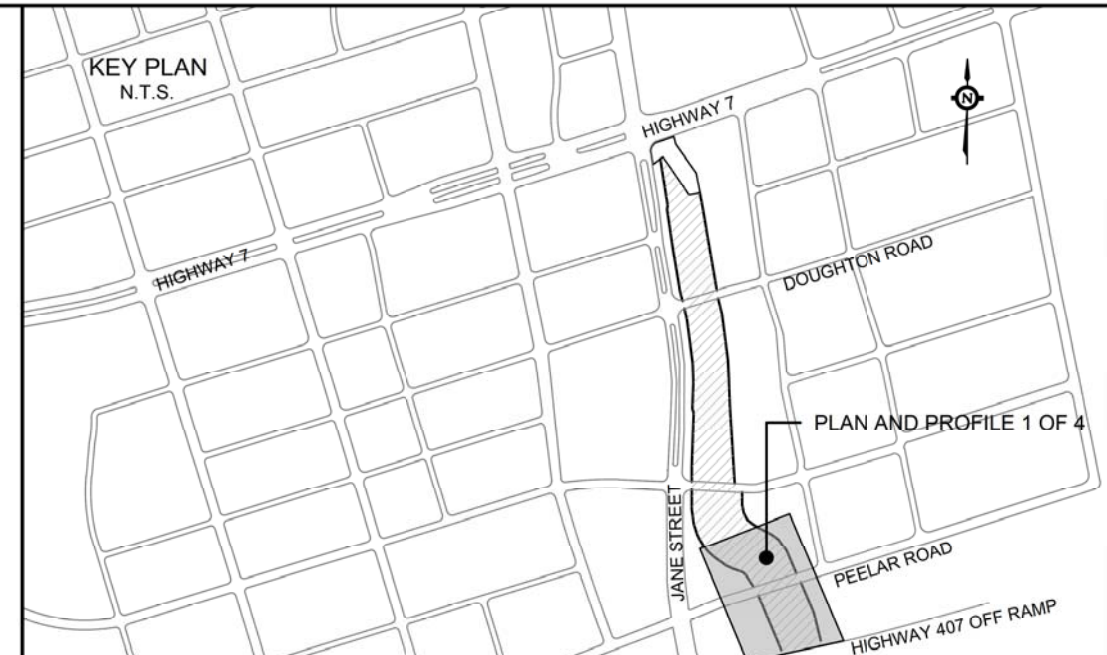
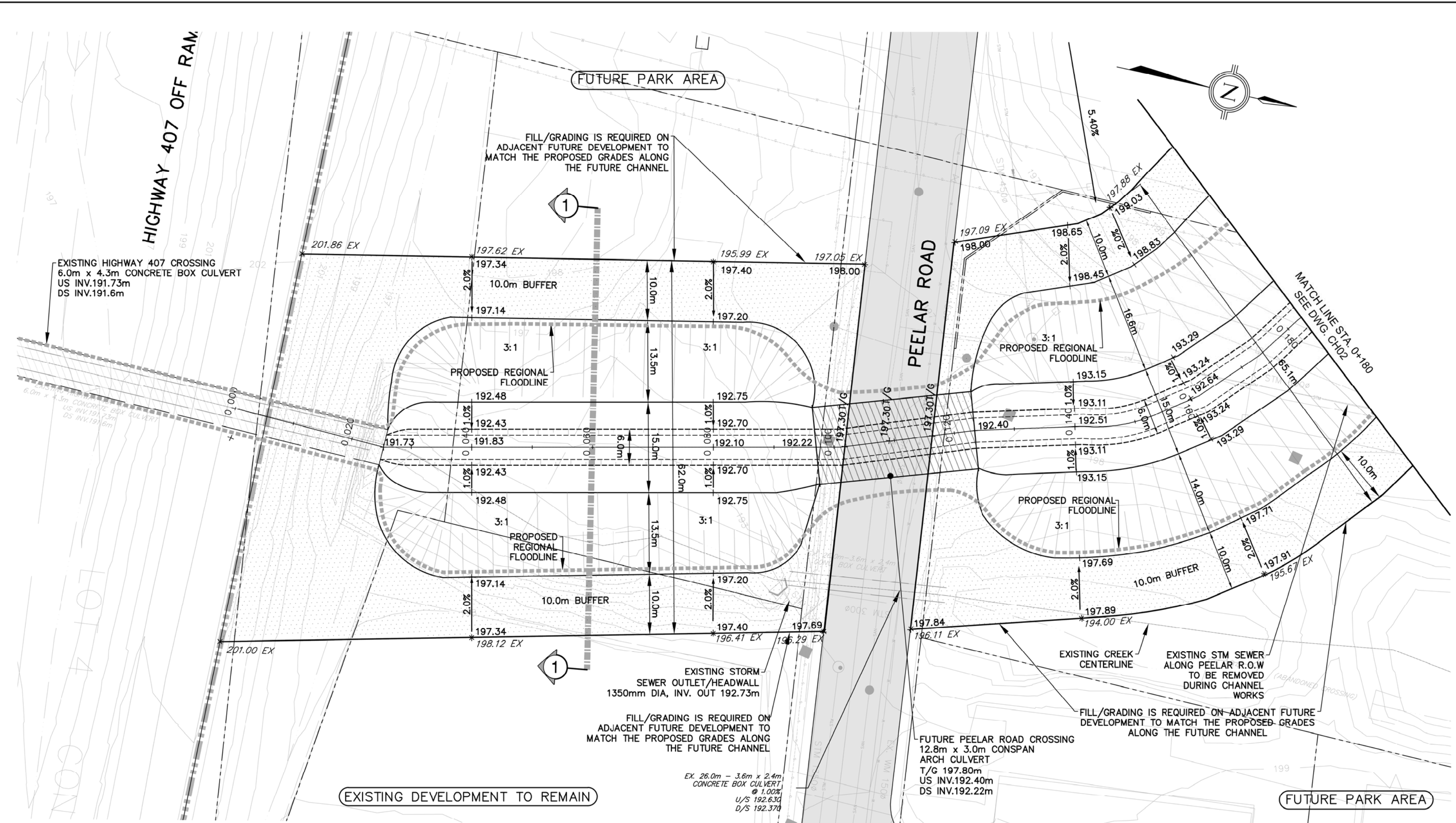


DRAWINGS

File: G:\Projects\2017\12\12 - Vaughan VMC Black Creek Renewal Class EA - Drawings\Fig 6 ESR Preliminary Design & Shading\1212-CH1-CP06.dwg, Layout: CH1, Date: Jul 19, 2018 - 1:25pm, Ed: By: jpathmanagan



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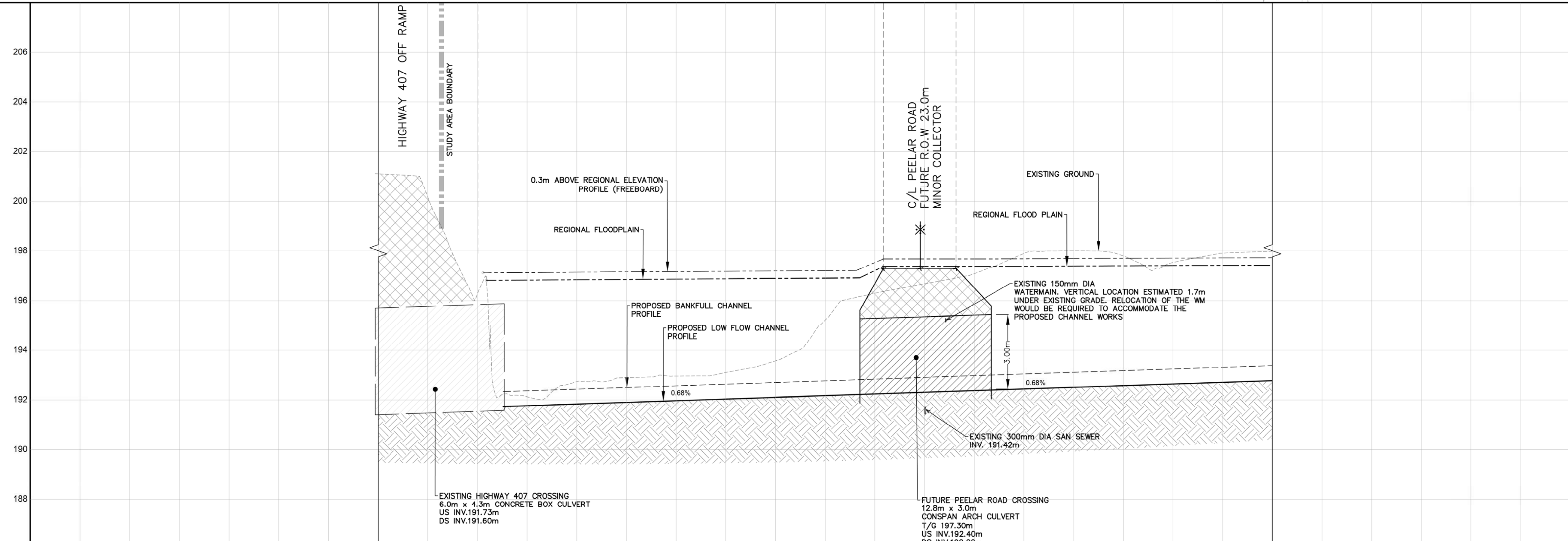
NOTE:
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BENCH MARK:
 (Symbol for benchmark)

ELEVATION:
 (Symbol for elevation)

LEGEND

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| (Symbol) | STUDY AREA BOUNDARY |
| (Symbol) | EXISTING CREEK |
| (Symbol) | PROPOSED ELEVATION |
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| (Symbol) | PROPOSED REGIONAL FLOODLINE |
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| (Symbol) | EXISTING WATERMAIN |
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| (Symbol) | EXISTING CATCHBASIN |
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| (Symbol) | EXISTING STM PIPES |
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| 1 | PRELIMINARY DESIGN | T.D./E.T. | OCT 2017 |
| NO. | DESCRIPTION | BY | DATE |

TMIG
 The Municipal Infrastructure Group Ltd
 5800 Dufferin Street, Suite 200, Vaughan, ON L4K 0C5
 p: 905.738.5700, f: 905.738.0065

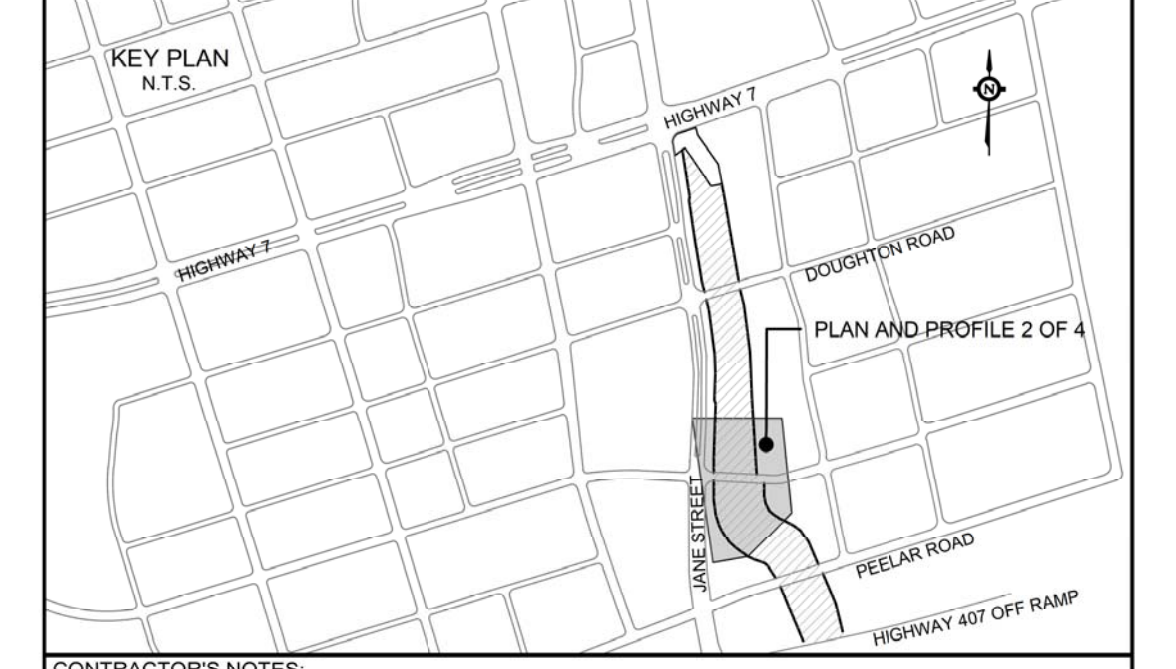
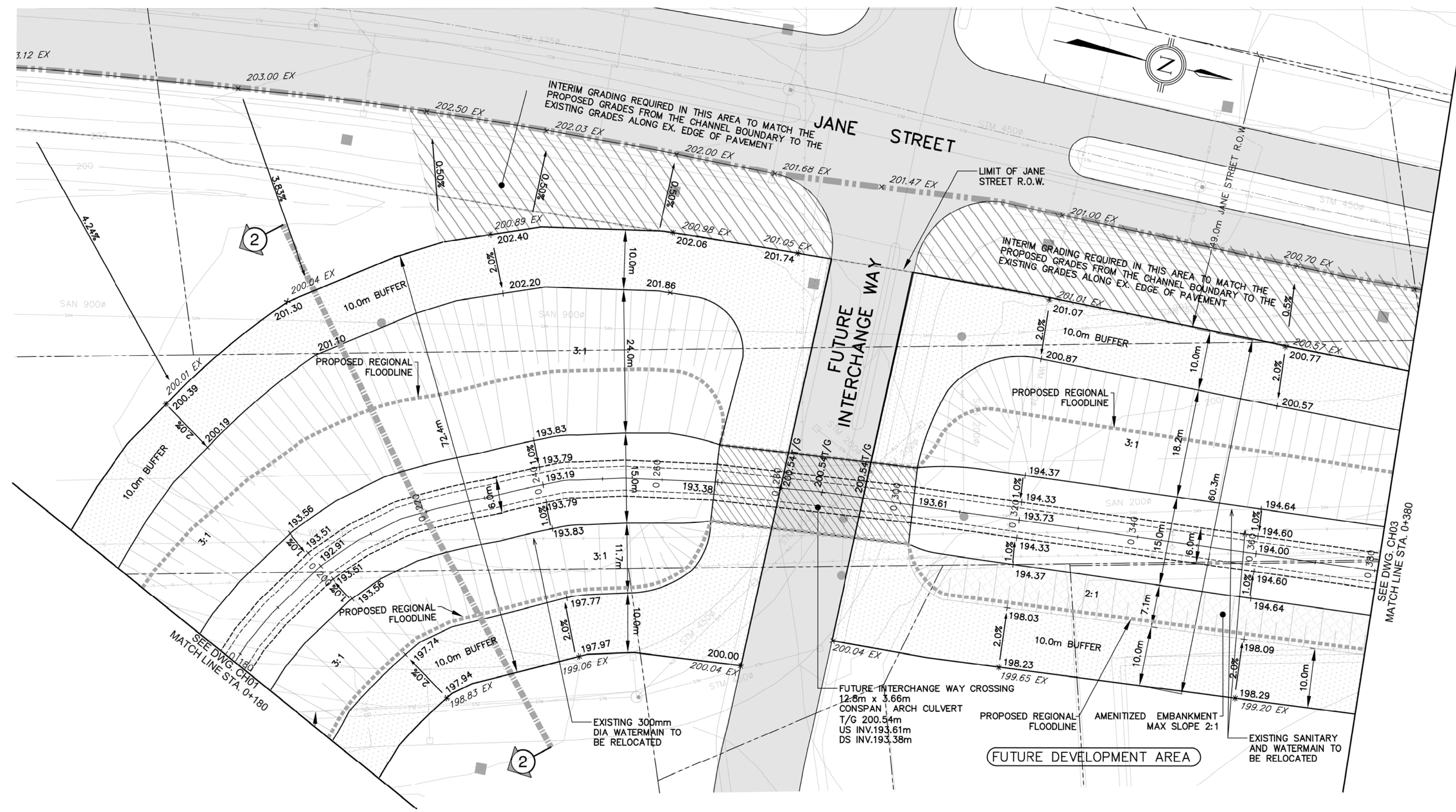
ENGINEER'S STAMP:
 APPROVED AS TO FORM IN RELIANCE UPON THE PROFESSIONAL SKILL AND ABILITY OF THE CONSULTING ENGINEERS AS TO DESIGN AND SPECIFICATIONS.
 JACK GRAZIOSI, P.Eng., M.Eng., DIRECTOR OF ENGINEERING SERVICES
 DATE

VAUGHAN VMC BLACK CREEK RENEWAL CLASS EA
 PRELIMINARY CHANNEL DESIGN
 PLAN AND PROFILE 1 OF 4

VAUGHAN
 Engineering Services

| | | |
|---|-------------------|-------------------|
| DESIGNED BY: T.D. | DATE: AUGUST 2018 | CHECKED BY: E.T. |
| DRAWN BY: M.M. | SURVEYED BY: | APPROVED BY: S.H. |
| SCALE: HORIZONTAL: 1:500, VERTICAL: 1:100 | PROJ. No. 12122 | DWG. No. 1 of 7 |

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| LOW FLOW ELEVATION | | 201.86 EX | 197.62 EX | 197.34 | 197.40 | 197.20 | 197.09 EX | 198.00 | 197.84 | 197.89 | 194.00 EX | 197.89 | 197.71 | 197.91 | 195.67 EX | |
| CENTERLINE CHAINAGE | | 0+000 | 0+020 | 0+040 | 0+060 | 0+080 | 0+100 | 0+120 | 0+140 | 0+160 | 0+180 | 0+200 | 0+220 | 0+240 | 0+260 | |



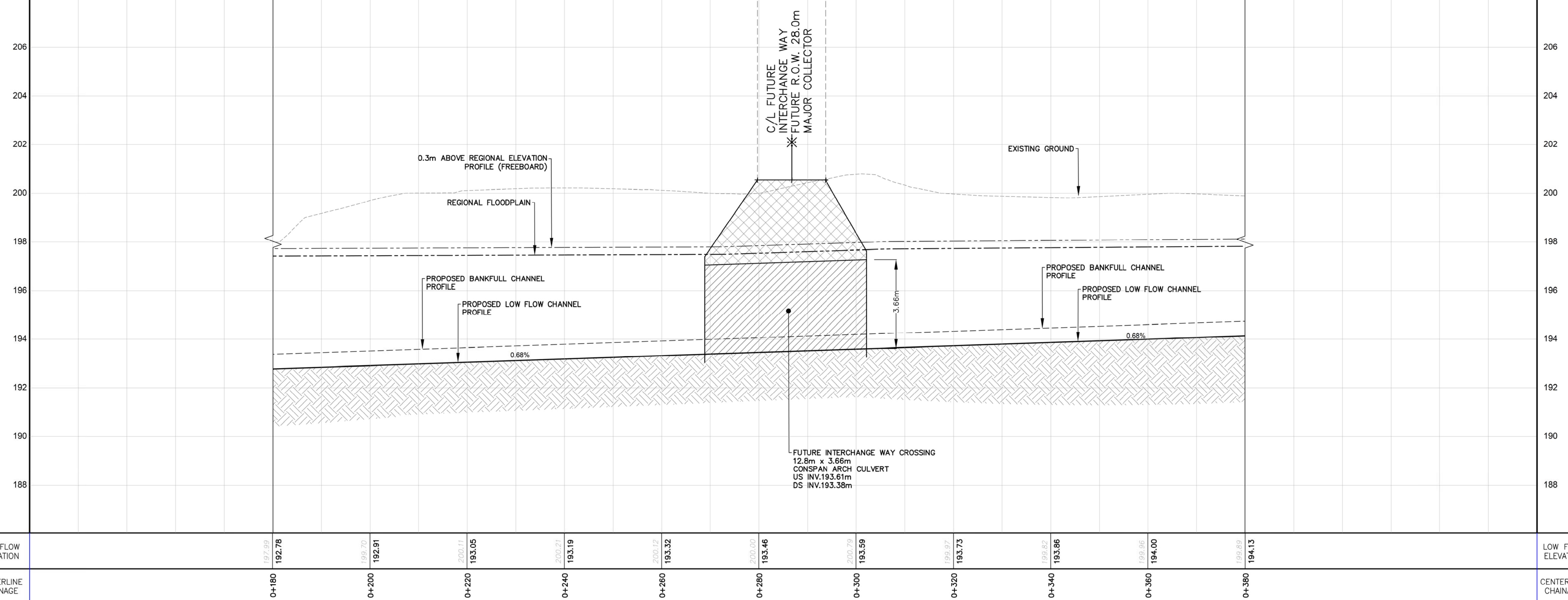
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BENCH MARK:
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| | STUDY AREA BOUNDARY |
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| | EXISTING ELEVATION |
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| | EXISTING STREET LIGHT / POLES |
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| | EXISTING WATER VALVES |
| | EXISTING HYDRANTS |
| | EXISTING CATCHBASIN |
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| NO. | DESCRIPTION | BY | DATE |

UPDATES & REVISIONS

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DIRECTOR OF ENGINEERING SERVICES

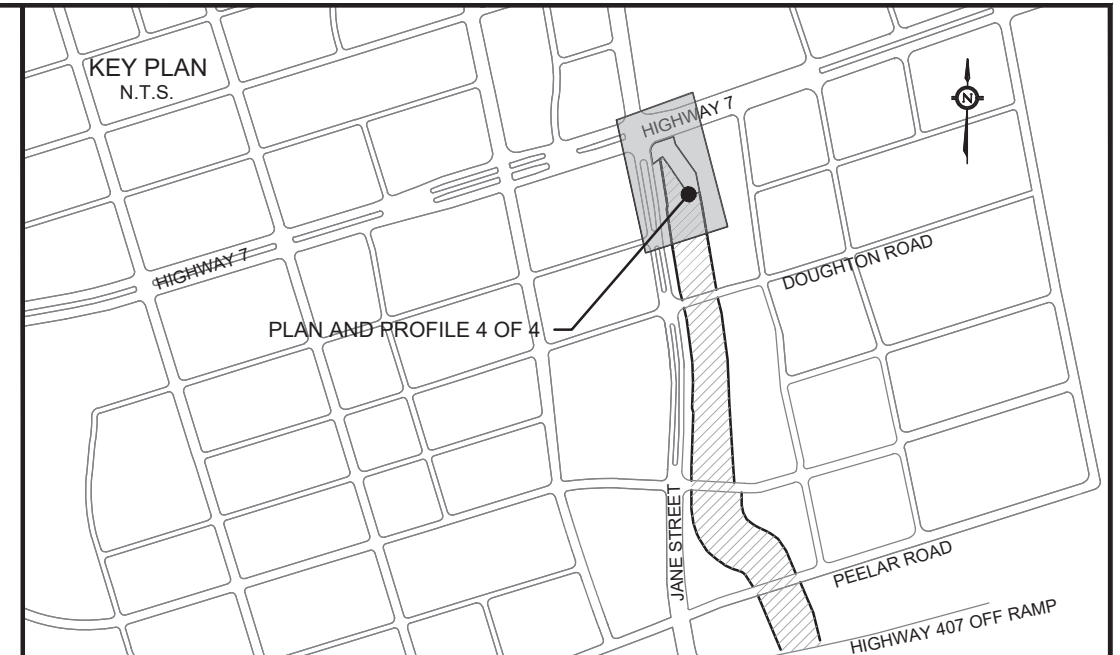
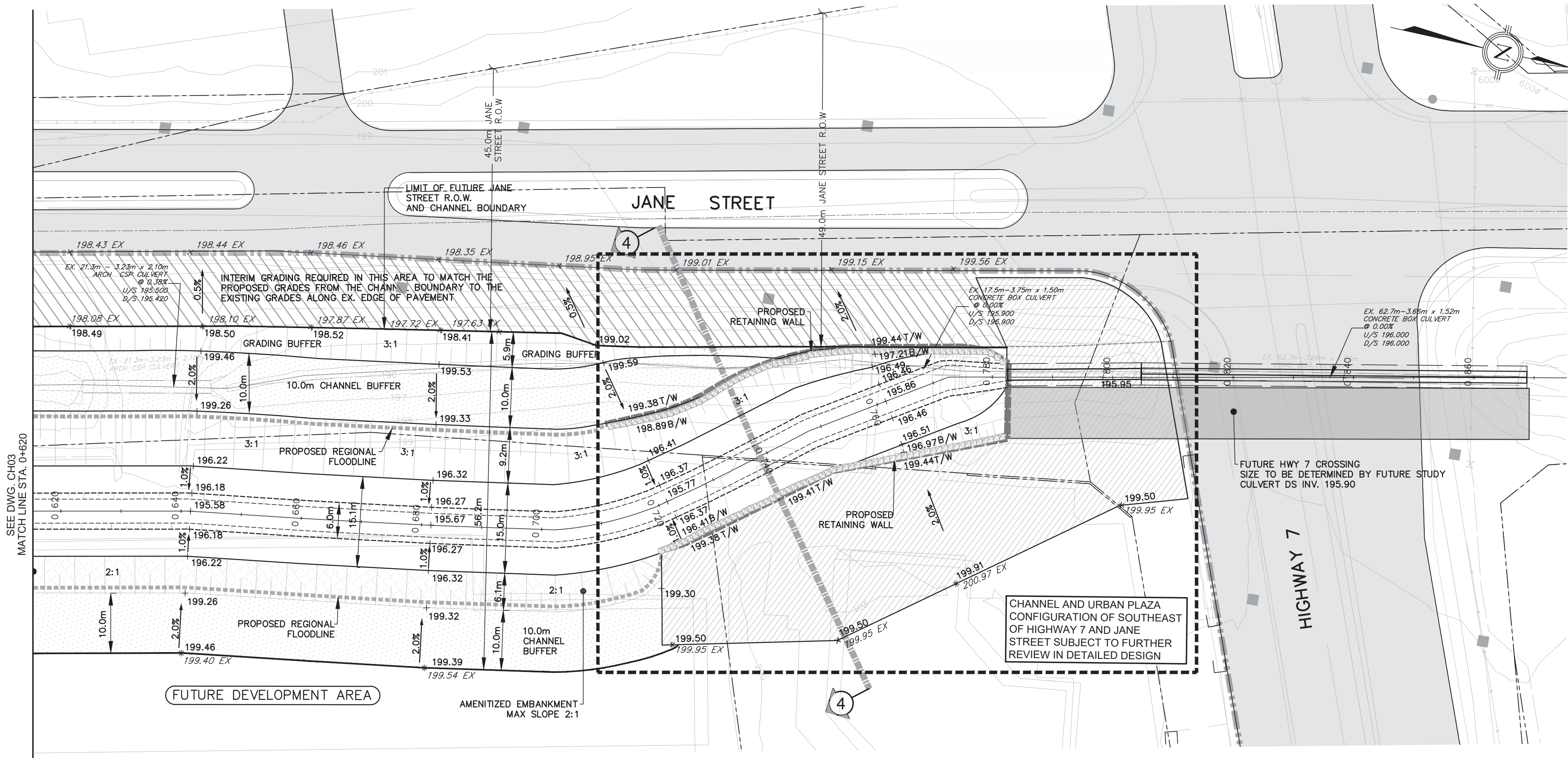
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VAUGHAN VMC BLACK CREEK RENEWAL CLASS EA
 PRELIMINARY CHANNEL DESIGN
 PLAN AND PROFILE 2 OF 4

VAUGHAN
Engineering Services

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| DESIGNED BY: T.D. | DATE: AUGUST 2018 | CHECKED BY: E.T. |
| DRAWN BY: M.M. | SURVEYED BY: | APPROVED BY: S.H. |
| SCALE: HORIZONTAL: 1:500 VERTICAL: 1:100 | PROJ. No. 12122 | DWG. No. 2 of 7 |

File: G:\Projects\08121212 - Vaughan VMC Black Creek Renewal Class EA - Drawings\Fig 2 ESR Preliminary Design & Shading\Fig 2 ESR Preliminary Design & Shading.dwg, Layout: CH02, Date: Jul 19, 2018 - 1:32pm, Edit By: jpathmanagan



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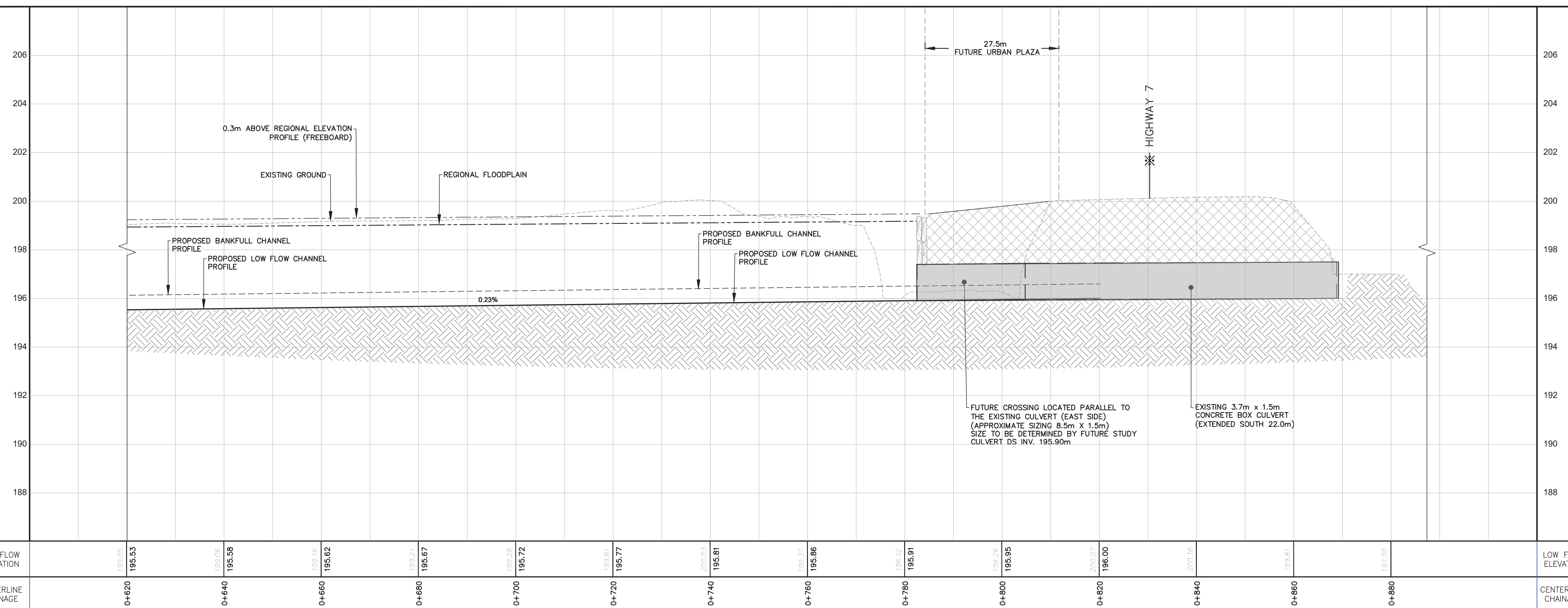
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BENCHMARK:
 BENCHMARK LOCATED: _____

ELEVATION:

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| --- | STUDY AREA BOUNDARY |
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| x | EXISTING ELEVATION |
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| ○ | EXISTING STM MANHOLE |
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| NO. | DESCRIPTION | BY | DATE |

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 DIRECTOR OF ENGINEERING SERVICES

DATE: _____

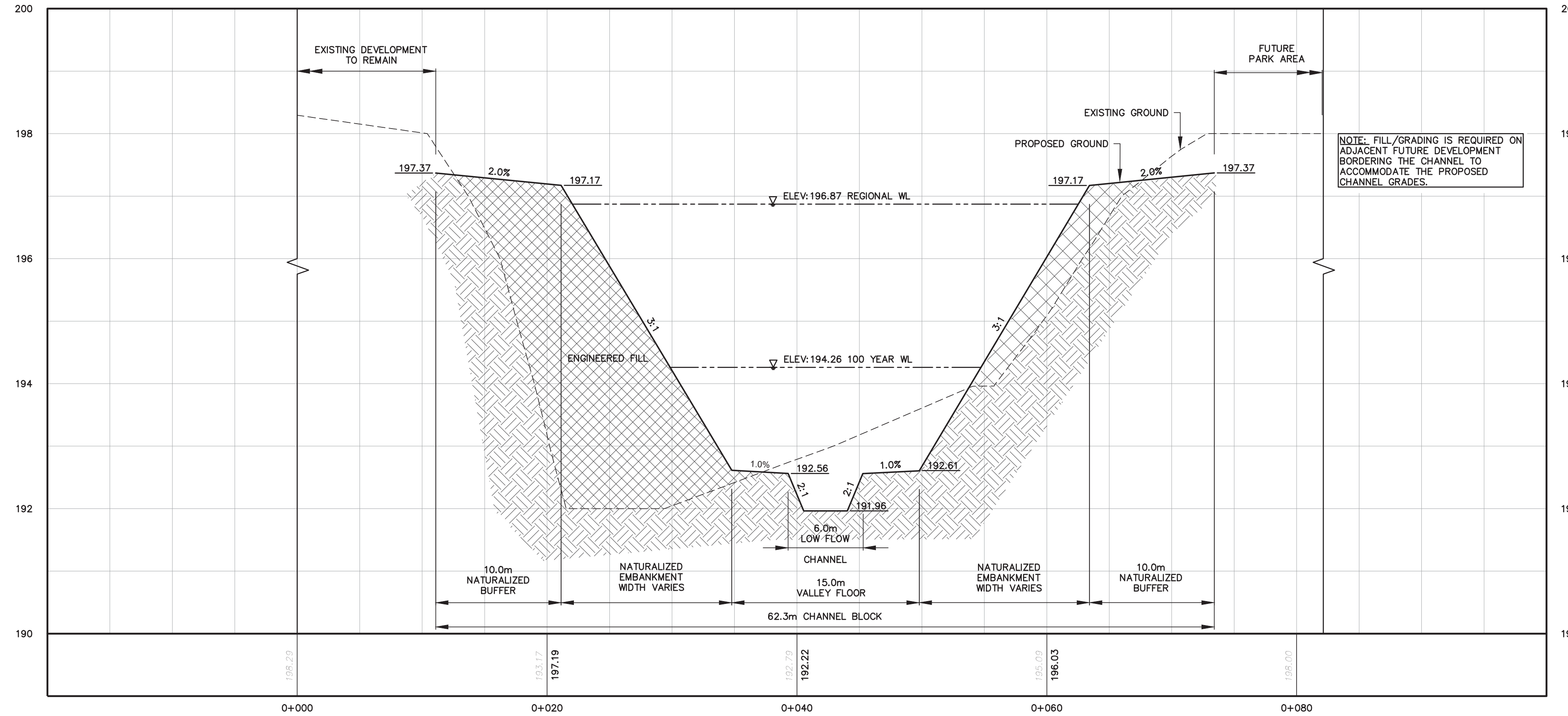
VAUGHAN VMC BLACK CREEK RENEWAL CLASS EA
 PRELIMINARY CHANNEL DESIGN
 PLAN AND PROFILE 4 OF 4

VAUGHAN
 Engineering Services

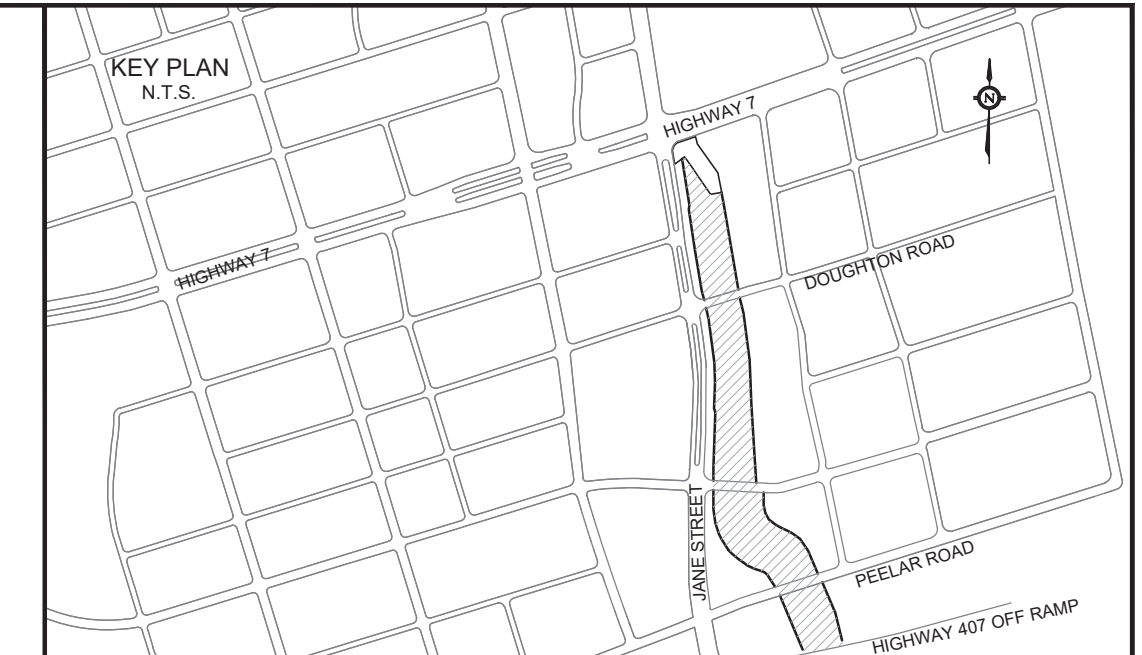
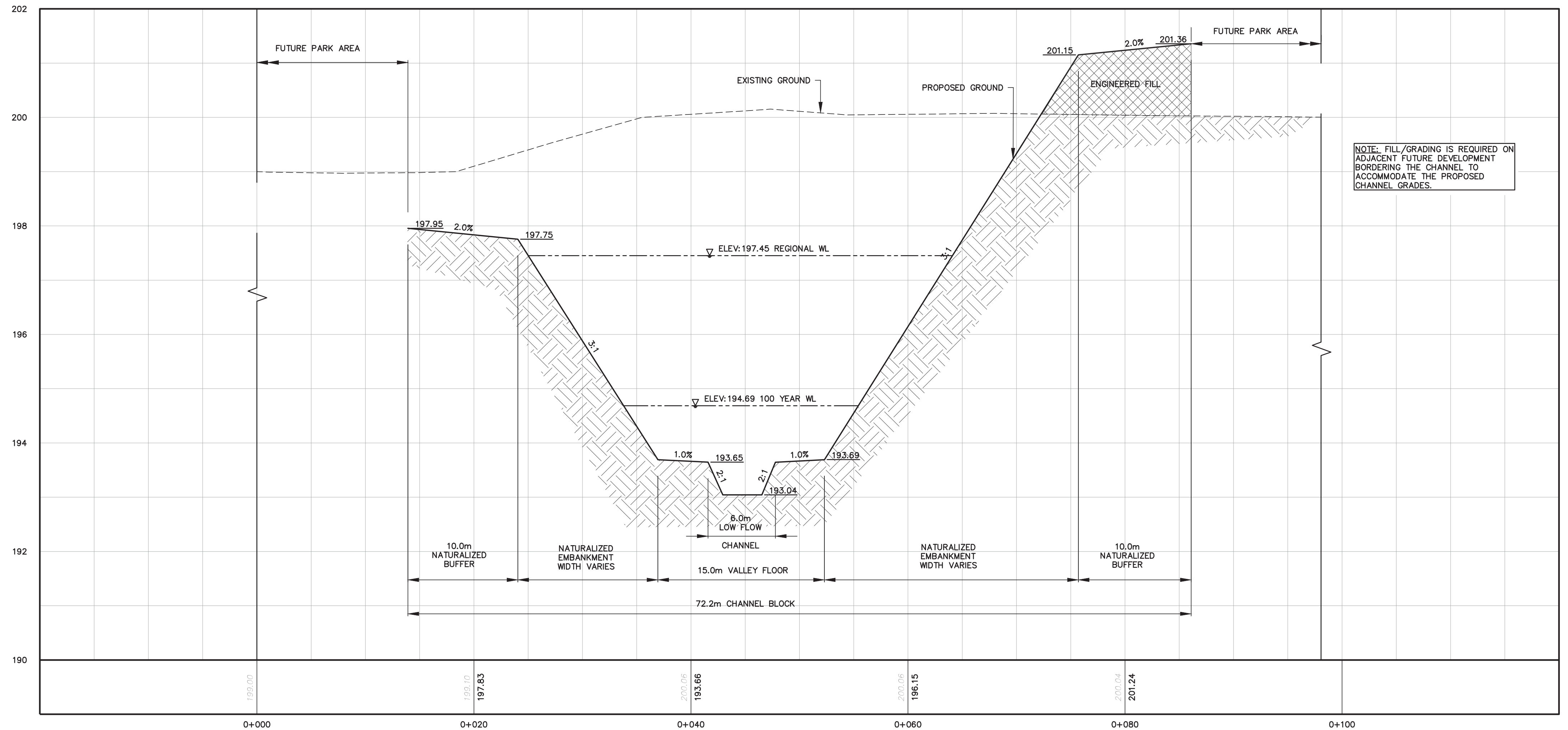
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| DESIGNED BY: T.D. | DATE: AUGUST 2018 | CHECKED BY: E.T. |
| DRAWN BY: M.M. | SURVEYED BY: | APPROVED BY: S.H. |
| SCALE: | PROJ. No. | DWG. No. |
| HORIZONTAL: 1:500 | 12122 | 4 of 7 |
| VERTICAL: 1:100 | | |

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CROSS SECTION 1
SCALE HOR 1:250 VER 1:50



CROSS SECTION 2
SCALE HOR 1:250 VER 1:50



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BENCH MARK:
BENCHMARKS LOCATED:

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NOTE: FOR CROSS SECTION LOCATION REFER TO CHANNEL DRAWINGS 1 TO 4

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| NO. | DESCRIPTION | BY | DATE |

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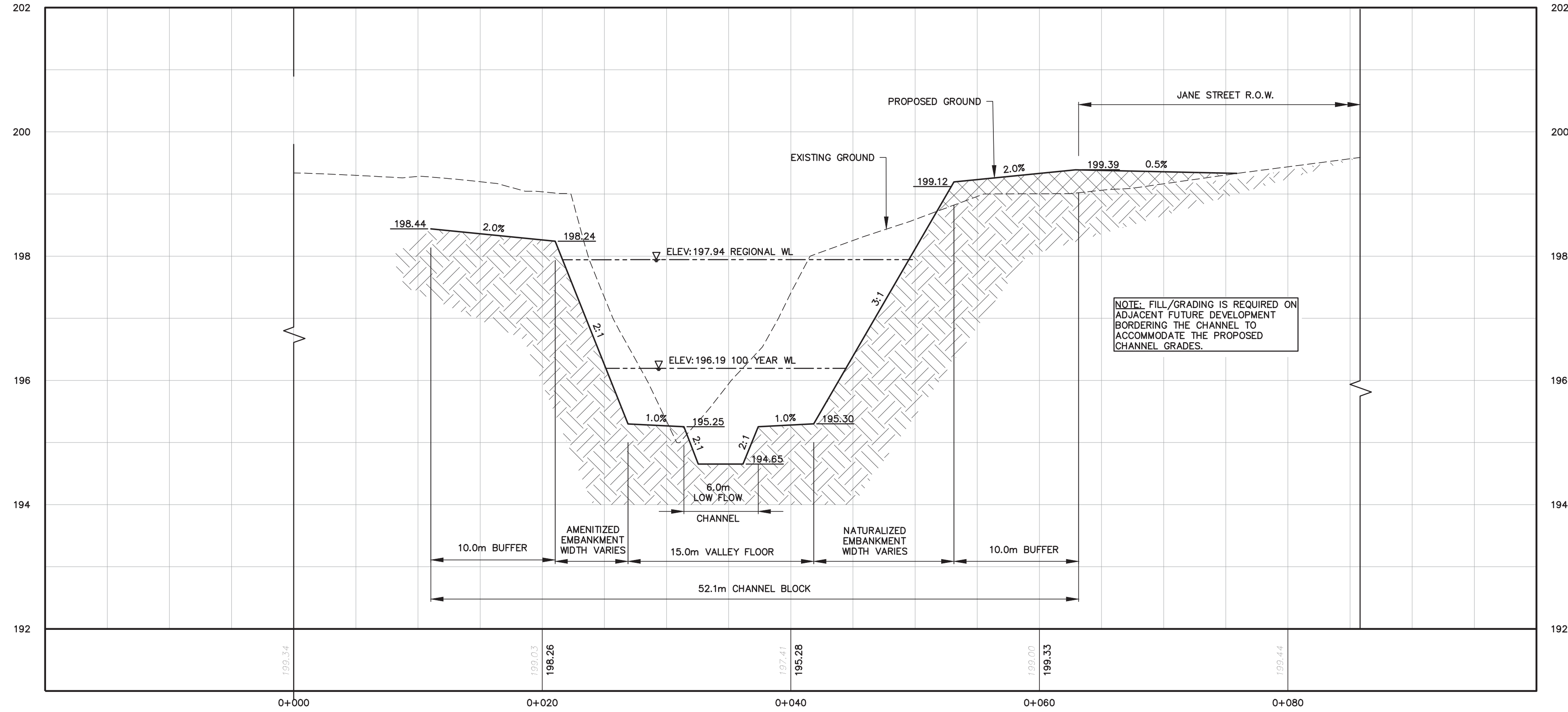
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VAUGHAN VMC BLACK CREEK
RENEWAL CLASS EA
PRELIMINARY CHANNEL DESIGN
TYPICAL SECTIONS 1 OF 2

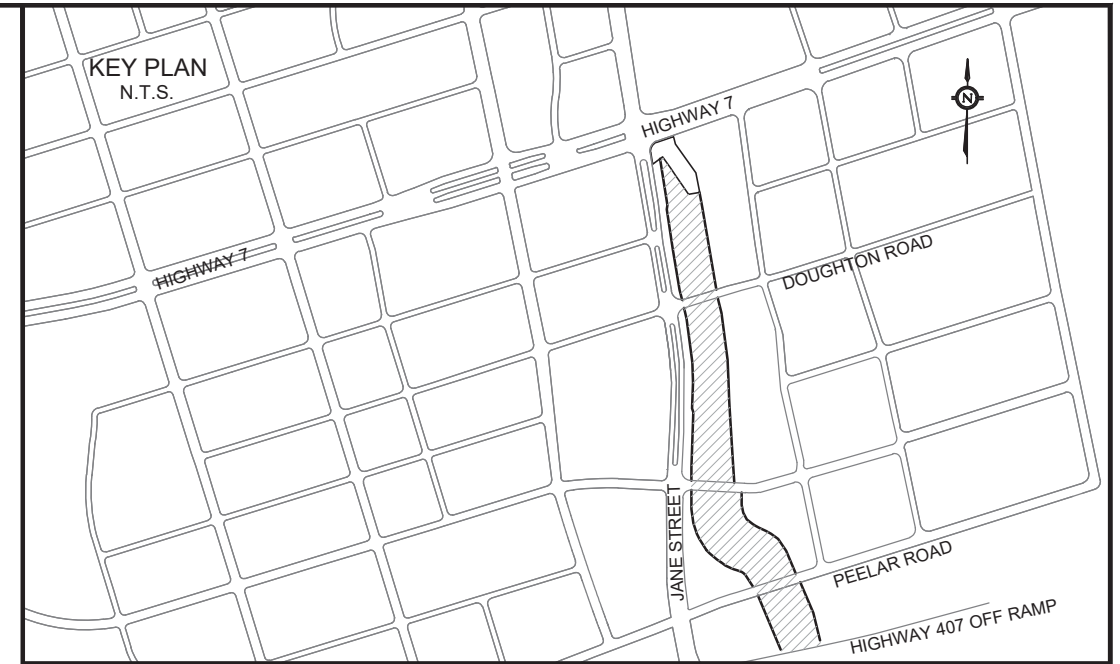
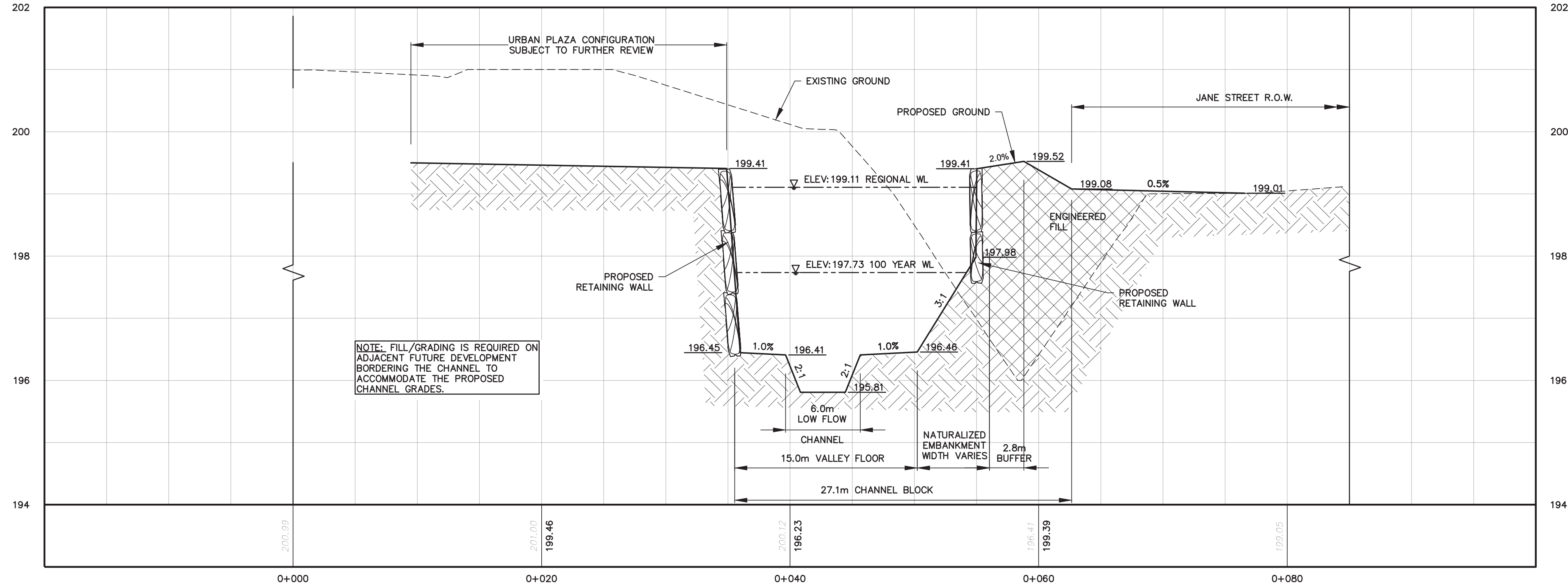


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| DESIGNED BY: T.D | DATE: AUGUST 2018 | CHECKED BY: E.T. |
| DRAWN BY: M.M. | SURVEYED BY: | APPROVED BY: S.H. |
| SCALE: | PROJ. No. | DWG. No. |
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CROSS SECTION 3
SCALE HOR 1:250 VER 1:50



CROSS SECTION 4
SCALE HOR 1:250 VER 1:50



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BENCH MARK:
BENCHMARK IS LOCATED AT: _____

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UPDATES & REVISIONS

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NOTE: FOR CROSS SECTION LOCATION REFER TO CHANNEL DRAWINGS 1 TO 4



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DIRECTOR OF ENGINEERING SERVICES

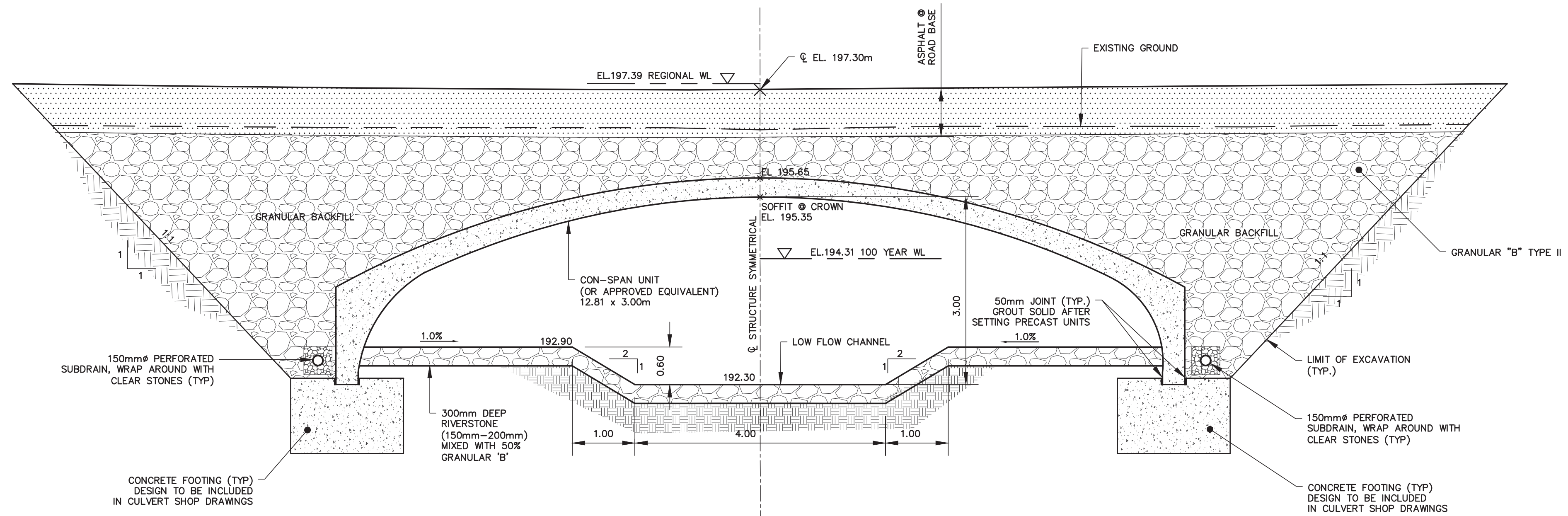
DATE _____

VAUGHAN VMC BLACK CREEK
RENEWAL CLASS EA
PRELIMINARY CHANNEL DESIGN
TYPICAL SECTIONS 2 OF 2

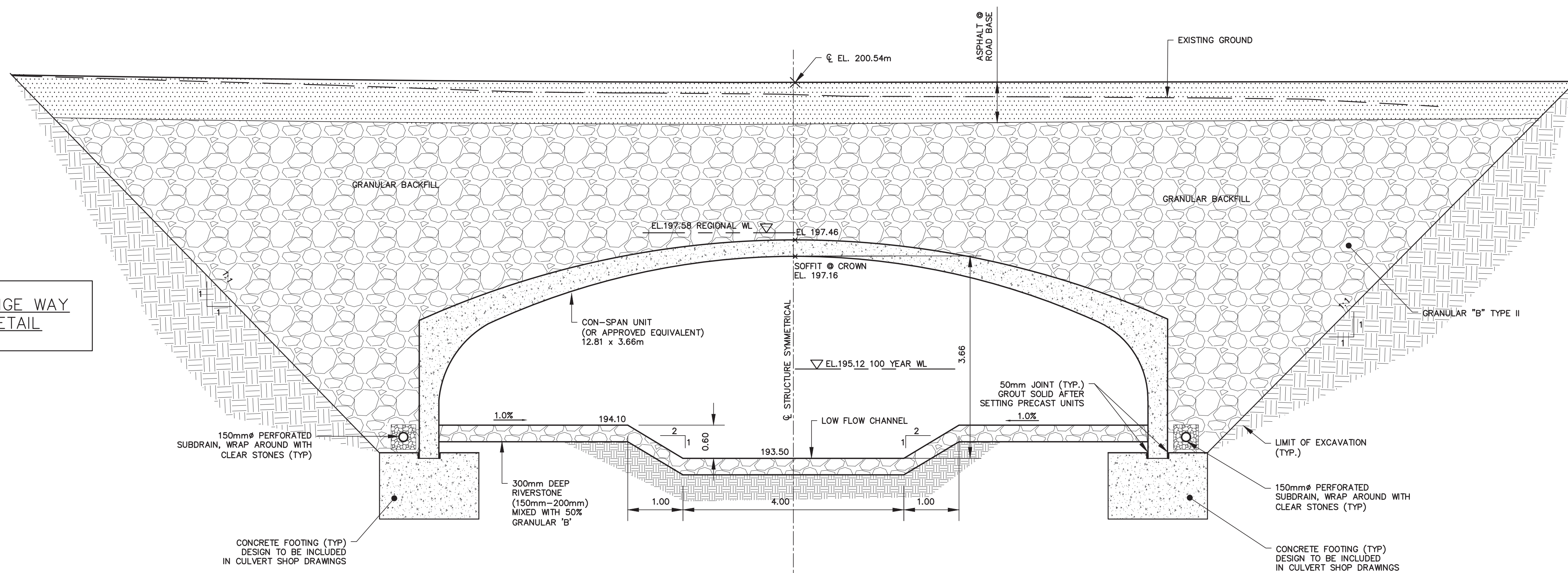


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| DESIGNED BY: T.D. | DATE: AUGUST 2018 | CHECKED BY: E.T. |
| DRAWN BY: M.M. | SURVEYED BY: | APPROVED BY: S.H. |
| SCALE: HORIZONTAL: 1:500 VERTICAL: 1:100 | PROJ. No. 12122 | DWG. No. 6 of 7 |

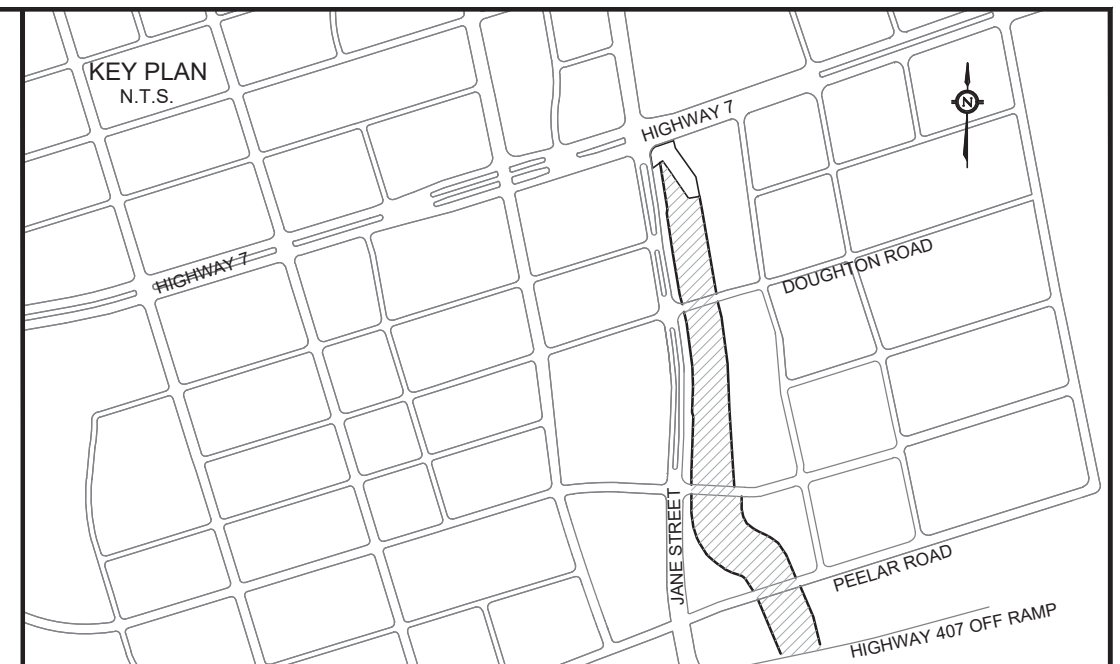
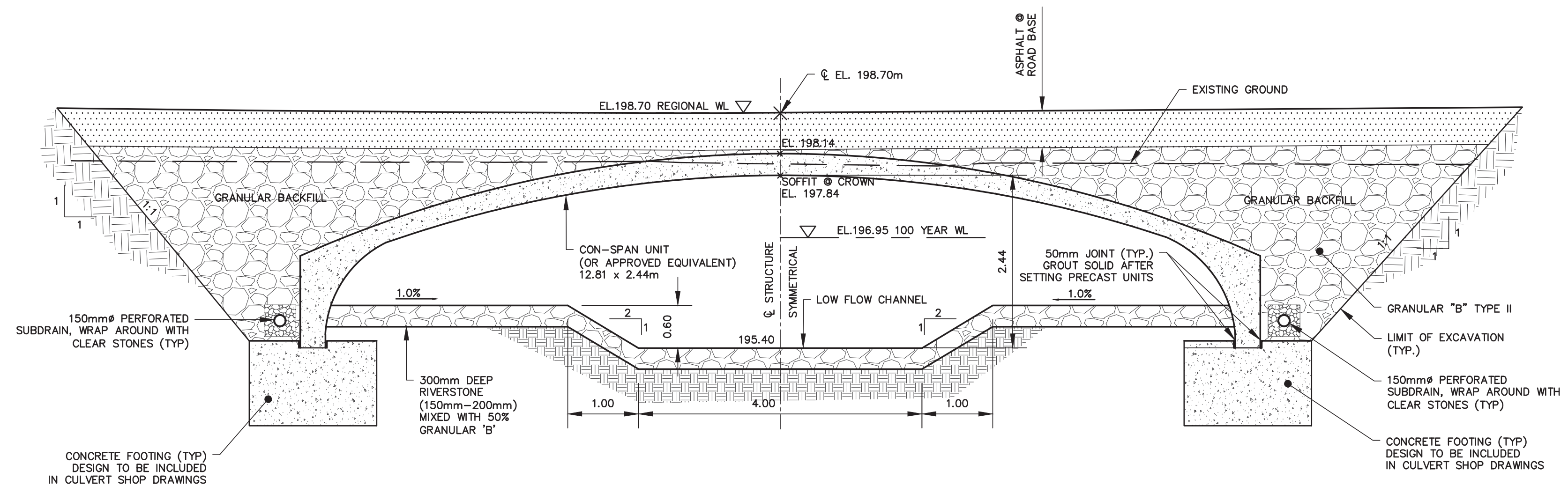
FUTURE PEELAR ROAD
MID-SECTION DETAIL



FUTURE INTERCHANGE WAY
MID-SECTION DETAIL



FUTURE DOUGHTON ROAD
MID-SECTION DETAIL



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BENCHMARK:
BENCHMARK IS LOCATED:

ELEVATION:

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| UPDATES & REVISIONS | | | |

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JACK GRAZIOSI, P.Eng., M.Eng.
DIRECTOR OF ENGINEERING SERVICES

DATE

VAUGHAN VMC BLACK CREEK
RENEWAL CLASS EA
PRELIMINARY CHANNEL DESIGN
CULVERT SECTION DETAILS



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| DESIGNED BY: T.D | DATE: AUGUST 2018 | CHECKED BY: E.T. |
| DRAWN BY: M.M. | SURVEYED BY: | APPROVED BY: S.H. |
| SCALE: | PROJ. No. | DWG. No. |
| HORIZONTAL: 1:500 | 12122 | 7 of 7 |
| VERTICAL: 1:100 | | |