

- EROSION & SEDIMENT CONTROL NOTES:**
1. EROSION & SEDIMENT CONTROL MEASURES MUST BE INSTALLED PRIOR TO THE COMMENCEMENT OF SITE WORKS.
  2. EROSION & SEDIMENT CONTROLS MUST BE INSPECTED ON A REGULAR BASIS AND AFTER EVERY RAIN FALL EVENT, AND MUST BE MAINTAINED AND REPAIRED IN A TIMELY MANNER TO PREVENT SEDIMENT FROM LEAVING THE SITE.
  3. EXISTING AND PROPOSED CATCHBASINS ARE TO BE PROTECTED WITH FILTER CLOTH AND 150mm OF 50mm STONE COVER DURING CONSTRUCTION.
  4. IT IS REQUIRED TO STABILIZE ALL AREAS THAT WILL REMAIN DISTURBED FOR MORE THAN 30 DAYS.
  5. MUD MAT, SILT FENCE, AND CATCHBASIN PROTECTION ARE NOT TO BE REMOVED UNTIL COMPLETION OF CONSTRUCTION.

1	ISSUED FOR 2ND SUBMISSION SPA	2019/SEPT/27
0	ISSUED FOR 1ST SUBMISSION SPA	2019/JAN/14
No.	ISSUE / REVISION	YYYY/MM/DD

**ELEVATION NOTE:**  
 ELEVATIONS ARE RELATED TO THE CANADIAN GEODETIC VERTICAL DATUM: 1978, AND ARE REFERRED TO STATION #008197988442 (VERTICAL ORDER: 1) LOCATED AT LATITUDE 43°3'18" NORTH, LONGITUDE 80°18'48" WEST. TABLET IN SOUTH FACE OF STONE FOUNDATION OF BRICK HOUSE (MUN. #173146). ELEVATION = 472.478 m. LOCAL BENCHMARKS WERE ESTABLISHED ON THE TOP OF TWO FIRE HYDRANTS AS SHOWN ON THE PLAN.

**SURVEY NOTES:**  
 SURVEY COMPLETED BY P.J. WILLIAMS (2018/DEC/18)  
 SURVEY COMPLETED BY CULLEN & ASSOCIATES (2017/NOV/13)  
 REFERENCE No.: 17-186  
 DISTANCES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

**SITE PLAN NOTES:**  
 DESIGN ELEMENTS ARE BASED ON SITE PLAN BY LINE ARCHITECT  
 DRAWING No.: A101, REV.1 (2019/SEPT/24)  
 PROJECT No.: 1731

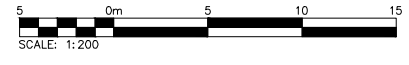
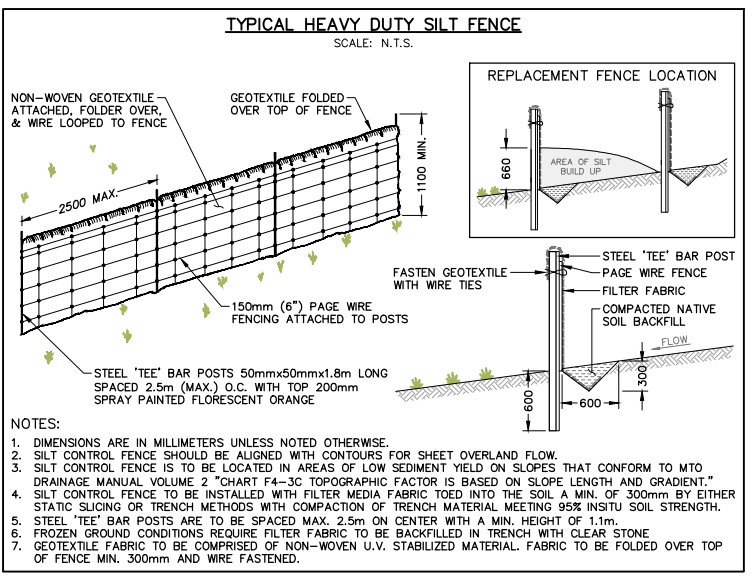
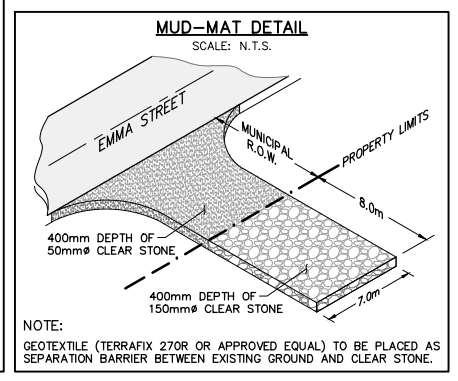
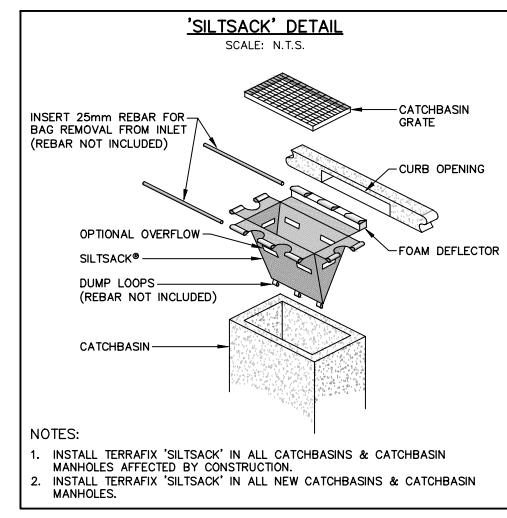
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 ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

Project  
**GOLDEN CANADIAN HOMES INC.**  
 100,108 & 114 EMMA ST SOUTH  
 GRAND VALLEY

Drawing  
**REMOVALS, EROSION & SEDIMENT CONTROL PLAN**



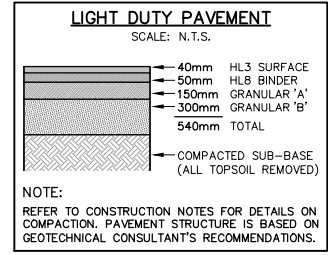
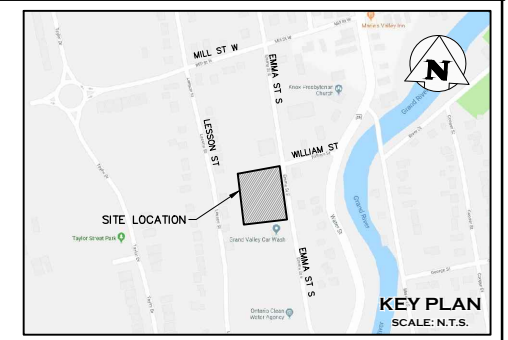
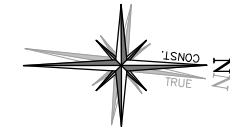
Stamp  
**CROZIER & ASSOCIATES**  
 Consulting Engineers  
 2800 HIGH POINT DRIVE  
 SUITE 100  
 MILTON, ON L9T 6P4  
 905 875-0026 T  
 905 875-4915 F  
 WWW.CFCROZIER.CA



**NOTE:**  
REGIONAL FLOOD ELEVATION = 455.33 m  
100-YEAR FLOOD LEVEL = 453.74 m

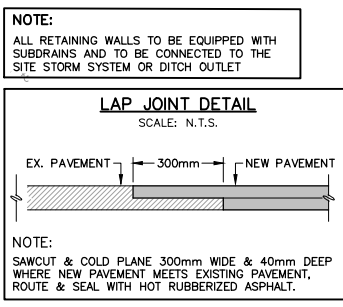
**NOTE:**  
SLOPE STABILITY TO BE VERIFIED BY A  
GEOTECHNICAL ENGINEER

**NOTE:**  
THE ROW THAT IS DISTURBED TO BE  
RESTORED WITH MINIMUM 150 mm TOP  
SOIL AND SOD.



**LEGEND**

- PROPERTY LINE
- EXISTING CONTOUR (0.5m)
- EXISTING CONTOUR (1.0m)
- EXISTING DITCH
- PRE DEVELOPMENT REGIONAL WATER LEVEL
- POST DEVELOPMENT REGIONAL WATER LEVEL
- EXISTING FENCE
- EXISTING GRADE
- PROPOSED GRADE
- PROPOSED GRADE (TO MATCH EXISTING)
- PROPOSED MINOR FLOW DIRECTION
- PROPOSED GRASSED SWALE
- PROPOSED SLOPE (3:1 MAX.)
- EXTENTS OF WORK
- BUILDING ENTRANCE (PERSONNEL DOOR)
- PROPOSED MAJOR OVERLAND FLOW DIRECTION
- PROPOSED FIRE HYDRANT & GATE VALVE
- PROPOSED SIAMESE (FIRE DEPT.) CONNECTION
- PROPOSED RETAINING WALL



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**SURVEY NOTES:**  
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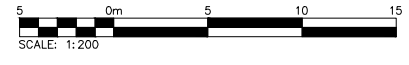
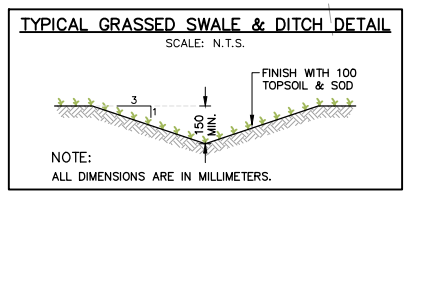
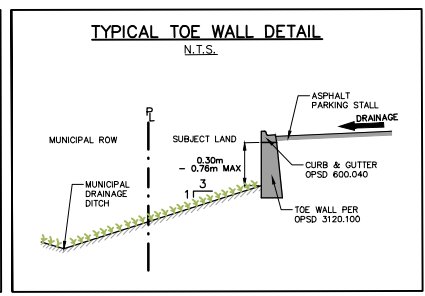
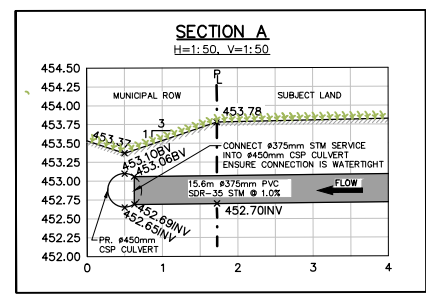
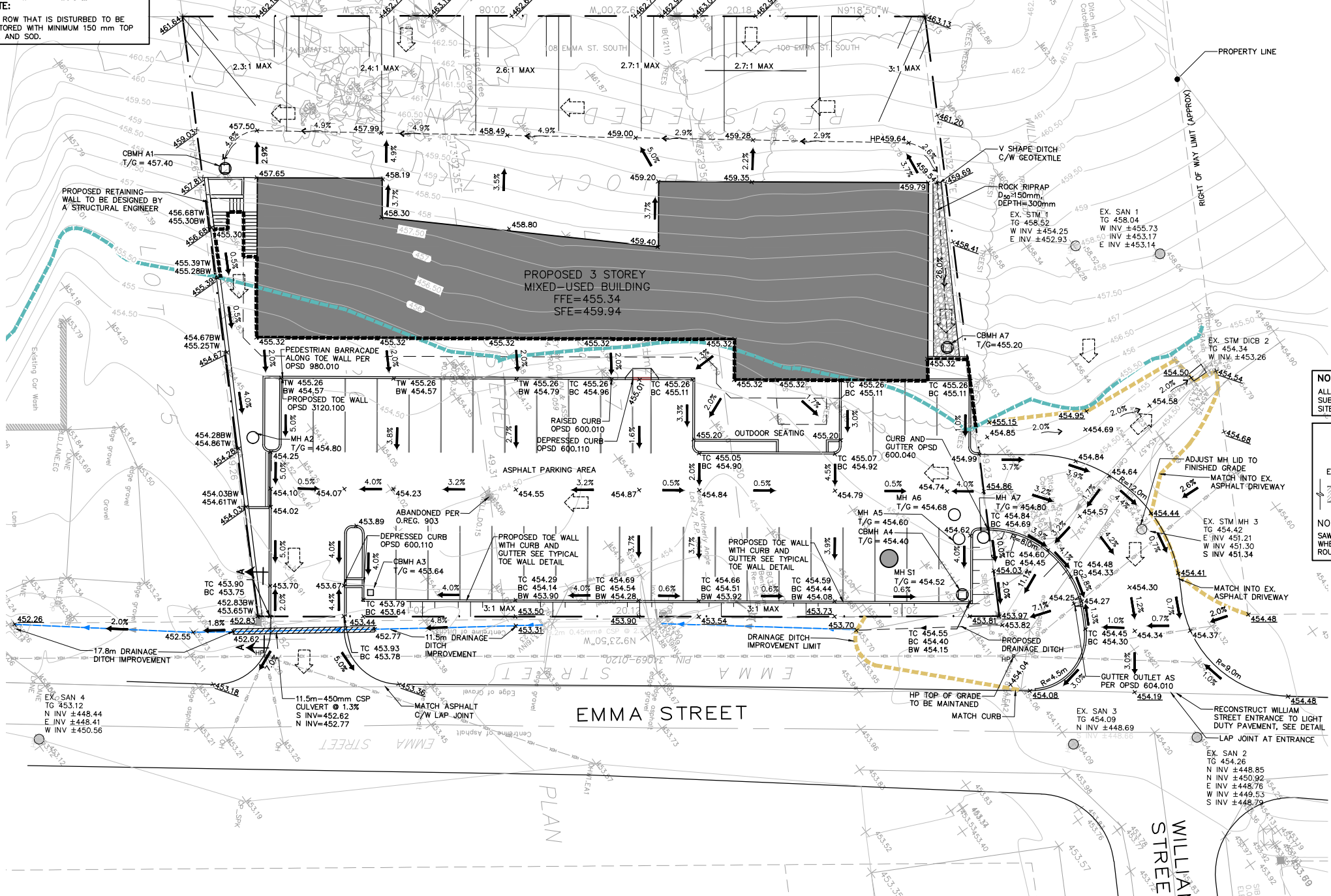
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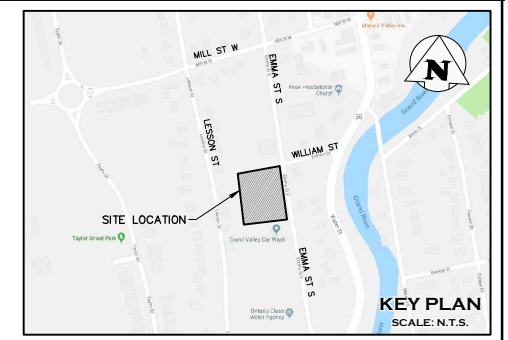
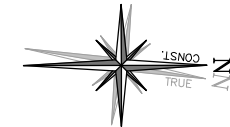
Project  
**GOLDEN CANADIAN HOMES INC.**  
100,108 & 114 EMMA ST SOUTH  
GRAND VALLEY

Drawing  
**SITE GRADING PLAN**

Stamp  
**CROZIER & ASSOCIATES**  
Consulting Engineers  
2800 HIGH POINT DRIVE  
SUITE 100  
MILTON, ON L9T 6P4  
905 875-0026 T  
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WWW.CFCROZIER.CA

Drawn	P.S.	Design	P.S.	Project No.	1476-4787
Check	S.C.S.	Check	J.A.	Scale	1:200
				Dwg.	C102





**LEGEND**

- PROPERTY LINE
- EXISTING WATERMAIN & GATE VALVE
- EXISTING STORM SEWER & MANHOLE
- EXISTING SINGLE / DOUBLE CATCHBASIN
- EXISTING SANITARY SEWER & MANHOLE
- PROPOSED WATERMAIN & GATE VALVE
- PROPOSED WATER SERVICE LATERAL (XXmm)
- PROPOSED FIRE HYDRANT & GATE VALVE
- PROPOSED SIAMESE CONNECTION
- PROPOSED WATER METER
- PROPOSED BACKFLOW PREVENTOR
- PROPOSED STORM SEWER & MANHOLE
- PROPOSED SINGLE / DOUBLE CATCHBASIN
- PROPOSED SANITARY SEWER & MANHOLE
- PROPOSED SAN. SERVICE LATERAL (XXmm)
- PROPOSED ELECTRICAL TRANSFORMER

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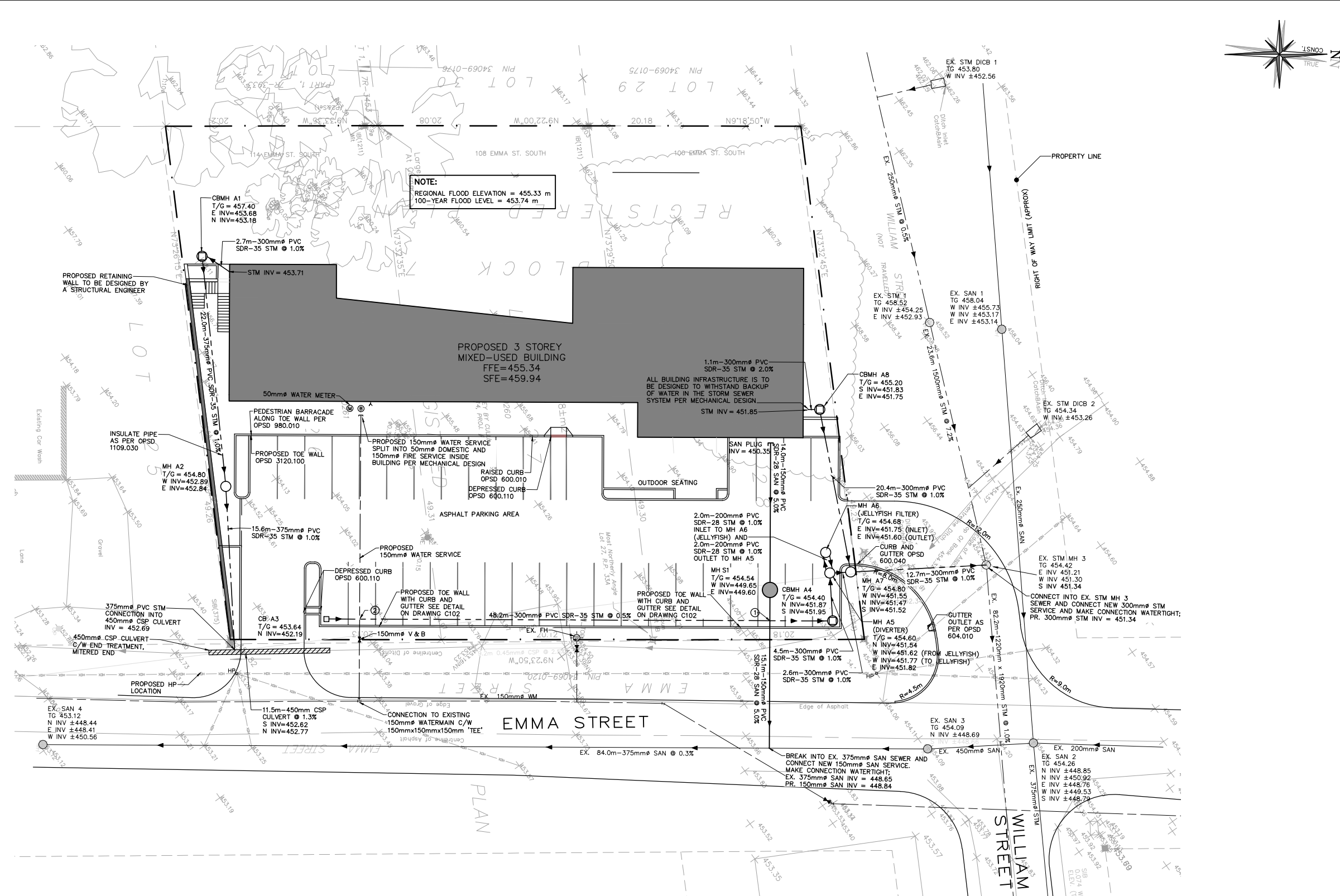
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**GOLDEN CANADIAN HOMES INC.**  
100,108 & 114 EMMA ST SOUTH  
GRAND VALLEY

Drawing  
**SITE SERVICING PLAN**

Stamp  
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2800 HIGH POINT DRIVE  
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Drawn	P.S.	Design	P.S.	Project No.	1476-4787
Check	S.C.S.	Check	J.A.	Scale	1:200
				Dwg.	C103



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100-YEAR FLOOD LEVEL = 453.74 m

**STORM STRUCTURES**

I.D.	T/G	SIZE	OPSD	COVER	OPSD
STM CBM H A1	457.40	1200	701.010	401.010	
STM MH A2	454.80	1200	701.010	401.030	
STM CB A3	453.64	1200	701.010	401.010	
STM CBM H A4	454.40	1200	701.010	401.010	
STM MH A5 (DIVERTER)	454.60	1500	701.011	401.030	
STM MH A6 (JELLYFISH FILTER)	454.68	1200	701.010	401.030	
STM MH A7	453.80	1200	701.010	401.030	
STM CBM H A8	455.20	1200	701.010	401.010	

**SANITARY STRUCTURES**

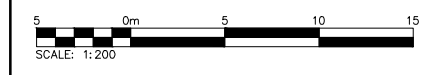
I.D.	T/G	SIZE	OPSD	COVER	OPSD
SAN MH S1	454.54	1200	701.010	401.030	

**CROSSINGS (VERTICAL)**

①	STM INV 451.98 SAN OBV 448.87
②	STM INV 452.17 WTR OBV 451.67

**NOTE:**  
SLOPE STABILITY TO BE VERIFIED BY A GEOTECHNICAL ENGINEER

**LOCATES NOTE:**  
ALL EXISTING ABOVE GROUND AND BELOW GROUND INFRASTRUCTURE/UTILITIES SHOWN ON THIS PLAN ARE LOCATED APPROXIMATELY FOR INFORMATION PURPOSES ONLY. THE CONTRACTOR WILL VERIFY BOTH HORIZONTAL AND VERTICAL LOCATIONS OF ALL THE EXISTING ABOVE GROUND AND BELOW GROUND INFRASTRUCTURE/UTILITIES PRIOR TO THE START OF ANY CONSTRUCTION WORKS ON THE SITE OR IN THE MUNICIPAL RIGHT OF WAY. ANY DISCREPANCIES WILL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION.



**GENERAL NOTES:**

- THE POSITION OF POLE, LINES, CONDUITS, STORM SEWER AND OTHER UNDERGROUND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE CONTRACT DRAWING AND WHERE SHOWN, THE ACCURACY AND STRUCTURES OF THE POSITION OF SUCH UTILITIES IS NOT GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL INFORM HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM.
- ALL WORK TO CONFORM WITH MINISTRY OF ENVIRONMENT & GRCA, TOWN OF GRAND VALLEY, ORANGEVILLE HYDRO STANDARDS AND ONTARIO PROVINCIAL STANDARDS SPECIFICATIONS.
- FOR ALL CONSTRUCTION DETAILS NOT SHOWN ON PLANS, REFERENCE SHALL BE MADE TO THE ONTARIO PROVINCIAL STANDARD DRAWINGS.
- THE CONTRACTOR MUST INSTALL ALL SEDIMENT CONTROL DEVICES PRIOR TO THE COMMENCEMENT TO SITE GRADING WORKS. SILT LADEN WATER MUST NOT BE PERMITTED TO ENTER INTO ANY EXISTING CATCH BASINS, INLETTING STRUCTURES, OR WATERCOURSES. ADDITIONAL CONTROL AS DEEMED REQUIRED BY THE AUTHORITIES AND/OR THE ENGINEER DURING CONSTRUCTION ACTIVITIES SHALL BE PROVIDED BY THE CONTRACTOR. THE CONTRACTOR MUST INSPECT SEDIMENT CONTROLS ON A REGULAR BASIS AND AFTER EVERY RAINFALL EVENT; REPAIRS MUST BE DONE IN A TIMELY MANNER TO PREVENT SEDIMENT FROM ENTERING ANY WATER SYSTEMS. ADDITIONAL SILT FENCING MUST BE AVAILABLE IN CASE IMMEDIATE REPAIR IS REQUIRED.
- ALL DIMENSIONS, ELEVATIONS AND OTHER INFORMATION SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE CONTRACTOR 72 HOURS PRIOR TO ANY CONSTRUCTION. ANY DISCREPANCIES FOUND MUST BE REPORTED IMMEDIATELY TO THE ENGINEER.
- ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE TOWN OF GRAND VALLEY ENGINEERING STANDARDS AND OPS STANDARDS, WHERE CONFLICT OCCURS, TOWN STANDARDS TO GOVERN.
- THE OWNER'S ENGINEER SHALL PROVIDE BENCHMARK ELEVATIONS AND HORIZONTAL ALIGNMENT REFERENCE FOR THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DETAILED LAYOUT OF THE WORK.
- ALL PROPERTY BARS TO BE PRESERVED AND REPLACED BY O.L.S. AT CONTRACTOR'S EXPENSIVE IF REMOVED DURING CONSTRUCTION.
- EXCAVATION AND GRADING TO BE IN ACCORDANCE WITH OPSS:MUNI 206 AND OPSS:MUNI 510.
- TRENCH BACKFILL TO BE SELECT NATIVE OR IMPORTED SELECT SUBGRADE MATERIAL IN ACCORDANCE WITH OPSS:MUNI 1010. BACKFILL TO BE PLACED IN MAXIMUM 200 mm THICK LIFTS AND COMPACTED TO A DRY DENSITY OF AT LEAST 95% OF THE MATERIAL'S STANDARD PROCTOR MAXIMUM DRY DENSITY (SPMDD).
- PIPE EMBEDMENT TO BE COMPACTED TO A DRY DENSITY OF AT LEAST 95% OF THE MATERIAL'S SPMDD. BACKFILL AND EMBEDMENT IN ACCORDANCE WITH OPSS 802.010 (FLEXIBLE PIPE), GRANULAR 'A' EMBEDMENT OR OPSS 802.030, OPSS 802.031 OR 802.032 (RIGID PIPE) CLASS 'B', GRANULAR 'A' BEDDING, GRANULAR 'B' COVER (MAX. AGGREGATE SIZE 25 mm), MINIMUM BEDDING DEPTH 150 mm, MINIMUM COVER DEPTH 300 mm ON ALL PIPES.
- CLEAR STONE WRAPPED IN FILTER FABRIC MAY BE SUBSTITUTED FOR BEDDING MATERIAL IF APPROVED BY THE ENGINEER.
- GENERAL INSTALLATION AND TESTING OF SEWERS, WATERMAIN AND APPURTENANCES TO BE IN ACCORDANCE WITH OPSS 407, 408, 409 (CCTV), OPSS:MUNI 410, OPSS:MUNI 421, AND OPSS:MUNI 441 AND ALL SPECIFICATIONS REFERENCED WITHIN THESE SECTIONS.
- ALL STRUCTURES TO BE BACKFILLED WITH GRANULAR 'B', COMPACTED TO AT LEAST 95% OF THE MATERIAL'S SPMDD.
- ALL STRUCTURES TO BE INSTALLED WITH FROST STRAPS IN ACCORDANCE WITH OPSS 701.100.
- PIPE SUPPORT AT ALL STRUCTURES IN ACCORDANCE WITH OPSS 708.020.
- ALL TOPSOIL AND EARTH EXCAVATION TO BE STOCKPILED OR REMOVED IN ACCORDANCE WITH OPSS 180 TO AN APPROVED SITE AS DIRECTED BY ENGINEER
- CLEARING AND GRUBBING TO BE COMPLETED IN ACCORDANCE WITH OPSS 201.
- THE CONTRACTOR SHALL MAKE HIS OWN ARRANGEMENTS FOR THE SUPPLY OF TEMPORARY WATER AND POWER.
- DEWATERING TO BE CARRIED OUT IN ACCORDANCE WITH OPSS:MUNI 517 AND OPSS:MUNI 518 TO MAINTAIN ALL TRENCHES IN A DRY CONDITION. A MOECC PERMIT TO TAKE WATER HAS NOT BEEN OBTAINED FOR THIS PROJECT. CONTRACTOR TO ENSURE ALL DEWATERING WORKS ARE IN ACCORDANCE WITH PROVINCIAL SPECIFICATIONS.
- ALL ENGINE DRIVEN PUMPS TO BE ADEQUATELY SILENCED, SUITABLE FOR OPERATION IN A RESIDENTIAL DISTRICT.
- REINSTATEMENT OF ALL DISTURBED AREAS TO INCLUDE REGRADING, PLACEMENT OF MIN. 150 mm TOPSOIL, SEED AND MULCH IN ACCORDANCE WITH OPSS 802 AND OPSS:MUNI 804.
- DISTURBED AREAS TO BE RENESTATED TO PREVIOUS CONDITION OR BETTER.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL PRESERVATION OF ALL EXISTING INFRASTRUCTURE/FACILITIES AS WELL AS NOTIFYING ALL UTILITY COMPANIES PRIOR TO COMMENCING WORK AND CO-ORDINATE CONSTRUCTION ACCORDINGLY.
- THE CONTRACTOR SHALL SUPPLY ALL NECESSARY WATER AND/OR CALCIUM CHLORIDE AS REQUIRED FOR COMPACTION AND/OR DUST CONTROL. DUST SUPPRESSANTS SHALL BE USED IN ACCORDANCE WITH OPSS 506.

**SEWER NOTES:**

- MAINTENANCE HOLE COVERS ARE TO BE WATER TIGHT AS PER OPSS 401.030
- STORM SEWER PIPE BEDDING AS PER OPSS 802.03 TO BE CLASS 'B' BEDDING WITH SAND BACKFILL COMPACTED 95% STANDARD PROCTOR DENSITY.
- ALL SINGLE CATCHBASIN LEADS TO BE 300MM PVC SDR 35 UNLESS OTHERWISE SPECIFIED. ALL DOUBLE CATCHBASIN LEADS TO BE 300MM UNLESS OTHERWISE SPECIFIED.
- ALL MANHOLES TO BE BENCH TO SPRINGLINE.
- ALL MANHOLE AND CATCHBASIN EXCAVATIONS TO BE BACKFILLED WITH GRANULAR 'B' COMPACTED TO 95% STANDARD PROCTOR DENSITY.
- MODULOC OR APPROVED MANHOLE AND CATCHBASIN ADAPTERS TO BE USED IN LIEU OF BRICKING. MAXIMUM OF THREE CAN BE USED PER ADJUSTMENT.
- ALL MATERIAL TO COMPLY WITH CSA, OPSS AND TOWN STANDARDS.
- STORM SEWER - PVC SDR 35
- SANITARY SERVICE - PVC SDR 28
- WATER SERVICE - POLYETHYLENE SERIES 160 MUNICIPAL SERVICE TUBING, COPPER TUBE SIZE TO CSA B137.1-09.
- WATERMAIN - PVC DR18
- FILTER FABRIC - TERRAFIX 270R OR APPROVED EQUAL
- SUBDRAINS - PERFORATED BIG 'O' SUBDRAIN WRAPPED IN FILTER FABRIC.

**GENERAL NOTES:**

- PRIOR TO STARTING ANY WORKS, THE CONTRACTOR MUST ENSURE THAT ALL NECESSARY APPROVALS ARE IN PLACE FROM THE TOWN OF GRAND VALLEY AND OTHER EXTERNAL AGENCIES, AS REQUIRED.
- ALL WORK SHALL BE CARRIED OUT IN COMPLIANCE WITH THE APPLICABLE HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS.
- ALL WORK AND MATERIALS TO CONFORM WITH THE CURRENT PROVINCIAL BUILDING CODE, MINISTRY OF THE ENVIRONMENT OF ONTARIO, TOWN OF GRAND VALLEY, ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS, LOCAL UTILITY STANDARDS AND MINISTRY OF TRANSPORTATION STANDARD DRAWINGS WILL APPLY WHERE REQUIRED.
- FOR ALL CONSTRUCTION DETAILS NOT SHOWN ON THE DRAWINGS, REFERENCE SHALL BE MADE TO THE DESIGN STANDARDS OF THE TOWN OF GRAND VALLEY OR OPSS.
- THE CONTRACTOR IS ADVISED THAT WORKS BY OTHERS MAY BE ONGOING DURING THE PERIOD OF THIS CONTRACT. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH ALL OTHER CONTRACTORS AND PREVENT CONSTRUCTION CONFLICTS.
- THE INFORMATION SHOWN FOR EXISTING UTILITIES WAS PROVIDED BY OTHERS. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UTILITIES DURING CONSTRUCTION. ALL EXISTING UTILITIES MUST BE LOCATED AND VERIFIED BY EACH PROVIDER PRIOR TO COMMENCEMENT OF WORK. ANY VARIANCE IS TO BE REPORTED TO THE ENGINEER 48 HRS PRIOR TO CONSTRUCTION. LOST TIME AND/OR ANY ADDITIONAL WORKS DUE TO FAILURE OF THE CONTRACTOR TO CONFIRM UTILITY LOCATIONS AND NOTIFY THE ENGINEER OF ANY CONFLICTS 48 HRS PRIOR TO CONSTRUCTION WILL BE AT THE CONTRACTORS EXPENSE.
- RETAINING WALLS GREATER THAN 1.0m IN HEIGHT TO BE DESIGNED AND APPROVED BY A STRUCTURAL ENGINEER.

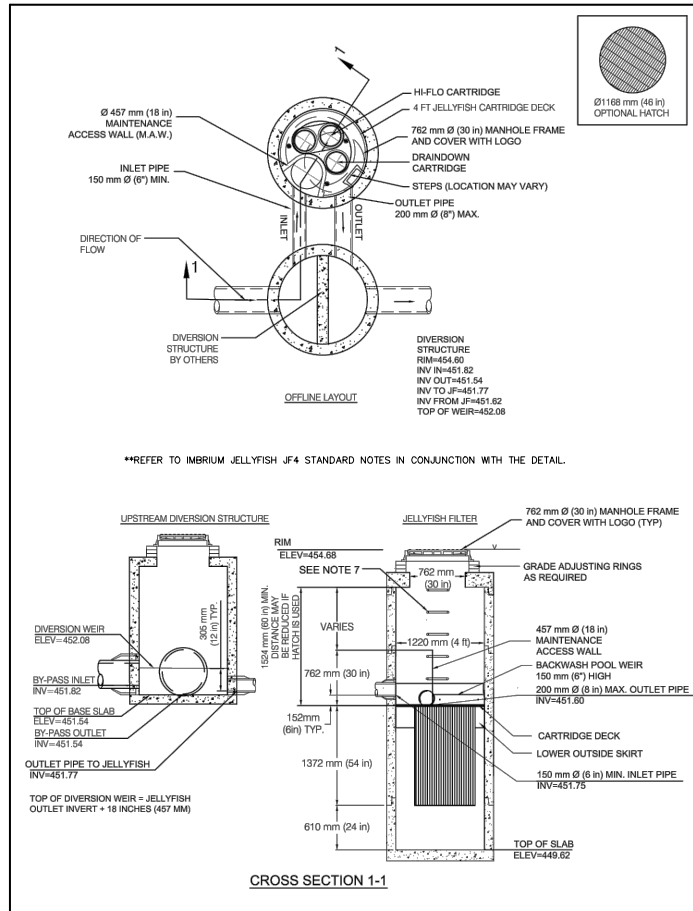
**SURFACE WORKS NOTES:**

- ALL GRANULAR BASE COURSE MATERIALS TO BE COMPACTED TO 100% STANDARD PROCTOR DENSITY
- ASPHALT TO BE CONSTRUCTED AS PER THE GEOTECHNICAL REPORT BY CENTRAL EARTH ENGINEERING DATED JANUARY 26, 2018:  
40MM OPSS HL3 TOP COURSE ASPHALT  
50MM OPSS HLB BASE COURSE ASPHALT  
150MM OPSS GRANULAR 'A' OR 19MM CRUSHER RUN - LIMESTONE BASE  
300MM OPSS GRANULAR 'B' TYPE 1 OR 50MM CRUSHER RUN LIMESTONE SUBBASE
- ALL DISTURBED GRASSED AREAS AND EXISTING DITCHES TO BE RESTORED WITH 150MM (MIN) THICK TOPSOIL (UNLESS OTHERWISE NOTED) AND HYPOSEED.
- ALL DISTURBED GRASSED AREAS ADJACENT TO STORM OUTFALLS TO BE RESTORED TO ORIGINAL CONDITION.
- CONTRACTOR TO PROVIDE AS-BUILTS UPON COMPLETION OF WORK.
- CONTRACTOR TO PROVIDE COLOUR VIDEO FOR STORM SEWER UPON COMPLETION OF WORK.
- ALL EXISTING CURB THAT IS IN POOR CONDITION OR DAMAGED DURING CONSTRUCTION IS TO BE REPAIRED TO THE SATISFACTION OF THE TOWNSHIP AND SITE ENGINEER.
- SUBGRADE AND BOULEVARD MATERIAL TO BE COMPACTED TO A MINIMUM DRY DENSITY OF AT LEAST 95% SPMDD. SUBGRADE TO BE PROOF ROLLED AND CERTIFIED PRIOR TO PLACING GRANULAR 'B'
- JOINTS WITH EXISTING ASPHALT TO BE SAW CUT STRAIGHT PRIOR TO PLACING NEW ASPHALT. TACK COAT TO BE APPLIED TO EXISTING ASPHALT. LAP JOINTS TO EXISTING ASPHALT TO BE PROVIDED PER DETAIL ON DWG C102.
- SUBDRAINS TO BE PERFORATED, COMPLETE WITH FILTER SOCK CONSTRUCTED IN ACCORDANCE WITH OPSS 405 AND OPSS 216.021, UNWRAPPED TRENCH, GRANULAR 'A' EMBEDMENT.
- CONCRETE BARRIER CURB IN ACCORDANCE WITH OPSS 600.110
- CONCRETE SIDEWALK IN ACCORDANCE WITH OPSS 310.010, OPSS 310.020, OPSS 310.033 AND OPSS 351. SUBBASE TO CONSIST OF 150 mm DEPTH GRANULAR 'A'. MINIMUM SIDEWALK THICKNESS SHALL BE 125 mm. THE THICKNESS SHALL BE INCREASE TO 175 mm WHERE THE SIDEWALK CROSSES THE DRIVEWAY.
- ASPHALT TO BE COMPACTED TO 97% OF THE MARSHALL BULK DENSITY.
- ALL GRANULAR AND ASPHALT MATERIALS AND PLACEMENT TO BE IN ACCORDANCE WITH OPSS:MUNI 314 AND OPSS 310.
- PAVEMENT MARKINGS - ORGANIC SOLVENT BASED OR WATER-BOURNE TRAFFIC PAINT COMPLETE WITH GLASS BEADS. SYMBOLS TO BE DURABLE HOT APPLIED THERMOSTATIC MARKING MATERIAL IN ACCORDANCE WITH OPSS 1713, OR FIELD REACTED POLYMERIC PAVEMENT MARKING MATERIALS IN ACCORDANCE WITH OPSS 1714.

**GRADING NOTES:**

- PRIOR TO COMMENCEMENT OF GRADING WORKS ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AND OPERATIONAL. THE CONTRACTOR SHALL MAINTAIN ALL WORKS UNTIL SERVING CONSTRUCTION IS COMPLETED TO THE SATISFACTION OF THE ENGINEER AND THE TOWNSHIP OF EAST GARAFRAXA.
- ALL GRANULAR BASE AND SUB-BASE COURSE MATERIALS SHALL BE COMPACTED TO 100% STANDARD PROCTOR MAXIMUM DRY DENSITY.
- CONTRACTOR TO OBTAIN A ROAD OCCUPANCY PERMIT 48 HOURS PRIOR TO COMMENCING ANY WORK WITHIN THE MUNICIPAL ROAD ALLOWANCE IF REQUIRED BY THE MUNICIPALITY OR THE COUNTY.
- EMBANKMENTS TO BE SLOPED AT MAX 3:1, UNLESS OTHERWISE SPECIFIED.
- SEDIMENT CONTROL TO BE PROVIDED AT CATCH BASINS AND CATCH BASIN MANHOLES UPON INSTALLATION OF STRUCTURES AS PER DETAIL PROVIDED.
- CONTRACTOR WILL BE RESPONSIBLE FOR ALL REMOVALS AS REQUIRED TO FACILITATE NEW CONSTRUCTION. ALL EXISTING STRUCTURES, VALVES, ETC. ARE TO BE ADJUSTED TO PROPOSED ELEVATIONS.
- EXISTING ELEVATION AT MATCH POINTS, AS SHOWN ON PLANS, ARE TO BE CONFIRMED BY THE CONTRACTOR 72 HOURS PRIOR TO MOBILIZATION OF FORCES. LOST TIME AND/OR ANY ADDITIONAL WORKS DUE TO FAILURE OF THE CONTRACTOR TO CONFIRM EXISTING ELEVATIONS AND NOTIFY THE ENGINEER OF POSSIBLE CONFLICTS 72 HOURS PRIOR TO MOBILIZATION WILL BE AT THE EXPENSE OF THE CONTRACTOR.
- WHERE SAND OCCURS REPLACE WITH A LAYER OF SILTY CLAY TILL MATERIAL. THICKNESS TO BE DETERMINED BY SOIL ENGINEER COMPACTED TO 95% OF STANDARD PROCTOR DRY DENSITY.

**JELLYFISH JF4 STANDARD DETAIL**



1	ISSUED FOR 2ND SUBMISSION SPA	2019/SEPT/27
0	ISSUED FOR 1ST SUBMISSION SPA	2019/JAN/14
No.	ISSUE / REVISION	YYYY/MM/DD

**ELEVATION NOTE:**  
ELEVATIONS ARE RELATED TO THE CANADIAN GEODETIC VERTICAL DATUM: 1978, AND ARE REFERRED TO STATION #00819798842 (VERTICAL ORDER: 1) LOCATED AT LATITUDE 43°3'18" NORTH, LONGITUDE 80°18'48" WEST. TABLET IN SOUTH FACE OF STONE FOUNDATION OF BRICK HOUSE (MUN. #173146). ELEVATION = 472.478 m. LOCAL BENCHMARKS WERE ESTABLISHED ON THE TOP OF TWO FIRE HYDRANTS AS SHOWN ON THE PLAN.

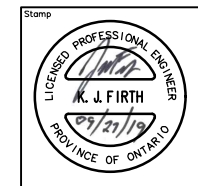
**SURVEY NOTES:**  
SURVEY COMPLETED BY P.J. WILLIAMS (2018/DEC/18)  
SURVEY COMPLETED BY CULLEN & ASSOCIATES (2017/NOV/13)  
REFERENCE No.: 17-186  
DISTANCES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

**SITE PLAN NOTES:**  
DESIGN ELEMENTS ARE BASED ON SITE PLAN BY LINE ARCHITECT  
DRAWING No.: A101, REV.1 (2019/SEPT/24)  
PROJECT No.: 1731

**DRAWING NOTES:**  
THIS DRAWING IS THE EXCLUSIVE PROPERTY OF C.F. CROZIER & ASSOCIATES INC. AND THE REPRODUCTION OF ANY PART OF IT WITHOUT PRIOR WRITTEN CONSENT OF THIS OFFICE IS STRICTLY PROHIBITED.  
THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, LEVELS, AND DATUMS ON SITE AND REPORT ANY DISCREPANCIES OR OMISSIONS TO THIS OFFICE PRIOR TO CONSTRUCTION. THIS DRAWING IS TO BE READ AND UNDERSTOOD IN CONJUNCTION WITH ALL OTHER PLANS AND DOCUMENTS APPLICABLE TO THIS PROJECT. DO NOT SCALE THIS DRAWING. ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

Project  
**GOLDEN CANADIAN HOMES INC.**  
**100,108 & 114 EMMA ST SOUTH**  
**GRAND VALLEY**

Drawing  
**NOTES AND DETAILS**



Stamp  
**CROZIER & ASSOCIATES**  
Consulting Engineers  
2800 HIGH POINT DRIVE  
SUITE 100  
MILTON, ON L9T 6P4  
905 875-0026 T  
905 875-4915 F  
WWW.CFCROZIER.CA

Drawn	P.S.	Design	P.S.	Project No.	<b>1476-4787</b>
Check	S.C.S.	Check	J.A.	Scale	1:200 Dwg. <b>C104A</b>

**PRECAST CONCRETE MAINTENANCE HOLE**  
1200mm DIAMETER

ONTARIO PROVINCIAL STANDARD DRAWING  
Nov 2014 Rev 5  
OPSD 701.010

**90° CONCRETE OUTLET**  
FOR CONCRETE CURB WITH GUTTER

ONTARIO PROVINCIAL STANDARD DRAWING  
Nov 2006 Rev 1  
OPSD 604.010

**CAST IRON, SQUARE FRAME WITH CIRCULAR WATERTIGHT COVER**  
FOR MAINTENANCE HOLES

ONTARIO PROVINCIAL STANDARD DRAWING  
Nov 2007 Rev 2  
OPSD 401.030

**WALLS RETAINING CONCRETE TOE WALL DETAILS**

ONTARIO PROVINCIAL STANDARD DRAWING  
Nov 2004 Rev 0  
OPSD - 3120.100

**CONCRETE BARRIER CURB WITH STANDARD GUTTER**

ONTARIO PROVINCIAL STANDARD DRAWING  
Nov 2012 Rev 2  
OPSD 600.040

**CONCRETE BARRIER CURB**

ONTARIO PROVINCIAL STANDARD DRAWING  
Nov 2006 Rev 1  
OPSD 600.110

**INSULATION FOR SEWERS AND WATERMAINS IN SHALLOW TRENCHES**

ONTARIO PROVINCIAL STANDARD DRAWING  
Nov 2015 Rev 0  
OPSD 1109.030

1	ISSUED FOR 2ND SUBMISSION SPA	2019/SEPT/27
0	ISSUED FOR 1ST SUBMISSION SPA	2019/JAN/14
No.	ISSUE / REVISION	YYYY/MM/DD

**ELEVATION NOTE:**  
ELEVATIONS ARE RELATED TO THE CANADIAN GEODETIC VERTICAL DATUM: 1978, AND ARE REFERRED TO STATION #008197988442 (VERTICAL ORDER: 1) LOCATED AT LATITUDE 43°53'18" NORTH, LONGITUDE 80°18'48" WEST. TABLET IN SOUTH FACE OF STONE FOUNDATION OF BRICK HOUSE (MUN. #173146). ELEVATION = 472.478 m. LOCAL BENCHMARKS WERE ESTABLISHED ON THE TOP OF TWO FIRE HYDRANTS AS SHOWN ON THE PLAN.

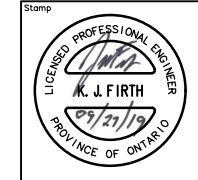
**SURVEY NOTES:**  
SURVEY COMPLETED BY P.J. WILLIAMS (2018/DEC/18)  
SURVEY COMPLETED BY CULLEN & ASSOCIATES (2017/NOV/13)  
REFERENCE No.: 17-186  
DISTANCES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

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Project  
**GOLDEN CANADIAN HOMES INC.**  
100,108 & 114 EMMA ST SOUTH  
GRAND VALLEY

Drawing  
**DETAILS**



2800 HIGH POINT DRIVE  
SUITE 100  
MILTON, ON L9T 6P4  
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Drawn	P.S.	Design	P.S.	Project No.	1476-4787
Check	S.C.S.	Check	J.A.	Scale	1:200 Dwg. C104B