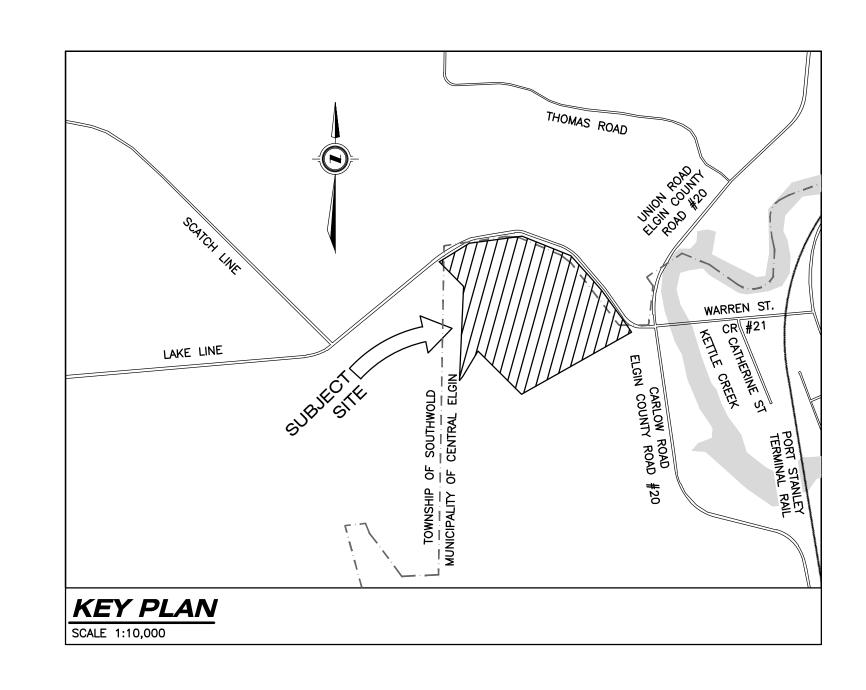
KETTLE CREEK SUBDIVISION 37719 LAKE LINE PORT STANLEY, ONTARIO

CONSULTANT:



PLANNING • CIVIL • STRUCTURAL • MECHANICAL • ELECTRICAL
1599 Adelaide St. N, Unit 301, London, Ontario, N5X 4E8
Tel: (519) 471-6667 Fax: (519) 471-0034
Email: sbm@sbmltd.ca





Sivil∖Drawings∖SB			L	IST OF DRAWINGS		
sign\3 (1	NOTES, LEGEND, AND DETAILS	10A	SUBDIVISION GRADING PLAN - SOUTHEAST	14	STREET 'B' - PLAN & PROFILE
on\2 De	2	SUBDIVISION PLAN	10B	SUBDIVISION GRADING PLAN - NORTHWEST	15A	EASEMENT/EXTENSION/RECONSTRUCTION - STA 3+000 TO 4+180 PLAN & PROFILE
Subdivis	3	EXISTING CONDITIONS, REMOVALS AND SEDIMENT & EROSION CONTROL PLAN	10C	SUBDIVISION GRADING PLAN - SOUTHWEST	15B	EASEMENT/EXTENSION/RECONSTRUCTION - STA 4+180 TO 4+409 PLAN & PROFILE
e Creek	4	MASTER SERVICING PLAN	10D	SUBDIVISION GRADING PLAN - SWM POND GRADING PLAN	15C	EASEMENT/EXTENSION/RECONSTRUCTION — STA 4+409 TO 4+615 PLAN & PROFILE
d Kettl	5	STORM CATCHMENT AREAS PLAN	11	MAJOR FLOWS CATCHMENT AREAS PLAN	15D	EASEMENT/EXTENSION/RECONSTRUCTION - STA 5+000 TO 5+658 PLAN & PROFILE
arms Lta	6A	STORM DESIGN SHEET	12A	STORMWATER MANAGEMENT FACILITY SECTIONS, NOTES AND DETAILS	16	CONCEPTUAL STREET LIGHT PLAN
y Turf F	6B	MUNICIPAL DRAIN DESIGN SHEETS	12B	STORMWATER MANAGEMENT FACILITY SECTIONS, NOTES AND DETAILS	17	COMMUNITY MAILBOX AND OGS DETAILS
Strathro	7	SANITARY CATCHMENT AREAS PLAN	13A	STREET 'A' - STA 1+000 TO 1+323 PLAN & PROFILE	18	MUNICIPALITY OF CENTRAL ELGIN STANDARD DETAILS
18-0530	8	SANITARY DESIGN SHEET	13B	STREET 'A' - STA 1+323 TO 1+646 PLAN & PROFILE	19	ONTARIO PROVINCIAL STANDARD DRAWINGS
S\SBM-i	9	WATER DISTRIBUTION PLAN	13C	STREET 'A' - STA 1+646 TO 1+864 PLAN & PROFILE		

GENERAL NOTES:

- THE OWNER'S PROFESSIONAL ENGINEER IS REQUIRED TO FIELD REVIEW THE INSTALLATION OF SERVICES INCLUDED IN THIS PROJECT IN ACCORDANCE WITH THE GENERAL REVIEW COMMITMENT CERTIFICATION PROCESS. THE OWNER'S CONTRACTOR IS TO PROVIDE STRIK, BALDINELLI, MONIZ LTD. (SBM) AND THE MUNICIPALITY OF CENTRAL
- ELGIN PHYSICAL SERVICES DEPARTMENT AT LEAST 48 HOURS NOTICE PRIOR TO COMMENCING CONSTRUCTION OF THE SITE SERVICES. AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION ON ANY EXISTING ROAD ALLOWANCE MAINTAINED BY THE COUNTY OF ELGIN, THE CONTRACTOR SHALL OBTAIN THE NECESSARY PERMITS FROM THE COUNTY ENGINEER'S DEPARTMENT, AFTER DISCUSSION WITH THE STAFF.
- THE OWNER/OWNER'S CONTRACTOR SHALL HAVE ITS PROFESSIONAL ENGINEER PROVIDE FULL-TIME ONSITE REVIEW DURING CONSTRUCTION ON AN EXISTING MUNICIPAL STREET OR EASEMENT AND PROVIDE A CERTIFICATE OF COMPLETION OF WORKS UPON COMPLETION OF ALL WORKS TO BE CONSTRUCTED.
- 4. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE CURRENT ONTARIO BUILDING CODE (OBC) AND ANY APPLICABLE STATUTES, REGULATIONS, CODES AND BY-LAWS. SBM IS NOT RESPONSIBLE FOR THE INFORMATION (EXISTING TOPOGRAPHY, BENCHMARKS, PROPERTY BOUNDARY, ETC.) PROVIDED BY OTHERS.

CONSTRUCTION NOTES:

- THE OWNER'S CONTRACTOR IS TO CONTACT THE CONSULTING ENGINEER (SBM) FOR FINAL ONSITE REVIEW. THE CONTRACTOR IS TO PROVIDE AT LEAST 48 HOURS NOTICE PRIOR TO REQUIRED ONSITE REVIEW. THE OWNER'S CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES UNDER THE OCCUPATIONAL HEALTH AND SAFETY ACT AS REQUIRED BY THE MINISTRY OF LABOUR TO EXECUTE THE WORK.
- THE OWNER'S CONTRACTOR IS TO REVIEW AND CONFIRM ALL EXISTING CONDITION INFORMATION & INFORM SBM OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. SBM IN NO WAY ACCEPTS RESPONSIBILITY FOR ANY INACCURACIES FOUND ON THIS PLAN RELATIVE TO EXISTING CONDITIONS FOR THE SITE.
- 4. PRIOR TO COMMENCING ANY CONSTRUCTION, ALL SEWER OUTLET INFORMATION, BENCHMARKS, ELEVATIONS, DIMENSIONS, GRADES, ETC. MUST BE CHECKED BY CONTRACTOR AND VERIFIED AND ANY DISCREPANCIES REPORTED TO THE ENGINEERS.
- 5. PRIOR TO COMMENCING ANY WORK ON THE INSTALLATION OF SERVICES & GRADING, AN APPROVED SET OF PLANS AND SPECIFICATIONS MUST BE AVAILABLE ON JOB AND SHALL REMAIN THERE WHILE WORK IS BEING DONE.
- 6. STRIP FULL DEPTH OF TOPSOIL IN AREAS TO BE DISTURBED AND STOCK PILE FOR RE-USE IN GRASSED/LANDSCAPED AREAS. 7. OWNER'S CONTRACTOR IS RESPONSIBLE FOR ALL AS-BUILT INVERTS AND GRADES, RECORD ANY DEVIATION OF PIPE OR STRUCTURE LOCATION INVOLVED WITH THIS
- PROJECT AND OWNER'S CONTRACTOR TO PROVIDE A COPY OF THE AS-BUILT DRAWING SHOWING ALL CHANGES CLEARLY MARKED IN RED. THE OWNER'S CONTRACTOR SHALL CONSTRUCT TEMPORARY MEASURES TO CONTROL SILT ENTERING THE STORM DRAINAGE SYSTEM TO THE SPECIFICATIONS OUTLINED IN THE GUIDELINES ON EROSION AND SEDIMENT CONTROL FOR URBAN CONSTRUCTION SITES PREPARED BY THE MINISTRY OF NATURAL RESOURCES. THESE MEASURES ARE
- TO BE INSTALLED PRIOR TO COMMENCING ANY CONSTRUCTION FOR THIS PROJECT AND ARE TO REMAIN IN PLACE UNTIL CONSTRUCTION HAS BEEN COMPLETED TO BASE ASPHALT AND SOD OR THE SATISFACTION OF THE MUNICIPAL ENGINEER.
- CONNECTING ANY EXISTING SEWER OR DRAIN ENCOUNTERED DURING CONSTRUCTION TO A NEW SEWER OF SIMILAR TYPE. SIZE AND MATERIAL OR INTO ANOTHER EXISTING SEWER OF THE SAME TYPE AND TO REPORT ON AS-BUILT DRAWINGS. ENSURING THAT THERE IS NO INTERRUPTION OF ANY SURFACE OR SUBSURFACE DRAINAGE FLOW THAT WOULD ADVERSELY AFFECT NEIGHBOURING PROPERTIES. 10. NO FOUNDATION DRAIN CONNECTIONS WILL BE PERMITTED INTO THE SANITARY SEWERS AND NO DIRECT GRAVITY CONNECTIONS FROM THE FOUNDATION DRAINS WILL BE
- 11. WORK ON OR ADJACENT TO THE MUNICIPAL CITY RIGHT OF WAY (R.O.W.) SHALL BE COMPLETED IN ACCORDANCE WITH THE ONTARIO TRAFFIC MANUAL BOOK 7 BOOK 18 CURRENT EDITION.

PERMITTED TO THE STORM SYSTEM UNLESS THE STORM SYSTEM HAS THE CAPACITY TO PROVIDE FOR SUCH CONNECTIONS TO THE SATISFACTION OF THE MUNICIPAL

SURFACE WORKS NOTES:

- 1. ALL WORK IN THE MUNICIPAL ROAD ALLOWANCE SHALL MEET THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE CURRENT MUNICIPALITY OF CENTRAL ELGIN INFRASTRUCTURE DESIGN GUIDELINES AND CONSTRUCTION STANDARDS (IDGCS) ARE TO BE APPLIED TO WORKS WITHIN THE MUNICIPAL ROAD ALLOWANCE UNLESS OTHERWISE APPROVED BY THE MUNICIPALITY ENGINEER. THE CONTRACTOR IS REQUIRED TO OBTAIN & PAY FOR PERMIT TO WORK IN MUNICIPAL R.O.W. 2. ALL SURFACES WHICH ARE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO A CONDITION AT LEAST AS GOOD AS ORIGINAL, OR AS PER BELOW (WHICHEVER
- IS GREATER) OR IF WITHIN THE MUNICIPAL RIGHT OF WAY TO THE SATISFACTION OF THE MUNICIPAL ENGINEER, ALL AT NO COST TO THE MUNICIPALITY 2.1. GRASSED AREAS TO BE RESTORED w/ 100mm (MIN) TOPSOIL + SOD
- 2.2. CONCRETE SIDEWALK TO OPSD 310.010 (CONCRETE SIDEWALK).
- 2.3. CONCRETE CURB AND GUTTER TO OPSD 600.100 (CONCRETE MOUNTABLE CURB WITH NARROW GUTTER) OR OPSD 600.110 (CARLOW ROAD BARRIER CURB). 2.4. ANY ASPHALT AREA DISTURBED DURING CONSTRUCTION SHALL BE RESTORED AS FOLLOWS:
- 2.4.1. PROOF ROLL SUBGRADE (TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER) PRIOR TO PLACEMENT OF GRANULARS (98% STANDARD PROCTOR MAXIMUM DRY DENSITY (SPMDD) MIN.). 2.4.2. MILL ADJACENT ASPHALT TO BE TIED INTO 50mm DEEP x 500mm WIDE PRIOR TO RESTORATION SEE DETAIL ON SHEET C1.

		PROPOS	ED PAVEMENT S			TO BE PLACED IN 2 LIFTS
MATERIAL	LAKE LINE	STREET 'A'	STREET 'B'	CARLOW ROAD	PARKING LOT	DRIVEWAY
HL-3	40mm	40mm	40mm	40mm	35mm	_
HL-4	-	-	-	-	ı	60mm
HL-8	40mm	40mm	40mm	40mm	40mm	_
GRANULAR 'A'	150mm	150mm	150mm	150mm	150mm	150mm
GRANULAR 'B'	400mm	400mm	400mm	400mm	350mm	_

- 2.5. RESTORE ALL PAVEMENT MARKINGS TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS (UNLESS OTHERWISE NOTED) AND MARKINGS SHALL BE COMPLETED IN ACCORDANCE WITH OPSS 710 'CONSTRUCTION SPECIFICATION FOR PAVEMENT MARKING'
- 2.6. ALL EXTERIOR HORIZONTAL CONCRETE SHALL BE MIN 150mm THICK PER IDGCS 6.6.e), 30 MPa AT 28 DAYS c/w 5-8% AIR ENTRAINMENT AND TEMPERATURE BETWEEN 10-28°C. ON MIN 150mm THICK GRANULAR 'A' COMPACTED TO 100% SPMDD. ALL AREAS OUTSIDE THE CONSTRUCTION LIMITS SHALL NOT BE DISTURBED. ANY DAMAGED TO THOSE AREAS ARE TO BE REPAIRED AT THE CONTRACTORS EXPENSE.

SERVICING NOTES:

- (SEE ADDITIONAL SERVICING NOTES ON SHEET 4) ALL STORM AND/OR SANITARY SEWER INSTALLATION SHALL BE IN ACCORDANCE WITH THE CURRENT MUNICIPALITY OF CENTRAL ELGIN'S STANDARDS AND SPECIFICATIONS
- AND THE CURRENT EDITION OF THE ONTARIO BUILDING CODE. 2. ALL ORGANIC. UNSTABLE OR UNSUITABLE MATERIALS BENEATH THE ROAD ALLOWANCE, SERVICES, UTILITIES, OR FOUNDATIONS MUST BE REMOVED AND THESE AREAS BACKFILLED WITH AN APPROVED FILL MATERIAL, ALL TO THE SATISFACTION OF A GEOTECHNICAL ENGINEER AND SHOULD BE PLACED IN LIFTS NOT EXCEEDING 300mm OPTIMUM MOISTURE CONTENT
- REMOVE ALL TRENCH WATER WHEN PIPE LAYING IS IN PROGRESS. ALL REQUIREMENTS FOR DEWATERING PERMITS (INCLUDING THE MINISTRY OF ENVIRONMENT. CONSERVATION AND PARKS (M.E.CP)'S PERMIT TO TAKE WATER, IF REQUIRED) SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONNECTIONS FROM FOUNDATIONS, WEEPING TILE, SUMP PUMP, AND ROOF DRAINS ARE NOT PERMITTED TO ENTER THE SANITARY SEWER SYSTEM AND SHALL BE IN
- REQUIREMENTS IN SECTION 2.7. . ALL PROPOSED STORM SEWER PIPE SHALL BE: PVC SMOOTH WALL (CSA B182.2) (1000 TO 6000) OR RIBBED (CSA B182.4) (2000 TO 6000) OR REINFORCED CONCRETE (CAN/CSA 257.2) AND SANITARY SEWER PIPE TO BE PVC SMOOTH WALL (CSA B182.2) (1000 TO 6000) OR RIBBED (CSA B182.4) (2000 TO 6000). PVC PIPE SHALL BE LAID WITH TYPE I BEDDING UNDER 4.5m OF COVER AND TYPE II BEDDING OVER 4.5m OF COVER. CONCRETE PIPE SHALL BE LAID WITH CLASS B (B1 OR B2) BEDDING. ALL SEWER BACKFILL MUST BE COMPACTED TO 95% STANDARD MAXIMUM DRY DENSITY (MINIMUM) (100% FOR PAVED AREAS). REFER TO OPSD

ACCORDANCE WITH THE MUNICIPALITY OF CENTRAL ELGIN INFRASTRUCTURE DESIGN GUIDELINES AND CONSTRUCTION STANDARDS INCLUDING, BUT NOT LIMITED TO

- 802.010, OPSD 802.030, AND MUNICIPALITY OF CENTRAL ELGIN CURRENT STANDARDS. THE MINIMUM DEPTH OF A STORM SEWER SHALL BE 1.5m (1.25m FOR CATCH BASIN LEADS) FROM THE FINISHED GROUND ELEVATION TO THE CROWN OF THE PIPE AS PER THE MUNICIPALITY OF CENTRAL ELGIN INFRASTRUCTURE DESIGN GUIDELINES AND CONSTRUCTION STANDARDS. WHERE MINIMUM DEPTHS CANNOT BE ACHIEVED AND THEREFORE FROST PROTECTION IS WARRANTED, INSULATION IS REQUIRED AS PER THE MUNICIPALITY OF CENTRAL ELGIN DRAWIN W-3 'WATERMAIN CROSS OVER DETAIL'. ALL STORM AND SANITARY SEWERS/SERVICES AND CATCHBASIN LEADS SHALL HAVE APPROVED RUBBER GASKET JOINTS + BE INSTALLED USING A LASER LEVEL.
- 8. CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR ALL PRECAST CONCRETE STRUCTURES PRIOR TO ORDERING THEM FOR REVIEW BY ENGINEER. 9. ALL CATCHBASINS TO HAVE 0.6m SUMP AS PER OPSD 705.010 AND CATCHBASIN MAINTENANCE HOLES 12000 & LARGER TO HAVE 0.3m SUMP AS PER OPSD 701.010. 10. 3.0m LENGTHS OF 150mm DIAMETER PERFORATED FILTER WRAPPED PVC PIPE ARE TO BE INSTALLED AS SUBDRAINS CONNECTED TO TWO SIDES OF EACH CATCHBASIN AND CATCHBASIN MAINTENANCE HOLE WITHIN PAVED AREAS. THE SUBDRAINS ARE TO BE LOCATED JUST BELOW SUBGRADE ELEVATION AND RUN PARALLEL WITH THE
- CURB AS PER MUNICIPALITY OF CENTRAL ELGIN DRAWING SCS-1. 11. MAINTENANCE HOLES TO BE CONSTRUCTED OF PRE-CAST CONCRETE. ALL MAINTENANCE HOLES TO BE INSTALLED IN ACCORDANCE WITH THE ONTARIO PROVINCIAL STANDARDS (OPSD) DIVISION 700 DETAILS AND REQUIREMENTS, SEE LIST OF COMMON DETAILS.
- 12. ENSURE MINIMUM OF 1 ADJUSTMENT UNIT FOR ALL STRUCTURES. MAXIMUM TOTAL ADJUSTMENT UNITS HEIGHT: 300mm.
- 13. RUNG SPACING IN MAINTENANCE HOLES TO BE 300mm MIN. AND A MAX. OF 600mm DISTANCE BETWEEN THE LID AND THE FIRST RUNG.
- 14. WATERMAINS 250mm AND ABOVE MUST BE RESTRAINED FOR 30.0m IN EITHER DIRECTION OF DEAD END/VALVE.
- 15. WHERE ANY WATER SERVICE CONNECTION IS REQUIRED TO BE MADE FOLLOWING THE CONSTRUCTION OF CURB, GUTTER, CONCRETE SIDEWALKS, AND/OR WEARING SURFACE COAT OF ASPHALT ON ANY STREET IN A NEW SUBDIVISION, SUCH WATER SERVICE CONNECTION SHALL NOT BE MADE USING 'OPEN CUT' METHODS BUT SHALL BE MADE USING TRENCHLESS TECHNOLOGIES AND IN SUCH A MANNER AS TO ELIMINATE THE POSSIBILITY OF SETTLEMENT OF SUCH CURB, GUTTER, CONCRETE SIDEWALKS AND/OR WEARING SURFACE COAT OF ASPHALT; IT BEING UNDERSTOOD THAT THIS POLICY SHALL APPLY, EXCEPT WHERE IN THE OPINION OF THE MUNICIPAL ENGINEER, GROUND CONDITIONS ARE SUCH THAT THE USE OF DRILLING OR BORING METHODS BECOME UNREASONABLE OR UNECONOMICAL.
- 16. ALL WATERMAIN MATERIAL AND CONSTRUCTION SHALL CONFORM TO THE CURRENT MUNICIPALITY'S STANDARDS AND SPECIFICATIONS. 17. ALL FIRE HYDRANTS SHALL BE 3-WAY HYDRANTS c/w STORZ CONNECTION WITH VALVE DIRECTIONAL OPERATION TO BE ESTABLISHED BY MUNICIPALITY OF CENTRAL ELGIN
- AS PER THE MUNICIPALITY OF CENTRAL ELGIN'S STANDARDS AND SPECIFICATIONS. 18. ALL WATERMAIN VALVES SHALL BE GATE VALVES MANUFACTURED TO AWWA C500 AND EPOXY COATED TO AWWA C550 WITH VALVE DIRECTIONAL OPERATION TO BE ESTABLISHED BY MUNICIPALITY OF CENTRAL ELGIN. 19. INSTALLATION, HYDROSTATIC TESTING, SWABBING, FLUSHING AND DISINFECTION SHALL BE DONE IN ACCORDANCE WITH THE MUNICIPALITY OF CENTRAL ELGIN'S STANDARDS
- AND SPECIFICATIONS. 20. SEPARATION BETWEEN BURIED WSC & PDC AS PER M.E.C.P GUIDELINES AND MUNICIPALITY OF CENTRAL ENGIN'S STANDARDS AND SPECIFICATIONS 21. WATER SERVICE TO BE PEX AND ALL WATER PIPE TO HAVE 12AWG TRACER WIRE INSTALLED ON ALL PVC WATERMAINS, VALVES, AND FIRE HYDRANTS. APPROVED TRACER WIRE FOR OPEN CUT INSTALLATION: "COPPERHEAD 1230-HS". WATERMAIN TO BE INSTALLED WITH 1.7m MIN COVER. PEX WATER SERVICE REQUIRES BRASS FITTINGS AS
- PER THE MUNICIPALITY OF CENTRAL ELGIN'S STANDARDS AND SPECIFICATIONS. PROVIDE PIPE RESTRAINTS AS REQUIRED BY THE PIPE MANUFACTURER 22. WHEN CROSSING ABOVE A SANITARY/STORM SEWER THE CONTRACTOR IS TO ENSURE A MINIMUM 0.15m VERTICAL SEPARATION FROM THE UNDERSIDE OF THE WATER SERVICE TO THE TOP OF THE SEWER AS OUTLINED IN THE CURRENT EDITION OF THE M.E.C.P "DESIGN GUIDELINES FOR DRINKING-WATER SYSTEMS" AND INSULATE
- 23. ALL SUBSTITUTIONS MUST BE APPROVED BY THE MUNICIPAL ENGINEER. 24. THE ELEVATION OF THE GROUND WATER TABLE IS UNKNOWN. CONTRACTOR TO ADVISE SBM IF GROUNDWATER IS ENCOUNTERED DURING EXCAVATION OPERATIONS; FURTHER REVIEW/INVESTIGATION BY A GEOTECHNICAL ENGINEER MAY BE REQUIRED. IF GROUNDWATER IS ENCOUNTERED DURING EXCAVATION OPERATIONS. CIVIL STRUCTURES AND PIPES ARE TO BE DESIGNED FOR HYDROSTATIC PRESSURE AND UPLIFT/BUOYANCY FORCES. PROVIDE SHOP DRAWINGS SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO FOR REVIEW. CONTRACTOR IS RESPONSIBLE OF APPLYING FOR ANY REGISTRY AND/OR PERMIT TO TAKE WATER IF REQUIRED, SEE NOTE ON SHEET 2.

REVISIONS

D/M/Y

UTILITIES NOTES:

OPSD

OPSD

708.010

1.50

1.50

2.0% MIN

5.0% MAX 4.0% MAX

708,020

OPSD 708.030

CURB *

STOP)

1.00

GAŠ

310.010

3.80

LEGEND:

 \bigcirc

2.0%

OFR

ہے FR−2

150 PVC WSC

-

20.0 - 300 ST @ 1.0% EXISTING STORM SEWER

20.0-3000 ST 0 1.0% PROPOSED STORM SEWER

20.0-1506 SA @ 1.0% EXISTING SANITARY SEWER

150 PVC WSC ___ PROPOSED WATERMAIN

20.0-150%_SA 9 1.0% PROPOSED SANITARY SEWER

- ALL WORK FOR COORDINATION, DESIGN, AND CONSTRUCTION OF UTILITIES IS BY OTHERS. SBM DESIGN AND DRAWINGS ARE FOR MUNICIPAL SERVICING ONLY. ANY UTILITY INFORMATION SHOWN IS FOR REFERENCE/COORDINATION PURPOSES ONLY AND MAY NOT BE ACCURATE. THE UTILITY PROVIDERS MUST BE INFORMED AT LEAST TWO WEEKS PRIOR TO CONSTRUCTION ON ANY EXISTING CITY ROAD ALLOWANCE. ALL EXISTING UNDERGROUND SERVICE OR UTILITIES WITHIN THE LIMITS OF THE CONSTRUCTION SITE SHALL BE LOCATED AND MARKED. ANY UTILITIES, DAMAGED OR DISTURBED DURING CONSTRUCTION, SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE
- GOVERNING BODY AT THE CONTRACTOR'S EXPENSE. ALL EXISTING UNDERGROUND UTILITY (TELEPHONE, HYDRO, GAS, CABLE, SEWER, WATERMAINS, ETC.) THAT WILL BE CROSSED UNDER DURING THE INSTALLATION OF SERVICES FOR THIS DEVELOPMENT SHALL BE SUPPORTED, AS MAY BE REQUIRED BY THE OWNERS OF THE UTILITY BEING CROSSED UNDER.
- OWNER'S CONTRACTOR TO LOCATE/FIELD VERIFY LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION OWNER'S CONTRACTOR TO COORDINATE WITH UTILITIES PROVIDER FOR BRACING, DECOMMISSIONING AND/OR RELOCATION OF EXISTING GAS, HYDRO, TELEPHONE, CABLE, ETC. SERVICES, IF REQUIRED.

20.00 (TYP)

4.25

ZONE 'A'

1.50

BUILDING ENTRANCE

PROPOSED ASPHALT

PROPOSED CONCRETE

DETÁIL ON THIS PAGE

PROPOSED SILT SACK

🗯 PROPOSED BUILDING

LIMITS OF DRAINAGE AREA

///// EXISTING BUILDING

PROPOSED RETAINING WALL

MILL/PAVE LAP JOINT AS PER

PROPOSED STRAW BALE BARRIER

(DESIGNED BY OTHERS)

OVERHEAD DOOR

0

SANITARY

HL3 SURFACE ASPHALT COMPACTED TO 97% MARSHALL

GRANULAR 'B' SUB-BASE COMPACTED TO 100% SPMDD

- HL8 BASE ASPHALT COMPACTED TO 97% MARSHALL

GRANULAR 'A' BASE COMPACTED TO 100% SPMDD

APPROVED SUBGRADE 0.30 (TYP)

1 (TYP)

1 (TYP)

3.50

LIST OF STANDARD DETAILS:

CATCH BASIN CONNECTION FOR RIGID MAIN PIPE SEWER

CATCH BASIN CONNECTION, FLEXIBLE PIPE SEWER

1.80

\(\sigma\) UNDISTURBED

SOILS (TYP)

- CONC. SW, 150mm THICK PER IDGCS

OVER 150mm GRANULAR 'A' BASE

6.6.e) (SEE SURFACE WORKS NOTE 2.6)

COMPACTED TO 100% SPMDD PER OPSD

UTILITY

TYPICAL ROAD CROSS SECTION

EXISTING SPOT ELEVATION

EXISTING SPOT ELEVATION

PROPOSED SPOT ELEVATION

PROPOSED SWALE ELEVATION

EXISTING CATCH BASIN

PROPOSED CATCH BASIN

EXISTING CLEANOUT

PROPOSED CLEANOUT

MAINTENANCE HOLE

PROPOSED SWALE

PROPOSED SLOPE

EXISTING WATERMAIN

EXISTING FIRE HYDRANT

EXISTING WATER VALVE

PROPOSED WATER VALVE

PROPOSED CURB STOP

BOREHOLE (SEE REFERENCE

TEST PIT (SEE REFERENCE

PROPOSED RAMP

DOCUMENT #6)

DOCUMENT #6)

PROPOSED FIRE HYDRANT

PROPOSED CATCH BASIN

EXISTING MAINTENANCE HOLE

PROPOSED MAINTENANCE HOLE

PROPOSED DRAINAGE DIRECTION

EXISTING OVERLAND FLOW ROUTE

PROPOSED OVERLAND FLOW ROUTE

PROPOSED SIGN, TYPE OF SIGN

(TO REMAIN)

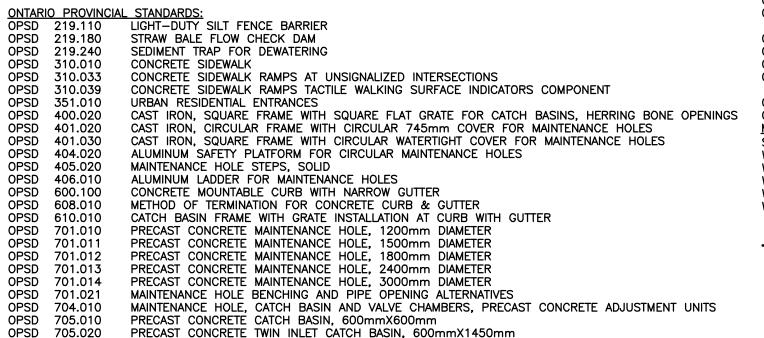
SUPPORT FOR PIPE AT CATCH BASIN OR MAINTENANCE HOLE

0.95

SOD OVER 150mm

PER IDGCS 8.4.2.

TOPSOIL MIN.



4.25

CURB & GUTTER

OPSD 600.100 (TYP)

2.0%

ZONE 'A'

 \bigcirc

TRENCH LIMITS

2 FOR TYPE 4 SOILS

TRENCH LIMITS

1.50

ROADWAY

(TYPE 1&2 SOILS) -

(TYPE 3 SOILS) SEE NOTE

STORM

OPSD 802.010 FLEXIBLE PIPE EMBEDMENT AND BACKFILL, EARTH EXCAVATION RIGID PIPE BEDDING COVER AND BACKFILL, TYPE 1 OR 2 SOIL, EARTH EXCAVATION CONCRETE HEADWALL FOR SEWER OR CULVERT PIPE OPSD 804,050 GRATING FOR CONCRETE ENDWALL GENERAL RIP-RAP LAYOUT FOR SEWER AND CULVERT OUTLETS OPSD 810.010 GUIDE RAIL SYSTEM, STEEL BEAM WOODEN POST ASSEMBLY ADJUSTMENT - SINGLE RAIL CAST-IN-PLACE MAINTENANCE HOLE DROP STRUCTURE WYE OPSD 1006.010 SEWER SERVICE CONNECTION FOR RIGID MAIN PIPE SEWER

MUNICIPALITY OF CENTRAL ELGIN STANDARD DRAWINGS: URBAN (RESIDENTIAL) RIGHT OF WAY STANDARD CROSS SECTION SCS-1 TYPICAL HYDRANT INSTALLATION W-1 W-2 TYPICAL SERVICE CONNECTION 19mm AND 25mm DIAMETER SIZE WATERMAIN CROSS OVER DETAIL

REFERENCE DOCUMENTS:

- SWM BRIEF BY SBM LTD. DATED 17/02/2019. 2. INFORMATION OBTAINED FROM DRAFT PLAN OF SUBDIVISION BY
- CALLON DIETZ INC. FILE No: 19-22517B A, PLOTTED JULY 25,
- 3. TOPOGRAPHIC INFORMATION OBTAINED FROM COORDINATION FILE FROM GIBSON SURVEYING INC. FILE No: 09-888-TOPO RECEIVED MARCH 22, 2018 AND ADDITIONAL TOPOGRAPHIC INFORMATION RECEIVED AUGUST 13, 2018 & SEPTEMBER 25,

1.30 HYDRANT

1.00 | STOP)

5.75

2.0% MIN

PERFORATED WITH BEDDING

🖥 EQUAL) SUB DRAIN (BOTH

BASIN LOCATION c/w END

CAPS (SEE OPSD 216.03).

FILTER WRAPPED (TERRAFIX GAS

3.80

- 3.0m LONG, 150ø

290R OR APPROVED

| SIDES) AT ALL CATCH

150mm THICK GRANULAR 'A' BASE

COMPACTED TO 100% SPMDD UNDER

CURB & GUTTER PER OPSD 600.100

UTILITY

TRENCH

PROPOSED TREE

PRESERVATION FENCE

DECIDUOUS/CONIFEROUS

DECIDUOUS/CONIFEROUS

TO BE REMOVED

LIMITS OF SUBJECT

1.20

WATERMAIN JOINT

5.0% MAX

- - TYPICAL ISOLATION VALVE DETAIL TYPICAL ANODE INSTALLATION DETAIL

THE GEOTECHNICAL ENGINEER)

EXCAVATIONS IN TYPE 4 SOILS.

GEOTECHNICAL ENGINEER.

- RFPORT 973006.

REG. 213/91)

GRADIFNT

REFERENCE: SCS-1 - URBAN (RESIDENTIAL) RIGHT OF WAY STANDARD CROSS SECTION (SEE REFERENCE FOR ADDITIONAL NOTES)

- 4. ADDITIONAL LEGAL AND TOPOGRAPHIC INFORMATION BY SBMG FEBRUARY 5 & AUGUST 8, 2020.

LEGAL INFORMATION

PART OF

CLERGY RESERVE LOT "D"

NORTH OF THE LAKE ROAD

PART OF

JAMES BEGG LOTS 14 & 15

REGISTERED PLAN No. 20 (MIDD)

AND PART OF

ROAD ALLOWANCE BETWEEN

LOTS 14 & 15 NORTH OF THE LAKE

ROAD

AND ALL OF

LOT "T", REGISTERED PLAN No.39

IN THE

MUNICIPALITY OF CENTRAL ELGIN

COUNTY OF ELGIN

- EXISTING INFORMATION OBTAINED FROM AS-BUILT DRAWINGS PROVIDED BY THE MUNICIPALITY OF CENTRAL ELGIN INFORMATION ORTAINED FROM SUPPLEMENTARY GEOTECHNICAL
- INVESTIGATION BY EXP SERVICES INC. PROJECT No: LON-0013222-GE SUBMITTED APRIL 9, 2015. GOVERNMENT OF CANADA NATURAL RESOURCES CANADA STATION BOLLARD IN CENTER OF SEMI-CIRCULAR END OF THE WARF.
- SERVICES INC. PROJECT No: LON-22006266-AO, DATECD APRIL 7. 2022

ZONE 'A' - PIPE BEDDING AS SPECIFIED ON PLAN AND PROFILE

DRAWINGS COMPACTED TO 95% SPMDD IN LAYERS NOT EXCEEDING

150mm TO 300mm ABOVE PIPE. (TO BE REVIEWED/APPROVED BY

ZONE 'B' - SHALL CONSIST OF APPROVED NATIVE MATERIALS OR

GRANULAR 'C' COMPACTED TO 95% SPMDD (98% SPMDD WITHIN

1m OF SUBGRADE) IN LAYERS NOT EXCEEDING 300mm (TO BE

TRENCH CONSTRUCTION IS TO BE IN ACCORDANCE WITH

2. TYPICAL CROSS SECTIONS ARE FOR TYPE 1 OR 2 SOILS.

ISIDE SLOPES OF 1:1 FROM THE BOTTOM OF THE EXCAVATION.

SIDE SLOPES OF 3:1 OR FLATTER ARE TO BE USED FOR

3. 19mm CLEAR STONE BEDDING ENCLOSED WITH A SUITABLE

USED IN ALL OTHER AREAS, ALL AS RECOMMENDED BY THE

ACCORDANCE WITH OPSS 1860). TO BE USED WHERE HYDRAULIC CONDITIONS ARE ANTICIPATED WITH STANDARD

BEDDING AS NOTED ON THE PLAN AND PROFILE DRAWINGS BEING

GEOTEXTILE (TERRAFIX 279R OR APPROVED EQUAL, IN

LIST OF ITEMS REQUIRING ENGINEER'S REVIEW

NOTE: CONTRACTOR TO PROVIDE MIN. 48 HOURS NOTICE PRIOR TO REQUESTED

FIELD REVIEW TIME.

EROSION AND SEDIMENT CONTROL MEASURES, UPON COMPLETION

SERVICING IN MUNICIPAL RIGHT-OF-WAY (R.O.W.), EXISTING AND FUTURE, DURING

CONSTRUCTION

GRADING - CURB & GUTTER STRINGLINE, PRIOR TO CURB INSTALLATION

GRADING - ROAD SUBGRADE, PRIOR TO GRANULARS

GRADING - GRANULAR 'B', PRIOR TO GRANULAR 'A'

GRADING - GRANULAR 'A', PRIOR TO BASE ASPHALT

GRADING - BASE ASPHALT, PRIOR TO TOP COAT ASPHALT

GRADING - TOP COAT ASPHALT

GRADING - BOULEVARDS (ROUGH GRADING)

MANDREL, LEAKAGE, AND LOW PRESSURE AIR TESTING (SEWERS) - DURING TEST

WATERMAIN COMMISSIONING, DURING PROCEDURE

CURRENT SPECIFICATIONS REGARDING THE TRENCH WIDTH. (Ont,

EXCAVATION WITHIN TYPE 3 SOILS IS TO BE CARRIED OUT USING

REVIEWED/APPROVED BY THE GEOTECHNICAL ENGINEER)

- ADDITIONAL LEGAL INFORMATION BY BRIAN VAUGHAN SURVEYING ELEVATION: 175.902m (CGVD28:78) PLAN 11R-7427 DATED OCTOBER 31, 2000.
- INFORMATION OBTAINED FROM SLOPE ASSESSMENT BY EXP ELEVATION: 175.460m (CGVD2013)

MONUMENT NAME: V010915404

LOCATION: BRASS CAP ON THE SOUTH OF LAKE ROAD, IN THE COUNTY OF ELGIN, IN THE GEOGRAPHIC TOWNSHIP OF SOUTHWOLD, APPROXIMATELY 8.0m SOUTH OF THE CENTRELINE OF LAKE ROAD AND 11.8m EAST OF THE PRODUCTION OF CENTRELINE OF SCOTCH ROAD.

SUBJECT

SITE

ELEVATION: 214.432m (CGVD28:78)

KEY PLAN

BENCHMARKS:

MONUMENT NAME: 973006 (GEODETIC BENCHMARK)

LOCATION: PORT STANLEY GEODETIC BRASS TABLET SET IN

TOP OF AT SOUTH END OF WHARF AT WEST SIDE OF

HARBOUR IN PORT STANLEY, 38.8m SOUTH OF SOUTH EAST

CORNER OF WATER GAUGE HOUSE, 8.3m SOUTHEAST OF CYL

SUPPORT FOR GREEN BEACON LIGHT AND 2.27m EAST OF

(CONTRACTOR TO CONFIRM BENCHMARK INFORMATION PRIOR TO CONSTRUCTION)

VERTICAL DATUM NOTE: NFORMATION FROM CGVD28:78 HAS BEEN VERTICALLY ADJUSTED BY -0.442m BASED ON BENCHMARK DATUM VALUES OF 175.902 TO 175.460 TO CONVERT TO CGVD2013 PER NATURAL RESOURCES CANANDA DOCUMENT NRCAN 973006 PORT STANLEY PIER BM

LIST OF SUBMITTALS

NOTE: CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR REVIEW PRIOR TO ORDERING MATERIALS. SHOP DRAWINGS - STORM & SANITARY STRUCTURES

SHOP DRAWINGS - RETAINING WALL PRODUCT SPECIFICATIONS - SEWER AND WATERMAIN, INCLUDING

APPURTENANCES ASPHALT JOB MIX FORMULA(E)

CONCRETE (CURB AND SIDEWALK) MIX DESIGN(S)

GRANULAR 'A' AND 'B' SIEVE ANALYSIS'

EXCESS FILL - DUMP SITE INFORMATION AND PERMISSION LETTER

MATERIAL TESTING REPORT - ENGINEERED FILL SOURCE LETTER (RE CONTAMINANTS, ETC.) MATERIAL TESTING REPORT - ENGINEERED FILL COMPACTION

MATERIAL TESTING REPORT - ENGINEERED FILL PLAN MATERIAL TESTING REPORT - SUBGRADE COMPACTION/PREPARATION MATERIAL TESTING REPORT - GRANULAR COMPACTION MATERIAL TESTING REPORT - CONCRETE CYLINDERS

MATERIAL TESTING REPORT - ASPHALT COMPACTION MATERIAL TESTING REPORT - ASPHALT SAMPLES AS-BUILT SURVEY FOR EARTHWORKS QUANTITIES

CCTV OF STORM AND SANITARY SEWERS WATERMAIN TESTING RESULTS

MANDREL, LEAKAGE, AND LOW PRESSURE AIR TESTING RESULTS

FOR PAVEMENT-

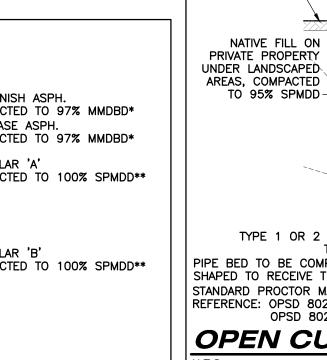
COMPOSITION

SEE SURFACE WORKS

NOTE 2 ON SHEET C2

EX. PAVEMENT -MILL EX. ASPH. SURFACE 500mm WIDE x 50mm DEEP STRUCTURE -HL3 FINISH ASPH. 500mm COMPACTED TO 97% MMDBD* -HL8 BASE ASPH. EX. EDGE OF PAVEMENT TO BE COMPACTED TO 97% MMDBD* SAWCUT AND TACK COATED PRIOR TO PLACEMENT OF ASPH.--GRANULAR 'A' COMPACTED TO 100% SPMDD** TACK COAT -GRANULAR 'B' COMPACTED TO 100% SPMDD**

NOTE: REFER TO SURFACE WORKS NOTE 2 ON SHEET C1 FOR PAVEMENT COMPOSITION *MARSHALL MIX DESIGN BULK DENSITY (MMDBD) **STANDARD PROCTOR MAXIMUM DRY DENSITY (SPMDD) PAVEMENT MILLING DETAIL



N/A

TYPE 1 OR 2 BEDDING, SUBJECT / / / / / / / TO HEIGHT OF FILL-PIPE BED TO BE COMPACTED AND SHAPED TO RECEIVE THE BOTTOM OF THE PIPE — STANDARD PROCTOR MAXIMUM DRY DENSITY (SPMDD) REFERENCE: OPSD 802.010 FLEXIBLE PIPE EMBEDMÉNT AND BACKFILL, EARTH EXCAVATION OPSD 802.030 RIGID PIPE BEDDING, COVER AND BACKFILL, TYPE 1 OR 2 SOIL, EARTH EXCAVATION

PLANS FOR SIZE)

300mm MIN FOR PIPE DIA (D) 100mm TO 900mm 500mm MIN FOR PIPE DIA (D) OVER 900mm - 0.6D FOR CLASS B BEDDING

OPEN CUT/ TRENCH DETAIL

NOTES, LEGEND, AND DETAILS

PORT STANLEY, ONTARIO

RESTORATION OF GRASSED AREAS

TO BE AS PER SURFACE WORKS

NOTE 2 ON SHEET C2

WATERMAIN BEDDING SHALL BE GRANULAR 'B' SAND BEDDING

GRANULAR 'B TYPE II'

COMPACTED TO 95%

SPMDD (98% SPMDD

THE GEOTECHNICAL

YPE 1 & 2 SOILS: 1:1

LIMITS OF SAFE EXCAVATIONS:

ENGINEER)

TYPE 3 SOIL:

- TYPE 4 SOIL:

BACKFILL UNDER ASPH. &

WITHIN MUNICIPAL R.O.W..

WITHIN 1m OF SUBGRADE)

REVIEWED/APPROVED BY

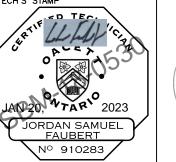
17/02/21 DESIGN JSF/KJC ISSUED FOR ENGINEERING SUBMISSION CONCEPTUAL ZONING DATA CHART ADDED 08/03/21 | JSF FOR PRE-SUBMISSION CONSULTATION MEETING 05/04/21 CHECKED ISSUED FOR DRAFT PLAN APPLICATION APPROVED NGU REISSUED FOR DRAFT PLAN APPLICATION REISSUED FOR DRAFT PLAN APPLICATION 5/12/22 | JSF CAD SBM-18-0530 REISSUED FOR DRAFT PLAN APPLICATION 20/01/23 | JSF

WATER SERVICE MUNICIPALITY OF CENTRAL ELGIN DRAWING W-3. WHERE REQUIRED.

AS CONSTRUCTED SERVICES COMPLETION

STRIK PLANNING + CIVIL + STRUCTURAL + MECHANICAL + FLECTRICAL 1599 Adelaide St. N, Unit 301, London, Ontario, N5X 4E8 Tel: (519) 471-6667 Fax: (519) 471-0034 Email: sbm@sbmltd.ca

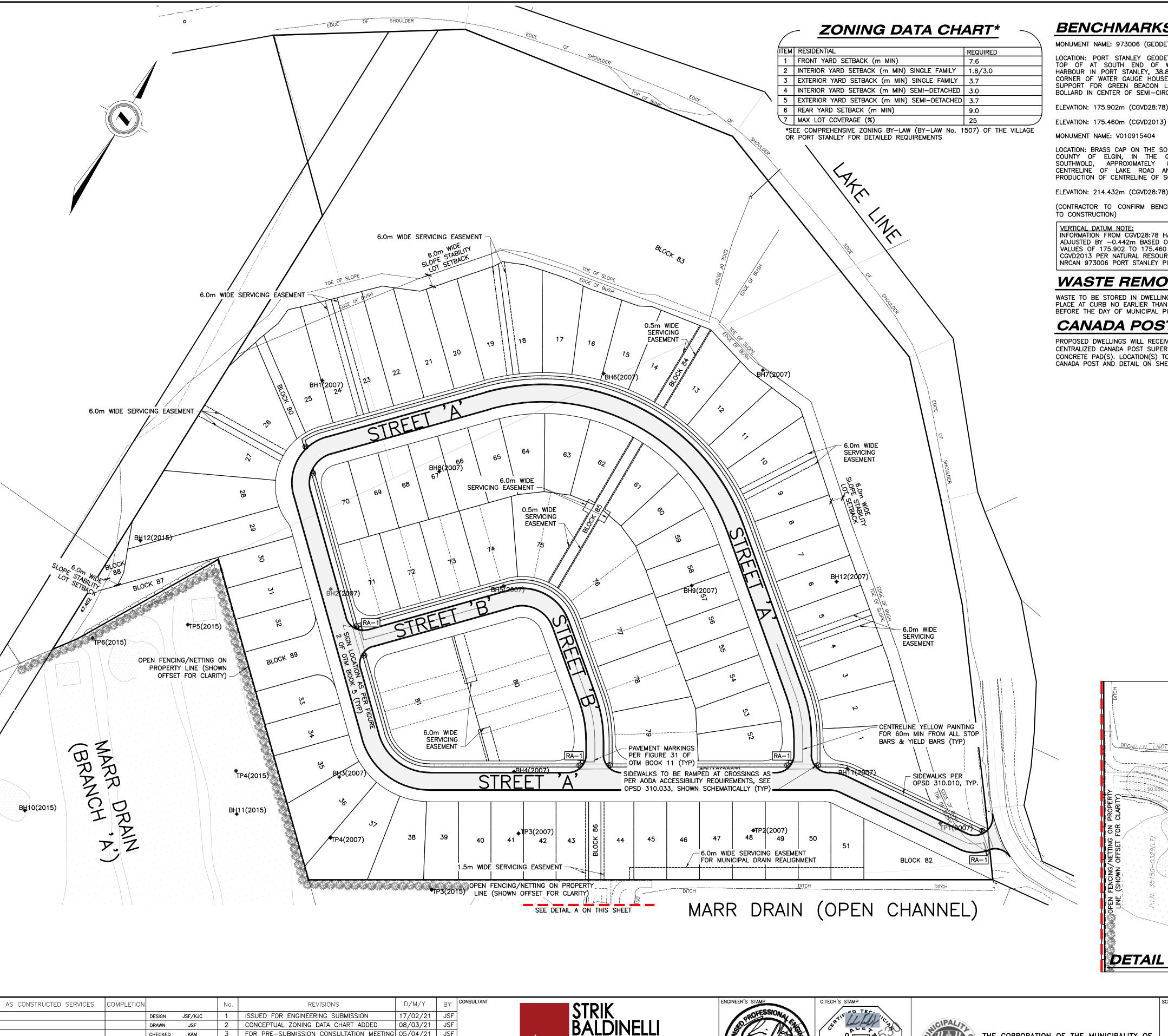






KETTLE CREEK SUBDIVISION 37719 LAKE LINE

SBM-18-0530 PLAN FILE No.



MONUMENT NAME: 973006 (GEODETIC BENCHMARK)

LOCATION: PORT STANLEY GEODETIC BRASS TABLET SET IN TOP OF AT SOUTH END OF WHARF AT WEST SIDE OF HARBOUR IN PORT STANLEY, 38.8m SOUTH OF SOUTH EAST CORNER OF WATER GAUGE HOUSE, 8.3m SOUTHEAST OF CYL SUPPORT FOR GREEN BEACON LIGHT AND 2.27m EAST OF BOLLARD IN CENTER OF SEMI-CIRCULAR END OF THE WARF.

ELEVATION: 175.902m (CGVD28:78)

LOCATION: BRASS CAP ON THE SOUTH OF LAKE ROAD, IN THE COUNTY OF ELGIN, IN THE GEOGRAPHIC TOWNSHIP OF SOUTHWOLD, APPROXIMATELY 8.0m SOUTH OF THE CENTRELINE OF LAKE ROAD AND 11.8m EAST OF THE PRODUCTION OF CENTRELINE OF SCOTCH ROAD.

ELEVATION: 214.432m (CGVD28:78)

(CONTRACTOR TO CONFIRM BENCHMARK INFORMATION PRIOR

VERTICAL DATUM NOTE:
INFORMATION FROM CGVD28:78 HAS BEEN VERTICALLY ADJUSTED BY -0.442m BASED ON BENCHMARK DATUM VALUES OF 175.902 TO 175.460 TO CONVERT TO CGVD2013 PER NATURAL RESOURCES CANANDA DOCUMENT NRCAN 973006 PORT STANLEY PIER BM

WASTE REMOVAL

WASTE TO BE STORED IN DWELLINGS AND HOMEOWNER TO PLACE AT CURB NO EARLIER THAN 6:00PM THE EVENING BEFORE THE DAY OF MUNICIPAL PICK-UP

CANADA POST

PROPOSED DWELLINGS WILL RECEIVE MAIL DELIVERY TO CENTRALIZED CANADA POST SUPERBOX(ES) ON CAST-IN-PLACE CONCRETE PAD(S). LOCATION(S) TO BE DETERMINED BY CANADA POST AND DETAIL ON SHEET 17

LEGAL INFORMATION

PART OF CLERGY RESERVE LOT "D" NORTH OF THE LAKE ROAD

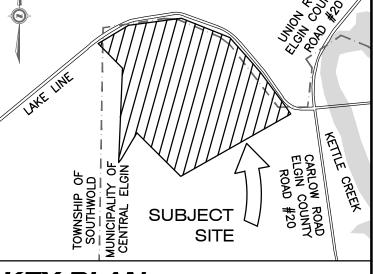
JAMES BEGG LOTS 14 & 15 REGISTERED PLAN No. 20 (MIDD)

AND PART OF

ROAD ALLOWANCE BETWEEN LOTS 14 & 15 NORTH OF THE LAKE ROAD AND ALL OF

LOT "T", REGISTERED PLAN No.39 MUNICIPALITY OF CENTRAL ELGIN

COUNTY OF ELGIN



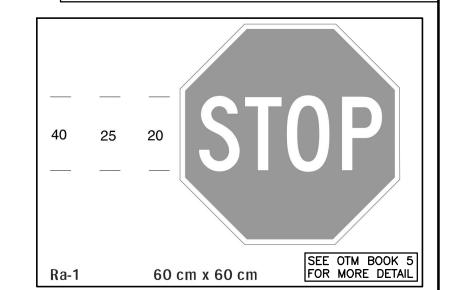
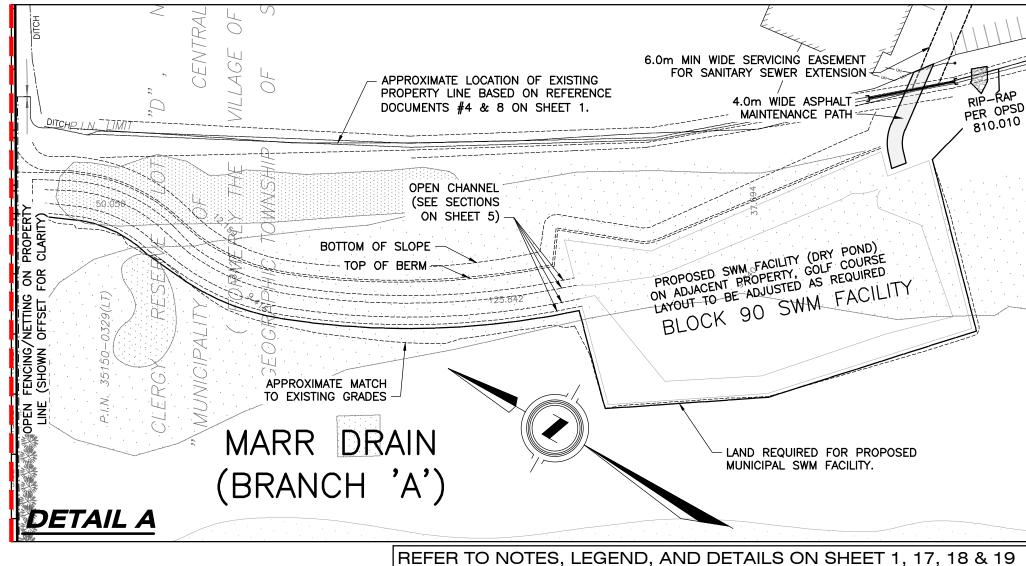


Figure 31 - Approaches to Unsignalized Urban Intersections SEE OTM BOOK 11 FOR MORE DETAIL

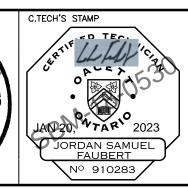


3 FOR PRE-SUBMISSION CONSULTATION MEETING 05/04/21 JSF 4 ISSUED FOR DRAFT PLAN APPLICATION |16/07/21 | JSF| DATE 08/02/2021 5 REISSUED FOR DRAFT PLAN APPLICATION | 02/08/22 | JSF | 6 REISSUED FOR DRAFT PLAN APPLICATION 15/12/22 JSF REISSUED FOR DRAFT PLAN APPLICATION 20/01/23

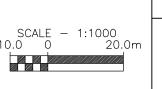


Email: sbm@sbmltd.ca



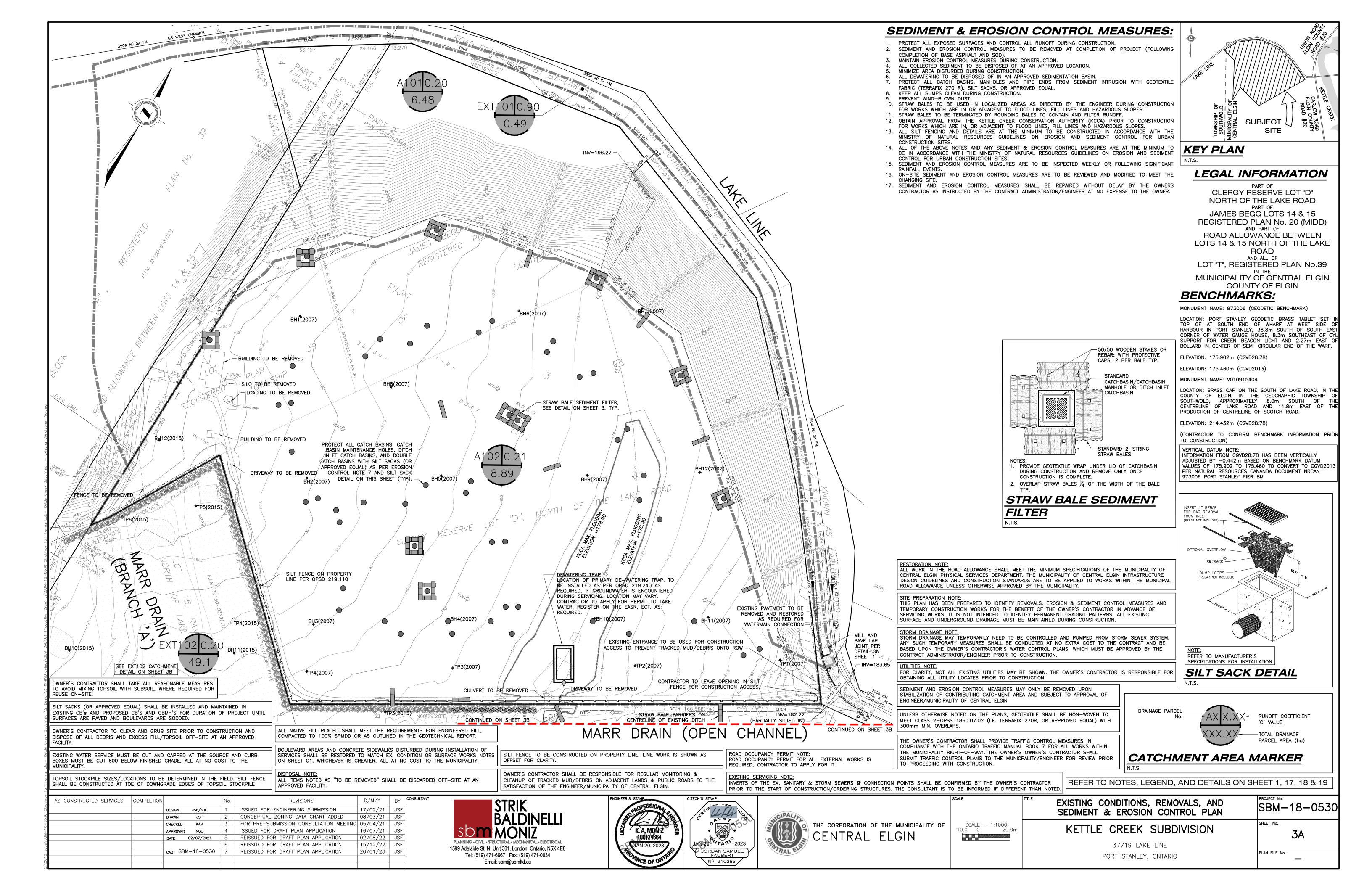


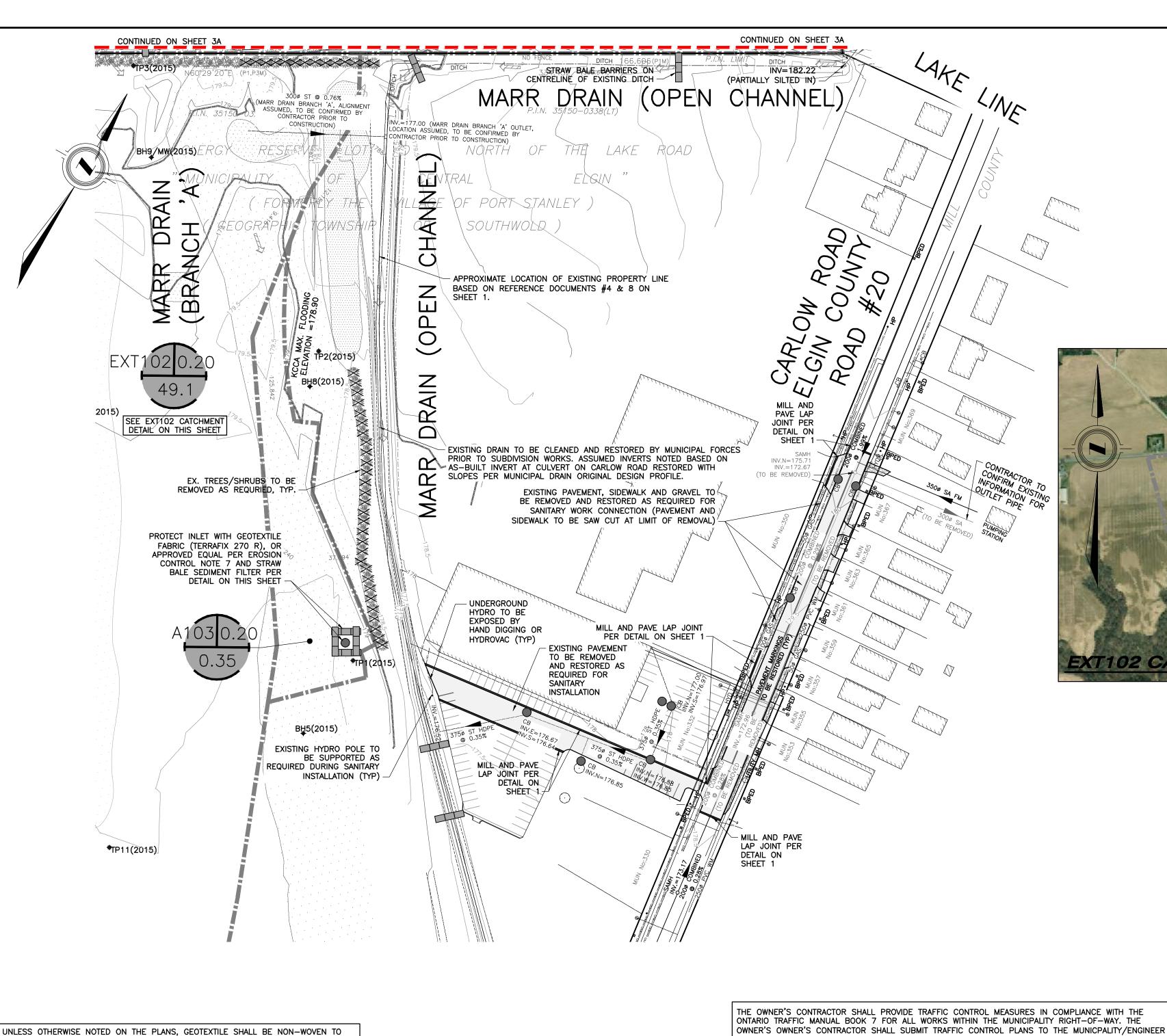




SUBDIVISION PLAN SBM-18-0530 KETTLE CREEK SUBDIVISION 37719 LAKE LINE PLAN FILE No.

PORT STANLEY, ONTARIO





SILT FENCE TO BE CONSTRUCTED ON PROPERTY LINE. LINE WORK IS SHOWN AS

OWNER'S CONTRACTOR SHALL BE RESPONSIBLE FOR REGULAR MONITORING &

SATISFACTION OF THE ENGINEER/MUNICIPALITY OF CENTRAL ELGIN.

CONFIRMED BY THE OWNER'S CONTRACTOR PRIOR TO THE START OF

CLEANUP OF TRACKED MUD/DEBRIS ON ADJACENT LANDS & PUBLIC ROADS TO THE

EXISTING SERVICING NOTE:
INVERTS OF THE EX. SANITARY & STORM SEWERS @ CONNECTION POINTS SHALL BE

CONSTRUCTION/ORDERING STRUCTURES. THE CONSULTANT IS TO BE INFORMED IF

ALL NATIVE FILL PLACED SHALL MEET THE REQUIREMENTS FOR ENGINEERED FILL,

ON SHEET C1, WHICHEVER IS GREATER, ALL AT NO COST TO THE MUNICIPALITY.

ALL ITEMS NOTED AS "TO BE REMOVED" SHALL BE DISCARDED OFF-SITE AT AN

BOULEVARD AREAS AND CONCRETE SIDEWALKS DISTURBED DURING INSTALLATION OF

SERVICES SHALL BE RESTORED TO MATCH EX. CONDITION OR SURFACE WORKS NOTES

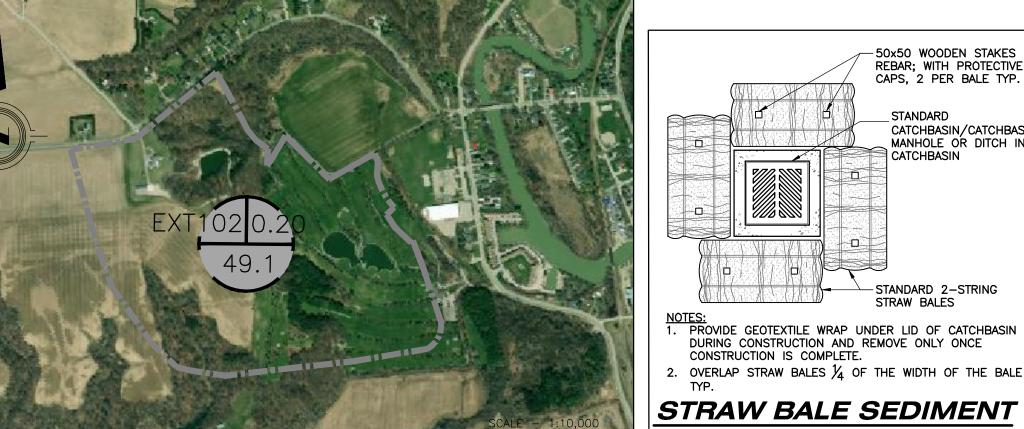
COMPACTED TO 100% SPMDD OR AS OUTLINED IN THE GEOTECHNICAL REPORT.

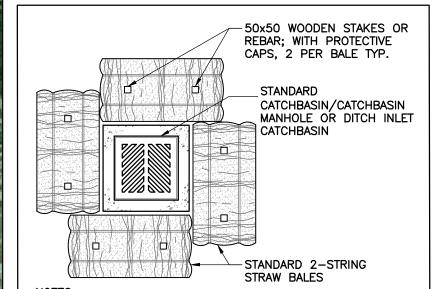
OFFSET FOR CLARITY.

SEDIMENT & EROSION CONTROL MEASURES:

- PROTECT ALL EXPOSED SURFACES AND CONTROL ALL RUNOFF DURING CONSTRUCTION. SEDIMENT AND EROSION CONTROL MEASURES TO BE REMOVED AT COMPLETION OF PROJECT (FOLLOWING
- COMPLETION OF BASE ASPHALT AND SOD).
- MAINTAIN EROSION CONTROL MEASURES DURING CONSTRUCTION.
- ALL COLLECTED SEDIMENT TO BE DISPOSED OF AT AN APPROVED LOCATION. MINIMIZE AREA DISTURBED DURING CONSTRUCTION.
- ALL DEWATERING TO BE DISPOSED OF IN AN APPROVED SEDIMENTATION BASIN. PROTECT ALL CATCH BASINS, MANHOLES AND PIPE ENDS FROM SEDIMENT INTRUSION WITH GEOTEXTILE
- FABRIC (TERRAFIX 270 R), SILT SACKS, OR APPROVED EQUAL. KEEP ALL SUMPS CLEAN DURING CONSTRUCTION. PREVENT WIND-BLOWN DUST.
- STRAW BALES TO BE USED IN LOCALIZED AREAS AS DIRECTED BY THE ENGINEER DURING CONSTRUCTION FOR WORKS WHICH ARE IN OR ADJACENT TO FLOOD LINES, FILL LINES AND HAZARDOUS SLOPES.
- 11. STRAW BALES TO BE TERMINATED BY ROUNDING BALES TO CONTAIN AND FILTER RUNOFF. 12. OBTAIN APPROVAL FROM THE KETTLE CREEK CONSERVATION AUTHORITY (KCCA) PRIOR TO CONSTRUCTION
- FOR WORKS WHICH ARE IN, OR ADJACENT TO FLOOD LINES, FILL LINES AND HAZARDOUS SLOPES.

 13. ALL SILT FENCING AND DETAILS ARE AT THE MINIMUM TO BE CONSTRUCTED IN ACCORDANCE WITH THE MINISTRY OF NATURAL RESOURCES GUIDELINES ON EROSION AND SEDIMENT CONTROL FOR URBAN 14. ALL OF THE ABOVE NOTES AND ANY SEDIMENT & EROSION CONTROL MEASURES ARE AT THE MINIMUM TO
- BE IN ACCORDANCE WITH THE MINISTRY OF NATURAL RESOURCES GUIDELINES ON EROSION AND SEDIMENT CONTROL FOR URBAN CONSTRUCTION SITES. 15. SEDIMENT AND EROSION CONTROL MEASURES ARE TO BE INSPECTED WEEKLY OR FOLLOWING SIGNIFICANT
- RAINFALL EVENTS. 16. ON-SITE SEDIMENT AND EROSION CONTROL MEASURES ARE TO BE REVIEWED AND MODIFIED TO MEET THE
- CHANGING SITE 17. SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REPAIRED WITHOUT DELAY BY THE OWNERS
- CONTRACTOR AS INSTRUCTED BY THE CONTRACT ADMINISTRATOR/ENGINEER AT NO EXPENSE TO THE OWNER.



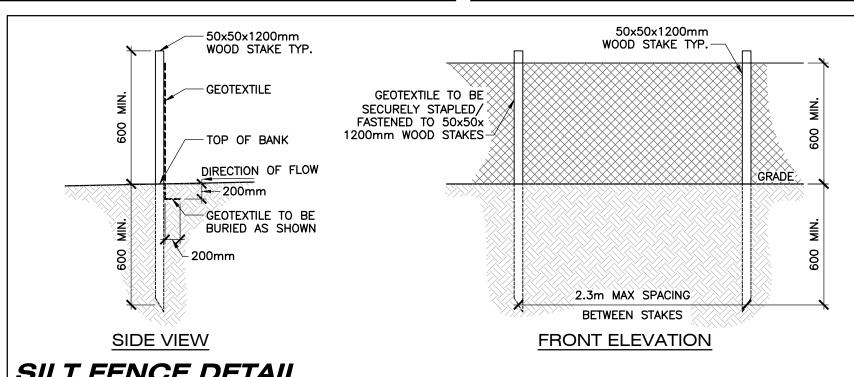


NOTES:

1. PROVIDE GEOTEXTILE WRAP UNDER LID OF CATCHBASIN DURING CONSTRUCTION AND REMOVE ONLY ONCE CONSTRUCTION IS COMPLETE.

STRAW BALE SEDIMENT

FILTER



- ANGLE FIRST STAKE TOWARDS PREVIOUSLY LAID BALE 50x50 WOODEN STAKES OR REBAR; 2 PER BALE TYP. BUTT BALES FIRMLY TOGETHER STANDARD 2-STRING STRAW BALES DIRECTION OF FLOW UNDISTURBED GROUND COVER -100 MIN ENSURE 600 MIN. STAKE EMBEDMENT INTO NATIVE SOIL EXTENT OF TRENCH TOP VIEW SIDE VIEW TYP. STRAW BALE BARRIER

REFER TO MANUFACTURER'S SPECIFICATIONS FOR INSTALLATION SILT SACK DETAIL

SUBJECT

LEGAL INFORMATION

CLERGY RESERVE LOT "D"

NORTH OF THE LAKE ROAD PART OF

JAMES BEGG LOTS 14 & 15

REGISTERED PLAN No. 20 (MIDD)

AND PART OF ROAD ALLOWANCE BETWEEN LOTS 14 & 15 NORTH OF THE LAKE

AND ALL OF

LOT "T", REGISTERED PLAN No.39

MUNICIPALITY OF CENTRAL ELGIN

COUNTY OF ELGIN

BENCHMARKS:

ELEVATION: 175.902m (CGVD28:78)

ELEVATION: 175.460m (CGVD2013)

ELEVATION: 214.432m (CGVD28:78)

973006 PORT STANLEY PIER BM

TO CONSTRUCTION)

FOR BAG REMOVAL

(REBAR NOT INCLUDED

OPTIONAL OVERFLOW

DUMP LOOPS

MONUMENT NAME: V010915404

MONUMENT NAME: 973006 (GEODETIC BENCHMARK)

LOCATION: PORT STANLEY GEODETIC BRASS TABLET SET

TOP OF AT SOUTH END OF WHARF AT WEST SIDE O

HARBOUR IN PORT STANLEY, 38.8m SOUTH OF SOUTH EAS CORNER OF WATER GAUGE HOUSE, 8.3m SOUTHEAST OF CYL

SUPPORT FOR GREEN BEACON LIGHT AND 2.27m EAST O

LOCATION: BRASS CAP ON THE SOUTH OF LAKE ROAD, IN TH

COUNTY OF ELGIN, IN THE GEOGRAPHIC TOWNSHIP O

SOUTHWOLD, APPROXIMATELY 8.0m SOUTH OF TH

CENTRELINE OF LAKE ROAD AND 11.8m EAST OF THE

(CONTRACTOR TO CONFIRM BENCHMARK INFORMATION PRIOR

VALUES OF 175.902 TO 175.460 TO CONVERT TO CGVD2013

<u>VERTICAL DATUM NOTE:</u> INFORMATION FROM CGVD28:78 HAS BEEN VERTICALLY

ADJUSTED BY -0.442m BASED ON BENCHMARK DATUM

PER NATURAL RESOURCES CANANDA DOCUMENT NRCAN

PRODUCTION OF CENTRELINE OF SCOTCH ROAD.

BOLLARD IN CENTER OF SEMI-CIRCULAR END OF THE WARF.

KEY PLAN

SITE

DRAINAGE PARCEL -RUNOFF COEFFICIENT 'C' VALUE - TOTAL DRAINAGE PARCEL AREA (ha) CATCHMENT AREA MARKER

REFER TO NOTES, LEGEND, AND DETAILS ON SHEET 1, 17, 18 & 19

APPROVED FACILITY. AS CONSTRUCTED SERVICES | COMPLETION | REVISIONS D/M/Y 17/02/21 ISSUED FOR ENGINEERING SUBMISSION CONCEPTUAL ZONING DATA CHART ADDED FOR PRE-SUBMISSION CONSULTATION MEETING ISSUED FOR DRAFT PLAN APPLICATION REISSUED FOR DRAFT PLAN APPLICATION REISSUED FOR DRAFT PLAN APPLICATION 5/12/22 | JSF CAD SBM-18-0530 REISSUED FOR DRAFT PLAN APPLICATION 20/01/23 | JSF

MEET CLASS 2-OPSS 1860.07.02 (I.E. TERRAFIX 270R, OR APPROVED EQUAL) WITH

ROAD OCCUPANCY PERMIT NOTE:
ROAD OCCUPANCY PERMIT FOR ALL EXTERNAL WORKS IS REQUIRED, CONTRACTOR TO

OWNER'S CONTRACTOR SHALL TAKE ALL REASONABLE MEASURES TO AVOID MIXING

EXISTING CB's AND PROPOSED CB'S AND CBMH'S FOR DURATION OF PROJECT UNTIL

OWNER'S CONTRACTOR TO CLEAR AND GRUB SITE PRIOR TO CONSTRUCTION AND

DISPOSE OF ALL DEBRIS AND EXCESS FILL/TOPSOIL OFF-SITE AT AN APPROVED

EXISTING WATER SERVICE MUST BE CUT AND CAPPED AT THE SOURCE AND CURB

TOPSOIL STOCKPILE SIZES/LOCATIONS TO BE DETERMINED IN THE FIELD. SILT FENCE

SHALL BE CONSTRUCTED AT TOE OF DOWNGRADE EDGES OF TOPSOIL STOCKPILE

BOXES MUST BE CUT 600 BELOW FINISHED GRADE, ALL AT NO COST TO THE

SILT SACKS (OR APPROVED EQUAL) SHALL BE INSTALLED AND MAINTAINED IN

TOPSOIL WITH SUBSOIL, WHERE REQUIRED FOR REUSE ON-SITE.

SURFACES ARE PAVED AND BOULEVARDS ARE SODDED.

APPLY FOR IT.

STRIK BALDINELLI

1599 Adelaide St. N, Unit 301, London, Ontario, N5X 4E8

Tel: (519) 471-6667 Fax: (519) 471-0034

Email: sbm@sbmltd.ca

FOR REVIEW PRIOR TO PROCEEDING WITH CONSTRUCTION.

ROAD ALLOWANCE UNLESS OTHERWISE APPROVED BY THE MUNICIPALITY.

CONTRACT ADMINISTRATOR/ENGINEER PRIOR TO CONSTRUCTION.

SEDIMENT AND EROSION CONTROL MEASURES MAY ONLY BE REMOVED UPON STABILIZATION OF CONTRIBUTING

ALL WORK IN THE ROAD ALLOWANCE SHALL MEET THE MINIMUM SPECIFICATIONS OF THE MUNICIPALITY OF CENTRAL ELGIN PHYSICAL SERVICES DEPARTMENT. THE MUNICIPALITY OF CENTRAL ELGIN INFRASTRUCTURE DESIGN GUIDELINES AND CONSTRUCTION STANDARDS ARE TO BE APPLIED TO WORKS WITHIN THE MUNICIPAL

SITE PREPARATION NOTE:
THIS PLAN HAS BEEN PREPARED TO IDENTIFY REMOVALS, EROSION & SEDIMENT CONTROL MEASURES AND

STORM DRAINAGE NOTE:
STORM DRAINAGE MAY TEMPORARILY NEED TO BE CONTROLLED AND PUMPED FROM STORM SEWER SYSTEM.

ANY SUCH TEMPORARY MEASURES SHALL BE CONDUCTED AT NO EXTRA COST TO THE CONTRACT AND BE

BASED UPON THE OWNER'S CONTRACTOR'S WATER CONTROL PLANS. WHICH MUST BE APPROVED BY THE

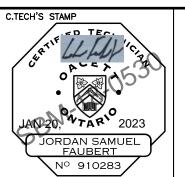
FOR CLARITY, NOT ALL EXISTING UTILITIES MAY BE SHOWN. THE OWNER'S CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL UTILITY LOCATES PRIOR TO CONSTRUCTION.

TEMPORARY CONSTRUCTION WORKS FOR THE BENEFIT OF THE OWNER'S CONTRACTOR IN ADVANCE OF

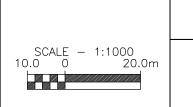
SERVICING WORKS. IT IS NOT INTENDED TO IDENTIFY PERMANENT GRADING PATTERNS. ALL EXISTING

SURFACE AND UNDERGROUND DRAINAGE MUST BE MAINTAINED DURING CONSTRUCTION

CATCHMENT AREA AND SUBJECT TO APPROVAL OF ENGINEER/MUNICIPALITY OF CENTRAL ELGIN.







EXISTING CONDITIONS, REMOVALS, AND SEDIMENT & EROSION CONTROL PLAN

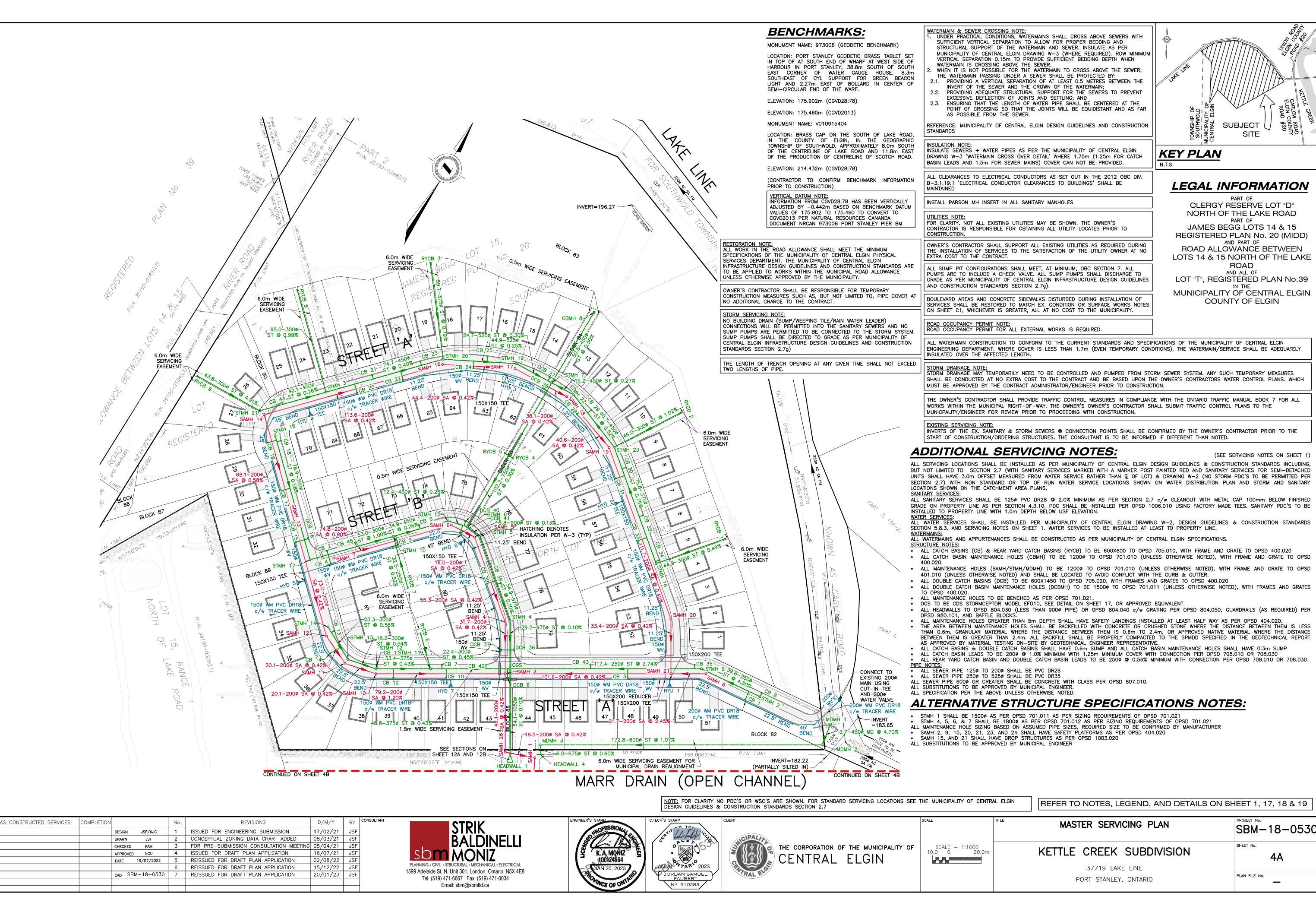
SBM-18-0530

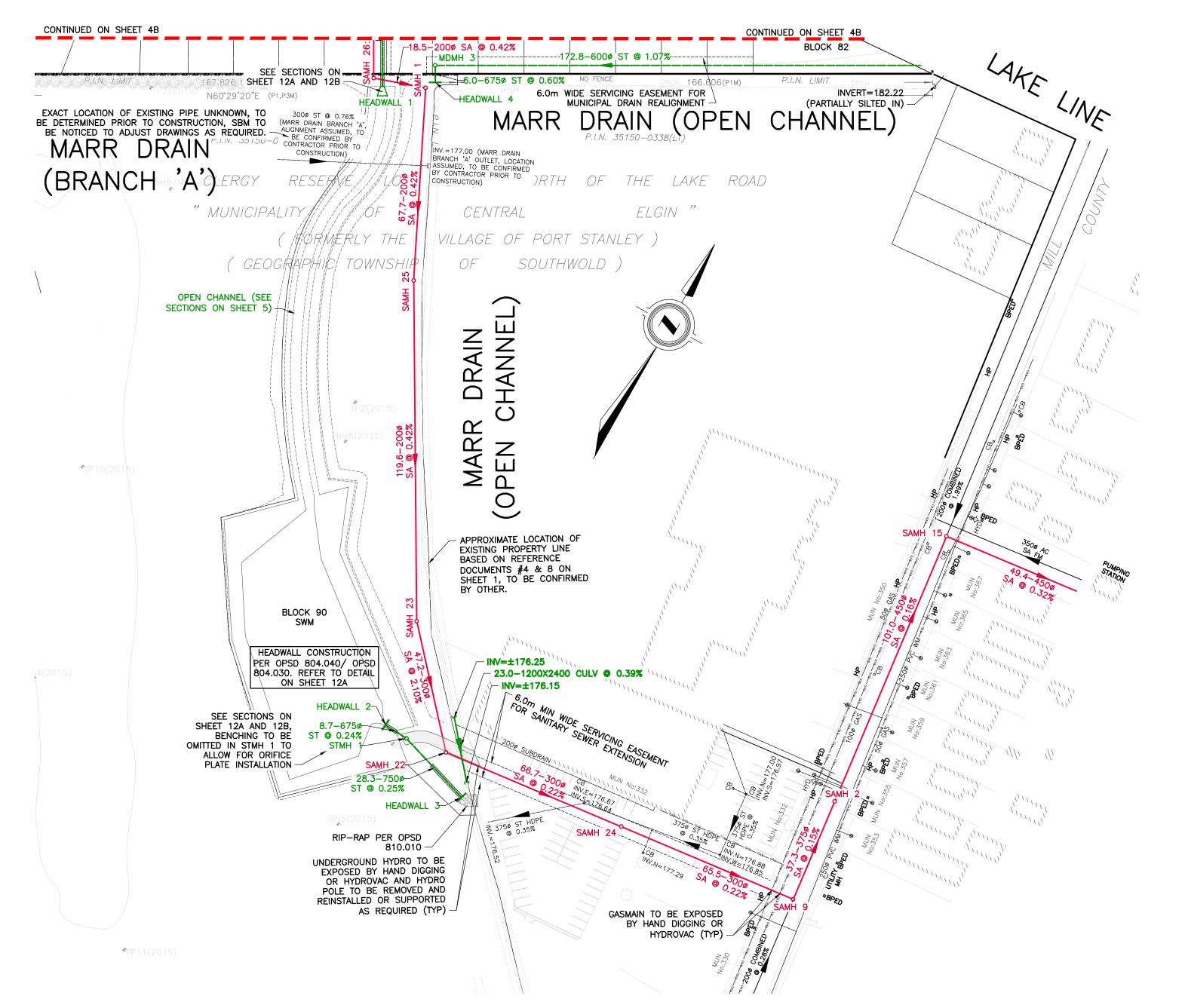
KETTLE CREEK SUBDIVISION

PLAN FILE No.

37719 LAKE LINE PORT STANLEY, ONTARIO

SILT FENCE DETAIL REFERENCE: OPSD 219.110





MONUMENT NAME: 973006 (GEODETIC BENCHMARK)

LOCATION: PORT STANLEY GEODETIC BRASS TABLET SET IN TOP OF AT SOUTH END OF WHARF AT WEST SIDE OF HARBOUR IN PORT STANLEY, 38.8m SOUTH OF SOUTH EAST CORNER OF WATER GAUGE HOUSE, 8.3m SOUTHEAST OF CYL SUPPORT FOR GREEN BEACON LIGHT AND 2.27m EAST OF BOLLARD IN CENTER OF SEMI-CIRCULAR END OF THE WARF.

ELEVATION: 175.902m (CGVD28:78)

ELEVATION: 175.460m (CGVD2013)

MONUMENT NAME: V010915404

LOCATION: BRASS CAP ON THE SOUTH OF LAKE ROAD, IN THE COUNTY OF ELGIN, IN THE GEOGRAPHIC TOWNSHIP OF SOUTHWOLD. APPROXIMATELY 8.0m SOUTH OF THE CENTRELINE OF LAKE ROAD AND 11.8m EAST OF THE PRODUCTION OF CENTRELINE OF SCOTCH ROAD.

ELEVATION: 214.432m (CGVD28:78)

(CONTRACTOR TO CONFIRM BENCHMARK INFORMATION PRIOR TO CONSTRUCTION)

<u>VERTICAL DATUM NOTE:</u> INFORMATION FROM CGVD28:78 HAS BEEN VERTICALLY ADJUSTED BY -0.442m BASED ON BENCHMARK DATUM VALUES OF 175.902 TO 175.460 TO CONVERT TO CGVD2013 PER NATURAL RESOURCES CANANDA DOCUMENT NRCAN 973006 PORT STANLEY PIER BM

INVERTS OF THE EX. SANITARY & STORM SEWERS @ CONNECTION POINTS SHALL BE CONFIRMED BY THE OWNER'S CONTRACTOR PRIOR TO THE START OF CONSTRUCTION/ORDERING STRUCTURES. THE CONSULTANT IS TO BE INFORMED IF DIFFÉRENT THAN NOTED.

RESTORATION NOTE:
ALL WORK IN THE ROAD ALLOWANCE SHALL MEET THE MINIMUM SPECIFICATIONS OF THE MUNICIPALITY OF CENTRAL ELGIN PHYSICAL SERVICES DEPARTMENT. THE MUNICIPALITY OF CENTRAL ELGIN INFRASTRUCTURE DESIGN GUIDELINES AND CONSTRUCTION STANDARDS ARE TO BE APPLIED TO WORKS WITHIN THE MUNICIPAL ROAD ALLOWANCE UNLESS OTHERWISE APPROVED BY THE MUNICIPALITY.

OWNER'S CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY CONSTRUCTION MEASURES SUCH AS, BUT NOT LIMITED TO, PIPE COVER AT NO ADDITIONAL CHARGE TO THE CONTRACT.

STORM SERVICING NOTE:

NO BUILDING DRAIN (SUMP/WEEPING TILE/RAIN WATER LEADER) CONNECTIONS WILL BE PERMITTED INTO THE SANITARY SEWERS AND NO SUMP PUMPS ARE PERMITTED TO BE CONNECTED TO THE STORM SYSTEM. SUMP PUMPS SHALL BE DIRECTED TO GRADE AS PER MUNICIPALITY OF CENTRAL ELGIN INFRASTRUCTURE DESIGN GUIDELINES AND CONSTRUCTION STANDARDS SECTION 2.7g)

THE LENGTH OF TRENCH OPENING AT ANY GIVEN TIME SHALL NOT EXCEED TWO LENGTHS OF PIPE.

WATERMAIN & SEWER CROSSING NOTE:

1. UNDER PRACTICAL CONDITIONS, WATERMAINS SHALL CROSS ABOVE SEWERS WITH SUFFICIENT VERTICAL SEPARATION TO ALLOW FOR PROPER BEDDING AND STRUCTURAL SUPPORT OF THE WATERMAIN AND SEWER, INSULATE AS PER MUNICIPALITY OF CENTRAL ELGIN DRAWING W-3 (WHERE REQUIRED). ROW MINIMUM VERTICAL SEPARATION 0.15m TO PROVIDE SUFFICIENT BEDDING DEPTH WHEN

WATERMAIN IS CROSSING ABOVE THE SEWER. WHEN IT IS NOT POSSIBLE FOR THE WATERMAIN TO CROSS ABOVE THE SEWER,

THE WATERMAIN PASSING UNDER A SEWER SHALL BE PROTECTED BY: PROVIDING A VERTICAL SEPARATION OF AT LEAST 0.5 METRES BETWEEN THE INVERT OF THE SEWER AND THE CROWN OF THE WATERMAIN;

2.2. PROVIDING ADEQUATE STRUCTURAL SUPPORT FOR THE SEWERS TO PREVENT EXCESSIVE DEFLECTION OF JOINTS AND SETTLING; AND ENSURING THAT THE LENGTH OF WATER PIPE SHALL BE CENTERED AT THE POINT OF CROSSING SO THAT THE JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE SEWER.

REFERENCE: MUNICIPALITY OF CENTRAL ELGIN DESIGN GUIDELINES AND CONSTRUCTION

NSULATE SEWERS + WATER PIPES AS PER THE MUNICIPALITY OF CENTRAL ELGIN DRAWING W-3 'WATERMAIN CROSS OVER DETAIL' WHERE 1.70m (1.25m FOR CATCH BASIN LEADS AND 1.5m FOR SEWER MAINS) COVER CAN NOT BE PROVIDED.

ALL CLEARANCES TO ELECTRICAL CONDUCTORS AS SET OUT IN THE 2012 OBC DIV. B-3.1.19.1 'ELECTRICAL CONDUCTOR CLEARANCES TO BUILDINGS' SHALL BE

INSTALL PARSON MH INSERT IN ALL SANITARY MANHOLES

UTILITIES NOTE:

FOR CLARITY, NOT ALL EXISTING UTILITIES MAY BE SHOWN. THE OWNER'S CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL UTILITY LOCATES PRIOR TO CONSTRUCTION.

OWNER'S CONTRACTOR SHALL SUPPORT ALL EXISTING UTILITIES AS REQUIRED DURING THE INSTALLATION OF SERVICES TO THE SATISFACTION OF THE UTILITY OWNER AT NO EXTRA COST TO THE CONTRACT.

ALL SUMP PIT CONFIGURATIONS SHALL MEET, AT MINIMUM, OBC SECTION 7. ALL PUMPS ARE TO INCLUDE A CHECK VALVE. ALL SUMP PUMPS SHALL DISCHARGE TO GRADE AS PER MUNICIPALITY OF CENTRAL ELGIN INFRASTRUCTURE DESIGN GUIDELINES AND CONSTRUCTION STANDARDS SECTION 2.7g).

BOULEVARD AREAS AND CONCRETE SIDEWALKS DISTURBED DURING INSTALLATION OF SERVICES SHALL BE RESTORED TO MATCH EX. CONDITION OR SURFACE WORKS NOTES ON SHEET C1, WHICHEVER IS GREATER, ALL AT NO COST TO THE MUNICIPALITY.

ROAD OCCUPANCY PERMIT NOTE:
ROAD OCCUPANCY PERMIT FOR ALL EXTERNAL WORKS IS REQUIRED.

ALL WATERMAIN CONSTRUCTION TO CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY OF CENTRAL ELGIN ENGINEERING DEPARTMENT. WHERE COVER IS LESS THAN 1.7m (EVEN TEMPORARY CONDITIONS), THE WATERMAIN/SERVICE SHALL BE ADEQUATELY INSULATED OVER THE AFFECTED LENGTH.

STORM DRAINAGE MAY TEMPORARILY NEED TO BE CONTROLLED AND PUMPED FROM STORM SEWER SYSTEM. ANY SUCH TEMPORARY MEASURES SHALL BE CONDUCTED AT NO EXTRA COST TO THE CONTRACT AND BE BASED UPON THE OWNER'S CONTRACTORS WATER CONTROL PLANS. WHICH MUST BE APPROVED BY THE CONTRACT ADMINISTRATOR/ENGINEER PRIOR TO CONSTRUCTION.

THE OWNER'S CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL MEASURES IN COMPLIANCE WITH THE ONTARIO TRAFFIC MANUAL BOOK 7 FOR ALL WORKS WITHIN THE MUNICIPAL RIGHT-OF-WAY. THE OWNER'S OWNER'S CONTRACTOR SHALL SUBMIT TRAFFIC CONTROL PLANS TO THE MUNICPALITY/ENGINEER FOR REVIEW PRIOR TO PROCEEDING WITH CONSTRUCTION.

ADDITIONAL SERVICING NOTES:

(SEE SERVICING NOTES ON SHEET 1) ALL SERVICING LOCATIONS SHALL BE INSTALLED AS PER MUNICIPALITY OF CENTRAL ELGIN DESIGN GUIDELINES & CONSTRUCTION STANDARDS INCLUDING,

SUBJECT

LEGAL INFORMATION

CLERGY RESERVE LOT "D"

NORTH OF THE LAKE ROAD

PART OF

JAMES BEGG LOTS 14 & 15

REGISTERED PLAN No. 20 (MIDD)

AND PART OF

ROAD ALLOWANCE BETWEEN

LOTS 14 & 15 NORTH OF THE LAKE

ROAD

AND ALL OF

LOT "T", REGISTERED PLAN No.39

MUNICIPALITY OF CENTRAL ELGIN

COUNTY OF ELGIN

KEY PLAN

SITE

SECTION 2.7) WITH NON STANDARD OR TOP OF RUN WATER SERVICE LOCATIONS SHOWN ON WATER DISTRIBUTION PLAN AND STORM AND SANITARY LOCATIONS SHOWN ON THE CATCHMENT AREA PLANS. SANITARY SERVICES: ALL SANITARY SERVICES SHALL BE 1250 PVC DR28 @ 2.0% MINIMUM AS PER SECTION 2.7 c/w CLEANOUT WITH METAL CAP 100mm BELOW FINISHED

GRADE ON PROPERTY LINE AS PER SECTION 4.3.10. PDC SHALL BE INSTALLED PER OPSD 1006.010 USING FACTORY MADE TEES. SANITARY PDC'S TO BE INSTALLED TO PROPERTY LINE WITH 1.0m DEPTH BELOW USF ELEVATION.

BUT NOT LIMITED TO SECTION 2.7 (WITH SANITARY SERVICES MARKED WITH A MARKER POST PAINTED RED AND SANITARY SERVICES FOR SEMI-DETACHED

UNITS SHALL HAVE 3.0m OFFSET MEASURED FROM WATER SERVICE RATHER THAN € OF LOT) & DRAWING W-2 (NO STORM PDC'S TO BE PERMITTED PER

ALL WATER SERVICES SHALL BE INSTALLED PER MUNICIPALITY OF CENTRAL ELGIN DRAWING W-2, DESIGN GUIDELINES & CONSTRUCTION STANDARDS SECTION 5.8.3, AND SERVICING NOTES ON SHEET 1. WATER SERVICES TO BE INSTALLED AT LEAST TO PROPERTY LINE.

ALL WATERMAINS AND APPURTENANCES SHALL BE CONSTRUCTED AS PER MUNICIPALITY OF CENTRAL ELGIN SPECIFICATIONS.

ALL CATCH BASINS (CB) & REAR YARD CATCH BASINS (RYCB) TO BE 600X600 TO OPSD 705.010, WITH FRAME AND GRATE TO OPSD 400.020

 ALL CATCH BASIN MAINTENANCE HOLES (CBMH) TO BE 12000 TO OPSD 701.010 (UNLESS OTHERWISE NOTED), WITH FRAME AND GRATE TO OPSD • ALL MAINTENANCE HOLES (SAMH/STMH/MDMH) TO BE 12000 TO OPSD 701.010 (UNLESS OTHERWISE NOTED), WITH FRAME AND GRATE TO OPSD

401.010 (UNLESS OTHERWISE NOTED) AND SHALL BE LOCATED TO AVOID CONFLICT WITH THE CURB & GUTTER. ALL DOUBLE CATCH BASINS (DCB) TO BE 600X1450 TO OPSD 705.020, WITH FRAMES AND GRATES TO OPSD 400.020

ALL DOUBLE CATCH BASIN MAINTENANCE HOLES (DCBMH) TO BE 15000 TO OPSD 701.011 (UNLESS OTHERWISE NOTED), WITH FRAMES AND GRATES

TO OPSD 400.020. • ALL MAINTENANCE HOLES TO BE BENCHED AS PER OPSD 701.021.

• OGS TO BE STORMCEPTOR MODEL EFO10, SEE DETAIL ON SHEET 17, OR APPROVED EQUIVALENT. • ALL HEADWALLS TO OPSD 804.030 (LESS THAN 9000 PIPE) OR OPSD 804.040 c/w GRATING PER OPSD 804.050, GUARDRAILS (AS REQUIRED) PER

OPSD 980.101, AND BAFFLE BLOCKS. ALL MAINTENANCE HOLES GREATER THAN 5m DEPTH SHALL HAVE SAFETY LANDINGS INSTALLED AT LEAST HALF WAY AS PER OPSD 404.020. • THE AREA BETWEEN MAINTENANCE HOLES SHALL BE BACKFILLED WITH CONCRETE OR CRUSHED STONE WHERE THE DISTANCE BETWEEN THEM IS LESS

THAN 0.6m, GRANULAR MATERIAL WHERE THE DISTANCE BETWEEN THEM IS 0.6m TO 2.4m, OR APPROVED NATIVE MATERIAL WHERE THE DISTANCE BETWEEN THEM IS GREATER THAN 2.4m. ALL BACKFILL SHALL BE PROPERLY COMPACTED TO THE SPMDD SPECIFIED IN THE GEOTECHNICAL REPORT AS APPROVED BY MATERIAL TESTING ON-SITE BY GEOTECHNICAL ENGINEER REPRESENTATIVE.

• ALL CATCH BASINS & DOUBLE CATCH BASINS SHALL HAVE 0.6m SUMP AND ALL CATCH BASIN MAINTENANCE HOLES SHALL HAVE 0.3m SUMP

 ALL CATCH BASIN LEADS TO BE 2000 @ 1.0% MINIMUM WITH 1.25m MINIMUM COVER WITH CONNECTION PER OPSD 708.010 OR 708.030 • ALL REAR YARD CATCH BASIN AND DOUBLE CATCH BASIN LEADS TO BE 2500 @ 0.56% MINIMUM WITH CONNECTION PER OPSD 708.010 OR 708.030

 ALL SEWER PIPE 125ø TO 200ø SHALL BE PVC DR28 • ALL SEWER PIPE 2500 TO 5250 SHALL BE PVC DR35

• ALL SEWER PIPE 6000 OR GREATER SHALL BE CONCRETE CLASS 65-D ALL SUBSTITUTIONS TO BE APPROVED BY MUNICIPAL ENGINEER

ALL SPECIFICATION PER THE ABOVE UNLESS OTHERWISE NOTED ALTERNATIVE STRUCTURE SPECIFICATIONS NOTES:

FOR ALTERNATIVE STRUCTURE SPECIFICATIONS SEE SHEET 4A.

NOTE: FOR CLARITY NO PDC'S OR WSC'S ARE SHOWN. FOR STANDARD SERVICING LOCATIONS SEE THE MUNICIPALITY OF CENTRAL ELGIN DESIGN GUIDELINES & CONSTRUCTION STANDARDS SECTION 2.7

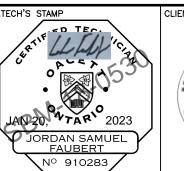
REFER TO NOTES, LEGEND, AND DETAILS ON SHEET 1, 17, 18 & 19

AS CONSTRUCTED SERVICES COMPLETION REVISIONS D/M/Y17/02/21 ISSUED FOR ENGINEERING SUBMISSION 08/03/21 | JSF CONCEPTUAL ZONING DATA CHART ADDED FOR PRE-SUBMISSION CONSULTATION MEETING CHECKED APPROVED NGU/KAM ISSUED FOR DRAFT PLAN APPLICATION REISSUED FOR DRAFT PLAN APPLICATION REISSUED FOR DRAFT PLAN APPLICATION 5/12/22 | JSF CAD SBM-18-0530 REISSUED FOR DRAFT PLAN APPLICATION 20/01/23 | JSF

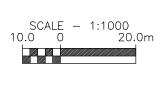
STRIK PLANNING • CIVIL • STRUCTURAL • MECHANICAL • ELECTRICA 1599 Adelaide St. N, Unit 301, London, Ontario, N5X 4E8 Tel: (519) 471-6667 Fax: (519) 471-0034

Email: sbm@sbmltd.ca





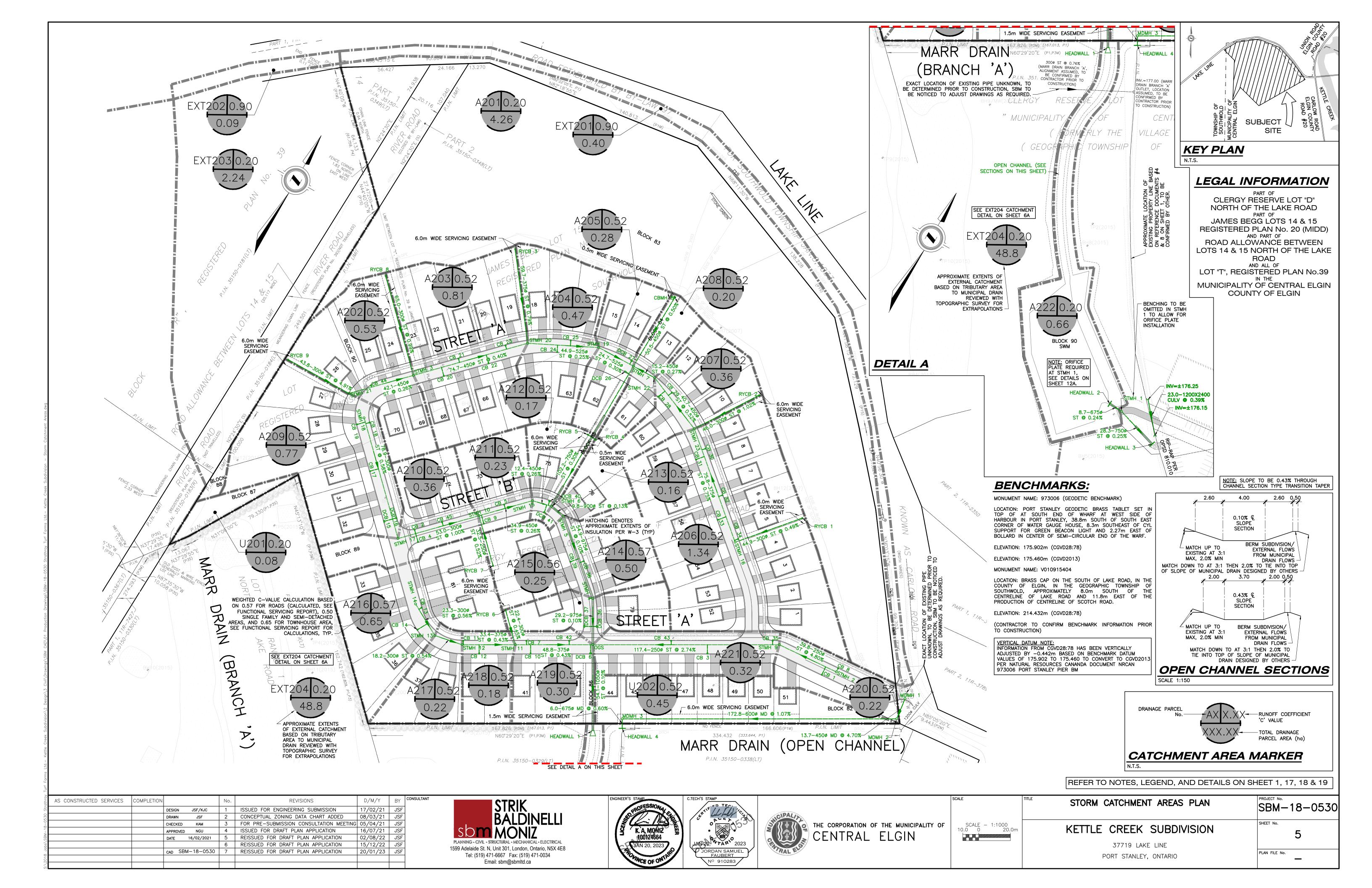


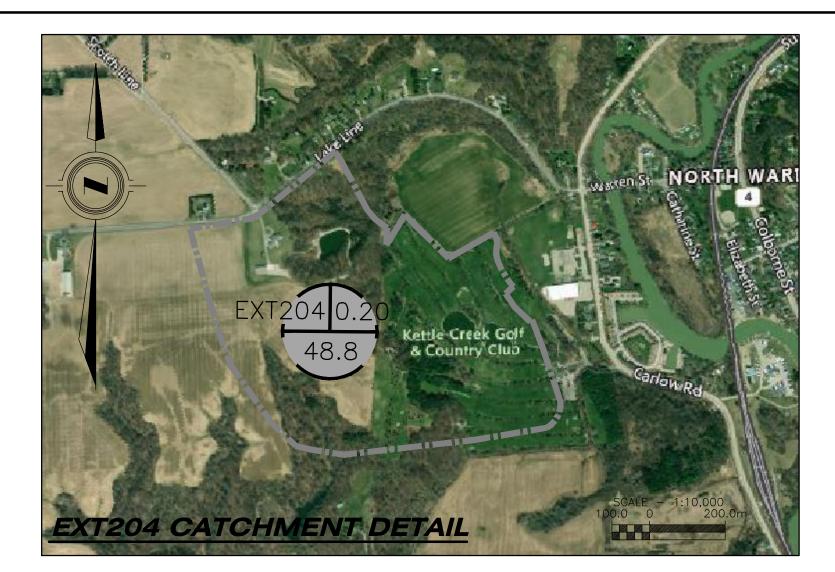


	MACTED CEDVICING DI ANI	PROJECT No. SBM-18-053
n	KETTLE CREEK SUBDIVISION	SHEET No.

37719 LAKE LINE PORT STANLEY, ONTARIO

PLAN FILE No.





MONUMENT NAME: 973006 (GEODETIC BENCHMARK)

LOCATION: PORT STANLEY GEODETIC BRASS TABLET SET IN TOP OF AT SOUTH END OF WHARF AT WEST SIDE OF HARBOUR IN PORT STANLEY, 38.8m SOUTH OF SOUTH EAST CORNER OF WATER GAUGE HOUSE, 8.3m SOUTHEAST OF CYL SUPPORT FOR GREEN BEACON LIGHT AND 2.27m EAST OF BOLLARD IN CENTER OF SEMI-CIRCULAR END OF THE WARF.

ELEVATION: 175.902m (CGVD28:78)

ELEVATION: 175.460m (CGVD2013)

MONUMENT NAME: V010915404

LOCATION: BRASS CAP ON THE SOUTH OF LAKE ROAD, IN THE COUNTY OF ELGIN, IN THE GEOGRAPHIC TOWNSHIP OF SOUTHWOLD, APPROXIMATELY 8.0m SOUTH OF THE CENTRELINE OF LAKE ROAD AND 111.8m EAST OF THE PRODUCTION OF CENTRELINE OF SCOTCH ROAD.

ELEVATION: 214.432m (CGVD28:78)

(CONTRACTOR TO CONFIRM BENCHMARK INFORMATION PRIOR TO CONSTRUCTION)

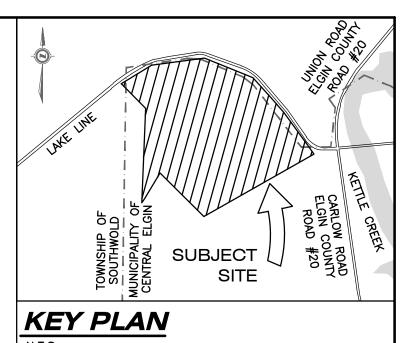
<u>VERTICAL DATUM NOTE:</u> INFORMATION FROM CGVD28:78 HAS BEEN VERTICALLY ADJUSTED BY -0.442m BASED ON BENCHMARK DATUM VALUES OF 175.902 TO 175.460 TO CONVERT TO CGVD2013 PER NATURAL RESOURCES CANANDA DOCUMENT NRCAN 973006 PORT STANLEY PIER BM

LEGAL INFORMATION

CLERGY RESERVE LOT "D" NORTH OF THE LAKE ROAD PART OF

JAMES BEGG LOTS 14 & 15 REGISTERED PLAN No. 20 (MIDD) AND PART OF ROAD ALLOWANCE BETWEEN LOTS 14 & 15 NORTH OF THE LAKE

AND ALL OF LOT "T", REGISTERED PLAN No.39 IN THE MUNICIPALITY OF CENTRAL ELGIN COUNTY OF ELGIN



STORM SEWER DESIGN SHEET

KETTLE CREEK SUBDIVISION

MUNICIPALITY OF CENTRAL ELGIN

RUNOFF COEFFICIENT 'C' VALUES THE FOLLOWING 'C' VALUES WILL APPLY WHEN DESIGNING STORM SEWERS:

PARKS, PLAYGROUNDS, OPEN SPACE

SINGLE FAMILY SEMI-DETACHED

APARTMENTS COMMERCIAL, INSTITUTIONAL & INDUSTRIAL

DENSELY BUILT, PAVED

PROJECT NAME: 0.35-0.75 0.52 USED IN COMBINATION WITH ROW

0.20

0.90

0.50 - 0.90

0.40-0.75 0.52 USED IN COMBINATION WITH ROW 0.50 - 0.70

FLOW Q = $2.78 \times A \times I \times R$

WHERE Q=PEAK FLOW IN LITRES PER SECOND (L / s) A=AREA IN HECTARES (Ha) R=RUNOFF COEFFICIENT I=RAINFALL INTENSITY (mm / hr) RETURN PERIOD = 2 YEARS

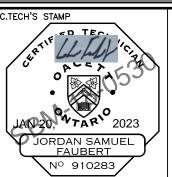
Date:	November 30, 2022
Job Number:	SBM-18-0530
Client:	Strathroy Turf Farms
Project:	Kettle Creek Subdivision
Designed By:	JSF
Reviewed By:	KAM/NGu
Project File No.	SBM-18-0530

	LOCATION				AREA			TOTAL (A x C)			R	AINFALL INTE	NSITY	Q				SEWER DESIG	GN			PROFILE				
				_								NTRY mm						Τ							INVERT	ELEVATION
		FROM	то	DELTA	TOTAL		TOTAL	TOTAL	TOTAL	TOTAL			INTENSITY		PIPE SIZE			Q	VELOCITY	LENGTH	TIME OF	FALL IN	HEADLOSS	DROP IN		T
AREA No.	STREET	MANHOLE	MANHOLE	HECTARE	HECTARES	C Ax	SECTION	LATERAL	SEWER	2.78AxC	SECTION	ACCUM.	mm/hr	L/s	mm	n	SLOPE %	CAP I/s	m / s	m	FLOW	SEWER	IN D.S. MH	MANHOLE	U.S.	D.S.
EXT201	LAKE LINE	EXTERNAL	CBMH 8	0.40	0.40	0.90 0.3	0.00	0.00	0.36	1.00	0.0	20.0	53.1	53.1												
A201	BLOCK 91	CBMH 8	STMH 7	4.26	4.66	0.20 0.8	0.36	0.00	1.21	3.37	0.0	20.0	53.1	178.8	450	0.013	0.50	201.6	1.27	50.5	0.66	0.252	0.000	-	178.82	178.57
											0.7	20.7														
EXT202	LAKE LINE	EXTERNAL	EXTERNAL	0.09	0.09	0.90 0.0	0.00	0.00	0.08	0.23	0.0	20.0	53.1	11.9												
EXT203	LAKE LINE	EXTERNAL	STMH 21	2.24	2.33	0.20 0.4	0.08	0.00	0.53	1.47	0.0	20.0	53.1	78.0												
A202	STREET 'A'	STMH 21	STMH 3	0.53	2.86	0.52 0.2	0.53	0.00	0.80	2.24	0.0	20.0	53.1	118.7	450	0.013	0.26	145.4	0.91	42.1	0.77	0.110	0.000	-	179.16	179.05
A203	STREET 'A'	STMH 3	STMH 20	0.81	3.67	0.52 0.4	0.80	0.00	1.23	3.41	0.8	20.8	51.8	176.4	450	0.013	0.40	180.3	1.13	74.7	1.10	0.299	0.000	0.010	179.04	178.74
A204	STREET 'A'	STMH 20	STMH 19	0.47	4.14	0.52 0.2	1.23	0.00	1.47	4.09	1.1	21.9	50.0	204.5	525	0.013	0.25	215.0	0.99	44.9	0.75	0.112	0.025	0.080	178.66	178.55
A205	STREET 'A'	STMH 19	STMH 7	0.28	4.42	0.52 0.1	1.47	0.00	1.62	4.49	0.8	22.6	48.9	219.8	525	0.013	0.30	235.5	1.09	24.7	0.38	0.074	0.096	0.030	178.52	178.45
											0.4	23.0														
A206	STREET 'A'	STMH 16	STMH 23	1.36	1.36	0.52 0.7	0.00	0.00	0.71	1.97	0.0	20.0	53.1	104.3	375	0.013	0.75	151.8	1.37	75.8	0.92	0.569	0.028	-	179.48	178.91
A207	STREET 'A'	STMH 23	STMH 22	0.36	1.72	0.52 0.1	0.71	0.00	0.89	2.49	0.9	20.9	51.5	128.1	450	0.013	0.52	205.6	1.29	40.7	0.52	0.212	0.018	0.080	178.83	178.62
A208	STREET 'A'	STMH 22	STMH 7	0.20	1.92	0.52 0.1	0.89	0.00	1.00	2.78	0.5	21.4	50.7	140.7	450	0.013	0.27	148.1	0.93	15.2	0.27	0.041	0.096	0.030	178.59	178.55
											0.3	21.7														
	BLOCK 92	STMH 7	STMH 6	0.00	11.00	0.20 0.0	1.21	2.61	3.83	10.64	0.0	21.9	50.0	531.8	750	0.013	0.30	606.7	1.37	102.2	1.24	0.304	0.051	0.146	178.30	178.00
											1.2	23.1														
A209	STREET 'A'	STMH 18	STMH 17	0.77	0.77	0.52 0.4	0.00	0.00	0.40	1.11	0.0	20.0	53.1	59.1	300	0.013	0.58	73.6	1.04	78.9	1.26	0.458	0.095	-	179.26	178.80
A210	STREET 'B'	STMH 17	STMH 10	0.36	1.13	0.52 0.1	0.40	0.00	0.59	1.63	1.3	21.3	51.0	83.3	300	0.013	1.00	96.7	1.37	53.0	0.65	0.530	0.000	0.100	178.70	178.17
A211	STREET 'B'	STMH 10	STMH 15	0.24	1.37	0.52 0.1	0.59	0.00	0.71	1.98	0.6	21.9	50.0	99.0	450	0.013	0.26	145.4	0.91	34.9	0.64	0.091	0.023	0.053	178.12	178.03
A212	STREET 'B'	STMH 15	STMH 6	0.17	1.54	0.52 0.0	0.71	0.00	0.80	2.23	0.6	22.5	49.0	109.2	450	0.013	0.26	145.4	0.91	12.4	0.23	0.032	0.021	0.030	178.00	177.97
											0.2	22.8														
A213	STREET 'B'	STMH 6	STMH 5	0.16	12.54	0.52 0.0	0.80	3.83	4.71	13.09	0.0	23.1	48.3	632.4	900	0.013	0.13	652.7	1.03	9.8	0.16	0.013	0.024	0.029	177.94	177.92
A214	STREET 'B'	STMH 5	STMH 4	0.50	13.04	0.57 0.2	4.71	0.00	5.00	13.89	0.2	23.2	48.1	667.6	975	0.013	0.10	708.7	0.95	54.9	0.96	0.055	0.016	0.030	177.89	177.84
A215	STREET 'B'	STMH 4	OGS	0.25	13.29	0.56 0.1	5.00	0.00	5.14	14.28	1.0	24.2	46.8	668.2	975	0.013	0.10	708.7	0.95	29.2	0.51	0.029	0.000	0.030	177.81	177.78
											0.5	24.7														
A216	STREET 'A'	STMH 14	STMH 13	0.65	0.65	0.57 0.3	0.00	0.00	0.37	1.03	0.0	20.0	53.1	54.7	300	0.013	0.56	72.4	1.02	23.3	0.38	0.130	0.032	-	178.81	178.68
A217	STREET 'A'	STMH 13	STMH 12	0.22	0.87	0.52 0.1	0.37	0.00	0.48	1.35	0.4	20.4	52.4	70.7	300	0.013	0.54	71.1	1.01	18.2	0.30	0.098	0.019	0.030	178.65	178.55
A218	STREET 'A'	STMH 12	STMH 11	0.18	1.05	0.52 0.0	0.48	0.00	0.58	1.61	0.3	20.7	51.9	83.5	375	0.013	0.43	115.0	1.04	33.4	0.54	0.144	0.000	0.080	178.47	178.33
A219	STREET 'A'	STMH 11	OGS	0.30	1.35	0.52 0.1	0.58	0.00	0.73	2.04	0.5	21.2	51.0	104.2	375	0.013	0.43	115.0	1.04	48.8	0.78	0.210	0.051	0.012	178.32	178.11
											0.8	22.0				•	•				•					
A220	STREET 'A'	STMH 2	STMH 9	0.22	0.22	0.52 0.1	0.00	0.00	0.11	0.32	0.0	20.0	53.1	16.9	250	0.013	4.80	130.3	2.65	39.8	0.25	1.910	0.086	-	183.83	181.92
A221	STREET 'A'	STMH 9	OGS	0.32	0.54	0.52 0.1	0.11	0.00	0.28	0.78	0.2	20.2	52.6	41.1	250	0.013	2.74	98.4	2.01	117.4	0.98	3.217	0.051	0.860	181.06	177.84
											1.0	21.2														
	BLOCK 95	OGS	HW 1	0.00	15.18	0.20 0.0	5.14	1.02	6.15	17.10	0.0	24.2	46.8	800.5	1050	0.013	0.10	863.5	1.00	54.1	0.90	0.054	-	0.002	177.78	177.73
												•	•	•				<u> </u>								
EXT204	OVERLAND	-	-	46.50	46.50	0.52 24.3	8 0.00	0.00	24.18	67.22																
A222	SWM FACILITY	HW 2	STMH 1	0.66	62.34	0.33 0.2	2 6.15	24.18	30.55	84.92		SEE SWM	MODELING		675	0.013	0.24	SEE SWM	MODELING	8.7	-	0.021	0.000	-	176.83	176.81
,	SWM FACILITY	STMH 1	HW 3	0.00	62.34	0.32 0.0		0.00	30.55	84.92	SI	EE SWM MOD	ELING	917.0	750	0.013		SEE SWM	MODELING	28.3	_	0.071	_	0.010	176.80	176.73

ESTRICTED FLOW VALUE, SEE FUNCTIONAL SERVICING REPORT D/M/Y AS CONSTRUCTED SERVICES | COMPLETION | REVISIONS ISSUED FOR ENGINEERING SUBMISSION 17/02/21 JSF 08/03/21 JSF CONCEPTUAL ZONING DATA CHART ADDED FOR PRE-SUBMISSION CONSULTATION MEETING 05/04/21 JSF ISSUED FOR DRAFT PLAN APPLICATION 16/07/21 JSF 4 ISSUED FOR DRAFT PLAN APPLICATION APPROVED NGU REISSUED FOR DRAFT PLAN APPLICATION 15/12/22 JSF REISSUED FOR DRAFT PLAN APPLICATION CAD SBM-18-0530 7 REISSUED FOR DRAFT PLAN APPLICATION 20/01/23 JSF

1599 Adelaide St. N, Unit 301, London, Ontario, N5X 4E8 Tel: (519) 471-6667 Fax: (519) 471-0034 Email: sbm@sbmltd.ca





N/A

REFER TO NOTES, LEGEND, AND DETAILS ON SHEET 1, 17, 18 & 19 STORM DESIGN SHEET SBM-18-0530

KETTLE CREEK SUBDIVISION 37719 LAKE LINE

PLAN FILE No. PORT STANLEY, ONTARIO

MONUMENT NAME: 973006 (GEODETIC BENCHMARK)

LOCATION: PORT STANLEY GEODETIC BRASS TABLET SET IN TOP OF AT SOUTH END OF WHARF AT WEST SIDE OF HARBOUR IN PORT STANLEY, 38.8m SOUTH OF SOUTH EAST CORNER OF WATER GAUGE HOUSE, 8.3m SOUTHEAST OF CYL SUPPORT FOR GREEN BEACON LIGHT AND 2.27m EAST OF BOLLARD IN CENTER OF SEMI-CIRCULAR END OF THE WARF.

ELEVATION: 175.902m (CGVD28:78)

ELEVATION: 175.460m (CGVD2013)

MONUMENT NAME: V010915404

LOCATION: BRASS CAP ON THE SOUTH OF LAKE ROAD, IN THE COUNTY OF ELGIN, IN THE GEOGRAPHIC TOWNSHIP OF SOUTHWOLD, APPROXIMATELY 8.0m SOUTH OF THE CENTRELINE OF LAKE ROAD AND 11.8m EAST OF THE PRODUCTION OF CENTRELINE OF SCOTCH ROAD.

ELEVATION: 214.432m (CGVD28:78)

(CONTRACTOR TO CONFIRM BENCHMARK INFORMATION PRIOR TO CONSTRUCTION)

VERTICAL DATUM NOTE:
INFORMATION FROM CGVD28:78 HAS BEEN VERTICALLY ADJUSTED BY -0.442m BASED ON BENCHMARK DATUM VALUES OF 175.902 TO 175.460 TO CONVERT TO CGVD2013 PER NATURAL RESOURCES CANANDA DOCUMENT NRCAN 973006 PORT STANLEY PIER BM

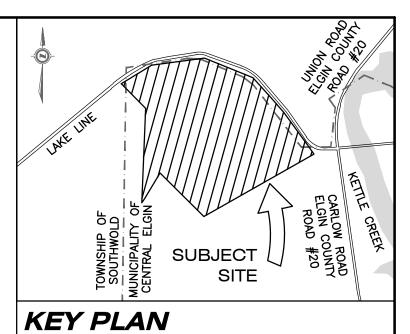
LEGAL INFORMATION

CLERGY RESERVE LOT "D" NORTH OF THE LAKE ROAD PART OF

JAMES BEGG LOTS 14 & 15

REGISTERED PLAN No. 20 (MIDD) AND PART OF ROAD ALLOWANCE BETWEEN LOTS 14 & 15 NORTH OF THE LAKE ROAD AND ALL OF

LOT "T", REGISTERED PLAN No.39 IN THE MUNICIPALITY OF CENTRAL ELGIN COUNTY OF ELGIN



REFER TO NOTES, LEGEND, AND

DETAILS ON SHEET 1, 17, 18 & 19

MARR DRAIN DESIGN SHEET

MUNICIPALITY OF CENTRAL ELGIN

PROJECT NAME: **KETTLE CREEK SUBDIVISION**

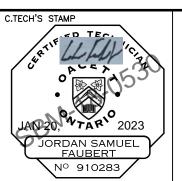
Date:	July 12, 2022
Job Number:	SBM-18-0530
Client:	Strathroy Turf Farms
Project:	Kettle Creek Subdivision
Designed By:	JSF
Reviewed By:	KAM/NGu
Project File No.	SBM-18-0530
	•

	LOCATION				AREA	TOTAL (A x C)				RAINFALL INTENSITY Q				SEWER DESIGN							PROFILE					
											TIME EN	NTRY mm													INVERT EL	EVATION
		FROM	то	DELTA	TOTAL		TOTAL	TOTAL	TOTAL	TOTAL			INTENSITY		PIPE SIZE			Q	VELOCITY	LENGTH	TIME OF	FALL IN	HEADLOSS	DROP IN		
AREA No.	STREET	MANHOLE	MANHOLE	HECTARE	HECTARES	C AxC	SECTION	LATERAL	SEWER	2.78AxC	SECTION	ACCUM.	mm/hr	L/s	mm	n	SLOPE %	CAP I/s	m / s	m	FLOW	SEWER	IN D.S. MH	MANHOLE	U.S.	D.S.
	LAKE LINE	EXTERNAL	MDMH 1	0.00	ASSUMED									618.1	450	0.013	4.70	618.1	3.89	N/A			0.771	-	UNKNOWN	181.69
	STREET 'A' REAR YARD	MDMH 1	MDMH 2	0.00	ASSUMED									618.1	450	0.013	4.70	618.1	3.89	13.7	0.06	0.643	0.222	0.770	180.92	180.28
	STREET 'A' REAR YARD	MDMH 2	MDMH 3	0.00	ASSUMED									618.1	600	0.013	1.07	633.6	2.24	172.8	1.28	1.840	0.169	0.518	179.76	177.92
	STREET 'A' REAR YARD	MDMH 3	HW 4	0.00	ASSUMED									618.1	675	0.013	0.60	651.1	1.82	6.0	0.05	0.036	-	0.169	177.75	177.71

athro	AS CONSTRUCTED SERVICES	COMPLETION			No.	REVISIONS	D/M/Y	BY	CONSUL
Str			DESIGN J	SF/KJC	1	ISSUED FOR ENGINEERING SUBMISSION	17/02/21	JSF	1
530			DRAWN	JSF	2	CONCEPTUAL ZONING DATA CHART ADDED	08/03/21	JSF	
3-0			CHECKED	KAM	3	FOR PRE-SUBMISSION CONSULTATION MEETING	05/04/21	JSF	
1-18			APPROVED NO	GU/KAM	4	ISSUED FOR DRAFT PLAN APPLICATION	16/07/21	JSF	
SBN			DATE 16/	/02/2021	5	REISSUED FOR DRAFT PLAN APPLICATION	02/08/22	JSF	
\sq					6	REISSUED FOR DRAFT PLAN APPLICATION	15/12/22	JSF	
3 Jc			cad SBM-1	18-0530	7	REISSUED FOR DRAFT PLAN APPLICATION	20/01/23	JSF	
2018									

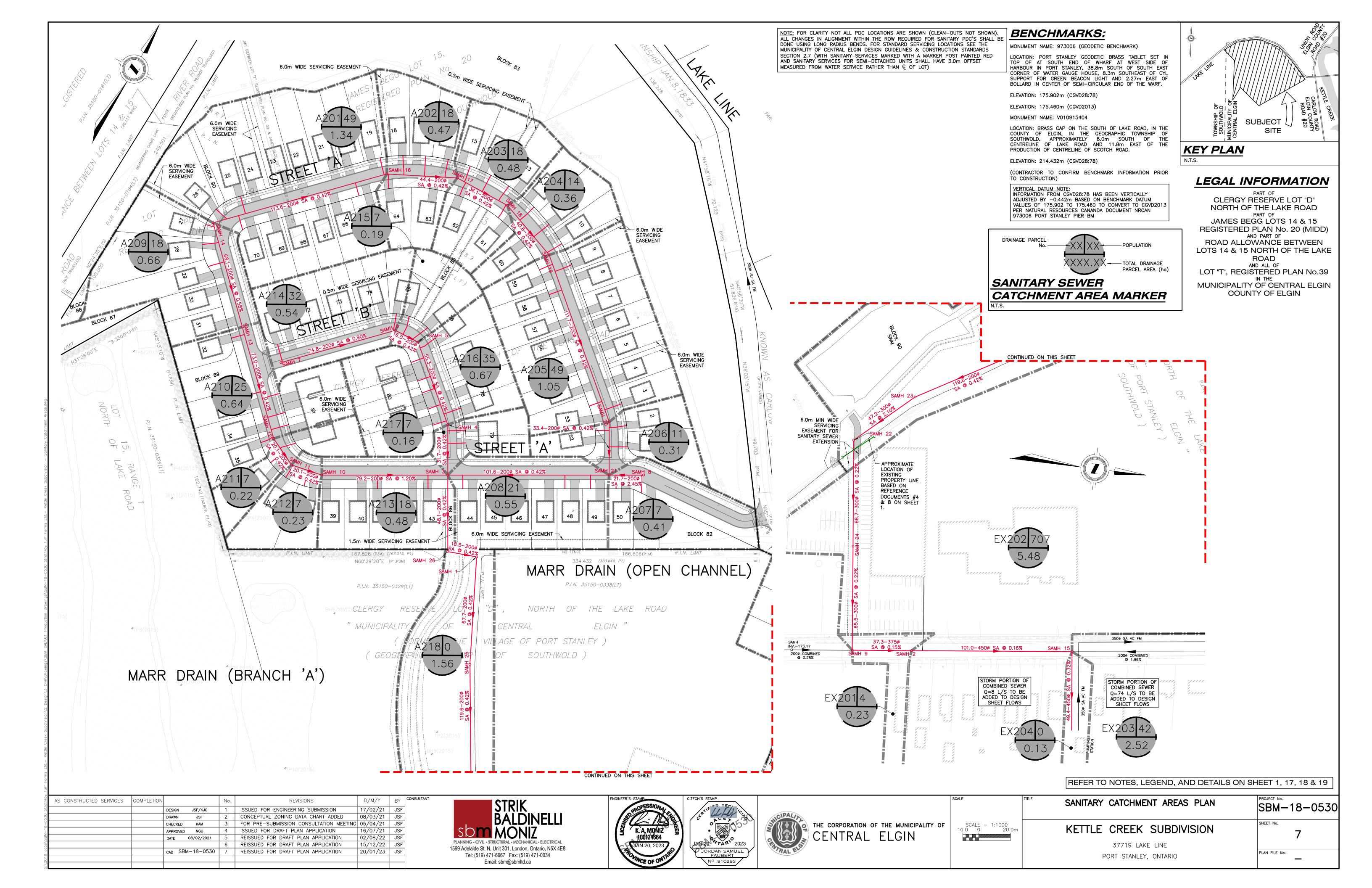








TITLE	MUNICIPAL DRAIN DESIGN SHEETS	SBM-18-0530
	KETTLE CREEK SUBDIVISION	SHEET No.
	37719 LAKE LINE PORT STANLEY, ONTARIO	PLAN FILE No.





LONDON LOCATION

1599 Adelaide St. N., Units 301 & 203 London, ON N5X 4E8 P: 519-471-6667

KITCHENER LOCATION

1415 Huron Rd., Unit 225 Kitchener, ON N2R 0L3 P: 519-725-8093

www.sbmltd.ca

sbm@sbmltd.ca

Sanitary Sewer Design Sheet
Municipality of Central Elgin

Residential Population Densities

Area Basis

Average Daily Domestic Flows

= 3.5 people/unit

Populations for school and community centre approximated, see Functional Servicing Report for details/calculations

Design Critera (Litres/capita/day) 400
Sewage Infiltration (Litres/hectare/sec) 0.2
Harmon Formula (Peaking Factor)
M = (1 + 14/(4+P^0.5))

Date: December 12, 2022

Job Number: SBM-18-0530

Client: Strathroy Turf Farms

Project: Kettle Creek Subdivision

Designed By: JSF

Reviewed By: KAM/NGu Project File No.: SBM-18-0530

N/A

BENCHMAR

BENCHMARKS:

KEY PLAN

MONUMENT NAME: 973006 (GEODETIC BENCHMARK)

LOCATION: PORT STANLEY GEODETIC BRASS TABLET SET IN TOP OF AT SOUTH END OF WHARF AT WEST SIDE OF HARBOUR IN PORT STANLEY, 38.8m SOUTH OF SOUTH EAST CORNER OF WATER GAUGE HOUSE, 8.3m SOUTHEAST OF CYL SUPPORT FOR GREEN BEACON LIGHT AND 2.27m EAST OF

LEGAL INFORMATION

CLERGY RESERVE LOT "D"

NORTH OF THE LAKE ROAD

JAMES BEGG LOTS 14 & 15

REGISTERED PLAN No. 20 (MIDD)

ROAD ALLOWANCE BETWEEN LOTS 14 & 15 NORTH OF THE LAKE

AND ALL OF LOT "T", REGISTERED PLAN No.39

MUNICIPALITY OF CENTRAL ELGIN

COUNTY OF ELGIN

BOLLARD IN CENTER OF SEMI-CIRCULAR END OF THE WARF.

ELEVATION: 175.902m (CGVD28:78)

ELEVATION: 175.460m (CGVD2013)

LOCATION: BRASS CAP ON THE SOUTH OF LAKE ROAD, IN THE COUNTY OF ELGIN, IN THE GEOGRAPHIC TOWNSHIP OF SOUTHWOLD, APPROXIMATELY 8.0m SOUTH OF THE CENTRELINE OF LAKE ROAD AND 11.8m EAST OF THE PRODUCTION OF CENTRELINE OF SCOTCH ROAD.

ELEVATION: 214.432m (CGVD28:78)

MONUMENT NAME: V010915404

(CONTRACTOR TO CONFIRM BENCHMARK INFORMATION PRIOR TO CONSTRUCTION)

VERTICAL DATUM NOTE:
INFORMATION FROM CGVD28:78 HAS BEEN VERTICALLY
ADJUSTED BY -0.442m BASED ON BENCHMARK DATUM
VALUES OF 175.902 TO 175.460 TO CONVERT TO CGVD2013
PER NATURAL RESOURCES CANANDA DOCUMENT NRCAN
973006 PORT STANLEY PIER BM

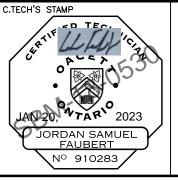
REFER TO NOTES, LEGEND, AND

U													Uncertain Development Factor of 1.1 applied to sewage peak flow													
Location Area											Sewag	ge Flows				Sewer d	esign			Profile Design						
Area No.	Street Name	From MH	To MH	Delta Hectare	Total Hectare	People Per Lot	No. of Lots	Delta Pop.	Total Pop.	Harmon Peaking Factor	Infilt L/S	Sewage L/S	Total L/S	n	Pipe Slope %	Calc'd Dia.	Dia. mm	Capacity L/S	Velocity m/s	Length m	Fall in Sewer	Headloss	Drop in U.S. MH	U.S. Invert	D.S. Invert	
A201	STREET 'A'	SAMH 14	SAMH 16	1.34	1.34	3.5	14	49	49	4.3165	0.27	0.98	1.25	0.013	0.42%	69.06	200	21.27	0.68	113.6	0.48	0.008	-	178.30	177.82	
A202	STREET 'A'	SAMH 16	SAMH 17	0.47	1.81	3.5	5	18	67	4.2873	0.36	1.33	1.69	0.013	0.42%	77.42	200	21.27	0.68	44.4	0.19	0.010	0.03	177.79	177.60	
A203	STREET 'A'	SAMH 17	SAMH 18	0.48	2.29	3.5	5	18	85	4.2622	0.46	1.68	2.14	0.013	0.42%	84.48	200	21.27	0.68	36.1	0.15	0.009	0.03	177.57	177.42	
A204	STREET 'A'	SAMH 18	SAMH 19	0.36	2.65	3.5	4	14	99	4.2448	0.53	1.95	2.48	0.013	0.42%	89.30	200	21.27	0.68	40.6	0.17	0.008	0.03	177.39	177.22	
A205	STREET 'A'	SAMH 19	SAMH 20	1.05	3.70	3.5	14	49	148	4.1929	0.74	2.87	3.61	0.013	0.42%	102.90	200	21.27	0.68	111.7	0.47	0.008	0.03	177.19	176.72	
A206	STREET 'A'	SAMH 20	SAMH 21	0.31	4.01	3.5	3	11	159	4.1827	0.80	3.08	3.88	0.013	0.42%	105.70	200	21.27	0.68	33.4	0.14	0.023	0.03	176.69	176.55	
A207	STREET 'A'	SAMH 8	SAMH 21	0.41	0.41	3.5	2	7	7	4.4283	0.08	0.14	0.23	0.013	2.45%	26.12	200	51.37	1.64	21.7	0.53	0.000	-	180.91	180.38	
A208	STREET 'A'	SAMH 21	SAMH 3	0.55	4.97	3.5	6	21	187	4.1585	0.99	3.60	4.59	0.013	0.42%	112.60	200	21.27	0.68	101.6	0.43	0.023	0.06	176.49	176.06	
A209	STREET 'A'	SAMH 14	SAMH 13	0.66	0.66	3.5	5	18	18	4.3864	0.13	0.37	0.50	0.013	0.58%	46.05	200	24.99	0.80	68.1	0.39	0.000	-	178.42	178.02	
A210	STREET 'A'	SAMH 13	SAMH 12	0.64	1.30	3.5	7	25	43	4.3275	0.26	0.86	1.12	0.013	0.42%	66.36	200	21.27	0.68	73.0	0.31	0.008	0.02	178.01	177.70	
A211	STREET 'A'	SAMH 12	SAMH 11	0.22	1.52	3.5	2	7	50	4.3147	0.30	1.00	1.30	0.013	0.42%	70.19	200	21.27	0.68	20.1	0.08	0.014	0.03	177.67	177.59	
A212	STREET 'A'	SAMH 11	SAMH 10	0.23	1.75	3.5	2	7	57	4.3029	0.35	1.14	1.49	0.013	0.42%	73.74	200	21.27	0.68	20.1	0.08	0.023	0.03	177.56	177.48	
A213	STREET 'A'	SAMH 10	SAMH 3	0.48	2.23	3.5	5	18	75	4.2757	0.45	1.48	1.93	0.013	1.20%	66.82	200	35.95	1.14	79.2	0.95	0.023	0.03	177.45	176.50	
A214	STREET 'B'	SAMH 7	SAMH 6	0.54	0.54	3.5	9	32	32	4.3502	0.11	0.64	0.75	0.013	0.90%	49.53	200	31.13	0.99	74.8	0.67	0.015	-	177.73	177.06	
A215	STREET 'B'	SAMH 6	SAMH 5	0.19	0.73	3.5	2	7	39	4.3353	0.15	0.78	0.93	0.013	0.42%	61.83	200	21.27	0.68	16.0	0.07	0.015	0.07	176.99	176.92	
A216	STREET 'B'	SAMH 5	SAMH 4	0.67	1.40	3.5	10	35	74	4.2771	0.28	1.47	1.75	0.013	0.42%	78.33	200	21.27	0.68	55.3	0.23	0.008	0.03	176.89	176.66	
A217	STREET 'B'	SAMH 4	SAMH 3	0.16	1.56	3.5	2	7	81	4.2675	0.31	1.60	1.91	0.013	0.42%	81.06	200	21.27	0.68	31.7	0.13	0.023	0.03	176.63	176.50	
							_	_																		
	STREET 'A'	SAMH 3	SAMH 26	0.00	8.76	3.5	0	0	343	4.0530	1.75	6.44	8.19	0.013	0.42%	139.85	200	21.27	0.68	48.1	0.20	0.001	0.50	176.00	175.80	
A218	SWM FACILITY	SAMH 26	SAMH 1	1.56	10.32	3.5	0	0	343	4.0530	2.06	6.44	8.50	0.013	0.42%	141.83	200	21.27	0.68	18.5	0.08	0.041	0.06	175.74	175.66	
	SWM FACILITY	SAMH 1	SAMH 25	0.00	10.32	3.5	0	0	343	4.0530	2.06	6.44	8.50	0.013	0.42%	141.83	200	21.27	0.68	67.7	0.28	0.000	0.06	175.60	175.32	
	SWM FACILITY	SAMH 25	SAMH 23	0.00	10.32	3.5	0	0	343	4.0530	2.06	6.44	8.50	0.013	0.42%	141.83	200	21.27	0.68	119.6	0.50	0.000	0.03	175.29	174.79	
	GOLF COURSE	SAMH 23	SAMH 22	0.00	10.32	3.5	0	0	343	4.0530	2.06	6.44	8.50	0.013	2.10%	104.88	200	47.56	1.51	47.2	0.99	0.016	0.90	174.76	173.77	
	COMMUNITY CNTR	SAMH 22	SAMH 24	0.00	10.32	3.5	0	0	343	4.0530	2.06	6.44	8.50	0.013	0.22%	160.11	300	45.38	0.64	66.7	0.15	0.000	0.50	173.27	173.12	
	COMMUNITY CNTR	SAMH 24	SAMH 9	0.00	10.32	3.5	0	0	343	4.0530	2.06	6.44	8.50	0.013	0.22%	160.11	300	45.38	0.64	65.5	0.14	0.019	0.01	173.11	172.97	
	CADLOW/ DOAD	EVICTING	CANALLO									<u> </u>		0.012	0.200/	0.00	200	17.20	0.55	20.1	0.11	0.000		170 17	172.06	
	CARLOW ROAD	EXISTING	SAMH 9	Λ.D.		LILATION O	E 92 EOD 0		CENTRE A	DDED TO D		LATION DELC).W/	0.013	0.28%	O.00 ABOVE PIPE	200	17.30	0.55	38.1	0.11	0.000	-	173.17	173.06	
EV201	CADLOVALDOAD	CANALLO	CANALLO	1		1	1 02 FUK C					LATION BELO			т				-	27.2	0.00	0.000	0.10	172.00	172.02	
EX201	CARLOW ROAD	SAMH 9	SAMH 2	0.23	11.28	3.5	<u> </u>	707	347	4.0507	2.26	6.51	26.07	0.013	0.15%	261.88	375	67.95	0.62	37.3	0.06	0.000	0.18	172.89	172.83	
EX202	CARLOW ROAD	SAMH 2	SAMH 15	5.48	16.76	3.5 Y DODUI A	/		1054	3.7852	3.35	18.47	76.18	0.013	0.16%	386.81	450	114.11	0.72	101.0	0.16	0.053	0.08	172.75 D	172.59	
EX203 STREET 'A' EXISTING SAMH 15 2.52 2.52 3.5 12 42 42 4.3294 0.50 0.84 75.35													0.013	1.99%	Q OF 8 L/S AD 240.13	200	46.30	1.47	158.3	3.15	0.053	INED SEAVE	178.86	175.71		
													75.55 0.015 1.5570 240.15 200 40.50 1.47 150.5 5.15 0.055 - 170.00 175.71													
DIFFERENCE IN CAPACITY OF PIPE ABOVE AND ASSUMED TOTAL SEWAGE DEMAND ADDED TO EX202 AND ALL DOWN STREAM ASSUMING STORM OFR TO DOWN STREAM CB													(Q OF 74 L/S A	DDED TO A	AREA EX203	TO ACCOUI	NT FOR STO	RM PORTIC	ON OF COMB	INED SEWE	ER				
EX204	PUMPING STATION	SAMH 15	SA PUMP	0.13	19.41	3.5	0	0	1096	3.7740	3.88	19.15	122.33	0.013	0.32%	405.70	450	161.38	1.01	49.4	0.16	0.000	3.17	172.54	172.38	

AS CONSTRUCTED SERVICES	COMPLETION			No.	REVISIONS	D/M/Y	BY	CONSUL
		DESIGN	JSF/KJC	1	ISSUED FOR ENGINEERING SUBMISSION	17/02/21	JSF	
		DRAWN	JSF	2	CONCEPTUAL ZONING DATA CHART ADDED	08/03/21	JSF	
		CHECKED	KAM	3	FOR PRE-SUBMISSION CONSULTATION MEETING	05/04/21	JSF	
		APPROVED	NGU	4	ISSUED FOR DRAFT PLAN APPLICATION	16/07/21	JSF	
		DATE	08/02/2021	5	REISSUED FOR DRAFT PLAN APPLICATION	02/08/22	JSF	
				6	REISSUED FOR DRAFT PLAN APPLICATION	15/12/22	JSF	
		CAD SBI	M-18-0530	7	REISSUED FOR DRAFT PLAN APPLICATION	20/01/23	JSF	
								1









DETAILS ON SHEET 1, 17, 18 & 19

SANITARY DESIGN SHEET

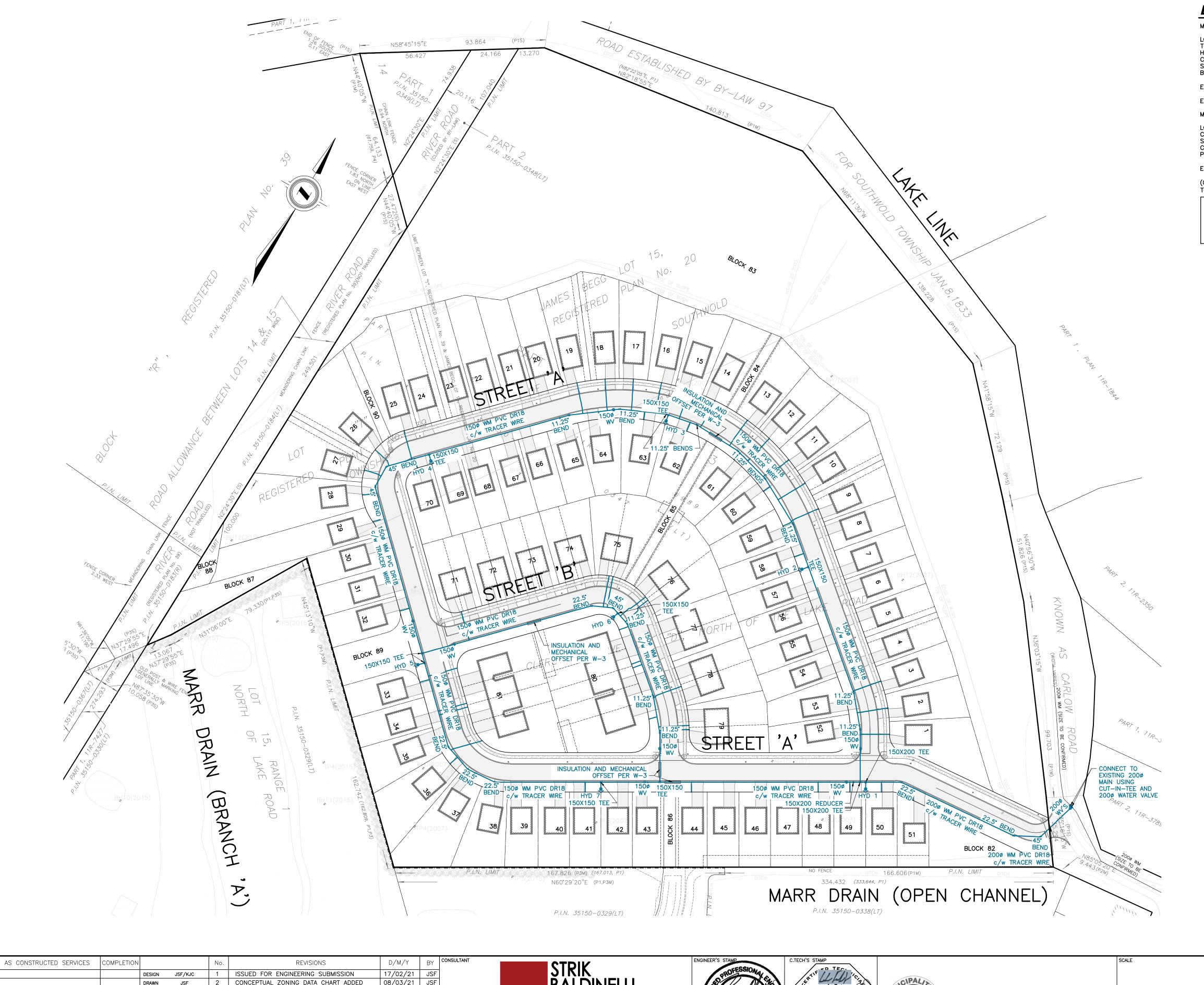
SBM-18-0530

KETTLE CREEK SUBDIVISION

37719 LAKE LINE
PORT STANLEY, ONTARIO

SHEET No.

PLAN FILE No.



MONUMENT NAME: 973006 (GEODETIC BENCHMARK)

LOCATION: PORT STANLEY GEODETIC BRASS TABLET SET IN TOP OF AT SOUTH END OF WHARF AT WEST SIDE OF HARBOUR IN PORT STANLEY, 38.8m SOUTH OF SOUTH EAST CORNER OF WATER GAUGE HOUSE, 8.3m SOUTHEAST OF CYL SUPPORT FOR GREEN BEACON LIGHT AND 2.27m EAST OF BOLLARD IN CENTER OF SEMI-CIRCULAR END OF THE WARF.

ELEVATION: 175.902m (CGVD28:78)

ELEVATION: 175.460m (CGVD2013) MONUMENT NAME: V010915404

LOCATION: BRASS CAP ON THE SOUTH OF LAKE ROAD, IN THE COUNTY OF ELGIN, IN THE GEOGRAPHIC TOWNSHIP OF SOUTHWOLD, APPROXIMATELY 8.0m SOUTH OF THE CENTRELINE OF LAKE ROAD AND 11.8m EAST OF THE PRODUCTION OF CENTRELINE OF SCOTCH ROAD.

ELEVATION: 214.432m (CGVD28:78)

(CONTRACTOR TO CONFIRM BENCHMARK INFORMATION PRIOR TO CONSTRUCTION)

<u>VERTICAL DATUM NOTE:</u> INFORMATION FROM CGVD28:78 HAS BEEN VERTICALLY ADJUSTED BY -0.442m BASED ON BENCHMARK DATUM VALUES OF 175.902 TO 175.460 TO CONVERT TO CGVD2013 PER NATURAL RESOURCES CANANDA DOCUMENT NRCAN 973006 PORT STANLEY PIER BM

SITE

KEY PLAN

LEGAL INFORMATION

PART OF

CLERGY RESERVE LOT "D" NORTH OF THE LAKE ROAD

JAMES BEGG LOTS 14 & 15 REGISTERED PLAN No. 20 (MIDD) AND PART OF

ROAD ALLOWANCE BETWEEN LOTS 14 & 15 NORTH OF THE LAKE

AND ALL OF LOT "T", REGISTERED PLAN No.39

MUNICIPALITY OF CENTRAL ELGIN COUNTY OF ELGIN

WATERMAIN & SEWER CROSSING NOTE:

1. UNDER PRACTICAL CONDITIONS, WATERMAINS SHALL CROSS ABOVE SEWERS WITH SUFFICIENT VERTICAL SEPARATION TO ALLOW FOR PROPER BEDDING AND STRUCTURAL SUPPORT OF THE WATERMAIN AND SEWER. INSULATE AS PER MUNICIPALITY OF CENTRAL ELGIN DRAWING W-3 (WHERE REQUIRED). ROW MINIMUM VERTICAL SEPARATION 0.15m TO PROVIDE SUFFICIENT BEDDING DEPTH WHEN WATERMAIN IS CROSSING ABOVE THE SEWER. WHEN IT IS NOT POSSIBLE FOR THE WATERMAIN TO CROSS ABOVE THE SEWER,

THE WATERMAIN PASSING UNDER A SEWER SHALL BE PROTECTED BY: 2.1. PROVIDING A VERTICAL SEPARATION OF AT LEAST 0.5 METRES BETWEEN THE INVERT OF THE SEWER AND THE CROWN OF THE WATERMAIN 2.2. PROVIDING ADEQUATE STRUCTURAL SUPPORT FOR THE SEWERS TO PREVENT EXCESSIVE DEFLECTION OF JOINTS AND SETTLING; AND 2.3. ENSURING THAT THE LENGTH OF WATER PIPE SHALL BE CENTERED AT THE POINT OF CROSSING SO THAT THE JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE SEWER.

REFERENCE: MUNICIPALITY OF CENTRAL ELGIN DESIGN GUIDELINES AND CONSTRUCTION STANDARDS

INSULATION NOTE:
INSULATE SEWERS + WATER PIPES AS PER THE MUNICIPALITY OF CENTRAL ELGIN DRAWING W-3 'WATERMAIN CROSS OVER DETAIL' WHERE 1.70m (1.25m FOR CATCH BASIN LEADS AND 1.5m FOR SEWER MAINS) COVER CAN NOT BE PROVIDED.

ALL WATERMAIN CONSTRUCTION TO CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY OF CENTRAL ELGIN ENGINEERING DEPARTMENT. WHERE COVER IS LESS THAN 1.7m (EVEN TEMPORARY CONDITIONS), THE WATERMAIN/SERVICE SHALL BE ADEQUATELY INSULATED OVER THE AFFECTED LENGTH.

NOTE: FOR CLARITY NOT ALL WATER SERVICE LOCATIONS ARE SHOWN (CURB STOPS NOT SHOWN). FOR STANDARD SERVICING LOCATIONS SEE THE MUNICIPALITY OF CENTRAL ELGIN DESIGN GUIDELINES & CONSTRUCTION STANDARDS SECTION 2.7

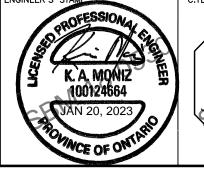
REFER TO NOTES, LEGEND, AND DETAILS ON SHEET 1, 17, 18 & 19

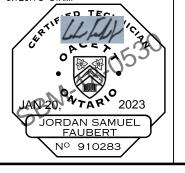
ISSUED FOR DRAFT PLAN APPLICATION REISSUED FOR DRAFT PLAN APPLICATION REISSUED FOR DRAFT PLAN APPLICATION 15/12/22 JSF CAD SBM-18-0530 REISSUED FOR DRAFT PLAN APPLICATION 20/01/23 JSF



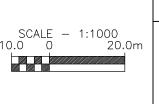
Tel: (519) 471-6667 Fax: (519) 471-0034

Email: sbm@sbmltd.ca

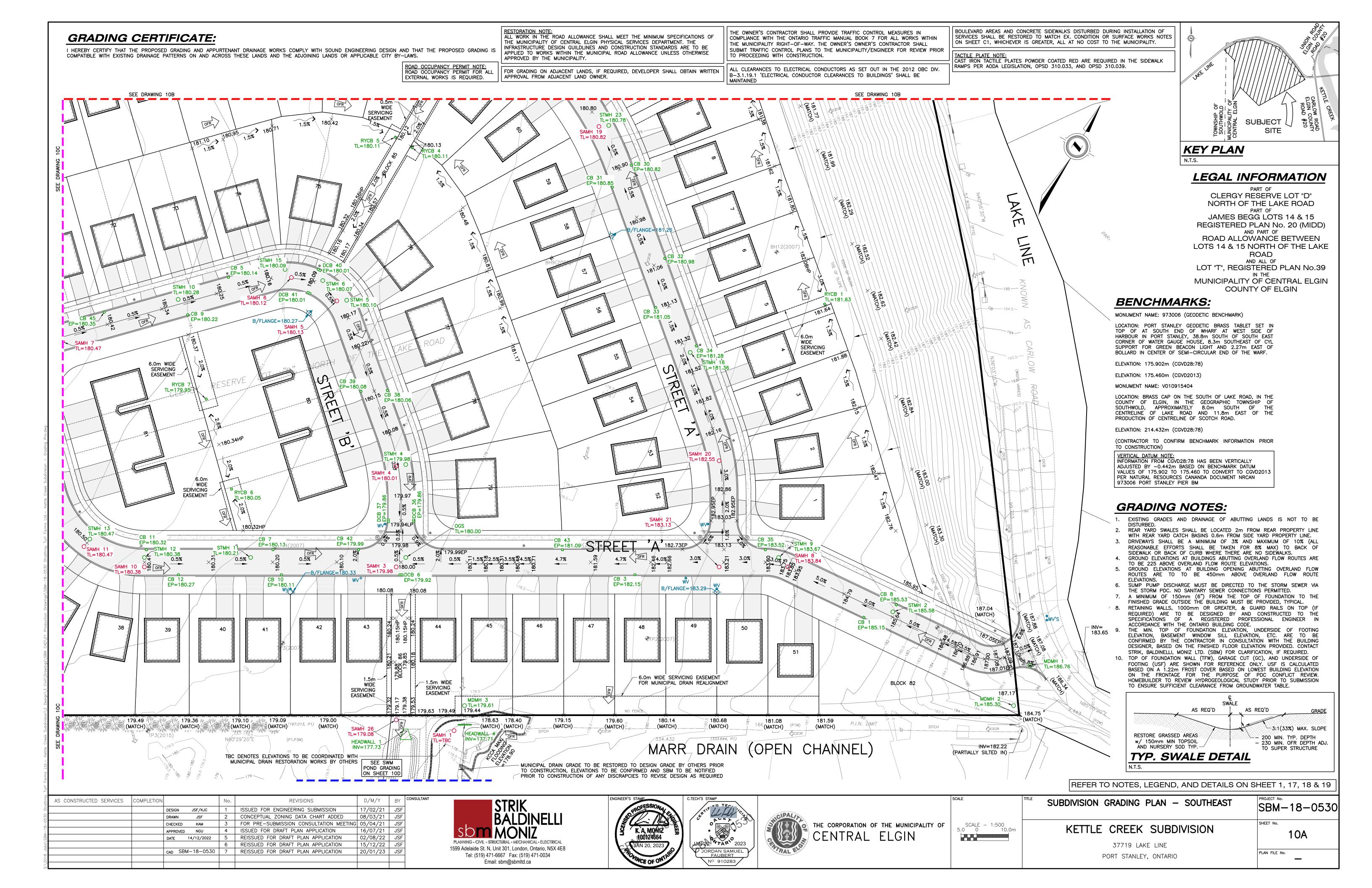








ТІТ	WATER DISTRIBUTION PLAN	SBM-18-0530
	KETTLE CREEK SUBDIVISION	SHEET No.
	37719 LAKE LINE	
	PORT STANLEY, ONTARIO	PLAN FILE No.



GRADING CERTIFICATE:

I HEREBY CERTIFY THAT THE PROPOSED GRADING AND APPURTENANT DRAINAGE WORKS COMPLY WITH SOUND ENGINEERING DESIGN AND THAT THE PROPOSED GRADING IS COMPATIBLE WITH EXISTING DRAINAGE PATTERNS ON AND ACROSS THESE LANDS AND THE ADJOINING LANDS OR APPLICABLE CITY BY-LAWS.

ROAD OCCUPANCY PERMIT NOTE:
ROAD OCCUPANCY PERMIT FOR ALL EXTERNAL WORKS IS REQUIRED.

182.74 (MATCH)

1.8%

SEE DRAWING 10A

RESTORATION NOTE:
ALL WORK IN THE ROAD ALLOWANCE SHALL MEET THE MINIMUM SPECIFICATIONS OF THE MUNICIPALITY OF CENTRAL ELGIN PHYSICAL SERVICES DEPARTMENT. THE INFRASTRUCTURE DESIGN GUILDLINES AND CONSTRUCTION STANDARDS ARE TO BE APPLIED TO WORKS WITHIN THE MUNICIPAL ROAD ALLOWANCE UNLESS OTHERWISE APPROVED BY THE MUNICIPALITY.

FOR GRADING ON ADJACENT LANDS, IF REQUIRED, DEVELOPER SHALL OBTAIN WRITTEN APPROVAL FROM ADJACENT LAND OWNER.

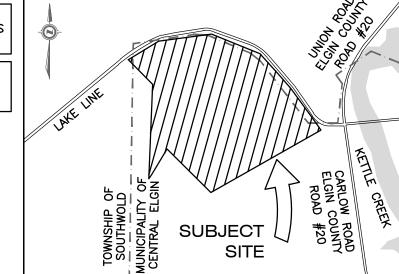
THE OWNER'S CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL MEASURES IN COMPLIANCE WITH THE ONTARIO TRAFFIC MANUAL BOOK 7 FOR ALL WORKS WITHIN THE MUNICIPALITY RIGHT-OF-WAY. THE OWNER'S OWNER'S CONTRACTOR SHALL SUBMIT TRAFFIC CONTROL PLANS TO THE MUNICIPALITY/ENGINEER FOR REVIEW PRIOR TO PROCEEDING WITH CONSTRUCTION.

ALL CLEARANCES TO ELECTRICAL CONDUCTORS AS SET OUT IN THE 2012 OBC DIV. B-3.1.19.1 'ELECTRICAL CONDUCTOR CLEARANCES TO BUILDINGS' SHALL BE

INV=196.27

BOULEVARD AREAS AND CONCRETE SIDEWALKS DISTURBED DURING INSTALLATION OF SERVICES SHALL BE RESTORED TO MATCH EX. CONDITION OR SURFACE WORKS NOTES ON SHEET C1. WHICHEVER IS GREATER, ALL AT NO COST TO THE MUNICIPALITY.

TACTILE PLATE NOTE:
CAST IRON TACTILE PLATES POWDER COATED RED ARE REQUIRED IN THE SIDEWALK RAMPS PER AODA LEGISLATION, OPSD 310.033, AND OPSD 310.039.



KEY PLAN

LEGAL INFORMATION

CLERGY RESERVE LOT "D" NORTH OF THE LAKE ROAD

JAMES BEGG LOTS 14 & 15 REGISTERED PLAN No. 20 (MIDD)

AND PART OF

ROAD ALLOWANCE BETWEEN LOTS 14 & 15 NORTH OF THE LAKE ROAD

LOT "T", REGISTERED PLAN No.39

MUNICIPALITY OF CENTRAL ELGIN COUNTY OF ELGIN

AND ALL OF

BENCHMARKS:

MONUMENT NAME: 973006 (GEODETIC BENCHMARK)

LOCATION: PORT STANLEY GEODETIC BRASS TABLET SET IN TOP OF AT SOUTH END OF WHARF AT WEST SIDE OF HARBOUR IN PORT STANLEY, 38.8m SOUTH OF SOUTH EAST CORNER OF WATER GAUGE HOUSE, 8.3m SOUTHEAST OF CYL SUPPORT FOR GREEN BEACON LIGHT AND 2.27m EAST OF BOLLARD IN CENTER OF SEMI-CIRCULAR END OF THE WARF.

ELEVATION: 175.902m (CGVD28:78)

ELEVATION: 175.460m (CGVD2013)

MONUMENT NAME: V010915404

LOCATION: BRASS CAP ON THE SOUTH OF LAKE ROAD, IN THE COUNTY OF ELGIN, IN THE GEOGRAPHIC TOWNSHIP OF SOUTHWOLD. APPROXIMATELY 8.0m SOUTH OF THE CENTRELINE OF LAKE ROAD AND 11.8m EAST OF THE PRODUCTION OF CENTRELINE OF SCOTCH ROAD.

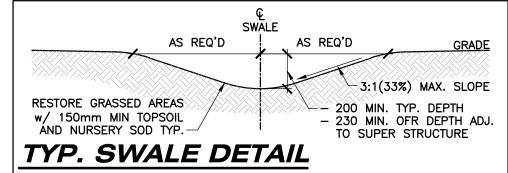
ELEVATION: 214.432m (CGVD28:78)

(CONTRACTOR TO CONFIRM BENCHMARK INFORMATION PRIOR TO CONSTRUCTION)

VERTICAL DATUM NOTE:
INFORMATION FROM CGVD28:78 HAS BEEN VERTICALLY ADJUSTED BY -0.442m BASED ON BENCHMARK DATUM
VALUES OF 175.902 TO 175.460 TO CONVERT TO CGVD2013 PER NATURAL RESOURCES CANANDA DOCUMENT NRCAN 973006 PORT STANLEY PIER BM

GRADING NOTES:

- EXISTING GRADES AND DRAINAGE OF ABUTTING LANDS IS NOT TO BE DISTURBED.
- REAR YARD SWALES SHALL BE LOCATED 2m FROM REAR PROPERTY LINE WITH REAR YARD CATCH BASINS 0.6m FROM SIDE YARD PROPERTY LINE.
- DRIVEWAYS SHALL BE A MINIMUM OF 3% AND MAXIMUM OF 10% (ALL
- REASONABLE EFFORTS SHALL BE TAKEN FOR 8% MAX) TO BACK OF SIDEWALK OR BACK OF CURB WHERE THERE ARE NO SIDEWALKS. GROUND ELEVATIONS AT BUILDINGS ABUTTING OVERLAND FLOW ROUTES ARE
- TO BE 225 ABOVE OVERLAND FLOW ROUTE ELEVATIONS GROUND ELEVATIONS AT BUILDING OPENING ABUTTING OVERLAND FLOW
- ROUTES ARE TO TO BE 450mm ABOVE OVERLAND FLOW ROUTE
- SUMP PUMP DISCHARGE MUST BE DIRECTED TO THE STORM SEWER VIA
- THE STORM PDC. NO SANITARY SEWER CONNECTIONS PERMITTED.
- A MINIMUM OF 150mm (6") FROM THE TOP OF FOUNDATION TO THE FINISHED GRADE OUTSIDE THE BUILDING MUST BE PROVIDED, TYPICAL. RETAINING WALLS, 1000mm OR GREATER, & GUARD RAILS ON TOP (IF REQUIRED) ARE TO BE DESIGNED BY AND CONSTRUCTED TO THE SPECIFICATIONS OF A REGISTERED PROFESSIONAL ENGINEER IN
- ACCORDANCE WITH THE ONTARIO BUILDING CODE THE MIN. TOP OF FOUNDATION ELEVATION, UNDERSIDE OF FOOTING ELEVATION, BASEMENT WINDOW SILL ELEVATION, ETC. ARE TO BE CONFIRMED BY THE CONTRACTOR IN CONSULTATION WITH THE BUILDING
- DESIGNER, BASED ON THE FINISHED FLOOR ELEVATION PROVIDED. CONTACT STRIK, BALDINELLI, MONIZ LTD. (SBM) FOR CLARIFICATION, IF REQUIRED. 10. TOP OF FOUNDATION WALL (TFW), GARAGE CUT (GC), AND UNDERSIDE OF
- FOOTING (USF) ARE SHOWN FOR REFERENCE ONLY. USF IS CALCULATED BASED ON A 1.22m FROST COVER BASED ON LOWEST BUILDING ELEVATION ON THE FRONTAGE FOR THE PURPOSE OF PDC CONFLICT REVIEW. HOMEBUILDER TO REVIEW HYDROGEOLOGICAL STUDY PRIOR TO SUBMISSION TO ENSURE SUFFICIENT CLEARANCE FROM GROUNDWATER TABLE.



REFER TO NOTES, LEGEND, AND DETAILS ON SHEET 1, 17, 18 & 19

AS CONSTRUCTED SERVICES COMPLETION REVISIONS D/M/Y ISSUED FOR ENGINEERING SUBMISSION 17/02/21 08/03/21 JSF CONCEPTUAL ZONING DATA CHART ADDED FOR PRE-SUBMISSION CONSULTATION MEETING 05/04/21 | JSF CHECKED ISSUED FOR DRAFT PLAN APPLICATION APPROVED NGU REISSUED FOR DRAFT PLAN APPLICATION REISSUED FOR DRAFT PLAN APPLICATION 15/12/22 JSF cad SBM-18-0530 REISSUED FOR DRAFT PLAN APPLICATION 20/01/23 | JSF

SEE DRAWING 10C

∠TL=182.44

SERVICING EASEMENT

SEE DRAWING 10C

SERVICING

\EASEMENT



Email: sbm@sbmltd.ca

(MATCH)

\²:0%

0 180.85

1.79

CB 24

EP=180.70

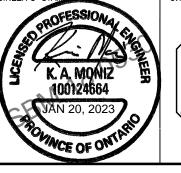
RYCB 3

WIDE

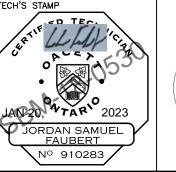
SERVICING EASEMENT

CB 22 EP=180.93

TL=181.53



WIDE SERVICING EASEMENT



⊌DCB 27

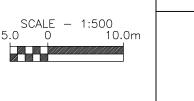
EP=180.47

EP=180.47 STMH / CBMH 8 TL=180.57

SERVICING

EASEMENT





SEE DRAWING 10A

SERVICING

EASEMENT

- MATCH TO EXISTING GRADE AT 2.0%, TYP.

7.5%

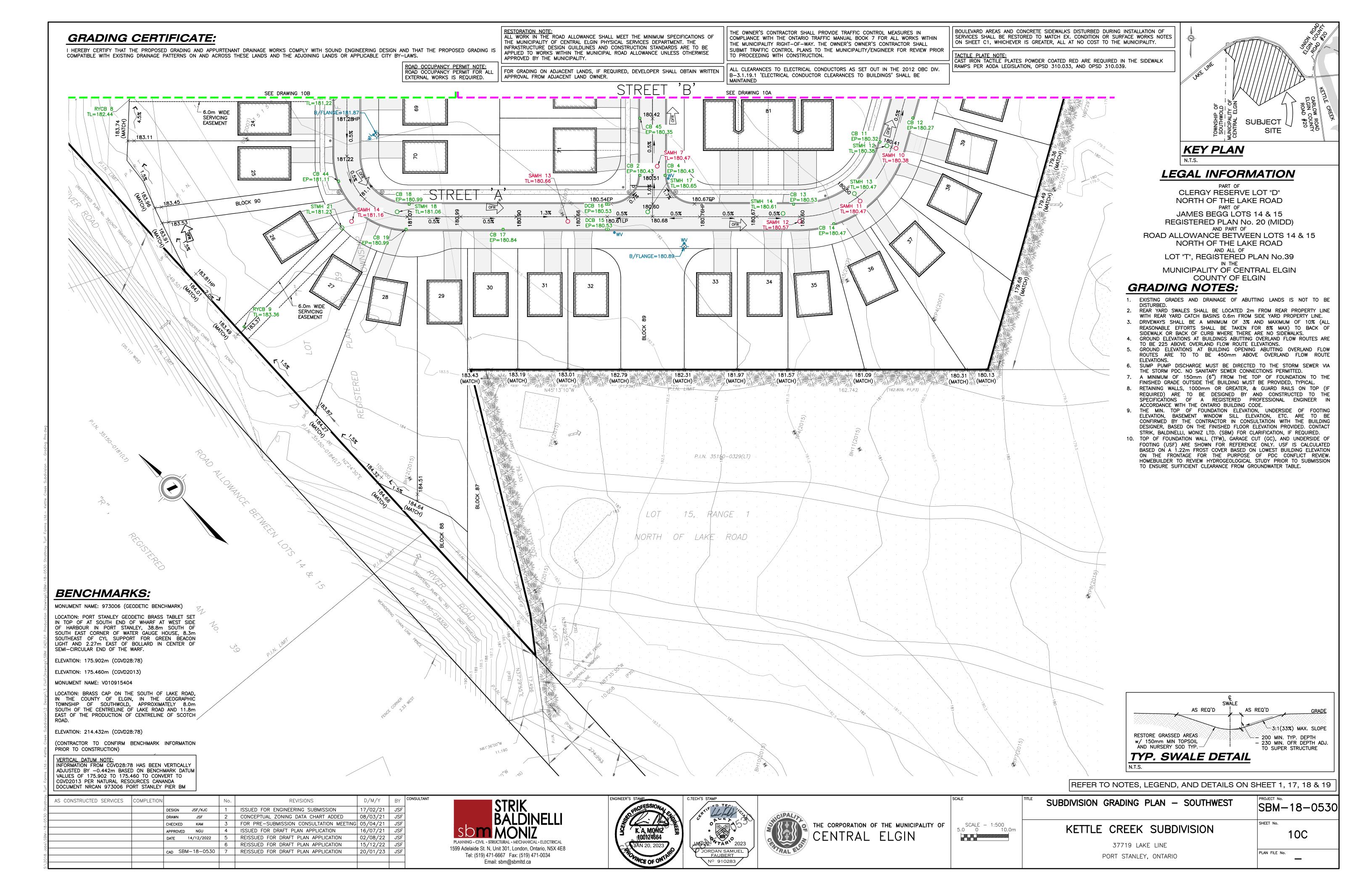
RYCB 2 TL=181.08

SUBDIVISION GRADING PLAN - NORTHWEST

KETTLE CREEK SUBDIVISION

SBM-18-0530

37719 LAKE LINE PORT STANLEY, ONTARIO PLAN FILE No.



GRADING CERTIFICATE:

I HEREBY CERTIFY THAT THE PROPOSED GRADING AND APPURTENANT DRAINAGE WORKS COMPLY WITH SOUND ENGINEERING DESIGN AND THAT THE PROPOSED GRADING IS COMPATIBLE WITH EXISTING DRAINAGE PATTERNS ON AND ACROSS THESE LANDS AND THE ADJOINING LANDS OR APPLICABLE CITY BY-LAWS.

RESTORATION NOTE:
ALL WORK IN THE ROAD ALLOWANCE SHALL MEET THE MINIMUM SPECIFICATIONS OF THE MUNICIPALITY OF CENTRAL ELGIN PHYSICAL SERVICES DEPARTMENT. THE INFRASTRUCTURE DESIGN GUILDLINES AND CONSTRUCTION STANDARDS ARE TO BE APPLIED TO WORKS WITHIN THE MUNICIPAL ROAD ALLOWANCE UNLESS OTHERWISE APPROVED BY THE MUNICIPALITY.

THE MUNICIPALITY RIGHT-OF-WAY. THE OWNER'S OWNER'S CONTRACTOR SHALL SUBMIT TRAFFIC CONTROL PLANS TO THE MUNICIPALITY/ENGINEER FOR REVIEW PRIOR TO PROCEEDING WITH CONSTRUCTION.

THE OWNER'S CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL MEASURES IN

COMPLIANCE WITH THE ONTARIO TRAFFIC MANUAL BOOK 7 FOR ALL WORKS WITHIN

TACTILE PLATE NOTE:
CAST IRON TACTILE PLATES POWDER COATED RED ARE REQUIRED IN THE SIDEWALK RAMPS PER AODA LEGISLATION, OPSD 310.033, AND OPSD 310.039.

ON SHEET C1, WHICHEVER IS GREATER, ALL AT NO COST TO THE MUNICIPALITY.

BOULEVARD AREAS AND CONCRETE SIDEWALKS DISTURBED DURING INSTALLATION OF SERVICES SHALL BE RESTORED TO MATCH EX. CONDITION OR SURFACE WORKS NOTES SUBJECT SITE

KEY PLAN

LEGAL INFORMATION

CLERGY RESERVE LOT "D" NORTH OF THE LAKE ROAD

PART OF

JAMES BEGG LOTS 14 & 15 REGISTERED PLAN No. 20 (MIDD) AND PART OF **ROAD ALLOWANCE BETWEEN LOTS 14 & 15**

NORTH OF THE LAKE ROAD AND ALL OF

LOT "T", REGISTERED PLAN No.39

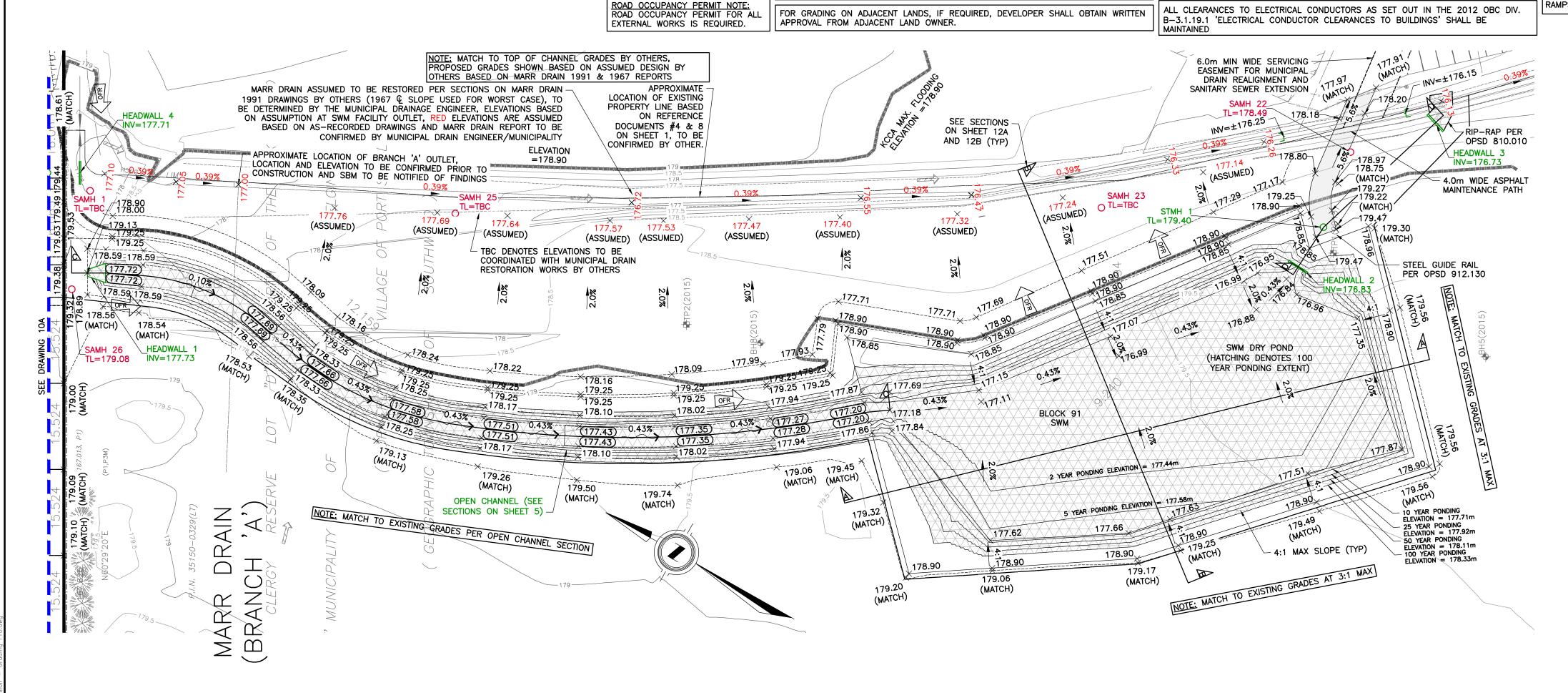
MUNICIPALITY OF CENTRAL ELGIN COUNTY OF ELGIN

GRADING NOTES.

- EXISTING GRADES AND DRAINAGE OF ABUTTING LANDS IS NOT TO BE
- REAR YARD SWALES SHALL BE LOCATED 2m FROM REAR PROPERTY LINE WITH REAR YARD CATCH BASINS 0.6m FROM SIDE YARD PROPERTY LINE. 3. DRIVEWAYS SHALL BE A MINIMUM OF 3% AND MAXIMUM OF 10% (ALL
- SIDEWALK OR BACK OF CURB WHERE THERE ARE NO SIDEWALKS. GROUND ELEVATIONS AT BUILDINGS ABUTTING OVERLAND FLOW ROUTES ARE

REASONABLE EFFORTS SHALL BE TAKEN FOR 8% MAX) TO BACK OF

- TO BE 225 ABOVE OVERLAND FLOW ROUTE ELEVATIONS. GROUND ELEVATIONS AT BUILDING OPENING ABUTTING OVERLAND FLOW ROUTES ARE TO TO BE 450mm ABOVE OVERLAND FLOW ROUTE
- 6. SUMP PUMP DISCHARGE MUST BE DIRECTED TO THE STORM SEWER VIA THE STORM PDC. NO SANITARY SEWER CONNECTIONS PERMITTED.
- A MINIMUM OF 150mm (6") FROM THE TOP OF FOUNDATION TO THE FINISHED GRADE OUTSIDE THE BUILDING MUST BE PROVIDED, TYPICAL.
- RETAINING WALLS, 1000mm OR GREATER, & GUARD RAILS ON TOP (IF REQUIRED) ARE TO BE DESIGNED BY AND CONSTRUCTED TO THE SPECIFICATIONS OF A REGISTERED PROFESSIONAL ENGINEER IN ACCORDANCE WITH THE ONTARIO BUILDING CODE.
- THE MIN. TOP OF FOUNDATION ELEVATION, UNDERSIDE OF FOOTING ELEVATION, BASEMENT WINDOW SILL ELEVATION, ETC. ARE TO BE CONFIRMED BY THE CONTRACTOR IN CONSULTATION WITH THE BUILDING DESIGNER, BASED ON THE FINISHED FLOOR ELEVATION PROVIDED. CONTACT STRIK, BALDINELLI, MONIZ LTD. (SBM) FOR CLARIFICATION, IF REQUIRED.
- 10. TOP OF FOUNDATION WALL (TFW), GARAGE CUT (GC), AND UNDERSIDE OF FOOTING (USF) ARE SHOWN FOR REFERENCE ONLY. USF IS CALCULATED BASED ON A 1.22m FROST COVER BASED ON LOWEST BUILDING ELEVATION ON THE FRONTAGE FOR THE PURPOSE OF PDC CONFLICT REVIEW. HOMEBUILDER TO REVIEW HYDROGEOLOGICAL STUDY PRIOR TO SUBMISSION TO ENSURE SUFFICIENT CLEARANCE FROM GROUNDWATER TABLE.



BENCHMARKS:

MONUMENT NAME: 973006 (GEODETIC BENCHMARK)

LOCATION: PORT STANLEY GEODETIC BRASS TABLET SET IN TOP OF AT SOUTH END OF WHARF AT WEST SIDE OF HARBOUR IN PORT STANLEY, 38.8m SOUTH OF SOUTH EAST CORNER OF WATER GAUGE HOUSE, 8.3m SOUTHEAST OF CYL SUPPORT FOR GREEN BEACON LIGHT AND 2.27m EAST OF BOLLARD IN CENTER OF SEMI-CIRCULAR END OF THE WARF.

ELEVATION: 175.902m (CGVD28:78)

ELEVATION: 175.460m (CGVD2013) MONUMENT NAME: V010915404

LOCATION: BRASS CAP ON THE SOUTH OF LAKE ROAD, IN THE COUNTY OF ELGIN, IN THE GEOGRAPHIC TOWNSHIP OF SOUTHWOLD, APPROXIMATELY 8.0m SOUTH OF THE CENTRELINE OF LAKE ROAD AND 11.8m EAST OF THE PRODUCTION OF CENTRELINE OF SCOTCH

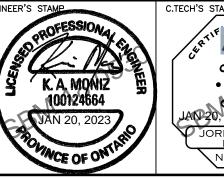
ELEVATION: 214.432m (CGVD28:78)

(CONTRACTOR TO CONFIRM BENCHMARK INFORMATION PRIOR TO CONSTRUCTION)

VERTICAL DATUM NOTE: INFORMATION FROM CGVD28:78 HAS BEEN VERTICALLY ADJUSTED BY -0.442m BASED ON BENCHMARK DATUM VALUES OF 175.902 TO 175.460 TO CONVERT TO CGVD2013 PER NATURAL RESOURCES CANANDA DOCUMENT NRCAN 973006 PORT STANLEY PIER BM

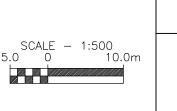
D/M/Y

STRIK BALDINELLI 1599 Adelaide St. N, Unit 301, London, Ontario, N5X 4E8 Tel: (519) 471-6667 Fax: (519) 471-0034 Email: sbm@sbmltd.ca









REFER TO NOTES, LEGEND, AND DETAILS ON SHEET 1, 17, 18 & 19 SUBDIVISION GRADING PLAN — SOUTHWEST & SBM-18-0530

TYP. SWALE DETAIL

RESTORE GRASSED AREAS

w/ 150mm MIN TOPSOIL

AND NURSERY SOD TYP.-

KETTLE CREEK SUBDIVISION

SWM POND GRADING PLAN

GRADE

3:1(33%) MAX. SLOPE

200 MIN. TYP. DEPTH

- 230 MIN. OFR DEPTH ADJ.

TO SUPER STRUCTURE

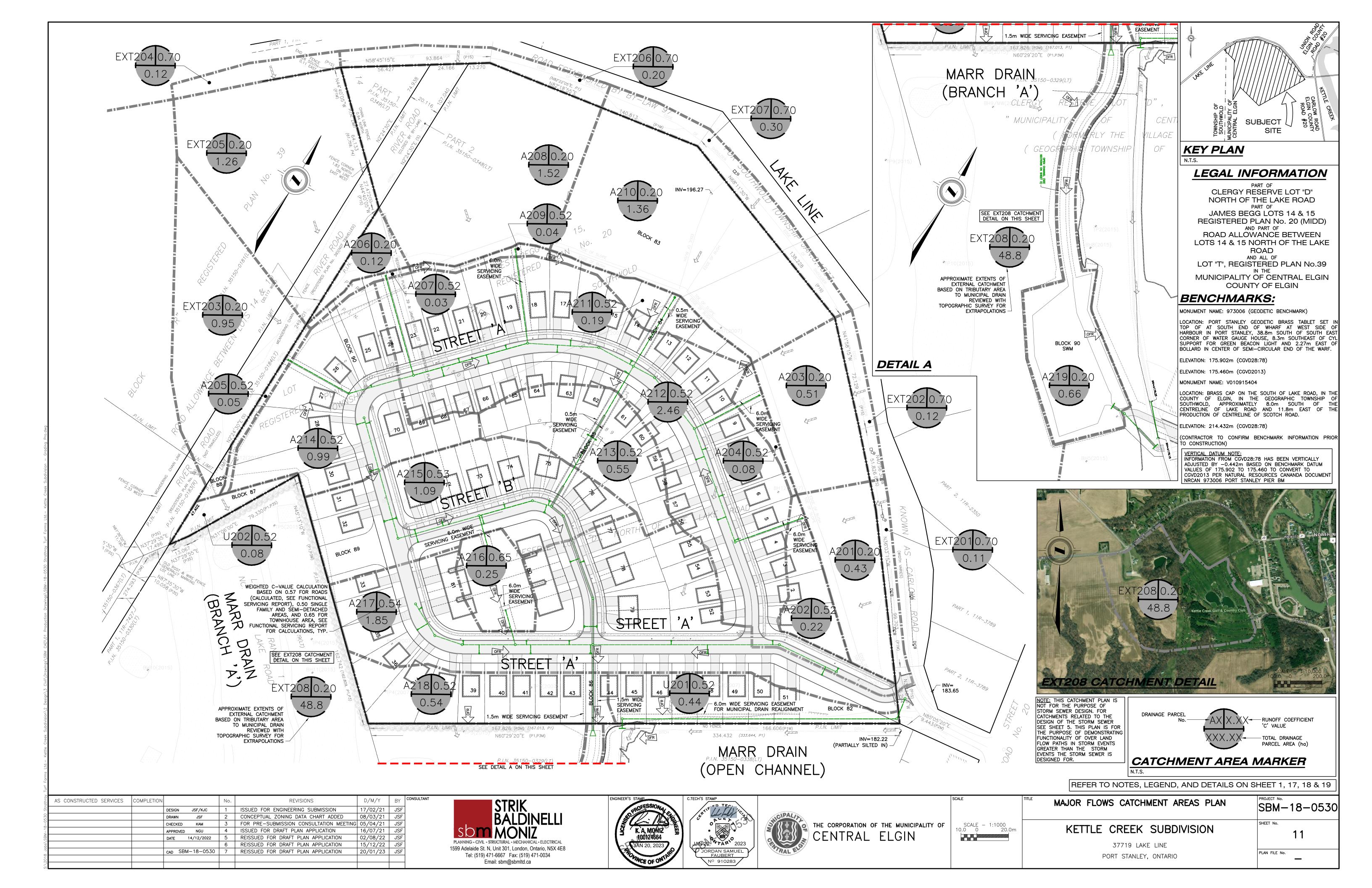
37719 LAKE LINE PLAN FILE No. PORT STANLEY, ONTARIO

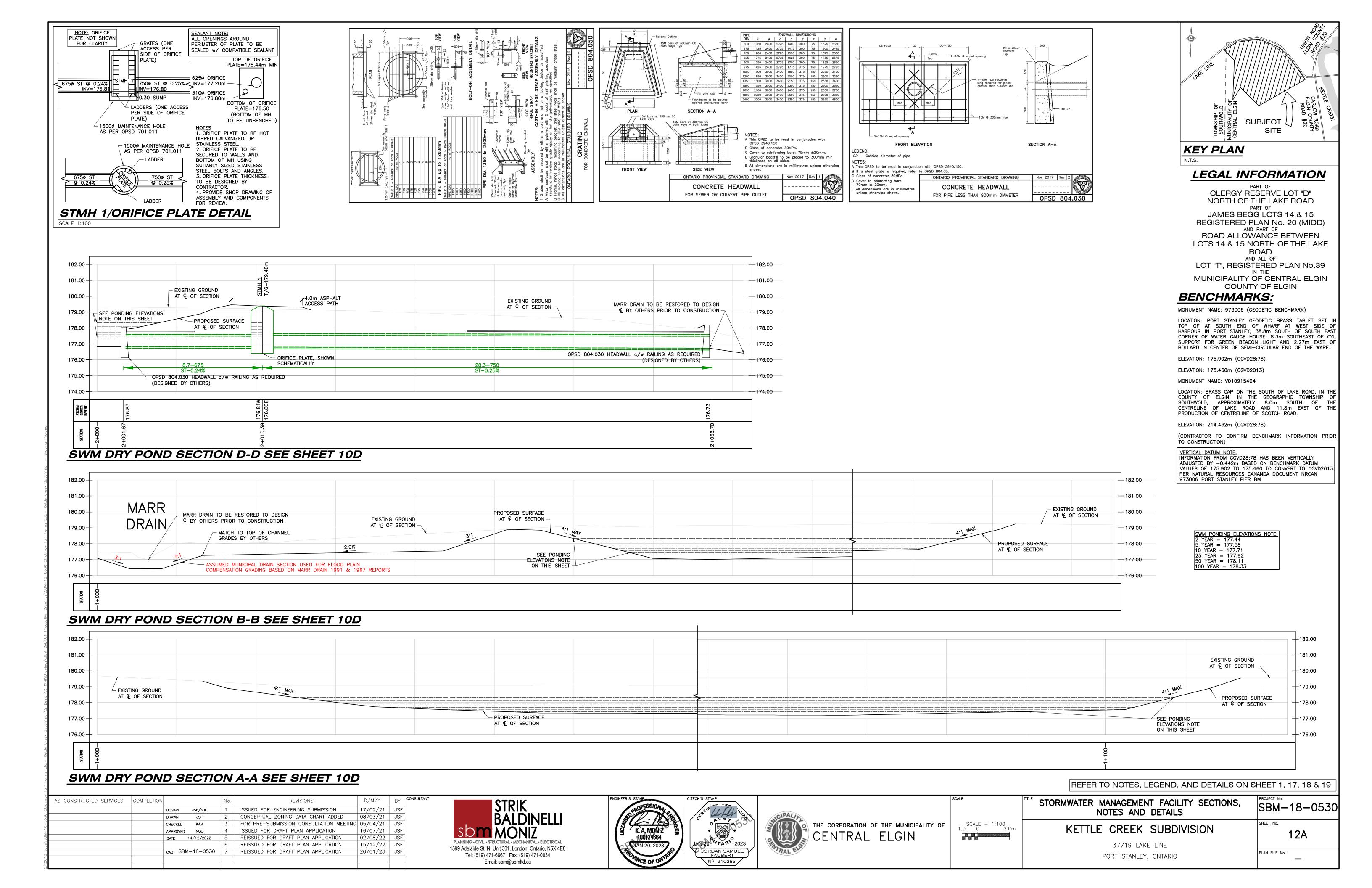
AS REQ'D

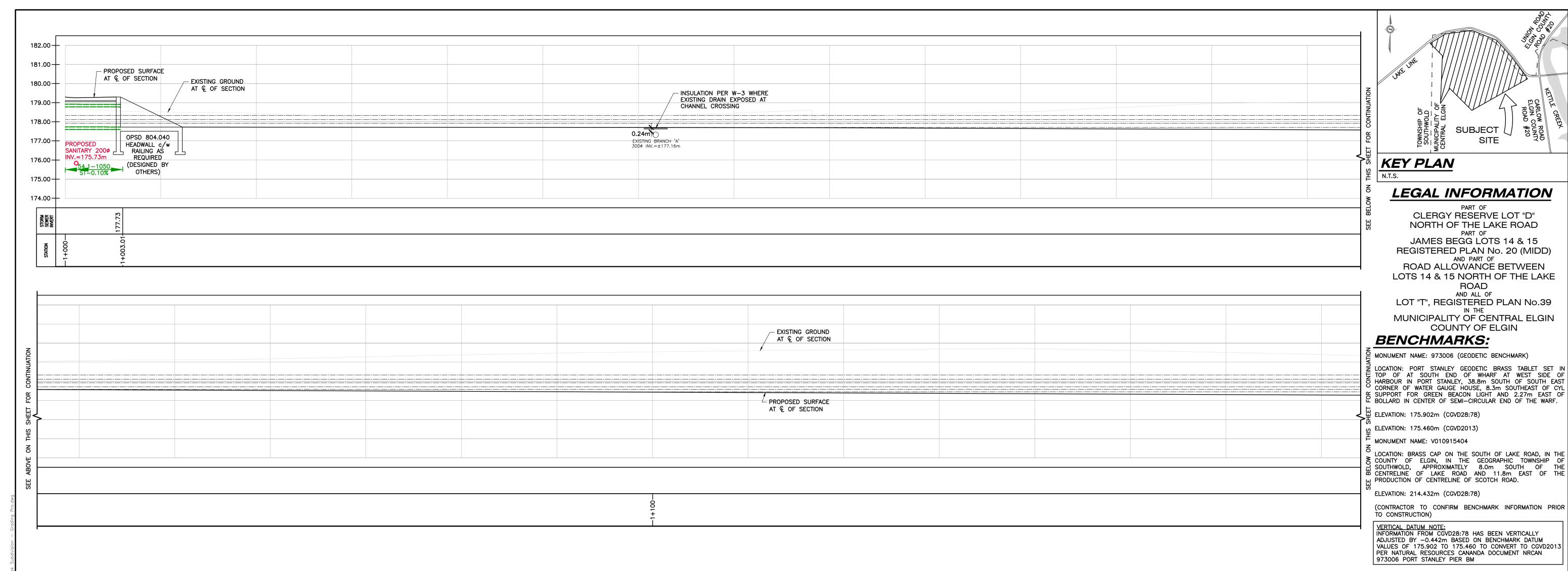
AS REQ'D

AS CONSTRUCTED SERVICES | COMPLETION REVISIONS 17/02/21 | JSF ISSUED FOR ENGINEERING SUBMISSION 08/03/21 JSF CONCEPTUAL ZONING DATA CHART ADDED FOR PRE-SUBMISSION CONSULTATION MEETING CHECKED KAM ISSUED FOR DRAFT PLAN APPLICATION APPROVED NGU/KAM DATE 14/12/2022 REISSUED FOR DRAFT PLAN APPLICATION PLANNING • CIVIL • STRUCTURAL • MECHANICAL • ELECTRICAL REISSUED FOR DRAFT PLAN APPLICATION 15/12/22 JSF CAD SBM-18-0530 REISSUED FOR DRAFT PLAN APPLICATION 20/01/23 | JSF

JAN 20, "TAR" 2023 JORDAN SAMUEL FAUBERT







EXISTING		G ELEVATIONS NOTE ON THIS FEAR STORM NOT SHOWN ON
AT & OF	SECTION THIS SEC	TEAR STORM NOT SHOWN ON TION, LESS THAN PROPOSED FACE ELEVATION AT SECTION
		PROPOSED SURFACE AT © OF SECTION

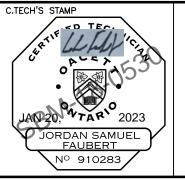
SWM DRY POND SECTION C-C SEE SHEET 10D

RFFFR TO NOTES. LEGEND. AND DETAILS ON SHEET 1, 17, 18 & 19

AS CONSTRUCTED SERVICES COMPLETION REVISIONS ISSUED FOR ENGINEERING SUBMISSION CONCEPTUAL ZONING DATA CHART ADDED FOR PRE-SUBMISSION CONSULTATION MEETING ISSUED FOR DRAFT PLAN APPLICATION REISSUED FOR DRAFT PLAN APPLICATION REISSUED FOR DRAFT PLAN APPLICATION 15/12/22 JSF CAD SBM-18-0530 7 REISSUED FOR DRAFT PLAN APPLICATION 20/01/23 JSF









SCALE - 1:100 1.0 0 2.0m	

		1 10 110	LO, LLC	ALIND, AINL	DETAILS OF	V OI I		, , ,	10 & 13
						ΙP	ROJECT No.		
STORM	WATER	MANAG	EMENT	FACILITY	SECTIONS,		SRM-	_18	-053
		NOTES	AND D	ETAILS			- ואוטנ	10	

		CLIDDIVICION
NEIILE	CKEEN	SUBDIVISION

CREEK SUBDIVISION	12B
37719 LAKE LINE	
PORT STANLEY, ONTARIO	PLAN FILE No.

SITE

PART OF

AND PART OF

ROAD AND ALL OF

IN THE

SWM PONDING ELEVATIONS NOTE: 2 YEAR = 177.44 5 YEAR = 177.58 10 YEAR = 177.71 25 YEAR = 177.92

50 YEAR = 178.11 100 YEAR = 178.33