

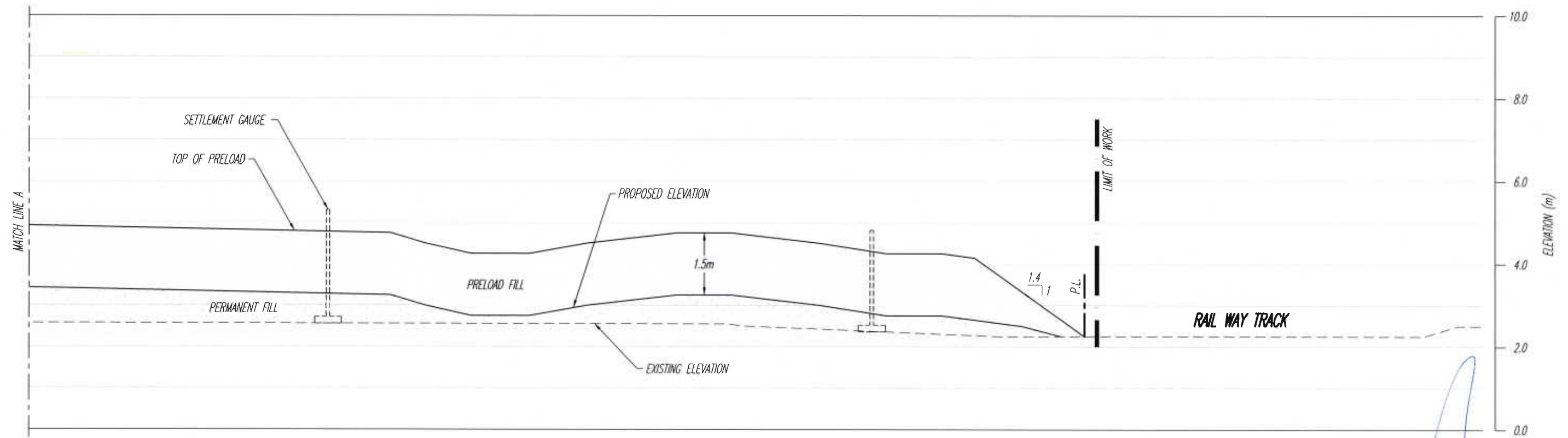
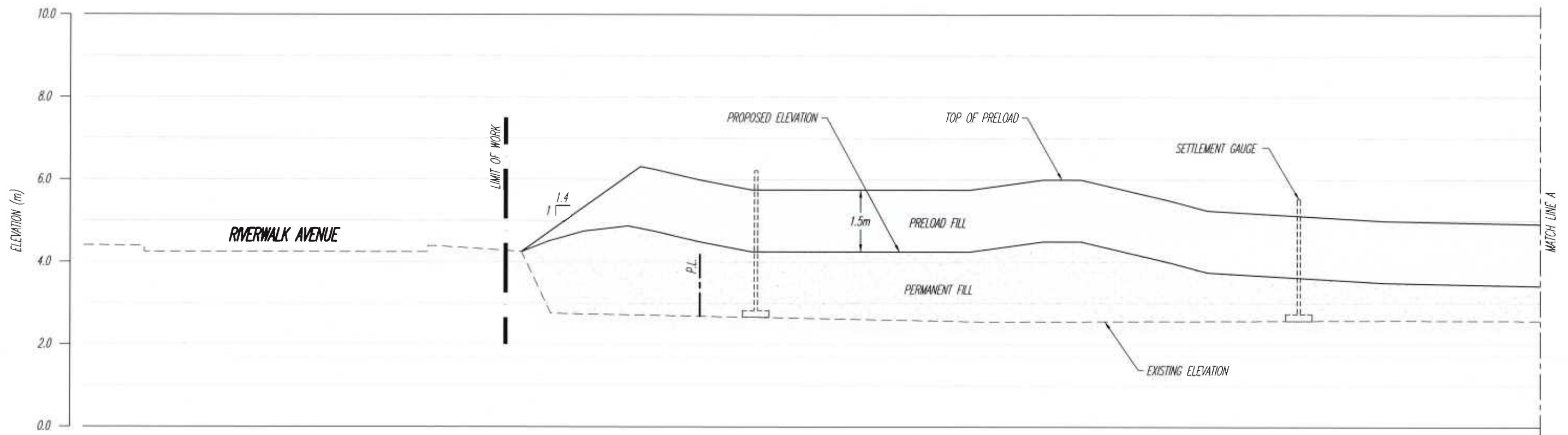
LEGEND:

- ◆ - SETTLEMENT GAUGE
- - MONITORING HUBS

SITE PLAN
SCALE = 1:200



DWG. x-16006 base plan NOVEMBER, 2018 (RECEIVED)		1759 W 75th Avenue Vancouver, B.C. V6P 6P2 P 604 439 0922 F 604 439 9659	NOVEMBER 23, 2018			RIVER DISTRICT - EFL AREA 2 PARKS NORTH AND MIDDLE KINROSS PARKS, VANCOUVER, BC KINROSS PARK MIDDLE PRELOAD - SITE PLAN	9820-F G-P1 (MIDDLE)	MARCH 25, 2019 - Monitoring Hubs
			H.S.	M.J.K.	K.J.			



SECTION A
SCALE = 1:100



MAR 26 2019



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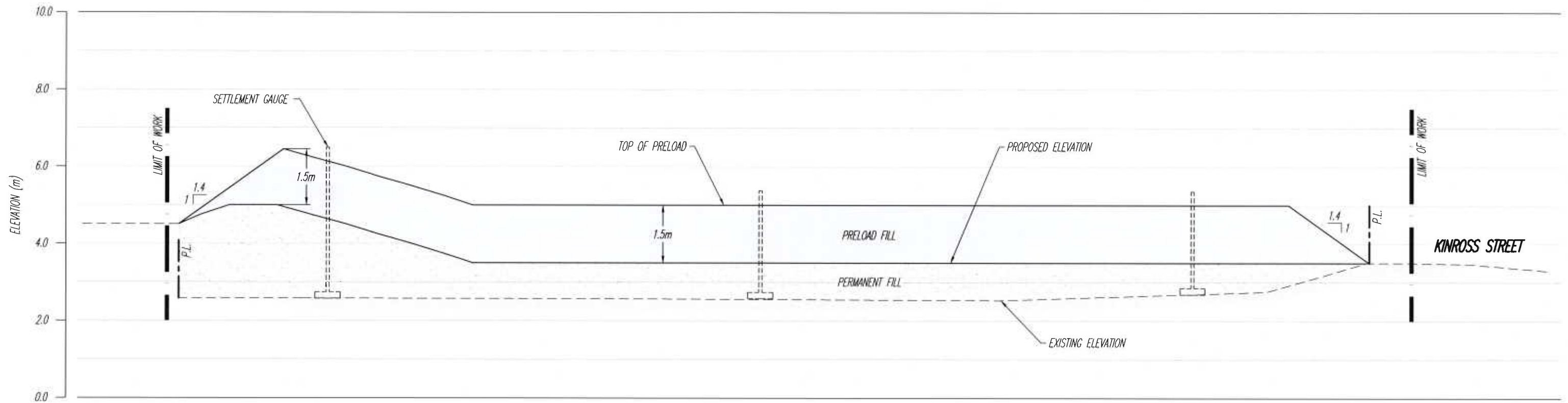
NOVEMBER 23, 2018

H.S.	M.J.K.	K.J.
AS SHOWN		

RIVER DISTRICT - EFL AREA 2 PARKS
NORTH AND MIDDLE KINROSS PARKS, VANCOUVER, BC
KINROSS PARK MIDDLE PRELOAD - SECTION A

9820-F

G-P2 (MIDDLE)



SECTION B
SCALE = 1:100

PROFESSIONAL
ENGINEER
PROVINCE OF
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M. J. KOKAN
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MAR 26 2019



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RIVER DISTRICT - EFL AREA 2 PARKS
NORTH AND MIDDLE KINROSS PARKS, VANCOUVER, BC
KINROSS PARK MIDDLE PRELOAD - SECTION B

9820-F

G-P3 (MIDDLE)

PART 1 – GENERAL

- 1.01: In these Notes, the Engineer is GeoPacific Consultants Ltd.
- 1.02: These Notes must be read in conjunction with Drawing G-P1 to G-P3.
- 1.03: The work described and shown involves site preparation, placement of permanent and preload fill.
- 1.04: Contractor shall confirm all dimensions shown on these preload drawings by reference to the Architect's, Civil and Structural Engineer's and Topographic and Legal Surveyor's plans. Any discrepancy to be reported immediately to the Geotechnical Engineer.
- 1.05: Soil conditions, site preparation and preload are described in the geotechnical report by GeoPacific Consultants Ltd.

PART 2 – MATERIALS

- 2.01: PERMANENT FILL / PRELOAD FILL – Permanent fill shall be engineered fill, defined as well-graded soil with a maximum top size of 150 mm, containing less than 25% fines (passing a 75 µm) and with the fines fraction having a plasticity index of 10 or less. The material shall contain no organics or other deleterious material. Materials outside of these criteria may be deemed acceptable upon inspection and approval by the Geotechnical Engineer. All materials to be used as permanent fill shall be reviewed by the Geotechnical Engineer prior to delivery to site.
- 2.02: PRELOAD FILL (Option) – The preload should consist of clean, river sand with a unit weight of at least 16.5 kN/m³.

PART 3 – SITE PREPARATION

- 3.01: The native soils and fills shall be sloped at MAX 1:1 (H:V). The cut slopes may need to be flatter to satisfy soil conditions encountered.
- 3.02: The Contractor shall excavate to the lines and grades shown on the drawings unless otherwise approved by the Engineer. The Engineer will inspect the excavation and approve subgrade prior to the placement of any fill soils.
- 3.03: Stripping of Unsuitable Soils, as directed by the Engineer will be replaced with Permanent fill as defined above. Unsuitable soils are defined as asphalt, concrete, construction debris, organic soil, loose / soft soils and other deleterious materials. Any grade reinstatement below the top of Permanent fill elevation must be done using Permanent fill, compacted to 98% of Standard Proctor Dry Density (ASTM D698).
- 3.04: Place the settlement gauges on the stripped subgrade and secure with sand-bags or similar. Protect all instrumentation during subsequent work. Any instrumentation damaged must be replaced at the Contractors cost.
- 3.05: Permanent fill shall be placed in loose lifts no greater than 300 mm and compacted to a minimum density of 98% of Standard Proctor Dry Density (ASTM D698) within a moisture content range of ±2% of optimum for compaction. Placement and compaction of permanent fill may only be undertaken during periods of dry weather unless materials containing less than 8% fines are used. Compaction shall be confirmed by the Geotechnical Engineer. No layer of permanent fill shall be covered with subsequent layers until density tests have been performed by the Geotechnical Engineer to confirm compaction requirements have been met.
- 3.06: The preload fill shall be placed to the elevations shown in the plan & cross sections.

PART 4 – SETTLEMENT GAUGES

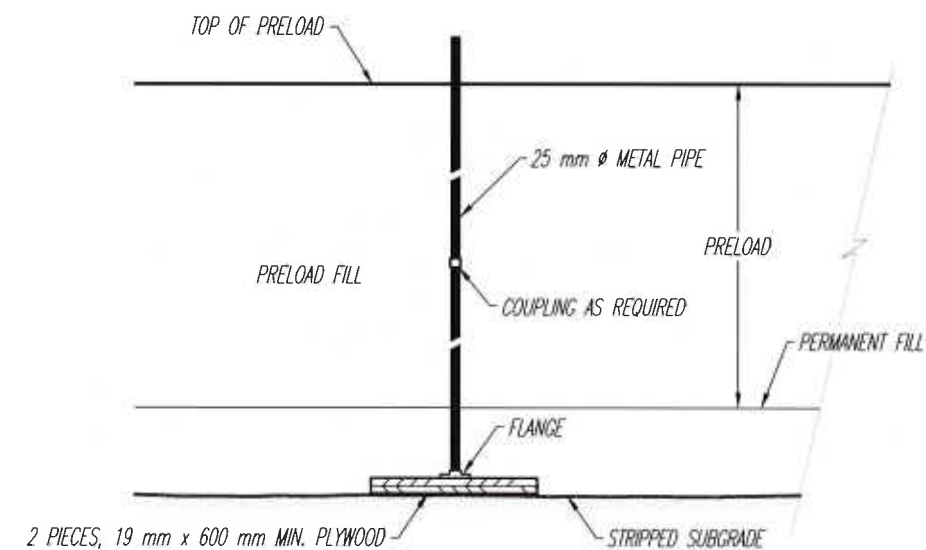
- 4.01: Settlement gauges should be placed on the stripped subgrade. A permanent benchmark should be established outside the influence of this or any other preload. The benchmark should have survey control with Municipal records.
- 4.02: Determine the elevation of the base of the settlement gauges relative to the benchmark and determine the approximate locations of the settlement gauges relative to the property lines.

- 4.03: Determine the length of the riser pipe and elevation of the top of the settlement gauges.
- 4.04: Determine the location of the crest and toe of the preload fill relative to the property lines and the elevation of the fill at the settlement gauge locations
- 4.05: The elevations of the tops of the settlement gauges should be surveyed every day that fill is placed and at weekly intervals thereafter until primary settlement is essentially complete. As a minimum, the first and last set of settlement readings must be taken by BCLS.
- 4.06: A plan showing the location and elevations of the preload as surveyed and the settlement gauge readings should be sent to the Geotechnical Engineer for review. The plan must be prepared by a BCLS and must show the position of the building with respect to the crest and toe of the preload.
- 4.07: The Geotechnical Engineer will determine the duration of the preload.
- 4.08: Monitoring Hubs should be installed on the sidewalk of Kinross Street and Riverwalk Avenue at the locations shown on the drawings. Monitoring Hubs should be surveyed every 2 weeks.

Part 5 – REVIEWS

The Contractor shall notify GeoPacific a minimum of 24 hours in advance of the commencement of the following aspects of the work:

1. Review of stripping
2. Permanent fill placement
3. Preload fill placement
4. Review of settlement data monitoring



"SURFACE" SETTLEMENT GAUGE DETAIL
SCALE = N.T.S.



MAR 26 2019

GEOPACIFIC
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NOVEMBER 23, 2018		
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AS SHOWN		

RIVER DISTRICT – EFL AREA 2 PARKS
NORTH AND MIDDLE KINROSS PARKS, VANCOUVER, BC
PRELOAD – DETAILS & NOTES

9820-F
G-P4 (MIDDLE)

MARCH 25, 2019 – Monitoring Hubs