DRAWING INDEX

SHEET NUMBER	CITY OF WINNIPEG DRAWING NUMBER	DRAWING TITLE
20	D–16158	DRAWING INDEX, DESIGN NOTES, LEGEND, & ABBREVIATIONS
21	D–16159	MOUNTAIN AVENUE – McPHILLIPS STREET TO 58m E OF McPHILLIPS STREET
22	D–16160	MOUNTAIN AVENUE – 58m E OF McPHILLIPS STREET TO 11m E OF TINNISWOOD STREET
23	D–16161	MOUNTAIN AVENUE – 11m E OF TINNISWOOD STREET TO RADFORD STREET
24	D–16162	MOUNTAIN AVENUE – 20m E OF MINNIGAFFE STREET TO 7m W OF CAIRNSMORE STREET
25	D–16163	MOUNTAIN AVENUE – 7m W OF CAIRNSMORE STREET TO 20m E OF GALLOWAY STREET
26	D–16164	MOUNTAIN AVENUE – 20m E OF GALLOWAY STREET TO 7m W OF SEYMOUR STREET
27	D–16165	MOUNTAIN AVENUE – 7m W OF SEYMOUR STREET TO ARLINGTON STREET
28	13031	McPHILLIPS STREET – NEW MANHOLE AT MOUNTAIN AVENUE

ABBREVIATIONS

WWS	WASTE WATER SEWER
CS	COMBINED SEWER
LDS	LAND DRAINAGE SEWER
FRM	FORCEMAIN
℄	PROPERTY LINE
℄	CENTER LINE
G.I.S.	GEOGRAPHIC INFORMATION SYSTEM
B.M.	BENCH MARK
TH	TEST HOLE
ELEV	ELEVATION
INV	INVERT
MIN	MINIMUM
MAX	MAXIMUM
SL	STREET LIGHTING
TS	TRAFFIC SIGNALS
ABAND	ABANDONED
BLDG	BUILDING
HSE	HOUSE
CRN	CORNER
OPP	OPPOSITE
C/S OR S/C	CURB STOP
MTS	MANITOBA TELEPHONE SYSTEM
R.O.W.	RIGHT–OF–WAY
WM	WATERMAIN
FM	FEEDERMAIN
CULV	CULVERT
MH	MANHOLE
CB	CATCH BASIN
CI	CURB INLET
VERT.	VERTICAL
HORZ.	HORIZONTAL
I.B.	IRON BAR
FIBRE	FIBRE OPTIC
TYP	TYPICAL
X–ING	CROSSING
HYD	HYDRANT
EXIST	EXISTING
N	NORTH
E	EAST
S	SOUTH
W	WEST
W/	WITH
C/W	CONSTRUCTED WITH
CONC	CONCRETE
AC	ASBESTOS CEMENT
VC OR CLAY	VITRIFIED CLAY
CI	CAST IRON
DI	DUCTILE IRON
PVC	POLYVINYL CHLORIDE
HDPE	HIGH DENSITY POLYETHYLENE
PCCP	PRESTRESSED CONCRETE CYLINDER PIPE
O.C.	ON CENTRE

LEGEND

PLAN VIEW

DESCRIPTION	ABANDONED	EXISTING	PROPOSED
WATER PIPE			
FIRE HYDRANT			
VALVE			
CURB STOP			
REDUCER			
COUPLING OR SLIDDER			
CROSS			
BEND – 11.25°, 22.5°, 45°, 90°			
TEE			
VERTICAL BEND			
ANODE			
REPAIR MARKER			
PLUG			
SEWER PIPE			
MANHOLE			
CATCH BASIN			
CURB INLET			
JUNCTION			
℄ DITCH			
CULVERT			
SURVEY BAR			
SURVEY MONUMENT			
TREE – DECIDUOUS			
TREE – CONIFEROUS			
HYDRO			
HYDRO POLE			
LAMP STANDARD			
HYDRO POLE W/STREET LIGHTING			
POLE			
GUY ANCHOR			
M.T.S. POLE			
PEDESTAL OR BOX			
CABINET			
M.T.S., SHAW, OR VIDEON			
TRAFFIC SIGNALS			
TRAFFIC LIGHT STANDARD			
GAS			
STEAM			
FIBRE OPTIC			
FENCE			
EDGE OF PAVEMENT OR GUTTER			
EDGE UNPAVED OR GRAVEL ROAD			
℄			
PROJECTED ℄			
LOT LINE			
SIDEWALK – PATHWAY			
EASEMENT			
EDGE OF BUILDING			
MAILBOX		M	
PARKING METER		P	
TEST HOLE			
TREE LINE OR BUSH			

PROFILE

DESCRIPTION	ABANDONED	EXISTING	PROPOSED
WATER PIPE			
HYDRANT TOP			
VALVE			
TEE OR CROSS			
COUPLING OR BEND			
REDUCER			
END OF PIPE			
SEWER PIPE			
UNPAVED GROUND SURFACE			
PAVED GROUND SURFACE – ℄ PIPE			
GUTTER (NORTH AND WEST)			
GUTTER (SOUTH AND EAST)			
℄ DITCH (NORTH AND WEST)			
℄ DITCH (SOUTH AND EAST)			
STRUCTURE			
MANHOLE OR CATCH BASIN			

HATCH PATTERNS

- EARTH OR GROUND ABOVE PIPE
- SAND OR OTHER FINE MATERIAL
- CONCRETE
- WASHED STONE OR GRANULAR MATERIAL
- INTERLOCKING STONE
- METAL
- GRAVEL OR STONE

CONSTRUCTION NOTES

1. EXPOSE ALL WATER MAIN TIE IN LOCATIONS TO CONFIRM ELEVATION, MATERIAL TYPE AND LOCATION PRIOR TO COMMENCEMENT OF THE WATER MAIN INSTALLATION.
2. EXPOSE ALL SERVICES 100 mm AND LARGER AT THE TIE IN LOCATIONS TO CONFIRM ELEVATION, MATERIAL TYPE AND LOCATION PRIOR TO COMMENCEMENT OF THE WATER MAIN INSTALLATION.
3. INSTALL WATER MAIN BY TRENCHLESS METHODS.
4. TRENCHES AND EXCAVATIONS WITHIN 1 METRE OF A PAVED AREA INCLUDING SIDEWALKS ARE CLASS 3 BACKFILL.
5. ALL MATERIALS TO CONFORM TO THE CITY OF WINNIPEG STANDARD CONSTRUCTION SPECIFICATIONS.
6. MINIMUM COVER TO TOP OF WATER MAIN SHALL BE 2.4 m EXCEPT WHERE NOTED.
7. EXPOSE ALL EXISTING UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION TO CONFIRM DEPTH AND LOCATION. ANY CONFLICTS WITH PROPOSED WATER MAINS AND EXISTING UNDERGROUND UTILITIES SHALL BE REPORTED TO THE CONTRACT ADMINISTRATOR PRIOR TO INSTALLATION.
8. REPLACE ALL EXISTING LEAD SERVICES FROM PROPOSED WATER MAIN TO ℄.
9. NOTIFY ALL AFFECTED RESIDENTS AND BUSINESSES 24 HOURS IN ADVANCE OF ANY WATER SHUTDOWNS OR DISRUPTION OF SERVICE.

ENGINEERS GEOSCIENTISTS MANITOBA
Certificate of Authorization
MORRISON HERSHFIELD
No. 1736

METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES
UNLESS OTHERWISE NOTED

LOCATION APPROVED
UNDERGROUND STRUCTURES

SUPV. U/G STRUCTURES COMMITTEE — DATE

NOTE:
LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.

VERTICAL DATUM: CGVD28 (HT2.0 Geoid)
HORIZONTAL DATUM: NAD83 (June 1990), Zone 14

NO.	REVISIONS	YY/MM/DD	BY
D	ISSUED FOR TENDER	22/03/15	ADB
C	ISSUED FOR CLIENT REVIEW	22/02/18	ADB
B	ISSUED FOR 90% DESIGN REVIEW	22/01/20	ADB
A	ISSUED FOR 30% DESIGN REVIEW	21/11/10	ADB

MORRISON HERSHFIELD

DESIGNED BY	JKH	CHECKED BY	ADB
DRAWN BY	DML	APPROVED BY	RPB
SCALE: HORIZONTAL		RELEASED FOR CONSTRUCTION	–
VERTICAL			
DATE	2022 03 16	DATE	YYYY MM DD

PLOT DATE: 2022 03 16

ENGINEER'S SEAL
PROVINCE OF MANITOBA
A. D. BRAUN
Member
24453
REGISTERED PROFESSIONAL ENGINEER
2022-03-16

CONSULTANT DRAWING NUMBER

Winnipeg

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
ENGINEERING DIVISION

2022 WATER MAIN RENEWAL AND
NEW SIPHON MANHOLE
McPHILLIPS STREET TO ARLINGTON STREET

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CITY DRAWING NUMBER
D–16158

BID OPPORTUNITY: 719–2021
CONTRACT NUMBER: N/A

FILE PATH: X:\Proj\2021\210258300–2021–2023 McGregor Mountain Renewal\09. CAD\07 Sheets\Mountain\
FILE NAME: 2102583–Mountain–WM–Index.dwg