

## GENERAL NOTES

- THE ORIGINAL TOPOGRAPHY, GROUND ELEVATION AND SURVEY DATA SHOWN ARE SUPPLIED FOR INFORMATION PURPOSES ONLY, AND IMPLY NO GUARANTEE OF ACCURACY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL INFORMATION AND PLANS AND TO MAKE ANY CHANGES AS REQUIRED AT NAD83 ZONE 8 METRE: QUEBEC AND ONTARIO 70-75 DEG WEST.
- THIS PLAN IS NOT A CADASTRAL SURVEY SHOWING LEGAL PROPERTY BOUNDARIES AND EASEMENTS. THE PROPERTY BOUNDARIES SHOWN HEREON HAVE BEEN DERIVED INFORMATION SUPPLIED BY FARLEY, SMITH AND DENNIS SURVEYING LTD. FOR INFORMATION PURPOSES ONLY. THE PRECISE LOCATION OF THE CURRENT PROPERTY BOUNDARIES AND EASEMENTS CAN ONLY BE DETERMINED BY AN UP-TO-DATE LAND TITLES SEARCH AND A SUBSEQUENT CADASTRAL SURVEY PERFORMED AND CERTIFIED BY AN ONTARIO LAND SURVEYOR.
- THE CONTRACTOR IS TO OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY BEFORE COMMENCING CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL LAYOUT.
- THE CONTRACTOR IS TO DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. PROVISIONS SHALL BE MADE TO PROTECT ALL UTILITIES WHETHER OR NOT SHOWN ON THESE DRAWINGS. IF THERE IS ANY DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER PROMPTLY.
- RESTORE ALL TRENCHES AND SURFACES OF PUBLIC ROAD ALLOWANCES TO CONDITION EQUAL OR BETTER THAN ORIGINAL CONDITION AND TO THE SATISFACTION OF THE CITY AUTHORITIES.
- EXCAVATE AND DISPOSE OF ALL EXCESS EXCAVATED MATERIAL, SUCH AS ASPHALT, CURBING AND DEBRIS, OFF SITE AS DIRECTED BY THE ENGINEER AND THE CITY.
- ALL DISTURBED AREAS TO BE RESTORED TO ORIGINAL CONDITION OR BETTER UNLESS OTHERWISE SPECIFIED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL AND SAFETY MEASURES DURING THE CONSTRUCTION PERIOD, INCLUDING THE SUPPLY, INSTALLATION AND REMOVAL OF ALL NECESSARY SIGNAGE, DELINEATORS, MARKERS AND BARRIERS.
- DO NOT ALTER GRADING OF THE SITE WITHOUT PRIOR APPROVAL OF THE ENGINEER/CITY.
- ALL WORK IN THE PARKING LOT AND GRAVING WORK TO BE UNDERTAKEN IN ACCORDANCE WITH CITY STANDARDS AND SPECIFICATIONS. THE CONTRACTOR IS TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE BUILDING.
- CONTACT THE CITY FOR INSPECTION OF ROUGH GRADING OF PARKING LOTS, ROADWAYS AND LANDSCAPED AREAS PRIOR TO PLACEMENT OF ASPHALT AND TOPSOIL. ALL DEFICIENCIES NOTED SHALL BE RECTIFIED TO THE CITY'S SATISFACTION PRIOR TO PLACEMENT OF ANY ASPHALT, TOPSOIL, SEED & MULCH AND/OR SOD.
- ALL DIMENSIONS AND INVERTS MUST BE VERIFIED PRIOR TO CONSTRUCTION. IF THERE IS ANY DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER PROMPTLY.
- ELECTRICAL, GAS, TELEPHONE AND TELEVISION SERVICE LOCATIONS ARE SUBJECT TO THE INDIVIDUAL AGENCY:
  - ELECTRICAL SERVICE - HYDRO OTTAWA,
  - GAS SERVICE - BELL CANADA,
  - TELEPHONE SERVICE - BELL CANADA,
  - TELEVISION SERVICE - ROGERS
- INSTALLATION TO BE IN ACCORDANCE WITH CURRENT CODES AND STANDARDS OF APPROVAL AGENCIES HYDRO OTTAWA, BELL AND THE CITY.
- CONTRACTOR TO ENSURE ALL APPLICABLE OPS SPECIFICATIONS ARE FOLLOWED DURING CONSTRUCTION.
- ALL PROPOSED CURB TO BE CONCRETE BARRIER CURB UNLESS OTHERWISE SPECIFIED.
- THIS PLAN MUST BE READ IN CONJUNCTION WITH THE GEOTECHNICAL INVESTIGATION.
- CONTRACTOR TO PROVIDE ALL UTILITY LOCATES FOR UNDERGROUND WORK, INCLUDING BOTH PUBLIC AND PRIVATE LOCATES.
- CONTRACTOR SHALL HAND-DIG AROUND EXISTING UTILITIES TO AVOID DAMAGE.

## EROSION AND SEDIMENT CONTROL

- THE CONTRACTOR SHALL IMPLEMENT SEDIMENT MANAGEMENT PRACTICES, TO PROVIDE FOR PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE RECEIVING WATER COURSES. THE CONTRACTOR SHALL IMPLEMENT SEDIMENT CONTROL (GEOSOCK INSERTS WITH AN OVERFLOW UNDER GRATE OR COVER) TO BE IMPLEMENTED DURING CONSTRUCTION OF ALL PROPOSED ROAD CATCHMENT REGIONS, CATCHBASINS, CATCHBASIN OUTLETS, DRAINS AND OTHER SEDIMENT TRAPS. NO RECYCLED GEOSOCK MATERIAL SHALL BE PERMITTED FOR USE ON SITE. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO FOLLOW APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY.
- AT THE DISCRETION OF THE PROJECT MANAGER OR MUNICIPAL STAFF, ADDITIONAL SILT CONTROL DEVICES SHALL BE INSTALLED AT DESIGNATED LOCATIONS.
- FOR SILT FENCE BARRIER, USE OPSD 219.110. GEOTEXTILE FOR SILT FENCE AS PER OPS 1860, TABLE 3.
- EXCEPT AS PROVIDED IN PARAGRAPHS 4.1, and 4.2 BELOW, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS FEASIBLE IN PORTIONS OF THE SITE WHICH ARE ACTIVELY EXPOSED. STABILIZATION MEASURES WHICH PERMANENTLY CEASE, BUT IN NO CASE MORE THAN 4 DAYS AFTER THE CONSTRUCTION ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED.

  - WHERE CONSTRUCTION ACTIVITY IS TEMPORARILY CEASED, STABILIZATION MEASURES WHICH PERMANENTLY CEASE, BUT IN NO CASE MORE THAN 4 DAYS AFTER THE CONSTRUCTION ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED, THE CONTRACTOR SHALL REINSTITUTE STABILIZATION MEASURES WHICH PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 4 DAYS AFTER THE CONSTRUCTION ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED. THE CONTRACTOR SHALL REINSTITUTE STABILIZATION MEASURES WHICH PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 4 DAYS AFTER THE CONSTRUCTION ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED.
  - WHERE CONSTRUCTION ACTIVITY WILL RESUME ON A PORTION OF THE SITE WITHIN 21 DAYS FROM WHEN ACTIVITIES CEASED, (E.G. THE TOTAL TIME FROM WHEN ACTIVITIES CEASED TO WHEN ACTIVITIES ARE RESUMED IS LESS THAN 21 DAYS) THEN STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF SITE BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED.

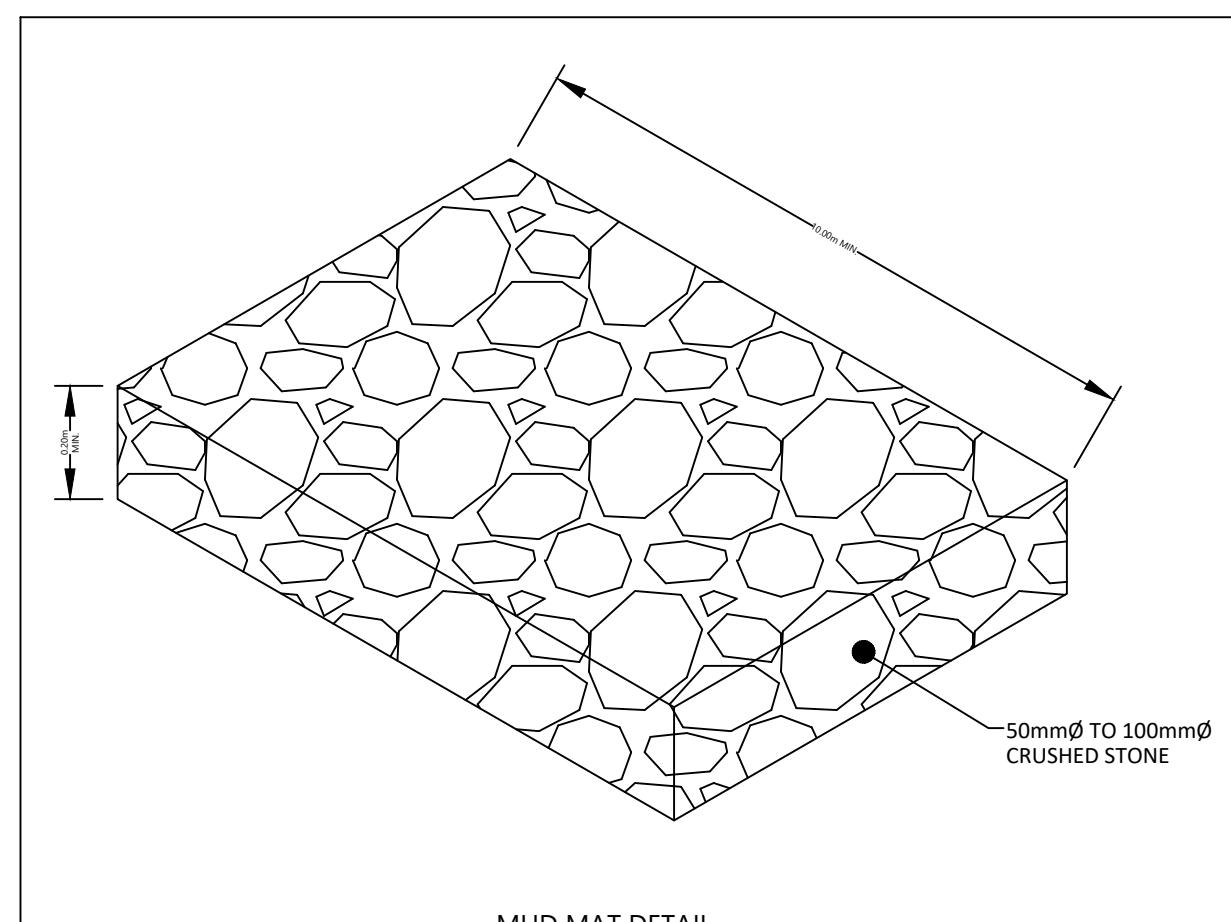
- IF THE SEDIMENT THAT IS ACCUMULATED BY THE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED IN A MANNER THAT AVOIDS ESCAPE OF THE SEDIMENT TO THE DOWNSTREAM SIDE OF THE CONTROL MEASURE AND AVOIDS DAMAGE TO THE CONTROL MEASURE. SEDIMENT WHICH IS ACCUMULATED BY THE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURE SHALL BE REMOVED AT THE TIME THE CONTROL MEASURE WAS CONSTRUCTED AND BE ACCORDING TO THE FOLLOWING:
  - FOR TEMPORARY SEDIMENT BARRIERS, ACCUMULATED SEDIMENT SHALL BE REMOVED ONCE IT REACHES THE LESSER OF THE FOLLOWING:
    - A DEPTH OF ONE-HALF THE EFFECTIVE HEIGHT OF THE CONTROL MEASURE.
    - A DEPTH OF 300 MM IMMEDIATELY UPSTREAM OF THE CONTROL MEASURE.
  - FOR SEDIMENT MEASURES, ACCUMULATED SEDIMENT SHALL BE REMOVED AS NECESSARY TO PERFORM MAINTENANCE REPAIRS.
  - ACCUMULATED SEDIMENT WHICH IS ACCUMULATED BY THE CONTROL MEASURE SHALL BE REMOVED PRIOR TO THE REMOVAL OF THE CONTROL MEASURE.
  - ACCUMULATED SEDIMENT IS TO BE REMOVED AND DISPOSED OF AS PER OPS 180.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MONITORED TO ENSURE THEY ARE IN EFFECTIVE WORKING ORDER. THE CONDITION OF THE CONTROL MEASURES SHALL BE MONITORED PRIOR TO ANY FORECAST STORM EVENT AND FOLLOWING A STORM EVENT.
- DUST CONTROL MEASURES SHOULD BE CONSIDERED PRIOR TO CLEARING AND GRAVING. THE USE OF WATER, CALCIUM CHLORIDE FLAKES/SOLUTION OR MAGNESIUM CHLORIDE FLAKES/SOLUTION SHALL BE USED AS DUST SUPPRESSANT. DUST CONTROL MEASURES SHALL NOT BE USED IN THE FORM OF COLS WHICH MAY TRANSPORT SEDIMENTS OFF SITE, WHERE THEY MAY BE WASHED INTO THE RECEIVING WATER BY THE NEXT RAINSTORM.
- ALL 'GREEN' AREAS TO BE TREATED WITH 150mm TOPSOIL AND SOD AS SOON AS FEASIBLE, AS PER OPS 570.
- ALL DISTURBED AREAS TO BE RESTORED TO ORIGINAL CONDITION OR BETTER UNLESS OTHERWISE SPECIFIED.
- STOCKPILED MATERIAL IS TO BE STORED AWAY FROM POTENTIAL RECEIVERS (E.G. STORM CATCHBASINS, MANHOLES), AND BE SURROUNDED BY EROSION CONTROL MEASURES WHERE MATERIAL IS LEFT IN PLACE IN EXCESS OF 14 DAYS.
- IF REQUIRED, Dewatering/Settling Basins shall be constructed as per OPSD 219.240 and located on flat grade upstream of other erosion mitigation measures. Watercourses shall not be diverted, or blocked, and temporary watercourses crossings shall not be constructed or utilized, unless otherwise specified in the contract. In cases of emergency, where water passage is necessary, the contractor shall release any stranded fish to the open portion of the watercourse without harm.
- ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL CONFORM TO OPS 577.
- WHERE DEWATERING IS REQUIRED, THE DISCHARGED WATER SHALL BE CONTROLLED IN ACCORDANCE WITH OPS 518.
- ALL SETTLING/FILTRATION BASINS SHALL BE EQUIPPED WITH TERRAFIX 2700 GEOTEXTILE (OR APPROVED EQUIVALENT) AND SHALL BE CLEANED AND REPLACED AS REQUIRED.

## SEWER NOTES

- CONSTRUCT ALL SEWERS, CATCH BASINS, MANHOLES AND APPURTENANCES IN ACCORDANCE WITH OPSD STANDARDS AND SPECIFICATIONS, AS WELL AS CITY.
- SEWER TRENCHING AND BEDDING SHALL CONFORM TO OPSD 802.010 AND 802.013 UNLESS NOTED OTHERWISE.
  - BEDDING SHALL BE A MINIMUM 150mm OF GRANULAR "A", COMPACTED TO MINIMUM 95% STANDARD PROCTOR DRY DENSITY. THE USE OF GRAVEL OR STONE AS BEDDING SHALL NOT BE PERMITTED.
  - SUB-BEDDING, IF REQUIRED SHALL CONSIST OF 50mm OF COMPACTED GRANULAR "B" TYPE 1.
  - BACKFILL TO AT LEAST 300mm ABOVE TOP OF PIPE WITH GRANULAR "A" OR "B" TYPE 1.
  - TO MINIMIZE DIFFERENTIAL FROST HEAVING, TRENCH BACKFILL (FROM PAVEMENT SURGRADE TO 2.0 METRES BELOW FINISHED GRADE) SHALL MATCH EXISTING SOIL CONDITIONS.
- SANITARY SEWERS AND CONNECTIONS 150mmØ AND SMALLER TO BE PVC SDR-28.
- SEWERS AND CONNECTIONS 200mmØ AND LARGER TO BE PVC SDR-35, BEDDING TO TYPE "B" EXCEPT AT RISERS, UNLESS NOTED OTHERWISE.
- INSULATE ALL STORM AND SANITARY SEWERS/SERVICES THAT HAVE LESS THAN 2.0m OF COVER WITH THERMAL INSULATION AS PER OPSD 1109.030.
- SEWER CONNECTIONS ARE TO BE MADE ABOVE THE SPRINGLINE OF THE SEWERMAIN AS PER CITY OF OTTAWA STANDARD DRAWING S11, S11.1 & S11.2.
- SUPPLY AND INSTALL ALL PIPING AND APPURTENANCES AS SHOWN AND DETAILED TO WITHIN 1.0m OF BUILDING, ALL ENDS OF SERVICES TO BE PROPERLY CAPPED AND LOCATED WITH 2" x 8" LONG MARKER.
- CONTRACTOR TO TELEVIEW (CCTV) ALL PROPOSED SEWERS ON SITE, OUTLET CONNECTION TO THE MAIN, AND PIPES 150mmØ OR GREATER PRIOR TO BASE COURSE ASPHALT. UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS & APPURTENANCES.
- TYPE TESTING IS TO BE COMPLETED ON SANITARY SERVICE TO CONFIRM PROPER CONNECTION TO SANITARY SEWER MAIN.
- ALL SERVICES PASSING THROUGH FOUNDATION WALL TO BE SLEVED AS REQUIRED.
- ALL EXISTING SERVICES NOT TO BE USED SHALL BE BLANKED AT THE MAIN, TO THE SATISFACTION OF THE CITY.
- CONTRACTOR TO CONFIRM SUMP IN EXISTING CATCHBASINS AND/OR MANHOLES CAN ACCOMMODATE THE PROPOSED INLET CONTROL DEVICES (ICDs) IDENTIFIED ON PLAN C102.
- INSTALLATION TO BE IN ACCORDANCE WITH CURRENT CODES AND STANDARDS OF APPROVAL AGENCIES HYDRO OTTAWA, BELL AND THE CITY.
- CONTRACTOR TO ENSURE ALL APPLICABLE OPS SPECIFICATIONS ARE FOLLOWED DURING CONSTRUCTION.

## WATERMAIN NOTES

- CONSTRUCT ALL WATERMAINS AND APPURTENANCES IN ACCORDANCE WITH OPSD STANDARDS AND SPECIFICATIONS, AS WELL AS CITY STANDARDS.
- INDUSTRIAL/COMMERCIAL SERVICE CONNECTIONS TO BE 50mm COPPER PIPING AND SHALL CONFORM TO ASTM B88 TYPE 'K' SOFT.
- WATERMAINS AND/OR WATER SERVICES ARE TO HAVE A MINIMUM COVER OF 2.4m. OTHERWISE THERMAL INSULATION IS REQUIRED AS PER CITY STANDARDS (IF AVAILABLE) OR OPSD 1109.030.
- IF THE WATERMAIN MUST BE DEFLECTED TO MEET ALIGNMENT, ENSURE THAT THE AMOUNT OF DEFLECTION USED IS EQUAL TO OR LESS THAN THAT WHICH IS RECOMMENDED BY THE MANUFACTURER.
- THERMAL INSULATION OF WATERMAINS AT OPEN STRUCTURES AS PER CITY STANDARDS (IF AVAILABLE) OR OPSD 1109.030.
- VALVES TO BE OPERATED BY CITY STAFF ONLY.
- NO CONNECTION TO EXISTING WATER NETWORK SHALL BE COMPLETED UNTIL A WATER PERMIT IS OBTAINED FROM THE CITY, CITY TO PRESENT FOR WATERMAIN CONNECTION, CONNECTION, EXCAVATION, BACKFILLING AND REINSTATEMENT TO BE COMPLETED BY CONTRACTOR.
- ANY WATERMAIN CONNECTION(S) REQUIRED TO BE COMPLETED BY CITY FORCES.
- ALL WATERMAINS SHALL BE EQUIPPED WITH BUTTERFLY AND GATE VALVES AS PER OPSD 1100.011.
- ALL FIRE HYDRANTS, VALVE AND VALVE BOX SHALL CONFORM TO OPSD 1103.020.
- CONCRETE THRUST BLOCKS TO CONFORM TO OPSD 1103.010 AND OPSD 1103.020.
- ALL WATERMAIN TO BE CLASS 150 DR-18 OR APPROVED EQUIVALENT.
- ALL WATERMAIN TO BE EQUIPPED WITH TRACER WIRE.
- WATER SERVICE PASSING THROUGH FOUNDATION WALL TO BE SLEVED AS REQUIRED.
- IF TEMPORARY WATER SUPPLY IS SPECIFIED IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL COORDINATE WITH THE CITY AND PROVIDE TEMPORARY SERVICING AT THEIR OWN EXPENSE.
- ALL EXISTING SERVICES NOT TO BE USED SHALL BE BLANKED AT THE MAIN, TO THE SATISFACTION OF THE CITY.



MUD MAT DETAIL

## SAN STRUCTURE TABLE

NAME	RIM ELEV.	INVERT IN	INVERT OUT	DESCRIPTION
MH1	75.20		S73.650	COVER: CITY S24 FRAME: CITY S25 STR: OPSD 701.010
MH3	75.92		S74.100	COVER: CITY S24 FRAME: CITY S25 STR: OPSD 701.010
MH4	75.39	N73.130 E73.000	W72.980	COVER: CITY S24 FRAME: CITY S25 STR: OPSD 701.010
MH5	75.58	N73.550 SW73.590	W73.530	COVER: CITY S24 FRAME: CITY S25 STR: OPSD 701.010
MH6	75.55	S73.740	NE73.720	COVER: CITY S24 FRAME: CITY S25 STR: OPSD 701.010
MH7	76.36	N73.290	W73.287	COVER: CITY S24 FRAME: CITY S25 STR: OPSD 701.010
MH8	77.12	W73.700	S73.669	COVER: CITY S24 FRAME: CITY S25 STR: OPSD 701.010
MH9	75.66		N73.896	COVER: CITY S24 FRAME: CITY S25 STR: OPSD 701.010
MH10	75.48		N74.170	COVER: CITY S24 FRAME: CITY S25 STR: OPSD 701.010
MH11	76.56		E74.200	COVER: CITY S24 FRAME: CITY S25 STR: OPSD 701.010

## STM STRUCTURE TABLE

NAME	RIM ELEV.	INVERT IN	INVERT OUT	DESCRIPTION
CB1	75.50		E73.950	COVER: CITY S19 FRAME: CITY S19 STR: OPSD 705.010
CB6	75.20		E73.700	COVER: CITY S19 FRAME: CITY S19 STR: OPSD 705.010
CB8	76.30		S73.400	COVER: CITY S19 FRAME: CITY S19 STR: OPSD 705.010
CB9	76.30		NW74.330	COVER: CITY S19 FRAME: CITY S19 STR: OPSD 705.010
CB12	76.05		W74.794	COVER: CITY S19 FRAME: CITY S19 STR: OPSD 705.010
CB13	76.05		W74.224	COVER: CITY S19 FRAME: CITY S19 STR: OPSD 705.010
CBM3	75.50	NW73.620	S73.610	COVER: CITY S19 FRAME: CITY S25 STR: OPSD 701.010
CBM4	75.50	N73.480	W73.465	COVER: CITY S19 FRAME: CITY S25 STR: OPSD 701.010
CBM7	75.45	N73.300	S73.250	COVER: CITY S19 FRAME: CITY S25 STR: OPSD 705.010
CBM10	76.05	E74.630	N74.600	COVER: CITY S19 FRAME: CITY S19 STR: OPSD 705.010
CBM11	76.05	E74.060 S74.100	W74.050	COVER: CITY S19 FRAME: CITY S19 STR: OPSD 705.010
EX CB3	75.20	W73.500	E73.460	EXISTING
EX CB7	76.00	E73.678 NW73.850 S73.860	S73.850	EXISTING
EX CB8	76.02	NE75.300	S74.080	EXISTING
EX CB10	76.30	SE74.100	W74.070	EXISTING
OGS1	75.71	N72.840	S72.820	STORMCEPTOR EFO4 OR APPROVED EQUIVALENT
OGS2	75.90	N73.280	S73.270	STORMCEPTOR EFO4 OR APPROVED EQUIVALENT
OGS3	76.01	E73.110	W73.100	STORMCEPTOR EFO4 OR APPROVED EQUIVALENT
STMH2	75.94	W73.810	SE73.795	COVER: CITY S24.1 FRAME: CITY S25 STR: OPSD 701.010
STMH5	75.77	E73.395	S73.360	COVER: CITY S24.1 FRAME: CITY S25 STR: OPSD 701.010

## WATER COVER TABLE

LOCATION	STATION	FINISHED GRADE	TOP OF PIPE	COVER
A-CAP	0+000.00	75.68	73.28	2.4
VALVE	0+050.95	75.47	73.07	2.4
200X200X150 TEE	1+000.12	75.50	73.1	2.4
B-200x200 TEE	1+001.11	75.55	73.15	2.4
45 DEGREE BEND	1+048.02	75.60	73.2	2.4
45 DEGREE BEND	1+052.23	75.76	73.36	2.4