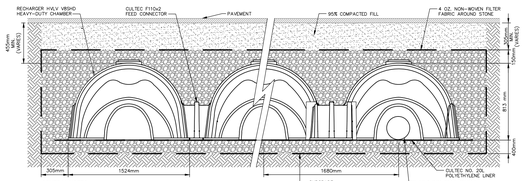


GENERAL NOTES

1. CHAMBER MANUFACTURER: CULTEC, INC. OF BROOKFIELD, CT. STORAGE PROVIDED = 13.515 CUFT/FT/FT/ DESIGN LIMIT. REFER TO CULTEC, INC'S CURRENT RECOMMENDED INSTALLATION GUIDELINES.
2. USE RECHARGER V8HD HEAVY DUTY FOR TRAFFIC AND/OR H20 APPLICATIONS.
3. ALL RECHARGER V8HD HEAVY DUTY UNITS ARE MARKED WITH A COLOR STRIPE FORMED INTO THE PANT ALONG THE LENGTH OF THE CHAMBER.
4. ALL RECHARGER V8HD CHAMBERS MUST BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

CULTEC RECHARGER V8HD HEAVY DUTY TYPICAL CROSS SECTION

N.T.S.

CULTEC MANIFOLD DETAIL

N.T.S.

PIPE INSULATION DETAIL FOR FROST PROTECTION

N.T.S.

STORMWATER MANAGEMENT - SUMMARY

SUB - AREA 'B'

CATCHBASIN NO.	CATCHBASIN TOP ELEV. (m)	PONDING ELEV. 100YR (m)	STORAGE AVAILABLE 100YR (m^3)	STORAGE REQUIRED 100YR (m^3)
CB MH 1	183.75	182.98	1.75	
CB 2	184.15	182.98	0.25	
CULTEC V8HD CHAMBER			62.16	
		TOTAL:	**64.16**	**44.52**

ALLOWABLE FLOW = $0.028\ m^3/s$ (2 yr)
TOTAL RELEASED FLOW = $0.028\ m^3/s$ (2 yr)

USE ZURN CONTROL FLO ROOF DRAINS
MAXIMUM FLOW PER 1 WEIR = 0.124 Ls per cm OF HEAD OF WATER
OR 5.0 USGPM per inch OF HEAD OF WATER
MAXIMUM DISCHARGE FROM ROOF : 0.1939 ha x $0.035m^3/s/ha$ = $0.0068m^3/s$

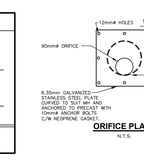
NUMBER OF WEIRS = 6.8 Ls /0.471 Ls = 15
NUMBER OF ROOF DRAINS - 3 DRAINS WITH 5 WEIRS

TOTAL ROOF DISCHARGE - 15x 0.471 L/sec = 7.1 L/sec
PONDING DEPTH = 3.8cm PONDING VOLUME = $73.90m^3$(100YR)

ROOF DISCHARGE RATE TO BE CONTROLLED TO 35.0 L/sec/Ha OF ROOF AREA

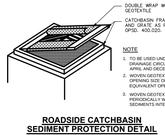
ORIFICE PLATE

N.T.S.



CONTROL MANHOLE - CBMH 1

N.T.S.



NOTE
1. TO BE USED UNDER APPROPRIATE DRAINAGE CIRCUMSTANCES, BETWEEN APRIL AND DECEMBER
2. WOVEN GEOTEXTILE TO HAVE EQUIVALENT OPENING SIZE (EOS) NOT GREATER THAN MANUFACTURER'S RECOMMENDATIONS
3. WOVEN GEOTEXTILE TO BE REPLACED PERIODICALLY WHEN ACCUMULATED SEDIMENTS INTERFERES WITH DRAINAGE.

ROADSIDE CATCHBASIN SEDIMENT PROTECTION DETAIL

N.T.S.

STORM SEWERS

1. ALL STORM SEWER MATERIALS AND CONSTRUCTION METHODS MUST CORRESPOND TO CURRENT MUNICIPAL STANDARDS AND SPECIFICATIONS.
2. BEDDING TO BE TYPE 'B' AS PER **C.W. STD. 2112.040** UNLESS OTHERWISE NOTED.
   a) SEWER BEDDING AND COVER MATERIAL SHALL CONFORM TO **C.W. STDS. 2112.111 AND 2112.100** UNLESS OTHERWISE NOTED.
   b) IF WATER IS PRESENT IN THE TRENCH EXCAVATION, THEN 19mm CLEAR STONE OR 6mm WASHED CRUSHED GRAVEL IS TO BE USED FOR BEDDING IN ACCORDANCE WITH **C.W. STDS. 2112.110 AND 2112.140** RESPECTIVELY.
   c) WHERE WET OR SOFT TRENCH SUBGRADE CONDITIONS ARE ENCOUNTERED, FURTHER ON-SITE GEOTECHNICAL ASSESSMENT MAY BE REQUIRED TO DETERMINE APPROPRIATE BEDDING IN ORDER TO STABILIZE THE SUBGRADE FOR SEWER CONSTRUCTION.
3. STORM SEWERS AND CONNECTIONS **150dia**. AND SMALLER TO BE CONCRETE CL 3, OR PVC SDR-28 PIPE, UNLESS OTHERWISE LISTED.
4. STORM SEWERS AND CONNECTIONS **200dia**. AND LARGER TO BE CONCRETE CL 3, CONCRETE CL 65-D, PVC SDR 35, WITH TYPE 'B' BEDDING THROUGHOUT EXCEPT AT RISERS, UNLESS OTHERWISE NOTED.
5. ALL CATCHBASINS TO BE **OPSD. 705.010**, UNLESS OTHERWISE NOTED.
6. ALL MANHOLES OR CATCHBASIN MANHOLES TO BE SUMPLESS AS PER **OPSD. 701.010**, UNLESS OTHERWISE NOTED.
7. ALL CATCHBASIN FRAME AND GRATES SHALL BE AS PER **OPSD. 400.02**.
8. CATCHBASIN LEADS TO BE **SINGLE - 250dia, DOUBLE - 200dia** UNLESS OTHERWISE NOTED.

SANITARY SEWERS

1. ALL SANITARY SEWER MATERIALS AND CONSTRUCTION METHODS MUST CORRESPOND TO CURRENT REGION OF PEEL STD. & SPEC.
2. SANITARY CONNECTIONS **150dia.** AND LESS TO BE **PVC SDR-28.**
3. SANITARY SEWERS AND CONNECTIONS **200dia.** AND LARGER TO BE **PVC SDR-35** ASTM D3034-81 WITH TYPE 'B' BEDDING THROUGHOUT EXCEPT AT RISERS, UNLESS OTHERWISE NOTED.
4. ALL MANHOLES TO BE **R.P. STD 2-5-3**, UNLESS OTHERWISE NOTED.

WATERMAINS

1. ALL MATERIALS AND CONSTRUCTION METHODS MUST CORRESPOND TO THE CURRENT PEEL PUBLIC WORKS STANDARDS AND SPECIFICATIONS.
2. WATERMAIN AND/OR WATER SERVICE MATERIALS **150dia** AND LARGER MUST BE P.V.C. DR-18 TO AWWA SPEC C900-16, SIZE **150dia**. AND SMALLER MUST BE **SOFT COPPER TYPE 'K' SPEC. ASTM-B88-49.**
3. WATERMAINS AND/OR WATER SERVICES ARE TO HAVE A MIN. DEPTH OF **1.7m** WITH A MIN. HORIZONTAL SPACING OF **1.2m** FROM THEMSELVES AND OTHER UTILITIES.
4. OUTSIDE FINISHED GRADE TO BE **150mm** BELOW BRICK VENEER ELEVATION.
5. PRIOR TO ANY SODDING, THE BUILDER IS TO ENSURE TO THE SOILS CONSULTANT AND/OR THE ENGINEER THAT THE SUBSOIL HAS BEEN SCARIFIED TO A MINIMUM DEPTH OF **150mm** AND THAT THE SUBSOIL IS FREE OF DEBRIS. TOPSOIL AND **NO 1** NURSERY SOD AND A MINIMUM DEPTH OF **150mm** OF TOPSOIL GRANULAR STONE TO BE PROVIDED ON THE ENTIRE LENGTH OF EACH DRIVEWAY ON A FIRM SUBGRADE AND THE DRIVEWAY TO BE PAVED WITH A MINIMUM COMPACTED DEPTH OF **75mm** OF ASPHALT BETWEEN THE CURB AND THE GARAGE.
6. NO SODDING ON ANY LOTS IS PERMITTED UNTIL PRELIMINARY INSPECTION IS DONE BY THE ENGINEER AND THE BUILDER.
7. AT ALL ENTRANCES TO THE SITE THE ROAD CURB AND SIDEWALK WILL BE CONTINUOUS THROUGH THE ENTRANCE. ALL SIDEWALKS WILL BE CONSTRUCTED FLUSH WITH THE EXISTING ON FUTURE SIDEWALK AND CURB DEPRESSION WILL BE PROVIDED FOR DRIVEWAYS.
8. DRIVEWAY GRADES SHOULD NOT BE LESS THAN **2.0%** AND NOT GREATER THAN **9%.**
9. LAWN AND SWALES SHALL HAVE A MINIMUM SLOPE OF **1.0%** (PREFERRED 2%) AND A MAXIMUM SLOPE OF **6%.**
10. ALL LIVE TAPPING AND OPERATION OF SEWER AND WATER VALVES SHALL BE ARRANGED THROUGH THE REGIONAL INSPECTOR ASSIGNED BY BY CONTACTING THE OPERATIONS AND MAINTENANCE DIVISION.
11. MECHANICAL RESTRAINTS MUST BE INSTALLED ON ALL BENDS, TEES AND REDUCERS.
12. LOCATION OF ALL EXISTING UTILITIES IN THE FIELD TO BE ESTABLISHED BY THE CONTRACTOR.
13. THE CONTRACTOR(S) SHALL BE SOLELY RESPONSIBLE FOR LOCATES, EXPOSING, SUPPORTING AND PROTECTING OF ALL UNDERGROUND AND OVERHEAD UTILITIES AND STRUCTURES EXISTING AT THE TIME OF CONSTRUCTION IN THE AREA OF THEIR WORK, WHETHER SHOWN ON THE PLANS OR NOT AND FOR ALL REPAIRS AND CONSEQUENCES RESULTING FROM DAMAGE TO SAME.
14. THE CONTRACTOR(S) SHALL BE SOLELY RESPONSIBLE TO GIVE 72 HOURS WRITTEN NOTICE TO THE UTILITIES PRIOR TO CROSSING OR WORKING NEAR THEIR PLANT AND TO ARRANGE FOR THE LOCATION OF THEIR PLANT AND TO PROTECT SAME DURING THE DURATION OF THE CONSTRUCTION, WITH THE CONTRACTOR RESPONSIBLE FOR ALL COSTS ARISING FROM SUCH INSPECTION.
15. ALL PROPOSED WATER PIPING MUST BE ISOLATED THROUGH A TEMPORARY CONNECTION THAT SHALL INCLUDE AN APPROPRIATE CROSS-CONNECTION CONTROL DEVICE, CONSISTENT WITH THE DEGREE OF HAZARD, FOR BACKFLOW PREVENTION OF THE ACTIVE DISTRIBUTION SYSTEM. CONFORMING TO **R.P. STD. 1-7-7 AND 1-7-8.**

GENERAL NOTES

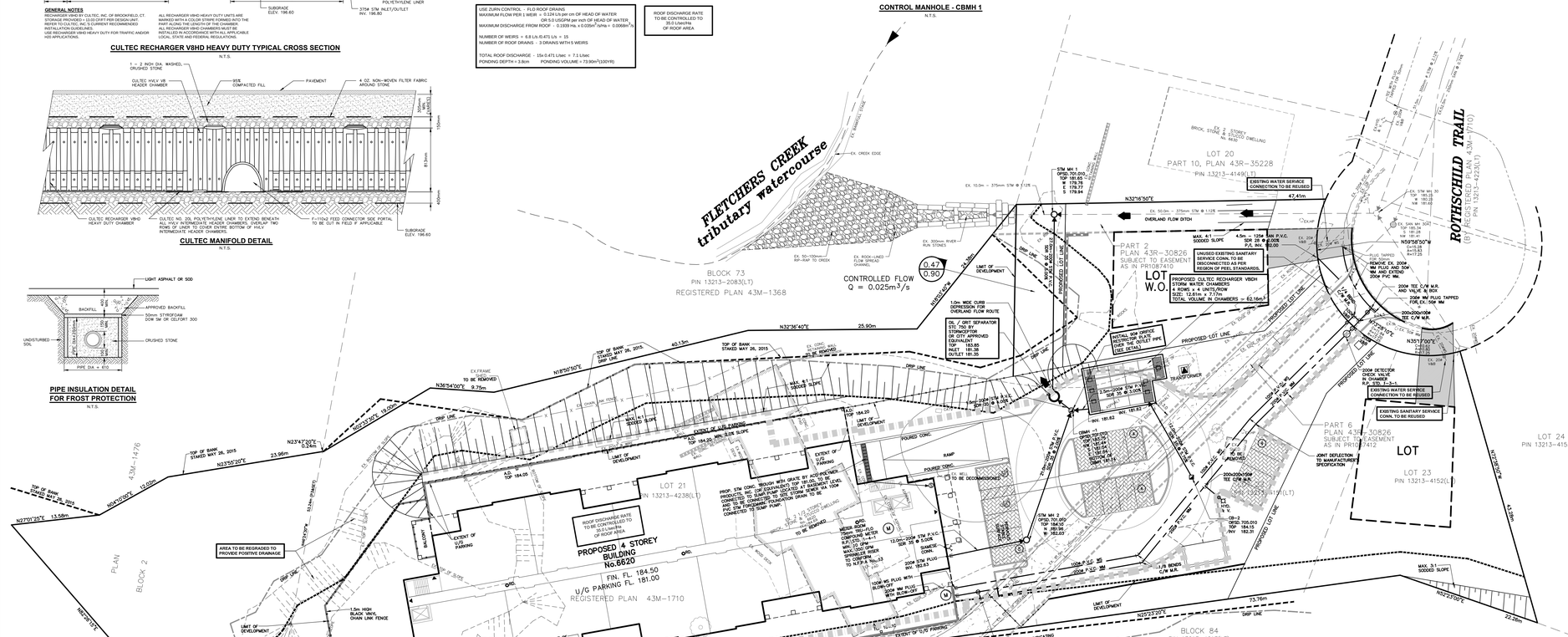
1. THE CONTRACTOR IS TO CHECK AND VERIFY ALL DIMENSIONS. IF ANY DISCREPANCIES, THEY MUST BE REPORTED TO THE ENGINEER IMMEDIATELY PRIOR TO CONSTRUCTION.
2. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UTILITIES DURING CONSTRUCTION. GAS, HYDRO, TELEPHONE OR ANY OTHER UTILITIES THAT MAY EXIST ON THE SITE OR WITHIN THE STREETLINES MUST BE LOCATED BY ITS OWN UTILITIES AND VERIFIED PRIOR TO CONSTRUCTION.
3. ALL CONNECTIONS SHALL BE INSTALLED AS PER MUNICIPAL STANDARDS AND SPECIFICATIONS.
4. BUILDER IS TO VERIFY TO THE ENGINEER THAT THE FINAL FOOTING ELEVATION AND TOP OF FOUNDATION WALL ELEVATION ARE IN CONFORMITY WITH THE BUILDING CODE AND THE CERTIFIED GRADING PLAN PRIOR TO PROCEEDING.
5. THE ELEVATION OF THE SIDE SWALE AT THE BUILDING LINE SHALL BE A MINIMUM OF **150mm** BELOW THE BUILDING LINE AT THE CENTRE OF THE SWALE.
6. OUTSIDE FINISHED GRADE TO BE A MINIMUM OF **150mm** BELOW BRICK VENEER ELEVATION.
7. PRIOR TO ANY SODDING, THE BUILDER IS TO ENSURE TO THE SOILS CONSULTANT AND/OR THE ENGINEER THAT THE SUBSOIL HAS BEEN SCARIFIED TO A MINIMUM DEPTH OF **150mm** AND THAT THE SUBSOIL IS FREE OF DEBRIS. TOPSOIL AND **NO 1** NURSERY SOD AND A MINIMUM DEPTH OF **150mm** OF TOPSOIL AND GRANULAR STONE TO BE PROVIDED ON THE ENTIRE LENGTH OF EACH DRIVEWAY ON A FIRM SUBGRADE AND THE DRIVEWAY TO BE PAVED WITH A MINIMUM COMPACTED DEPTH OF **75mm** OF ASPHALT BETWEEN THE CURB AND THE GARAGE.
8. NO SODDING ON ANY LOTS IS PERMITTED UNTIL PRELIMINARY INSPECTION IS DONE BY THE ENGINEER AND THE BUILDER.
9. AT ALL ENTRANCES TO THE SITE THE ROAD CURB AND SIDEWALK WILL BE CONTINUOUS THROUGH THE ENTRANCE. ALL SIDEWALKS WILL BE CONSTRUCTED FLUSH WITH THE EXISTING ON FUTURE SIDEWALK AND CURB DEPRESSION WILL BE PROVIDED FOR DRIVEWAY ENTRANCES.
10. DRIVEWAY GRADES SHOULD NOT BE LESS THAN **2.0%** AND NOT GREATER THAN **9%.**
11. LAWN AND SWALES SHALL HAVE A MINIMUM SLOPE OF **1.0%** (PREFERRED 2%) AND A MAXIMUM SLOPE OF **6%.**
12. WHERE GRADES IN EXCESS OF 6% ARE REQUIRED, THE MAXIMUM SLOPE SHALL BE 3:1. GRADE CHANGES IN EXCESS OF 1.5m ARE TO BE ACCOMPLISHED BY USE OF A RETAINING WALL. RETAINING WALLS HIGHER THAN 0.6m SHALL HAVE A FENCE INSTALLED ON THE HIGH SIDE.
13. THE SERVICE CONNECTION TRENCH WITHIN THE TRAVELLED PORTION OF THE ROAD ALLOWANCE SHALL BE BACKFILLED WITH: UNSHRINKABLE BACKFILL MATERIAL AS PER **C.W. STDS. 2220.030, 2220.031 AND 2220.032** UNLESS OTHERWISE SPECIFIED FROM APPROVAL FOR OTHER BACKFILL MATERIAL HAS BEEN OBTAINED.
14. ALL WATERMAINS AND WATER SERVICE MATERIALS AND CONSTRUCTION METHODS MUST CORRESPOND TO CURRENT MUNICIPAL STANDARDS & SPECIFICATIONS.
15. WATERMAINS AND/OR WATER SERVICES ARE TO HAVE A MIN. DEPTH OF **1.7m** WITH A MIN. HORIZONTAL SPACING OF **1.2m** FROM THEMSELVES AND OTHER UTILITIES.
16. SEDIMENT CONTROL FENCE TO BE INSTALLED AS PER **C.W. STD. 3960.010.**
17. ALL DAMAGED AND DISTURBED AREAS TO BE REINSTATED WITH TOPSOIL AND SOD.

FIRE DEPARTMENT

1. FIRE ROUTE WILL BE DESIGNATED AS PER CITY OF MISSISSAUGA **BYLAW (1526-81)** AS AMENDED PRIOR TO OCCUPANCY OF THE BUILDINGS.
2. FIRE ROUTES TO BE DESIGNED TO WITH STAND A LOAD NOT LESS THAN **11,340kg.** PER AXLE AND HAVE A CHANGE IN GRADIENT OF NOT MORE THAN 1 **IN 12.5** OVER A DISTANCE **15.0m**. AS PER **BY LAW 1036-81**.
3. ALL **12.0m** TURNING RADII HAVE MIN. CLEARANCE OF **3.0m** BETWEEN THE CENTRE LINE OF TURNING RADII AND ANY CURB OR PART OF BUILDING.
4. PRIVATE FIRE HYDRANTS SHALL BE FLOW TESTED AND COLOUR CODED IN CONFORMANCE WITH THE REGION OF PEEL "UNIFORM MARKING OF HYDRANTS".

ROADS

1. ALL FILL WITHIN ROAD ALLOWANCE AND EASEMENTS TO BE COMPACTED TO MIN **95%** STANDARD PROCTOR DENSITY. THE SUITABILITY AND COMPACTION OF ALL FILL MATERIALS TO BE CONFIRMED BY A RECOGNIZED SOIL CONSULTANT TO THE CITY ENGINEER AND THE SUBGRADE OF ALL ROADWAYS SHALL BE PROOF ROLLED UNDER THE SUPERVISION OF THE SOILS CONSULTANT PRIOR TO THE INSTALLATION OF ANY ROAD BASE MATERIALS.
2. THE DEVELOPER/CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING UTILITIES PRIOR TO AND DURING CONSTRUCTION. LOCATION OF EXISTING UTILITIES, INCLUDING BUT NOT LIMITED TO WATERMAINS, SANITARY SEWERS, STORM SEWERS, UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE DRAWINGS. PRIOR TO COMMENCEMENT OF WORK, CONTRACTOR MUST EXAMINE THE ACCURACY OF SUCH EXISTING UTILITIES AND STRUCTURES AND SHALL BE RESPONSIBLE FOR ANY DAMAGE TO SAME. ANY DISCREPANCIES OR DISCONTINUITIES TO LOCATION OF EXISTING WATERMAINS AND SEWERS TO BE REPORTED AT DEVELOPERS' CONTRACTOR'S EXPENSE.
3. THE DEVELOPER/CONTRACTOR MUST ENSURE THAT A SUBGRADE CERTIFICATE IS ISSUED BY THE GEOTECHNICAL SOILS CONSULTANT TO THE ENGINEER. ONLY UPON VERIFICATION AND APPROVAL OF THE SUBGRADE BY THE ENGINEER WILL THE INSTALLATION OF ANY ROAD BASE MATERIALS BE PERMITTED. INSTALLATION OF ANY ROAD BASE MATERIALS BE PLACED. FAILURE TO FOLLOW THIS PROCEDURE WILL MEAN THE REMOVAL OF ROAD BASE MATERIALS AND/OR ADDITIONAL TESTING THAT PROPER COMPACTION HAS BEEN ACHIEVED AT THE SUBGRADE AT THE DEVELOPERS/CONTRACTOR'S EXPENSE.
4. TRENCH BACKFILLING ON PROPOSED ROADS SHALL COMPLY WITH CITY OF MISSISSAUGA REQUIREMENTS FOR TRENCH BACKFILLING ON ROADS AS PROVIDED IN THE CITY'S DEVELOPMENT REQUIREMENT MANUAL.
   a) THE TOP **150mm** OF THE SUBGRADE IS TO BE COMPACTED TO A MINIMUM **98%** OF SPD WITHIN **2%** OF THE OPTIMUM MOISTURE CONTENT.
5. ALL CONNECTIONS WITHIN PAVED PORTION OF ANY EXISTING ROAD TO BE BACKFILLED WITH UNSHRINKABLE BACKFILL MATERIAL AS PER **C.W. STDS. 2220.030, 2220.031 AND 2220.032** UNLESS OTHERWISE SPECIFIED PRIOR APPROVAL FOR OTHER BACKFILL MATERIAL HAS BEEN OBTAINED.
6. ALL OTHER EXCAVATIONS WITHIN EXISTING ROAD ALLOWANCE SHALL BE BACKFILLED TO SUBGRADE ELEVATION WITH GRANULAR 'C' MATERIAL AND COMPACTED TO A MINIMUM OF **95%** STANDARD PROCTOR DENSITY. SUBGRADE ELEVATION SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITION IN ACCORDANCE WITH **O.P.S.S. 501**
7. CURB TO BE AS PER **O.P.S.D. 600.110** UNLESS OTHERWISE NOTED.
8. SUBDRAIN UNDERNEATH ALL CURBS TO BE MINIMUM **150dia.** AS PER **C.W. STDS. 2220.040 AND 2220.05** AND ON EXISTING ROADS.
9. ALL DISTURBED AREAS WITHIN EXISTING ROAD ALLOWANCE TO BE REINSTATED WITH TOPSOIL AND SOD TO THE SATISFACTION OF THE CITY OF MISSISSAUGA.
10. SIDEWALKS TO BE AS PER **C.W. STD. 2140.010** AND PEDESTRIAN RAMPS TO BE PROVIDED AT ALL INTERSECTIONS AS PER **C.W. STDS. 2240.020 AND 2240.030.**



LEGEND

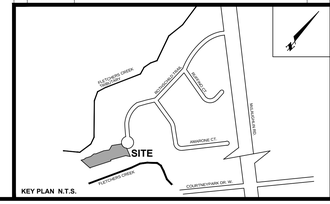
- 410.00/410.00 × 409.00 — EXISTING ELEVATION TO REMAIN / EXISTING ELEVATION
- DIRECTION OF SURFACE FLOW
- +000.00 — PROPOSED ELEVATION
- PROPOSED CATCHBASIN
- EXISTING TREE TO REMAIN
- EXISTING TREE TO BE REMOVED
- SUMP PUMP
- OVERLAND FLOW ROUTE
- DRAINAGE AREA BOUNDARY

NOTE:
FOR ADDITIONAL INFORMATION, DETAILS, DIMENSIONS AND CONFORMITY TO THE SITE PLAN, THE CONTRACTOR MUST REFER TO THE ARCHITECTURAL SITE PLAN PREPARED BY: PATRICK MARKUS LUCKIE, ARCHITECT

SITE DATA

ZONING	RESIDENTIAL
SITE AREA	0.9297 ha
ROOF AREA	0.1939 ha
LANDSCAPE AREA	0.5868 ha
PAVED/CONCRETE AREA	0.1480 ha
LAND DEDICATION	0.2600 ha

No.	DATE	REVISION	INIT.
2.	JUL.08/2020	REVISED AS PER NEW ARCHITECTURAL SITE PLAN.	E.W.
1.	JAN/2020	REVISED AS PER CITY COMMENTS	M.J.



KEY PLAN N.T.S.

C.M. BENCHMARK No. 1050 **ELEVATION: 194.056m**

DESCRIPTION: A TABLET SET HORIZONTALLY AT THE BASE OF A 750mm DIAMETER CONCRETE TRAFIC POLE AT THE SOUTHEAST CORNER OF MILAUGHLIN ROAD AND ARROWSMITH DRIVE

SKIRA & ASSOCIATES LTD.
CONSULTING ENGINEERS
3464 Semenyk Court, Suite 100, Mississauga, Ontario L5C 4P8
Tel. (905) 276-5100 Fax. (905) 270-1936 Email - info@skiraconsult.ca

pml.A
patrick markus luckie, Architect
720 BOSCO DRIVE - MISSISSAUGA, ON - L5V 2Y1 - 416.857.9708

PROPOSED 4 STOREY BUILDING "SIXTY SIX TWENTY"

LOT 21, 22 REG. PLAN 43M-1710

6620 ROTHSCHILD TRAIL

Di BLASIO HOMES

6620 ROTHSCHILD TRAIL, MISSISSAUGA, ON L5W 0A6 TEL:(905)890-2263

MISSISSAUGA

SITE SERVICING PLAN

S.P.

DATE: MARCH 2018	AREA: Z-44W	DWG.No. C102
SCALE: 1:300	DRAWN BY: E.W.	
CITY FILE: OZ 19/010	REGION FILE:	PROJECT No. 218-M14