

ENVIRONMENT ACT PROPOSAL REPORT

Paterson Grain (a division of Paterson GlobalFoods Inc.)

**Proposal for a New Class I Development
Located on the NE $\frac{1}{4}$ of Section 22-3-27 WPM in the Rural
Municipality of Two Borders, Manitoba**

Originally Submitted May 15, 2015

Revised Version Submitted August 10, 2015

Further Revised Version Submitted September 24, 2015

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Paterson Grain (a division of Paterson GlobalFoods Inc.) (“Paterson”)

Environment Act Proposal Report

Executive Summary

Paterson is proposing the development of a new full service crop inputs retail site to be located on the NE ¼ of Section 22-3-27 WPM in the Rural Municipality of Two Borders, Manitoba (collectively the “Site”). The Site will provide Manitoba farmers much needed access to highly efficient supply facilities for quality crop inputs products and services including: bulk seed; bagged seed; dry fertilizer; liquid fertilizer; anhydrous ammonia (“NH₃”); and, a variety of crop protection products.

Introduction and Background

Paterson was established in 1908 and has been in operation for over 100 years. After a detailed review of the current needs of Manitoba farmers in the area surrounding the Site, Paterson has determined that a new full service crop inputs retail location is required. Paterson has reviewed this situation in detail and concluded that the physical location of the Site is ideal. Specifically, the Site is out of town and away from the general population. The development of the Site is in line with Paterson’s commitment to satisfying the changing needs of Manitoba farmers with a focus on minimal impact to the environment and surrounding communities.

Proposed Development

Description of the Site

The Site is located on the NE ¼ of Section 22-3-27 WPM in the Rural Municipality of Two Borders, Manitoba and, upon approval of Paterson’s current subdivision application, will be eighteen (18) acres in size. Specifically, the Site is located just south of Provincial Trunk Highway (“PTH”) 83 and a Canadian Pacific Railway (“CPR”) railway line (located just north of PTH 83). The Site is approximately five (5) kilometers west of the town of Melita, Manitoba.

For your reference, a map with a point marker indicating the location of the Site is attached hereto as Schedule “1”.

As noted above, the Site will include all required infrastructure and facilities for Paterson to offer Manitoba farmers a complete range of high quality crop input products and services including: bulk seed; bagged seed; dry fertilizer; liquid fertilizer; anhydrous ammonia; and other crop protection products. The Site will also have an administration office. A working copy of the Site plan is attached hereto as Schedule “2”. Please note that Paterson intends to commence construction of the Site in or around October 1, 2015 with the intention to complete construction in October of 2016.

Upon completion of construction, the Site will be fully fenced (with a minimum fence height of one point eight (1.8) meters complete with wire barricade material) and equipped with a modern electronic security system. The Site will include a well for the supply of water and a new septic tank will be installed on the Site for the collection of waste water. Paterson will schedule regular emptying services for the septic tank on an ongoing and continuous basis, as required. As the Site will be strictly operated as a retail facility, the septic tank will house only sanitary waste.

The Site will include all required facilities for the purposes of mitigating risks associated to fire and/or accidental leak and/or product discharge. Specifically, the Site will be equipped with the required secondary containment infrastructure for its crop protection warehouse and be inclusive of a minimum of forty five (45) centimeters compacted clay earthen dyke and/or berm. The Site’s liquid fertilizer facility’s secondary containment infrastructure will be capable of holding one hundred ten percent (110%) of the maximum volume of the largest tank located on the Site. The Site’s crop protection warehouse, liquid fertilizer facility, dry fertilizer facility and seed facilities will be equipped with concrete work pads for the purposes of capturing and containing potential spills.

The Site will be equipped with a small fleet of passenger service vehicles, product delivery units and product application equipment. The Site will not include facilities for the storage of fuel for its fleet.

Summary of Key Facilities

A summary of the approximate size and/or capacity of the key facilities proposed to be included as part of the Site is set out as follows:

Description of Facility	Description of Relative Products to be Located at the Facility	Approximate Size/Capacity of Facility
Administrative Office	N/A	2,400 Square Feet (“ft ² ”)
Warehouse (Crop Protection)	Various agricultural herbicides, fungicides and insecticides.	7,500 ft ²
Seed Facility (Bulk)	Various agricultural seed including seed for cereal grains, oilseeds and pulses.	2,000 Metric Tonnes (“MT”)
Seed Facility (Bagged)	Various agricultural seed including seed for cereal grains, oilseeds, pulses and forages.	2,400 ft ²
Dry Fertilizer Facility (Bulk)	Various dry agricultural fertilizer including nitrogen, phosphates, potash, sulfur and micronutrients.	2,000 MT
Liquid Fertilizer Facility (Bulk)	Various liquid agricultural fertilizer including nitrogen, phosphates and sulfur.	2,800 MT
NH ₃ Facility	Anhydrous Ammonia	100 MT

Daily Operations

With respect to staffing, Paterson intends to employ five (5) to eight (8) full-time Site employees. Additionally, Paterson intends to employ between two (2) and six (6) seasonal part-time employees.

The Site's normal daily operating hours will be from 8:00 am to 5:00 pm, Monday to Friday; however, if and when necessary, Paterson may extend the Site's regular operating hours to accommodate customer demand during peak seasons.

Anticipated Traffic Flow

Anticipated traffic flow to and from the Site will vary dependant on the agricultural season. During the winter and crop growing months, traffic flow will be minimal and primarily limited to the daily commutes of the Site's staff and suppliers.

During the spring months, being a peak crop inputs season, Paterson anticipates to have increased daily customer and supplier vehicle traffic to and from the Site. For your reference, please find attached hereto as Schedule "3" a chart detailing the estimated traffic volumes to and from the Site. Please note that Paterson has already been in communication with Manitoba Infrastructure and Transportation ("MIT") with respect to potentially required on-highway improvements and is committed to working with MIT with respect to same.

Existing Environment

As noted previously, the Site is located on the NE ¼ of Section 22-3-27 WPM in the Rural Municipality of Two Borders, Manitoba and, upon successful subdivision, will be eighteen (18) acres. The Site is not situated in an active floodplain.

Zoning & Soil Conditions

The Site is currently zoned for agricultural use and is made up of Souris fine sandy loam soil. Paterson completed drilling and testing of Site bore holes in July 2015. These tests confirmed:

no standing aquifer; clay fill layer termination point; and, minimal groundwater movement through the examined soil strata. For your reference, please find attached hereto as Schedule “4” a copy of the Site’s bore hole test results.

The Site’s topography is generally flat and inclusive of natural drainage directions leading to the east and south. For your reference, please find attached hereto as Schedule “5” the detailed Site drainage design. Please note that Paterson has already secured approval of the provided drainage design from MIT’s Engineering and Operations Division.

Summary of Existing Environment

The Site is located on the south side of PTH 83 and a CPR railway is located immediately north of PTH 83. Road 16N-159W, a rudimentary gravel range road providing ingress and egress to the Site, is located to the east of the Site. The Site is approximately five (5) kilometers west of the town of Melita, Manitoba. The closest subdivision, government institution and bridge are all located within the town of Melita, Manitoba. The Site and all lands surrounding the Site is existing farm land used for crop production purposes.

With respect to waterways, the Souris River is located approximately one point six (1.6) kilometers away from the Site, to the south. The Souris River is the receiving stream for the Site. For your reference, please find attached hereto as Schedule “6” a map of the area surrounding the Site inclusive of plot points indicating the location of the Souris River relative to the Site.

The Site is located with ample buffer areas from inhabited yard sites and is not located near parks, historic sites or Aboriginal reserve land. The closest yard sites to the Site are located in excess of one point two (1.2) and one point six (1.6) kilometers, respectively. The first of these yard sites is located to the west, north of PTH 83 and the CRP railway line (“Yard Site 1”). The second yard site is located to the east, south of PTH 83 (“Yard Site 2”). Please refer to Schedule “6” for the locations of Yard Site 1 and Yard Site 2.

Environmental Effects of Proposed Development

While all new developments incorporate a degree of impact to the environment, Paterson's development and operation of the Site will satisfy all required levels of environmental protection and applicable standards for sites of similar commercial nature. The Site is planned to be a crop inputs retail location; however, Paterson confirms that the Site will not be directly manufacturing crop input products nor will the Site's operations create hazardous industrial waste. Paterson desires to incorporate the latest technology in land development and crop inputs site infrastructure during the construction of the Site.

Human Health Effects of Proposed Development

Paterson is committed to satisfying all legal requirements regarding human health in its development and operation of the Site.

Although all new developments incorporate some risk to human health, the physical location of the Site, being outside of town limits and away from the general population, provides an enhanced degree of protection to human health. As noted previously, Paterson desires to incorporate the latest technology in land development and crop inputs site infrastructure and believes same will provide additional protection to human health and safety.

Environment and Human Health Protection

The Site will be intentionally landscaped to appropriately manage general water runoff and will be inclusive of the required containment systems to capture accidental spills at all product load out areas. Additionally, the Site will incorporate the required secondary containment systems for its crop protection warehouse, seed treatment facility and liquid fertilizer facility.

The Site will be monitored for accidental and/or potential spills on a continuous and ongoing daily basis. Paterson will remedy accidental spills in accordance with applicable government and industry standards with a focus on minimizing any impact to the environment and human

health. As noted previously, the Site is located with ample buffer areas from inhabited yard sites and the general population.

In addition to satisfying all relative industry standards, the Site will be consistently managed and maintained to satisfy all legal requirements with respect to the environment and the health and safety of its staff and customers. Specifically, the Site will be certified by the Agrichemical Warehousing Standards Association (“AWSA”) for its bulk seed operation, NH₃ and crop protection operations.

Follow-up Plan(s)

Paterson is committed to operating and maintaining the Site in accordance with all legal requirements. With respect to health and safety matters and environmental considerations, the Site will be inspected on an ongoing and consistent basis, but in any event at a minimum of several times per year, in accordance with AWSA’s prescribed standards.

Inspections may be conducted by: Site staff; Paterson’s Environmental, Health & Safety Officer; and/or the loss prevention department of Paterson’s insurance company. In addition, the Site will be recertified on an ongoing basis to meet the AWSA certification standards for its bulk seed, NH₃ and crop protection operations.

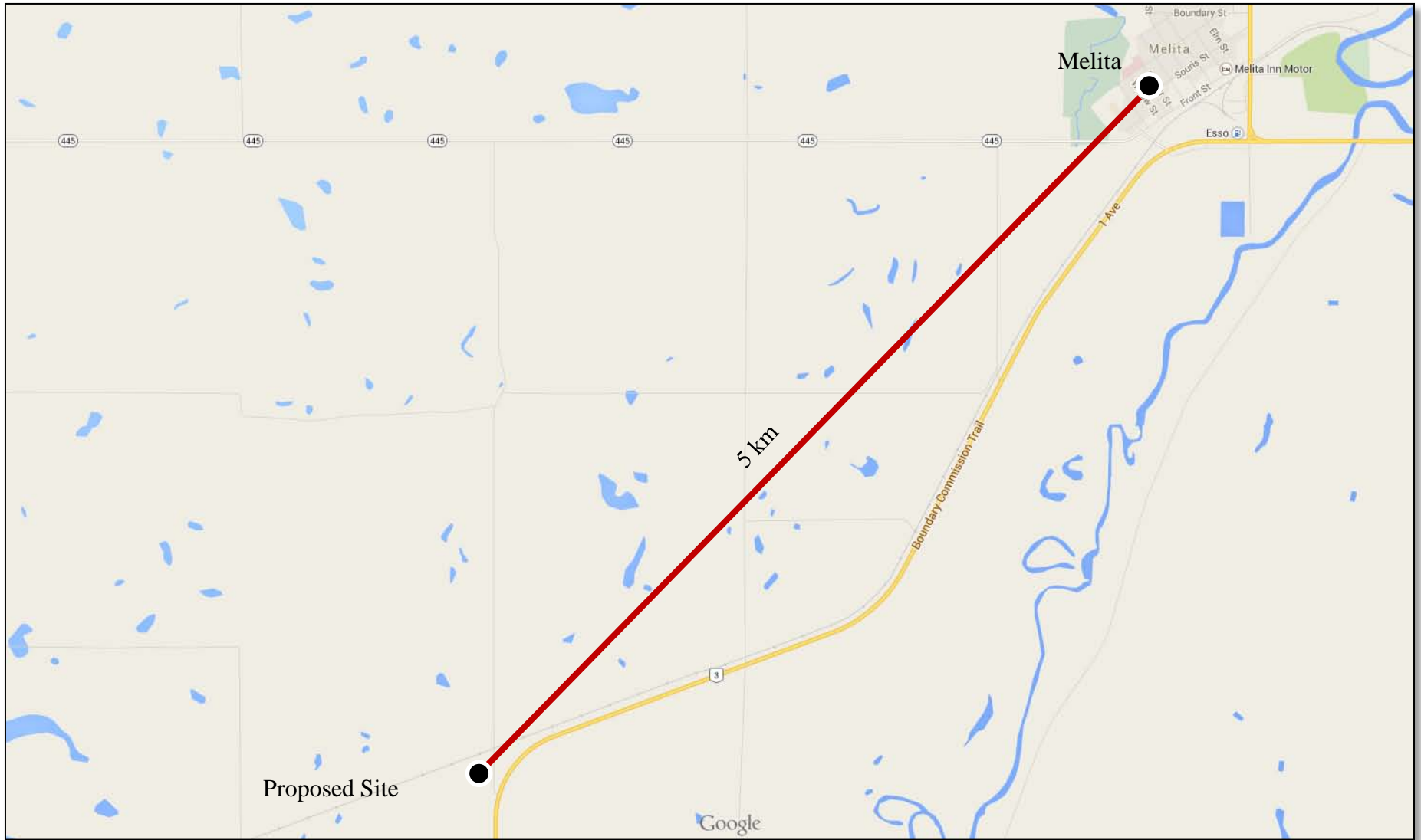
Conclusions

Paterson’s development of the Site will provide Manitoba farmers access to a new full service, highly efficient, crop input retail location.

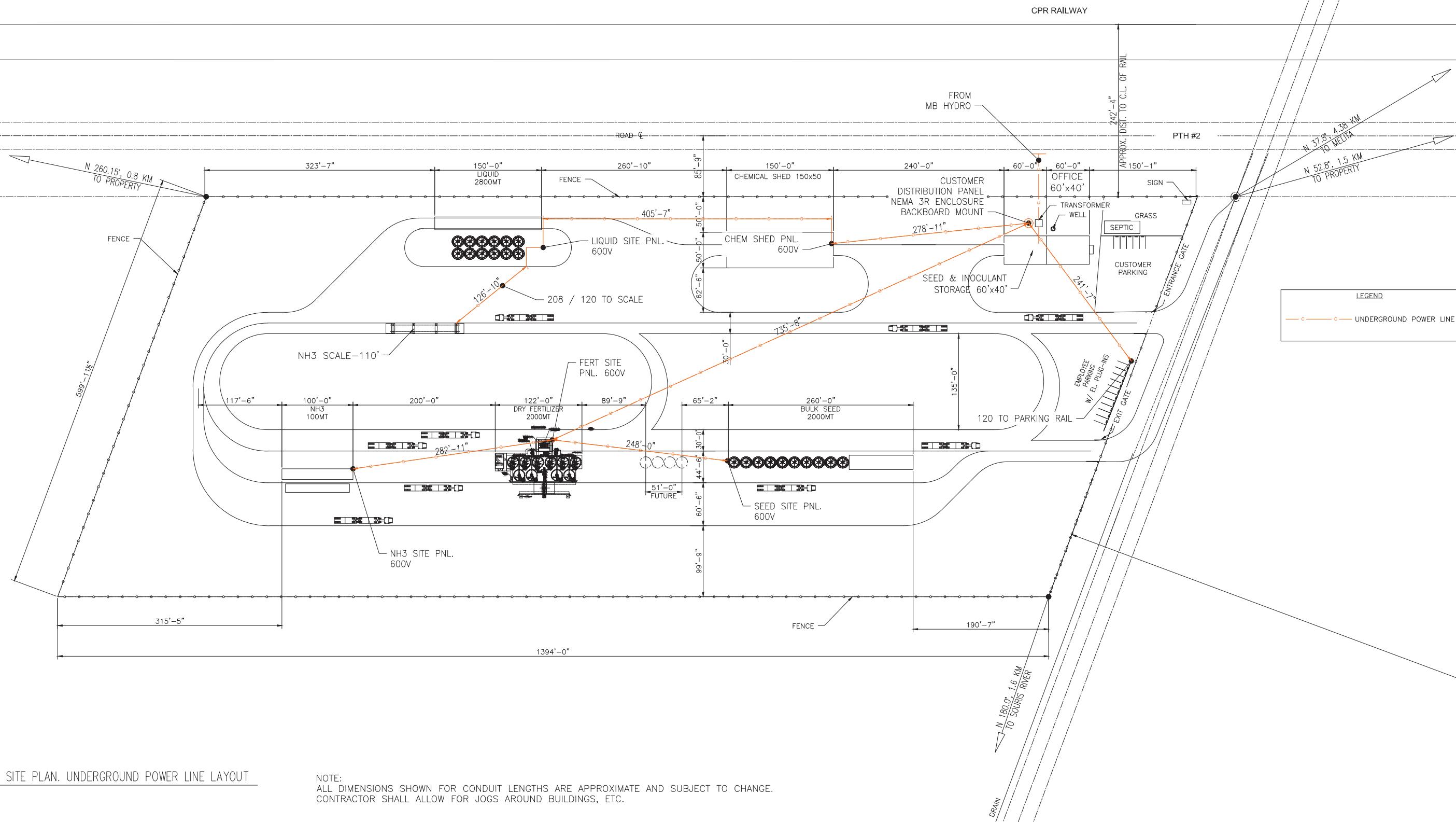
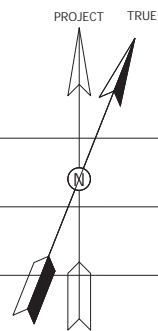
As noted herein, Paterson is committed to offering Manitoba famers a greater selection of premium products and services while improving its operations with an emphasis on the environment and the health and safety of its staff and customers.

The proposed development of the Site not only provides Manitoba farmers with the necessary high quality crop inputs products and services they require for their local farming operations but

has been specifically designed to satisfy the applicable environmental and health and safety requirements.







LEGEND	
	UNDERGROUND POWER LINE

GENERAL ARRANGEMENT. SITE PLAN. UNDERGROUND POWER LINE LAYOUT
Scale: 1/70"=1'-0"

NOTE:
ALL DIMENSIONS SHOWN FOR CONDUIT LENGTHS ARE APPROXIMATE AND SUBJECT TO CHANGE.
CONTRACTOR SHALL ALLOW FOR JOGS AROUND BUILDINGS, ETC.

PRELIMINARY
NOT FOR CONSTRUCTION

APPROVALS:	
BUSINESS UNIT:	_____
MANAGER ENGINEERING	_____
CEO	_____

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A	GS	09JUNE2015	PRELIMINARY-ISSUED FOR REVIEW

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PROJECT
**CROP INPUT
MELITA, MB**

PATERSON GRAIN

TITLE:
**CROP INPUT
SITE DEVELOPMENT**

DETAIL:
GENERAL ARRANGEMENT
SITE DEVELOPMENT PLAN
UNDERGROUND UTILITY LAYOUT

SITE AREA:	MELITA
DRAWN BY:	GS
DATE:	09 JUNE 2015
SCALE:	AS SHOWN
JOB NO.:	15-C22-SITE
DWG NO.:	G004
REV NO.:	A

F:\PTC Construction\Drafting\WIP\Georg\Manitoba\Melita Crop Input\PTC DRAWINGS\G - General Arrangements, elevations, sections & plans\CURRENT\15-C22-SITE-G004-RA-GA & SITE PLAN\UNDERGROUND UTILITY.dwg

Estimated Traffic Volumes

Proposed Crop Inputs Site, West of Melita, MB

Off Season Start	Off Season End	Off Season Days
1-Jul	30-May	334
Weight Off Season	92%	
Weight In Season	8%	

Vehicle Type	Off Season Trips	In Season Trips
Passenger Vehicle - Company Owned	16	20
Passenger Vehicle - Supplier Owned	2	4
Passenger Vehicle - Customer Owned	10	30
Truck - Company Owned	4	14
Truck - Supplier Owned	4	20
Truck - Customer Owned	4	12
Total Passenger Vehicle	28	54
Total Trucks	12	46
ADT - All Vehicles	40	100
ADT - Trucks	12	46
Weighted AADT - Trucks	15	
Weighted AADT - All Vehicles	45	

General Notes:

"Trip" defined as one vehicle movement from or to the proposed site.
 Site situated as per attached location plan.
 Trip origins/destinations approximately equally distributed from/to east and west along PTH#3.
 No trips originating or terminating north or south of the site along Road 16N - 159W.

PATERSON GRAIN
PROPOSED CROP INPUTS SITE WEST OF MELITA, MB



Project No: SU-15-042-00-SU

TH1

Project: Fertilizer, Office and Chemical Sheds

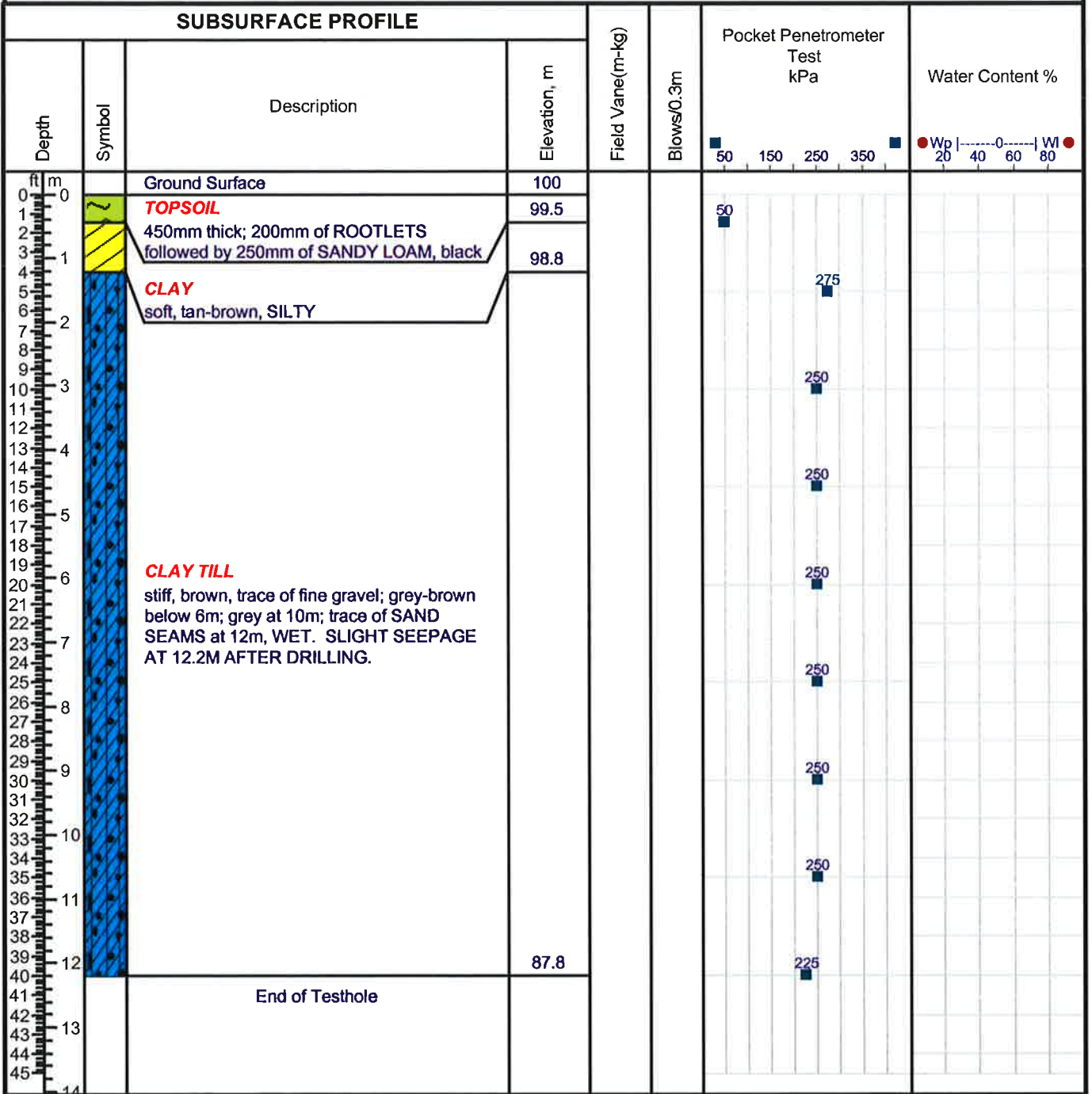
Client: HMC c/o Paterson Grain

Enclosure:

Location: Melita, Manitoba

Engineer: SSU

SUBSURFACE PROFILE



Drill Method: Continuous Auger

Datum: 100.0M(Road Grade)

Drill Date: 07/02/2015

Checked by: SSU

Hole Size: 125mm

Sheet: 1 of 1

Project No: SU-15-042-00-SU

TH2

Project: Fertilizer, Office and Chemical Sheds

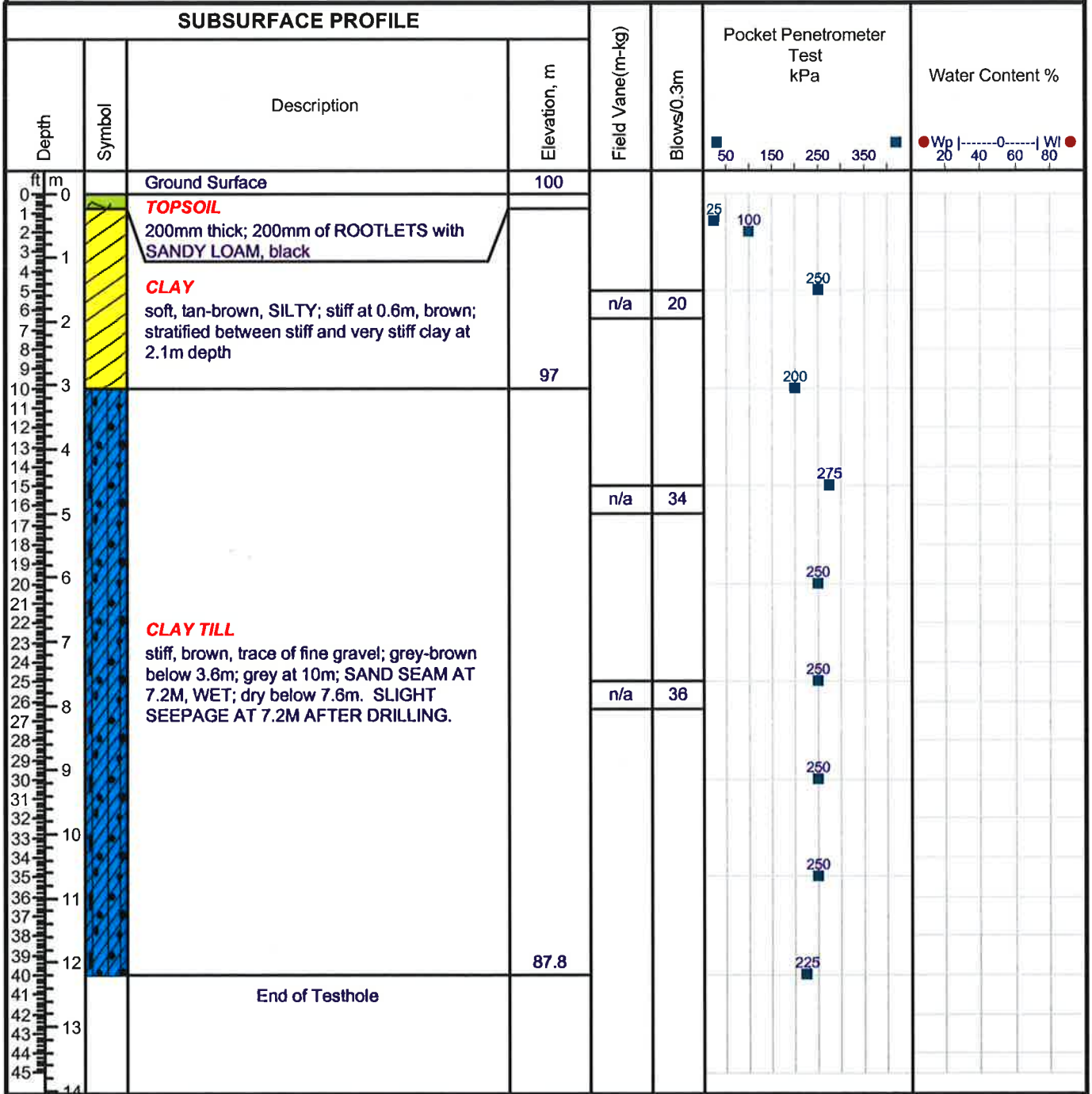
Client: HMC c/o Paterson Grain

Enclosure:

Location: Melita, Manitoba

Engineer: SSU

SUBSURFACE PROFILE



Drill Method: Continuous Auger

Datum: 100.0M(Road Grade)

Drill Date: 07/02/2015

Checked by: SSU

Hole Size: 125mm

Sheet: 1 of 1

Project No: SU-15-042-00-SU

TH3

Project: Fertilizer, Office and Chemical Sheds

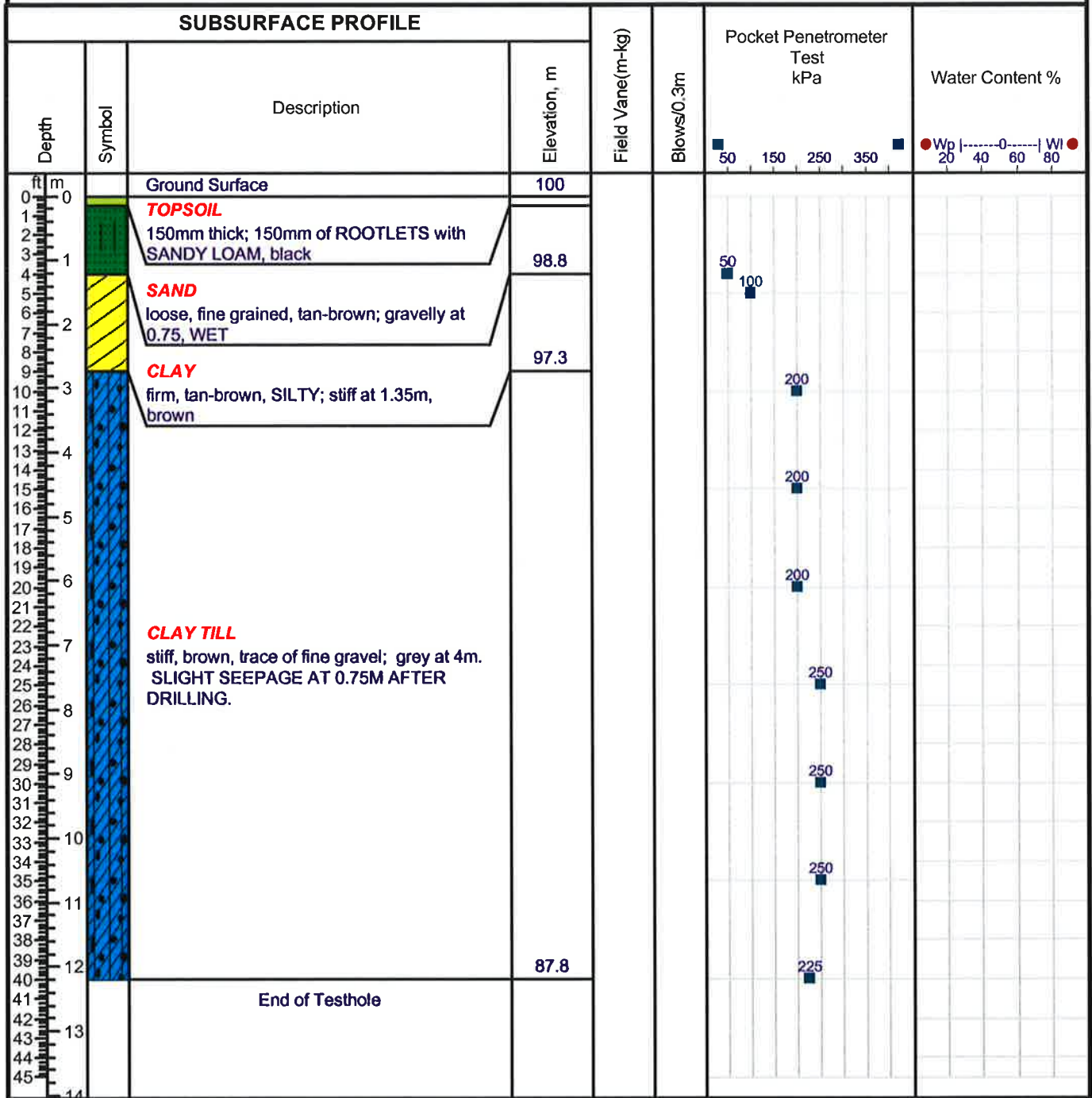
Client: HMC c/o Paterson Grain

Enclosure:

Location: Melita, Manitoba

Engineer: SSU

SUBSURFACE PROFILE



Drill Method: Continuous Auger

Datum: 100.0M(Road Grade)

Drill Date: 07/02/2015

Checked by: SSU

Hole Size: 125mm

Sheet: 1 of 1

Project No: SU-15-042-00-SU

TH4

Project: Fertilizer, Office and Chemical Sheds

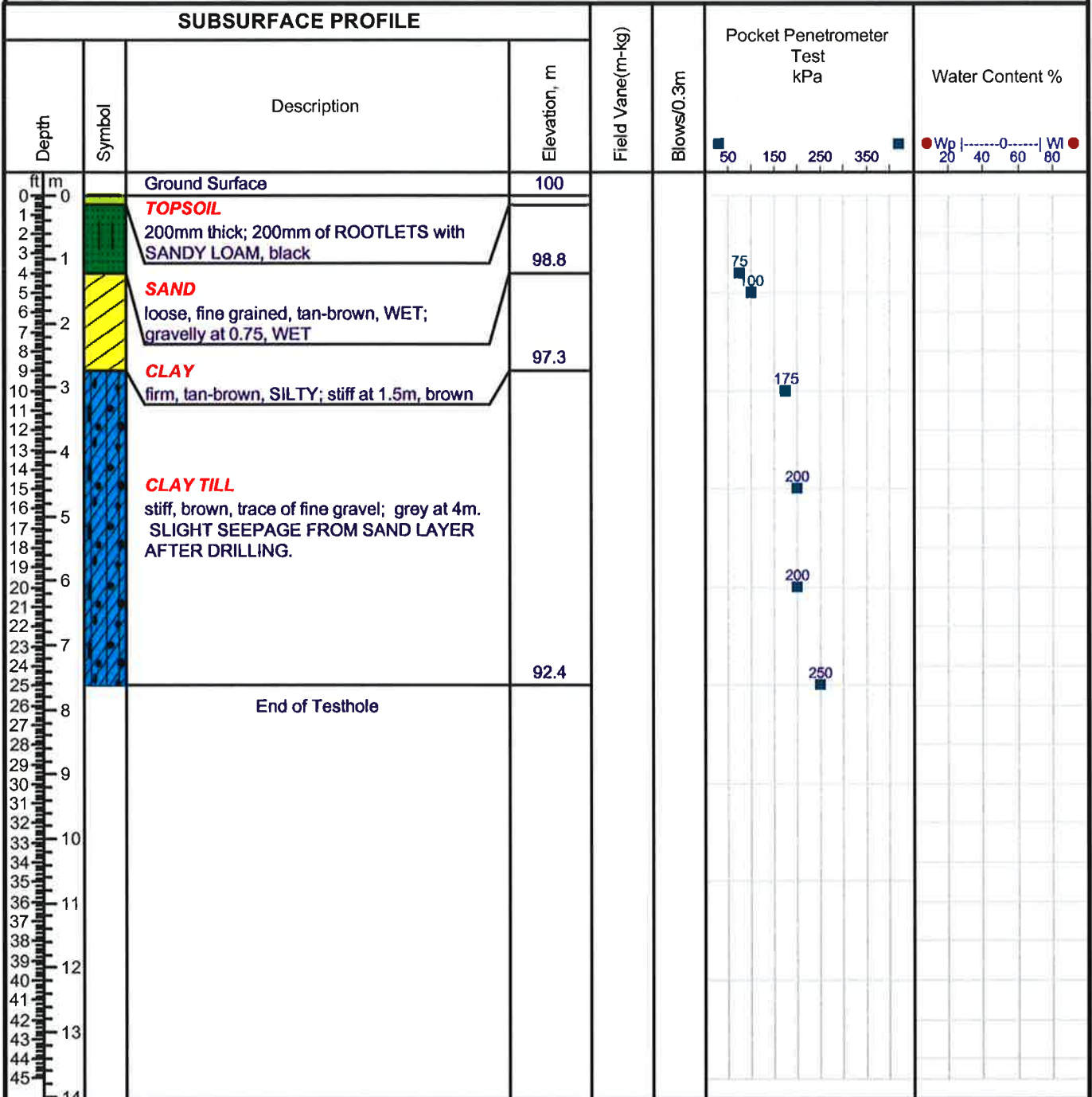
Client: HMC c/o Paterson Grain

Enclosure:

Location: Melita, Manitoba

Engineer: SSU

SUBSURFACE PROFILE



Drill Method: Continuous Auger

Datum: 100.0M(Road Grade)

Drill Date: 07/02/2015

Checked by: SSU

Hole Size: 125mm

Sheet: 1 of 1

Project No: SU-15-042-00-SU

TH5

Project: Fertilizer, Office and Chemical Sheds

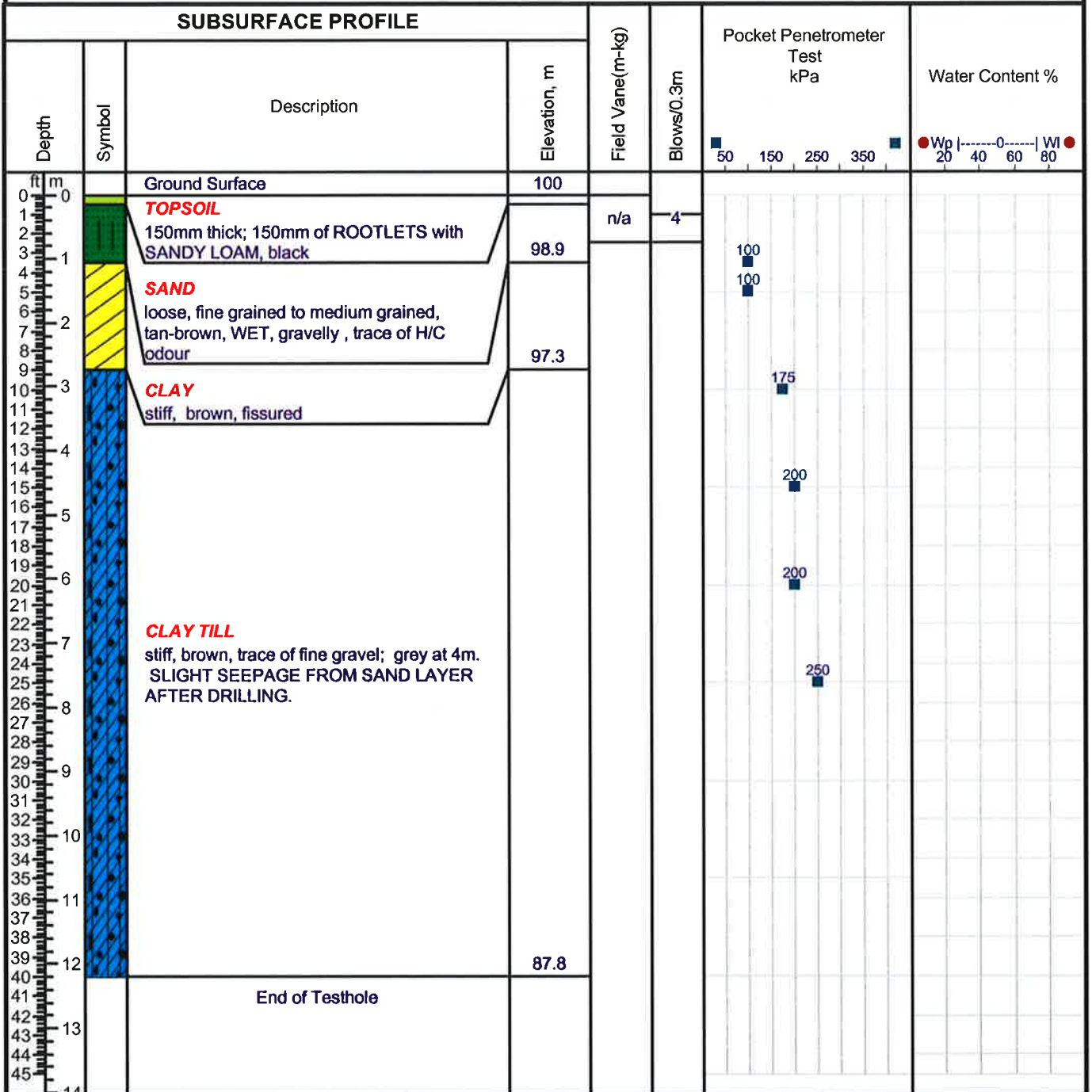
Client: HMC c/o Paterson Grain

Enclosure:

Location: Melita, Manitoba

Engineer: SSU

SUBSURFACE PROFILE



Drill Method: Continuous Auger

Datum: 100.0M(Road Grade)

Drill Date: 07/02/2015

Checked by: SSU

Hole Size: 125mm

Sheet: 1 of 1

Project No: SU-15-042-00-SU

TH6

Project: Fertilizer, Office and Chemical Sheds

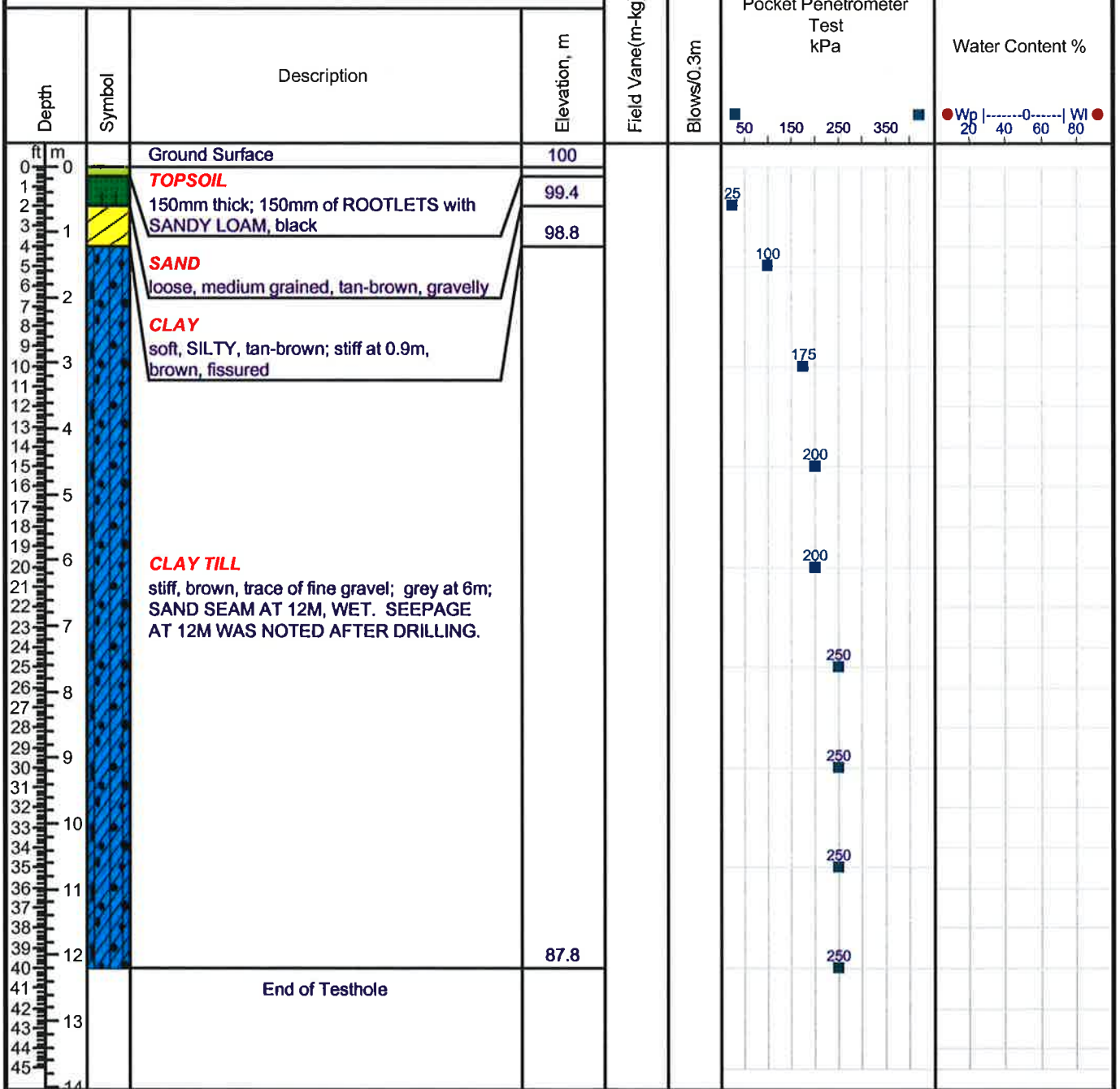
Client: HMC c/o Paterson Grain

Enclosure:

Location: Melita, Manitoba

Engineer: SSU

SUBSURFACE PROFILE



Drill Method: Continuous Auger

Datum: 100.0M(Road Grade)

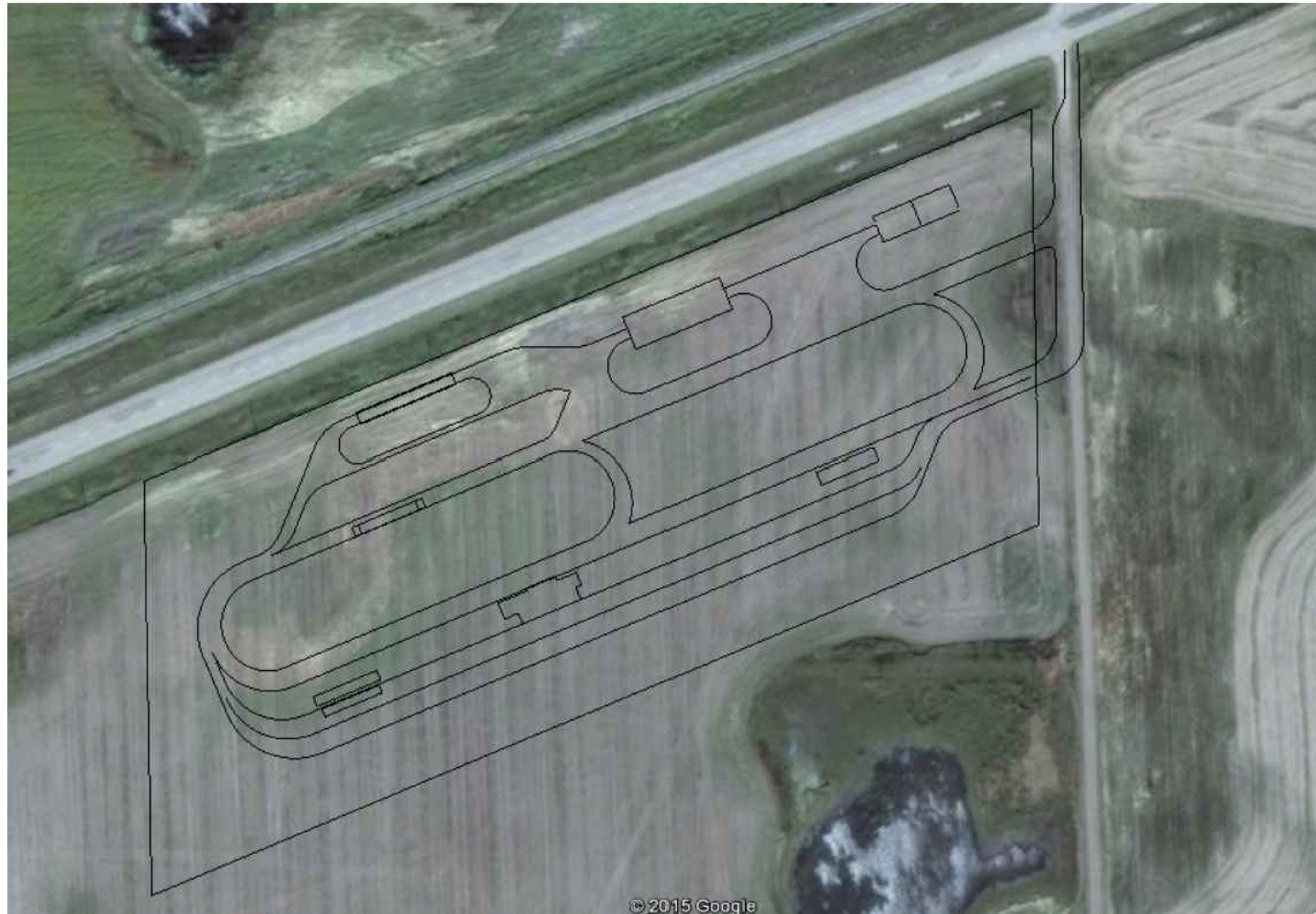
Drill Date: 07/02/2015

Checked by: SSU

Hole Size: 125mm

Sheet: 1 of 1

PTC Construction Ltd - Melita Crop Site



Drawing Number	Description	Rev.
1	Survey Plan	0
2	Site Plan	0
3	Grading Plan	0
4	Existing Site Catchment Areas	0
3	Design Site Catchment Areas	0

REV.	REVISION DESCRIPTION	DATE	DRAWN	CHECKED	DESIGNED BY	INITIALED
0	Summary Sheet	07-06-15	NH		NH	NH
					DRWN BY	INITIALED
					NH	NH
					DWG. CHECK	INITIALED
					DESIGN CHECK	INITIALED
					DATE	07-06-15
NO.	REFERENCE DRAWING					



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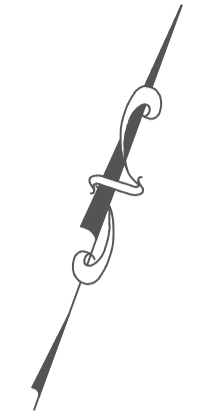
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Summary Sheet		
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PROJECT
 PTC Construction Ltd
 Melita Crop Site

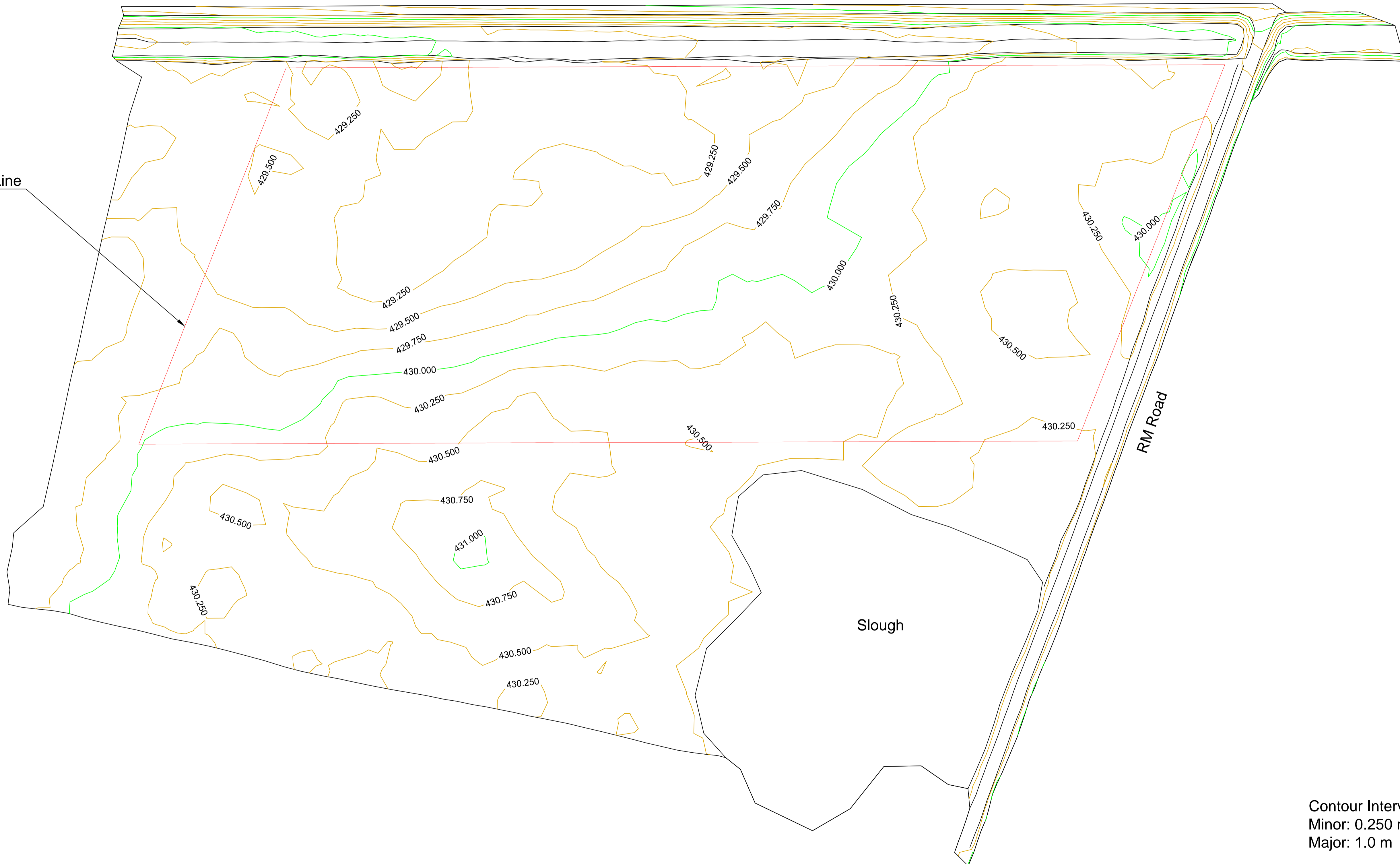
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By Nikki R. Highmoor DATE 07-06-15

Manitoba Highway #3



Property Line



Slough

RM Road

Contour Interval Information:
 Minor: 0.250 m
 Major: 1.0 m

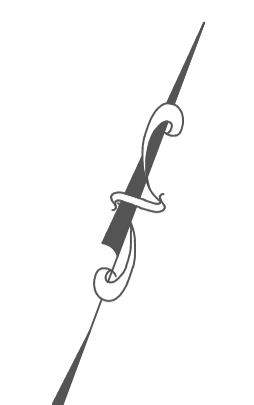
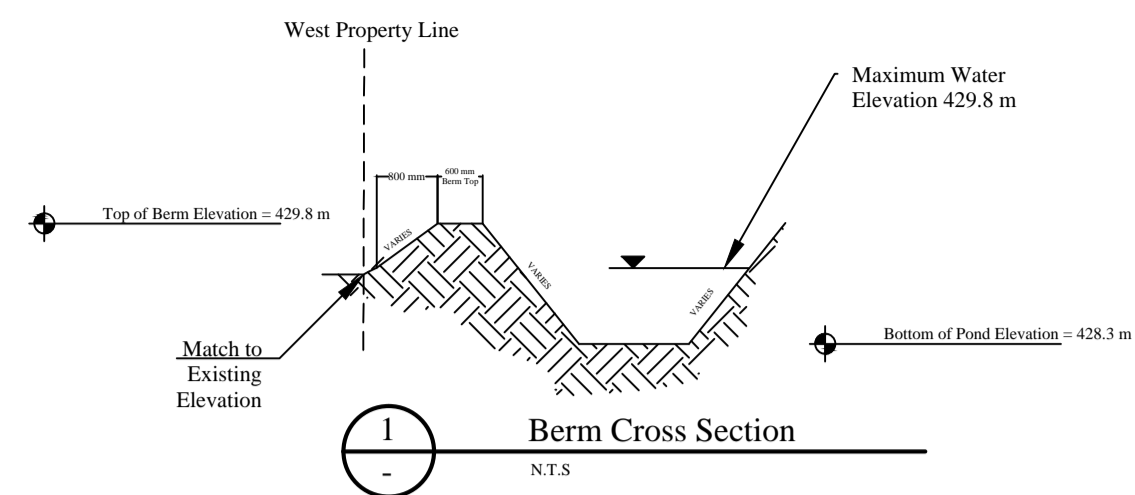
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					SURVEYED BY	GJ	INITIALED
					DESIGN CHECK		INITIALED
					DATE	07-06-15	



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Original Ground Contour Map			
DWG NO.	1	REV.	0
SCALE	N/A		

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BY Nikki R. Highmoor	DATE 07-06-15



Retention Pond
Storage Volume = 502.5 m³
@ Elevation 429.30 m

2000 x 6.0 m C.S.P
Invert @ 429.30 m

Property Line

Manitoba Highway #3

Berm

Gravel Surface

RM Road

Note:
Site Layout Provided by PTC Construction Ltd.
for Preliminary Design Information
Job No: 15-C22-SITE
Dwg No: G002
Rev No: A

REV.	REVISION DESCRIPTION	DATE	DRAWN	CHECKED	DESIGNED BY	NH	INITIALED
0	Preliminary Drainage Design	07-06-15	NH				NH
					DRAWN BY	NH	INITIALED NH
					DWG. CHECK		INITIALED
					DESIGN CHECK		INITIALED
					DATE	07-06-15	



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SHEET TITLE		
Site Plan		
DWG NO. 2	REV. 0	SCALE N/A

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BY Nikki R. Highmoor	DATE 07-06-15

Drainage Rational:

1. RATIONAL METHOD USED FOR ALL DRAINAGE CALCULATIONS.
2. IDF CURVE FROM GOVERNMENT OF CANADA ENGINEERING CLIMATE DATA FOR CITY OF BRANDON A USED (NEAREST MONITORING AREA)
3. TIME OF CONCENTRATION CALCULATED BY T-55 METHOD IN AUTOCAD CIVIL 3D.
4. RUNOFF COEFFICIENTS:
C = 0.25 (Tilled Surface with Rowed Crop)
C = 0.6 (Gravel Surface)
5. ANALYSIS PROVIDED FOR 1-IN-50-YEAR STORM EVENT

PRE-DEVELOPMENT CONDITIONS:

WHERE:
'C' (Tilled Surface)' = 0.25
'A' = 72,285.0 m²
Max 'i' = 252.3 mm/hr
Combined Time to Peak = 3 min
Combined Multi-Watershed Peak Flow = 0.694 cms
Combined Multi-Watershed Volume to Peak Runoff = 560 m³

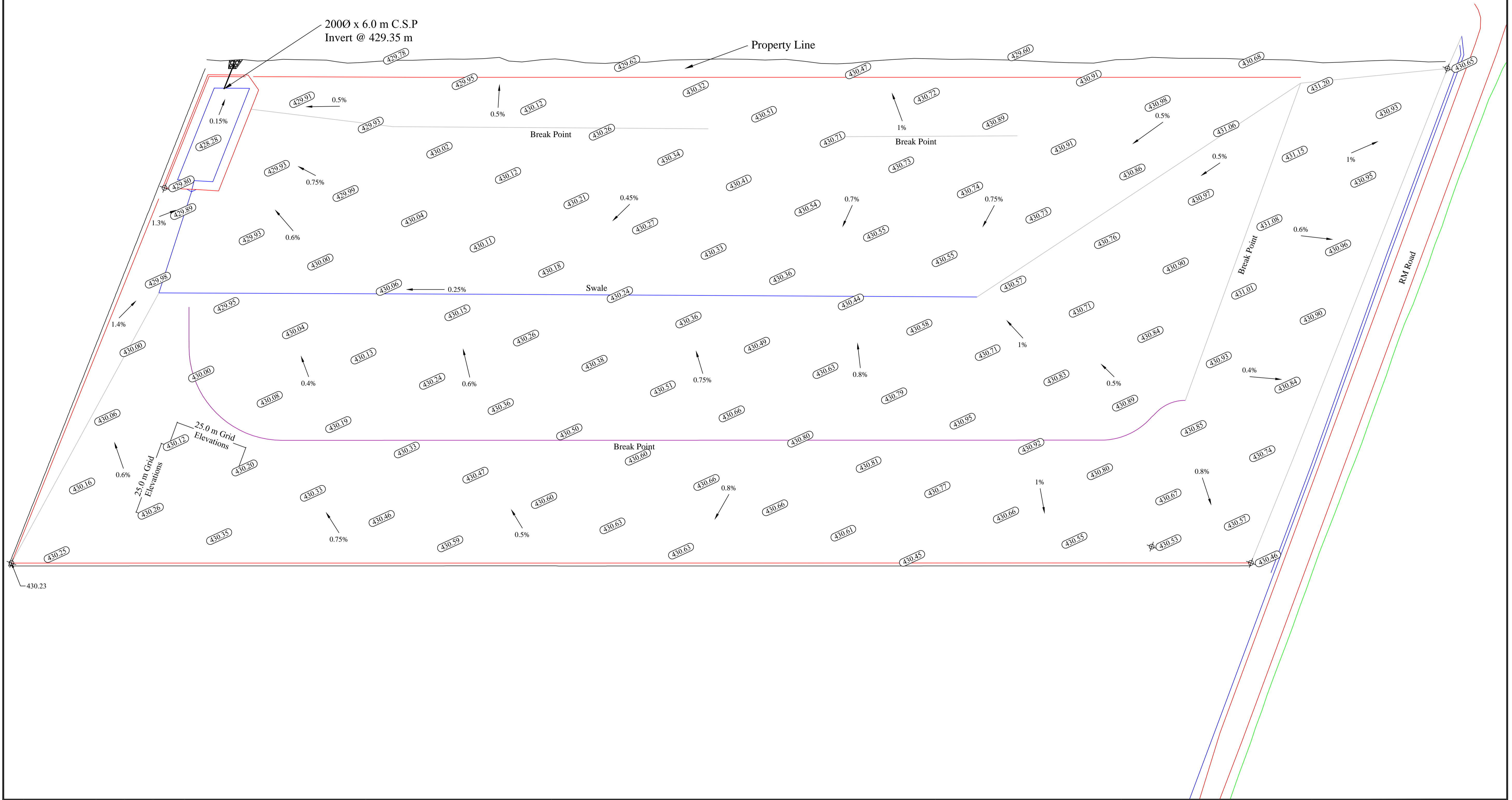
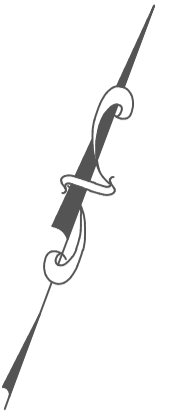
POST-DEVELOPMENT CONDITIONS:

WHERE:
'C' (Gravel Surface)' = 0.6
'A' = 72,285.0 m²
Max 'i' = 286 mm/hr
Combined Time to Peak = 6 min
Combined Multi-Watershed Peak Flow = 0.672 cms
Combined Multi-Watershed Volume to Peak Runoff = 1009 m³ (before retention)

POST-DEVELOPMENT CONDITIONS CONTINUED:

To reduce peak runoff volume to pre-development levels, a retention pond was designed to hold the excess 449 m³. This pond has an outlet 200 mm C.S.P with an invert of 429.3 m, to allow overflow once the required volume is retained.

STORAGE VOLUME REQUIRED FOR RETENTION = 449 m³
STORAGE VOLUME PROVIDED FOR RETENTION = 502.5 m³ (@ELEVATION 429.3 m)



REV.	REVISION DESCRIPTION	DATE	DRAWN	CHECKED	DESIGNED BY	NH	INITIALED
0	Grading Plan	07-06-15	NH				NH
					DRAWN BY	NH	INITIALED NH
					DWG. CHECK		INITIALED
					DESIGN CHECK		INITIALED
NO.	REFERENCE DRAWING				DATE	07-06-15	



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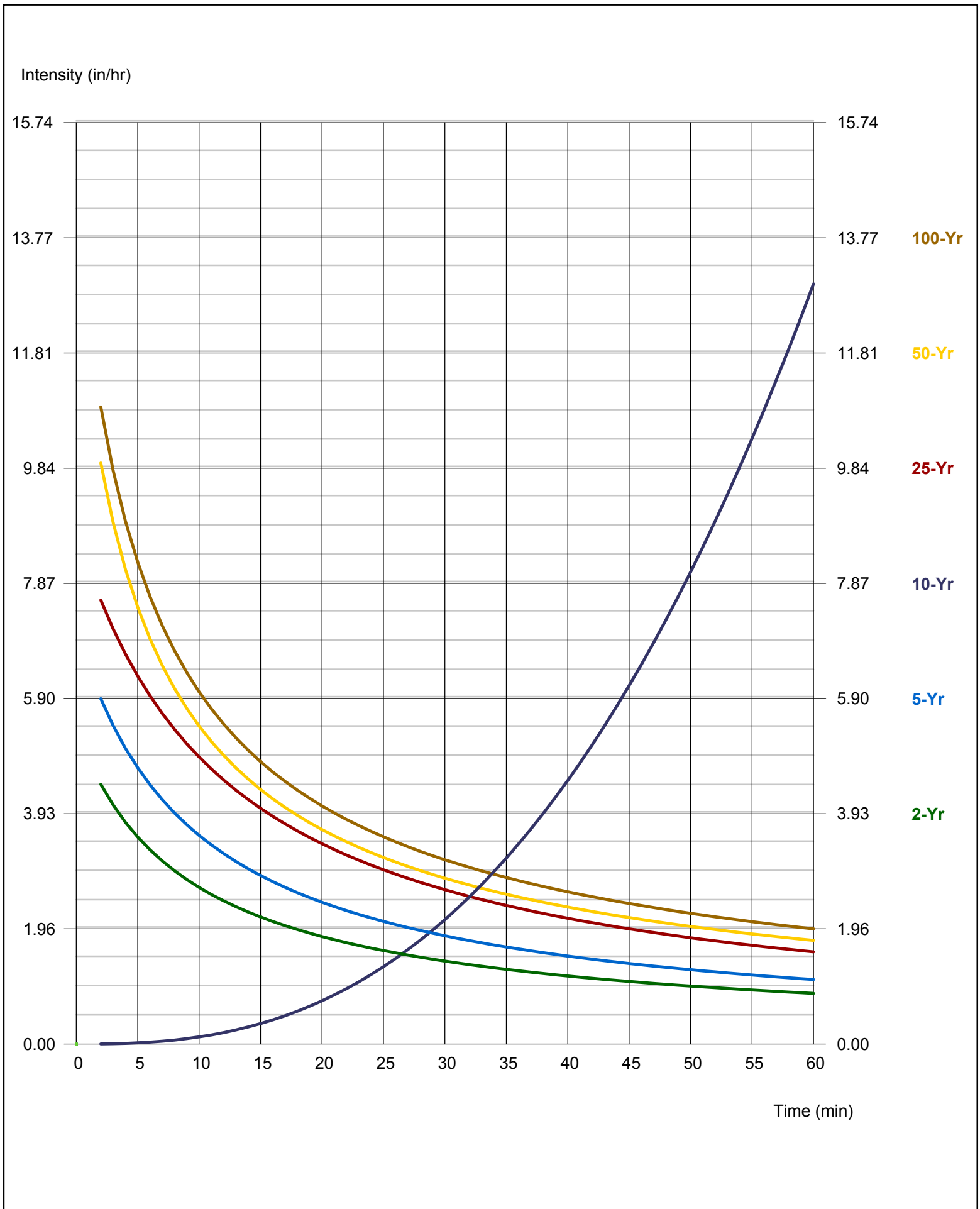
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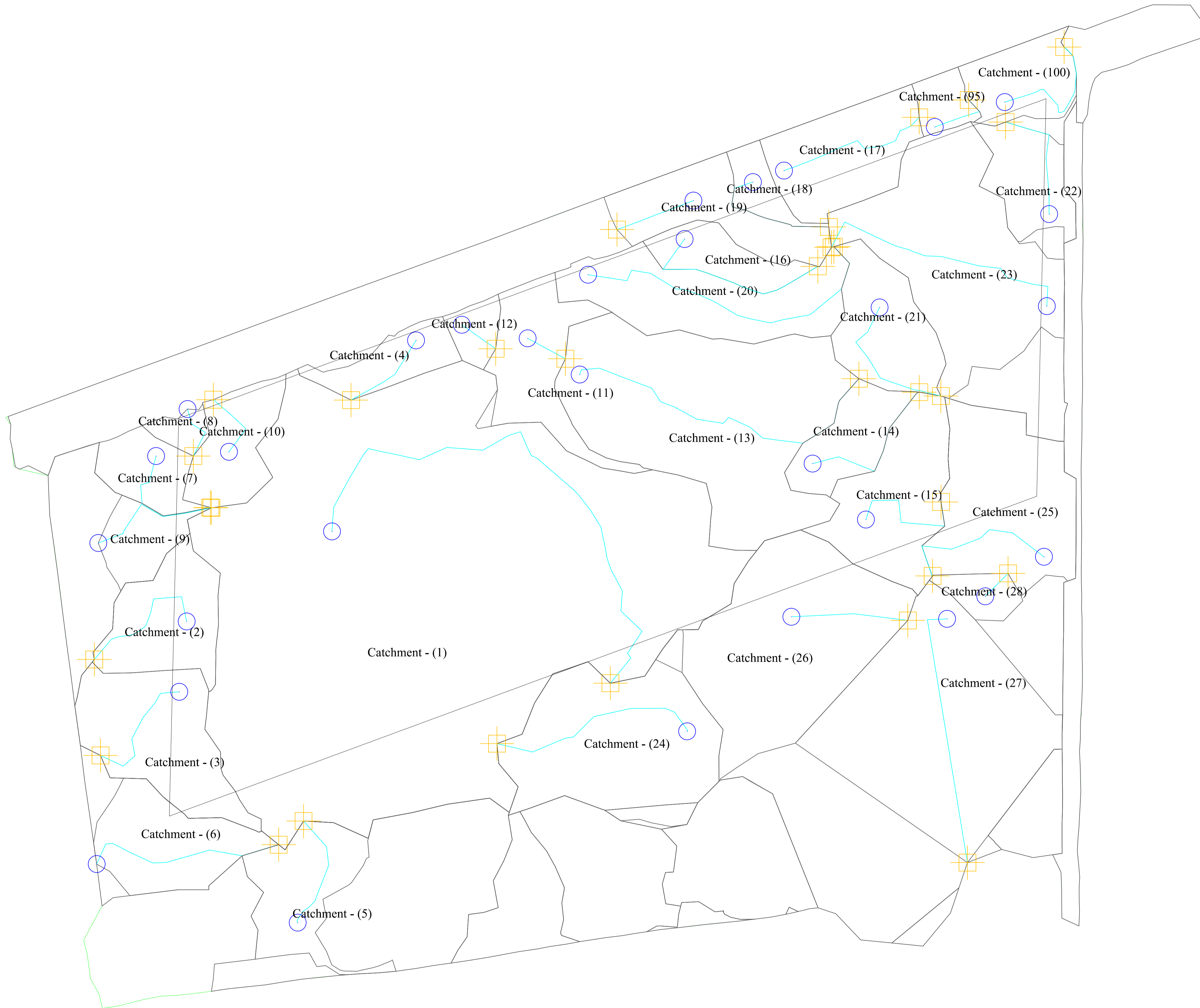
SHEET TITLE		
Grading Plan		
DWG NO. 3	REV. 0	SCALE N/A

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By Nikki R. Highmoor DATE 07-06-15

Hydraflow IDF Curves

IDF file: Brandon A, MB.IDF





REV.	REVISION DESCRIPTION	DATE	DRAWN	CHECKED
0	Existing Site Catchment Areas	07-06-15	NH	
NO.	REFERENCE DRAWING			

DESIGNED BY	NH	INITIALED	NH
DRAWN BY	NH	INITIALED	NH
DWG. CHECK		INITIALED	
DESIGN CHECK		INITIALED	
DATE	07-06-15		



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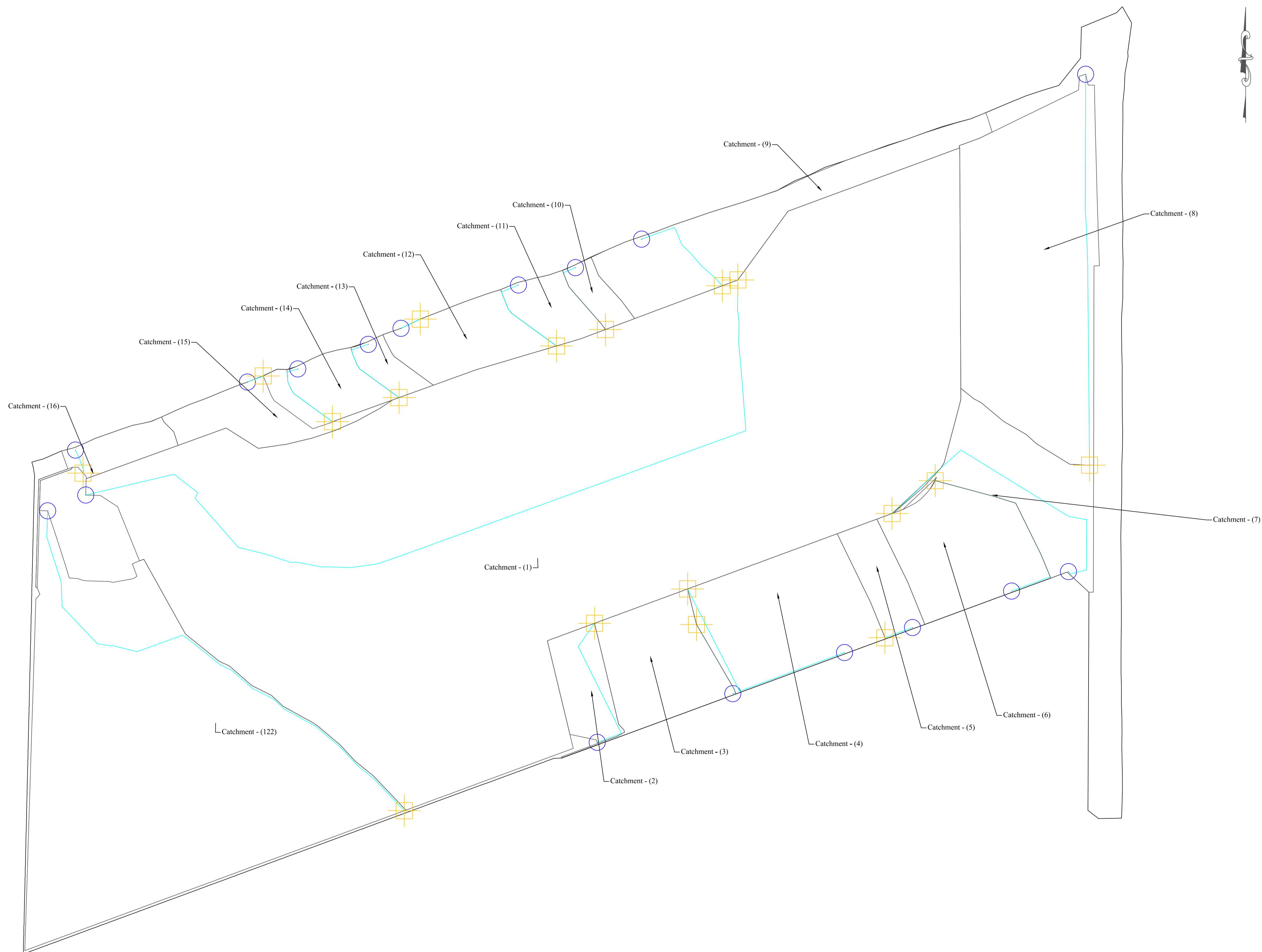
SHEET TITLE		
Existing Site Catchment Areas		
DWG NO.	REV.	SCALE
4	0	N/A

PROJECT
PTC Construction Ltd Melita Crop Site
<small>NOTICE: THIS DRAWING REMAINS TTES PROPERTY. USER MAY NOT REPRODUCE OR DISCLOSE ANY INFORMATION CONTAINED HEREON TO OTHERS WITHOUT OUR CONSENT AND AGREES TO HOLD ALL DATA APPEARING IN CONFIDENCE.</small>
BY Nikki R. Highmoor DATE 07-06-15

Hydrograph Summary
Pre-Development Watershed Analysis

Storm Frequency 50-Year
 Time Interval 1 min
 IDF Curve Brandon A, MB.IDF
 Runoff Coefficient 0.25 Gravel Surface

Number	Drainage Area hectare	Intensity mm/hr	Peak Discharge cms	Time to Peak min	Hyd. Volume cum	T _c min
1	3.51	125.301	0.303	12	218.1	12
2	0.25	252.261	0.043	2	5.2	2
3	0.35	226.552	0.055	3	9.8	3
4	0.36	175.956	0.044	6	15.7	6
5	0.9	175.956	0.109	6	39.3	6
6	0.16	226.552	0.025	3	4.5	3
7	0.32	175.956	0.039	6	14	6
8	0.66	164.333	0.075	7	31.4	7
9	0.58	189.693	0.076	5	22.7	5
10	0.44	189.693	0.057	5	17.2	5
11	0.69	154.356	0.073	8	35.2	8
12	0.82	85.371	0.048	23	66.5	23
13	0.06	226.552	0.009	3	1.7	3
14	0.25	138.072	0.024	10	14.3	10
15	0.26	226.552	0.041	3	7.3	3
16	0.24	252.261	0.042	2	5	2
17	0.18	252.261	0.031	2	3.8	2
18	0.12	252.261	0.021	2	2.5	2
19	0.06	252.261	0.01	2	1.3	2
20	0.17	252.261	0.03	2	3.5	2
21	0.12	226.552	0.019	3	3.4	3
22	0.28	226.552	0.044	3	7.9	3
23	0.07	252.261	0.012	2	1.5	2
24	0.23	252.261	0.04	2	4.8	2
25	0.12	226.552	0.019	3	3.4	3
26	0.04	252.261	0.007	2	0.8	2
27	0.11	226.552	0.017	3	3.1	3
28	0.24	226.552	0.037	3	6.7	3
29	0.17	252.261	0.03	2	3.5	2
Total	11.76				554.1	



REV.	REVISION DESCRIPTION	DATE	DRAWN	CHECKED
0	Design Site Catchment Areas	07-06-15	NH	

DESIGNED BY	NH	INITIALED	NH
DRAWN BY	NH	INITIALED	NH
DWG. CHECK		INITIALED	
DESIGN CHECK		INITIALED	
DATE	07-06-15		



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SHEET TITLE			
Design Site Catchment Areas			
DWG NO.	5	REV.	0
SCALE	N/A		

PROJECT	PTC Construction Ltd Melita Crop Site
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BY	Nikki R. Highmoor
DATE	07-06-15

Hydrograph Summary

Post-Development Watershed Analysis

Storm Frequency 50-Year

Time Interval 1 min

IDF Curve Brandon A, MB.IDF

Runoff Coefficient 0.6 Gravel Surface

Number	Drainage Area hectare	Intensity mm/hr	Peak Discharge cms	Time to Peak mins	Hyd. Volume cum	T _c min
1	3.79	93.11	0.583	20	699.9	20
2	1.22	175.956	0.355	6	127.7	6
3	0.08	226.552	0.03	3	5.4	3
4	0.18	285.988	0.085	1	5.1	1
5	0.27	226.552	0.101	3	18.2	3
6	0.07	175.956	0.02	6	7.3	6
7	0.22	226.552	0.082	3	14.8	3
8	0.21	189.693	0.066	5	19.8	5
9	0.63	131.326	0.137	11	90.3	11
10	0.26	285.988	0.123	1	7.4	1
11	0.03	285.988	0.014	1	0.9	1
12	0.06	285.988	0.028	1	1.7	1
13	0.13	285.988	0.061	1	3.7	1
14	0.03	285.988	0.014	1	0.9	1
15	0.07	285.988	0.033	1	2	1
16	0.09	285.988	0.043	1	2.6	1
17	0.05	285.988	0.024	1	1.4	1
Total	7.39				1009.1	

Hydrograph Report

Hyd. No. 22

Combined Post-Development Watershed

Hydrograph type = Combine
Storm frequency = 50 yrs
Time interval = 1 min
Inflow hyds. = 18, 19, 20, 21

Peak discharge = 0.677 cms
Time to peak = 6 min
Hyd. volume = 1,009.0 cum
Contrib. drain. area = 0.000 hectare

Combined Post-Development Watershed

Hyd. No. 22 -- 50 Year

