Filename: p:\projects\civil\245000\ott-00245036-a0 - oak ridge gate-ph2-ashcroft\60-execution\64-dwg\245036-det.dwg Last Saved: 6/15/2018 9:34:46 AM Pen Table:: exp-64.ctb 21. CIVIL <u>-</u> 20. FOR 13. THE CONTRACTOR SAME. ALL SANITARY SEWERS SHALL BE PVC SDR 35, IPEX "RING-TITE" B182.2 OR LATEST AMENDMENT, UNLESS OTHERWISE NOTED. MINIMUM SOIL COVER TO BE 2.1M TO PROTECT ADEQUATE FROST COVER CANNOT BE ACHIEVED, OPSD 514.010 SANITARY SEWER MANHOLES SHALL BE BENCHED AS PER OPSD 701.021. SANITARY MANHOLE FRAME AND COVERS SHALL BE AS PER CITY OF OTTAWA STD. S24 AND S25. SAFETY PLATFORMS SHALL BE AS PER OPSD 404.02. DROP STRUCTURES SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA SPECIFICATIONS AND OPSD 1003.01. 8 WITHIN THE FROST ZONE, THE BACKFILL IN THE SERVICE MINIMIZE DIFFERENTIAL FROST HEAVING IN THE SUBGRADE. ALL SANITARY SEWER MATERIALS AND INSTALLATION SHALL STANDARDS AND SPECIFICATIONS OF THE CITY OF OTTAWA, (OPSD) AND SPECIFICATIONS (OPSS). CLAY SEALS THE CONTRACTOR SHALL APPRAISE HIS/HER SENCOUNTERED AND SHALL CARRY OUT THEIR INDEPENDENT ASSESSMENT OF GROUND CONDITANY EXTRA COST DUE TO ANY SUCH GROUND CONTRACTOR. ALL EDGES OF DISTURBED PLACING NEW PAVEMENT. ALL NECESSARY CLEARING AND GRUBBING SHALL BE COMPLETED AY ENGINEER AND THE CITY OF OTTAWA PRIOR TO ANY TREE CUTTING. ALL ELEVATIONS ARE GEODETIC AND UTILIZE METRIC OTHERWISE SPECIFIED. ALL DRAWINGS SHOULD NOT QUESTIONABLE DIMENSIONS ARE TO BE CONFIRMED TION SOSITION OF ALL POLE LINES, UITS, WATERMAINS, SEWERS AND OTHER REGROUND UTILITIES STRUCTURES IS NOT NECESSARILY N ON THE CONTRACT DRAWINGS, AND E SHOWN, THE ACCURACY OF THE ION OF SUCH UTILITIES AND CTURES IS NOT GUARANTEED. BEFORE TING WORK, DETERMINE THE EXACT TION OF ALL SUCH UTILITIES AND CTURES AND ASSUME ALL LIABILITY FOR ALL SANITARY BUILDING DRAINS TO BE EQUIPPED OF OTTAWA STANDARD DRAWING \$14.1. THE CONTRACTOR EXISTING SEWERS THE SITE LAYOUT IS THE RESPONSIBILITY OF THE CONTRACTOR. DRAWINGS SHALL BE MAINTAINED ON SITE BY THE CONTRACTOR. THE SUPPORT OF ALL UTILITIES HAVING JURISDICTION. ANY AREAS BEYOND THE LIMIT OF THE SITE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION AT THE CONTRACTOR'S EXPENSE. ALL WORK SHALL BE COMPLETED I REGULATIONS FOR CONSTRUCTION I CONSTRUCTOR AS DEFINED IN THE CONTRACTOR 2.013. DURING SANITARY LATERALS ARE TE AND MARKED WITH A VE GRADE PAINTED RED. TOPOGRAPHICAL DRAWINGS BEDDING SEWERS UNLESS CONSTRUCT SEWER Т CONNECTIONS TO BE CONSTRUCTED AS PER CITY STANDARD S SHOWN ON THE DRAWINGS ARE FOR INFORMATION ONLY. IECHNICAL INVESTIGATION REPORT PREPARED BY PATERSON NO. PG2401-1. ВE ö TO BE READ IN CONJUNCTION WITH AS PER CITY STANDARD S6 & ARE BELOW THE GROUNDWATER TRENCH AND BEDDING SHALL BE AS PER CITY OTHERWISE NOTED. SHALL CONDUCT CCTV INSPECTION OF ALL NEWLY INSTALLED SANITARY SEWERS AND CONNECTED TO. THE TEST SHALL BE PERFORMED IMMEDIATELY AFTER SEWERS INSTALLED SHALL CONDUCT INFILTRATION/EXFILTRATION (AS PER CURRENT OPSS) TESTING ON SANITARY SEWERS. THE TEST SHALL BE PERFORMED IMMEDIATELY AFTER SEWER VIEWED BY THE ENGINEER. WILL BE RESPONSIBLE FOR ADDITIONAL BEDDING WIDTH, AS SPECIFIED BY OPSD, IS EXCEEDED. SHALL L BE RESPONSIBLE F. CONSTRUCTION TO JURISDICTION. PROVIDED USING SUBSTITUTION INFORMATION REFER TO PLAN PREPARED BY ANNIS, NOTES 먪 DRAWINGS 50mm 7 MINIMUM CITY SHALL ' WITH THE CITY OF OTTAWA REQUIREMENTS FOR TRAFFIC CONSTRUCTION SIGNAGE MUST CONFORM TO THE M.T.O. CES (LATEST AMENDMENT). IN ACCORDANCE WITH THE PROJECTS", THE GENERAL ACT. OF MATERIALS X 100mm 유 ΒE SHALL THAT ARE NOT MARKED BE N EVERY 60m OTTAWA REMOVED ALL EXCAVATION, I FOR TION AND ELEVATION OF EXISTING SERVICES PRIOR TO AN CONFIRM LOCATIONS AND ELEVATIONS OF EXISTING SERVICE IXISTING SERVICES THAT MAY BE DAMAGED OR CAUSE CONTRICT OF THE CONTRACTOR PRIOR TO THE START OF PRETATIONS, CHANGES AND ADDITIONS TO THESE DRAWING INGINEER, WHEN NOTED AND BEFORE PROCEEDING WITH CONSTRUCTION IN AREAS WHERE DISCREPANCIES APPEAR TO CONSTRUCTION IN AREAS WHERE DISCREPANCIES APPEAR SELF OF A OWN TEST DITIONS. ВE 28, IPEX WOODEN ACCORDANCE WITH S7. GRANULAR SANITARY SEWERS IN ACCORDANCE WITH OPSD TOR SHALL PROTECT THE PIPES FROM HEAVY COMPACTED TO A MINIMUM OF 95% SPMDD. SEWERS FROM FROST EQUIVALENT THERMAL OBTAINING UNLESS STANDARDS. WITH SANITARY BACKWATER OF ALL SURFACE AND SUBSURFACE CONDITIONS TEST PITS AS REQUIRED TO MAKE THEIR OWN S. THE CONTRACTOR SHALL NOT MAKE ANY CLANDITIONS VARYING FROM THOSE ANTICIPATED BY FROM THE BE SCALED BY THE WITH THE ENGINEER ARCHITECTURAL, CUT AS PER "RING-TITE" (OR EQUIVALENT), MARKER, EXTENDING FROM THE TRENCHES WRITTEN CONFORM ONTARIO TO FORM F BACKFILL AND REINSTATEMENT THE ENGINEER, THE CITY OF "OCCUPATIONAL HEALTH CONTRACTOR SHALL BE "ISSUED PERMITS Ş Þ, 유 OR ADDITIONAL BEDDING OTTAWA SHOULD TO THE LATEST REVIS 末 LANDSCAPE REQUIREMENTS EQUIVALENT), FOR CONTRACTOR. IN WRITING. REQUIRED . FOR GEOTECHNICAL GROUP INC, DATED o'SULLIVAN, CONTRACTOR. S11.1. STD. AND MATCH VALVES 7 В BE INCREASED ₽ND **S6** AND STRENGTH PIPE METRES UNLESS R. ANY MISSING THE SOIL AND SAF AND ENGINEER INSTALLED VOLLEBEKK LTD. 유 BEAR S7, DRAWINGS WITH APPEAR U FETY ACT AND TO BE THE COST CLAIM FOR BY THE 2 CLASS 당 PER HAS 70 AREAS AND TH ਜ 징 유 엄 BEEN 먪 Ħ . 17. 13. .. WATERMAIN NOTES 16. 13. 12. 16. 15. 12. 15. 10. NO WORK SHALL (CONNECTIONS BY CONTRACTOR. STORM CATHODIC W42. ALL FIRE HYDRANTS TO BE INSTALLED AS PER W18 AND/OR CITY STANDARD CROSS SECTIONS. SEWER THRUST BLOCKS THE CONTRACTOR SHALL CONDUCT EXISTING SEWERS CONNECTED TO. CURB INLET TYPE CATCH BASIN (CICB) SHALL BE IN GRATE SHALL BE AS PER CITY OF OTTAWA STD. S22 SAFETY PLATFORMS MINIMUM SOIL COVER TO BE 2.1M ADEQUATE FROST COVER CANNOT I OPSD 514.010 WITHIN THE FROST ZONE, THE BACKFILL IN THE SERVICE MINIMIZE DIFFERENTIAL FROST HEAVING IN THE SUBGRADE WHERE THE SEPARATION BETWEEN SERVICES BE INSULATED AS PER CITY OF OTTAWA STD. INSULATION FOR WATERMAIN CROSSING OVER OTTAWA STD. W25.2 AND W25, RESPECTIVELY, DISINFECTION ALL WATERMAINS TO WATER SERVICES ARE TO BE TYPE K SOFT SPECIFIED. ALL WATER SERVICES CROSSING W38. WATER SERVICES SHALL BE MARKED 1.0m ABOVE GRADE PAINTED BLUE. STAND LINE. CONTRACTOR SHALL ALL CATCHBASINS OTHERWISE NOTED. ALL STORM LATERALS SHALL WOODEN MARKER EXTENDING WATERMAINS TRENCH AND BEDDING SHALL BE UNLESS OTHERWISE SPECIFIED. BEDDING AND GEOTECHNICAL ENGINEER. WATERMAIN MUST BE DEFLECTED TO MEET LESS THAN HALF THAT RECOMMENDED BY E CONTRACTOR SHALL CONSTRUC 2.013. RIGID STORM PIPE SHALL NSTRUCTION THE CONTRACTOR SH DDING AND BACKFILL SHALL BE (WATERMAIN MATERIALS , NUDARDS AND SPECIFICAT PSD) AND SPECIFICATIONS CONTRACTOR : STORM SERVICES TO PVC MANHOLE FRAME AND BEDDING AS WATERMAINS SHALL BE INSTALLED WITH ACCORDANCE WITH CITY OF OTTAWA STD. PROTECTION IS REQUIRED AND TESTING CONNECTIONS AND RESTRAINT AS PER CITY OF COMMENCE UNLESS A CITY WATER CITY OF OTTAWA FORCES WITH ALL SHALL PROVIDE ALL TEMPORARY CAPS, DISINFECTION OF THE WATERMAN. ₽ SHALL BE SHALL BE ENSURE THAT CATCHBASINS PER CITY STANDARD BE INSTALLED AT MINIMUM CATCHBASIN 略 유 TO BE S HAVE BEEN DESIGNI EXCEEDED, THE CON E OF BEDDING OR A I BE EQUAL COVERS BE PVC SDR 28, V FROM THE INVERT Z Z WATERMAIN TO SS). ACCORDANCE WITH BE 7 CCTV INSPECTION OF A CONSTRUCTED MANHOLES ON ALL METALLIC ACHIEVED, SHALL BE 70 SHALL 86 & TO BE INSTALLED SEWERS nm AND AND W23 COVER MATER IN ACCORDAN AND BELOW SEWER SHALL WHERE WATERMAN COVER SHALL CONFO 쁀 WITH CITY COVER WHITE TO 1. 쁌 ARE SS MANHOLES A 10 . W36. Z SS ဂ္ OTTAWA LESS ROVED BA PER OPSD PER INSTA ACCORDANCE WITH CITY OF OTTAWA STD. AND S23, UNLESS OTHERWISE NOTED. ОПА GAL 유 THAN 900mm SHALL BE CONSTRUCTED USE BENCHING IN ACCORDANCE WITH COLOR AND MARKED WITH A 50mm ABOVE GRADE PAINTED GREEN. OF OTTAWA CITY OF OTTAWA STD. ROM FROST DAMAGE. IN AREAS WHERE S INSPECTOR IS ON SITE. WATERMAIN VATION BACKFILL AND ROAD REINSTATEMENT RFORMED IMMEDIATELY AFTER SEWERS INSTALLED. 404.02. ICE WITH CITY OF OTTAWA STD. S1. AND OPSD PER CITY OF OTTAWA STD. S19 FOR REAR LOT RM TO THE LATEST REVISIONS OF THE ONTARIO PROVINCIAL STANDARD DRAWIN LED AT THE LOW POINT OF SAG CURB WORKS. AS PER AND STRANDED W19 W25.3 AND Տ멾 OF OTTAWA STANDARD W17, SPECIFIED BY PROJECT COPPER TWU OR RWU TRACER STANDARDS DEFLECTION USED $\overset{\mathsf{A}}{\mathsf{D}}$ WITH CITY OF GENERAL CONTRACTOR TO ADJUST EXISTING CATCH BASINS, BOXES TO FINAL GRADE AS REQUIRED. IT SHALL BE THE BUILDER'S RESPONSIBILITY TO ENSURE THAT GRADING AROUND HYDRANTS, TRANSFORMERS AND UTILITY PEDESTALS, ETC., MEET CURRENT CITY OF OTTAWA, HYDRO AND UTILITY COMPANY REQUIREMENTS. GRADING IN GRASSED AREAS MAXIMUM 3:1 TERRACING CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO BUILDINGS DURING EXCAVATION AND CONSTRUCTION PERIOD. ALL GROUND SURFACES SHALL BE EVENLY GRADED WITHOUT PONDING AREAS EXCEPT WHERE APPROVED SWALE OR CATCH BASIN OUTLETS ARE PROVIDED. ASPHALT WEAR COURSE SHALL NOT BE PLACED UNTIL THE REPAIRS HAVE BEEN CARRIED OUT TO THE SATISFACTION OF NOTES FOR FACE OF BUILDING GRADING 略 EDGE OF (TYPICAL) TYPICAL TYPICAL VIDEO INSPECTION THE ENGINEER. CONCRETE SIDEWALK 6.7m SERVICE N.T.S ROAD STMMH CONNECTIONS **CROSS** SINGLE DRIVEWAY DOUBLE DRIVEWAY **SECTION** BUILDING FACE SANITARY WATER SERVICE (END UNITS ONLY) exp. ID UNITS ONLY) ၈ ெ APPED FACE ASHCROFT HOMES 18 ANTARES DRIVE OTTAWA, ON. K2E 1A9 TYPICAL TOWNHOME SERVICING TYPICAL SERVICE TRENCH TYPE 4 1-150mm SANITARY SERVICE (PVC SDR28) 1-150mm STORM SERVICE (PVC SDR28) 1-50mm WATER SERVICE (TYPE K COPPER) TYPICAL SERVICE TRENCH TYPE 3 2-135mm SANITARY SERVICE (PVC SDR28) 2-19mm WATER SERVICE (TYPE K COPPER) YPICAL SERVICE TRENCH TYPE 1 -135mm SANITARY SERVICE (PVC SDR28) -100mm STORM SERVICE (PVC SDR28) -19mm WATER SERVICE (TYPE K COPPER) PICAL SERVICE TRENCH TYPE 2 135mm SANITARY SERVICE (PVC SDR28) 100mm STORM SERVICE (PVC SDR28) 19mm WATER SERVICE (TYPE K COPPER) SWALE 1:50 DETAIL SAB BMT BMT BMT BMT PROPOSED LEGEND OAKRIDGE GATE, PHASE OTTAWA, ONTARIO P3 M=88.18 (0.28) 100=88.14 (0.14) 5=88.03 (0.13) NOTES, LEGEND AND DETAILS SHEET ○ STMMH 200● SANMH 100 <u>200mmø_STM</u> 200mmø SAN → CBMH 202 O CBE ■CB1 ■ CB1 ⊗ V&VB ≖ 203×152 ⊗wsv ۲ 22° <u>ላ</u> 45• Ħ = 203x203 MOUNTABLE CURB (SC1.3) BARRIER CURB (SC1.1) DEPRESSED BARRIER CURB LOCATION SWALE AND DIRECTION OF FLOW SANITARY SEWER STORM SEWER SEWER/WATERMAIN CROSSING LOCATION REFER TO TABLE ON CO1 MAXIMUM SPILL LIMIT 100 YEAR PONDING LIMIT 5 YEAR PONDING LIMIT SILT FENCE CATCHBASIN TEE SLOPE AND DIRECTION OF FLOW BASEMENT FINISHED FLOOR ELEVATION TOP OF FOUNDATION ELEVATION REMOTE WATER METER READER WATERMAIN TEE (MAIN BRANCH) WATERMAIN CROSS SANITARY MANHOLE STORM MANHOLE PONDING AREA NUMBER MAXIMUM SPILL ELEVATION (DEPTH) 100 YEAR ELEVATION (DEPTH) 5 YEAR ELEVATION (DEPTH) BUILDING ENTRY/EXIT BOREHOLE LOCATION OVERLAND FLOW ROUTE FINAL GRADE VALVE AND VALVE BOX CATCHBASIN ELBOW CATCHBASIN c/w ICD CATCHBASIN CATCHBASIN MANHOLE c/w ICD CATCHBASIN MANHOLE PROPERTY LINE TOP OF GRATE ELEVATION TOP OF WATERMAIN ELEVATION TOP OF FINISHED FLOOR ELEVATION TOP OF FINISHED LOWER FLOOR ELEVATION 11.25° WATERMAIN BEND WATER METER 45° WATERMAIN BEND WATER SERVICE VALVE NDERSIDE OF FOOTING ELEVATION STING TREES WATERMAIN BEND =

MARCH 2018

C04

GENERAL NOTES:

STORM

SEWER NOTES

SEWER AND SP SPECIF

INSTALLATION
THE CITY OF

NFORM TO THE LATEST REVISIONS OF THE ONTARIO PROVINCIAL STANDARD DRAWINGS

ROADWAY SPECIFICATIONS

ALL WORKS AND MATERIALS SHALL CONFORM TO THE LATEST REVISIONS SPECIFICATIONS OF THE CITY OF OTTAWA, ONTARIO PROVINCIAL STANDARD SPECIFICATIONS (OPSS), WHERE APPLICABLE.

TO ANY
SERVICES AND
SE CONFLICTS
DIMENSIONS

STORM SEWERS ARE OTHERWISE SPECIFIED.

TO BE

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ORM SEWERS IN ACCORDANCE WITH OPSD 802.010 AND STED IN ACCORDANCE WITH OPSD 802.030. DURING THE PIPES FROM HEAVY CONSTRUCTION EQUIPMENT. A MINIMUM OF 95% SPMDD.

ALL REINFORCED CONCRETE STORM SEWER PIPE AMENDMENT). ALL NON-REINFORCED CONCRETE A257.L (LATEST AMENDMENT). PIPE SHALL BE JC (LATEST AMENDMENT).

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E WITH CSA A257.2 (LATEST BE IN ACCORDANCE WITH CSA GASKETS AS PER CSA A257.3

ROAD SUBDRAINS SHALL BE IN ACCORDANCE WITH CITY OF LENGTH AT CATCHBASINS. SUBDRAINS SHALL BE INSTALLED SIDE AT FLOWBY CATCHBASINS.

OTTAWA STD. R1. SUBDRAINS SHALL BE 6m IN BOTH SIDES AT LOW POINTS AND ON THE HIGH

PAVEMENT REINSTATEMENT FOR SERVICE AND STD. R10 AND OPSD 509.010, OPSS 310.

SHALL BE PLACED TO A MINIMUM THICKNESS

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AROUND

TYPICAL (BLOCK 1 d

TOWNHOME SERVICING

HEAVY DUTY PAVEMENT STRUCTURE
40mm HL3 OR SUPERPAVE 12.5mm
50mm HL8 OR SUPERPAVE 19.0mm
150mm GRANULAR 'A'
400mm GRANULAR 'B' TYPE II

ERHEAD WIRES
LITY POLE
HT STANDARD
TCHBASIN
TCHBASIN ELBOI
TCHBASIN TEE
OF GRATE
S METER

LIGHT DUTY PAVEMENT STRUCTURE
50mm HL3 OR SUPERPAVE 12.5mm
150mm GRANULAR 'A'
300mm GRANULAR 'B' TYPE II

CONCRETE CURB SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. SCI.1.1(BARRIER (MOUNTABLE CURB), AS NOTED. PROVISION SHALL BE MADE FOR CURB DEPRESSIONS AT DRIVEWAYS.

CURB) AND SC1.3 SIDEWALKS AND

STRIPPED

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<u>PAVEMENT</u>

STRUCTURES

LEGEND