RR98 - L-01

IMAGES:

X-REFERENCES:

UTILITIES
HYDRO (HH/YY/MM/DD)
CNOR (YYY/MM/DD)
CP (YYY/MM/DD)
ENBRIDGE HYDRO (YYY/MM/DD)
BELL (YYY/MM/DD)
DATA (YYY/MM/DD)

APPROVALS
MOE YYY/MM/DD
REGION YYY/MM/DD
REGION YYY/MM/DD
CPR YYY/MM/DD

GEOGRAPHIC PROJECTION: UTM NAD 83 ZONE 17 XXXXXXXXXX ELEV ###.###
VERTICAL DATUM: CGVD28 HTv2.0 XXXXXXXXXX ELEV ###.###
DATUM: DATUM PROJECTION: XXXXXXXXXX ELEV ###.###

DWG NAME:
FILE FORMAT:Autodesk Civil 3D 2015 BOUNDING COORDINATES UPPER LEFT: Northing Easting BOUNDING COORDINATES LOWER RIGHT:Northing Easting

EXISTING TRAFFIC

- POLE MOUNTED TRAFFIC CONTROLLER — TS_AER_CONTROLLER
- BASE MOUNTED TRAFFIC CONTROLLER — TS_GND_CONTROLLER
- POWER SUPPLY CABINET — TS_PS_CABINET
- TRAFFIC POLE — TS_POLE
- TRAFFIC SIGN — TS_SIGN
- JUNCTION BOX — TS_JB
- LUMINAIRE — TS_LUMINAIRE
- PUSH BUTTON — AUDIBLE — TS_PB_AUDIBLE
- PED HEAD — AUDIBLE — TS_PH_AUDIBLE
- PED HEAD — COUNTDOWN — TS_PH_COUNTDOWN
- BEACON — TS_BEACON
- PARKING METER — TS_PARKINGMETER
- RADIO INTERCONNECT — TS_RAD_INTER
- SIGNAL HEAD 1 — TS_SIGNAL_HEAD1
- SIGNAL HEAD 2 — TS_SIGNAL_HEAD2
- SIGNAL HEAD 3 — TS_SIGNAL_HEAD3
- SIGNAL HEAD 4 — TS_SIGNAL_HEAD4
- SIGNAL HEAD 5 — TS_SIGNAL_HEAD5
- SIGNAL HEAD 6 — TS_SIGNAL_HEAD6
- SIGNAL HEAD 7 — TS_SIGNAL_HEAD7
- SIGNAL HEAD 8 — TS_SIGNAL_HEAD8
- EMERGENCY VEHICLE PRE-EMPTION DETECTOR — TS_PREMPT_EMDPD
- VIDEO CAMERA — TS_VC
- DETECTION CAMERA — TS_DC
- MULTI-LEG DETECTION CAMERA — TS_MDC
- GROUND ROD — TS_GND_ROD
- TRAFFIC HANDHOLE — TS_TRAFFICHANDHOLE
- ILLUMINATED TRAFFIC SIGN — TS_ITS
- ILLUMINATED TRAFFIC SIGN — DOUBLE — TS_ITSD

PAVEMENT MARKINGS

- EX. DIRECTIONAL ARROWS
- PROPOSED DIRECTIONAL ARROWS
- EXISTING LINE MARKINGS
- EXISTING 60cm STOP BAR
- PROPOSED LINE MARKINGS
- PROPOSED 60cm STOP BAR

MISCELLANEOUS

- BOREHOLE — GT_BOREHOLE
- TESTHOLE — GT_TESTHOLE
- OBSERVATION WELL — GT_OBS_WELL
- ADVERTISING SIGN — LF_ADVERT_SIGN
- BARRIER POST — LF_BARRIER_POST
- BENCH — LF_BENCH
- BOLLARD — LF_BOLLARD
- FLAGPOLE — LF_FLAGPOLE
- GATE — LF_GATE
- MAILBOX — LF_MAILBOX
- PLANTER — LF_PLANTER
- POLE — LF_POLE
- POLEWELL — LF_POLEWELL
- TREEGRATE — LF_TREEGRATE
- TREEGUARD — LF_TREEGUARD
- WASTE RECEPTACLE — LF_WASTE_RECEPTACLE
- BOULDER — NF_BOULDER
- DRIPLINE — NF_DRIPLINE
- SHRUB – CONIFEROUS — NF_SHRUB_CONIFER
- SHRUB – DECIDUOUS — NF_SHRUB_DECID
- STUMP — NF_STUMP
- TREE – DECIDUOUS – 100mm — NF_TREE_DECID_100mm
- TREE – CONIFEROUS – 100mm — NF_TREE_CONIFER_100mm
- FENCE (OTHER THAN WOOD)
- WOOD FENCE
- EXISTING HANDRAIL
- PROPOSED HANDRAIL
- RAILWAY (SINGLE TRACK)
- LEFT PROPERTY LINE (PROFILE)
- RIGHT PROPERTY LINE (PROFILE)
- LEFT SIDEWALK (PROFILE)
- RIGHT SIDEWALK (PROFILE)
- GUIDERAIL
- PROPOSED GUIDERAIL
- BANK
- PROPERTY LINE (For Traffic Signal legal approval drawing only)
- EASEMENT
- EXISTING DITCH
- PROPOSED DITCH
- DITCH ON PROFILE
- CENTERLINE OF ROAD
- GRANULAR SHOULDER

SURVEY POINTS

- BENCHMARK — SV_BM
- TURNING POINT — SV_TP
- VERTICAL POINT OF INTERSECTION — SV_VPI
- HORIZONTAL CONTROL MONUMENT — SV_HCM
- HORIZONTAL VERTICAL CONTROL MONUMENT — SV_HVCM
- HORIZONTAL PROJECT CONTROL POINT — SV_HCP
- HUB ON TANGENT — SV_HOT
- NAIL — SV_NAIL
- CUT CROSS FOUND — SV_CCF
- CONCRETE MONUMENT FOUND — SV_CMF
- CONCRETE PIN FOUND — SV_CPF
- IRON BAR FOUND — SV_IBF
- IRON PIPE — SV_IP
- ROCK BAR FOUND — SV_RBF
- ROUND IRON BAR FOUND — SV_RIB
- ROCK POST FOUND — SV_RPF
- ROCK PLUG FOUND — SV_RPLF
- STANDARD IRON BAR FOUND — SV_SIBF
- SHORT STANDARD IRON BAR FOUND — SV_SSIBF

EXISTING UTILITIES

- BROAD BAND NETWORK POLE — BN_BBN_POLE
- BELL MANHOLE — BL_MANHOLE
- BELL POLE — BL_POLE
- BELL GUYPOLE — BL_GUYPOLE
- BELL PEDESTAL — BL_PED
- PHONE BOOTH — BL_PHONEBOOTH
- BELL JUNCTION BOX — BL_JBOX
- BELL UNDERGROUND MARKER — BL_MARKER
- GAS PUMP — GS_PUMP
- GAS VALVE — GS_VALVE
- GAS METER — GS_METER
- GAS VENT — GS_VENT
- GAS MANHOLE — GS_MANHOLE
- GAS MAIN MARKER — GS_MAINMARKER
- GAS DRIP — GS_DRIP
- HYDRO UNDERGROUND TRANSFORMER VAULT — HY_TRANSVAULT
- HYDRO POLE — HY_POLE
- HYDRO UNDERGROUND MARKER — HY_MARKER
- HYDRO UNDERGROUND POWER MARKER — HY_UND_POWERMARKER
- HYDRO GUYWIRE — HY_GUY
- HYDRO GUYPOLE — HY_GUYPOLE
- BELL AND HYDRO POLE — BL_&_H_POLE
- HYDRO KIOSK — HY_KIOSK
- HYDRO TOWER — HY_TOWER
- LIGHT STANDARD — HY_LIGHT_STD
- HYDRO JUNCTION BOX — HY_JBOX
- HYDRO ELECTRIC MANHOLE — HY_ELECMANHOLE
- HYDRO HANDHOLE — HY_HANDHOLE
- HYDRO GROUND ROD — HY_GROUND_ROD
- CABLE TV PEDESTAL — TV_PED
- CABLE TV JUNCTION BOX — TV_JBOX
- CABLE TV POLE — TV_POLE
- FUEL OIL VENT — OL_FUEL_VENT
- BELL CABLE (UNDERGROUND) — B
- BELL CONDUIT (UNDERGROUND) — BC
- BELL (AERIAL) — AB
- GAS MAIN (UNDERGROUND) — G
- HYDRO CABLE (UNDERGROUND) — H
- HYDRO CABLE (AERIAL) — AH
- GUY WIRE (AERIAL) — GW
- TELEVISION CABLE (UNDERGROUND) — TV
- TELEVISION CABLE (AERIAL) — AT
- OIL PIPE LINE — OL

PROPOSED TRAFFIC

- TRAFFIC CONTROLLER — TS_AER_CONTROLLER_PROP
- TRAFFIC CONTROLLER — TS_GND_CONTROLLER_PROP
- POWER SUPPLY CABINET — TS_PS_CABINET_PROP
- TRAFFIC SIGNAL POLE — TS_POLE_PROP
- SIGNAL HEAD 1 — HWY SIGNAL HEAD 30cm RED & 20 cm AMBER/GREEN WITH BACKBOARD — TS_SIGNAL_HEAD1_PROP
- SIGNAL HEAD 2 — HWY SIGNAL HEAD 30cm RED & 20cm AMBER/GREEN ON OVERHEAD SPAN CABLE WITH BACKBOARD — TS_SIGNAL_HEAD2_PROP
- SIGNAL HEAD 3 — LED SIGNAL HEAD ALL 20cm LENSES WITH BACKBOARD — TS_SIGNAL_HEAD3_PROP
- SIGNAL HEAD 4 — STANDARD SIGNAL HEAD ALL 200M LENSES WITHOUT BACKBOARD — TS_SIGNAL_HEAD4_PROP
- SIGNAL HEAD 5 — HWY SIGNAL HEAD ALL 30cm LENSES WITH BACKBOARD — TS_SIGNAL_HEAD5_PROP
- SIGNAL HEAD 6 — HWY SIGNAL HEAD WITH ARROW INDICATION(S) ALL 30cm LENSES WITH BACKBOARD — TS_SIGNAL_HEAD6_PROP
- SIGNAL HEAD 7 — HWY SIGNAL HEAD WITH ARROW INDICATION ALL 30cm LENSES WITH 1 OR MORE PROGRAMMABLE LENSE WITH BACKBOARD — TS_SIGNAL_HEAD7_PROP
- SIGNAL HEAD 8 — HWY SIGNAL HEAD ALL 30cm LENSES WITH 1 OR MORE PROGRAMMABLE LENSE WITH BACKBOARD — TS_SIGNAL_HEAD8_PROP
- TRAFFIC SIGN — TS_SIGN_PROP
- ILLUMINATED TRAFFIC SIGN — TS_ITS_PROP
- ILLUMINATED TRAFFIC SIGN – DOUBLE — TS_ITSD_PROP
- JUNCTION BOX — TS_JB_PROP
- LUMINAIRE — TS_LUMINAIRE_PROP
- PUSH BUTTON — TS_PB_PROP
- PUSH BUTTON – AUDIBLE — TS_PB_AUDIBLE_PROP
- PED HEAD — TS_PH_PROP
- PED HEAD – AUDIBLE — TS_PH_AUDIBLE_PROP
- PED HEAD – COUNTDOWN — TS_PH_COUNTDOWN_PROP
- VIDEO CAMERA — TS_VC_PROP
- DETECTION CAMERA — TS_DC_PROP
- MULTI-LEG DETECTION CAMERA — TS_MDC_PROP
- LOOP DETECTOR
- 50mm CONDUIT
- 1–50mm & 1–100mm CONDUIT — TS
- 50mm INTERCONNECT CONDUIT — INTER

WATER SYSTEMS

- EX. 11 1/4 DEGREE BEND — WS_11BEND
- PROP. 11 1/4 DEGREE BEND — WS_11BEND_PROP
- EX. 22 1/2 DEGREE BEND — WS_22BEND
- PROP. 22 1/2 DEGREE BEND — WS_22BEND_PROP
- EX. 45 DEGREE BEND — WS_45BEND
- PROP. 45 DEGREE BEND — WS_45BEND_PROP
- EX. 90 DEGREE BEND — WS_90BEND
- PROP. 90 DEGREE BEND — WS_90BEND_PROP
- EX. ANODE — WS_ANODE
- PROP. ANODE — WS_ANODE_PROP
- EX. BLOWOFF — WS_BLOWOFF
- PROP. BLOWOFF — WS_BLOWOFF_PROP
- EX. CROSS — WS_CROSS
- PROP. CROSS — WS_CROSS_PROP
- EX. CURBSTOP — WS_CURBSTOP
- PROP. CURBSTOP — WS_CURBSTOP_PROP
- EX. HYDRANT — WS_HYDRANT
- PROP. HYDRANT — WS_HYDRANT_PROP
- EX. HYDRANT VALVE — WS_HYDRANT_VALVE
- PROP. HYDRANT VALVE — WS_HYDRANT_VALVE_PROP
- EX. WATERMAIN CAP — WS_MAIN_CAP
- PROP. WATERMAIN CAP — WS_MAIN_CAP_PROP
- EX. PRESSURE VALVE — WS_PRESSURE_VALVE
- PROP. PRESSURE VALVE — WS_PRESSURE_VALVE_PROP
- EX. WATERMAIN REDUCER — WS_REDUCER
- PROP. WATERMAIN REDUCER — WS_REDUCER_PROP
- EX. WATERMAIN TEE — WS_TEE
- PROP. WATERMAIN TEE — WS_TEE_PROP
- EX. WATERMAIN TAPPING SLEEVE AND VALVE — WS_TSAVALVE
- PROP. WATERMAIN TAPPING SLEEVE AND VALVE — WS_TSAVALVE_PROP
- EX. WATERMAIN VALVE — WS_VALVE
- PROP. WATERMAIN VALVE — WS_VALVE_PROP
- EX. WATERMAIN VALVE CHAMBER — WS_VALVECHAMBER
- PROP. WATERMAIN VALVE CHAMBER — WS_VALVECHAMBER_PROP
- EX. WATER WELL — WS_WELL
- PROP. WATER WELL — WS_WELL_PROP
- EX. WATER SAMPLING STATION — WS_WSS
- PROP. WATER SAMPLING STATION — WS_WSS
- EX. WATER METER — WS_METER
- EX. SPRINKLER — WS_SPRINKLER
- EXISTING WATERMAIN
- PROPOSED WATERMAIN
- EXISTING WATER SERVICE LATERAL

WASTE WATER / SANITARY

- EX. SANITARY SEWER CAP — WW_CAP
- EX. SANITARY SEWER LATERAL CLEANOUT — WW_CLEANOUT
- PROP. SANITARY SEWER LATERAL CLEANOUT — WW_CLEANOUT_PROP
- EX. MANHOLE COMBINED SEWER — WW_COMB_MH
- PROP. MANHOLE COMBINED SEWER — WW_COMB_MH_PROP
- EX. SANITARY FORCEMAIN VALVE — WW_FORCEMAIN_VALVE
- PROP. SANITARY FORCEMAIN VALVE — WW_FORCEMAIN_VALVE_PROP
- EX. SANITARY FORCEMAIN VALVE CHAMBER — WW_FORCEMAIN_VC
- PROP. SANITARY FORCEMAIN VALVE CHAMBER — WW_FORCEMAIN_VC_PROP
- EX. SANITARY PLUG — WW_PLUG
- PROP. SANITARY PLUG — WW_PLUG_PROP
- EX. SANITARY SEWER MANHOLE — WW_SAN_MH
- PROP. SANITARY SEWER MANHOLE — WW_SAN_MH_PROP
- EX. UNKNOWN MANHOLE — WW_UNKNOWN_MH
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER
- SANITARY SEWER LATERAL

DRAINAGE SYSTEMS / STORM

- EX. CATCH BASIN — DS_CB
- PROP. CATCH BASIN — DS_CB_PROP
- EX. CATCH BASIN MANHOLE — DS_CBMH
- PROP. CATCH BASIN MANHOLE — DS_CBMH_PROP
- EX. STORM MANHOLE — DS_STM_MH
- PROP. STORM MANHOLE — DS_STM_MH_PROP
- EX. CULVERT END – CLAY — DS_CULV_END_CLAY
- EX. CULVERT END – CONCRETE — DS_CULV_END_CONC
- EX. CULVERT END – CSP — DS_CULV_END_CSP
- EX. CULVERT END – PE — DS_CULV_END_PE
- EX. CULVERT END – PVC — DS_CULV_END_PVC
- EX. DOUBLE CATCH BASIN — DS_DCB
- PROP. DOUBLE CATCH BASIN — DS_DCB_PROP
- EX. DITCH INLET CATCH BASIN — DS_DICB
- PROP. DITCH INLET CATCH BASIN — DS_DICB_PROP
- EX. RIPRAP LABEL — DS_RIPRAP_LABEL
- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- STORM SEWER LATERAL
- CULVERT

RESTORATION

- GRAVEL RESTORATION
- BRICK RESTORATION
- TOPSOIL AND SOD
- CONCRETE
- ASPHALT
- WIRE MESH

REMOVAL

- ASPHALT REMOVAL
- MILLING
- EXISTING TREES TO BE RELOCATED

NO.	REVISION	DATE	INIT.
D	ISSUED FOR TENDERING	2019/01/09	Y.W.
C	ISSUED FOR TENDERING REVIEW	2018/11/30	Y.W.
B	ISSUED FOR 90% REVIEW	2018/10/22	Y.W.
A	ISSUED FOR REVIEW	2017/12/09	R.B.

NOTES/LEGEND

1 THE POSITION OF POLE LINES, CONDUITS, WATERMAINS, SEWER AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS AND, WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL INFORM HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

CAD R.B.B.
DESIGN Y.W.
CHECKED BY N.B.
APPROVED BY

BENCH MARK:
MONUMENT No: 99036061
Concrete box culvert under Montrose Road located at the intersection of Montrose Road and Mid-east Road 15.2m east from the centre line of Montrose Road, and 23.6m north from the centre line of Mid-east Road
Brass Tablet set vertically in the top of the culvert 2.35m south from the north edge of culvert and 1.12m west from the east edge of culvert
ELEVATION: 181.508m

LICENSED PROFESSIONAL ENGINEER Y. WENG 100110138 9/1/19 PROVINCE OF ONTARIO

Niagara Region PUBLIC WORKS
PARSONS

RN19-05
ROAD RECONSTRUCTON AND WIDENING
REGIONAL ROAD 98 (MONTROSE ROAD)
NIAGARA FALLS

LEGEND SHEET

CONSULTANT FILE No. 603119
DATE 2016/10/01
SCALE HORIZ. 1:200 VERT. 1:50
REF. No. RR98 - L-01
DWG No. RR98 - L-01
REV. D