

CONTRACT 19001

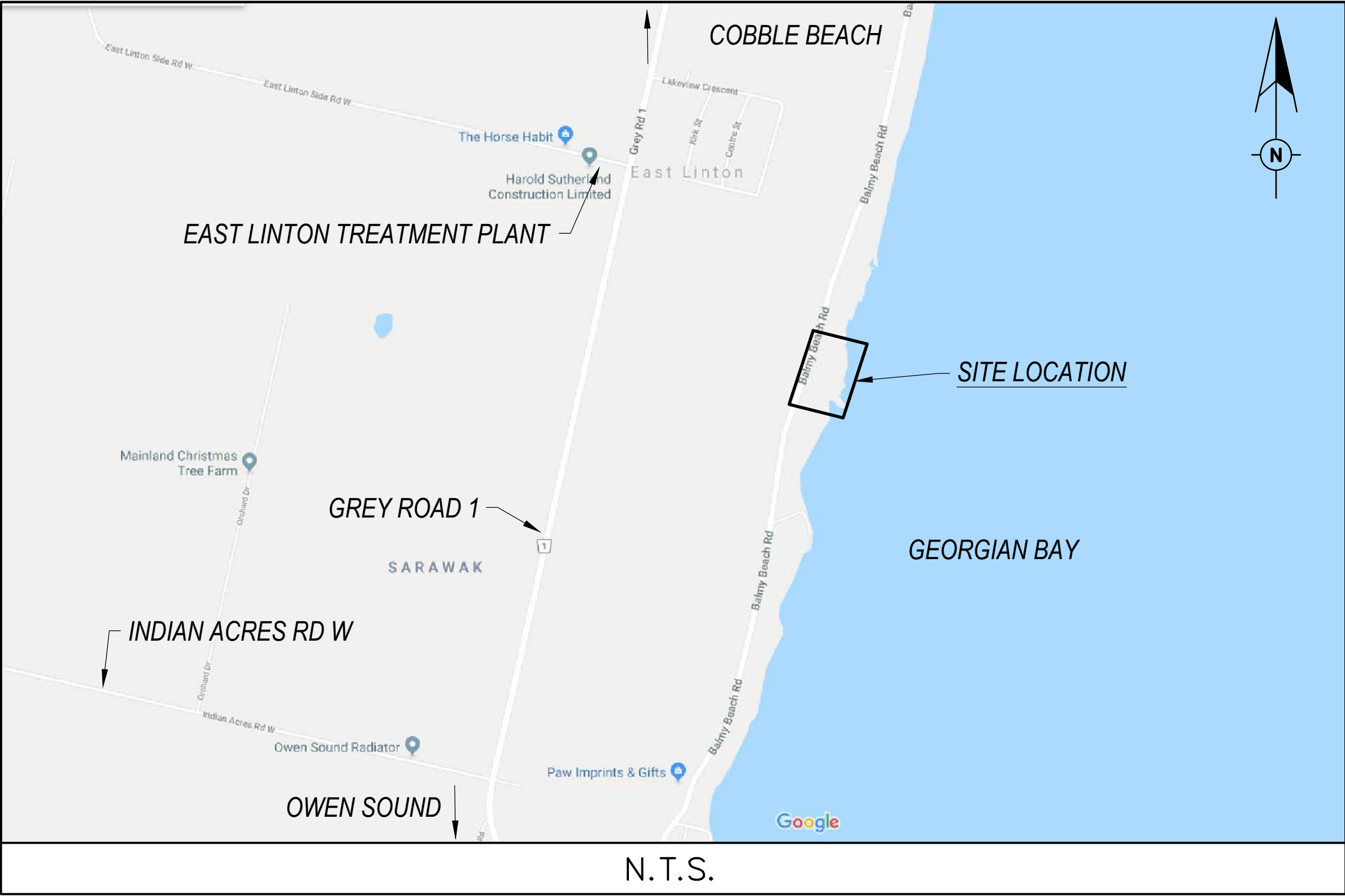
PLAN 447 LOTS 51, 52 & 52A SEVERANCE

345 & 355 BALMY BEACH ROAD (EAST LINTON)

DR. MEHRAN SHAHABI

TOWNSHIP OF GEORGIAN BLUFFS

AUGUST 2021



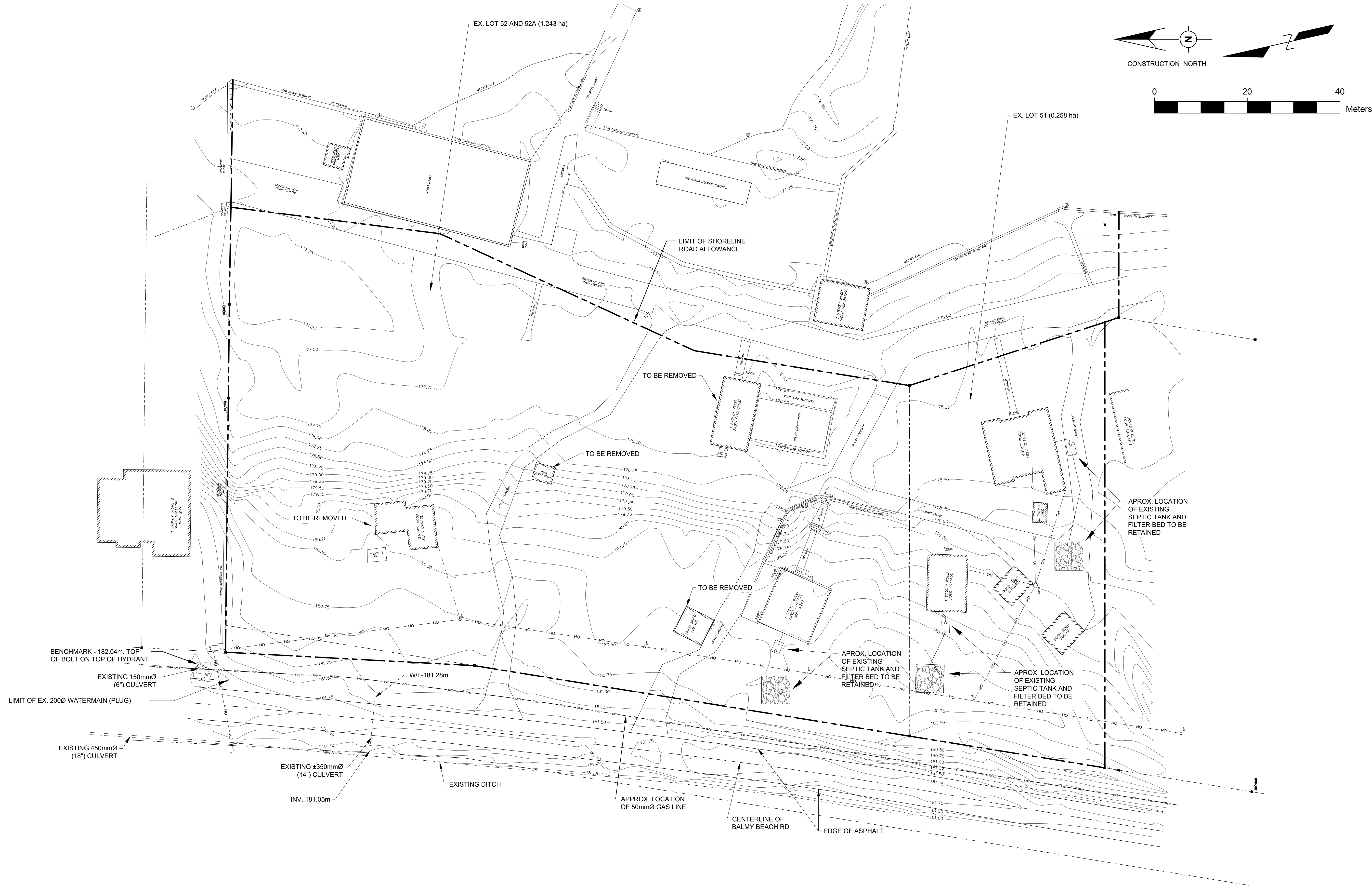
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DRAWING INDEX	
DRAWING No.	DRAWING NAME
19001-01	TITLE SHEET AND INDEX
19001-02	EXISTING CONDITIONS AND REMOVALS
19001-03	PROPOSED SEVERANCES
19001-04	TEST PIT LOCATIONS
19001-05	TREE RETENTION AREA
19001-06	DRAINAGE & STORMWATER MANAGEMENT
19001-07	PROPOSED WATER SERVICING
19001-08	SCHEMATIC HOUSE PLAN LOTS 1 TO 3
19001-09	SCHEMATIC HOUSE PLAN LOTS 4 TO 6

31/08/21	REVISIONS PER PEER REVIEW COMMENTS
30/10/20	SOUTHERLY 6m DRAINAGE EASEMENT REMOVED
10/08/20	REVISED LOT DIMENSIONS
DD/MM/YY	DESCRIPTION
	REVISION / ISSUE
Seal not valid unless signed and dated	
Unit 104D 1010 9th Avenue West, Owen Sound, ON, N4K 5R7 Telephone: (519) 372-4828	
Title: TITLE SHEET AND INDEX PLAN 447 LOTS 51, 52 & 52A BALMY BEACH RD GEORGIAN BLUFFS	
Client: DR. MEHRAN SHAHABI	
Design: JTG	Scale: NTS
Drawn: TDL	Approved:
Checked: JTG	
Date: AUG. 2021	
Drawing No. 19001-01	

PLOTTED: August 31, 2021 11:21:08 AM

PLOTTED: August 31, 2021 11:22:21 AM



KEY PLAN



LEGEND

- IB IRON BAR
- SIB STANDARD IRON BAR
- PROPERTY LINE
- - - FENCELINE
- - - ROAD CENTERLINE
- - - EX. BUILDING LAYOUT
- - - OVERHEAD WIRES
- UP UTILITY POLE (HYDRO)

GEORGIAN BAY WATER LEVEL = 177.05m. SURVEYED 24/05/19

ORIGINAL SURVEY PRODUCED BY EPLETT WOROBEC RAIKES SURVEYING LTD. ONTARIO LAND SURVEYORS. COMPLETED NOVEMBER 29th 2018

CAUTION: THE POSITION OF POLE LINES, CONDUITS, WATERMANS, SEWERS, PROPERTY LINES AND OTHER UNDERGROUND AND OVERGROUND UTILITIES ARE STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES, PROPERTY LINES & STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL INFORM HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES, PROPERTY LINES & STRUCTURES, AND SHOULD ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

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Unit 104D 1010 9th Avenue West, Owen Sound, ON, N4K 5R7
Telephone: (519) 372-4828

Title: EXISTING CONDITIONS & REMOVALS

BALMY BEACH RD – GEORGIAN BLUFFS

Client: DR. MEHRAN SHAHABI

Design: JTG Scale: 1:400

Drawn: TDL Approved: Design Engineer

Checked: JTG

Date: AUG. 2021

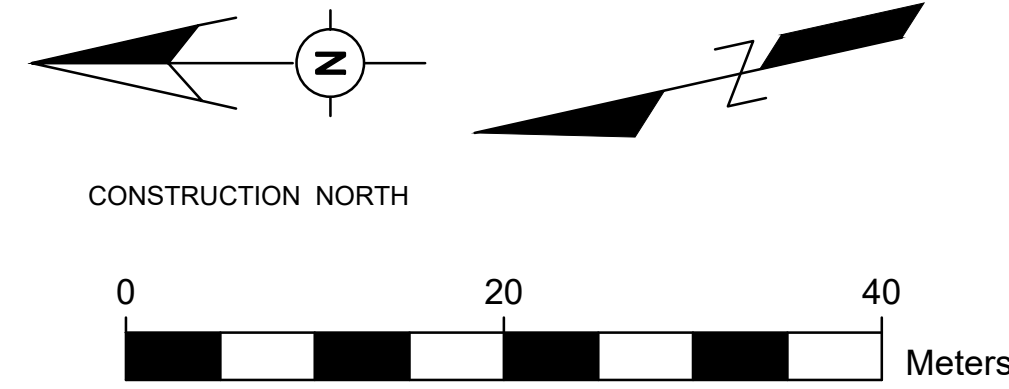
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LOT SUMMARY				
LOT #	LOT FRONTAGE (m)	AVERAGE LOT WIDTH (m)	AVERAGE LOT DEPTH (m)	AREA (m²)
1	34.5m	34.5m	94.7m	3267.15m²
2	33.2m	33.2m	89.4m	2968.08m²
3	31.5m	31.5m	80.6m	2538.90m²
4	30.0m	31.5m	75.8m	2387.70m²
5	30.0m	29.7m	77.5m	2301.75m²
6	30.4m	28.4m	89.0m	2527.60m²

AREA SUMMARY		
DESCRIPTION	LOTS	AREA (m²)
RESIDENTIAL	1-6	15,991.18m²
OPEN SPACE	-	-
STORMWATER MANAGEMENT	-	-
TOTAL	6	15,991.18m²



LEGEND	
IB	IRON BAR
SIB	STANDARD IRON BAR
---	PROPERTY LINE
---	FENCELINE
---	ROAD CENTERLINE
---	EX. BUILDING LAYOUT
---	OVERHEAD WIRES
---	UTILITY POLE (HYDRO)
---	DEVELOPABLE AREAS AS PER MUNICIPAL YARD SETBACKS AND GSCA SETBACK. TO INCLUDE RESIDENTIAL DWELLINGS, ALL GARAGES, OUTBUILDINGS AND SEPTIC SYSTEMS.

GEORGIAN BAY WATER LEVEL = 177.05m. SURVEYED 24/05/19
ORIGINAL SURVEY PRODUCED BY EPLETT WOROBEC RAIKES SURVEYING LTD, ONTARIO LAND SURVEYORS.
COMPLETED NOVEMBER 29th 2018

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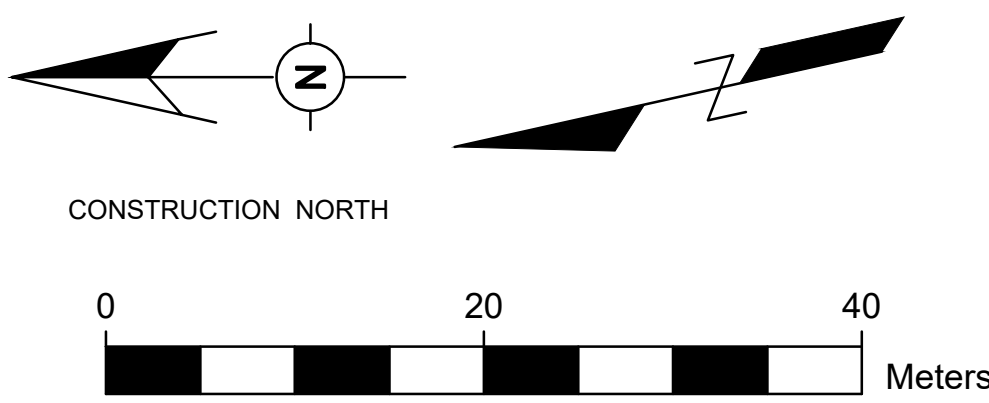
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ENGINEERING CONSULTANTS LTD
Unit 104D 1010 9th Avenue West, Owen Sound, ON, N4K 5R7
Telephone: (519) 372-4828

Title: PROPOSED SEVERANCES
PLAN 447 LOTS 51, 52 & 52A
BALMY BEACH RD - GEORGIAN BLUFFS
Client: DR. MEHRAN SHAHABI
Design: JTG Scale: 1:400
Drawn: TDL Approved: Design Engineer
Checked: JTG
Date: AUG. 2021
Drawing No. 19001-03

PLOTTED: August 31, 2021 11:23:12 AM



LEGEND	
■ IB	IRON BAR
■ SIB	STANDARD IRON BAR
---	PROPERTY LINE
---	FENCELINE
---	ROAD CENTERLINE
---	EX. BUILDING LAYOUT
---	OVERHEAD WIRES
○ UP	UTILITY POLE (HYDRO)
---	PROPOSED BUILDING ENVELOPE

GEORGIAN BAY WATER LEVEL = 177.05m. SURVEYED 24/05/19

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Mehman Shahabi
PROFESSIONAL ENGINEER
PROVINCE OF ONTARIO

ENGINEERING CONSULTANTS LTD.

Unit 104D 1010 9th Avenue West, Owen Sound, ON, N4K 5R7
Telephone: (519) 372-4828

Title: BLDG ENVELOPES FOR TREE RETENTION AREA
PLAN 447 LOTS 51, 52 & 52A
BALMY BEACH RD - GEORGIAN BLUFFS

Client: DR. MEHRAN SHAHABI

Design: JTG Scale: 1:400

Drawn: TDL Approved: Design Engineer

Checked: JTG

Date: AUG. 2021

Drawing No. 19001-05

TABLE 1
Stormwater Retention Volume and Infiltration Trench Summary
Balmy Beach Subdivision
Dr. Shahabi

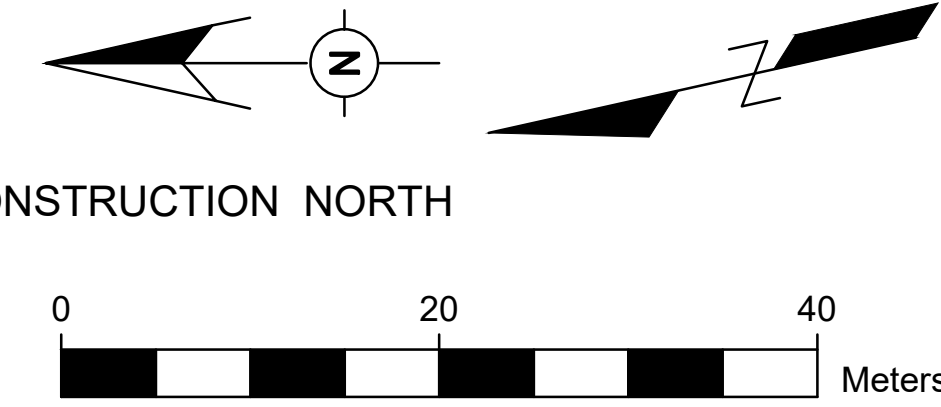
July 22, 2020

19-001

Lot Number	Width	Depth *	Area	Storage Volume Required **	Length of Infiltration Trench (based on 0.45 m ³ /m Storage Volume in Trench)
1	34.5 m	48 m	1,650 m ²	4 m ³	9 m
2	33.2 m	50 m	1,660 m ²	3 m ³	7 m
3	31.5 m	60 m	1,890 m ²	4 m ³	9 m
4	30 m	55 m	1,650 m ²	6 m ³	13 m
5	30 m	70 m	2,100 m ²	4 m ³	9 m
6	30.4 m	85 m	2,580 m ²	3 m ³	7 m
Total			11,530 m ²	24 m ³	

* Includes 10 m of road allowance. Measured to 15 m wave setback (15 m from 100-year flood line of 177.9 m).

** Based on 25 m³/ha for infiltration system providing Enhanced Protection (Table 3.2 of Storm Water Management Planning and Design Manual – MOE 2003)



LEGEND

- IB IRON BAR
- SB STANDARD IRON BAR
- PROPERTY LINE
- FENCELINE
- ROAD CENTERLINE
- EX. BUILDING LAYOUT
- OVERHEAD WIRES
- PROPOSED DRAINAGE SWALE
- UTILITY POLE (HYDRO)
- TP3 STAKED FIELD TP LOCATION FOR SEPTIC SYSTEM DESIGN (24/05/19)
- PROPOSED INFILTRATION TRENCH
- OVERLAND STORM FLOW

GEORGIAN BAY WATER LEVEL = 177.05m. SURVEYED 24/05/19

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10/08/20 REVISED LOT DIMENSIONS

DD/MM/YY DESCRIPTION

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Unit 104D 1010 9th Avenue West, Owen Sound, ON, N4K 5R7
Telephone: (519) 372-4828

Title:
DRAINAGE & STORMWATER MANAGEMENT
PLAN 447 LOTS 51, 52 & 52A
BALMY BEACH RD – GEORGIAN BLUFFS

Client: DR. MEHRAN SHAHABI

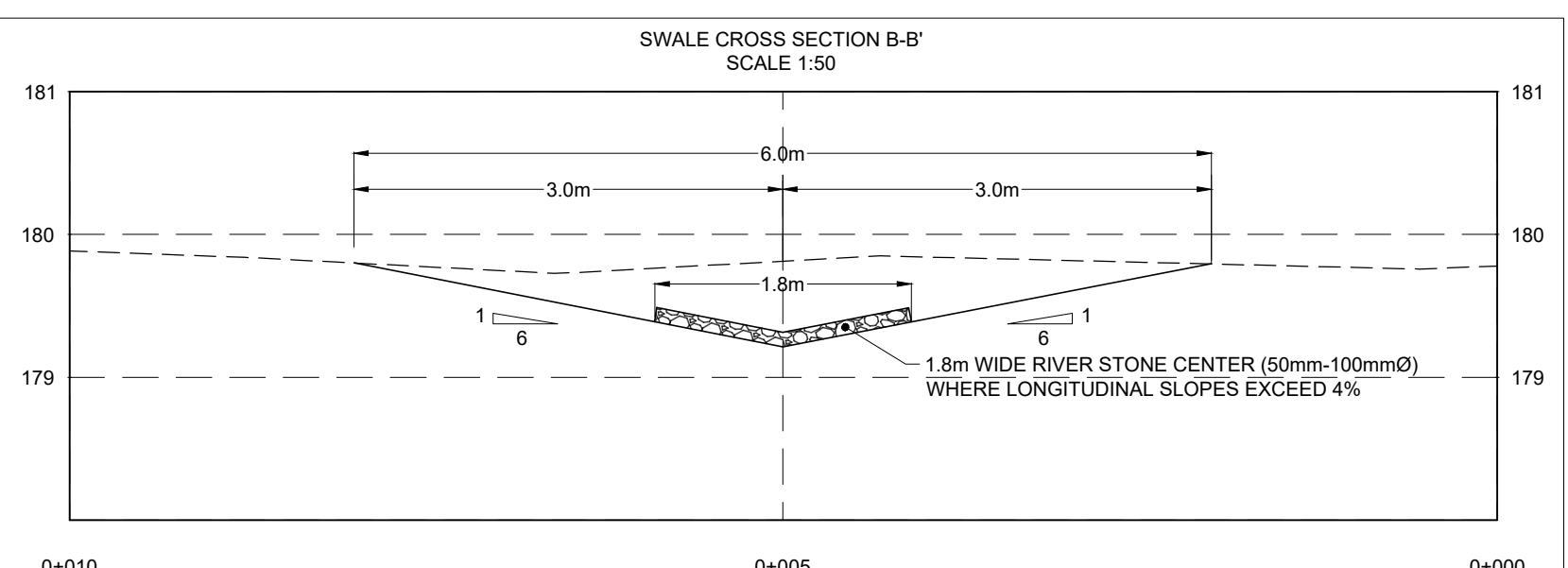
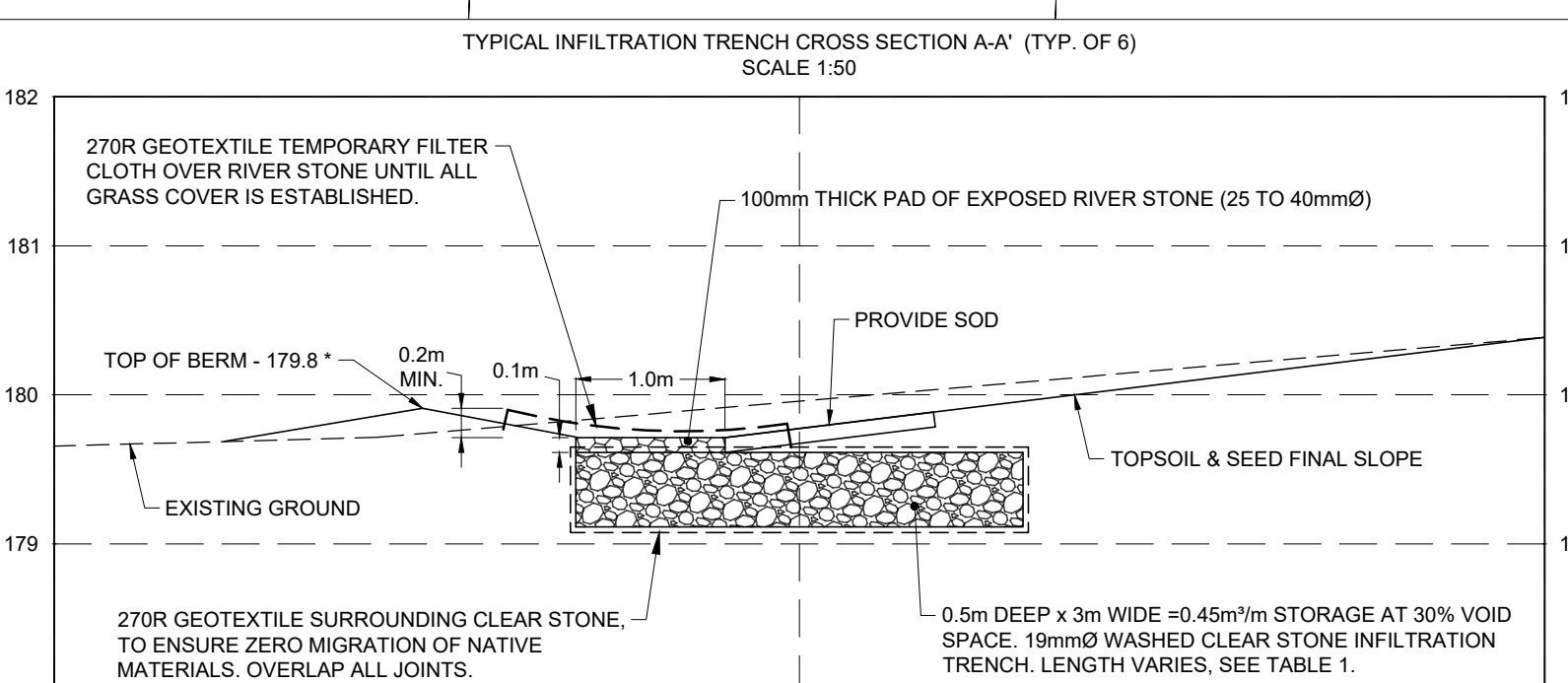
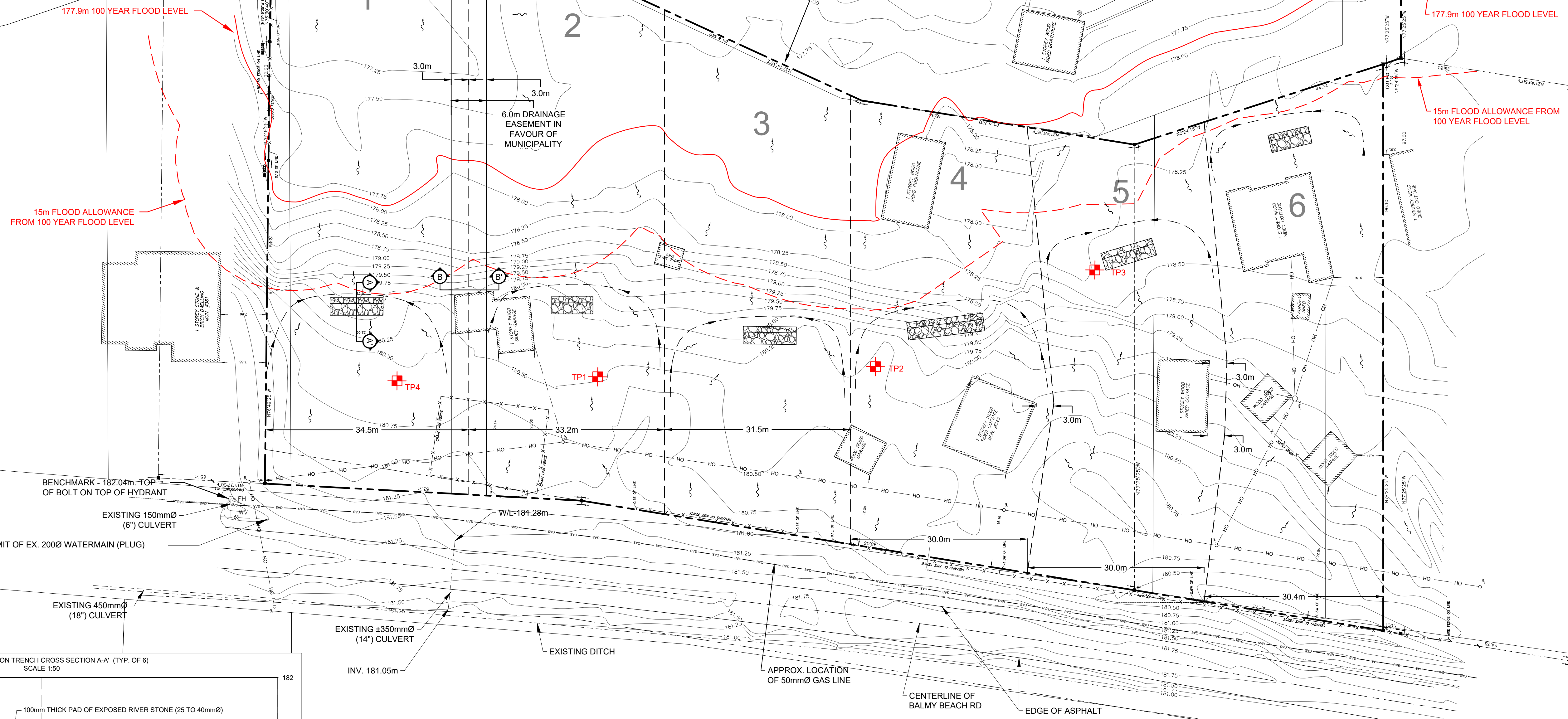
Design: JTG Scale: 1:400

Drawn: TDL Approved: Design Engineer

Checked: JTG

Date: AUG. 2021

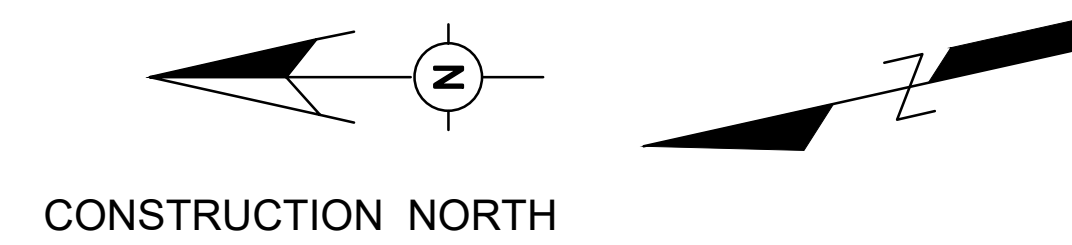
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* LOCATION OF INFILTRATION TRENCH MAY BE ADJUSTED TO ACCOMMODATE FINAL BUILDING LOCATIONS. DRAINAGE MUST BE DIRECTED TO THE INFILTRATION TRENCH. TWO SMALLER INFILTRATION TRENCHES MAY BE USED IN LIEU OF ONE, HOWEVER, THE TOTAL STORAGE VOLUME/LENGTH MUST BE EQUIVALENT TO THE VOLUMES SPECIFIED IN TABLE 1. BOTTOM OF INFILTRATION TRENCH NOT TO BE LOWER THAN 178.2m.
NOTE: ADD CLEAN, PIT RUN GRAVEL FILL FOR LOTS 5 AND 6 TO RAISE INFILTRATION TRENCHES AS REQUIRED.

WATERMAIN

1. ALL WATERMAIN AND ASSOCIATIVE INFRASTRUCTURE TO BE CONSTRUCTED TO GEORGIAN BLUFFS MUNICIPAL ENGINEERING STANDARDS AS PER SCHEDULE "C" OF THE SUBDIVISION AGREEMENT.
2. INSTALLATION SHALL BE IN ACCORDANCE WITH OPSD 1100 SERIES DRAWINGS AND OPSS 701.
3. WATERMAIN PIPE SHALL BE 1120 kPa (D.R.18) PVC (POLY VINYL CHLORIDE) WITH RUBBER GASKET JOINT FITTINGS.
4. SERVICES SHALL BE 20mm DIAMETER TYPE K COPPER TUBE WITH AN APPROVED WORKING PRESSURE OF 1120 kPa. A CURB STOP SHALL BE INSTALLED FOR EACH HOUSE. MAIN STOPS SHALL BE USED ON EACH SERVICE. ALL CURB STOPS WILL INCLUDE A STAINLESS STEEL EXTENSION ROD TO WITHIN 450mm OF THE SURFACE. FITTINGS TO BE USED ARE AS FOLLOWS: MAIN STOP ~ MUELLER H-15008, CURB STOP ~ MUELLER H-15207, SERVICE BOX ~ MUELLER A-726, OR EQUIVALENTS.
5. THE MINIMUM COVER ON WATERMAINS AND SERVICES SHALL BE 1.7m AT ALL POINTS.
6. HYDRANTS SHALL BE CANADA VALVE "CENTURY" OR APPROVED EQUAL. HYDRANT LEADS SHALL BE 150mm DIAMETER AND SHALL HAVE A SHUT-OFF VALVE, DARLING 55 OR APPROVED EQUAL. PLACED 1m FROM THE HYDRANT. ALL HYDRANTS TO BE EQUIPPED WITH PUMPER PORT AND A STORZ QUICK CONNECT FITTING. ALL HYDRANTS SHOULD NORMALLY BE FOR A 2m DEPTH OF TRENCH WITH PROVISION FOR EXTENSION AT SURFACE FOR ADJUSTMENT TO STREET LINE GRADES. HYDRANTS SHALL BE BEDDED IN 19mm SCREENED, CRUSHED STONE AND BRACED WITH POURED CONCRETE TO THE SATISFACTION OF THE MUNICIPALITY'S ENGINEER.
7. PRESSURE LEAKAGE TESTS SHALL BE PERFORMED ON THE COMPLETED WATERMAIN. A PRESSURE OF 1035 kPa SHALL BE APPLIED TO THE SECTION OF THE PIPE BEING TESTED AND MAINTAINED FOR A PERIOD OF 1 HOUR. ANY LEAKS DETECTED DURING THE PRESSURE TESTS SHALL BE REPAIRED AND THE MAIN RE-TESTED.
8. FOLLOWING THE SUCCESSFUL COMPLETION OF THE PRESSURE TEST, A LEAKAGE TEST SHALL BE PERFORMED IN ACCORDANCE WITH OPSS 701. MINIMUM TEST PRESSURE TO BE 105 psi.
9. BEFORE PLACING INTO SERVICE, THE WATER SYSTEM SHALL BE DISINFECTED BY THE DEVELOPER IN ACCORDANCE WITH THE REQUIREMENTS OF THE MINISTRY OF THE ENVIRONMENT FOR CHLORINATION OF A POTABLE WATER SUPPLIES AND TO THE SATISFACTION OF THE MUNICIPALITY'S ENGINEER.
10. A MINIMUM OF TWO SAMPLES FROM THE DISINFECTED MAIN WILL BE TESTED AT AN APPROVED LABORATORY AND FOUND TO MEET ACCEPTABLE STANDARDS PRIOR TO ANY SERVICE BEING CONNECTED TO A SOURCE FOR POTABLE WATER.



LEGEND

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- SIB STANDARD IRON BAR
- PROPERTY LINE
- FENCELINE
- ROAD CENTERLINE
- EX. BUILDING LAYOUT
- OVERHEAD WIRES
- UP UTILITY POLE (HYDRO)
- CS PRO. CURB STOP
- ⊗ PRO. VALVE
- ⊙ PRO. FIRE HYDRANT

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Telephone: (519) 372-4828

Title: PROPOSED WATER SERVICING
PLAN 447 LOTS 51, 52 & 52A
BALMY BEACH RD - GEORGIAN BLUFFS

Client: DR. MEHRAN SHAHABI

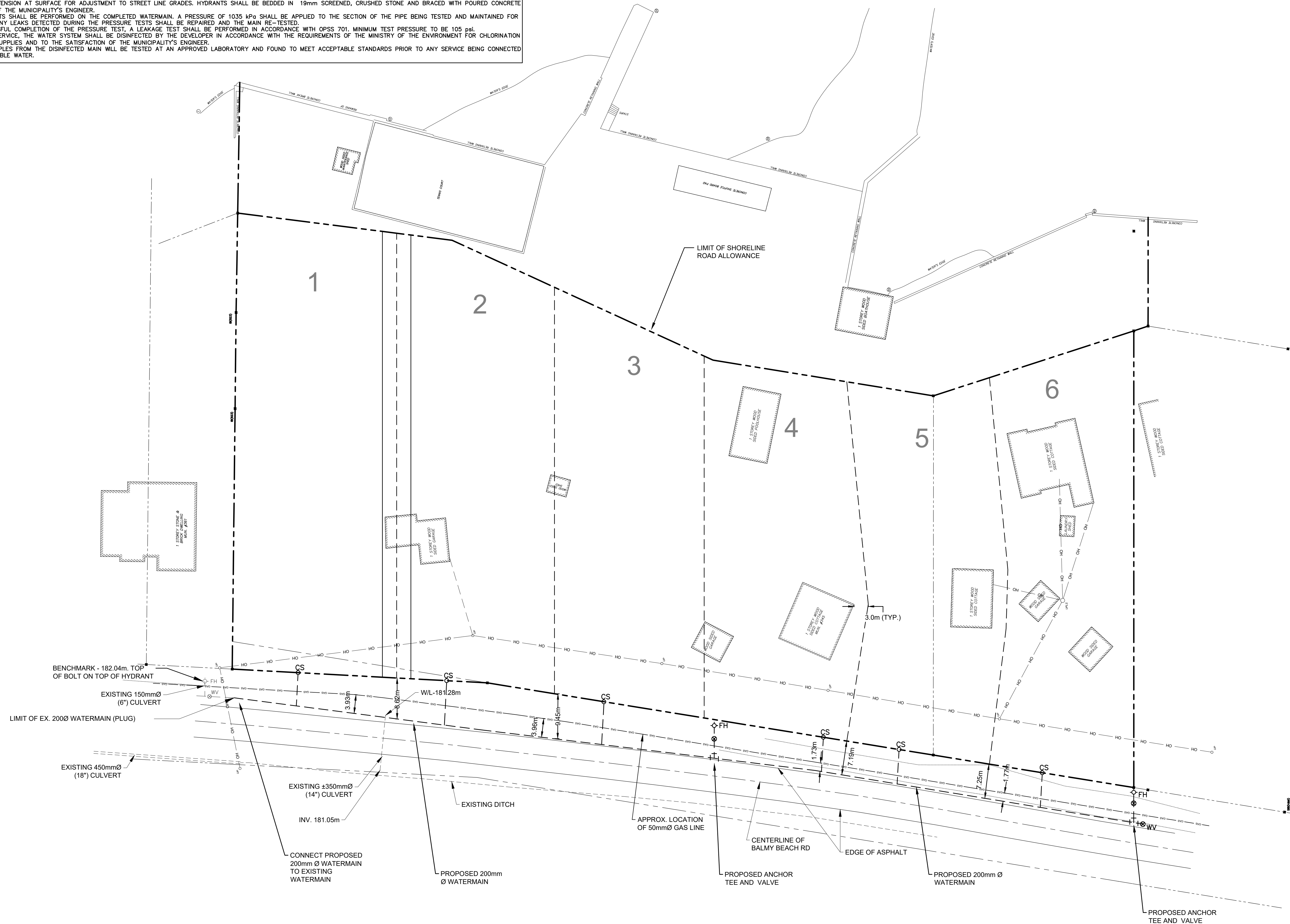
Design: JTG Scale: 1:400

Drawn: SNM Approved: Design Engineer

Checked: JTG

Date: AUG. 2021

Drawing No. 19001-07



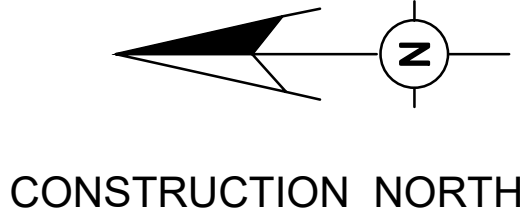
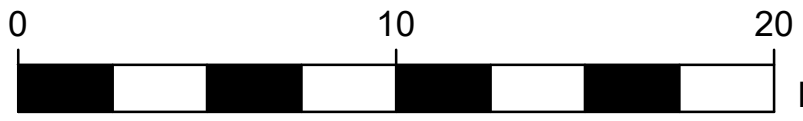
LOT COVERAGES			
LOT (#)	LOT SIZE (m²)	BUILDING SIZE (m²)	BUILDING COVERAGE (%)
1	3,325	250	7.52
2	3,000	245	8.17
3	2,546	210	8.25

SEPTIC SYSTEM NOTES

1) PER GM BLUEPLAN TEST PIT SAMPLE ANALYSIS, SILT AND CLAY PRESENCE IN TP1 AND TP2 PROVIDE A HIGH PERCOLATION TIME UNSUITABLE FOR IN-GROUND FILTER BED. PROPOSED SEPTIC SYSTEMS ON LOTS 1-3 WILL REQUIRE PARTIALLY RAISED SEPTIC SYSTEMS. SEPTIC CLEARANCES BASED ON A 0.6m RAISED FILTER BED IN ACCORDANCE WITH OBC REQUIREMENTS.

2) PROPOSED SEPTIC TANK LOCATIONS NOT SHOWN.

3) FILTER BEDS ARE TO BE ±30m² (4.5m x 6.8m) *



- LEGEND
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 - SIB STANDARD IRON BAR
 - PROPERTY LINE
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 - PROPOSED DRAINAGE SWALE
 - UTILITY POLE (HYDRO)
 - TP3 STAKED FIELD TP LOCATION FOR SEPTIC SYSTEM DESIGN (24/05/19)
 - PROPOSED INFILTRATION TRENCH
 - PROPOSED BUILDING ENVELOPE
 - FFE FINISHED FLOOR ELEVATION
 - FBE TOP OF FILTER BED ELEVATION
 - CS PRO. CURB STOP
 - PRO. VALVE
 - PRO. FIRE HYDRANT

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PROFESSIONAL ENGINEER
L. BRAHAM
Aug 31/21
PROVINCE OF ONTARIO

ENGINEERING CONSULTANTS LTD.

Unit 104D 1010 9th Avenue West, Owen Sound, ON, N4K 5R7
Telephone: (519) 372-4828

Title: SCHEMATIC HOUSE PLAN
LOTS 1 TO 3
BALMY BEACH RD - GEORGIAN BLUFFS

Client: DR. MEHRAN SHAHABI

Design: JTG Scale: 1:200
Drawn: SNM Approved: Design Engineer
Checked: JTG
Date: AUG. 2021

Drawing No. 19001-08

* FILTER BED BASED ON A 4 BEDROOM HOME WITH A DAILY FLOW OF 2000 L/DAY.
USE $A = Q/75 = 2000/75 = 26.72 \text{ m}^2$ (MINIMUM OF 30 m^2 RECOMMENDED).

