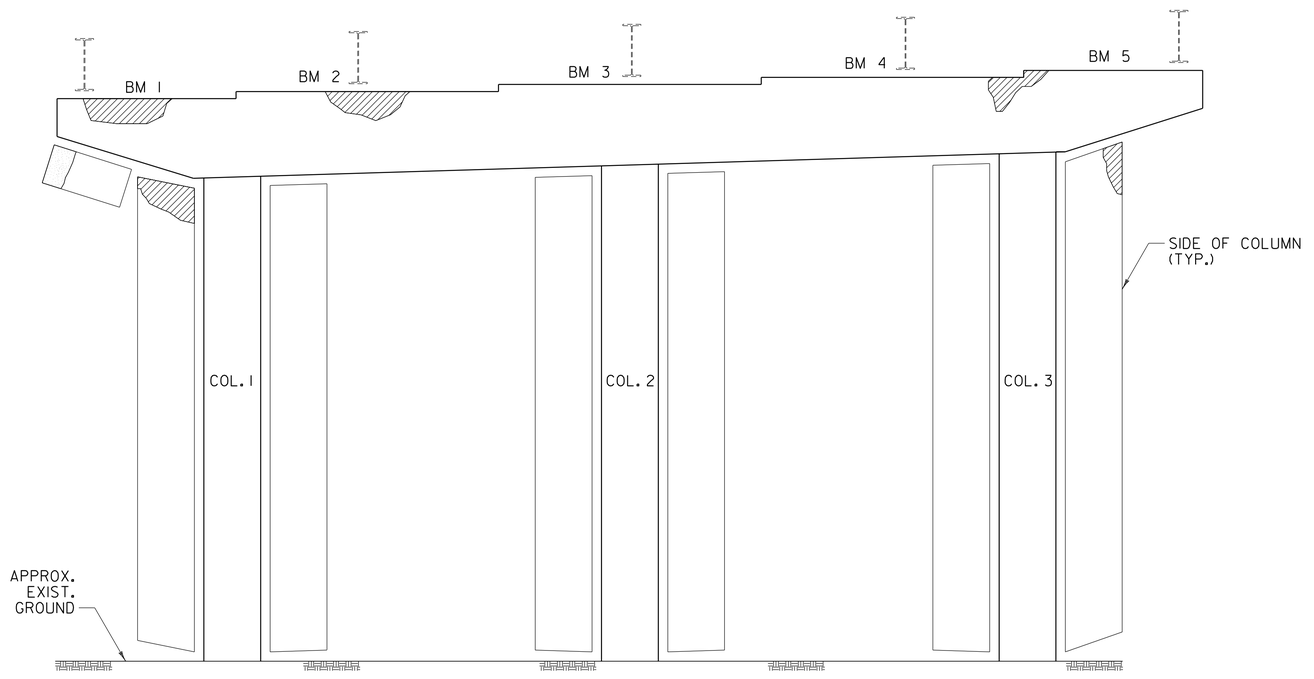
PROJECT NAME: WESTMINSTER
PROJECT NUMBER: IM 091-1(70)

FILE NAME: z13a098piers.dgn
PROJECT LEADER: M. CHENETTE
DESIGNED BY: N. TIRK
PIER NO. 1 NORTHBOUND - REPAIRS

PLOT DATE: 9/2/2015
DRAWN BY: L. BUXTON
CHECKED BY: X. XXXX
SHEET 17 OF 48



NORTH FACE



NOTE:
NO ACCESS WITH BUCKET,
BEST QUESS AT DETERIORATION
FROM GROUND.

SOUTH FACE

PIER NO. 2 NORTHBOUND

SCALE 1/4" = 1'-0"

NOTE:
DETERIORATED AREAS SHOWN ARE BASED ON INSPECTIONS CONDUCTED IN JULY 2015. ACTUAL LIMITS, DEPTH AND CLASS OF REPAIR TO BE DETERMINED BY THE ENGINEER.

NOTE:

ALL REPAIRS ARE ESTIMATED.

LEGEND

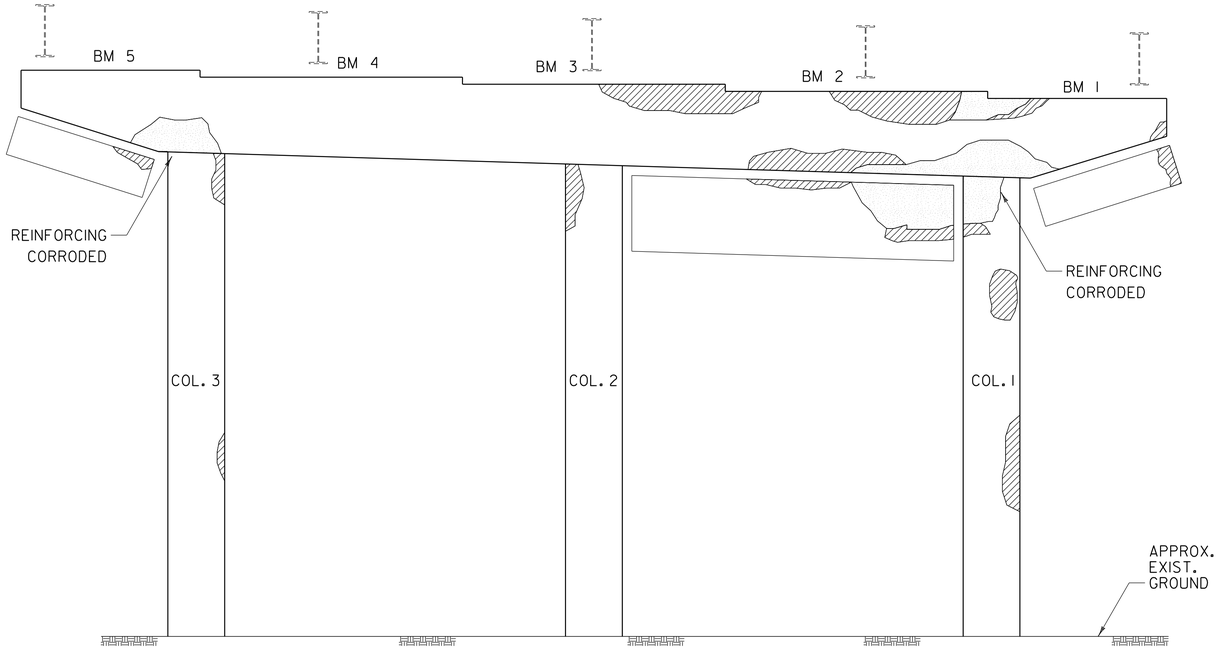
- CRACK
- DEEPLY SPALLED WITH EXPOSED REBAR
- DELAMINATED AREA

Stantec

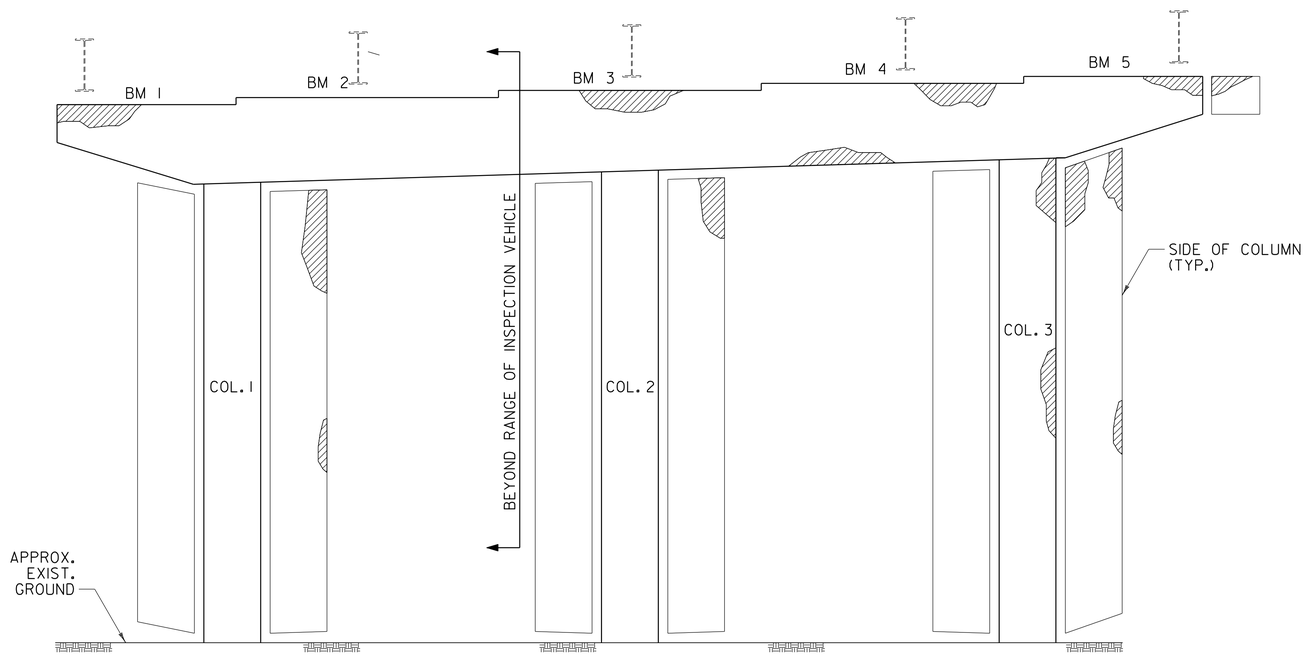
PROJECT NAME: WESTMINSTER
PROJECT NUMBER: IM 091-1(70)

FILE NAME: z13a098piers.dgn
PROJECT LEADER: M. CHENETTE
DESIGNED BY: N. TIRK
PIER NO. 2 NORTHBOUND - REPAIRS

PLOT DATE: 9/2/2015
DRAWN BY: L. BUXTON
CHECKED BY: X. XXXX
SHEET 18 OF 48



NORTHFACE



SOUTHFACE

PIER NO. 3 NORTHBOUND

SCALE 1/4" = 1'-0"

NOTE:
DETERIORATED AREAS SHOWN ARE BASED ON INSPECTIONS CONDUCTED IN JULY 2015. ACTUAL LIMITS, DEPTH AND CLASS OF REPAIR TO BE DETERMINED BY THE ENGINEER.

NOTE:

ALL REPAIRS ARE ESTIMATED.

LEGEND

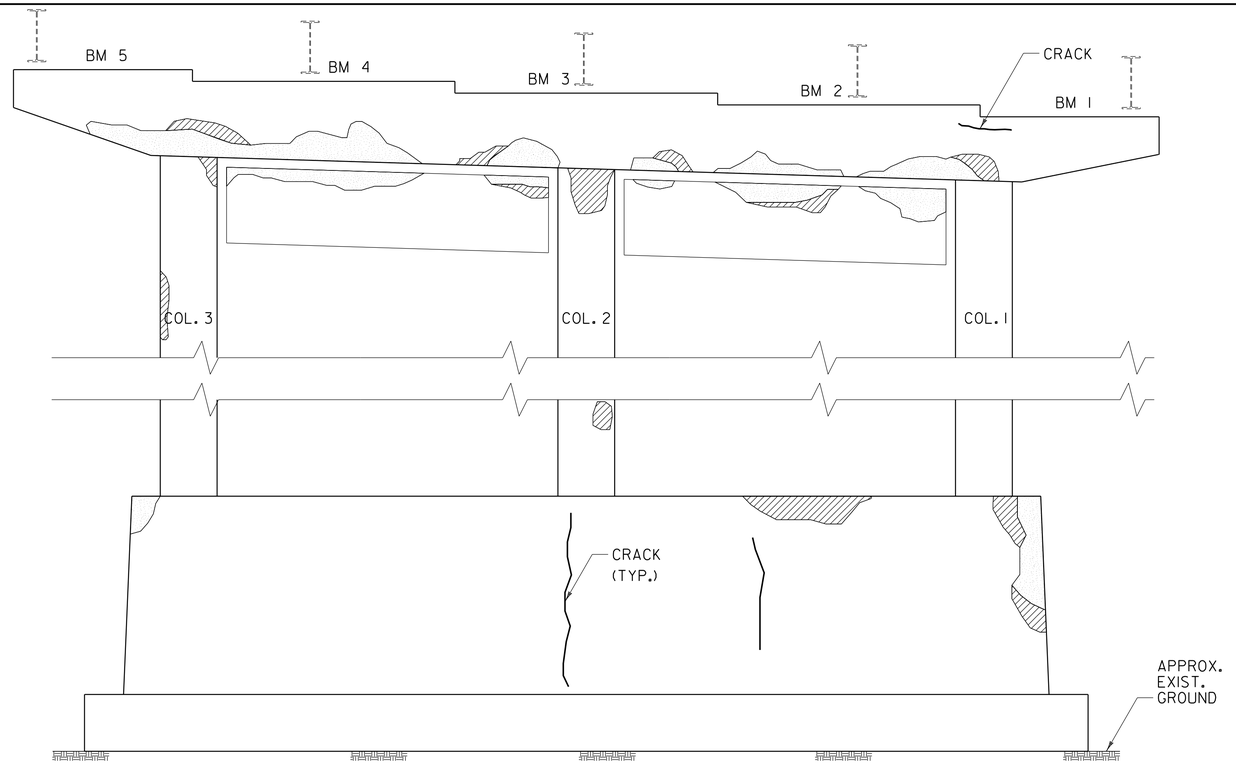
- CRACK
- DEEPLY SPALLED WITH EXPOSED REBAR
- DELAMINATED AREA

Stantec

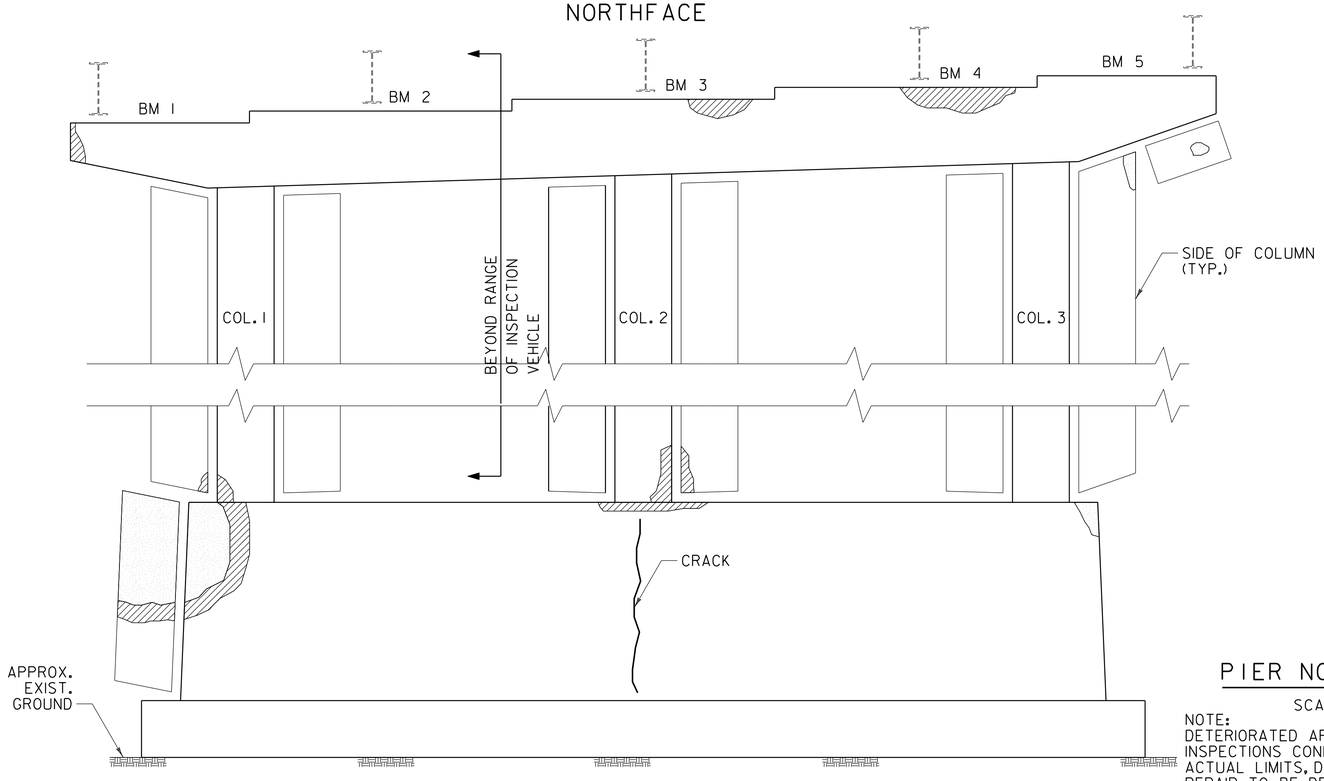
PROJECT NAME: WESTMINSTER
PROJECT NUMBER: IM 091-1(70)

FILE NAME: z13a098piers.dgn
PROJECT LEADER: M. CHENETTE
DESIGNED BY: N. TIRK
PIER NO. 3 NORTHBOUND - REPAIRS

PLOT DATE: 9/2/2015
DRAWN BY: L. BUXTON
CHECKED BY: X. XXXX
SHEET 19 OF 48



NORTH FACE



SOUTH FACE

PIER NO. 4 NORTHBOUND

SCALE 1/4" = 1'-0"

NOTE:
DETERIORATED AREAS SHOWN ARE BASED ON INSPECTIONS CONDUCTED IN JULY 2015. ACTUAL LIMITS, DEPTH AND CLASS OF REPAIR TO BE DETERMINED BY THE ENGINEER.

NOTE:

ALL REPAIRS ARE ESTIMATED.

LEGEND

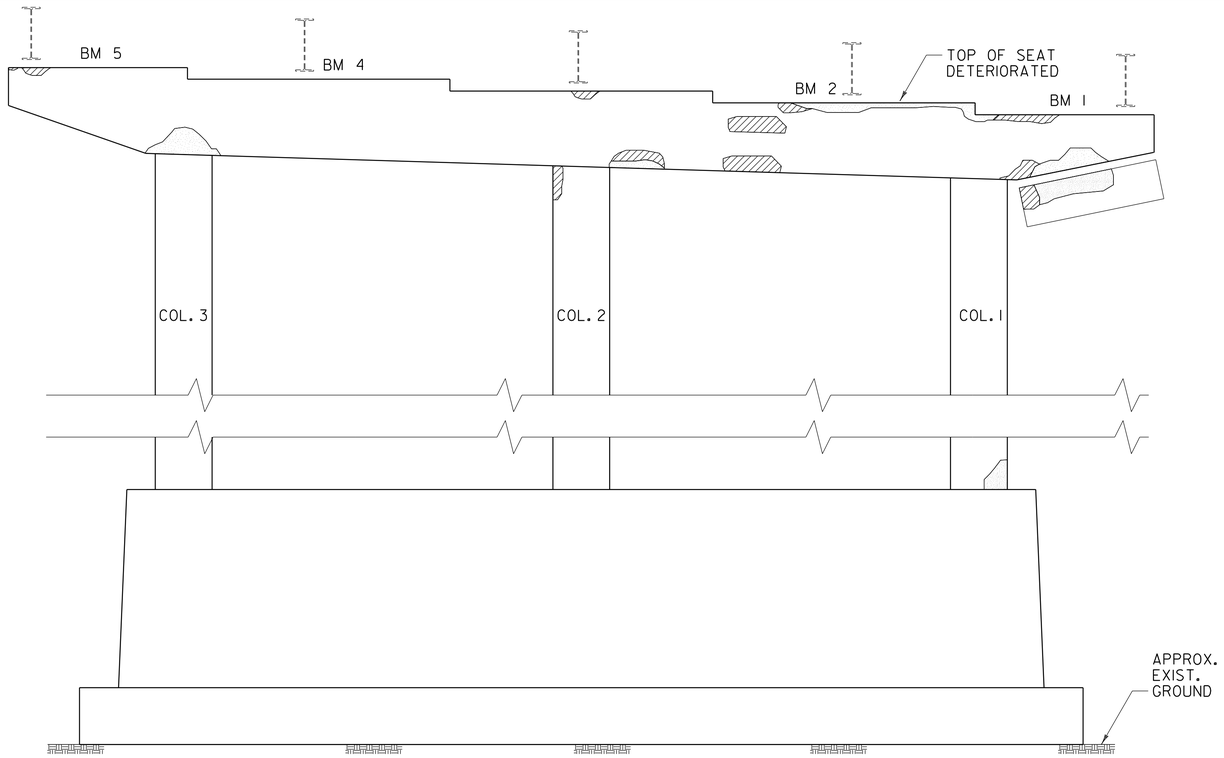
- CRACK
- DEEPLY SPALLED WITH EXPOSED REBAR
- DELAMINATED AREA

Stantec

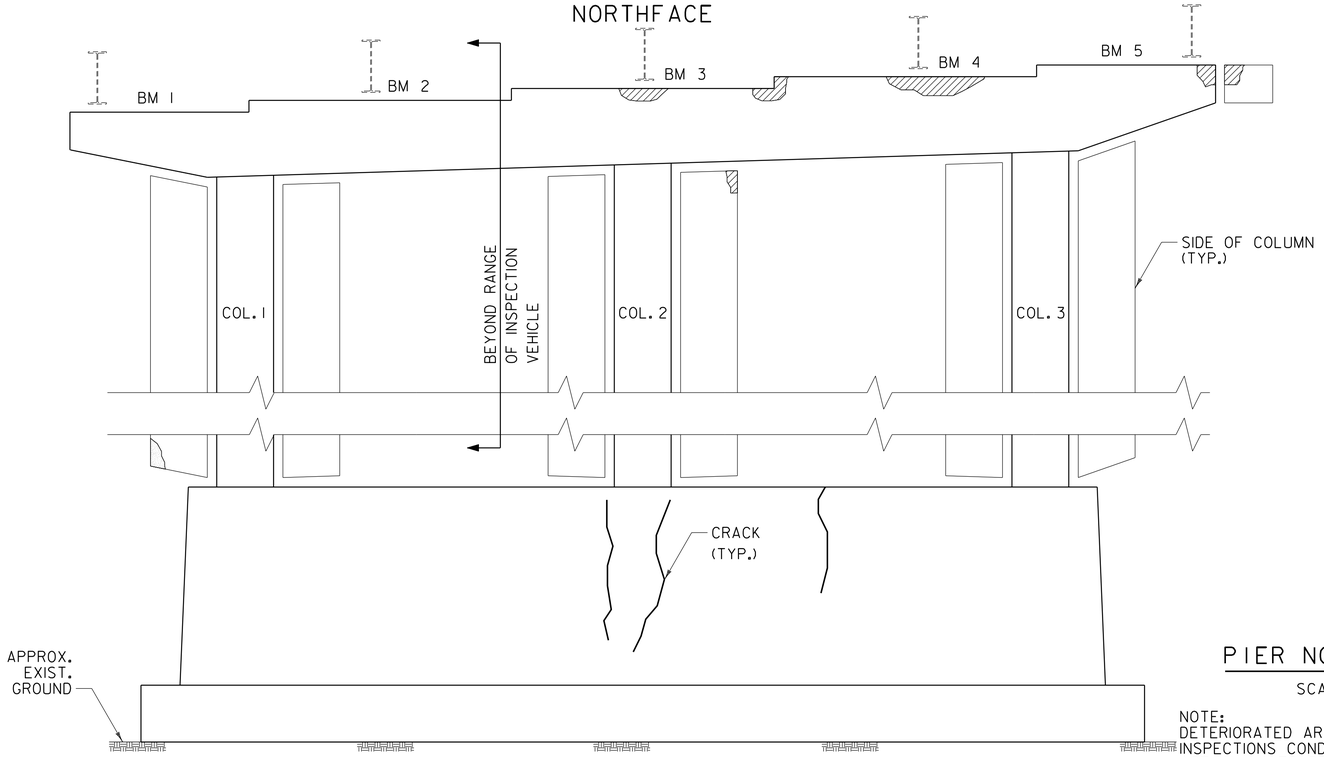
PROJECT NAME: WESTMINSTER
PROJECT NUMBER: IM 091-1(70)

FILE NAME: z13a098piers.dgn
PROJECT LEADER: M. CHENETTE
DESIGNED BY: N. TIRK
PIER NO. 4 NORTHBOUND - REPAIRS

PLOT DATE: 9/2/2015
DRAWN BY: L. BUXTON
CHECKED BY: X. XXXX
SHEET 20 OF 48



NORTHFACE



SOUTHFACE

PIER NO. 5 NORTHBOUND

SCALE 1/4" = 1'-0"

NOTE:
DETERIORATED AREAS SHOWN ARE BASED ON INSPECTIONS CONDUCTED IN JULY 2015. ACTUAL LIMITS, DEPTH AND CLASS OF REPAIR TO BE DETERMINED BY THE ENGINEER.

NOTE:

ALL REPAIRS ARE ESTIMATED.

LEGEND

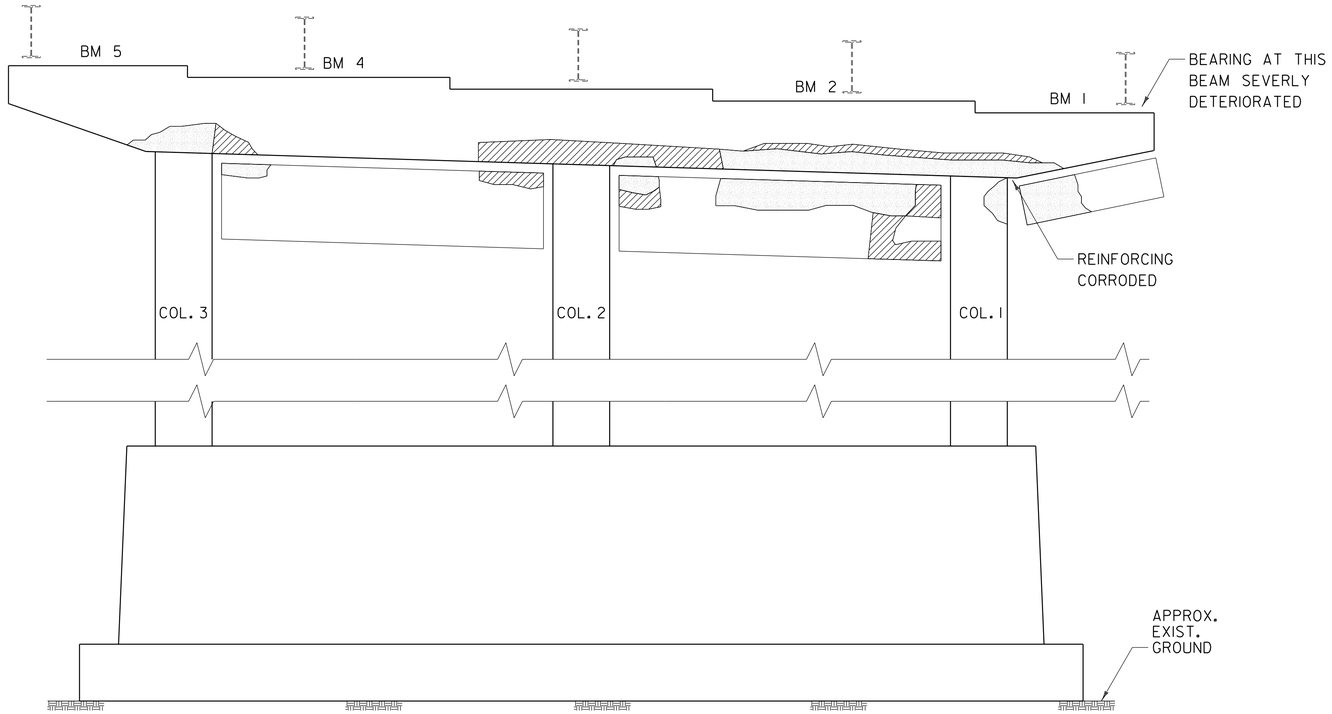
- CRACK
- DEEPLY SPALLED WITH EXPOSED REBAR
- DELAMINATED AREA

Stantec

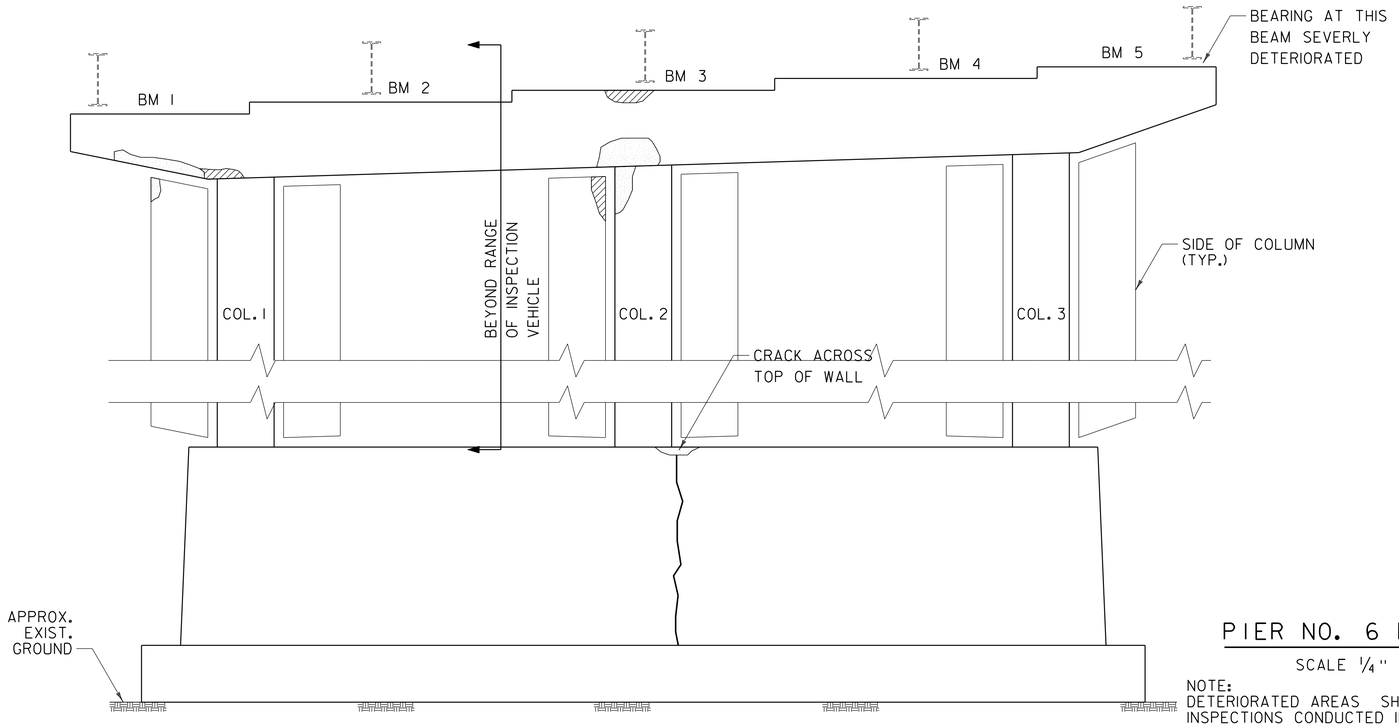
PROJECT NAME: WESTMINSTER
PROJECT NUMBER: IM 091-1(70)

FILE NAME: z13a098piers.dgn
PROJECT LEADER: M. CHENETTE
DESIGNED BY: N. TIRK
PIER NO. 5 NORTHBOUND - REPAIRS

PLOT DATE: 9/2/2015
DRAWN BY: L. BUXTON
CHECKED BY: X. XXXX
SHEET 21 OF 48



NORTHFACE



SOUTHFACE

PIER NO. 6 NORTHBOUND

SCALE 1/4" = 1'-0"

NOTE:
DETERIORATED AREAS SHOWN ARE BASED ON INSPECTIONS CONDUCTED IN JULY 2015. ACTUAL LIMITS, DEPTH AND CLASS OF REPAIR TO BE DETERMINED BY THE ENGINEER.

NOTE:

ALL REPAIRS ARE ESTIMATED.

LEGEND

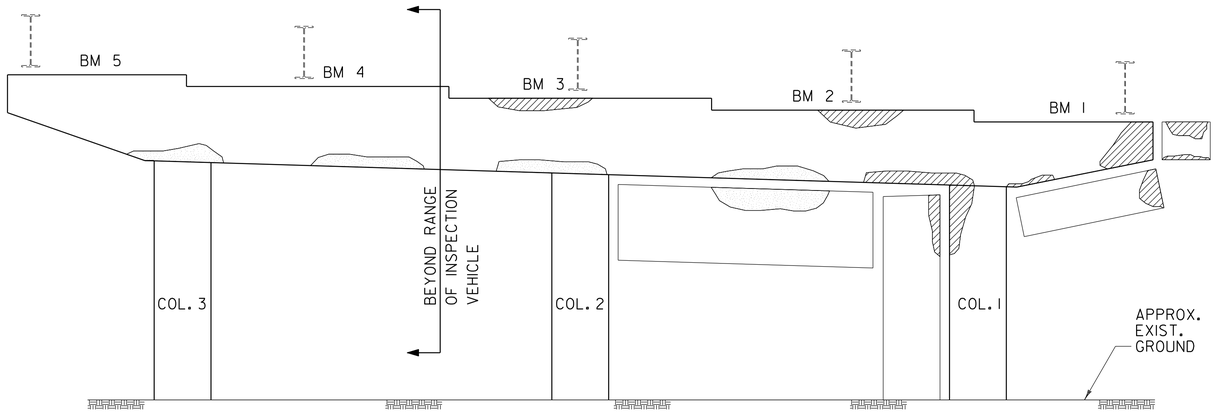
- CRACK
- DEEPLY SPALLED WITH EXPOSED REBAR
- DELAMINATED AREA

Stantec

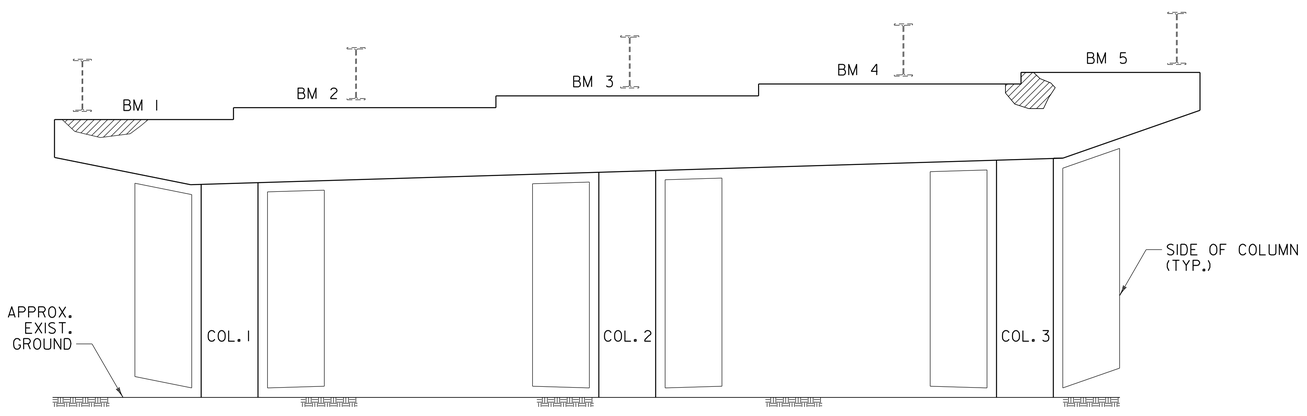
PROJECT NAME: WESTMINSTER
PROJECT NUMBER: IM 091-1(70)

FILE NAME: z13a098piers.dgn
PROJECT LEADER: M. CHENETTE
DESIGNED BY: N. TIRK
PIER NO. 6 NORTHBOUND - REPAIRS

PLOT DATE: 9/2/2015
DRAWN BY: L. BUXTON
CHECKED BY: X. XXXX
SHEET 22 OF 48



NORTHFACE



SOUTHFACE

PIER NO. 1 SOUTHBOUND

SCALE 1/4" = 1'-0"

NOTE:
DETERIORATED AREAS SHOWN ARE BASED ON INSPECTIONS CONDUCTED IN JULY 2015. ACTUAL LIMITS, DEPTH AND CLASS OF REPAIR TO BE DETERMINED BY THE ENGINEER.

NOTE:

ALL REPAIRS ARE ESTIMATED.

LEGEND

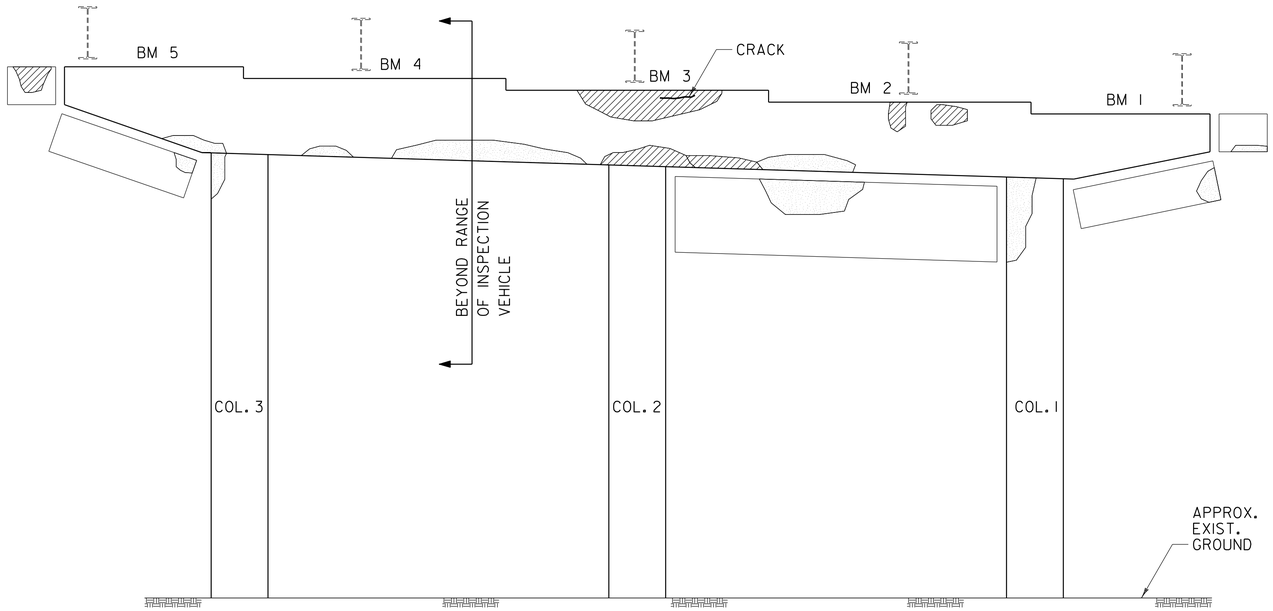
- CRACK
- DEEPLY SPALLED WITH EXPOSED REBAR
- DELAMINATED AREA

Stantec

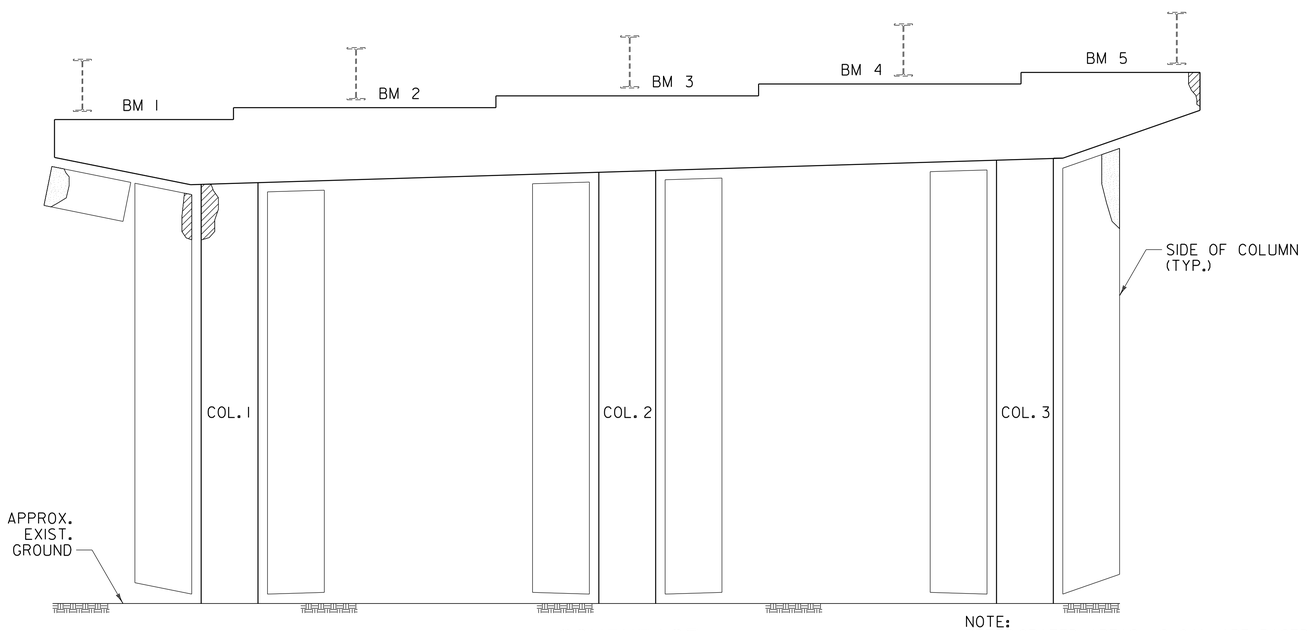
PROJECT NAME: WESTMINSTER
PROJECT NUMBER: IM 091-1(70)

FILE NAME: zl3a098piers.dgn
PROJECT LEADER: M. CHENETTE
DESIGNED BY: N. TIRK
PIER NO. 1 SOUTHBOUND - REPAIRS

PLOT DATE: 9/2/2015
DRAWN BY: L. BUXTON
CHECKED BY: X. XXXX
SHEET 23 OF 48



NORTH FACE



SOUTH FACE

PIER NO. 2 SOUTHBOUND

SCALE 1/4" = 1'-0"

NOTE:
DETERIORATED AREAS SHOWN ARE BASED ON INSPECTIONS CONDUCTED IN JULY 2015. ACTUAL LIMITS, DEPTH AND CLASS OF REPAIR TO BE DETERMINED BY THE ENGINEER.

NOTE:

ALL REPAIRS ARE ESTIMATED.

LEGEND

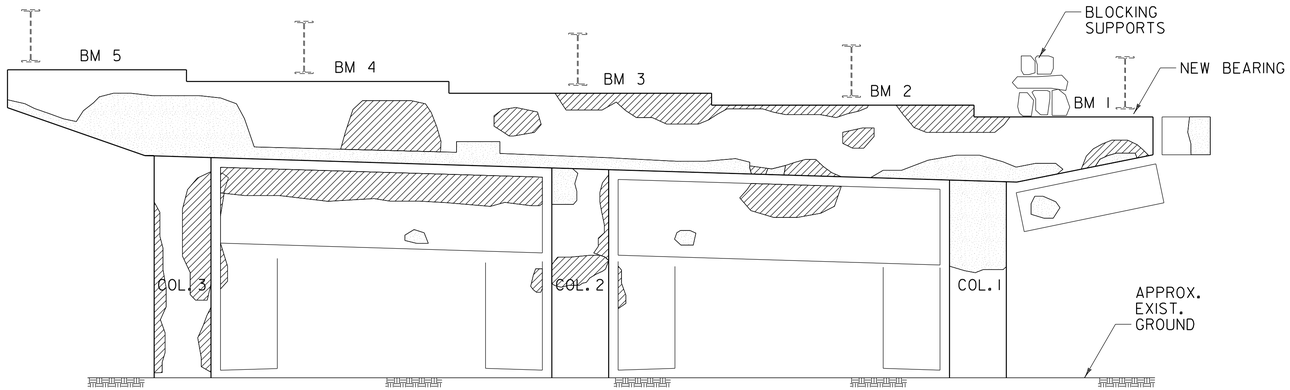
- CRACK
- DEEPLY SPALLED WITH EXPOSED REBAR
- DELAMINATED AREA

Stantec

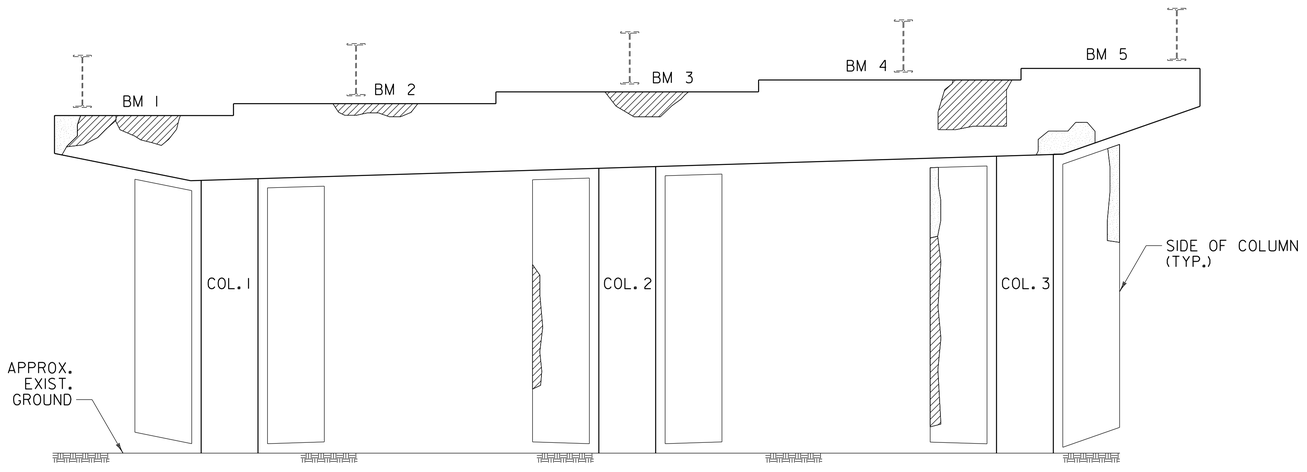
PROJECT NAME: WESTMINSTER
PROJECT NUMBER: IM 091-1(70)

FILE NAME: z13a098piers.dgn
PROJECT LEADER: M. CHENETTE
DESIGNED BY: N. TIRK
PIER NO. 2 SOUTHBOUND - REPAIRS

PLOT DATE: 9/2/2015
DRAWN BY: L. BUXTON
CHECKED BY: X. XXXX
SHEET 24 OF 48



NORTHFACE



SOUTHFACE

NOTE:

ALL REPAIRS ARE ESTIMATED.

LEGEND

- CRACK
- DEEPLY SPALLED WITH EXPOSED REBAR
- DELAMINATED AREA

PIER NO. 3 SOUTHBOUND

SCALE 1/4" = 1'-0"

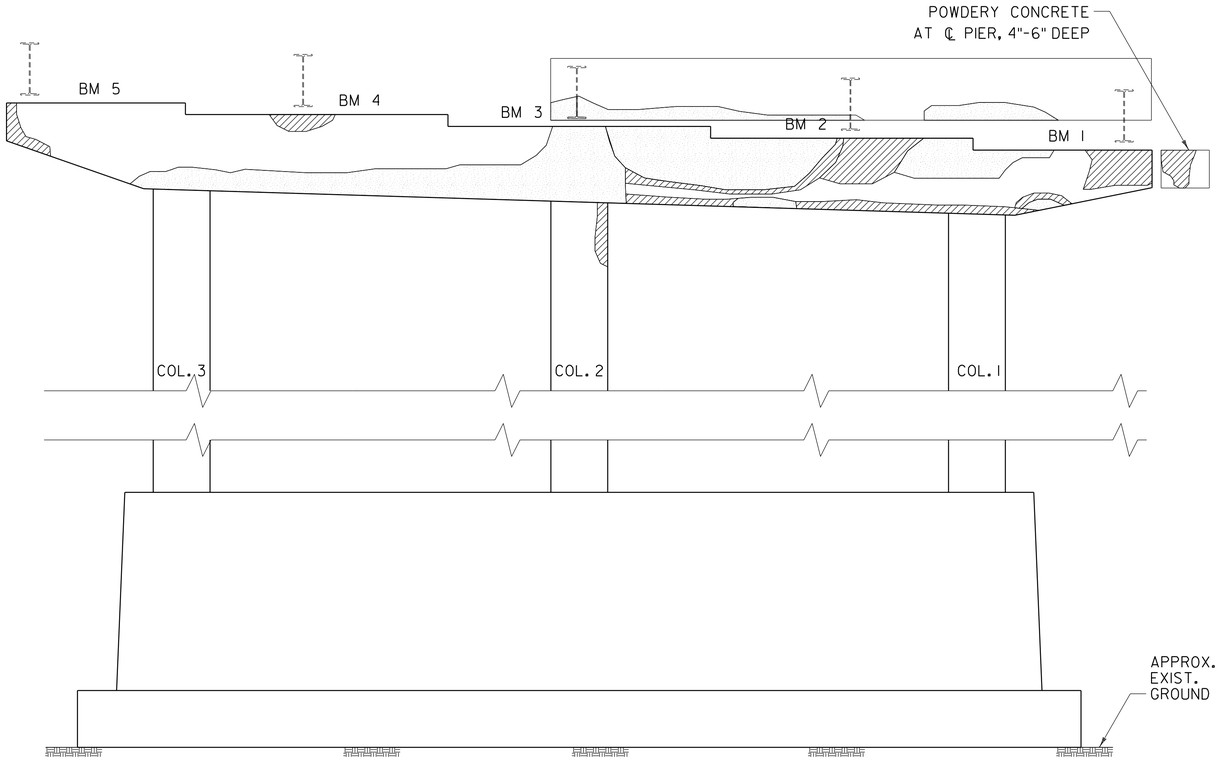
NOTE:
DETERIORATED AREAS SHOWN ARE BASED ON INSPECTIONS CONDUCTED IN JULY 2015. ACTUAL LIMITS, DEPTH AND CLASS OF REPAIR TO BE DETERMINED BY THE ENGINEER.

Stantec

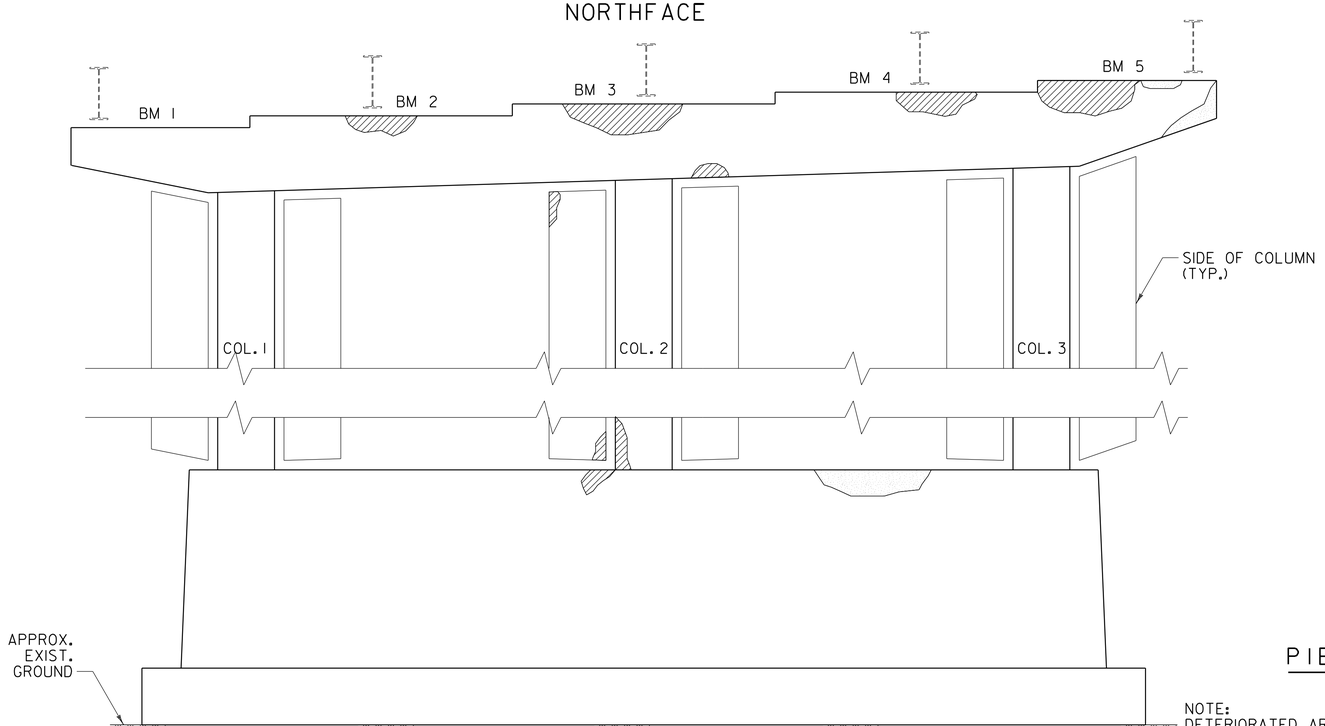
PROJECT NAME: WESTMINSTER
PROJECT NUMBER: IM 091-1(70)

FILE NAME: z13a098piers.dgn
PROJECT LEADER: M. CHENETTE
DESIGNED BY: N. TIRK
PIER NO. 3 SOUTHBOUND - REPAIRS

PLOT DATE: 9/2/2015
DRAWN BY: L. BUXTON
CHECKED BY: X. XXXX
SHEET 25 OF 48



NORTH FACE



SOUTH FACE

NOTE:
DETERIORATED AREAS SHOWN ARE BASED ON INSPECTIONS CONDUCTED IN JULY 2015. ACTUAL LIMITS, DEPTH AND CLASS OF REPAIR TO BE DETERMINED BY THE ENGINEER.

NOTE:

ALL REPAIRS ARE ESTIMATED.

LEGEND

- CRACK
- DEEPLY SPALLED WITH EXPOSED REBAR
- DELAMINATED AREA

PIER NO. 4 SOUTHBOUND

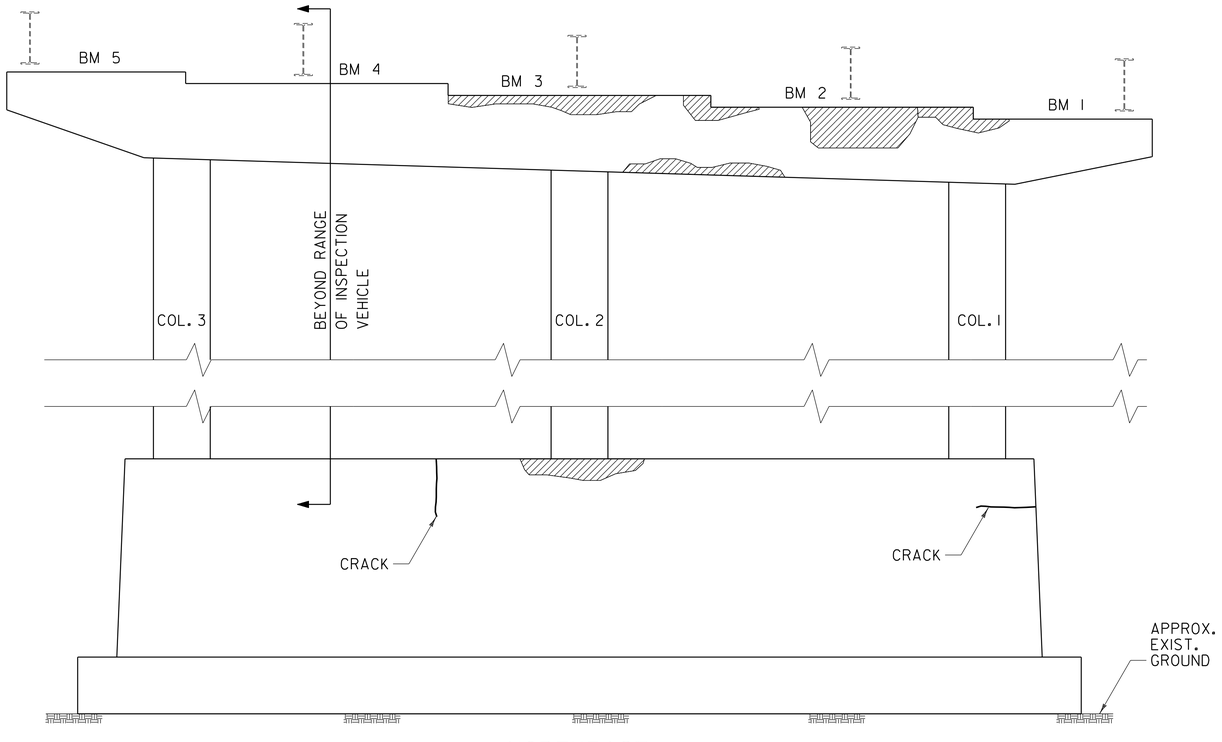
SCALE 1/4" = 1'-0"

Stantec

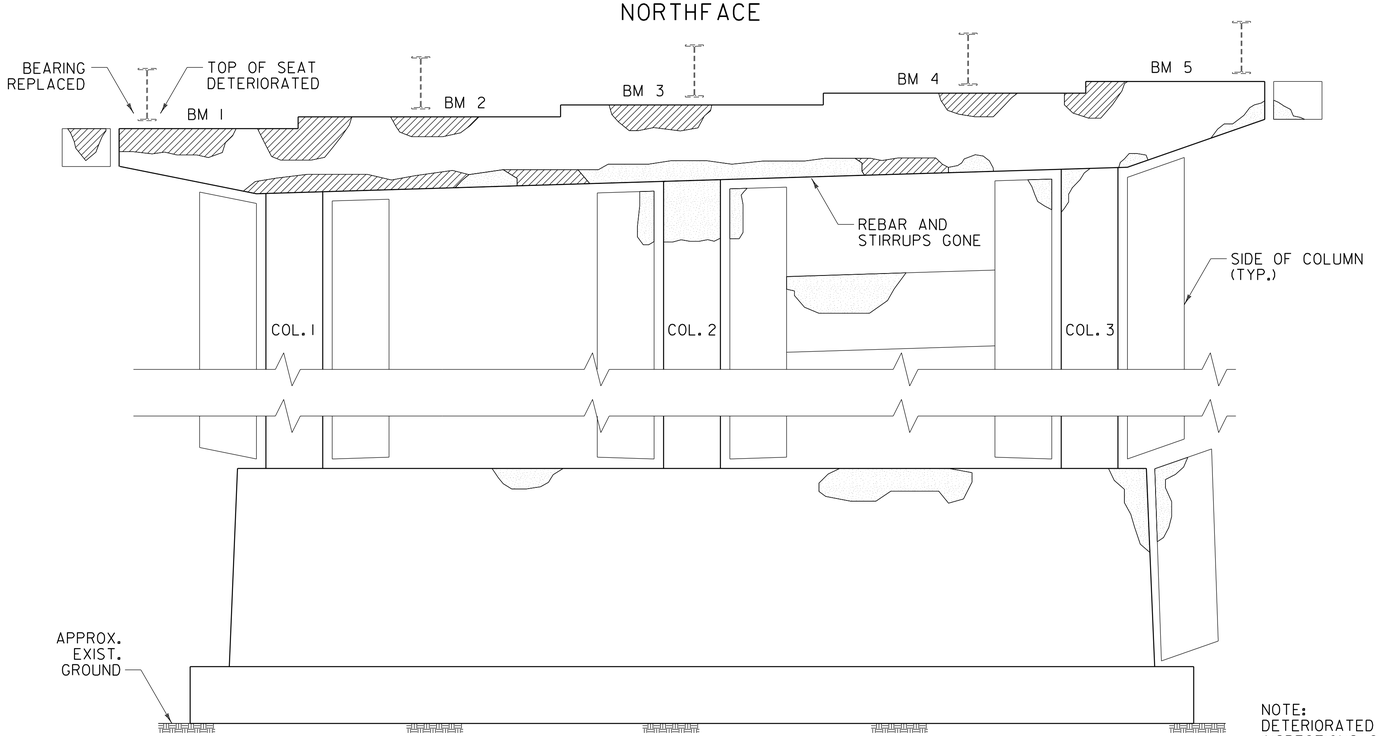
PROJECT NAME: WESTMINSTER
PROJECT NUMBER: IM 091-1(70)

FILE NAME: z13a098piers.dgn
PROJECT LEADER: M. CHENETTE
DESIGNED BY: N. TIRK
PIER NO. 4 SOUTHBOUND - REPAIRS

PLOT DATE: 9/2/2015
DRAWN BY: L. BUXTON
CHECKED BY: X. XXXX
SHEET 26 OF 48



NORTH FACE



SOUTH FACE

NOTE:

ALL REPAIRS ARE ESTIMATED.

LEGEND

- CRACK
- DEEPLY SPALLED WITH EXPOSED REBAR
- DELAMINATED AREA

PIER NO. 5 SOUTHBOUND

SCALE 1/4" = 1'-0"

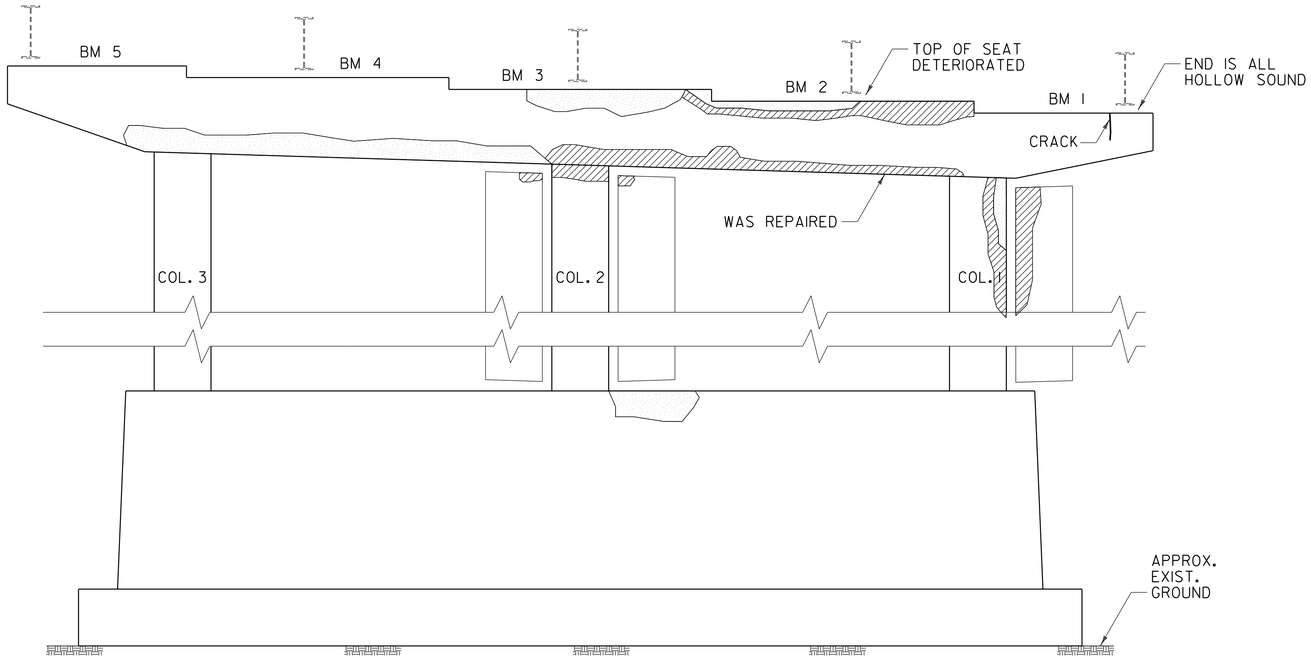
NOTE:
DETERIORATED AREAS SHOWN ARE BASED ON INSPECTIONS CONDUCTED IN JULY 2015. ACTUAL LIMITS, DEPTH AND CLASS OF REPAIR TO BE DETERMINED BY THE ENGINEER.

Stantec

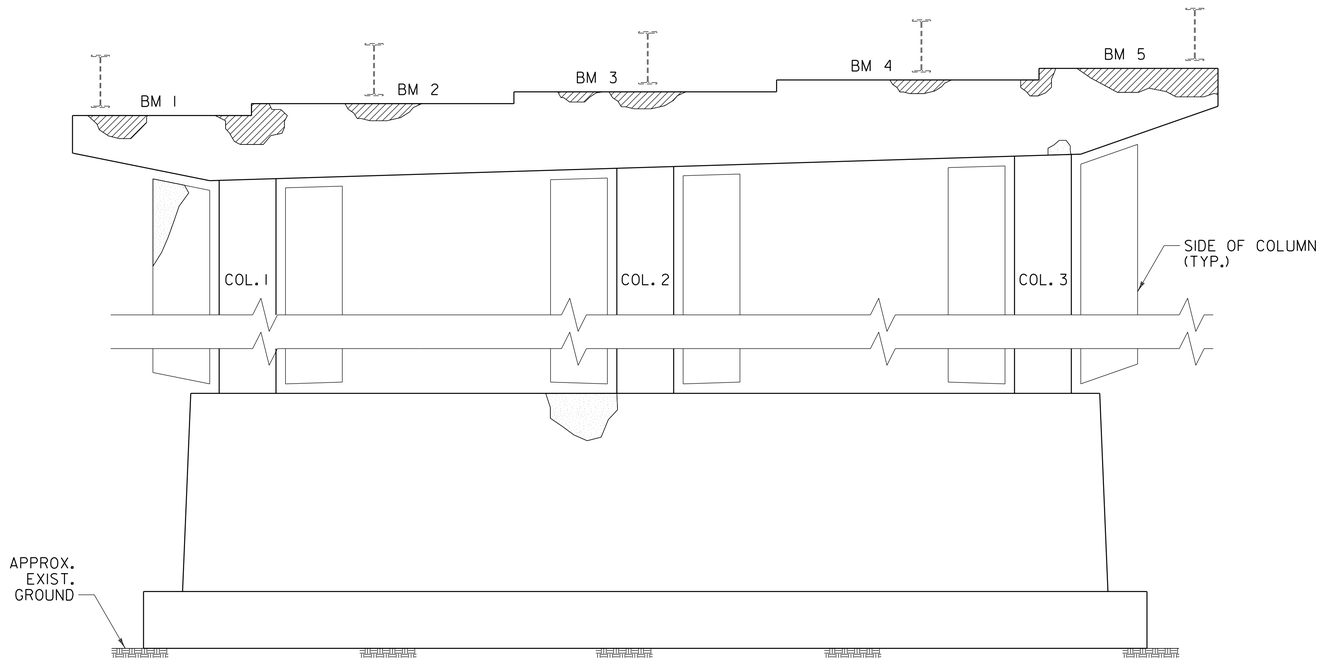
PROJECT NAME: WESTMINSTER
PROJECT NUMBER: IM 091-1(70)

FILE NAME: zl3a098piers.dgn
PROJECT LEADER: M. CHENETTE
DESIGNED BY: N. TIRK
PIER NO. 5 SOUTHBOUND - REPAIRS

PLOT DATE: 9/2/2015
DRAWN BY: L. BUXTON
CHECKED BY: X. XXXX
SHEET 27 OF 48



NORTH FACE



SOUTH FACE

PIER NO. 6 SOUTHBOUND

SCALE 1/4" = 1'-0"

NOTE:
DETERIORATED AREAS SHOWN ARE BASED ON INSPECTIONS CONDUCTED IN JULY 2015. ACTUAL LIMITS, DEPTH AND CLASS OF REPAIR TO BE DETERMINED BY THE ENGINEER.

NOTE:

ALL REPAIRS ARE ESTIMATED.

LEGEND

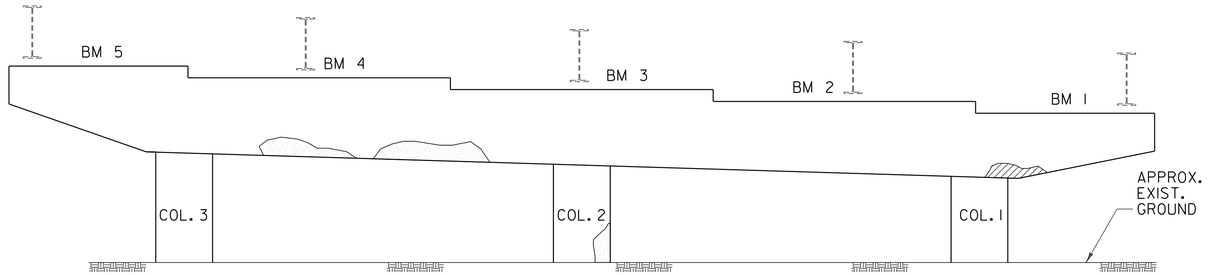
- CRACK
- DEEPLY SPALLED WITH EXPOSED REBAR
- DELAMINATED AREA

Stantec

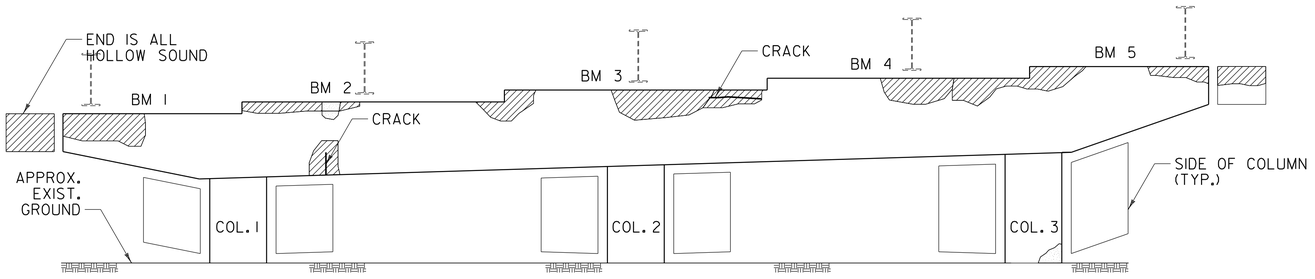
PROJECT NAME: WESTMINSTER
PROJECT NUMBER: IM 091-1(70)

FILE NAME: z13a098piers.dgn
PROJECT LEADER: M. CHENETTE
DESIGNED BY: N. TIRK
PIER NO. 6 SOUTHBOUND - REPAIRS

PLOT DATE: 9/2/2015
DRAWN BY: L. BUXTON
CHECKED BY: X. XXXX
SHEET 28 OF 48



NORTHFACE



SOUTHFACE

PIER NO. 7 SOUTHBOUND

SCALE 1/4" = 1'-0"

NOTE:
DETERIORATED AREAS SHOWN ARE BASED ON INSPECTIONS CONDUCTED IN JULY 2015. ACTUAL LIMITS, DEPTH AND CLASS OF REPAIR TO BE DETERMINED BY THE ENGINEER.

NOTE:

ALL REPAIRS ARE ESTIMATED.

LEGEND

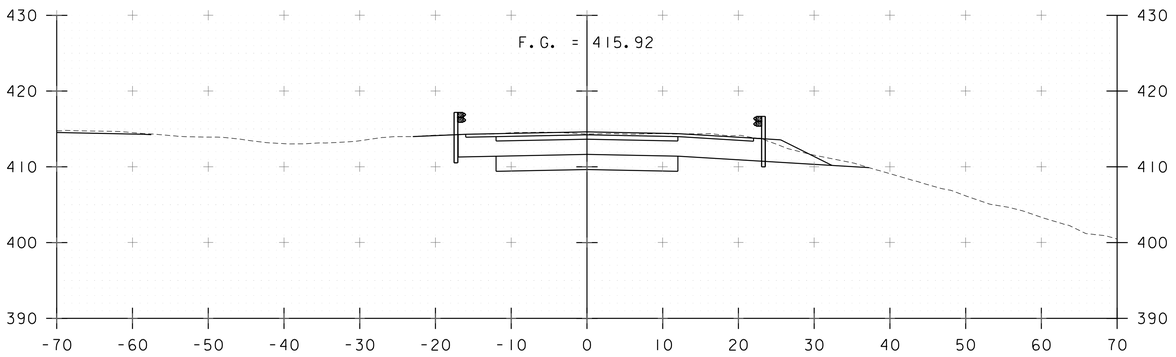
- CRACK
- DEEPLY SPALLED WITH EXPOSED REBAR
- DELAMINATED AREA

Stantec

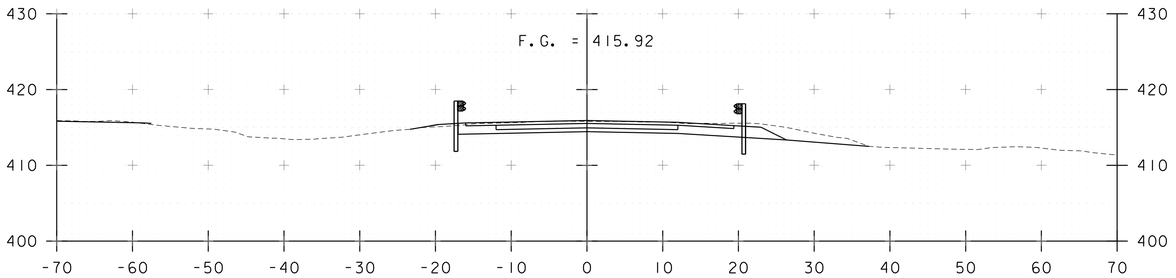
PROJECT NAME: WESTMINSTER
PROJECT NUMBER: IM 091-1(70)

FILE NAME: zl3a098piers.dgn
PROJECT LEADER: M. CHENETTE
DESIGNED BY: N. TIRK
PIER NO. 7 SOUTHBOUND - REPAIRS

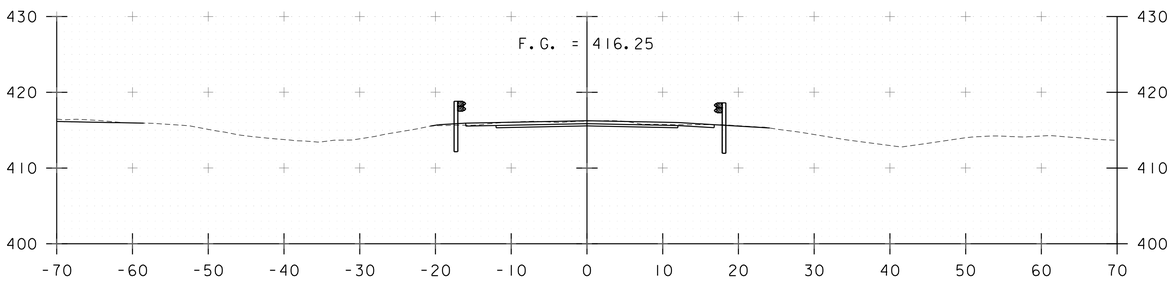
PLOT DATE: 9/2/2015
DRAWN BY: L. BUXTON
CHECKED BY: X. XXXX
SHEET 29 OF 48



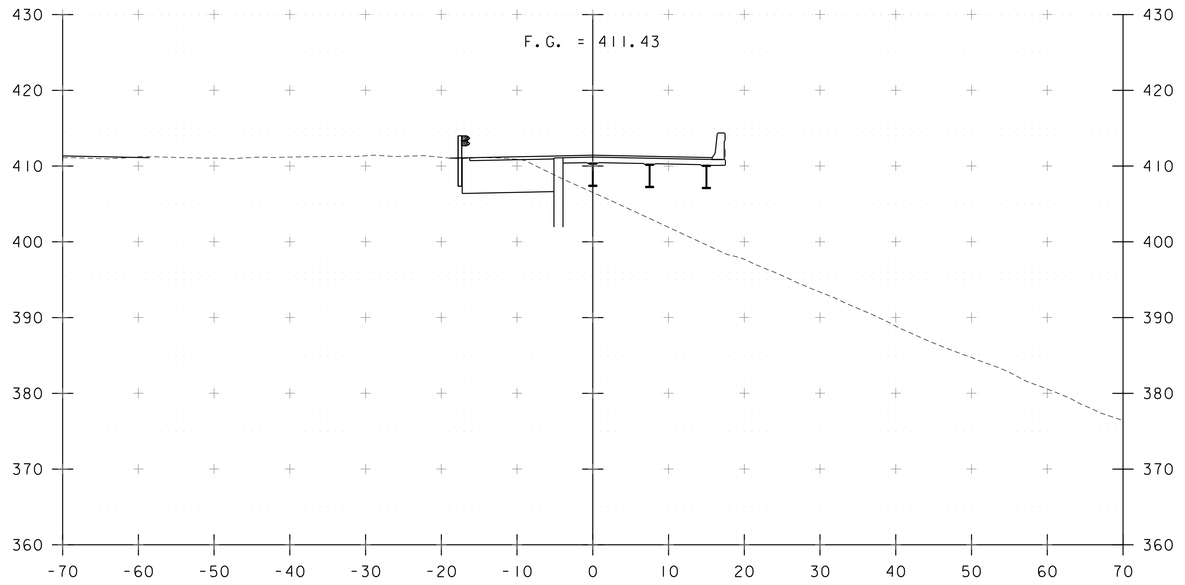
1643+00
BEGIN PROJECT



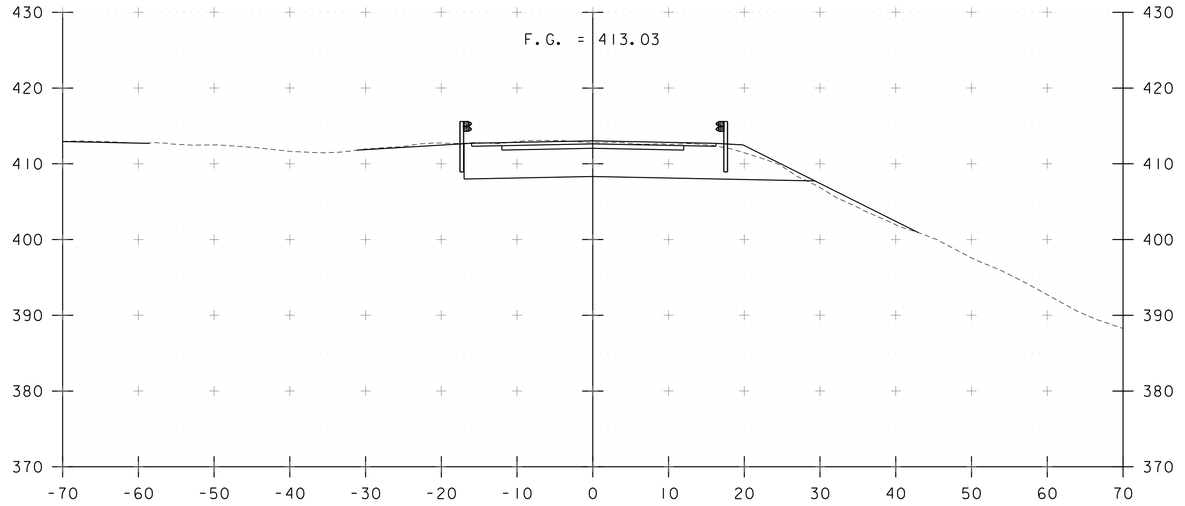
1642+60



1642+50



1644+00
1643+94.00
BEGIN BRIDGE

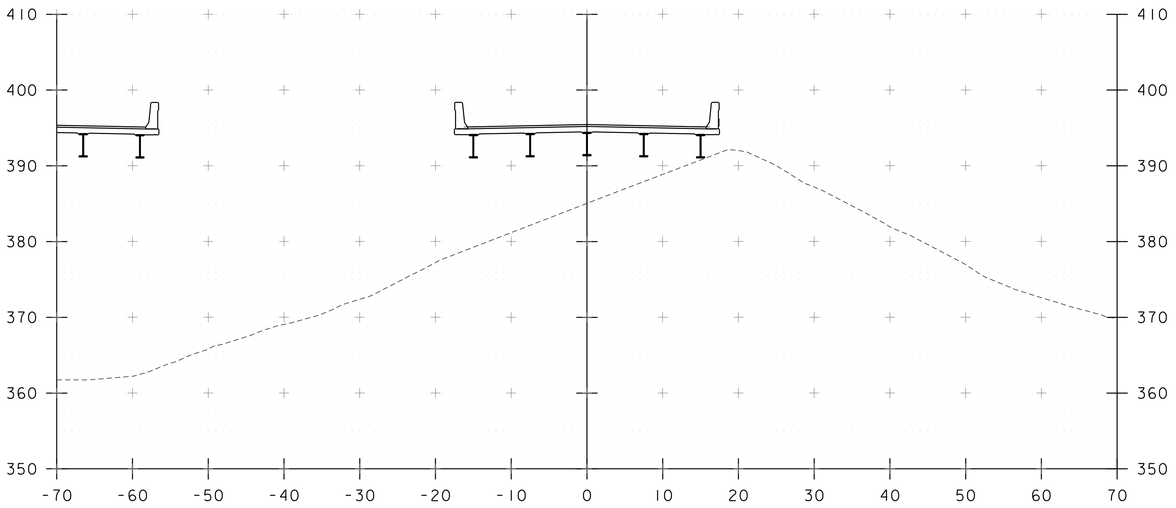


1643+50

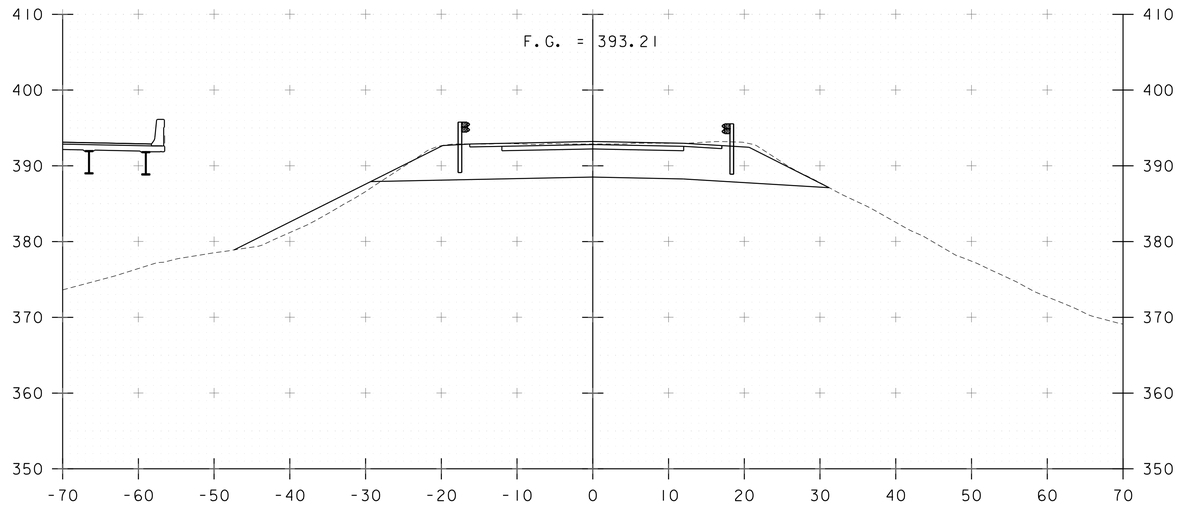
STA. 1642+50 TO STA. 1644+00

Stantec

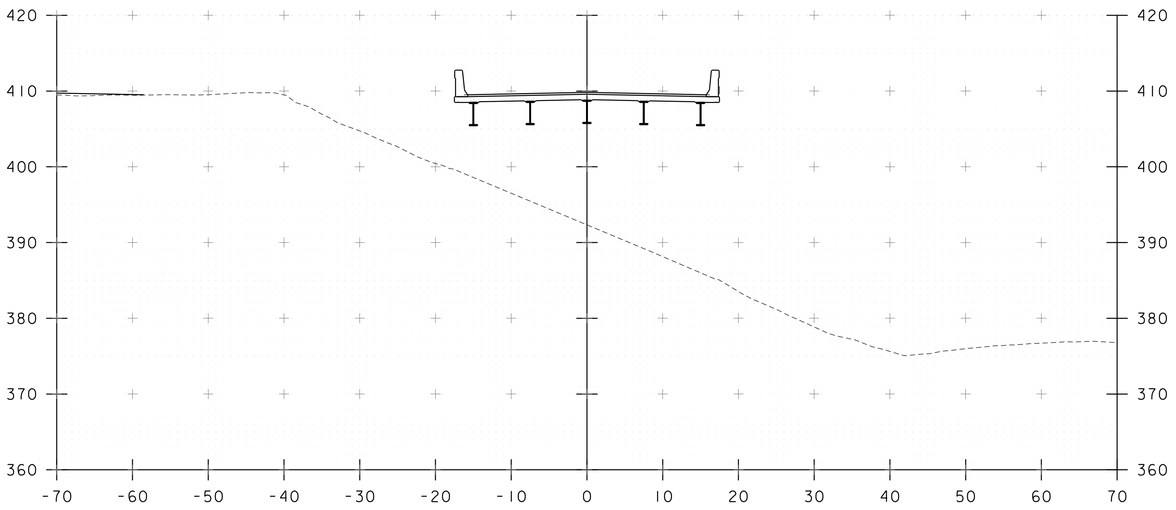
PROJECT NAME: WESTMINSTER	
PROJECT NUMBER: IM 091-1(70)	
FILE NAME: z13a098xs.dgn	PLOT DATE: 9/2/2015
PROJECT LEADER: M. CHENETTE	DRAWN BY: I. MAYNARD
DESIGNED BY: I. MAYNARD	CHECKED BY: X. XXXX
I-91 NORTHBOUND CROSS SECTION SHEET 1	SHEET 30 OF 48



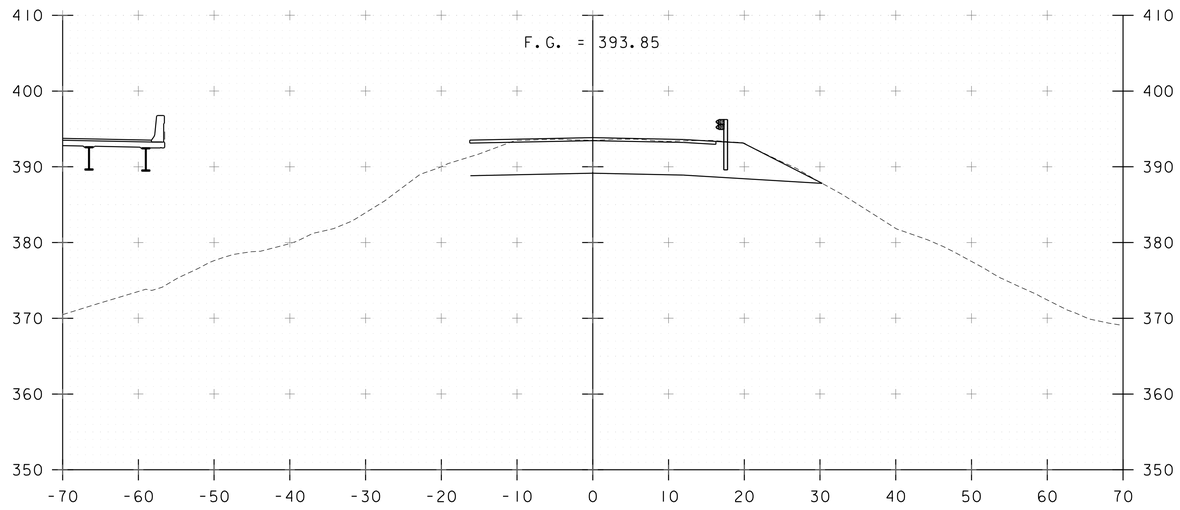
1649+00



1649+70



1644+50



1649+50
1649+18.05
END BRIDGE

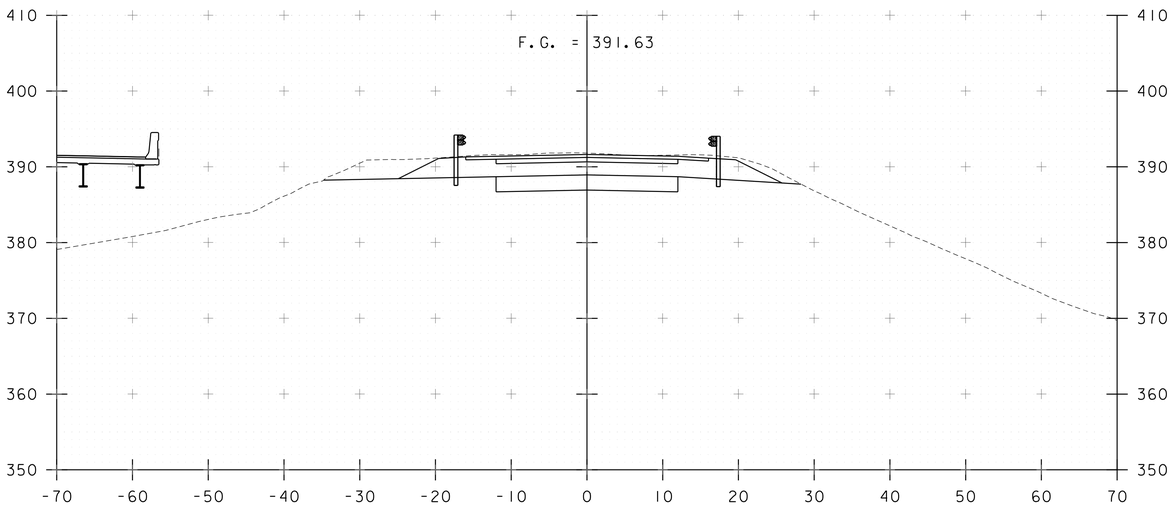
STA. 1644+50 TO STA. 1649+70

Stantec

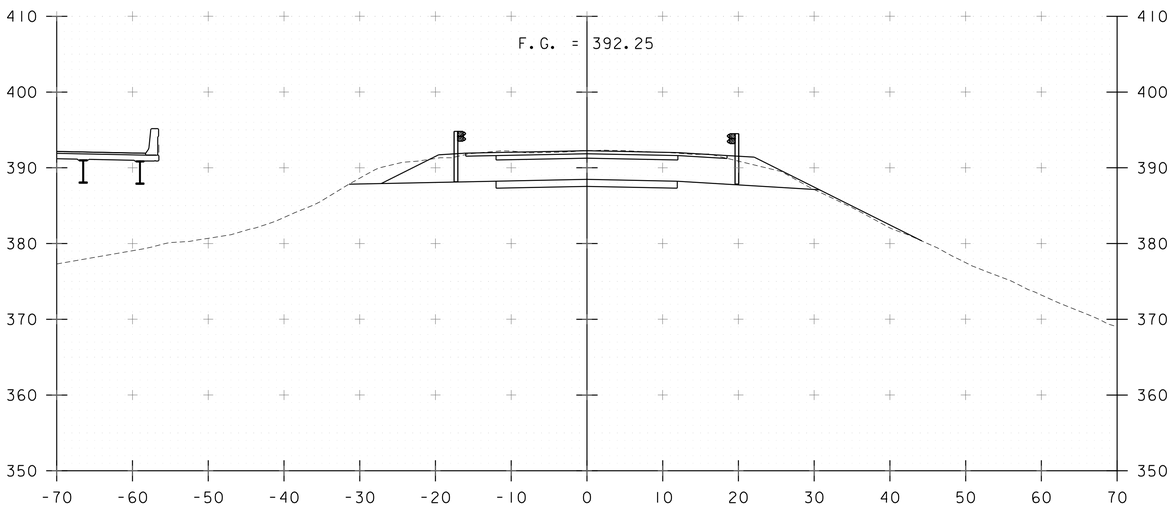
PROJECT NAME: WESTMINSTER
PROJECT NUMBER: IM 091-1(70)

FILE NAME: z13a098xs.dgn
PROJECT LEADER: M. CHENETTE
DESIGNED BY: I. MAYNARD
I-91 NORTHBOUND CROSS SECTION SHEET 2

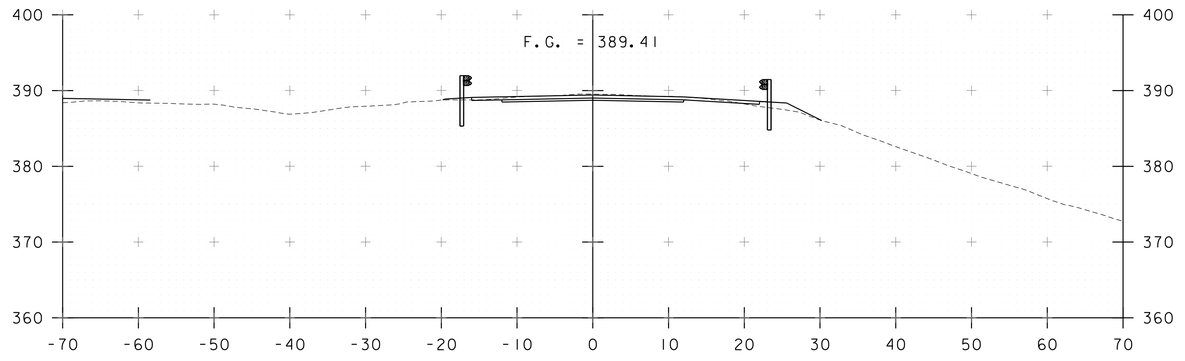
PLOT DATE: 9/2/2015
DRAWN BY: I. MAYNARD
CHECKED BY: X. XXXX
SHEET 31 OF 48



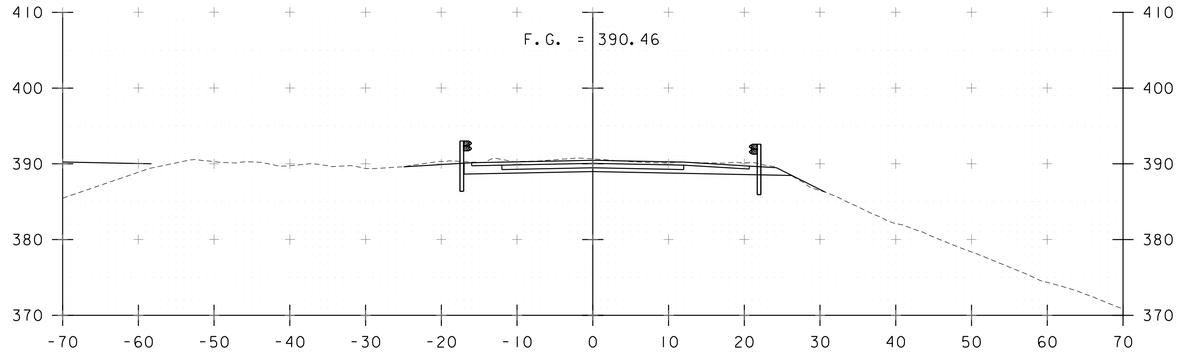
1650+20
END PROJECT



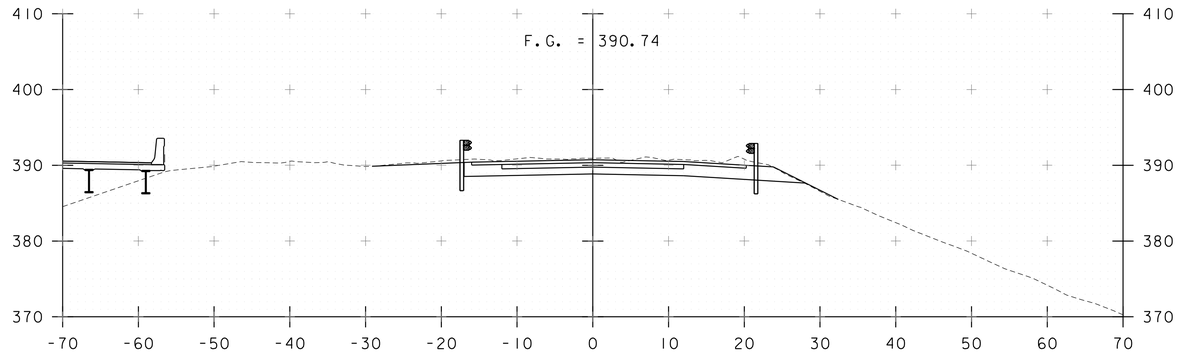
1650+00



1651+00



1650+60

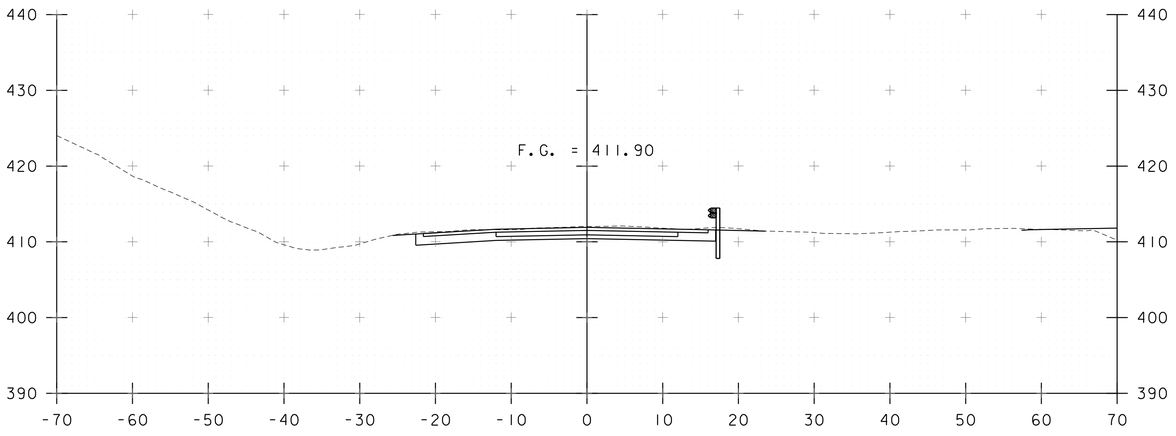


1650+50

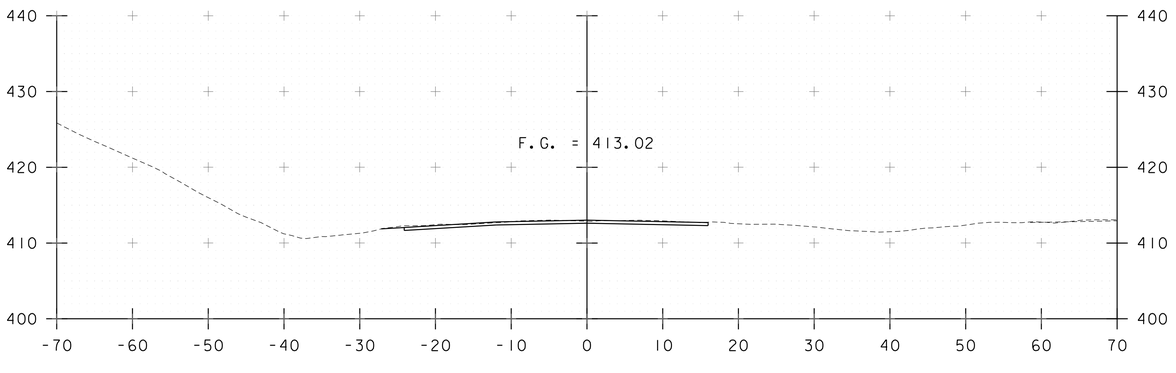
STA. 1650+00 TO STA. 1651+00

Stantec

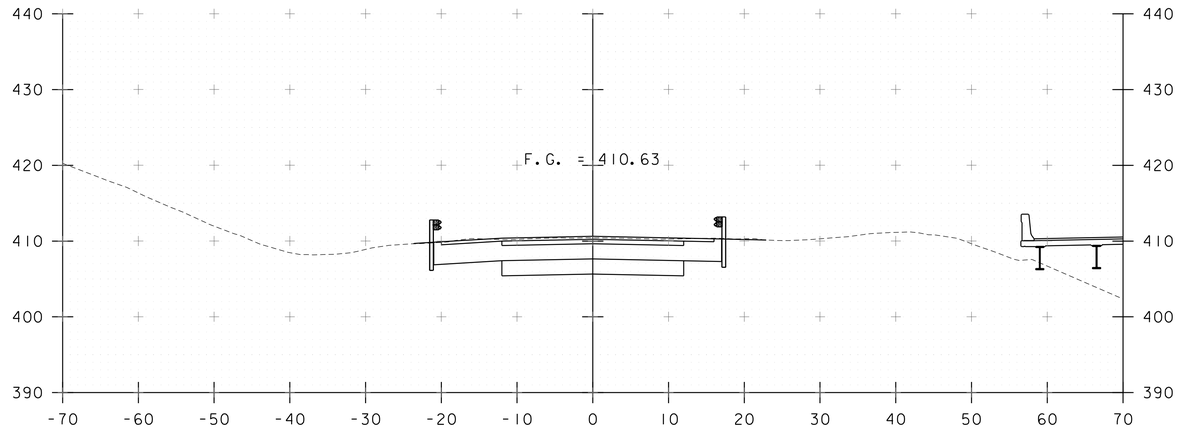
PROJECT NAME: WESTMINSTER	
PROJECT NUMBER: IM 091-1(70)	
FILE NAME: z13a098xs.dgn	PLOT DATE: 9/2/2015
PROJECT LEADER: M. CHENETTE	DRAWN BY: I. MAYNARD
DESIGNED BY: I. MAYNARD	CHECKED BY: X. XXXX
I-91 NORTHBOUND CROSS SECTION SHEET 3	SHEET 32 OF 48



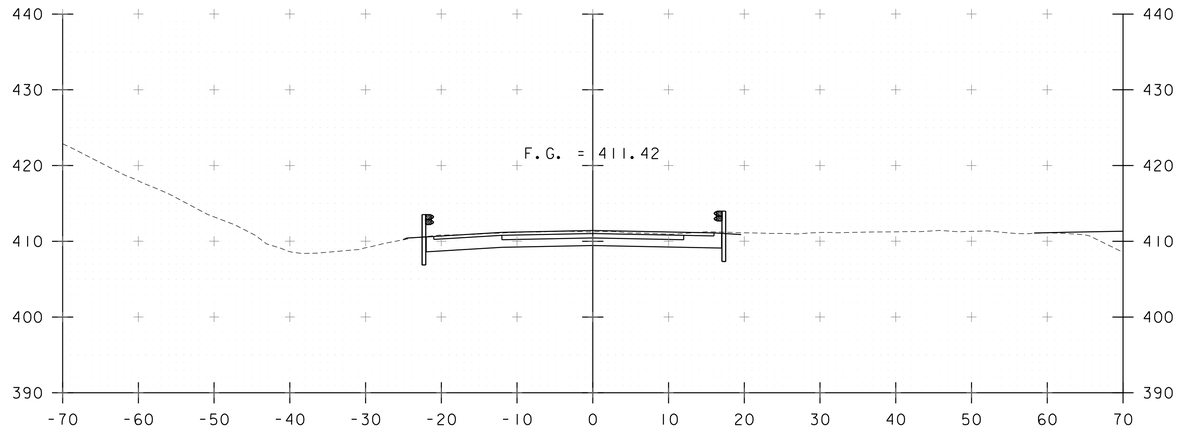
2643+85



2643+50



2644+25
BEGIN PROJECT

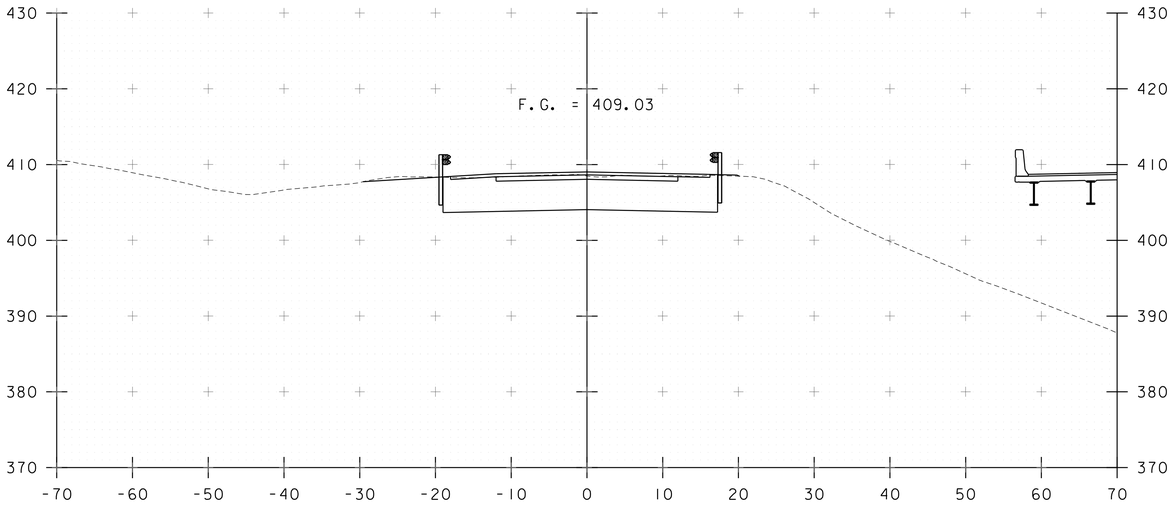


2644+00

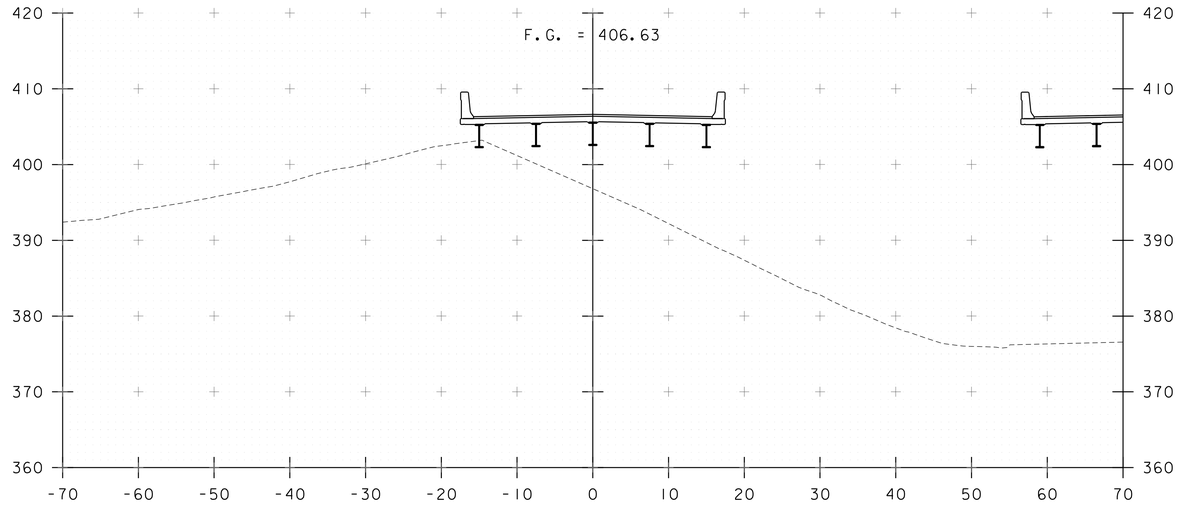
STA. 2643+50 TO STA. 2644+25

Stantec

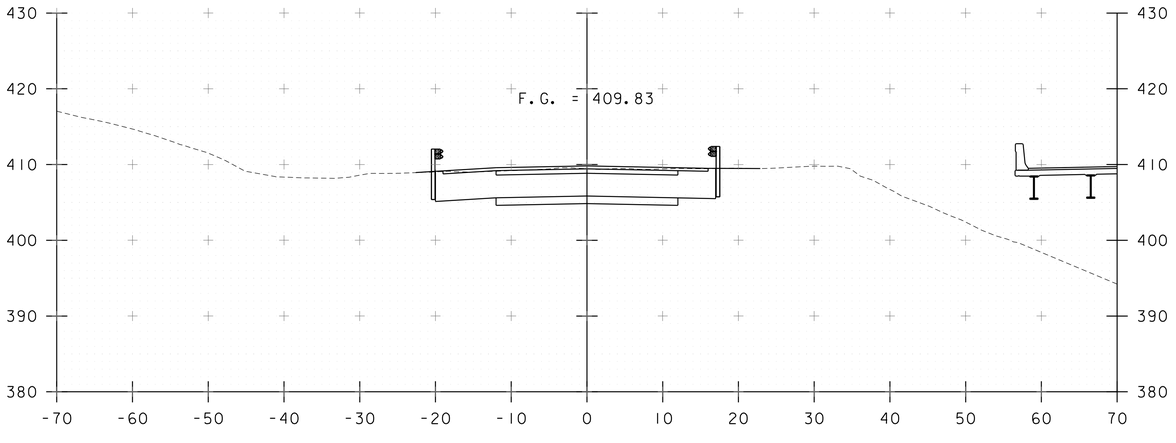
PROJECT NAME: WESTMINSTER	
PROJECT NUMBER: IM 091-1(70)	
FILE NAME: z13a098xs.dgn	PLOT DATE: 9/2/2015
PROJECT LEADER: M. CHENETTE	DRAWN BY: I. MAYNARD
DESIGNED BY: I. MAYNARD	CHECKED BY: X. XXXX
I-91 SOUTHBOUND CROSS SECTION SHEET 1	SHEET 33 OF 48



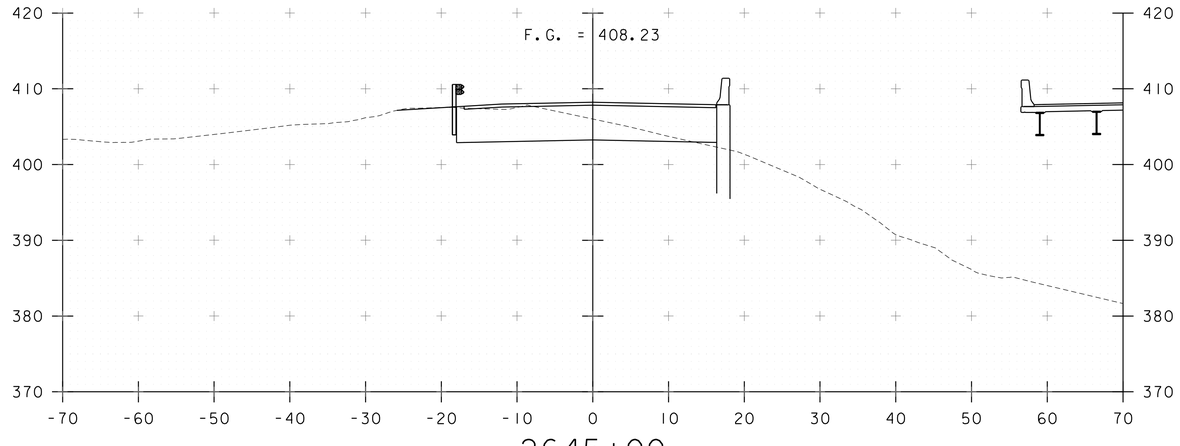
2644+75



2645+50



2644+50

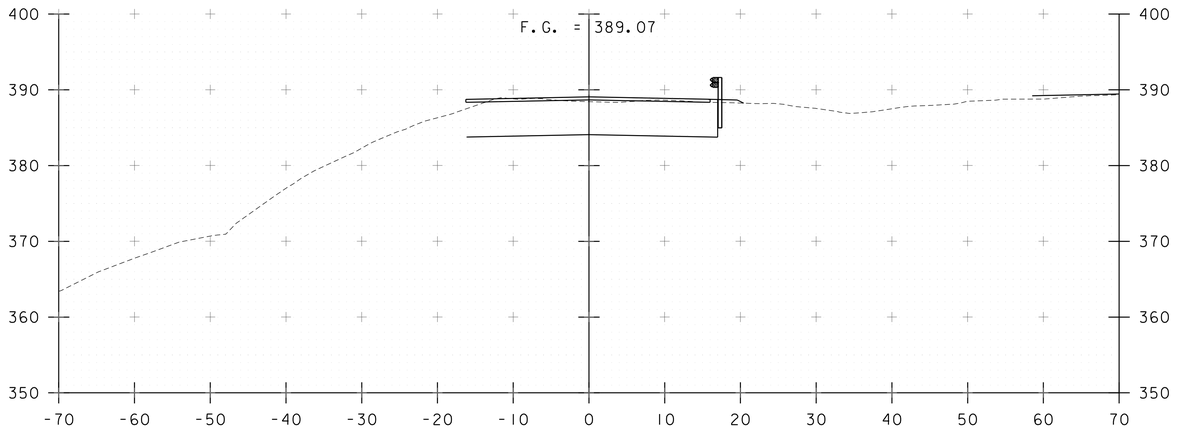


2645+00
2645+25.25
BEGIN BRIDGE

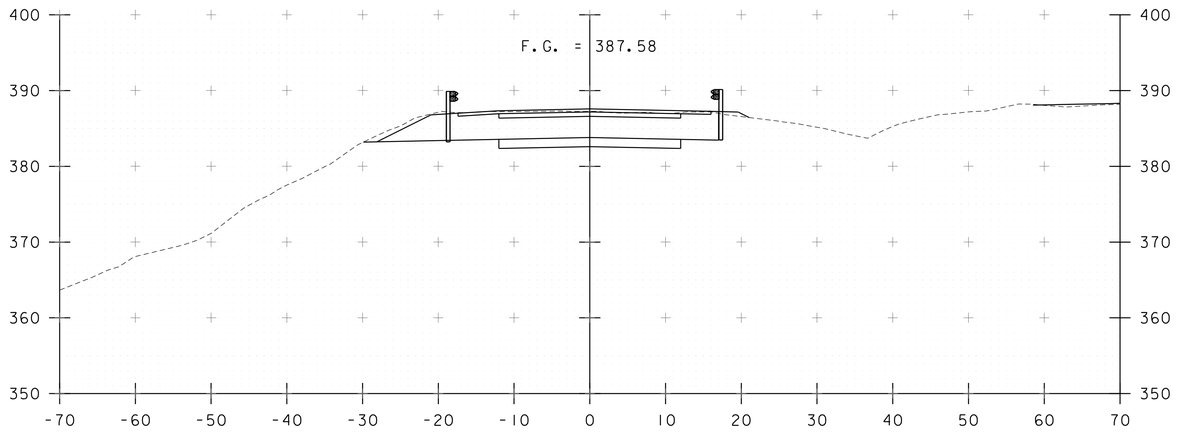
STA. 2644+50 TO STA. 2645+50

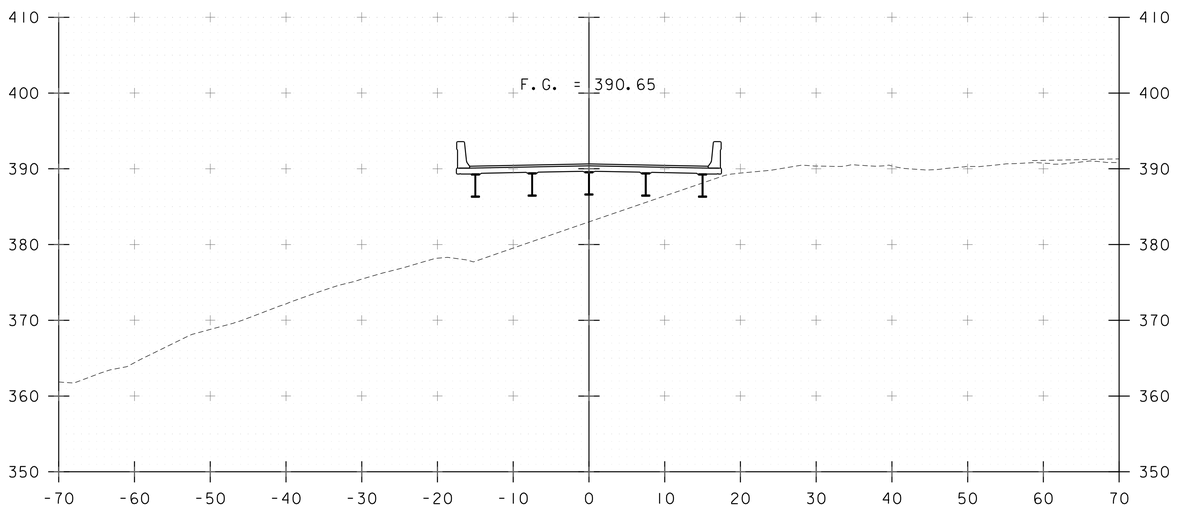
Stantec

PROJECT NAME: WESTMINSTER	
PROJECT NUMBER: IM 091-1(70)	
FILE NAME: zl3a098xs.dgn	PLOT DATE: 9/2/2015
PROJECT LEADER: M. CHENETTE	DRAWN BY: I. MAYNARD
DESIGNED BY: I. MAYNARD	CHECKED BY: X. XXXX
I-91 SOUTHBOUND CROSS SECTION SHEET 2	SHEET 34 OF 48



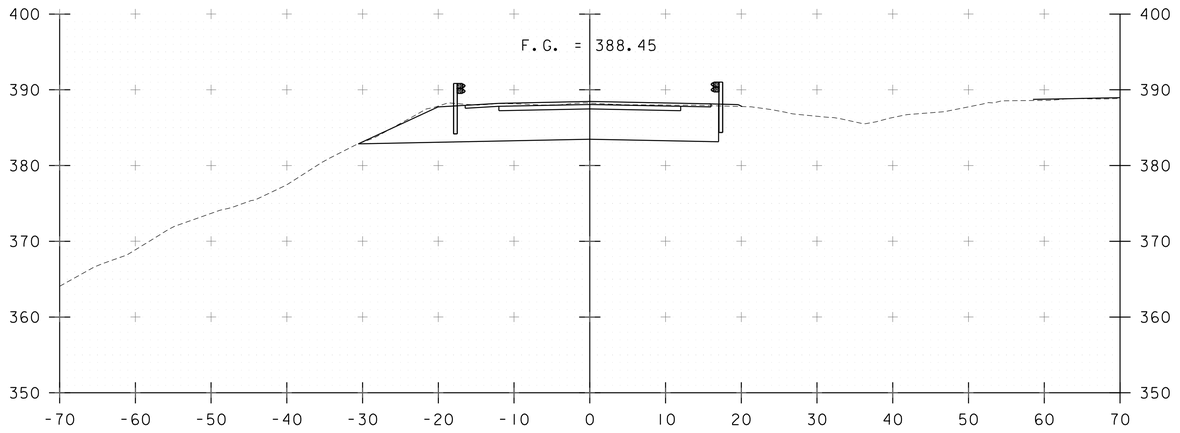
2651+00





2650+50
2650+65.75
END BRIDGE

2651+50

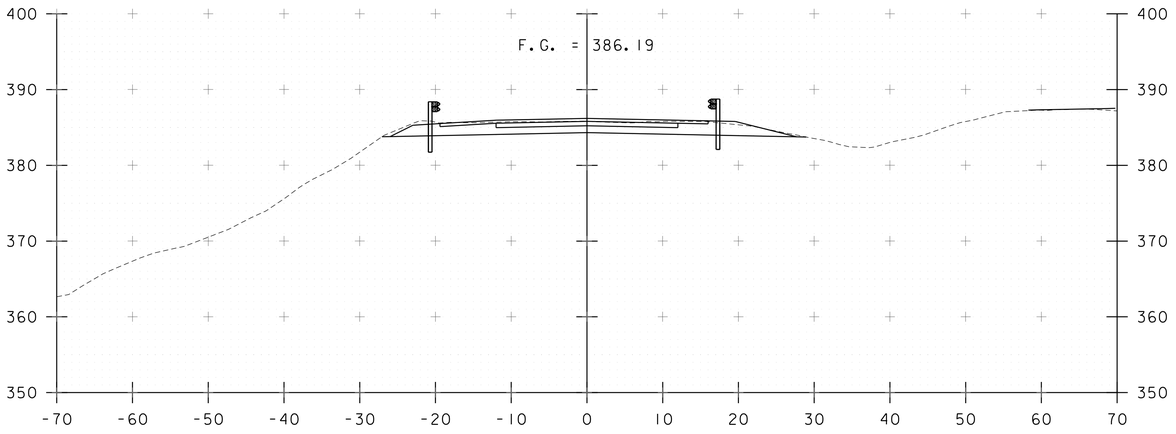


2651+20

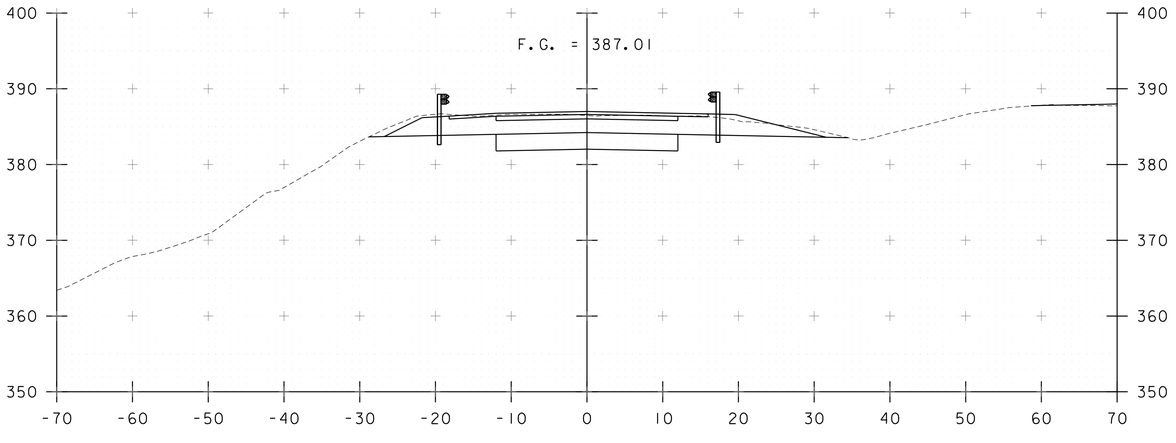
STA. 2650+50 TO STA. 2651+50

Stantec

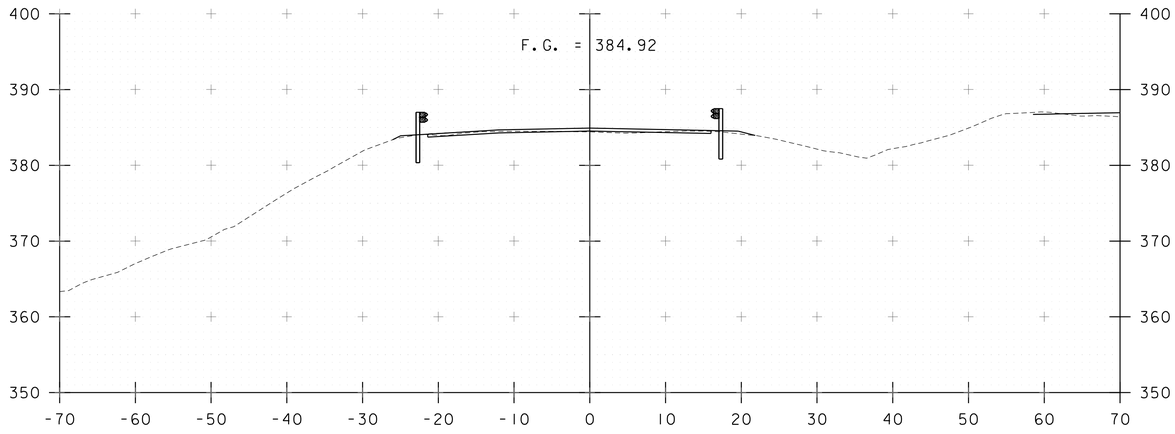
PROJECT NAME: WESTMINSTER	
PROJECT NUMBER: IM 091-1(70)	
FILE NAME: z13a098xs.dgn	PLOT DATE: 9/2/2015
PROJECT LEADER: M. CHENETTE	DRAWN BY: I. MAYNARD
DESIGNED BY: I. MAYNARD	CHECKED BY: X. XXXX
I-91 SOUTHBOUND CROSS SECTION SHEET 3	SHEET 35 OF 48



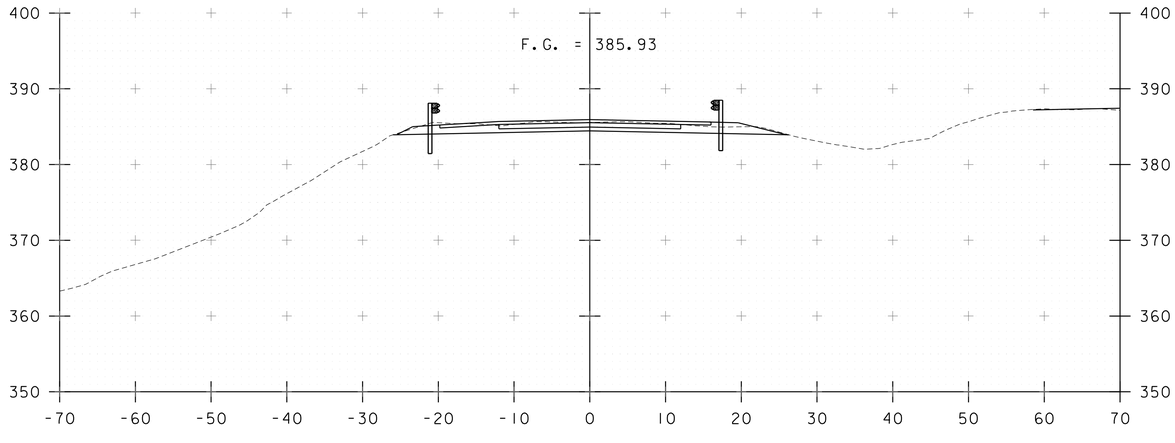
2652+00



2651+70
END PROJECT



2652+50

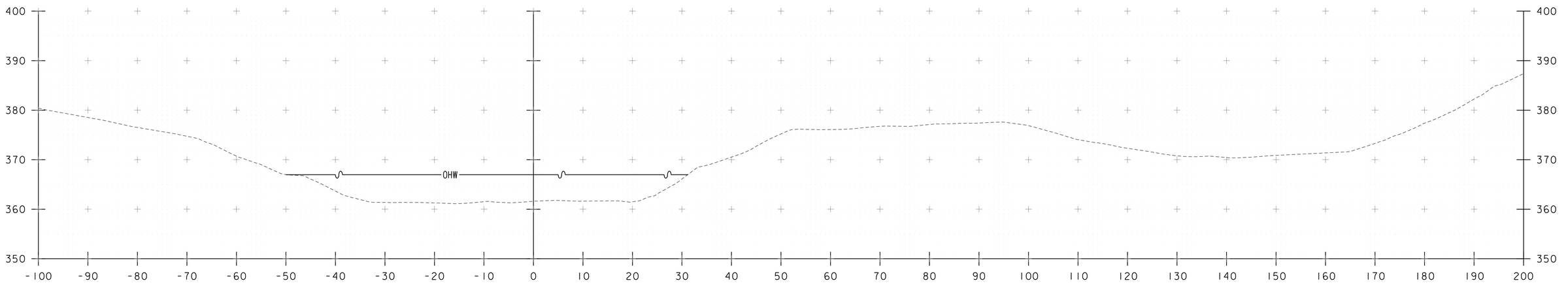


2652+10

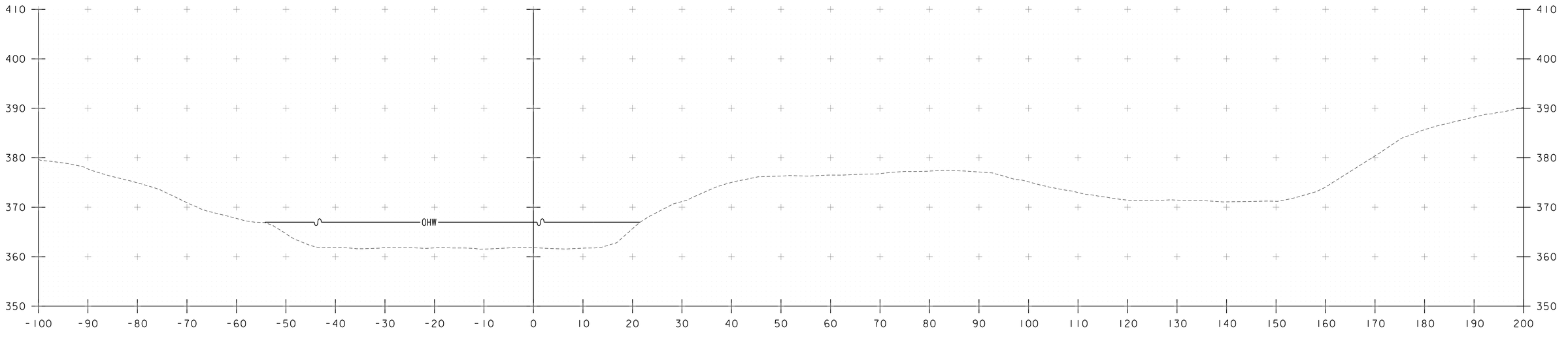
STA. 2651+70 TO STA. 2652+50

Stantec

PROJECT NAME: WESTMINSTER	
PROJECT NUMBER: IM 091-1(70)	
FILE NAME: zl3a098xs.dgn	PLOT DATE: 9/2/2015
PROJECT LEADER: M. CHENETTE	DRAWN BY: I. MAYNARD
DESIGNED BY: I. MAYNARD	CHECKED BY: X. XXXX
I-91 SOUTHBOUND CROSS SECTION SHEET 4	SHEET 36 OF 48



50+50

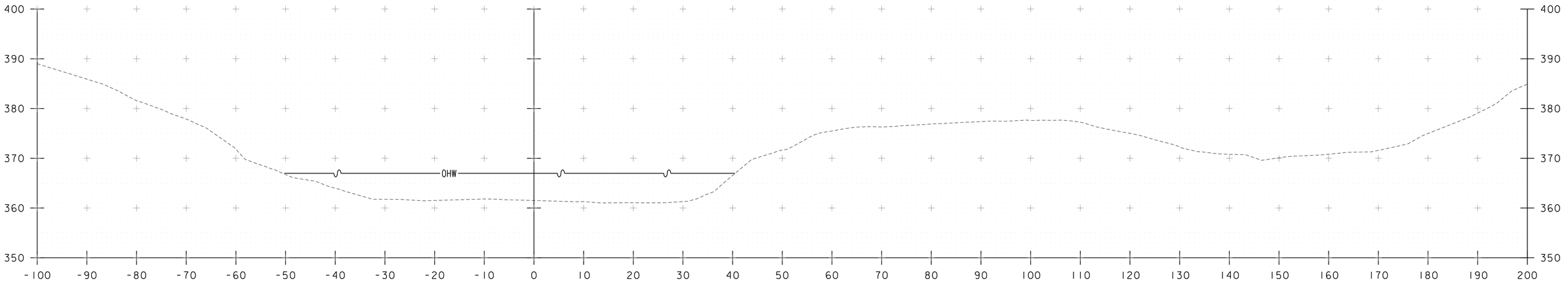


50+00

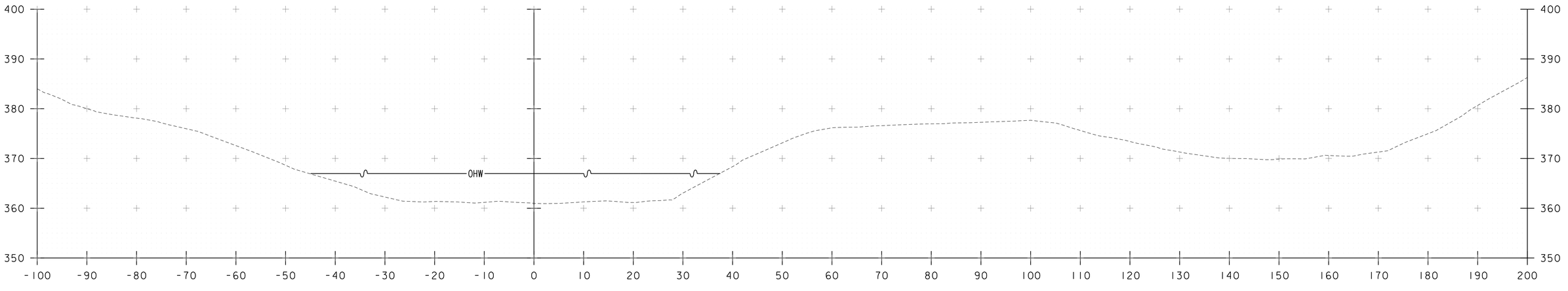
STA. 50+00 TO STA. 50+50

Stantec

PROJECT NAME: WESTMINSTER	
PROJECT NUMBER: IM 091-1(70)	
FILE NAME: z13a098xs.dgn	PLOT DATE: 9/2/2015
PROJECT LEADER: M. CHENETTE	DRAWN BY: I. MAYNARD
DESIGNED BY: I. MAYNARD	CHECKED BY: X. XXXX
SAXTONS RIVER CROSS SECTION SHEET 1	SHEET 37 OF 48



51+50

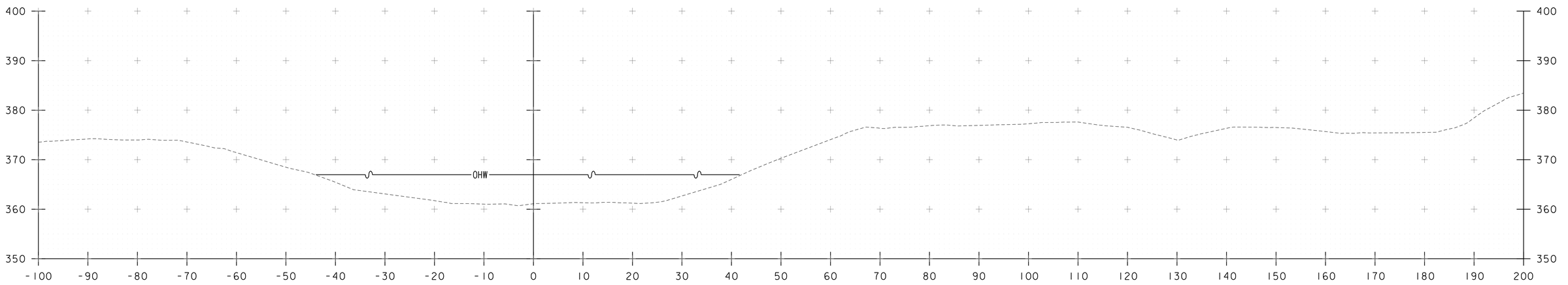


51+00

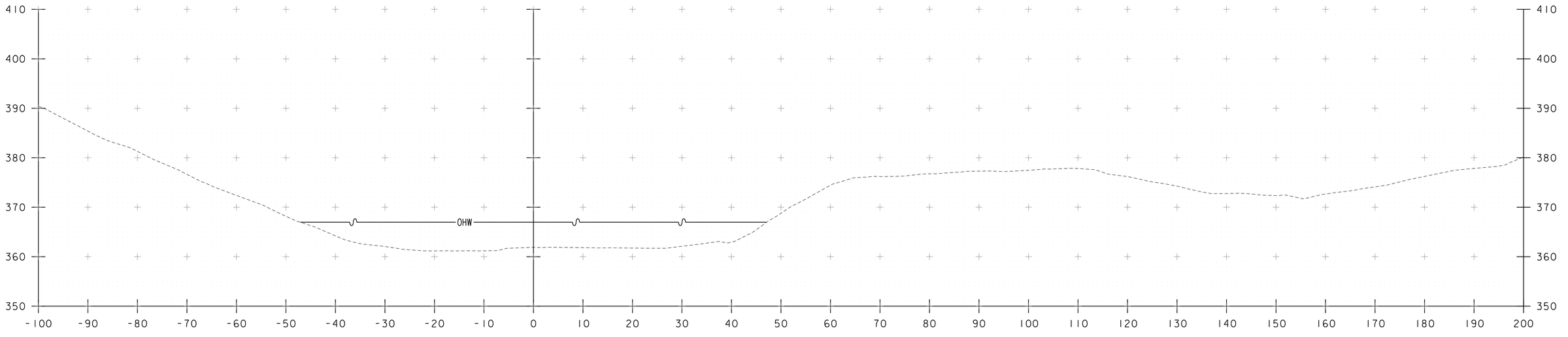
STA. 51+00 TO STA. 51+50

Stantec

PROJECT NAME: WESTMINSTER	
PROJECT NUMBER: IM 091-1(70)	
FILE NAME: zl3a098xs.dgn	PLOT DATE: 9/2/2015
PROJECT LEADER: M. CHENETTE	DRAWN BY: I. MAYNARD
DESIGNED BY: I. MAYNARD	CHECKED BY: X. XXXX
SAXTONS RIVER CROSS SECTION SHEET 2	SHEET 38 OF 48



52+50

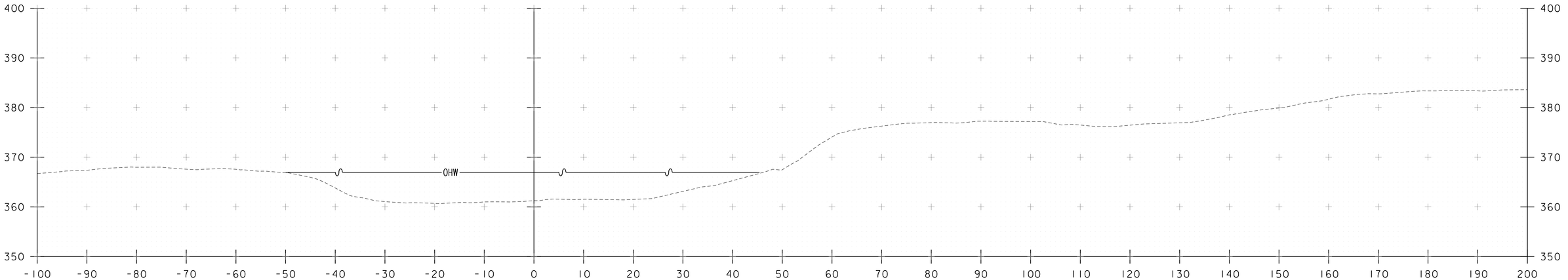


52+00

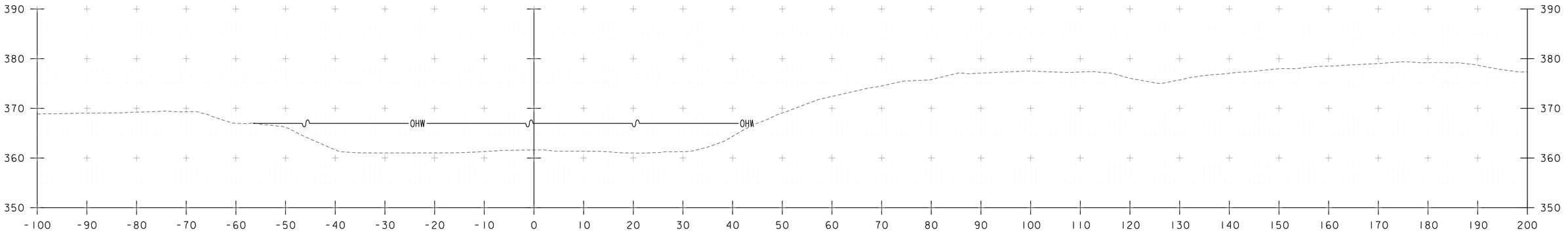
STA. 52+00 TO STA. 52+50

Stantec

PROJECT NAME: WESTMINSTER	
PROJECT NUMBER: IM 091-1(70)	
FILE NAME: z13a098xs.dgn	PLOT DATE: 9/2/2015
PROJECT LEADER: M. CHENETTE	DRAWN BY: I. MAYNARD
DESIGNED BY: I. MAYNARD	CHECKED BY: X. XXXX
SAXTONS RIVER CROSS SECTION SHEET 3	SHEET 39 OF 48



53+50

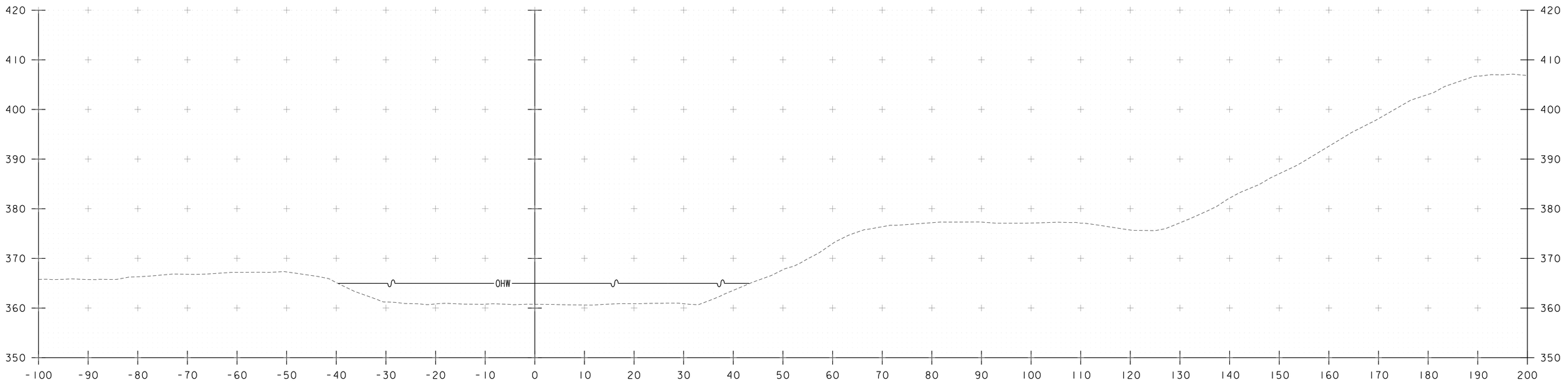


53+00

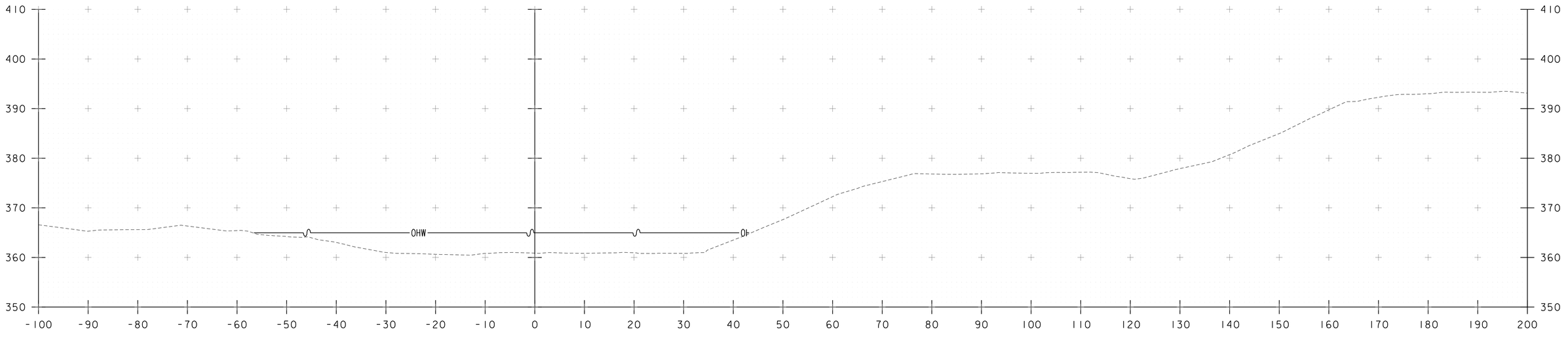
STA. 53+00 TO STA. 53+50

Stantec

PROJECT NAME: WESTMINSTER	
PROJECT NUMBER: IM 091-1(70)	
FILE NAME: z13a098xs.dgn	PLOT DATE: 9/2/2015
PROJECT LEADER: M. CHENETTE	DRAWN BY: I. MAYNARD
DESIGNED BY: I. MAYNARD	CHECKED BY: X. XXXX
SAXTONS RIVER CROSS SECTION SHEET 4	SHEET 40 OF 48



54+50

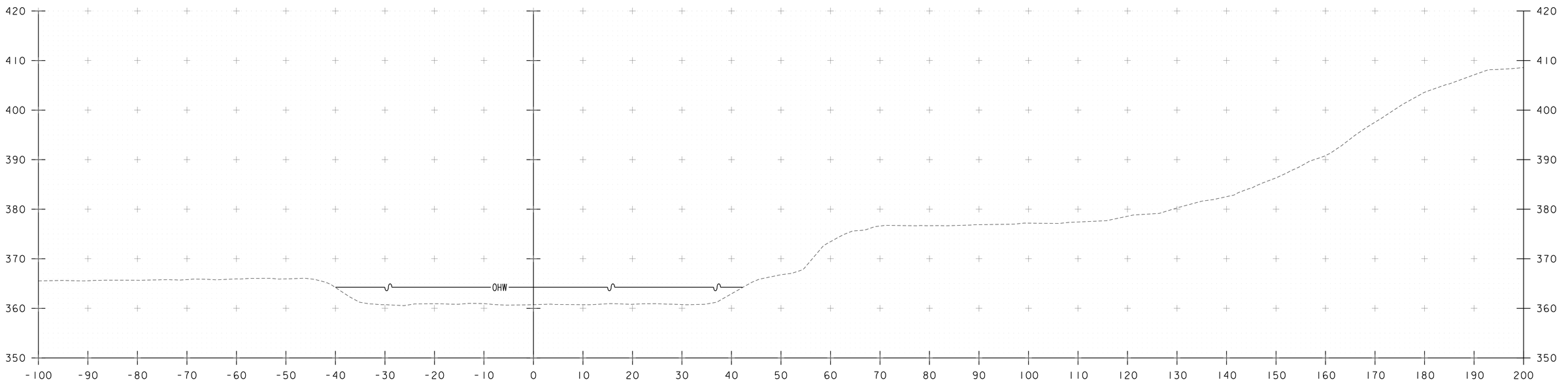


54+00

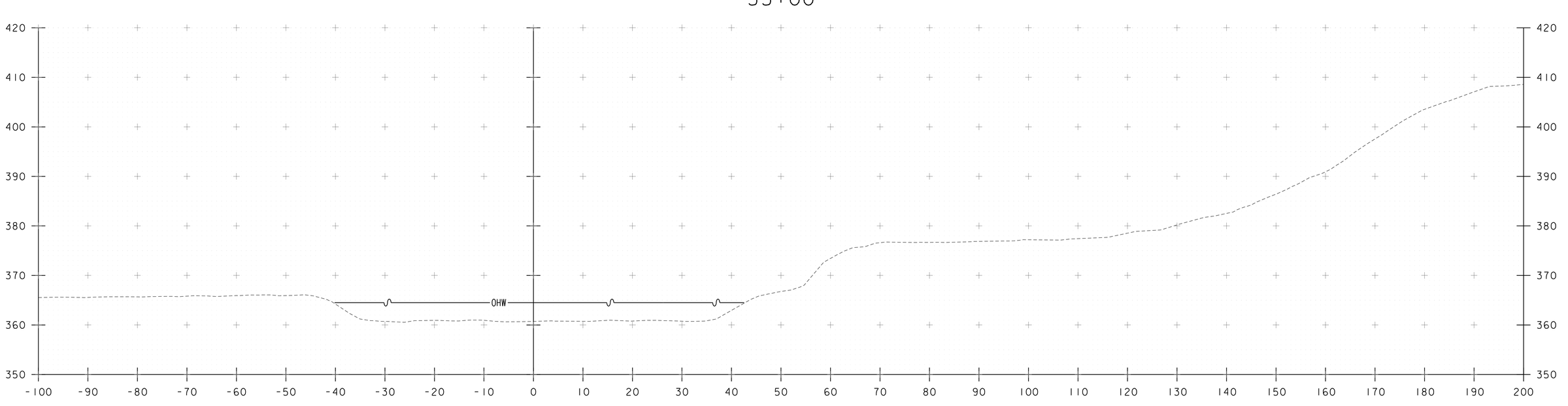
STA. 54+00 TO STA. 54+50

Stantec

PROJECT NAME: WESTMINSTER	
PROJECT NUMBER: IM 091-1(70)	
FILE NAME: z13a098xs.dgn	PLOT DATE: 9/2/2015
PROJECT LEADER: M. CHENETTE	DRAWN BY: I. MAYNARD
DESIGNED BY: I. MAYNARD	CHECKED BY: X. XXXX
SAXTONS RIVER CROSS SECTION SHEET 5	SHEET 41 OF 48



55+00



55+00

STA. 55+00 TO STA. 55+00

Stantec

PROJECT NAME: WESTMINSTER	
PROJECT NUMBER: IM 091-1(70)	
FILE NAME: z13a098xs.dgn	PLOT DATE: 9/2/2015
PROJECT LEADER: M. CHENETTE	DRAWN BY: I. MAYNARD
DESIGNED BY: I. MAYNARD	CHECKED BY: X. XXXX
SAXTONS RIVER CROSS SECTION SHEET 6	SHEET 42 OF 48

VT STATE PLANE GRID

N

SOIL CONDITIONS
QUOSNSET AND WARWICK
2%-8% SLOPES
LOW EROSION POTENTIAL
K = 0.24

SOIL CONDITIONS
QUOSNSET AND WARWICK
25%-70% SLOPES
LOW EROSION POTENTIAL
K = 0.24

1633+00
1634+00
1635+00
1636+00
1637+00
1638+00

2633+00
2634+00
2635+00
2636+00
2637+00
2638+00

MATCHLINE STA. 1638+50

MATCHLINE STA. 2638+50

SIGN
WX-X

ARCH

DI

0 20 40
SCALE IN FEET

Stantec

PROJECT NAME: WESTMINSTER
PROJECT NUMBER: IM 091-1(70)

FILE NAME: z13a098bdr_ero.dgn
PROJECT LEADER: M. CHENETTE
DESIGNED BY: I.MAYNARD
EPSC - EXISTING SHEET 1

PLOT DATE: 9/2/2015
DRAWN BY: I.MAYNARD
CHECKED BY: X. XXXX
SHEET 43 OF 48

SOIL CONDITIONS
QUOSNSET AND WARWICK
2%-8% SLOPES
LOW EROSION POTENTIAL
K = 0.24

SOIL CONDITIONS
QUOSNSET AND WARWICK
25%-70% SLOPES
LOW EROSION POTENTIAL
K = 0.24

VT STATE PLANE GRID N

MATCHLINE STA. 2638+50

MATCHLINE STA. 1638+50

2639+00 2640+00 2641+00 2642+00 2643+00 2644+00

1639+00 1640+00 1641+00 1642+00 1643+00 1644+00

MATCHLINE STA. 2644+50

MATCHLINE STA. 1644+50

SIGN
MILE MARKER
31.0

SIGN
OM3P

SIGN
OM3L

SIGN
MILE MARKER
31.0
BRIDGE
2WY

TELEPHONE POLE

0 20 40
SCALE IN FEET

Stantec

PROJECT NAME:	WESTMINSTER
PROJECT NUMBER:	IM 091-1(70)
FILE NAME: zl3a098bdr_ero.dgn	PLOT DATE: 9/2/2015
PROJECT LEADER: M. CHENETTE	DRAWN BY: I.MAYNARD
DESIGNED BY: I.MAYNARD	CHECKED BY: X. XXXX
EPSC - EXISTING SHEET 2	SHEET 44 OF 48

SOIL CONDITIONS
QUOSNSET AND WARWICK
25%-70% SLOPES
LOW EROSION POTENTIAL
K = 0.24

SOIL CONDITIONS
PODUNK FINE SANDY LOAM
0%-3% SLOPES
LOW EROSION POTENTIAL
K = 0.24

SOIL CONDITIONS
PODUNK FINE SANDY LOAM
0%-3% SLOPES
LOW EROSION POTENTIAL
K = 0.24

VT STATE PLANE GRID

N

TELEPHONE POLE

ARCH

MATCHLINE STA. 2644+50

MATCHLINE STA. 2650+25

2645+00 2646+00 2647+00 2648+00 2649+00 2650+00

1645+00 1646+00 1647+00 1648+00 1649+00 1650+00

MATCHLINE STA. 1644+50

MATCHLINE STA. 1650+25

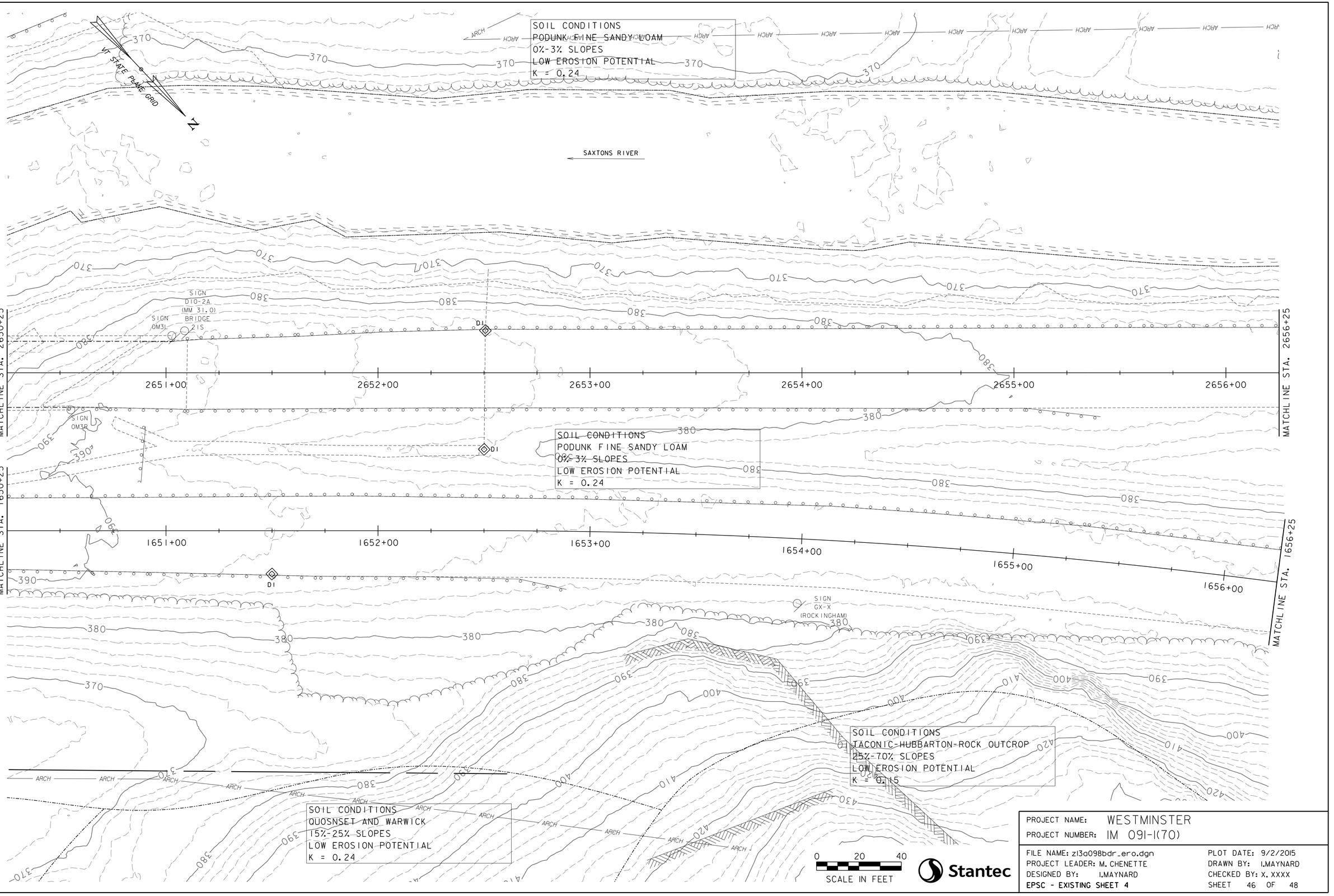
SAXTONS RIVER

0 20 40

SCALE IN FEET

Stantec

PROJECT NAME: WESTMINSTER	
PROJECT NUMBER: IM 091-1(70)	
FILE NAME: z13a098bdr_ero.dgn	PLOT DATE: 9/2/2015
PROJECT LEADER: M. CHENETTE	DRAWN BY: I.MAYNARD
DESIGNED BY: I.MAYNARD	CHECKED BY: X. XXXX
EPSC - EXISTING SHEET 3	SHEET 45 OF 48



PROJECT NAME:	WESTMINSTER
PROJECT NUMBER:	IM 091-1(70)
FILE NAME: z13a098bdr_ero.dgn	PLOT DATE: 9/2/2015
PROJECT LEADER: M. CHENETTE	DRAWN BY: I.MAYNARD
DESIGNED BY: I.MAYNARD	CHECKED BY: X. XXXX
EPSC - EXISTING SHEET 4	SHEET 46 OF 48

VT STATE PLANE GRID

N

SAXTONS RIVER

SIGN
WX-X

SIGN
GX-X
(WESTMINSTER)

MATCHLINE STA. 2656+25

2657+00

2658+00

2659+00

2660+00

2661+00

2662+00

XX" CULVERT
FLOW

PC
STA 2658+33.16

PI
STA 1659+53.03

MATCHLINE STA. 1656+25

1657+00

1658+00

1659+00

1660+00

1661+00

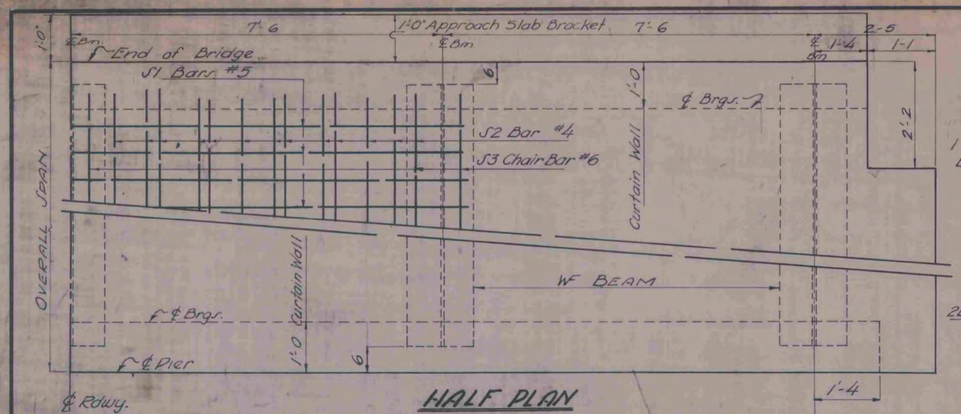
1662+00

XX" CULVERT
FLOW

0 20 40
SCALE IN FEET

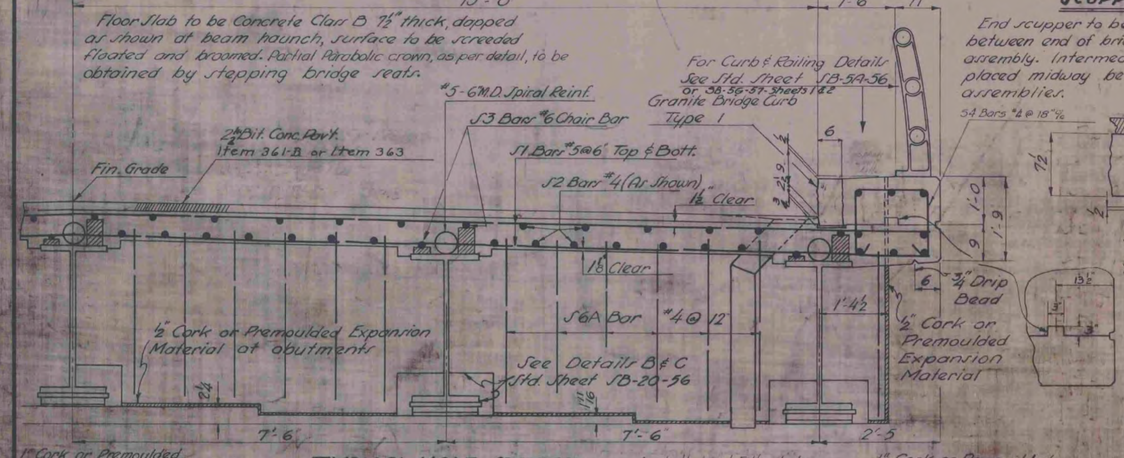
Stantec

PROJECT NAME: WESTMINSTER	
PROJECT NUMBER: IM 091-1(70)	
FILE NAME: zl3a098bdr_ero.dgn	PLOT DATE: 9/2/2015
PROJECT LEADER: M. CHENETTE	DRAWN BY: I.MAYNARD
DESIGNED BY: I.MAYNARD	CHECKED BY: X. XXXX
EPSC - EXISTING SHEET 5	SHEET 47 OF 48

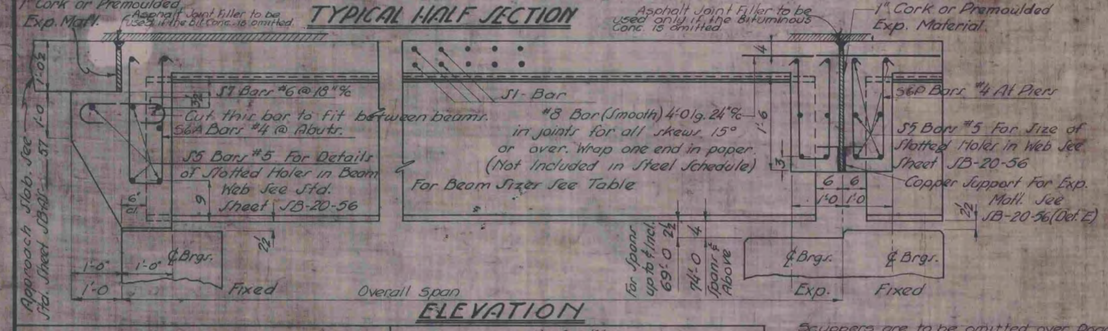


HALF PLAN

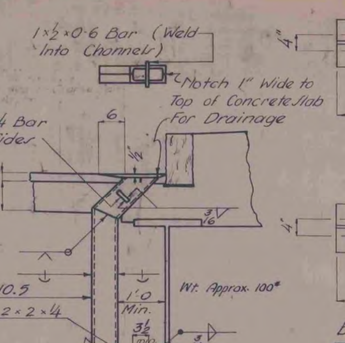
Floor Slab to be Concrete Class B 7½" thick, dapped as shown at beam haunch, surface to be screeded floated and broomed. Partial Parabolic crown, as per detail, to be obtained by stepping bridge seats.



TYPICAL HALF SECTION

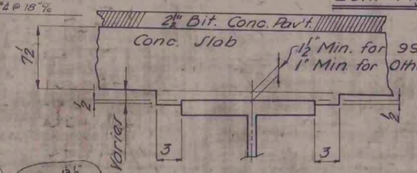


ELEVATION



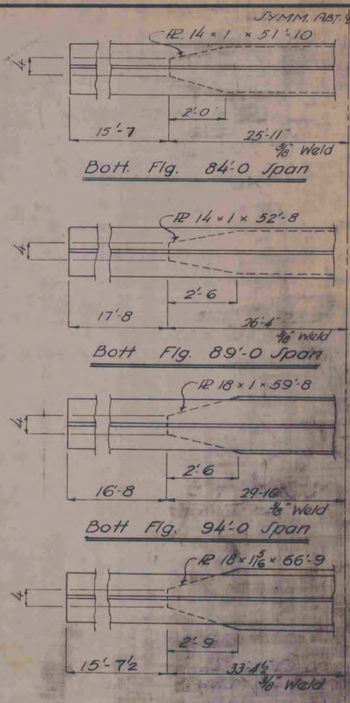
SCUPPER DETAIL

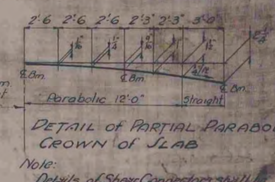
End scupper to be placed midway between end of bridge and first diaph. assembly. Intermediate scuppers to be placed midway between diaphragm assemblies.



DETAIL OF BEAM HAUNCH

SPIRAL WELDING





DETAIL of PARTIAL PARABOLIC CROWN of SLAB

Note:
Details of Shear Connectors shall be submitted to the State for approval. Either Channel or Stud Shear Connectors may be substituted for the designed Spiral Connectors. The Studs shall be substituted on the basis of 2-¾" Studs for each pitch of 2-⅝" Spiral.

GENERAL NOTES

Unless otherwise called for on the Contract Plans, all beams shall be rolled to a true circular camber; the middle ordinate being that shown in A.I.S.C. handbook as being the minimum camber likely to remain permanent.

The final coat of field paint shall be black, unless otherwise directed by Engineer.

Quantities given in accompanying table are for single span square bridge. Quantities for Bituminous Concrete Pavement include 15% overrun, and Concrete quantities include 5% overrun, & Structural Steel includes 2% overrun.

When bridge is on a skew, transverse bars shall be furnished as for a square span. Bars shall be cut in field to fit skew end and cut-off shall be used in opposite skew end. In skew spans, the S5 bars shall be lengthened and the S6A and S6P bars shall be increased in number. The length of beams is increased on skew spans as indicated in detail © drwg. SB-20-56.

All materials and construction shall conform to the State of Vermont, Dept of Highways, Standard Specifications for Road and Bridge Construction, dated Jan. 1956 and the AASHO Specifications dated 1957. Designed for H20-S16 (44) loading modified for National System of Interstate Highways, applied in accordance with the provisions of the AASHO Standard Specifications Art. 1.2.8.

For location of fixed and expansion bearings see contract plans. For details of bearing devices see drwg. SB-20-56 detail ©.

Diaphragms shall be 15"[33.9 for beams up to and including 30" and 18"[42.7 for 33" and 36" beams. For details see drwg. SB-20-56, detail (E) or (G).

All welding of cover plates to be done in such a manner that no internal stresses are introduced into beam flanges. When cover plate is wider than beam flange, the weld is to be omitted one inch either side of the intersection of the cover plate and the edge of the beam flange. All welds on cover plates shall be continuous fillets of size noted.

Scuppers are to be omitted over Roadways or Sidewalks under a bridge and placed at least 2'0" outside of shoulder point or edge of sidewalk, but not within 4'-0" of face of Abutment or Pier. On a banked Bridge, Scuppers are to be placed on the lower side only.

All exposed edges of Concrete to be Chamfered 12. All construction joints to be made as on drwg SB-20-56, details (A) and (B) unless otherwise noted.

All Structural Steel shall conform to the latest revisions of Structural Steel for Welding A.S.T.M. Designation A-373-54T.

REVISIONS & CORRECTIONS

Cov. ℙ. Welds & Pitch of Spiral Shear Connectors revised to meet A.A.S.H.O. Specs. for 1957.
Bit. Conc. Pave. revised for 2½" (Asphalt Joint Filler Revised for 18" Clear for slab reinforcing steel. (Revised Sept. 25, 1959)
Revised Weld, Shear Spacing & Clearance 2/23/60
Structural Steel Note added 9/30/60

DRAWN BY LMB 10/31/56 - Redrawn 9-11-58
TRACED BY LMB 10/31/56 - Retraced 9-11-58
CHECKED BY RTB - Rechecked 9-12-58
CORRECT 12/17/56 A.S.T. Bridge Engineer
APPROVED 12/19/56 Chief Engineer

DETAILS OF 30 Ft. ROADWAY COMPOSITE BEAM BRIDGES

DEPARTMENT OF HIGHWAYS
STANDARD STRUCTURES
SHEET 76 OF 76

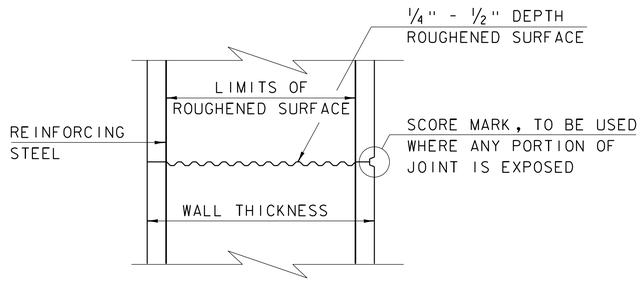
IR-DECK(26)
BR 21 N&S
THIS SHEET FOR INFORMATION ONLY

WESTMINSTER I-91 N & S BRIDGE REPAIRS
SHEET 48 OF 48
IM 091-1(70)
FOR REFERENCE ONLY

SCB-30-58

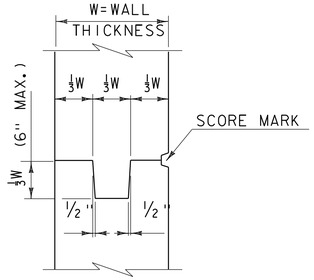
CONCRETE GENERAL NOTES

1. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1" x 1"
2. REINFORCING STEEL SIZE AND SPACING SHOWN IN THE PLANS IS BASED ON 60 KSI STEEL, UNLESS NOTED OTHERWISE. WITH THE ENGINEER'S PERMISSION, BAR SIZE AND SPACING MAY BE MODIFIED ACCORDING TO THE LATEST AASHTO LRFD BRIDGE DESIGN SPECIFICATION AND STRUCTURES DESIGN MANUAL WHEN USING HIGHER STRENGTH STEEL.

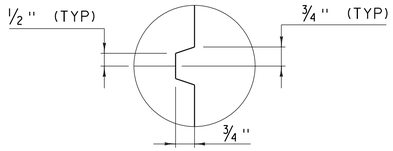


TYPICAL HORIZONTAL CONSTRUCTION JOINT
(NOT TO SCALE)

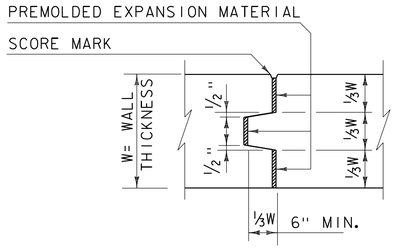
1. THE SURFACE OF THE CONCRETE CONSTRUCTION JOINTS SHALL BE CLEANED AND FREE OF LAITANCE.
2. IMMEDIATELY BEFORE NEW CONCRETE IS PLACED, ALL CONSTRUCTION JOINTS SHALL BE WETTED AND STANDING WATER REMOVED.



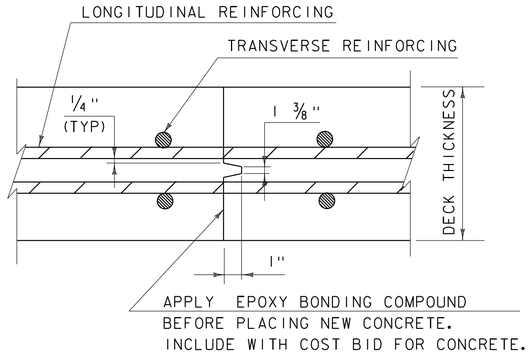
TYPICAL CONCRETE CONSTRUCTION JOINT
(NOT TO SCALE)



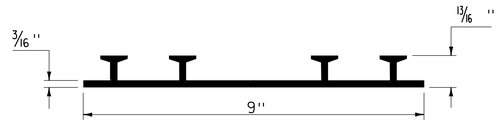
SCORE MARK DETAIL
(NOT TO SCALE)



TYPICAL CONCRETE EXPANSION JOINT
(NOT TO SCALE)



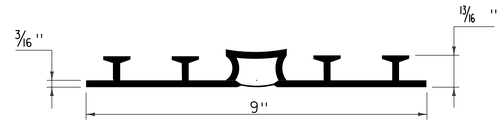
TRANSVERSE BRIDGE SLAB CONSTRUCTION JOINT DETAILS
(NOT TO SCALE)



P.V.C. WATERSTOP FOR CONSTRUCTION JOINTS
(NOT TO SCALE)

PAYMENT FOR THE P.V.C. WATERSTOP SHALL BE INCIDENTAL TO THE UNIT BID PRICE FOR THE ADJACENT CONCRETE.

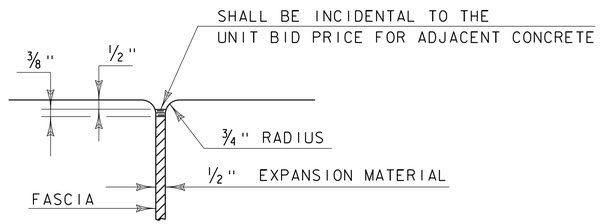
OTHER CONFIGURATIONS OF WATERSTOP MAY BE USED UPON APPROVAL OF THE ENGINEER.



P.V.C. WATERSTOP FOR EXPANSION JOINTS
(NOT TO SCALE)

PAYMENT FOR THE P.V.C. WATERSTOP SHALL BE INCIDENTAL TO THE UNIT BID PRICE FOR THE ADJACENT CONCRETE.

OTHER CONFIGURATIONS OF WATERSTOP MAY BE USED UPON APPROVAL OF THE ENGINEER.



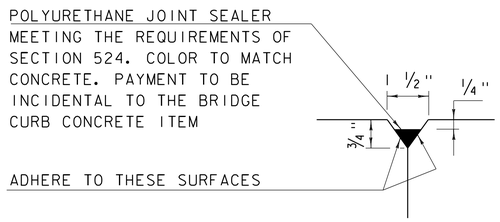
JOINT BETWEEN FASCIA AND WINGWALL
(NOT TO SCALE)

REVISIONS	
MAY 7, 2010	APPROVED FOR USE BY VAOT STRUCTURES SECTION
FEBRUARY 9, 2012	REBAR SUBSTITUTION ALLOWANCE ADDED TO CONCRETE GENERAL NOTES.

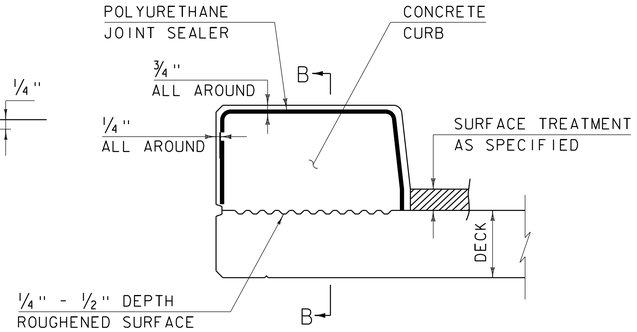
CONCRETE DETAILS AND NOTES

VERMONT AGENCY OF TRANSPORTATION
STRUCTURES - SECTION

STRUCTURES DETAIL
SD-501.00

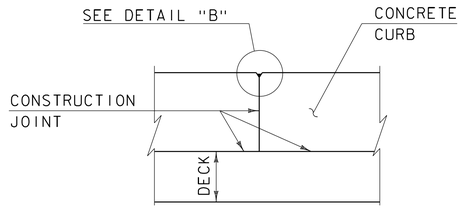


DETAIL "B"
(NOT TO SCALE)

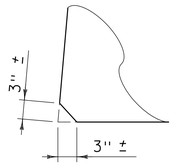


CONCRETE CURB JOINT SECTION
(NOT TO SCALE)

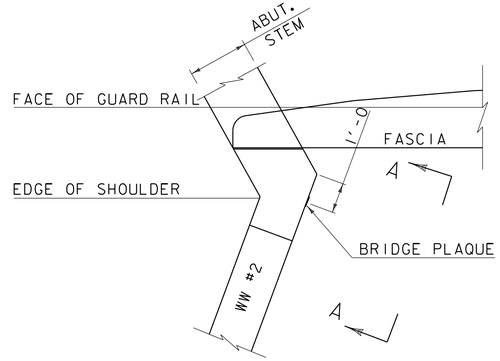
1. SEE TYPICAL HORIZONTAL CONSTRUCTION JOINT DETAIL FOR ADDITIONAL INFORMATION



SECTION B - B
(NOT TO SCALE)



ACUTE ANGLE CLIP DETAIL
(NOT TO SCALE)



PLAN

CONCRETE CURB JOINT NOTES

1. CONCRETE CURBS MAY BE PLACED IN ONE CONTINUOUS OPERATION IF AN APPROVED SHRINKAGE REDUCING ADMIXTURE LISTED IN THE SPECIAL PROVISIONS IS USED WITH THE CONCRETE MIX DESIGN. PAYMENT FOR THE SHRINKAGE REDUCING ADMIXTURE WILL BE INCIDENTAL TO THE BRIDGE CURB CONCRETE ITEM.

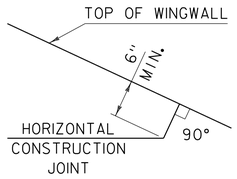
2. IF THE CONTRACTOR CHOOSES NOT TO USE AN APPROVED SHRINKAGE REDUCING ADMIXTURE, THE CURBS SHALL BE CONSTRUCTED WITH CONSTRUCTION JOINTS SPACED AT A MAXIMUM OF 15'-0" CENTER TO CENTER AND 2'-0" MINIMUM FROM THE CENTER OF NEAREST BRIDGE RAILING POST.

3. ON MULTI-SPAN CONTINUOUS SUPERSTRUCTURES, REGARDLESS OF WHETHER APPROVED SHRINKAGE REDUCING ADMIXTURE IS USED, CURB JOINTS SHALL BE LOCATED OVER THE CENTERLINE OF PIERS AND 7'-0" EACH SIDE OF THE CENTERLINE OF EACH PIER.

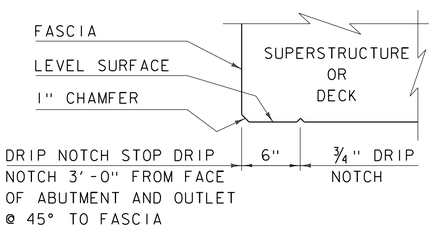
4. WHEN CURB JOINTS ARE USED THE CURBS SHALL BE PLACED IN ALTERNATE SECTIONS WITH A MINIMUM OF 48 HOUR DELAY BETWEEN ADJACENT PLACEMENTS.

5. LONGITUDINAL REINFORCING SHALL BE CONTINUOUS THROUGH CURB CONSTRUCTION JOINTS. CURB STIRRUP BARS SHALL BE TURNED AS NECESSARY TO MAINTAIN COVER IN THE FLARED CURB ENDS.

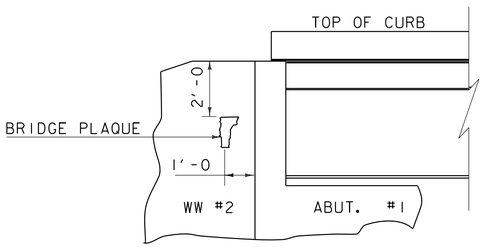
6. THE JOINT SPACING AND DETAILS SHOWN SHALL APPLY TO SIDEWALKS WHEN SHOWN IN THE PLANS.



HORIZONTAL WINGWALL CONSTRUCTION JOINT
(NOT TO SCALE)



DRIP NOTCH DETAIL
(NOT TO SCALE)



VIEW "A - A"

BRIDGE PLAQUE
(NOT TO SCALE)

THE BRIDGE PLAQUE WILL BE SUPPLIED BY THE AGENCY OF TRANSPORTATION AND SHALL BE INSTALLED BY THE CONTRACTOR AT ABUTMENT #1 ON THE RIGHT SIDE AS SHOWN OR AS DIRECTED BY THE ENGINEER.

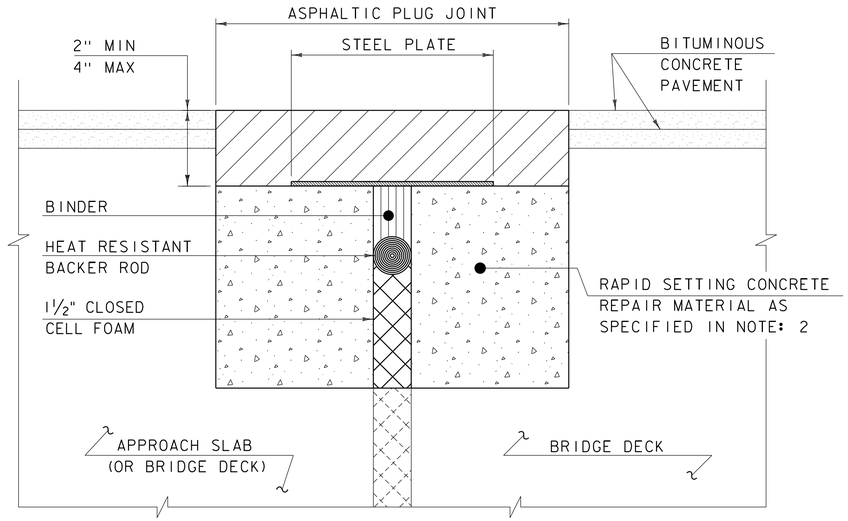
PAYMENT FOR INSTALLATION OF THE BRIDGE PLAQUE SHALL BE INCIDENTAL TO THE ADJACENT CONCRETE.

REVISIONS	
MAY 7, 2010	APPROVED FOR USE BY VAOT STRUCTURES SECTION
JUNE 4, 2010	MODIFIED AND ADDED TWO DETAILS
OCTOBER 10, 2012	MODIFIED HORZ. JOINT WINGWALL ADD 6" MIN. DIMENSION

CONCRETE DETAILS AND NOTES

VERMONT AGENCY OF TRANSPORTATION
STRUCTURES - SECTION

STRUCTURES DETAIL
SD-502.00



ASPHALTIC PLUG JOINT DETAIL - REHAB

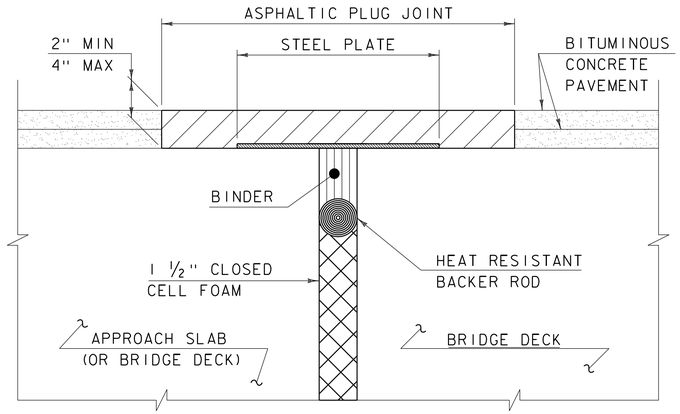
NOTES:

1. THE CONTRACTOR SHALL REMOVE ALL ASPHALTIC PLUG JOINT MATERIAL AND DETERIORATED CONCRETE AS DIRECTED BY THE ENGINEER. REMOVAL OF THE FIRST 4 INCHES OF MATERIAL SHALL BE INCLUDED IN THE BID PRICE FOR ITEM 516.10 BRIDGE EXPANSION JOINT, ASPHALTIC PLUG. ANY REMOVAL OF MATERIAL GREATER THAN 4 INCHES SHALL BE INCLUDED IN THE BID PRICE OF ITEM 580.20 RAPID SETTING CONCRETE REPAIR MATERIAL WITH COARSE AGGREGATE.

2. THE CONTRACTOR SHALL REPLACE REMOVED MATERIAL THAT IS LESS THAN 4" FROM FINISHED GRADE WITH ASPHALTIC PLUG JOINT MATERIAL MEETING THE REQUIREMENTS OF SUBSECTION 707.15. ALL REMOVED MATERIAL THAT IS GREATER THAN 4 INCHES FROM FINISHED GRADE SHALL BE REPLACED WITH RAPID SETTING CONCRETE REPAIR MATERIAL WITH COARSE AGGREGATE MEETING THE REQUIREMENTS OF SUBSECTION 780.04.

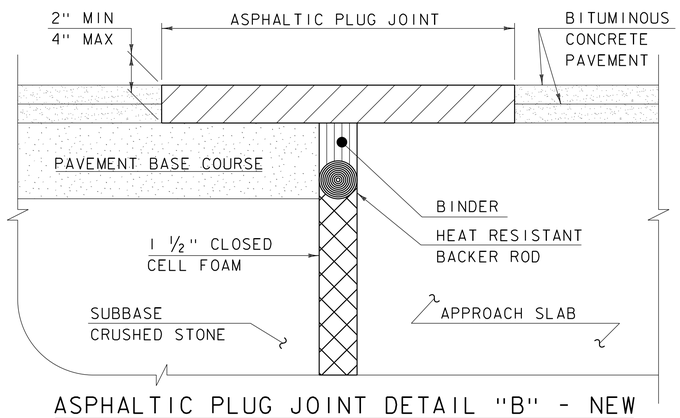
3. REINFORCING STEEL NOT SHOWN FOR CLARITY.

4. PLACE 1/4" THICK BY 8" WIDE SECTIONS OF STEEL PLATE OVER THE CENTER OF THE MOVEMENT GAP. SECURE THE PLATES FROM MOVING BY INSERTING LOCATING PINS THROUGH THE PRE-STAMPED HOLES INTO BACKER ROD AND COVER WITH HOT BINDER. THE STEEL PLATES MAY BE OMITTED WHERE THE ENGINEER DETERMINES THAT THE APPROACH SLAB OR BRIDGE DECK WILL PROVIDE INADEQUATE SUPPORT AND WHERE VERTICAL MOVEMENT OF THE PLATES MIGHT OCCUR.



ASPHALTIC PLUG JOINT DETAIL "A" - NEW

NOTE:
PLACE 1/4" THICK BY 8" WIDE SECTIONS OF STEEL PLATE OVER THE CENTER OF THE MOVEMENT GAP. SECURE THE PLATES FROM MOVING BY INSERTING LOCATING PINS THROUGH THE PRE-STAMPED HOLES INTO BACKER ROD AND COVER WITH HOT BINDER.



ASPHALTIC PLUG JOINT DETAIL "B" - NEW

ASPHALTIC PLUG JOINT NOTES

INSTALLATION:

1. LOCATE THE JOINT CENTRALLY OVER THE DECK OVERLAY EXPANSION GAP OR FIXED JOINT, MARKED OUT TO THE MANUFACTURER'S RECOMMENDED WIDTH.
2. REMOVE THE BITUMINOUS CONCRETE PAVEMENT FULL DEPTH AS SHOWN ON THE PLANS. THE PAVEMENT SHALL BE DRY AND SAW CUT TO THE LIMITS REQUIRED TO PLACE THE JOINT. A PNEUMATIC HAMMER AND CHISEL MAY BE USED ADJACENT TO THE CURB ONLY WHEN SAW CUTTING IS NOT POSSIBLE.
3. BLAST CLEAN THE JOINT AREA OF DEBRIS, ASPHALT AND SHEET MEMBRANE. THOROUGHLY DRY THE JOINT AREA WITH COMPRESSED AIR PRIOR TO APPLYING BINDER MATERIAL.
4. PLACE PROPERLY SIZED HEAT RESISTANT BACKER ROD IN THE MOVEMENT GAP ALLOWING FOR 1" +/- OF BINDER ABOVE THE ROD.
5. HEAT AND PLACE THE BINDER MATERIAL AS RECOMMENDED BY THE MANUFACTURER.
6. IMMEDIATELY AFTER TOP COATING, CAST AN ANTI-SKID MATERIAL OVER THE JOINT TO REDUCE THE RISK OF TRACKING.

WEATHER LIMITATIONS

APPLY BINDER MATERIAL ONLY WHEN THE FOLLOWING CONDITIONS PREVAIL OR AS RECOMMENDED BY THE MANUFACTURER:

1. THE AMBIENT AIR TEMPERATURE IS AT LEAST 10 DEG C (50 DEG F) AND RISING.
2. THE ROAD SURFACE IS DRY.
3. WEATHER CONDITIONS OR OTHER CONDITIONS ARE FAVORABLE AND ARE EXPECTED TO REMAIN SO FOR THE PERFORMANCE OF SATISFACTORY WORK.

DETAILS ON THIS SHEET ARE NOT TO SCALE.

REVISIONS	
MAY 7, 2010	APPROVED FOR USE BY VAOT STRUCTURES SECTION
AUGUST 29, 2011	ADD DETAIL "B" AND REV. NOTES

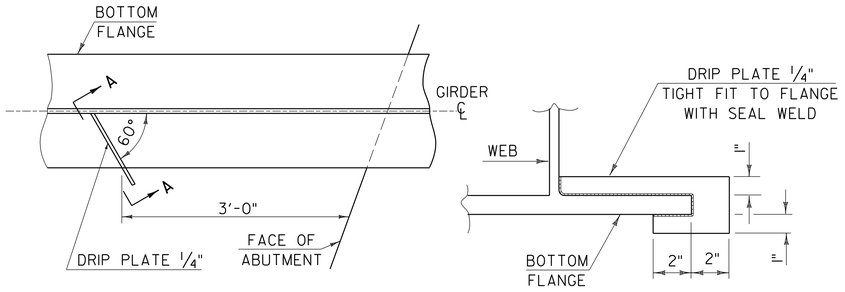
BRIDGE JOINT
ASPHALTIC PLUG

VERMONT AGENCY OF TRANSPORTATION
STRUCTURES - DIVISION

STRUCTURES DETAIL
SD-516.10

STRUCTURAL STEEL GENERAL NOTES:

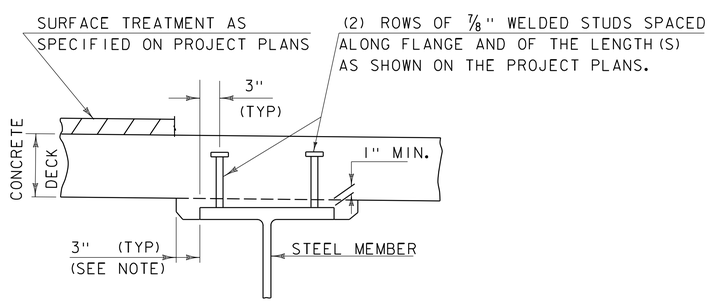
1. ALL FIELD CONNECTIONS SHALL BE MADE WITH 7/8" DIAMETER HIGH-STRENGTH BOLTS IN 15/16" DIAMETER HOLES, PER SUBSECTION 506.19, UNLESS OTHERWISE SPECIFIED.
2. ALL HOLES IN THE WEBS OF THE FASCIA GIRDERS THAT ARE NOT OTHERWISE FILLED, SHALL BE FILLED WITH EITHER BUTTON HEAD OR HEX HEAD BOLTS. THESE BOLTS SHALL BE TIGHTENED IN ACCORDANCE WITH SUBSECTION 506.19.
3. ALL WELDING SHALL CONFORM TO THE PROVISIONS OF SUBSECTION 506.10.
4. ANY CONNECTIONS THAT ARE NOT DETAILED ON THE PLANS SHALL BE DETAILED BY THE FABRICATOR AND SUBMITTED TO THE STRUCTURES ENGINEER FOR APPROVAL.
5. STRUCTURAL STEEL MEMBERS DESIGNATED "CVN" IN THE PLANS SHALL BE CHARPY V-NOTCH TESTED IN ACCORDANCE WITH SUBSECTION 714.01 OF THE STANDARD SPECIFICATIONS.
6. ENDS OF GIRDERS ARE TO BE VERTICAL IN THEIR FINAL POSITION.
7. AFTER SUPERSTRUCTURE STEEL HAS BEEN ERECTED, ELEVATIONS ALONG THE TOP OF THE GIRDERS SHALL BE TAKEN AS DIRECTED BY THE RESIDENT ENGINEER FOR USE IN DETERMINING FINISHED GRADES.



PLAN DRIP PLATE

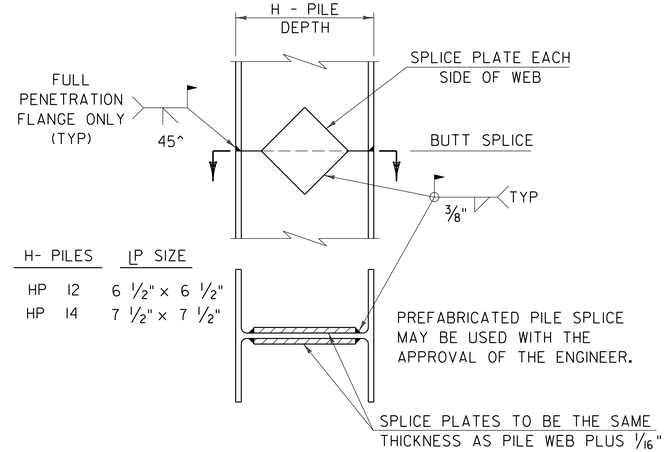
SECTION A - A

NOTE: DRIP PLATES SHALL BE PLACED ON OUTSIDE EDGE OF FASCIA GIRDERS ON THE HIGH SIDE OF ALL PIERS AND ABUTMENTS OR AS INDICATED ON PROJECT PLANS.



NOTE:
THE 3" HORIZONTAL SECTION MAY BE ELIMINATED FOR FORMING SYSTEMS DESIGNED FOR THE CONSTRUCTION OF VERTICAL HAUNCHES. ANY VOIDS RESULTING FROM FORMING SYSTEM ELEMENTS SHALL BE FILLED WITH JOINT SEALER, POLYURETHANE MEETING THE REQUIREMENTS OF SECTION 524. THE COST OF THE JOINT SEALER, POLYURETHANE SHALL BE INCIDENTAL TO THE ADJACENT CONCRETE.

HAUNCH AND SHEAR CONNECTOR DETAIL



H- PILES	LP SIZE
HP 12	6 1/2" x 6 1/2"
HP 14	7 1/2" x 7 1/2"

DETAIL OF PILE SPLICE

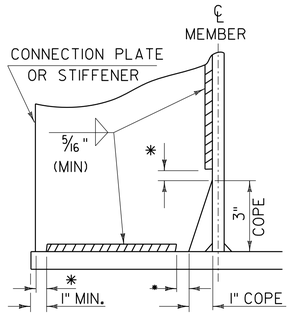
DETAILS ON THIS SHEET ARE "NOT TO SCALE" UNLESS NOTED OTHERWISE.

REVISIONS	
MAY 7, 2010	APPROVED FOR USE BY VAOT STRUCTURES SECTION
JUNE 4, 2010	MODIFIED NOTES

STRUCTURAL STEEL DETAILS & NOTES

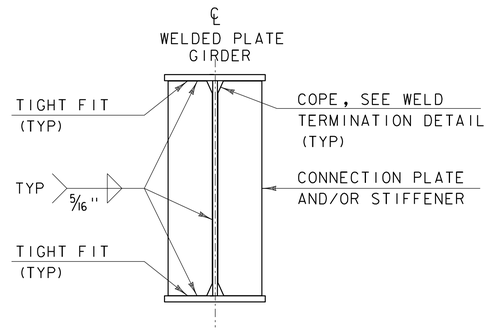
VERMONT AGENCY OF TRANSPORTATION
STRUCTURES - SECTION

STRUCTURES DETAIL
SD-601.00



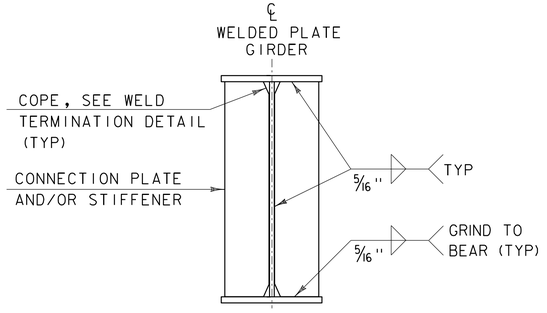
WELD TERMINATION AND COPING DETAILS FOR STEEL MEMBERS

*NO WELD FOR 3/8" MIN. 7/8" MAX. (EXCEPT MUST MAINTAIN 1" MINIMUM FROM EDGE OF FLANGE)

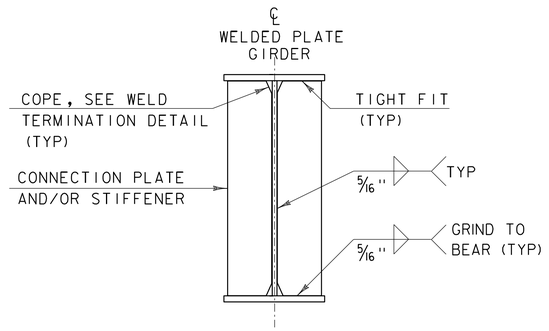


INTERMEDIATE CONNECTION PLATES AND/OR STIFFENERS FOR WELDED PLATE GIRDERS

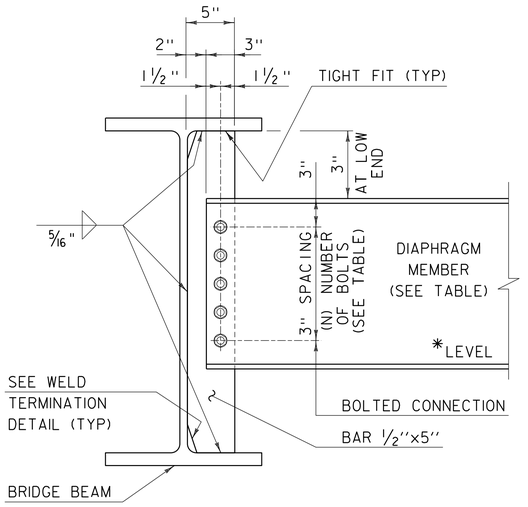
INTERMEDIATE DETAIL IS ONLY USED WHEN PLATE DOES NOT OCCUR AT AN ABUTMENT OR PIER.



ABUTMENT BEARING STIFFENERS AND/OR CONNECTION PLATES FOR WELDED PLATE GIRDERS



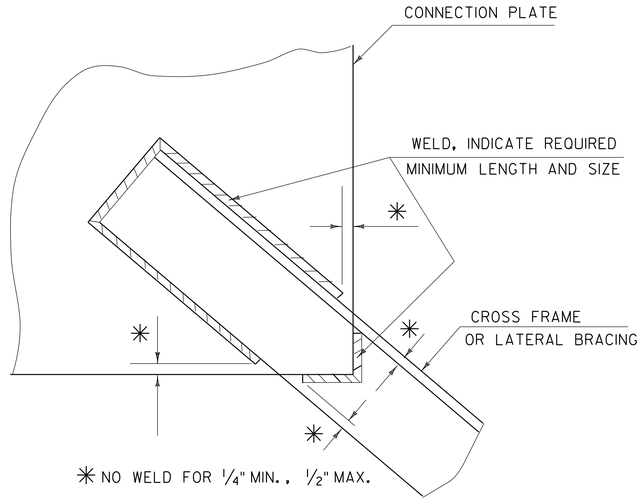
PIER BEARING STIFFENERS AND/OR CONNECTION PLATES FOR WELDED PLATE GIRDERS



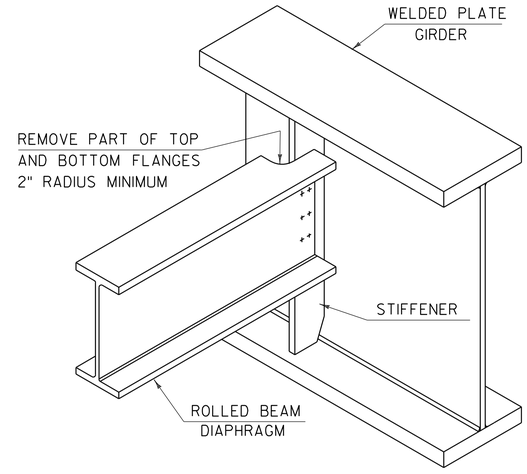
DEPTH		DIAPHRAGM MEMBER	(N) BOLTS
ROLLED BEAM	24" 30"	C15x33.9	4
	31" 36"	MC18x42.7	5
	37" 42"	W21x44	6
PLATE GIRDER WEB	31" 36"	W27x84	7
	37" 42"	W33x118	9
	43" 48"	W36x135	10

INTERMEDIATE DIAPHRAGMS FOR 24" TO 48" BRIDGE BEAMS

* IF CLEARANCE CANNOT BE MET, DIAPHRAGM MAY BE SLOPED.



WELD LOCATION DETAIL AT CROSS FRAMES AND LATERAL BRACING



SEE CONTRACT DRAWINGS FOR SIZES OF MEMBERS AND CONNECTION DETAILS

ROLLED BEAM USED AS DIAPHRAGM

DETAILS ON THIS SHEET ARE "NOT TO SCALE" UNLESS NOTED OTHERWISE.

REVISIONS	
MAY 7, 2010	APPROVED FOR USE BY VAOT STRUCTURES SECTION
MAY 2, 2011	ADD INTERMEDIATE DIAPHRAGMS DETAIL & ADD NOT TO SCALE NOTE

STRUCTURAL STEEL PLATE GIRDER DETAILS AND NOTES

VERMONT AGENCY OF TRANSPORTATION
STRUCTURES - SECTION

STRUCTURES DETAIL SD-602.00