

**DRAWING NOTES**

**1.0 GENERAL**

- 1.1 CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
- 1.2 DO NOT SCALE DRAWINGS.
- 1.3 CONTRACTOR TO REPORT ALL DISCOVERIES OF ERRORS, OMISSIONS OR DISCREPANCIES TO THE ARCHITECT OR DESIGN ENGINEER AS APPLICABLE.
- 1.4 USE ONLY THE LATEST REVISED DRAWINGS OR THOSE THAT ARE MARKED "ISSUED FOR CONSTRUCTION".
- 1.5 ALL CONSTRUCTION SHALL COMPLY WITH CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS.
- 1.6 THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL RELEVANT DRAWINGS AND SPECIFICATIONS.
- 1.7 FOR LEGAL SURVEY INFORMATION REFER TO REGISTERED PLAN.
- 1.8 REFER TO SITE PLAN BY CREDEE LEAHY ARCHITECTS INC.
- 1.9 CONTRACTOR TO IMPLEMENT EROSION AND SEDIMENT CONTROL MEASURES AS IDENTIFIED IN THE EROSION AND SEDIMENT CONTROL PLAN TO THE SATISFACTION OF THE CITY OF OTTAWA. PRIOR TO UNDERTAKING ANY SITE ALTERATIONS (FILLING, GRADING, REMOVAL OF VEGETATION, ETC.), DURING ALL PHASES OF THE SITE PREPARATION THE MEASURES ARE TO BE MAINTAINED TO THE SATISFACTION OF THE ENGINEER AND CITY OF OTTAWA IN ACCORDANCE WITH THE BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL. SHOULD ANY ADDITIONAL MEASURES BE REQUIRED TO ADDRESS FIELD CONDITIONS THEY SHALL BE INSTALLED AS DIRECTED BY THE ENGINEER OR THE CITY OF OTTAWA. SUCH ADDITIONAL MEASURES MAY INCLUDE BUT NOT BE LIMITED TO INSTALLATION OF FILTER CLOTHS ACROSS MANHOLE AND CATCHBASIN LIDS TO PREVENT SEDIMENT FROM ENTERING THE STRUCTURE AND INSTALLATION AND MAINTENANCE OF A LIGHT DUTY SILT FENCE BARRIER AS REQUIRED.
- 1.10 ALL IRON WORK ELEVATIONS SHOWN ARE APPROXIMATE AND ARE SUBJECT TO MINOR ADJUSTMENTS AS DETERMINED BY THE ENGINEER.
- 1.11 ALL CONCRETE CURBS AND SIDEWALKS TO CONFORM TO O.P.S. AND CONSTRUCTED TO CITY STANDARDS. ALL ONSITE CURBS TO BE BARRIER TYPE, WITH DEPRESSIONS AS NOTED.
- 1.12 ALL CONCRETE SHALL BE "NORMAL PORTLAND CEMENT" IN ACCORDANCE WITH O.P.S.S. 1350 AND SHALL ACHIEVE A MINIMUM STRENGTH OF 30MPa AT 28 DAYS.
- 1.13 ALL CONSTRUCTION TRAFFIC TO ACCESS SITE FROM SHUTTLEWORTH DRIVE.
- 1.14 FOR GEOTECHNICAL REPORT SEE GEOTECHNICAL INVESTIGATION PROPOSED RESIDENTIAL DEVELOPMENT - KELLAM LANDS, OTTAWA, ON, REPORT NO. 12-1121-0286 BY GOLDER ASSOCIATES.
- 1.15 CONTRACTOR TO PROTECT EXISTING INFRASTRUCTURE AND PROPERTY SUCH AS TREES, PARKING METERS, SIDEWALKS, CURBS, ASPHALT, AND STREET SIGNS FROM DAMAGE DURING CONSTRUCTION. CONTRACTOR TO PAY THE COST TO REINSTATE OR REPLACE ANY DAMAGED INFRASTRUCTURE OR PROPERTY TO THE SATISFACTION OF THE CITY.
- 1.16 THE POSITION OF POLE LINES, CONDUITS, WATERMAIN, SEWERS, AND OTHER UNDERGROUND AND ABOVEGROUND UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK THE CONTRACTOR SHALL INFORM ITSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES. SHALL PROTECT ALL UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM.
- 1.17 CONTRACTOR TO SUPPLY SUITABLE FILL MATERIAL WHERE REQUIRED TO ROUGH GRADE THE SITE. ALL IMPORTED FILL MATERIAL TO BE CERTIFIED AS ACCEPTABLE BY THE GEOTECHNICAL ENGINEER.
- 1.18 CONTRACTOR TO HAUL EXCESS MATERIAL OFFSITE AS NECESSARY TO GRADE SITE TO MEET THE PROPOSED GRADES. ALL EXCESS MATERIAL TO BE HAULED OFFSITE AND DISPOSED OF AT AN APPROVED DUMP SITE. SHOULD THE CONTRACTOR DISCOVER ANY HAZARDOUS MATERIAL, CONTRACTOR IS TO NOTIFY ENGINEER, ENGINEER TO DETERMINE APPROPRIATE DISPOSAL METHODOLOGATION.
- 1.19 FILL MATERIAL WITHIN THE PARKING LOT AND BUILDING PAD AREAS, AND SUPPORTING BUILDING FOUNDATIONS SHALL BE COMPACTED TO 90% STANDARD PROCTOR DENSITY AND TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER.
- 1.20 ALL COMPACTION METHODS TO BE PERFORMED TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER TO INCLUDE BUT NOT BE LIMITED TO THE THICKNESS OF LIFTS, AND COMPACTION EQUIPMENT USED.
- 1.21 ALL DISTURBED BOULEVARDS TO BE REINSTATED WITH SOD ON 100mm TOPSOIL.
- 1.22 UTILTY DUCTS TO BE INSTALLED PRIOR TO ROAD BASE CONSTRUCTION.
- 1.23 CLAY DYKES TO BE INSTALLED WHERE INDICATED ON THE DRAWINGS OR AS APPROVED AND DIRECTED BY THE GEOTECHNICAL ENGINEER ALL IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS AND SPECIFICATIONS.

- 3.3 STORM MH COVERS TO BE OPEN TYPE, AS PER CITY STANDARD S24. FRAMES TO BE PER CITY OF OTTAWA STD. S25. CONTRACTOR TO INSTALL FILTER FABRIC UNDER STORM MH COVER UNTIL SODDING IS COMPLETE.
- 3.4 STORM MAINTENANCE HOLES TO BE OPSS, SIZE AS SPECIFIED, TAPER TOP.
- 3.5 ALL CATCH BASINS TO BE AS PER OPSS 705.010, FRAME & FISH TYPE GRATE AS PER CITY OF OTTAWA STD S19.1.
- 3.6 150mm DIAMETER SOCK-WRAPPED PERFORATED PVC SUBDRAINS TO BE INSTALLED AT THE LIMIT OF THE HEAVY DUTY ASPHALT WHERE IT MEETS THE LIGHT DUTY ROAD STRUCTURE AND AT ALL CB'S IN HEAVY DUTY ROADS AS IDENTIFIED ON PLAN. SUBDRAINS TO DISCHARGE TO CBS AS SHOWN.
- 3.7 ANY STORM SEWER WITH LESS THAN 2.0m COVER REQUIRES THERMAL INSULATION AS PER CITY OF OTTAWA STANDARD W22, OR AS APPROVED BY THE ENGINEER.
- 3.8 CONNECTION TO THE EXISTING STORM SEWER TO BE INCLUDED IN THE COST FOR STORM SEWER INSTALLATION. THIS INCLUDES REINSTATEMENT OF ROAD CUT TO CITY STANDARDS.
- 3.9 CONTRACTOR TO PROVIDE IPBX-TEMPST MHF ICDS SHOP DRAWINGS, OR EQUIVALENT, FOR ENGINEERS REVIEW PRIOR TO ORDERING ICDS.

**4.0 WATER**

- 4.1 ALL WATERMANS TO BE PVC DR 18, WITH MINIMUM COVER OF 2.4m AND INSTALLED PER CITY OF OTTAWA STANDARDS. ALL DOMESTIC WATER SERVICES ARE TO BE 200mmH.
- 4.2 THRUST BLOCKS TO BE INSTALLED AT ALL BENDS, TEES, AND CAPS ALL AS PER OPSS 1103.01 AND 1103.02.
- 4.3 CONTRACTOR TO CONDUCT PRESSURE AND LEAKAGE TESTING OF ALL WATERMANS AND DISINFECT AND CHLORINATE ALL WATERMANS TO THE SATISFACTION OF M.O.E. AND THE CITY OF OTTAWA.
- 4.4 TRACER WIRE TO BE INSTALLED ALONG THE FULL LENGTH OF WATERMAIN AND ATTACHED TO EACH MAIN STOP AS PER CITY OF OTTAWA STANDARDS.
- 4.5 ALL COMPONENTS OF THE WATER DISTRIBUTION SYSTEM SHALL BE CATHODICALLY PROTECTED AS PER CITY OF OTTAWA STANDARDS.
- 4.6 ALL VALVES & VALVE BOXES AND CHAMBERS, HYDRANTS, AND HYDRANT VALVES AND ASSEMBLIES SHALL BE INSTALLED AS PER CITY OF OTTAWA STANDARDS.
- 4.7 ANY WATERMAIN WITH LESS THAN 2.4m COVER REQUIRES THERMAL INSULATION AS PER CITY OF OTTAWA STANDARD W22, OR AS APPROVED BY THE ENGINEER.
- 4.8 CONTRACTOR IS RESPONSIBLE FOR ACQUIRING THE WATER PERMIT FROM THE CITY OF OTTAWA AND PAYMENT OF ANY FEES ASSOCIATED WITH SECURING THE WATER PERMIT. OWNER IS RESPONSIBLE FOR REIMBURSING THE CONTRACTOR FOR THE ACTUAL COST OF ACQUIRING THE WATER PERMIT.
- 4.9 CONNECTION TO EXISTING WATERMAIN TO BE INCLUDED IN THE COST FOR THE WATERMAIN INSTALLATION. THIS COST INCLUDES REINSTATEMENT OF ROAD CUTS TO CITY STANDARDS.
- 4.10 THESE CROSSINGS WERE PROVIDED FOR THE PREVIOUS SITE PLAN APPLICATION AND ARE NO LONGER NECESSARY BASED ON THE REVISED SANITARY SEWER WATERMAIN CONFIGURATION.

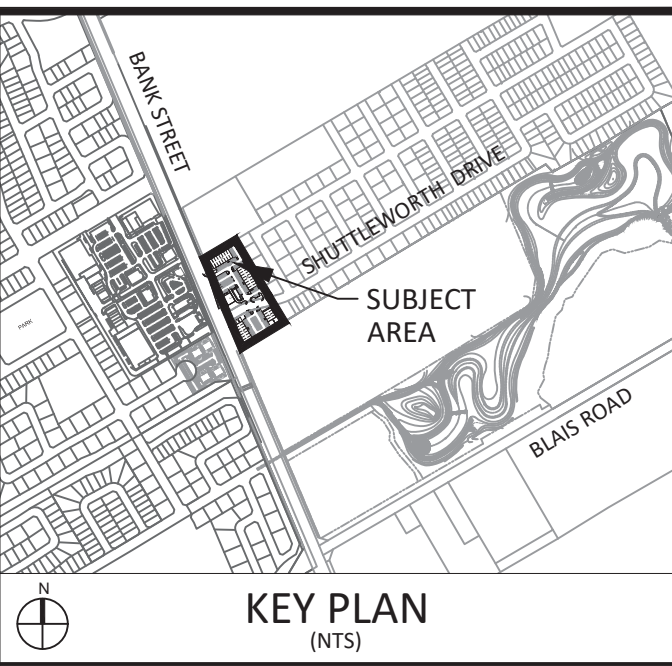
**5.0 PARKING LOT AND WORK IN PUBLIC RIGHTS OF WAY**

- 5.1 CONTRACTOR TO REINSTATE ROAD CUTS PER CITY OF OTTAWA STANDARD R-10.
- 5.2 THE CONTRACTOR SHALL PREPARE A TRAFFIC MANAGEMENT PLAN FOR REVIEW AND APPROVAL BY THE CITY OF OTTAWA. CONTRACTOR TO MAINTAIN TRAFFIC FLOW DURING THE ENTIRE CONSTRUCTION PERIOD. MAINTENANCE OF ROAD CUTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. PROVISION OF FLAGMEN, DETOURS AS NECESSARY, BARRICADES AND SIGNS TO THE FULL SATISFACTION OF THE ENGINEER AND ROAD AUTHORITY SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- 5.3 CONTRACTOR TO PREPARE SUBGRADE, INCLUDING PROOFROLLING, TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER PRIOR TO THE COMMENCEMENT OF PLACEMENT OF GRANULAR B MATERIAL.
- 5.4 FILL TO BE PLACED AND COMPACTED PER THE GEOTECHNICAL REPORT REQUIREMENTS.
- 5.5 CONTRACTOR TO SUPPLY, PLACE AND COMPACT GRANULAR B MATERIAL IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER. CONTRACTOR TO PROVIDE ENGINEER WITH SAMPLES OF GRANULAR A MATERIAL FOR TESTING AND CERTIFICATION FROM THE GEOTECHNICAL ENGINEER THAT THE MATERIAL MEETS THE GRADATION REQUIREMENTS SPECIFIED IN THE GEOTECHNICAL REPORT.
- 5.6 GRANULAR A MATERIAL TO BE PLACED ONLY UPON APPROVAL BY THE GEOTECHNICAL ENGINEER OF GRANULAR B PLACEMENT.
- 5.7 CONTRACTOR TO SUPPLY, PLACE AND COMPACT GRANULAR A MATERIAL IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER. CONTRACTOR TO PROVIDE ENGINEER WITH SAMPLES OF GRANULAR A MATERIAL FOR TESTING AND CERTIFICATION FROM THE GEOTECHNICAL ENGINEER THAT THE MATERIAL MEETS THE GRADATION REQUIREMENTS SPECIFIED IN THE GEOTECHNICAL REPORT.
- 5.8 ASPHALT MATERIAL TO BE PLACED ONLY UPON APPROVAL BY THE GEOTECHNICAL ENGINEER OF GRANULAR A PLACEMENT.
- 5.9 CONTRACTOR TO SUPPLY, PLACE AND COMPACT ASPHALT MATERIAL IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER. CONTRACTOR TO PROVIDE ENGINEER WITH SAMPLES OF ASPHALT MATERIAL FOR TESTING AND CERTIFICATION FROM THE GEOTECHNICAL ENGINEER THAT THE MATERIAL MEETS THE REQUIREMENTS SPECIFIED IN THE GEOTECHNICAL REPORT.
- 5.10 CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING LINE AND GRADE IN ACCORDANCE WITH THE PLANS, AND FOR PROVIDING THE ENGINEER WITH VERIFICATION PRIOR TO PLACEMENT.
- 5.11 DITCHES DISTURBED DURING CULVERT INSTALLATION AND GRADING OPERATIONS ARE TO BE REINSTATED TO THEIR ORIGINAL CONDITION AND FLOWLINE GRADES.
- 5.12 EXISTING EAST SIDE ROAD DITCH ALONG PALLADIUM DRIVE TO BE REALIGNED AS PER THE GRADING PLAN. ADJACENT AREAS BETWEEN ROAD SIDE DITCH AND PARKING LOT TO BE RE GRADED AS PER THE GRADING PLAN. ALL RE GRADED AREAS IN EXISTING PUBLIC RIGHTS OF WAY AND ANY OTHER DISTURBED AREAS IN EXISTING PUBLIC RIGHTS OF WAY ARE TO BE FINISHED WITH SOD ON 100mm TOPSOIL.
- 5.13 ALL EXCESS MATERIAL TO BE HAULED OFFSITE AND DISPOSED OF AT AN APPROVED DUMP SITE. SHOULD THE CONTRACTOR DISCOVER ANY HAZARDOUS MATERIAL, CONTRACTOR IS TO NOTIFY ENGINEER, ENGINEER TO DETERMINE APPROPRIATE DISPOSAL METHODOLOGATION.
- 5.14 PAVEMENT STRUCTURE (MATERIAL TYPES AND THICKNESSES) FOR HEAVY DUTY AND LIGHT DUTY AREAS TO BE AS SPECIFIED IN THE GEOTECHNICAL REPORT AND SHOWN ON THE PLANS.

CATCH BASIN DATA TABLE											
STRUCTURE ID	AREA ID	STRUCTURE	COVER	ELEVATION			OUTLET PIPE		HEAD	FLOW	ICD TYPE
				TOP OF GRATE	INVERT		DIAMETER (mm)	TYPE			
					INLET	OUTLET					
ECB1	P105	CITY STD S29	S30/S31	93.40		92.400	250	HDPE PERF			
TCB1	P105	CITY STD S29	S30/S31	93.55	92.350	92.350	250	HDPE PERF			
<b>CB13</b>	P105	OPSD 705.010	S22 & S23	93.85	92.300	92.150	200	PVC DR-35	1.650	30.00	TEMPEST HF
<b>CB12</b>	P101A	OPSD 705.010	S19	94.00		92.300	200	PVC DR-35	1.700	6.00	TEMPEST LF
<b>CB14</b>	P101B	OPSD 705.010	S19	94.00		92.300	200	PVC DR-35	1.400	14.00	TEMPEST LF
<b>CB1</b>	P106B	OPSD 705.010	S19	94.10		92.400	200	PVC DR-35	1.600	15.00	TEMPEST LF
<b>CB2</b>	P106A	OPSD 705.010	S19	94.05		92.350	200	PVC DR-35	1.650	10.00	TEMPEST LF
<b>CB4</b>	P103A	OPSD 705.010	S19	94.15		92.45A	200	PVC DR-35	1.546	6.00	TEMPEST LF
<b>CB5</b>	P103B	OPSD 705.010	S19	93.70	92.348	92.087	200	PVC DR-35	1.763	6.00	TEMPEST LF
<b>CB6</b>	P103C	OPSD 705.010	S19	93.95		92.250	200	PVC DR-35	1.600	7.00	TEMPEST LF
<b>CB7</b>	P8B	OPSD 705.010	S19	93.80		92.100	200	PVC DR-35	1.650	8.00	TEMPEST LF
<b>CB9</b>	P8C	OPSD 705.010	S19	93.65		91.950	200	PVC DR-35			
<b>CB10</b>	P8A	OPSD 705.010	S19	93.65		91.950	200	PVC DR-35	1.750	11.00	TEMPEST LF
<b>CBMH8</b>	P8C	OPSD 701.010	S25 & S28.1 Open	93.65	91.800	91.286	375	PVC DR-35			
<b>TCB2</b>	P8C	CITY STD S29	S30/S31	93.70	92.700	92.700	250	HDPE PERF			
<b>ECB2</b>	P8C	CITY STD S29	S30/S31	93.80		92.800	250	HDPE PERF			
<b>ECB3</b>	P103B	CITY STD S29	S30/S31	94.10		92.600	200	PVC DR-35			
<b>ECB32</b>	P113A	CITY STD S29	S30/S31	93.45		92.450	250	HDPE PERF			
<b>CCB33</b>	P113A	CITY STD S29	S30/S31	93.50	92.400	92.400	250	HDPE PERF			
<b>CCB32</b>	P113A	CITY STD S29	S30/S31	93.55	92.350	92.350	250	PVC DR-35			
<b>RYCB31</b>	P113A	OPSD 705.010	S19	93.80	92.300	92.250	200	PVC DR-35	1.350	18.0	TEMPEST LMF
<b>TCB30</b>	P113A	CITY STD S29	S30/S31	94.10	92.800	92.800	250	HDPE PERF			
<b>CCB30</b>	P113A	CITY STD S29	S30/S31	93.95	92.850	92.850	250	HDPE PERF			
<b>ECB30</b>	P113A	CITY STD S29	S30/S31	93.90		92.900	250	HDPE PERF			
<b>CB32</b>	P113A	OPSD 705.010	S19	93.60		91.850	250	PVC DR-35	1.550	50.0	TEMPEST HF
<b>CB31</b>	P113B	OPSD 705.010	S19	93.60	91.710	91.650		PVC DR-35	2.000	50.0	TEMPEST HF
<b>CB33</b>	P113B	OPSD 705.010	S19	93.60		91.850		PVC DR-35			

*Bold font indicates CB's with ICD's*

Revision: 2018-07-12



**2.0 SANITARY**

- 2.1 ALL SANITARY SEWER MAINS TO BE CSA CERTIFIED, BELL AND SPIGOT TYPE, ONLY FACTORY FITTINGS TO BE USED. SEWER TO BE INSTALLED AS PER OPSS 1005.01. SANITARY SEWER MATERIALS TO BE: 250mm AND SMALLER - PVC DR 35
- 2.2 ALL SANITARY MAINTENANCE HOLES TO BE 1.2m DIAMETER AS PER CITY OF OTTAWA STANDARDS COMPLETE WITH BENCHING, RUNGS, FRAME AND COVER, DROP PIPES AND LANDINGS WHERE NEEDED.
- 2.3 SANITARY MANHOLE COVERS TO BE CITY OF OTTAWA STD S25 (MOD, OPSS 401.020). SANITARY MANHOLE COVER TO BE CLOSED COVER TYPE, AS PER CITY STANDARD S24.
- 2.4 SANITARY SEWER LEAKAGE TEST AND CCTV INSPECTION SHALL BE COMPLETED AS PER CITY SPECIFICATIONS PRIOR TO INSTALLATION OF BASE COURSE ASPHALT.
- 2.5 ANY SANITARY SEWER WITH LESS THAN 2.0m COVER REQUIRES THERMAL INSULATION AS PER CITY OF OTTAWA STANDARD W22, OR AS APPROVED BY THE ENGINEER.
- 2.6 CONNECTION TO THE EXISTING SANITARY SEWER TO BE INCLUDED IN THE COST FOR SANITARY SEWER INSTALLATION. THIS INCLUDES REINSTATEMENT OF ROAD CUTS TO CITY STANDARDS.

**3.0 STORM**

- 3.1 ALL STORM SEWERS TO BE CSA CERTIFIED, BELL AND SPIGOT TYPE. ALL STORM SEWERS TO BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS. ONLY FACTORY FITTINGS TO BE USED. STORM SEWER MATERIALS TO BE: 450mm AND LARGER - 100 REINFORCED CONCRETE
- 3.2 ALL STORM MAINTENANCE HOLES TO BE SIZED IN ACCORDANCE WITH THE PLANS AND AS PER CITY OF OTTAWA STANDARDS COMPLETE WITH BENCHING, RUNGS, AND FRAME AND COVER.

CROSSING SCHEDULE	
①	250# STM 0.25m CLEARANCE OVER 200# SAN.
②	375# STM 0.18m CLEARANCE UNDER 200# SAN.
③	200# STM 0.55m CLEARANCE OVER 200# SAN.
④	150# W/M 1.00m CLEARANCE OVER 200# SAN.
⑤	150# W/M 0.70m CLEARANCE OVER 450# STM.
⑥	200# W/M 0.10m CLEARANCE UNDER 250# STM.
⑦	250# STM 0.80m CLEARANCE OVER 200# SAN.
⑧	150# W/M 0.35m CLEARANCE OVER 200# SAN.
⑨	200# STM 1.15m CLEARANCE OVER 200# SAN.
⑩	150# W/M 0.85m CLEARANCE OVER 450# STM.
⑪	200# STM 0.90m CLEARANCE OVER 200# WM.
⑫	200# STM 1.0m CLEARANCE OVER 200# SAN.
⑬	450# STM 0.20m CLEARANCE UNDER 200# SAN.
⑭	150# W/M 0.50m(MIN) CLEARANCE UNDER 300# STM.
⑮	200# SAN 0.25m CLEARANCE OVER 300# STM.
⑯	150# W/M 0.8m CLEARANCE UNDER 200# SAN.
⑰	150# W/M .5m (MIN) CLEARANCE UNDER 250# STM.

PAVEMENT STRUCTURE **	
<b>CAR ONLY PARKING AREAS:</b>	
50mm WEAR COURSE - HL-3 OR SUPERPAVE 12.5 ASPHALTIC CONCRETE 150mm BASE - OPSS GRANULAR GRANULAR "A" CRUSHED STONE 300mm SUBBASE - OPSS GRANULAR "B" TYPE II SUBGRADE - IN SITU SOIL, OR OPSS GRANULAR "B" TYPE I OR II MATERIAL PLACED OVER IN SITU SOIL	
<b>HEAVY TRUCK PARKING AREAS AND ACCESS LANES:</b>	
40mm WEAR COURSE - HL-3 OR SUPERPAVE 12.5 ASPHALTIC CONCRETE 50mm BINDER COURSE - HL-8 OR SUPERPAVE 19.0 ASPHALTIC CONCRETE 150mm BASE COURSE - OPSS GRANULAR "A" CRUSHED STONE 400mm SUBBASE - OPSS GRANULAR "B" TYPE II SUBGRADE - IN SITU SOIL, OR OPSS GRANULAR "B" TYPE I OR II MATERIAL PLACED OVER IN SITU SOIL	

\*\* REFER TO GEOTECHNICAL REPORT 12-1121-0286 BY GOLDER ASSOCIATES

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1	ISSUED FOR SPA	T.R.B.	2018/07/12
No.	REVISIONS	By	Date

**WATERMAIN SCHEDULE**

STATION	DESCRIPTION	FINISHED GRADE	TOP OF WATERMAIN	AS-BUILT WATERMAIN
A 0+000.00	CONNECT TO EXISTING 200# CAP	EX.94.21		EX.±91.81
B 0+004.15	200x150TEE	94.20	91.80	
B 0+000.00	200x150TEE	94.20	91.80	
0+012.51	22.5° BEND	94.44	92.04	
0+027.69	45° BEND	94.40	92.00	
0+029.45	45° BEND	94.43	92.03	
C 0+029.93	BUILDING "E" CONNECTION	94.50	92.10	
B 0+000.00	200x150TEE	94.20	91.80	
0+008.21	22.5° BEND	93.95	91.55	
0+042.96	45° BEND	93.70	91.30	
0+045.46	45° BEND	93.65	91.25	
D 0+047.65	BUILDING "D" CONNECTION	93.95	91.55	
E 0+000.00	CONNECT TO EXISTING 200# CAP	EX.94.13		EX.±91.73
F 0+005.54	200x150CROSS	94.07	91.67	
0+064.01	HYDRANT TEE	94.01	91.61	
0+070.54	200x150 REDUCER	93.94	91.54	
0+071.82	VERTICAL BEND	93.94	91.54	
0+072.32	VERTICAL BEND	93.94	90.50	
0+074.21	45BEND	93.97	90.50	
0+077.97	45BEND	94.04	90.50	
0+080.49	VERTICAL BEND	94.05	90.50	
0+080.99	VERTICAL BEND	94.05	91.65	
0+095.24	45BEND	94.00	91.60	
0+099.37	45BEND	94.07	91.67	
0+120.70	45BEND	94.12	91.72	
0+123.64	45BEND	94.33	91.93	
I 0+124.89	BUILDING "A" CONNECTION	94.35	91.95	
F 0+000.00	200x150CROSS	94.07	91.67	
0+016.70	45BEND	94.03	91.63	
0+20.87	45BEND	94.27	91.87	
G 0+022.12	BUILDING "C" CONNECTION	94.30	91.90	
F 0+000.00	200x150CROSS	94.07	91.67	
0+028.80	45BEND	94.16	91.76	
0+032.97	45BEND	94.22	91.82	
H 0+038.20	BUILDING "B" CONNECTION	94.50	92.10	

REVISED 2018-07-06

Commercial Sanitary STRUCTURE TABLE						
NAME	RIM ELEV.	INVERT IN	INVERT IN AS-BUILT	INVERT OUT	INVERT OUT AS-BUILT	DESCRIPTION
MH101A	94.02	NW91.680		SE91.240		1200mm# OPSS-701.010
MH104A	94.06	NW90.896 SW90.895		SE90.297		1200mm# OPSS-701.010
MH105A	93.67	NW91.952		NE91.364		1200mm# OPSS-701.010
MH112A	93.90	SE90.949		N90.351		1200mm# OPSS-701.010
MH113A	93.72			NW91.034		1200mm# OPSS-701.010

Commercial - Storm STRUCTURE TABLE						
NAME	RIM ELEV.	INVERT IN	INVERT IN AS-BUILT	INVERT OUT	INVERT OUT AS-BUILT	DESCRIPTION
CBMH8	93.65			NE91.286		1200mm# OPSS-701.010
MH101	94.05	SW91.085 NE91.510 NW91.957		SE91.011		1200mm# OPSS-701.010
MH103	94.20	SE92.299 N91.849		SW91.799		1200mm# OPSS-701.010
MH104	94.08	NW90.290 NE91.390 SW91.240		SE90.215		1200mm# OPSS-701.010
MH105	93.57	NW91				