NIAGARA PENINSULA CONSERVATION AUTHORITY
250 Thorold Road West, 3rd Floor, Welland, Ontario L3C 3W2
Telephone 905.788.3135 | Facsimile 905.788.1121 | www.npca.ca

April 25, 2023

File Number PLPER202300339

Wesley Visser
c/o Ken Depodesta
2309 Highway 3 East,
Port Colborne, ON L3K 5V3

Dear Ken Depodesta:

SUBJECT: N.P.C.A. PERMIT NO. PLPER202300339 DATED APRIL 25, 2023 FOR WORK TO BE UNDERTAKEN AT KILLALY STREET, ARN 271104000304605 IN THE MUNICIPALITY OF PORT COLBORNE.

Enclosed with this letter is a Permit issued by the Niagara Peninsula Conservation Authority (the "**NPCA**").

You are responsible to read and understand all of the limitations, terms and conditions that govern your Permit. If necessary, you should obtain whatever assistance and advice you may need to ensure your full compliance with the terms and conditions of the Permit.

If you wish to make any changes to the scope, nature or location of the work authorized by your Permit, you must first notify the NPCA to ensure that no further approvals or amendments to the Permit are required.

Kindly note that this Permit has been issued by the NPCA pursuant to the *Conservation Authorities Act* and Ontario Regulation 155/06, only. It does not relieve you from the need to comply with all other applicable federal, provincial or municipal statutes, regulations or by-laws, and the issuance of this Permit will not be a defense if you breach any other law or regulation that may apply to the work.

Should you have any questions regarding this Permit please contact Meagan Doan, Watershed Planner at (905) 788-3135 ext. 228.

Yours truly,

Leilani Lee-Yates BES, MSPL.RPD, MCIP, RPP
Director, Planning and Development
Niagara Peninsula Conservation Authority

Prepared by:

Meagan Doan
Watershed Planner
Niagara Peninsula Conservation Authority

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NPCA PERMIT NO. PLPER202300339

This Permit is issued pursuant to s. 28 of the ***Conservation Authorities Act*, R.S.O. 1990, c. C.27** and **s. 3 of O. Reg. 155/06.**

IMPORTANT (PLEASE READ)

The permission granted for development pursuant to this Permit is limited to the Permitted Works as stated in this Permit and is subject to compliance by the permit holder with the following:

a) the provisions of **Ontario Regulation 155/06** (*Niagara Peninsula Conservation Authority: Regulation of Development, Interference with Wetlands, and Alterations to Shorelines and Watercourses*);

b) the **General Terms & Conditions** set out herein; and

c) such **Specific Terms & Conditions** as may be attached in a Schedule appended hereto.

This Permit is non-transferrable, applies only for the purpose of undertaking the Permitted Works at the Site, and remains in effect only for the period of validity stated. Any variation to the terms of this Permit must receive prior written approval from the NPCA in order to be effective,

Permit holder ("**Permittee**"):

Name of Permittee:	Wesley Visser c/o Ken Depodesta
Mailing Address of Permittee:	2309 Highway 3 East, Port Colborne, ON L3K 5V3
Telephone No. of Permittee: 905-834-8484	Email Address of Permittee: ken.depodesta@gmail.com

Location ("**Site**"):

Location of Permitted Works:	Killaly Street East, ARN 271104000304605
Name of Municipality:	Port Colborne

Period of validity (unless cancelled or extended by the NPCA in writing):

Permit Start Date:	April 25, 2023
Permit Expiration Date:	April 25, 2025

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Telephone 905.788.3135 | Facsimile 905.788.1121 | www.npca.ca

Permitted work ("**Permitted Works**"):

The Permitted Works are works undertaken for the purpose of: Addition of fill to create building envelopes within a flood hazard.
and which works are in conformity with the application of the Permittee dated: March 15, 2023
and which works are in accordance with the NPCA-stamped drawings here listed: City of Port Colborne Individual Lot Grading Certificate, submitted by Ken Depodesta to the NPCA on 15/03/2023 Refinement of Grading Plans for Fill Permit Application, prepared by KD2 Consulting, dated 14/03/2023

Permit issued by *(not valid unless signed by authorized signatory)*:

Place of Issue: **City of Welland, Ontario.**	C.A.O./Secretary-Treasurer or Director, Planning and Development
Issuing Authority: **Niagara Peninsula Conservation Authority**	Date (DD/MM/YYYY): 25/04/2023

Note: *This Permit includes the General Terms & Conditions (attached hereto) and any Specific Terms & Conditions required by the NPCA and contained in a schedule hereto. This Permit also incorporates by reference any documents identified in the preceding sections.*

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250 Thorold Road West, 3rd Floor, Welland, Ontario L3C 3W2
Telephone 905.788.3135 | Facsimile 905.788.1121 | www.npca.ca

NPCA PERMIT NO. PLPER20300339

GENERAL TERMS & CONDITIONS

1. **Limited effect of Permit** The issuance of this Permit by the Niagara Peninsula Conservation Authority ("**NPCA**") indicates only that the Permitted Works are authorized by the NPCA in accordance with the *Conservation Authorities Act* and Ontario Reg. 155/06. The work permitted by the NPCA may also require the Permittee to obtain additional authorizations, approvals, permits, consents or agreements from other governmental agencies and in certain cases, private persons whose legal rights and interests may be impacted by the work. The Permittee is warned that a failure to obtain such other approvals or permissions may expose the Permittee to prosecution by other regulatory bodies or to civil proceedings instituted by private persons notwithstanding the issuance of this Permit.

2. **Indemnity in the event of civil proceedings related to the permitted work** In the event of civil proceedings being instated by a third party where the NPCA is named as a party by reason of having approved the permitted work or development, the Permittee, on behalf of itself and its agents and contractors, jointly and severally agrees to fully indemnify and hold harmless the NPCA and its directors, officers, staff, servants and agents, which indemnity shall include on a full indemnity basis their reasonable legal fees and costs, of and from any and all claims, demands, losses, causes of action, damage, lawsuits, judgments, of whatever kind and nature, that arise out of, in connection with, or by reason of the permitted work or development.

3. **Notices required to be given** Referencing the NPCA Permit Number shown at the top of this Permit, and within the time-frames stated below, the Permittee shall advise the NPCA by email to permits@npca.ca of the following events:

    a. **Upon commencement** The Permittee shall give notice of its intention to commence work at the Site on a particular date by notifying the NPCA not less than one (1) full business day (business days do not include weekends or statutory holidays) prior to commencing the permitted work;

    b. **Upon completion** The Permittee shall give notice of the date on which the permitted work was completed by notifying the NPCA not more than ten (10) business days following the completion of the permitted work; and

    c. **Upon receipt of a complaint** Within five (5) business days of receiving a complaint relating in any way to the permitted work, the Permittee shall notify the NPCA of the complaint and provide the NPCA with such particulars of the complainant and the complaint as the NPCA may request, including any action which the Permittee has taken or proposes to take with regard to the complaint.

4. **Entry upon lands** The Permittee shall grant entry to representatives of the NPCA onto lands and buildings at the Site at all times during daylight hours that such entry is requested, in order for the NPCA to make such surveys, examinations, investigations, inspections or inquiries as the NPCA and its representatives may consider necessary.

5. **Permit to be kept at the Site** The Permittee shall keep available at the Site this Permit, or else a true copy of same, including both these General Terms and Conditions and any Special Terms and Conditions appended hereto. The person in charge of the work at the Site shall produce and show this Permit (or true copy thereof) to any NPCA Officer when so requested.

6. **Offences** Work carried out in contravention of this Permit, including any condition attached hereto, constitutes an offence under the *Conservation Authorities Act* and may lead to charges being laid against the Permittee by the NPCA. The Permittee is warned that upon conviction of an offence under the *Conservation Authorities Act*, the Permittee and its agents and contractors may be liable to a substantial fine or to imprisonment, or both.

7. **Cancellation** The NPCA may cancel this Permit or add to or amend any of the conditions included herewith, at any time and without prior notice, if the NPCA determines that:

   a. the works are not in conformity with the Permit;

   b. the information presented to obtain the Permit was materially false or misleading; or

   c. the works or method of construction used in the work are having or will have detrimental impacts on the environment.

8. **Terms and conditions forming part of Permit** These General Terms and Conditions, together with any Specific Terms and Conditions imposed by the NPCA as a condition of permitting the work, are an integral part of the Permit and all parts thereof shall be deemed to constitute one document.

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NPCA PERMIT NO. PLPER202300339

SCHEDULE – SPECIFIC TERMS & CONDITIONS

In addition to the General Terms and Conditions, the following Specific Terms and Conditions apply to this Permit:

1. Construction shall be limited to the limit of work area depicted on the approved drawing and clearly identified on site (preferably using visible construction fence) prior to any site alteration. No equipment, machinery or materials shall extend beyond the limit of work area into any other sections of the floodplain. Any part of equipment entering the water shall be free of fluid leaks and externally cleaned/degreased to prevent any deleterious substance from entering the watercourse and floodplain.

2. All materials and equipment used for the purpose of site preparation and project completion shall be operated, maintained and stored in a manner that prevents any deleterious substance (e.g. petroleum products, silt, debris, etc.) from entering the floodplain.

3. No fill or alteration of the natural vegetation, or development is to take place within any other section of the floodplain that exists on the property, other than what is currently proposed.

4. All areas of disturbed soil shall be stabilized and re-vegetated with an appropriate ground cover immediately upon completion of work and restored to a pre-disturbed state or better. All re-vegetated areas shall be monitored on a regular basis (weekly) to ensure that vegetation has established successfully, and re-vegetating shall be conducted during the growing season as appropriate to ensure vegetative cover of disturbed areas.

5. Sediment and erosion control measures shall be installed as needed to ensure no migration of sediment into the floodplain. Sediment and erosion controls shall be inspected regularly and maintained in good working order throughout the construction period and until all areas of exposed soil have been stabilized. If the sediment and erosion control measures are not functioning properly, no further work shall continue until the sediment and/or erosion problem is addressed.

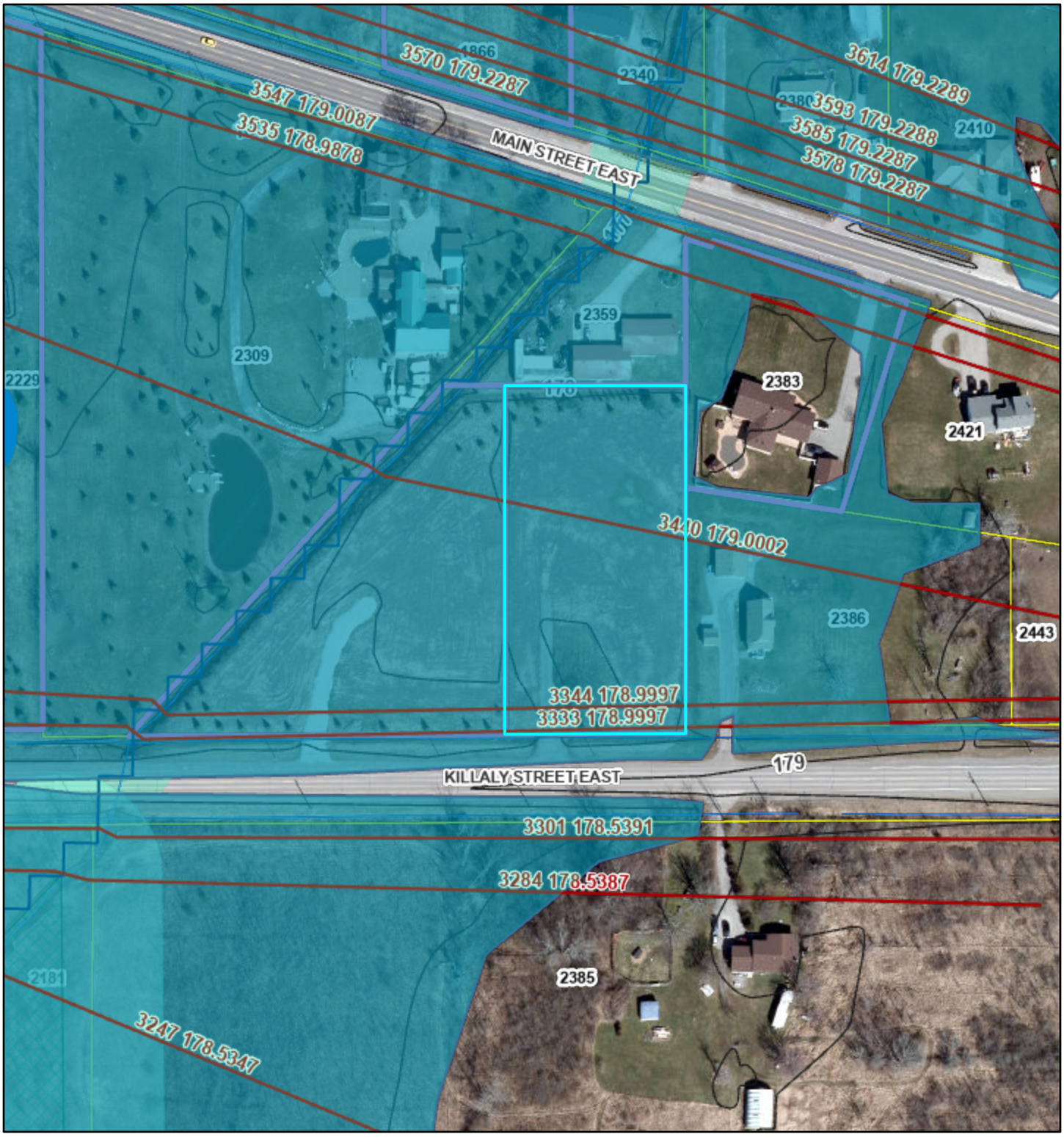
6. All mitigation measures as outlined on the approved drawings must be implemented and adhered to for this project.

7. Any stockpiled materials shall be stored and stabilized outside of the 100 year floodplain above the elevation on 179.00 m.

8. Additional construction considerations and mitigation measures as recommended by KD2 Consulting in their report titled Refinement of Grading Plans for Fill Permit Applications, March 14, 2023, displaying the NPCA stamp and forming part of this permit, shall be adhered to.

9. Any future development or site alterations proposed on this property (outside of what has been permitted though this Permit) must be circulated to the NPCA prior to the commencement of the work on the property for review and approval. As the property is still impacted by NPCA regulated lands, Work Permits from this office will be required prior to any additional works being undertaken.

Killaly Street East Map



4/20/2023, 3:33:20 PM

1:2,257

0 0.01 0.03 0.05 mi

0 0.02 0.04 0.08 km

SWOOP 2020 NPCA

- Red: Band_1
- Green: Band_2
- Blue: Band_3

Roads

NPCA APPROXIMATE REGULATION LANDS

Wetland Allowance

Regulation Wetlands

Evaluated-Provincial

NPCA, Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

PART OF LOT 15, CONCESSION 2
STREET: KILLALY STREET EAST
OWNER: WESLEY VISSER

CITY OF PORT COLBORNE

INDIVIDUAL LOT GRADING CERTIFICATE

BENCH MARK (LOCATION AND ELEVATION) ELEVATIONS SHOWN HEREON ARE ORTHOMETRIC.

SCALE 1:750

NIAGARA PENINSULA CONSERVATION AUTHORITY
THIS DOCUMENT FORMS PARTS OF
PERMIT NO. 202300339
ISSUED ON April 25, 2023
FILE PLPER202300339
APPROVAL SIGNATURE Megan Dam

The position of conduits, watermains, sewers and other underground utilities and structures are not necessarily shown on this plan, and where shown, the accuracy of the position of such utilities and structures is not guaranteed. Before starting work the contractor shall inform himself of the exact location of all such utilities and structures, and shall assume all liability for damage to them.

NOTE:
REGULATORY FLOOD LEVEL EL. 179.08m.

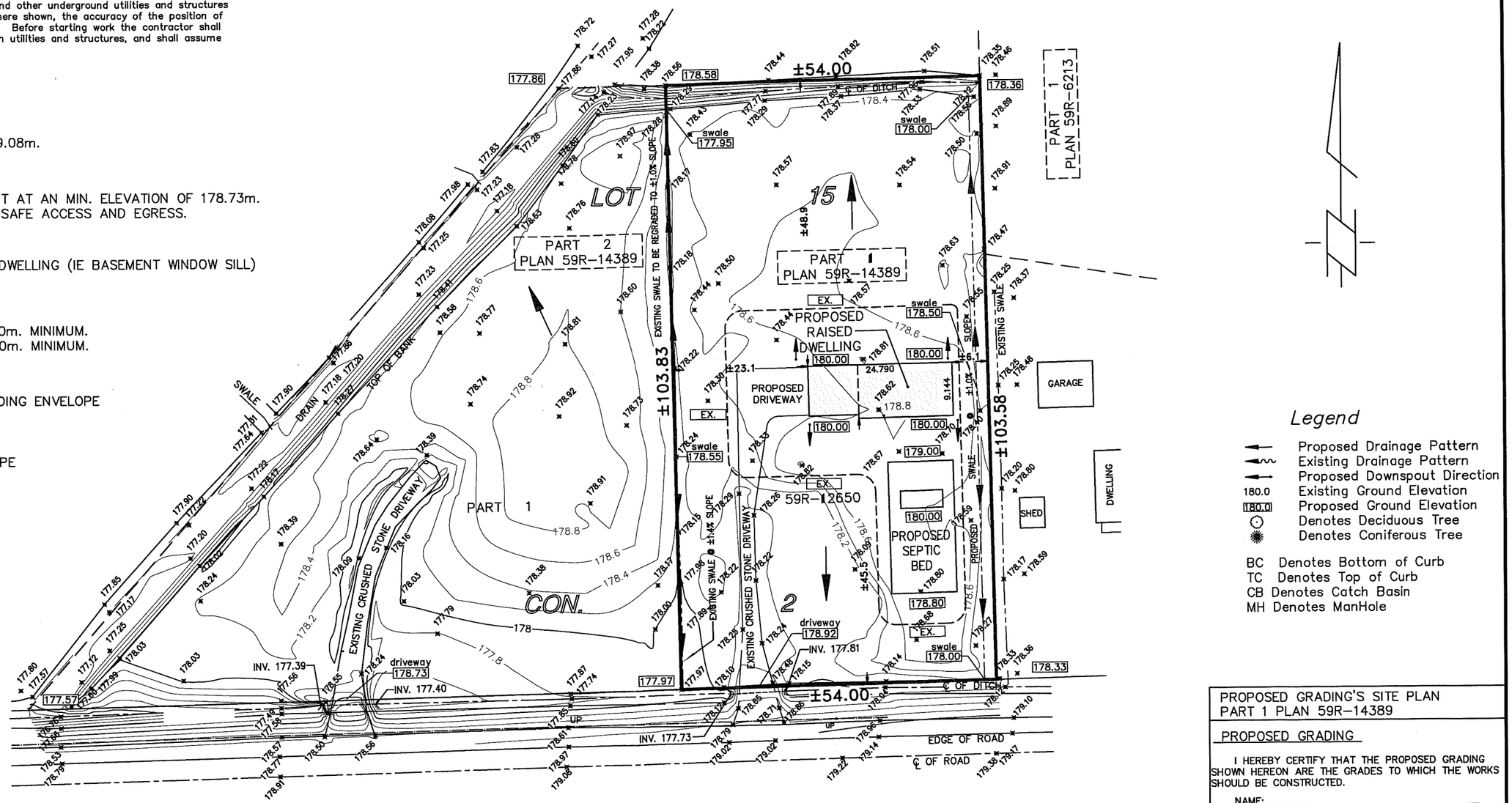
NOTE:
DRIVEWAYS/ENTRANCES WILL START AT AN MIN. ELEVATION OF 178.73m. AT THE STREET LIMIT TO ENSURE SAFE ACCESS AND EGRESS.

NOTE:
LOWEST OPENING FOR PROPOSED DWELLING (IE BASEMENT WINDOW SILL) TO BE EL. 179.38m. MINIMUM.

NOTE:
FIRST FLOOR EL. TO BE EL. 180.70m. MINIMUM.
GARAGE FLOOR EL. TO BE EL.180.0m. MINIMUM.

NOTE:
180.0 PROPOSED GRADE FOR BUILDING ENVELOPE

NOTE:
------ LIMIT OF BUILDING ENVELOPE



Legend

- Proposed Drainage Pattern
- Existing Drainage Pattern
- Proposed Downspout Direction
- 180.0 Existing Ground Elevation
- 180.0 Proposed Ground Elevation
- Denotes Deciduous Tree
- Denotes Coniferous Tree

BC Denotes Bottom of Curb
TC Denotes Top of Curb
CB Denotes Catch Basin
MH Denotes ManHole

PROPOSED GRADING'S SITE PLAN
PART 1 PLAN 59R-14389

PROPOSED GRADING

I HEREBY CERTIFY THAT THE PROPOSED GRADING SHOWN HEREON ARE THE GRADES TO WHICH THE WORKS SHOULD BE CONSTRUCTED.

NAME: _____
SIGNATURE _____
DATE: _____
ACCEPTED BY CITY _____
DATE _____

PART OF LOT 15, CONCESSION 2
STREET: KILLALY STREET EAST
OWNER: WESLEY VISSER

CITY OF PORT COLBORNE

INDIVIDUAL LOT GRADING CERTIFICATE

BENCH MARK (LOCATION AND ELEVATION) ELEVATIONS SHOWN HEREON ARE ORTHOMETRIC.

SCALE 1:750

NIAGARA PENINSULA CONSERVATION AUTHORITY
THIS DOCUMENT FORMS PARTS OF
PERMIT NO. 202300339
ISSUED ON April 25, 2023
FILE PLPER202300339
APPROVAL SIGNATURE Meagan Ware

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180.0 PROPOSED GRADE FOR BUILDING ENVELOPE

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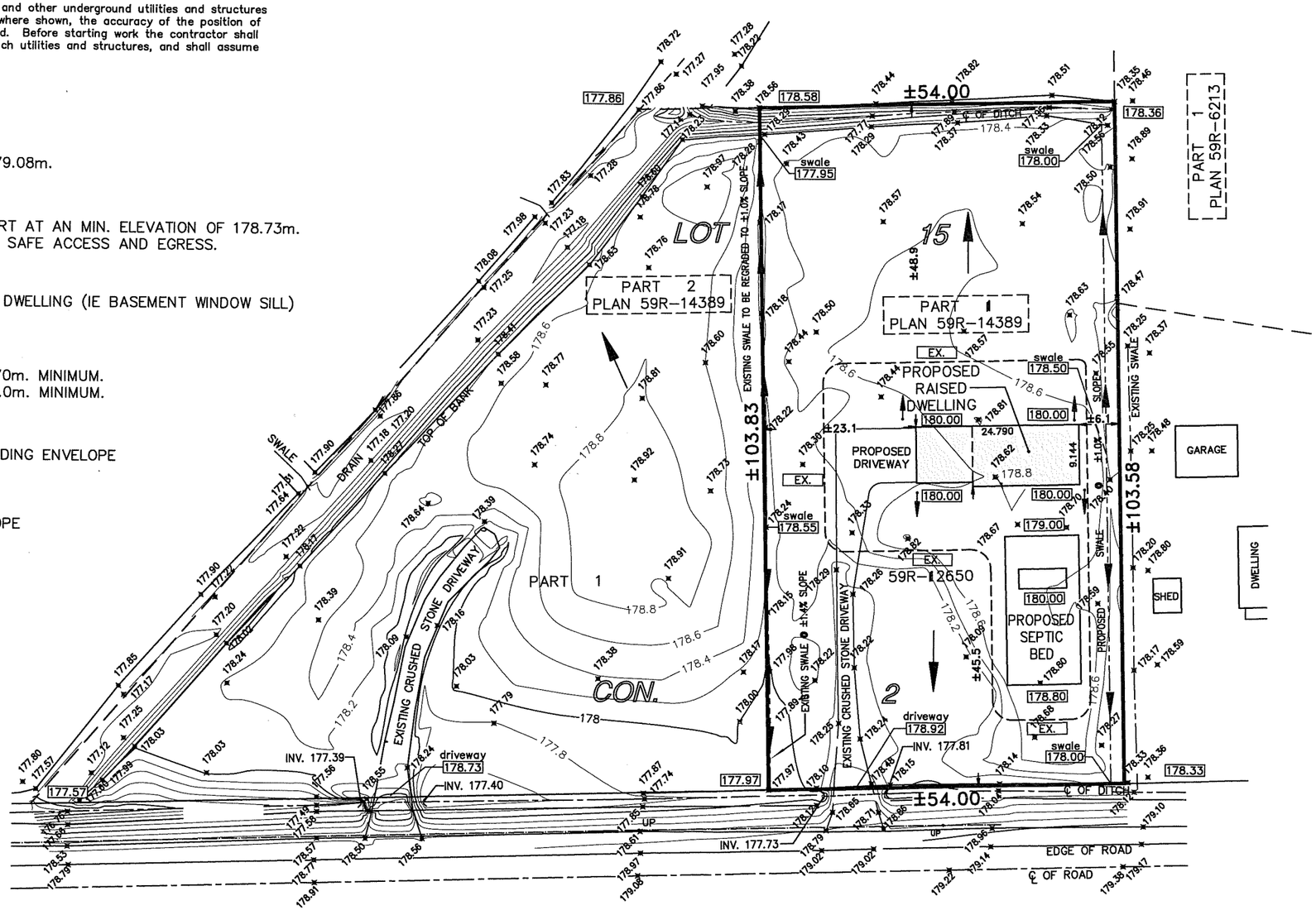

KILLALY STREET EAST

Legend

- Proposed Drainage Pattern
- Existing Drainage Pattern
- Proposed Downspout Direction
- 180.0 Existing Ground Elevation
- 180.0 Proposed Ground Elevation
- Denotes Deciduous Tree
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PROPOSED GRADING'S SITE PLAN
PART 1 PLAN 59R-14389

PROPOSED GRADING

I HEREBY CERTIFY THAT THE PROPOSED GRADING SHOWN HEREON ARE THE GRADES TO WHICH THE WORKS SHOULD BE CONSTRUCTED.

NAME: _____
SIGNATURE _____
DATE: _____
ACCEPTED BY CITY _____
DATE _____

KD2 CONSULTING

March 14, 2023

Parts 1 and 2 Plan 59R 14389

Refinement of Grading Plans for Fill Permit Applications

Killaly Street (Visser), CITY OF PORT COLBORNE

Introduction

The above-noted Parts 1 and 2 was the subject of NPCA Notices of Violation ARN 271104000304605 and ARN 271104000304610 in 2019 as a result of grading work being carried out without requisite NPCA approval and Fill Permits. Following technical assessment by KD2 Consulting, NPCA issued compliance certification for each of the 2 parts on the basis that the grading carried out on these parts did not result in adverse impacts (ie raised regulatory flood levels).

Since the completion of lot grading of Parts 1 and 2 was not allowed in 2019 for the 2 single family residential lots, refinement of the lot grading and site plan features has been prepared now that complies with municipal standards for the 2 proposed, single family residential lots. The grading designs and the site feature presentations depicted on the attached drawings along with the table of comparative 'existing/proposed' hydraulic analyses that demonstrate no increases in regulatory flood levels along the subject Beaver Dam Creek floodplain reach completes the technical requirements for the Fill Permit applications attached herewith..

Documentation for Hydraulic Analyses (HEC RAS) and Lot Grading Warrants

As noted in the technical reports submitted to NPCA to support the compliance certification for the 2 parts, survey of those grades have been referred to as 'existing' was carried out in August 2019 and additional survey of that area was also completed by Lanthier/Gilmore in 2021. Hydraulic analyses referred to as 'existing' conditions is reflective of those survey grades and 'proposed' conditions represents of the proposed grades on the Grading/Site Plans attached. The insertion of additional sections into the hydraulic models was not warranted. Grading and Site Plans for Parts 1 and 2 are included as DWG 1. The overall plan for the section layout on the site is included as DWG 2. Sections from HEC RAS for the 'Exisitng' and 'Proposed' conditions are included as Figures 1 and 2 respectively. All Figures, DWGs and Tables are attached to this report as a separate digital file as Killaly- HEC RAS March 14 2023.

Design of the proposed lot grading (i.e. 'Proposed' conditions) accounts for the regulatory flood level of el. 179.08 metres determined by the HEC RAS modeling which matches the 'Existing' conditions results. In this regard, a minimum 'freeboard' height of

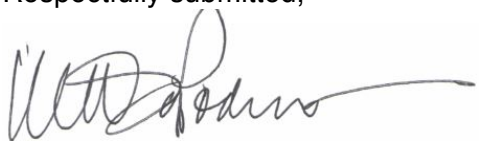
0.3 metres has been used to define the minimum lowest opening elevation of 179.38 metres (i.e. basement windowsill level) and all grades around the proposed dwelling have been adjusted to account for the basement windowsill level. Accordingly, the first flood elevation for the dwelling is proposed at a minimum elevation of 180.70 metres for both lots/dwellings with the proposed grade at each building foundation of 180.40 metres with proposed garage floor levels proposed similarly at 180.40 metres. The building apron grades have been set at el. 180.40 metres (with maximum apron heights at the dwelling foundation of about 0.6 to 0.7 metres) to match the garage floor grade requiring slopes away from the dwelling foundation to be set at about 7% to minimize the lateral extent of the apron area to 10 metres.

HEC RAS results for 'Existing' and 'Proposed' conditions are summarized in Tables 1 and 2 along with a summary comparison table. Although 1 cm differences in elevation are highlighted in the summary tables, no differences in regulatory flood levels of any significance resulted from the analyses of existing and proposed grading. Consequently, it is concluded that the proposed grading refinements for parts 1 and 2 have no impact on the regulatory flood level of 179.08 metres within this reach of the Beaver Dam Creek.

Conclusion and Recommendation

The hydraulic analyses for the Grading/Site Plan drawings for Parts 1 and 2 Plan 59R 14389 demonstrate no adverse impact to any properties on the Beaver Dam Creek watercourse system. Accordingly, NPCA should state, subject to approval of these applications, agreement to issue Fill Permits for Parts 1 and 2 and issue notification to the City of Port Colborne that the case has been made to satisfy NPCA for these 2 floodplain parts as building lots in the City of Port Colborne.

Respectfully submitted,



Per: Kenneth R. DePodesta, P. Eng

Enclos 2 Fill Permit applications

Table 1.0 - Current Properties Filled East and West Side (2019 to Present)

HEC-RAS Plan: 26 River: BeaverDamDrain Reach: Main Profile: PF 1

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Main	5649.622	PF 1	15.70	177.62	179.70		179.70	0.000005	0.06	338.08	485.53	0.02
Main	5640.246	PF 1	15.70	177.62	179.70	178.82	179.70	0.000004	0.06	354.97	480.15	0.02
Main	5627.330		Culvert									
Main	5614.885	PF 1	15.70	177.61	179.70	178.89	179.70	0.000005	0.06	338.92	423.28	0.02
Main	5604.59	PF 1	15.70	177.60	179.70	178.85	179.70	0.000004	0.06	335.20	414.50	0.02
Main	5583.056	PF 1	15.70	177.57	179.70	179.04	179.70	0.000005	0.07	311.30	406.21	0.02
Main	5572.635	PF 1	15.70	177.56	179.70	178.94	179.70	0.000006	0.07	303.23	407.86	0.02
Main	5569.216		Bridge									
Main	5563.179	PF 1	15.70	177.55	179.70	178.90	179.70	0.000006	0.08	297.06	417.15	0.02
Main	5515.562	PF 1	15.70	177.44	179.70	178.72	179.70	0.000006	0.08	302.41	377.92	0.02
Main	5506.027	PF 1	15.70	177.41	179.70	178.72	179.70	0.000006	0.08	292.32	362.63	0.02
Main	5494.577	PF 1	15.70	177.41	179.70		179.70	0.000006	0.08	274.92	330.08	0.02
Main	5484.1	PF 1	15.70	177.41	179.70	178.74	179.70	0.000006	0.08	267.61	306.71	0.02
Main	5388.259	PF 1	15.70	177.41	179.70		179.70	0.000007	0.09	249.37	272.35	0.02
Main	5379.509	PF 1	15.70	177.41	179.70	178.57	179.70	0.000007	0.09	242.58	271.26	0.02
Main	5375.759		Bridge									
Main	5365.98	PF 1	15.70	177.41	179.70		179.70	0.000008	0.10	224.38	243.04	0.02
Main	5356.483	PF 1	15.70	177.40	179.69	178.70	179.70	0.000094	0.33	67.52	243.97	0.08
Main	5251.444	PF 1	15.70	177.40	179.69	178.51	179.69	0.000027	0.17	119.75	232.24	0.04
Main	5122.923	PF 1	15.70	177.39	179.69	178.51	179.69	0.000010	0.11	222.34	297.75	0.03
Main	5113.53	PF 1	15.70	177.39	179.69	178.55	179.69	0.000012	0.13	211.96	294.75	0.03
Main	5108.108		Bridge									
Main	5101.667	PF 1	15.70	177.39	179.69		179.69	0.000013	0.13	204.89	291.54	0.03
Main	5092.027	PF 1	15.70	177.39	179.69	178.50	179.69	0.000014	0.13	194.19	284.22	0.03
Main	5000.183	PF 1	15.70	177.39	179.69	178.35	179.69	0.000011	0.07	225.55	290.41	0.02
Main	4887.108	PF 1	15.70	177.38	179.69	178.78	179.69	0.000024	0.15	191.81	274.72	0.04
Main	4792.208	PF 1	15.70	177.38	179.68	178.59	179.68	0.000010	0.23	224.92	295.99	0.06
Main	4743.279	PF 1	15.70	177.38	179.68	178.95	179.68	0.000024	0.33	169.57	337.12	0.09
Main	4692.966	PF 1	15.70	177.38	179.68	178.89	179.68	0.000021	0.33	159.94	220.77	0.09
Main	4688.699	PF 1	15.70	177.38	179.68	179.15	179.68	0.000023	0.32	158.86	223.40	0.09
Main	4683.299		Culvert									
Main	4676.571	PF 1	15.70	177.38	179.68	179.20	179.68	0.000020	0.31	163.27	221.83	0.08
Main	4671.208	PF 1	15.70	177.38	179.68	179.14	179.68	0.000033	0.10	166.99	219.62	0.03
Main	4633.101	PF 1	15.70	177.38	179.68	179.01	179.68	0.000054	0.15	144.54	220.57	0.04
Main	4574.502	PF 1	15.70	177.36	179.67	179.26	179.67	0.000657	0.50	52.46	108.04	0.13
Main	4570.663	PF 1	15.70	177.36	179.66	178.96	179.67	0.000264	0.30	66.26	105.07	0.07
Main	4565.643		Culvert									
Main	4559.555	PF 1	15.70	177.36	179.47	179.01	179.47	0.000118	0.17	101.74	134.79	0.05
Main	4557.962	PF 1	15.70	177.35	179.47	178.69	179.47	0.000074	0.14	117.27	138.74	0.04
Main	4488.429	PF 1	15.70	177.29	179.47	178.71	179.47	0.000053	0.14	172.70	365.00	0.03
Main	4412.907	PF 1	15.70	177.23	179.46	179.01	179.46	0.000085	0.15	157.87	515.67	0.04
Main	4352.556	PF 1	15.70	177.18	179.45	178.59	179.45	0.000273	0.32	76.63	612.71	0.08
Main	4342.653	PF 1	15.70	177.17	179.45	178.45	179.45	0.000268	0.33	72.22	592.10	0.08
Main	4334.239		Culvert									
Main	4327.295	PF 1	15.70	177.15	179.44	178.42	179.44	0.000225	0.29	72.34	571.09	0.07
Main	4316.046	PF 1	15.70	177.15	179.44	178.32	179.44	0.000136	0.24	78.57	570.04	0.06
Main	4281.646	PF 1	15.70	177.12	179.44	178.28	179.44	0.000093	0.20	81.98	551.48	0.05
Main	4278.073	PF 1	15.70	177.12	179.44	178.40	179.44	0.000103	0.20	80.07	548.76	0.05
Main	4270.652		Culvert									
Main	4263.136	PF 1	15.70	177.11	179.42	178.39	179.43	0.000107	0.24	76.38	484.41	0.06
Main	4252.244	PF 1	15.70	177.10	179.42	178.34	179.42	0.000099	0.23	78.65	446.96	0.06
Main	4136.239	PF 1	15.70	177.03	179.37	178.38	179.40	0.000552	0.84	26.27	323.84	0.20
Main	4049.12	PF 1	15.70	176.97	179.33	178.39	179.35	0.000536	0.78	26.53	259.72	0.19
Main	3951.578	PF 1	15.70	176.91	179.29	178.27	179.31	0.000333	0.78	36.97	147.29	0.18
Main	3899.268	PF 1	15.70	176.88	179.29	178.09	179.30	0.000104	0.43	60.80	84.73	0.10
Main	3848.793	PF 1	15.70	176.85	179.29	178.06	179.29	0.000094	0.42	74.39	141.07	0.10
Main	3803.685	PF 1	15.70	176.82	179.26	178.27	179.28	0.000283	0.69	29.77	140.65	0.19
Main	3709.865	PF 1	15.70	176.82	179.22	178.45	179.25	0.000475	0.86	28.68	467.11	0.23
Main	3614.638	PF 1	15.70	176.82	179.23	178.17	179.23	0.000017	0.19	247.36	671.09	0.05
Main	3593.771	PF 1	15.70	176.82	179.23	178.15	179.23	0.000010	0.14	284.61	648.42	0.04
Main	3588.409		Bridge									
Main	3585.333	PF 1	15.70	176.82	179.23	178.26	179.23	0.000007	0.12	322.73	655.65	0.03
Main	3578.098	PF 1	15.70	176.82	179.23	178.30	179.23	0.000006	0.11	369.17	660.66	0.03
Main	3570.625	PF 1	15.70	176.81	179.23	178.14	179.23	0.000005	0.12	389.44	665.29	0.03
Main	3557.856		Culvert	***Main Street Culvert***								
Main	3547.604	PF 1	19.10	176.80	179.08	178.53	179.08	0.000129	0.48	89.73	614.81	0.12
Main	3535.841	PF 1	19.10	176.79	179.08		179.08	0.000045	0.28	180.96	436.81	0.07
Main	3504	PF 1	19.10	176.65	179.08		179.08	0.000017	0.17	272.97	583.87	0.04
Main	3472	PF 1	19.10	176.65	179.08		179.08	0.000010	0.14	339.10	604.64	0.03
Main	3440.136	PF 1	19.10	176.66	179.08		179.08	0.000010	0.07	361.79	648.63	0.02
Main	3416	PF 1	19.10	176.43	179.08		179.08	0.000004	0.05	458.27	657.98	0.01
Main	3392	PF 1	19.10	176.55	179.08		179.08	0.000003	0.04	502.04	638.60	0.01

Table 1.0 - Current Properties Filled East and West Side (2019 to Present)

HEC-RAS Plan: 26 River: BeaverDamDrain Reach: Main Profile: PF 1 (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Main	3368	PF 1	19.10	176.45	179.08		179.08	0.000004	0.05	505.44	673.59	0.01
Main	3344.535	PF 1	19.10	176.53	179.08		179.08	0.000004	0.04	451.31	488.04	0.01
Main	3333.891	PF 1	19.10	176.52	179.08	177.72	179.08	0.000002	0.03	588.52	590.37	0.01
Main	3318.738		Culvert	***Killaly Street Culvert***								
Main	3301.874	PF 1	19.10	176.46	179.03	177.63	179.03	0.000001	0.03	620.17	529.45	0.01
Main	3284.692	PF 1	19.10	176.43	179.03		179.03	0.000003	0.04	495.58	495.50	0.01
Main	3247.761	PF 1	19.10	176.35	179.03		179.03	0.000024	0.12	219.84	277.60	0.03
Main	3213.481	PF 1	19.10	176.28	179.03		179.03	0.000022	0.10	287.43	381.71	0.02
Main	3192.173	PF 1	19.10	176.24	179.03	177.98	179.03	0.000012	0.07	357.48	406.11	0.02
Main	3184.326		Bridge									
Main	3178.667	PF 1	19.10	176.22	179.03	178.02	179.03	0.000009	0.06	398.32	409.22	0.01
Main	3165.552	PF 1	19.10	176.21	179.03	177.95	179.03	0.000007	0.07	406.99	369.93	0.02
Main	3063.519	PF 1	19.10	176.14	179.03	177.53	179.03	0.000002	0.04	807.54	971.14	0.01
Main	2977.502	PF 1	19.10	176.08	179.03	177.42	179.03	0.000001	0.03	1085.87	1084.40	0.01
Main	2887.125	PF 1	19.10	176.02	179.03	177.43	179.03	0.000001	0.02	1297.54	1126.07	0.00
Main	2816.561	PF 1	19.10	175.97	179.03	177.37	179.03	0.000000	0.02	1476.03	1220.04	0.00
Main	2749.676	PF 1	19.10	175.93	179.03	177.41	179.03	0.000001	0.02	1258.80	1311.42	0.00
Main	2698.785	PF 1	19.10	175.89	179.03	177.40	179.03	0.000001	0.02	1130.16	1103.13	0.00
Main	2639.83	PF 1	19.10	175.85	179.03	177.17	179.03	0.000002	0.04	583.72	693.42	0.01
Main	2602.333	PF 1	19.10	175.83	179.03	177.17	179.03	0.000004	0.05	328.84	173.32	0.01
Main	2596.053	PF 1	19.10	175.82	179.03	177.13	179.03	0.000003	0.05	347.83	177.56	0.01
Main	2589.555		Culvert									
Main	2582.989	PF 1	19.10	175.81	179.03		179.03	0.000006	0.06	290.56	181.13	0.01
Main	2580.652	PF 1	19.10	175.80	179.03		179.03	0.000002	0.04	526.14	345.69	0.01
Main	2577.576	PF 1	19.10	175.77	179.03	177.28	179.03	0.000001	0.03	674.06	442.02	0.01
Main	2571.395		Culvert									
Main	2562.964	PF 1	19.10	175.77	177.50	177.28	177.52	0.007702	0.72	26.77	308.13	0.39
Main	2558.173	PF 1	19.10	175.77	177.47	177.20	177.50	0.003803	1.05	29.56	333.00	0.31
Main	2538.146	PF 1	19.10	175.74	177.44	176.79	177.45	0.001176	0.64	43.60	548.89	0.18
Main	2475.458	PF 1	24.10	175.67	177.12	177.12	177.22	0.021526	2.23	21.77	236.46	0.70
Main	2414.225	PF 1	24.10	175.60	177.08	176.92	177.08	0.000622	0.24	125.08	419.95	0.11
Main	2352.828	PF 1	24.10	175.55	177.02	177.01	177.02	0.001575	0.59	92.33	405.95	0.19
Main	2266.219	PF 1	24.10	175.44	176.92	176.86	176.93	0.000758	0.44	126.99	618.77	0.14
Main	2140.456	PF 1	24.10	175.30	176.82	176.54	176.82	0.000930	0.54	88.04	524.83	0.16
Main	2019.667	PF 1	24.10	175.16	176.75	176.24	176.75	0.000372	0.37	110.34	686.29	0.11
Main	1891.918	PF 1	24.10	175.02	176.68	176.18	176.69	0.000777	0.54	85.18	630.35	0.15
Main	1763.928	PF 1	24.10	174.88	176.63	176.49	176.63	0.000269	0.26	153.70	1462.22	0.08
Main	1537.122	PF 1	24.10	174.62	176.52	176.40	176.53	0.000909	0.44	83.98	1197.68	0.15
Main	1360.516	PF 1	24.10	174.42	176.52	175.84	176.52	0.000018	0.10	505.99	1022.22	0.03
Main	1350.843	PF 1	24.10	174.41	176.52	175.68	176.52	0.000012	0.08	561.47	1061.74	0.02
Main	1214.436	PF 1	24.10	174.26	176.51	175.44	176.51	0.000032	0.15	277.98	765.08	0.04
Main	1048.968	PF 1	24.10	174.08	176.51	175.40	176.51	0.000020	0.16	340.13	867.24	0.04
Main	912.0248	PF 1	24.10	173.92	176.51	175.37	176.51	0.000018	0.16	344.53	920.83	0.04
Main	766.321	PF 1	24.10	173.90	176.51	175.87	176.51	0.000006	0.11	535.63	1164.51	0.03
Main	659.084	PF 1	24.10	173.90	176.49	175.71	176.50	0.000480	0.78	79.88	798.18	0.18
Main	646.5068	PF 1	24.10	173.90	176.50	175.27	176.50	0.000040	0.33	211.65	362.86	0.07
Main	633.7078		Culvert									
Main	620.3826	PF 1	24.10	173.90	176.49	175.66	176.50	0.000147	0.63	91.07	105.06	0.13
Main	618.2822	PF 1	24.10	173.90	176.49	175.87	176.50	0.000168	0.64	89.67	104.77	0.14
Main	521.4542	PF 1	24.10	173.90	176.49	175.63	176.49	0.000002	0.06	911.70	1073.32	0.01
Main	428.1618	PF 1	24.10	173.90	176.49	175.48	176.49	0.000001	0.05	1247.31	1515.70	0.01
Main	323.1122	PF 1	24.10	173.90	176.49	175.33	176.49	0.000001	0.06	1267.11	1539.41	0.01
Main	253.1821	PF 1	24.10	173.90	176.49	175.31	176.49	0.000001	0.05	1207.74	1665.36	0.01
Main	231.774	PF 1	24.10	173.91	176.49	175.34	176.49	0.000001	0.05	1083.23	1304.37	0.01
Main	221.4046		Culvert									
Main	211.148	PF 1	24.10	173.92	176.49	175.30	176.49	0.000006	0.12	436.74	1191.32	0.03
Main	200.6427	PF 1	24.10	173.92	176.49	175.24	176.49	0.000004	0.10	413.60	1153.01	0.02
Main	143.9432	PF 1	24.10	173.95	176.49	175.52	176.49	0.000078	0.42	123.82	809.29	0.10
Main	118.0865	PF 1	24.10	173.96	176.38	175.43	176.48	0.000997	1.38	18.31	589.88	0.34
Main	104.2832	PF 1	24.10	174.06	176.31	175.36	176.45	0.001707	1.70	14.20	399.53	0.40
Main	98.51758		Inl Struct									
Main	90.40731	PF 1	24.10	174.00	175.39	175.21	175.69	0.005709	2.42	9.96	9.95	0.77
Main	82.98856	PF 1	24.10	174.00	175.22	175.22	175.62	0.010112	2.80	8.61	10.92	1.01

Table 2.0 - Current Properties with Two (2) New Developed Lots on East Side

HEC-RAS Plan: 33 River: BeaverDamDrain Reach: Main Profile: PF 1

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Main	5649.622	PF 1	15.70	177.62	179.71		179.71	0.000004	0.06	340.81	485.76	0.02
Main	5640.246	PF 1	15.70	177.62	179.71	178.82	179.71	0.000004	0.06	357.67	480.38	0.02
Main	5627.330		Culvert									
Main	5614.885	PF 1	15.70	177.61	179.70	178.89	179.70	0.000004	0.06	341.34	423.65	0.02
Main	5604.59	PF 1	15.70	177.60	179.70	178.85	179.70	0.000004	0.06	337.58	415.07	0.02
Main	5583.056	PF 1	15.70	177.57	179.70	179.04	179.70	0.000005	0.07	313.63	406.44	0.02
Main	5572.635	PF 1	15.70	177.56	179.70	178.94	179.70	0.000006	0.07	305.57	408.24	0.02
Main	5569.216		Bridge									
Main	5563.179	PF 1	15.70	177.55	179.70	178.90	179.70	0.000006	0.08	299.45	417.38	0.02
Main	5515.562	PF 1	15.70	177.44	179.70	178.72	179.70	0.000005	0.08	304.58	378.58	0.02
Main	5506.027	PF 1	15.70	177.41	179.70	178.72	179.70	0.000006	0.08	294.40	363.24	0.02
Main	5494.577	PF 1	15.70	177.41	179.70		179.70	0.000006	0.08	276.81	330.94	0.02
Main	5484.1	PF 1	15.70	177.41	179.70	178.74	179.70	0.000006	0.08	269.37	307.25	0.02
Main	5388.259	PF 1	15.70	177.41	179.70		179.70	0.000007	0.09	250.93	272.68	0.02
Main	5379.509	PF 1	15.70	177.41	179.70	178.57	179.70	0.000007	0.10	244.14	271.99	0.02
Main	5375.759		Bridge									
Main	5365.98	PF 1	15.70	177.41	179.70		179.70	0.000008	0.10	225.77	243.40	0.02
Main	5356.483	PF 1	15.70	177.40	179.70	178.70	179.70	0.000092	0.33	67.98	244.40	0.08
Main	5251.444	PF 1	15.70	177.40	179.70	178.51	179.70	0.000026	0.17	120.47	232.56	0.04
Main	5122.923	PF 1	15.70	177.39	179.69	178.51	179.69	0.000010	0.11	224.10	298.03	0.03
Main	5113.53	PF 1	15.70	177.39	179.69	178.55	179.69	0.000011	0.12	213.71	295.07	0.03
Main	5108.108		Bridge									
Main	5101.667	PF 1	15.70	177.39	179.69		179.69	0.000013	0.13	206.61	292.00	0.03
Main	5092.027	PF 1	15.70	177.39	179.69	178.50	179.69	0.000013	0.13	195.71	297.77	0.03
Main	5000.183	PF 1	15.70	177.39	179.69	178.35	179.69	0.000011	0.07	227.29	295.96	0.02
Main	4887.108	PF 1	15.70	177.38	179.69	178.78	179.69	0.000023	0.15	193.46	276.09	0.04
Main	4792.208	PF 1	15.70	177.38	179.69	178.59	179.69	0.000010	0.23	226.57	297.05	0.06
Main	4743.279	PF 1	15.70	177.38	179.69	178.95	179.69	0.000024	0.33	171.06	338.17	0.09
Main	4692.966	PF 1	15.70	177.38	179.69	178.89	179.69	0.000020	0.33	161.28	220.77	0.09
Main	4688.699	PF 1	15.70	177.38	179.69	179.17	179.69	0.000022	0.32	160.22	223.40	0.09
Main	4683.299		Culvert									
Main	4676.571	PF 1	15.70	177.38	179.69	179.20	179.69	0.000020	0.31	164.61	221.83	0.08
Main	4671.208	PF 1	15.70	177.38	179.69	179.14	179.69	0.000032	0.09	168.31	219.62	0.03
Main	4633.101	PF 1	15.70	177.38	179.68	179.01	179.69	0.000053	0.14	145.88	220.57	0.04
Main	4574.502	PF 1	15.70	177.36	179.67	179.26	179.68	0.000631	0.49	53.16	108.04	0.13
Main	4570.663	PF 1	15.70	177.36	179.67	178.96	179.67	0.000256	0.29	66.94	105.07	0.07
Main	4565.643		Culvert									
Main	4559.555	PF 1	15.70	177.36	179.48	179.01	179.48	0.000114	0.17	102.85	134.97	0.05
Main	4557.962	PF 1	15.70	177.35	179.48	178.69	179.48	0.000072	0.14	118.41	138.74	0.04
Main	4488.429	PF 1	15.70	177.29	179.48	178.71	179.48	0.000051	0.13	174.94	371.86	0.03
Main	4412.907	PF 1	15.70	177.23	179.47	179.01	179.47	0.000081	0.14	160.49	523.30	0.04
Main	4352.556	PF 1	15.70	177.18	179.46	178.59	179.46	0.000262	0.31	77.78	614.56	0.08
Main	4342.653	PF 1	15.70	177.17	179.46	178.44	179.46	0.000259	0.32	73.21	594.00	0.08
Main	4334.239		Culvert									
Main	4327.295	PF 1	15.70	177.15	179.45	178.43	179.45	0.000218	0.29	73.20	572.71	0.07
Main	4316.046	PF 1	15.70	177.15	179.45	178.32	179.45	0.000132	0.23	79.44	571.33	0.06
Main	4281.646	PF 1	15.70	177.12	179.45	178.28	179.45	0.000090	0.20	82.94	553.30	0.05
Main	4278.073	PF 1	15.70	177.12	179.45	178.40	179.45	0.000100	0.20	81.05	556.42	0.05
Main	4270.652		Culvert									
Main	4263.136	PF 1	15.70	177.11	179.43	178.39	179.43	0.000106	0.24	76.64	485.69	0.06
Main	4252.244	PF 1	15.70	177.10	179.43	178.34	179.43	0.000098	0.23	78.98	447.70	0.06
Main	4136.239	PF 1	15.70	177.03	179.38	178.37	179.40	0.000551	0.84	26.37	325.04	0.20
Main	4049.12	PF 1	15.70	176.97	179.33	178.39	179.35	0.000533	0.78	26.65	260.25	0.19
Main	3951.578	PF 1	15.70	176.91	179.30	178.27	179.31	0.000328	0.78	37.33	150.11	0.18
Main	3899.268	PF 1	15.70	176.88	179.30	178.09	179.30	0.000102	0.43	61.37	84.99	0.10
Main	3848.793	PF 1	15.70	176.85	179.29	178.06	179.30	0.000091	0.42	75.36	141.56	0.10
Main	3803.685	PF 1	15.70	176.82	179.27	178.26	179.29	0.000277	0.69	30.19	145.74	0.18
Main	3709.865	PF 1	15.70	176.82	179.23	178.44	179.26	0.000462	0.85	29.21	484.35	0.23
Main	3614.638	PF 1	15.70	176.82	179.24	178.17	179.24	0.000016	0.18	252.95	675.14	0.05
Main	3593.771	PF 1	15.70	176.82	179.24	178.16	179.24	0.000010	0.14	289.31	652.88	0.04
Main	3588.409		Bridge									
Main	3585.333	PF 1	15.70	176.82	179.24	178.26	179.24	0.000007	0.12	327.50	660.84	0.03
Main	3578.098	PF 1	15.70	176.82	179.24	178.30	179.24	0.000005	0.10	374.64	662.29	0.03
Main	3570.625	PF 1	15.70	176.81	179.24	178.14	179.24	0.000005	0.11	394.95	666.94	0.03
Main	3557.856		Culvert	***Main Street Culvert***								
Main	3547.604	PF 1	19.10	176.80	179.08	178.53	179.09	0.000128	0.48	89.90	615.01	0.12
Main	3535.841	PF 1	19.10	176.79	179.08		179.08	0.000045	0.28	181.39	436.94	0.07
Main	3504	PF 1	19.10	176.65	179.08		179.08	0.000017	0.17	273.56	584.00	0.04
Main	3472	PF 1	19.10	176.65	179.08		179.08	0.000010	0.14	339.71	604.70	0.03
Main	3440.136	PF 1	19.10	176.66	179.08		179.08	0.000011	0.07	336.91	606.99	0.02
Main	3416	PF 1	19.10	176.43	179.08		179.08	0.000005	0.05	443.10	608.73	0.01
Main	3392	PF 1	19.10	176.55	179.08		179.08	0.000004	0.05	478.04	612.79	0.01
Main	3368	PF 1	19.10	176.45	179.08		179.08	0.000004	0.05	506.09	673.63	0.01
Main	3344.535	PF 1	19.10	176.53	179.08		179.08	0.000004	0.04	451.79	488.11	0.01
Main	3333.891	PF 1	19.10	176.52	179.08	177.72	179.08	0.000002	0.03	589.09	590.41	0.01
Main	3318.738		Culvert	***Killaly Street Culvert***								
Main	3301.874	PF 1	19.10	176.46	179.03	177.63	179.04	0.000001	0.03	620.24	529.48	0.01

Table 2.0 - Current Properties with Two (2) New Developed Lots on East Side

HEC-RAS Plan: 33 River: BeaverDamDrain Reach: Main Profile: PF 1 (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Main	3284.692	PF 1	19.10	176.43	179.03		179.03	0.000003	0.04	495.64	495.51	0.01
Main	3247.761	PF 1	19.10	176.35	179.03		179.03	0.000024	0.12	219.87	277.61	0.03
Main	3213.481	PF 1	19.10	176.28	179.03		179.03	0.000022	0.10	287.48	381.71	0.02
Main	3192.173	PF 1	19.10	176.24	179.03	177.98	179.03	0.000012	0.07	357.53	406.11	0.02
Main	3184.326		Bridge									
Main	3178.667	PF 1	19.10	176.22	179.03	178.02	179.03	0.000009	0.06	398.37	409.22	0.01
Main	3165.552	PF 1	19.10	176.21	179.03	177.95	179.03	0.000007	0.07	407.04	369.93	0.02
Main	3063.519	PF 1	19.10	176.14	179.03	177.53	179.03	0.000002	0.04	807.64	971.15	0.01
Main	2977.502	PF 1	19.10	176.08	179.03	177.42	179.03	0.000001	0.03	1086.00	1084.41	0.01
Main	2887.125	PF 1	19.10	176.02	179.03	177.43	179.03	0.000001	0.02	1297.69	1126.07	0.00
Main	2816.561	PF 1	19.10	175.97	179.03	177.37	179.03	0.000000	0.02	1476.19	1220.06	0.00
Main	2749.676	PF 1	19.10	175.93	179.03	177.41	179.03	0.000001	0.02	1258.92	1311.43	0.00
Main	2698.785	PF 1	19.10	175.89	179.03	177.40	179.03	0.000001	0.02	1130.27	1103.14	0.00
Main	2639.83	PF 1	19.10	175.85	179.03	177.17	179.03	0.000002	0.04	583.76	693.43	0.01
Main	2602.333	PF 1	19.10	175.83	179.03	177.17	179.03	0.000004	0.05	328.86	173.32	0.01
Main	2596.053	PF 1	19.10	175.82	179.03	177.13	179.03	0.000003	0.05	347.85	177.56	0.01
Main	2589.555		Culvert									
Main	2582.989	PF 1	19.10	175.81	179.03		179.03	0.000006	0.06	289.90	181.13	0.01
Main	2580.652	PF 1	19.10	175.80	179.03		179.03	0.000002	0.04	524.89	345.69	0.01
Main	2577.576	PF 1	19.10	175.77	179.03	177.27	179.03	0.000001	0.03	672.47	442.02	0.01
Main	2571.395		Culvert									
Main	2562.964	PF 1	19.10	175.77	177.50	177.28	177.52	0.007706	0.72	26.77	308.11	0.39
Main	2558.173	PF 1	19.10	175.77	177.47	177.20	177.50	0.003805	1.05	29.56	332.99	0.31
Main	2538.146	PF 1	19.10	175.74	177.44	176.78	177.45	0.001176	0.64	43.60	548.87	0.18
Main	2475.458	PF 1	24.10	175.67	177.12	177.12	177.22	0.021527	2.23	21.77	236.46	0.70
Main	2414.225	PF 1	24.10	175.60	177.08	176.92	177.08	0.000622	0.24	125.08	419.95	0.11
Main	2352.828	PF 1	24.10	175.55	177.02	177.01	177.02	0.001575	0.59	92.33	405.95	0.19
Main	2266.219	PF 1	24.10	175.44	176.92	176.86	176.93	0.000758	0.44	126.99	618.77	0.14
Main	2140.456	PF 1	24.10	175.30	176.82	176.54	176.82	0.000930	0.54	88.04	524.83	0.16
Main	2019.667	PF 1	24.10	175.16	176.75	176.24	176.75	0.000372	0.37	110.34	686.29	0.11
Main	1891.918	PF 1	24.10	175.02	176.68	176.18	176.69	0.000777	0.54	85.18	630.35	0.15
Main	1763.928	PF 1	24.10	174.88	176.63	176.49	176.63	0.000269	0.26	153.70	1462.22	0.08
Main	1537.122	PF 1	24.10	174.62	176.52	176.40	176.53	0.000909	0.44	83.99	1197.68	0.15
Main	1360.516	PF 1	24.10	174.42	176.52	175.84	176.52	0.000018	0.10	506.01	1022.24	0.03
Main	1350.843	PF 1	24.10	174.41	176.52	175.68	176.52	0.000012	0.08	561.49	1061.75	0.02
Main	1214.436	PF 1	24.10	174.26	176.51	175.43	176.51	0.000032	0.15	277.98	765.11	0.04
Main	1048.968	PF 1	24.10	174.08	176.51	175.40	176.51	0.000020	0.16	340.14	867.27	0.04
Main	912.0248	PF 1	24.10	173.92	176.51	175.37	176.51	0.000018	0.16	344.54	920.87	0.04
Main	766.321	PF 1	24.10	173.90	176.51	175.87	176.51	0.000006	0.11	535.65	1164.52	0.03
Main	659.084	PF 1	24.10	173.90	176.49	175.70	176.50	0.000479	0.78	79.89	798.20	0.18
Main	646.5068	PF 1	24.10	173.90	176.50	175.27	176.50	0.000040	0.33	211.65	362.86	0.07
Main	633.7078		Culvert									
Main	620.3826	PF 1	24.10	173.90	176.49	175.65	176.50	0.000147	0.63	91.07	105.06	0.13
Main	618.2822	PF 1	24.10	173.90	176.49	175.88	176.50	0.000168	0.64	89.67	104.77	0.14
Main	521.4542	PF 1	24.10	173.90	176.49	175.63	176.49	0.000002	0.06	911.70	1073.32	0.01
Main	428.1618	PF 1	24.10	173.90	176.49	175.48	176.49	0.000001	0.05	1247.31	1515.70	0.01
Main	323.1122	PF 1	24.10	173.90	176.49	175.33	176.49	0.000001	0.06	1267.11	1539.41	0.01
Main	253.1821	PF 1	24.10	173.90	176.49	175.31	176.49	0.000001	0.05	1207.74	1665.36	0.01
Main	231.774	PF 1	24.10	173.91	176.49	175.34	176.49	0.000001	0.05	1083.23	1304.37	0.01
Main	221.4046		Culvert									
Main	211.148	PF 1	24.10	173.92	176.49	175.30	176.49	0.000006	0.12	436.74	1191.32	0.03
Main	200.6427	PF 1	24.10	173.92	176.49	175.24	176.49	0.000004	0.10	413.60	1153.01	0.02
Main	143.9432	PF 1	24.10	173.95	176.49	175.52	176.49	0.000078	0.42	123.82	809.29	0.10
Main	118.0865	PF 1	24.10	173.96	176.38	175.43	176.48	0.000997	1.38	18.31	589.96	0.34
Main	104.2832	PF 1	24.10	174.06	176.31	175.36	176.45	0.001706	1.70	14.21	399.72	0.40
Main	98.51758		Inl Struct									
Main	90.40731	PF 1	24.10	174.00	175.39	175.21	175.69	0.005738	2.42	9.94	9.95	0.77
Main	82.98856	PF 1	24.10	174.00	175.23	175.23	175.62	0.009984	2.79	8.65	10.94	1.00

Comparision of Floodline Elevations between Current properties Filled and with Two (2) New Lots Added on East Side

River Sta	Q Total (m3/s)	Current Properties Filled 2019 to Present - East & West Sides W.S. Elev (m)	Current Properties with **Two (2) New Lots** on East Side W.S. Elev (m)	**Δ WSEL With Two (2) Lots - Current Filled Lots (m)**
5649.622	15.7	179.70	179.71	0.01
5640.246	15.7	179.70	179.71	0.01
5627.33	Culvert			
5614.885	15.7	179.70	179.70	0
5604.59	15.7	179.70	179.70	0
5583.056	15.7	179.70	179.70	0
5572.635	15.7	179.70	179.70	0
5569.216	Bridge			
5563.179	15.7	179.70	179.70	0
5515.562	15.7	179.70	179.70	0
5506.027	15.7	179.70	179.70	0
5494.577	15.7	179.70	179.70	0
5484.1	15.7	179.70	179.70	0
5388.259	15.7	179.70	179.70	0
5379.509	15.7	179.70	179.70	0
5375.759	Bridge			
5365.98	15.7	179.70	179.70	0
5356.483	15.7	179.69	179.70	0.01
5251.444	15.7	179.69	179.70	0.01
5122.923	15.7	179.69	179.69	0
5113.53	15.7	179.69	179.69	0
5108.108	Bridge			
5101.667	15.7	179.69	179.69	0
5092.027	15.7	179.69	179.69	0
5000.183	15.7	179.69	179.69	0
4887.108	15.7	179.68	179.69	0.01
4792.208	15.7	179.68	179.69	0.01
4743.279	15.7	179.68	179.69	0.01
4692.966	15.7	179.68	179.69	0.01
4688.699	15.7	179.68	179.69	0.01
4683.299	Culvert			
4676.571	15.7	179.68	179.69	0.01
4671.208	15.7	179.68	179.69	0.01
4633.101	15.7	179.68	179.68	0
4574.502	15.7	179.66	179.67	0.01
4570.663	15.7	179.66	179.67	0.01
4565.643	Culvert			
4559.555	15.7	179.48	179.48	0
4557.962	15.7	179.48	179.48	0
4488.429	15.7	179.47	179.48	0.01
4412.907	15.7	179.47	179.47	0
4352.556	15.7	179.46	179.46	0
4342.653	15.7	179.45	179.46	0.01
4334.239	Culvert			
4327.295	15.7	179.45	179.45	0
4316.046	15.7	179.45	179.45	0
4281.646	15.7	179.44	179.45	0.01
4278.073	15.7	179.44	179.45	0.01

Comparision of Floodline Elevations between Current properties Filled and with Two (2) New Lots Added on East Side

River Sta	Q Total (m3/s)	Current Properties Filled 2019 to Present - East & West Sides W.S. Elev (m)	Current Properties with **Two (2) New Lots** on East Side W.S. Elev (m)	**Δ WSEL With Two (2) Lots - Current Filled Lots (m)**
4270.652	Culvert			
4263.136	15.7	179.42	179.43	0.01
4252.244	15.7	179.42	179.43	0.01
4136.239	15.7	179.37	179.38	0.01
4049.12	15.7	179.32	179.33	0.01
3951.578	15.7	179.29	179.30	0.01
3899.268	15.7	179.29	179.30	0.01
3848.793	15.7	179.28	179.29	0.01
3803.685	15.7	179.26	179.27	0.01
3709.865	15.7	179.21	179.23	0.02
3614.638	15.7	179.23	179.24	0.01
3593.771	15.7	179.23	179.24	0.01
3588.409	Bridge			
3585.333	15.7	179.23	179.24	0.01
3578.098	15.7	179.23	179.24	0.01
3570.625	15.7	179.23	179.24	0.01
3557.856	Culvert			
3547.604	19.1	179.08	179.08	0
3535.841	19.1	179.08	179.08	0
3504	19.1	179.08	179.08	0
3472	19.1	179.08	179.08	0
3440.136	19.1	179.08	179.08	0
3416	19.1	179.08	179.08	
3392	19.1	179.08	179.08	0
3368	19.1	179.08	179.08	0
3344.535	19.1	179.08	179.08	0
3333.891	19.1	179.08	179.08	0
3318.738	Culvert			0
3301.874	19.1	179.03	179.03	
3284.692	19.1	179.03	179.03	0
3247.761	19.1	179.03	179.03	0
3213.481	19.1	179.03	179.03	0
3192.173	19.1	179.03	179.03	0
3184.326	Bridge			0
3178.667	19.1	179.03	179.03	0
3165.552	19.1	179.03	179.03	0
3063.519	19.1	179.03	179.03	0
2977.502	19.1	179.03	179.03	0
2887.125	19.1	179.03	179.03	0
2816.561	19.1	179.03	179.03	0
2749.676	19.1	179.03	179.03	
2698.785	19.1	179.03	179.03	0
2639.83	19.1	179.03	179.03	0
2602.333	19.1	179.03	179.03	0
2596.053	19.1	179.03	179.03	
2589.555	Culvert			0
2582.989	19.1	179.03	179.03	0
2580.652	19.1	179.03	179.03	0
2577.576	19.1	179.03	179.03	0

Comparision of Floodline Elevations between Current properties Filled and with Two (2) New Lots Added on East Side

River Sta	Q Total (m3/s)	Current Properties Filled 2019 to Present - East & West Sides W.S. Elev (m)	Current Properties with **Two (2) New Lots** on East Side W.S. Elev (m)	**Δ WSEL With Two (2) Lots - Current Filled Lots (m)**
2571.395	Culvert			0
2562.964	19.1	177.50	177.50	0
2558.173	19.1	177.47	177.47	0
2538.146	19.1	177.44	177.44	0
2475.458	24.1	177.12	177.12	0
2414.225	24.1	177.08	177.08	0
2352.828	24.1	177.02	177.02	0
2266.219	24.1	176.92	176.92	0
2140.456	24.1	176.82	176.82	0
2019.667	24.1	176.75	176.75	0
1891.918	24.1	176.68	176.68	0
1763.928	24.1	176.63	176.63	0
1537.122	24.1	176.52	176.52	0
1360.516	24.1	176.52	176.52	0
1350.843	24.1	176.52	176.52	0
1214.436	24.1	176.51	176.51	0
1048.968	24.1	176.51	176.51	
912.0248	24.1	176.51	176.51	0
766.321	24.1	176.51	176.51	0
659.084	24.1	176.49	176.49	0
646.5068	24.1	176.50	176.50	0
633.7078	Culvert			0
620.3826	24.1	176.49	176.49	0
618.2822	24.1	176.49	176.49	0
521.4542	24.1	176.49	176.49	
428.1618	24.1	176.49	176.49	0
323.1122	24.1	176.49	176.49	0
253.1821	24.1	176.49	176.49	0
231.774	24.1	176.49	176.49	0
221.4046	Culvert			0
211.148	24.1	176.49	176.49	
200.6427	24.1	176.49	176.49	0
143.9432	24.1	176.49	176.49	0
118.0865	24.1	176.38	176.38	0
104.2832	24.1	176.31	176.31	0
98.51758	Inl Struct			
90.40731	24.1	175.39	175.39	0
82.98856	24.1	175.23	175.23	0

Figure 1.0 - Current Properties Filled on East & West Side (2019 to Present)

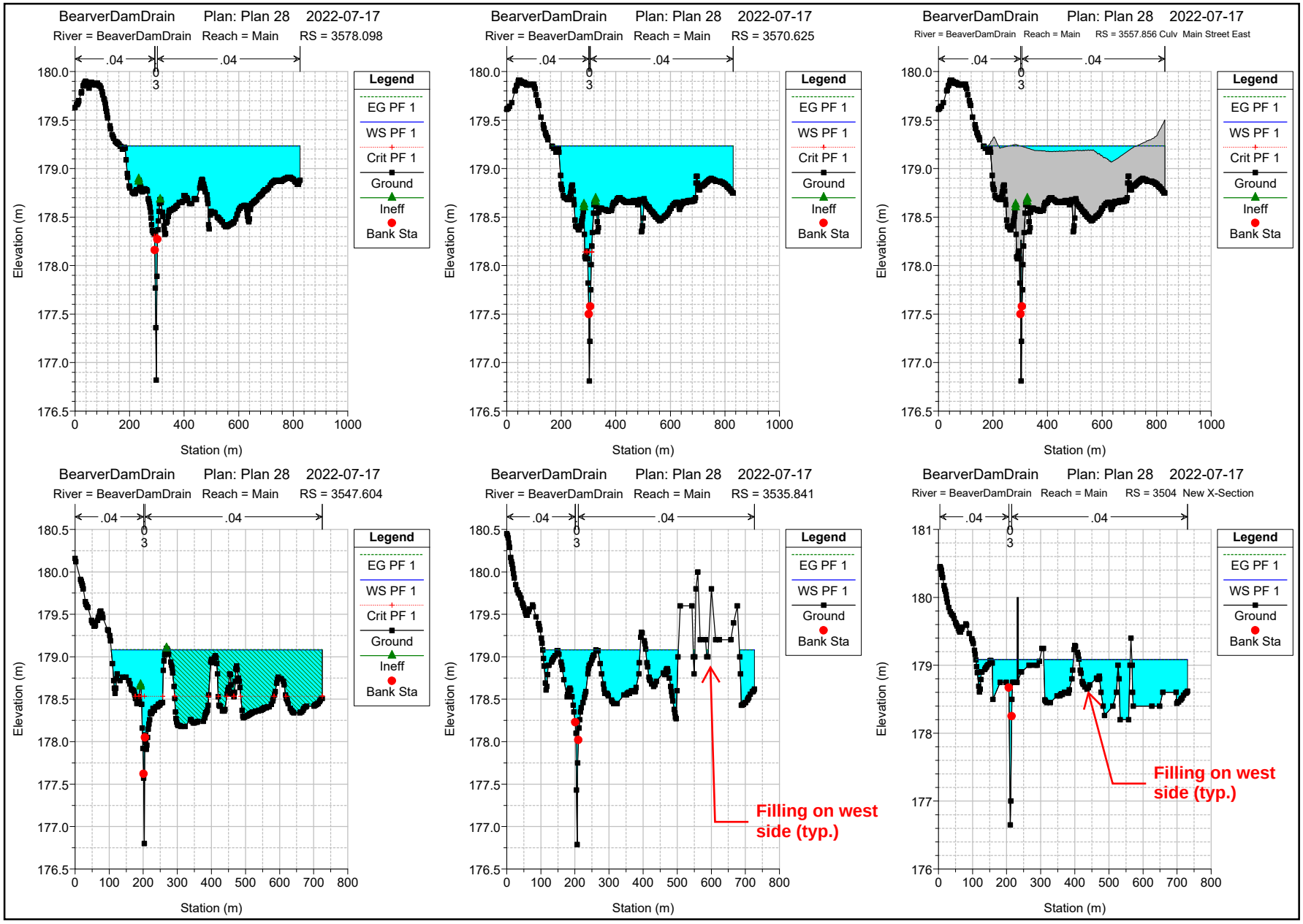


Figure 1.0 - Current Properties Filled on East & West Side (2019 to Present)

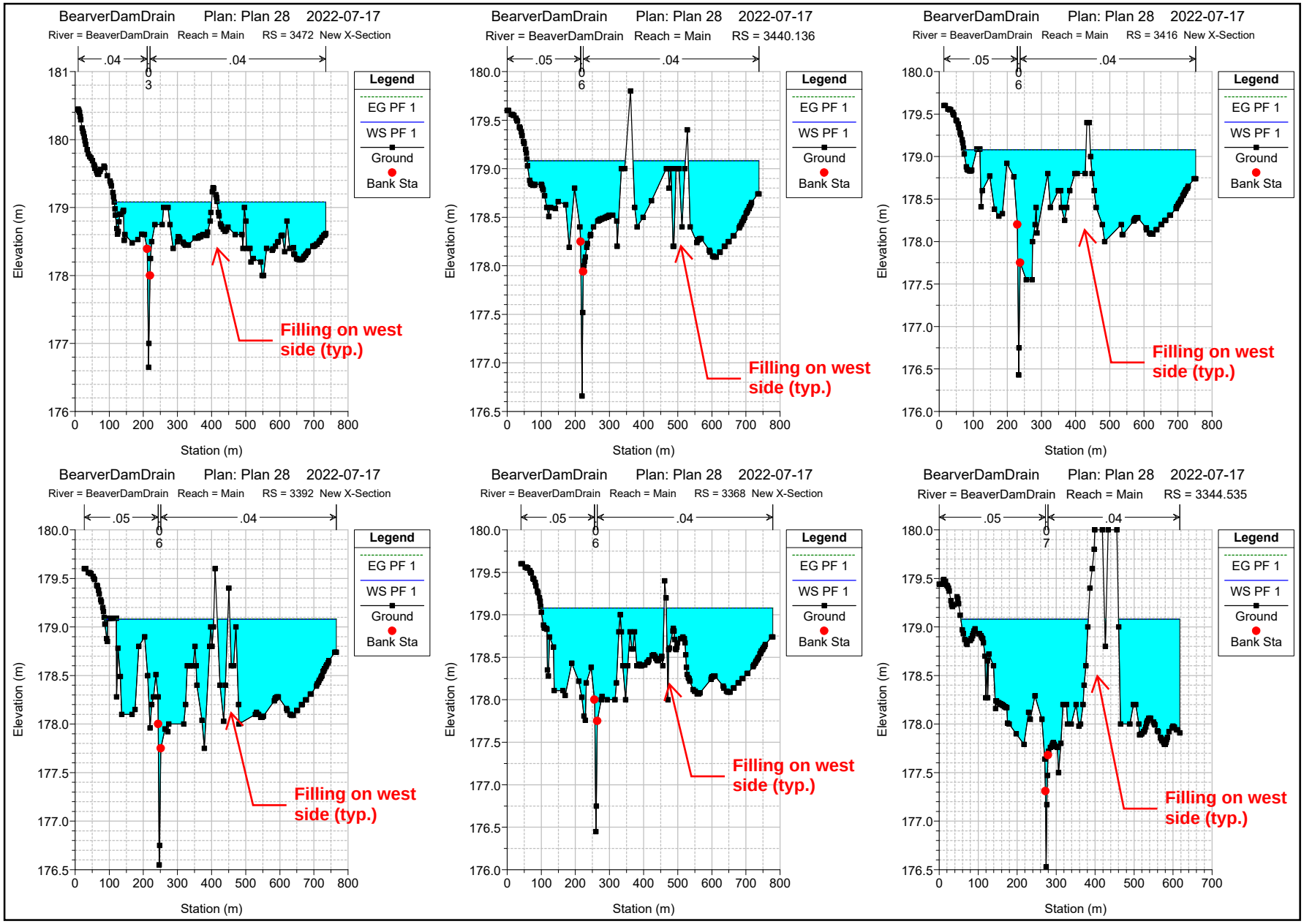


Figure 1.0 - Current Properties Filled on East & West Side (2019 to Present)

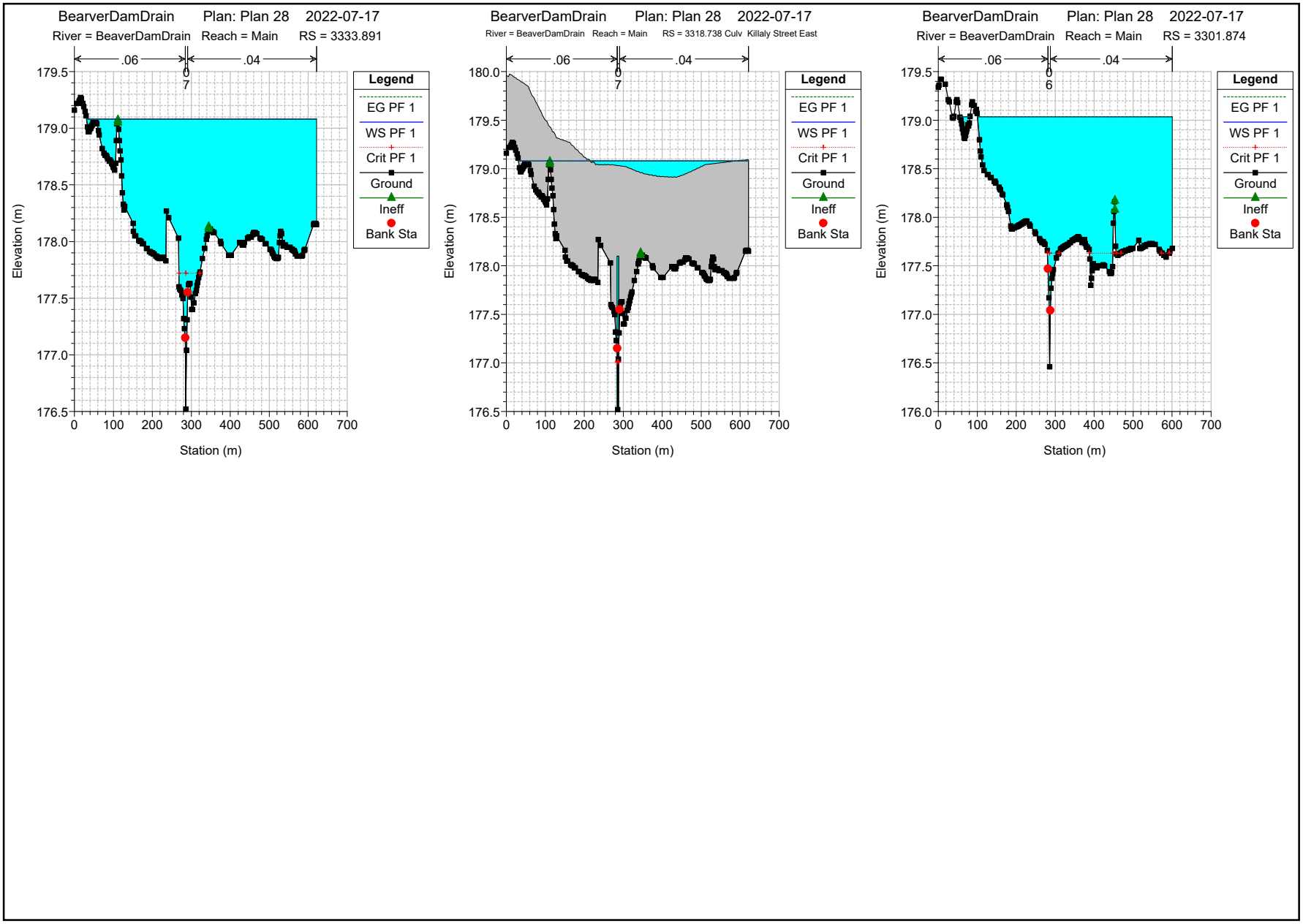


Figure 2.0 - Current Properties with Two (2) New Developed Lots on East Side

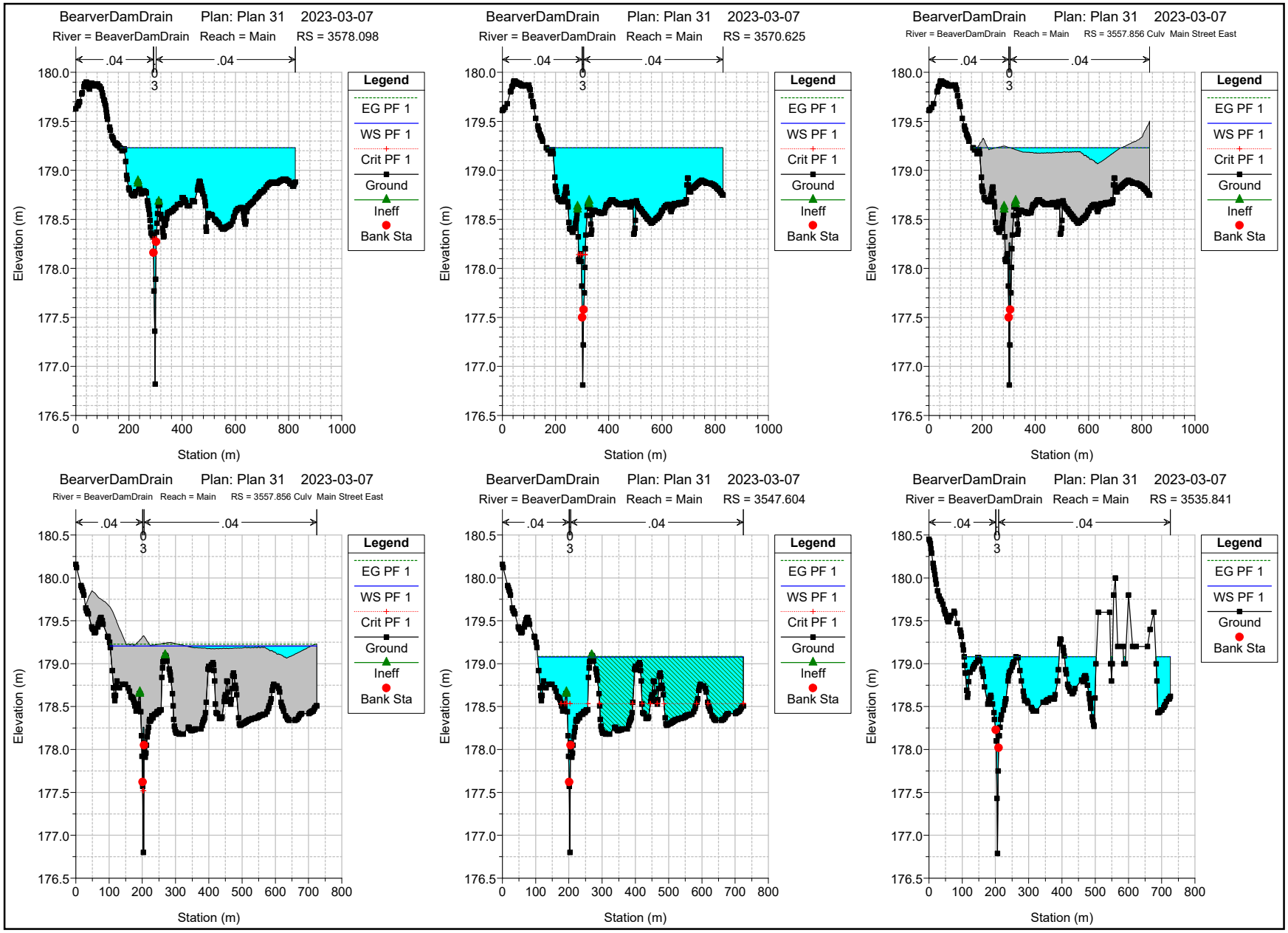


Figure 2.0 - Current Properties with Two (2) New Developed Lots on East Side

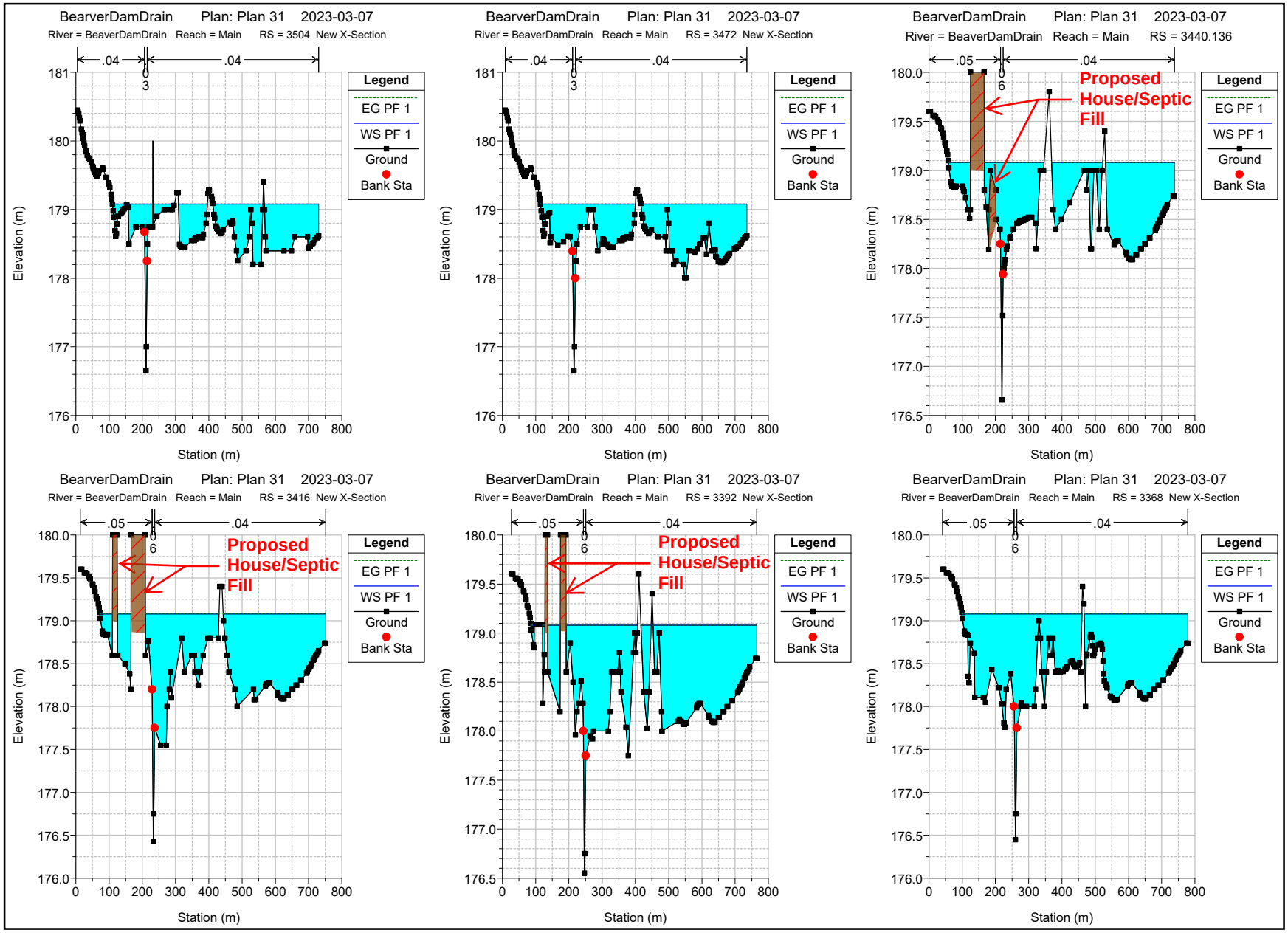
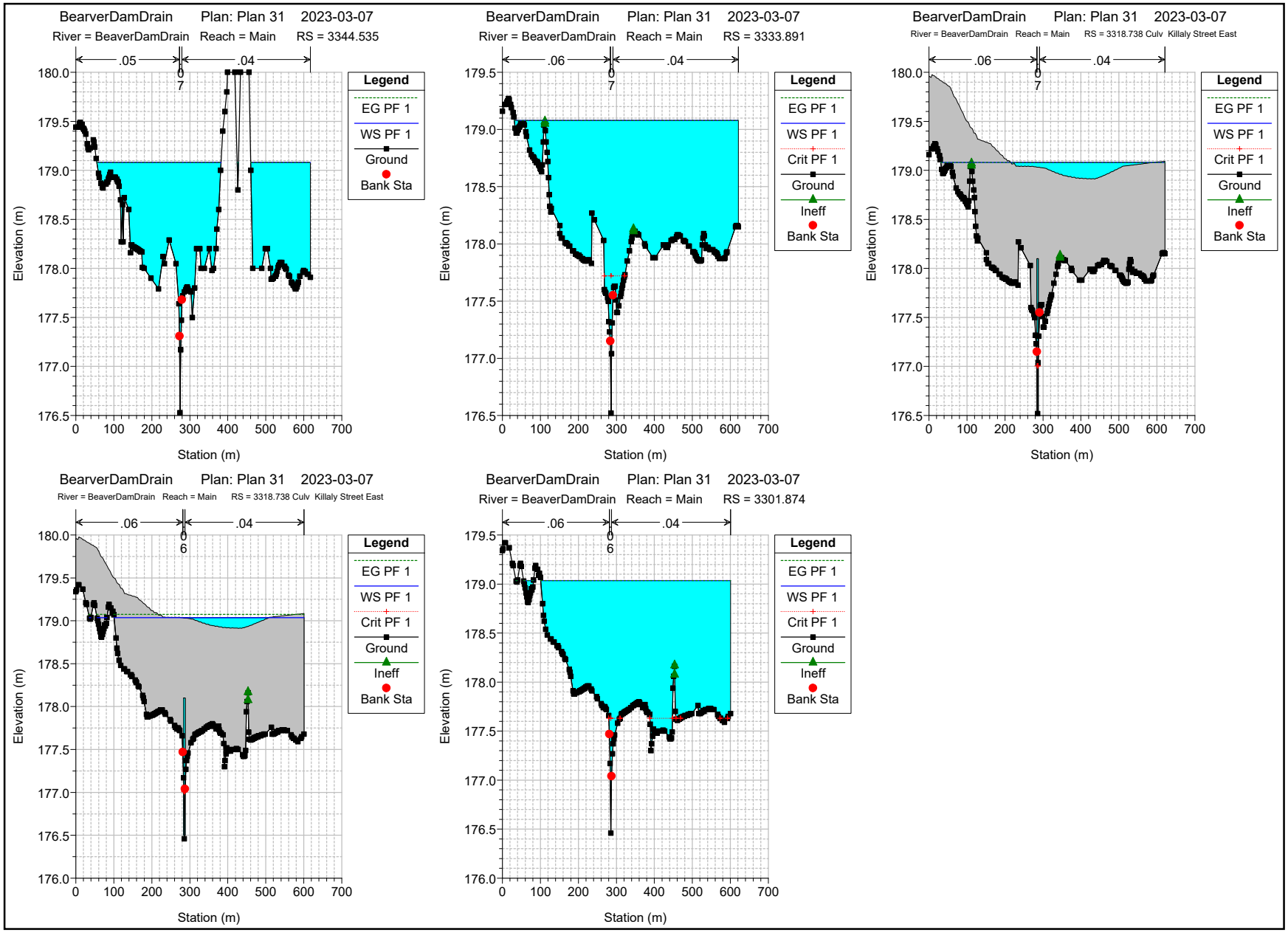


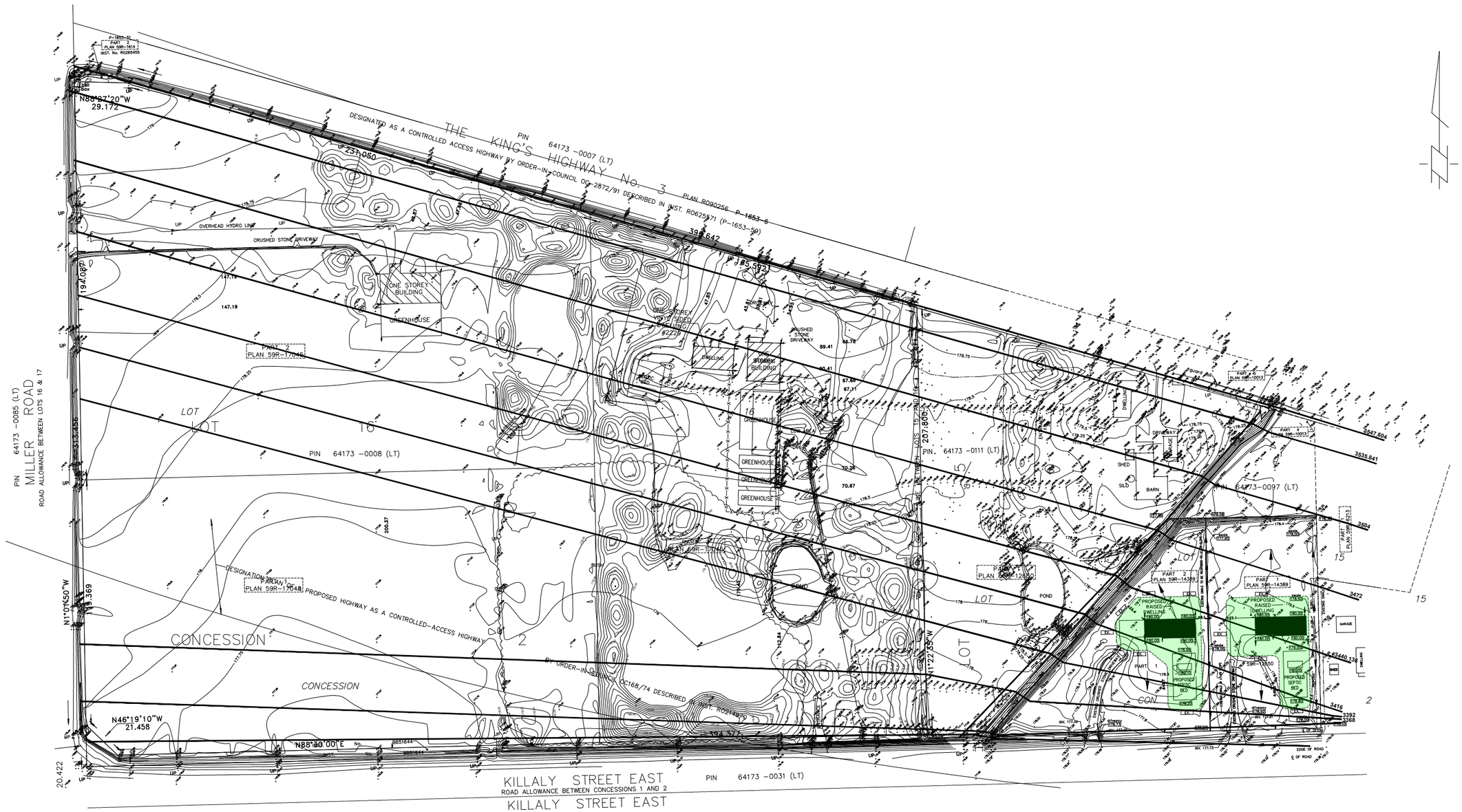
Figure 2.0 - Current Properties with Two (2) New Developed Lots on East Side



Note
Proposed lot grading by others

DWG. 1.0 - PROPOSED LOTS

SCALE - 1:750 (11X17)



DWG. 2.0 - CURRENT PROPERTIES WITH PROPOSED LOTS

SCALE - 1:2000 (11X17)

RECEIPT OF PAYMENT

Receipt Number: 2023004675
Receipt Date: 03/28/2023
Date Paid: 03/28/2023
Full Amount: $847.50

Payment Details:	Payment Method	Amount Tendered	Check Number
	Check	$847.50	085

Amount Tendered: $847.50
Change / Overage: $0.00
Contact: VISSER WESLEY c/o 2023781 Ontario Inc., Address:2309 Highway 3 East, Phone:(905) 834-8484

FEE DETAILS:

Fee Description	Reference Number	Amount Owing	Amount Paid
Hydrogeological Report Review - Major	PLPER202300339	$847.50	$847.50