

GENERAL NOTES:

- ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH THE ONTARIO BUILDING CODE, PLUMBING CODE, ONTARIO REGULATION 815/84, AND CITY OF WINDSOR STANDARDS.
- ALL WORK INSIDE PROPERTY SHALL MEET THE REQUIREMENTS OF THE CITY OF WINDSOR BUILDING DEPARTMENT.
- ALL WORK OUTSIDE PROPERTY SHALL MEET THE REQUIREMENTS OF THE CITY OF WINDSOR PUBLIC WORKS DEPARTMENT.
- RESTORE ALL SURFACES TO A CONDITION EQUAL TO OR BETTER THAN ORIGINAL AND TO THE SATISFACTION OF THE CITY OF WINDSOR PUBLIC WORKS DEPARTMENT, AND THE OWNER AND/OR HIS REPRESENTATIVES.
- THE CONTRACTOR SHALL CONFIRM THE LOCATIONS AND INVERTS OF EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE TO THE OWNER FOR ALL DAMAGES TO ANY UTILITY.
- ALL SEWERS SHALL BE PVC SDR 35 PIPE, UNLESS NOTED OTHERWISE.
- ALL SEWERS AND WATER SERVICES, NOT WITHIN THE CITY OF WINDSOR RIGHT-OF-WAY, UNDER THE PAVEMENT SHALL BE BACKFILLED WITH GRANULAR 'A' TO 100% S.P.M.D.D. AND WITH APPROVED NATIVE MATERIAL TO 95% S.P.M.D.D. ELSEWHERE.
- EXTEND BACKFILL FOR SEWERS CROSSING PAVEMENT TO 1'-6" (450mm) BEYOND FACE OF CURB.
- CLEAN-OUTS IN PAVED AREAS SHALL BE SURROUNDED IN 6" (150mm) CONCRETE. COVERS SHALL BE HEAVY DUTY METAL.
- PAVEMENT GRADES SHOWN ARE AT CATCH BASINS OR AT EDGE OF PAVEMENT.
- ANY FILL SHALL BE APPROVED NATIVE MATERIAL.
- THE CONTRACTOR SHALL DISPOSE OF REMOVED AND EXCESS MATERIAL OFF SITE IN A SUITABLE MANNER.
- ALL CATCHBASINS/MANHOLE CATCHBASINS SHALL BE EQUIPPED WITH 4" (100mm) DIA. SUBDRAIN WITH FILTER SOCK, INSTALLED IN FOUR DIRECTIONS EACH 10'-0" (3.0m) IN LENGTH, TRENCHED IN THE SUBGRADE.
- ALL PERFORATED PIPE SHALL BE CAPPED AT UPSTREAM END.
- THE ELEVATIONS OF ALL EXISTING UTILITY COVERS/APURTANCES SHALL BE ADJUSTED TO MEET THE PROPOSED GRADES. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING: MANHOLES, CLEANOUTS, VALVES, ETC.
- THE CONTRACTOR SHALL SUBMIT A CERTIFICATE BY AN ONTARIO LAND SURVEYOR OR ENGINEER STATING THAT THE GRADES CONFORM TO THE ELEVATIONS SHOWN ON THE APPROVED DRAWINGS AT THE COMPLETION OF CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR APPLYING FOR, OBTAINING, SCHEDULING AND PAYING FOR ALL NECESSARY PERMITS, INSPECTIONS, FEES, ETC. TO PERFORM THE WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE SITE TO SATISFY HIMSELF OF THE EXISTING SITE CONDITIONS.
- RESTORATION OF THE RIGHT-OF-WAY SHALL FOLLOW CITY OF WINDSOR STANDARD SPECIFICATION S-29 AND CITY OF WINDSOR STANDARD DETAIL AS-207B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY RESTORATION. PERMANENT RESTORATION OF ALL HARD SURFACES AND ADJACENT BOULEVARD/LANDSCAPED AREAS SHALL BE COMPLETED BY THE CITY, AND AT THE COST BORNE BY THE CONTRACTOR.

THE FOLLOWING ONTARIO PROVINCIAL STANDARD DRAWINGS SHALL APPLY:

OPSD-400.020	CAST IRON, SQUARE FRAME WITH SQUARE FLAT GRATE FOR CATCH BASINS, HERRING BONE OPENINGS
OPSD-802.010	FLEXIBLE PIPE EMBEDMENT AND BACKFILL EARTH EXCAVATION
OPSD-802.030	RIGID PIPE BEDDING, COVER AND BACKFILL, TYPE 1 OR 2 SOIL - EARTH EXCAVATION
OPSD-1006.010	SEWER SERVICE CONNECTIONS FOR RIGID MAIN PIPE SEWER
OPSD-1006.020	SEWER SERVICE CONNECTIONS FOR FLEXIBLE MAIN PIPE SEWER

WATER SERVICE NOTES:

- ALL MATERIAL AND WORK SHALL BE IN ACCORDANCE WITH WINDSOR UTILITIES COMMISSION SPECIFICATIONS AND STANDARD DETAILS, AND OBTAIN ALL PERMITS.
- WATER SERVICES SHALL HAVE 5 ft. (1.5m) MINIMUM DEPTH OF COVER.
- 4" (100mm) 12" (300mm) WATERMAIN PIPING SHALL BE POLYVINYL CHLORIDE (PVC) CONFORMING TO THE CURRENT SPECIFICATION AWWA C-900, CLASS 150, DR 18, BLUE IN COLOUR.
- 1" (25mm) TO 2" (50mm) WATER SERVICES SHALL BE POLYETHYLENE (PE) PRESSURE TUBING CONFORMING TO THE CURRENT SPECIFICATION AWWA C-901 AND MUST HAVE STAMPED THEREON THE DESIGNATION "SERIES 160 POTABLE OD PIPE PE 2306 CSA CERTIFIED".
- ALL PLASTIC PIPE TO INCLUDE TRACER WIRE #12 AWG CONDUCTOR, SOLID WHITE, TWU FLAMESEAL WIRE. SPLICES WILL BE ACCOMPLISHED USING 'BURNDY' KS-90, 16-10 CONNECTORS.
- ALL WORK SHALL BE IN ACCORDANCE WITH THE WINDSOR UTILITIES COMMISSION REQUIREMENTS, INCLUDING ALL NECESSARY FITTINGS, FLUSHING AND TESTING.
- ALL EXISTING REDUNDANT SERVICES SHALL BE REMOVED UP TO AND ABANDONED AT THE PROPERTY LINE PER WINDSOR UTILITIES COMMISSION STANDARDS.
- THE CONTRACTOR SHALL SUPPLY THE NECESSARY TRAFFIC PLAN AND INSPECTION WITHIN THE RIGHT-OF-WAY IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF WINDSOR PUBLIC WORKS DEPARTMENT AND THE WINDSOR UTILITIES COMMISSION.

SEDIMENT CONTROL MEASURES:

- THE CONTRACTOR SHALL PROTECT ALL EXPOSED SURFACES AND CONTROL ALL RUNOFF DURING CONSTRUCTION.
- ALL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO STARTING CONSTRUCTION AND MUST REMAIN IN PLACE UNTIL RESTORATION IS COMPLETE.
- THE CONTRACTOR SHALL MAINTAIN EROSION CONTROL MEASURES DURING CONSTRUCTION.
- ALL COLLECTED SEDIMENT SHALL BE DISPOSED OF AT AN APPROVED LOCATION.
- AREA DISTURBED DURING CONSTRUCTION SHALL BE KEPT TO A MINIMUM.
- ALL DE-WATERING SHALL BE DISPOSED OF IN AN APPROVED SEDIMENTATION BASIN.
- THE CONTRACTOR SHALL PROTECT ALL CATCHBASINS, MANHOLES AND PIPE ENDS FROM SEDIMENT INTRUSION WITH FILTER CLOTH OR OTHER APPROVED METHOD.
- ALL SUMPS SHALL BE KEPT CLEAN DURING CONSTRUCTION.
- THE CONTRACTOR SHALL PREVENT WIND-BLOWN DUST.
- STRAW BALES SHALL BE USED DURING CONSTRUCTION, AS REQUIRED.

THE FOLLOWING CITY OF WINDSOR STANDARD DRAWINGS/SPECIFICATIONS SHALL APPLY TO THIS CONTRACT:

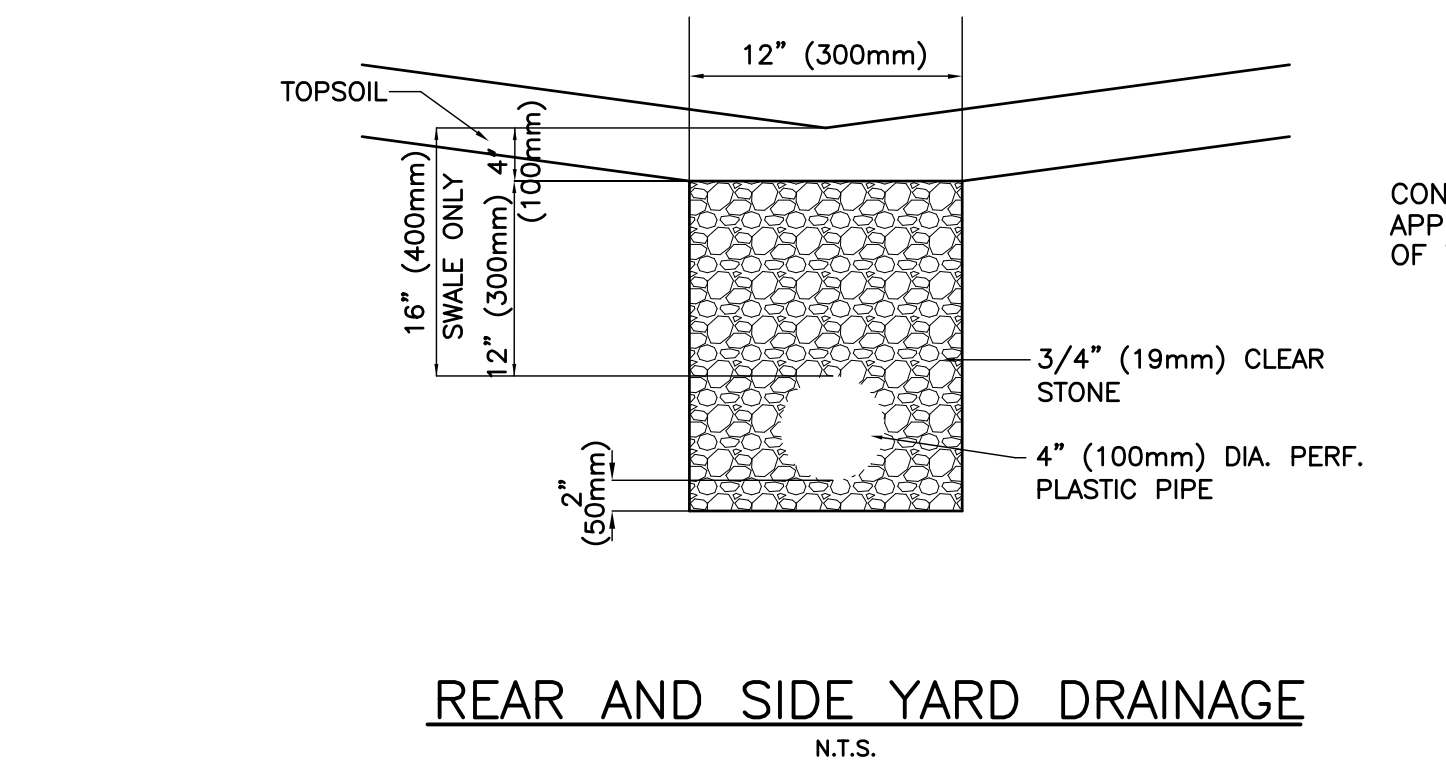
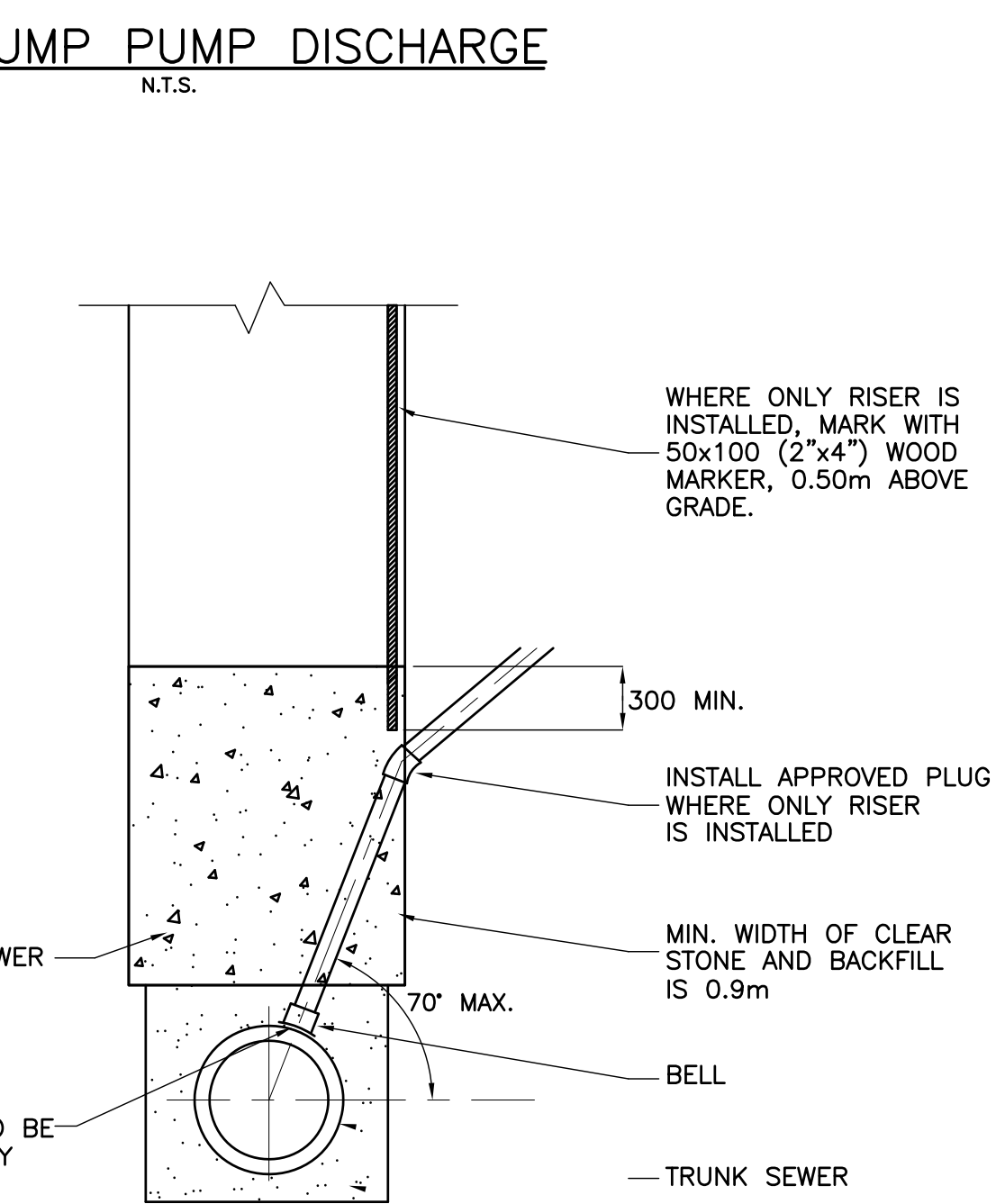
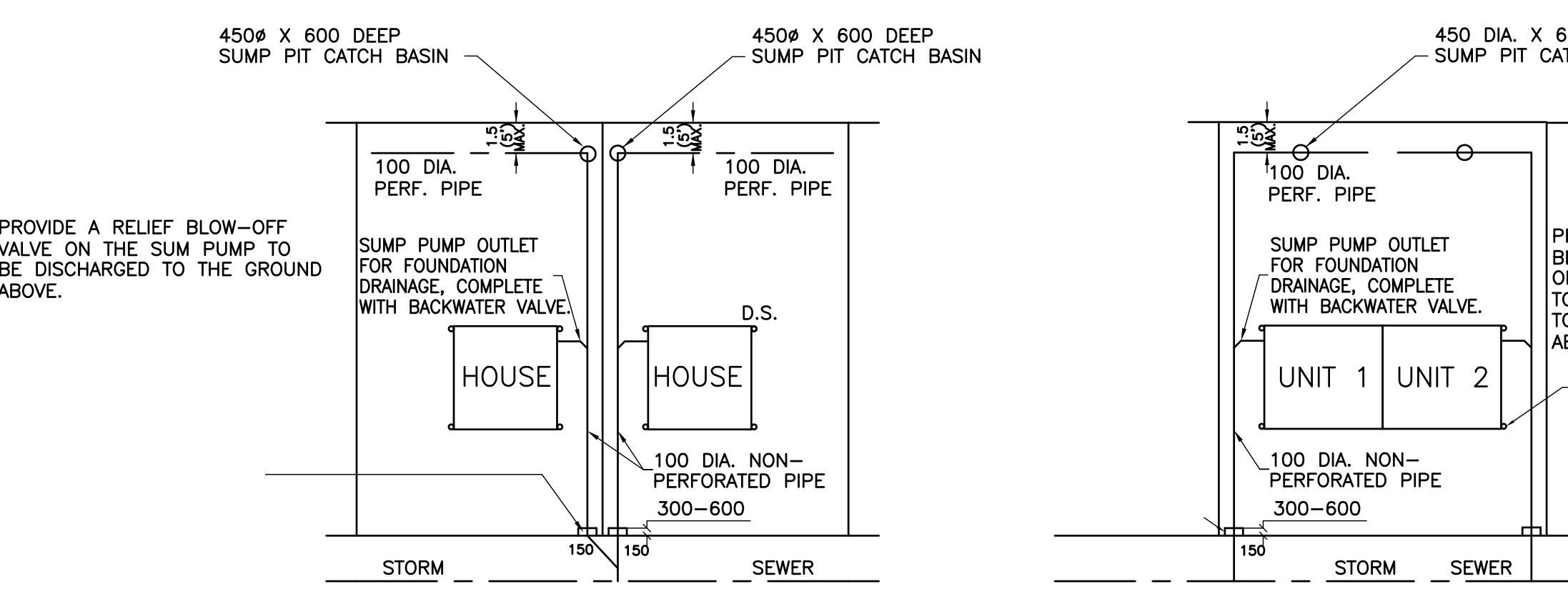
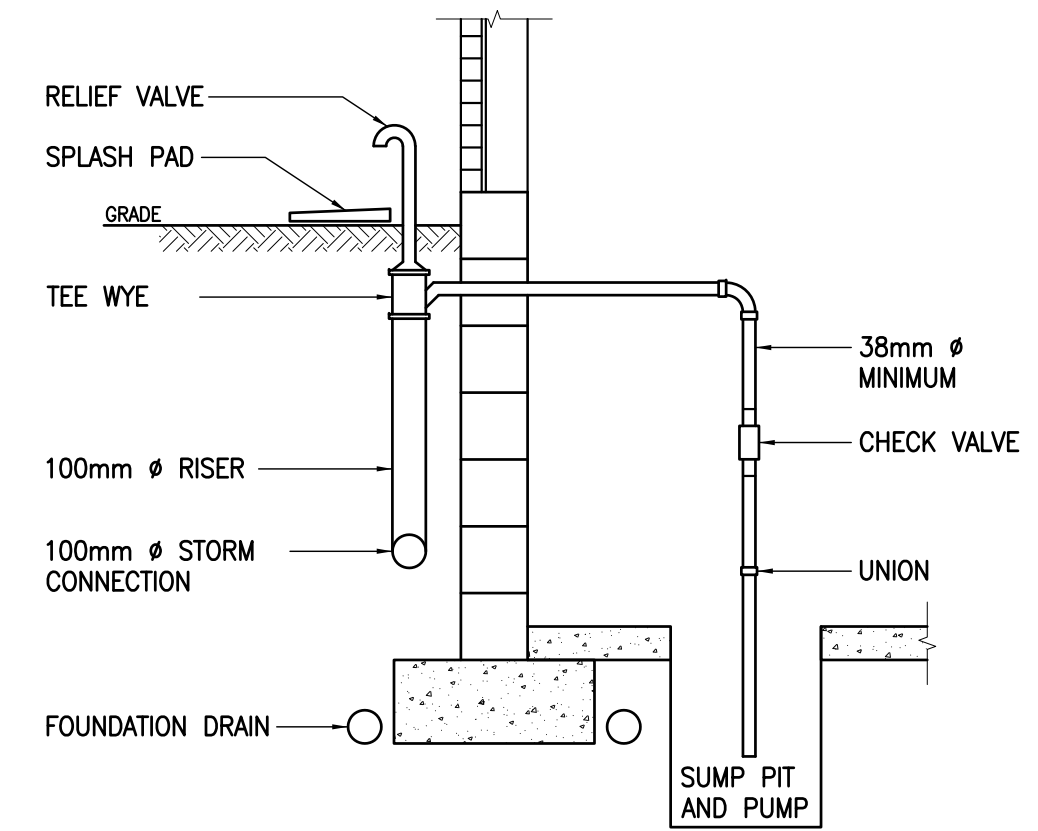
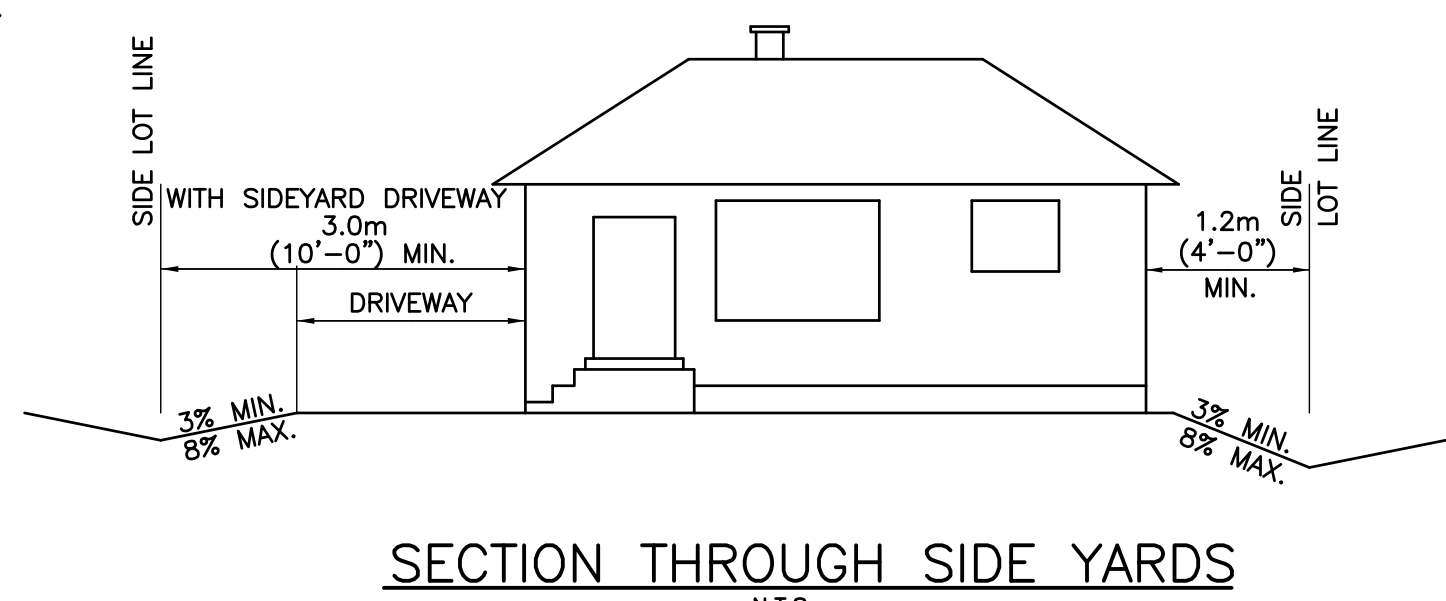
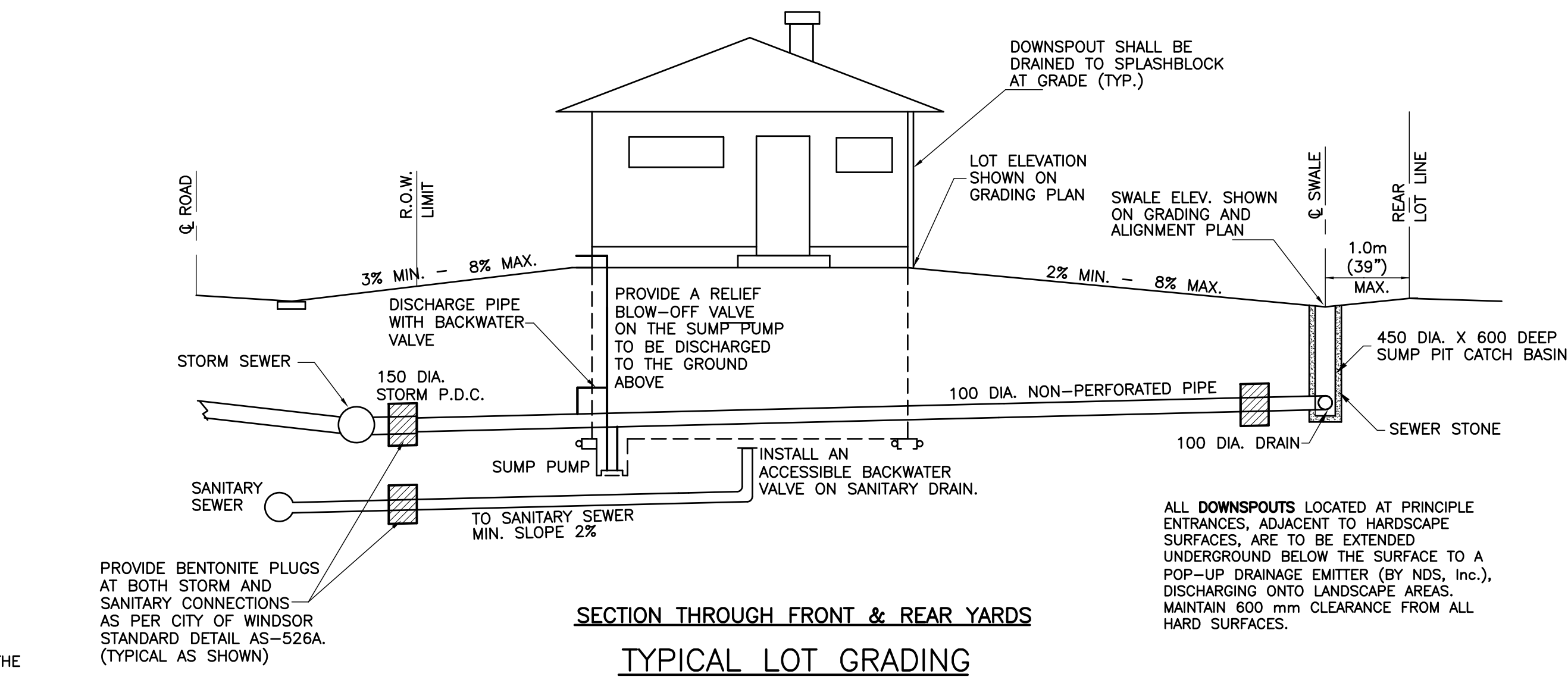
2'x2' PRECAST CONCRETE CATCH BASIN WITH T-Y TRAP AND CLEANOUT	BD-02
DRIVEWAY APPROACH ACROSS CULVERT	AS-209
8.6m (28 ft) WIDE RESIDENTIAL ASPHALT PAVEMENT	AS-214
RESIDENTIAL DRIVE CONCRETE	CS-222
CURB AND GUTTER FOR ASPHALT PAVEMENT	AS-208
MANHOLE FRAME AND COVER - TYPE II	AS-304A
DETAIL OF TYPICAL MANHOLE STEP	AS-305
CLASS "B" BEDDING DETAIL VARIOUS CASES	AS-310B
PRECAST MAINTENANCE HOLE 1200 mm DIAMETER	AS-314A
RESIDENTIAL CONCRETE SIDEWALK	AS-401
INLET CATCH BASIN BOX-OUT FOR ASPHALT PAVEMENT	AS-546
CULVERTS, HEADWALLS AND ROADSIDE DRAINAGE	S-11
UTILITY CUTS RESTORATION	S-29
REPLACEMENT OF PRIVATE DRAIN CONNECTIONS	S-35

LOT GRADING AND DRAINAGE NOTES:

- LOT GRADING TO DIRECT WATER AWAY FROM HOUSE TO EITHER ROAD OR REAR YARD DRAIN.
- SANITARY CONNECTION TO CARRY DOMESTIC SEWAGE ONLY.
- CONNECT WEeping TILES AROUND FOOTING TO BASEMENT SUMP AND DISCHARGE TO STORM SEWER.
- THE EXISTING CATCH BASINS IN THE ALLEYS AND REAR YARDS, WHICH ARE IMMEDIATELY NORTH AND SOUTH OF THE SITE, ARE TO BE LEFT IN THEIR CURRENT LOCATION AND CONDITION. THESE CATCH BASINS ARE NOT TO BE USED FOR DRAINAGE FOR THE NEWLY CREATED LOTS. DURING THE SERVICING CONSTRUCTION PHASE OF THE DEVELOPMENT, THE DEVELOPER WILL UNDERTAKE TO DETERMINE THE LOCATION AND INVERTS OF DRAINAGE PIPES CONNECTING TO THESE CATCH BASINS.
- REAR YARD CATCH BASINS TO BE USED.
- GRADE AROUND BUILDINGS SHALL BE A MINIMUM 100mm BELOW THE LOWEST BUILDING OPENING.
- ALL EXPOSED FOUNDATION WALLS BELOW THE LOWEST BUILDING OPENING SHALL BE WATER-PROOFED.
- A CONCRETE ARCHITECTURAL BLOCK RETAINING WALL SHALL BE CONSTRUCTED TO THE SATISFACTION OF CITY OF WINDSOR, WHERE APPLICABLE.

SUPPORT OF HORIZONTAL STORM WATER PIPING ON PRIVATE PROPERTY IS TO BE PROVIDED BY ONE OF THE FOLLOWING OPTIONS:

- ON UNDISTURBED SOIL
- ON CLEAR STONE PLACED ON UNDISTURBED SOIL
- ON ENGINEERED FILL
- ON AN ENGINEERED SUPPORT STRUCTURE
- BY ENGINEERED STRAPPING TO FOUNDATION WALL.



NOTES:

- For plastic service pipes, install main stop at 15' above horizontal with a minimum 1.2m long gooseneck.
- Direct top ductile iron pipe with approved tool with standard AWWA inlet thread.
- Service connections to plastic watermains shall be made using service saddles or factory made tees.
- Couplings shall not be permitted unless the service length exceeds 20m between the main stop and curb stop.
- All water services shall be installed 90' to the longitudinal axis of the watermain.
- Backfill material within 500mm of service box shall be native or imported, as specified.
- All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING Nov 2013 Rev 3

WATER SERVICE CONNECTION

19 and 25mm DIAMETER SIZES

OPSD 1104.010

NOTES:

- ANY MATERIAL MUST BE APPROVED BY THE ENGINEER.
- IN SANDY OR PERVIOUS SOIL THIS WILL REQUIRE SPECIAL DESIGN.
- UNLESS SPECIFIED, THE CONTRACTOR WILL HAVE A CHOICE OF EITHER LEAN GROUT OR BENTONITE.

CITY OF WINDSOR INFRASTRUCTURE SERVICES

STANDARD LEAN GROUT / BENTONITE PLUG DETAIL (SERVICE CONNECTION)

DRAWN BY: W.A. DATE: MAY, 2003

REVISION: CO-222 CHECKED BY:

CH'D BY: PASSED BY: 07/2

AS-526-A

DESIGNED BY: C.G.	SECRET GARDEN RESIDENTIAL SUBDIVISION	MISCELLANEOUS NOTES AND DETAILS
DRAWN BY: C.G.		
CHECKED BY: W.T.		
SCALE: AS NOTED		
DATE: OCTOBER 2022		
APPROVED AS TO FORM, IN RELIANCE UPON THE PROFESSIONAL SKILL AND ABILITY OF HADDAD MORGAN AND ASSOCIATES LTD. AS TO DESIGN AND SPECIFICATION.	WINDSOR	ONTARIO
0 APPROVAL 09-05-24 CG Mark Winterton, P.Eng. Commissioner of Infrastructure Services THE CORPORATION OF THE CITY OF WINDSOR	CHIEF BUILDING OFFICIAL THE CORPORATION OF THE CITY OF WINDSOR	PROJECT NO.: 19-134 DWG. NO.: 4
CHG. DESCRIPTION DD-MM-YY BY		ACCOUNT NO.: