

2. SUPPLEMENTAL STANDARD DETAILED DRAWINGS TO MMCD

Standard Detail Drawings for all Works and Services constructed within the City of Kelowna are contained in the Master Municipal Construction Documents (MMCD) 2019 Edition - Volume II, except as specified in the following Index and Cross Reference to MMCD (the Index).

The Supplemental Standard Detail Drawings augment and supersede the MMCD Standard Detail Drawing" as set out herein.

The Index lists only the Supplemental Standard Detailed Drawing. The order of drawings listed in the updated Index mirrors the order of drawings in MMCD (alphabetical), with the City of Kelowna specific sections listed at the end (Linear Park Trails, Landscaping and Irrigation).

CITY OF KELOWNA STANDARD DRAWINGS INDEX AND CROSS-REFERENCE TO MMCD

MMCD Standard Drawings		City of Kelowna Standard Drawings		
Dwg.	Title	Comment	Dwg.	Title
	CONCRETE AND MISCELLANEOUS DETAILS			
C7	Driveway Crossing for Barrier Curbs	Replaced	SS-C7a	Driveway Crossing for Barrier Curbs - Separate Sidewalk and Letdown
		Added	SS-C7b	Driveway Crossing for Barrier Curbs - Combined Sidewalk and Letdown
C8	Wheelchair Ramp for Sidewalk, Infill and Barrier Curbs	Replaced	SS-C8	Sidewalk Ramp Details
C9	Wheelchair Ramp for Sidewalk and Barrier Curbs	Replaced	SS-C9	Sidewalk Ramp Layouts
C10	Concrete Walkway	Deleted		(See SS-R28)
C11	Bicycle Baffle	Deleted		
C12	Removable Barrier Post	Deleted	SS-C12b	Permanent Bollard (Barrier Post)
	ELECTRICAL			
E1.1	Type M (NEMA Cabinet) Concrete Controller Base	Replaced	SS-E1.1	Type M (NEMA Cabinet) Concrete Controller Base
E1.2	Type P (NEMA Cabinet) Concrete Controller Base	Replaced	SS-E1.2	Type P (NEMA Cabinet) Concrete Controller Base
E1.4	Controller Installation (For Type P and M Cabinets)	Replaced	SS-E1.4	Controller Service Panel Installation
		Added	SS-E1.8	Typical Installation for Traffic Controller
E2.1	Round Plastic Junction Boxes	Replaced	SS-E2.1	Large Round Plastic Junction Box Details
E2.3	Large Concrete Junction Boxes	Replaced	SS-E2.3	Traffic Signal Main Vault Details
E2.4	Large Concrete Junction Boxes	Added	SS-E2.4	Traffic Signal Junction Box Details
E2.5	Concrete Vault	Replaced	SS-E2.5	Concrete Traffic Communication Pull Box Details
E2.6	Concrete Vault	Replaced	SS-E2.6	Plastic Communication Pull Box Details
E5.12	Audible Signals	Replaced	SS-E5.12	Pedestrian and Audible Signal Installation Details
E5.3	Side of Pole Signal Head Mounting (Method 2)	Replaced	SS-E.5.3	Signal/Pedestrian Head Mounting on traffic Signal Poles
		Added	SS-E5.16	Roadside Pedestrian Activated Flashers (No Median Option)
		Added	SS-E5.16a	Solar Roadside Pedestrian Activated Flashers (No Median Option)

2. Supplemental Standard Detail Drawings

MMCD Standard Drawings		City of Kelowna Standard Drawings		
Dwg.	Title	Comment	Dwg.	Title
		Added	SS-E5.17	Roadside Pedestrian Activated Flashers (Median Option)
		Added	SS-E5.17a	Solar Roadside Pedestrian Activated Flashers (Median Option)
		Added	SS-E5.18	Roadside Pedestrian Activated Flashers (Overhead Sign Option)
		Added	SS-E5.19	Roadside Pedestrian Activated Flashers (Overhead Sign Median Option)
		Added	SS-E5.20	Signal Head Quick Change Kit
E7.10	Service Ground Plate Installation Detail	Replaced	SS-E7.10	Grounding of Electrical Service Installation Details
E7.11	Luminaire Wining in Pole Handhole	Replaced	SS-E7.11	Luminaire Wining on Pole Handhole Detail
		Added	SS-E7.19	Signal Wiring Colour Code Chart (From JB to Pole)
E8.2	Detector Loops	Replaced	SS-E8.2	Detector Loops
E8.8	Pre-Formed Diamond Detector Loop Installation Details	Replaced	SS-E8.8	Pre-Formed Diamond Detector Loops
E8.9	Pre-Formed Diamond Detector Loop Installation Details	Replaced	SS-E8.9	Pre-Formed Diamond Detector Loops
E8.10	Pre-Formed Diamond Detector Loop Installation Details	Replaced	SS-E8.10	Pre-Formed Diamond Detector Loops
	GENERAL DETAILS			
G1	General Legend for Contract Drawings	Deleted		(Legend as per City Drawing Standards)
G2	Legend for Materials	Deleted		(Legend as per City Drawing Standards)
G3	Legend for Street Light and Traffic Signal Drawings	Deleted		(Legend as per City Drawing Standards)
G4	Utility Trench	Replaced	SS-G4	Utility Trench
G5	Pavement Restoration	Replaced	SS-G5	Pavement Restoration
	ROADWORKS			
R1	Paved Shoulders	Deleted		
R2	Driveway Letdowns, Cross-Section	Deleted		(See SS-C7a and SS-C7b)
R3	Sidewalks, Interim Asphalt	Deleted		
R4	Single Ramp Letdown with Parallel Scoring	Deleted		(See SS-C8 and SS-C9)
R5	Traffic Calming, Speed Hump and Table	Deleted		(See ITE TAC standards)
R6	Traffic Calming, Raised Intersection Details	Deleted		(Guideline only, subject to detailed approval)
R7	Traffic Calming, Typical Raised Median	Deleted		

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MMCD Standard Drawings		City of Kelowna Standard Drawings		
Dwg.	Title	Comment	Dwg.	Title
R8	Traffic Calming, Curb Extensions and On-Street Parking Bay	Deleted		(See SS-R51 and SS-R52)
		Added	SS-R20	Left Turn Lane (Raised Median)
		Added	SS-R21	Left Turn Lane (Painted) and Two-Way Left Turn Lane
		Added	SS-R23	Concrete Drainage Swale Across Asphalt
		Added	SS-R28	Walkway Gate
		Added	SS-R50	Smart Channel Right Turn
		Added	SS-R51	Intersection Curb Extension - Higher Class Road No Parking
		Added	SS-R52	Intersection Curb Extension - Higher Class Road With Parking
		Added	SS-R53	Cul-De-Sac Turnaround
		Added	SS-R54	Hammerhead Turnaround
		Added	SS-R55	Standard Ditch Section
		Added	SS-R56	Utility Access and Location at Ditch
		Added	SS-R57	Rock Cut Cross Section
		Added	SS-R58	Driveway Grades
		Added	SS-R59	Urban Transit Stop Layout
		Added	SS-R60	Urban Transit Stop Shelter Pad Details
		Added	SS-R61	Post Mounted Sign
		Added	SS-R62	Street Name Blade Details
	CROSS SECTION STANDARDS			
		Added	XS-R01	Hillside Laneway
		Added	XS-R02	Suburban / Core Area / Urban Centre Laneways
		Added	XS-R20	Rural Local
		Added	XS-R21	Hillside Village Local Residential
		Added	XS-R22	Hillside Local Condition A (Development Both Sides)
		Added	XS-R23	Hillside Local Condition B (Development One Side)
		Added	XS-R24	Hillside Local Condition C (No Development Either Side)
		Added	SX-R25	Suburban Local
		Added	XS-R26	Industrial Local
		Added	XS-R27	Core Area Local
		Added	XS-R28	Urban Centre Local
		Added	XS-R40	Rural Collector

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MMCD Standard Drawings		City of Kelowna Standard Drawings		
Dwg.	Title	Comment	Dwg.	Title
		Added	XS-R41	Hillside Village Collector Condition A (Retail/M.F. Fronting)
		Added	XS-R42	Hillside Village Collector Condition B (No Retail Fronting)
		Added	XS-R43	Hillside - Collector Condition A (Development Both Sides)
		Added	XS-R44	Hillside Collector Condition B (Development One Side)
		Added	XS-R45	Hillside Collector Condition C (No Development Either Side)
		Added	XS-R46	Hillside Minor Collector Condition A
		Added	XS-R47	Hillside Minor Collector Condition B
		Added	XS-R48	Suburban Collector
		Added	XS-R49	Suburban Collector (With Bike Lanes)
		Added	XS-R50	Industrial Collector
		Added	XS-R51	Core Area Collector
		Added	XS-R52	Core Area Collector (With Bike Lanes)
		Added	XS-R53	Urban Centre Collector
		Added	XS-R54	Urban Centre Collector (With Bike Lanes)
		Added	XS-R60	Rural Minor Arterial
		Added	XS-R61	Rural Minor Arterial (With Multi-Use Path)
		Added	XS-R62	Hillside Arterial Condition A (Village Parkway)
		Added	XS-R63	Hillside Arterial Condition B (Within 0.8km Walking Distance of Village)
		Added	XS-R64	Hillside Arterial Condition C (Greater Than 0.8km Walking Distance of Village)
		Added	XS-R65	Suburban Minor Arterial
		Added	XS-R66	Core Area Minor Arterial
		Added	XS-R67	Urban Centre Minor Arterial
		Added	XS-R80	Rural Major Arterial (3 Lane)
		Added	XS-R81	Rural Major Arterial (3 Lane with Multi-Use Path)
		Added	XS-R82	Rural Major Arterial (5 Lane)
		Added	XS-R83	Rural Major Arterial (5 Lane with Multi-Use Path)
		Added	XS-R84	Suburban Major Arterial (3 Lane)
		Added	XS-R85	Suburban Major Arterial (5 Lane)
		Added	XS-R86	Core Area Major Arterial (3 Lane)
		Added	XS-R87	Core Area Major Arterial (5 Lane)
		Added	XS-R88	Urban Centre Major Arterial (3 Lane)
		Added	XS-R89	Urban Centre Major Arterial (5 Lane)

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MMCD Standard Drawings		City of Kelowna Standard Drawings		
Dwg.	Title	Comment	Dwg.	Title
	STORM AND SANITARY SEWERS			
S1	Standard and Sump Manholes	Replaced	SS-S1a	Manholes
		Added	SS-S1b	Manhole Frame and Cover
		Added	SS-S1C	Adjustable Manhole Frame and Cover
S4	Inside Drop Manhole	Replaced	SS-S4	Inside Drop Manhole
S6	Sewer Clean-Out	Replaced	SS-S6	Clean-Out Detail (Temporary)
S7	Sanitary Sewer Service Connection	Replaced	SS-S7	Sanitary Sewer Service Connection
S9	Inspection Chamber for 100 to 200 Sanitary Sewer Connection	Replaced	SS-S9	Inspection Chamber for 100 to 200 Sanitary Sewer Connection
S11	Top Inlet Catch Basin	Replaced	SS-S11a	Catch Basin 900 mm diameter
		Added	SS-S11b	Catch Basin Castings Combined Side and Gutter Inlet
		Added	SS-S11c	Catch Basin - Top Slabs
		Added	SS-S13b	Storm Drain Outlet with Safety Grillage
		Added	SS-S50	Manhole Requirement for Services
		Added	SS-S51	Drainage Drywell
		Added	SS-S52	Drainage Drywell Installation
		Added	SS-S52a	Drywell Installation with Perforated Pipe System
		Added	SS-S53	Pipe Perforation and Bedding Detail for Ground Water Recharge
		Added	SS-S54	Catch Basin Trapping Hood
		Added	SS-S55a	Flow Control Chamber - City Facility
		Added	SS-S55b	Flow Control Chamber - Private Facility
		Added	SS-S56	IDF Curves
		Added	SS-S57	Riprap Design Chart
		Added	SS-S58	Groundwater Recharge Suitability Map
		Added	SS-S59	Typical Lift Station Site Layout
		Added	SS-S60	Sanitary Lift Station
		Added	SS-S61	Above Ground Valve Kiosk
		Added	SS-S62	Pigging Port
		Added	SS-S63	Radio Antenna Mast and Base

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MMCD Standard Drawings		City of Kelowna Standard Drawings		
Dwg.	Title	Comment	Dwg.	Title
	WATERWORKS			
W2a	Water Service Connection	Replaced	SS-W2	Water Service Connection
W2b	Water Service Connection	Deleted		
W2c	Meter Installation for 19mm & 25mm Service Connections	Deleted		
W2d	Meter Installation for 38mm & 50mm Service Connections	Deleted		
W4	Fire Hydrant Installation	Replaced	SS-W4	Hydrant
W6	Air Valve Assemblies - 25 and 50 mm Valves	Replaced	SS-W6a	25mm Underground Air Valve (50mm Air Valves as directed by City Engineer)
W7	Air Valve Assembly - 100 mm Valve	Deleted		
W8	Blow-Off for Water Main	Replaced	SS-W8a	Blow-Off (for mains 100mm & smaller)
		Added	SS-W8b	100mm Blow-Off (for mains 150mm & larger)
		Added	SS-W50	Irrigation Service
		Added	SS-W51	U-Bend Detail (Pipe Crossing Conflict)
		Added	SS-W52	AC Watermain Crossings
		Added	SS-W53a	Pressure Reducing Station
		Added	SS-W53b	Pressure Reducing Station
	LINEAR PARK TRAILS			
		Added	SS-T01	Class 1 - Major Urban Promenade
		Added	SS-T02	Class 2 - Major Multi-Use Urban
		Added	SS-T03	Class 3 - Major Multi-Use Rural
		Added	SS-T04	Class 4 - Standard Multi-Use Rural
		Added	SS-T05	Class 5 - Narrow Multi-Use Rural
		Added	SS-T06	Class 6 - Nature Trail Rural
	LANDSCAPING			
		Added	SS-L01	Growing Medium - Boulevard Groundcover
		Added	SS-L02	Growing Medium - Boulevard Planting Bed
		Added	SS-L03	Tree - in Open Green Space
		Added	SS-L04	Tree - in Planting Bed
		Added	SS-L05a	Tree - in Boulevard - Section
		Added	SS-L05b	Tree - in Boulevard - Plan
		Added	SS-L06a	Boulevard Tree - in Soil Cell (Plan)
		Added	SS-L06b	Boulevard Tree - in Soil Cell (Section A-A')

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MMCD Standard Drawings		City of Kelowna Standard Drawings		
Dwg.	Title	Comment	Dwg.	Title
	IRRIGATION			
		Added	SS-IR.01a	Standard Kiosk - Non-Metered
		Added	SS-IR.01b	Double-Sided Metered Kiosk - External
		Added	SS-IR.01c	Double-Sided Metered Kiosk - Internal
		Added	SS-IR.02a	Irrigation Vault - Kon Kast 1102
		Added	SS-IR.02b	Irrigation Vault - Kon Kast 1132
		Added	SS-IR.03a	Point of Connection - 25mm to 50mm
		Added	SS-IR.03b	Point of Connection - 100mm
		Added	SS-IR.03c	Irrigation Service
		Added	SS-IR.04a	Trench Section
		Added	SS-IR.04b	Wire Splice Box
		Added	SS-IR.05a	Gate Valve - 25mm to 75mm
		Added	SS-IR.05b	Resilient Wedge Gate Valve - 75mm to 150mm
		Added	SS-IR.05c	Quick Coupler
		Added	SS-IR.05d	Electric Control Valve - 25mm to 50mm
		Added	SS-IR.05e	Drip Zone Kit - 25mm
		Added	SS-IR.05f	Drip Zone Kit - 38mm
		Added	SS-IR.06a	Sprayhead Sprinkler
		Added	SS-IR.06b	Rotor Sprinkler
		Added	SS-IR.06c	Root Watering System
		Added	SS-IR.07a	Dripline Layout - Inline Drip
		Added	SS-IR.07b	Dripline Layout - Point Source Drip
		Added	SS-IR.07c	Flush Valve Assembly
		Added	SS-IR.07d	Air Relief Valve