

LIST OF DRAWINGS:

PART A - BRIDGE WORK

CITY OF WPG. DRAWING NUMBER	TETRA TECH DRAWING NUMBER	DRAWING DESCRIPTION
B243-15-001	1400070800-DWG-S0001	COVER SHEET
B243-15-002	1400070800-DWG-S0002	DESIGN DATA AND LIST OF DRAWINGS
B243-15-003	1400070800-DWG-S0003	SITE PLAN AND SCOPE OF WORK
B243-15-004	1400070800-DWG-S0004	GENERAL ARRANGEMENT PLAN
B243-15-005	1400070800-DWG-S0005	GENERAL ARRANGEMENT ELEVATION AND CROSS SECTION
B243-15-006	1400070800-DWG-S0006	BOREHOLE LOCATIONS
B243-15-007	1400070800-DWG-S0007	BOREHOLE LOGS SHEET 1 OF 4
B243-15-008	1400070800-DWG-S0008	BOREHOLE LOGS SHEET 2 OF 4
B243-15-009	1400070800-DWG-S0009	BOREHOLE LOGS SHEET 3 OF 4
B243-15-010	1400070800-DWG-S0010	BOREHOLE LOGS SHEET 4 OF 4
B243-15-011	1400070800-DWG-S0011	EMBANKMENT AND CHANNEL WORKS EXISTING CULVERT REMOVAL AND EMBANKMENT DETAILS
B243-15-012	1400070800-DWG-S0012	EMBANKMENT AND CHANNEL WORKS EXISTING CULVERT REMOVAL AND EMBANKMENT SECTIONS
B243-15-013	1400070800-DWG-S0013	EMBANKMENT AND CHANNEL WORKS SECTIONS AND DETAILS
B243-15-014	1400070800-DWG-S0014	EMBANKMENT RETAINING WALLS PLAN, SECTIONS AND DETAILS
B243-15-015	1400070800-DWG-S0015	PILING LAYOUT AND DETAILS
B243-15-016	1400070800-DWG-S0016	WEST ABUTMENT CONCRETE DETAILS
B243-15-017	1400070800-DWG-S0017	EAST ABUTMENT CONCRETE DETAILS
B243-15-018	1400070800-DWG-S0018	EAST AND WEST ABUTMENT REINFORCING DETAILS SHEET 1 OF 2
B243-15-019	1400070800-DWG-S0019	EAST AND WEST ABUTMENT REINFORCING DETAILS SHEET 2 OF 2
B243-15-020	1400070800-DWG-S0020	EAST AND WEST PIER CONCRETE DETAILS
B243-15-021	1400070800-DWG-S0021	EAST AND WEST PIER REINFORCING DETAILS SHEET 1 OF 2
B243-15-022	1400070800-DWG-S0022	EAST AND WEST PIER REINFORCING DETAILS SHEET 2 OF 2
B243-15-023	1400070800-DWG-S0023	PRECAST PRESTRESSED BOX GIRDER LAYOUT AND DETAILS
B243-15-024	1400070800-DWG-S0024	PRECAST PRESTRESSED BOX GIRDER PRESTRESSING STRAND LAYOUT
B243-15-025	1400070800-DWG-S0025	PRECAST PRESTRESSED BOX GIRDER GIRDERS Mk. G1, G1A, G3 AND G3A CONCRETE DETAILS
B243-15-026	1400070800-DWG-S0026	PRECAST PRESTRESSED BOX GIRDER GIRDERS Mk. G2 AND G2A CONCRETE DETAILS
B243-15-027	1400070800-DWG-S0027	PRECAST PRESTRESSED BOX GIRDER GIRDERS Mk. G4, G4A AND G4B CONCRETE DETAILS
B243-15-028	1400070800-DWG-S0028	PRECAST PRESTRESSED BOX GIRDER REINFORCING DETAILS SHEET 1 OF 2
B243-15-029	1400070800-DWG-S0029	PRECAST PRESTRESSED BOX GIRDER REINFORCING DETAILS SHEET 2 OF 2
B243-15-030	1400070800-DWG-S0030	BEARING LAYOUT AND DETAILS
B243-15-031	1400070800-DWG-S0031	DECK - CONCRETE PLAN, SECTION AND DETAIL
B243-15-032	1400070800-DWG-S0032	DECK - CONCRETE SECTIONS AND DETAILS
B243-15-033	1400070800-DWG-S0033	SIDEWALK, BARRIER AND CURB CONCRETE DETAILS
B243-15-034	1400070800-DWG-S0034	DECK - REINFORCING DETAILS
B243-15-035	1400070800-DWG-S0035	BACKWALL - REINFORCING DETAILS
B243-15-036	1400070800-DWG-S0036	SIDEWALK, BARRIER AND CURB REINFORCING DETAILS
B243-15-037	1400070800-DWG-S0037	TRANSITION BARRIER REINFORCING DETAILS
B243-15-038	1400070800-DWG-S0038	ALUMINUM PEDESTRIAN HANDRAIL ELEVATION AND DETAILS
B243-15-039	1400070800-DWG-S0039	ALUMINUM PEDESTRIAN HANDRAIL ELEVATIONS, SECTIONS AND DETAILS
B243-15-040	1400070800-DWG-S0040	ALUMINUM PEDESTRIAN HANDRAIL SECTIONS AND DETAILS
B243-15-041	1400070800-DWG-S0041	EAST AND WEST APPROACH SLAB CONCRETE DETAILS
B243-15-042	1400070800-DWG-S0042	EAST AND WEST APPROACH SLAB REINFORCING DETAILS
B243-15-043	1400070800-DWG-S0043	SLOPE PAVING AND PATHWAY CONCRETE AND REINFORCING DETAILS
B243-15-044	1400070800-DWG-S0044	UNDERBRIDGE LIGHTING
B243-15-045	1400070800-DWG-S0045	REINFORCING SCHEDULE SHEET 1 OF 3
B243-15-046	1400070800-DWG-S0046	REINFORCING SCHEDULE SHEET 2 OF 3
B243-15-047	1400070800-DWG-S0047	REINFORCING SCHEDULE SHEET 3 OF 3

PART B - ROADWORKS

CITY OF WPG. DRAWING NUMBER	TETRA TECH DRAWING NUMBER	DRAWING DESCRIPTION
P-3465-15-001	1400070800-DWG-C0048	HORIZONTAL GEOMETRY NESS AVENUE AND PATHWAYS
P-3465-15-002	1400070800-DWG-C0049	NESS AVENUE PAVEMENT RECONSTRUCTION WHARTON BOULEVARD TO 12m EAST OF SCHOOL ROAD STA 0+75 TO STA 2+00
P-3465-15-003	1400070800-DWG-C0050	NESS AVENUE PAVEMENT RECONSTRUCTION 12m E OF SCHOOL ROAD TO 42m W OF KIRBY DRIVE STA 2+00 TO STA 3+40
P-3465-15-004	1400070800-DWG-C0051	NESS AVENUE PAVEMENT RECONSTRUCTION/REHABILITATION 42m W OF KIRBY DRIVE TO 70m E OF KIRBY DRIVE STA 3+40 TO 4+70
P-3465-15-005	1400070800-DWG-C0052	NESS AVENUE PAVEMENT REHABILITATION 70m E OF KIRBY DRIVE TO 7m W OF HERITAGE BLVD STA 4+70 TO STA 5+85
P-3465-15-006	1400070800-DWG-C0053	NESS AVENUE PAVEMENT REHABILITATION 7m WEST OF HERITAGE BLVD TO 5m EAST OF PEBBLEWOOD LANE STA 5+85 TO STA 6+93
P-3465-15-007	1400070800-DWG-C0054	STURGEON CREEK PATHWAY PLAN, PROFILES AND BANK STABILIZATION
P-3465-15-008	1400070800-DWG-C0055	ROADWAY SECTIONS STATION 2+48 & STATION 3+48
P-3465-15-009	1400070800-DWG-C0056	ROADWORKS DETAILS
P-3465-15-010	1400070800-DWG-C0057	TRAFFIC MANAGEMENT - STAGE 1
P-3465-15-011	1400070800-DWG-C0058	TRAFFIC MANAGEMENT - STAGE 2

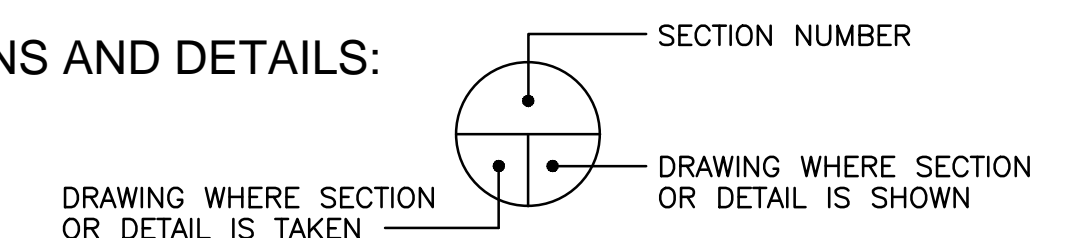
PART C - SEWER REPAIRS

CITY OF WPG. DRAWING NUMBER	TETRA TECH DRAWING NUMBER	DRAWING DESCRIPTION
P-3465-15-012	1400070800-DWG-C0059	SEWER REPAIRS - NESS AVE WHARTON STREET TO HERITAGE BOULEVARD
P-3465-15-013	1400070800-DWG-C0060	1950 LAND DRAINAGE SEWER AND OUTFALL
P-3465-15-014	1400070800-DWG-C0061	600 LAND DRAINAGE SEWER AND OUTFALL DETAILS
P-3465-15-015	1400070800-DWG-C0062	OUTFALL DETAILS
P-3465-15-016	1400070800-DWG-C0063	150 WATERMAIN RENEWAL AT ALCOTT STREET & NESS AVENUE
P-3465-15-017	1400070800-DWG-C0064	300 WATERMAIN & 250 FORCEMAIN RELOCATION ON NESS AVENUE

DESIGN DATA:

DESIGN SPECIFICATIONS:	CANADIAN HIGHWAY BRIDGE DESIGN CODE CAN/CSA-S6-06
LIVE LOADING:	CHBDC CL-625 TRUCK AND LANE LOAD
STRUCTURAL CONCRETE:	<ul style="list-style-type: none"> ABUTMENT FOOTINGS AND WINGWALLS, RETAINING WALL <ul style="list-style-type: none"> CSA A23.1, EXPOSURE CLASS S-1 f'c= 35MPa @ 28 DAYS AIR CONTENT CATEGORY 2 PIER CAPS, PIPE PILES, SLOPE PAVING, UNDERBRIDGE SIDEWALK <ul style="list-style-type: none"> CSA A23.1, EXPOSURE CLASS C-1 f'c= 35MPa @ 28 DAYS AIR CONTENT CATEGORY 1 GIRDERS <ul style="list-style-type: none"> CSA A23.1, EXPOSURE CLASS C-1 f'c= 45MPa @ 28 DAYS PRE-TENSIONING FORCES AT TIME OF TRANSFER f'ci = 36MPa AIR CONTENT CATEGORY 1 SUPERSTRUCTURE (DECK, TRAFFIC BARRIERS, CURBS, ABUTMENT BACKWALL, DIAPHRAGMS, APPROACH SLABS) <ul style="list-style-type: none"> CSA A23.1, EXPOSURE CLASS C-1 f'c= 35MPa @ 28 DAYS AIR CONTENT CATEGORY 1 SYNTHETIC FIBRES (MACRO)
REINFORCING STEEL:	CONCRETE COVER SHALL BE 60mm UNLESS OTHERWISE NOTED ALL REINFORCING TO BE ASTM A955, 300 SERIES, MINIMUM GRADE 420, UNS S32205, UNS S32304 OR UNS S31653 EXCEPT UNDERBRIDGE PATHWAY, ABUTMENTS, PIERS, WINGWALLS, RETAINING WALL, SLOPE PAVING, AND GIRDERS - CSA G30.18, GRADE 400W MINIMUM LAP LENGTH (UNLESS OTHERWISE NOTED): 15M OR 16SS - 600mm 20M OR 19SS - 800mm 25M OR 25SS - 1200mm 30M OR 30SS - 1600mm 35M OR 35SS - 2000mm
STRUCTURAL STEEL:	<ul style="list-style-type: none"> ALL STRUCTURAL STEEL SHALL CONFORM TO CAN/CSA-G40.21-M GRADE 300W UNLESS NOTED OTHERWISE
PRESTRESSING STRAND:	12.7mmØ SEVEN WIRE LOW RELAXATION, UNCOATED STEEL STRANDS JACKING FORCE PER 12.7mm DIAMETER SEVEN WIRE STRAND Pj = 138.0 kN MINIMUM ULTIMATE STRENGTH fpu = 1860 MPa GIRDER DIMENSIONAL TOLERANCE = LENGTH ±6mm, CROSS SECTION ±3mm
MISCELLANEOUS METAL:	<ul style="list-style-type: none"> ALL STRUCTURAL STEEL SHALL CONFORM TO CAN/CSA G40.21M GRADE 300W UNLESS NOTED OTHERWISE MISCELLANEOUS METAL TO BE HOT DIP GALVANIZED SHALL CONFORM TO CAN/CSA G164M TO A NET RETENTION OF 610g/m²
LATERAL POST TENSIONING TENDON:	<ul style="list-style-type: none"> 12.7mmØ SEVEN WIRE LOW RELAXATION, UNCOATED STEEL STRANDS, TWO STRANDS PER DUCT JACKING FORCE PER 12.7mm DIAMETER SEVEN WIRE STRAND = 93.45 kN MINIMUM ULTIMATE STRENGTH fpu = 1860 MPa
PILES:	<ul style="list-style-type: none"> HP PILES SHALL CONFORM TO CAN/CSA-G40.21 GRADE 350W PIPE PILES SHALL BE METALIZED AND CONFORM TO CAN/CSA-G40.21 GRADE 350W ABUTMENTS <ul style="list-style-type: none"> HP 360x132 STEEL PILES SLS PILE CAPACITY = 690 kN ULS PILE CAPACITY = 960 kN PIERS <ul style="list-style-type: none"> 610x12.7 CONCRETE FILLED STEEL PIPE PILES, GRADE 350W SLS PILE CAPACITY = 1750 kN ULS PILE CAPACITY = 2040 kN
HYDRAULIC DESIGN DATA:	DESIGN DISCHARGE Q = 76 m³/s V = 1.5 m/s
SOIL FOUNDATION DATA:	UNIT WEIGHT OF BACKFILL = 18 kN/m³ ACTIVE EARTH PRESSURE COEFFICIENT OF BACKFILL (Ka) = 0.3 PASSIVE EARTH PRESSURE COEFFICIENT OF BACKFILL (Kp) = 2.0
ROADWAY GEOMETRY:	CONFORM TO REQUIREMENTS OF THE LATEST CITY OF WINNIPEG STREET AND TRANSPORTATION STANDARD MANUAL, TRANSPORTATION ASSOCIATION OF CANADA (TAC) OR AASHTO

SECTIONS AND DETAILS:



B.M. ELEV.	TETRA TECH				THE CITY OF WINNIPEG PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION	NESS AVENUE AT STURGEON CREEK BRIDGE CONSTRUCTION	CITY DRAWING NUMBER B243-15-002 SHEET 2 OF 64
	DESIGNED BY D.M.	CHECKED BY S.A.					
	DRAWN BY G.I.	APPROVED BY E.F.S.					
	HOR. SCALE: AS NOTED	ACCEPTED BY DATE 15.09.24					
0 ISSUED FOR TENDER	15.09.24	S.A.					
NO. REVISIONS	DATE	BY	DATE 15.09.24	D.N. BURMEY, P.ENG. BRIDGE PROJECTS ENGINEER			