

# CHAPPUS DRAIN

*Upper End Repair and Improvement*

*& Maintenance Schedule*

*Geographic Township of Sandwich West*

TOWN OF LASALLE



**Town of LaSalle**  
**5950 Malden Road**  
**LaSalle, Ontario N9H 1S4**  
**519-969-7770**

***Rood Engineering Inc.***

***Consulting Engineers***

***9 Nelson Street***

***Leamington, Ontario N8H 1G6***

***519-322-1621***

*Project REI2016D045*

*April 18th, 2023*



April 18th, 2023

Mayor and Municipal Council  
Corporation of the Town of LaSalle  
5950 Malden Road  
LaSalle, Ontario  
N9H 1S4

Mayor Meloche and Members of Council:

**CHAPPUS DRAIN  
Repair and Improvement North Portion Upper End  
& Maintenance Schedule  
Geographic Twp. of Sandwich West  
Project REI2016D045  
Town of LaSalle, County of Essex**

**I. INTRODUCTION**

In accordance with the instructions provided at your meeting on August 9th, 2016, and received from the Town by letter dated August 17th, 2016, from Jonathan Osborne, P.Eng. your former Manager of Engineering, we have prepared the following report that provides for repair and improvements of the open drain at its upper end, along with bridge repairs and improvements along the drain, from Malden Road downstream to Golfview Drive together with ancillary work, and preparation of a maintenance schedule of assessment for proper cost sharing of future maintenance works carried out on the drain and its outlet pursuant to the 1994 drainage report. The Chappus Drain comprises of an open drain generally located running west between Pt. Lots 28 & 29 from Malden Road to Selkirk Avenue, then turning southerly, and flowing southerly and westerly through geographic township of Sandwich West draining to its outlet in the Rigolet Creek connected to the Canard River just south of County Road 3 (Malden Road), in the geographic township of Anderdon, Town of Amherstburg. A plan showing the Chappus Drain and outlet watershed, as well as the general location of the bridges along the drain portion that is being repaired and improved, is included herein as part of the report.

Our appointment and the works relative to the repair and improvements to the Chappus Drain, proposed under this report, is in accordance with Section 78 of the "Drainage Act, R.S.O. 1990, Chapter D.17, as amended 2021". We have performed all of the necessary survey, investigations, etcetera, for the proposed repairs and improvements to the bridges and drain, and we report thereon as follows.

**II. BACKGROUND**

From our review of the information provided from the Town's drainage files we have established the following reports that we utilized as reference for carrying out this project:

- |    |                     |                          |                        |
|----|---------------------|--------------------------|------------------------|
| 1) | November 16th, 1895 | Chappus Drain By-law 261 | C. McPhillipps, D.G.S. |
| 2) | March 7th, 1994     | Chappus Drainage System  | Ed LaFontaine, P.Eng.  |

The 1994 report by Ed LaFontaine, P.Eng. provided for general repairs and improvements to the entire length of the Chappus Drain, its tributaries, outlet drain and bridges and has the latest specifications for the grading of the drain.

We arranged with the Town to provide us with the updated assessment roll information for the affected parcels. We also reviewed reports for the abutting drains and spoke to the owners to help in establishing the current watershed limit for the Chappus Drain during the on-site meeting.

### **III. PRELIMINARY EXAMINATION AND ON-SITE MEETING**

After reviewing all of the drainage information provided by the Town, we arranged with the former Manager of Engineering Jonathan Osborne, P.Eng., to schedule an on-site meeting for June 9th, 2017. The following people were in attendance at said meeting: Charlie Bowyer, Sharon Vickers, Ken & Linda Balkwill, Ron Vermette, G. Lucente, M. Plesa, S. & J. Ferrara, John McCarty, Karen Bunegra, Eugene Nadeau, F. Schwalm, Leah Ohler, Christine Klym, Dan Durocher, Satish & Sanjay Jacob, Anthony Cusinato (Blueview Development), David Quaggiotto, Larry Pajot, Lou-Ann & Robert Kirk, Slebodan Gledic, Pat Pajot, Elsie Rousseau, Dale Laurier, Dina & Ivana Favaro, John Gallinger, Vito Cilluffo, Karen & George Linner, Dan Pajot, John & Sue Skrobiak, J.P. Bezaire, Kay & Michelle Weaver, Irma Costa, Michele DiManno, Bob Pajot, Brenda Hyman, Denis Zonta, Marianne Bezaire Depape, Ulric J. Renaud, Karl Muegge, Dan Farrer, Marvin Diotte, Murray Brown, Dan Stach, Bill Kolodzy, Giles Pajot, Vincent & Maria Nardulli, Chris Blanchette, Marina Simone, David Ducharme, Ross Murchison, M. Schincariol, Gerard Drouillard, Andre Pelletier, Alain Michaud, Peter Scalia, Kevin Markham, Natalie Boow, Peter Ekert, Gary Thibert, Guido Benevuti, Anita Mudry, Marlene Tudor, Janet Meloche, Steve Rock, R. Plastow, Jennifer St. Denis, Mignon Briggs, Grace LaSorda, Barbara M. Chery, Bob Graham, Barb & Mike Dupuis, Randy Cyr, Jeanne Langlois, Dan & Danielle Pelland, Mike Pajot, Joan Scalia, Jennifer Nugent, Jeffrey Renaud (Councillor), Jonathan Osborne (Manager of Engineering), Kory Snelgrove (Rood Engineering), and Gerard Rood (Rood Engineering).

Mr. Osborne did an introduction explaining the on-site meeting and proceeding in accordance with Section 78 of the Drainage Act. The proposed area of the work was shown, and owners were advised that consulting can be done with them after the formal meeting. Details of the drain were discussed, and the primary concern was some serious sediment accumulation in the drain with some bank erosion. It was discussed that the bridges along the drain section to be repaired and improved would be inspected, and owners of the bridges would be contacted if there were concerns with any of the structures. Once the work scope is confirmed, a final report is then prepared and submitted to Council and goes through the Drainage Act process of a Consideration meeting and Court of Revision meeting. Councillor Renaud outlined how the project would proceed and details of cost sharing. He noted that only lands and roads affected by the work will be assessed with larger parcels having a bigger share of the costs. Anyone assessed has the right to use the drain for their drainage needs. Areas downstream of the construction works being provided for on the drain are not assessed for those works.

Mr. Rood noted that two assessment schedules will be prepared with one being for the allocation of construction costs, and the second being a maintenance schedule for the Town to use in allocating future maintenance costs to the lands affected by the future works conducted on the drain and its outlet. He asked the Town and owners to provide information on any drainage changes that they might be aware of. The last report assessed the area immediately around the drain including tributary drains and its outlet through the Rigolet Creek to the Canard River.

Owners brought forward concerns with flooding and poor crops that have been experienced for four years. Approximate time lines for the report preparation and processing were discussed. An owner asked about the extent of the drain cleaning. It was discussed that all trees within the drain cross section from top of bank to top of bank will be removed to prevent obstruction of drainage. The north and west side of the drain will be basically cleared for access to carry out the work and dispose of material; however, some mature trees may be able to be saved if the Contractor can work around them. Material excavated along lawn areas will be trucked away. It was clarified that owners pay a portion of the cost if adjacent to the work area or upstream of the work. The Town wants to restore the drain to an adequate capacity and wants a more accurate and fair assessment schedule for drain maintenance.

Cost sharing of work to the bridges was discussed. Jonathan Osborne pointed out that the County of Essex bears the cost for the drainage from any County Roads. The Town expects to hold a Public Information Centre meeting with the owners to review the Draft report and get their input and address their questions on the project. It was discussed that owners may debenture the cost of \$5,000.00 or greater for the drainage work over a 5 year period to reduce the immediate cost burden of their assessment for the work. There were some general discussions about private ditches and options that are available to the owners.

A second on-site meeting was scheduled on July 13th, 2017, with Amherstburg, to provide affected owners in their town with the opportunity to receive information. No owners showed up at the meeting and the following people were in attendance: Shane McVitty, P.Eng. (Amherstburg Drainage Superintendent), Jonathan Osborne, P.Eng. (LaSalle Manager of Engineering), Kory Snelgrove (Rood Engineering), and Gerard Rood (Rood Engineering). The proposed work to the drain was reviewed with Mr. McVitty and he was advised of the assessment schedule to be provided in the drainage report.

#### **IV. FIELD SURVEY AND INVESTIGATIONS**

Subsequent to the on-site meeting we arranged for a topographic survey of the drain and bridges to be completed on the drain portion from Golfview Drive northerly and easterly to the upstream end near Malden Road (County Road 3). We further arranged to get updated assessment roll information from the Towns and obtained information on the tax class of each of the properties affected by the Municipal Drain.

The Town made initial submissions to the Essex Region Conservation Authority (E.R.C.A.) regarding their requirements and checked for any D.F.O. (Department of Fisheries and Oceans) requirements for work that would be proposed to be carried out on the Drain. A response from the Conservation Authority was received by email on October 13th, 2016, and it indicated that the Town must apply for a permit and follow standard mitigation requirements. We also

reviewed the Town maps for fish and mussel species at risk and find that there are no species indicated in the vicinity of this project. A copy of the concerns and requirements to satisfy E.R.C.A. and D.F.O. is included in **Appendix “REI-A”** of this report.

We also arranged to review the Ministry of Natural Resources & Forestry (M.N.R.F.) Species at Risk (S.A.R.) former agreement made with the Town pursuant to the Endangered Species Act, 2007. The former Town agreement with M.N.R.F. pursuant to Section 23 of the “Endangered Species Act, 2007” expired as of June 30th, 2015, with the former agreements being replaced with new legislation provisions under Ontario Regulation 242/08, administered by the Ministry of Environment, Conservation and Parks (M.E.C.P.), and Section 23.9 which allows repairs, maintenance and improvements to be conducted by the Town within existing municipal drains. These works are exempt from Sections 9 and 10 of the Endangered Species Act provided that the rules in the regulations are followed. When eligible, the new regulations allow Municipalities to give notice to M.N.R.F. by registering their drainage activities through an online registry system. The former Agreement plans indicate that snake species are a concern for this work area and although turtles are not indicated, they are mobile and could be encountered. The Agreement includes mitigation measures to be followed as outlined in “Schedule C Mitigation Measures” of the former agreement document and a copy of same as it relates to turtles and snakes is included herein in **Appendix “REI-B”**. The Town has also arranged for a report titled “Species at Risk Mitigation Plan for Drainage Works” to address requirements for conducting drainage works and the mitigation requirements in that report are included in this Appendix for reference by the Contractor, Owners, and Town staff when works are being conducted on the drain.

Earlier last year the Town was contacted by Essex Golf and Country Club with a request to divert the drain around the perimeter of their parcel. Additional field work has been carried out to establish the requirements for this work and the report and plans include the information needed to carry out this improvement to the drain portion located just north of Golfview Drive.

## **V. BRIDGES REVIEW**

As part of our investigations, we made detailed inspections of all of the bridges and enclosures along the drain portion affected by the works. Their condition and proposed work if any are summarized as follows:

1. (Portion “1C” north of Golfview Drive) This bridge enclosure section primarily serves parcels 130-26600 owned by William & Barbara Thompson, and 130-26700 owned by Pamela Drury & Fabio Visentin, along with access from the west to east side for the Essex Golf & Country Club parcel 130-50000. The structure comprises 900mm diameter H.D.P.E. pipe and is in fair condition and provides the two parcels with restricted use of their entire parcels. Our survey shows that the pipe was not set to the required grades and elevations of the drain. The report provides for the pipe to be extracted and re-installed to the correct elevations and grades to prevent water backup in the drain upstream of the pipe. The report and plans will provide the Town with the details and information needed for future work on the bridge enclosure section pursuant to the maintenance provisions of the Drainage Act.
2. This bridge serves the newly severed parcel 130-50000 owned by Essex Golf & Country Club. The bridge is in fair condition and comprises 900mm diameter corrugated steel pipe (C.S.P.). In discussions with the owner, it was established the owner wants the drain re-aligned to the north and east limit of their parcel and the bridge will no longer be required

with the existing channel being filled in. We have therefore provided for the removal of pipe and any ancillary materials and disposal of same. We recommend that the bridge be abandoned pursuant to Section 19 of the Drainage Act.

3. This bridge serves parcel 130-20400 owned by Tri-B Acres Inc. The bridge is in fair condition and comprises 900mm diameter corrugated steel pipe. The report and plans will provide the Town with the details needed for future work on the bridge pursuant to the maintenance provisions of the Drainage Act. This will include a replacement 1000mm diameter C.S.P. that needs to be embedded 10% of its diameter into the drain bottom and provision for quarried limestone on filter cloth sloped end treatments.

## **VI. PUBLIC INFORMATION CENTRE AND THE DRAINAGE ACT**

Arrangements will be made to meet at the Town Hall with the Manager of Engineering and interested owners to discuss this Draft drainage report for this project. The procedures under the Drainage Act will be reviewed and the next steps will be detailed. Owners are advised that they have the opportunity to debenture their assessed costs for 5 years and pay the assessment with their taxes as outlined in the on-site meeting. Owners are advised that they only pay a share of the cost for work adjacent to their lands and for downstream works to the drain. The Town is aware of concerns with the drain, and they are obliged to act in accordance with the requirements of the Drainage Act.

Benefit and Outlet liability assessments will be discussed as defined below. Establishment of pipe lengths is based on the minimum standard top width of 6.1m (20'), the depth of the drain and the type of end treatment provided. The cost of additional top width requested by an owner is fully borne by that owner. The drainage report provides estimates of costs, and the owners will only pay the actual cost shared on the basis of the assessment schedule. Lands eligible for the farm property tax class will be eligible for a grant in the amount of 1/3 of their total cost assessment.

The Town hopes to have the project approved by the end of the year. If the work is started before March 15th, it will likely be completed in the spring. If any delay occurs, the fish protection timing window from March 15 to July 15th will come into effect and the work will have to be done after July 15th. Bridge cost sharing will be reviewed with the owners. Existing pipes are normally cleaned by flushing them with a high pressure nozzle and the material is removed at the end of the pipe. The owners are advised that they can have their tile ends repaired by a qualified contractor. The tiles are inspected during the course of the work and only those in disrepair will be fixed up as part of the work.

It should be noted that the Public Information Centre (P.I.C.) is not a requirement under the Drainage Act but the Town holds these meetings to address questions and concerns and to solicit comments from the affected owners.

Owners are reminded that they have the opportunity to present their concerns to Council regarding the report details at the Consideration meeting and assessment questions at the Court of Revision meeting, along with appeal rights to the Ontario Ministry of Agriculture, Food and Rural Affairs (O.M.A.F.R.A.) Appeals Tribunal and to the Drainage Referee as provided for in the Drainage Act.

The Drainage Act definitions and applicable clarifications are as follows:

“Benefit” means the advantages to any lands, roads, buildings or other structures from the construction, improvement, repair, or maintenance of a drainage works such as will result in a higher market value or increased crop production or improved appearance or better control of surface or subsurface water, or any other advantages relating to the betterment of lands, roads, buildings, or other structures.

“Outlet liability” means the part of the cost of the construction, improvement or maintenance of a drainage works that is required to provide such outlet or improved outlet. Lands and roads that use a drainage works as an outlet, or for which, when the drainage works is constructed or improved, an improved outlet is provided either directly or indirectly through the medium of any other drainage works or of a swale, ravine, creek, or watercourse, may be assessed for outlet liability. The assessment for outlet liability shall be based upon the volume and rate of flow of the water artificially caused to flow upon the injured land or road or into the drainage works from the lands and roads liable for such assessments. Every drainage works constructed under this Act shall be continued to a sufficient outlet.

Owners are advised that they have a legal responsibility to convey their drainage to a sufficient outlet. For this reason, they have a share in the cost for upkeep of the drain downstream of their lands and this obligation is reflected in the assessment for Outlet Liability. Owners are reminded that the responsibility for carrying out maintenance on a Municipal drain rests with the Town as set out in the Drainage Act. Any owner can notify the Town that the drain requires maintenance, and the Town has to take action pursuant to the Act. This system is generally reactive and requires the property owners to raise their concerns and issues to the Town. Owners are reminded that keeping brush clear along their portion of the drain and having buffer strips provides them with a direct benefit of improved crop yield and preservation of topsoil on their lands. Owners have an Outlet Liability for the downstream portion of the drain. The owners are reminded that Municipal drainage is a communal project and basically a user pay system. As an example, when work is carried out on the Drain downstream of the Drain outlet, the owners in the watershed that are outletting to the Drain will be responsible for a portion of the cost, along with the other owners in the Drain watershed upstream of the work that is conducted. Owners are advised of the 1/3 grant available to agricultural lands that qualify for the Farm Property Tax Class and should be aware that the Town administers the grant process and reflects any available grant on the final billing to each qualified parcel owner.

Owners may appeal their assessment as set out in the drainage report. They are advised that they should submit their appeal to the Court of Revision 10 days before the scheduled date of the meeting; however, the Court of Revision can agree to hear appeals presented at the meeting. If owners are still dissatisfied with the report after that meeting, they may submit an appeal to the O.M.A.F.R.A. Appeals Tribunal through the Town Clerk within 21 days of the closing of the Court of Revision pursuant to Section 54 of the Drainage Act.

The cost sharing for bridges is based on the location of same along the overall length of the drainage system. Each owner has the right for one access across each Municipal drain. The owner generally pays 100% of the cost for the first bridge installation and it becomes part of the drain when included in an engineer’s report and is then to be maintained by the drain with costs shared as set out in the drainage report.



Owners should be aware that existing grass buffers and accesses will be protected and maintained as set out in the report specifications. Allowances as set out in the report are to offset damages to lands from the construction work and excavated material disposal. Owners are advised that the Contractor is responsible to remove any sticks and rocks (cobble) etcetera from the spread materials and the Contractor is responsible to guarantee the work performed on the drain with a maintenance period of one year from the date of substantial completion.

## **VII. FINDINGS AND RECOMMENDATIONS**

We find that the profile included in the 1994 report plans by engineer Ed LaFontaine provides a good fit to the existing profile of the upper portion of the drain. Said report provided for improvements to the open drain that still appear to suit the current conditions of the watershed. Based on our detailed survey, investigations, examinations, and discussions with the affected Owners and governing Authorities, we would recommend that drain improvement works be carried out as follows:

- a) We recommend that all drain improvements, be carried out in accordance with the requirements established by E.R.C.A. and D.F.O. as set out in the documents within **Appendix “REI-A”** attached to this report.
- b) As this is an existing Municipal drain, and conditions have not changed and there is no information to indicate any new species concerns, the repair and improvement can be carried out based on the provisions included within the former Agreement that the Municipality had with M.N.R.F. and the mitigation measures included within same as well as the new regulations that are in place. A copy of said mitigation measures is included in **Appendix “REI-B”** within this report. We recommend that any work being completed shall be carried out in accordance with the **Schedule “C” Mitigation Plan** of the former agreement and the new Mitigation report that the Town had prepared and as included in **Appendix “REI-B”** for reference by the land owners, the Town of LaSalle, and the Contractor who will be conducting the works. As is now required under the new “Endangered Species Act, 2007” provincial legislation administered by the Ministry of Environment, Conservation and Parks (M.E.C.P.), we have reviewed the former M.N.R.F. agreement with the Town and their self-assessment. The M.N.R.F. mapping has basically confirmed that snake species including Butler’s Garter Snake and Eastern Fox Snake are threatened and endangered, respectively. Because turtles and snakes are mobile and indicated as sensitive and endangered in the area, we have included herein a copy of the M.N.R.F. mitigation requirements for them in **Appendix “REI-B”**.

The Town of LaSalle retained Dillon Consulting to conduct a study and analysis of the area and provide a mitigation plan for all municipal drains in LaSalle. This report is titled “Species at Risk Mitigation Plan for Drainage Works December 2017” and shall be followed during all maintenance and construction activities provided for within this report. This report will address all mitigation measures to protect Species at Risk along the Chappus Drain.

- c) We find that the portion of the open drain that we were appointed to investigate from Golfview Drive northerly and easterly to its upper end has significant accumulation of silt

and debris in places along this reach of the drain and we recommend that these be cleaned out as set out further in this report.

- d) As provided for by Section 18 of the Drainage Act, we recommend that the bridges and enclosures along the drain be repaired and improved as outlined further in this report including the specifications and the plans that form part of the report. We further recommend that Bridge 2 be abandoned pursuant to Section 19 of the Drainage Act and be completely removed from the drain as part of the drain diversion and re-alignment around the perimeter of the affected property. We further recommend that the existing drain portion that will be diverted will be filled in and abandoned pursuant to Section 19 of the Drainage Act and the new alignment will become part of the municipal drain.
- e) The existing drain has some buffer strips and grass areas along the Municipal drain that reduce the amount of erosion and the sediment entering the drain and enhance water quality. We recommend that the existing grass areas and buffer strips be protected as part of this project and suggest that new buffer strips be constructed by the owners in all areas where no current grass buffer exists. These buffer strips will remain as private works and will not form part of the municipal drain.

We recommend that the Chappus Drain from Golfview Drive to its upper end be repaired and improved, in accordance with this report, the attached specifications and the accompanying drawings, and that all works associated with same be carried out pursuant to Section 78 of the “Drainage Act, R.S.O. 1990, Chapter D.17 as amended 2021”.

**VIII. ALLOWANCES**

We have provided that all of the work will generally be completed from the south and westerly side of the drain. The Contractor will be required to restore any existing grassed buffer and driveway areas damaged by the work. We recommend that any materials removed from the open drain or existing bridges, be spread on the adjacent lands to the south and west of the drain for disposal by the Contractor, beyond the limits of any existing grass buffer or driveway access. Based on all of the above we find that allowances for damages are payable pursuant to Sections 29 and 30 of the Drainage Act.

We find that the provision of access along the south and west bank of the drain and disposal of excavated material on the abutting farm and non-developed lands requires payment for the land necessary to carry out same. We therefore recommend that the following owners be compensated for all work areas that will be impacted, including for the access to the drain and for damages to lands and crops, if any, as follows, namely:

- |    |                                      |        |  |    |       |
|----|--------------------------------------|--------|--|----|-------|
| 1) | Town of LaSalle,<br>(Nomaka Avenue), | Owner, | Part of Lot 29,<br>Concession 1,       | \$ | 10.00 |
| 2) | Town of LaSalle<br>(Selkirk Avenue), | Owner, | Part of Lots 29 & 28,<br>Concession 1, | \$ | 10.00 |

**Report** - Chappus Drain – North Portion & Maintenance Schedule  
(Geographic Township of Sandwich West)  
Town of LaSalle - REI2016D045

2023-04-18

3)	(130-53700),	Owners,	Part of Lot 28 Concession 1,	\$	119.00
4)	(130-53600),	Owner,	Part of Lot 28, Concession 1,	\$	169.00
5)	(130-20400),	Owner,	Part of Lot 27, Concession1,	\$	437.00
6)	Town of LaSalle, (130-52900),	Owner,	Part of Lot 26, Concession 1,	\$	10.00
7)	(130-52800),	Owner,	Part of Lot 26, Concession 1,	\$	72.00
8)	Town of LaSalle, (Pitkin Avenue),	Owner,	Part of Lot 26, Concession 1,	\$	10.00
9)	(130-52100),	Owner,	Part of Lot 26, Concession 1,	\$	72.00
10)	Town of LaSalle, (130-52200),	Owner,	Part of Lot 26, Concession 1,	\$	10.00
11)	(130-51000),	Owner,	Part of Lot 26, Concession 1,	\$	72.00
12)	Town of LaSalle, (Agler Avenue),	Owner,	Part of Lot 26, Concession 1,	\$	10.00
13)	(130-50600),	Owner,	Part of Lot 26, Concession 1,	\$	72.00
14)	(130-50000),	Owner,	Part of Lots 25 & 24, Concession 1,	\$	622.00
15)	(130-26700),	Owners,	Part of Lot 24, Concession 1,	\$	55.00
16)	(130-26600),	Owners,	Part of Lot 24, Concession 1,	\$	55.00
<b>TOTAL FOR ALLOWANCES AND DAMAGES</b>				<b>\$</b>	<b>1,805.00</b>

These values for allowances and damages are based on a strip of land parallel to and immediately adjacent to the drain or grassed buffer and driveway, for the parcels abutting the south and west

sides of the open Municipal drain and both parcels abutting the covered drain portion at the north side of Golfview Drive and are based on a value of \$1,225.00 per acre (\$3,027.00 per hectare) for the affected lands and crops, if any. These allowances provide for a spread depth of 100mm and are calculated using a rate per acre of \$700.00 for year one, \$350.00 for year two and \$175.00 for the third year. The impact after 3 years is considered negligible. Town lands are paid a nominal allowance of \$10.00 to reflect that they are public lands that serve the community.

We have provided for this in our estimate as is provided for under Sections 29 and 30 of the "Drainage Act, R.S.O. 1990, Chapter D.17, as amended 2021".

## **IX. ESTIMATE OF COST**

Our estimate of the Total Cost of this work, including all incidental expenses, is the sum of **TWO HUNDRED FORTY SEVEN THOUSAND SIX HUNDRED DOLLARS (\$247,600.00)**, made up as follows:

### **CONSTRUCTION**

#### **Drain Re-alignment**

Item 1)	<b><u>Station 4+388 to Station 4+730</u></b> ; Carry out excavation of the new drain alignment to the profile grade and cross sections shown on the plans, including all hauling, placement, compaction, and leveling of material to fill the existing drain alignment that is being abandoned, approximately <u>342</u> lineal metres of new drain channel (approximately 1,800 cubic metres). Lump Sum	\$	54,000.00
Item 2)	<b><u>Station 4+388 to Station 4+730</u></b> ; Supply and install approximately <u>60</u> tonnes of quarried limestone rip rap for rock chute spillways and general erosion protection on bends, complete at <u>\$85.00</u> per tonne.	\$	5,100.00
Item 3)	<b><u>Station 4+388 to Station 4+730</u></b> ; Supply and install approximately <u>120</u> square metres of synthetic filter mat for rock chute spillways and general erosion protection, complete at <u>\$5.00</u> per square metre.	\$	600.00
Item 4)	<b><u>Bridge No. 2</u></b> ; Excavate drain, completely remove and dispose of the existing pipe, sediment and all endwall materials, including any other deleterious material encountered; backfill the drain cross section to match the abandoned drain portion being filled in; loading, hauling, disposal, compaction, grading, topsoil placement, seeding and mulching, and restoration and clean up, complete. Lump Sum	\$	850.00

**Report** - Chappus Drain – North Portion & Maintenance Schedule  
(Geographic Township of Sandwich West)  
Town of LaSalle - REI2016D045

2023-04-18

Item 4)	<b><u>Station 4+388 to Station 4+730;</u></b> Supply and install lateral tile drain extensions to new drain alignment outlet and shorten existing tile, including excavation, tile materials, heavy duty drain tile ends, rodent grates, backfill, compaction, topsoil placement and seed and mulch, complete.	Lump Sum	\$	1,500.00
Item 5)	<b><u>Station 4+388 to Station 4+730;</u></b> Brushing and grubbing including all disposal and clean up (approximately 342 lineal metres), removing and replacing fences, complete.	Lump Sum	\$	7,000.00
<b>Sub-Total Drain Re-Alignment</b>			<b>\$</b>	<b>69,050.00</b>

**Existing Drain Works**

Item 6)	<b><u>Bridge Enclosure No. 1C;</u></b> Remove obstructions along the drain and protect the materials for re-installation including fencing, trees, and shrubs; excavate and carefully remove the existing 900mm diameter H.D.P.E. drain pipe, and salvage all endwall materials; regrade the trench to the new profile and elevations and re-install the plastic pipe including granular bedding, Granular 'B' backfill and Granular 'A' travel surface where required, native fill and topsoil along grass areas; excavation, placement, compaction, grading; restore 305mm thick quarried limestone on filter cloth sloped end protection; topsoil placement, grass sodding, re-install obstructions that were removed; restoration and clean up, (approximately 60 lineal metres), complete.	Lump Sum	\$	10,200.00
Item 7)	<b><u>Station 4+730 to Station 6+070;</u></b> Brushing and grubbing including all disposal and clean up (approximately 1340 lineal metres), removing and replacing fences, complete.	Lump Sum	\$	26,800.00
Item 8)	<b><u>Station 4+730 to Station 6+070;</u></b> Carry out excavation of the existing drain alignment to the profile grade and cross sections shown on the plans, including all disposal, leveling, hauling, placement, and leveling of material to specified depth of 100mm, approximately <u>1340</u> metres (approximately 1,120 cubic metres).	Lump Sum	\$	40,200.00

**Report** - Chappus Drain – North Portion & Maintenance Schedule  
 (Geographic Township of Sandwich West)  
 Town of LaSalle - REI2016D045

2023-04-18

Item 9)	<b>Bridge No. 3;</b> Provide all labour, equipment and material to flush and clean pipe, including restoration and clean up, complete.	Lump Sum	\$	600.00
Item 10)	<b>Station 4+730 to Station 6+070;</b> Spread scavenged topsoil; carry out seeding and mulching on all newly excavated side slopes including all harrowing, raking, preparation and clean up, complete.	Lump Sum	\$	7,800.00
Item 11)	<b>Station 4+730 to Station 6+070;</b> Supply and install new heavy duty H.D.P.E. plastic tile main extensions, including connections, rodent grate, removal of any deleterious materials, excavation, backfill, compaction and restoration, complete:			
	a) 3.0 metres (10') of 150mm (6") diameter pipe for 150mm diameter tiles: <u>3</u> required at <u>\$250.00</u> each		\$	750.00
	b) 3.0 metres (10') of 200mm (8") diameter pipe for 200mm diameter tiles: <u>1</u> required at <u>\$300.00</u> each		\$	300.00
	c) 3.0 metres (10') of 250mm (10") diameter pipe for 250mm diameter tiles: <u>1</u> required at <u>\$350.00</u> each		\$	350.00
Item 12)	<b>Station 4+730 to Station 6+070;</b> Supply and install approximately <u>30</u> lateral tile drain extensions to outlet end of damaged existing 100mm diameter lateral tiles entering the drain, including excavation, rodent grate, backfill, compaction, topsoil placement and seed and mulch, complete at <u>\$150.00</u> each.		\$	4,500.00
Item 13)	Traffic control, signs, flagging.	Lump Sum	\$	1,500.00
Item 14)	Final clean up and restoration of all work areas.	Lump Sum	\$	2,500.00
	<b>Sub-Total Existing Drain Works</b>		<b>\$</b>	<b>95,500.00</b>
Item 15)	Estimated Net H.S.T. for Construction (1.76%)		\$	2,896.00
Item 16)	Contingency amount for construction.	Lump Sum	\$	10,554.00

**Report** - Chappus Drain – North Portion & Maintenance Schedule  
(Geographic Township of Sandwich West)  
Town of LaSalle - REI2016D045

2023-04-18

	<hr/> <b>TOTAL FOR CONSTRUCTION</b> <hr/>	<b>\$ 178,000.00</b> <hr/>
 <b><u>INCIDENTALS</u></b>		
1) Report, Estimate, & Specifications	\$	15,000.00
2) Survey, Assistants, Expenses, and Drawings	\$	28,250.00
3) Duplication Cost of Report and Drawings	\$	1,500.00
4) Estimated Cost of Letting Contract	\$	1,500.00
5) Estimated Cost of Layout and Staking	\$	1,200.00
6) Estimated Cost of Part-Time Supervision and Inspection During Construction (based on 3 day duration)	\$	2,400.00
7) Estimated Net H.S.T. on Incidental Items Above (1.76%)	\$	877.00
8) Estimated Cost of E.R.C.A. Permit	\$	800.00
9) Contingency Allowance	\$	1,518.00
	<hr/>	
<b>TOTAL FOR INCIDENTALS</b>	<b>\$</b>	<b>53,045.00</b>
<b>MAINTENANCE ASSESSMENT SCHEDULE PREPARATION</b>	<b>\$</b>	<b>14,750.00</b>
<b>TOTAL FOR ALLOWANCES (brought forward)</b>	<b>\$</b>	<b>1,805.00</b>
<b>TOTAL FOR CONSTRUCTION (brought forward)</b>	<b>\$</b>	<b>178,000.00</b>
	<hr/>	
<b>TOTAL ESTIMATE</b>	<b>\$</b>	<b>247,600.00</b> <hr/>

**x. DRAWINGS AND SPECIFICATIONS**

As part of this report, we have attached design drawings for the construction of the drain improvements from Golfview Drive to the upper end of the drain. The design drawings show the subject improvement locations and the details of the work, as well as the approximate location within the watershed area. The drain design drawings are attached to the back of this report and are labelled **Appendix "REI-E"**.

Also attached, we have prepared Specifications which set out the required construction details for the drain repair and improvements, which also include Standard Specifications labelled therein as **Appendix “REI-C”**.

## **XI . SCHEDULE OF ASSESSMENT**

We recommend that the Total Cost for construction of this project, including incidental costs, be charged against the lands and roads affected in accordance with the attached Construction Schedule of Assessment Chappus Drain – North Portion. A one time Special Benefit assessment has been included in the Schedule for the drain diversion work.

Also attached is an updated Maintenance Schedule of Assessment for the entire drainage works. The \$14,750.00 charge for the assessment schedule preparation as noted above shall be assessed to all the affected lands on a pro-rata basis with the values shown in the attached Maintenance Schedule of Assessment. On September 22nd, 2005, the Ontario Ministry of Agriculture, Food and Rural Affairs (O.M.A.F.R.A.) issued Administrative Policies for the Agricultural Drainage Infrastructure Program (A.D.I.P.). This program has re-instated financial assistance for eligible costs and assessed lands pursuant to the Drainage Act. Sections 85 to 90 of the Drainage Act allow the Minister to provide grants for various activities under said Act. Sections 85 and 87 make it very clear that grants are provided at the discretion of the Minister. Based on the current A.D.I.P., “lands used for agricultural purposes” may be eligible for a grant in the amount of 1/3 of their total assessment. The new policies define “lands used for agricultural purposes” as those lands eligible for the “Farm Property Class Tax Rate”. The Town provides this information to the Engineer from the current property tax roll. Properties that do not meet the criteria are not eligible for grants. In accordance with same we expect that this project will be qualified for the grants normally available for agricultural lands. The Ministry, however, is continually reviewing their policy for grants, and we recommend that the Town monitor the policies, and make application to the Ministry for any grant should same become available through the A.D.I.P. program or other available funds.

## **XII . FUTURE MAINTENANCE**

When maintenance work is carried out in the future on the drain and its outlet, the cost for said future maintenance shall be assessed in accordance with the attached Maintenance Schedule of Assessment. When future maintenance work is carried out, the assessment to the affected Owners shall be based on the actual future maintenance cost shared on a pro-rata basis with the values shown in this Maintenance Schedule of Assessment.

When maintenance work is carried out on any bridges in the future, we recommend that part of the cost be assessed as a Benefit to the abutting parcel served by the access bridge, and the remainder shall be assessed pro rata to the upstream lands and roads based on their affected area and outlet assessments as set out in the attached Maintenance Schedule of Assessment. The share for Benefit and Outlet Liability shall be as set out in the Bridge Cost Sharing table below.



**CHAPPUS DRAIN BRIDGE COST SHARING**

<b><u>Bridge Station</u></b>	<b><u>Owners</u></b>	<b><u>Plan I.D. #</u></b>	<b><u>Benefit to Owner</u></b>	<b><u>Outlet Upstream</u></b>
0+000	County of Essex, (Road 3, Malden Road),		98.0%	2.0%
1+312	Essex Terminal Railroad, (340-16500),	919	98.0%	2.0%
1+400	(160-15700),	901	38.0%	62.0%
1+470	(160-15500),	899	38.4%	61.6%
1+568	(160-15400),	898	38.9%	61.1%
1+705	(160-15300),	897	39.7%	60.3%
3+430	(130-45100),	254	49.5%	50.5%
3+584	(130-42100),	241	50.7%	49.3%
4+022	(130-34500),	177	55.1%	44.9%
4+290	(130-31600),	150	29.0%	42.0%
	(130-31700),	151	29.0%	
4+320	Town of LaSalle, (Golfview Drive),		98.0%	2.0%

**Report** - Chappus Drain – North Portion & Maintenance Schedule  
(Geographic Township of Sandwich West)  
Town of LaSalle - REI2016D045

2023-04-18

4+358	(130-26600),	100	19.5%	41.5%
	(130-26700),	101	19.5%	
	(130-50000)		19.5%	
4+932	(130-20400),	47	64.2%	35.8%

We recommend that the bridge structures as identified herein, be maintained in the future as part of the drainage works. We would also recommend that the access bridges in the drain, for which the future maintenance costs are to be borne by the abutting affected landowners and upstream lands and roads, be maintained by the Town and that said maintenance would include works to the bridge culvert, bedding, backfill, and end treatment. Where concrete, asphalt or other decorative driveway surfaces over the bridge culverts require removal as part of the maintenance works, these surfaces should also be repaired or replaced as part of the works. Likewise, if any fencing, gate, decorative walls, guard rails or other special features exist that will be impacted by the maintenance work, they are also to be removed and restored or replaced as part of the bridge maintenance work. However, the cost of the supply and installation of any surface material other than Granular "A" material, and the cost of removal and restoration or replacement, if necessary, of any special features, shall be totally assessed to the benefiting adjoining parcel served by said access bridge.

The sharing noted above is based on bridges with a minimum standard top width of 6.1 metres (20'). Should an owner desire a greater top width than the standard minimum top width of 6.1 metres, all of the increase in cost will be borne by the owner requesting the additional top width. To assist with accurately assessing the future bridge maintenance costs, we recommend that the tender for the bridge works include the following items:

- a) An item for the cost to repair and improve the standard 6.1 metre top width of the bridge including all backfill and end treatment costs and increasing the pipe size to the next available size to allow for embedment to 10% of the pipe height where necessary
- b) An item for the cost to provide any extra length of pipe including extra backfill material costs and installation costs for the additional length
- c) An item for the cost of removing and reinstalling or replacing any special features

Item a) costs shall be shared on the basis shown in the table above and shared as outlined above. Items b) and c) costs shall be assessed to the Owner(s) of the parcel served by the access bridge with no cost sharing to the upstream lands and roads.

The Maintenance Schedule of Assessment included herein has been developed on the basis of an estimated cost of \$100,000.00. The actual cost of maintenance work on the drain shall be assessed against the lands and roads affected by the future maintenance works in the same relative proportions as shown therein, subject to any future variations that may be made under the authority of the "Drainage Act R.S.O. 1990, Chapter D.17, as amended 2021". The estimated cost of \$14,750.00 as noted above for preparing the Maintenance Schedule of Assessment shall

**Report** - Chappus Drain – North Portion & Maintenance Schedule  
(Geographic Township of Sandwich West)  
Town of LaSalle - REI2016D045

2023-04-18

be assessed to all the affected lands on a pro-rata basis with the values shown in the attached Maintenance Schedule of Assessment when this report is fully adopted.

We further recommend that the maintenance cost sharing as set out above shall remain as aforesaid until otherwise determined and re-established under the provisions of the "Drainage Act, R.S.O. 1990, Chapter D.17 as amended 2021".

All of which is respectfully submitted.

*Rood Engineering Inc.*



Gerard Rood, P.Eng.



att .

***Rood Engineering Inc.***  
Consulting Engineers  
9 Nelson Street  
LEAMINGTON, Ontario N8H 1G6



**CONSTRUCTION SCHEDULE OF ASSESSMENT  
CHAPPUS DRAIN - NORTH PORTION  
Town of LaSalle**

**3. MUNICIPAL LANDS:**

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
		Malden Road		5.93	2.400	County of Essex	\$ -	\$ -	\$ -	\$ -
		Agler Avenue		5.93	2.400	Town of LaSalle	\$ 470.00	\$ 1,699.00	\$ -	\$ 2,169.00
		Dow Boulevard		5.44	2.200	Town of LaSalle	\$ 431.00	\$ 1,594.00	\$ -	\$ 2,025.00
		First Street		0.74	0.300	Town of LaSalle	\$ 60.00	\$ 181.00	\$ -	\$ 241.00
		Fleet Avenue		0.45	0.180	Town of LaSalle	\$ 235.00	\$ 705.00	\$ -	\$ 940.00
		Fleet Street		2.97	1.200	Town of LaSalle	\$ -	\$ 145.00	\$ -	\$ 145.00
		Golfview Drive		6.92	2.800	Town of LaSalle	\$ -	\$ -	\$ -	\$ -
		Herrick Street		0.25	0.100	Town of LaSalle	\$ -	\$ -	\$ -	\$ -
		Matchette Road		2.97	1.200	Town of LaSalle	\$ -	\$ -	\$ -	\$ -
		Mendelsohn Avenue		2.47	1.000	Town of LaSalle	\$ 196.00	\$ 709.00	\$ -	\$ 905.00
		Nomaka Avenue		5.44	2.200	Town of LaSalle	\$ 431.00	\$ 1,593.00	\$ -	\$ 2,024.00
		Parker Avenue		0.99	0.400	Town of LaSalle	\$ 79.00	\$ 283.00	\$ -	\$ 362.00
		Pembroke Street		0.99	0.400	Town of LaSalle	\$ 79.00	\$ 283.00	\$ -	\$ 362.00
		Pitkin Avenue		5.93	2.400	Town of LaSalle	\$ 470.00	\$ 1,699.00	\$ -	\$ 2,169.00
		Selkirk Avenue		1.73	0.700	Town of LaSalle	\$ 137.00	\$ 496.00	\$ -	\$ 633.00
		Tocoma Street		3.71	1.501	Town of LaSalle	\$ -	\$ 181.00	\$ -	\$ 181.00
		Tacoma Avenue		1.51	0.609	Town of LaSalle	\$ 294.00	\$ 892.00	\$ -	\$ 1,186.00
<b>Total on Municipal Lands.....</b>							<b>\$ 2,882.00</b>	<b>\$ 10,460.00</b>	<b>\$ -</b>	<b>\$ 13,342.00</b>

**4. PRIVATELY OWNED - NON-AGRICULTURAL LANDS:**

130-15500	676	LOTS 296 TO 299	0.42	0.42	0.170		\$ 165.00	\$ 214.00	\$ -	\$ 379.00
130-15600	676	LOTS 291 TO 295	0.38	0.38	0.154		\$ 149.00	\$ 195.00	\$ -	\$ 344.00
130-15700	676	LOTS 287 TO 290	0.42	0.42	0.168		\$ 163.00	\$ 212.00	\$ -	\$ 375.00
130-15800	676	LOT 286	0.10	0.10	0.042		\$ 41.00	\$ 55.00	\$ -	\$ 96.00
130-16000	676	LOTS 275 TO 285	1.14	1.14	0.462		\$ 449.00	\$ 572.00	\$ -	\$ 1,021.00
130-16100	676	LOTS 269 TO 274	0.62	0.62	0.252		\$ 245.00	\$ 314.00	\$ -	\$ 559.00

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
130-16200	676	LOTS 263 TO 268	0.62	0.62	0.252		\$ 245.00	\$ 314.00	\$ -	\$ 559.00
130-16300	676	LOTS 259 TO 262	0.42	0.42	0.168		\$ 198.00	\$ 216.00	\$ -	\$ 414.00
130-16400	676	LOTS 254 TO 258	0.38	0.38	0.154		\$ 186.00	\$ 191.00	\$ -	\$ 377.00
130-16500	676	LOTS 249 TO 250	0.16	0.16	0.063		\$ 133.00	\$ 79.00	\$ -	\$ 212.00
130-16600	676	LOTS 251 TO 253	0.22	0.22	0.091		\$ 151.00	\$ 116.00	\$ -	\$ 267.00
130-16700	676	LOTS 245 TO 248	0.42	0.42	0.168		\$ 198.00	\$ 216.00	\$ -	\$ 414.00
130-16800	676	LOTS 239 TO 244	0.62	0.62	0.252		\$ 245.00	\$ 314.00	\$ -	\$ 559.00
130-16900	676	LOTS 233 TO 238	0.62	0.62	0.252		\$ 245.00	\$ 314.00	\$ -	\$ 559.00
130-17000	676	LOTS 229 TO 232	0.42	0.42	0.168		\$ 198.00	\$ 216.00	\$ -	\$ 414.00
130-17100	676	LOTS 225 TO 228	0.42	0.42	0.168		\$ 198.00	\$ 216.00	\$ -	\$ 414.00
130-17200	676	LOTS 221 TO 224	0.42	0.42	0.168		\$ 198.00	\$ 216.00	\$ -	\$ 414.00
130-17300	676	LOTS 217 & 220	0.42	0.42	0.168		\$ 198.00	\$ 216.00	\$ -	\$ 414.00
130-17400	676	LOTS 212 TO 216	0.38	0.38	0.154		\$ 186.00	\$ 191.00	\$ -	\$ 377.00
130-17500	676	LOTS 92 TO 96	0.38	0.38	0.154		\$ 186.00	\$ 191.00	\$ -	\$ 377.00
130-17600	676	LOT 91	0.10	0.10	0.042		\$ 24.00	\$ 53.00	\$ -	\$ 77.00
130-17700	676	LOT 90	0.10	0.10	0.042		\$ 24.00	\$ 53.00	\$ -	\$ 77.00
130-17800	676	LOTS 85 TO 89	0.52	0.52	0.210		\$ 219.00	\$ 265.00	\$ -	\$ 484.00
130-17900	676	LOT 84	0.10	0.10	0.042		\$ 24.00	\$ 53.00	\$ -	\$ 77.00
130-18000	676	LOTS 82 & 83	0.21	0.21	0.084		\$ 145.00	\$ 103.00	\$ -	\$ 248.00
130-18100	676	LOTS 76 TO 81	0.62	0.62	0.252		\$ 245.00	\$ 314.00	\$ -	\$ 559.00
130-18200	676	LOTS 64 TO 75	1.25	1.25	0.504		\$ 392.00	\$ 622.00	\$ -	\$ 1,014.00
130-18300	676	LOTS 60 TO 63	0.42	0.42	0.168		\$ 198.00	\$ 216.00	\$ -	\$ 414.00
130-18400	676	LOTS 55 TO 59	0.38	0.38	0.154		\$ 186.00	\$ 191.00	\$ -	\$ 377.00
130-18500	676	LOTS 50 & 51	0.15	0.15	0.060		\$ 133.00	\$ 78.00	\$ -	\$ 211.00
130-18550	676	LOTS 52 & 53	0.15	0.15	0.060		\$ 133.00	\$ 78.00	\$ -	\$ 211.00
130-18600	676	LOT 54	0.08	0.08	0.033		\$ 18.00	\$ 40.00	\$ -	\$ 58.00
130-18700	676	LOTS 45 TO 49	0.52	0.52	0.210		\$ 221.00	\$ 265.00	\$ -	\$ 486.00
130-18800	676	LOT 44	0.10	0.10	0.042		\$ 24.00	\$ 53.00	\$ -	\$ 77.00
130-18900	676	LOTS 42 & 43	0.21	0.21	0.084		\$ 145.00	\$ 103.00	\$ -	\$ 248.00
130-19000	676	LOTS 40 & 41	0.21	0.21	0.084		\$ 145.00	\$ 103.00	\$ -	\$ 248.00
130-19100	676	LOTS 34 TO 39	0.62	0.62	0.252		\$ 245.00	\$ 314.00	\$ -	\$ 559.00

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
130-19200	676	LOTS 28 TO 33	0.62	0.62	0.252		\$ 245.00	\$ 314.00	\$ -	\$ 559.00
130-19300	676	LOTS 26 & 27	0.21	0.21	0.084		\$ 145.00	\$ 103.00	\$ -	\$ 248.00
130-19400	676	LOTS 24 & 25	0.21	0.21	0.084		\$ 145.00	\$ 103.00	\$ -	\$ 248.00
130-19450	676	LOTS 22 & 23	0.21	0.21	0.084		\$ 145.00	\$ 103.00	\$ -	\$ 248.00
130-19500	676	LOTS 18 TO 21	0.42	0.42	0.168		\$ 290.00	\$ 204.00	\$ -	\$ 494.00
130-19600	676	LOTS 13 TO 17	0.38	0.38	0.154		\$ 267.00	\$ 187.00	\$ -	\$ 454.00
130-19700	676	LOTS 6 TO 12	0.73	0.73	0.295		\$ 510.00	\$ 355.00	\$ -	\$ 865.00
130-20200	1	PT LOT 28	12.83	12.30	4.980		\$ 772.00	\$ 1,852.00	\$ -	\$ 2,624.00
130-20750	780	LOTS 127 TO 130	0.28	0.28	0.113		\$ 196.00	\$ 137.00	\$ -	\$ 333.00
130-20800	780	LOTS 122 TO 126	0.34	0.34	0.138		\$ 237.00	\$ 167.00	\$ -	\$ 404.00
130-20850	780	LOTS 117 TO 121	0.34	0.34	0.138		\$ 237.00	\$ 167.00	\$ -	\$ 404.00
130-21000	780	LOT G	0.21	0.21	0.086		\$ 145.00	\$ 102.00	\$ -	\$ 247.00
130-21200	780	LOT F	0.16	0.16	0.066		\$ 139.00	\$ 89.00	\$ -	\$ 228.00
130-21400	780	LOT E	0.17	0.17	0.068		\$ 139.00	\$ 89.00	\$ -	\$ 228.00
130-21600	780	LOTS 185 & 186	0.14	0.14	0.056		\$ 133.00	\$ 77.00	\$ -	\$ 210.00
130-21700	780	LOT J	0.17	0.17	0.069		\$ 139.00	\$ 89.00	\$ -	\$ 228.00
130-21900	780	LOTS 173 TO 182	0.66	0.66	0.268		\$ 257.00	\$ 336.00	\$ -	\$ 593.00
130-22100	780	LOT I	0.17	0.17	0.067		\$ 139.00	\$ 89.00	\$ -	\$ 228.00
130-22300	780	LOTS 157 TO 163	0.48	0.48	0.194		\$ 216.00	\$ 250.00	\$ -	\$ 466.00
130-22400	780	LOTS 151 TO 156	0.41	0.41	0.166		\$ 184.00	\$ 215.00	\$ -	\$ 399.00
130-22500	780	LOTS 145 TO 150	0.41	0.41	0.166		\$ 184.00	\$ 215.00	\$ -	\$ 399.00
130-22700	780	LOT H	0.24	0.24	0.098		\$ 109.00	\$ 128.00	\$ -	\$ 237.00
130-24000	1	PT LOT 24	0.42	0.42	0.168		\$ 198.00	\$ 214.00	\$ -	\$ 412.00
130-24100	1	PT LOT 24	0.35	0.35	0.141		\$ -	\$ 12.00	\$ -	\$ 12.00
130-24200	1	PT LOT 24	0.35	0.35	0.141		\$ -	\$ 12.00	\$ -	\$ 12.00
130-24300	1	PT LOT 24	0.35	0.35	0.141		\$ -	\$ 12.00	\$ -	\$ 12.00
130-24400	1	PT LOT 24	0.35	0.35	0.140		\$ -	\$ 12.00	\$ -	\$ 12.00
130-24500	1	PT LOT 24	0.35	0.35	0.140		\$ -	\$ 12.00	\$ -	\$ 12.00
130-24600	1576	W PT LOT 62	0.35	0.35	0.140		\$ -	\$ 12.00	\$ -	\$ 12.00
130-24700	1	PT LOT 24	0.35	0.35	0.140		\$ -	\$ 12.00	\$ -	\$ 12.00
130-24800	1	PT LOT 24	0.35	0.35	0.140		\$ -	\$ 12.00	\$ -	\$ 12.00

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
130-24900	1	PT LOT 24	0.35	0.35	0.140		\$ -	\$ 12.00	\$ -	\$ 12.00
130-25100	1	PT LOT 24	0.38	0.38	0.154		\$ 186.00	\$ 189.00	\$ -	\$ 375.00
130-25200	1	PT LOT 24	0.35	0.35	0.140		\$ -	\$ 12.00	\$ -	\$ 12.00
130-25300	1	PT LOT 24	0.34	0.34	0.140		\$ 237.00	\$ 167.00	\$ -	\$ 404.00
130-25400	1	PT LOT 24	0.40	0.40	0.160		\$ -	\$ 13.00	\$ -	\$ 13.00
130-25500	1	PT LOT 24	0.34	0.34	0.139		\$ 237.00	\$ 167.00	\$ -	\$ 404.00
130-25600	1	PT LOT 24	0.34	0.34	0.139		\$ 237.00	\$ 167.00	\$ -	\$ 404.00
130-25700	1	PT LOT 24	0.34	0.34	0.139		\$ 237.00	\$ 167.00	\$ -	\$ 404.00
130-25800	1	PT LOT 24	0.34	0.34	0.139		\$ 237.00	\$ 167.00	\$ -	\$ 404.00
130-25900	1	PT LOT 24	0.34	0.34	0.139		\$ 237.00	\$ 167.00	\$ -	\$ 404.00
130-26000	1	PT LOT 24	0.34	0.34	0.139		\$ 237.00	\$ 167.00	\$ -	\$ 404.00
130-26100	1	PT LOT 24	0.34	0.34	0.139		\$ 237.00	\$ 167.00	\$ -	\$ 404.00
130-26300	1	PT LOT 24	0.34	0.34	0.139		\$ 237.00	\$ 167.00	\$ -	\$ 404.00
130-26400	1	PT LOT 24	0.34	0.34	0.139		\$ 237.00	\$ 167.00	\$ -	\$ 404.00
130-26500	1	PT LOT 24	0.34	0.34	0.139		\$ 237.00	\$ 167.00	\$ -	\$ 404.00
130-26600	1	PT LOT 24	0.46	0.46	0.186		\$ 2,990.00	\$ 297.00	\$ -	\$ 3,287.00
130-26700	1	PT LOT 24	0.37	0.37	0.152		\$ 2,954.00	\$ 248.00	\$ -	\$ 3,202.00
130-26800	1	PT LOT 24	0.51	0.51	0.206		\$ -	\$ 15.00	\$ -	\$ 15.00
130-26900	1	PT LOT 24	0.34	0.34	0.137		\$ 237.00	\$ 167.00	\$ -	\$ 404.00
130-27000	1	PT LOT 24	0.37	0.37	0.151		\$ 372.00	\$ 248.00	\$ -	\$ 620.00
130-27100	1	PT LOT 24	0.34	0.34	0.137		\$ 237.00	\$ 167.00	\$ -	\$ 404.00
130-27200	1	PT LOT 24	0.34	0.34	0.137		\$ 237.00	\$ 167.00	\$ -	\$ 404.00
130-27400	1	PT LOT 24	0.41	0.41	0.165		\$ 184.00	\$ 215.00	\$ -	\$ 399.00
130-27500	1	PT LOT 24	0.34	0.34	0.137		\$ 237.00	\$ 167.00	\$ -	\$ 404.00
130-27600	1	PT LOT 24	0.34	0.34	0.137		\$ 237.00	\$ 167.00	\$ -	\$ 404.00
130-27700	1	PT LOT 24	0.34	0.34	0.136		\$ 237.00	\$ 167.00	\$ -	\$ 404.00
130-27800	1576	LOT 101	0.50	0.50	0.204		\$ -	\$ 15.00	\$ -	\$ 15.00
130-27900	1576	LOT 103	0.41	0.41	0.164		\$ 184.00	\$ 215.00	\$ -	\$ 399.00
130-28000	1576	W PT LOT 104	0.27	0.27	0.110		\$ -	\$ 10.00	\$ -	\$ 10.00
130-28100	1576	LOT 106	0.46	0.46	0.187		\$ 408.00	\$ 297.00	\$ -	\$ 705.00
130-49950	1	PT LOT 24	4.23	2.87	1.161		\$ 988.00	\$ 1,031.00	\$ -	\$ 2,019.00



Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
130-50000	1	PT LOTS 24 & 25	22.91	19.71	7.977		\$ 4,397.00	\$ 5,584.00	\$89,627.00	\$ 99,608.00
130-50050	1	PT LOT 25	7.45	5.26	2.128		\$ 990.00	\$ 967.00	\$ -	\$ 1,957.00
130-50100	863	LOTS 265 TO 270	0.49	0.49	0.200		\$ 227.00	\$ 244.00	\$ -	\$ 471.00
130-50400	863	LOT 256	0.07	0.07	0.029		\$ 18.00	\$ 21.00	\$ -	\$ 39.00
130-50800	863	LOTS 69 & 70	0.14	0.14	0.058		\$ 133.00	\$ 77.00	\$ -	\$ 210.00
130-51200	863	LOT 14	0.07	0.07	0.029		\$ 18.00	\$ 21.00	\$ -	\$ 39.00
130-51500	863	LOTS 1 TO 8	0.66	0.66	0.269		\$ 263.00	\$ 335.00	\$ -	\$ 598.00
130-51600	780	LOTS 270 TO 277	0.55	0.55	0.223		\$ 218.00	\$ 278.00	\$ -	\$ 496.00
130-51800	780	LOT N	0.15	0.15	0.059		\$ 133.00	\$ 77.00	\$ -	\$ 210.00
130-52000	780	LOT M	0.17	0.17	0.069		\$ 139.00	\$ 89.00	\$ -	\$ 228.00
130-52200	780	LOT L	0.17	0.17	0.069		\$ 139.00	\$ 89.00	\$ -	\$ 228.00
130-52400	780	LOT K	0.17	0.17	0.067		\$ 139.00	\$ 89.00	\$ -	\$ 228.00
130-52500	780	LOTS 74 & 75	0.14	0.14	0.056		\$ 133.00	\$ 77.00	\$ -	\$ 210.00
130-52700	780	LOT D	0.16	0.16	0.067		\$ 139.00	\$ 89.00	\$ -	\$ 228.00
130-52900	780	LOT C	0.17	0.17	0.068		\$ 139.00	\$ 89.00	\$ -	\$ 228.00
130-53100	780	LOT B	0.17	0.17	0.069		\$ 139.00	\$ 89.00	\$ -	\$ 228.00
130-53300	780	LOT A	0.18	0.18	0.073		\$ 139.00	\$ 89.00	\$ -	\$ 228.00
130-53400	780	LOTS 1 TO 5	0.50	0.43	0.174		\$ 210.00	\$ 212.00	\$ -	\$ 422.00
130-53600	1	PT LOT 28	6.31	5.87	2.374		\$ 770.00	\$ 1,694.00	\$ -	\$ 2,464.00
130-53700	1	PT LOT 28	5.54	4.78	1.934		\$ 686.00	\$ 1,249.00	\$ -	\$ 1,935.00
130-54200	676	LOTS 139 TO 143	0.38	0.38	0.154		\$ 186.00	\$ 191.00	\$ -	\$ 377.00
130-54300	676	LOTS 134 TO 138	0.38	0.38	0.154		\$ 186.00	\$ 191.00	\$ -	\$ 377.00
130-54400	676	LOTS 102 TO 133	3.32	3.32	1.345		\$ 559.00	\$ 1,640.00	\$ -	\$ 2,199.00
130-54500	676	LOTS 97 TO 101	0.38	0.38	0.154		\$ 186.00	\$ 191.00	\$ -	\$ 377.00
130-54600	676	LOTS 207 TO 209	0.23	0.23	0.093		\$ 151.00	\$ 116.00	\$ -	\$ 267.00
130-54700	676	LOTS 210 & 211	0.15	0.15	0.060		\$ 133.00	\$ 78.00	\$ -	\$ 211.00
130-54800	676	LOTS 175 TO 206	3.32	3.32	1.345		\$ 496.00	\$ 1,651.00	\$ -	\$ 2,147.00
130-54900	676	LOTS 170 TO 174	0.38	0.38	0.154		\$ 186.00	\$ 191.00	\$ -	\$ 377.00
130-55000	676	LOTS 165 TO 169	0.38	0.38	0.154		\$ 186.00	\$ 191.00	\$ -	\$ 377.00
<b>Total on Privately Owned - Non-Agricultural Lands.....</b>							<b>\$ 35,402.00</b>	<b>\$ 34,708.00</b>	<b>\$ 89,627.00</b>	<b>\$ 159,737.00</b>

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
<b>5. PRIVATELY OWNED - AGRICULTURAL LANDS (grantable):</b>										
130-20100	1	PT LOT 28	9.03	8.66	3.504		\$ 615.00	\$ 1,132.00	\$ -	\$ 1,747.00
130-20400	839	LOTS 829 TO 832	62.37	55.66	22.526		\$ 4,743.00	\$ 13,333.00	\$ -	\$ 18,076.00
130-20900	780	LOTS 114 TO 116	0.21	0.21	0.085		\$ 145.00	\$ 104.00	\$ -	\$ 249.00
130-21100	780	LOTS 95 TO 113	1.28	1.28	0.518		\$ 404.00	\$ 646.00	\$ -	\$ 1,050.00
130-21300	780	LOTS 76 TO 94	1.31	1.31	0.530		\$ 410.00	\$ 659.00	\$ -	\$ 1,069.00
130-21500	780	LOTS 187 TO 203	1.17	1.17	0.474		\$ 374.00	\$ 587.00	\$ -	\$ 961.00
130-21800	780	LOTS 183 & 184	0.14	0.14	0.056		\$ 133.00	\$ 78.00	\$ -	\$ 211.00
130-22000	780	LOTS 166 TO 172	0.48	0.48	0.195		\$ 216.00	\$ 252.00	\$ -	\$ 468.00
130-22200	780	LOTS 164 & 165	0.14	0.14	0.056		\$ 133.00	\$ 78.00	\$ -	\$ 211.00
130-22900	863	LOTS 108 TO 128	1.51	1.51	0.609		\$ 274.00	\$ 392.00	\$ -	\$ 666.00
130-23200	863	LOTS 90 TO 107	1.33	1.33	0.540		\$ 415.00	\$ 671.00	\$ -	\$ 1,086.00
130-23300	863	LOTS 71 TO 89	1.36	1.36	0.551		\$ 421.00	\$ 684.00	\$ -	\$ 1,105.00
130-23400	863	LOTS 184 TO 202	1.36	1.36	0.551		\$ 421.00	\$ 488.00	\$ -	\$ 909.00
130-23500	863	LOTS 166 TO 183	1.33	1.33	0.539		\$ 415.00	\$ 671.00	\$ -	\$ 1,086.00
130-23600	863	LOTS 143 TO 165	1.65	1.65	0.667		\$ 286.00	\$ 418.00	\$ -	\$ 704.00
130-23900	1	PT LOTS 24 & 25	47.65	41.22	16.681		\$ 3,796.00	\$ 11,725.00	\$ -	\$ 15,521.00
130-50200	863	LOTS 259 TO 264	0.43	0.43	0.174		\$ 198.00	\$ 216.00	\$ -	\$ 414.00
130-50300	863	LOTS 257 & 258	0.14	0.14	0.058		\$ 133.00	\$ 78.00	\$ -	\$ 211.00
130-50500	863	LOTS 240 TO 255	1.15	1.15	0.464		\$ 359.00	\$ 587.00	\$ -	\$ 946.00
130-50600	863	LOTS 221 TO 239	1.36	1.36	0.551		\$ 394.00	\$ 684.00	\$ -	\$ 1,078.00
130-50700	863	LOTS 203 TO 220	1.33	1.33	0.539		\$ 390.00	\$ 671.00	\$ -	\$ 1,061.00
130-50900	863	LOTS 53 TO 68	1.19	1.19	0.482		\$ 361.00	\$ 599.00	\$ -	\$ 960.00
130-51000	863	LOTS 34 TO 52	1.36	1.36	0.551		\$ 394.00	\$ 684.00	\$ -	\$ 1,078.00
130-51100	863	LOT 15 TO LOT 33	1.36	1.36	0.551		\$ 394.00	\$ 684.00	\$ -	\$ 1,078.00
130-51300	863	LOTS 9 TO 13	0.36	0.36	0.145		\$ 186.00	\$ 190.00	\$ -	\$ 376.00
130-51700	780	LOTS 261 TO 269	0.62	0.62	0.251		\$ 245.00	\$ 315.00	\$ -	\$ 560.00
130-51900	780	LOTS 242 TO 260	1.31	1.31	0.530		\$ 384.00	\$ 659.00	\$ -	\$ 1,043.00
130-52100	780	LOTS 223 TO 241	1.31	1.31	0.530		\$ 384.00	\$ 659.00	\$ -	\$ 1,043.00
130-52300	780	LOTS 204 TO 222	1.28	1.28	0.518		\$ 378.00	\$ 646.00	\$ -	\$ 1,024.00
130-52600	780	LOTS 57 TO 73	1.14	1.14	0.463		\$ 359.00	\$ 574.00	\$ -	\$ 933.00
130-52800	780	LOTS 38 TO 56	1.31	1.31	0.530		\$ 384.00	\$ 659.00	\$ -	\$ 1,043.00

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
130-53000	780	LOTS 19 TO 37	1.31	1.31	0.530		\$ 384.00	\$ 659.00	\$ -	\$ 1,043.00
130-53200	780	LOTS 6 TO 18	0.90	0.90	0.362		\$ 310.00	\$ 451.00	\$ -	\$ 761.00
<b>Total on Privately Owned - Agricultural Lands (grantable).....</b>							<b>\$ 18,838.00</b>	<b>\$ 40,933.00</b>	<b>\$ -</b>	<b>\$ 59,771.00</b>
<b>TOTAL ASSESSMENT LASALLE</b>				290.53	117.58		<b>\$ 57,122.00</b>	<b>\$ 86,101.00</b>	<b>\$ 89,627.00</b>	<b>\$ 232,850.00</b>

1 Hectare = 2.471 Acres  
 Project No. REI2016D045  
 April 18th, 2023



**MAINTENANCE SCHEDULE OF ASSESSMENT**  
**CHAPPUS DRAIN**  
**Town of LaSalle & Town of Amherstburg**

**3. MUNICIPAL LANDS:**

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
		Malden Road		5.93	2.400	County of Essex	\$ 427.00	\$ 365.00	\$ -	\$ 792.00
		Martin Lane		6.42	2.600	Town of LaSalle	\$ 462.00	\$ 396.00	\$ -	\$ 858.00
		Matchette Road		2.97	1.200	Town of LaSalle	\$ 212.00	\$ 184.00	\$ -	\$ 396.00
		Herrick Street		0.25	0.100	Town of LaSalle	\$ 18.00	\$ 15.00	\$ -	\$ 33.00
		Tacoma Street		3.71	1.501	Town of LaSalle	\$ 266.00	\$ 230.00	\$ -	\$ 496.00
		Mendelshion Street		1.29	0.522	Town of LaSalle	\$ 93.00	\$ 80.00	\$ -	\$ 173.00
		Fleet Street		2.97	1.200	Town of LaSalle	\$ 212.00	\$ 184.00	\$ -	\$ 396.00
		Fenmore Street		1.48	0.600	Town of LaSalle	\$ 105.00	\$ 92.00	\$ -	\$ 197.00
		Lawndale Street		1.24	0.500	Town of LaSalle	\$ 89.00	\$ 77.00	\$ -	\$ 166.00
		Kings Place		6.18	2.500	Town of LaSalle	\$ 444.00	\$ 381.00	\$ -	\$ 825.00
		Springdale Avenue		6.42	2.600	Town of LaSalle	\$ 462.00	\$ 396.00	\$ -	\$ 858.00
		Victory Street		6.42	2.600	Town of LaSalle	\$ 462.00	\$ 396.00	\$ -	\$ 858.00
		Tanglewood Court		1.98	0.800	Town of LaSalle	\$ 141.00	\$ 123.00	\$ -	\$ 264.00
		Golfview Drive		6.92	2.800	Town of LaSalle	\$ 497.00	\$ 427.00	\$ -	\$ 924.00
		Selkirk Avenue		1.73	0.700	Town of LaSalle	\$ 123.00	\$ 107.00	\$ -	\$ 230.00
		Parker Avenue		0.99	0.400	Town of LaSalle	\$ 71.00	\$ 61.00	\$ -	\$ 132.00
		Tocoma Avenue		3.71	1.500	Town of LaSalle	\$ 265.00	\$ 230.00	\$ -	\$ 495.00
		Mendelsohn Avenue		2.47	1.000	Town of LaSalle	\$ 176.00	\$ 153.00	\$ -	\$ 329.00
		Grover Avenue		2.97	1.200	Town of LaSalle	\$ 212.00	\$ 184.00	\$ -	\$ 396.00
		Pitkin Avenue		5.93	2.400	Town of LaSalle	\$ 426.00	\$ 365.00	\$ -	\$ 791.00
		Agler Avenue		5.93	2.400	Town of LaSalle	\$ 426.00	\$ 365.00	\$ -	\$ 791.00
		Dow Boulevard		5.44	2.200	Town of LaSalle	\$ 390.00	\$ 335.00	\$ -	\$ 725.00
		Nomaka Avenue		5.44	2.200	Town of LaSalle	\$ 390.00	\$ 335.00	\$ -	\$ 725.00
		First Street		0.74	0.300	Town of LaSalle	\$ 53.00	\$ 46.00	\$ -	\$ 99.00
		Pembroke Street		0.99	0.400	Town of LaSalle	\$ 71.00	\$ 61.00	\$ -	\$ 132.00
		Louise Street		0.25	0.100	Town of LaSalle	\$ 18.00	\$ 15.00	\$ -	\$ 33.00

**Chappus Drain  
Maintenance Schedule**

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
		Curtain Street		0.25	0.100	Town of LaSalle	\$ 18.00	\$ 15.00	\$ -	\$ 33.00
		Fleet Avenue		2.97	1.200	Town of LaSalle	\$ 212.00	\$ 184.00	\$ -	\$ 396.00
		Kinsman Place		4.31	1.743	Town of LaSalle	\$ 309.00	\$ 267.00	\$ -	\$ 576.00
		LaFontaine Lane		0.43	0.172	Town of LaSalle	\$ 31.00	\$ 26.00	\$ -	\$ 57.00
		Ford Street		0.47	0.191	Town of LaSalle	\$ 34.00	\$ 29.00	\$ -	\$ 63.00
		Utica Avenue		2.07	0.839	Town of LaSalle	\$ 148.00	\$ 129.00	\$ -	\$ 277.00
		Chicago Avenue		3.58	1.447	Town of LaSalle	\$ 256.00	\$ 222.00	\$ -	\$ 478.00
		Proctor Avenue		3.47	1.405	Town of LaSalle	\$ 249.00	\$ 216.00	\$ -	\$ 465.00
		Boston Avenue		3.37	1.366	Town of LaSalle	\$ 241.00	\$ 210.00	\$ -	\$ 451.00
		Dexter Avenue		3.18	1.287	Town of LaSalle	\$ 227.00	\$ 198.00	\$ -	\$ 425.00
		Erin Street		2.27	0.920	Town of LaSalle	\$ 162.00	\$ 141.00	\$ -	\$ 303.00
		Mayfair Avenue		0.22	0.091	Town of LaSalle	\$ 16.00	\$ 14.00	\$ -	\$ 30.00
		Hinde Street		0.50	0.202	Town of LaSalle	\$ 36.00	\$ 31.00	\$ -	\$ 67.00
		Donlon Street		2.45	0.993	Town of LaSalle	\$ 175.00	\$ 152.00	\$ -	\$ 327.00
		Runstedler Drive		1.16	0.469	Town of LaSalle	\$ 84.00	\$ 72.00	\$ -	\$ 156.00
		Herdman Street		2.26	0.913	Town of LaSalle	\$ 161.00	\$ 140.00	\$ -	\$ 301.00
		Trott Street		0.25	0.100	Town of LaSalle	\$ 18.00	\$ 15.00	\$ -	\$ 33.00
		Union Street		0.25	0.100	Town of LaSalle	\$ 18.00	\$ 15.00	\$ -	\$ 33.00
		Oakland Crescent		1.01	0.410	Town of LaSalle	\$ 73.00	\$ 63.00	\$ -	\$ 136.00
<b>Total on Municipal Lands.....</b>							<b>\$ 8,979.00</b>	<b>\$ 7,742.00</b>	<b>\$ -</b>	<b>\$ 16,721.00</b>

**4. PRIVATELY OWNED - NON-AGRICULTURAL LANDS:**

130-15500	676	LOTS 296 TO 299	0.42	0.42	0.170		\$ 15.00	\$ 18.00	\$ -	\$ 33.00
130-15600	676	LOTS 291 TO 295	0.38	0.38	0.154		\$ 14.00	\$ 16.00	\$ -	\$ 30.00
130-15700	676	LOTS 287 TO 290	0.42	0.42	0.168		\$ 15.00	\$ 18.00	\$ -	\$ 33.00
130-15800	676	LOT 286	0.10	0.10	0.042		\$ 4.00	\$ 6.00	\$ -	\$ 10.00
130-16000	676	LOTS 275 TO 285	1.14	1.14	0.462		\$ 41.00	\$ 37.00	\$ -	\$ 78.00
130-16100	676	LOTS 269 TO 274	0.62	0.62	0.252		\$ 22.00	\$ 23.00	\$ -	\$ 45.00
130-16200	676	LOTS 263 TO 268	0.62	0.62	0.252		\$ 22.00	\$ 23.00	\$ -	\$ 45.00
130-16300	676	LOTS 259 TO 262	0.42	0.42	0.168		\$ 15.00	\$ 18.00	\$ -	\$ 33.00

**Chappus Drain  
Maintenance Schedule**

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
130-16400	676	LOTS 254 TO 258	0.38	0.38	0.154		\$ 14.00	\$ 16.00	\$ -	\$ 30.00
130-16500	676	LOTS 249 TO 250	0.16	0.16	0.063		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
130-16600	676	LOTS 251 TO 253	0.22	0.22	0.091		\$ 8.00	\$ 11.00	\$ -	\$ 19.00
130-16700	676	LOTS 245 TO 248	0.42	0.42	0.168		\$ 15.00	\$ 18.00	\$ -	\$ 33.00
130-16800	676	LOTS 239 TO 244	0.62	0.62	0.252		\$ 22.00	\$ 23.00	\$ -	\$ 45.00
130-16900	676	LOTS 233 TO 238	0.62	0.62	0.252		\$ 22.00	\$ 23.00	\$ -	\$ 45.00
130-17000	676	LOTS 229 TO 232	0.42	0.42	0.168		\$ 15.00	\$ 18.00	\$ -	\$ 33.00
130-17100	676	LOTS 225 TO 228	0.42	0.42	0.168		\$ 15.00	\$ 18.00	\$ -	\$ 33.00
130-17200	676	LOTS 221 TO 224	0.42	0.42	0.168		\$ 15.00	\$ 18.00	\$ -	\$ 33.00
130-17300	676	LOTS 217 & 220	0.42	0.42	0.168		\$ 15.00	\$ 18.00	\$ -	\$ 33.00
130-17400	676	LOTS 212 TO 216	0.38	0.38	0.154		\$ 14.00	\$ 16.00	\$ -	\$ 30.00
130-17500	676	LOTS 92 TO 96	0.38	0.38	0.154		\$ 14.00	\$ 16.00	\$ -	\$ 30.00
130-17600	676	LOT 91	0.10	0.10	0.042		\$ 4.00	\$ 6.00	\$ -	\$ 10.00
130-17700	676	LOT 90	0.10	0.10	0.042		\$ 4.00	\$ 6.00	\$ -	\$ 10.00
130-17800	676	LOTS 85 TO 89	0.52	0.52	0.210		\$ 19.00	\$ 20.00	\$ -	\$ 39.00
130-17900	676	LOT 84	0.10	0.10	0.042		\$ 4.00	\$ 6.00	\$ -	\$ 10.00
130-18000	676	LOTS 82 & 83	0.21	0.21	0.084		\$ 7.00	\$ 11.00	\$ -	\$ 18.00
130-18100	676	LOTS 76 TO 81	0.62	0.62	0.252		\$ 22.00	\$ 23.00	\$ -	\$ 45.00
130-18200	676	LOTS 64 TO 75	1.25	1.25	0.504		\$ 45.00	\$ 38.00	\$ -	\$ 83.00
130-18300	676	LOTS 60 TO 63	0.42	0.42	0.168		\$ 15.00	\$ 18.00	\$ -	\$ 33.00
130-18400	676	LOTS 55 TO 59	0.38	0.38	0.154		\$ 14.00	\$ 16.00	\$ -	\$ 30.00
130-18500	676	LOTS 50 & 51	0.15	0.15	0.060		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
130-18550	676	LOTS 52 & 53	0.15	0.15	0.060		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
130-18600	676	LOT 54	0.08	0.08	0.033		\$ 3.00	\$ 5.00	\$ -	\$ 8.00
130-18700	676	LOTS 45 TO 49	0.52	0.52	0.210		\$ 19.00	\$ 20.00	\$ -	\$ 39.00
130-18800	676	LOT 44	0.10	0.10	0.042		\$ 4.00	\$ 6.00	\$ -	\$ 10.00
130-18900	676	LOTS 42 & 43	0.21	0.21	0.084		\$ 7.00	\$ 11.00	\$ -	\$ 18.00
130-19000	676	LOTS 40 & 41	0.21	0.21	0.084		\$ 7.00	\$ 11.00	\$ -	\$ 18.00
130-19100	676	LOTS 34 TO 39	0.62	0.62	0.252		\$ 22.00	\$ 23.00	\$ -	\$ 45.00
130-19200	676	LOTS 28 TO 33	0.62	0.62	0.252		\$ 22.00	\$ 23.00	\$ -	\$ 45.00
130-19300	676	LOTS 26 & 27	0.21	0.21	0.084		\$ 7.00	\$ 11.00	\$ -	\$ 18.00

**Chappus Drain  
Maintenance Schedule**

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
130-19400	676	LOTS 24 & 25	0.21	0.21	0.084		\$ 7.00	\$ 11.00	\$ -	\$ 18.00
130-19450	676	LOTS 22 & 23	0.21	0.21	0.084		\$ 7.00	\$ 11.00	\$ -	\$ 18.00
130-19500	676	LOTS 18 TO 21	0.42	0.42	0.168		\$ 15.00	\$ 18.00	\$ -	\$ 33.00
130-19600	676	LOTS 13 TO 17	0.38	0.38	0.154		\$ 14.00	\$ 16.00	\$ -	\$ 30.00
130-19700	676	LOTS 6 TO 12	0.73	0.73	0.295		\$ 26.00	\$ 26.00	\$ -	\$ 52.00
130-20200	1	28	12.83	12.30	4.980		\$ 444.00	\$ 139.00	\$ -	\$ 583.00
130-20750	780	LOTS 127 TO 130	0.28	0.28	0.113		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
130-20800	780	LOTS 122 TO 126	0.34	0.34	0.138		\$ 12.00	\$ 15.00	\$ -	\$ 27.00
130-20850	780	LOTS 117 TO 121	0.34	0.34	0.138		\$ 12.00	\$ 15.00	\$ -	\$ 27.00
130-21000	780	LOT G	0.21	0.21	0.086		\$ 8.00	\$ 11.00	\$ -	\$ 19.00
130-21200	780	LOT F	0.16	0.16	0.066		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
130-21400	780	LOT E	0.17	0.17	0.068		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
130-21600	780	LOTS 185 & 186	0.14	0.14	0.056		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
130-21700	780	LOT J	0.17	0.17	0.069		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
130-21900	780	LOTS 173 TO 182	0.66	0.66	0.268		\$ 24.00	\$ 25.00	\$ -	\$ 49.00
130-22100	780	LOT I	0.17	0.17	0.067		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
130-22300	780	LOTS 157 TO 163	0.48	0.48	0.194		\$ 17.00	\$ 20.00	\$ -	\$ 37.00
130-22400	780	LOTS 151 TO 156	0.41	0.41	0.166		\$ 15.00	\$ 18.00	\$ -	\$ 33.00
130-22500	780	LOTS 145 TO 150	0.41	0.41	0.166		\$ 15.00	\$ 18.00	\$ -	\$ 33.00
130-22700	780	LOT H	0.24	0.24	0.098		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
130-24000	1	PT LOT 24	0.42	0.42	0.168		\$ 15.00	\$ 18.00	\$ -	\$ 33.00
130-24100	1	PT LOT 24	0.35	0.35	0.141		\$ 13.00	\$ 15.00	\$ -	\$ 28.00
130-24200	1	PT LOT 24	0.35	0.35	0.141		\$ 13.00	\$ 15.00	\$ -	\$ 28.00
130-24300	1	PT LOT 24	0.35	0.35	0.141		\$ 13.00	\$ 15.00	\$ -	\$ 28.00
130-24400	1	PT LOT 24	0.35	0.35	0.140		\$ 13.00	\$ 15.00	\$ -	\$ 28.00
130-24500	1	PT LOT 24	0.35	0.35	0.140		\$ 13.00	\$ 15.00	\$ -	\$ 28.00
130-24600	1576	W PT LOT 62	0.35	0.35	0.140		\$ 12.00	\$ 15.00	\$ -	\$ 27.00
130-24700	1	PT LOT 24	0.35	0.35	0.140		\$ 12.00	\$ 15.00	\$ -	\$ 27.00
130-24800	1	PT LOT 24	0.35	0.35	0.140		\$ 12.00	\$ 15.00	\$ -	\$ 27.00
130-24900	1	PT LOT 24	0.35	0.35	0.140		\$ 12.00	\$ 15.00	\$ -	\$ 27.00
130-25100	1	PT LOT 24	0.38	0.38	0.154		\$ 14.00	\$ 16.00	\$ -	\$ 30.00



**Chappus Drain  
Maintenance Schedule**

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
130-25200	1	PT LOT 24	0.35	0.35	0.140		\$ 12.00	\$ 15.00	\$ -	\$ 27.00
130-25300	1	PT LOT 24	0.34	0.34	0.140		\$ 12.00	\$ 15.00	\$ -	\$ 27.00
130-25400	1	PT LOT 24	0.40	0.40	0.160		\$ 14.00	\$ 17.00	\$ -	\$ 31.00
130-25500	1	PT LOT 24	0.34	0.34	0.139		\$ 12.00	\$ 15.00	\$ -	\$ 27.00
130-25600	1	PT LOT 24	0.34	0.34	0.139		\$ 12.00	\$ 15.00	\$ -	\$ 27.00
130-25700	1	PT LOT 24	0.34	0.34	0.139		\$ 12.00	\$ 15.00	\$ -	\$ 27.00
130-25800	1	PT LOT 24	0.34	0.34	0.139		\$ 12.00	\$ 15.00	\$ -	\$ 27.00
130-25900	1	PT LOT 24	0.34	0.34	0.139		\$ 12.00	\$ 15.00	\$ -	\$ 27.00
130-26000	1	PT LOT 24	0.34	0.34	0.139		\$ 12.00	\$ 15.00	\$ -	\$ 27.00
130-26100	1	PT LOT 24	0.34	0.34	0.139		\$ 12.00	\$ 15.00	\$ -	\$ 27.00
130-26300	1	PT LOT 24	0.34	0.34	0.139		\$ 12.00	\$ 15.00	\$ -	\$ 27.00
130-26400	1	PT LOT 24	0.34	0.34	0.139		\$ 12.00	\$ 15.00	\$ -	\$ 27.00
130-26500	1	PT LOT 24	0.34	0.34	0.139		\$ 12.00	\$ 15.00	\$ -	\$ 27.00
130-26600	1	PT LOT 24	0.46	0.46	0.186		\$ 17.00	\$ 19.00	\$ -	\$ 36.00
130-26700	1	PT LOT 24	0.37	0.37	0.152		\$ 14.00	\$ 16.00	\$ -	\$ 30.00
130-26800	1	PT LOT 24	0.51	0.51	0.206		\$ 18.00	\$ 20.00	\$ -	\$ 38.00
130-26900	1	PT LOT 24	0.34	0.34	0.137		\$ 12.00	\$ 15.00	\$ -	\$ 27.00
130-27000	1	PT LOT 24	0.37	0.37	0.151		\$ 13.00	\$ 16.00	\$ -	\$ 29.00
130-27100	1	PT LOT 24	0.34	0.34	0.137		\$ 12.00	\$ 15.00	\$ -	\$ 27.00
130-27200	1	PT LOT 24	0.34	0.34	0.137		\$ 12.00	\$ 15.00	\$ -	\$ 27.00
130-27400	1	PT LOT 24	0.41	0.41	0.165		\$ 15.00	\$ 17.00	\$ -	\$ 32.00
130-27500	1	PT LOT 24	0.34	0.34	0.137		\$ 12.00	\$ 15.00	\$ -	\$ 27.00
130-27600	1	PT LOT 24	0.34	0.34	0.137		\$ 12.00	\$ 15.00	\$ -	\$ 27.00
130-27700	1	PT LOT 24	0.34	0.34	0.136		\$ 12.00	\$ 15.00	\$ -	\$ 27.00
130-27800	1576	LOT 101	0.50	0.50	0.204		\$ 18.00	\$ 19.00	\$ -	\$ 37.00
130-27900	1576	LOT 103	0.41	0.41	0.164		\$ 15.00	\$ 17.00	\$ -	\$ 32.00
130-28000	1576	W PT LOT 104	0.27	0.27	0.110		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
130-28100	1576	LOT 106	0.46	0.46	0.187		\$ 17.00	\$ 19.00	\$ -	\$ 36.00
130-28200	1576	LOTS 1 TO 3	0.99	0.99	0.401		\$ 36.00	\$ 34.00	\$ -	\$ 70.00
130-28300	1	PT LOT 23	0.41	0.41	0.167		\$ 15.00	\$ 18.00	\$ -	\$ 33.00
130-28400	1	PT LOT 23	0.56	0.56	0.225		\$ 20.00	\$ 21.00	\$ -	\$ 41.00

**Chappus Drain  
Maintenance Schedule**

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
130-28500	1	PT LOT 23	0.39	0.39	0.158		\$ 14.00	\$ 17.00	\$ -	\$ 31.00
130-28600	1	PT LOT 23	0.31	0.31	0.127		\$ 11.00	\$ 14.00	\$ -	\$ 25.00
130-28700	1	PT LOT 23	0.31	0.31	0.127		\$ 11.00	\$ 14.00	\$ -	\$ 25.00
130-28800	1	PT LOT 23	0.60	0.60	0.244		\$ 22.00	\$ 22.00	\$ -	\$ 44.00
130-28900	1	PT LOT 23	0.60	0.60	0.244		\$ 22.00	\$ 22.00	\$ -	\$ 44.00
130-29000	1	PT LOT 23	0.08	0.08	0.031		\$ 3.00	\$ 5.00	\$ -	\$ 8.00
130-29100	1	PT LOT 23	0.58	0.58	0.234		\$ 21.00	\$ 22.00	\$ -	\$ 43.00
130-29200	1	PT LOTS 22 & 23	1.84	1.53	0.617		\$ 55.00	\$ 40.00	\$ -	\$ 95.00
130-29300	1	PT LOTS 22 & 23	1.24	1.24	0.500		\$ 45.00	\$ 38.00	\$ -	\$ 83.00
130-29400	1	PT LOT 22	0.84	0.80	0.323		\$ 29.00	\$ 28.00	\$ -	\$ 57.00
130-29500	1	PT LOT 22	0.61	0.61	0.245		\$ 22.00	\$ 23.00	\$ -	\$ 45.00
130-29600	1	PT LOT 22	0.65	0.65	0.265		\$ 24.00	\$ 24.00	\$ -	\$ 48.00
130-29700	1	PT LOT 22	0.66	0.66	0.267		\$ 24.00	\$ 25.00	\$ -	\$ 49.00
130-29800	1	PT LOT 22	0.80	0.80	0.322		\$ 29.00	\$ 29.00	\$ -	\$ 58.00
130-29900	1	PT LOT 22	0.87	0.87	0.352		\$ 31.00	\$ 30.00	\$ -	\$ 61.00
130-30000	1	PT LOTS 22 & 23	0.58	0.58	0.236		\$ 21.00	\$ 22.00	\$ -	\$ 43.00
130-30100	1	PT LOT 23	1.07	1.07	0.435		\$ 39.00	\$ 35.00	\$ -	\$ 74.00
130-30200	1	PT LOT 23	0.74	0.74	0.298		\$ 27.00	\$ 27.00	\$ -	\$ 54.00
130-30300	1	PT LOT 23	0.71	0.71	0.287		\$ 26.00	\$ 26.00	\$ -	\$ 52.00
130-30400	1	PT LOT 23	0.71	0.71	0.285		\$ 25.00	\$ 25.00	\$ -	\$ 50.00
130-30500	1	PT LOT 23	0.75	0.75	0.303		\$ 27.00	\$ 27.00	\$ -	\$ 54.00
130-30600	1	PT LOT 23	0.55	0.55	0.223		\$ 20.00	\$ 21.00	\$ -	\$ 41.00
130-30700	1	PT LOT 23	0.56	0.56	0.226		\$ 20.00	\$ 21.00	\$ -	\$ 41.00
130-30800	1	PT LOT 23	0.14	0.14	0.057		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
130-30900	1	PT LOT 23	1.35	1.35	0.546		\$ 49.00	\$ 41.00	\$ -	\$ 90.00
130-31000	1	PT LOT 23	0.44	0.44	0.180		\$ 16.00	\$ 19.00	\$ -	\$ 35.00
130-31100	1	PT LOT 23	0.45	0.45	0.180		\$ 16.00	\$ 19.00	\$ -	\$ 35.00
130-31200	1	PT LOT 23	0.37	0.37	0.151		\$ 13.00	\$ 16.00	\$ -	\$ 29.00
130-31300	1	PT LOT 23	0.37	0.37	0.150		\$ 13.00	\$ 16.00	\$ -	\$ 29.00
130-31400	1	PT LOT 23	0.39	0.39	0.156		\$ 14.00	\$ 17.00	\$ -	\$ 31.00
130-31500	1576	PT LOTS 17 & 18	0.17	0.17	0.071		\$ 6.00	\$ 9.00	\$ -	\$ 15.00

**Chappus Drain  
Maintenance Schedule**

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
130-31550	1	PT LOT 23	2.96	2.96	1.198		\$ 107.00	\$ 70.00	\$ -	\$ 177.00
130-31600	1	PT LOT 23	0.35	0.35	0.140		\$ 12.00	\$ 15.00	\$ -	\$ 27.00
130-31700	1	PT LOT 23	0.28	0.28	0.113		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
130-31800	1	PT LOT 23	0.33	0.33	0.134		\$ 12.00	\$ 15.00	\$ -	\$ 27.00
130-31900	1	PT LOT 23	0.33	0.33	0.133		\$ 12.00	\$ 15.00	\$ -	\$ 27.00
130-32100	1	PT LOT 23	0.28	0.28	0.112		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
130-32200	1	PT LOT 23	0.27	0.27	0.111		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
130-32300	1	PT LOT 23	0.28	0.28	0.112		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
130-32400	1	PT LOT 23	0.28	0.28	0.112		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
130-32500	1	PT LOT 23	0.27	0.27	0.111		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
130-32600	1	PT LOT 23	0.28	0.28	0.111		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
130-32700	1	PT LOT 23	0.28	0.28	0.111		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
130-32800	1	PT LOT 23	0.28	0.28	0.112		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
130-32900	1	PT LOT 23	0.28	0.28	0.112		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
130-33000	1	PT LOT 23	0.28	0.28	0.111		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
130-33100	1	PT LOT 23	0.34	0.34	0.138		\$ 12.00	\$ 15.00	\$ -	\$ 27.00
130-33300	1	PT LOT 23	0.46	0.46	0.186		\$ 17.00	\$ 19.00	\$ -	\$ 36.00
130-33400	1	PT LOT 23	0.28	0.28	0.112		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
130-33500	1	PT LOT 23	0.28	0.28	0.112		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
130-33600	1	PT LOT 23	0.27	0.27	0.111		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
130-33700	1	PT LOT 23	0.28	0.28	0.111		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
130-33800	1	PT LOT 23	0.28	0.28	0.112		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
130-33900	1	PT LOT 23	0.28	0.28	0.111		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
130-34000	1	PT LOT 23	0.28	0.28	0.112		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
130-34100	1	PT LOT 23	0.27	0.27	0.111		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
130-34200	1	PT LOT 23	0.34	0.34	0.139		\$ 12.00	\$ 15.00	\$ -	\$ 27.00
130-34500	1	PT LOTS 22 & 23	40.38	34.43	13.933		\$ 1,242.00	\$ 389.00	\$ -	\$ 1,631.00
130-35000	1064	LOTS 110 TO 113	0.29	0.29	0.116		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
130-35100	1064	LOTS 106 TO 109	0.29	0.29	0.116		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
130-35200	1064	LOTS 104 & 105	0.14	0.14	0.058		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
130-35300	1064	LOTS 98 TO 103	0.43	0.43	0.174		\$ 16.00	\$ 18.00	\$ -	\$ 34.00

**Chappus Drain  
Maintenance Schedule**

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
130-35400	1064	LOTS 94 TO 97	0.29	0.29	0.116		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
130-35500	1064	LOTS 80 TO 93	1.00	1.00	0.406		\$ 36.00	\$ 33.00	\$ -	\$ 69.00
130-35600	1064	LOTS 75 TO 79	0.36	0.36	0.145		\$ 13.00	\$ 16.00	\$ -	\$ 29.00
130-35700	1064	LOTS 71 TO 74	0.35	0.35	0.142		\$ 13.00	\$ 15.00	\$ -	\$ 28.00
130-35800	1064	LOTS 67 TO 70	0.29	0.29	0.116		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
130-35900	1064	LOTS 62 TO 66	0.36	0.36	0.145		\$ 13.00	\$ 16.00	\$ -	\$ 29.00
130-36000	1064	LOTS 58 TO 61	0.35	0.35	0.142		\$ 13.00	\$ 15.00	\$ -	\$ 28.00
130-36100	1064	LOTS 186 TO 192	0.57	0.57	0.231		\$ 21.00	\$ 22.00	\$ -	\$ 43.00
130-36200	1064	LOTS 183 TO 185	0.21	0.21	0.085		\$ 8.00	\$ 11.00	\$ -	\$ 19.00
130-36300	1064	LOTS 176 TO 182	0.57	0.57	0.231		\$ 21.00	\$ 22.00	\$ -	\$ 43.00
130-36400	1064	LOTS 169 TO 175	0.50	0.50	0.202		\$ 18.00	\$ 20.00	\$ -	\$ 38.00
130-36500	1064	LOTS 166 TO 168	0.21	0.21	0.085		\$ 8.00	\$ 11.00	\$ -	\$ 19.00
130-36600	1064	LOTS 157 TO 165	0.64	0.64	0.259		\$ 23.00	\$ 24.00	\$ -	\$ 47.00
130-36700	1064	LOTS 145 TO 156	0.86	0.86	0.348		\$ 31.00	\$ 30.00	\$ -	\$ 61.00
130-36800	1064	LOTS 138 TO 144	0.50	0.50	0.202		\$ 18.00	\$ 20.00	\$ -	\$ 38.00
130-37400	1064	LOTS 350 TO 356	0.50	0.50	0.203		\$ 18.00	\$ 19.00	\$ -	\$ 37.00
130-37500	1064	LOTS 338 TO 349	0.86	0.86	0.348		\$ 31.00	\$ 30.00	\$ -	\$ 61.00
130-37600	1064	LOTS 325 TO 337	0.93	0.93	0.377		\$ 34.00	\$ 32.00	\$ -	\$ 66.00
130-37670	1064	LOTS 322 TO 324	0.21	0.21	0.087		\$ 8.00	\$ 11.00	\$ -	\$ 19.00
130-37700	1064	LOTS 319 TO 321	0.21	0.21	0.087		\$ 8.00	\$ 11.00	\$ -	\$ 19.00
130-37800	1064	LOTS 312 TO 318	0.57	0.57	0.229		\$ 20.00	\$ 22.00	\$ -	\$ 42.00
130-37900	1064	LOTS 306 TO 311	0.43	0.43	0.174		\$ 16.00	\$ 18.00	\$ -	\$ 34.00
130-38000	1064	LOTS 302 TO 305	0.35	0.35	0.142		\$ 13.00	\$ 15.00	\$ -	\$ 28.00
130-38010	1064	LOTS 432 TO 440	0.71	0.71	0.287		\$ 26.00	\$ 26.00	\$ -	\$ 52.00
130-38100	1064	LOTS 424 TO 431	0.64	0.64	0.258		\$ 23.00	\$ 24.00	\$ -	\$ 47.00
130-38200	1064	LOTS 420 TO 423	0.29	0.29	0.116		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
130-38300	1064	LOTS 415 TO 419	0.36	0.36	0.145		\$ 13.00	\$ 16.00	\$ -	\$ 29.00
130-38400	1064	LOTS 411 TO 414	0.29	0.29	0.116		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
130-38500	1064	LOTS 405 TO 410	0.43	0.43	0.174		\$ 16.00	\$ 18.00	\$ -	\$ 34.00
130-38600	1064	LOTS 396 TO 404	0.64	0.64	0.261		\$ 23.00	\$ 24.00	\$ -	\$ 47.00
130-38700	1064	LOTS 391 TO 395	0.36	0.36	0.145		\$ 13.00	\$ 16.00	\$ -	\$ 29.00

**Chappus Drain  
Maintenance Schedule**

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
130-38800	1064	LOTS 386 TO 390	0.36	0.36	0.145		\$ 13.00	\$ 16.00	\$ -	\$ 29.00
130-38900	1064	LOTS 374 TO 385	0.86	0.28	0.115		\$ 10.00	\$ 10.00	\$ -	\$ 20.00
130-39400	1064	LOTS 597 TO 602	0.43	0.38	0.155		\$ 14.00	\$ 16.00	\$ -	\$ 30.00
130-39500	1064	LOTS 591 TO 596	0.43	0.43	0.174		\$ 16.00	\$ 18.00	\$ -	\$ 34.00
130-39600	1064	LOTS 587 TO 590	0.29	0.29	0.116		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
130-39700	1064	LOTS 581 TO 586	0.43	0.43	0.174		\$ 16.00	\$ 18.00	\$ -	\$ 34.00
130-39800	1064	LOTS 578 TO 580	0.21	0.21	0.087		\$ 8.00	\$ 11.00	\$ -	\$ 19.00
130-39900	1064	LOTS 575 TO 577	0.21	0.21	0.087		\$ 8.00	\$ 11.00	\$ -	\$ 19.00
130-40000	1064	LOTS 566 TO 574	0.64	0.64	0.261		\$ 23.00	\$ 24.00	\$ -	\$ 47.00
130-40100	1064	LOTS 559 TO 565	0.50	0.50	0.203		\$ 18.00	\$ 19.00	\$ -	\$ 37.00
130-40200	1064	LOTS 550 TO 558	0.71	0.71	0.287		\$ 26.00	\$ 26.00	\$ -	\$ 52.00
130-40300	1064	LOTS 547 TO 549	0.21	0.21	0.087		\$ 8.00	\$ 11.00	\$ -	\$ 19.00
130-40400	1064	LOTS 542 TO 546	0.42	0.42	0.171		\$ 15.00	\$ 18.00	\$ -	\$ 33.00
130-40500	1064	LOTS 682 TO 686	0.42	0.42	0.171		\$ 15.00	\$ 18.00	\$ -	\$ 33.00
130-40600	1064	LOTS 679 TO 681	0.21	0.21	0.087		\$ 8.00	\$ 11.00	\$ -	\$ 19.00
130-40700	1064	LOTS 670 TO 678	0.71	0.71	0.287		\$ 26.00	\$ 26.00	\$ -	\$ 52.00
130-40800	1064	LOTS 663 TO 669	0.50	0.50	0.203		\$ 18.00	\$ 19.00	\$ -	\$ 37.00
130-40900	1064	LOTS 657 TO 662	0.43	0.43	0.174		\$ 16.00	\$ 18.00	\$ -	\$ 34.00
130-41000	1064	LOTS 651 TO 656	0.43	0.43	0.174		\$ 16.00	\$ 18.00	\$ -	\$ 34.00
130-41100	1064	LOTS 645 TO 650	0.43	0.43	0.174		\$ 16.00	\$ 18.00	\$ -	\$ 34.00
130-41200	1064	LOTS 641 TO 644	0.29	0.29	0.116		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
130-41300	1064	LOTS 638 TO 640	0.21	0.21	0.087		\$ 8.00	\$ 11.00	\$ -	\$ 19.00
130-41400	1064	LOTS 632 & 633	0.14	0.14	0.058		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
130-41425	1064	LOTS 634 & 635	0.14	0.14	0.058		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
130-41450	1064	LOTS 636 & 637	0.14	0.14	0.058		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
130-41500	1064	LOTS 629 TO 631	0.21	0.21	0.087		\$ 8.00	\$ 11.00	\$ -	\$ 19.00
130-41600	1064	LOTS 626 TO 628	0.21	0.21	0.087		\$ 8.00	\$ 11.00	\$ -	\$ 19.00
130-41700	1064	LOTS 623 TO 625	0.21	0.21	0.087		\$ 8.00	\$ 11.00	\$ -	\$ 19.00
130-42100	1	PT LOT 20	46.17	44.72	18.097		\$ 1,613.00	\$ 505.00	\$ -	\$ 2,118.00
130-42800	1	PT LOT 19	12.84	11.52	4.663		\$ 416.00	\$ 130.00	\$ -	\$ 546.00
130-44100	1	PT LOT 18 PT LOT 19	1.07	1.07	0.434		\$ 39.00	\$ 35.00	\$ -	\$ 74.00

**Chappus Drain  
Maintenance Schedule**

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
130-44200	1	PT LOT 18 PT LOT 19	1.07	1.07	0.435		\$ 39.00	\$ 35.00	\$ -	\$ 74.00
130-44300	1	PT LOT 18 PT LOT 19	2.13	2.13	0.864		\$ 77.00	\$ 53.00	\$ -	\$ 130.00
130-44500	1	PT LOT 18	0.67	0.67	0.269		\$ 24.00	\$ 25.00	\$ -	\$ 49.00
130-44600	1	PT LOT 18	1.52	1.52	0.617		\$ 55.00	\$ 45.00	\$ -	\$ 100.00
130-44700	1	PT LOT 18	1.01	1.01	0.407		\$ 36.00	\$ 33.00	\$ -	\$ 69.00
130-44900	1	PT LOT 18	11.80	11.80	4.775		\$ 426.00	\$ 133.00	\$ -	\$ 559.00
130-45600	1064	PT LOT 688	0.06	0.06	0.024		\$ 2.00	\$ 4.00	\$ -	\$ 6.00
130-45700	1064	LOT 687	0.14	0.14	0.055		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
130-45800	1064	LOT 541	0.14	0.14	0.055		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
130-45900	1064	PT LOT 540	0.04	0.04	0.016		\$ 1.00	\$ 2.00	\$ -	\$ 3.00
130-46500	1064	LOTS 475 TO 488	1.00	1.00	0.406		\$ 36.00	\$ 33.00	\$ -	\$ 69.00
130-46600	1064	LOTS 458 TO 474	1.35	1.35	0.545		\$ 49.00	\$ 41.00	\$ -	\$ 90.00
130-46700	1064	LOTS 443 TO 457	1.18	1.18	0.478		\$ 43.00	\$ 39.00	\$ -	\$ 82.00
130-46800	1064	PT LOT 442	0.03	0.03	0.012		\$ 1.00	\$ 2.00	\$ -	\$ 3.00
130-46900	1064	LOT 441	0.14	0.14	0.055		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
130-47000	1064	LOT 301	0.14	0.14	0.055		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
130-47100	1064	PT LOT 300	0.03	0.03	0.012		\$ 1.00	\$ 2.00	\$ -	\$ 3.00
130-47700	1064	LOTS 245 TO 247	0.28	0.28	0.114		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
130-48100	1064	LOTS 194 & 195	0.14	0.14	0.058		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
130-48200	1064	LOT 193	0.14	0.14	0.055		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
130-48300	1064	LOTS 56 & 57	0.30	0.30	0.120		\$ 11.00	\$ 13.00	\$ -	\$ 24.00
130-48400	1064	PT LOT 54	0.02	0.02	0.008		\$ 1.00	\$ 1.00	\$ -	\$ 2.00
130-48500	1064	LOTS 51 TO 53	0.25	0.25	0.101		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
130-48600	1064	LOTS 46 TO 50	0.36	0.36	0.145		\$ 13.00	\$ 16.00	\$ -	\$ 29.00
130-48700	1064	LOTS 44 & 45	0.14	0.14	0.058		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
130-48800	1064	LOTS 41 TO 43	0.28	0.28	0.113		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
130-48900	1064	LOTS 39 & 40	0.21	0.21	0.084		\$ 7.00	\$ 11.00	\$ -	\$ 18.00
130-49000	1064	LOTS 28 TO 38	0.79	0.79	0.319		\$ 28.00	\$ 28.00	\$ -	\$ 56.00
130-49050	1064	LOTS 24 TO 27	0.35	0.35	0.142		\$ 13.00	\$ 15.00	\$ -	\$ 28.00
130-49100	1064	LOTS 8 TO 23	1.15	1.15	0.464		\$ 41.00	\$ 38.00	\$ -	\$ 79.00
130-49190	1064	LOTS 1 TO 3	0.36	0.36	0.146		\$ 13.00	\$ 16.00	\$ -	\$ 29.00

**Chappus Drain  
Maintenance Schedule**

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
130-49300	1064	LOTS 1 TO 3	0.36	0.36	0.145		\$ 13.00	\$ 16.00	\$ -	\$ 29.00
130-49400	1	PT LOTS 22 & 23	2.08	2.08	0.842		\$ 75.00	\$ 52.00	\$ -	\$ 127.00
130-49500	1	PT LOTS 22 & 23	1.88	1.88	0.762		\$ 68.00	\$ 49.00	\$ -	\$ 117.00
130-49600	1	PT LOT 23	1.54	1.54	0.624		\$ 56.00	\$ 45.00	\$ -	\$ 101.00
130-49700	1	PT LOT 23	2.43	2.43	0.983		\$ 88.00	\$ 60.00	\$ -	\$ 148.00
130-49800	1	PT LOT 23	0.71	0.71	0.286		\$ 26.00	\$ 26.00	\$ -	\$ 52.00
130-49900	1	PT LOT 23	0.71	0.71	0.286		\$ 26.00	\$ 26.00	\$ -	\$ 52.00
130-49950	1	PT LOT 24	4.23	2.87	1.161		\$ 104.00	\$ 55.00	\$ -	\$ 159.00
130-50000	1	Pt. Lots 24 & 25	22.91	19.71	7.977		\$ 711.00	\$ 223.00	\$ -	\$ 934.00
130-50050	1	PT LOT 25	7.45	5.26	2.128		\$ 190.00	\$ 71.00	\$ -	\$ 261.00
130-50100	863	LOTS 265 TO 270	0.49	0.49	0.200		\$ 18.00	\$ 20.00	\$ -	\$ 38.00
130-50400	863	LOT 256	0.07	0.07	0.029		\$ 3.00	\$ 4.00	\$ -	\$ 7.00
130-50800	863	LOTS 69 & 70	0.14	0.14	0.058		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
130-51200	863	LOT 14	0.07	0.07	0.029		\$ 3.00	\$ 4.00	\$ -	\$ 7.00
130-51500	863	LOTS 1 TO 8	0.66	0.66	0.269		\$ 24.00	\$ 25.00	\$ -	\$ 49.00
130-51600	780	LOTS 270 TO 277	0.55	0.55	0.223		\$ 20.00	\$ 21.00	\$ -	\$ 41.00
130-51800	780	LOT N	0.15	0.15	0.059		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
130-52000	780	LOT M	0.17	0.17	0.069		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
130-52200	780	LOT L	0.17	0.17	0.069		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
130-52400	780	LOT K	0.17	0.17	0.067		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
130-52500	780	LOTS 74 & 75	0.14	0.14	0.056		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
130-52700	780	LOT D	0.16	0.16	0.067		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
130-52900	780	LOT C	0.17	0.17	0.068		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
130-53100	780	LOT B	0.17	0.17	0.069		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
130-53300	780	LOT A	0.18	0.18	0.073		\$ 6.00	\$ 10.00	\$ -	\$ 16.00
130-53400	780	LOTS 1 TO 5	0.50	0.43	0.174		\$ 16.00	\$ 17.00	\$ -	\$ 33.00
130-53600	1	PT LOT 28	6.31	5.87	2.374		\$ 212.00	\$ 93.00	\$ -	\$ 305.00
130-53700	1	PT LOT 28	5.54	4.78	1.934		\$ 172.00	\$ 81.00	\$ -	\$ 253.00
130-54200	676	LOTS 139 TO 143	0.38	0.38	0.154		\$ 14.00	\$ 16.00	\$ -	\$ 30.00
130-54300	676	LOTS 134 TO 138	0.38	0.38	0.154		\$ 14.00	\$ 16.00	\$ -	\$ 30.00
130-54400	676	LOTS 102 TO 133	3.32	3.32	1.345		\$ 120.00	\$ 71.00	\$ -	\$ 191.00

**Chappus Drain  
Maintenance Schedule**

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
130-54500	676	LOTS 97 TO 101	0.38	0.38	0.154		\$ 14.00	\$ 16.00	\$ -	\$ 30.00
130-54600	676	LOTS 207 TO 209	0.23	0.23	0.093		\$ 8.00	\$ 11.00	\$ -	\$ 19.00
130-54700	676	LOTS 210 & 211	0.15	0.15	0.060		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
130-54800	676	LOTS 175 TO 206	3.32	3.32	1.345		\$ 120.00	\$ 71.00	\$ -	\$ 191.00
130-54900	676	LOTS 170 TO 174	0.38	0.38	0.154		\$ 14.00	\$ 16.00	\$ -	\$ 30.00
130-55000	676	LOTS 165 TO 169	0.38	0.38	0.154		\$ 14.00	\$ 16.00	\$ -	\$ 30.00
140-00200	1	PT LOT 22	1.07	1.07	0.433		\$ 39.00	\$ 35.00	\$ -	\$ 74.00
140-00300	1	PT LOT 22	0.71	0.71	0.287		\$ 26.00	\$ 26.00	\$ -	\$ 52.00
140-00400	1	PT LOT 22	0.76	0.76	0.309		\$ 28.00	\$ 28.00	\$ -	\$ 56.00
140-00500	733	LOTS 217 & 218	0.18	0.18	0.072		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-00600	733	LOTS 215 & 216	0.16	0.16	0.064		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-00700	733	LOTS 213 & 214	0.16	0.16	0.064		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-00800	733	LOTS 211 & 212	0.16	0.16	0.064		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-00900	733	LOTS 206 TO 210	0.39	0.39	0.160		\$ 14.00	\$ 17.00	\$ -	\$ 31.00
140-01000	733	LOTS 203 TO 205	0.24	0.24	0.097		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-01100	733	LOT 200 TO LOT 202	1.23	1.23	0.498		\$ 44.00	\$ 37.00	\$ -	\$ 81.00
140-01200	733	LOT 196 TO 199	0.32	0.32	0.128		\$ 11.00	\$ 14.00	\$ -	\$ 25.00
140-01300	733	LOTS 194 & 195	0.20	0.20	0.080		\$ 7.00	\$ 10.00	\$ -	\$ 17.00
140-01400	733	LOT 191 TO 192	0.20	0.20	0.080		\$ 7.00	\$ 10.00	\$ -	\$ 17.00
140-01600	1	PT LOT 22	0.50	0.50	0.201		\$ 18.00	\$ 20.00	\$ -	\$ 38.00
140-01700	1	PT LOT 22	0.84	0.84	0.338		\$ 30.00	\$ 29.00	\$ -	\$ 59.00
140-01800	1	PT LOT 22	0.55	0.55	0.222		\$ 20.00	\$ 21.00	\$ -	\$ 41.00
140-01900	1	PT LOT 22	1.46	0.88	0.355		\$ 32.00	\$ 26.00	\$ -	\$ 58.00
140-02000	1	PT LOT 22	1.21	0.52	0.210		\$ 19.00	\$ 16.00	\$ -	\$ 35.00
140-02100	733	LOTS 188 TO 190	0.21	0.21	0.084		\$ 7.00	\$ 10.00	\$ -	\$ 17.00
140-02200	733	LOT 185 TO 187	0.21	0.21	0.084		\$ 7.00	\$ 10.00	\$ -	\$ 17.00
140-02300	733	LOT 183 LOT 184	0.14	0.14	0.056		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-02400	733	LOTS 178 TO 182	0.34	0.34	0.139		\$ 12.00	\$ 15.00	\$ -	\$ 27.00
140-02500	733	LOT 176 TO 177	0.17	0.17	0.069		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-02600	733	LOTS 171 TO 174	0.31	0.31	0.126		\$ 11.00	\$ 14.00	\$ -	\$ 25.00
140-02700	733	LOTS 169 & 170 &	0.17	0.17	0.069		\$ 6.00	\$ 9.00	\$ -	\$ 15.00



**Chappus Drain  
Maintenance Schedule**

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
140-02800	733	LOT 166 LOT 168	0.17	0.17	0.070		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-02900	733	LOT 165	0.07	0.07	0.028		\$ 2.00	\$ 4.00	\$ -	\$ 6.00
140-03000	733	BLK 1	0.27	0.27	0.109		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
140-03300	733	LOTS 161 TO 164	0.32	0.32	0.128		\$ 11.00	\$ 14.00	\$ -	\$ 25.00
140-14450	1	PT. LOT 21	0.06	0.07	0.027		\$ 2.00	\$ 4.00	\$ -	\$ 6.00
140-16800	1	PT LOT 21	11.08	11.08	4.484		\$ 400.00	\$ 125.00	\$ -	\$ 525.00
140-16900	733	LOT 288 LOT 288A	0.99	0.99	0.400		\$ 36.00	\$ 33.00	\$ -	\$ 69.00
140-17000	733	LOT 285 PT LOT 283	1.10	1.10	0.444		\$ 40.00	\$ 36.00	\$ -	\$ 76.00
140-17010	733	LOT 281 PT LOT 282	0.22	0.22	0.090		\$ 8.00	\$ 11.00	\$ -	\$ 19.00
140-17020	1	PT LOT 35	0.31	0.31	0.126		\$ 11.00	\$ 14.00	\$ -	\$ 25.00
140-17030	CPN	PT LOT 35	0.31	0.31	0.126		\$ 11.00	\$ 14.00	\$ -	\$ 25.00
140-17100	733	LOTS 262 TO 274	5.29	5.29	2.141		\$ 191.00	\$ 90.00	\$ -	\$ 281.00
140-17200	733	LOT 259 TO LOT 261	0.95	0.95	0.386		\$ 34.00	\$ 32.00	\$ -	\$ 66.00
140-17300	1	PT LOT 21	4.19	4.19	1.696		\$ 151.00	\$ 80.00	\$ -	\$ 231.00
140-17400	733	LOT 257 PT LOT 256	0.19	0.19	0.075		\$ 7.00	\$ 9.00	\$ -	\$ 16.00
140-17500	733	LOTS 254 & 255 &	0.18	0.18	0.075		\$ 7.00	\$ 9.00	\$ -	\$ 16.00
140-17600	733	LOTS 252 & 253	0.19	0.19	0.075		\$ 7.00	\$ 9.00	\$ -	\$ 16.00
140-17700	733	LOT 250 PT LOT 249	0.18	0.18	0.075		\$ 7.00	\$ 9.00	\$ -	\$ 16.00
140-17800	733	LOT 248 PT LOT 247	0.17	0.17	0.069		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-17900	733	LOT 245 LOT 246	0.17	0.17	0.069		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-18000	733	LOT 243 PT LOT	0.18	0.18	0.072		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-18100	733	LOT 241 PT LOT 240	0.17	0.17	0.070		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-18200	733	LOT 239 PT LOT 238	0.42	0.42	0.170		\$ 15.00	\$ 18.00	\$ -	\$ 33.00
140-18300	733	LOTS 236 & 237	0.42	0.42	0.171		\$ 15.00	\$ 18.00	\$ -	\$ 33.00
140-18400	733	LOT 234 PT LOT 233	0.18	0.18	0.074		\$ 7.00	\$ 9.00	\$ -	\$ 16.00
140-18500	733	LOT 232 PT LOT 231	0.18	0.18	0.075		\$ 7.00	\$ 9.00	\$ -	\$ 16.00
140-18600	733	LOTS 229 & 230	0.18	0.18	0.075		\$ 7.00	\$ 9.00	\$ -	\$ 16.00
140-18700	733	LOT 227 PT LOT 226	0.19	0.19	0.075		\$ 7.00	\$ 9.00	\$ -	\$ 16.00
140-18800	733	LOT 225 PT LOT 224	0.18	0.18	0.074		\$ 7.00	\$ 9.00	\$ -	\$ 16.00
140-18900	733	LOTS 219 TO 223	0.48	0.48	0.193		\$ 17.00	\$ 19.00	\$ -	\$ 36.00
140-19000	1	PT LOT 21	1.99	1.99	0.805		\$ 72.00	\$ 52.00	\$ -	\$ 124.00

**Chappus Drain  
Maintenance Schedule**

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
140-19100	1	PT LOT 21	2.75	2.75	1.113		\$ 99.00	\$ 65.00	\$ -	\$ 164.00
140-19200	743	LOTS 1 TO 14	1.14	1.14	0.460		\$ 41.00	\$ 37.00	\$ -	\$ 78.00
140-19300	743	LOTS 15 TO 19	0.40	0.40	0.162		\$ 14.00	\$ 17.00	\$ -	\$ 31.00
140-19350	743	LOTS 20 TO 24	0.40	0.40	0.162		\$ 14.00	\$ 17.00	\$ -	\$ 31.00
140-19375	743	LOTS 25 TO 29	0.40	0.40	0.162		\$ 14.00	\$ 17.00	\$ -	\$ 31.00
140-19400	743	LOTS 30 TO 36	0.56	0.56	0.226		\$ 20.00	\$ 21.00	\$ -	\$ 41.00
140-19500	743	LOTS 37 TO 39	0.24	0.24	0.097		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-19600	743	LOTS 40 TO 45	0.48	0.48	0.194		\$ 17.00	\$ 19.00	\$ -	\$ 36.00
140-19700	743	LOTS 46 TO 48	0.24	0.24	0.097		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-19800	743	LOTS 49 TO 51	0.24	0.24	0.097		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-19900	743	LOTS 52 TO 57	0.56	0.56	0.226		\$ 20.00	\$ 21.00	\$ -	\$ 41.00
140-20000	743	LOTS 58 TO 62	0.32	0.32	0.130		\$ 12.00	\$ 14.00	\$ -	\$ 26.00
140-20100	743	LOTS 63 TO 65	0.24	0.24	0.097		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-20200	743	LOTS 66 TO 68	0.24	0.24	0.097		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-20300	743	LOTS 69 TO 73	0.40	0.40	0.162		\$ 14.00	\$ 17.00	\$ -	\$ 31.00
140-20350	743	LOTS 79 TO 86	0.64	0.64	0.259		\$ 23.00	\$ 24.00	\$ -	\$ 47.00
140-20400	743	LOTS 87 TO 90	0.32	0.32	0.130		\$ 12.00	\$ 14.00	\$ -	\$ 26.00
140-20500	820	LOTS A TO F	0.57	0.57	0.231		\$ 21.00	\$ 22.00	\$ -	\$ 43.00
140-20600	820	LOTS G TO J	0.36	0.36	0.146		\$ 13.00	\$ 16.00	\$ -	\$ 29.00
140-20700	743	LOTS 91 TO 96	0.48	0.48	0.194		\$ 17.00	\$ 20.00	\$ -	\$ 37.00
140-20800	743	LOTS 97 TO 99	0.24	0.24	0.097		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-20900	743	LOTS 100 TO 102	0.24	0.24	0.097		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-21000	743	LOT 103	0.08	0.08	0.032		\$ 3.00	\$ 5.00	\$ -	\$ 8.00
140-21100	743	LOTS 110 TO 112	0.24	0.24	0.096		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-21200	743	LOTS 113 TO 118	0.48	0.48	0.193		\$ 17.00	\$ 19.00	\$ -	\$ 36.00
140-21300	743	LOTS 119 TO 123	0.40	0.40	0.161		\$ 14.00	\$ 17.00	\$ -	\$ 31.00
140-21400	743	LOTS 124 TO 126	0.24	0.24	0.096		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-21500	743	LOTS 127 TO 132	0.48	0.48	0.192		\$ 17.00	\$ 19.00	\$ -	\$ 36.00
140-21600	743	LOTS 133 TO 135	0.24	0.24	0.096		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-21700	743	LOTS 136 TO 138	0.24	0.24	0.096		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-21800	743	LOTS 139 TO 141	0.24	0.24	0.096		\$ 9.00	\$ 12.00	\$ -	\$ 21.00

**Chappus Drain  
Maintenance Schedule**

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
140-21900	743	LOTS 142 TO 144	0.24	0.24	0.096		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-22000	743	LOTS 145 TO 157	1.03	1.03	0.417		\$ 37.00	\$ 34.00	\$ -	\$ 71.00
140-22100	743	LOTS 158 TO 160	0.24	0.24	0.096		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-22200	743	LOTS 161 TO 163	0.24	0.24	0.096		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-22300	743	LOTS 164 TO 166	0.24	0.24	0.096		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-22400	743	LOTS 167 TO 183	1.45	1.45	0.585		\$ 52.00	\$ 42.00	\$ -	\$ 94.00
140-22600	834	LOTS 497 TO 515	1.34	1.34	0.542		\$ 48.00	\$ 41.00	\$ -	\$ 89.00
140-22700	834	LOT 516	0.07	0.07	0.028		\$ 3.00	\$ 4.00	\$ -	\$ 7.00
140-22800	834	LOTS 517 & 518	0.14	0.14	0.056		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-23000	834	LOTS 519 TO 521	0.21	0.21	0.084		\$ 8.00	\$ 11.00	\$ -	\$ 19.00
140-23100	834	LOTS 522 TO 536	1.04	1.04	0.422		\$ 38.00	\$ 34.00	\$ -	\$ 72.00
140-23400	834	LOTS 537 TO 553	1.18	1.18	0.479		\$ 43.00	\$ 39.00	\$ -	\$ 82.00
140-23500	834	LOT 554	0.07	0.07	0.028		\$ 3.00	\$ 4.00	\$ -	\$ 7.00
140-23600	834	LOTS 555 & 556	0.14	0.14	0.056		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-23700	834	LOT 557	0.07	0.07	0.028		\$ 3.00	\$ 4.00	\$ -	\$ 7.00
140-23800	834	LOTS 558 TO 562	0.35	0.35	0.141		\$ 13.00	\$ 15.00	\$ -	\$ 28.00
140-23900	834	LOTS 563 TO 570	0.62	0.62	0.252		\$ 22.00	\$ 23.00	\$ -	\$ 45.00
140-24000	834	LOT 424 PT LOT 423	0.10	0.10	0.041		\$ 4.00	\$ 6.00	\$ -	\$ 10.00
140-24100	834	LOTS 425 TO 430	0.42	0.42	0.169		\$ 15.00	\$ 18.00	\$ -	\$ 33.00
140-24200	834	LOTS 431 TO 445	1.04	1.04	0.422		\$ 38.00	\$ 34.00	\$ -	\$ 72.00
140-24300	834	LOT 446	0.07	0.07	0.028		\$ 3.00	\$ 4.00	\$ -	\$ 7.00
140-24400	834	LOT 447	0.07	0.07	0.028		\$ 3.00	\$ 4.00	\$ -	\$ 7.00
140-24500	834	LOT 448	0.07	0.07	0.028		\$ 3.00	\$ 4.00	\$ -	\$ 7.00
140-24600	834	LOT 449	0.07	0.07	0.028		\$ 3.00	\$ 4.00	\$ -	\$ 7.00
140-24700	834	LOT 450	0.07	0.07	0.028		\$ 3.00	\$ 4.00	\$ -	\$ 7.00
140-24800	834	LOTS 451 TO 456	0.42	0.42	0.169		\$ 15.00	\$ 18.00	\$ -	\$ 33.00
140-24900	834	LOTS 457 TO 459	0.21	0.21	0.084		\$ 8.00	\$ 11.00	\$ -	\$ 19.00
140-25000	834	LOTS 460 TO 465	0.42	0.42	0.169		\$ 15.00	\$ 18.00	\$ -	\$ 33.00
140-25100	834	LOTS 466 TO 471	0.42	0.42	0.169		\$ 15.00	\$ 18.00	\$ -	\$ 33.00
140-25200	834	LOTS 472 & 473	0.14	0.14	0.056		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-25300	834	LOTS 474 TO 477	0.28	0.28	0.113		\$ 10.00	\$ 13.00	\$ -	\$ 23.00

**Chappus Drain  
Maintenance Schedule**

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
140-25400	834	LOTS 478 TO 483	0.42	0.42	0.169		\$ 15.00	\$ 18.00	\$ -	\$ 33.00
140-25500	834	LOTS 347 TO 362	2.18	2.18	0.882		\$ 79.00	\$ 54.00	\$ -	\$ 133.00
140-25800	834	LOTS 363 TO 365	0.21	0.21	0.084		\$ 8.00	\$ 11.00	\$ -	\$ 19.00
140-25900	834	LOTS 366 TO 371	0.42	0.42	0.169		\$ 15.00	\$ 18.00	\$ -	\$ 33.00
140-26000	834	LOTS 372 TO 377	0.42	0.42	0.169		\$ 15.00	\$ 18.00	\$ -	\$ 33.00
140-26100	834	LOTS 378 TO 380	0.21	0.21	0.084		\$ 8.00	\$ 11.00	\$ -	\$ 19.00
140-26200	834	LOTS 381 TO 383	0.21	0.21	0.084		\$ 8.00	\$ 11.00	\$ -	\$ 19.00
140-26300	834	LOTS 384 TO 386	0.21	0.21	0.084		\$ 8.00	\$ 11.00	\$ -	\$ 19.00
140-26400	834	LOTS 387 TO 412	1.81	1.81	0.732		\$ 65.00	\$ 47.00	\$ -	\$ 112.00
140-26500	834	LOTS 413 TO 417	0.35	0.35	0.141		\$ 13.00	\$ 15.00	\$ -	\$ 28.00
140-26600	834	PT LOTS 418 & 419	0.10	0.10	0.038		\$ 3.00	\$ 6.00	\$ -	\$ 9.00
140-26700	834	PT LOT 421	0.00	0.00	0.001		\$ 1.00	\$ 1.00	\$ -	\$ 2.00
140-26800	834	PT LOT 276 LOT 277	0.12	0.12	0.050		\$ 4.00	\$ 7.00	\$ -	\$ 11.00
140-27000	834	LOTS 278 TO 280	0.21	0.21	0.085		\$ 8.00	\$ 11.00	\$ -	\$ 19.00
140-27100	834	LOTS 281 TO 287	0.49	0.49	0.197		\$ 18.00	\$ 19.00	\$ -	\$ 37.00
140-27200	834	LOTS 288 & 289	0.14	0.14	0.056		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-27300	834	LOTS 290 TO 293	0.28	0.28	0.113		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
140-27400	834	LOTS 294 & 295	0.14	0.14	0.056		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-27500	834	LOT 296	0.07	0.07	0.028		\$ 3.00	\$ 4.00	\$ -	\$ 7.00
140-27600	834	LOTS 297 TO 301	0.35	0.35	0.141		\$ 13.00	\$ 15.00	\$ -	\$ 28.00
140-27700	834	LOTS 302 TO 306	0.35	0.35	0.141		\$ 13.00	\$ 15.00	\$ -	\$ 28.00
140-27800	834	LOTS 307 & 308	0.14	0.14	0.056		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-27900	834	LOT 309	0.07	0.07	0.028		\$ 3.00	\$ 4.00	\$ -	\$ 7.00
140-28000	834	LOT 310	0.07	0.07	0.028		\$ 3.00	\$ 4.00	\$ -	\$ 7.00
140-28100	834	LOT 311	0.07	0.07	0.028		\$ 3.00	\$ 4.00	\$ -	\$ 7.00
140-28200	834	LOT 312	0.07	0.07	0.028		\$ 3.00	\$ 4.00	\$ -	\$ 7.00
140-28300	834	LOTS 313 TO 316	0.28	0.28	0.113		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
140-28400	834	LOT 317	0.07	0.07	0.028		\$ 3.00	\$ 4.00	\$ -	\$ 7.00
140-28500	834	LOTS 318 TO 327	0.70	0.70	0.282		\$ 25.00	\$ 26.00	\$ -	\$ 51.00
140-28600	834	LOTS 328 TO 346	1.36	1.36	0.550		\$ 49.00	\$ 41.00	\$ -	\$ 90.00
140-29250	834	LOTS 207 TO 213	1.56	1.56	0.631		\$ 56.00	\$ 46.00	\$ -	\$ 102.00

**Chappus Drain  
Maintenance Schedule**

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
140-29300	834	LOTS 214 TO 232	1.32	1.32	0.535		\$ 48.00	\$ 40.00	\$ -	\$ 88.00
140-29400	834	LOT 233	0.07	0.07	0.028		\$ 3.00	\$ 4.00	\$ -	\$ 7.00
140-29500	834	LOT 234	0.07	0.07	0.028		\$ 3.00	\$ 4.00	\$ -	\$ 7.00
140-29600	834	LOTS 235 TO 245	0.77	0.77	0.310		\$ 28.00	\$ 28.00	\$ -	\$ 56.00
140-29700	834	LOTS 246 TO 249	0.28	0.28	0.113		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
140-29900	834	LOTS 250 & 251	0.14	0.14	0.056		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-30000	834	LOT 252	0.07	0.07	0.028		\$ 3.00	\$ 4.00	\$ -	\$ 7.00
140-30100	834	LOTS 253 TO 257	0.35	0.35	0.141		\$ 13.00	\$ 15.00	\$ -	\$ 28.00
140-30200	834	LOT 258	0.07	0.07	0.028		\$ 3.00	\$ 4.00	\$ -	\$ 7.00
140-30300	834	LOT 259	0.07	0.07	0.028		\$ 3.00	\$ 4.00	\$ -	\$ 7.00
140-30400	834	LOT 260	0.07	0.07	0.028		\$ 3.00	\$ 4.00	\$ -	\$ 7.00
140-30500	834	LOTS 261 & 262	0.14	0.14	0.056		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-30600	834	PT LOTS 263 & 264	0.12	0.12	0.047		\$ 4.00	\$ 7.00	\$ -	\$ 11.00
140-30700	834	LOTS 269 TO 271	0.29	0.29	0.117		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
140-30750	834	LOTS 143 TO 146	0.25	0.25	0.100		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-30780	834	PT LOT 147	0.04	0.04	0.016		\$ 1.00	\$ 2.00	\$ -	\$ 3.00
140-30900	834	LOT 152 PT LOT 150	0.14	0.14	0.058		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-31000	834	LOT 153	0.07	0.07	0.028		\$ 3.00	\$ 4.00	\$ -	\$ 7.00
140-31100	834	LOT 154	0.07	0.07	0.028		\$ 3.00	\$ 4.00	\$ -	\$ 7.00
140-31200	834	LOTS 155 TO 163	0.63	0.63	0.253		\$ 23.00	\$ 23.00	\$ -	\$ 46.00
140-31250	834	LOTS 164 TO 172	0.63	0.63	0.253		\$ 23.00	\$ 23.00	\$ -	\$ 46.00
140-31300	834	LOTS 173 TO 178	0.42	0.42	0.169		\$ 15.00	\$ 18.00	\$ -	\$ 33.00
140-31500	834	LOTS 179 AND 180	0.14	0.14	0.056		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-31600	834	LOTS 181 TO 185	0.35	0.35	0.141		\$ 13.00	\$ 15.00	\$ -	\$ 28.00
140-31700	834	LOTS 186 TO 191	0.42	0.42	0.169		\$ 15.00	\$ 18.00	\$ -	\$ 33.00
140-31800	834	LOTS 192 TO 197	0.42	0.42	0.169		\$ 15.00	\$ 18.00	\$ -	\$ 33.00
140-31900	834	LOTS 198 TO 200	0.21	0.21	0.084		\$ 8.00	\$ 11.00	\$ -	\$ 19.00
140-32000	834	LOTS 201 & 202	0.14	0.14	0.056		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-32100	834	LOTS 203 & 204	0.14	0.14	0.056		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-32200	834	LOTS 205 & 206	0.14	0.14	0.056		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-32300	921	LOTS 25 TO 30	0.39	0.39	0.157		\$ 14.00	\$ 17.00	\$ -	\$ 31.00

**Chappus Drain  
Maintenance Schedule**

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
140-32400	921	LOTS 22 TO 24	0.53	0.53	0.214		\$ 19.00	\$ 20.00	\$ -	\$ 39.00
140-32600	921	LOTS 37 TO 39	0.67	0.67	0.270		\$ 24.00	\$ 25.00	\$ -	\$ 49.00
140-32700	921	LOTS 34 TO 36	0.26	0.26	0.104		\$ 9.00	\$ 13.00	\$ -	\$ 22.00
140-32800	921	LOTS 31 TO 33	0.22	0.22	0.091		\$ 8.00	\$ 11.00	\$ -	\$ 19.00
140-32900	834	LOTS 79 TO 81	0.26	0.26	0.104		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-33000	834	LOTS 82 TO 84	0.26	0.26	0.104		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-33100	834	LOTS 85 TO 90	0.51	0.51	0.207		\$ 18.00	\$ 20.00	\$ -	\$ 38.00
140-33200	834	LOTS 91 TO 93	0.26	0.26	0.104		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-33300	834	LOTS 94 TO 96	0.26	0.26	0.104		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-33400	834	LOTS 97 TO 102	0.51	0.51	0.207		\$ 18.00	\$ 20.00	\$ -	\$ 38.00
140-33500	834	LOTS 103 TO 106	0.34	0.34	0.138		\$ 12.00	\$ 15.00	\$ -	\$ 27.00
140-33600	834	LOTS 107 TO 112	0.51	0.51	0.208		\$ 19.00	\$ 20.00	\$ -	\$ 39.00
140-33700	834	LOTS 113 TO 115	0.26	0.26	0.104		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-33800	834	LOTS 116 TO 127	1.02	1.02	0.415		\$ 37.00	\$ 34.00	\$ -	\$ 71.00
140-33900	834	LOTS 128 TO 132	0.43	0.43	0.173		\$ 15.00	\$ 18.00	\$ -	\$ 33.00
140-34000	834	PT LOTS 133 & 134	0.07	0.07	0.030		\$ 3.00	\$ 5.00	\$ -	\$ 8.00
140-34100	834	LOTS 138 TO 142	0.45	0.45	0.184		\$ 16.00	\$ 19.00	\$ -	\$ 35.00
140-34200	834	LOTS 1 TO 7	0.49	0.49	0.200		\$ 18.00	\$ 19.00	\$ -	\$ 37.00
140-34300	834	LOTS 11 TO 14	0.28	0.28	0.113		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
140-34400	834	LOTS 15 TO 18	0.28	0.28	0.113		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
140-34450	834	LOTS 19 & 20	0.14	0.14	0.057		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-34500	834	LOTS 21 TO 23	0.21	0.21	0.085		\$ 8.00	\$ 11.00	\$ -	\$ 19.00
140-34600	834	LOTS 24 TO 26	0.21	0.21	0.085		\$ 8.00	\$ 11.00	\$ -	\$ 19.00
140-34700	834	LOTS 27 & 28	0.14	0.14	0.057		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-34800	834	LOTS 29 & 30	0.14	0.14	0.057		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-34900	834	LOTS 31 & 32	0.14	0.14	0.057		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-35000	834	LOTS 33 TO 36	0.28	0.28	0.113		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
140-35100	834	LOTS 37 TO 40	0.28	0.28	0.113		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
140-35200	834	LOTS 41 TO 46	0.43	0.43	0.174		\$ 16.00	\$ 18.00	\$ -	\$ 34.00
140-35300	834	LOTS 47 TO 49	0.21	0.21	0.085		\$ 8.00	\$ 11.00	\$ -	\$ 19.00
140-35400	834	LOTS 50 TO 55	0.43	0.43	0.174		\$ 16.00	\$ 18.00	\$ -	\$ 34.00

**Chappus Drain  
Maintenance Schedule**

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
140-35500	834	LOTS 56 TO 58	0.21	0.21	0.085		\$ 8.00	\$ 11.00	\$ -	\$ 19.00
140-35600	834	LOTS 59 TO 64	0.43	0.43	0.174		\$ 16.00	\$ 18.00	\$ -	\$ 34.00
140-35700	834	LOTS 65 TO 70	0.43	0.43	0.174		\$ 16.00	\$ 18.00	\$ -	\$ 34.00
140-35800	834	LOTS 71 TO 73	0.22	0.22	0.089		\$ 8.00	\$ 11.00	\$ -	\$ 19.00
140-35900	834	LOTS 75 TO 77	0.24	0.24	0.097		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-36000	834	LOT 74	0.11	0.11	0.045		\$ 4.00	\$ 7.00	\$ -	\$ 11.00
140-36200	1	PT LOT 18	5.33	5.33	2.157		\$ 192.00	\$ 90.00	\$ -	\$ 282.00
140-36300	1	PT LOT 18	0.26	0.26	0.107		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
140-36600	1	PT LOT 18	0.24	0.68	0.275		\$ 25.00	\$ 33.00	\$ -	\$ 58.00
140-36602	1	PT LOT 18	0.35	0.86	0.348		\$ 31.00	\$ 38.00	\$ -	\$ 69.00
140-36700	350	S PT LOT 10	0.34	0.71	0.289		\$ 26.00	\$ 31.00	\$ -	\$ 57.00
140-36800	350	S PT LOT 10	0.37	0.37	0.149		\$ 13.00	\$ 16.00	\$ -	\$ 29.00
140-37000	350	PT LOT 9	0.29	0.29	0.118		\$ 11.00	\$ 13.00	\$ -	\$ 24.00
140-37100	350	PT LOT 9	0.29	0.29	0.118		\$ 11.00	\$ 13.00	\$ -	\$ 24.00
140-37300	350	PT LOT 10	37.10	37.13	15.026		\$ 1,339.00	\$ 419.00	\$ -	\$ 1,758.00
140-37350	350	PT LOT 8	1.60	1.60	0.648		\$ 58.00	\$ 45.00	\$ -	\$ 103.00
140-37400	350	PT LOT 8	1.60	1.60	0.647		\$ 58.00	\$ 47.00	\$ -	\$ 105.00
140-37500	1	PT LOT 18	3.03	3.03	1.226		\$ 109.00	\$ 65.00	\$ -	\$ 174.00
140-37550	1	PT LOT 18	0.17	0.17	0.067		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-37600	350	E PT LOT 7	1.20	1.20	0.486		\$ 43.00	\$ 39.00	\$ -	\$ 82.00
140-37700	350	E PT LOT 7	1.19	1.19	0.480		\$ 43.00	\$ 39.00	\$ -	\$ 82.00
140-37800	350	E PT LOT 7	0.94	0.94	0.379		\$ 34.00	\$ 32.00	\$ -	\$ 66.00
140-37900	350	W PT LOT 7	0.94	0.94	0.379		\$ 34.00	\$ 32.00	\$ -	\$ 66.00
140-38000	1	PT LOT 19	0.94	0.94	0.380		\$ 34.00	\$ 32.00	\$ -	\$ 66.00
140-38100	350	W PT LOT 7	0.94	0.94	0.379		\$ 34.00	\$ 32.00	\$ -	\$ 66.00
140-38300	350	E PT LOT 5	3.10	3.10	1.255		\$ 112.00	\$ 66.00	\$ -	\$ 178.00
140-38350	1	PT LOT 18	2.84	2.84	1.149		\$ 102.00	\$ 67.00	\$ -	\$ 169.00
140-38400	1	PT LOT 18	0.25	0.25	0.101		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-40201	1	PT LOT 21	0.14	0.14	0.055		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40203	1	PT LOT 21	0.13	0.13	0.052		\$ 5.00	\$ 7.00	\$ -	\$ 12.00
140-40205	1	PT LOT 21	0.13	0.13	0.052		\$ 5.00	\$ 7.00	\$ -	\$ 12.00

**Chappus Drain  
Maintenance Schedule**

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
140-40207	1	PT LOT 21	0.13	0.13	0.052		\$ 5.00	\$ 7.00	\$ -	\$ 12.00
140-40209	1	PT LOT 21	0.13	0.13	0.052		\$ 5.00	\$ 7.00	\$ -	\$ 12.00
140-40211	1	PT LOT 21	0.13	0.13	0.053		\$ 5.00	\$ 7.00	\$ -	\$ 12.00
140-40213	1	PT LOT 21	0.13	0.13	0.053		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40215	1	PT LOT 21	0.13	0.13	0.053		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40217	1	PT LOT 21	0.13	0.13	0.053		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40219	1	PT LOT 21	0.12	0.12	0.050		\$ 4.00	\$ 7.00	\$ -	\$ 11.00
140-40221	1	PT LOT 21	0.30	0.30	0.120		\$ 11.00	\$ 13.00	\$ -	\$ 24.00
140-40229	1	PT LOT 21	0.29	0.29	0.117		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
140-40231	1	PT LOT 21	0.25	0.25	0.099		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-40233	1	PT LOT 21	0.25	0.25	0.099		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-40235	1	PT LOT 21	0.25	0.25	0.099		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-40237	1	PT LOT 21	0.25	0.25	0.099		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-40239	1	PT LOT 21	0.25	0.25	0.099		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-40241	1	PT LOT 21	0.25	0.25	0.099		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-40243	1	PT LOT 21	0.25	0.25	0.099		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-40245	1	PT LOT 21	0.25	0.25	0.099		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-40247	1	PT LOT 21	0.25	0.25	0.099		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-40249	1	PT LOT 21	0.25	0.25	0.099		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-40251	1	PT LOT 21	0.25	0.25	0.099		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-40253	1	PT LOT 21	0.25	0.25	0.099		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-40255	1	PT LOT 21	0.25	0.25	0.099		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-40257	1	PT LOT 21	0.25	0.25	0.099		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-40259	1	PT LOT 21	0.25	0.25	0.100		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-40261	1	PT LOT 21	0.38	0.38	0.156		\$ 14.00	\$ 17.00	\$ -	\$ 31.00
140-40263	1	PT LOT 21	0.80	0.80	0.324		\$ 29.00	\$ 28.00	\$ -	\$ 57.00
140-40265	1	PT LOT 21	0.37	0.37	0.149		\$ 13.00	\$ 16.00	\$ -	\$ 29.00
140-40267	1	PT LOT 21	0.35	0.35	0.143		\$ 13.00	\$ 16.00	\$ -	\$ 29.00
140-40269	1	PT LOT 21	0.21	0.21	0.087		\$ 8.00	\$ 11.00	\$ -	\$ 19.00
140-40271	1	PT LOT 21	0.17	0.17	0.069		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40273	1	PT LOT 21	0.15	0.15	0.062		\$ 6.00	\$ 8.00	\$ -	\$ 14.00



**Chappus Drain  
Maintenance Schedule**

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
140-40275	1	PT LOT 21	0.15	0.15	0.062		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40277	1	PT LOT 21	0.15	0.15	0.062		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40279	1	PT LOT 21	0.15	0.15	0.061		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40281	1	PT LOT 21	0.15	0.15	0.062		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40283	1	PT LOT 21	0.16	0.16	0.063		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40285	1	PT LOT 21	0.16	0.16	0.063		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40287	1	PT LOT 21	0.15	0.15	0.063		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40289	1	PT LOT 21	0.15	0.15	0.063		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40291	1	PT LOT 21	0.15	0.15	0.062		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40293	1	PT LOT 21	0.15	0.15	0.062		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40295	1	PT LOT 21	0.15	0.15	0.062		\$ 6.00	\$ 8.00	\$ -	\$ 14.00
140-40297	1	PT LOT 21	0.15	0.15	0.062		\$ 6.00	\$ 8.00	\$ -	\$ 14.00
140-40299	1	PT LOT 21	0.15	0.15	0.063		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40301	1	PT LOT 21	0.15	0.15	0.059		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40303	1	PT LOT 21	0.16	0.16	0.064		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40305	1	PT LOT 21	0.16	0.16	0.064		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40307	1	PT LOT 21	0.16	0.16	0.064		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40309	1	PT LOT 21	0.16	0.16	0.063		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40311	1	PT LOT 21	0.16	0.16	0.063		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40313	1	PT LOT 21	0.16	0.16	0.063		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40315	1	PT LOT 21	0.16	0.16	0.063		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40317	1	PT LOT 21	0.16	0.16	0.063		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40319	1	PT LOT 21	0.16	0.16	0.063		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40321	1	PT LOT 21	0.15	0.15	0.063		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40323	1	PT LOT 21	0.15	0.15	0.063		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40325	1	PT LOT 21	0.14	0.14	0.058		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40327	1	PT LOT 21	0.22	0.22	0.087		\$ 8.00	\$ 11.00	\$ -	\$ 19.00
140-40329	1	PT LOT 21	0.24	0.24	0.098		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
140-40331	1	PT LOT 21	0.16	0.16	0.063		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40333	1	PT LOT 21	0.16	0.16	0.063		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40335	1	PT LOT 21	0.16	0.16	0.063		\$ 6.00	\$ 9.00	\$ -	\$ 15.00

**Chappus Drain  
Maintenance Schedule**

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
140-40337	1	PT LOT 21	0.18	0.18	0.074		\$ 7.00	\$ 9.00	\$ -	\$ 16.00
140-40339	1	PT LOT 21	0.17	0.17	0.068		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40341	1	PT LOT 21	0.14	0.14	0.059		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40343	1	PT LOT 21	0.14	0.14	0.059		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40345	1	PT LOT 21	0.14	0.14	0.059		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40347	1	PT LOT 21	0.14	0.14	0.059		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40349	1	PT LOT 21	0.14	0.14	0.059		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40351	1	PT LOT 21	0.15	0.15	0.060		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40353	1	PT LOT 21	0.16	0.16	0.066		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40355	1	PT LOT 21	0.19	0.19	0.078		\$ 7.00	\$ 10.00	\$ -	\$ 17.00
140-40357	1	PT LOT 21	0.22	0.22	0.089		\$ 8.00	\$ 11.00	\$ -	\$ 19.00
140-40359	1	PT LOT 21	0.19	0.19	0.075		\$ 7.00	\$ 9.00	\$ -	\$ 16.00
140-40361	1	PT LOT 21	0.18	0.18	0.074		\$ 7.00	\$ 9.00	\$ -	\$ 16.00
140-40363	1	PT LOT 21	0.20	0.20	0.081		\$ 7.00	\$ 10.00	\$ -	\$ 17.00
140-40365	1	PT LOT 21	0.17	0.17	0.067		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40367	1	PT LOT 21	0.15	0.15	0.061		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40369	1	PT LOT 21	0.15	0.15	0.061		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40371	1	PT LOT 21	0.15	0.15	0.061		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40373	1	PT LOT 21	0.15	0.15	0.061		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40375	1	PT LOT 21	0.16	0.16	0.063		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40377	1	PT LOT 21	0.16	0.16	0.063		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40379	1	PT LOT 21	0.16	0.16	0.063		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40381	1	PT LOT 21	0.16	0.16	0.063		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40383	1	PT LOT 21	0.16	0.16	0.063		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40385	1	PT LOT 21	0.16	0.16	0.063		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40387	1	PT LOT 21	0.16	0.16	0.063		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40389	1	PT LOT 21	0.16	0.16	0.063		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40391	1	PT LOT 21	0.18	0.18	0.072		\$ 6.00	\$ 10.00	\$ -	\$ 16.00
140-40393	1	PT LOT 21	0.18	0.18	0.072		\$ 6.00	\$ 10.00	\$ -	\$ 16.00
140-40395	1	PT LOT 21	0.16	0.16	0.063		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40397	1	PT LOT 21	0.16	0.16	0.063		\$ 6.00	\$ 9.00	\$ -	\$ 15.00

**Chappus Drain  
Maintenance Schedule**

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
140-40399	1	PT LOT 21	0.16	0.16	0.063		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40401	1	PT LOT 21	0.16	0.16	0.063		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40403	1	PT LOT 21	0.16	0.16	0.063		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40405	1	PT LOT 21	0.16	0.16	0.063		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40407	1	PT LOT 21	0.16	0.16	0.063		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40409	1	PT LOT 21	0.16	0.16	0.063		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40411	1	PT LOT 21	0.15	0.15	0.061		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40413	1	PT LOT 21	0.15	0.15	0.061		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40415	1	PT LOT 21	0.15	0.15	0.061		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40417	1	PT LOT 21	0.15	0.15	0.061		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40419	1	PT LOT 21	0.17	0.17	0.067		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40421	1	PT LOT 21	0.16	0.16	0.064		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40423	1	PT LOT 21	0.13	0.13	0.054		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40425	1	PT LOT 21	0.13	0.13	0.054		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40427	1	PT LOT 21	0.13	0.13	0.054		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40429	1	PT LOT 21	0.13	0.13	0.054		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40431	1	PT LOT 21	0.13	0.13	0.054		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40433	1	PT LOT 21	0.13	0.13	0.054		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40435	1	PT LOT 21	0.13	0.13	0.054		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40437	1	PT LOT 21	0.13	0.13	0.054		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40439	1	PT LOT 21	0.13	0.13	0.054		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40441	1	PT LOT 21	0.13	0.13	0.054		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40443	1	PT LOT 21	0.13	0.13	0.054		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40445	1	PT LOT 21	0.13	0.13	0.054		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40447	1	PT LOT 21	0.13	0.13	0.054		\$ 5.00	\$ 8.00	\$ -	\$ 13.00
140-40449	1	PT LOT 21	0.16	0.16	0.064		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
140-40451	1	PT LOT 21	0.06	0.06	0.023		\$ 2.00	\$ 4.00	\$ -	\$ 6.00
140-40453	1	PT LOT 21	19.32	19.32	7.820		\$ 697.00	\$ 218.00	\$ -	\$ 915.00
140-40800	1	PT LOT 19	0.55	0.25	0.102		\$ 9.00	\$ 10.00	\$ -	\$ 19.00
140-41200	1	PT LOTS 18 & 19	41.58	35.11	14.207		\$ 1,266.00	\$ 396.00	\$ -	\$ 1,662.00
140-41310	1	PT LOT 20	4.61	4.61	1.866		\$ 166.00	\$ 83.00	\$ -	\$ 249.00

**Chappus Drain  
Maintenance Schedule**

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
150-00100	1	PT LOTS 2 TO 4	8.82	8.82	3.569		\$ 318.00	\$ 110.00	\$ -	\$ 428.00
150-00200	1	PT LOT 2 PT LOT 3	1.75	1.75	0.710		\$ 63.00	\$ 49.00	\$ -	\$ 112.00
150-00300	1	PT LOTS 2 & 3	0.91	0.91	0.370		\$ 33.00	\$ 31.00	\$ -	\$ 64.00
150-00400	1	PT LOTS 2 & 3	0.66	0.66	0.266		\$ 24.00	\$ 25.00	\$ -	\$ 49.00
150-00500	1	PT LOT 2	0.24	0.24	0.097		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
150-00600	1	PT LOTS 2 & 3	1.32	1.32	0.534		\$ 48.00	\$ 40.00	\$ -	\$ 88.00
150-00700	1	PT LOTS 2 & 3	0.70	0.70	0.283		\$ 25.00	\$ 26.00	\$ -	\$ 51.00
150-02200	1	PT LOT 4	16.72	11.15	4.513		\$ 402.00	\$ 126.00	\$ -	\$ 528.00
150-02800	1	PT LOT 6	13.84	11.24	4.547		\$ 405.00	\$ 127.00	\$ -	\$ 532.00
150-03100	1201	LOTS 160 & 161	0.17	0.17	0.068		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
150-03600	1201	LOTS 47 & 48	0.17	0.17	0.068		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
150-04500	1	PT LOT 6 & 7	6.01	4.39	1.779		\$ 159.00	\$ 69.00	\$ -	\$ 228.00
150-04900	1	PT LOT 8	59.36	51.33	20.773		\$ 1,852.00	\$ 580.00	\$ -	\$ 2,432.00
150-05100	1	PT LOT 10	17.79	14.99	6.066		\$ 541.00	\$ 169.00	\$ -	\$ 710.00
150-05500	1	PT LOT 11	6.32	4.95	2.005		\$ 179.00	\$ 78.00	\$ -	\$ 257.00
150-05800	1	PT LOT 12	9.85	7.72	3.126		\$ 279.00	\$ 87.00	\$ -	\$ 366.00
150-06000	1	PT LOT 12	10.30	8.12	3.286		\$ 293.00	\$ 92.00	\$ -	\$ 385.00
150-06100	1	PT LOT 12	10.87	8.68	3.513		\$ 313.00	\$ 98.00	\$ -	\$ 411.00
150-06200	1	PT LOT 12	29.10	23.84	9.650		\$ 860.00	\$ 269.00	\$ -	\$ 1,129.00
150-06700	1	PT LOT 15	14.89	12.18	4.930		\$ 439.00	\$ 138.00	\$ -	\$ 577.00
150-07000	1	PT LOT 15	19.57	15.79	6.389		\$ 570.00	\$ 178.00	\$ -	\$ 748.00
150-07300	1	PT LOT 16	15.37	12.77	5.166		\$ 461.00	\$ 144.00	\$ -	\$ 605.00
150-07500	1	PT LOT 16	14.38	12.59	5.097		\$ 454.00	\$ 142.00	\$ -	\$ 596.00
150-07600	1	PT LOT 17	5.07	4.07	1.647		\$ 147.00	\$ 69.00	\$ -	\$ 216.00
150-07700	1	PT LOT 17	4.49	3.64	1.474		\$ 131.00	\$ 70.00	\$ -	\$ 201.00
150-07800	1	PT LOT 17	7.67	5.81	2.351		\$ 210.00	\$ 79.00	\$ -	\$ 289.00
150-07850	1	PT LOT 17	1.10	1.10	0.444		\$ 40.00	\$ 36.00	\$ -	\$ 76.00
150-07900	1	PT LOT 17	6.82	5.34	2.161		\$ 193.00	\$ 84.00	\$ -	\$ 277.00
150-08200	1	PT LOT 17	22.30	12.57	5.087		\$ 453.00	\$ 142.00	\$ -	\$ 595.00
150-09700	1	PT LOT 17	0.61	0.14	0.057		\$ 5.00	\$ 5.00	\$ -	\$ 10.00
150-09800	1	PT LOT 17	0.51	0.51	0.206		\$ 18.00	\$ 20.00	\$ -	\$ 38.00

**Chappus Drain  
Maintenance Schedule**

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
150-09900	1	PT LOT 17	0.80	0.80	0.322		\$ 29.00	\$ 29.00	\$ -	\$ 58.00
150-10000	1	PT LOT 17	0.70	0.70	0.283		\$ 25.00	\$ 25.00	\$ -	\$ 50.00
150-10100	1	PT LOT 17	0.46	0.46	0.188		\$ 17.00	\$ 19.00	\$ -	\$ 36.00
150-10200	1	PT LOT 17	0.62	0.62	0.251		\$ 22.00	\$ 23.00	\$ -	\$ 45.00
150-10300	1	PT LOT 17	0.50	0.50	0.201		\$ 18.00	\$ 20.00	\$ -	\$ 38.00
150-10350	1	PT LOT 17	0.50	0.50	0.201		\$ 18.00	\$ 20.00	\$ -	\$ 38.00
150-10400	1	PT LOT 17	0.86	0.86	0.346		\$ 31.00	\$ 30.00	\$ -	\$ 61.00
150-10500	1	PT LOT 17	0.53	0.53	0.213		\$ 19.00	\$ 20.00	\$ -	\$ 39.00
150-10600	1	PT LOT 17	0.34	0.34	0.136		\$ 12.00	\$ 15.00	\$ -	\$ 27.00
150-10700	1	PT LOT 17	0.33	0.33	0.132		\$ 12.00	\$ 14.00	\$ -	\$ 26.00
150-10800	1	PT LOT 17	0.33	0.33	0.132		\$ 12.00	\$ 14.00	\$ -	\$ 26.00
150-10900	1	PT LOT 17	0.35	0.35	0.143		\$ 13.00	\$ 16.00	\$ -	\$ 29.00
150-11000	1	PT LOT 17	0.35	0.35	0.143		\$ 13.00	\$ 16.00	\$ -	\$ 29.00
150-11100	1	PT LOT 17	0.35	0.35	0.143		\$ 13.00	\$ 16.00	\$ -	\$ 29.00
150-11110	1	PT LOT 17	0.30	0.30	0.120		\$ 11.00	\$ 13.00	\$ -	\$ 24.00
150-11120	1	PT LOT 17	0.30	0.30	0.120		\$ 11.00	\$ 13.00	\$ -	\$ 24.00
150-11200	1	PT LOT 17	0.30	0.30	0.120		\$ 11.00	\$ 13.00	\$ -	\$ 24.00
150-11210	1	PT LOT 17	0.29	0.29	0.118		\$ 11.00	\$ 13.00	\$ -	\$ 24.00
150-11220	1	PT LOT 17	0.49	0.49	0.200		\$ 18.00	\$ 20.00	\$ -	\$ 38.00
150-11230	1	PT LOT 17	5.67	5.67	2.295		\$ 205.00	\$ 96.00	\$ -	\$ 301.00
150-11240	1	PT LOT 17	0.40	0.40	0.160		\$ 14.00	\$ 17.00	\$ -	\$ 31.00
150-11250	1	PT LOT 17	0.50	0.50	0.200		\$ 18.00	\$ 20.00	\$ -	\$ 38.00
150-11260	1	PT LOT 17	0.40	0.40	0.160		\$ 14.00	\$ 17.00	\$ -	\$ 31.00
150-11270	1	PT LOT 17	1.50	1.50	0.607		\$ 54.00	\$ 44.00	\$ -	\$ 98.00
150-11300	1	PT LOT 17	1.50	1.50	0.607		\$ 54.00	\$ 44.00	\$ -	\$ 98.00
150-11400	1	PT LOT 17	0.78	0.78	0.314		\$ 28.00	\$ 28.00	\$ -	\$ 56.00
150-11500	1	PT LOT 17	0.78	0.78	0.314		\$ 28.00	\$ 28.00	\$ -	\$ 56.00
150-11600	1	PT LOT 17	1.57	1.57	0.634		\$ 56.00	\$ 46.00	\$ -	\$ 102.00
150-11700	1	PT LOT 17	2.15	2.15	0.869		\$ 78.00	\$ 53.00	\$ -	\$ 131.00
150-11750	1	PT LOT 17	0.95	0.95	0.383		\$ 34.00	\$ 32.00	\$ -	\$ 66.00
150-11800	1	PT LOT 17	1.74	1.74	0.702		\$ 63.00	\$ 49.00	\$ -	\$ 112.00

**Chappus Drain  
Maintenance Schedule**

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
160-02200	1	PT LOT 3	5.00	5.00	2.023		\$ 180.00	\$ 90.00	\$ -	\$ 270.00
160-02300	1	PT LOT 3 PT LOT 4	5.02	5.02	2.031		\$ 181.00	\$ 85.00	\$ -	\$ 266.00
160-02400	1	PT LOT 3 PT LOT 4	1.15	1.15	0.465		\$ 41.00	\$ 38.00	\$ -	\$ 79.00
160-02500	1	PT LOT 3 PT LOT 4	1.08	1.08	0.438		\$ 39.00	\$ 35.00	\$ -	\$ 74.00
160-02600	1	PT LOT 3 PT LOT 4	0.77	0.77	0.311		\$ 28.00	\$ 28.00	\$ -	\$ 56.00
160-02700	1	PT LOT 3	0.47	0.47	0.189		\$ 17.00	\$ 19.00	\$ -	\$ 36.00
160-02800	1	PT LOT 3	0.43	0.43	0.176		\$ 16.00	\$ 18.00	\$ -	\$ 34.00
160-02900	1	PT LOT 3	0.53	0.53	0.216		\$ 19.00	\$ 21.00	\$ -	\$ 40.00
160-03000	1	PT LOT 3 PT LOT 4	3.17	3.17	1.282		\$ 114.00	\$ 68.00	\$ -	\$ 182.00
160-03100	1	PT LOT 3	0.25	0.25	0.101		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
160-03200	1	PT LOT 3	0.22	0.22	0.091		\$ 8.00	\$ 11.00	\$ -	\$ 19.00
160-03300	1	PT LOT 3 PT LOT 4	2.30	2.30	0.930		\$ 83.00	\$ 57.00	\$ -	\$ 140.00
160-03400	1	PT LOT 3 PT LOT 4	1.55	1.55	0.627		\$ 56.00	\$ 45.00	\$ -	\$ 101.00
160-03500	1	PT LOT 3 PT LOT 4	0.25	0.25	0.102		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
160-03600	1	PT LOT 3 PT LOT 4	0.80	0.80	0.326		\$ 29.00	\$ 28.00	\$ -	\$ 57.00
160-03700	1	PT LOT 3 PT LOT 4	0.79	0.79	0.321		\$ 29.00	\$ 29.00	\$ -	\$ 58.00
160-03800	1	PT LOT 4	0.94	0.94	0.380		\$ 34.00	\$ 32.00	\$ -	\$ 66.00
160-03900	1	PT LOT 4	0.44	0.44	0.176		\$ 16.00	\$ 18.00	\$ -	\$ 34.00
160-04000	1	PT LOT 4	0.56	0.56	0.226		\$ 20.00	\$ 21.00	\$ -	\$ 41.00
160-04100	1	PT LOT 4	0.42	0.42	0.171		\$ 15.00	\$ 18.00	\$ -	\$ 33.00
160-04200	1	PT LOT 4	0.29	0.29	0.119		\$ 11.00	\$ 13.00	\$ -	\$ 24.00
160-04400	1	PT LOT 4	2.96	2.80	1.132		\$ 101.00	\$ 66.00	\$ -	\$ 167.00
160-05400	1	PT LOT 5	11.95	8.96	3.624		\$ 323.00	\$ 101.00	\$ -	\$ 424.00
160-06400	1	PT LOT 6	9.51	4.50	1.820		\$ 162.00	\$ 51.00	\$ -	\$ 213.00
160-07000	1	PT LOT 6 & 7	135.69	67.25	27.216		\$ 2,426.00	\$ 759.00	\$ -	\$ 3,185.00
160-07200	1	PT LOT 10	63.99	43.89	17.762		\$ 1,583.00	\$ 496.00	\$ -	\$ 2,079.00
160-07500	1	PT LOT 11 & 12	62.18	30.59	12.378		\$ 1,103.00	\$ 345.00	\$ -	\$ 1,448.00
160-08000	1	PT LOT 14 & 15	64.07	38.61	15.625		\$ 1,393.00	\$ 436.00	\$ -	\$ 1,829.00
160-08900	1	PT LOT 16 & 17	76.67	60.43	24.456		\$ 2,180.00	\$ 682.00	\$ -	\$ 2,862.00
160-09800	1	PT LOT 17	0.41	0.41	0.165		\$ 15.00	\$ 17.00	\$ -	\$ 32.00
160-09900	1	PT LOT 17	0.26	0.26	0.106		\$ 9.00	\$ 12.00	\$ -	\$ 21.00

**Chappus Drain  
Maintenance Schedule**

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
160-10000	1	PT LOT 17	0.57	0.57	0.230		\$ 21.00	\$ 22.00	\$ -	\$ 43.00
160-10100	1	PT LOT 17	0.50	0.50	0.203		\$ 18.00	\$ 19.00	\$ -	\$ 37.00
160-10200	1	PT LOT 17	1.26	1.26	0.512		\$ 46.00	\$ 39.00	\$ -	\$ 85.00
160-10300	1	PT LOT 17	0.90	1.26	0.508		\$ 45.00	\$ 44.00	\$ -	\$ 89.00
160-10400	1	PT LOT 17	0.77	0.43	0.174		\$ 16.00	\$ 16.00	\$ -	\$ 32.00
160-10500	1	PT LOT 17	0.43	0.43	0.172		\$ 15.00	\$ 18.00	\$ -	\$ 33.00
160-10600	1	PT LOT 17	2.20	2.20	0.891		\$ 79.00	\$ 55.00	\$ -	\$ 134.00
160-10700	1	PT LOT 17	0.72	0.72	0.291		\$ 26.00	\$ 26.00	\$ -	\$ 52.00
160-10900	1	PT LOT 17	0.23	0.23	0.095		\$ 8.00	\$ 11.00	\$ -	\$ 19.00
160-11000	1	PT LOT 17	0.27	0.27	0.110		\$ 10.00	\$ 13.00	\$ -	\$ 23.00
160-12300	1	PT LOT 16 PT LOT 17	2.03	2.03	0.823		\$ 73.00	\$ 50.00	\$ -	\$ 123.00
160-12500	1	PT LOT 17	0.46	0.46	0.186		\$ 17.00	\$ 19.00	\$ -	\$ 36.00
160-12550	1	PT LOT 17	0.72	0.72	0.292		\$ 26.00	\$ 26.00	\$ -	\$ 52.00
160-12700	1	PT LOT 17	0.73	0.73	0.297		\$ 27.00	\$ 27.00	\$ -	\$ 54.00
160-12900	1	PT LOT 17	0.52	0.52	0.209		\$ 19.00	\$ 20.00	\$ -	\$ 39.00
160-13000	1	PT LOT 17	0.52	0.52	0.209		\$ 19.00	\$ 20.00	\$ -	\$ 39.00
160-13100	1	PT LOT 17	0.52	0.52	0.209		\$ 19.00	\$ 20.00	\$ -	\$ 39.00
160-13200	1	PT LOT 17	1.03	1.03	0.419		\$ 37.00	\$ 34.00	\$ -	\$ 71.00
160-13500	1	PT LOT 17	0.52	0.52	0.210		\$ 19.00	\$ 20.00	\$ -	\$ 39.00
160-13600	1	PT LOT 17	3.68	3.68	1.489		\$ 133.00	\$ 75.00	\$ -	\$ 208.00
160-13700	1	PT LOT 17	1.76	1.76	0.713		\$ 64.00	\$ 50.00	\$ -	\$ 114.00
160-13800	1	PT LOT 17	1.68	1.68	0.680		\$ 61.00	\$ 47.00	\$ -	\$ 108.00
160-13900	1	PT LOT 17	1.26	1.26	0.509		\$ 45.00	\$ 38.00	\$ -	\$ 83.00
160-14000	1	PT LOT 17	0.31	0.31	0.126		\$ 11.00	\$ 14.00	\$ -	\$ 25.00
160-14100	1	PT LOT 17	0.44	0.44	0.178		\$ 16.00	\$ 18.00	\$ -	\$ 34.00
160-14200	1	PT LOT 17	0.42	0.42	0.170		\$ 15.00	\$ 18.00	\$ -	\$ 33.00
160-15600	1	PT LOT 12	7.88	7.88	3.189		\$ 284.00	\$ 107.00	\$ -	\$ 391.00
160-16700	1201	LOTS 64 & 65	0.17	0.17	0.068		\$ 6.00	\$ 9.00	\$ -	\$ 15.00
160-17200	1201	LOTS 100 TO 102	0.25	0.25	0.101		\$ 9.00	\$ 12.00	\$ -	\$ 21.00
340-16500	1	PT LOT 3 TO 39	23.75	6.06	2.452		\$ 219.00	\$ 68.00	\$ -	\$ 287.00
<b>Total on Privately Owned - Non-Agricultural Lands.....</b>							<b>\$ 40,823.00</b>	<b>\$ 21,964.00</b>	<b>\$ -</b>	<b>\$ 62,787.00</b>

**Chappus Drain  
Maintenance Schedule**

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
<b>5. PRIVATELY OWNED - AGRICULTURAL LANDS (grantable):</b>										
130-20100	1	28	9.03	8.66	3.504		\$ 62.00	\$ 98.00	\$ -	\$ 160.00
130-20400	839	LOTS 829 TO 832	62.37	55.66	22.526		\$ 402.00	\$ 628.00	\$ -	\$ 1,030.00
130-20900	780	LOTS 114 TO 116	0.21	0.21	0.085		\$ 2.00	\$ 11.00	\$ -	\$ 13.00
130-21100	780	LOTS 95 TO 113	1.28	1.28	0.518		\$ 9.00	\$ 39.00	\$ -	\$ 48.00
130-21300	780	LOTS 76 TO 94	1.31	1.31	0.530		\$ 9.00	\$ 40.00	\$ -	\$ 49.00
130-21500	780	LOTS 187 TO 203	1.17	1.17	0.474		\$ 8.00	\$ 38.00	\$ -	\$ 46.00
130-21800	780	LOTS 183 & 184	0.14	0.14	0.056		\$ 1.00	\$ 8.00	\$ -	\$ 9.00
130-22000	780	LOTS 166 TO 172	0.48	0.48	0.195		\$ 3.00	\$ 19.00	\$ -	\$ 22.00
130-22200	780	LOTS 164 & 165	0.14	0.14	0.056		\$ 1.00	\$ 8.00	\$ -	\$ 9.00
130-22900	863	LOTS 108 TO 128	1.51	1.51	0.609		\$ 11.00	\$ 44.00	\$ -	\$ 55.00
130-23200	863	LOTS 90 TO 107	1.33	1.33	0.540		\$ 10.00	\$ 41.00	\$ -	\$ 51.00
130-23300	863	LOTS 71 TO 89	1.36	1.36	0.551		\$ 10.00	\$ 42.00	\$ -	\$ 52.00
130-23400	863	LOTS 184 TO 202	1.36	1.36	0.551		\$ 10.00	\$ 41.00	\$ -	\$ 51.00
130-23500	863	LOTS 166 TO 183	1.33	1.33	0.539		\$ 10.00	\$ 41.00	\$ -	\$ 51.00
130-23600	863	LOTS 143 TO 165	1.65	1.65	0.667		\$ 12.00	\$ 47.00	\$ -	\$ 59.00
130-23900	1	PT LOTS 24 & 25	47.65	41.22	16.681		\$ 297.00	\$ 465.00	\$ -	\$ 762.00
130-34300	1	PT LOT 23	8.16	6.78	2.743		\$ 49.00	\$ 84.00	\$ -	\$ 133.00
130-34400	1	PT LOT 24	9.52	7.93	3.209		\$ 57.00	\$ 90.00	\$ -	\$ 147.00
130-42200	1	PT LOT 20	9.73	8.01	3.243		\$ 58.00	\$ 90.00	\$ -	\$ 148.00
130-44400	1	PT LOT 18	4.08	4.08	1.650		\$ 29.00	\$ 78.00	\$ -	\$ 107.00
130-44800	1	PT LOT 19	37.77	37.77	15.285		\$ 272.00	\$ 426.00	\$ -	\$ 698.00
130-45000	1	PT LOT 19	4.01	4.01	1.623		\$ 29.00	\$ 77.00	\$ -	\$ 106.00
130-45100	1	PT LOT 19	29.39	29.39	11.894		\$ 212.00	\$ 332.00	\$ -	\$ 544.00
130-45200	1064	LOTS 731 TO 733	0.31	0.31	0.126		\$ 2.00	\$ 14.00	\$ -	\$ 16.00
130-45300	1064	LOTS 726 TO 730	0.36	0.36	0.145		\$ 3.00	\$ 16.00	\$ -	\$ 19.00
130-45340	1064	LOTS 721 TO 725	0.36	0.36	0.145		\$ 3.00	\$ 16.00	\$ -	\$ 19.00
130-45380	1064	LOTS 715 TO 720	0.49	0.49	0.200		\$ 4.00	\$ 20.00	\$ -	\$ 24.00
130-45400	1064	LOTS 708 TO 714	0.50	0.50	0.203		\$ 4.00	\$ 19.00	\$ -	\$ 23.00
130-45440	1064	LOTS 704 TO 707	0.35	0.35	0.142		\$ 3.00	\$ 15.00	\$ -	\$ 18.00
130-45480	1064	LOTS 702 & 703	0.21	0.21	0.084		\$ 1.00	\$ 11.00	\$ -	\$ 12.00



**Chappus Drain  
Maintenance Schedule**

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
130-45500	1064	LOTS 696 TO 701	0.43	0.43	0.174		\$ 3.00	\$ 18.00	\$ -	\$ 21.00
130-45550	1064	LOTS 689 TO 695	0.52	0.52	0.209		\$ 4.00	\$ 20.00	\$ -	\$ 24.00
130-45950	1064	LOTS 535 TO 539	0.39	0.39	0.157		\$ 3.00	\$ 17.00	\$ -	\$ 20.00
130-46000	1064	LOTS 527 TO 534	0.57	0.57	0.232		\$ 4.00	\$ 22.00	\$ -	\$ 26.00
130-46040	1064	LOTS 525 & 526	0.21	0.21	0.084		\$ 1.00	\$ 11.00	\$ -	\$ 12.00
130-46080	1064	LOTS 519 TO 524	0.49	0.49	0.200		\$ 4.00	\$ 20.00	\$ -	\$ 24.00
130-46100	1064	LOTS 510 TO 518	0.64	0.64	0.261		\$ 5.00	\$ 24.00	\$ -	\$ 29.00
130-46150	1064	LOTS 508 & 509	0.21	0.21	0.084		\$ 1.00	\$ 11.00	\$ -	\$ 12.00
130-46200	1064	LOTS 496 TO 507	0.86	0.86	0.348		\$ 6.00	\$ 30.00	\$ -	\$ 36.00
130-46300	1064	LOT 493	0.29	0.29	0.118		\$ 2.00	\$ 13.00	\$ -	\$ 15.00
130-46400	1064	LOTS 489 TO 492	0.36	0.36	0.146		\$ 3.00	\$ 15.00	\$ -	\$ 18.00
130-47200	1064	LOTS 285 TO 299	1.18	1.18	0.478		\$ 9.00	\$ 39.00	\$ -	\$ 48.00
130-47300	1064	LOTS 268 TO 284	1.35	1.35	0.545		\$ 10.00	\$ 41.00	\$ -	\$ 51.00
130-47400	1064	LOTS 252 TO 267	1.15	1.15	0.464		\$ 8.00	\$ 38.00	\$ -	\$ 46.00
130-47500	1064	LOTS 249 TO 251	0.29	0.29	0.119		\$ 2.00	\$ 13.00	\$ -	\$ 15.00
130-47600	1064	LOT 248	0.09	0.09	0.035		\$ 1.00	\$ 5.00	\$ -	\$ 6.00
130-47800	1064	LOTS 227 TO 244	1.29	1.29	0.522		\$ 9.00	\$ 39.00	\$ -	\$ 48.00
130-47900	1064	LOTS 210 TO 226	1.35	1.35	0.545		\$ 10.00	\$ 41.00	\$ -	\$ 51.00
130-48000	1064	LOTS 196 TO 209	1.07	1.07	0.432		\$ 8.00	\$ 35.00	\$ -	\$ 43.00
130-50200	863	LOTS 259 TO 264	0.43	0.43	0.174		\$ 3.00	\$ 18.00	\$ -	\$ 21.00
130-50300	863	LOTS 257 & 258	0.14	0.14	0.058		\$ 1.00	\$ 8.00	\$ -	\$ 9.00
130-50500	863	LOTS 240 TO 255	1.15	1.15	0.464		\$ 8.00	\$ 38.00	\$ -	\$ 46.00
130-50600	863	LOTS 221 TO 239	1.36	1.36	0.551		\$ 10.00	\$ 41.00	\$ -	\$ 51.00
130-50700	863	LOTS 203 TO 220	1.33	1.33	0.539		\$ 10.00	\$ 41.00	\$ -	\$ 51.00
130-50900	863	LOTS 53 TO 68	1.19	1.19	0.482		\$ 9.00	\$ 39.00	\$ -	\$ 48.00
130-51000	863	LOTS 34 TO 52	1.36	1.36	0.551		\$ 10.00	\$ 42.00	\$ -	\$ 52.00
130-51100	863	LOT 15 TO LOT 33	1.36	1.36	0.551		\$ 10.00	\$ 42.00	\$ -	\$ 52.00
130-51300	863	LOTS 9 TO 13	0.36	0.36	0.145		\$ 3.00	\$ 16.00	\$ -	\$ 19.00
130-51700	780	LOTS 261 TO 269	0.62	0.62	0.251		\$ 4.00	\$ 23.00	\$ -	\$ 27.00
130-51900	780	LOTS 242 TO 260	1.31	1.31	0.530		\$ 9.00	\$ 40.00	\$ -	\$ 49.00
130-52100	780	LOTS 223 TO 241	1.31	1.31	0.530		\$ 9.00	\$ 40.00	\$ -	\$ 49.00
130-52300	780	LOTS 204 TO 222	1.28	1.28	0.518		\$ 9.00	\$ 39.00	\$ -	\$ 48.00

**Chappus Drain  
Maintenance Schedule**

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
130-52600	780	LOTS 57 TO 73	1.14	1.14	0.463		\$ 8.00	\$ 37.00	\$ -	\$ 45.00
130-52800	780	LOTS 38 TO 56	1.31	1.31	0.530		\$ 9.00	\$ 40.00	\$ -	\$ 49.00
130-53000	780	LOTS 19 TO 37	1.31	1.31	0.530		\$ 9.00	\$ 40.00	\$ -	\$ 49.00
130-53200	780	LOTS 6 TO 18	0.90	0.90	0.362		\$ 6.00	\$ 31.00	\$ -	\$ 37.00
140-36100	1	PT LOT 18	19.70	21.04	8.515		\$ 152.00	\$ 238.00	\$ -	\$ 390.00
140-36400	1	PT LOT 18	0.41	0.41	0.165		\$ 3.00	\$ 17.00	\$ -	\$ 20.00
140-36500	1	PT LOT 18	3.72	3.04	1.229		\$ 22.00	\$ 62.00	\$ -	\$ 84.00
140-38200	350	LOT 6	6.19	6.19	2.505		\$ 45.00	\$ 98.00	\$ -	\$ 143.00
150-01500	1	PT LOT 3	10.03	6.20	2.511		\$ 45.00	\$ 70.00	\$ -	\$ 115.00
150-02000	1	PT LOT 4	5.38	3.20	1.295		\$ 23.00	\$ 54.00	\$ -	\$ 77.00
150-02400	1	S PT LOT 5	17.65	13.26	5.366		\$ 96.00	\$ 150.00	\$ -	\$ 246.00
150-02600	1	PT LOT 5	5.02	3.55	1.435		\$ 26.00	\$ 60.00	\$ -	\$ 86.00
150-03000	1201	LOTS 162 TO 179	1.56	0.18	0.074		\$ 1.00	\$ 5.00	\$ -	\$ 6.00
150-03300	1201	LOTS 133 TO 143	0.92	0.92	0.373		\$ 7.00	\$ 31.00	\$ -	\$ 38.00
150-03400	1201	LOTS 125 TO 132	0.69	0.69	0.280		\$ 5.00	\$ 26.00	\$ -	\$ 31.00
150-03500	1201	LOTS 49 TO 56	0.69	0.69	0.279		\$ 5.00	\$ 26.00	\$ -	\$ 31.00
150-03700	1201	LOTS 39 TO 46	0.68	0.68	0.274		\$ 5.00	\$ 25.00	\$ -	\$ 30.00
150-03800	1201	LOTS 21 TO 38	1.52	1.52	0.615		\$ 11.00	\$ 45.00	\$ -	\$ 56.00
150-03900	1201	LOTS 16 TO 20	0.42	0.42	0.171		\$ 3.00	\$ 18.00	\$ -	\$ 21.00
150-04200	1	PT LOT 6	4.41	3.23	1.308		\$ 23.00	\$ 62.00	\$ -	\$ 85.00
150-04300	1	PT LOT 6	0.71	0.71	0.286		\$ 5.00	\$ 26.00	\$ -	\$ 31.00
150-04400	1	PT LOT 6	6.28	4.47	1.811		\$ 32.00	\$ 71.00	\$ -	\$ 103.00
150-04600	1	PT LOT 7	1.92	1.92	0.777		\$ 14.00	\$ 50.00	\$ -	\$ 64.00
150-04700	1	PT LOT 7	16.15	11.45	4.633		\$ 83.00	\$ 129.00	\$ -	\$ 212.00
150-04800	1	PT LOT 8	17.83	13.37	5.413		\$ 96.00	\$ 151.00	\$ -	\$ 247.00
150-05600	1	PT LOT 11	10.22	7.96	3.220		\$ 57.00	\$ 90.00	\$ -	\$ 147.00
150-05700	1	PT LOT 11	10.37	8.10	3.280		\$ 58.00	\$ 91.00	\$ -	\$ 149.00
150-05900	1	PT LOT 12	10.20	8.03	3.250		\$ 58.00	\$ 91.00	\$ -	\$ 149.00
150-06400	1	PT LOT 14	8.65	6.97	2.821		\$ 50.00	\$ 87.00	\$ -	\$ 137.00
150-06500	1	PT LOT 14	8.37	6.79	2.747		\$ 49.00	\$ 84.00	\$ -	\$ 133.00
150-06600	1	PT LOT 15	6.25	4.96	2.006		\$ 36.00	\$ 78.00	\$ -	\$ 114.00

**Chappus Drain  
Maintenance Schedule**

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
150-07150	1	PT LOT 15	20.52	17.68	7.155		\$ 128.00	\$ 200.00	\$ -	\$ 328.00
160-04300	1	PT LOT 3	14.07	14.07	5.694		\$ 102.00	\$ 159.00	\$ -	\$ 261.00
160-06500	1	PT LOT 6	12.61	6.46	2.614		\$ 47.00	\$ 73.00	\$ -	\$ 120.00
160-07800	1	PT LOT 12 & 13	47.31	24.61	9.961		\$ 178.00	\$ 278.00	\$ -	\$ 456.00
160-07900	1	PT LOT 14	20.72	11.85	4.796		\$ 85.00	\$ 134.00	\$ -	\$ 219.00
160-08950	1	PT LOT 15 & 16	47.49	31.96	12.935		\$ 231.00	\$ 361.00	\$ -	\$ 592.00
160-11100	1	PT LOT 17	3.08	3.08	1.247		\$ 22.00	\$ 66.00	\$ -	\$ 88.00
160-12200	1	PT LOT 17	3.60	3.60	1.459		\$ 26.00	\$ 73.00	\$ -	\$ 99.00
160-12400	1	PT LOT 16 PT LOT 17	49.83	49.84	20.170		\$ 360.00	\$ 563.00	\$ -	\$ 923.00
160-12600	1	PT LOT 16 & 17	8.34	8.34	3.375		\$ 60.00	\$ 104.00	\$ -	\$ 164.00
160-13400	1	PT LOT 16 & 17	13.78	13.78	5.577		\$ 99.00	\$ 156.00	\$ -	\$ 255.00
160-14300	1	PT LOT 16	1.46	1.46	0.590		\$ 11.00	\$ 43.00	\$ -	\$ 54.00
160-14400	1	PT LOT 16	2.66	2.66	1.076		\$ 19.00	\$ 63.00	\$ -	\$ 82.00
160-14500	1	PT LOT 16	1.56	1.56	0.630		\$ 11.00	\$ 46.00	\$ -	\$ 57.00
160-14600	1	PT LOT 16	2.71	2.71	1.097		\$ 20.00	\$ 64.00	\$ -	\$ 84.00
160-14800	1	PT LOT 15	9.43	9.43	3.816		\$ 68.00	\$ 106.00	\$ -	\$ 174.00
160-14900	1	PT LOT 15	3.55	3.55	1.437		\$ 26.00	\$ 72.00	\$ -	\$ 98.00
160-15000	1	PT LOT 14	5.85	5.85	2.367		\$ 42.00	\$ 99.00	\$ -	\$ 141.00
160-15100	1	PT LOT 14	5.89	5.89	2.384		\$ 42.00	\$ 100.00	\$ -	\$ 142.00
160-15200	1	PT LOT 13 & 14	19.10	19.10	7.730		\$ 138.00	\$ 216.00	\$ -	\$ 354.00
160-15300	1	PT LOT 12	8.89	8.89	3.598		\$ 64.00	\$ 110.00	\$ -	\$ 174.00
160-15400	1	PT LOT 12	8.26	8.26	3.343		\$ 60.00	\$ 103.00	\$ -	\$ 163.00
160-15500	1	PT LOT 12	8.29	8.29	3.355		\$ 60.00	\$ 103.00	\$ -	\$ 163.00
160-15700	1	PT LOT 11	10.26	10.26	4.152		\$ 74.00	\$ 116.00	\$ -	\$ 190.00
160-15800	1	PT LOT 11	11.05	11.05	4.472		\$ 80.00	\$ 125.00	\$ -	\$ 205.00
160-16200	1	PT LOT 8	17.33	17.33	7.013		\$ 125.00	\$ 196.00	\$ -	\$ 321.00
160-16300	1	PT LOT 7	1.41	1.41	0.571		\$ 10.00	\$ 41.00	\$ -	\$ 51.00
160-16400	1	PT LOT 6	3.82	3.82	1.546		\$ 28.00	\$ 78.00	\$ -	\$ 106.00
160-16600	1201	LOTS 57 TO 63	0.66	0.66	0.268		\$ 5.00	\$ 25.00	\$ -	\$ 30.00
160-16800	1201	LOTS 66 TO 73	0.68	0.68	0.274		\$ 5.00	\$ 25.00	\$ -	\$ 30.00
160-17000	1201	LOTS 108 TO 124	1.40	1.40	0.565		\$ 10.00	\$ 43.00	\$ -	\$ 53.00

**Chappus Drain  
Maintenance Schedule**

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
160-17100	1201	LOTS 103 TO 107	0.42	0.42	0.169		\$ 3.00	\$ 18.00	\$ -	\$ 21.00
160-17300	1201	LOTS 91 TO 99	0.74	0.74	0.299		\$ 5.00	\$ 27.00	\$ -	\$ 32.00
160-17400	1	PT LOT 6	9.19	9.19	3.719		\$ 66.00	\$ 104.00	\$ -	\$ 170.00
160-17500	1	PT LOT 5	4.20	4.20	1.700		\$ 30.00	\$ 81.00	\$ -	\$ 111.00
160-17600	1	PT LOT 5	4.21	4.21	1.704		\$ 30.00	\$ 81.00	\$ -	\$ 111.00
160-17700	1	PT LOT 5	17.18	17.18	6.953		\$ 124.00	\$ 194.00	\$ -	\$ 318.00
<b>Total on Privately Owned - Agricultural Lands (grantable).....</b>							<b>\$ 5,307.00</b>	<b>\$ 10,306.00</b>	<b>\$ -</b>	<b>\$ 15,613.00</b>
<b>TOTAL ASSESSMENT LASALLE</b>			1990.86	805.69			<b>\$ 55,109.00</b>	<b>\$ 40,012.00</b>	<b>\$ -</b>	<b>\$ 95,121.00</b>

**SCHEDULE OF ASSESSMENT**  
**CHAPPUS DRAIN**  
**Town of Amherstburg**

**4. PRIVATELY OWNED - NON-AGRICULTURAL LANDS:**

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
500-32300	1	PT LOT 42	0.34	0.27	0.110		\$ 10.00	\$ 12.00	\$ -	\$ 22.00
500-32400	1	PT LOT 42	0.96	0.96	0.388		\$ 35.00	\$ 65.00	\$ -	\$ 100.00
500-32500	1	PT LOT 42	0.52	0.47	0.190		\$ 17.00	\$ 54.00	\$ -	\$ 71.00
500-32600	1	PT LOT 42	1.03	1.03	0.418		\$ 37.00	\$ 135.00	\$ -	\$ 172.00
500-32700	1	PT LOT 42	8.93	6.47	2.620		\$ 234.00	\$ 402.00	\$ -	\$ 636.00
500-33100	1	PT LOT 41	13.70	7.78	3.150		\$ 281.00	\$ 527.00	\$ -	\$ 808.00
500-33200	1	PT LOT 41	9.26	4.15	1.680		\$ 150.00	\$ 328.00	\$ -	\$ 478.00
500-33300	1	PT LOTS 39 & 40	41.61	14.70	5.950		\$ 530.00	\$ 1,328.00	\$ -	\$ 1,858.00
500-33500	1	PT LOT 39	13.05	2.74	1.110		\$ 99.00	\$ 279.00	\$ -	\$ 378.00
500-33600	1	PT LOTS 38 & 39	9.96	0.99	0.400		\$ 36.00	\$ 112.00	\$ -	\$ 148.00
500-33700	1	PT LOT 38	7.07	0.79	0.320		\$ 29.00	\$ 118.00	\$ -	\$ 147.00
500-33801	1	PT LOTS 37 & 38	25.71	0.35	0.144		\$ 13.00	\$ 48.00	\$ -	\$ 61.00

**Chappus Drain  
Maintenance Schedule**

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Owned	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
<b>Total on Privately Owned - Non-Agricultural Lands.....</b>							<b>\$ 1,471.00</b>	<b>\$ 3,408.00</b>	<b>\$ -</b>	<b>\$ 4,879.00</b>
<b>TOTAL ASSESSMENT AMHERSTBURG</b>				40.72	16.48		<b>\$ 1,471.00</b>	<b>\$ 3,408.00</b>	<b>\$ -</b>	<b>\$ 4,879.00</b>
<b>TOTAL ASSESSMENT LASALLE (brought forward)</b>							<b>\$ 55,109.00</b>	<b>\$ 40,012.00</b>	<b>\$ -</b>	<b>\$ 95,121.00</b>
<b>TOTAL ASSESSMENT</b>				2031.59	822.17		<b>\$ 56,580.00</b>	<b>\$ 43,420.00</b>	<b>\$ -</b>	<b>\$ 100,000.00</b>

1 Hectare = 2.471 Acres  
Project No. REI2016D045  
April 18th, 2023



**SPECIFICATIONS****CHAPPUS DRAIN****(Geographic Township of Sandwich West)****TOWN OF LASALLE****I. GENERAL SCOPE OF WORK**

The Chappus Drain comprises of an open drain generally located to the west of Malden Road extending from an outlet in the Rigolet Creek tributary of the Canard River in the geographic township of Anderdon in Amherstburg, running northerly and easterly to a point near the centre of Lot 29 in Concession 1, in the geographic township of Sandwich West, Town of LaSalle. The current work on the drain will extend from the north side of Golfview Drive as noted on the plans and proceeds northerly and easterly to the upstream end of the open drain. The work under this project generally comprises of improvements to the open drain to provide a suitable cross section for conveyance of flows, along with diversion of the open drain and removal and disposal of the existing bridge at the Essex Golf & Country Club parcel, adjusting grade for the enclosure north of Golfview Drive, and cleaning of the other bridges along the course of the drain. Other work on the drain includes excavation, levelling, loading, hauling, disposal, supply and installation of quarried limestone on filter cloth general erosion protection and rock chute inlets, and enclosure grade correction. The proposed work is intended to address the repair and improvement of the open drain and enclosure, any tile end improvements, and erosion protection in accordance with current standards.

All work shall be carried out in accordance with these specifications, the plans forming part of this drainage project, as well as the Standard Details included in **Appendix "REI-C"**. All work carried out under this project shall be completed to the full satisfaction of the Manager of Engineering and the Engineer.

**II. E.R.C.A. AND D.F.O. CONSIDERATIONS**

The Contractor will be required to implement stringent erosion and sedimentation controls during the course of the work to help minimize the amount of silt and sediment being carried downstream into the Rigolet Creek and Canard River. It is intended that work on this project be carried out during relatively dry weather to ensure proper site and drain conditions and to avoid conflicts with sediment being deposited into the outlet drainage systems. All disturbed areas on the open drain shall be restored as quickly as possible with grass seeding and mulching installed to ensure a protective cover and to minimize any erosion from the work site subsequent to construction. The Contractor may be required to provide temporary silt fencing and straw bales as outlined further in these specifications.

All of the work shall be carried out in accordance with any permits or authorizations issued by the Essex Region Conservation Authority (E.R.C.A.) or the Department of Fisheries and Oceans (D.F.O.), copies of which will be provided, if available, and the notes in **Appendix "REI-A"**. The Contractor is advised that no work may be carried out in the existing drain from March 15th to June 30th of any given year because the drain is directly connected to a downstream drain that is classified as sensitive to impacts on aquatic life and habitat by E.R.C.A. and D.F.O.

As part of its work, the Contractor will implement the following measures that will ensure that any potential adverse effects on fish and fish habitat will be mitigated:

- a) As per standard requirements, work will not be conducted at times when flows in the drain are elevated due to local rain events, storms, or seasonal floods. Work will be done in the dry.

- b) All disturbed soils on the drain banks and within the channel, including spoil, must be stabilized immediately upon completion of work. The restoration of the site must be completed to a like or better condition to what existed prior to the works. The spoil material must be hauled away and disposed of at a suitable site or spread an appropriate distance from the top of the drain bank to ensure that it is not washed back into the drain.
- c) To prevent sediment entry into the Drain, in the event of an unexpected rainfall, silt barriers and/or traps must be placed in the channel during the works and until the site has been stabilized. All sediment and erosion control measures are to be in accordance with related Ontario Provincial Standards. It is incumbent on the proponent and their Contractors to ensure that sediment and erosion control measures are functioning properly and are maintained and upgraded as required.
- d) Silt or sand accumulated in the barrier traps must be removed and stabilized on land once the site is stabilized.
- e) All activities including maintenance procedures should be controlled to prevent the entry of petroleum products, debris, rubble, concrete, or other deleterious substances into the water. Vehicular refuelling and maintenance should be conducted away from the water.

### **III. M.N.R.F. & M.E.C.P. ENDANGERED SPECIES ACT CONSIDERATIONS**

The Contractor is to note that the Ministry of Environment, Conservation and Parks (M.E.C.P.) screening process by way of a Species at Risk (S.A.R.) review of the M.E.C.P. “Endangered Species Act, 2007” (E.S.A.) will be completed as a self-assessment by the Town pursuant to Section 23.9 of the E.S.A. prior to construction. This Section allows the Town to conduct eligible works of repair, maintenance and improvement to existing municipal drains under the Drainage Act, and exemptions from Sections 9 and 10 of the E.S.A., provided that the requirements are followed in accordance with Ontario Regulation 242/08. The results of the review will be provided to the Contractor and copies of the mitigation measures, habitat protection and identification sheets will be included within **Appendix “REI-B”**.

The Ministry of Natural Resources and Forestry (M.N.R.F.) - M.E.C.P. mapping has basically confirmed that snake species including Butler’s Garter Snake and Eastern Fox Snake are threatened and endangered, respectively, on this project. Because snakes are mobile and indicated as sensitive and endangered in the area, we have included herein a copy of the M.N.R.F. - M.E.C.P. mitigation requirements for them in **Appendix “REI-B”**. Providing mitigation requirements are implemented, it was concluded that present wildlife Species at Risk will be protected from negative impacts and the works will not contravene Section 9 (species protection) or Section 10 (habitat protection) of the Endangered Species Act, 2007.

The Species at Risk screening maps show there are Species at Risk Fish or Mussels identified in the outlet area at the Canard River. The maps indicate that there may be Pugnose Minnow present which are classified as threatened in Ontario. In addition, there may be Spotted Sucker present which are classified as species of special concern in Ontario. The maps show that there is no presence of any mussel species at risk. The drain is located within the Regulated Area and is under the jurisdiction of the E.R.C.A., and therefore all work has to comply with the current mitigation provisions of the E.R.C.A. and D.F.O. Details of these mitigation measures are included in the Specifications and **Appendix “REI-A”** forming part of this report.

The Ministry of Natural Resources & Forestry (M.N.R.F.) Species at Risk former Town agreement with M.N.R.F. pursuant to Section 23 of the “Endangered Species Act, 2007” expired as of June 30th, 2015. The former agreements are replaced with new regulation provisions under Ontario Regulation 242/08 administered by the Ministry of Environment, Conservation and Parks (M.E.C.P.). Section 23.9 allows repairs, maintenance and improvements to be conducted by the



Town within existing municipal drains. These works are exempt from Sections 9 and 10 of the Endangered Species Act provided that the rules in the regulations are followed. When eligible, the new regulations allow Municipalities to give notice to M.N.R.F. by registering their drainage activities through an online registry system.

The Town of LaSalle retained Dillon Consulting to conduct a study and analysis of the area and provide a mitigation plan for all municipal drains in LaSalle. This report titled “Species at Risk Mitigation Plan for Drainage Works” shall be followed during all maintenance and construction activities provided for within this report. This report will address all mitigation measures to protect Species at Risk along the Chappus Drain. The Contractor may obtain a copy of this report from the Town of LaSalle. Section 7.0 Mitigation Measures from the report is included in **Appendix “REI-B”** for reference by the Contractor and project supervisory staff.

The Contractor is to review **Appendix “REI-B”** in detail and is required to comply in all regards with the contents of said M.N.R.F. & M.E.C.P. measures, and follow the special requirements therein included during construction. Throughout the course of construction, the Contractor will be responsible to ensure that all necessary provisions are undertaken to protect all species at risk and their habitats. If a threatened or sensitive species is encountered, the Contractor shall notify the Town and M.N.R.F. - M.E.C.P. and provide all the equipment and materials stipulated by the mitigation requirements for handling the species and cooperate fully with the Town and M.N.R.F. - M.E.C.P. staff in the handling of the species.

#### **IV. ACCESS TO WORK**

The Contractor is advised that the majority of the work to be carried out on this project extends along the south and west sides of the open portions of the Chappus Drain and centred over the enclosed portion. The Contractor shall have access for a minimum width of 6 metres (20 feet) abutting the proposed drainage works. The Contractor may utilize the work area as necessary, to permit the completion of all of the work required to be carried out for this project along with an area sufficient to spread the excavated material to a maximum depth of 100mm on the adjacent vacant lands beyond any grass buffer or driveway access. The Contractor shall also have access along the roadway boulevard at lawn areas and driveways as necessary to access the open drain and carry out the work on the existing access bridges as set out on the plans and in these specifications, along with a sufficient area in the vicinity of the bridges to carry out the removal of the sediment, installation of the pipe, and ancillary work.

The Contractor shall ensure that the traveling public is protected at all times while utilizing the roadway for its access. The Contractor shall provide traffic control, including flag persons when required.

Throughout the course of the work, it is imperative that the Contractor protect as much landscaping and vegetation as possible when accessing along the drain. This will be of particular concern along the grass buffer and driveway areas abutting the drain and enclosure north of Golfview Drive. Any accesses or areas used in carrying out the works are to be fully restored to their original conditions by the Contractor at its cost, including topsoil placement and lawn restoration as directed by the Manager of Engineering and the Consulting Engineer. Restoration shall include but not be limited to all necessary levelling, grading, shaping, topsoil placement, seeding, mulching, sodding at lawn areas, and granular placement required to make good any damage caused.

#### **V. REMOVAL OF BRUSH, TREES AND RUBBISH**

Where there is any brush, trees or rubbish along the course of the drainage works from top of bank to top of bank, including the full width of the work access, all such brush, trees or rubbish

shall be close cut and grubbed out, and the whole shall be chipped up for recycling, burned or otherwise satisfactorily disposed of by the Contractor. The brush and trees removed along the course of the work are to be cut as close to the ground as practicable and within the drain banks parallel to the side slopes. Except as noted herein, stumps shall be left in place and shall be sprayed with a single application of stump killer (Diphenoprop BK700 or approved equal). All removed materials shall be put into piles by the Contractor in locations adjacent to the drain and within the working corridors, where they can be safely chipped and disposed of, or burned by it, or hauled away and disposed of by the Contractor to a site to be obtained by it at its expense. In all cases, trees and brush shall be stockpiled on the property on which they were cut. Prior to and during the course of any burning operations, the Contractor shall comply with the guidelines prepared by the Air Quality Branch of the Ontario Ministry of the Environment and shall ensure that the Environmental Protection Act is not violated. The Contractor shall assume all responsibility for control of the burn, obtaining all utility locates in the area of each burn site, all responsibility for liabilities related to the burning of the brush and smoke generated, and will be required to notify the local fire authorities to obtain any permits and co-operate with them in the carrying out of any work. All work shall be carried out in conformance with any Town by-laws for same. The removal of brush and trees shall be carried out in close consultation with the Manager of Engineering or Engineer to ensure that no decorative trees or shrubs are disturbed by the operations of the Contractor that can be saved. It is the intent of this project to save as many trees and bushes as practical on private lands adjacent to the drain and within the working corridors, especially mature trees beyond the drain sideslopes.

The Contractor shall protect all other trees, bushes, and shrubs located along the length of the drainage works except for those trees that are established, in consultation with the Manager of Engineering, the Engineer, and the landowners, to be removed as part of the works. The Contractor shall note that protecting and saving the trees may require the Contractor to carry out hand work around the trees, bushes, and shrubs to complete the necessary final site grading and restoration.

Following the completion of the work, the Contractor is to trim up any broken or damaged limbs on trees which are to remain standing, and it shall dispose of said branches along with other brush, thus leaving the trees in a neat and tidy condition.

The Contractor shall remove all deleterious materials and rubbish along the course of the open drain and any such materials located in the bridge culverts and enclosures while carrying out its cleaning of same. All such deleterious materials and rubbish shall be loaded up and hauled away by the Contractor to a site to be obtained by it at its cost.

## **VI. FENCING**

Where it is necessary to take down any fence to proceed with the work, the same shall be done by the Contractor across or along that portion of the work where such fence is located. The Contractor will be required to exercise extreme care in the removal of any fencing so as to cause a minimum of damage to same. The Contractor will be required to reinstall any fence that is taken down in order to proceed with the work, and the fence shall be reinstated in a neat and workmanlike manner. The Contractor will not be required to procure any new materials for rebuilding the fence provided that it has used reasonable care in the removal and replacement of same. When any fence is removed by the Contractor, and the Owner thereof deems it advisable and procures new material for replacing the fence so removed, the Contractor shall replace the fence using the new materials and the materials from the present fence shall remain the property of the Owner.

## **VII. DETAILS OF BRIDGE AND ENCLOSURE WORK**

The Contractor shall completely remove and dispose of Bridge 2 located on the Essex Golf & Country Club parcel at the drain diversion. The existing Bridge 3 corrugated steel pipe shall be

cleaned out as provided for in the schedule of items and prices. The Contractor shall load up and haul away all deleterious material from the bridge sites as set out further in these specifications.

At the north side of Golfview Drive the Contractor shall extract Bridge Enclosure 1C and reinstall the 900mm H.D.P.E. pipe to the grades shown on the plan profile. Existing rock protection on the north end shall be salvaged for re-use when the pipe is re-laid, and additional filter fabric and rock provided as need to match the standard bridge sloped end protection requirements. The south end shall remain securely connected to the maintenance hole. Fencing and any other obstructions to the work shall be temporarily removed as needed and fully reinstated and restored upon completion of the work.

The installation of the complete length of the access bridge culvert or enclosure, including all appurtenances, shall be completely inspected by the Town Manager of Engineering or Engineer prior to backfilling any portions of same. Under no circumstance shall the Contractor backfill same until the Town Manager of Engineering or Engineer inspects and approves said pipe installation. The Contractor shall provide a minimum notice of 2 working days to the Town Manager of Engineering or Engineer prior to the commencement of this work. The installation of the access bridge or enclosure is to be performed during the normal working hours from Monday to Friday of the Town Manager of Engineering or Engineer.

Once the pipe has been satisfactorily set in place at the site, the Contractor shall completely backfill same with granular material M.T.O. Type “B” O.P.S. Form 1010, with the exception of the top 305mm (12”) of the backfill material for the full top width of the drain trench in the area of the roadway, which shall be granular material M.T.O. Type “A” O.P.S. Form 1010. Across the lawn areas at the enclosure pipe the trench shall be backfilled with compacted native material that is salvaged during the extraction of the pipe. The end slope of the backfill material over the pipe from the invert of said pipe to the top of bank elevation shall be quarried limestone on filter cloth erosion protection. The end wall shall be extended around onto the drain banks in line with the end of the pipe, all as shown on the plans included in **Appendix “REI-E”**.

Once the pipe has been set in place at its location, the Contractor shall completely backfill same as noted above, and install the quarried limestone on filter cloth protection on the end of the bridge enclosure pipe and secure the pipe end against flotation. The installation of the endwall, as well as the backfilling of the pipe where applicable, shall be provided in compliance with Items 2), 3), and 4) of the **“Standard Specifications for Access Bridge Construction”** attached within **Appendix “REI-C”** and in total compliance and in all respects with the General Conditions included in Item 4) of said Appendix. The Contractor, in all cases, shall comply with these specifications and upon completion of the sloped quarried limestone end protection installation shall restore the adjacent areas to their original conditions.

The pipe for this installation shall be provided with a depth of cover measured from the top of the pipe to the top of the backfill of approximately 0.305m (12”) for the bridge or enclosure and if the pipe is placed at its proper elevations, this should be easily achieved. If the Contractor finds that the specified cover is not being met, they shall notify the Town Manager of Engineering and the Engineer immediately so that steps can be taken to rectify the condition prior to the placement of any backfill. The cover requirement is **critical** and must be attained. In order for this enclosure bridge culvert to properly fit the channel parameters, all of the design grade elevations provided on the plans must be strictly adhered to.

Also, for use by the Contractor, we have established a Bench Mark near the site as noted on the plans. The Contractor is to check that the pipe invert grades are correct by referencing the Bench Mark provided for the site.

As part of the work provided for the construction of the access bridge or enclosure, the Contractor shall be required to protect or extend any existing lateral tile ends which conflict with the bridge pipe or enclosure installation. All existing lateral tile drains, where required, shall be diverted and extended to the ends of the access bridge culvert or enclosure and shall be extended and installed in accordance with the “Standard Lateral Tile Detail” as shown in **Appendix “REI-C”**, unless otherwise noted. Connections shall be made using manufacturer’s couplers wherever possible. All connections shall be completely sealed with concrete grout around the full exterior perimeter of each joint.

All of the granular backfill, native fill, and the compaction levels for same shall be provided to the full satisfaction of the Town Manager of Engineering or the Engineer. The Contractor shall also note that any sediment being removed from the drain bottom as previously specified herein, shall not be utilized for the construction work, and shall be disposed of by the Contractor to a site to be obtained by it at its own expense. The Contractor shall provide any extra materials required to restore the work area along the enclosure to its original grade.

The Contractor shall be required to restore any and all drain sideslopes damaged by the future replacement access bridge installation, utilizing the available scavenged topsoil, and shall seed and mulch over all of said areas.

The placing and grading of any topsoil shall be carefully and meticulously carried out in accordance with Ontario Provincial Standard Specifications, Form 802 dated November 2010, or as subsequently amended, or as amended by these specifications and be readied for the seeding and mulching process. The seeding and mulching of all of the above mentioned areas shall comply in all regards to Ontario Provincial Standard Specifications, Form 803 dated November 2010 and Form 804, dated November 2013, or as subsequently amended, or as amended by these specifications. The seeding mixture shall be the Standard Roadside Mix (Canada No. 1 Lawn Grass Seed Mixture) as set out in O.P.S.S. 804. At the lawn areas the Contractor shall provide sod restoration of the grass. All cleanup and restoration work shall be performed to the full satisfaction of the Town Manager of Engineering or Engineer.

When all of the work for this installation has been completed, the Contractor shall ensure that positive drainage is provided to all areas and shall ensure that the site is left in a neat and workmanlike manner, all to the full satisfaction of the Town Manager of Engineering or Engineer.

The Contractor shall completely remove and dispose of the sediment in all the other access bridges along the course of the drain. Sediment shall be flushed out of the pipes with care being taken not to damage the pipes. All removed materials shall be loaded up and hauled away by the Contractor for disposal.

The Contractor shall completely remove and dispose of the existing farm Bridge 2, along with headwall removal and other work as noted.

The existing steel pipe shall be removed and disposed of by the Contractor, along with any other deleterious materials that are encountered. The drain cross section in the location of the bridge shall be backfilled with compacted materials from the drain diversion as detailed on the plans and the new exposed fill materials restored with topsoil, grass seed, and mulch as noted in these specifications. The Contractor shall consult with the Essex Golf & County Club for storage of any extra materials from the drain diversion and work with them on the desired grass seed to be used and finishing of the filled in drain section.

The Contractor will be responsible to restore any damage caused to the roadways at its cost. All damaged hard surface roadway areas shall be neatly saw cut and the damaged materials removed and disposed of by the Contractor prior to carrying out any restoration work. The extent of the repairs shall be established in consultation with the Manager of Engineering, the Road Authority, and the Consulting Engineer and the repairs shall be completed to their full satisfaction.

The Contractor is to note that any intercepted tiles or pipes along the length of the existing culverts are to be extended and connected through the rock end protection at its cost unless otherwise noted in the accompanying drawings.

### **VIII. REMOVALS**

In the future when maintenance work is carried out and where existing access bridges are to be completely removed and replaced, the Contractor shall be required to excavate and completely extract the existing culvert pipe and the existing endwalls in their entirety, as well as any other deleterious materials that may be encountered in removing same. The Contractor shall also be required to completely dispose of all removed materials to a site to be obtained by it at its own expense.

All unsuitable and deleterious materials from the excavation and removal of the existing bridge culverts and drain cleaning shall be hauled away and disposed of by the Contractor to a site to be obtained by it at its expense. Likewise, any deleterious material excavated for removal of the headwalls shall also be hauled away and disposed of by the Contractor.

### **IX. GENERAL QUARRIED LIMESTONE EROSION PROTECTION**

At all of the swale and furrow locations entering the drain, it is required that general quarried limestone erosion protection and rock chutes be provided on the drain slopes, at any locations indicated, and to the widths generally shown within the details and notes included in the accompanying drawings. The rock chutes shall be V-shaped and constructed to direct all flows through the centre portion of the rock chute. Where the drain banks are showing erosion or slumping and distress, the Contractor shall provide quarried limestone on filter cloth general erosion protection as outlined below. Protection locations shall be as established in consultation with the Manager of Engineering and the Engineer and shall include any areas noted on the profile including the banks at the outside curves of the drain diversion.

The quarried limestone erosion protection shall be embedded into the sideslopes of the drain a minimum thickness of 305mm and shall be underlain in all cases with non-woven synthetic filter mat. The filter mat shall not only be laid along the flat portion of the erosion protection, but also contoured to the exterior limits of the quarried limestone and the unprotected slope. The width of the general erosion protection shall be as established in the accompanying drawings or as otherwise directed by the Manager of Engineering or the Engineer during construction. In placing the erosion protection, the Contractor shall carefully tamp the quarried limestone pieces into place with the use of the equipment bucket so that the erosion protection when completed will be consistent, uniform and tightly laid. In no instance shall the quarried limestone protrude beyond the exterior contour of the unprotected drain sideslopes along either side of said protection. The synthetic filter mat to be used shall be non-woven geotextile GMN160 conforming to O.P.S.S. 1860 Class I, as available from Armtec Construction Products, or equal. The quarried limestone to be used shall be graded in size from a minimum of 100mm to a maximum of 250mm, and is available from Walker Industries Amherstburg Quarry, in Amherstburg, Ontario, or equal.

### **X. BENCH MARKS**

Also, for use by the Contractor, we have established Bench Marks along the course of the work as shown on the plans and noted above. The Contractor shall work with the Manager of Engineering or Engineer to transfer the bench mark as necessary to be used in setting the drain and pipe design grades.

In all cases, the Contractor is to utilize the specified bench mark and drain grade to control its work. The Contractor shall ensure that it takes note of the direction of flow and sets all grades to

assure that all flows go from east to west and north to south to match the direction of flow within the drain.

#### **XI. ANCILLARY WORK**

During the course of any work to the bridges along the course of the drain, the Contractor will be required to protect or extend any existing tile ends or swales and connect them to the drainage works to maintain the drainage from the adjacent lands. All existing tiles shall be extended utilizing solid Big 'O' "standard tile ends" or equal plastic pipe of the same diameter as the existing tile and shall be installed in accordance with the "**Standard Lateral Tile Detail**" included in the plans, unless otherwise noted. Connections shall be made using a manufactured coupling where possible. For other connections, the Contractor shall utilize a grouted connection. Grouted mortar joints shall be composed of three (3) parts of clean, sharp sand to one (1) part of Portland cement with just sufficient water added to provide a stiff plastic mix, and the mortar connection shall be performed to the full satisfaction of the Manager of Engineering or the Consulting Engineer. The mortar joint shall be of a sufficient mass around the full circumference of the joint on the exterior side to ensure a tight, solid seal. The Contractor is to note that any intercepted pipes along the length of the existing culverts are to be extended and connected to the open drain unless otherwise noted in the accompanying drawings.

The Contractor shall re-grade the existing swales to allow for the surface flows to freely enter the drain. Any disturbed grass areas shall be fully restored with topsoil, seed and mulch or sod at residential lawn areas.

Although it is anticipated that the bridge work at each site shall be undertaken in the dry, the Contractor shall supply and install a temporary straw bale or silt curtain check dam in the drain bottom immediately downstream of each bridge site during the time of construction. The straw bale check dam or silt curtain shall be to the satisfaction of the Manager of Engineering or the Engineer and must be removed upon completion of the construction. The straw bales and silt curtains may be reused at each site subject to their condition. All costs associated with the supply and installation of this straw bale or silt curtain check dam shall be included in the cost bid for the bridge works.

#### **XII. TOPSOIL, SEED AND MULCH**

The Contractor will be required to protect grass buffers and driveway accesses along the top of the drain bank where they currently exist. Where any of these are damaged, they shall be fully restored including placement of topsoil. The topsoil shall be prepared for seeding as noted further in these specifications. Should the existing topsoil be treated to prevent grass growth, the Contractor shall strip the existing topsoil material back and spread it on the adjacent field and supply 50mm thick imported topsoil, or topsoil material scavenged from the drain banks at rock protection locations, that is suitable for growing grass.

The placing and grading of any topsoil shall be carefully and meticulously carried out in accordance with Ontario Provincial Standard Specifications, Form 802 dated November 2010, or as subsequently amended, or as amended by these specifications and be readied for the seeding and mulching process. The seeding and mulching or sod placement of all of the above mentioned areas shall comply in all regards to Ontario Provincial Standard Specifications, Form 803 dated November 2010 and Form 804, dated November 2013, or as subsequently amended, or as amended by these specifications. The seeding mixture shall be the Standard Roadside Mix (Canada No. 1 Lawn Grass Seed Mixture) as set out in O.P.S.S. 804. At the Essex Golf & Country Club drain diversion the Contractor shall consult with the owner and use a seed mixture to match the existing grass areas of the driving range. All cleanup and restoration work shall be performed to the full satisfaction of the Town Drainage Superintendent or Manager of Engineering and the Consulting Engineer.

All of the work relative to the placement of topsoil and the seeding and mulching operation shall be meticulously done and completed in a good and workmanlike manner all to the full satisfaction of the Manager of Engineering and the Engineer.

**XIII. GENERAL CONDITIONS**

- a) The Manager of Engineering or Consulting Engineer shall have authority to carry out minor changes to the work where such changes do not lessen the efficiency of the work.
- b) The Contractor shall satisfy itself as to the exact location, nature and extent of any existing structure, utility or other object which it may encounter during the course of the work. The Contractor shall indemnify and save harmless the Town of LaSalle, the County of Essex and the Consulting Engineer and their representatives for any damages which it may cause or sustain during the progress of the work. It shall not hold the Town of LaSalle, County of Essex or the Consulting Engineer liable for any legal action arising out of any claims brought about by such damage caused by it.
- c) The Contractor shall provide a sufficient number of layout stakes and grade points so that the Manager of Engineering and Consulting Engineer can review same and check that the work will generally conform to the design and project intent.
- d) The Contractor will be responsible for any damage caused by it to any portion of the Municipal road system, especially to the travelled portion. When excavation work is being carried out and the excavation equipment is placed on the travelled portion of the road, the travelled portion shall be protected by having the excavation equipment placed on satisfactory timber planks or timber pads. If any part of the travelled portion of the road is damaged by the Contractor, the Town shall have the right to have the necessary repair work done by its employees and the cost of all labour and materials used to carry out the repair work shall be deducted from the Contractor's contract and credited to the Town. The Contractor, upon completing the works, shall clean all debris and junk, etcetera, from the roadside of the drain, and leave the site in a neat and workmanlike manner. The Contractor shall be responsible for keeping all public roadways utilized for hauling materials free and clear of mud and debris.
- e) The Contractor shall provide all necessary lights, signs, and barricades to protect the public. All work shall be carried out in accordance with the requirements of the Occupational Health and Safety Act, and latest amendments thereto. If traffic control is required on this project, signing is to comply with the M.T.O. Manual of Uniform Traffic Control Devices (M.U.T.C.D.) for Roadway Work Operations and Ontario Traffic Manual Book 7.
- f) During the course of the work the Contractor shall be required to connect existing drainage pipes to the Municipal Drain. In the event that polluted flows are discovered, the Contractor shall delay the connection of the pipe and leave the end exposed and alert the Town, the Manager of Engineering/Drainage Superintendent and the Consulting Engineer so that steps can be taken by the Town to address the concern with the owner and the appropriate authorities. Where necessary the Contractor shall cooperate with the Town in providing temporary measures to divert the drain or safely barricade same. Should the connection be found acceptable by the authorities, the Contractor shall complete the connection of the drain as provided for in the specifications, at no extra cost to the project.
- g) Following the completion of the work, the Contractor is to trim up any broken or damaged limbs on trees which are to remain standing, and it shall dispose of said branches along with other brush, thus leaving the trees in a neat and tidy condition.

- h) The whole of the work shall be satisfactorily cleaned up, and during the course of the construction, no work shall be left in any untidy or incomplete state before subsequent portions are undertaken.
- i) During the course of the project the Contractor shall deal with any excess soil management from the project in accordance with Ontario Reg 406/19 pursuant to the Environmental Protection Act, R.S.O. 1990, c. E.19 and any subsequent amendments to same.
- j) All driveways, laneways and access bridges, or any other means of access on to the job site shall be fully restored to their former condition at the Contractor's expense. Before authorizing Final Payment, the Manager of Engineering shall inspect the work in order to be sure that the proper restoration has been performed. In the event that the Contractor fails to satisfactorily clean up any portion of these accesses, the Manager of Engineering shall order such cleanup to be carried out by others and the cost of same be deducted from any monies owing to the Contractor.
- k) The Contractor will be required to submit to the Town a Certificate of Good Standing from the Workplace Safety and Insurance Board prior to the commencement of the work. The Contractor will also be required to submit to the Town a Certificate of Clearance for the project from the Workplace Safety and Insurance Board before Final Payment is made to the Contractor.
- l) The Contractor shall furnish a Performance and Maintenance Bond along with a separate Labour and Material Payment Bond within ten (10) days after notification of the execution of the Agreement by the Owner. One copy of said bonds shall be bound into each of the executed sets of the Contract. Each Performance and Maintenance Bond and Labour and Material Payment Bond shall be in the amount of 100% of the total Tender Price. All Bonds shall be executed under corporate seal by the Contractor and a surety company, authorized by law to carry out business in the Province of Ontario. The Bonds shall be acceptable to the Owner in every way and shall guarantee faithful performance of the contract during the period of the contract, including the period of guaranteed maintenance which will be in effect for twelve (12) months after substantial completion of the works.

The Tenderer shall include the cost of bonds in the unit price of the Tender items as no additional payment will be made in this regard.

- m) The Contractor shall be required, as part of this Contract, to provide Comprehensive Liability Insurance coverage for not less than \$5,000,000.00 on this project and shall name the Town of LaSalle and its officials, the County of Essex and its officials and the Consulting Engineer and its staff as additional insured under the policy. The Contractor must submit a copy of this policy to both the Municipal Clerk and the Consulting Engineer prior to the commencement of work.
- n) Monthly progress orders for payment shall be furnished the Contractor by the Manager of Engineering. Said orders shall be for not more than 90% of the value of the work done and the materials furnished on the site. The paying of the full 90% does not imply that any portion of the work has been accepted. The remaining 10% will be paid 60 days after the final acceptance and completion of the work and payment shall not be authorized until the Contractor provides the following:
  - i) a Certificate of Clearance for the project from the Workplace Safety and Insurance Board
  - ii) proof of advertising



- iii) a Statutory Declaration, in a form satisfactory to the Consulting Engineer and the Town, that all liabilities incurred by the Contractor and its Sub-Contractors in carrying out the Contract have been discharged and that all liens in respect of the Contract and Sub-Contracts thereunder have expired or have been satisfied, discharged or provided for by payment into Court.

The Contractor shall satisfy the Town that there are no liens or claims against the work and that all of the requirements as per the Construction Act, 2018 and its subsequent amendments have been adhered to by the Contractor.

- o) In the event that the Specifications, Information to Tenderers, or the Form of Agreement do not apply to a specific condition or circumstance with respect to this project, the applicable section or sections from the Canadian Construction Documents Committee C.C.D.C.2 shall govern and be used to establish the requirements of the work.
- p) Should extra work be required by the Town Manager of Engineering or Consulting Engineer, and it is done on a time and material basis, the actual cost of the work will be paid to the Contractor with a 15% markup on the total actual cost of labour, equipment and materials needed to complete the extra work.



## APPENDIX "REI-A"



**STANDARD E.R.C.A. AND D.F.O.**  
**MITIGATION REQUIREMENTS**

As part of its work, the Contractor will implement the following measures that will ensure that any potential adverse effects on fish and fish habitat will be mitigated:

- Work will not be conducted at times when flows are elevated due to local rain events, storms or seasonal floods. In-water works will not be undertaken between March 15th and June 30th.
- New culverts are to be installed with a minimum 10 % embedment below the existing bottom or design bottom of the drain (whichever is lower).
- All new culverts must provide for fish passage. Typically, culvert lengths that do not exceed 15.0 metres do not create an obstruction to fish passage. Depending on the proposed culvert diameter, however, longer lengths may be allowed. Concerns with longer culverts relate to velocity, loss of riparian habitat, etc. (Note: IF longer culvert lengths are proposed, we recommend that they be reviewed with this office prior to finalizing the engineer's report. Ultimately, it is the proponent's responsibility to undertake the necessary studies to confirm that the proposed length will not be a barrier to fish passage.)
- All disturbed soils on both banks and within the channel, including spoil, must be stabilized immediately upon completion of work. The restoration of the site must be completed to a like or better condition to what existed prior to the works. The spoil material must be spread an appropriate distance from the top of the drain bank to ensure that it is not washed back into the drain.
- To prevent sediment entry into the drain, in the event of an unexpected rainfall, silt barriers and/or traps must be placed in the channel during the works and until the site has been stabilized. All sediment and erosion control measures are to be in accordance with related Ontario Provincial Standards. It is incumbent on the proponent and his/her contractors to ensure that sediment and erosion control measures are functioning properly and are maintained/upgraded as required.
- Silt or sand accumulated in the barriers/traps must be removed and stabilized on land once the site is stabilized.
- All activities, including maintenance procedures, should be controlled to prevent the entry of petroleum products, debris, rubble, concrete or other deleterious substances into the water. Vehicular refueling and maintenance should be conducted away from the water.



**SECTION II**  
**SPECIFICATIONS**  
**FOR FISH SALVAGE**

**GENERAL**  
**SECTION 201**

The Work shall include the capture, salvage and release of fish that are trapped or stranded as the result of the Contractor's operations, at locations identified in the Fish Salvage Plan, and in co-operation with the Essex Region Conservation Authority (E.R.C.A.).

Fish capture shall be performed prior to dewatering, and in such manner that will minimize the injury to the fish.

**MATERIALS**  
**SECTION 202**

All materials required for fish capture, salvage and release shall be supplied by the Contractor.

**CONSTRUCTION**  
**SECTION 203**

The Contractor shall not commence any fish capture, salvage and release work until the Fish Salvage Plan has been accepted by the Consultant and the Conservation Authority. All work shall be performed in accordance with the Fish Salvage Plan unless otherwise determined by the Consultant or the Conservation Authority.

The Contractor shall ensure an ice-free pool is maintained throughout all fish capture and release operations.

All fish shall be captured within the area specified and released at an acceptable location in the downstream water body. Fish shall be captured by electro fishing, netting, seining, trapping, or other method acceptable to the Consultant and/or the Conservation Authority.

**MEASUREMENT AND PAYMENT**  
**SECTION 204**

Payment for this Work will be included in the price bid for drainage work components or made at the lump sum price bid for "Fish Capture and Release". The lump sum price will be considered full compensation for all labour, materials, equipment, tools, and incidentals necessary to complete the Work to the satisfaction of the Consultant.





# Measures to Avoid Causing Harm to Fish and Fish Habitat

If you are conducting a project near water, it is your responsibility to ensure you avoid causing [serious harm to fish](#) in compliance with the *Fisheries Act*. The following advice will help you avoid causing harm and comply with the *Act*.

**PLEASE NOTE:** This advice applies to all project types and replaces all “Operational Statements” previously produced by DFO for different project types in all regions.

## Measures

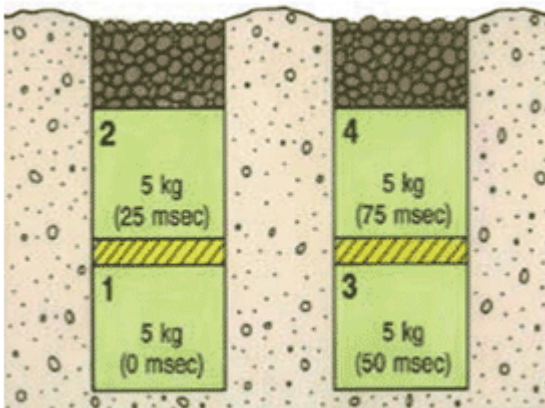
- Time work in water to respect [timing windows](#) to protect fish, including their eggs, juveniles, spawning adults and/or the organisms upon which they feed.
- Minimize duration of in-water work.
- Conduct instream work during periods of low flow, or at low tide, to further reduce the risk to fish and their habitat or to allow work in water to be isolated from flows.
- Schedule work to avoid wet, windy and rainy periods that may increase erosion and sedimentation.
  
- Design and plan activities and works in waterbody such that loss or disturbance to aquatic habitat is minimized and sensitive spawning habitats are avoided.
- Design and construct approaches to the waterbody such that they are perpendicular to the watercourse to minimize loss or disturbance to riparian vegetation.
- Avoid building structures on meander bends, braided streams, alluvial fans, active floodplains or any other area that is inherently unstable and may result in erosion and scouring of the stream bed or the built structures.
- Undertake all instream activities in isolation of open or flowing water to maintain the natural flow of water downstream and avoid introducing sediment into the watercourse.
  
- Plan activities near water such that materials such as paint, primers, blasting abrasives, rust solvents, degreasers, grout, or other chemicals do not enter the watercourse.
- Develop a response plan that is to be implemented immediately in the event of a sediment release or spill of a deleterious substance and keep an emergency spill kit on site.
- Ensure that building material used in a watercourse has been handled and treated in a manner to prevent the release or leaching of substances into the water that may be deleterious to fish.

- Develop and implement an Erosion and Sediment Control Plan for the site that minimizes risk of sedimentation of the waterbody during all phases of the project. Erosion and sediment control measures should be maintained until all disturbed ground has been permanently stabilized, suspended sediment has resettled to the bed of the waterbody or settling basin and runoff water is clear. The plan should, where applicable, include:
  - Installation of effective erosion and sediment control measures before starting work to prevent sediment from entering the water body.
  - Measures for managing water flowing onto the site, as well as water being pumped/diverted from the site such that sediment is filtered out prior to the water entering a waterbody. For example, pumping/diversion of water to a vegetated area, construction of a settling basin or other filtration system.
  - Site isolation measures (e.g., silt boom or silt curtain) for containing suspended sediment where in-water work is required (e.g., dredging, underwater cable installation).
  - Measures for containing and stabilizing waste material (e.g., dredging spoils, construction waste and materials, commercial logging waste, uprooted or cut aquatic plants, accumulated debris) above the high water mark of nearby waterbodies to prevent re-entry.
  - Regular inspection and maintenance of erosion and sediment control measures and structures during the course of construction.
  - Repairs to erosion and sediment control measures and structures if damage occurs.
  - Removal of non-biodegradable erosion and sediment control materials once site is stabilized.
- Clearing of riparian vegetation should be kept to a minimum: use existing trails, roads or cut lines wherever possible to avoid disturbance to the riparian vegetation and prevent soil compaction. When practicable, prune or top the vegetation instead of grubbing/uprooting.
- Minimize the removal of natural woody debris, rocks, sand or other materials from the banks, the shoreline or the bed of the waterbody below the ordinary high water mark. If material is removed from the waterbody, set it aside and return it to the original location once construction activities are completed.
- Immediately stabilize shoreline or banks disturbed by any activity associated with the project to prevent erosion and/or sedimentation, preferably through re-vegetation with native species suitable for the site.
- Restore bed and banks of the waterbody to their original contour and gradient; if the original gradient cannot be restored due to instability, a stable gradient that does not obstruct fish passage should be restored.
- If replacement rock reinforcement/armouring is required to stabilize eroding or exposed areas, then ensure that appropriately-sized, clean rock is used; and that rock is installed at a similar slope to maintain a uniform bank/shoreline and natural stream/shoreline alignment.
- Remove all construction materials from site upon project completion.

- Ensure that all in-water activities, or associated in-water structures, do not interfere with fish passage, constrict the channel width, or reduce flows.
- Retain a qualified environmental professional to ensure applicable permits for relocating fish are obtained and to capture any fish trapped within an isolated/enclosed area at the work site and safely relocate them to an appropriate location in the same waters. Fish may need to be relocated again, should flooding occur on the site.
- Screen any water intakes or outlet pipes to prevent entrainment or impingement of fish. Entrainment occurs when a fish is drawn into a water intake and cannot escape. Impingement occurs when an entrapped fish is held in contact with the intake screen and is unable to free itself.
  - In freshwater, follow these measures for design and installation of intake end of pipe fish screens to protect fish where water is extracted from fish-bearing waters:
    - Screens should be located in areas and depths of water with low concentrations of fish throughout the year.
    - Screens should be located away from natural or artificial structures that may attract fish that are migrating, spawning, or in rearing habitat.
    - The screen face should be oriented in the same direction as the flow.
    - Ensure openings in the guides and seals are less than the opening criteria to make “fish tight”.
    - Screens should be located a minimum of 300 mm (12 in.) above the bottom of the watercourse to prevent entrainment of sediment and aquatic organisms associated with the bottom area.
    - Structural support should be provided to the screen panels to prevent sagging and collapse of the screen.
    - Large cylindrical and box-type screens should have a manifold installed in them to ensure even water velocity distribution across the screen surface. The ends of the structure should be made out of solid materials and the end of the manifold capped.
    - Heavier cages or trash racks can be fabricated out of bar or grating to protect the finer fish screen, especially where there is debris loading (woody material, leaves, algae mats, etc.). A 150 mm (6 in.) spacing between bars is typical.
    - Provision should be made for the removal, inspection, and cleaning of screens.
    - Ensure regular maintenance and repair of cleaning apparatus, seals, and screens is carried out to prevent debris-fouling and impingement of fish.
    - Pumps should be shut down when fish screens are removed for inspection and cleaning.
- Avoid using explosives in or near water. Use of explosives in or near water produces shock waves that can damage a fish swim bladder and rupture internal organs. Blasting vibrations may also kill or damage fish eggs or larvae.
  - If explosives are required as part of a project (e.g., removal of structures such as piers, pilings, footings; removal of obstructions such as beaver dams; or preparation of a river or lake bottom for installation of a structure such as a dam or water intake), the potential for impacts to fish and fish habitat should be minimized by implementing the following measures:

- Time in-water work requiring the use of explosives to prevent disruption of vulnerable fish life stages, including eggs and larvae, by adhering to appropriate fisheries [timing windows](#).
- Isolate the work site to exclude fish from within the blast area by using bubble/air curtains (i.e., a column of bubbled water extending from the substrate to the water surface as generated by forcing large volumes of air through a perforated pipe/hose), cofferdams or aquadams.
- Remove any fish trapped within the isolated area and release unharmed beyond the blast area prior to initiating blasting
- Minimize blast charge weights used and subdivide each charge into a series of smaller charges in blast holes (i.e., decking) with a minimum 25 millisecond (1/1000 seconds) delay between charge detonations (see Figure 1).
- Back-fill blast holes (stemmed) with sand or gravel to grade or to streambed/water interface to confine the blast.
- Place blasting mats over top of holes to minimize scattering of blast debris around the area.
- Do not use ammonium nitrate based explosives in or near water due to the production of toxic by-products.
- Remove all blasting debris and other associated equipment/products from the blast area.

**Figure 1: Sample Blasting Arrangement**



Per Fig. 1: 20 kg total weight of charge; 25 msecs delay between charges and blast holes; and decking of charges within holes.

- Ensure that machinery arrives on site in a clean condition and is maintained free of fluid leaks, invasive species and noxious weeds.

- Whenever possible, operate machinery on land above the high water mark, on ice, or from a floating barge in a manner that minimizes disturbance to the banks and bed of the waterbody.
- Limit machinery fording of the watercourse to a one-time event (i.e., over and back), and only if no alternative crossing method is available. If repeated crossings of the watercourse are required, construct a temporary crossing structure.
- Use temporary crossing structures or other practices to cross streams or waterbodies with steep and highly erodible (e.g., dominated by organic materials and silts) banks and beds. For fording equipment without a temporary crossing structure, use stream bank and bed protection methods (e.g., swamp mats, pads) if minor rutting is likely to occur during fording.
- Wash, refuel and service machinery and store fuel and other materials for the machinery in such a way as to prevent any deleterious substances from entering the water.

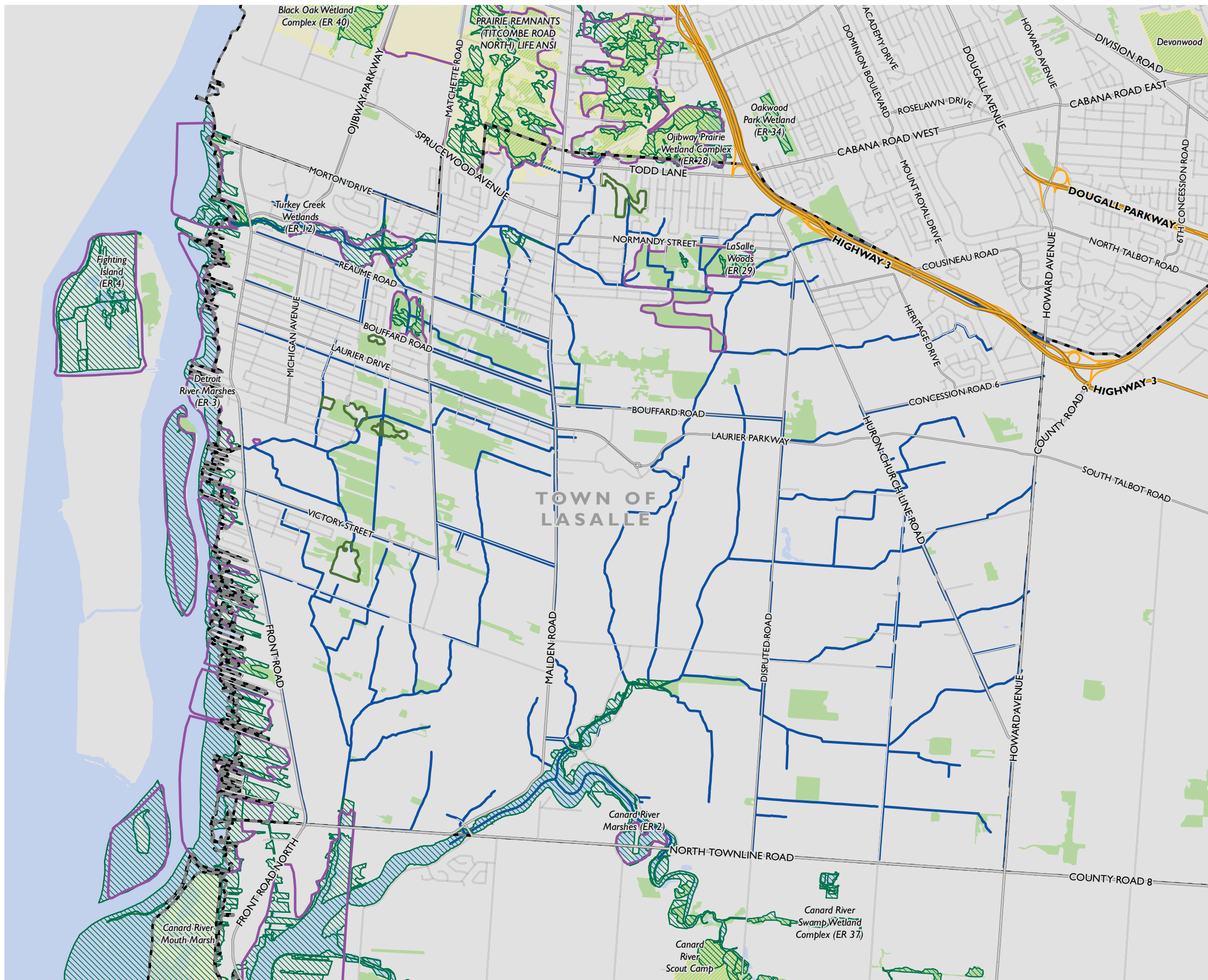
Date modified:  
2013-11-25



## APPENDIX "REI-B"







**TOWN OF LASALLE**

**NATURAL FEATURES**

FIGURE 1

- Lower Tier Municipality
- Tallgrass Prairie Community
- Environmentally Sensitive Area
- Provincially Significant Wetland
- ANSI, Earth Science
- ANSI, Life Science
- Municipal Drain
- Water Body
- Forest



MAP DRAWING INFORMATION:  
 DATA PROVIDED BY MNR  
 MAP CREATED BY: GM  
 MAP CHECKED BY: KM/AB  
 MAP PROJECTION: NAD 1983 UTM Zone 17N



PROJECT: 16-4263  
 STATUS: FINAL  
 DATE: 5/3/2017

## 6.0 Species at Risk

A review of secondary source information, including Natural Heritage Information Centre (NHIC) GIS Database records (i.e. 1 km squares that overlap the Study Area) were reviewed to gather a list of the SAR that have the potential to occur within the Town's boundaries. A total of thirty-nine (39) species listed as either endangered or threatened on the SARO list (O.Reg. 230/08) were identified to occur within the Study Area (see **Appendix C**). Fourteen (14) Restricted Species Records were also identified in the year 2010 and included in **Appendix A** under records reviewed.

The habitat requirements for each of the thirty-nine (39) species was cross referenced with habitats identified within the Study Area. A total of twenty-three (23) species listed as endangered or threatened were identified as having potential habitat within the Study Area, consisting of Turtles (2 species), Snakes (3 species), Fishes (4 species), Birds (3 species), and Plants (11 species). **Table 2** lists the SAR, preferred habitat type(s) (Agricultural, Urban, Forest, Wetland or All) and water presence (requirement for some species), and the dates during the year when the species is likely to be carrying out sensitive life processes, referred to herein as the Restricted Activity Period (RAP).

Three (3) species listed in Table 1, subsection 2, Section 23.9 of O. Reg. 242/08 were identified as having the potential to occur within the Town of LaSalle drains, these species include: Pugnose Minnow (*Opsopoeodus emiliae*) (1 fish species), Heart-leaved Plantain (*Plantago cordata*) and Scarlet Ammannia (*Ammannia robusta*) (2 plant species). Since these species are listed in Table 1, subsection 2, Section 23.9 of O. Reg. 242/08 they have not been included in **Table 2** below and permitting may be required when working in specific drains. More information on species, their habitat preferences, known distribution within the area and steps that need to be taken to determine whether a permit is required are outlined in **Appendix D**.

**Table 2: Species at Risk with Potential to Occur within the Study Area**

Scientific Name	Common Name	ESA <sup>1</sup>	Preferred Habitat Type <sup>2</sup>	Restricted Activity Period
<b>Turtles</b>				
<i>Emydoidea blandingii</i>	Blanding's Turtle	THR	Wetland, Forest, Water is present	November 1 to April 30 <b>Important to Note: Activities that require water level reduction cannot occur in areas when and where turtles are hibernating (paragraph 6, subsection 13, under Section 23.9 of O.Reg. 242/08).</b>
<i>Apalone spinifera</i>	Spiny Softshell	THR	Wetland, Forest, Water is present	
<b>Snakes</b>				
<i>Pantherophis gloydi</i>	Eastern Foxsnake (Carolinian population)	END	All <sup>3</sup>	September 20 to May 31

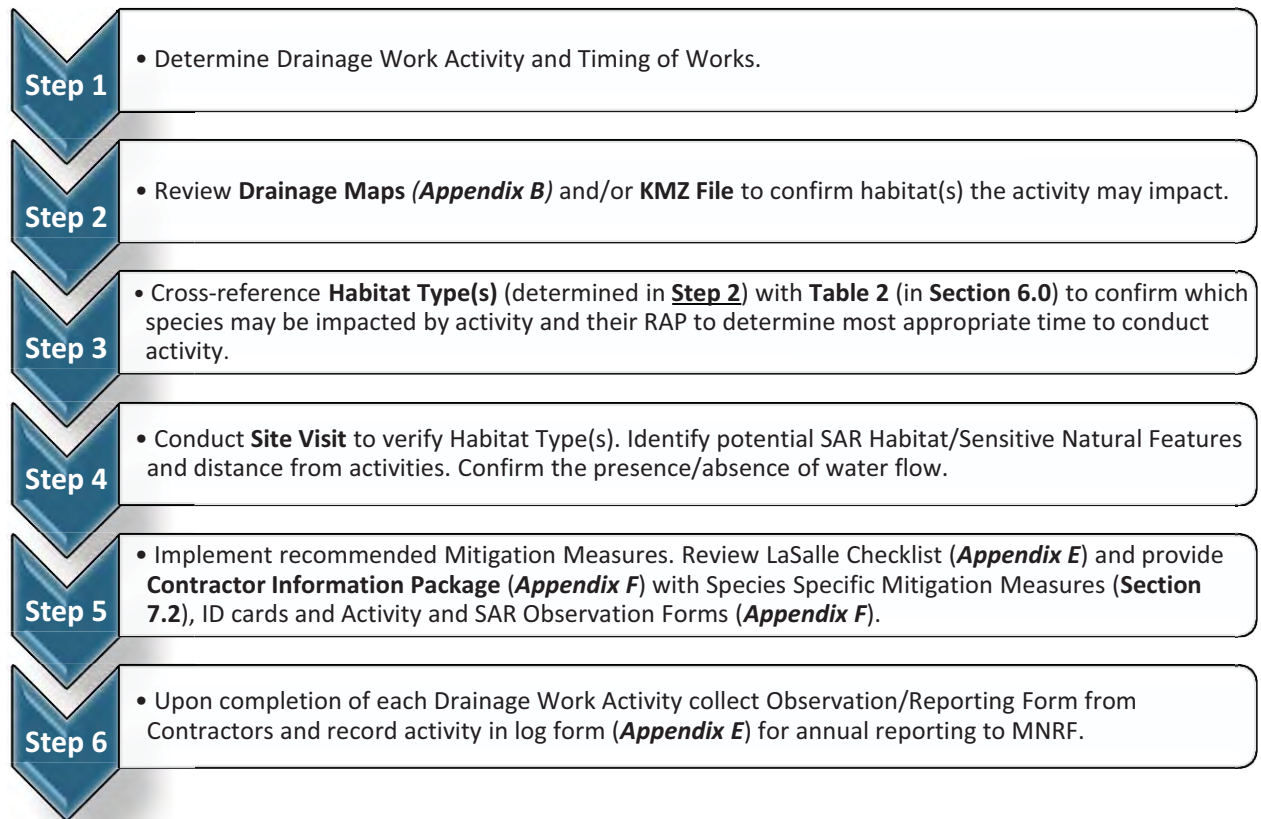
Scientific Name	Common Name	ESA <sup>1</sup>	Preferred Habitat Type <sup>2</sup>	Restricted Activity Period
<i>Regina septemvittata</i>	Queensnake	END	All <sup>3</sup> , Water is present	
<i>Thamnophis butleri</i>	Butler's Gartersnake	END	All <sup>3</sup>	
<b>Fishes</b>				
<i>Notropis anogenus</i>	Pugnose Shiner	END	Water is present	March 15 to June 30
<i>Lepisosteus oculatus</i>	Spotted Gar	THR		
<i>Percina copelandi</i>	Channel Darter	THR		
<i>Ammocrypta pellucida</i>	Eastern Sand Darter	END		
<b>Birds</b>				
<i>Dolichonyx oryzivorus</i>	Bobolink	THR	Agricultural	May 1 to July 15
<i>Sturnella magna</i>	Eastern Meadowlark	THR	Agricultural	
<i>Icteria virens virens</i>	Yellow-breasted Chat	END	Agricultural	
<b>Vascular Plants</b>				
<i>Aletris farinosa</i>	Colicroot	THR	Agricultural, Forest	Not Applicable
<i>Trillium flexipes</i>	Drooping Trillium	END	Forest, Water is present	
<i>Liparis liliifolia</i>	Purple Twayblade	THR	Forest, TPC <sup>4</sup>	
<i>Platanthera leucophaea</i>	Eastern Prairie Fringed-Orchid	END	Wetland, TPC <sup>4</sup>	
<i>Liatris spicata</i>	Dense Blazing Star	THR	Agricultural, TPC <sup>4</sup>	
<i>Symphotrichum praealtum</i>	Willowleaf Aster	THR	Agricultural, TPC <sup>4</sup>	
<i>Cornus florida</i>	Eastern Flowering Dogwood	END	Forest	
<i>Castanea dentata</i>	American Chestnut	END	Forest	
<i>Gentiana alba</i>	White Prairie Gentian	END	TPC <sup>4</sup>	
<i>Juglans cinerea</i>	Butternut	END	Forest	
<i>Morus rubra</i>	Red Mulberry	END	Forest	

<sup>1</sup>Endangered Species Act – status as defined by O.Reg. 242/08 as of April 27, 2017; <sup>2</sup>Preferred Habitat Types – The habitat types listed are areas where a SAR has the potential to occur. It should be noted that species have the potential to occur outside of these habitats; <sup>3</sup>All – Structures such as culverts, rip rap and gabion baskets have the potential to provide nesting and/or hibernaculum for snake species; <sup>4</sup>TPC: Tallgrass Prairie Community – SAR identified are likely to be limited to this habitat type.

## 7.0

## Mitigation Measures

Based on the types of drainage work activities outlined above and the potential for SAR and SAR habitat within and adjacent to the drainage features, the following best practices and mitigation measures are recommended for when conducting drainage works. Prior to starting drainage works, the following steps are recommended to help determine the appropriate mitigation/management measures:



### 7.1 General Mitigation Measures

The following mitigation measures are recommended to avoid or minimize impacts to the natural environment when conducting drainage works. Following this section species specific mitigation measures are provided.

When planning for drainage works, activities should be planned outside of sensitive timing windows for all wildlife species wherever possible. **Table 2** in Section 6.0 indicates the Restricted Activity Periods for the different SAR having the potential to occur within the Study Area. **Table 3** indicates sensitive timing windows for various types of wildlife (including SAR) based on habitat types. This information can be used to determine what time(s) of year may be sensitive at a particular site, based on which types of habitat and wildlife are present.

Where possible, activities are recommended to be planned outside of these sensitive time(s); otherwise additional species specific mitigation measures are recommended and/or consultation with the MNRF.

**Table 3: Sensitive Timing Windows for other Wildlife Species (including SAR)**

Habitat Type	Wildlife	Sensitive Timing Windows
Agricultural (Hayfields and pastures)	Migratory Birds	March through July (breeding season for most species)
	Migratory Birds (including waterfowl)	March through Mid-August
Wetlands/ Waterbodies	Turtles and Amphibians	March through Mid-August; and Mid-October through March (for overwintering wildlife, including turtles).
	Mammals	March through mid-August; and Mid-October through March (overwintering wildlife)
	Fish	In-water timing restriction for warmwater fishes March 15 to June 30.
Forest	Migratory Birds	March through mid-August
	Mammals	March through mid-August; and Mid-October through March (overwintering wildlife)
	Snakes	March through mid-August; and Mid-October through March (overwintering wildlife)
Urban	Snakes	March through mid-August; and
	Mammals	October through March (overwintering wildlife)

The following list provides general measures that are recommended when conducting any drainage work activities:

- **Bats:** The work associated with drainage maintenance covered under this management plan would typically not include the removal of trees. As such, the potential for drainage work activities to impact bat SAR is low. However, if a tree that exhibits a diameter at breast height of 25 cm or greater or a tree that exhibits loose shaggy bark requires removal for drainage works, removal should be completed between November 1 and March 1, outside of the active season for bats. If the tree removal needs to occur during the active season, removal should be completed after dusk.
- Review species specific seasonal timing windows to avoid sensitive periods for species
- Where possible, abide by regulatory timing windows and setback distances and avoid regulated habitat features
- Minimize duration of in-water work (where applicable)
- Any in-stream work should be conducted during periods of low flow
- Schedule work to avoid wet, windy and rainy periods that may increase erosion and sedimentation

- Conduct wildlife sweeps prior to the commencement of drainage work activities to determine if SAR (or other wildlife) are present at the site and engaged in critical life processes (e.g. nesting, etc.)
- Following the wildlife sweep, the area of activity is to be isolated with silt fencing to keep SAR and other wildlife from entering the work space area.
- Develop and implement an erosion and sediment control plan for the site that minimizes the risk of sedimentation to the drain during all phases of an activity. Erosion and sediment control measures should be maintained until all disturbed ground has been permanently stabilized, suspended sediment has resettled to the bed of the drain of settling basin and runoff water is clear. Following the DFO's Measures to Avoid Harm (as outlined on DFO's website: <http://www.dfo-mpo.gc.ca/pnw-ppe/measures-mesures/measures-mesures-eng.html>), an erosion and sediment control plan, where applicable, is to include the following:
  - Installation of effective erosion and sediment control measures before starting work to prevent sediment from entering the drain
  - Measures for managing water flowing onto the site, as well as water being pumped/diverted from the site such that sediment is filtered out prior to the water entering the drain
  - Site isolation measures, where required, to contain suspended sediment
  - Measures for containing and stabilizing waste materials generated from activities are stored away from any water bodies and prevent materials from re-entering water bodies
  - Erosion and sediment control measures are inspected and maintained on a regular basis during drainage works
  - Any damages to erosion and control measures are to be repaired immediately
  - Removal of non-biodegradable erosion and sediment control materials once site has been stabilized
- ***Phragmites*** is a non-native perennial grass species that has been observed throughout much of the province and LaSalle, developing tall dense stands that degrade wetlands and other features by outcompeting native vegetation and changing habitat. To further prevent the spread and introduction of this unwanted species in the province, the provincial government has regulated invasive *Phragmites* as restricted under the *Invasive Species Act, 2015*. Restricted species under the Act, prohibits i) the transport of species into any provincial park and conservation reserve and ii) the deposit or release of species in Ontario. For further information on the *Invasive Species Act, 2015* please visit: [www.ontario.ca/invasionON](http://www.ontario.ca/invasionON). It is recommended that care be taken when working in areas with *Phragmites* and efforts be taken to prevent further spread of species through equipment transfer. Methods to prevent the spread of *Phragmites* while conducting drainage works should include:
  - Inspection of vehicles, equipment and heavy machinery thoroughly inside and out for accumulation of dirt, plant material or snow/ice, including the underside of vehicles, radiators, spare tires, foot wells and bumpers before entering onto a site. Remove any guards, covers, plates or other easy to remove external equipment;
  - Inspections should be completed when: moving vehicles out of local area of operation; moving machinery between properties or sites within the same property where invasive species may be

- present or known to occur; and using machinery along roadsides, in ditches and along watercourses.
- Vehicles, equipment and heavy machinery should be cleaned: before moving out of local area where invasive species has been identified or known to occur; and when accumulations of dirt, plant material or snow/ice has been observed.
  - Clean vehicles, equipment and heavy machinery in an area where risk of contamination is low, ideally on a mud free hard surface, at least 30 m away from any watercourse, waterbody, wetland or other natural area, if possible. Where risk of runoff is high, cleaning stations should be contained by sediment fence as per standard erosion and sediment control specifications.
  - Remove large accumulations of dirt, using a compressed air device, high pressure hose or other device as necessary. Clean the vehicle starting at the top and working down, with particular attention to the undersides, wheels, wheel arches, guards, chassis, engine bays, grills and other attachments.
  - Clean inside vehicles by sweeping, vacuuming or using compressed air device including floor, foot wells, pedals, seats and under the seats.

Additional details on cleaning equipment and/or managing invasive species can be found in the Clean Equipment Protocol for Industry (J. Halloran, et al., 2013) and online at the Government of Ontario's website: <https://www.ontario.ca/page/stop-spread-invasive-species>.

## 7.2 Species Specific Mitigation Plans

In the event a SAR or SAR habitat has been identified within the proposed area for drainage work activity, the following information should be clearly conveyed to the on-site staff as part of the drainage works protocol, via notes or plans and on-site briefings with construction/personnel:

- Schedule for pre-construction activities such as wildlife inspections, silt fencing installation and contractor briefing.
- Description of wildlife mitigation measures to be used during drainage work activities, including:
  - Placement and specifications of required protection measures (e.g. fencing, signage)
  - Phasing and direction of site clearing activities
  - Any recommendations regarding access routes for equipment, vehicle parking, materials, stockpiling, etc.
- Guidance on what to do in the event of a wildlife encounter, including SAR and arrangements for dealing with injured or orphaned animals (as indicated in **Table 5** and **Appendix F**). This guidance should be summarized in a handout suitable for quick reference by on-site staff, including truck drivers.
- SAR awareness training should be provided to all on-site staff.

In the Contractor Information Package (**Appendix F**) Dillon has provided SAR identification sheets for SAR with the potential to occur within the Study Area.



7.2.1 Species Specific Mitigation Measures for Snake Species

Snake species can be found in a variety of habitat types and most of the drainage work activities have the potential to encounter snakes. Particular attention should be given when conducting works on catch basins, culverts, rip rap and crossing structures, as snakes carry out sensitive life processes in structures such as these. **Table 4** shows the sensitive timing windows for snake species when carrying out life processes related to hibernation and staging.

**Table 4: Sensitive Timing Windows for Snake Species**

Month	Jan			Feb			Mar			Apr			May			Jun			Jul			Aug			Sep			Oct			Nov			Dec								
Date Codes <sup>1</sup>	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L
Hibernation																																										
Staging																																										

<sup>1</sup>Monthly intervals: E = Early (days 1-10); M = Middle (days 11-20); L = Late (days 21-31). Adapted from the Seasonal Timing Windows Chart in the MNR Agreement under Section 23 of O.Reg. 242/08 made under ESA, 2007 (File #: AY-23D-009-10).

**Table 5** below outlines the recommended mitigation measures to avoid impacts to snake species during and outside of RAP. Photographs of habitat observed within and adjacent to drains that have the potential to support SAR snakes, have been included in **Appendix G** (Photographs #1 - 4).

Table 5: Mitigation Measures for Snake Species

Common Name	Recommended Mitigation Measures to Avoid Impacts to SAR Snakes in Study Area
Eastern Foxsnake (Carolinian population)	<ul style="list-style-type: none"> <li>• Preconstruction planning that includes review for potential habitat.</li> <li>• During site visit, verify if attributes of regulated habitat occur and delineate where possible.</li> <li>• Establish constraints for activities, where possible, that abide by timing windows and setback distances and avoid regulated habitat features</li> <li>• Narrow construction footprint if possible.</li> <li>• Flag or fence off environmentally sensitive areas prior to drainage work activity. Bury fencing minimum of 10 – 20 cm and vertical height of at least 60 cm. Note, stakes should be installed on the activity side to prevent snake use of stakes to climb fence.</li> <li>• Complete wildlife sweep within the exclusion area following fence installation to ensure no trapped wildlife.</li> <li>• Staff/workers conducting drainage works should be trained in snake species identification and procedures if encountered (review and sign off form in Contractor Information Package)</li> <li>• One staff member/worker or qualified biologist should be trained in proper snake handling procedures and protocols outlined in Section 2 of the <i>Ontario Species at Risk Handling Manual: For Endangered Species Act Authorization Holders</i> (Included in the Contractor Information Package). This person should be onsite at all times (when required) for the potential capture, temporary holding, transfer and release of any snakes encountered during construction. A minimum of two holding tubs and cotton sacks should be onsite at all times.</li> <li>• Prior to commencement of daily drainage work activity, the area should be cleared of snakes through machinery inspections (e.g. wheels, engine compartment) each morning and after machinery is left idle for more than one (1) hour if left on site during the snake active season.</li> <li>• If a nest is uncovered during drainage work activity: <ul style="list-style-type: none"> <li>○ Collect any displaced or damaged eggs and transfer them to a holding tub</li> <li>○ Capture and transfer all injured dispersing juveniles of that species into a light-coloured drawstring cotton sack</li> <li>○ Place all cotton sacks with the captured injured individuals into a holding tub out of direct sunlight</li> <li>○ Immediately contact the MNRF to seek direction and to arrange for transfer of the injured individuals</li> <li>○ Immediately stop any disturbance to the nest site and loosely cover exposed portions with soil or organic material to protect the integrity of the remaining individuals</li> <li>○ Do not drive over the nest site or conduct any activities within 5 m of the nest site</li> <li>○ Do not place any dredged materials removed from drainage works on top of the nest site</li> </ul> </li> </ul>
Queensnake	<ul style="list-style-type: none"> <li>○ Mark out the physical location of the nest site but not by any means that might increase the susceptibility of the nest to predation or poaching</li> <li>○ Where there are no collected eggs or captured individuals, contact the MNRF within 24 hours to provide information on the location of the nest</li> <li>• Any injured captured snakes should be stored outside of direct sunlight and the MNRF should immediately be contacted to seek direction and to arrange for transfer. MNRF may require transfer to the nearest MNRF authorized Wildlife Rehabilitator. Contact Information for Authorized Wildlife Rehabilitator can be found in <b>Appendix F</b> and on SAR Information Sheets (<b>Appendix F</b>).</li> <li>• If conducting drainage works during a species sensitive timing window and one or more individuals belonging to a snake species is encountered or active hibernacula is discovered: <ul style="list-style-type: none"> <li>○ Trained staff/worker or qualified biologist shall capture and transfer all injured and uninjured individual snakes of that species into individual light-coloured, drawstring cotton sacks</li> <li>○ Place cotton sacks into a holding tub</li> <li>○ Ensure that the holding tub with captured individuals is stored at a cool temperature to protect snakes from freezing until the individuals can be retrieved or transferred</li> <li>○ If an active hibernacula is uncovered cease all work and immediately</li> <li>○ Contact the MNRF immediately to seek advice and arrange for transfer and/or removal</li> </ul> </li> <li>• If conducting drainage works outside of a species sensitive timing window and one or more individuals belonging to a snake species is encountered: <ul style="list-style-type: none"> <li>○ Briefly stop the activity for a reasonable period of time to allow any uninjured individual snakes of that species to leave the work area</li> <li>○ If the individuals do not leave the work area after the activity is briefly stopped, trained staff/worker or qualified biologist shall capture all uninjured individuals and release them in accordance with the methods outlined below</li> <li>○ Where circumstances do not allow for the immediate release of captured uninjured individuals, they may be transferred into individual, light-coloured, drawstring cotton sacks before placing them into a holding tub which shall be stored out of direct sunlight for a maximum of 24 hours before releasing them in accordance with the methods outlined below</li> <li>○ Capture and transfer any individuals injured as a result of conducting drainage works into a holding tub separate from any holding tub containing uninjured individuals</li> <li>○ Store all captured injured individuals out of direct sunlight and immediately contact the MNRF to seek direction and to arrange their transfer</li> </ul> </li> </ul>
Butler's Gartersnake	

Common Name	Recommended Mitigation Measures to Avoid Impacts to SAR Snakes in Study Area
Butler's Gartersnake (con'd)	<ul style="list-style-type: none"> <li>• Uninjured individuals captured during drainage works, are to be released within 24 hours of capture, in an area immediately adjacent to the drainage works with natural vegetation cover within 50 m and out of harm's way (as per subsections 2.3 and 2.4 of Handling Manual included in the Contractor Information Package).</li> <li>• Where one or more individuals belonging to a snake species is killed as a result of drainage work activity, or a person finds a deceased individual of a snake species, the following measures should be followed: <ul style="list-style-type: none"> <li>○ Collect and transfer any dead individuals into a holding tub outside of direct sunlight; and,</li> <li>○ Contact the MNRF within 72 hours to seek direction and to arrange for the transfer of the carcasses of the deal individuals.</li> </ul> </li> <li>• If the methods of handling snakes outlined in subsection 2.3 and 2.4 of the Handling Manuals are not applicable due to a snake's injuries, use a shovel or flat object to pick up the snake, ensuring that injured areas are supported and place in a large plastic bin or bucket with a lid with air holes. Immediately transport the turtle to an MNRF authorized veterinarian or wildlife rehabilitator and contact the MNRF. Contact Information for Authorized Wildlife Rehabilitator can be found in <b>Appendix F</b> and on SAR Information Sheets (<b>Appendix F</b>).</li> <li>• <b>Complete a SAR Encounter Reporting Form included in Contractor Information Package.</b></li> </ul>

7.2.2 Species Specific Mitigation Measures for Turtle Species

Turtles can generally be found associated with large wetlands and shallow lakes with abundant aquatic vegetation. For nesting, turtles prefer moist well drained, loose soils for digging and on a gradual typically south facing slope. Species such as Blanding’s Turtle hibernate underwater in permanent waterbodies. Sensitive timing windows for turtle species includes the nesting period and has been provided in **Table 6**.

When conducting drainage works where there is potential for turtle species to be hibernating, water level **cannot be reduced** as per Paragraph 6 of subsection 13 of Section 23.9 of O.Reg. 242/08.

**Table 6: Restricted Activity Period for Turtle Species**

Month	Jan			Feb			Mar			Apr			May			Jun			Jul			Aug			Sep			Oct			Nov			Dec								
Date Codes <sup>1</sup>	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L			
Hibernation																																										

<sup>1</sup>Monthly intervals: E = Early (days 1-10); M = Middle (days 11-20); L = Late (days 21-31). Adapted from the Seasonal Timing Windows Chart in the MNRF Agreement under Section 23 of O.Reg. 242/08 made under ESA, 2007 (File #: AY-23D-009-10).

In **Table 7** below, the recommended mitigation measures to avoid impacts to turtle species during and outside sensitive timing windows and what to do when encountering turtle nests are provided. Photographs of habitat observed within and adjacent to drains that have the potential to support SAR Turtles, have been included in **Appendix G** (Photographs #5 - 6).

Table 7: Mitigation Measures for Turtle Species

Common Name	Recommended Mitigation Measures to Avoid Impacts to SAR Turtles within the Study Area
Blanding's Turtle	<ul style="list-style-type: none"> <li>• Preconstruction planning that includes review for potential habitat.</li> <li>• During site visit, verify if attributes of regulated habitat occur and delineate where possible.</li> <li>• Establish constraints for activities, where possible, that abide by timing windows and setback distances and avoid regulated habitat features.</li> <li>• Narrow construction footprint if possible.</li> <li>• Flag or fence off environmentally sensitive areas prior to drainage work activity. Bury fencing minimum of 10 – 20cm and vertical height of at least 60 cm.</li> <li>• Complete wildlife sweep within the exclusion/construction area following fence installation to ensure no trapped wildlife.</li> <li>• Staff/workers conducting drainage works should be trained in turtle species identification and procedures if encountered (Review and sign off form in the Contractor Information Package).</li> <li>• One staff member/worker or qualified biologist should be trained in proper turtle handling procedures and protocols outlined in Section 1 of the Ontario Species at Risk Handling Manual: For Endangered Species Act Authorization Holders (provided in the Contractor Information Package). This person should be onsite at all times (when required) for the potential capture, temporary holding, transfer and release of any turtles encountered during construction. A minimum of two holding tubs and cotton sacks should be onsite at all times.</li> <li>• If construction is planned to commence during the turtle nesting period, prior to site preparation a turtle nesting search should be completed to identify turtle nests. If nests are encountered, the MNRF must be consulted immediately. Nests should be relocated to an appropriate facility for incubation with MNRF approval. Contact information for MNRF Authorized Wildlife Rehabilitator can be found in <b>Appendix F</b> and on SAR Information Sheets (<b>Appendix F</b>).</li> <li>• Drainage work activity related to excavation of sediment or disturbance to banks should be avoided during the sensitive timing windows for turtles.</li> <li>• During turtle hibernation periods, water in drains or ditches cannot be reduced.</li> <li>• Prior to commencement of daily activity, the area should be cleared of turtles and turtle nests by a specially trained staff member or qualified biologist.</li> </ul>
Spiny Softshell	<ul style="list-style-type: none"> <li>• Do not disturb a turtle encountered laying eggs and do not conduct activities within 20 m of the turtle while it is laying eggs.</li> <li>• If conducting drainage works during a species sensitive timing window and one or more individuals belonging to a turtle species is encountered: <ul style="list-style-type: none"> <li>○ Trained staff/worker or qualified biologist shall capture and transfer all injured and uninjured individual of that species to a holding tub</li> <li>○ Capture and transfer all individuals injured as a result of the drainage work activity into a holding tub separate from any holding tub containing uninjured individuals</li> <li>○ Ensure that the holding tub with captured individuals is stored at a cool temperature to protect turtles from freezing until the individuals can be retrieved or transferred</li> <li>○ Contact the MNRF immediately to seek advice and arrange for transfer and/or removal</li> </ul> </li> <li>• If a nest is uncovered during construction, immediately stop all activity near the nest. Cover the nest with soil or organic material. Do not drive within 5 m of the nest and contact the MNRF within 24 hours if no eggs or individuals were captured/collected.</li> <li>• Isolate material stockpile areas with fencing.</li> <li>• Any injured captured turtles should be stored outside of direct sunlight and the MNRF should immediately be contacted to seek direction and to arrange for transfer.</li> <li>• Machinery should be inspected each morning (e.g. under vehicles) for presence of turtles.</li> <li>• Uninjured individuals captured during drainage works, are to be released within 1 hour of capture, out of harm's way no more than 125 m of where it was found, unless absolutely necessary. If it is not possible to relocate the turtle within 125 m of the capture location, contact the MNRF for further direction. MNRF may require transport of turtle(s) to MNRF Authorized Rehabilitator or Veterinarian. Contact information can be found in <b>Appendix F</b>.</li> <li>• If the methods of handling turtles outlined in subsection 1.3 of the Handling Protocol are not possible due to a turtle's injuries, use a shovel or flat object to pick up the turtle, ensuring that injured areas are supported and place in a large plastic bin or bucket with a lid with air holes. Immediately transport the turtle to an MNRF authorized veterinarian or wildlife rehabilitator and contact the MNRF. Contact Information for Authorized Wildlife Rehabilitator can be found in <b>Appendix F</b> and on SAR Information Sheets (<b>Appendix F</b>). See subsection 1.7 of the Handling Manual (included in the Contractor Information Package) for more details.</li> <li>• <b>Complete a SAR Encounter Reporting Form included in the Contractor Information Package.</b></li> </ul>



## APPENDIX "REI-C"





# STANDARD SPECIFICATIONS FOR ACCESS BRIDGE CONSTRUCTION

## 1. PRECAST CONCRETE BLOCK & CONCRETE FILLED JUTE BAG HEADWALLS

After the Contractor has set the endwall foundations and the new pipe in place, it shall completely backfill same and install new precast concrete blocks or concrete filled jute bag headwalls at the locations and parameters indicated on the drawing. All concrete used for headwalls shall be a minimum of 30 mPa at 28 days and include 6% +/- 1% air entrainment.

Precast concrete blocks shall be interlocking and have a minimum size of 600mmX600mmX1200mm. Half blocks shall be used to offset vertical joints. Cap blocks shall be a minimum of 300mm thick. A foundation comprising minimum 300mm thick poured concrete or precast blocks the depth of the wall and the full bottom width of the drain plus 450mm embedment into each drain bank shall be provided and placed on a firm foundation as noted below. The Contractor shall provide a levelling course comprising a minimum thickness of 150mm Granular "A" compacted to 100% Standard Proctor Density or 20mm clear stone, or a lean concrete as the base for the foundation. The base shall be constructed level and flat to improve the speed of installation. Equipment shall be provided as required and recommended by the block supplier for placing the blocks such as a swift lift device for the blocks and a 75mm eye bolt to place the concrete caps,. The headwall shall extend a minimum of 150mm below the invert of the access bridge culvert with the top of the headwall set to match the finished driveway grade, unless a 150mm high curb is specified at the edge of the driveway. To achieve the required top elevation, the bottom course of blocks and footing may require additional embedment into the drain bottom. The Contractor shall provide shop drawings of the proposed wall for approval by the Drainage Superintendent or Engineer prior to construction.

Blocks shall be placed so that all vertical joints are staggered. Excavation voids on the ends of each block course shall be backfilled with 20mm clear stone to support the next course of blocks above. Walls that are more than 3 courses in height shall be battered a minimum of 1 unit horizontal for every 5 units of vertical height. The batter shall be achieved by careful grading of the footing and foundation base, or use of pre-battered base course blocks. Filter cloth as specified below shall be placed behind the blocks to prevent the migration of any fill material through the joints. Backfill material shall be granular as specified below. Where the wall height exceeds 1.8 metres in height, a uni-axial geogrid SG350 or equivalent shall be used to tie back the walls and be installed in accordance with the manufacturer's recommendations. The wall face shall not extend beyond the end of the access bridge pipe. Non-shrink grout shall be used to fill any gaps between the blocks and the access bridge pipe for the full depth of the wall. The grout face shall be finished to match the precast concrete block walls as closely as possible.

When constructing the concrete filled jute bag headwalls, the Contractor shall place the bags so that the completed headwall will have a slope inward from the bottom of the pipe to the top of the finished headwall. The slope of the headwall shall be one unit horizontal to five units vertical. The Contractor shall completely backfill behind the new concrete filled jute bag headwalls with Granular "B" and Granular "A" material as per O.P.S.S. Form 1010 and the granular material shall be compacted in place to a Standard Proctor Density of 100%. The placing of the jute bag headwalls and the backfilling shall be performed in lifts simultaneously. The granular backfill shall be placed and compacted in lifts not to exceed 305mm (12") in thickness.

The concrete filled jute bag headwalls shall be constructed by filling jute bags with concrete. All concrete used to fill the jute bags shall have a minimum compressive strength of 25 MPa in 28 days and shall be provided and placed only as a wet mix. Under no circumstance shall the concrete to be used for filling the jute bags be placed as a dry mix. The jute bags, before being filled with concrete, shall have a dimension of 460mm (18") x 660mm (26"). The jute bags shall be filled with concrete so that when they are laid flat, they will be approximately 100mm (4") thick, 305mm (12") to 380mm (15") wide and 460mm (18") long.

The concrete jute bag headwall to be provided at the end of the bridge pipe shall be a single or double bag wall construction as set out in the specifications. The concrete filled bags shall be laid so that the 460mm (18") dimension is parallel with the length of the new pipe. The concrete filled jute bags shall be laid on a footing of plain concrete being 460mm (18") wide, and extending for the full length of the wall, and 305mm (12") thick extending below the bottom of the culvert pipe.

All concrete used for the footing, cap and bags shall have a minimum compressive strength of 30 mPa at 28 days and shall include 6% ± 1% air entrainment.

Upon completion of the jute bag headwall the Contractor shall cap the top row of concrete filled bags with a layer of plain concrete, minimum 100mm (4") thick, and hand trowelled to obtain a pleasing appearance. If the cap is made more than 100mm thick, the Contractor shall provide two (2) continuous 15M reinforcing bars set at mid-depth and equally spaced in

the cap. The Contractor shall fill all voids between the concrete filled jute bags and the corrugated steel pipe with concrete, particular care being taken underneath the pipe haunches to fill all voids.

The completed jute bag headwalls shall be securely embedded into the drain bank a minimum of 450mm (18") measured perpendicular to the sideslopes of the drain.

As an alternate to constructing a concrete filled jute bag headwall, the Contractor may construct a grouted concrete rip rap headwall. The specifications for the installation of a concrete filled jute bag headwall shall be followed with the exception that broken pieces of concrete may be substituted for the jute bags. The concrete rip rap shall be approximately 460mm (18") square and 100mm (4") thick and shall have two (2) flat parallel sides. The concrete rip rap shall be fully mortared in place using a mixture composed of three (3) parts of clean sharp sand and one (1) part of Portland cement.

The complete placement and backfilling of the headwalls shall be performed to the full satisfaction of the Drainage Superintendent and the Engineer.

## **2. QUARRIED LIMESTONE ENDWALLS**

The backfill over the ends of the corrugated steel pipe shall be set on a slope of 1-½ units horizontal to 1 unit vertical from the bottom of the corrugated steel pipe to the top of each end slope and between the drain banks. The top 305mm (12") in thickness of the backfill over the ends of the corrugated steel pipe shall be quarried limestone. The quarried limestone shall also be placed on a slope of 1-½ units horizontal to 1 unit vertical from the bottom of the corrugated steel pipe to the top of each bank of the drain adjacent each end slope. The quarried limestone shall have a minimum dimension of 100mm (4") and a maximum dimension of 250mm (10"). The end slope protection shall be placed with the quarried limestone pieces carefully tamped into place with the use of a shovel bucket so that, when complete, the end protection shall be consistent, uniform, and tightly laid in place.

Prior to placing the quarried limestone end protection over the granular backfill and on the drain banks, the Contractor shall lay non-woven geotextile filter fabric "GMN160" conforming to O.P.S.S. 1860 Class I or approved equal. The geotextile filter fabric shall extend from the bottom of the corrugated steel pipe to the top of each end slope of the bridge and along both banks of the drain to a point opposite the ends of the pipe.

The Contractor shall take extreme care not to damage the geotextile filter fabric when placing the quarried limestone on top of the filter fabric.

## **3. BRIDGE BACKFILL**

After the corrugated steel pipe has been set in place, the Contractor shall backfill the pipe with Granular "B" material, O.P.S.S. Form 1010 with the exception of the top 305mm (12") of the backfill. The top 305mm (12") of the backfill for the full width of the excavated area (between each bank of the drain) and for the top width of the driveway, shall be Granular "A" material, O.P.S.S. Form 1010. The granular backfill shall be compacted in place to a Standard Proctor Density of 100% by means of mechanical compactors. All of the backfill material, equipment used, and method of compacting the backfill material shall be inspected and approved and meet with the full satisfaction of the Drainage Superintendent and Engineer.

## **4. GENERAL**

Prior to the work commencing, the Drainage Superintendent and Engineer must be notified, and under no circumstances shall work begin without one of them being at the site. Furthermore, the grade setting of the pipe must be checked, confirmed, and approved by the Drainage Superintendent or Engineer prior to continuing on with the bridge installation.

The alignment of the new bridge culvert pipe shall be in the centreline of the existing drain, and the placing of same must be performed totally in the dry.

Prior to the installation of the new access bridge culvert, the existing sediment build-up in the drain bottom must be excavated and completely removed. This must be done not only along the drain where the bridge culvert pipe is to be installed, but also for a distance of 3.05 metres (10 ft.) both upstream and downstream of said new access bridge culvert. When setting the new bridge culvert pipe in place it must be founded on a good undisturbed base. If unsound soil is encountered, it must be totally removed and replaced with 20mm (3/4") clear stone, satisfactorily compacted in place.

When doing the excavation work or any other portion of the work relative to the bridge installation, care should be taken not to interfere with, plug up, or damage any existing surface drains, swales, and lateral or main tile ends. Where damage is encountered, repairs to correct same must be performed immediately as part of the work.

The Contractor and/or landowner performing the bridge installation shall satisfy themselves as to the exact location, nature and extent of any existing structure, utility or other object that they may encounter during the course of the work. The Contractor shall indemnify and save harmless the Town, or the Municipality, the Engineer, and their staff from any damages which it may cause or sustain during the progress of the work. It shall not hold them liable for any legal action arising out of any claims brought about by such damage caused by it.

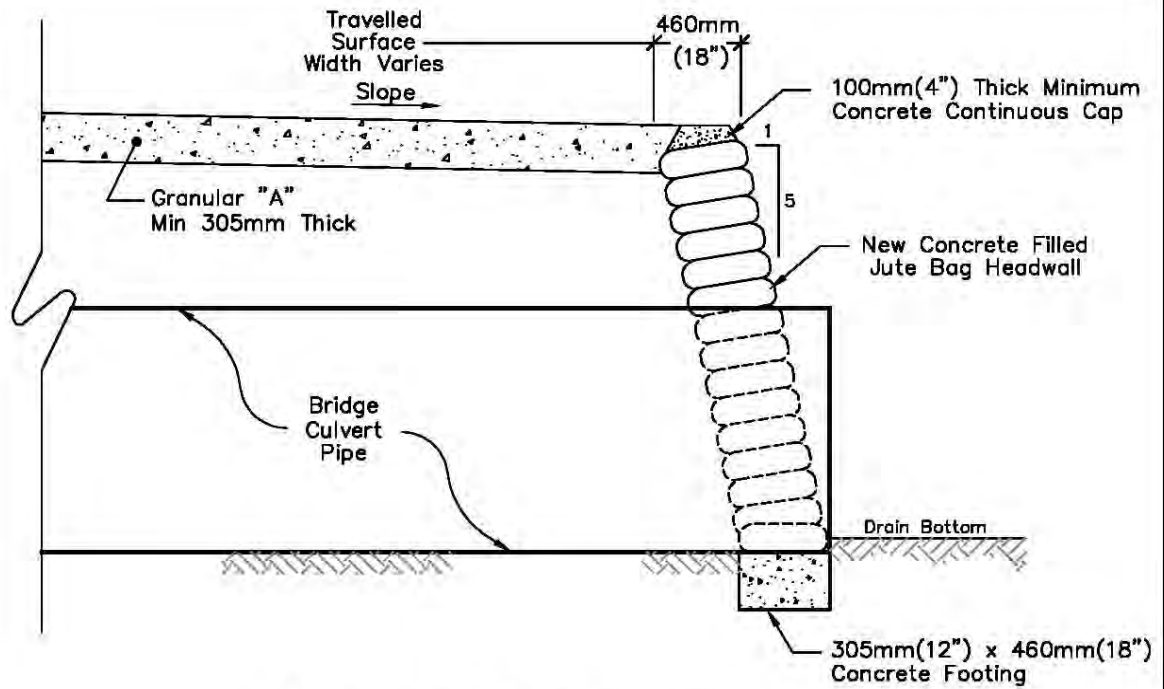
Where applicable, the Contractor and/or landowner constructing the new bridge shall be responsible for any damage caused by them to any portion of the Town road right-of-way. They shall take whatever precautions are necessary to cause a minimum of damage to same and must restore the roadway to its original condition upon completion of the works.

When working along a municipal roadway, the Contractor shall provide all necessary lights, signs, barricades and flagpersons as required to protect the public. All work shall be carried out in accordance with the requirements of the Occupational Health and Safety Act, and latest amendments thereto. If traffic control is required on this project, it is to comply with the M.T.O. Traffic Control Manual for Roadway Work Operations and Ontario Traffic Manual Book 7.

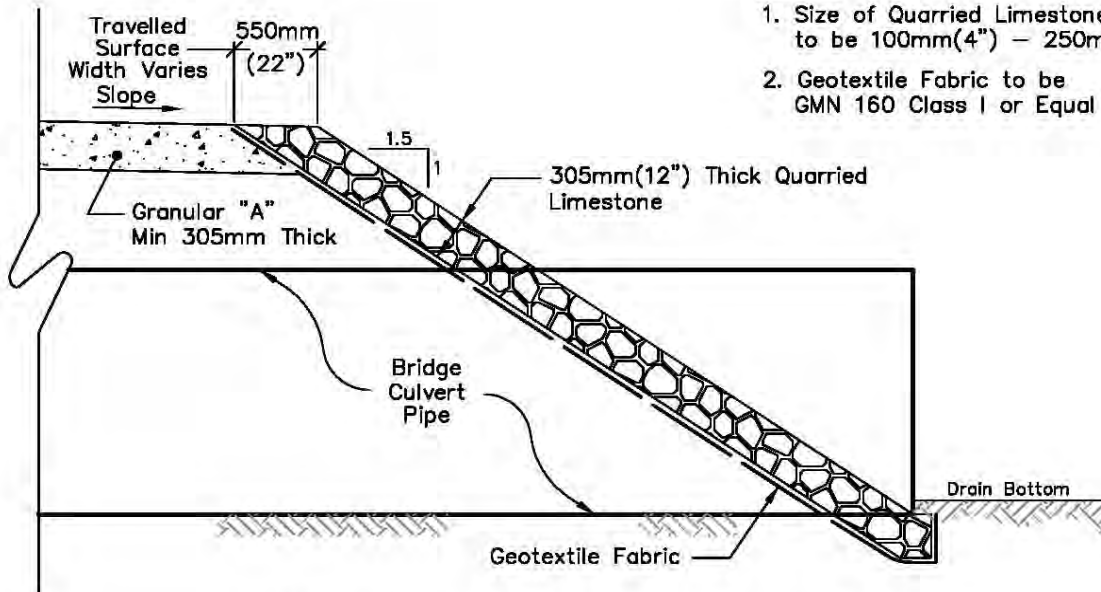
Once the bridge installation has been completed, the drain sideslopes directly adjacent the new headwalls and/or endwalls are to be completely restored including revegetation, where necessary.

All of the work required towards the installation of the bridge shall be performed in a neat and workmanlike manner. The general site shall be restored to its' original condition, and the general area shall be cleaned of all debris and junk, etc. caused by the work

All of the excavation, installation procedures, and parameters as above mentioned are to be carried out and performed to the full satisfaction of the Drainage Superintendent and Engineer.



**Typical Jute Bag Headwall**

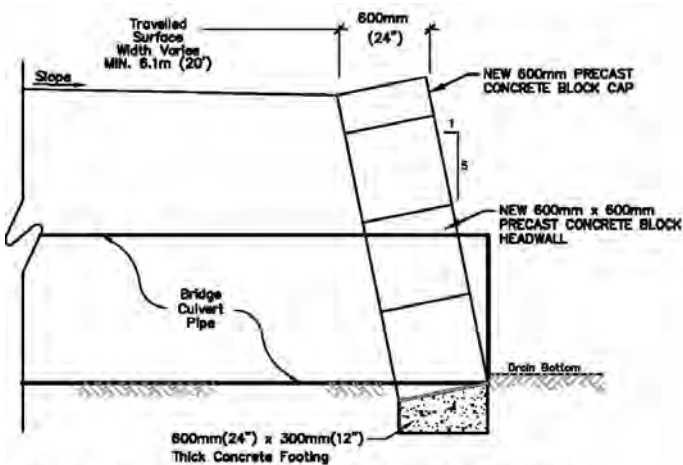
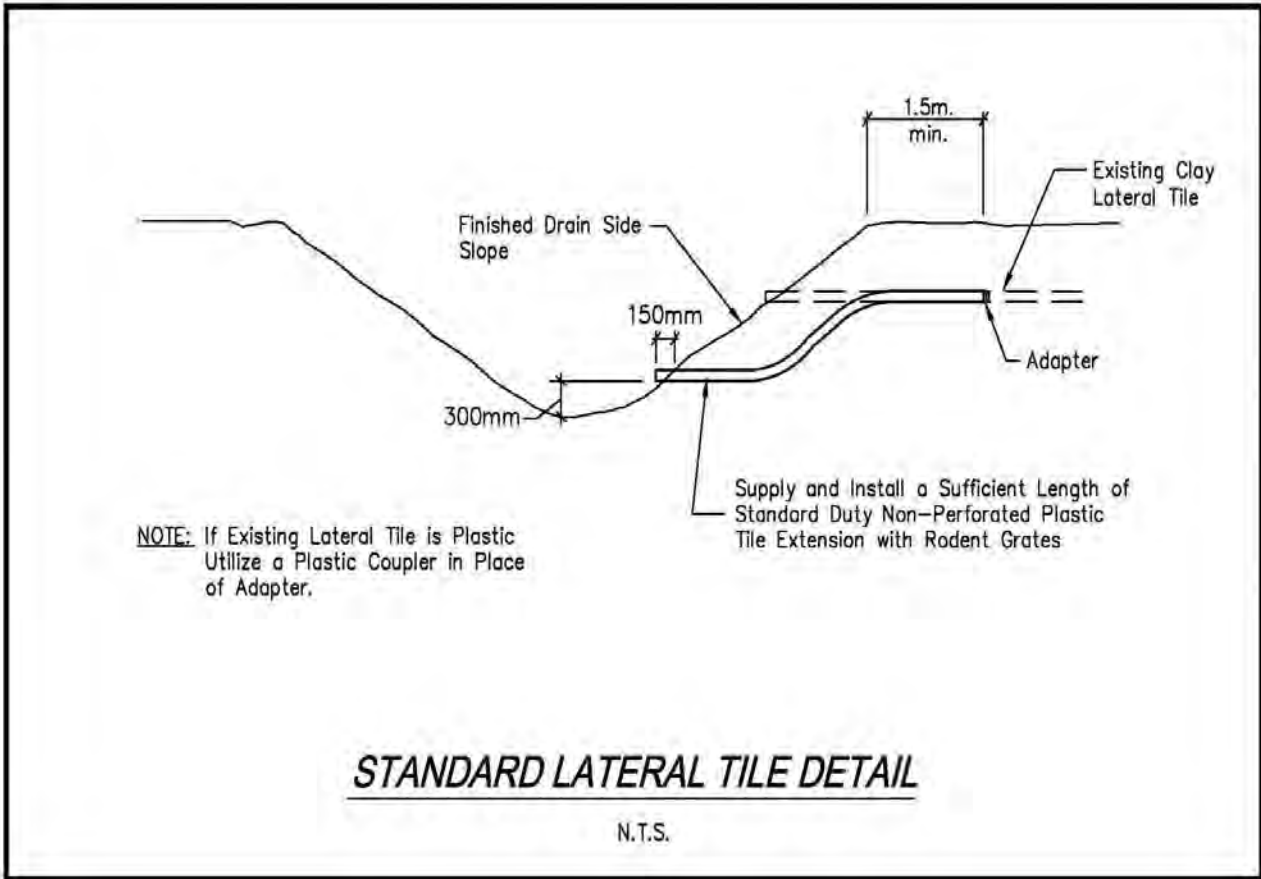


**NOTE:**

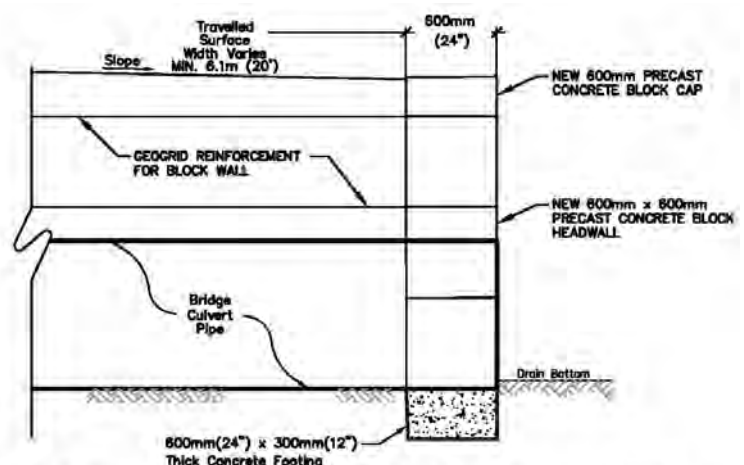
1. Size of Quarried Limestone to be 100mm(4") – 250mm(10")
2. Geotextile Fabric to be GMN 160 Class I or Equal

**Typical Quarried Limestone End Protection**

***Rood Engineering Inc.***  
**Consulting Engineers**  
 9 Nelson Street  
 Leamington, Ontario N8H 1G6  
 519-322-1621



**TYPICAL PRECAST CONCRETE BLOCK END PROTECTION**  
Scale = N.T.S.



**TYPICAL VERTICAL PRECAST CONCRETE BLOCK END PROTECTION**  
Scale = N.T.S.



## APPENDIX "REI-D"

Appendix D – General Conditions and Specifications not required.



## APPENDIX "REI-E"



WATERSHED PLAN, PROFILES, SECTIONS, BRIDGE PLANS, AND DRAIN REALIGNMENT PLAN

FOR THE

# CHAPPUS DRAIN REPAIR & IMPROVEMENTS, AND DRAIN REALIGNMENT

(Geographic Township of Sandwich West)

IN THE

TOWN OF LASALLE

IN THE

COUNTY OF ESSEX • ONTARIO

*Gerard Rood*  
GERARD ROOD, P.ENG.



**ROOD  
ENGINEERING  
INC.**

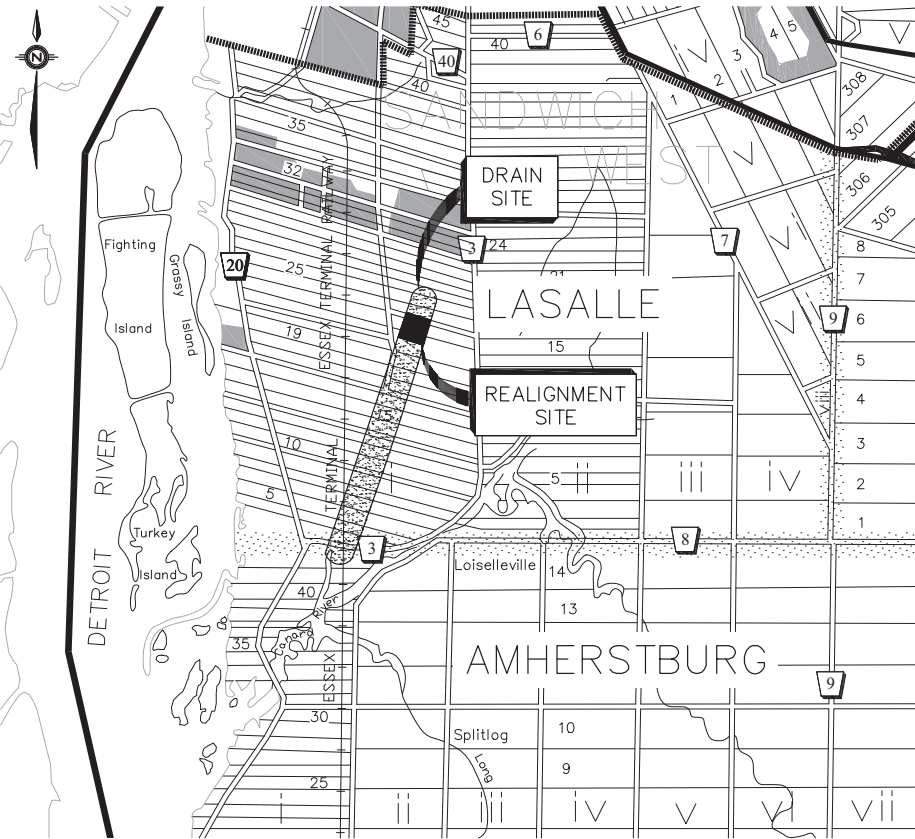
DATE: April 18th, 2023

TOWN OF LASALLE

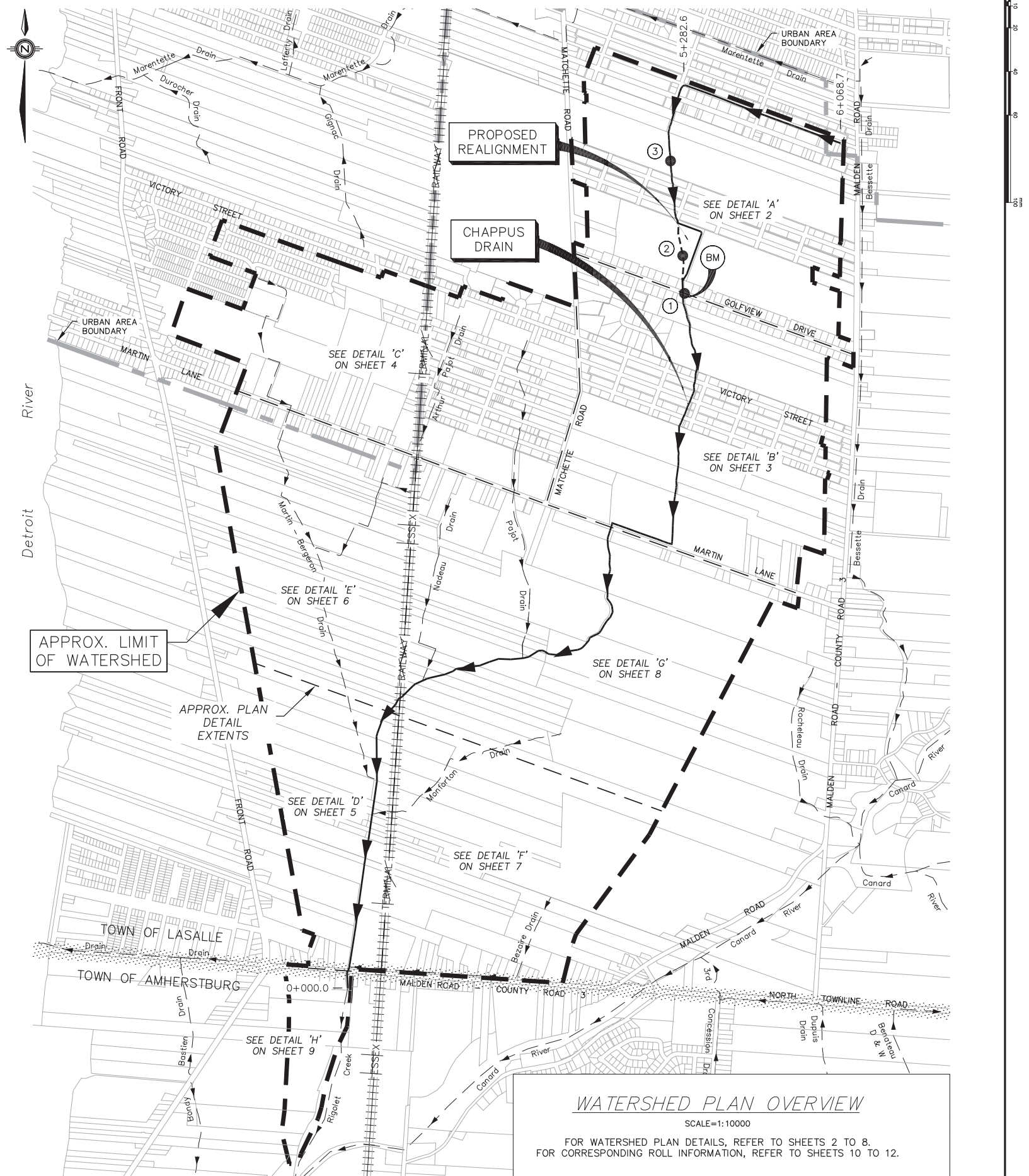
MAYOR: Crystal Meloche  
CLERK: Jennifer Astrolago  
DRAINAGE SUPERINTENDENT: Michael Cappucci, P.Eng.

BENCHMARK:

TOP NUT OF FIRE HYDRANT AT 1465 GOLFVIEW DRIVE.  
ELEV: 178.202m



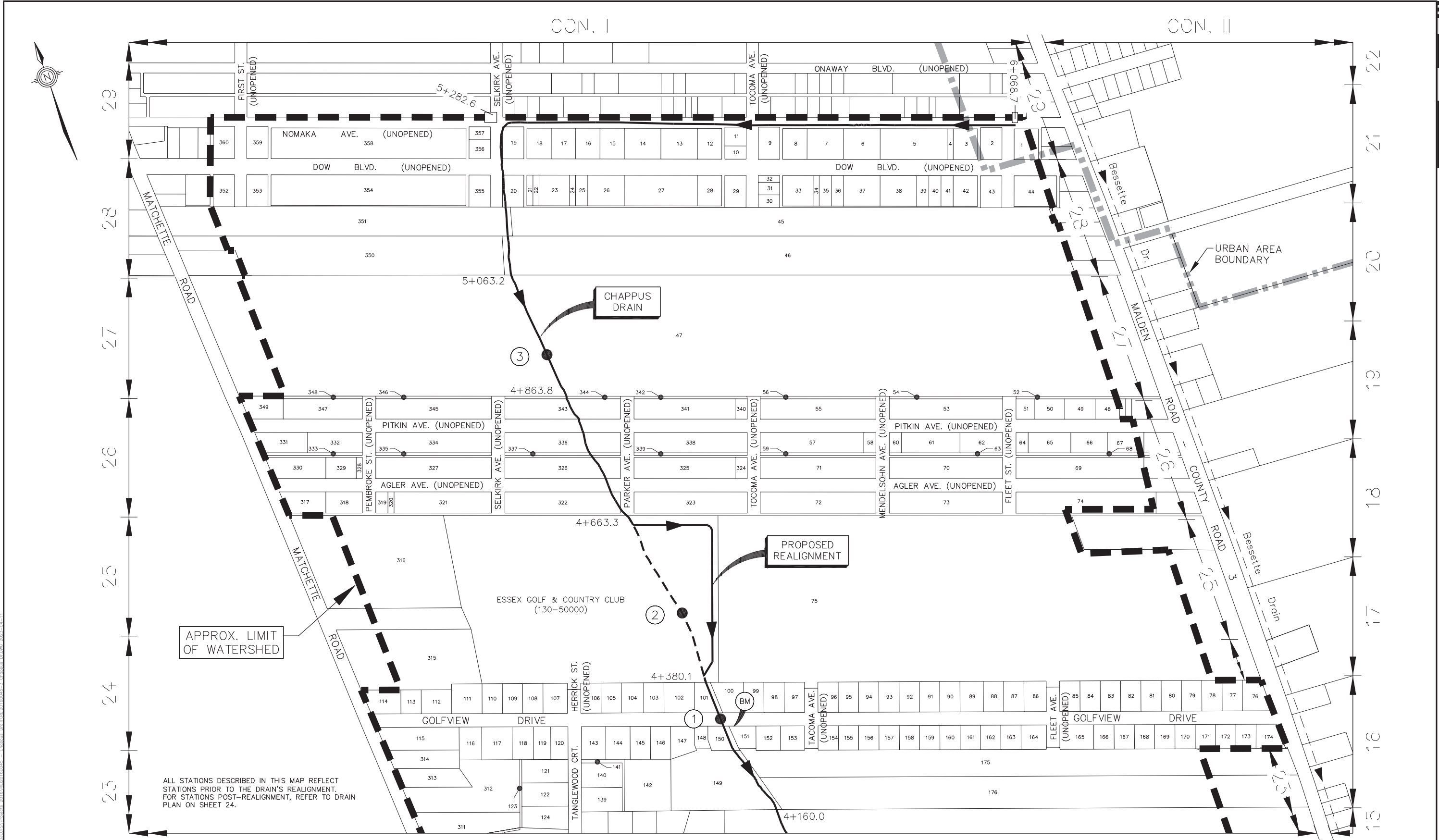
KEY MAP  
SCALE=1:50000



WATERSHED PLAN OVERVIEW  
SCALE=1:10000  
FOR WATERSHED PLAN DETAILS, REFER TO SHEETS 2 TO 8.  
FOR CORRESPONDING ROLL INFORMATION, REFER TO SHEETS 10 TO 12.

THESE PLANS HAVE BEEN REDUCED AND THE SCALE THEREFORE VARIES. FULL SCALE PLANS MAY BE VIEWED AT THE MUNICIPAL OFFICE.

DRAWN BY: L.V. & S.H.  
PLOT CODE: 1:1  
COMPUTER FILE: REI2016D045.DWG  
FILE No.: SHEET No.:  
REI2016D045 1 of 24



ALL STATIONS DESCRIBED IN THIS MAP REFLECT STATIONS PRIOR TO THE DRAIN'S REALIGNMENT. FOR STATIONS POST-REALIGNMENT, REFER TO DRAIN PLAN ON SHEET 24.

\*WATERSHED PLAN DETAILS 'A' & 'B' COMBINE TO SHOW PARCEL ID NUMBERS 1 TO 360.  
 FOR WATERSHED PLAN OVERVIEW, REFER TO SHEET 1.  
 FOR CORRESPONDING ROLL INFORMATION, REFER TO SHEETS 10 TO 12.

WATERSHED PLAN DETAIL 'A' - PARCEL ID NUMBERS 1 TO 360\*

SCALE=1:2500

THESE PLANS HAVE BEEN REDUCED AND THE SCALE THEREFORE VARIES. FULL SCALE PLANS MAY BE VIEWED AT THE MUNICIPAL OFFICE.

DRAWN BY: L.V. & S.H.  
 PLOT CODE: 1:1  
 COMPUTER FILE: REI2016D045.DWG  
 FILE No.: REI2016D045 SHEET No.: 2 of 24



CON. I

CON. II

CON. I

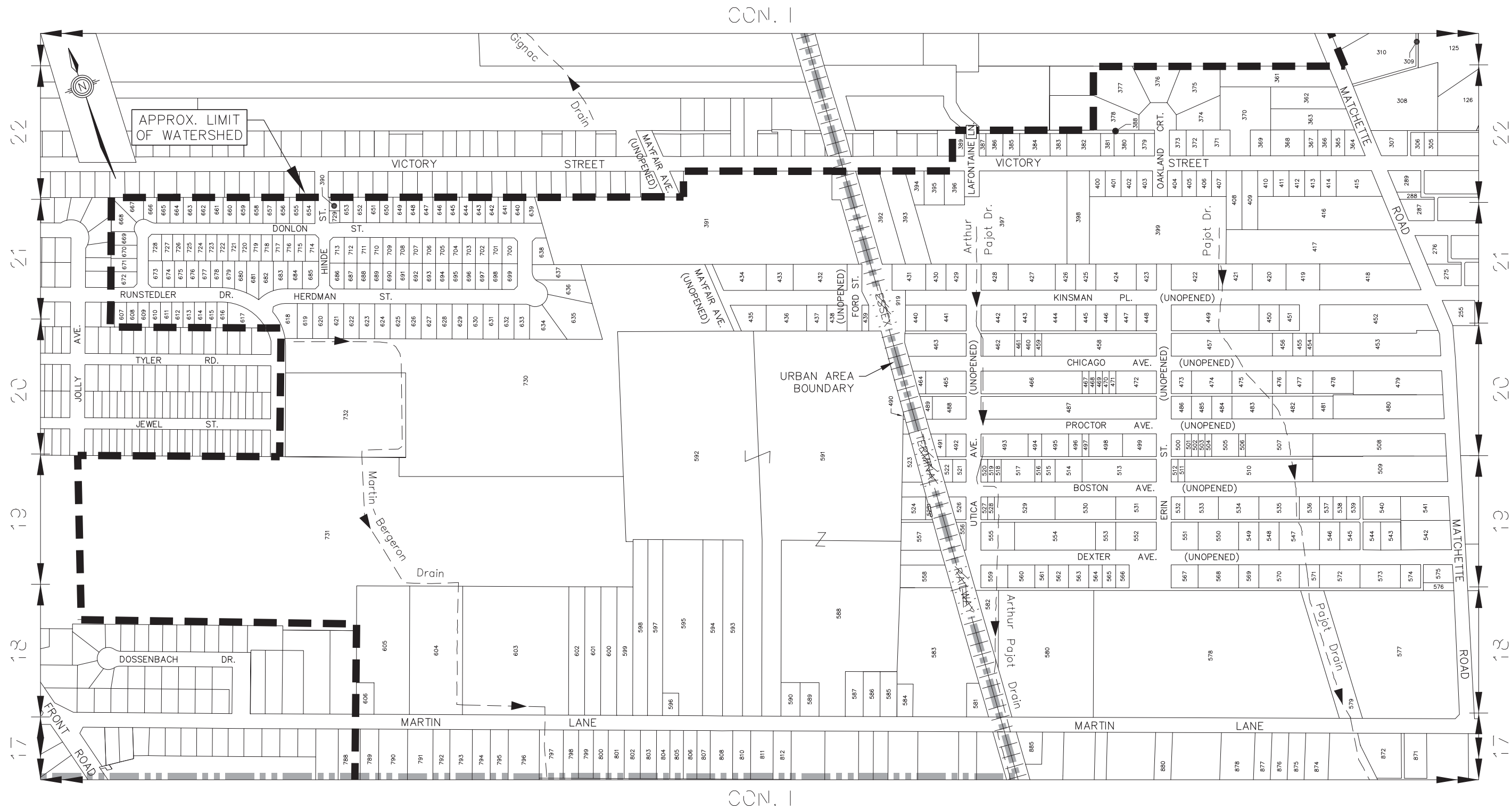
\*WATERSHED PLAN DETAILS 'A' & 'B' COMBINE TO SHOW PARCEL ID NUMBERS 1 TO 360.  
 FOR WATERSHED PLAN OVERVIEW, REFER TO SHEET 1.  
 FOR CORRESPONDING ROLL INFORMATION, REFER TO SHEETS 10 TO 12.

*WATERSHED PLAN DETAIL 'B' - PARCEL ID NUMBERS 1 TO 360\**

SCALE=1:2500

THESE PLANS HAVE BEEN REDUCED  
 AND THE SCALE THEREFORE VARIES.  
 FULL SCALE PLANS MAY BE VIEWED  
 AT THE MUNICIPAL OFFICE.

DRAWN BY: L.V. & S.H.  
 PLOT CODE: 1:1  
 COMPUTER FILE: REI2016D045.DWG  
 FILE No.: REI2016D045 SHEET No.: 3 of 24



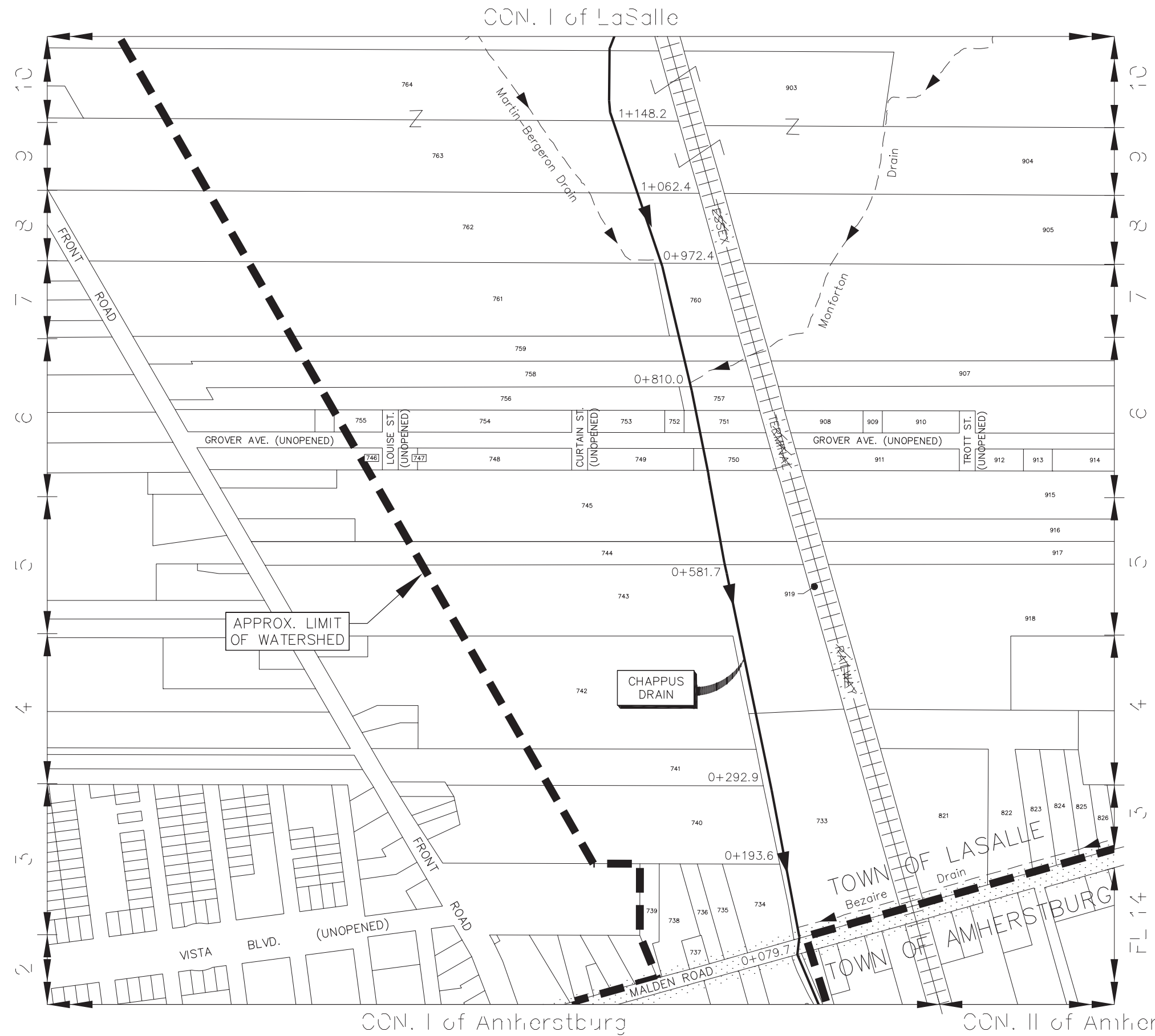
WATERSHED PLAN DETAIL 'C' - PARCEL ID NUMBERS 361 TO 732

SCALE=1:2500

FOR WATERSHED PLAN OVERVIEW, REFER TO SHEET 1.  
FOR CORRESPONDING ROLL INFORMATION, REFER TO SHEETS 10 TO 12.

THESE PLANS HAVE BEEN REDUCED  
AND THE SCALE THEREFORE VARIES.  
FULL SCALE PLANS MAY BE VIEWED  
AT THE MUNICIPAL OFFICE.

DRAWN BY: L.V. & S.H.  
PLOT CODE: 1:1  
COMPUTER FILE: REI2016D045.DWG  
FILE No.: REI2016D045  
SHEET No.: 4 of 24



APPROX. LIMIT OF WATERSHED

CHAPPUS DRAIN

WATERSHED PLAN DETAIL 'D' - PARCEL ID NUMBERS 733 TO 764

SCALE=1:2500

FOR WATERSHED PLAN OVERVIEW, REFER TO SHEET 1.  
FOR CORRESPONDING ROLL INFORMATION, REFER TO SHEETS 10 TO 12.

THESE PLANS HAVE BEEN REDUCED AND THE SCALE THEREFORE VARIES. FULL SCALE PLANS MAY BE VIEWED AT THE MUNICIPAL OFFICE.

DRAWN BY: L.V. & S.H.	
PLOT CODE: 1:1	
COMPUTER FILE: REI2016D045.DWG	
FILE No.:	SHEET No.:
REI2016D045	5 of 24

CON. I



CON. I

WATERSHED PLAN DETAIL 'E' - PARCEL ID NUMBERS 765 TO 820

SCALE=1:2500

FOR WATERSHED PLAN OVERVIEW, REFER TO SHEET 1.  
FOR CORRESPONDING ROLL INFORMATION, REFER TO SHEETS 10 TO 12.

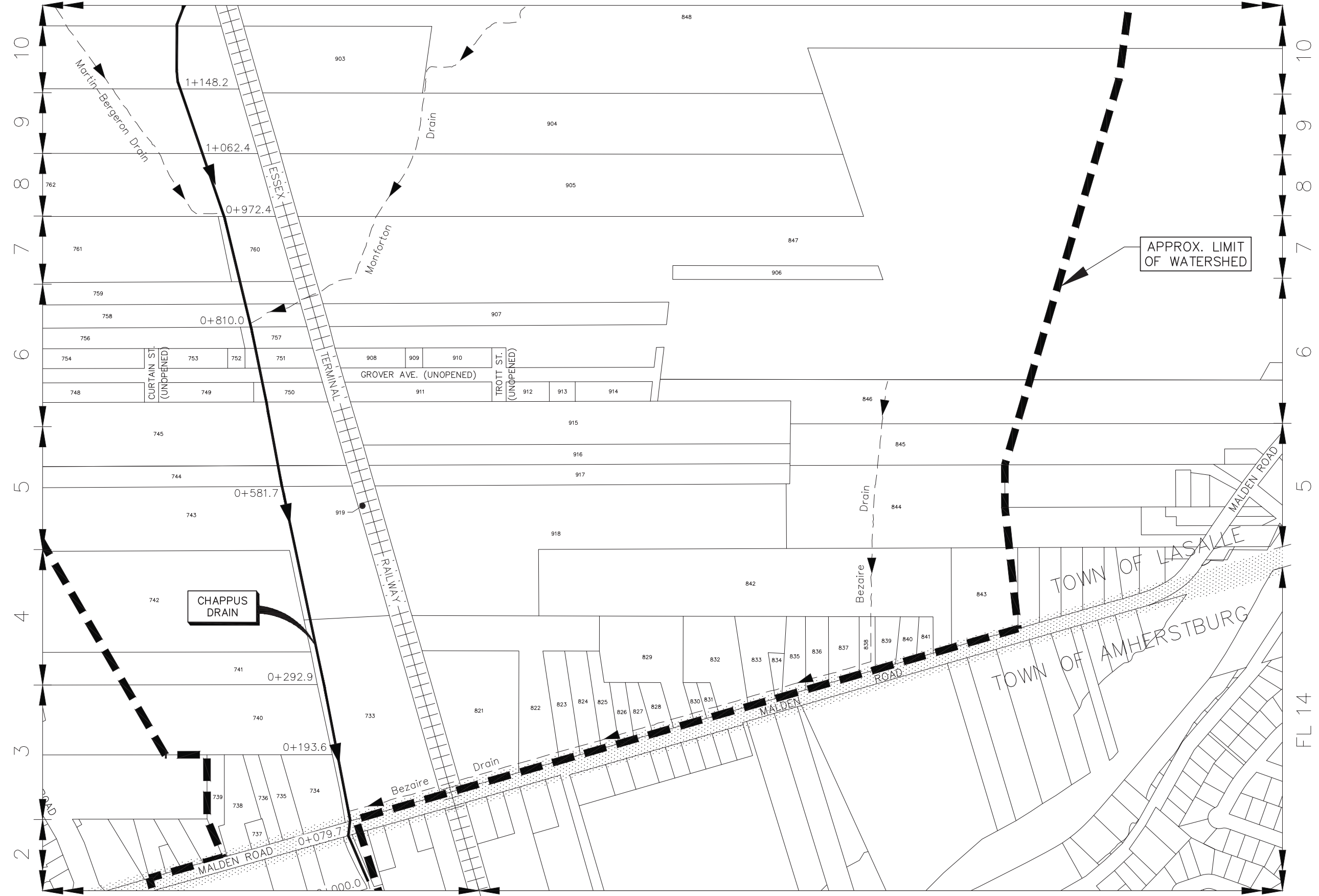
THESE PLANS HAVE BEEN REDUCED  
AND THE SCALE THEREFORE VARIES.  
FULL SCALE PLANS MAY BE VIEWED  
AT THE MUNICIPAL OFFICE.

DRAWN BY: L.V. & S.H.	
PLOT CODE: 1:1	
COMPUTER FILE: REI2016D045.DWG	
FILE No.:	SHEET No.:
REI2016D045	6 of 24

C:\Users\lvaugh\OneDrive\Documents\REI2016D045 - Chappus - Data\REI2016D045-2.dwg, 2021-07-27



CON. I of LaSalle



\*WATERSHED PLAN DETAILS 'F' & 'G' COMBINE TO SHOW PARCEL ID NUMBERS 821 TO 919.

FOR WATERSHED PLAN OVERVIEW, REFER TO SHEET 1.  
FOR CORRESPONDING ROLL INFORMATION, REFER TO SHEETS 10 TO 12.

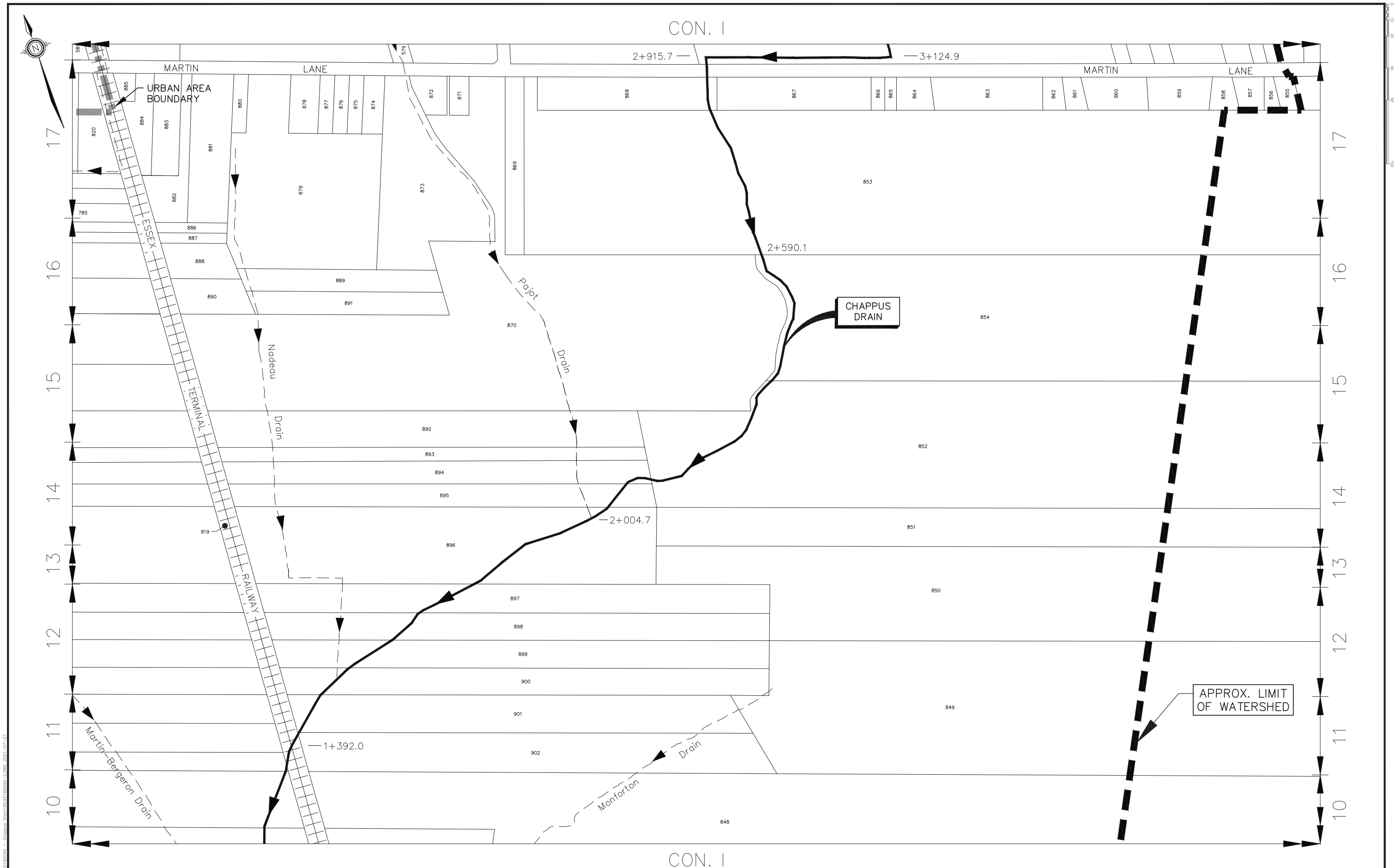
WATERSHED PLAN DETAIL 'F' - PARCEL ID NUMBERS 821 TO 919\*

SCALE=1:2500

THESE PLANS HAVE BEEN REDUCED  
AND THE SCALE THEREFORE VARIES.  
FULL SCALE PLANS MAY BE VIEWED  
AT THE MUNICIPAL OFFICE.

DRAWN BY: L.V. & S.H.	
PLOT CODE: 1:1	
COMPUTER FILE: REI2016D045.DWG	
FILE No.: REI2016D045	SHEET No.: 7 of 24

C:\Users\lva\OneDrive\Documents\REI2016D045.dwg - Chappus - Data\REI2016D045-2.dwg, 2021-07-27



\*WATERSHED PLAN DETAILS 'F' & 'G' COMBINE TO SHOW PARCEL ID NUMBERS 821 TO 919.

FOR WATERSHED PLAN OVERVIEW, REFER TO SHEET 1.  
FOR CORRESPONDING ROLL INFORMATION, REFER TO SHEETS 10 TO 12.

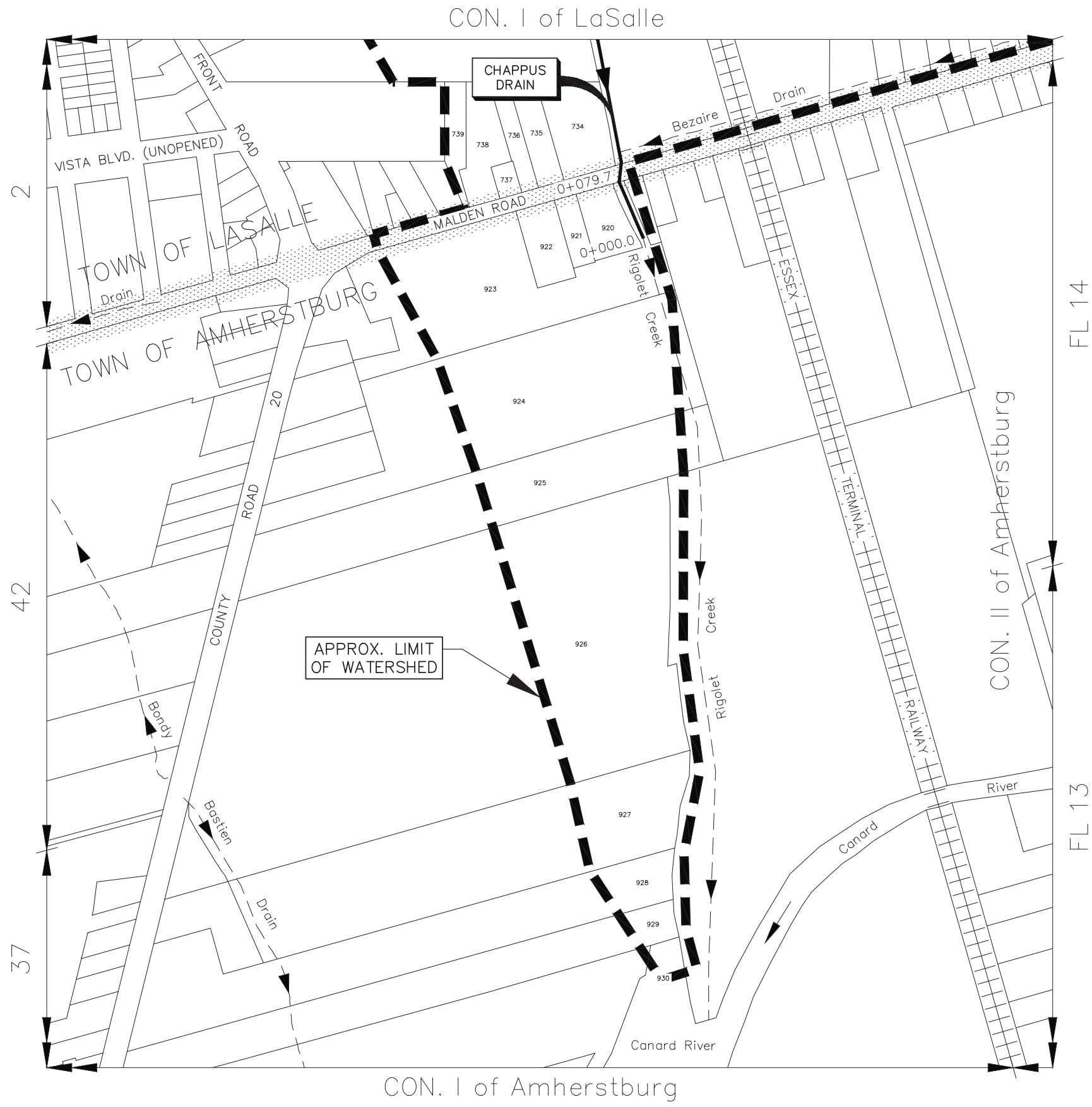
WATERSHED PLAN DETAIL 'G' - PARCEL ID NUMBERS 821 TO 919\*

SCALE=1:2500

THESE PLANS HAVE BEEN REDUCED  
AND THE SCALE THEREFORE VARIES.  
FULL SCALE PLANS MAY BE VIEWED  
AT THE MUNICIPAL OFFICE.

DRAWN BY: L.V. & S.H.  
PLOT CODE: 1-1  
COMPUTER FILE: REI2016D045.DWG  
FILE No.: REI2016D045 SHEET No.: 8 of 24

C:\Users\lvaugh\OneDrive\Documents\Drawings\REI2016D045-2.dwg, 2021-07-27



WATERSHED PLAN DETAIL 'H' - PARCEL ID NUMBERS 920 TO 930

SCALE=1:2500

FOR WATERSHED PLAN OVERVIEW, REFER TO SHEET 1.  
FOR CORRESPONDING ROLL INFORMATION, REFER TO SHEETS 10 TO 12.

THESE PLANS HAVE BEEN REDUCED  
AND THE SCALE THEREFORE VARIES.  
FULL SCALE PLANS MAY BE VIEWED  
AT THE MUNICIPAL OFFICE.

DRAWN BY: L.V. & S.H.	
PLOT CODE: 1:1	
COMPUTER FILE: REI2016D045.DWG	
FILE No.:	SHEET No.:
REI2016D045	9 of 24

C:\Users\lvaugh\OneDrive\Documents\REI2016D045 - Chappus - Data\REI2016D045-2.dwg, 2021-07-27

ROLL INFORMATION:

TOWN OF LASALLE

1. (130-15500)	41. (130-19450) (V)	81. (130-24500) M.N. 1740	121. (130-28800) M.N. 1255	161. (130-32800) M.N. 1575	201. (130-37700) (V)	241. (130-42100) M.N. 8075	281. (130-46900) (V)	321. (130-50500) (V)
2. (130-15600) (V)	42. (130-19500) (V)	82. (130-24600) M.N. 1730	122. (130-28900) M.N. 1265	162. (130-32900) M.N. 1665	202. (130-37800) (V)	242. (130-42200) M.N. 8095	282. (130-47000) (V)	322. (130-50600) (V)
3. (130-15700) (V)	43. (130-19600) (V)	83. (130-24700) M.N. 1720	123. (130-29000)	163. (130-33000) M.N. 1675	203. (130-37900) (V)	243. (130-42800) M.N. 8185	283. (130-47100) (V)	323. (130-50700) (V)
4. (130-15800) (V)	44. (130-19700)	84. (130-24800) M.N. 1710	124. (130-29100) M.N. 1275	164. (130-33100) M.N. 1685	204. (130-38000) (V)	244. (130-44100) M.N. 1085	284. (130-47200) (V)	324. (130-50800) (V)
5. (130-16000) (V)	45. (130-20100)	85. (130-24900) M.N. 1700	125. (130-29200) M.N. 1285	165. (130-33300) M.N. 1705	205. (130-38010) (V)	245. (130-44200) M.N. 1073	285. (130-47300) (V)	325. (130-50900) (V)
6. (130-16100) (V)	46. (130-20200) M.N. 7235	86. (130-25100) M.N. 1690	126. (130-29300) M.N. 1295	166. (130-33400) M.N. 1725	206. (130-38100) (V)	246. (130-44300) M.N. 1069	286. (130-47400) (V)	326. (130-51000) (V)
7. (130-16200) (V)	47. (130-20400)	87. (130-25200) M.N. 1680	127. (130-29400) M.N. 1305	167. (130-33500) M.N. 1735	207. (130-38200) (V)	247. (130-44400) M.N. 1055	287. (130-47500) (V)	327. (130-51100) (V)
8. (130-16300) (V)	48. (130-20750) (V)	88. (130-25300) M.N. 1670	128. (130-29500) M.N. 1315	168. (130-33600) M.N. 1745	208. (130-38300) (V)	248. (130-44500) M.N. 1049	288. (130-47600) (V)	328. (130-51200) (V)
9. (130-16400) (V)	49. (130-20800) (V)	89. (130-25400) M.N. 1580	129. (130-29600) M.N. 1325	169. (130-33700) M.N. 1755	209. (130-38400) (V)	249. (130-44600) M.N. 1037	289. (130-47700) M.N. 7810	329. (130-51300) (V)
10. (130-16500) (V)	50. (130-20850) (V)	90. (130-25500) M.N. 1570	130. (130-29700) M.N. 1335	170. (130-33800) M.N. 1765	210. (130-38500) (V)	250. (130-44700) M.N. 1025	290. (130-47800) (V)	330. (130-51500) M.N. 7380
11. (130-16600) (V)	51. (130-20900) (V)	91. (130-25600) M.N. 1560	131. (130-29800) M.N. 1345	171. (130-33900) M.N. 1775	211. (130-38600) (V)	251. (130-44800)	291. (130-47900) (V)	331. (130-51600) M.N. 7350
12. (130-16700) (V)	52. (130-21000) (V)	92. (130-25700) M.N. 1550	132. (130-29900) M.N. 1355	172. (130-34000) M.N. 1785	212. (130-38700) (V)	252. (130-44900) M.N. 8200	292. (130-48000) (V)	332. (130-51700) (V)
13. (130-16800) (V)	53. (130-21100) (V)	93. (130-25800) M.N. 1540	133. (130-30000) M.N. 1350	173. (130-34100) M.N. 1795	213. (130-38800) (V)	253. (130-45000)	293. (130-48100) (V)	333. (130-51800) (V)
14. (130-16900) (V)	54. (130-21200) (V)	94. (130-25900) M.N. 1530	134. (130-30100) M.N. 1340	174. (130-34200) M.N. 1799	214. (130-38900) (V)	254. (130-45100)	294. (130-48200) (V)	334. (130-51900) (V)
15. (130-17000) (V)	55. (130-21300) (V)	95. (130-26000) M.N. 1520	135. (130-30200) M.N. 1330	175. (130-34300) M.N. 7705	215. (130-39400) (V)	255. (130-45200) (V)	295. (130-48300) (V)	335. (130-52000) (V)
16. (130-17100) (V)	56. (130-21400) (V)	96. (130-26100) M.N. 1500	136. (130-30300) M.N. 1320	176. (130-34400)	216. (130-39500) (V)	256. (130-45300) (V)	296. (130-48400) (V)	336. (130-52100) (V)
17. (130-17200) (V)	57. (130-21500) (V)	97. (130-26300) M.N. 1490	137. (130-30400) M.N. 1310	177. (130-34500) M.N. 7745	217. (130-39600) (V)	257. (130-45340) (V)	297. (130-48500) (V)	337. (130-52200) (V)
18. (130-17300) (V)	58. (130-21600) (V)	98. (130-26400) M.N. 1480	138. (130-30500) M.N. 1300	178. (130-35000) (V)	218. (130-39700) (V)	258. (130-45380) (V)	298. (130-48600) (V)	338. (130-52300) (V)
19. (130-17400) (V)	59. (130-21700) (V)	99. (130-26500) M.N. 1470	139. (130-30600) M.N. 1260	179. (130-35100) (V)	219. (130-39800) (V)	259. (130-45400) (V)	299. (130-48700) (V)	339. (130-52400) (V)
20. (130-17500) (V)	60. (130-21800) (V)	100. (130-26600) M.N. 1460	140. (130-30700) M.N. 1250	180. (130-35200) (V)	220. (130-39900) (V)	260. (130-45440) (V)	300. (130-48800) (V)	340. (130-52500) (V)
21. (130-17600) (V)	61. (130-21900) (V)	101. (130-26700) M.N. 1340	141. (130-30800)	181. (130-35300) (V)	221. (130-40000) (V)	261. (130-45480) (V)	301. (130-48900) (V)	341. (130-52600) (V)
22. (130-17700) (V)	62. (130-22000) (V)	102. (130-26800) M.N. 1330	142. (130-30900)	182. (130-35400) (V)	222. (130-40100) (V)	262. (130-45500) (V)	302. (130-49000) (V)	342. (130-52700) (V)
23. (130-17800) (V)	63. (130-22100) (V)	103. (130-26900) M.N. 1320	143. (130-31000) M.N. 1305	183. (130-35500) (V)	223. (130-40200) (V)	263. (130-45550) (V)	303. (130-49050) (V)	343. (130-52800) (V)
24. (130-17900) (V)	64. (130-22200) (V)	104. (130-27000) M.N. 1316	144. (130-31100) M.N. 1315	184. (130-35600) (V)	224. (130-40300) (V)	264. (130-45600) (V)	304. (130-49100) (V)	344. (130-52900) (V)
25. (130-18000) (V)	65. (130-22300) (V)	105. (130-27100) M.N. 1310	145. (130-31200) M.N. 1325	185. (130-35700) (V)	225. (130-40400) (V)	265. (130-45700) (V)	305. (130-49190)	345. (130-53000) (V)
26. (130-18100) (V)	66. (130-22400) (V)	106. (130-27200) M.N. 1300	146. (130-31300) M.N. 1335	186. (130-35800) (V)	226. (130-40500) (V)	266. (130-45800) (V)	306. (130-49200)	346. (130-53100) (V)
27. (130-18200) (V)	67. (130-22500) (V)	107. (130-27400) M.N. 1280	147. (130-31400) M.N. 1345	187. (130-35900) (V)	227. (130-40600) (V)	267. (130-45900) (V)	307. (130-49300) M.N. 7780	347. (130-53200) (V)
28. (130-18300) (V)	68. (130-22700) (V)	108. (130-27500) M.N. 1276	148. (130-31500)	188. (130-36000) (V)	228. (130-40700) (V)	268. (130-45950) (V)	308. (130-49400) M.N. 7770	348. (130-53300) (V)
29. (130-18400) (V)	69. (130-22900) (V)	109. (130-27600) M.N. 1270	149. (130-31550) M.N. 1349	189. (130-36100) (V)	229. (130-40800) (V)	269. (130-46000) (V)	309. (130-29000)	349. (130-53400) M.N. 7330
30. (130-18500) (V)	70. (130-23200) (V)	110. (130-27700) M.N. 1260	150. (130-31600) M.N. 1455	190. (130-36200) (V)	230. (130-40900) (V)	270. (130-46040) (V)	310. (130-49500) M.N. 7750	350. (130-53600) M.N. 7260
31. (130-18550) (V)	71. (130-23300) (V)	111. (130-27800) M.N. 1250	151. (130-31700) M.N. 1465	191. (130-36300) (V)	231. (130-41000) (V)	271. (130-46080) (V)	311. (130-49600) M.N. 7730	351. (130-53700) M.N. 7240
32. (130-18600) (V)	72. (130-23400) (V)	112. (130-27900) M.N. 1230	152. (130-31800) M.N. 1475	192. (130-36400) (V)	232. (130-41100) (V)	272. (130-46100) (V)	312. (130-49700) M.N. 7680	352. (130-54200) (V)
33. (130-18700) (V)	73. (130-23500) (V)	113. (130-28000) M.N. 1210	153. (130-31900) M.N. 1485	193. (130-36500) (V)	233. (130-41200) (V)	273. (130-46150) (V)	313. (130-49800) M.N. 7670	353. (130-54300) (V)
34. (130-18800) (V)	74. (130-23600) (V)	114. (130-28100) M.N. 1200	154. (130-32100) M.N. 1515	194. (130-36600) (V)	234. (130-41300) (V)	274. (130-46200) (V)	314. (130-49900) M.N. 7660	354. (130-54400) (V)
35. (130-18900) (V)	75. (130-23900) M.N. 7455	115. (130-28200) M.N. 1215	155. (130-32200) M.N. 1525	195. (130-36700) (V)	235. (130-41400) (V)	275. (130-46300) (V)	315. (130-49950) M.N. 7550	355. (130-54500) (V)
36. (130-19000) (V)	76. (130-24000) M.N. 1790	116. (130-28300) M.N. 1255	156. (130-32300) M.N. 1535	196. (130-36800) (V)	236. (130-41425) (V)	276. (130-46400) (V)	316. (130-50050) M.N. 7450	356. (130-54600) (V)
37. (130-19100) (V)	77. (130-24100) M.N. 1780	117. (130-28400) M.N. 1265	157. (130-32400) M.N. 1545	197. (130-37400) (V)	237. (130-41450) (V)	277. (130-46500) (V)	317. (130-50100) M.N. 7400	357. (130-54700) (V)
38. (130-19200) (V)	78. (130-24200) M.N. 1770	118. (130-28500) M.N. 1275	158. (130-32500) M.N. 1549	198. (130-37500) (V)	238. (130-41500) (V)	278. (130-46600) (V)	318. (130-50200) (V)	358. (130-54800) (V)
39. (130-19300) (V)	79. (130-24300) M.N. 1760	119. (130-28600) M.N. 1285	159. (130-32600) M.N. 1555	199. (130-37600) (V)	239. (130-41600) (V)	279. (130-46700) (V)	319. (130-50300) (V)	359. (130-54900) (V)
40. (130-19400) (V)	80. (130-24400) M.N. 1750	120. (130-28700) M.N. 1295	160. (130-32700) M.N. 1565	200. (130-37670) (V)	240. (130-41700) (V)	280. (130-46800) (V)	320. (130-50400) (V)	360. (130-55000) (V)

*WATERSHED ROLL INFORMATION— PARCEL ID NUMBERS 1 TO 360*

"(V)" WRITTEN AT THE RIGHT SIDE OF A ROLL NUMBER DENOTES THE PARCEL IS VACANT.

FOR WATERSHED PLAN OVERVIEW, REFER TO SHEET 1.  
FOR WATERSHED PLAN DETAILS, REFER TO SHEETS 2 TO 9.

THESE PLANS HAVE BEEN REDUCED  
AND THE SCALE THEREFORE VARIES.  
FULL SCALE PLANS MAY BE VIEWED  
AT THE MUNICIPAL OFFICE.

DRAWN BY: L.V. & S.H.  
PLOT CODE: 1:1  
COMPUTER FILE: REI2016D045.DWG  
FILE No.: REI2016D045 SHEET No.: 10 of 24

ROLL INFORMATION:

TOWN OF LASALLE (CONT'D)

361. (140-00200) M.N. 7745	401. (140-17500) M.N. 900	441. (140-21200) (V)	481. (140-25800) (V)	521. (140-30500) (V)	561. (140-34450) (V)	601. (140-38000) M.N. 421	641. (140-40275) M.N. 655	681. (140-40355) M.N. 485
362. (140-00300) M.N. 7755	402. (140-17600) M.N. 910	442. (140-21300) (V)	482. (140-25900) (V)	522. (140-30600) (V)	562. (140-34500) (V)	602. (140-38100) M.N. 415	642. (140-40277) M.N. 645	682. (140-40357) M.N. 495
363. (140-00400) M.N. 7765	403. (140-17700) M.N. 914	443. (140-21400) (V)	483. (140-26000) (V)	523. (140-30700) (V)	563. (140-34600) (V)	603. (140-38200)	643. (140-40279) M.N. 635	683. (140-40359) M.N. 505
364. (140-00500) M.N. 1013	404. (140-17800) M.N. 916	444. (140-21500) (V)	484. (140-26100) (V)	524. (140-30750) (V)	564. (140-34700) (V)	604. (140-38300) M.N. 379	644. (140-40281) M.N. 625	684. (140-40361) M.N. 515
365. (140-00600) M.N. 1005	405. (140-17900) M.N. 918	445. (140-21600) (V)	485. (140-26200) (V)	525. (140-30780) (V)	565. (140-34800) (V)	605. (140-38350)	645. (140-40283) M.N. 615	685. (140-40363) M.N. 525
366. (140-00700) M.N. 1001	406. (140-18000) M.N. 920	446. (140-21700) (V)	486. (140-26300) (V)	526. (140-30900) (V)	566. (140-34900) (V)	606. (140-38400) M.N. 361	646. (140-40285) M.N. 605	686. (140-40365) M.N. 535
367. (140-00800) M.N. 987	407. (140-18100) M.N. 930	447. (140-21800) (V)	487. (140-26400) (V)	527. (140-31000) (V)	567. (140-35100) (V)	607. (140-40201) M.N. 360	647. (140-40287) M.N. 595	687. (140-40367) M.N. 545
368. (140-00900) M.N. 977	408. (140-18200) M.N. 940	448. (140-21900) (V)	488. (140-26500) (V)	528. (140-31100) (V)	568. (140-35200) (V)	608. (140-40203) M.N. 370	648. (140-40289) M.N. 585	688. (140-40369) M.N. 555
369. (140-01000) M.N. 953	409. (140-18300) M.N. 950	449. (140-22000) (V)	489. (140-26600) (V)	529. (140-31200) (V)	569. (140-35300) (V)	609. (140-40205) M.N. 380	649. (140-40291) M.N. 575	689. (140-40371) M.N. 565
370. (140-01100) M.N. 943	410. (140-18400) M.N. 960	450. (140-22100) (V)	490. (140-26700) (V)	530. (140-31250) (V)	570. (140-35400) (V)	610. (140-40207) M.N. 400	650. (140-40293) M.N. 565	690. (140-40373) M.N. 575
371. (140-01200) M.N. 933	411. (140-18500) M.N. 970	451. (140-22200) (V)	491. (140-26800) (V)	531. (140-31300) (V)	571. (140-35500) (V)	611. (140-40209) M.N. 410	651. (140-40295) M.N. 555	691. (140-40375) M.N. 585
372. (140-01300) M.N. 923	412. (140-18600) M.N. 980	452. (140-22400) M.N. 7915	492. (140-27000) (V)	532. (140-31500) (V)	572. (140-35600) (V)	612. (140-40211) M.N. 420	652. (140-40297) M.N. 545	692. (140-40377) M.N. 595
373. (140-01400) M.N. 919	413. (140-18700) M.N. 990	453. (140-22600) M.N. 7925	493. (140-27100) (V)	533. (140-31600) (V)	573. (140-35700) (V)	613. (140-40213) M.N. 430	653. (140-40299) M.N. 535	693. (140-40379) M.N. 605
374. (140-01600) M.N. 1	414. (140-18800) M.N. 1000	454. (140-22700) (V)	494. (140-27200) (V)	534. (140-31700) (V)	574. (140-35800) (V)	614. (140-40215) M.N. 440	654. (140-40301) M.N. 525	694. (140-40381) M.N. 615
375. (140-01700) M.N. 2	415. (140-18900) M.N. 1018	455. (140-22800) (V)	495. (140-27300) (V)	535. (140-31800) (V)	575. (140-35900) (V)	615. (140-40217) M.N. 450	655. (140-40303) M.N. 515	695. (140-40383) M.N. 625
376. (140-01800) M.N. 3	416. (140-19000) M.N. 7815	456. (140-23000) (V)	496. (140-27400) (V)	536. (140-31900) (V)	576. (140-36000) (V)	616. (140-40219) M.N. 460	656. (140-40305) M.N. 505	696. (140-40385) M.N. 635
377. (140-01900) M.N. 4	417. (140-19100) M.N. 7825	457. (140-23100) (V)	497. (140-27500) (V)	537. (140-32000) (V)	577. (140-36100) M.N. 8195	617. (140-40221) M.N. 480	657. (140-40307) M.N. 495	697. (140-40387) M.N. 645
378. (140-02000) M.N. 5	418. (140-19200) M.N. 7895	458. (140-23400) (V)	498. (140-27600) (V)	538. (140-32100) (V)	578. (140-36100) M.N. 671	618. (140-40223) M.N. 500	658. (140-40309) M.N. 485	698. (140-40389) M.N. 655
379. (140-02100) M.N. 909	419. (140-19300) (V)	459. (140-23500) (V)	499. (140-27700) (V)	539. (140-32200) (V)	579. (140-36100)	619. (140-40231) M.N. 510	659. (140-40311) M.N. 475	699. (140-40391) M.N. 665
380. (140-02200) M.N. 905	420. (140-19350) (V)	460. (140-23600) (V)	500. (140-27800) (V)	540. (140-32300) (V)	580. (140-36200) M.N. 609	620. (140-40233) M.N. 520	660. (140-40313) M.N. 465	700. (140-40393) M.N. 660
381. (140-02300) M.N. 901	421. (140-19375) (V)	461. (140-23700) (V)	501. (140-27900) (V)	541. (140-32400) M.N. 8125	581. (140-36300) M.N. 569	621. (140-40235) M.N. 530	661. (140-40315) M.N. 455	701. (140-40395) M.N. 650
382. (140-02400) M.N. 883	422. (140-19400) (V)	462. (140-23800) (V)	502. (140-28000) (V)	542. (140-32600) M.N. 8155	582. (140-36400) (V)	622. (140-40237) M.N. 540	662. (140-40317) M.N. 445	702. (140-40397) M.N. 640
383. (140-02500) M.N. 881	423. (140-19500) (V)	463. (140-23900) (V)	503. (140-28100) (V)	543. (140-32700) (V)	583. (140-36500) M.N. 555	623. (140-40239) M.N. 550	663. (140-40319) M.N. 435	703. (140-40399) M.N. 630
384. (140-02600) M.N. 875	424. (140-19600) (V)	464. (140-24000) (V)	504. (140-28200) (V)	544. (140-32800) (V)	584. (140-36600) M.N. 545	624. (140-40241) M.N. 560	664. (140-40321) M.N. 425	704. (140-40401) M.N. 620
385. (140-02700) M.N. 863	425. (140-19700) (V)	465. (140-24100) (V)	505. (140-28300) (V)	545. (140-32900) (V)	585. (140-36602) M.N. 531	625. (140-40243) M.N. 570	665. (140-40323) M.N. 415	705. (140-40403) M.N. 610
386. (140-02800) M.N. 853	426. (140-19800) (V)	466. (140-24200) (V)	506. (140-28400) (V)	546. (140-33000) (V)	586. (140-36700) M.N. 519	626. (140-40245) M.N. 580	666. (140-40325) M.N. 405	706. (140-40405) M.N. 600
387. (140-02900)	427. (140-19900) (V)	467. (140-24300) (V)	507. (140-28500) (V)	547. (140-33100) (V)	587. (140-36800) M.N. 513	627. (140-40247) M.N. 590	667. (140-40327) M.N. 399	707. (140-40407) M.N. 590
388. (140-03000)	428. (140-20000) (V)	468. (140-24400) (V)	508. (140-28600) M.N. 8025	548. (140-33200) (V)	588. (140-37300) M.N. 501	628. (140-40249) M.N. 600	668. (140-40329) M.N. 395	708. (140-40409) M.N. 580
389. (140-03300) M.N. 841	429. (140-20100) (V)	469. (140-24500) (V)	509. (140-29250) M.N. 8075	549. (140-33300) (V)	589. (140-37000) M.N. 495	629. (140-40251) M.N. 610	669. (140-40331) M.N. 389	709. (140-40411) M.N. 570
390. (140-14450) M.N. 526	430. (140-20200) (V)	470. (140-24600) (V)	510. (140-29300) (V)	550. (140-33400) (V)	590. (140-37100) M.N. 485	630. (140-40253) M.N. 620	670. (140-40333) M.N. 385	710. (140-40413) M.N. 560
391. (140-16800) M.N. 782	431. (140-20300) (V)	471. (140-24700) (V)	511. (140-29400) (V)	551. (140-33500) (V)	591. (140-37300)	631. (140-40255) M.N. 630	671. (140-40335) M.N. 379	711. (140-40415) M.N. 550
392. (140-16900) M.N. 808	432. (140-20350) (V)	472. (140-24800) (V)	512. (140-29500) (V)	552. (140-33600) (V)	592. (140-37300) M.N. 475	632. (140-40257) M.N. 640	672. (140-40337) M.N. 375	712. (140-40417) M.N. 540
393. (140-17000) M.N. 818	433. (140-20400) (V)	473. (140-24900) (V)	513. (140-29600) (V)	553. (140-33700) (V)	593. (140-37350) M.N. 469	633. (140-40259) M.N. 650	673. (140-40339) M.N. 405	713. (140-40419) M.N. 530
394. (140-17010)	434. (140-20500) (V)	474. (140-25000) (V)	514. (140-29700) (V)	554. (140-33800) (V)	594. (140-37400) M.N. 461	634. (140-40261) M.N. 660	674. (140-40341) M.N. 415	714. (140-40421) M.N. 520
395. (140-17020)	435. (140-20600) (V)	475. (140-25100) (V)	515. (140-29900) (V)	555. (140-33900) (V)	595. (140-37500) M.N. 455	635. (140-40263) M.N. 670	675. (140-40343) M.N. 425	715. (140-40423) M.N. 510
396. (140-17030)	436. (140-20700) (V)	476. (140-25200) (V)	516. (140-30000) (V)	556. (140-34000) (V)	596. (140-37550) M.N. 451	636. (140-40265) M.N. 680	676. (140-40345) M.N. 435	716. (140-40425) M.N. 500
397. (140-17100) M.N. 860	437. (140-20800) (V)	477. (140-25300) (V)	517. (140-30100) (V)	557. (140-34100) (V)	597. (140-37600) M.N. 445	637. (140-40267) M.N. 690	677. (140-40347) M.N. 445	717. (140-40427) M.N. 490
398. (140-17200) M.N. 888	438. (140-20900) (V)	478. (140-25400) (V)	518. (140-30200) (V)	558. (140-34200)	598. (140-37700) M.N. 439	638. (140-40269) M.N. 670	678. (140-40349) M.N. 455	718. (140-40429) M.N. 480
399. (140-17300)	439. (140-21000) (V)	479. (140-25500) M.N. 7955	519. (140-30300) (V)	559. (140-34300) (V)	599. (140-37800) M.N. 433	639. (140-40271) M.N. 675	679. (140-40351) M.N. 465	719. (140-40431) M.N. 470
400. (140-17400) M.N. 898	440. (140-21100) (V)	480. (140-25700) M.N. 7985	520. (140-30400) (V)	560. (140-34400) (V)	600. (140-37900) M.N. 427	640. (140-40273) M.N. 665	680. (140-40353) M.N. 475	720. (140-40433) M.N. 460

*WATERSHED ROLL INFORMATION— PARCEL ID NUMBERS 361 TO 720*

"(V)" WRITTEN AT THE RIGHT SIDE OF A ROLL NUMBER DENOTES THE PARCEL IS VACANT.

FOR WATERSHED PLAN OVERVIEW, REFER TO SHEET 1.  
FOR WATERSHED PLAN DETAILS, REFER TO SHEETS 2 TO 9.

THESE PLANS HAVE BEEN REDUCED  
AND THE SCALE THEREFORE VARIES.  
FULL SCALE PLANS MAY BE VIEWED  
AT THE MUNICIPAL OFFICE.

DRAWN BY: L.V. & S.H.  
PLOT CODE: 1:1  
COMPUTER FILE: REI2016D045.DWG  
FILE No.: REI2016D045 SHEET No.: 11 of 24

ROLL INFORMATION:

TOWN OF LASALLE (CONT'D)

721. (140-40435) M.N. 450  
 722. (140-40437) M.N. 440  
 723. (140-40439) M.N. 430  
 724. (140-40441) M.N. 420  
 725. (140-40443) M.N. 414  
 726. (140-40445) M.N. 410  
 727. (140-40447) M.N. 404  
 728. (140-40449) M.N. 400  
 729. (140-40451)  
 730. (140-40453)  
 731. (140-41200)  
 732. (140-41310)  
 733. (150-00100)  
 734. (150-00200) M.N. 9543  
 735. (150-00300) M.N. 9545  
 736. (150-00400) M.N. 9549  
 737. (150-00500) M.N. 9553  
 738. (150-00600) M.N. 9561  
 739. (150-00700) M.N. 9557  
 740. (150-01500) M.N. 3027  
 741. (150-02000) M.N. 2985  
 742. (150-02200) M.N. 2969  
 743. (150-02400) M.N. 2945  
 744. (150-02600) M.N. 2921  
 745. (150-02800) M.N. 2903  
 746. (150-03000) (V)  
 747. (150-03100) (V)  
 748. (150-03200) (V)  
 749. (150-03300) (V)  
 750. (150-03400) (V)  
 751. (150-03500) (V)  
 752. (150-03600) (V)  
 753. (150-03700) (V)  
 754. (150-03800) (V)  
 755. (150-03900) (V)  
 756. (150-04200)  
 757. (150-04300)  
 758. (150-04400) M.N. 2867  
 759. (150-04500) M.N. 2859  
 760. (150-04600)

761. (150-04700) M.N. 2855  
 762. (150-04800) M.N. 2825  
 763. (150-04900) M.N. 2807  
 764. (150-04900)  
 765. (150-05100) M.N. 2781  
 766. (150-05500) M.N. 2757  
 767. (150-05600) M.N. 2751  
 768. (150-05700) M.N. 2745  
 769. (150-05800) M.N. 2739  
 770. (150-05900) M.N. 2727  
 771. (150-06000) M.N. 2721  
 772. (150-06100) M.N. 2715  
 773. (150-06200) M.N. 2697  
 774. (150-06400)  
 775. (150-06500)  
 776. (150-06600) M.N. 2685  
 777. (150-06700) M.N. 2681  
 778. (150-07000) M.N. 2673  
 779. (150-07150)  
 780. (150-07300) M.N. 2653  
 781. (150-07500) M.N. 2647  
 782. (150-07600) M.N. 2645  
 783. (150-07700) M.N. 2643  
 784. (150-07800) M.N. 2637  
 785. (150-07850)  
 786. (150-07900) M.N. 2633  
 787. (150-08200) M.N. 2625  
 788. (150-09700) M.N. 350  
 789. (150-09800) M.N. 360  
 790. (150-09900) M.N. 370  
 791. (150-10000) M.N. 376  
 792. (150-10100) M.N. 382  
 793. (150-10200) M.N. 390  
 794. (150-10300) M.N. 394  
 795. (150-10350) M.N. 396  
 796. (150-10400) M.N. 400  
 797. (150-10500) M.N. 404  
 798. (150-10600) M.N. 410  
 799. (150-10700) M.N. 420  
 800. (150-10800) M.N. 430

801. (150-10900) M.N. 436  
 802. (150-11000) M.N. 440  
 803. (150-11100) M.N. 444  
 804. (150-11110) M.N. 448  
 805. (150-11120) M.N. 450  
 806. (150-11200) M.N. 452  
 807. (150-11210) M.N. 456  
 808. (150-11220) M.N. 460  
 809. (150-11230)  
 810. (150-11240) M.N. 470  
 811. (150-11250) M.N. 476  
 812. (150-11260) M.N. 480  
 813. (150-11270) M.N. 500  
 814. (150-11300) M.N. 516  
 815. (150-11400) M.N. 520  
 816. (150-11500) M.N. 522  
 817. (150-11600) M.N. 534  
 818. (150-11700) M.N. 550  
 819. (150-11750) M.N. 560  
 820. (150-11800) M.N. 570  
 821. (160-02200) M.N. 9541  
 822. (160-02300) M.N. 9539  
 823. (160-02400) M.N. 9535  
 824. (160-02500) M.N. 9531  
 825. (160-02600) M.N. 9527  
 826. (160-02700) M.N. 9523  
 827. (160-02800) M.N. 9519  
 828. (160-02900) M.N. 9517  
 829. (160-03000) M.N. 9515  
 830. (160-03100) M.N. 9509  
 831. (160-03200) M.N. 9505  
 832. (160-03300) M.N. 9501  
 833. (160-03400) M.N. 9499  
 834. (160-03500) M.N. 9495  
 835. (160-03600) M.N. 9489  
 836. (160-03700) M.N. 9485  
 837. (160-03800) M.N. 9479  
 838. (160-03900) M.N. 9473  
 839. (160-04000) M.N. 9467  
 840. (160-04100) M.N. 9461

841. (160-04200) M.N. 9455  
 842. (160-04300) M.N. 9449  
 843. (160-04400) M.N. 9443  
 844. (160-05400) M.N. 9379  
 845. (160-06400) M.N. 9325  
 846. (160-06500) M.N. 9315  
 847. (160-07000) M.N. 9055  
 848. (160-07200) M.N. 9025  
 849. (160-07500) M.N. 8935  
 850. (160-07800) M.N. 8775  
 851. (160-07900)  
 852. (160-08000) M.N. 8595  
 853. (160-08900) M.N. 8475  
 854. (160-08950)  
 855. (160-09800) M.N. 1090  
 856. (160-09900) M.N. 1086  
 857. (160-10000) M.N. 1080  
 858. (160-10100) M.N. 1062  
 859. (160-10200) M.N. 1056  
 860. (160-10300) M.N. 1030  
 861. (160-10400) M.N. 998  
 862. (160-10500) M.N. 986  
 863. (160-10600) M.N. 962  
 864. (160-10700) M.N. 938  
 865. (160-10900) M.N. 934  
 866. (160-11000) M.N. 932  
 867. (160-11100)  
 868. (160-12200)  
 869. (160-12300) M.N. 742  
 870. (160-12400)  
 871. (160-12500) M.N. 722  
 872. (160-12550) M.N. 712  
 873. (160-12600) M.N. 702  
 874. (160-12700) M.N. 696  
 875. (160-12900) M.N. 690  
 876. (160-13000) M.N. 686  
 877. (160-13100) M.N. 680  
 878. (160-13200) M.N. 674  
 879. (160-13400) M.N. 666  
 880. (160-13500) M.N. 660

881. (160-13600) M.N. 654  
 882. (160-13700) M.N. 648  
 883. (160-13800) M.N. 628  
 884. (160-13900) M.N. 612  
 885. (160-14000) M.N. 602  
 886. (160-14100)  
 887. (160-14200)  
 888. (160-14300)  
 889. (160-14400)  
 890. (160-14500)  
 891. (160-14600)  
 892. (160-14800)  
 893. (160-14900)  
 894. (160-15000)  
 895. (160-15100)  
 896. (160-15200)  
 897. (160-15300)  
 898. (160-15400)  
 899. (160-15500)  
 900. (160-15600)  
 901. (160-15700)  
 902. (160-15800)  
 903. (150-04900)  
 904. (150-04900)  
 905. (160-16200)  
 906. (160-16300)  
 907. (160-16400)  
 908. (160-16600) (V)  
 909. (160-16700) (V)  
 910. (160-16800) (V)  
 911. (160-17000) (V)  
 912. (160-17100) (V)  
 913. (160-17200) (V)  
 914. (160-17300) (V)  
 915. (160-17400)  
 916. (160-17500)  
 917. (160-17600)  
 918. (160-17700)  
 919. (340-16500)

TOWN OF AMHERSTBURG

920. (500-32400) M.N. 9556  
 921. (500-32500) M.N. 9560  
 922. (500-32600) M.N. 9562  
 923. (500-32700)  
 924. (500-33100) M.N. 2281  
 925. (500-33200) M.N. 2269  
 926. (500-33300) M.N. 2257  
 927. (500-33500)  
 928. (500-33600) M.N. 2125  
 929. (500-33700) M.N. 2113  
 930. (500-33801)

WATERSHED ROLL INFORMATION- PARCEL ID NUMBERS 720 TO 930

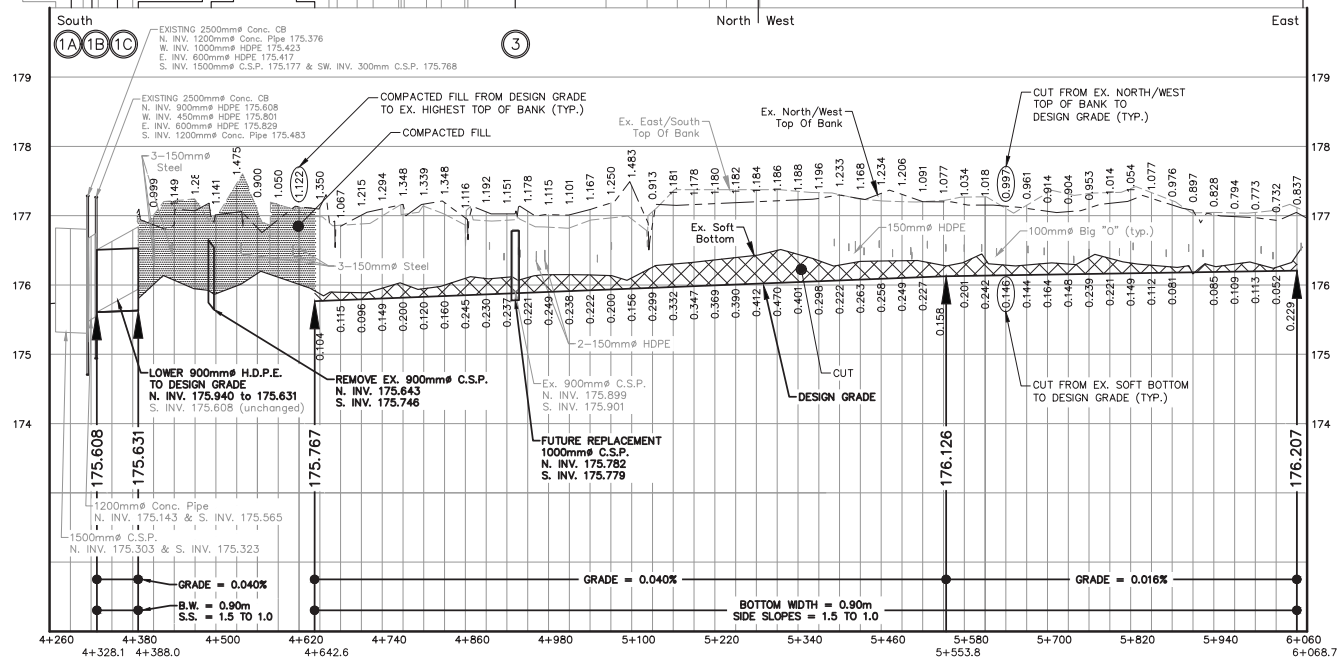
"(V)" WRITTEN AT THE RIGHT SIDE OF A ROLL NUMBER DENOTES THE PARCEL IS VACANT.

FOR WATERSHED PLAN OVERVIEW, REFER TO SHEET 1.  
FOR WATERSHED PLAN DETAILS, REFER TO SHEETS 2 TO 9.

THESE PLANS HAVE BEEN REDUCED  
AND THE SCALE THEREFORE VARIES.  
FULL SCALE PLANS MAY BE VIEWED  
AT THE MUNICIPAL OFFICE.

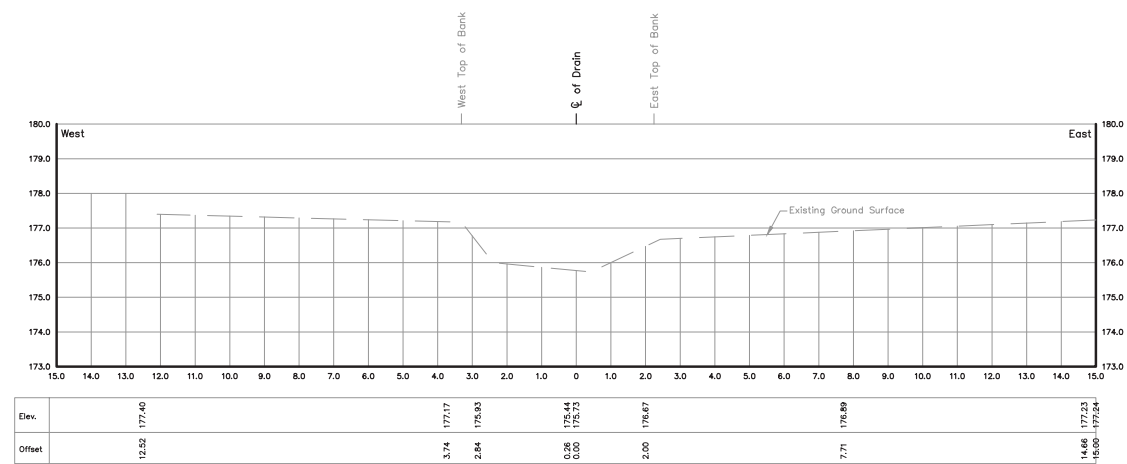
DRAWN BY: L.V. & S.H.  
PLOT CODE: 1:1  
COMPUTER FILE: REI2016D045.DWG  
FILE No.: REI2016D045 SHEET No.: 12 of 24

4+268.0 R. parcels 130-31550/130-34300 & 30-53600/130-31700 C.S.P.  
 to 4+314.0 1500mm C.S.P.  
 4+268.7 R. parcels 130-31600/130-31700 & Golfview Drive R.O.W.  
 4+316.5 to 4+326.3 1200mm Concrete Pipe  
 4+330.5 R. parcels Golfview Drive R.O.W. & 130-26700/130-26600  
 to 4+388.0 900mm H.D.P.E. REINSTALLMENT  
 4+388.1 R. parcels 130-26700/130-26600 & 130-23900  
 4+388.0 COMPACTED FILL & EX. DRAIN ABANDONMENT STARTS AT NORTH END OF 900mm H.D.P.E.  
 4+489.3 EX. 900mm C.S.P. REMOVE & ABANDON  
 4+388.0 COMPACTED FILL & EX. DRAIN ABANDONMENT ENDS  
 4+663.3 R. parcels 130-23900 & Development Plan R.O.W.  
 4+675.1 R. parcels 130-50600 & Agler Ave. R.O.W. & 130-50600  
 4+704.0 R. parcels 130-50600 & Agler Ave. R.O.W.  
 4+727.1 R. parcels Agler Ave. R.O.W. & 130-51000  
 4+763.9 R. parcels 130-51000 & Development Plan R.O.W.  
 4+767.4 R. parcels Development Plan R.O.W. & 130-52200  
 4+771.7 R. parcels 130-52200 & 130-52100  
 4+804.1 R. parcels 130-52100 & Pitkin Ave. R.O.W.  
 4+825.5 R. parcels Pitkin Ave. R.O.W. & 130-52800  
 4+859.5 R. parcels 130-52800 & 130-52900  
 4+863.8 R. parcels 130-52900 & 130-20400  
 4+926.5 to 4+935.9 Ex. 900mm C.S.P. FUTURE REPLACEMENT  
 4+926.5 to 4+937.5 1000mm C.S.P.  
 5+063.2 R. parcels 130-20400 & 130-53600/130-20200  
 5+122.4 R. parcels 130-53600/130-20200 & 130-53700/130-20100  
 5+165.9 R. parcels 130-53700/130-20100 & Development Plan R.O.W./130-17500  
 5+214.2 R. parcels Development Plan R.O.W./130-17500 & Dow Blvd. R.O.W.  
 5+236.9 R. parcels Dow Blvd. R.O.W. & Development Plan R.O.W./130-17400  
 5+282.6 R. parcels Development Plan R.O.W./130-17400 & Drain bends easterly  
 5+285.0 R. parcels Development Plan R.O.W./130-17400 & Nomaka R.O.W.  
 6+068.7 High end of Chappus Drain located between Parcel 130-15500 R.O.W. & Parcel 130-15500 R.O.W.

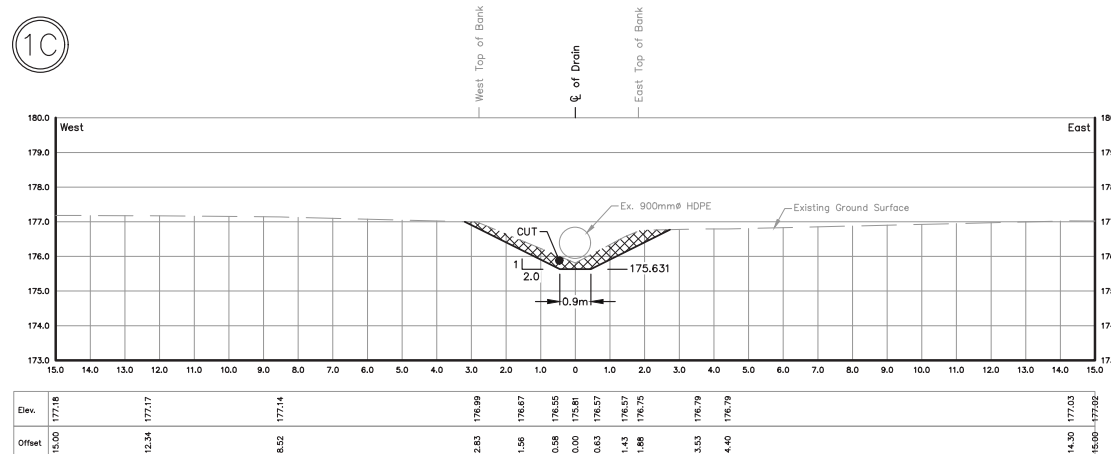


PROFILE- CHAPPUS DRAIN EXISTING ALIGNMENT

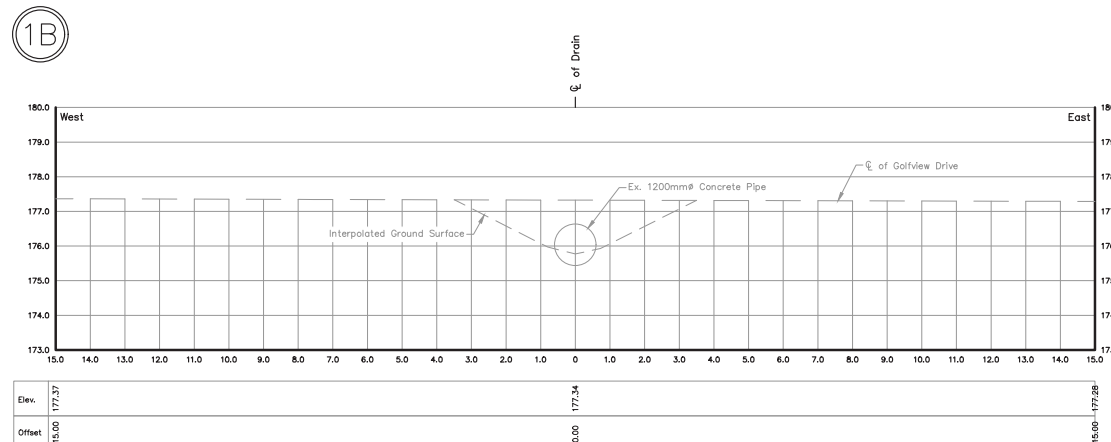
SCALE = 1:5000 hor.  
1:50 vert.



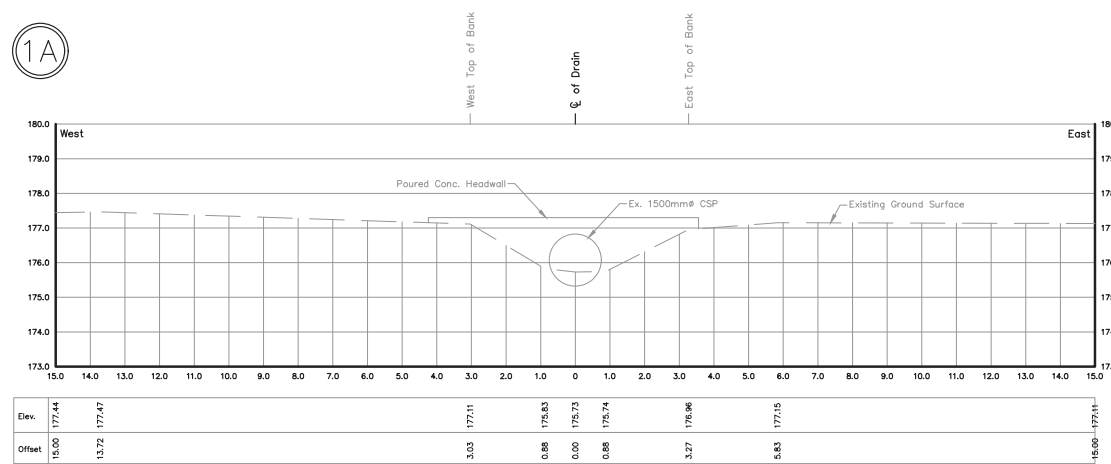
STA. 4+260.0  
Scale = 1:100



STA. 4+388.0  
Scale = 1:100



STA. 4+320.4  
Scale = 1:100



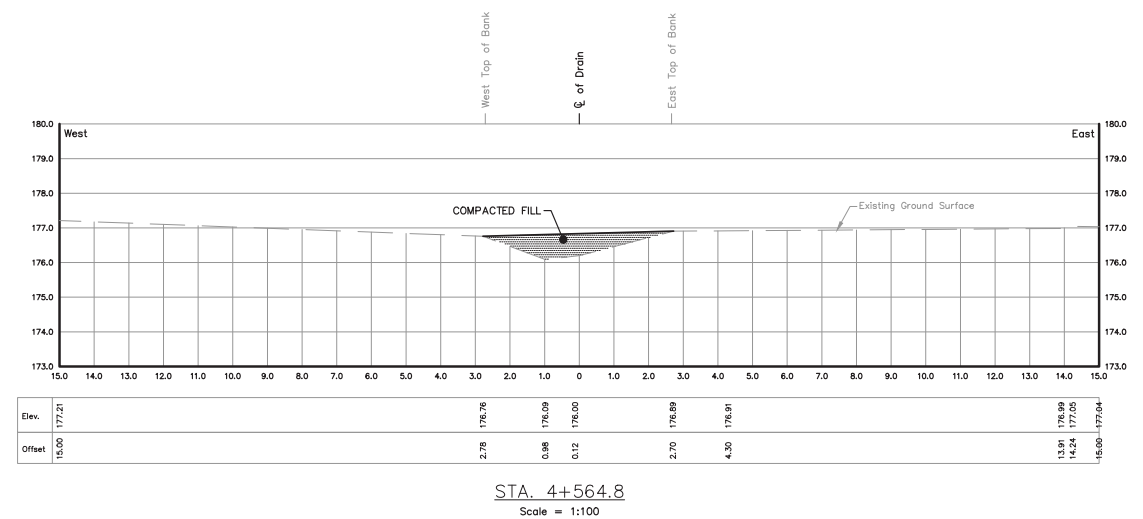
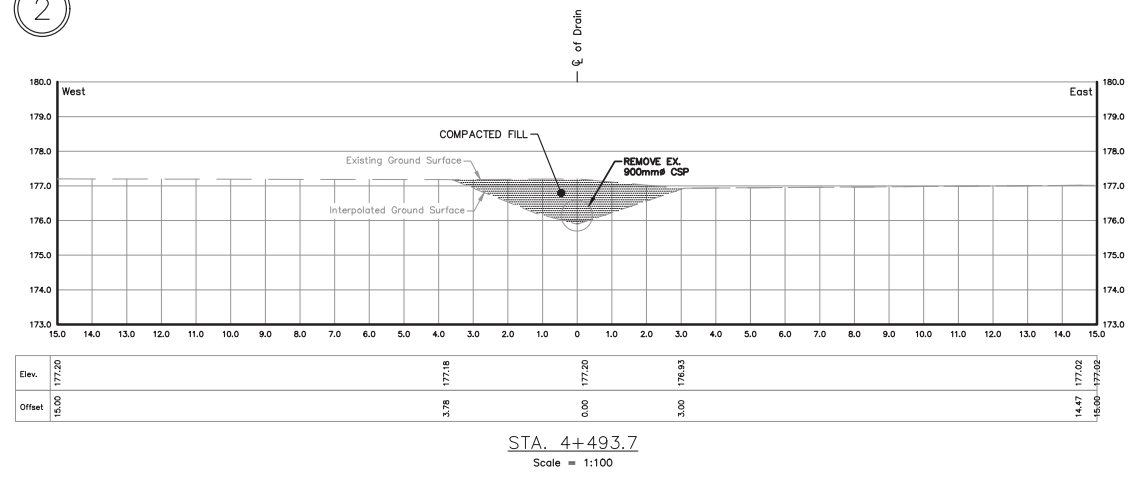
STA. 4+268.7  
Scale = 1:100

CROSS-SECTIONS OF CHAPPUS DRAIN EXISTING ALIGNMENT

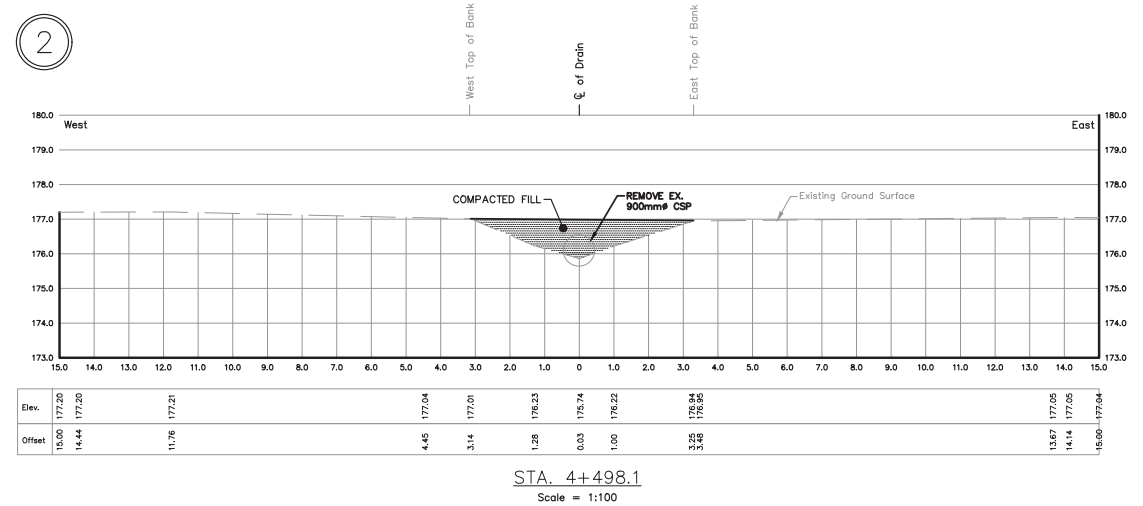
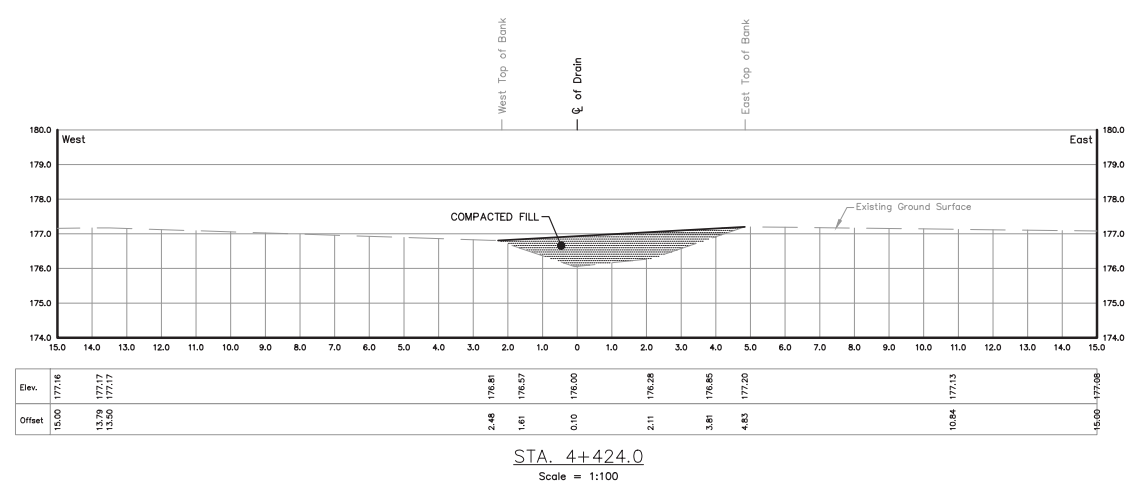
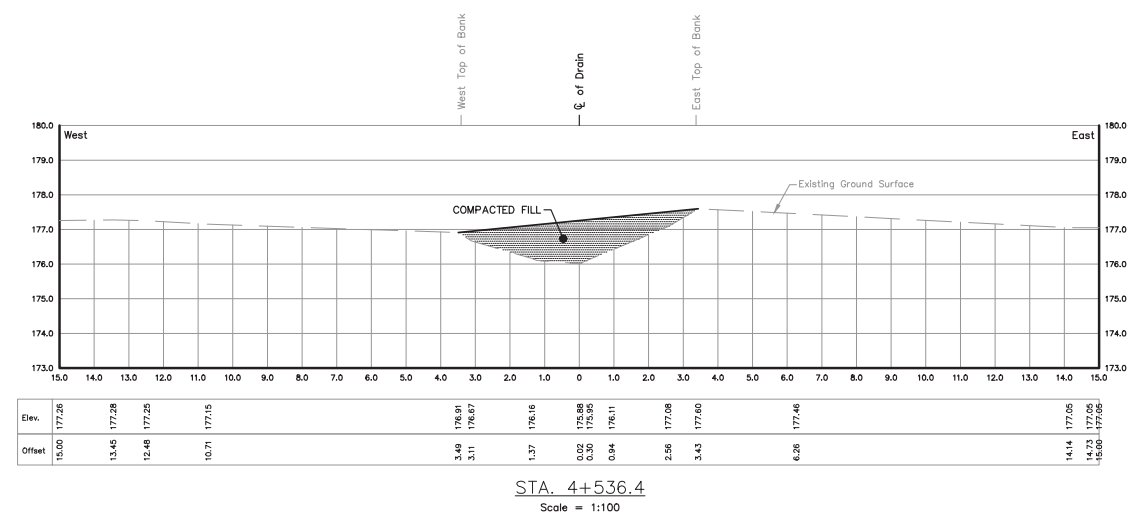
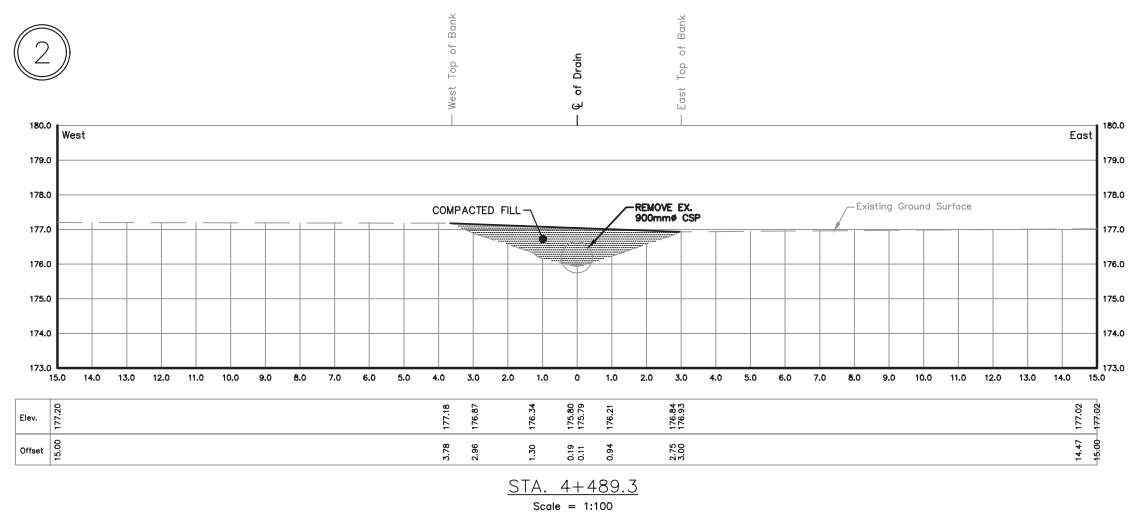
THESE PLANS HAVE BEEN REDUCED AND THE SCALE THEREFORE VARIES. FULL SCALE PLANS MAY BE VIEWED AT THE MUNICIPAL OFFICE.

DRAWN BY: L.V. & S.H.  
PLOT CODE: 1:1  
COMPUTER FILE: REI2016D045.DWG  
FILE No.: REI2016D045  
SHEET No.: 13 of 24

2



2

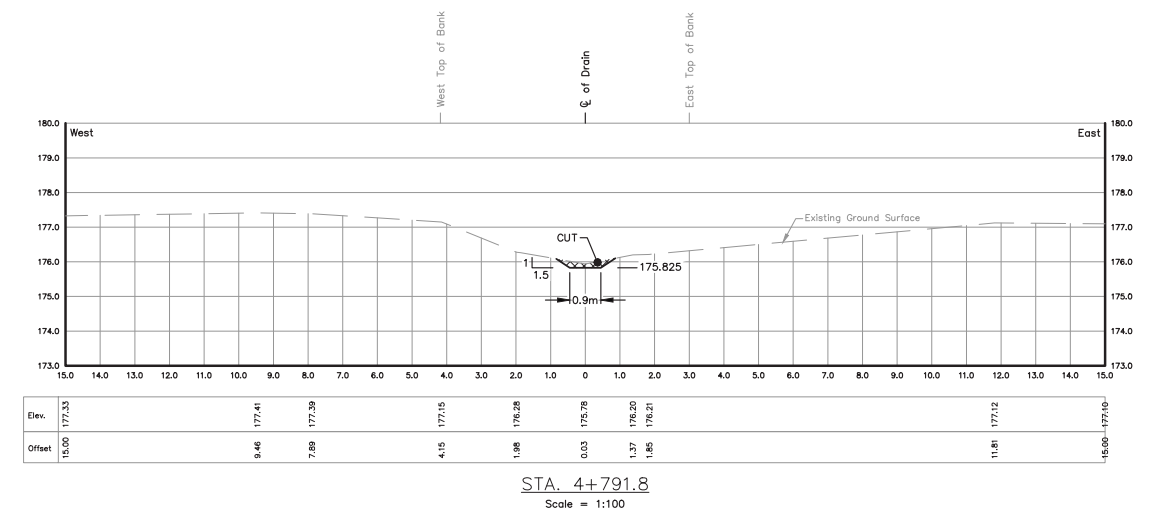
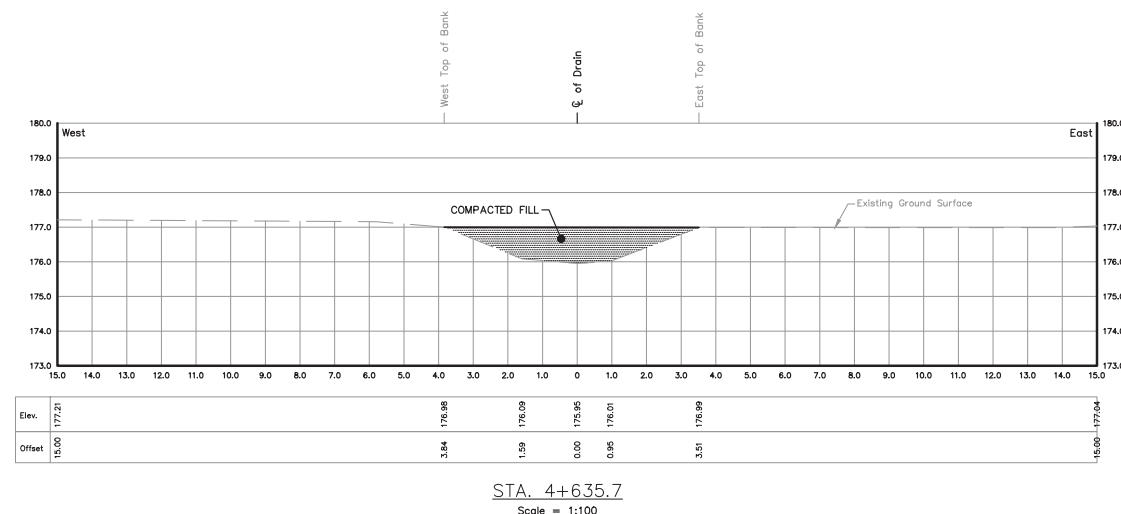
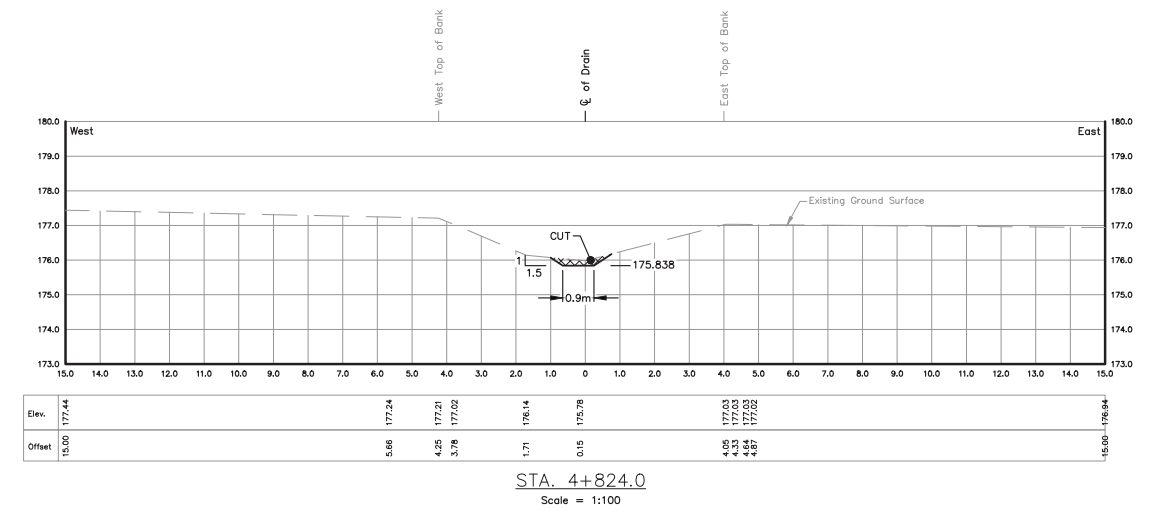
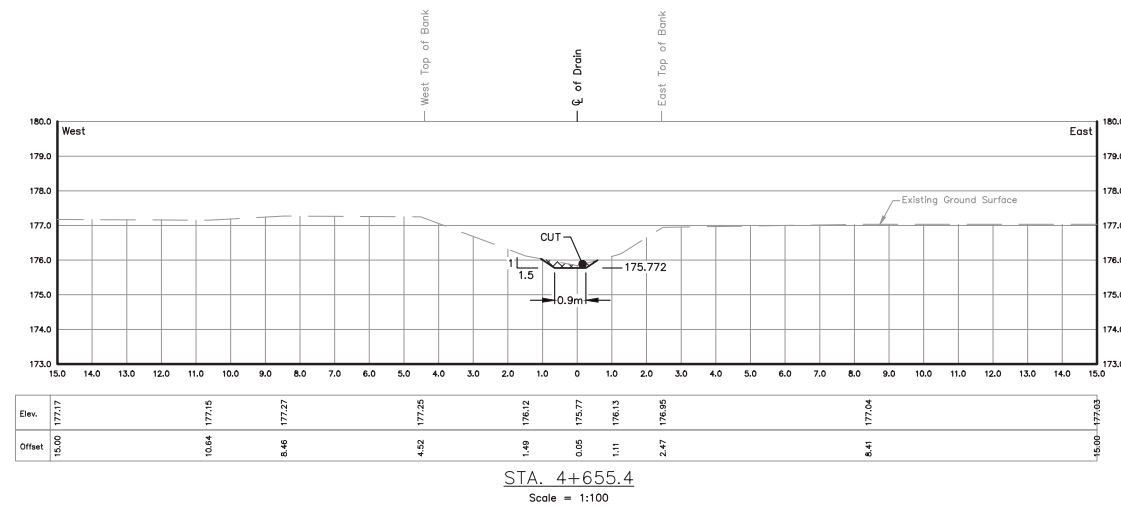
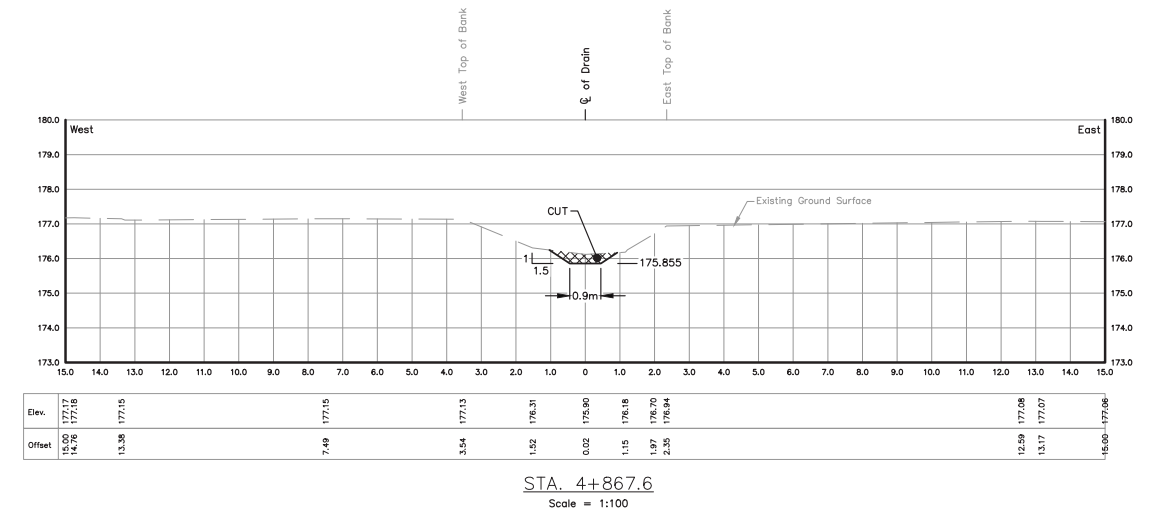
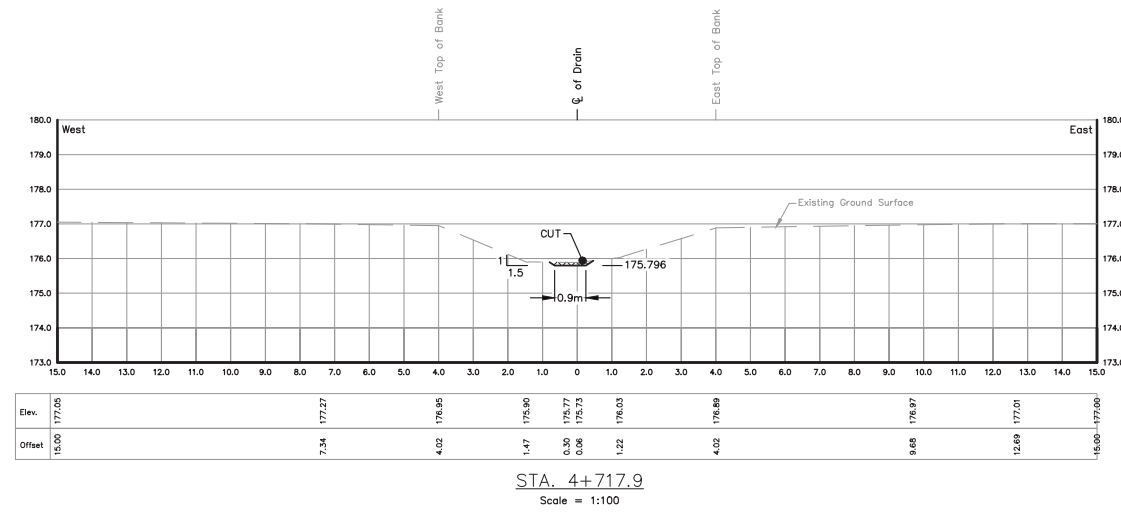


CROSS-SECTIONS OF CHAPPUS DRAIN EXISTING ALIGNMENT (CONT'D)

THESE PLANS HAVE BEEN REDUCED AND THE SCALE THEREFORE VARIES. FULL SCALE PLANS MAY BE VIEWED AT THE MUNICIPAL OFFICE.

DRAWN BY: L.V. & S.H.  
PLOT CODE: 1-1  
COMPUTER FILE: REI2016D045.DWG  
FILE No.: REI2016D045 SHEET No.: 14 of 24

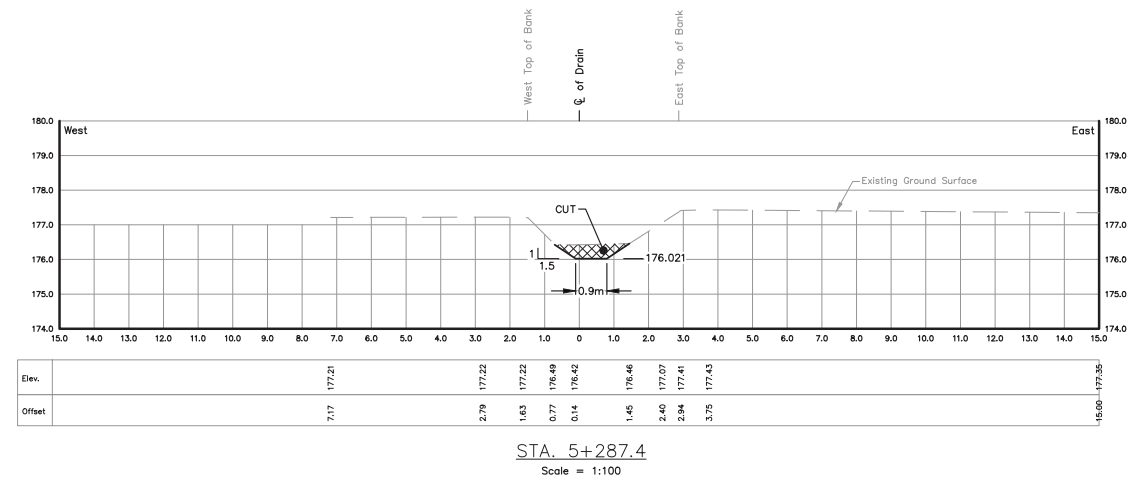
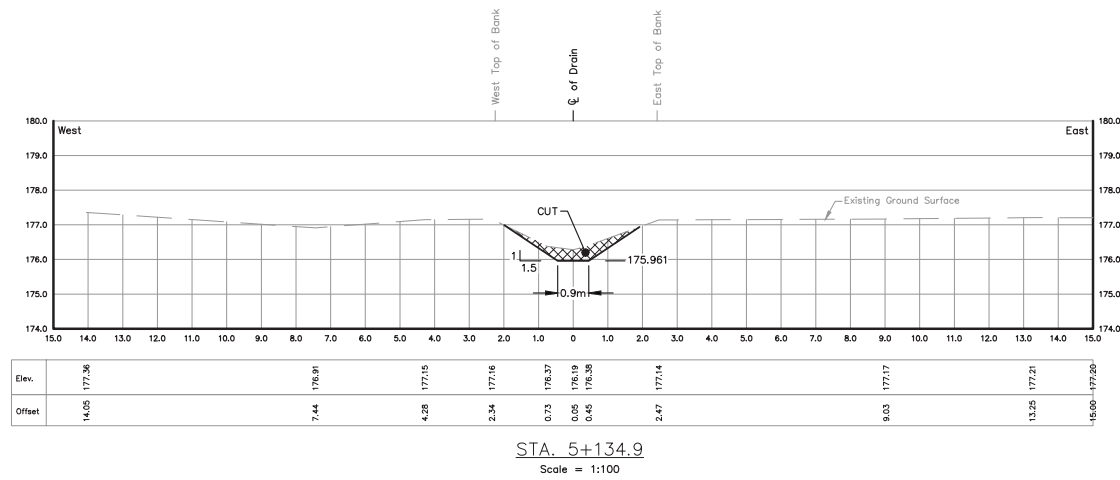
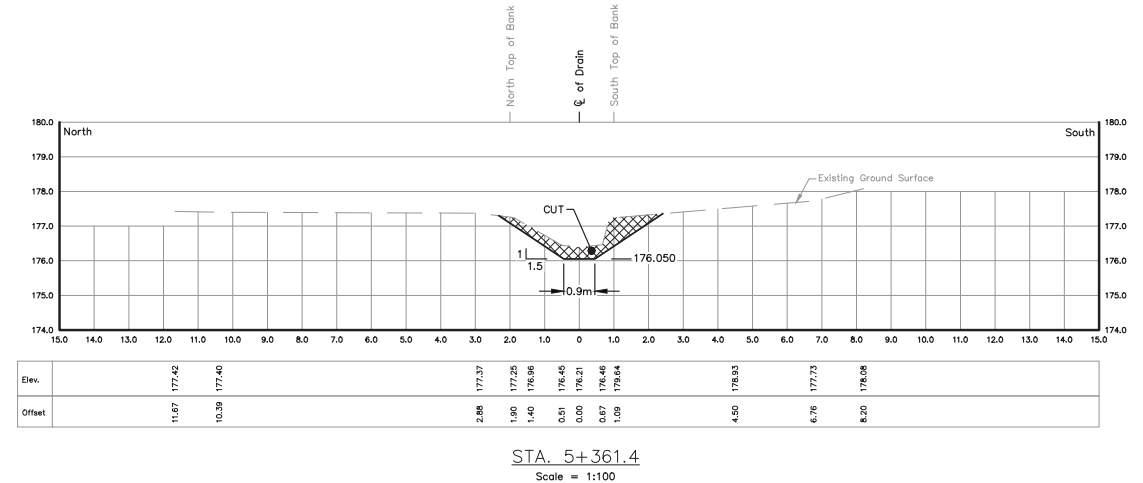
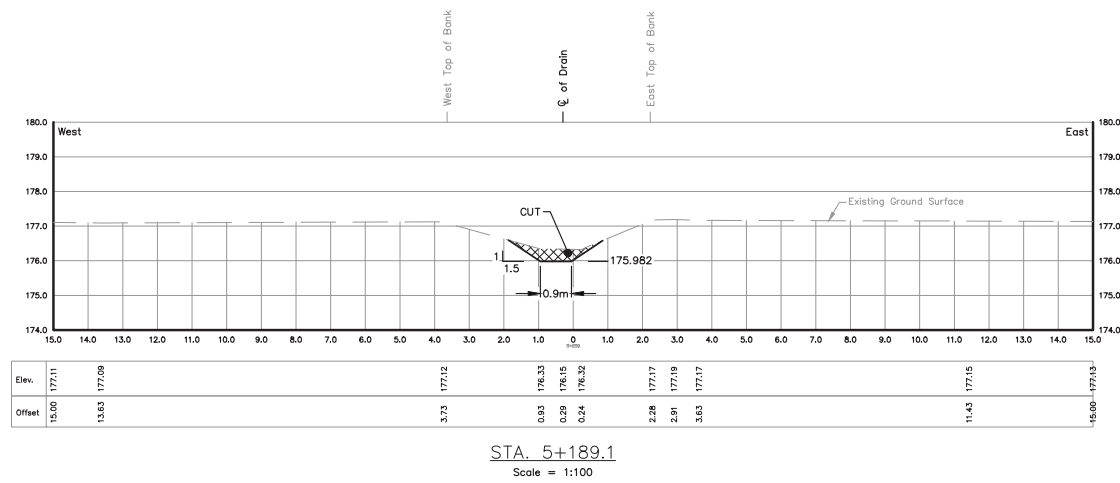
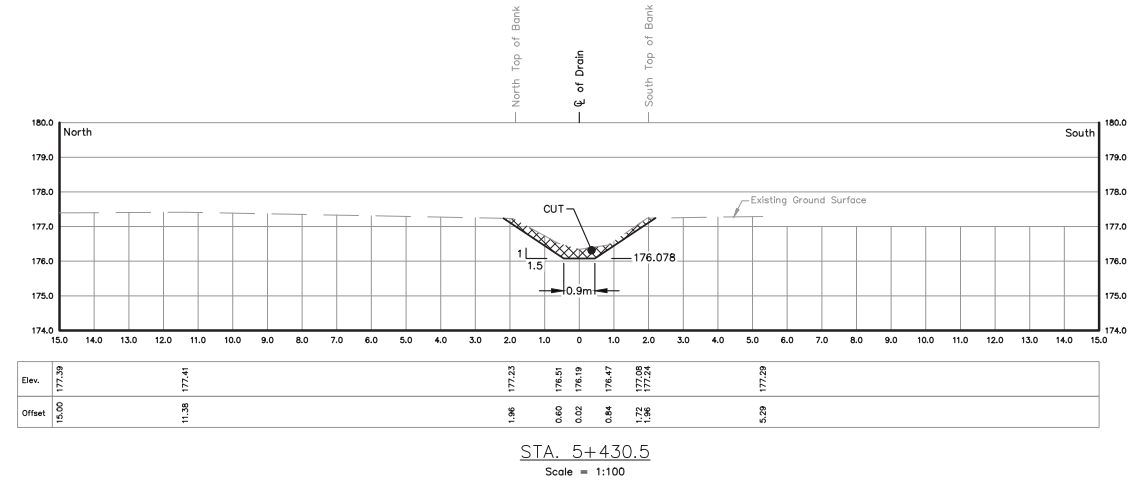
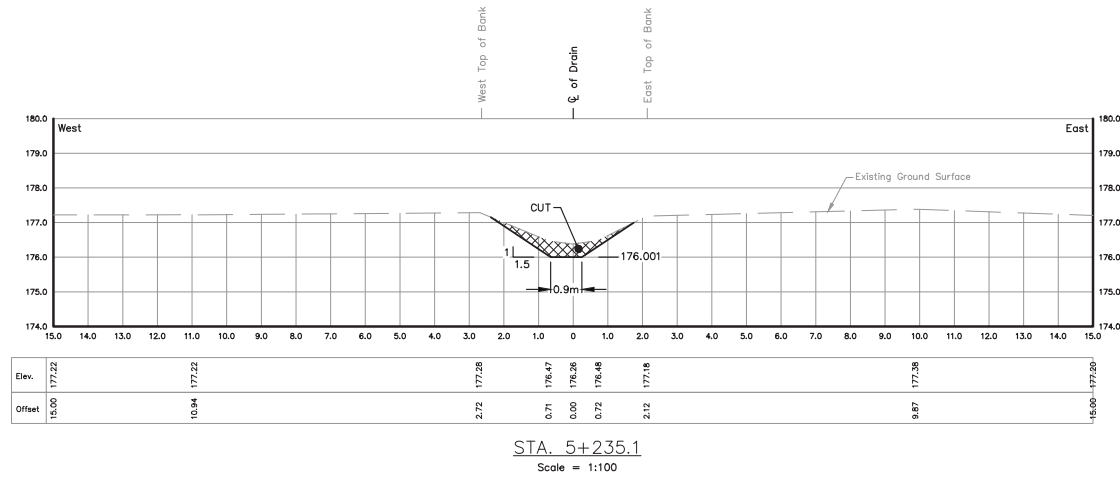




CROSS-SECTIONS OF CHAPPUS DRAIN EXISTING ALIGNMENT (CONT'D)

THESE PLANS HAVE BEEN REDUCED AND THE SCALE THEREFORE VARIES. FULL SCALE PLANS MAY BE VIEWED AT THE MUNICIPAL OFFICE.

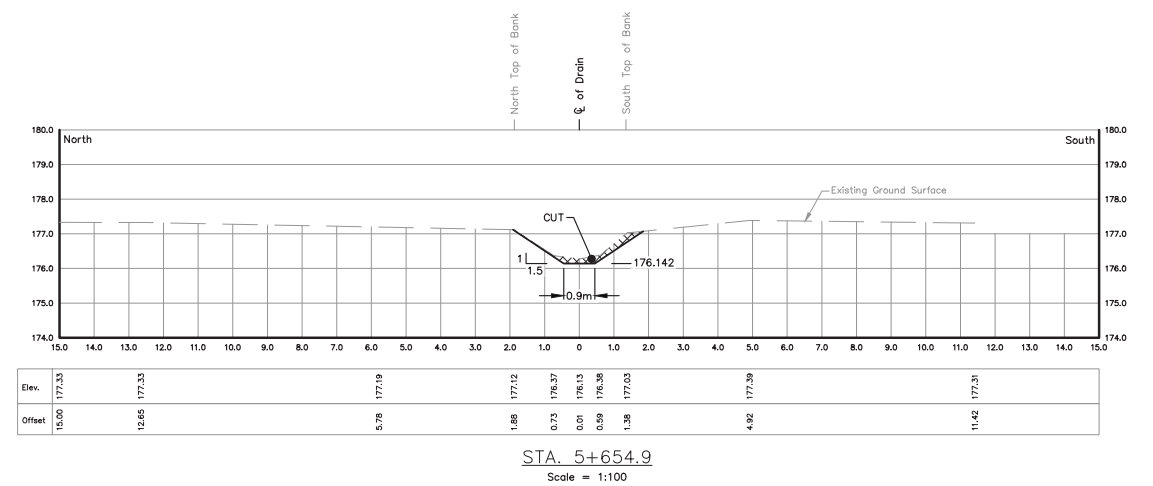
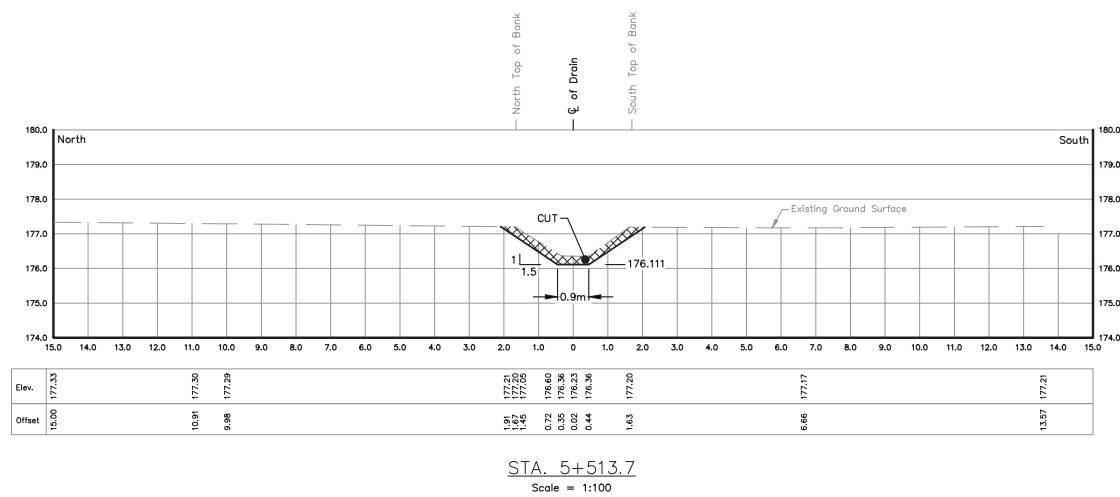
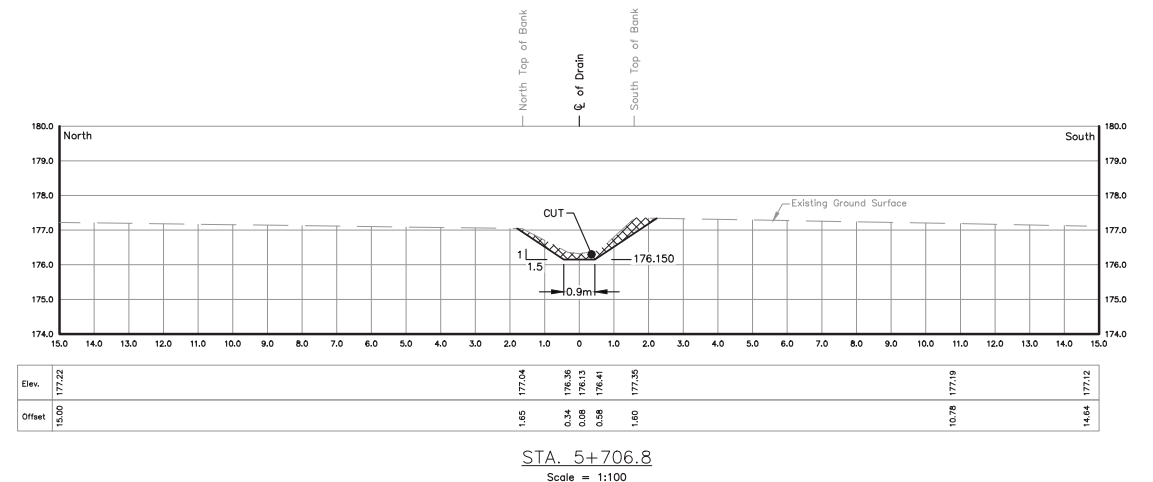
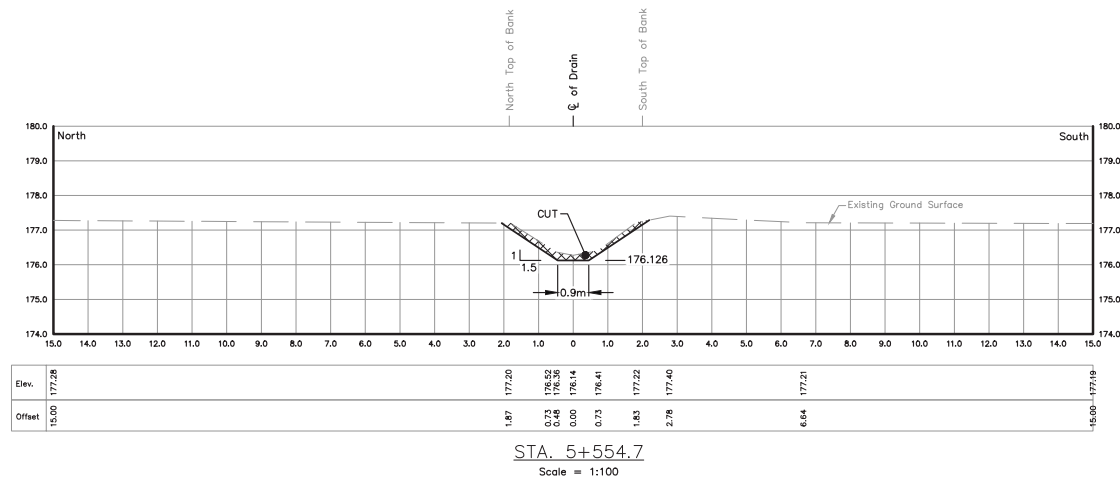
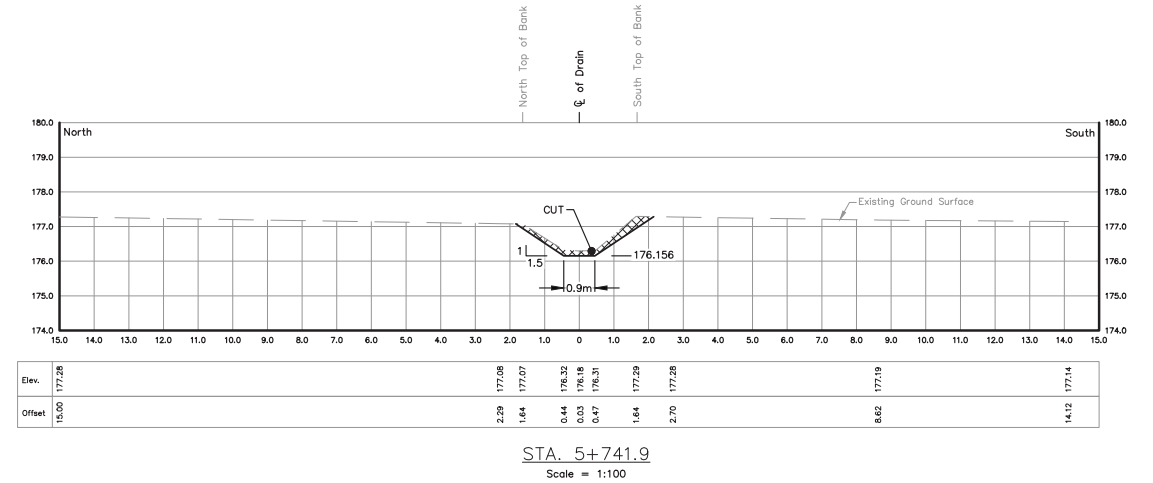
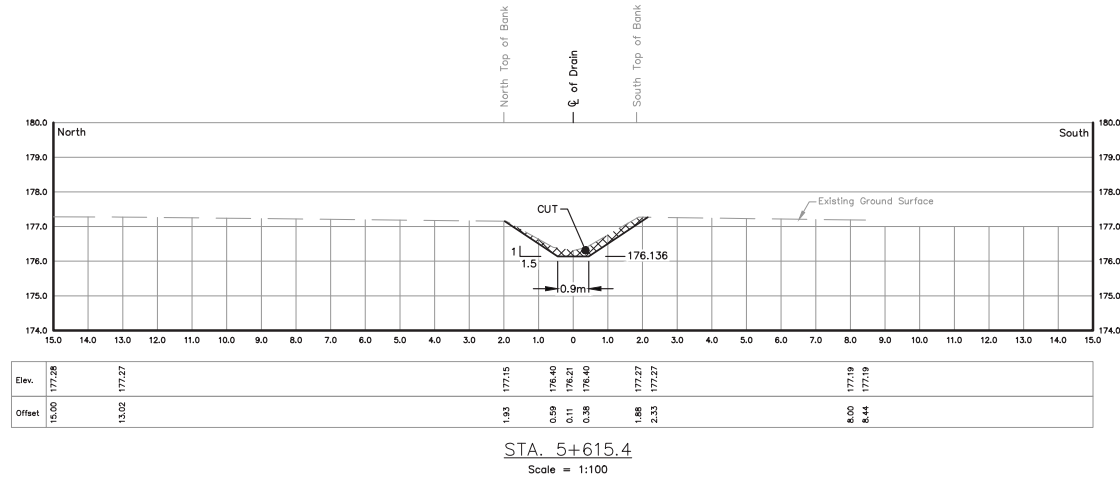




CROSS-SECTIONS OF CHAPPUS DRAIN EXISTING ALIGNMENT (CONT'D)

THESE PLANS HAVE BEEN REDUCED AND THE SCALE THEREFORE VARIES. FULL SCALE PLANS MAY BE VIEWED AT THE MUNICIPAL OFFICE.

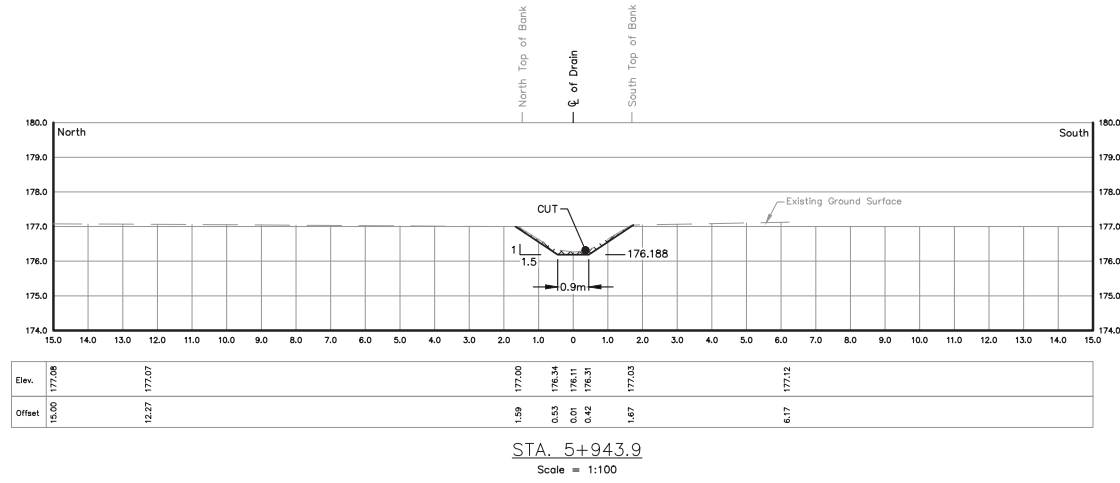
C:\Users\user\Desktop\REI2016D045 - Chappus Drain\REI2016D045-2.DWG, 2021-07-24



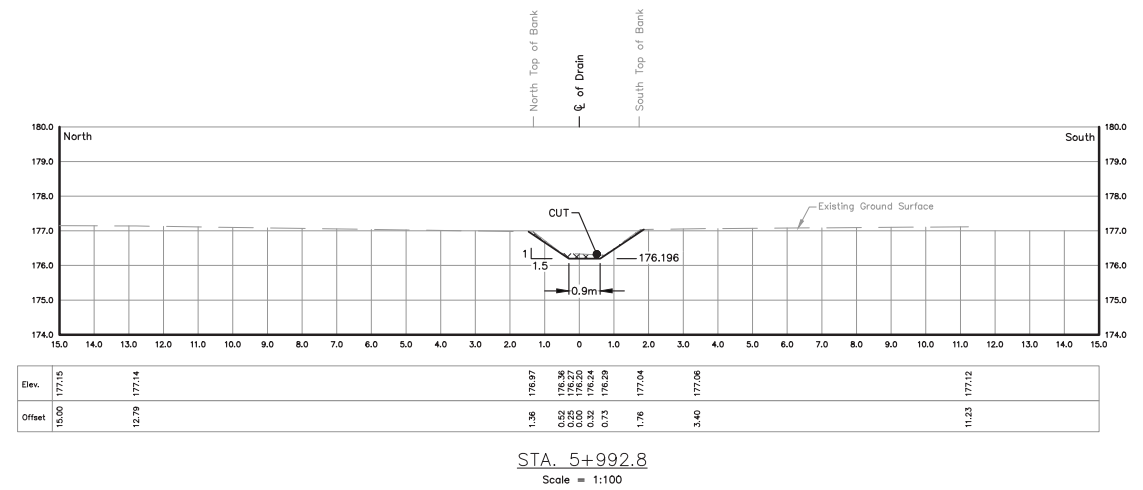
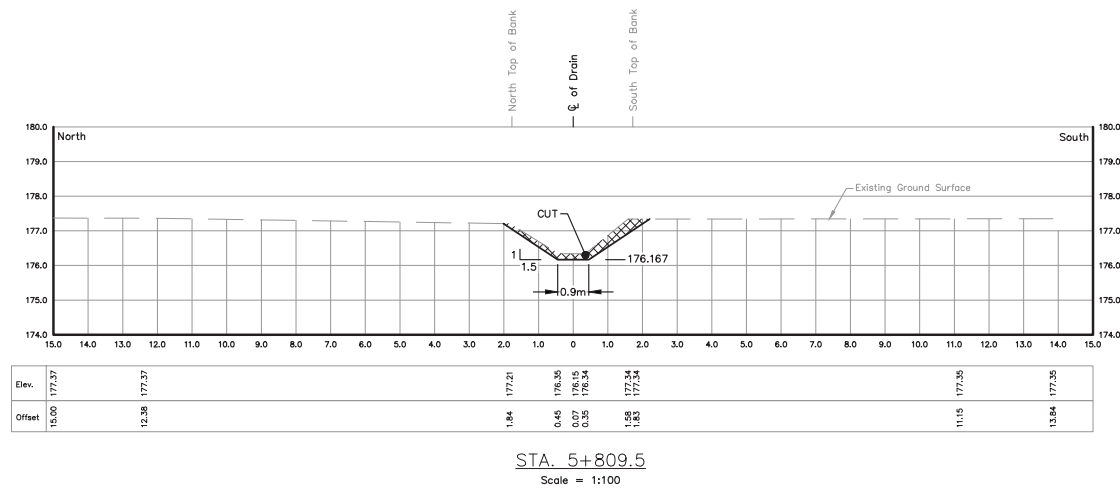
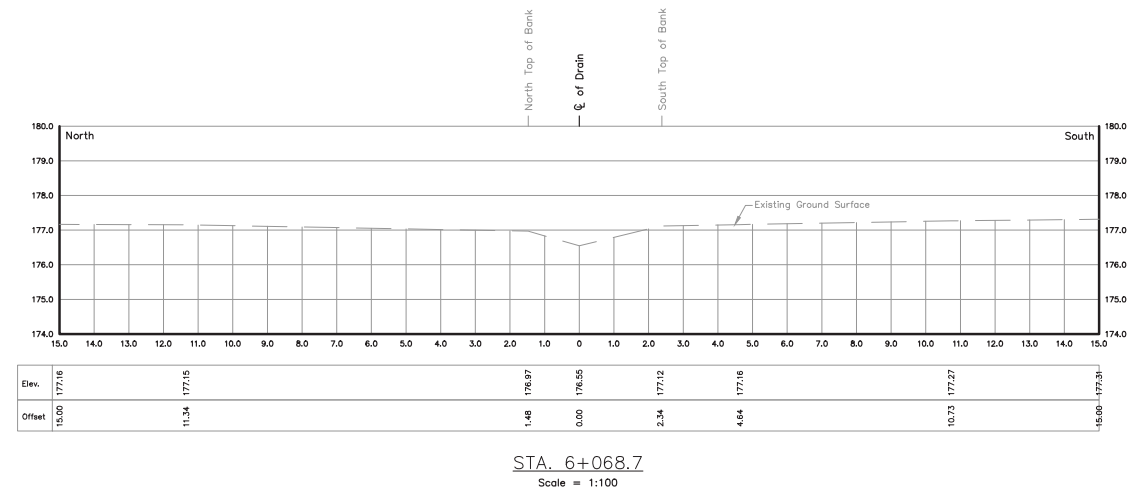
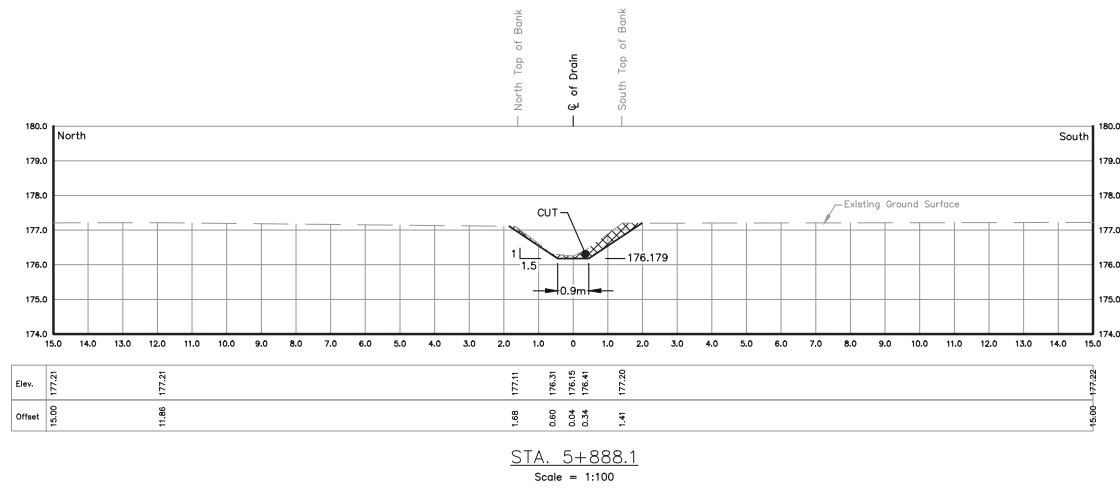
CROSS-SECTIONS OF CHAPPUS DRAIN EXISTING ALIGNMENT (CONT'D)

THESE PLANS HAVE BEEN REDUCED AND THE SCALE THEREFORE VARIES. FULL SCALE PLANS MAY BE VIEWED AT THE MUNICIPAL OFFICE.

C:\Users\jvaia\Desktop\REI2016D045 - Chappus Drain\REI2016D045-2.DWG, 2021-07-24

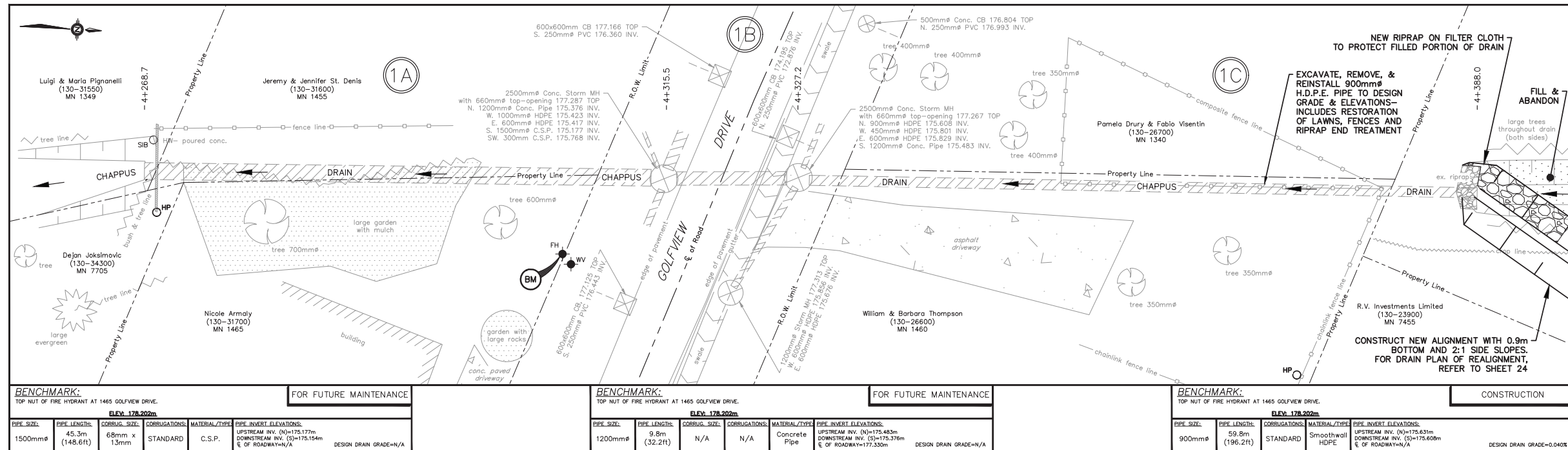


TOP END OF CHAPPUS DRAIN



CROSS-SECTIONS OF CHAPPUS DRAIN EXISTING ALIGNMENT (CONT'D)

THESE PLANS HAVE BEEN REDUCED AND THE SCALE THEREFORE VARIES. FULL SCALE PLANS MAY BE VIEWED AT THE MUNICIPAL OFFICE.



**BENCHMARK:**  
TOP NUT OF FIRE HYDRANT AT 1465 GOLFWAY DRIVE.  
ELEV. 178.202m

PIPE SIZE	PIPE LENGTH	CORRUG. SIZE	CORRUGATIONS	MATERIAL/TYPE	PIPE INVERT ELEVATIONS
1500mm $\phi$	45.3m (148.6ft)	68mm x 13mm	STANDARD	C.S.P.	UPSTREAM INV. (N)=175.177m DOWNSTREAM INV. (S)=175.154m % OF ROADWAY=N/A

DESIGN DRAIN GRADE=N/A

**BENCHMARK:**  
TOP NUT OF FIRE HYDRANT AT 1465 GOLFWAY DRIVE.  
ELEV. 178.202m

PIPE SIZE	PIPE LENGTH	CORRUG. SIZE	CORRUGATIONS	MATERIAL/TYPE	PIPE INVERT ELEVATIONS
1200mm $\phi$	9.8m (32.2ft)	N/A	N/A	Concrete Pipe	UPSTREAM INV. (N)=175.483m DOWNSTREAM INV. (S)=175.376m % OF ROADWAY=177.350m

DESIGN DRAIN GRADE=N/A

**BENCHMARK:**  
TOP NUT OF FIRE HYDRANT AT 1465 GOLFWAY DRIVE.  
ELEV. 178.202m

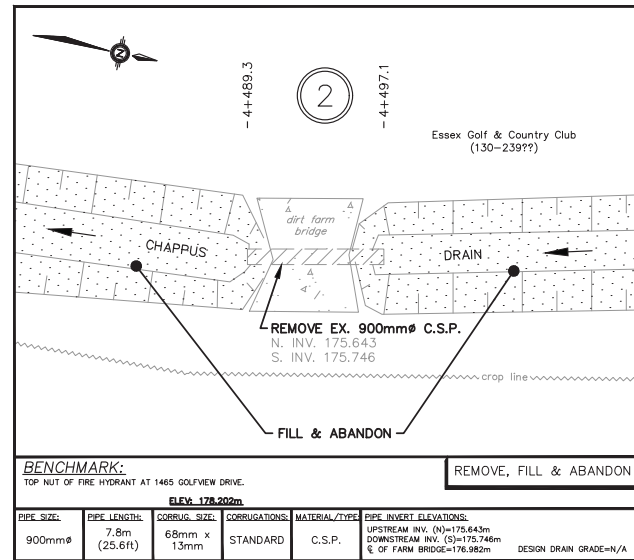
PIPE SIZE	PIPE LENGTH	CORRUGATIONS	MATERIAL/TYPE	PIPE INVERT ELEVATIONS
900mm $\phi$	59.8m (196.2ft)	STANDARD	Smoothwall HDPE	UPSTREAM INV. (N)=175.631m DOWNSTREAM INV. (S)=175.608m % OF ROADWAY=N/A

DESIGN DRAIN GRADE=0.040%

**BRIDGE #1A PLAN**  
SCALE=1:200

**BRIDGE #1B PLAN**  
SCALE=1:200

**BRIDGE #1C PLAN**  
SCALE=1:200

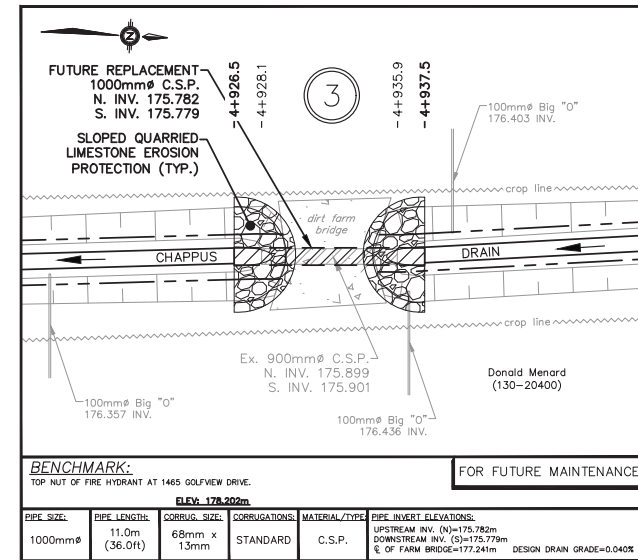


**BENCHMARK:**  
TOP NUT OF FIRE HYDRANT AT 1465 GOLFWAY DRIVE.  
ELEV. 178.202m

PIPE SIZE	PIPE LENGTH	CORRUG. SIZE	CORRUGATIONS	MATERIAL/TYPE	PIPE INVERT ELEVATIONS
900mm $\phi$	7.8m (25.6ft)	68mm x 13mm	STANDARD	C.S.P.	UPSTREAM INV. (N)=175.643m DOWNSTREAM INV. (S)=175.746m % OF FARM BRIDGE=176.982m

DESIGN DRAIN GRADE=N/A

**BRIDGE #2 PLAN**  
SCALE=1:200

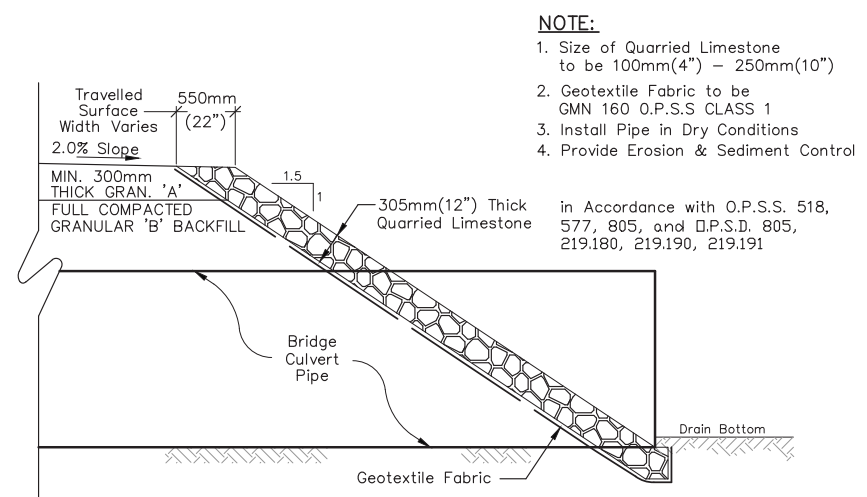


**BENCHMARK:**  
TOP NUT OF FIRE HYDRANT AT 1465 GOLFWAY DRIVE.  
ELEV. 178.202m

PIPE SIZE	PIPE LENGTH	CORRUG. SIZE	CORRUGATIONS	MATERIAL/TYPE	PIPE INVERT ELEVATIONS
1000mm $\phi$	11.0m (36.0ft)	68mm x 13mm	STANDARD	C.S.P.	UPSTREAM INV. (N)=175.782m DOWNSTREAM INV. (S)=175.779m % OF FARM BRIDGE=177.241m

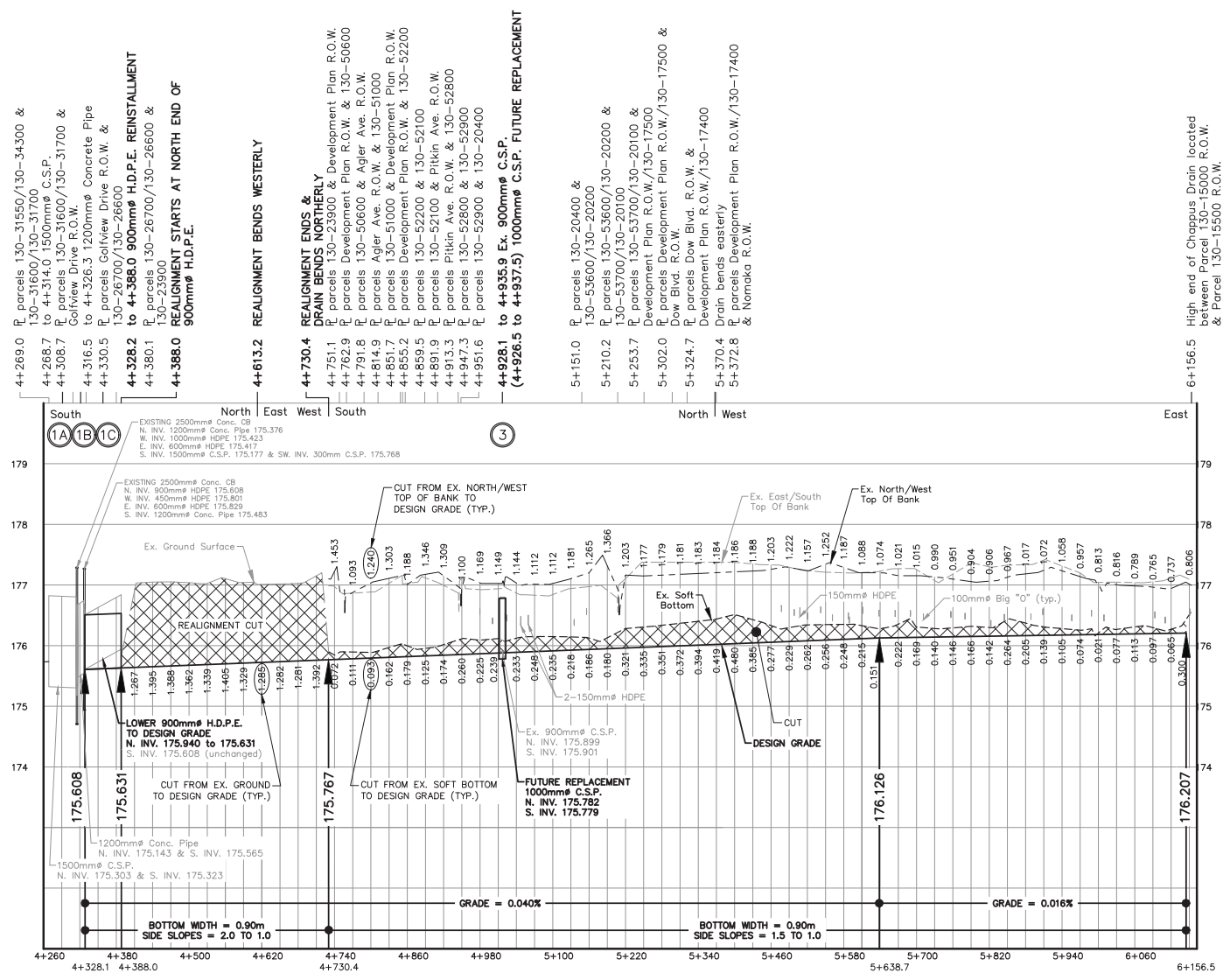
DESIGN DRAIN GRADE=0.040%

**BRIDGE #3 PLAN**  
SCALE=1:200



**TYPICAL QUARRIED LIMESTONE END PROTECTION**  
SCALE=N.T.S.

- NOTE:**
1. Size of Quarried Limestone to be 100mm(4") - 250mm(10")
  2. Geotextile Fabric to be GMN 160 O.P.S.S CLASS 1
  3. Install Pipe in Dry Conditions
  4. Provide Erosion & Sediment Control
- in Accordance with O.P.S.S. 518, 577, 805, and D.P.S.D. 805, 219.180, 219.190, 219.191



4+269.0 E parcels 130-31550/130-34300 & 130-31600/130-31700 to 4+314.0 1500mm $\phi$  C.S.P.  
 4+268.7 E parcels 130-31600/130-31700 & 4+308.7 Golfview Drive R.O.W.  
 4+316.5 to 4+326.3 1200mm $\phi$  Concrete Pipe  
 4+330.5 E parcels Golfview Drive R.O.W. & 130-29700/130-26600  
 4+328.2 to 4+388.0 900mm $\phi$  H.D.P.E. REINSTALLMENT  
 4+380.1 E parcels 130-26700/130-26600 & 130-23900  
 4+388.0 REALIGNMENT STARTS AT NORTH END OF 900mm $\phi$  H.D.P.E.  
 4+613.2 REALIGNMENT BENDS WESTERLY  
 4+730.4 REALIGNMENT ENDS & DRAIN BENDS NORTHERLY  
 4+751.1 parcels 130-23900 & Development Plan R.O.W.  
 4+762.9 parcels Development Plan R.O.W. & 130-50600  
 4+791.8 parcels 130-50600 & Agler Ave. R.O.W.  
 4+814.9 parcels Agler Ave. R.O.W. & 130-51000  
 4+851.7 parcels 130-51000 & Development Plan R.O.W.  
 4+855.2 parcels Development Plan R.O.W. & 130-52200  
 4+859.5 parcels 130-52200 & 130-52100  
 4+891.9 parcels 130-52100 & Pitkin Ave. R.O.W.  
 4+913.3 parcels Pitkin Ave. R.O.W. & 130-52800  
 4+947.3 parcels 130-52800 & 130-52900  
 4+951.6 parcels 130-52900 & 130-20400  
 4+928.1 to 4+935.9 Ex. 900mm $\phi$  C.S.P.  
 (4+926.5 to 4+937.5) 1000mm $\phi$  C.S.P. FUTURE REPLACEMENT  
 5+151.0 E parcels 130-20400 & 130-53600/130-20200  
 5+210.2 E parcels 130-53600/130-20200 & 130-53700/130-20100  
 5+253.7 E parcels 130-53700/130-20100 & Development Plan R.O.W./130-17500  
 5+302.0 E parcels Development Plan R.O.W./130-17500 & Low Blvd. R.O.W. & 130-17500  
 5+324.7 E parcels Low Blvd. R.O.W. & Development Plan R.O.W./130-17400  
 5+370.4 Drain bends easterly  
 5+372.8 E parcels Development Plan R.O.W./130-17400 & Normad R.O.W.  
 6+156.5 High end of Chappus Drain located by Parcel 130-15000 R.O.W. & Parcel 130-15500 R.O.W.

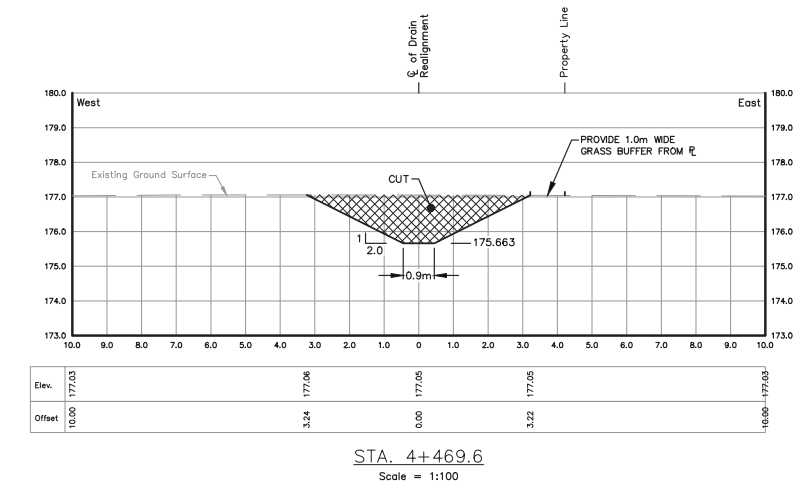
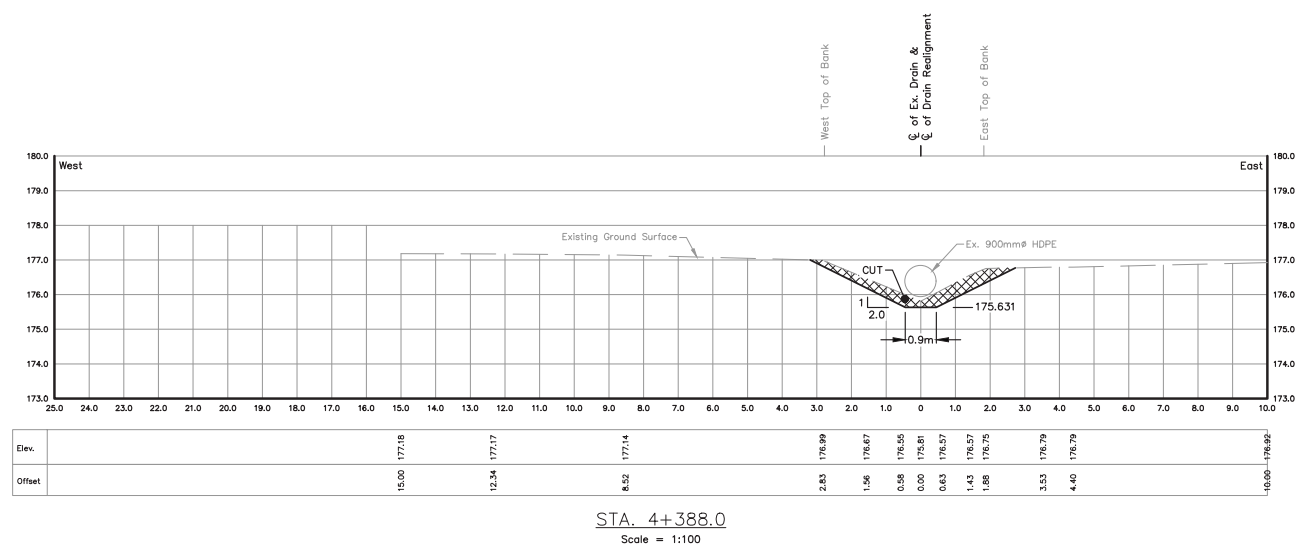
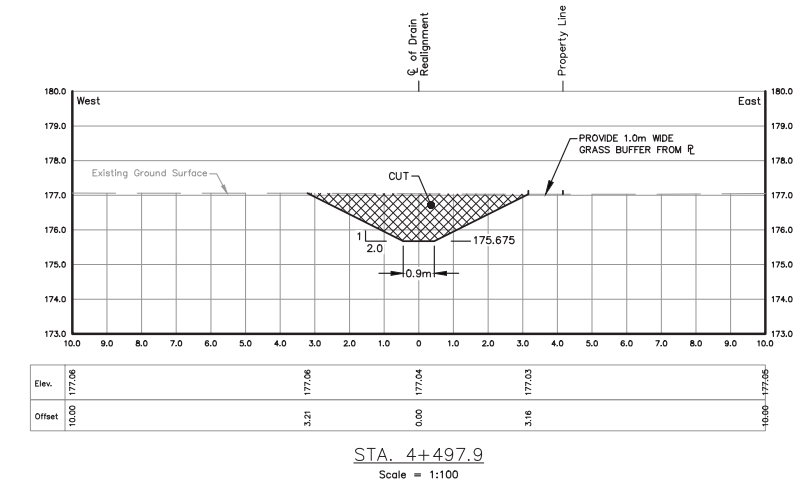
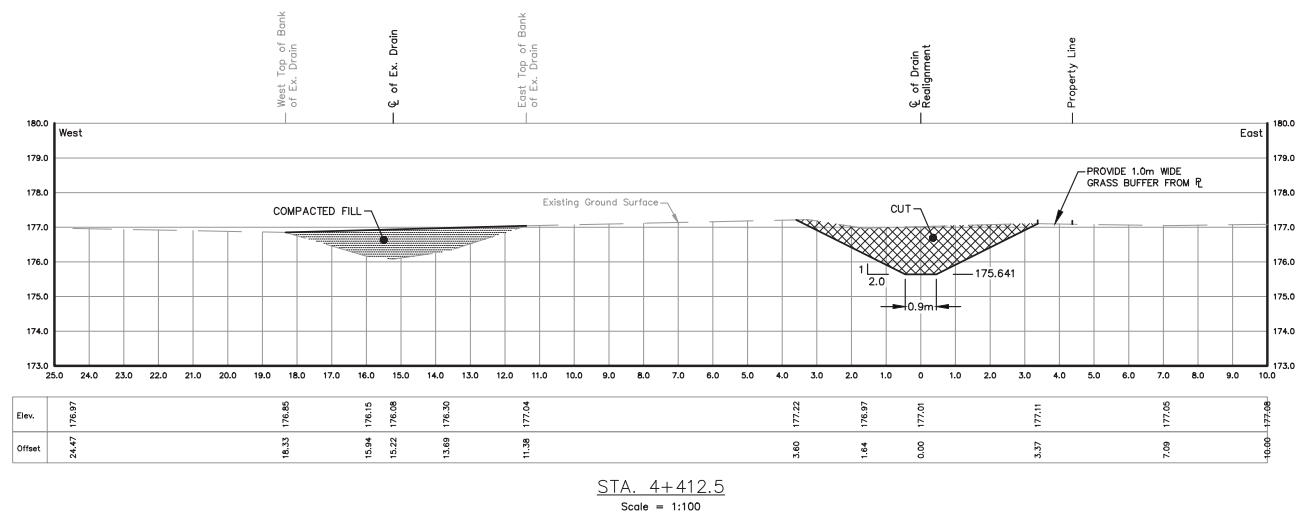
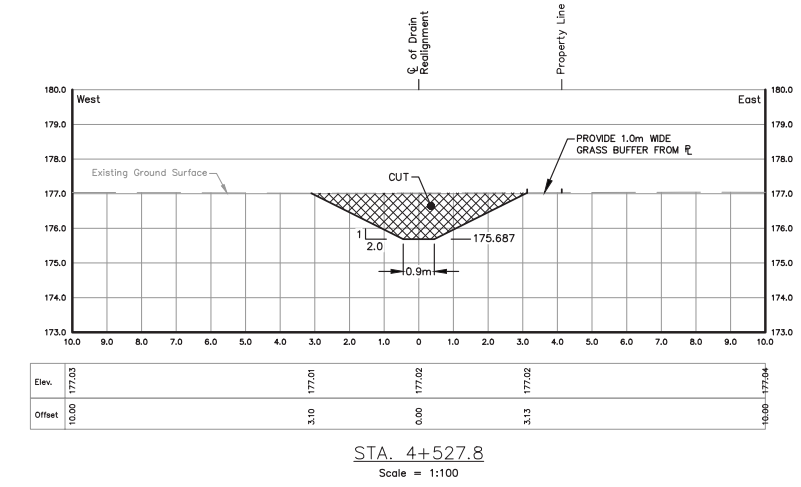
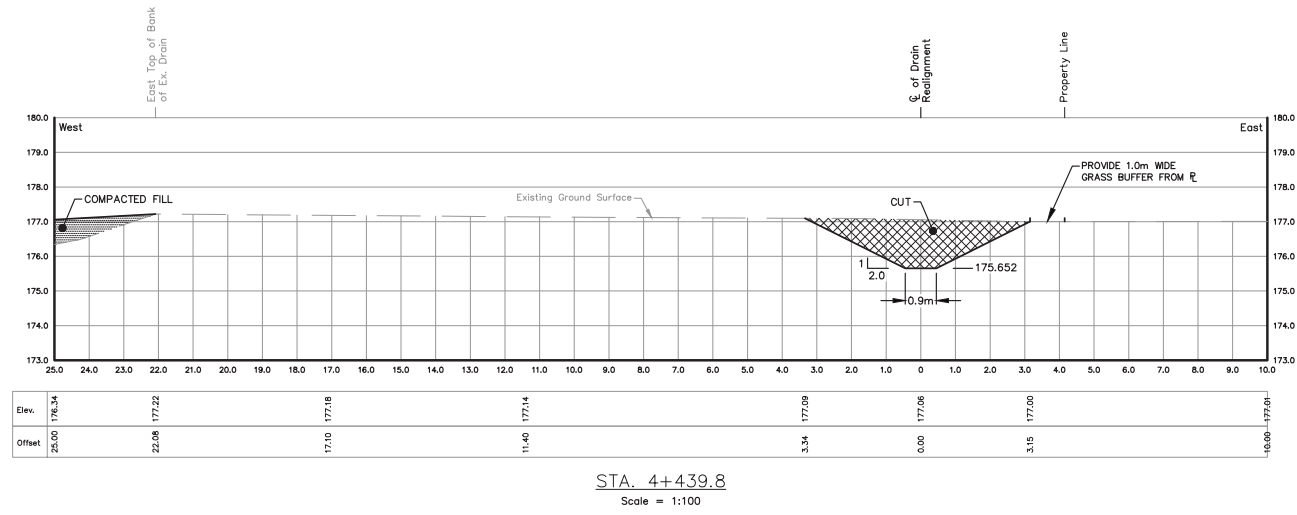
PROFILE- CHAPPUS DRAIN REALIGNMENT

SCALE = 1:5000 hor.  
 1:50 vert.

C:\Users\jason\OneDrive\Desktop\REI2016D045 - Chappus - Data\REI2016D045-2.dwg, 2021-07-24

THESE PLANS HAVE BEEN REDUCED AND THE SCALE THEREFORE VARIES. FULL SCALE PLANS MAY BE VIEWED AT THE MUNICIPAL OFFICE.

DRAWN BY: SH  
 PLOT CODE: 1:1  
 COMPUTER FILE: REI2016D045.DWG  
 FILE No.: REI2016D045 SHEET No.: 21 of 24

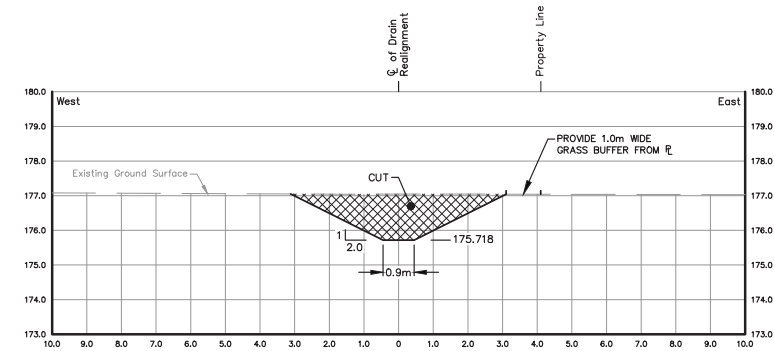


CROSS-SECTIONS OF CHAPPUS DRAIN REALIGNMENT

THESE PLANS HAVE BEEN REDUCED AND THE SCALE THEREFORE VARIES. FULL SCALE PLANS MAY BE VIEWED AT THE MUNICIPAL OFFICE.

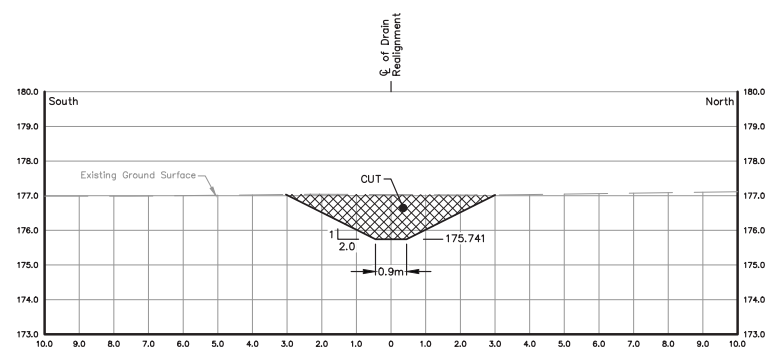
DRAWN BY: SH.  
PLOT CODE: 1-1  
COMPUTER FILE: REI2016D045.DWG  
FILE No.: REI2016D045  
SHEET No.: 22 of 24





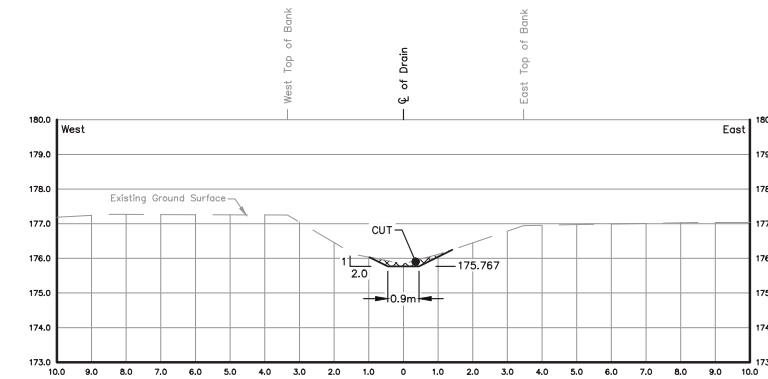
Elev.	177.26	177.04	177.03	177.26
Offset	10.00	3.12	0.00	3.10

STA. 4+606.8  
Scale = 1:100



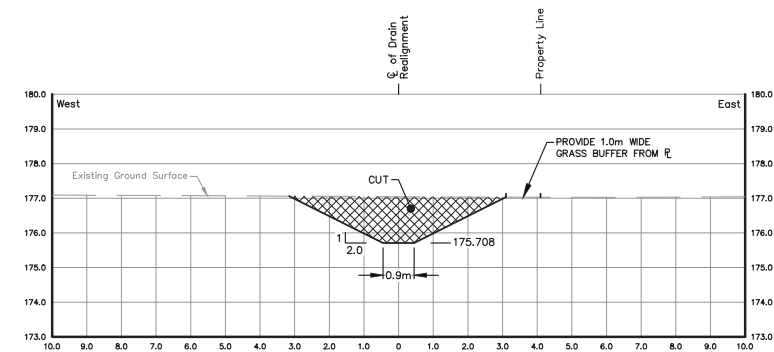
Elev.	176.99	177.04	177.03	177.02
Offset	10.00	3.00	0.00	3.00

STA. 4+665.8  
Scale = 1:100



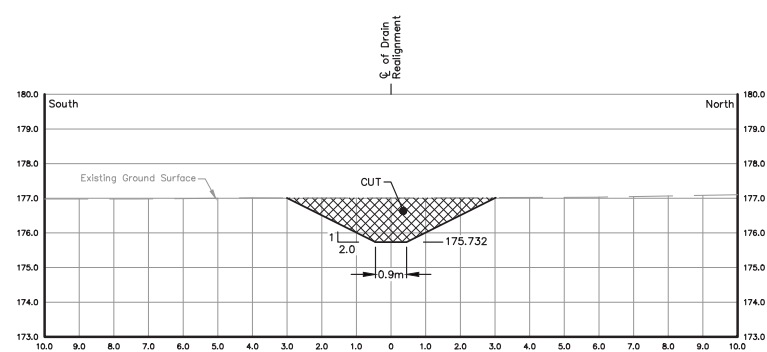
Elev.	177.15	177.27	177.25	175.77	176.85	177.04	177.03
Offset	10.00	8.46	3.34	0.00	3.47	8.41	10.00

STA. 4+730.4  
Scale = 1:100



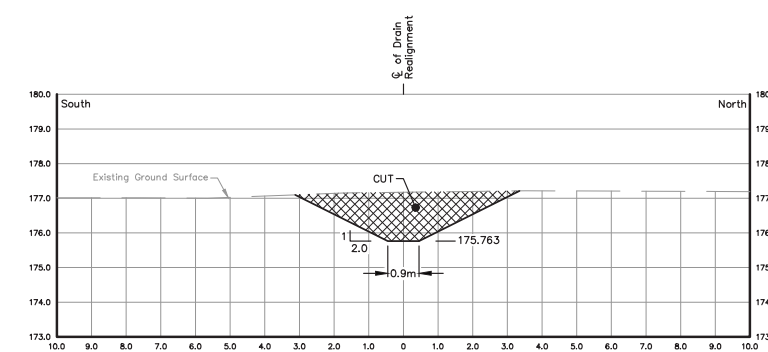
Elev.	177.09	177.06	177.04	177.03
Offset	10.00	3.16	0.00	3.10

STA. 4+582.7  
Scale = 1:100



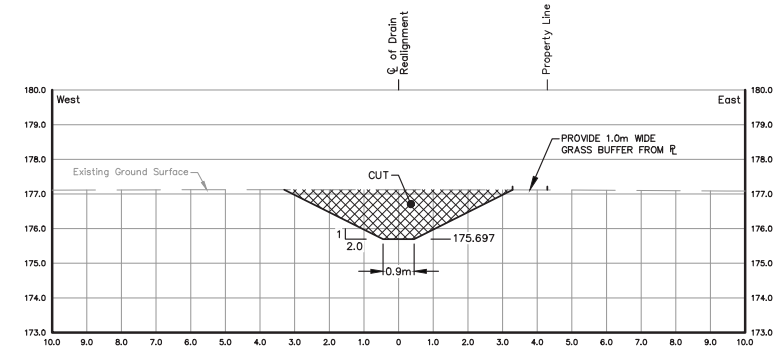
Elev.	176.99	177.01	177.01	177.02
Offset	10.00	3.00	0.00	3.02

STA. 4+641.0  
Scale = 1:100



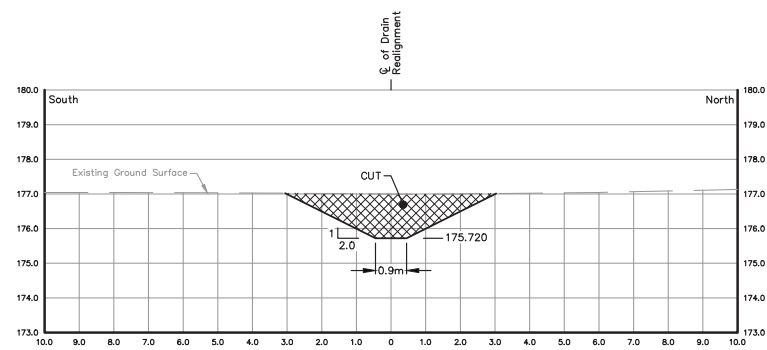
Elev.	177.01	177.15	177.17	177.21
Offset	10.00	3.12	0.00	3.35

STA. 4+719.2  
Scale = 1:100



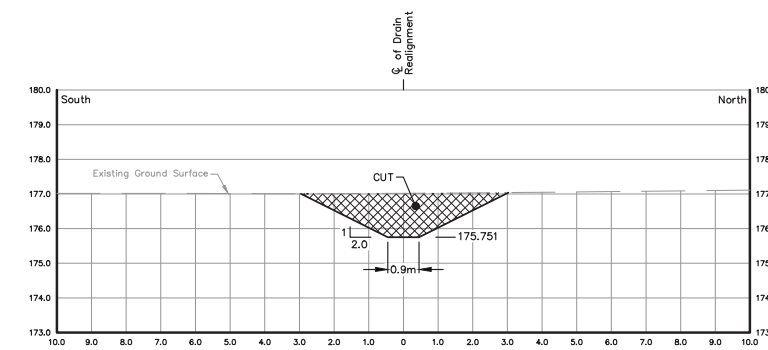
Elev.	177.11	177.11	177.12	177.11
Offset	10.00	3.30	0.00	3.29

STA. 4+554.2  
Scale = 1:100



Elev.	177.03	177.03	176.99	177.00
Offset	10.00	3.06	0.00	3.04

STA. 4+613.2  
Scale = 1:100



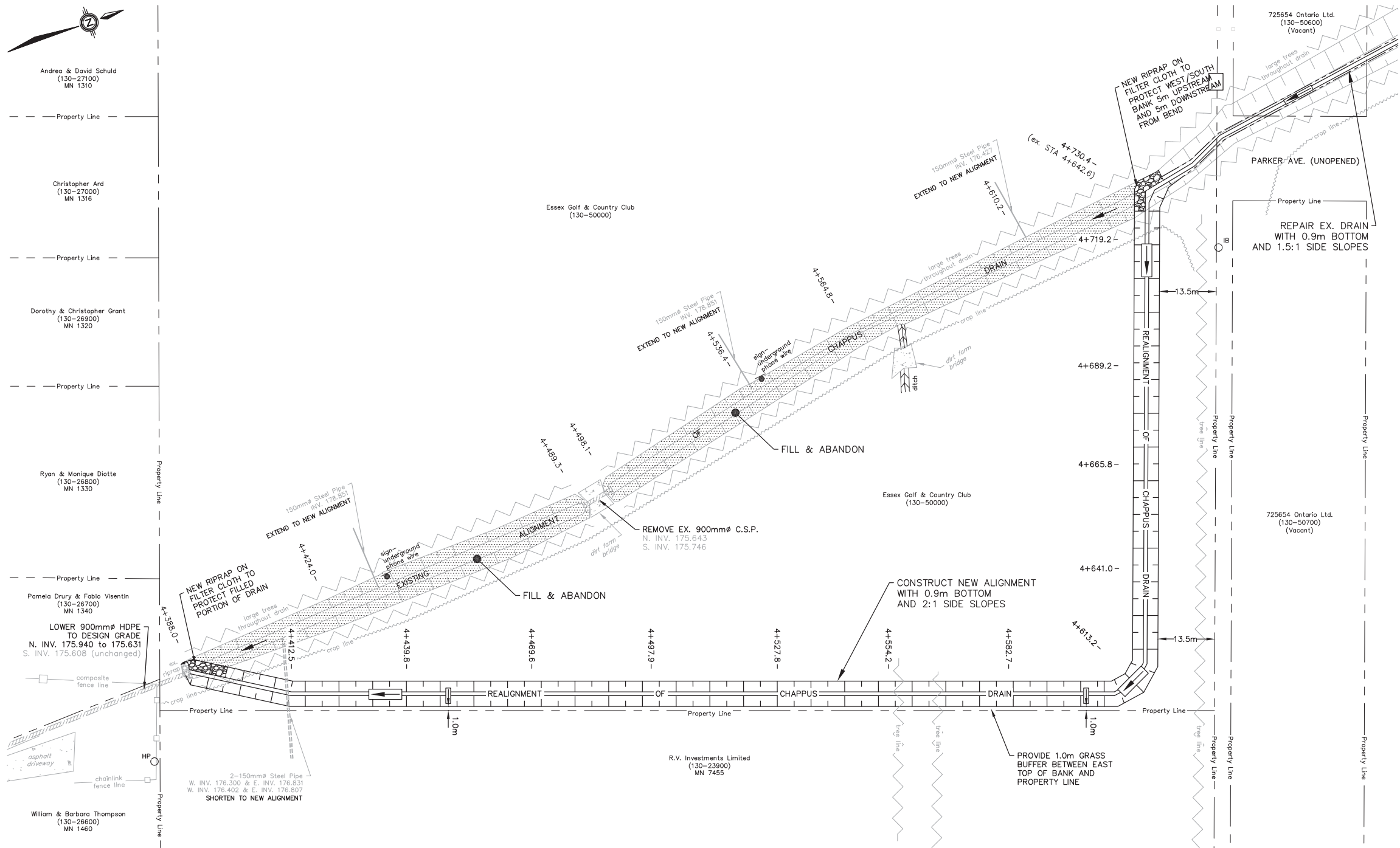
Elev.	177.02	177.00	177.02	177.04
Offset	10.00	2.96	0.00	3.03

STA. 4+689.2  
Scale = 1:100

CROSS-SECTIONS OF CHAPPUS DRAIN REALIGNMENT (CONT'D)

THESE PLANS HAVE BEEN REDUCED AND THE SCALE THEREFORE VARIES. FULL SCALE PLANS MAY BE VIEWED AT THE MUNICIPAL OFFICE.

DRAWN BY: S.H.  
PLOT CODE: 1:1  
COMPUTER FILE: REI2016D045.DWG  
FILE No.: REI2016D045  
SHEET No.: 23 of 24



**DRAIN PLAN - CHAPPUS DRAIN REALIGNMENT**

SCALE=1:500

THESE PLANS HAVE BEEN REDUCED AND THE SCALE THEREFORE VARIES. FULL SCALE PLANS MAY BE VIEWED AT THE MUNICIPAL OFFICE.

DRAWN BY: S.H.  
 PLOT CODE: 1:1  
 COMPUTER FILE: REI2016D045.DWG  
 FILE No.: REI2016D045  
 SHEET No.: 24 of 24