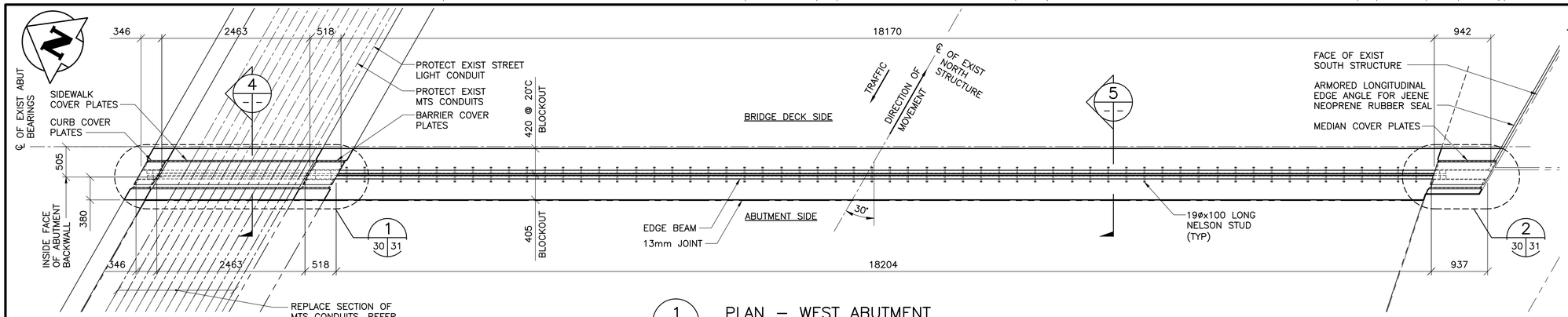
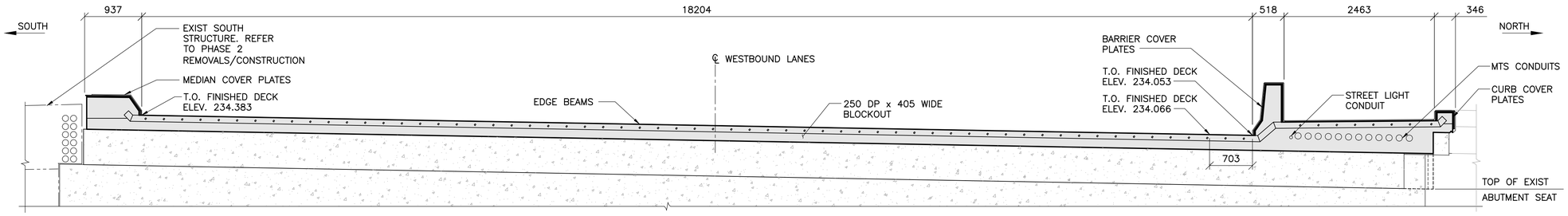


1 PLAN – WEST ABUTMENT

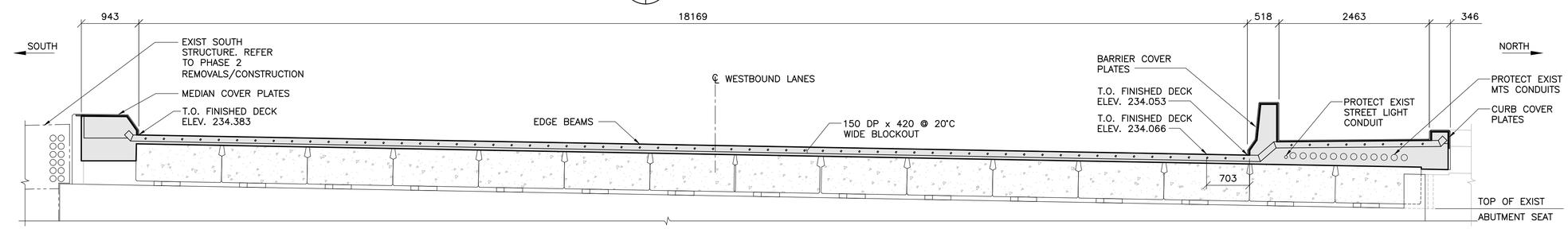
1 : 40

– EXPANSION JOINT SHOWN AT +20°C



2 ELEVATION – ABUTMENT SIDE

1 : 40



3 ELEVATION – DECK SIDE

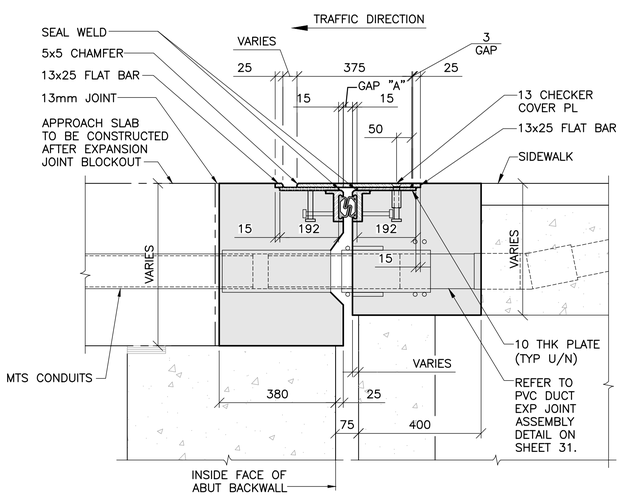
1 : 40

EXPANSION JOINTS GENERAL NOTES:

1. TRANSVERSE EXPANSION JOINTS SHALL BE WABO MODULAR D–300 JOINTS. LONGITUDINAL JOINTS SHALL BE ARMOURED EDGE ANGLE COMPLETE WITH JEENE SEAL.
2. REFER TO SPECIFICATIONS E12, STRUCTURAL CONCRETE AND E15, EXPANSION JOINTS.
3. THE EXPANSION JOINT ASSEMBLIES SHALL BE DESIGNED TO CARRY THE LATEST EDITION OF CHBD CS6–06 CL–625 TRUCK LOADS.
4. STEEL SHALL BE IN ACCORDANCE WITH THE LATEST CSA STANDARD CAN/CSA G40.21M GRADE 300W OR GRADE A588 OR EQUAL AND ALL SUBSEQUENT REVISIONS.
5. STEEL EXTRUSIONS SHALL BE IN ACCORDANCE WITH THE LATEST CSA STANDARD CAN/CSA G40.21M GRADE 230G OR GRADE A588 MINIMUM AND ALL SUBSEQUENT REVISIONS.
6. ALL STEEL COMPONENTS SURFACES, INCLUDING COVER PLATES AND TRENCH SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH THE LATEST CSA STANDARD CAN/CSA G164–M92 AND ALL SUBSEQUENT REVISIONS TO A MINIMUM NET RETENTION OF 610 gm/m^2 AFTER FABRICATION.
7. JOINT ASSEMBLY SHALL BE FABRICATED AND COMPLETELY SHOP ASSEMBLED AND PRESET TO DIMENSIONS "A" FOR 20°C PRIOR TO SHIPMENT.
8. THE CONTRACTOR SHALL FIELD VERIFY CONCRETE DIMENSIONS AROUND THE EXPANSION JOINT BLOCKOUT PRIOR TO FABRICATION.
9. EXPANSION JOINT UNITS AND RELATED MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
10. THE CONTRACTOR IS REQUIRED TO PROVIDE SUPPORT FOR THE EXPANSION JOINT BOXES ASSEMBLIES DURING PLACEMENT OF CONCRETE. ALL SUPPORT SYSTEMS SHALL NOT INTERFERE WITH ANY CONCRETE FINISHING OPERATIONS.
11. BLEEDER HOLES SHALL BE DRILLED INTO THE TOP OF THE STEEL EDGE BEAMS OF THE EXPANSION JOINT AND INTO THE TOP OF THE CURB COVER PLATES WHERE CONCRETE CAST DIRECTLY AGAINST. FOLLOWING CONCRETING OPERATIONS THE ENGINEER SHALL INSPECT THESE AREAS BY METHOD OF SOUNDING. ALL VOIDS SHALL BE FILLED WITH AN APPROVED NON–SHRINK GROUT.
12. EXPANSION JOINTS SHALL BE INSTALLED TO THE MANUFACTURER'S PROCEDURE FOR INSTALLATION.
13. SEAL SHALL BE PREFORMED NEOPRENE RUBBER AS SPECIFIED. EACH SEAL SHALL BE SUPPLIED & INSTALLED IN ONE CONTINUOUS PIECE. NO SPLICE IN THE RUBBER SEAL WILL BE PERMITTED.
14. ALL CURB COVER PLATES SHALL BE RECESSED 13mm FROM THE FACE OF THE CONCRETE.
15. UNLESS NOTED, CURB DIMENSIONS SHOWN ARE TO CONCRETE FACES. EXPANSION JOINT FABRICATOR SHALL MAKE APPROPRIATE ADJUSTMENTS FOR CHAMFERS AND OFFSETS AS SHOWN ON DETAILS.
16. INSTALLATION TEMPERATURE SHALL BE TAKEN AS THE MEAN SHADE AIR TEMPERATURE 48 HOURS PRIOR TO JOINT INSTALLATION.
17. ALL AREAS OF DAMAGED GALVANIZING SHALL BE REPAIRED BY USING THE FIELD APPLIED GALVANIZING TOUCH–UP PROCEDURE AS SPECIFIED IN E15.
18. PRIOR TO PLACING REINFORCING BARS OR CONCRETE, THE INSTALLATION SHALL BE APPROVED BY THE ENGINEER.
19. IMMEDIATELY PRIOR TO PLACEMENT OF CONCRETE, ALL METAL SURFACES WHICH WILL BE IN CONTACT WITH CONCRETE SHALL BE COATED WITH EPOXY ADHESIVE. RATE OF PLACEMENT OF ADHESIVE SHALL BE SUCH THAT THE ADHESIVE DOES NOT DRY OR SET BEFORE CONCRETE IS PLACED AGAINST IT.
20. LOOSEN ERECTION BOLTS WITHIN 24 HOURS OF CONCRETING TO ALLOW JOINT MOVEMENT DUE TO TEMPERATURE CHANGE.
21. AFTER REMOVAL OF CLAMPING CHANNELS AND SPACER DAM, BOLT AND BLEEDER HOLES TO BE FILLED WITH AN APPROVED EPOXY GROUT.
22. SEAL WELDING OF THE TOP EDGE COVER PLATE MEMBERS TO THE EXPANSION JOINT END PLATES AND ASSOCIATED FIELD GALVANIZING SHALL TAKE PLACE PRIOR TO INSTALLATION OF EXPANSION JOINT SEALS.
23. ALL SURFACES IN CONTACT WITH JOINT SEALS SHALL BE CLEANED PRIOR TO INSTALLATION OF SEALS.
24. AVOID ANY CONTACT BETWEEN REINFORCING STEEL AND GALVANIZED ANCHORS.

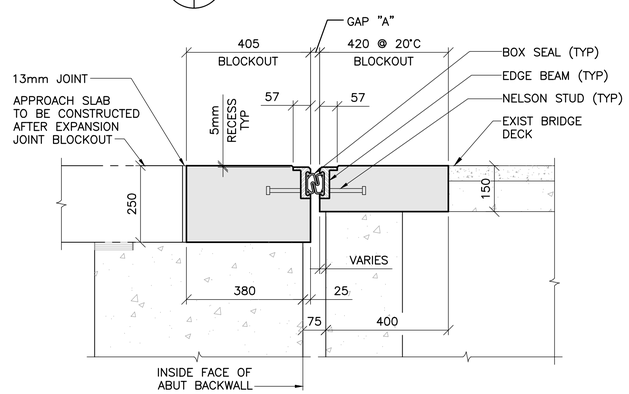
DESIGN DATA:

1. EXPANSION JOINTS ARE DESIGNED TO ACCOMMODATE THE ANTICIPATED THERMAL EXPANSION/CONTRACTION REQUIREMENTS BASED ON AN 80°C TEMPERATURE RANGE PLUS AN ADDITIONAL 25mm OF MOVEMENT FOR EACH END OF TEMPERATURE SPECTRUM.
2. EXPANSION JOINTS ARE PRESET TO ALLOW FOR A MINIMUM SEAL INSTALLATION WIDTH OF 33mm AT 15°C.



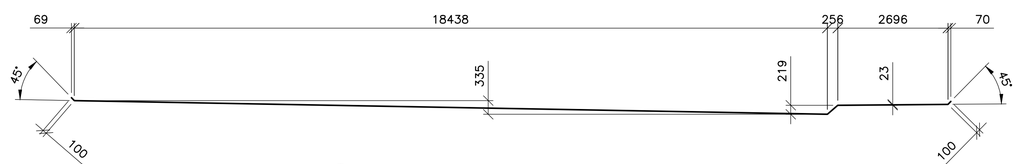
4 SECTION

1 : 10



5 SECTION

1 : 10



6 PROFILE DETAIL – EDGE BEAMS

1 : 75

TEMPERATURE WIDTH ADJUSTMENT TABLE							
TEMP.	25°C	20°C	15°C	10°C	5°C	0°C	–5°C
"A"	27	30	33	36	39	42	45

FOR WEST ABUTMENT

NOTES:

1. T.O. FINISHED DECK ELEVATIONS GIVEN ARE BASED ON RECORD DRAWINGS. T.O. FINISHED DECK TO MATCH EXISTING ROAD CROSSFALL AND VERTICAL PROFILE. CONTRACTOR TO FIELD VERIFY EXISTING SITE ELEVATIONS AND PROVIDE ELEVATIONS ALONG INSIDE FACE OF BACKWALL TO CONSULTANT PRIOR TO EXPANSION JOINT FABRICATION.

APEGM Certificate of Authorization TETRA TECH WEI Inc. No. 5313 Date: April 30, 2014

NO.	REVISIONS	DATE	BY
0	ISSUED FOR TENDER	13.12.09	V.B.

B.M. ELEV. F.B.

TETRA TECH

DESIGNED BY K.Y. | CHECKED BY V.B.
DRAWN BY E.V. | APPROVED BY E.F.S.
HOR. SCALE: AS NOTED | RELEASED FOR CONSTRUCTION DATE
VERTICAL: | ORIGINAL SIGNED 13.12.09 D. BURMEY, P.ENG. BRIDGE PROJECTS ENGINEER
DATE 13.07.18

PROVINCE OF MANITOBA REGISTERED PROFESSIONAL ENGINEER ORIGINAL SIGNED 13.12.09 V. BANTHIA Member 23477

CONSULTANT DRAWING NO. 1300070700–DWG–S0030

Winnipeg

THE CITY OF WINNIPEG
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

PORTAGE AVENUE TWIN BRIDGES
OVER STURGEON CREEK
REHABILITATION AND RELATED WORKS

PHASE 1 CONSTRUCTION
WEST ABUTMENT EXPANSION JOINT
PLAN, ELEVATION AND PROFILE

CITY DRAWING NUMBER B178–14–030
SHEET 30 OF 70
30