

ISSUANCE

HEAVY DUTY SILT FENCE CATCHBASIN SILT SACK EXISTING DRAINAGE ARROW/SLOPE PROPOSED OVERLAND FLOW ROUTE

PROPOSED STORM MANHOLE PROPOSED SANITARY MANHOLE PROPOSED CATCHBASIN EXISTING CATCHBASIN

EXISTING STORM MANHOLE EXISTING MAJOR CONTOUR EXISTING EXTERNAL SITE CONTOUR (BASED ON 2015 SWOOP LIDAR) EXISTING DITCH CENTRELINE

TEMPORARY CONSTRUCTION ENTRANCE

EXISTING DECIDUOUS TREE

TEMPORARY COIR LOGS CHECK DAM

TOPOGRAPHIC SURVEY INFORMATION: TOPOGRAPHIC SURVEY COMPLETED BY CHAMBERS AND

ASSOCIATES SURVEYING LTD, DWG NO. 14019-5 TOPO, DATED DECEMBER 18, 2018. BENCHMARK: ELEVATIONS HEREON ARE GEODETIC AND WERE DERIVED FROM THE TOPNET RKT NETWORK, NAD83 CSRS, VERSION 3, EPOC 2010.

REFERENCE MATERIAL INFORMATION: EXISTING SEWER AND WATERMAIN INFORMATION OBTAINED FROM AS-RECORDED PLAN AND PROFILES PREPARED BY DENCO ENGINEERING LTD. DWG NO. 90057, DATED FEBRUARY 19, 1991 AND CONSTRUCTION PLAN AND PROFILES PREPARED BY TOWN OF FORT ERIE ENGINEERING DIVISION, DWG SET NO. IS08PEAR, DATED SEPTEMBER 23, 2008.

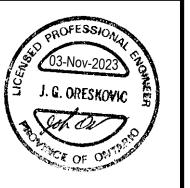
SCHOUT COMMUNITIES INC.

45 REINHART PLACE, PETERSBURG, ON

3770 HAZEL STREET TOWN OF FORT ERIE

**EROSION & SEDIMENT CONTROL** 

A PART OF WF GROUP 800.685.1378 walterfedy.com



COPYRIGHT © 2023 WalterFedy

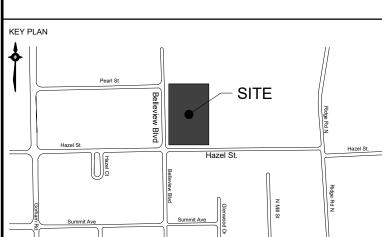
2023-11-02 PROJECT NO.: 2022.0365.10 RAWN BY: MPB HECKED BY: JGO

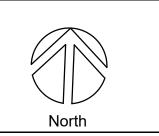
**C1-1** 

#### **GENERAL GRADING NOTES**

- 1. THIS PLAN IS NOT FOR CONSTRUCTION UNTIL SEALED BY THE ENGINEER AND APPROVED BY THE TOWN OF
- 2. ALL MATERIALS AND CONSTRUCTION METHODS TO BE AS PER THE TOWN OF FORT ERIE (LATEST REVISIONS) AND THE ONTARIO STANDARDS AND SPECIFICATIONS (LATEST REVISION)
- 3. THE MAXIMUM LOT SURFACE GRADE FOR REAR YARDS WITHIN THE MINIMUM AMENITY AREA SETBACK SHALL BE 6%. A SLOPE OF 3:1 (3 PARTS HORIZONTAL TO 1 PART VERTICAL) SHALL BE USED TO TAKE UP ANY ADDITIONAL GRADE DIFFERENCE. OTHERWISE, AN APPROVED RETAINING WALL IS REQUIRED.
- 4. ALL BOULEVARD AREAS SHALL BE GRADED WITH A CONSTANT SLOPE FROM THE CURB TO THE STREET LIMIT (MINIMUM SLOPE TO BE 2%; MAXIMUM SLOPE TO BE 8%) AND ALL WATER BOXES, MANHOLE COVERS, VALVE BOXES. ETC. SHALL BE SET FLUSH WITH THE FINISHED SOD SURFACE. WHERE SIDEWALKS ARE REQUIRED WITHIN THE BOULEVARD THE MAXIMUM SLOPE FROM CURB TO PROPERTY LINE SHALL BE 4%.
- 5. ALL LANDSCAPED SURFACES SHALL BE CONSTRUCTED TO A MINIMUM GRADE OF 2% (EXCLUDING REAR YARD
- 6. THE MINIMUM ROADWAY GRADE SHALL BE 0.5% AND MAXIMUM GRADE SHALL NOT EXCEED 6%.
- 7. ALL REAR YARD DRAINAGE SHALL BE DIRECTED AWAY FROM THE BUILDINGS IN DEFINED SWALES WHICH OUTLET AT THE CURB, SIDEWALK, OR A CATCHBASIN.
- 8. REAR AND SIDE YARD SWALES SHALL HAVE A MINIMUM SLOPE OF 2.0%. MAXIMUM DEPTH FOR ALL SWALES SHALL BE 0.5m. MAXIMUM SIDE SLOPE ON ANY SWALE SHALL BE 3:1. SWALE SLOPES LESS THAN 2.0% SHALL REQUIRE 150mm PERFORATED SUBDRAIN AND CONNECTED TO A
- 9. ALL RETAINING WALLS 0.60m OR HIGHER REQUIRE PLACEMENT OF FENCING OR A GUARD ALONG THE TOP OF THE WALL, IN ACCORDANCE WITH THE ONTARIO BUILDING CODE. WALLS EXCEEDING A HEIGHT OF 1.0m SHALL BE DESIGN BY A QUALIFIED STRUCTURAL ENGINEER AND BE APPROVED BY THE TOWN OF FORT ERIE.
- 10. FOUNDATION DRAINS SHALL BE PUMPED BY A SUMP PUMP IN EACH HOUSE DISCHARGING VIA SPLASH PADS OR OTHER MEANS WHICH SHALL EXTEND A DISTANCE AT LEAST 1.2 METRES AWAY FROM THE STRUCTURE AND MUST DIRECT FLOW AWAY FROM THE BUILDING, TO SIDE OR REAR YARD SWALES.
- 11. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE CONSULTING ENGINEER 72 HOURS PRIOR TO COMMENCING THE SITE WORKS TO REQUEST INSPECTION. THE CONSULTING ENGINEER SHALL DETERMINE THE EXTENT OF INSPECTION AND TESTING REQUIRED FOR CERTIFICATION ON THE UNDERGROUND SERVICE INSTALLATION AS MANDATED BY THE ONTARIO BUILDING CODE DIVISION C, PART 1, SECTION 1.2.2, GENERAL REVIEW. FAILURE TO MAKE SUITABLE ARRANGEMENTS FOR INSPECTION WILL LEAD TO POST CONSTRUCTION TESTING AND INSPECTION AS DETERMINED BY THE ENGINEER. ALL COSTS ASSOCIATED WITH ANY REQUIRED POST CONSTRUCTION TESTING AND INSPECTION SHALL BE BORNE BY THE CONTRACTOR, INCLUDING ANY DELAYS TO CONSTRUCTION, NECESSARY REWORK AND RESTORATION OF DISTURBED WORKS. FINAL CERTIFICATION OF THE WORKS WILL BE WITHHELD UNTIL ALL POST CONSTRUCTION INSPECTION OF THE UN-INSPECTED WORKS IS COMPLETE TO THE SATISFACTION OF THE CONSULTING ENGINEER. FULL PAYMENT FOR UN-INSPECTED WORKS MAY BE WITHHELD UNTIL.

INTERNAL ROAD PAVEMENT STRUCTURE PER SOIL-MAT GEOTECHNICAL REPORT (OCTOBER 31, 2023): - 40mm HL3 SURFACE ASPHALT (COMPACTED TO MIN 92% MRD) - 50mm HL8 BINDER ASPHALT (COMPACTED TO MIN 92% MRD) 150mm GRANULAR 'A' (COMPACTED TO MIN 98% SPMDD) - 250mm GRANULAR 'B', TYPE II (COMPACTED TO MIN 98% SPMDD)





ISSUANCE 2023.02.10 ISSUED FOR DRAFT CONDO PLAN SUBMISSION 2023.11.03 | ISSUED FOR 2nd DRAFT CONDO PLAN SUBMISSION

# PROPOSED ELEVATION

• [195.00]HP PROPOSED HIGH POINT ELEVATION •[195.50EX] MATCH TO EXISTING GRADE × 195.50 EXISTING GRADE PROPOSED DRAINAGE ARROW/SLOPE PROPOSED SWALE -~--EXISTING DRAINAGE ARROW/SLOPE PROPOSED OVERLAND FLOW ROUTE

PROPOSED DRAINAGE DIVIDE EXISTING MAJOR CONTOUR EXISTING EXTERNAL SITE CONTOUR (BASED ON 2015 SWOOP LIDAR)

EXISTING DITCH CENTRELINE REMOVALS NUMBER OF BUILDING RISERS FINISH FLOOR ELEVATION BASEMENT FLOOR ELEVATION

PROPOSED STORM MANHOLE PROPOSED SANITARY MANHOLE PROPOSED CATCHBASIN EXISTING CATCHBASIN

EXISTING STORM MANHOLE EXISTING SANITARY MANHOLE EX SAN MH TOPOGRAPHIC SURVEY INFORMATION: TOPOGRAPHIC SURVEY COMPLETED BY CHAMBERS AND ASSOCIATES SURVEYING LTD, DWG NO. 14019-5\_TOPO, DATED

DECEMBER 18, 2018. BENCHMARK: ELEVATIONS HEREON ARE GEODETIC AND WERE DERIVED FROM THE TOPNET RKT NETWORK, NAD83 CSRS, VERSION 3, EPOC 2010.

REFERENCE MATERIAL INFORMATION: EXISTING SEWER AND WATERMAIN INFORMATION OBTAINED FROM AS-RECORDED PLAN AND PROFILES PREPARED BY DENCO ENGINEERING LTD. DWG NO. 90057, DATED FEBRUARY 19, 1991 AND CONSTRUCTION PLAN AND PROFILES PREPARED BY TOWN OF FORT ERIE ENGINEERING DIVISION, DWG SET NO. IS08PEAR, DATED SEPTEMBER 23, 2008.

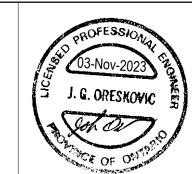
SCHOUT COMMUNITIES INC

45 REINHART PLACE, PETERSBURG, ON

3770 HAZEL STREET TOWN OF FORT ERIE

**GRADING PLAN** 

A PART OF WF GROUP 800.685.1378 walterfedy.com



COPYRIGHT © 2023 WalterFedy

1:500 2023-11-02 PROJECT NO.: 2022.0365.10 RAWN BY: MPB

HECKED BY: JGO

150mmØ PERFORATED PLASTIC SODDED SIDES AND BOTTOM PIPE SUBDRAIN (IF REQUIRED) ON MIN. 100mm TOPSOIL FOR SWALES LESS THAN 19mm CLEAR STONE 1.5% OR OTHERWISE NOTED BEDDING PLACED MIN. 150mm TOP & SIDES, 50mm UNDER PIPE

TYPICAL SWALE X-SECTION WITH SUBDRAIN

SODDED SIDES AND BOTTOM

ON 100mm TOPSOIL

## **GENERAL**

- 1. THIS PLAN IS NOT FOR CONSTRUCTION UNTIL SEALED BY THE ENGINEER AND APPROVED BY THE TOWNSHIP OF
- ALL MATERIALS AND CONSTRUCTION METHODS TO BE AS PER THE TOWN OF FORT ERIE (LATEST REVISIONS) AND THE ONTARIO STANDARDS AND SPECIFICATIONS (LATEST REVISION)
- 3. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE CONSULTING ENGINEER 72 HOURS PRIOR TO COMMENCING THE SITE WORKS TO REQUEST INSPECTION. THE CONSULTING ENGINEER SHALL DETERMINE THE EXTENT OF INSPECTION AND TESTING REQUIRED FOR CERTIFICATION ON THE UNDERGROUND SERVICE INSTALLATION AS MANDATED BY THE ONTARIO BUILDING CODE DIVISION C, PART 1, SECTION 1.2.2, GENERAL REVIEW. FAILURE TO MAKE SUITABLE ARRANGEMENTS FOR INSPECTION WILL LEAD TO POST CONSTRUCTION TESTING AND INSPECTION AS DETERMINED BY THE ENGINEER. ALL COSTS ASSOCIATED WITH ANY REQUIRED POST CONSTRUCTION TESTING AND INSPECTION SHALL BE BORNE BY THE CONTRACTOR. INCLUDING ANY DELAYS TO CONSTRUCTION, NECESSARY REWORK AND RESTORATION OF DISTURBED WORKS. FINAL CERTIFICATION OF THE WORKS WILL BE WITHHELD UNTIL ALL POST CONSTRUCTION INSPECTION OF THE UN-INSPECTED WORKS IS COMPLETE TO THE SATISFACTION OF THE CONSULTING ENGINEER. FULL PAYMENT
- FOR UN-INSPECTED WORKS MAY BE WITHHELD UNTIL. 4. PAVEMENT STRUCTURE RECOMMENDATIONS OUTLINED IN THE GEOTECHNICAL INVESTIGATION PREPARED BY SOIL-MAT ENGINEERS (OCTOBER 31, 2023).

## SANITARY SEWERS/SERVICES

- 1. THE MINIMUM PIPE SIZE IN ROADWAYS SHALL BE 200mm. SERVICE LATERALS SHALL BE 100mm AND AT A MINIMUM SLOPE OF 2.0%.
- 2. THE MINIMUM COVER FOR SANITARY SEWERS SHALL BE 2.40m BELOW GRADE.
- 3. IF NECESSARY, CONCRETE ENCASED RISERS SHALL BE PROVIDED FOR CONNECTION WITH THE MAIN SEWER. 2% MINIMUM GRADE SHALL BE MAINTAINED FOR CONNECTION PIPES.
- 4. HORIZONTAL SEPARATION FROM WATER SERVICE CONNECTIONS OF NOT LESS THAN 2.44m MEASURED HORIZONTALLY FROM UNDISTURBED OR COMPACTED EARTH OR AS APPROVED BY THE MANGER OF ENVIRONMENTAL SERVICES.
- 5. ALL SANITARY SEWER LATERAL CONNECTIONS SHALL BE INSTALLED USING PREFABRICATED TEES. ALL CONNECTIONS SHALL CONFORM TO CURRENT OPSD 1006.010 AND OPSS 410.

TOP=184.05 (NORTH) BOTTOM=183.61 (SOUTH) EX W INV= 182.66± EX S INV= 182.58±

#### STORM SEWERS 6. THE MINIMUM SIZE OF STORM SEWER IN THE ROADWAY SHALL BE 300mm WITH A MINIMUM OF 1.2m COVER BELOW GRADE. MINIMUM SIZE FOR A CATCHBASIN STORM LEADS SHALL BE 200mm AND 250mm FOR DOUBLE CATCHBASINS. 7. THE CONNECTION OF THE STORM DRAIN TO THE STORM SEWER MAY BE MADE AT AN EXISTING MANHOLE OR DIRECTLY TO THE STORM SEWER (IF THE SIZE OF THE CONNECTION IS LESS THAN HALF OF THE SIZE OF THE STORM SEWER). IF THE CONNECTION SIZE IS EQUAL TO OR GREATER THAN ONE HALF THE SIZE OF THE MAIN SEWER, THE CONNECTION MUST BE MADE TO A MANHOLE, EXISTING OR NEW, ON THE STORM SEWER.

8. FOUNDATION DRAINS (WEEPING TILES) SHALL BE CONNECTED DIRECTLY TO A SUMP AND DRAINED VIA A SUMP PUMP AND THE SUMP PUMP SHALL DISCHARGE ON GROUND VIA SPLASH PADS AS ROOF LEADERS OR DOWNSPOUTS. ROOF DRAIN CONNECTIONS TO THE STORM SERVICE CONNECTION IS PROHIBITED. ROOF LEADERS SHALL DISCHARGE ON GROUND VIA SPLASH PADS AT LEAST 1.2m AWAY FROM THE BUILDING FOUNDATION FLOWS SHALL BE DIRECTED AWAY FROM THE BUILDING TOWARDS SIDE OR REAR YARD SWALE WITHOUT ANY

### WATERMAINS/SERVICES

PROPOSED WM -

END FLAT CAP

- 1. FOR EACH RESIDENTIAL UNIT, A 20mm DIAMETER TYPE K SOFT COPPER SERVICE SHALL EXTEND FROM THE MAIN TO THE PROPERTY LINE COMPLETE WITH A CURB STOP AND BOX PER OPSD 1104.010. ALL SERVICE CONNECTIONS SHALL BE INSTALLED WITH MAGNESIUM OR ZINC SACRIFICIAL ANODE FOR CORROSION PROTECTION.
- 2. MINIMUM COVER FOR WATERMAINS SHALL BE 1.70m BELOW GRADE. 3. ALL VALVES INSTALLED SHALL BE THE SAME SIZE AS THE WATERMAIN.

EROSION OR INCONVENIENCE TO ADJACENT PROPERTY.

- DRILL AND TAP 50mmØ

COPPER PIPE OFF WM FLAT

- CAP c/w 50mm CURB STOP

REFER TO OPSD 1104.030 20"

-18.5m-250mmØ STM @ 1.00%

PROPOSED TOWNHOUSES

- 4. ALL VALVES SHALL BE RESILIENT-SEATED GATE VALVES WHICH CONFORM TO AWWA C509 AND SHALL OPEN LEFT (COUNTER CLOCKWISE) AND CLOSE RIGHT (CLOCKWISE). ALL GATE VALVES SHALL HAVE NON-RISING STEMS, 50MM OPERATING NUTS AND MECHANICAL JOINT ENDS.
- 5. ALL WATER SERVICES SHALL BE INSTALLED AT RIGHT ANGLES TO THE WATERMAIN. 6. HYDRANT LEADS SHALL BE 150mm AND SHALL BE CONNECTED USING A GATE VALVE AND ANCHOR TEE.
- 7. HYDRANTS SHALL BE IN ACCORDANCE WITH OPSD 1105.010 WITH A MINIMUM 150mm DIAMETER LEADS AND DRAIN HOLES PLUGGED BY THE MANUFACTURER.
- 8. HYDRANTS ACCEPTABLE TO THE TOWN OF FORT ERIE SHALL BE CANADA VALVE CENTURY, MCAVITY M67, AMERICAN AVK, DARLING B50B WITH TWO (2) 65MM HOSE NOZZLES AND ONE (1) 114MM PUMPER NOZZLE INCLUDING STORTZ

Geoprocess Dripline

PROPOSED WM -

(2022-11-25)

\* END FLAT CAP \*== \*

DRILL AND TAP 50mmØ

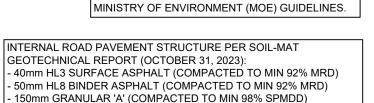
COPPER PIPE OFF WM FLAT

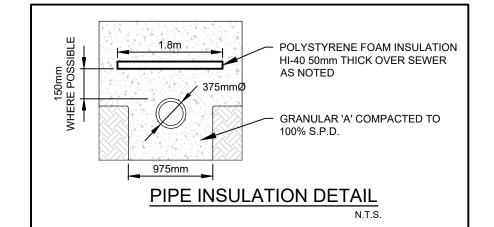
REFER TO OPSD 1104.030

PROPOSED 150mmx100mmØ

, PVC REDUCER

9. A MINIMUM VERTICAL SEPARATION OF 0.50m IS MAINTAINED BETWEEN THE INVERT OF THE CONFLICTING SEWER AND THE OBVERT OF THE WATERMAIN.



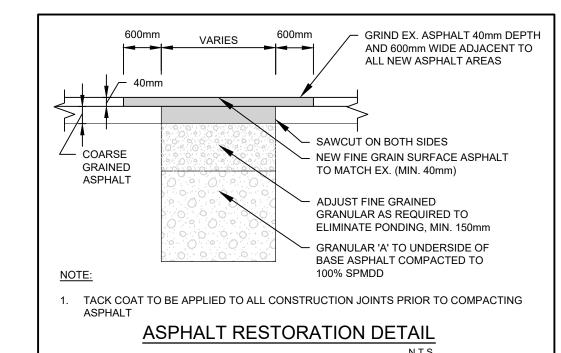


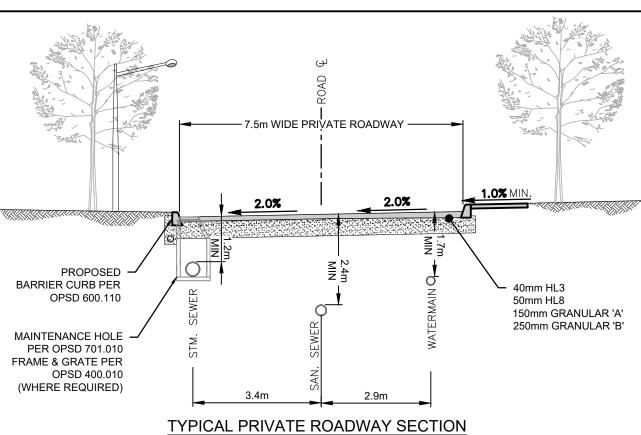
*NOTE:	SEWER CROSSING TABLE					
VERTICAL SEPARATION BETWEEN SEWER DRAINS AND WATERMAINS SHALL BE MINIMUM 0.5m PER MINISTRY OF ENVIRONMENT (MOE) GUIDELINES.	CROSSING #	INVERT	<u>OBVERT</u>	DIFFERENCE		
MINISTRY OF ENVIRONMENT (MOE) GOIDELINES.	1	182.57 STM	181.40 SAN	1.17m		
INTERNAL ROAD PAVEMENT STRUCTURE PER SOIL-MAT GEOTECHNICAL REPORT (OCTOBER 31, 2023): - 40mm HL3 SURFACE ASPHALT (COMPACTED TO MIN 92% MRD)	2	182.33 WM	181.83 SAN	*0.50m		
- 50mm HL8 BINDER ASPHALT (COMPACTED TO MIN 92% MRD) - 150mm GRANULAR 'A' (COMPACTED TO MIN 98% SPMDD) - 250mm GRANULAR 'B', TYPE II (COMPACTED TO MIN 98% SPMDD)	3	183.03 STM	182.42 WM	0.61m		
255 6.5 a.t. 2 , 1 2 (6.6 / 10.1.2 10	4	183.02 STM	181.76 SAN	1.26m		
	5	183.17 STM	182.03 SAN	1.14m		
mØ VM FLAT \\	6	183.19 STM	182.44 WM	0.75m		
	7	182.98 STM	181.60 SAN	1.38m		
STOP 04.030	8	183.01 STM	182.26 WM	0.75m		
EX TOP OF SOP	9	182.79 STM	181.70 SAN	1.09m		
	10	182.81 STM	182.27 WM	0.54m		
	11	183.03 STM	182.05 SAN	0.98m		
	12	183.05 STM	182.43 WM	0.62m		
	13	183.23 WM	182.45 SAN	0.78m		
		<u> </u>				

183.83 STM

183.00 SAN

183.22 SAN





	→ GAD ASSESS OF THE ROAD ASSESS	1 0% MIN
	2.0% NEW TOTAL TOT	2.0%
PROPOSED	MIN NO SEWER	40mm HL3 50mm HL8 150mm GRANULAR 'A'
MAINTENANCE HOLE PER OPSD 701.010 FRAME & GRATE PER OPSD 400.010 (WHERE REQUIRED)	3.4m 2.9	
<u>T\</u>	PICAL PRIVATE ROADWA	AY SECTION SCALE 1:100

STORM INVERT STRUCTURE TABLE		SANITARY INVERT STRUCTURE TABLE			
NAME	PIPES IN:	PIPES OUT	NAME	PIPES IN:	PIPES OUT
CB15 =184.86		W183.49 (200mmØ)	MH1A TG=184.89	E180.90 (200mmØ)	W180.86 (200mmØ)
CB16 =184.99		W183.38 (200mmØ)	MH2A TG=185.06	N181.31 (200mmØ) S181.31 (200mmØ)	W181.23 (200mmØ)
CB17 =184.66		W183.97 (200mmØ)	MH3A TG=185.05		S181.85 (200mmØ)
CB24 =185.00		W183.33 (250mmØ)	MH4A TG=185.33	S181.82 (200mmØ)	N181.80 (200mmØ)
BMH4 =185.01	E183.16 (300mmØ) S183.23 (450mmØ)	W183.14 (450mmØ)	MH5A TG=185.23		N182.34 (200mmØ)
BMH5 =185.15	S183.40 (300mmØ)	W183.32 (300mmØ)	MH6A TG=185.17	S182.23 (200mmØ) N182.23 (200mmØ)	W182.16 (200mmØ)
BMH6 =184.97	E183.00 (300mmØ) N182.95 (300mmØ)	S182.93 (375mmØ)	MH7A TG=185.30		S182.53 (200mmØ)
BMH7 =185.01	E183.22 (300mmØ)	W183.20 (300mmØ)	MH8A TG=185.37	S182.68 (200mmØ)	N182.67 (200mmØ)
BMH8 =185.03		W183.35 (300mmØ)	MH9A TG=185.69		N183.06 (200mmØ)
BMH12 =184.90		W183.14 (200mmØ)	MH10A TG=185.07	N181.54 (200mmØ)	S181.52 (200mmØ)
BMH19 i=185.01	S182.71 (375mmØ) E182.76 (200mmØ)	N182.70 (375mmØ)	MHEX SAN MH TG=184.75	E180.63 (200mmØ) S180.64 (200mmØ)	W180.62 (200mmØ)
BMH20 =185.27	S182.96 (300mmØ) E183.00 (200mmØ)	N182.91 (375mmØ)	Γ		

0.83m

\*0.50m

UNDERGROUND STORAGE				
TYPE	STORMCON OR APPROVED EQUAL			
SIZE (h x w x I)	1.0 x 10.4x 46.1m (1.5 LAYERS)			
STORAGE TO BE PROVIDED	432m³			
TOP OF CLEAR STONE ELEVATION	184.40			
TOP OF CHAMBER UNIT ELEVATION	184.25			
BOTTOM OF CHAMBER UNIT ELEVATION	183.25			
BOTTOM OF BASE CLEAR STONE ELEVATION	183.10			

TOPOGRAPHIC SURVEY INFORMATION: NOTE: ALL JOINTS AND PIPE CONNECTIONS TO BE SEALED PER TOPOGRAPHIC SURVEY COMPLETED BY CHAMBERS AND ASSOCIATES SURVEYING LTD, DWG NO. 14019-5 TOPO, DATED SUPPLIERS SPECS. BACKFILL AND INSTALLATION DETAILS PER SUPPLIER'S SPECS. SEE SHOP DRAWINGS (BY OTHERS) FOR DECEMBER 18, 2018. DESIGN DETAILS AND SPECIFICATIONS. INSTALLATION TO BE BENCHMARK: ELEVATIONS HEREON ARE GEODETIC AND WERE CERTIFIED BY AN APPROVED REPRESENTATIVE OF STORMCON. TANKS DERIVED FROM THE TOPNET RKT NETWORK, NAD83 CSRS, TO BE WRAPPED WITH AN IMPERMEABLE LAYER. VERSION 3, EPOC 2010.

REFERENCE MATERIAL INFORMATION: EXISTING SEWER AND WATERMAIN INFORMATION OBTAINED FROM AS-RECORDED PLAN AND PROFILES PREPARED BY DENCO ENGINEERING LTD. DWG NO. 90057, DATED FEBRUARY 19, 1991 AND CONSTRUCTION PLAN AND PROFILES PREPARED BY TOWN OF FORT ERIE ENGINEERING DIVISION, DWG SET NO. IS08PEAR, DATED SEPTEMBER 23, 2008.

REMOVALS

ISSUANCE

PROPOSED SANITARY SEWER/SERVICE PROPOSED STORM SEWER/SERVICE

> PROPOSED WATERMAIN VALVE PROPOSED WATER METER PROPOSED CURB STOP

PROPOSED SANITARY CLEANOUT PROPOSED STORM MANHOLE PROPOSED SANITARY MANHOLE

PROPOSED SUMP PUMP PROPOSED CATCHBASIN EXISTING CATCHBASIN

EXISTING STORM MANHOLE EXISTING SANITARY MANHOLE EXISTING FIRE HYDRANT

PROPOSED INSULATED STORM SEWER PROPOSED WATERMAIN/SERVICE EXISTING SANITARY SERVICE

— — — EXISTING STORM SERVICE

—— · —— · EXISTING WATERMAIN

2023.02.10 ISSUED FOR DRAFT CONDO PLAN SUBMISSION 2023.11.03 | ISSUED FOR 2nd DRAFT CONDO PLAN SUBMISSION

LEGEND

SCHOUT COMMUNITIES INC

45 REINHART PLACE, PETERSBURG, ON

3770 HAZEL STREET

SERVICING PLAN



KITCHENER | HAMILTON | TORONTO | CALGARY A PART OF WF GROUP 800.685.1378 walterfedy.com



COPYRIGHT © 2023 WalterFedy

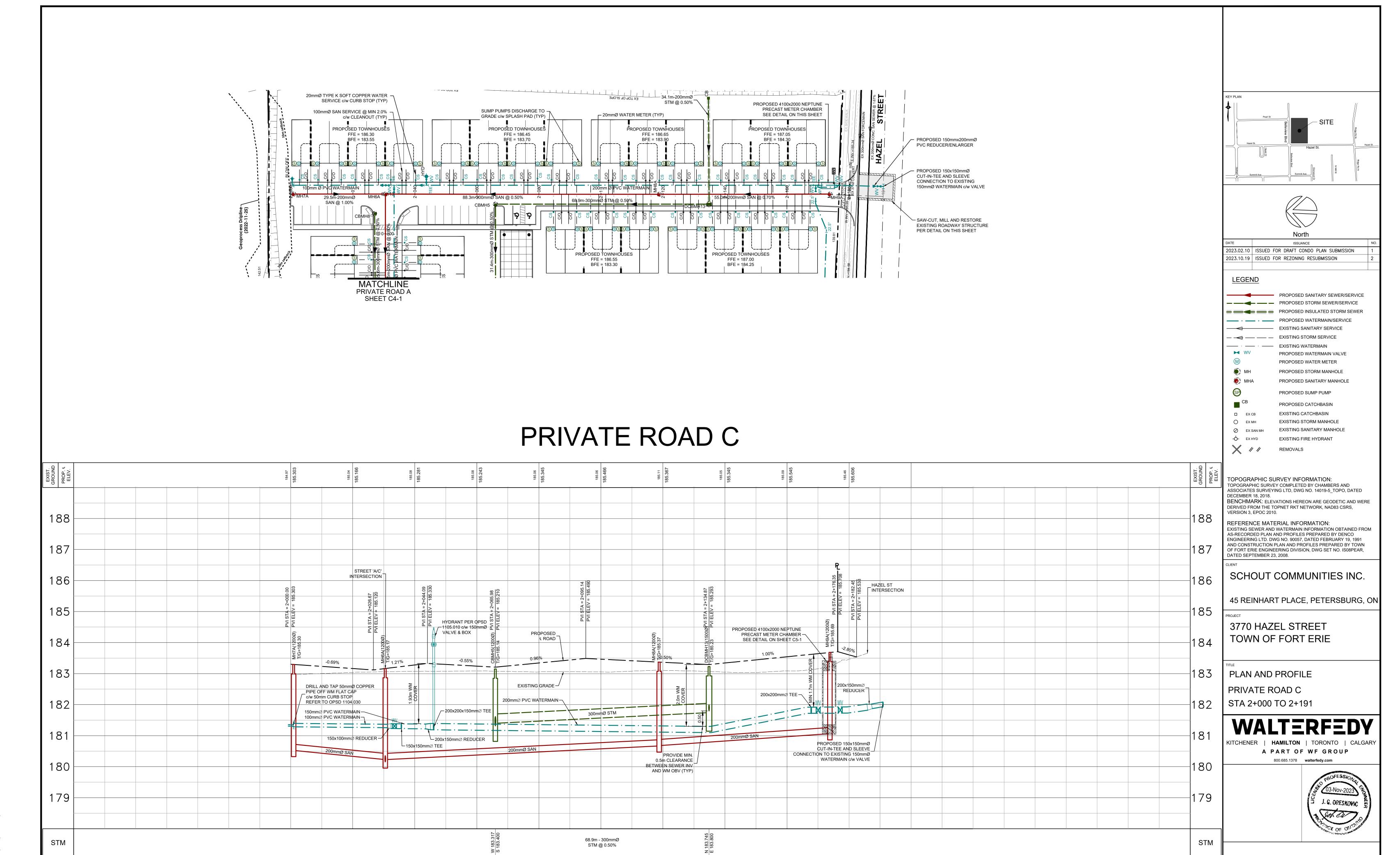
SCALE: 1:500 DATE: 2023-11-03 PROJECT NO.: 2022.0365.10 DRAWN BY: MPB CHECKED BY: JGO

<u>525m</u>mø TOWN OF FORT ERIE 205mmØ ORIFICE PLATE BOLTED -TO MANHOLE FACE AND SEALED WITH NON-SHRINK GROUT. INVERT OF ORIFICE TO MATCH INVERT OF OUTLET PIPE <u>Plan view</u> NOTES: MH 1 (1200Ø) INSTALL ORIFICE CONTROL PRIOR TO GRATE 184.79 PLACING CAP. ORIFICE CONTROL TO BE UNIFORM STEEL SECTION WITH NO OPEN SEAMS. MATERIAL TO BE MIN 3mm THICK GALVANIZED STEEL OR ALUMINUM CONTROL FEATURES MUST BE INSTALLED AND INSPECTED BY THE ENGINEER PRIOR TO PAVING TO ENSURE STORMWATER RUNOFF FLOW CONTROLS ARE IN PLACE TO PROTECT DOWNSTREAM SYSTEM. 525mmØ STORM INLET -- 205mmØ ORIFICE PLATE BOLTED TO MANHOLE FACE AND SEALED WITH NON-SHRINK GROUT. INVERT OF ORIFICE TO MATCH INVERT OF 450mmØ OUTLET PIPE (182.56) - MIN. 300mm GRANULAR "A" <u>SECTION A-A</u> CONTROL MANHOLE (MH1) (SHOP DRAWINGS TO BE PROVIDED) N.T.S - MANHOLE STRUCTURE MAY NOT BE EXACTLY AS SHOWN

- CAR-		CR2 PROP 150mmx100mmØ PVC REDUCER 69.5m-200mmØ	1 1 1 (M)	Geoprocess Dripline (2022-11-25)	STORM INVERT STRUCTURE TABLE
	S S WV	150mm Ø FVC WATI	CR13 - VVV C/O	PROPOSED 150mmØ	NAME PIPES IN: PIPES OUT
CONTRACTOR TO REMOVE EXIST — SE.INV=182.50 EX.NINV=182.40± CRM4.445				PVC WATERMAIN PROPOSED 200mmx150mmØ	CB15 W183 49 (200mm@)
EAST SANITARY SERVICE & EX SINV= 182 40± EX SINV= 182 30± RIM= 83.9.  (MATCH EXISTING EAST INVERT)	4.2m-450mmØ		TEE W	PVC REDUCER	TG=184.86 W183.43 (200mmØ)  CB16 TG=184.99 W183.38 (200mmØ)
EX 600Ø CONC STM @ 0.20%  SAN @ 2.86%	STM @ 0.48% CS	PROPOSED TOWNHOUSES FFE = 186.05		PROPOSED HYDRANT PER OPSD 1105.010 c/w 150mmØ VALVE & BOX	CB17 TG=184.66 W183.97 (200mmØ)
EX 200mmØ CONC. SAN SEWER EX SAN MH MH RIM=184/76	CBMH2 MH3	BFE = 183.30		EX	CB24 TG=185.00 W183.33 (250mmØ)
PEARL STREET  EX 150mmØ PVC WATERMAIN  EX 150mmØ PVC WATERMAIN  EX 205mmØ	H1A 33.4m-200mmØ SAN @ 1.00% PRIVATE ROAD 'A' C	13.2m-450mmØ	© 0.50 © CS		CBMH4 TG=185.01 E183.16 (300mmØ) W183.14 (450mmØ)
EX HYD ORIFICE PLATE INV. 182.56 SEE CONTROL	17.1m-525mmØ	10     31M @ 0.30 %	STM @ 0.50% CBMH5 & C/O	P. Company	CBMH5 TG=185.15 S183.40 (300mmØ) W183.32 (300mmØ)
STORMCON STORMWATER STORAGE TANKS	14.4m-375mmØ STM @ 0.50%	1.6m-450mmØ 183.25 INV @ TANK————————————————————————————————————	CS BHE BHE	DPOSED	CBMH6 TG=184.97         E183.00 (300mmØ) N182.95 (300mmØ)         S182.93 (375mmØ)
TANKS TO BE WRAPPED WITH AN IMPERMEABLE LINER  TOTAL TANK VOLUME TO BE PROVIDED = 432m <sup>3</sup> REQUIRED 100-YEAR STORAGE = 407m <sup>3</sup>	C/O	R9	ε. 88 • c/O		CBMH7 TG=185.01 E183.22 (300mmØ) W183.20 (300mmØ)
TANK FOOTPRINT = 450m <sup>2</sup> TOP OF TANKS = 184.25  BOTTOM OF TANKS = 183.25	C/O CS C	R10 38.0m-200mmØ STM @ 1.00% INSPECTION POR		W W W W W W W W W W W W W W W W W W W	CBMH8 TG=185.03 W183.35 (300mmØ)
CONTRACTOR TO PROVIDE SHOP DRAWINGS	PROPC CS	C/O C C C C C C C C C C C C C C C C C C	CS C/O C/O	N1°32'20'	CBMH12 TG=184.90 W183.14 (200mmØ) CBMH19 S182.71 (375mmØ) N182.70 (275mmØ)
		2/0	C/O C/O	SUMP PUMPS DISCHARGE TO	TG=185.01 E182.76 (200mmØ) N162.70 (373HIHIØ)
//EW  EX200mm  EX200mm	Manuella (1997)		CS CS CS CS	GRADE c/w SPLASH PAD (TYP)	TG=185.27 E183.00 (200mmØ) N162.91 (3/3111110)
CB RM =183.71 = 18.2	2.55± $\sigma$ C/O Z $\sigma$	BFE 10	C/O		TG=185.12 (300Hillis) (N163.06 (300Hillis)
	CS W	3.55 NH 88.6.30 NH		S S O D E	TG=185.01 E183.30 (200111119) N183.20 (300111119)  CBMH23 E183.15 (250mm/d) S183.09 (2000mm/d)
	C/O	PROP 200mmx150mmØ PVC REDUCER	CS C	PROP SOLUTION TO S	DCBMH2 E182.67 (525mm@) W182.66 (525mm@)
La Caractaria Caractar	C/O CS MH4A	PROPOSED HYDRANT PER OPSD 1105.010 c/w 150mmØ VALVE & BOX	C/O S C/O S C/O S T T T T T T T T T T T T T T T T T T		TG=184.74 E182.07 (323mmØ) W182.00 (323mmØ)  DCBMH13 TG=185.23 E183.80 (200mmØ) N183.74 (300mmØ)
	CR11 CBMH20 CS	38.2m-200mmØ STM @ 1.00% CB16	186.65		MH1 TG=184.79 E182.62 (525mmØ) NW182.56 (450mmØ) 205mmØ ORIFICE PLATE
NATERMAI	CR12 6 20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8.0m OF STORM SEWER INSULATION REQUIRED	C/O C/O	SE CONTRACTOR CONTRACT	MH3 S182.55 (450mmØ) W182.76 (525mmØ) N182.80 (375mmØ)
-		100mmØ SAN SERVICES @ MIN 2.0% (TYP)	C/O C/O C/O CS CS CR14		MH25 TG=185.09 S182.63 (375mmØ) N182.62 (450mmØ)
EX 180	PROPO		DCBMH13  CS  34.1m-200mmØ.STM @ C  C/O  S  CS		MH42 TG=182.93 SE182.50 (450mmØ)
. EX SAN MH CB RIM H 183,59 EX INV= 181,901 EX INV= 181,901 EX INV= 181,2781	BEE = 18 BEE = 18 CO CS	B H H B B B B B B B B B B B B B B B B B	C/O (B) C/O	STORM SEWER INSULATION REQUIRED PER DETAIL ON THIS SHEET	OGS HS10 TG=184.89 SE182.54 (450mmØ) NW182.54 (450mmØ)
GAS	33.8. X CBMH21 CBMH21 CS	= 187.00 = 184.25 = 183.55 = 183.55	CS VS QUAL CS CS		
	C/O			ROPOSE	
- 6AS	S CS WILL S CS C	20mmØ TYPE K SOFT COPPER	CS C	EX TOP OF SLOPE	EX SWALE
	C/O C/O	WATER SERVICES (TYP)  15.0m OF	C/O CS 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		76.20
	CS 6 45°-1	C/O STORM SEWER INSULATION REQUIRED	C/O		18 44 18.44
	CBMH22 MH5A	200mmØ PVC WATERMAIN 5° 37.9m-200mmØ STM @ 0.50% CB15	CR15 — CS SS SS NH9A	100mmØ NON-PERFORATED CHAMBER SUMP SUBDRAIN TO OUTLET INTO 2.0x1.0m SOAKAWAY F	PIT
EX 375Ø CULVERT  N-W  \( \bar{V} \cdot = 183.87 \\ E \( \bar{IN} \cdot \cdot = 183.89 \)	● HANDHOLE EX DITCH WINV = 184	EMV.=184.58	139.81	F: 7 <b>T</b>	
— . □ G	J. IV. CKOLIVIAN		$-1/\pi$	FX DITCH	<b>4</b>
EX SAN MH MH RIM=185.04 EX EINV = 181.97± EX S INV= 182.03±	EX 200mmØ CONC. SAN SEWER @ 0.65%  HAZEL  S	CENTRELINE OF ASPHALT  EX SAN MH MH RIM=185.17  EX INV= 182.47±  15	EX 300mmØ SAN  EX 200mmØ CONC  EX 200mmØ CONC	FORCEMAIN EX SAN MH EX 300mmØ SAN FORCE	<del></del>
San SE	EX 150mmØ PVC WATERMAIN	BOSS 200 HDPE STM C  EX HYD - O- PROPOSED 4100x2	ULV @ 1.00%		EX SAN MH MH RIM=188.89
			ER CHAMBER PVC REDUCER	0mmx200mmØ EX 150mmØ PVC WATERMAIN VENLARGER	EX HYD-
EX 2000	L <sub>BOS</sub>	SS 2000 HDPE SAW-CUT, MILL A 1 CULV @ 1.00% EXISTING ROADWAY PER DETAIL ON SEE CROSS SECTION A-A O	STRUCTURE CUT-IN-TEE AND SLE I THIS SHEET CONNECTION TO EX	EEVE KISTING	







STM @ 0.50%

88.3m - 200mmØ

SAN @ 0.50%

182.670

55.0m - 200mmØ

SAN @ 0.70%

W 182.156 S 182.230 N 182.230

29.5m - 200mmØ

SAN @ 1.00%

SAN

STA

CHECKED BY: JGO

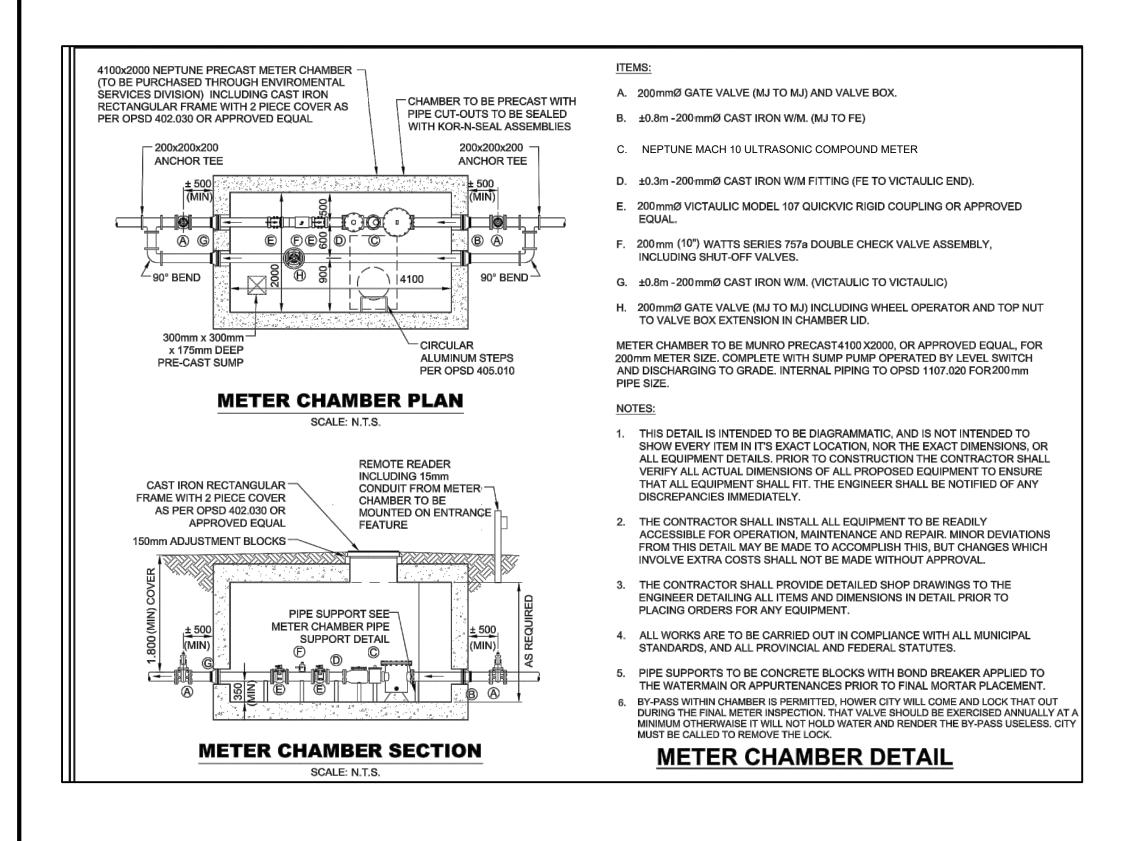
COPYRIGHT © 2023 WalterFedy

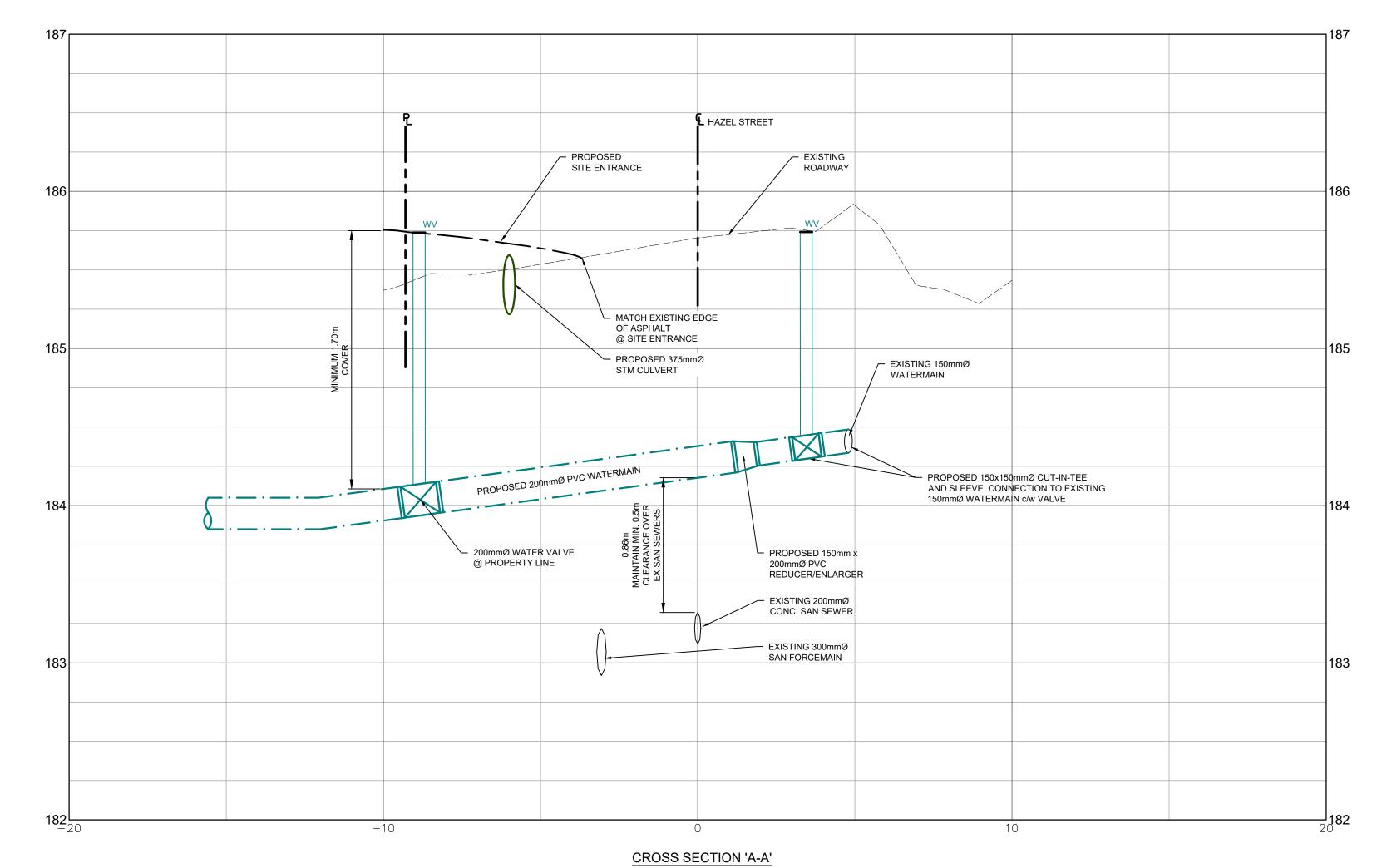
H1:500 V1:50

PRAWN BY: MPB

SAN

STA





Pearl St.

Pearl St.

Page Rd N

Hazel St.

Hazel St.

N Mil S

Summit Ave

Summit Ave

2023.02.10 ISSUED FOR DRAFT CONDO PLAN SUBMISSION 1
2023.11.03 ISSUED FOR 2nd DRAFT CONDO PLAN SUBMISSION 5

TOPOGRAPHIC SURVEY INFORMATION:
TOPOGRAPHIC SURVEY COMPLETED BY CHAMBERS AND
ASSOCIATES SURVEYING LTD, DWG NO. 14019-5\_TOPO, DATED
DECEMBER 18, 2018.
BENCHMARK: ELEVATIONS HEREON ARE GEODETIC AND WERE
DERIVED FROM THE TOPNET RKT NETWORK, NAD83 CSRS,
VERSION 3, EPOC 2010.

REFERENCE MATERIAL INFORMATION:
EXISTING SEWER AND WATERMAIN INFORMATION OBTAINED FROM
AS-RECORDED PLAN AND PROFILES PREPARED BY DENCO
ENGINEERING LTD. DWG NO. 90057, DATED FEBRUARY 19, 1991
AND CONSTRUCTION PLAN AND PROFILES PREPARED BY TOWN
OF FORT ERIE ENGINEERING DIVISION, DWG SET NO. IS08PEAR,
DATED SEPTEMBER 23, 2008.

DATED

SCHOUT COMMUNITIES INC.

45 REINHART PLACE, PETERSBURG, ON

DRO IECT

3770 HAZEL STREET TOWN OF FORT ERIE

NOTES AND DETAILS

## WALTERFEDY

KITCHENER | HAMILTON | TORONTO | CALGARY

A PART OF WF GROUP

800.685.1378 walterfedy.com



COPYRIGHT © 2023 WalterFedy

SCALE: AS NOTED

DATE: 2023-11-02

PROJECT NO.: 2022.0365.10

DRAWN BY: MPB

CHECKED BY: JGO

C5-1

P:\2022\0365\10\06—DWGS\CIVIL\Plot Files\2022.0365.10\_DET\_PLT; C5—1; None; Michael Bucci; 2023—11-

H1:100 V1:20 1 0 1 2 1:100 (m)