

LEGEND

PLAN VIEW

EXISTING PROPOSED

DESCRIPTION	EXISTING	PROPOSED
WATER PIPE	—	—
FIRE HYDRANT	⊕	⊕
VALVE	⊖	⊖
CURB STOP	◀	▶
REDUCER	⋈	⋈
COUPLING OR SLIDER	X	X
CROSS	⊕	⊕
BEND - 11.25°, 22.5°, 45°, 90°	H H H H	H H H H
TEE	H	H
VERTICAL BEND	H	H
ANODE	⊕	⊕
REPAIR MARKER	⊕	⊕
PLUG	J	J
SEWER PIPE	—	—
MANHOLE	○	○
CATCH BASIN	□	□
CURB INLET	▽	▽
JUNCTION	⊥	⊥
⊕ DITCH	—	—
CULVERT	---	---
SURVEY BAR	⊕	⊕
SURVEY MONUMENT	⊕	⊕
TREE - DECIDUOUS	(circle with lines)	(circle with lines)
TREE - CONIFEROUS	(star symbol)	(star symbol)
HYDRO	—	—
HYDRO POLE	H	H
LAMP STANDARD	⊕	⊕
HYDRO POLE W/STREET LIGHTING	H	H
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	⊕	⊕
PARKING METER	⊕	⊕
TEST HOLE	⊕	⊕
TREE LINE OR BUSH	---	---
ROCK COLUMN	⊕	⊕

PROFILE

EXISTING PROPOSED

DESCRIPTION	EXISTING	PROPOSED
WATER PIPE	---	---
HYDRANT TOP	+	+
VALVE	X	X
TEE OR CROSS	⊥	⊥
COUPLING OR BEND	⋈	⋈
REDUCER	⋈	⋈
END OF PIPE	⊖	⊖
SEWER PIPE	---	---
UNPAVED GROUND SURFACE	(wavy line)	(wavy line)
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	---	---

DRAWING INDEX

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1	C100	COVER SHEET
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4	C103	PIPE PULLBACK STAGING

ABBREVIATIONS

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

HATCH PATTERNS

EXISTING	PROPOSED	DESCRIPTION
(diagonal lines)	(diagonal lines)	EARTH OR GROUND ABOVE PIPE
(stippled)	(stippled)	SAND OR OTHER FINE MATERIAL
(dots)	(dots)	CONCRETE
(dots)	(dots)	WASHED STONE OR GRANULAR MATERIAL
(interlocking squares)	(interlocking squares)	INTERLOCKING STONE
(diagonal lines)	(diagonal lines)	METAL
(dots)	(dots)	GRAVEL OR STONE
(dots)	(dots)	RIPRAP



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.	B.M. ELEV. <table border="1" style="width:100%; height: 100px;"> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </table>																																													<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> KGS GROUP </div> <div style="text-align: center;"> AE Associated Engineering </div> </div> DESIGNED BY: CL (AE) CHECKED BY: <i>RBO (KGS)</i> DRAWN BY: GEL (KGS) APPROVED BY: <i>[Signature]</i> SCALE: NA HORIZONTAL: NA VERTICAL: NA RELEASED FOR CONSTRUCTION: <i>02/15/22</i>	ENGINEER'S SEAL CONSULTANT DRAWING NUMBER 22-0107-021_C101	THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT ENGINEERING DIVISION NEWTON FORCE MAIN RED RIVER CROSSING BY HORIZONTAL DIRECTIONAL DRILLING INDEX PAGE	SHEET 2 OF 4 CITY DRAWING NUMBER 13154

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