GENERAL NOTES:

- 1. COORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
- 2. DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. PROTECT AND ASSUME RESPONSIBILITY FOR ALL EXISTING UTILITIES WHETHER OR NOT SHOWN ON THIS DRAWING.
- B. OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF OTTAWA BEFORE COMMENCING CONSTRUCTION.
- BEFORE COMMENCING CONSTRUCTION OBTAIN AND PROVIDE PROOF OF COMPREHENSIVE, ALL RISK AND OPERATIONAL LIABILITY INSURANCE FOR \$5,000,000.00. INSURANCE POLICY TO NAME OWNERS, ENGINEERS AND ARCHITECTS
- RESTORE ALL DISTURBED AREAS ON-SITE AND OFF-SITE, INCLUDING TRENCHES AND SURFACES ON PUBLIC ROAD ALLOWANCES TO EXISTING CONDITIONS OR BETTER TO THE SATISFACTION OF THE CITY OF OTTAWA AND ENGINEER.
- REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL, ORGANIC MATERIAL AND DEBRIS UNLESS OTHERWISE INSTRUCTED BY ENGINEER. EXCAVATE AND REMOVE FROM SITE ANY CONTAMINATED MATERIAL. ALL CONTAMINATED MATERIAL SHALL BE DISPOSED OF AT A LICENSED LANDFILL FACILITY.
- ALL DIMENSIONS AND INVERTS MUST BE VERIFIES PRIOR TO CONSTRUCTION. IF THERE IS ANY DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER
- ALL ELEVATIONS ARE GEODETIC. ALL ELEVATIONS ARE REFERED TO RHE CGVD 28:78 GEODETIC DATUM. BEARINGS ARE REFERANCE TO THE MTM ZONE 9, NAD 83 (ORIGINAL) PROJECTION. REFER TO TOPOGRAPHICAL PLAN OF SURVEY OF PART OF LOTS A AND 1 CONCESSION 4 (RIDEAU FRONT), TOWNSHIP OF GLOUCESTER, CITY OF OTTAWA, PREPARED BY ANNIS O'SULIVAN VOLLEBEKK Ltd., DATED AUGUST 8TH, 2022.
- REFER TO GEOTECHNICAL REPORT (No. PG6149-1, REVISION 2, DATED MAY 24, 2023), PREPARED BY PATTERSON GROUP INC. FOR SUBSURFACE CONDITIONS, CONSTRUCTION RECOMMENDATIONS, AND GEOTECHNICAL INSPECTION REQUIREMENTS. THE GEOTECHNICAL CONSULTANT IS TO REVIEW ON-SITE CONDITIONS AFTER EXCAVATION PRIOR TO PLACEMENT OF THE GRANULAR
- 10. REFER TO ARCHITECT'S AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HARDSURFACE AREAS AND DIMENSIONS.
- 11. REFER TO THE SERVIICING AND STORMWATER MANAGEMENT REPORT(R-2022-191) PREPARED BY NOVATECH ENGINEERING CONSULTANTS LTD. DATED: AUGUST
- 12. SAW CUT AND KEY GRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10).
- 13. PROVIDE LINE/PARKING PAINTING.
- 14. CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GENERAL PLAN OF SERVICES INDICATING ALL SERVICING AS-BUILT INFORMATION SHOWN ON THIS PLAN. AS-BUILT INFORMATION MUST INCLUDE: PIPE MATERIAL, SIZES, LENGTHS, SLOPES, INVERT AND T/G ELEVATIONS. STRUCTURE LOCATIONS. VALVE AND HYDRANT LOCATIONS. T/WM ELEVATIONS AND ANY ALIGNMENT CHANGES, ETC.
- 15. CONTRACTOR IS RESPONSIBLE FOR ALL LAYOUT FOR CONSTRUCTION PURPOSES.

SEWER NOTES:

(SANMH 301b, 303, 305)

1.	SPECIFICATIONS:
	ITEM

SPECIFICATIONS.		
ITEM	SPEC. No.	<u>REFERENCE</u>
CATCHBASIN (600x600mm)	705.010	OPSD
STORM / SANITARY MANHOLE (1200Ø)	701.010	OPSD
STORM / SANITARY MANHOLE (1500Ø)	701.011	OPSD
STORM / SANITARY MANHOLE (1800Ø)	701.012	OPSD
SANITARY COVER	S24	CITY OF OTTAWA
STORM COVER (CLOSED)	S24.1	CITY OF OTTAWA
STORM COVER (OPEN)	S28.1	CITY OF OTTAWA
SEWER TRENCH	S6 & S7	
STORM SEWER (<450mmØ)	,	ESS SPECIFIED OTHERWISE)
STORM SEWER (>450mmØ)		O (UNLESS SPECIFIED OTHERWISE
SANITARY SEWER	`	ESS SPECIFIED OTHERWISE)
CATCHBASIN LEAD	PVC DR 35	
CATCHBASIN COVER	S19	CITY OF OTTAWA
LANDSCAPE CATCHBASINS	S30 & S31	CITY OF OTTAWA
LANDSCAPE PERFORATED PIPE	S29	CITY OF OTTAWA
ROAD SUBDRAIN (CONTINUOUS)	R1	CITY OF OTTAWA
WATERTIGHT FRAME & COVER	401.030	OPSD
WATERTIGITI I NAME & COVER	401.030	OI OD

- . INSULATE ALL PIPES (SAN/STM) THAT HAVE LESS THAN 2.0m COVER WITH 50mmX1200mm HI-40 INSULATION. PROVIDE 150mm CLEARANCE BETWEEN PIPE AND INSULATION (REFER TO DETAIL)
- 3. THE PIPE BEDDING FOR SEWER AND WATER PIPES PLACED ON A RELATIVELY DRY, UNDISTURBED SUBGRADE SURFACE SHOULD CONSIST OF AT LEAST 150 mm OF OPSS GRANULAR A MATERIAL. WHERE THE BEDDING IS LOCATED WITHIN THE SILTY CLAY, THE THICKNESS OF THE BEDDING MATERIAL SHOULD BE INCREASED TO A MINIMUM OF 300 mm. THE BEDDING SHOULD EXTEND TO THE SPRING LINE OF THE PIPE.
- COVER MATERIAL, FROM THE SPRING LINE TO AT LEAST 300 mm ABOVE THE OBVERT OF THE PIPE, SHOULD CONSIST OF OPSS GRANULAR A OR GRANULAR B TYPE II WITH A MAXIMUM SIZE OF 25 mm. THE BEDDING AND COVER MATERIALS SHOULD BE PLACED IN MAXIMUM 225 MM THICK LIFTS COMPACTED TO 99% OF THE MATERIAL'S STANDARD PROCTOR MAXIMUM DRY DENSITY. THE USE OF CLEAR CRUSHED STONE AS A BEDDING LAYER SHALL NOT BE PERMITTED.
- WHERE HARD SURFACE AREAS ARE CONSIDERED ABOVE THE TRENCH BACKFILL. THE TRENCH BACKFILL MATERIAL WITHIN THE FROST ZONE (ABOUT 1.8 m BELOW FINISHED GRADE) SHOULD MATCH THE SOILS EXPOSED AT THE TRENCH WALLS TO REDUCE POTENTIAL DIFFERENTIAL FROST HEAVING. THE BACKFILL SHOULD BE PLACED IN MAXIMUM 225 MM THICK LOOSE LIFTS AND COMPACTED TO A MINIMUM OF 95% OF THE MATERIAL'S SPMDD
- FLEXIBLE CONNECTIONS ARE REQUIRED FOR CONNECTING PIPES TO MANHOLES (FOR EXAMPLE KOR-N-SEAL, PSX: POSITIVE SEAL AND DURASEAL). THE CONCRETE CRADLE FOR THE PIPE CAN BE
- THE OWNER SHALL REQUIRE THAT THE SITE SERVICING CONTRACTOR PERFORM FIELD TESTS FOR QUALITY CONTROL OF ALL SANITARY SEWERS, LEAKAGE TESTING SHALL BE COMPLETED IN ACCORDANCE WITH OPSS 410.07.16, 410.07.16.04 AND 407.07.24. DYE TESTING IS TO BE COMPLETED ON ALL SANITARY SERVICES TO CONFIRM PROPER CONNECTION TO THE SANITARY SEWER MAIN. THE FIELD TESTS SHALL BE PERFORMED IN THE PRESENCE OF A CERTIFIED PROFESSIONAL ENGINEER WHO SHALL SUBMIT A CERTIFIED COPY OF THE TEST RESULTS.
- 8. STORM MANHOLES AND CBMHS ARE TO HAVE 300mm SUMPS UNLESS OTHERWISE INDICATED. CONTRACTOR TO TELEVISE (CCTV) ALL PROPOSED SEWERS. 200mmØ OR GREATER PRIOR TO BASE COURSE ASPHALT. UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS & APPURTENANCES.
- 10. ALL WORKS SHALL BE PERFORMED AS APPLICABLE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD SPECIFICATIONS, AND IN PARTICULAR O.P.S.S. 407 AND 410. **CLAY SEALS**
- TO REDUCE LONG-TERM LOWERING OF THE GROUNDWATER LEVEL AT THIS SITE, CLAY SEALS SHOULD BE PROVIDED IN THE SERVICE TRENCHESINSTALL CLAY SEALS AS PER CITY OF
- THE SEALS SHOULD BE AT LEAST 1.5 m LONG AND SHOULD EXTEND FROM TRENCH WALL TO TRENCH WALL. GENERALLY, THE SEALS SHOULD EXTEND FROM THE FROST LINE AND FULLY PENETRATE THE BEDDING, SUB-BEDDING AND COVER MATERIAL.
- THE BARRIERS SHOULD CONSIST OF RELATIVELY DRY AND COMPACTABLE BROWN SILTY CLAY PLACED IN MAXIMUM 225 mm THICK LOOSE LAYERS AND COMPACTED TO A MINIMUM OF 95% OF THE MATERIAL'S SPMDD. THE CLAY SEALS SHOULD BE PLACED AT THE SITE BOUNDARIES AND AT STRATEGIC LOCATIONS AT NO MORE THAN 60 M INTERVALS IN THE SERVICE TRENCHES.
- 4. REFER TO PROFILE DRAWINGS FOR LOCATION OF SEEPAGE BARRIERS.

WATERMAIN NOTES:

1.	SPECIFICATIONS:		
	ITEM	SPEC. No.	REFERENCE
	WATERMAIN TRENCHING	W17	CITY OF OTTAWA
	THERMAL INSULATION IN SHALLOW TRENCHES	W22	CITY OF OTTAWA
	WATERMAIN CROSSING BELOW SEWER	W25	CITY OF OTTAWA
	WATERMAIN CROSSING ABOVE SEWER	W25.2	CITY OF OTTAWA
	WATERMAIN	PVC DR 18	
	HYDRANT	WSD-24	CITY OF OTTAWA
	VALVE AND VALVE BOX	WSD-19	CITY OF OTTAWA

- 2 SUPPLY AND CONSTRUCT ALL WATERMAINS AND APPURTENANCES IN ACCORDANCE WITH THE CITY OF OTTAWA STANDARDS AND SPECIFICATIONS, EXCAVATION, INSTALLATION, BACKFILL AND RESTORATION OF ALL WATERMAINS BY THE CONTRACTOR. CONNECTIONS AND SHUT-OFFS AT THE MAIN AND CHLORINATION OF THE WATER SYSTEM SHALL BE PERFORMED BY CITY OFFICIALS.
- 3. WATERMAIN SHALL BE MINIMUM 2.4m DEPTH BELOW GRADE UNLESS OTHERWISE INDICATED. ANY WATERMAIN WITH LESS THAN 2.4m COVER TO BE INSULATED PER THE SEWER AND WATERMAIN NOTES
- 4. PROVIDE MINIMUM CLEARANCE, BETWEEN OUTSIDE OF PIPES, AT ALL CROSSINGS AS PER CITY DETAILS W25 AND W25.2. WATERMAIN MUST HAVE A MINIMUM VERTICAL CLEARANCE OF 0.25m OVER AND 0.50m UNDER SEWERS AND ALL OTHER UTILITIES WHEN CROSSING.
- 6. CATHODIC PROTECTION REQUIRED FOR ALL IRON FITTINGS CITY OF OTTAWA STANDARD DETAILS WSD-39,
- 7. PROVIDE THERMAL INSULATION FOR WATERMAIN AT OPEN STRUCTURES PER CITY OF OTTAWA STANDARD DETAIL WSD-23.
- 8. IF WATERMAIN MUST BE DEFLECTED TO MEET ALIGNMENT, ENSURE THAT THE AMOUNT OF DEFLECTION USED IS LESS THAN HALF THAT RECOMMENDED BY THE MANUFACTURER.

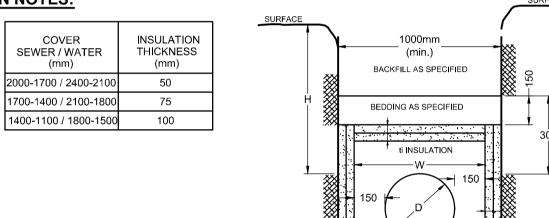
TYPICAL SINGLE, SEMI-DETACHED AND TOWNHOUSE LOT SERVICING

- 1. NO HORIZONTAL BENDS IN RIGHT-OF-WAY UNLESS OTHERWISE APPROVED BY THE CITY. MAXIMUM OF TWO 22.5°
- 2. 1% MINIMUM SANITARY AND STORM SERVICE GRADIENT WITH 2% PREFERRED.
- 3. STORM SERVICE LATERAL SHALL BE LOCATED TO THE LEFT OF SANITARY SERVICE LATERAL WHEN LOOKING AT THE STRUCTURE FROM THE STREET. SERVICE SIZES IN CONFORMANCE WITH S11.
- 4. SEE S7 FOR PIPE FOUNDATION, EMBEDMENT AND FINAL BACKFILL REQUIREMENTS.
- 5. MULTIPLE TAPS WITH SADDLES IN PVC WATERMAIN SHALL BE STAGGERED AND MINIMUM 600mm APART.
- 6. ELEVATION OF SERVICES VARIABLE DEPENDING ON GRADIENT AND/OR DEPTH OF COVER.
- 7. CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GRADING PLAN INDICATING AS-BUILT ELEVATIONS OF ALL DESIGN GRADES SHOWN ON THIS PLAN
- 8. REFER TO R.O.W. CROSS SECTIONS FOR UTILITY LOCATIONS (DEPICTED ON 122040-ND2).
- 9. SEE W27 FOR ADDITIONAL WATER SERVICING SCENARIOS.

SEWER & WATERMAIN INSULATION NOTES:

HORIZONTAL BENDS FOR SANITARY AND STORM SERVICES.

- 1. INSULATE ALL SEWER PIPES THAT HAVE LESS THAN 2.0m COVER AND ALL WATERMAIN WITH LESS THAN 2.4m OF COVER WITH EXPANDED POLYSTYRENE INSULATION AS PER OPSD
- 1109 030 2. THE THICKNESS OF INSULATION SHALL BE THE EQUIVALENT OF 25mm FOR EVERY 300mm REDUCTION IN THE REQUIRED DEPTH OF COVER WITH 50mm MINIMUM (SEE TABLE)
- T = THICKNESS OF INSULATION (mm) W = WIDTH OF INSULATION (mm) W = D + 300 (1000 min.)D = O.D OF PIPE (mm)



INSULATION DETAIL FOR SHALLOW

BEDDING AS SPECIFIED

NOTE: BEDDING TO BE 300mm IN PRESENCE

SEWERS & WATERMAIN

ICD DIA 100yr CAPTURE T/G ELEV INVERT CB ID STATION RATE (L/s) E=83.73(200mm) 2+050.53 | 610X1219 84.99 79.5 E=83.67(200mm) W=83.79(200mm) 02 | 2+050.53 | 610X1219 84.99 NE=84.56(200mm | 2+148.66 | 610X1219 | 85.89 145mm NE=84.62(200mm) 04 | 2+148.66 | 610X1219 | 85.89 SW=84.69(200mm) SE=85.04(300mm 1+052 610X610 86.24 NW=84.98(300mm 1+052 610X610 86.24 SE=84.97(300mm 1+349.83 | 1219X610 | 85.05 NE=83.82(300mm) 1+349.83 | 1219X610 85.05 E=83.75(300mm) NE=84.86(200mm) 09 | 1+244.23 | 610X610 | 86.06 21.1 SE=84.65(200mm 41.1 3+018 610X610 85.91 SE=84.35(200mm NW=84.71(200mm) 610X610 85.91 3+018 SE=84.13(200mm) 3+123 610X610 85.69 57.6 145mm SE=84.43(200mm 3+123 610X610 85.69 NW=84.49(200mn 1+158.27 | 610X610 86.44 SE=85.24(300mm) NW=85.17(300mm) 1+158.27 | 610X610 86.44 E=85.11(300mm) NW=85.24(300mm 16 3+309.95 610X610 86.44 3+215.71 610X610 NW=84.82(300mm 86.02 SE=84.76(300mm) 3+215.70 610X610 86.02 NW=84.75(300mm 19 3+171.95 610X610 85.69 NE=84.49(300mm) SE=84.08(200mm) 20 | 4+226.35 | 610X610 85.28 85.35 NW=84.15(200mm) 21 | 4+194.37 | 610X610 22 | 4+154.82 | 610X610 | 85.38 NW=84.18(200mm) NW=84.20(200mm 4+124.19 | 610X610 85.40 24 4+075.02 610X610 NE=84.21(200mm) 85.41 NE=84.25(200mm 25 | 4+036.57 | 610X610 85.45

CATCHBASIN TABLE

F	REAR	YARD M	ANHOLE	TAB	LE
MANHOLE ID	SIZE (mm)	T/G ELEV (m)	INVERT (m)	ICD	100yr CAPTURE RAT (L/s)
703	1200	86.04	NW=84.58 SW=84.38 SE=84.44	LMF	12.5
704	1200	85.79	NW=84.33 NE=84.27	LMF	11.5

RE	AR YA	RD CATC	HBASIN M	1ANHOLI	E TABLE		
СВМН ID	SIZE (mm)	T/G ELEV (m)	INVERT (m)	ICD DIA (mm)	100yr CAPTURE RATE (L/s)		
701	1200	85.10	N=83.91 W=83.53 S=83.59	83mm	17.4		
702	1200	85.25	N=84.18 E=83.89 S=83.95	LMF	12.6		
705	1200	85.80	SW=84.47 SE=84.40	LMF	12.2		
708	1200	85.40	NE=83.11 S=83.05				
709	1200	85.70	SW=84.31 NE=83.95				

LANDSCAPE DRAIN TABLE

RYCB No.	T/G ELEVATION	INVERT	TYPE
1001	85.10	N=83.79	ELBOW
1002	85.34	S=84.08	ELBOW
1003	85.15	N=84.15	ELBOW
1004	85.44	S=84.44	ELBOW
1005	85.84	NW=84.60	ELBOW
1006	85.70	SE=84.48 NW=84.47	TEE
1008	86.45	SE=84.94	ELBOW
1009	85.65	NW=84.40 SE=84.39	TEE
1010	86.29	SE=84.71	ELBOW
1011	86.40	NE=85.20	ELBOW
1012	86.45	SW=84.90 NE=84.89	TEE
1013	86.30	SW=84.65 NE=84.64	TEE
1014A	85.20	NE=83.28 SW=83.27	TEE
1014B	85.00	SW=83.70	ELBOW
1015	86.13	NE=84.90	ELBOW
1016	85.85	NE=84.63 SW=84.64	TEE

MANHOLE ID	STATION	SIZE (mm)	T/G ELEV (m)	INVERT (m)		MANHOLE I	
202	2+108.73	1200mmØ	86.01	NW=81.85 S=81.77		100	
203	1+121.22	1200mmØ	86.74	SW=82.23 SE=82.15 NE=82.30		101	
204	1+019.02	1200mmØ	86.49	NE=82.89		102	
205	1+163.50	1200mmØ	86.51	SW=82.57 NW=84.04			
402	1+281.39	1200mmØ	86.15	NW=81.44 S=81.37		103	
				NE=81.62		104	
403	1+251.13	1200mmØ	86.11	SE=81.54 NW=81.62		105	
404	3+097.56	1200mmØ	85.89	NE=82.04 SW=81.89		300	
405	3+130.68	1200mmØ	85.87	SW=82.27		301	
406	1+181.96	1200mmØ	86.63	SE=81.82 NE=82.02 N=81.93		302	
407	3+228.54	1200mmØ	86.13	SW=82.29 NE=82.30		304	
408	3+195.39	1200mmØ	85.91	SW=82.53		200	
599	4+266.42	1200mmØ	84.70	NW=81.88 SE=81.88 SW=83.00		306	
				NE=83.79		307	
800	9+031.32	1200mmØ	86.13	NW=83.39		308	
802	9+093.55	1200mmØ	85.48	N=84.35 SW=84.10		309	
					_ l	901	
SWM CATCHBASIN MANHOLE TABLE							

T/G ELEV

(m)

86.44

85.69

T/G ELEV

86.33

86.07

86.16

86.15

85.79

85.52

85.58

STATION

3+309.95

3+171.95

1+043.66

1+286.78

3+230.16

MANHOLE ID | STATION

2400

1800

SWM MANHOLE TABLE

SIZE

1500mmØ

1800mmØ

1800mmØ

3+193.47 | 2400mmØ |

3+161.98 | 1200mmØ

4+115.54 | 1200mmØ |

4+098.30 | 1200mmØ |

506

509

INVERT

NE=82.31

SW=82.30

SE=85.18

SW=84 42

NW=82.83

SE=83.35

INVERT

NE=83.34

S=82 65

N=83 01

NE=82.56

SW=82.5

SE=82.7

SW=82.69

NW=83.40

SW=83.9

NE=83.53 NW=83.64

E=83.61

STM MANHOLE TABLE

MANHOLE	EID STATION	SIZE (mm)	T/G ELEV (m)	INVERT (m)
100	2+006.68	1200mmØ	85.05	N=82.02 W=81.90 E=81.89
101	2+019.92	1200mmØ	85.15	N=82.10 S=82.06
102	2+109.74	1200mmØ	86.07	NW=82.60 S=82.37
103	1+119.73	1200mmØ	86.79	NE=82.96 SE=82.90 SW=82.96
104	1+017.52	1200mmØ	86.50	NE=83.62
105	1+160.89	1200mmØ	86.52	SW=83.23
300	1+382.75	1200mmØ	85.20	NW=81.80 SW=81.66 NE=81.65
301	1+371.75	1200mmØ	85.26	NW=81.97 SE=81.83
302	1+283.33	1200mmØ	86.17	S=82.26 NW=82.29
304	3+100	1200mmØ	85.92	NE=82.75 SW=82.74
306	1+183.21	1200mmØ	86.69	SE=82.60 NE=82.66 NW=82.61
307	3+226.10	1200mmØ	86.16	SW=82.95 NE=82.96
308	3+196.86	1200mmØ	85.90	SW=83.16
309	1+176.67	1200mmØ	86.59	SE=82.66
	8+016	1200mmØ	86.71	SW=83.08

SAN MANHOLE TABLE

SAN MANHOLE TABLE (C/W WATERTIGHT LID -OPSD 401.030)						
MANHOLE ID	STATION	SIZE (mm)	T/G ELEV (m)	INVERT (m)		
301b	1+357.65	1200mmØ	85.16	N=82.04 SE=82.01		
303	1+249.63	1200mmØ	86.14	NW=82.40 SE=82.39 NE=82.45		
305	3+129.22	1200mmØ	85.76	SW=82.95		
_						

	604	4+03	0.00	1200111		00.0	0	SW	=84.21	
SWM MANHOLE TABLE (ICD)										
MANHOLE ID	STATION	SIZE (mm)	T/G	ELEV (m)		/ERT (m)	IC	:D	CAPTU	00yr JRE RATE [L/s)
501	1+073.16	1500mmØ	8	36.42		=83.25 =82.69	8	3		9.1
503	1+353.58	1800mmØ	8	35.13		82.45 81.85	LN	1F	,	12.4
505	1+179.07	1800mmØ	8	36.57	S=	=82.27 81.97 84.90	LN	1F		12.4
601	4+235.77	1200mmØ	8	35.41	-	=83.17 =83.16	102	mm	:	29.5
801	9+016.27	1200mmØ	8	36.46		=83.31 :81.93	138	mm	(60.2

					•	
OGS TABLE						
MANHOLE ID	STATION	SIZE (mm)	OGS SPECIFICATION	T/G ELEV (m)	INVERT (m)	
600	4+240.45	1200mmØ	CDS PMSU2015-4-C	85.45	SW=83.14 NE=83.13	
201	2+018.20	1500mmØ	CDS PMSU2025-5-C	85.08	N=81.50 S=81.01	
401	1+369.17	1800mmØ	CDS PMSU3020-6-C	85.20	NW=81.08 SE=80.70	

	A X7mm DEEP D 17mm SEAT 11/4" BOLT	CATCH BASIN - T' (S30) CATCH BASIN - T' (S30) NON PERFORATED CATCHBASIN - 3 - WAY NON PERFORATED CATCHBASIN - 1 - WAY NON PERFORATED CATCHBASIN - 1 - WAY STORM SEWER (SEE NOTE 9)
TAPERED 312 273 273 273 273 273 273 273 273 273 27	E DIAMETER (INSIDE)	NOTES: 1. SIDE SLOPE OF SWALE - MIN. 1.5%, MAX. 3:1. 2. LONGITUDINAL SLOPE OF SWALE - MIN. 1.5%, MAX. 3:1. 2. LONGITUDINAL SLOPE OF SWALE WITH PERFORATED PIPE 1.5% MIN. 3. LONGITUDINAL SLOPE OF SWALE WITH PERFORATED PIPE 1.5% MIN. 4. LONGITUDINAL SLOPE OF SWALE WITH PERFORATED PIPE 1.5% MIN. 5. GR "T" TO BE SPACED ABOUT EVERY 20 TO 25m AND LOCATED 1 m OF REAR YARD AND SIDE YARD PROPERTY LINES. 6. GB ELBOW TO BE AT UPPER ENDS OF PERFORATED PIPE AND LOCATED 1 m OFF REAR YARD AND SIDE YARD PROPERTY LINES. 7. GEOTEXTILE SHALL BE APPROVED NON-MOVEN CLASS 1 OR AS SPECIFIED. 8. MAXIMUM REAR YARD WATER DEPTH IS 300mm. 9. ASTANDARD OLTSPEARS NO DEEPER THAN 4 and OR A CATCHARSIN MAINTENANCE HOLE. STANDARD FRAMES CW PERFORATED. N.T.S. N.T.S.
CATCH BASIN - ELBOW	DATE: MARCH 2007	PERFORATED PIPE INSTALLATION DATE: MARCH 2007

PROPERTY LINE - WEEPING TILE J.U.T. (HYDRO, BELL, CABLE, J.U.T. SERVICE GAS) (HYDRO, BELL — GAS SERVICE 0.5m TY CURBST STORM SERVICE __STORM SEWER__ SANITARY SERVICE ---SANITARY SEWER TOWNHOUSE SERVICES SANITARY- 1-135mmØ PVC DR 28 @ 1.0% (MIN) 2.0% DESIRED STORM-1-100mmØ PVC DR 28 @ 1.0% (MIN) 2.0% DESIRED WATER-1-19mmØ (TYPE K COPPER) WATER METER REMOTE RECEPTACLE HM HYDRO GANG METER GAS METER NOTE: SANITARY SERVICE TO BE TO THE RIGHT OF THE STORM SERVICE WHEN FACING THE DWELLING FORM THE STREET TOWNHOUSE SERVICE CONNECTIONS

NOTE:
THE POSITION OF ALL POLE LINES, CONDUITS,
WATERMAINS, SEWERS AND OTHER
UNDERGROUND AND OVERGROUND UTILITIES A
CTRUCTURES IS NOT NECESSARILY SUBJECT.

STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN. THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

CLARIDGE HOMES

CLARIDGE HOMES 505 PRESTON STREET, 2ND FLOOR OTTAWA , ONTARIO K1S 4N7.



NOT FOR CONSTRUCTION

DWG. No.: S31

FOR REAR YARD, DITCHED PIPE

Itawa | AND LANDSCAPING APPLICATIONS

	7.	ISSUED FOR CITY APPROVAL	AUG 13/24	ARM		
	6.	REVISED SITE PLAN	JULY 12/24	ARM		
	5.	REVISED PER CITY COMMENTS	JAN 31/24	ARM		
	4	REVISED SITE PLAN	SEPT 29/23	ARM		
	3	ISSUED FOR UTILITY COORDINATION	SEPT 20/23	ARM		
	2.	REVISED PER CITY COMMENTS	MAY 26/23	GJM		
	1.	ISSUED IN SUPPORT OF DEVELOPMENT APPLICATIONS	NOV 01/22	GJM		
	No.	REVISION	DATE	BY		

FOR REAR YARD AND

LANDSCAPING APPLICATIONS

SCALE ARM AS SHOWN GJN CJF/ARN ARN

GJM

FOR REVIEW ONLY A.R. MESTWARE

(613) 254-9643 Telephone Facsimile (613) 254-5867

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