

TORONTO HYDRO

UNDERGROUND INSTALLATION A11498 HANDWELL STANDARDIZATION REMEDIATION STREET LIGHT HANDWELL AND CABLE REPLACEMENT+REMOVAL LAKE SHORE BLVD W FROM SPADINA AVE TO BATHURST ST AREA MAP #137-C

THIS WORK INSTRUCTION HAS BEEN ASSEMBLED UTILIZING ONLY TORONTO HYDRO CERTIFIED CONSTRUCTION STANDARDS, SPECIFICATIONS AND APPROVED EQUIPMENT AND MEETS THE SAFETY REQUIREMENTS OF SECTION 4 OF ONTARIO REGULATION 22/04.

GENERAL NOTES

- ALL CIVIL WORK ON THIS CONTRACT SHALL BE DONE IN ACCORDANCE WITH TORONTO HYDRO'S LATEST ISSUE OF TECHNICAL SPECIFICATIONS FOR CIVIL CONSTRUCTION WORK "CV-CON-01".
 - WHOLE NUMBERS INDICATE MILLIMETRES, DECIMALIZED NUMBERS INDICATE METRES.
 - AS PER THE REQUIREMENTS OF BILL 208, THE FOLLOWING "DESIGNATED SUBSTANCES" MAY BE ENCOUNTERED ON THE PROJECT:
VINYL CHLORIDE - 4" DUCTS AND PVC JACKETED CABLES
ETHYLENE OXIDE - POLYETHYLENE INSULATED CABLES
 - MINIMUM HORIZONTAL CLEARANCES FROM FOREIGN UTILITIES SHALL BE MAINTAINED IN ACCORDANCE WITH APPENDIX "O" OF THE CITY OF TORONTO MUNICIPAL CONSENT REQUIREMENTS. FOR CLEARANCES REFER TO TORONTO HYDRO'S STANDARD 31-0100.
 - EXISTING UTILITIES
ARRANGE FOR "HOLD-OFFS" AND USE EXTREME CAUTION WHEN WORKING IN THE VICINITY OF ENERGIZED EQUIPMENT OR CABLES.
ANY DAMAGE TO THE EXISTING UTILITIES IS TO BE DOCUMENTED AND WILL REQUIRE IMMEDIATE REPAIR. THE COST OF THE REPAIR IS TO BE BORNE BY THE CONTRACTOR.
 - ALL WORK IN THIS DRAWING SHALL BE PERFORMED BY THE CONTRACTOR, UNLESS OTHERWISE STATED.
 - CONTRACTOR TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. WATER, STORM, SANITARY, GAS, BELL, CABLES, TRAFFIC, SIGNAL AND T.H.E.S. SERVICES TO INDIVIDUAL PROPERTIES ARE NOT SHOWN IN THIS DRAWING.
 - ALL INTERLOCKING BRICK SIDEWALK TO BE RESTORED. MAKE GOOD TO MATCH EXISTING AFTER UNDERGROUND CONSTRUCTION IS COMPLETED. CONTRACTOR TO VERIFY ALL DIMENSIONS AND ELEVATIONS SHOWN ON DRAWINGS PRIOR TO COMMENCING CONSTRUCTION. NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
 - CIVIL DRAWINGS SHOW THE COMPLETED AREA FOR CIVIL WORK AND DO NOT INDICATE COMPONENTS WHICH MAY BE NECESSARY FOR SAFETY DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR SAFETY DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR SAFETY IN AND ABOUT THE JOB SITE DURING CONSTRUCTION.
 - SITE FEATURES DISTURBED BY CONSTRUCTION BUT NOT INDICATED FOR REMOVAL TO BE REINSTALLED TO ORIGINAL CONDITION.
 - THE STANDARD REQUIREMENTS FOR TEMPORARY REPAIRS TO SIDEWALK AND PAVEMENTS ON STREETS, IMPROVED PUBLIC LANES, ASPHALT BOULEVARDS AND DRIVEWAYS SHALL BE AS DETAILED IN THE CITY OF TORONTO'S "MUNICIPAL CONSENT REQUIREMENTS".
 - PUBLIC SIDEWALKS AND/OR BOULEVARDS CONSTRUCTED OF REPLACEABLE SURFACES SUCH AS INTERLOCKING BRICK, PAVING BLOCKS, PRECAST SLABS OR GRANITE SETS WHICH ARE ON A GRANULAR BASE SHALL BE PERMANENTLY REPAIRED BY THE CONTRACTOR TO MATCH THE EXISTING SURFACE CONDITIONS AND TO THE SATISFACTION OF THE CITY.
- HANDWELL REMOVALS ONLY**
- EXCAVATE FOR AND REMOVE EXISTING HANDWELLS AS PER CIVIL PLAN.
 - RESTORE AREA IN ACCORDANCE WITH THE CITY OF TORONTO'S "MUNICIPAL CONSENT REQUIREMENTS".

- HANDWELL INSTALLATION**
- EXCAVATE FOR AND REMOVE EXISTING HANDWELLS.
 - SUPPLY AND INSTALL NEW HANDWELL AS PER STANDARD 31-3140.
 - DEPTH OF THE NEW HANDWELL SHALL MATCH THE EXISTING HANDWELL DEPTH. NEW HANDWELLS MAY BE CUT DOWN PROVIDED THEY MEET WITH THE MANUFACTURER'S RECOMMENDATIONS. THESE WILL BE PROVIDED.
 - NEW HANDWELLS SHALL BE DRILLED OR NOTCHED TO ALLOW FOR THE ROUTING OF THE EXISTING STREET LIGHT DUCTS INSIDE THE HANDWELL. DUCTS SHALL BE EXTENDED AS REQUIRED.
 - DUCTS ENTERING NEW HANDWELLS SHALL BE SEALED IN ORDER TO PREVENT BACKFILL MATERIAL FROM ENTERING INSIDE THE HANDWELL.

- CABLE REMOVAL & INSTALLATION**
- REMOVE EXISTING STREET LIGHT CABLES FROM DUCTS AS PER CABLE REMOVAL/INSTALLATION DRAWING.
 - INSTALL NEW STREET LIGHT CABLE AS PER CABLE REMOVAL/INSTALLATION DRAWING.
 - SUFFICIENT LENGTHS OF STREET LIGHT CABLE SHALL BE PULLED INSIDE THE HANDWELL TO ALLOW FOR THE NEW CONNECTIONS TO BE ACCESSIBLE FROM THE TOP OF THE HANDWELL.
 - IF THE EXISTING STREET LIGHT CABLES CANNOT BE REMOVED DUE TO COLLAPSED OR PLUGGED DUCTS OR IF CABLES ARE DIRECT BURIED, CABLES SHALL BE EXTENDED AS REQUIRED AND RE-TERMINATED AS PER STANDARD 16-5610 & 16-5620.

- ELECTRICAL CONNECTIONS**
- REMOVE STREET LIGHT CONNECTIONS IN EXISTING HANDWELL TO ALLOW FOR CABLE REMOVAL FROM THE DUCT. NOTE THE SUPPLY PHASE TO ANY CONNECTED STREET LIGHT.
 - UPON INSTALLATION OF NEW STREET LIGHT CABLE IN HANDWELL RECONNECT. ENSURE TO CONNECT STREET LIGHT TO THE SAME SUPPLY PHASE.

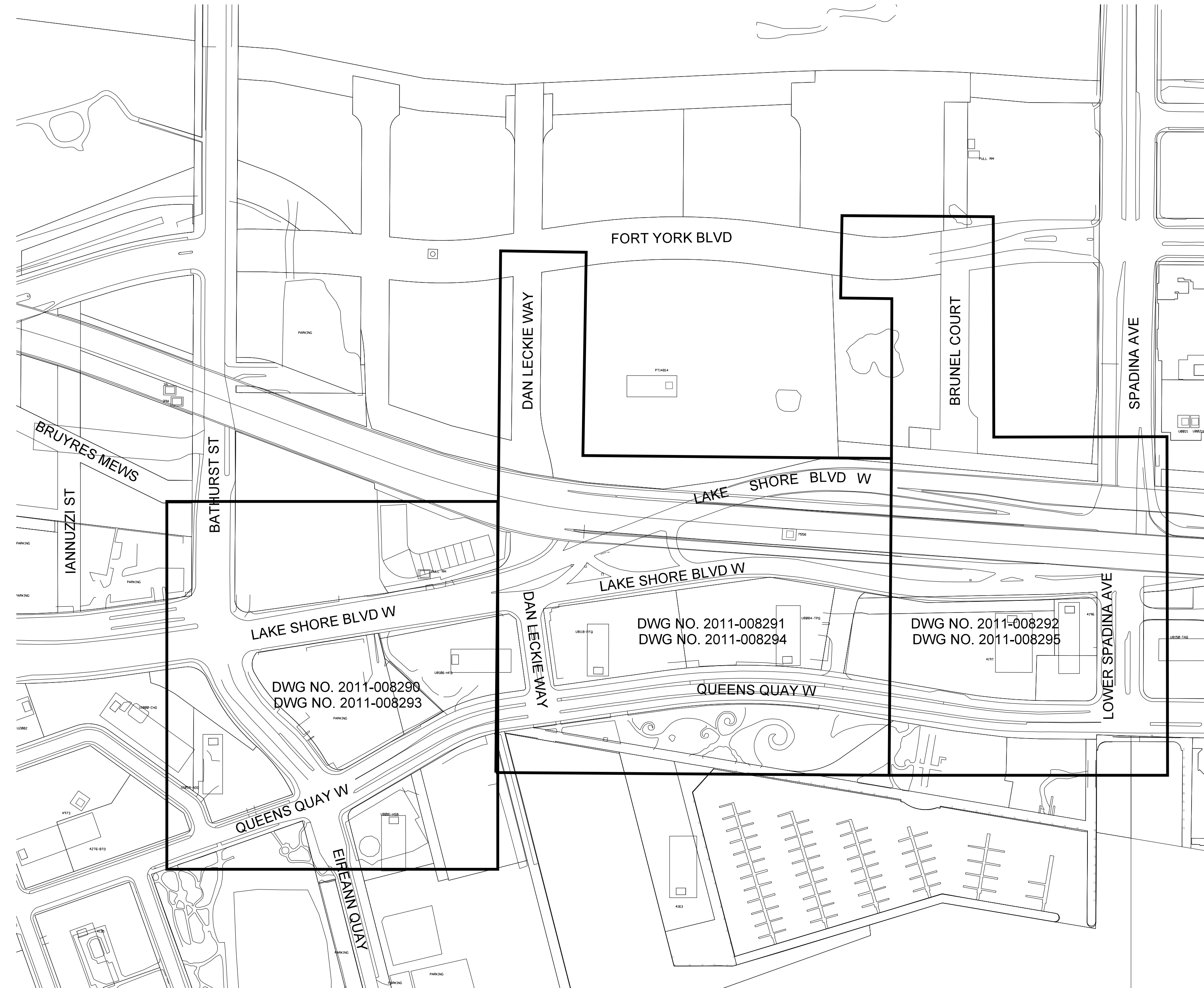
- ADDITIONAL NOTES**
- BASE PLAN PROVIDED BY TORONTO HYDRO.
 - THE POSITION OF EXISTING POLE LINES, CONDUITS, CABLES, WATERMANS SEWERS AND OTHER UNDERGROUND AND ABOVEGROUND UTILITIES, STRUCTURES AND APPURTENANCES IS NOT NECESSARILY SHOWN AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. THE CONTRACTOR SHALL INFORM AND SATISFY HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM DURING THE COURSE OF CONSTRUCTION.

Cut Repair Estimates	
Description	Quantity
Sidewalk	666 SQM
Other(ASPHALT)	_____ SQM

DRAWINGS FOR PROJECT NUMBER P00_____

DRAWING NUMBERS	DESCRIPTION
2011-008289	COVER SHEET
2011-008290	CIVIL PLAN
2011-008291	CIVIL PLAN
2011-008292	CIVIL PLAN
2011-008293	CABLE REMOVAL /INSTALLATION PLAN
2011-008294	CABLE REMOVAL /INSTALLATION PLAN

DRAWING NUMBERS	DESCRIPTION
2011-008295	CABLE REMOVAL /INSTALLATION PLAN
2011-008296	CABLE REMOVAL /INSTALLATION PLAN
2011-008297	CABLE REMOVAL /INSTALLATION PLAN



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A11498	V.M.-MMM	//
design project no.	assembled by	date yy/ mm/ dd
.	.	//
construction project no.	design supervisor	date yy/ mm/ dd
P00_____	BRAD JOHNSON ENTERA	//
Scale: N.T.S.	construction supervisor	date yy/ mm/ dd
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dwg. title:
A11498 HANDWELL STANDARDIZATION
REMEDATION, AREA MAP #137-C
LAKE SHORE BLVD W FROM SPADINA AVE
TO BATHURST ST

dwg. no. 2011 - 008289 rev. no. A

COVER SHEET

