



# FRASER VALLEY HIGHWAY 1 CORRIDOR IMPROVEMENT PROGRAM HIGHWAY 1 - MAINLINE WEST **DRAWING PACKAGE 1** HIGHWAY 1 SIX LANING - LEFEUVRE ROAD TO ROSS ROAD SUGGESTED CONSTRUCTION STAGING I. PILKINGTON, CHIEF ENGINEER

PROJECT No. 13253-1001

# BRITISH

COLIMBIA

# Ministry of Transportation and Infrastructure

FOR REFERENCE ONLY

R1-1105-1800

# SUGGESTED CONSTRUCTION STAGING REFERENCE PACKAGE

**HIGHWAY 1 - MAINLINE WEST** 

| R1-1105-1810 | NATHAN CREEK TRIBUTARY        |
|--------------|-------------------------------|
| R1-1105-1811 | NATHAN CREEK TRIBUTARY        |
| R1-1105-1812 | NATHAN CREEK MIDDLE TRIBUTARY |
| R1-1105-1813 | NATHAN CREEK MIDDLE TRIBUTARY |
| R1-1105-1814 | CULVERT 40                    |
| R1-1105-1815 | CULVERT 41                    |
| R1-1105-1816 | SALMON RIVER                  |
| R1-1105-1820 | HIGHWAY 1 AT BRADNER OVERPASS |
| R1-1105-1821 | HIGHWAY 1 AT BRADNER OVERPASS |
| R1-1105-1822 | HIGHWAY 1 AT BRADNER OVERPASS |
| R1-1105-1823 | HIGHWAY 1 AT BRADNER OVERPASS |
| R1-1105-1824 | HIGHWAY 1 AT BRADNER OVERPASS |
| R1-1105-1825 | HIGHWAY 1 AT BRADNER OVERPASS |
| R1-1105-1826 | HIGHWAY 1 AT BRADNER OVERPASS |
| R1-1105-1827 | HIGHWAY 1 AT BRADNER OVERPASS |
| R1-1105-1828 | HIGHWAY 1 AT BRADNER OVERPASS |
| R1-1105-1830 | SURFACING                     |
| R1-1105-1831 | SURFACING                     |
| R1-1105-1832 | SURFACING                     |

# NOTE TO CONTRACTOR

CONCEPT.

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|          | SUITE 201, 8506 - 200 STREET<br>LANGLEY, BRITISH COLUMBIA, V2Y 0M1<br>PH : 604.371.0091 FAX : 604.371.0098 |                                     | BRITISH<br>COLUMBIA<br>MINISTRY OF TRANSPORTATION<br>AND INFRASTRUCTURE<br>SOUTH COAST REGION<br>HIGHWAY DESIGN AND GEOMATICS ENGINEERING   |  |  |  |  |
|----------|--|-------------------------------------|---|--|--|--|--|
| SCALE    | CAD FILENAME <u>R1-1</u><br>FILE NUMBER <u>PLOT DATE</u>   | 105-1801.DWG<br>33036<br>2024-02-27 | SUGGESTED CONSTRUCTION STAGING  |  |  |  |  |
| REV DATE | REVISIONS  | NAME                                | DRAWING INDEX   |  |  |  |  |
|          |  |                                     | DESIGNEDA.GJERLAUGDATE2024-02-29QUALITY CONTROLAS/CC/SCDATE2024-02-29QUALITY ASSURANCEG.NGIENGDATE2024-02-29DRAWND.SWANSONDATE2024-02-29PROJECT NUMBERREGDRAWING NUMBERREV13253-10011R1-1105-1801 |  |  |  |  |

# THE FOLLOWING DRAWINGS DO NOT REFLECT A PRESCRIBED STAGING SCENARIO. THE FOLLOWING PACKAGE IS AN EXAMPLE ONLY. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY FOR DEVELOPING ITS OWN STAGING





# LEGEND

STAGE 1 PROPOSED WORK ZONE

- PROPOSED PUSH PAD
- PROPOSED ACCESS ROAD

STAGE 2 PROPOSED WORK ZONE

## NOTES

- DESIGN SPEED 80km/h

STAGE 1:

- 1. CONSTRUCT ACCESS ROAD TO WORK AREAS.
- 2. INSTALL CULVERTS TRENCHLESS THROUGH THE ROADWAY LANE
- MANHOLE TO BE INSTALLED AFTER INSTALLATION OF STAGE 1 SV
  INSTALL TEMPORARY DRAINAGE AS REQUIRED.

|              |               | о г | 1.500 |     |        |             |   |  |
|--------------|---------------|-----|-------|-----|--------|-------------|---|--|
| EQ           | PROFILE SCALE |     | 1:500 | 25m |        | <u> 15L</u> | SUITE 201, 850<br>LANGLEY, BRIT<br>PH : 604.371.0 | 06 - 200 STREET<br>'ISH COLUMBIA, V2Y 0M<br>091 FAX : 604.371.0098 |
| ES.<br>SWSP. |               |     |       | s   | CALE   | 20 1:2000   | 100m  | CAD FILENAME<br>FILE NUMBEF<br>PLOT DATE                           |
|              |               |     |       | REV | / DATE |             | REVISIO   | DNS  |
|              |               |     |       |     |        |             |   |  |
|              |               |     |       |     |        |             |   |  |
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|              |               |     |       |     |        |             |   |  |
|              |               |     |       | 1   |        |             |   |  |

| 1                   |  | BRITISH<br>COLUMBIA<br>BRITISH<br>COLUMBIA<br>MINISTRY OF TRANSPORTATION<br>AND INFRASTRUCTURE<br>SOUTH COAST REGION<br>HIGHWAY DESIGN AND GEOMATICS ENGINEERING |  |             |  |  |  |  |
|---------------------|--|--|--|-------------|--|--|--|--|
| E <u>CONST</u><br>R | TRAF-C14-15.DWG<br>33036<br>2024-02-16 | SUGGESTED C  |  | TIO<br>UTAI | N STAGING  | Ì                                      |  |  |
|                     | NAME                                   | STAGE 1  |  |             |  |  |  |  |
|                     |  |  | DESIGNED    A.GJERLAUG    DA      QUALITY CONTROL    AS/CC/SC    DA      QUALITY ASSURANCE    G.NGIENG    DA |             |  | 2024-02-29<br>2024-02-29<br>2024-02-29 |  |  |
|                     |  |  | DRAWN _<br>PROJECT NUMBER<br>13253-1001  | REG<br>1    | J.CAPEWELL DATE<br>DRAWING NUMBER<br>R1-1105-181 | 0                                      |  |  |





|  | PROFILE SCALE | 0 5 | 1:500 | 25m |        | <u>ISL</u> | SUITE 201, 8506 - :<br>LANGLEY, BRITISH<br>PH : 604.371.0091 | 200 STREET<br>COLUMBIA, V2Y 0M1<br>FAX : 604.371.0098 |
|--|---------------|-----|-------|-----|--------|------------|--|---|
| HAN CREEK TRIBUTARY TO THE NORTH<br>NELEVATIONS.<br>1 SWSP |               |     |       | S   | CALE   | 20 1:2000  | 100m   | CAD FILENAME<br>FILE NUMBER<br>PLOT DATE              |
|  |               |     |       | REV | / DATE |            | REVISION   | S   |
|  |               |     |       |     |        |            |  |   |

| BRITISH<br>COLUMBIA<br>BRITISH<br>COLUMBIA<br>BRITISH<br>COLUMBIA<br>BRITISH<br>AND INFRASTRUCTURE<br>SOUTH COAST REGION<br>HIGHWAY DESIGN AND GEOMATICS ENGINEERING |   |  |  |  |  |  |
|--|---|--|--|--|--|--|
| E_CONSTTRAF-C14-15.DWG<br>R33036<br>E2024-02-16  | SUGGESTED CONSTRUCTION STAGING<br>NATHAN CREEK TRIBUTARY  |  |  |  |  |  |
| NAME   | STAGE 2   |  |  |  |  |  |
|  | DESIGNEDA.GJERLAUGDATE2024-02-29QUALITY CONTROLAS/CC/SCDATE2024-02-29QUALITY ASSURANCEG.NGIENGDATE2024-02-29DRAWNJ.CAPEWELLDATE2024-02-29 |  |  |  |  |  |
|  | PROJECT NUMBER  REG  DRAWING NUMBER  REV    13253-1001  1  R1-1105-1811  1  |  |  |  |  |  |





| 1                         |   | BRITISH<br>COLUMBIA<br>BRITISH<br>COLUMBIA<br>MINISTRY OF TRANSPORTATION<br>AND INFRASTRUCTURE<br>SOUTH COAST REGION<br>HIGHWAY DESIGN AND GEOMATICS ENGINEERING |                                 |  |                |   |                                  |  |  |
|---------------------------|---|--|---------------------------------|--|----------------|---|----------------------------------|--|--|
| E <u>CONS</u> T<br>R<br>E | TTRAF-C14-15.DWG<br>33036<br>2024-02-16 | SUGGESTE<br>NATH/  | ED CONSTRUC                     | TIO<br>TRIB  | N STAGINO      | 6 |                                  |  |  |
|                           | NAME                                    | STAGE 2  |                                 |  |                |   |                                  |  |  |
|                           |   |  | DESIGNED _<br>QUALITY CONTROL _ | DESIGNED <u>A.GJERLAUG</u> [<br>JALITY CONTROL <u>AS/CC/SC</u> [ |                |   | - <u>02-29</u><br>- <u>02-29</u> |  |  |
|                           |   |  | QUALITY ASSURANCE _ DRAWN _     | ASSURANCE <u>G.NGIE</u><br>DRAWN <u>J.CAPEW</u>                  |                |   | <u>-02-29</u><br>-02-29          |  |  |
|                           |   |  | PROJECT NUMBER<br>13253-1001    | REG<br>1   | DRAWING NUMBER | 3 | REV                              |  |  |
|                           |   |  |                                 |  |                |   |                                  |  |  |





| PROFILE SCALE   |     |      | ISL       | SUITE 201, 850<br>LANGLEY, BRITI<br>PH : 604,371,00 | 6 - 200 STREET<br>SH COLUMBIA, V2Y 0M1<br>911 FAX : 604.371.0098 |
|---|-----|------|-----------|---|--|
| D 80km/h<br>DRKS SHALL TAKE PLACE BETWEEN AUGUST 1, 2025 AND SEPTEMBER 15, 2025.<br>GTOR SHALL MAINTAIN EXISTING DRAINAGE UNTIL EXISTING ENV(IDONMENTAL DESTRICTIONS) |     |      |           |   |  |
| GTOR SHALL MAINTAIN EXISTING DRAINAGE UNTIL EXISTING ENVIRONMENTAL RESTRICTIONS   | sc  |      | 20 1:2000 | 100m  | CAD FILENAME<br>FILE NUMBER                                      |
| AINAGE CAPACITIES SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION   |     |      |           |   | PLOT DATE  |
| TAL RESTRICTIONS AND GUIDLINES SHALL BE FOLLOWED  | REV | DATE |           | REVISIO   | NS   |
| ACCESS ROAD TO WORK AREA.<br>/ERTS TRENCHLESS THROUGH THE ROADWAY LANES.  |     |      |           |   |  |
|   |     |      |           |   |  |
|   |     |      |           |   |  |
|   |     |      |           |   |  |
|   |     |      |           |   |  |





| IGN SPEED IS 80km/h<br>JR DESIGN SPEED IS 50km/h   | PROFILE SCALE  |   | :500 25m |     |          |    | ISL    | SUITE 201, 8506<br>LANGLEY, BRITI<br>PH : 604.371.00 | 5 - 200 STREET<br>SH COLUMBIA, V2Y 0M1<br>91 FAX : 604.371.0098 |
|--|--|---|----------|-----|----------|----|--------|--|---|
| :<br>I EXISTING EB & WB BRIDGES<br>D AREA IN WEST MEDIAN. PRELOAD AREA TO RI<br>TRAFFIC SIGNALS ON THE BRADNER ROAD TO   | EMAIN IN PLACE FOF<br>MAINTAIN A SINGLE  | R 1 YEAR<br>LANE  |          | SC  | 0<br>ALE | 20 | 1:2000 | 100m   | CAD FILENAME _<br>FILE NUMBER _<br>PLOT DATE _                  |
| IC.<br>ON BRADNER ROAD TO PROVIDE ROOM FOR TH<br>OLLOWED BY THE PARTIAL CONSTRUCTION OF T<br>ORARY SHEETPILE COFFERDAM FOR THE GROU<br>ION OF THE WEST ABUTMENT. FOR THE APPRO<br>RUCTURAL DRAWINGS. | E INSTALLATION OF<br>THE WEST ABUTMEN<br>ND IMPROVEMENT V<br>XIMATE EXTENTS OF | THE TEMPORAR'<br>T.<br>VORKS FOR THE<br>- THE SHEETPILE | Y        | REV | DATE     |    |        | REVISIO  | N S   |
|  |  |   |          |     |          |    |        |  |   |



![](_page_11_Figure_0.jpeg)

| R DESIGN SPEED IS 80km/h<br>DETOUR DESIGN SPEED IS 50km/h<br>AGING:  | PROFILE SCALE   |  |    |       |     | <u> 151</u> | SUITE 201, 850<br>LANGLEY, BRIT<br>PH : 604.371.0 | 06 - 200 STREET<br>FISH COLUMBIA, V2<br>1091 FAX : 604.371. |
|--|---|--|----|-------|-----|-------------|---|---|
| 1 EB TRAFFIC ONTO THE PARTIALLY CON<br>ON EXISTING WB BRIDGE.<br>PORARY TRAFFIC SIGNALS ON THE BRADN                           | STRUCTED PROPOSED WB BF<br>ER ROAD TO MAINTAIN A SING | RIDGE. MAINTAIN THE                    | :  | SCALE | 0 2 | 0 1:200     | 0 100m  | CAD FILEN<br>FILE NUN<br>PLOT I                             |
| B LANE ON BRADNER ROAD TO PROVIDE F  | ROOM FOR THE INSTALLATION                             | OF THE SHEETPILE                       | RE | EV D. | ATE |             | REVISIO   | O N S   |
| E EXISTING EB BRIDGE.<br>A TEMPORARY SHEETPILE COFFERDAM FO<br>STRUCTION OF THE WEST ABUTMENT. FO<br>B TO STRUCTURAL DRAWINGS. | OR THE GROUND IMPROVEME<br>R THE APPROXIMATE EXTENTS  | NT WORKS FOR THE<br>S OF THE SHEETPILE |    |       |     |             |   |   |

![](_page_12_Figure_0.jpeg)

![](_page_12_Figure_1.jpeg)

![](_page_13_Figure_0.jpeg)

![](_page_14_Figure_0.jpeg)

| IGN SPEED IS 80km/h<br>JR DESIGN SPEED IS 50km/h  | PROFILE SCALE         | 05       | 1:500 | 25m      |  |      |    | ISL    | SUITE 201, 850<br>LANGLEY, BRIT<br>PH : 604.371.0 | 16 - 200 STREET<br>ISH COLUMBIA, V2Y 0M1<br>091 FAX : 604.371.0098 |
|---|-----------------------|----------|-------|----------|--|------|----|--------|---|--|
| AFFIC AS PER STAGE 3A.<br>7 TRAFFIC SIGNALS ON THE BRADNER ROAD TO MAINTAIN A SINGLE LANE<br>FIC.<br>8 ON BRADNER ROAD TO PROVIDE ROOM FOR THE INSTALLATION OF THE SHEETPILE<br>OUND IMPROVEMENT FOLLOWED BY THE EAST ABUTMENT. |                       |          |       |          |  | LE E | 20 | 1:2000 | 100m  | CAD FILENAME _<br>FILE NUMBER _<br>PLOT DATE _                     |
|   |                       |          |       |          |  | DATE |    |        | REVISIO   | VISIONS  |
| ORARY SHEETPILE COFFERDAM FOR THE APPROXIMA   | HE GROUND IMPROVEMENT | WORKS FO | R THE |          |  |      |    |        |   |  |
| INGS.   |                       |          |       | F        |  |      |    |        |   |  |
| DGE.  |                       |          |       | $\vdash$ |  |      |    |        |   |  |
|   |                       |          |       | F        |  |      |    |        |   |  |
|   |                       |          |       |          |  |      |    |        |   |  |

![](_page_15_Figure_0.jpeg)

![](_page_16_Figure_0.jpeg)

|     |      | <u> ISL</u> | SUITE 201, 850<br>LANGLEY, BRIT<br>PH : 604.371.0 | 06 - 200 STREET<br>ISH COLUMBIA, V2Y 0M1<br>091 FAX : 604.371.0098 |
|-----|------|-------------|---|--|
|     | 0    | 20 1:2000   | 100m  | CAD FILENAME   |
| SC  | ALE  |             |   | FILE NUMBER  |
|     |      |             |   | PLOT DATE  |
| REV | DATE |             | REVISIO   | DNS  |
|     |      |             |   |  |
|     |      |             |   |  |
|     |      |             |   |  |
|     |      |             |   |  |
|     |      |             |   |  |
|     |      |             |   |  |
|     |      |             |   |  |
|     |      |             |   |  |

![](_page_17_Figure_0.jpeg)

![](_page_17_Figure_2.jpeg)

| c===== |
|--------|

![](_page_18_Figure_0.jpeg)

| JRE TO TOP OF SGSB.<br>MINUS TOP LIFT ASPHALT. |     |            | <u> ISL</u> | SUITE 201, 8506 - 200 ST<br>LANGLEY, BRITISH COLU<br>PH : 604.371.0091 FAX : | TREET<br>MBIA, V2Y 0M1<br>: 604.371.0098 |
|--|-----|------------|-------------|--|--|
|  | SC  | ALE: AS SH | OWN         | CAD FILENAME<br>FILE NUMBER  | CONSTTRAF ML                             |
| BE COMPLETED AS REQUIRED                       |     |            |             | PLOT DATE  |  |
| NEW MEDIAN LANES                               | REV | DATE       |             | REVISIONS  |  |
|  |     |            |             |  |  |
|  |     |            |             |  |  |
| G OR NEW GP SLOW LANES                         |     |            |             |  |  |
|  |     |            |             |  |  |
|  |     |            |             |  |  |
|  |     |            |             |  |  |
|  |     |            |             |  |  |
|  |     |            |             |  |  |

![](_page_19_Figure_0.jpeg)

|  | 115<br>115<br>110<br>110                      | 2.70<br>SHD  | ST<br>   |
|--|---|--|--|
| IGHT TIME INSIDE LANE CLOSURE<br>DAY TIME TRAFFIC ON EX. LANES   | 105 105                                       | EXISTING GROU  | FINISHED GROUND  |
| 2.70 3.65 - 3.65<br>SHD WB LANE WB LANE - 0.65 3.65 - 3.65<br>SHD  | 2 1:250 -43<br>2 1:250 12m<br>STAGE 4<br>3.65 |  | -23 -20 -13 -10 -3   |
| FINISHED GROUND  |   | NIGHT TIME LA<br>LANE OF TRAFFIC<br>DAY TIME TRAFFI<br>HIGHV | INE CLOSURE, ONE<br>ON NEW MEDIAN LANE<br>FIC ON NEW OR EX.<br>WAY LANES                                 |
| -30 -25 -20 -15 -10<br>DRK ON THE ROADWAY<br>PROXIMATE BASED ON SURVEY<br>N CONJUNCTION WITH MAINLINE WIDENING<br>ATED IN R1-1105-151 PVMT STRUCT PLAN | -5 0 5 1                                      | 0 15 20  | 25 30 35 40 45   |
| STRUCTURE TO TOP OF SGSB.<br>ENT   |   |  | SUITE 201, 8506 - 200 STREET<br>LANGLEY, BRITISH COLUMBIA, V2Y 01<br>PH : 604.371.0091 FAX : 604.371.009 |
| CHING TO BE COMPLETED AS REQUIRED  |   | SCALE: A   | CAD FILENAME <u>CONSTTR</u><br>S SHOWN FILE NUMBER <u>PLOT DATE</u><br>R E V I S I O N S                 |
| ON EXISTING HIGHWAY<br>FFIC ON NEW MEDIAN LANES<br>EXISTING OR NEW GP SLOW LANES   |   |  |  |

![](_page_20_Figure_0.jpeg)