Transport Canada Transports Canada

Navigation Protection Program
Programs Group
Transport Canada

Your file:

Our file:
2019-501394

APPROVAL

APPLICANT: Adriana da Costa
300 -10003 110 Avenue
Fort St John, BC V1J 6M7

WORK: Bridge
Diversion

SITE LOCATION: **Located at approximately 56°7'14.23"N, -121°44'7.51"W, Peace River, located on unsurveyed foreshore being part of Farrell Creek and Portions of Farrell Creek lying within Sections 19 and 20 Township 82 Range 24 West of the 6th Meridian Peace River District, legal Subdivision 8 Section 19 Township 82 Range 24 West of the 6th Meridian Peace River District Except Plan 21821 in the province of British Columbia.**

As per the application (detailed above) to the Minister of Transport, submitted pursuant to the *Canadian Navigable Waters Act*, for an approval of the work per the attached plans three (3), the Minister hereby approves the work pursuant to subsection 7(6) for the construction, of the above mentioned work, in accordance with the following terms and conditions:

1. The NPA Approval and its Terms and Conditions shall be posted at an easily accessible place at the worksite, and be provided to the contractor conducting the work.

2. In the event that the construction or the operation of the above works is terminated, it will be the proponent's responsibility to remove the works and associated equipment in its entirety including any anchors and pilings. The banks and bed of the waterway disturbed by the works are to be contoured to match the local conditions.

3. The owner shall provide information about any temporary closures to vessel traffic using the Boater Communications Protocol, and post the information on the owner website, on a page related to the project.

4. If a temporary closure to vessel traffic will last longer than 5 days, the owner must obtain prior written approval before from the Navigation Protection Program at Transport Canada, a minimum of 10 days before the temporary closure begins.

Prior to diversion of the channel

5. Prior to the diversion of the channel, warning signs must be installed and maintained at locations approximately 100 m upstream and downstream from where the diversion begins and ends. Signs shall be a minimum of 72" x 48", a white background with black lettering, the size of the text shall be at least 15cm tall with the word "WARNING" at 1.5 times the size of the message text. Signs shall be emplaced for the duration of construction of the bridge with text as outlined below.

WARNING
BRIDGE CONSTRUCTION
HAZARDS AHEAD

6. Any construction equipment anchored or left in or on the waterway overnight shall be marked with a yellow flashing light placed on the extremity closest to the centre of the navigation channel and must be visible to upstream and downstream traffic.

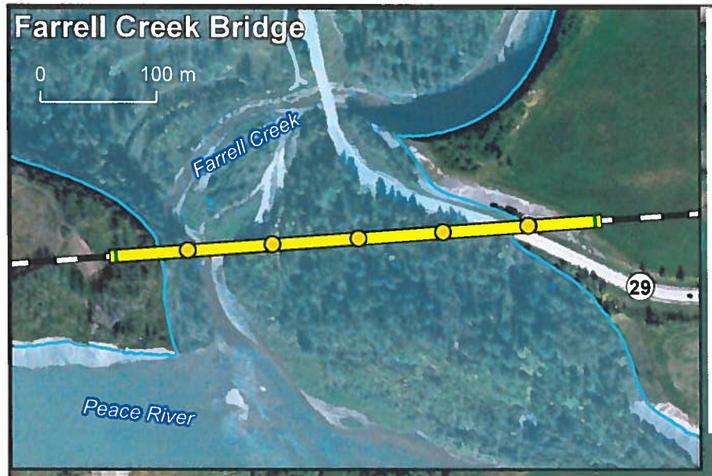
7. A safe navigation channel shall be maintained for the duration of construction. When construction activities require channel closures to ensure public safety they will be communicated 5 days in advance using the Boater Communication Protocol.

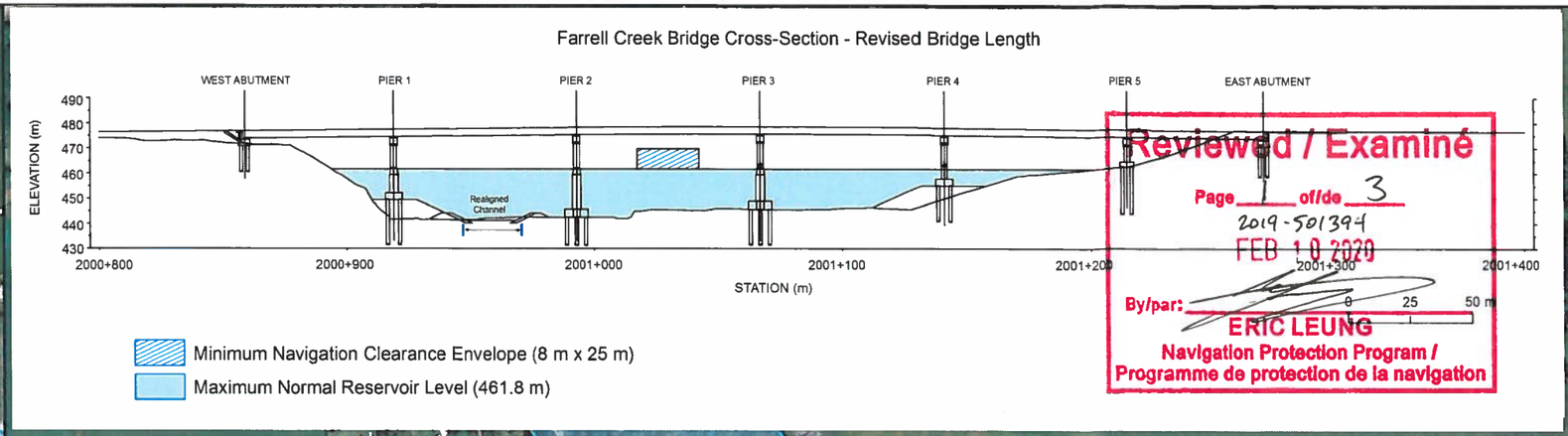
Post diversion and prior to inundation

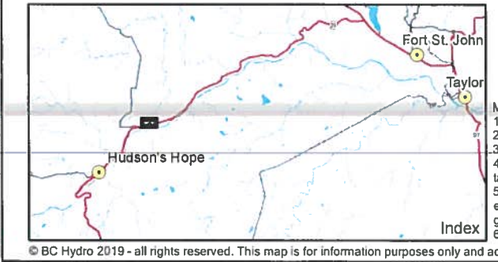
8. Upon completion of the bridge construction and prior to inundation, the five piers shall be marked with standard W-54 object marker signs on the upstream and downstream sides. Piers 1 and 5 shall be marked with two standard W-54 object marker signs, on the upstream and downstream sides, marking the extremity of the pier closest to the middle of the channel, and piers 2 to 4 shall be marked with four standard W-54 object marker signs, as illustrated by the red lines in Figure 1 below. They shall be placed 1 meter above the maximum normal reservoir level.

SIGNED on February 13, 2020 in Pacific

Eric Leung
Navigation Protection Program
Programs Group
Transport Canada
Pacific Region
For the Minister of Transport







Map Notes:
1. Datum: NAD83
2. Projection: UTM Zone 10N
3. Base Data: Province of B.C.
4. Orthophotos created from 1:40,000 photos taken Sept 10th 2007.
5. Proposed reservoir area (461.8m maximum normal elevation) from Digital Elevation Models (DEM) generated from LiDAR data acquired July/August, 2006.
6. Reservoir elevation 461.8 m does not consider realignment.

Legend

- Highway 29 Realignment - Revised Realignment (2019)
- Proposed Bridge - Revised Realignment (2019)
- Pier - Revised Realignment (2019)
- Abutment - Revised Realignment (2019)
- Maximum Normal Reservoir Level (461.8 m)
- Existing Highway 29

1:7,000 0 150 300 m

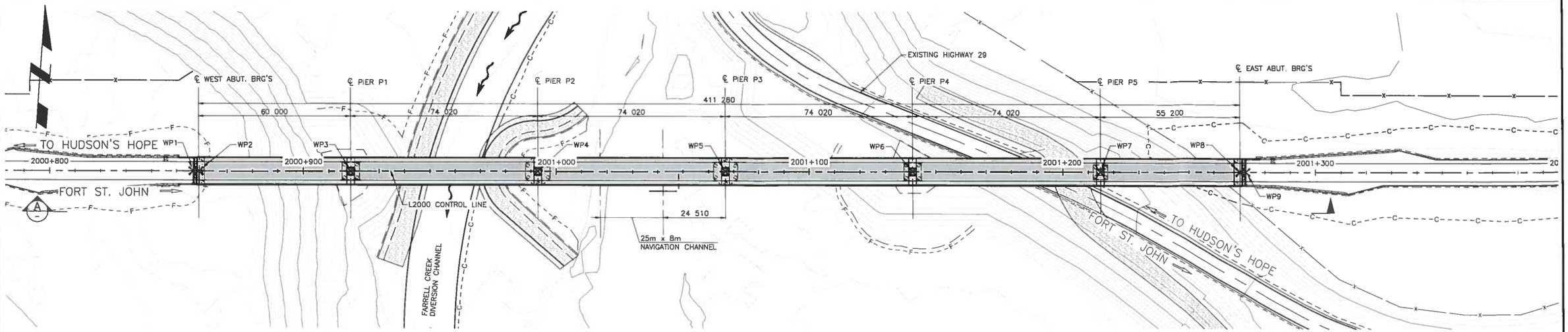
BC Hydro

Figure 3: General arrangement of Highway 29 realignment segment at Farrell Creek, per proposed modified design (proposed Figure 4.32 Rev 2)

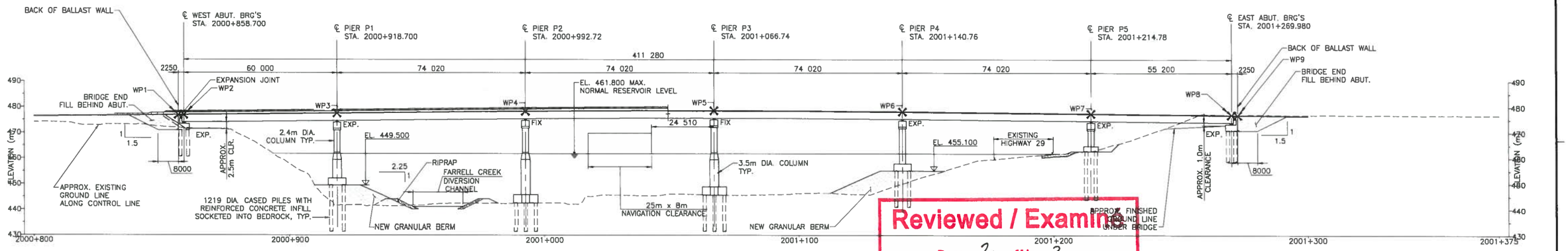
Date	Nov 6, 2019	DWG NO	1016-C14-B6158-16	R 1

Construction of the Site C Clean Energy Project is subject to required regulatory and permitting approvals.

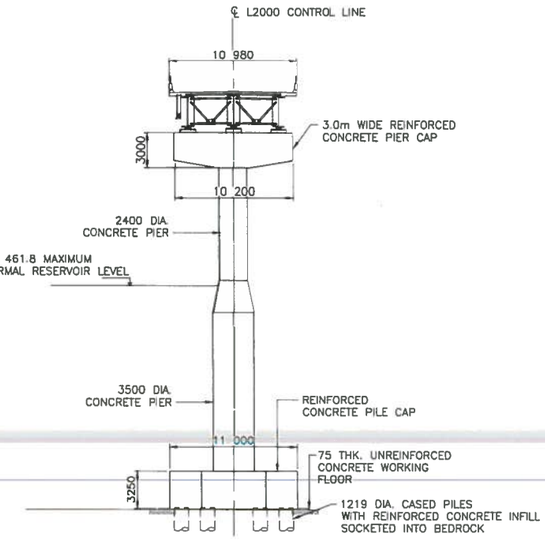
Path: X:\Arc\GIS\Projects\Regulatory\EAC_Amend\Farrell\Creek\Farrell\Creek_HwyRealign_EAC_1016_C14_B6158-16.mxd



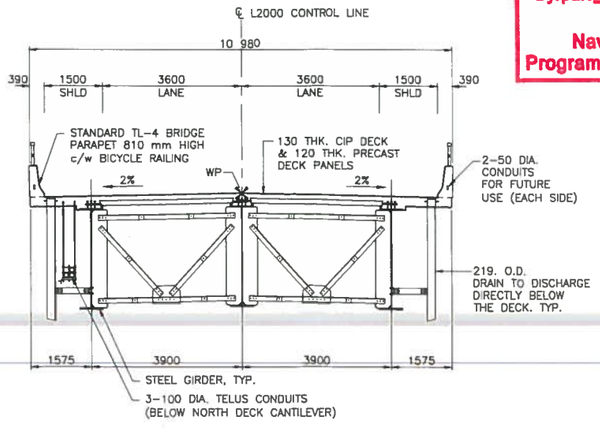
PLAN
SCALE 1:750



SECTION (A)
SCALE 1:750



PIER P3 ELEVATION VIEW
SCALE 1:250



TYPICAL SECTION
SCALE 1:75

WORKPOINTS			
WORKPOINT	NORTHING	EASTING	ELEVATION (m)
WP1	220215.280	578534.050	476.964
WP2	220215.445	578536.293	476.987
WP3	220219.834	578596.133	477.587
WP4	220225.257	578669.954	478.323
WP5	220230.663	578743.776	478.622
WP6	220236.078	578817.598	478.192
WP7	220241.493	578891.419	477.452
WP8	220245.531	578946.472	476.900
WP9	220245.695	578948.716	476.878

PRELIMINARY
NOT ISSUED FOR CONSTRUCTION

Rev	Date	Description	Init
A	19/10/09	ISSUED FOR EAC REVIEW	JD

REVISIONS

BRITISH COLUMBIA
Ministry of Transportation & Infrastructure
Northern Region

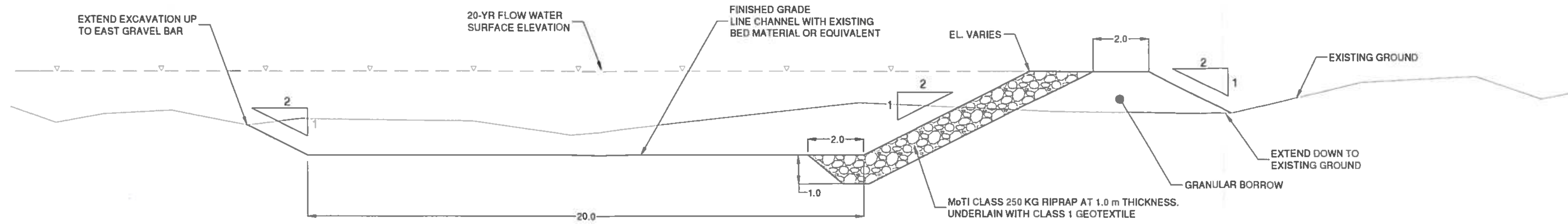
NORTHERN REGION
HIGHWAY NO. 29
FARRELL CREEK BRIDGE NO. 02184
GENERAL ARRANGEMENT

PREPARED UNDER THE DIRECTION OF
GURPREET SOHAL
ENGINEER OF RECORD
DATE 19/10/28

DESIGNED MF DATE 19/10/28
CHECKED GS DATE 19/10/28
DRAWN JCF DATE 19/10/28
SCALE
NEGATIVE No.

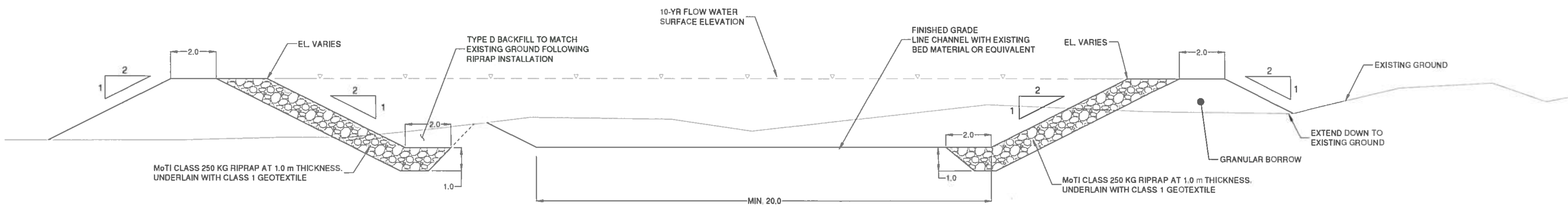
FILE No. | PROJECT No. 37501-0000 | REG. 3 | DRAWING No. 2184-SK-01 | A

CANCEL PRINTS BEARING PREVIOUS LETTER



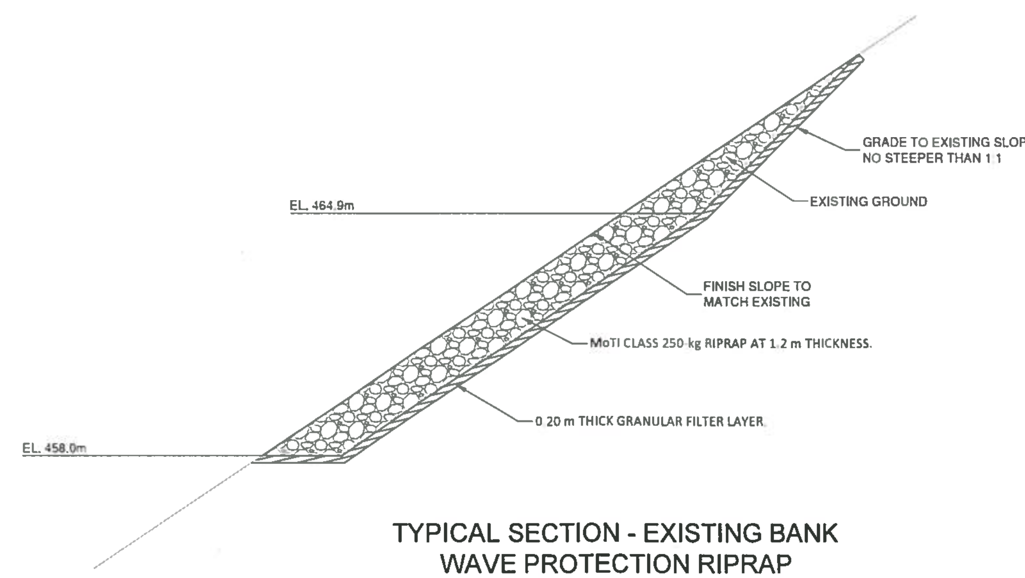
TYPICAL SECTION - CREEK CHANNEL

STA. 2020+003.199 TO STA. 2020+146.700



TYPICAL SECTION - CREEK CHANNEL

STA. 2020+146.700 TO STA. 2020+187.900



TYPICAL SECTION - EXISTING BANK WAVE PROTECTION RIPRAP

STA. 2001+150.000 TO STA. 2001+270.000

Reviewed / Examiné
Page 3 of/de 3
2019-501394
FEB 10 2020
By/par: ERIC LEUNG
Navigation Protection Program / Programme de protection de la navigation

90% DETAILED DESIGN - OCT 28, 2019

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BRITISH COLUMBIA
MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE
HIGHWAY ENGINEERING
NORTHERN REGION

SCALE 0 1 1:100 5m
CAD FILENAME R3-338-300.DWG
DATE 2019-11-04

TYPICAL SECTIONS AND DETAILS
HIGHWAY NO. 29
FARRELL CREEK

REV	DATE	REVISIONS	SIGNATURE
B	19/10/28	ISSUED FOR 90% SUBMISSION	VT
A	19/09/11	ISSUED FOR 50% SUBMISSION	VT

SENIOR DESIGNER
DATE 2019-10-28

DESIGNED F. DU / E.YANG DATE 2019-10-28
QUALITY CONTROL F. DU / E.YANG DATE 2019-10-28
QUALITY ASSURANCE V. TABERNERO DATE 2019-10-28
DRAWN S. CHIANG DATE 2019-10-28

FILE NUMBER	PROJECT NUMBER	REG	DRAWING NUMBER	REV
17-0473	37501-0000	NR	R3-338-305	B