



Engineering Design Criteria & Standard Drawings

(December 2020)

APPENDIX A – STANDARD DRAWINGS



FOREWORD

The Standard Drawings presented are meant to be read in conjunction with the City's Design Criteria document.

The 2020 edition of the Standard Drawings has been prepared in response to the planned growth envisioned by the City's Official Plan and informed by various Master Plan studies for transportation, water, wastewater and stormwater management infrastructure. While the previous stock of Standard Drawings has been simplified and consolidated wherever appropriate, additional standard drawings have been created to address the past experience of the City as well as emerging trends in the industry.

Changes and revisions will be made to the Design Criteria and Standard Drawings from time-to-time. It is the responsibility of the developer, its engineer(s) and others using this information to obtain and make use of the latest versions available at the time of design.

The Standard Drawings are unique to the City of Vaughan and take precedence over any Ontario Provincial Standard Drawings (OPSD) for similar matters, unless approved otherwise by the City.

If no standard drawing is provided by the City, the OPSD are to be consulted and referenced. In the event that OPSD does not contained the required standard, the developer, through its engineer, may prepare a standard for the review and approval of the City prior to the submission of any designs.



Please consider the environment before printing.

STANDARD DRAWING INDEX

SECTION	PRIOR REF 2004	DESCRIPTION
GENERAL		
G-101		BASE MAP
G-102		LEGEND OF SYMBOLS
G-103		ABBREVIATIONS
G-104		GEODEDIC CONTROL SURVEY MARKER – TYPE A
G-105		GEODEDIC CONTROL SURVEY MARKER – TYPE B
G-106		GEODEDIC CONTROL SURVEY MARKER – ENGRAVING/STAMPING
G-107		GEODEDIC CONTROL CONCRETE SURVEY MARKER
G-108		PROJECT SIGN
ROADS		
R-101	B3/B8	MAJOR COLLECTOR ROAD - 26m R.O.W
R-102		MINOR COLLECTOR ROAD - 24m R.O.W. (WITH LAY-BY LANE)
R-103		MINOR COLLECTOR ROAD - 24m R.O.W. (W/O LAY-BY LANE)
R-104	B12	LOCAL ROAD - 17.5m R.O.W. - 8m PAVEMENT
R-105	B13	BUFFER ROAD - 15m R.O.W. - 7m PAVEMENT
R-106	B14	LANEWAY - 8m R.O.W. - 6m PAVEMENT
R-107		CUL-DE-SAC
R-108		ANGLE BEND
R-109		HORIZONTAL CURVE
R-110		INTERSECTION DESIGN GUIDELINES
R-111		STREET SIGNS
R-112		BREAKAWAY BOLLARD DETAIL
R-113		DEAD END BARRICADE
R-114		CONSTRUCTION TRAFFIC BARRICADES
R-115	J-1	TRAFFIC CALMING ADVANCE WARNING SIGNS
R-116	J-2	SPEED HUMP
R-117	J-3	RAISED CROSSWALK
R-118	J-4	RAISED INTERSECTION
R-119	J-5	ROUNDAABOUT LAYOUT
R-120	J-6	SINGLE-LANE ROUNDAOUT – NEW DEVELOPMENT AND RE-DEVELOPMENT
R-121	J-7	MINI-ROUNDAABOUT – RE-DEVELOPMENT ONLY
R-122	J-8	TRAFFIC CALMING MEDIANS
R-123	J-9	CURB EXTENSIONS AND ROAD NARROWINGS
R-124		LADDER PAVEMENT MARKING DETAIL AT SIGNALIZED INTERSECTIONS
R-125		CATCH BASIN CURB DETAIL
R-126		CURB AND SUBDRAIN DETAIL
R-127	<i>UNDER DEVELOPMENT</i>	UNIT PAVER CROSSWALK DETAIL
R-128		SIDEWALK AND RAMP
R-129		WALKWAYS
R-130	<i>UNDER DEVELOPMENT</i>	BOLLARD DETAIL
R-131		CONCRETE MULTI-USE PATH DETAIL
R-132		MULTI-USE PATHWAY
R-133		PEDESTRIAN CYCLING FACILITIES
R-134		MAJOR LOCAL ROAD 19M R.O.W. – 8M PAVEMENT
R-135		2-STAGE CURB AND GUTTER

SEWER SYSTEM

S-101		OUTFALL GRATE MAX. 900mm DIAMETER
S-102		INLET GRATE
S-103		REAR YARD CATCHBASIN GRATE
S-104	K-4	PRECAST CONCRETE CATCHBASIN
S-105	K-5	SUMPLESS REAR YARD PRECAST CONCRETE CATCHBASIN
S-106		STORM WATER FACILITY POND WARNING SIGN
S-107		SAFETY STATION FOR PONDS AND WATERWAYS
S-108	<i>UNDER DEVELOPMENT</i>	SIDE INLET CATCHBASIN DETAILS
S-109		IFC MAINTENANCE HOLE TAPERED TOP ASSEMBLY

WATER

W-101		SINGLE VALVE IN CHAMBER
W-102		MULTIPLE VALVE CHAMBER
W-103		AIR RELEASE VALVE CHAMBER
W-104		HYDRANT INSTALLATION
W-105		RESTRAINING OF PVC WATERMAIN AT VALVES AND FITTINGS
W-106		METER, BACKFLOW PREVENTER & BY-PASS IN CHAMBER
W-107		METER CHAMBER FOR COPPER SERVICES
W-108		INTENTIONALLY LEFT BLANK
W-109		INDUSTRIAL/COMMERCIAL METER WITH BACKFLOW PREVENTER AND BY-PASS VALVE INSTALLATION (METER ROOM)
W-110		WATER VALVE OPEN/CLOSE DIRECTIONS
W-111		BACKFLOW PREVENTER & CHAMBER FOR 6" THROUGH 12" DOUBLE CHECK VALVE ASSEMBLY
W-112	<i>UNDER DEVELOPMENT</i>	<i>TEMPORARY SUPPLY AND DISINFECTION CONNECTION</i>
W-113		WATERMAIN BYPASS SETUP
W-114		HYDRANT CONNECTION WITH METER AND BACKFLOW PREVENTER
W-115	<i>UNDER DEVELOPMENT</i>	<i>GROUNDWATER FLOW MEASURING DEVICE PIPING LAYOUT</i>
W-116	<i>UNDER DEVELOPMENT</i>	<i>GROUNDWATER SAMPLING ACCESS POINT WITH MAINTENANCE ACCESS HOLE</i>
W-117	<i>UNDER DEVELOPMENT</i>	<i>GROUNDWATER SAMPLING ACCESS POINT</i>
W-118		AUTOMATED IRRIGATION SYSTEM FOR YORK REGION LANDSCAPE MEDIANS

CONNECTIONS

C-101	RESIDENTIAL SERVICE CONNECTIONS
C-102	BLOCK SERVICE CONNECTIONS
C-103	BLOCK WATER CONNECTION
C-104	STORM CONNECTION WITH ORIFICE CONTROL

STREET LIGHTING

SL-100a	STANDARD TRENCH FOR DIRECT BURIED CABLES
SL-100b	STANDARD STREETLIGHTING TRENCH
SL-101	INSTALLATION OF STREETLIGHT CABLE AT ROAD CROSSINGS
SL-102	STREETLIGHT WIRING CONNECTIONS
SL-103	INSTALLATION OF BOLLARD WALKWAY LIGHT SERVICE AT STREETLIGHT POLE
SL-104	STREETLIGHT PEDESTAL BASE DETAIL
SL-105	STREETLIGHT PEDESTAL DETAIL
SL-106	POLE HAND HOLE BREAKER SL1-15
SL-107	POLE HAND HOLE BREAKER SL2-15
SL-108	POLE HAND HOLE BREAKER SL1-50
SL-109	POLE HAND HOLE BREAKER SL2-50
SL-110	VICTORIAN SCROLL ARM 1.5M (5')
SL-111	VICTORIAN SCROLL ARM 1.8M (6')
SL-112	ALUMINUM ELLIPTICAL BRACKET 30' (2.5')
SL-113	ALUMINUM ELLIPTICAL BRACKET 1.83M (6')
SL-114	ALUMINUM ELLIPTICAL BRACKET 2.44M (8')

SL-115	ALUMINUM ELLIPTICAL BRACKET 2.44M (10')
SL-116	ALUMINIUM ELLIPTICAL BRACKET 3.65M (12')
SL-117	TAPERED ROUND CONCRETE POLE 7.6M (25')
SL-118	TAPERED ROUND CONCRETE POST TOP POLE 9.1M (30")
SL-119	TAPERED ROUND CONCRETE POLE 9.9M (32.5')
SL-120	TAPERED ROUND CONCRETE POLE 12.2M (40')
SL-121	TAPERED ROUND CONCRETE POLE 12.9 (42.5')
SL-122	TAPERED ROUND CONCRETE POLE 15.2M (50')
SL-123	DECORATIVE FLUTED OCTAGONAL (POST TOP) POLE 5.3M (17.5")
SL-124	DECORATIVE FLUTED OCTAGONAL (POST TOP) POLE 6M (19.6')
SL-125	TAPERED OCTAGONAL (POST TOP) POLE 6.1M (20')
SL-126	TAPERED OCTAGONAL POLE 6.1M (20')
SL-127	TAPERED OCTAGONAL POLE 9.9M (32.5')
SL-128	DECORATIVE OCTOGONAL POLE 7.6M (25')
SL-129	DECORATIVE OCTOGONAL POLE 8.2M (27')
SL-130	DECORATIVE FLUTED OCTAGONAL POLE 9.75M (32')
SL-131	DECORATIVE MULTI-UTILITY POLE 9.9M (32.5')
SL-132	DECORATIVE OCTAGONAL POLE 11.1M (36.5')
SL-133	POLE ASSEMBY WALKWAY/PATHWAY LIGHTING 6.1M (20')

FENCING AND RETAINING WALLS

FRW-101	CHAIN LINK SECURITY FENCE
FRW-102	ACCOUSTIC WOOD FENCE
FRW-103	PRIVACY WOOD FENCE
FRW-104	ACCOUSTIC/PRIVACY FENCE NOTES
FRW-105	PEDESTRIAN/BICYCLE HANDRAIL
FRW-106	FENCE TYPES & PLACEMENT