

NOTES :

CONSTRUCTION STANDARDS
 TO BE CONSTRUCTED IN ACCORDANCE WITH MANITOBA HYDRO DISTRIBUTION AND SUBTRANSMISSION STANDARDS. LATEST REVISION.
 NO MAJOR CHANGES SHALL BE MADE WITHOUT APPROVAL OF THE DESIGN ENGINEER OR DELEGATE.
 SINGLE PHASE PAD-MOUNTED TRANSFORMER LOCATION
 SEE CD205-3 FOR RULES PERTAINING TO THE PLACEMENT OF ALL PADMOUNTED EQUIPMENT
 CUSTOMER ACCEPTANCE
 THE CUSTOMER SERVICE DEPARTMENT REPRESENTATIVE IS RESPONSIBLE FOR OBTAINING WRITTEN CUSTOMER AGREEMENT TO THE PROPOSED INSTALLATION PRIOR TO CONSTRUCTION COMMENCEMENT.
 SITE GRADING
 THE DEVELOPER IS RESPONSIBLE FOR GRADING OF THE SITE TO WITHIN +0.15M OF FINISHED GRADE PRIOR TO CONSTRUCTION COMMENCEMENT. BENCHMARKS ARE TO BE OBTAINED FROM THE DEVELOPER OR CONSULTANT.
 EQUIPMENT ELEVATIONS
 THE DEVELOPER TO INDICATE ON ONE COPY OF THE MANITOBA HYDRO DRAWINGS THE FINISHED GRADE AT ALL EQUIPMENT LOCATIONS. REFERENCED TO A BENCHMARK
 SERVICE CONDUCTOR
 SERVICE CONDUCTOR TO BE 1/0 AL PE1/PVC1 TRIPLEX UNLESS NOTED OTHERWISE.

AUTHORITY	NOTIFIED	NOT REQ'D	OBTAINED
DISTRICT	2019 XX XX		2019 XX XX
C.O.W./MUNICIPAL	2019 XX XX	X	2019 XX XX
M.T.S.		X	
GAS		X	
SHAW		X	
EASEMENTS		X	
COMMUNICATIONS		X	
S.C.C.		X	
DEPT. OF HIGHWAYS		X	

CONTACT	NAME	PHONE NUMBER	E-MAIL ADDRESS
DESIGN	TAMMY BALMANN	306-471-7541	TBALMANN@HYDRO.MB.CA
DESIGN ENGINEER	VICTOR EDOHO	306-261-2204	VEDOHO@HYDRO.MB.CA
PORTFOLIO PM	DARIN WACH	451-2617	DWACH@HYDRO.MB.CA
ENERGY SERVICES	DARRYL STOCKI	918-0341	DSTOCKI@HYDRO.MB.CA
UG CONSTRUCTION	BILL AMMETER	981-4356	BAMMETER@HYDRO.MB.CA
OH CONSTRUCTION	WAYNE IRELAND	771-5212	WIreland@HYDRO.MB.CA
HYDRO GAS			
SHAW			
MTS			
CUSTOMER REP			
DISTRICT ENG TECH	ROB DENEKA	796-1926	Rdeneka@HYDRO.MB.CA

INSTALLED			
Quantity	Fixture Type	Wattage	Pole Type
10	LED	90	EXCLUSIVE
##	LED	##	EXCLUSIVE
##	LED	##	EXCLUSIVE
##	LED	##	SHARED
##	LED	##	SHARED

REMOVED			
Quantity	Fixture Type	Wattage	Pole Type
2	LED	40	EXCLUSIVE
8	LED	60	EXCLUSIVE
##	LED	##	EXCLUSIVE
##	LED	##	SHARED
##	LED	##	SHARED

LED CONVERSION CHART			
WPS WATTAGE	EQUIVALENT LED WATTAGE	CATALOG NUMBER	
100	73	ERS10C3E1540	
150	95	ERS10C3E1740	
250	138	ERS120H3E1540	
400	209	ERS30N3E1540	

STREETLIGHT PLACEMENT FOLLOWS IES STANDARDS AND THEY ARE PLACED ACCORDINGLY USING DRIVEWAY LOCATIONS PROVIDED BY THE DEVELOPER. DRIVEWAY LOCATIONS THAT HAVE BEEN CHANGED AFTER THE DESIGN HAS BEEN SEALED RESULTING IN A CONFLICT BETWEEN STREETLIGHTS AND THE DRIVEWAY ARE THE RESPONSIBILITY OF THE DEVELOPER TO RECOVER THE COSTS ASSOCIATED WITH RELOCATING THE STREETLIGHTS.

BANNERS AND ASSOCIATED HARDWARE TO BE REMOVED AND RETURNED TO THE CITY OF WINNIPEG, 1277 PACIFIC AVENUE WITH AN ITEMIZED LIST AND QUANTITIES.

INFORMATION PERTAINING TO THE SIZE, TYPE AND LOCATION OF MANITOBA HYDRO FACILITIES AND INSTALLATIONS IS ILLUSTRATED AND DETAILED ONLY BE RELIED ON FOR THE PURPOSES OF ANY ACTIVITY BEING CONDUCTED AT OR NEAR THE IDENTIFIED HYDRO FACILITIES. ALL LOCATIONS AND EQUIPMENT MUST BE VERIFIED BY APPROPRIATE HYDRO FIELD OFFICES PRIOR TO ANY PHYSICAL ACTIVITY BEING UNDERTAKEN AT NEAR HYDRO INSTALLATIONS.

COLOR	DESCRIPTION
MAGENTA	PROPOSED TRENCH
RED	PROPOSED OBJECT
PINK	OBJECT TO BE ABANDONED
GREEN	OBJECT TO BE SALVAGED
BLACK	EXISTING OBJECT
LL ANNOTATION	1 - #6 AL CN STREET LIGHTING CABLE
LL ANNOTATION	1 - 1/0 TRIPLEX STREET LIGHTING CABLE

UPON DISCONNECTION BY MANITOBA HYDRO THE CONTRACTOR SHALL INSTALL TEMPORARY #4PX OVERHEAD FEED IN ORDER TO MAINTAIN LIGHTING DURING CONSTRUCTION.
 AT THE END OF CONSTRUCTION TEMPORARY OVERHEAD SHALL BE DISCONNECTED BY THE CONTRACTOR AND RETURNED TO MANITOBA HYDRO.

MANITOBA HYDRO SHALL CUT, CAP & ABANDON ORIGINAL FEED TO THE STREET LIGHTS PRIOR TO REMOVAL. ALL FINAL CONNECTIONS WILL BE COMPLETED BY MANITOBA HYDRO.

INSTALL ALL STEET LIGHT CABLE IN 2" CONDUIT

INSTALL PROPOSED STREET LIGHTS ON NEW TRENCH ALIGNMENT AS SHOWN

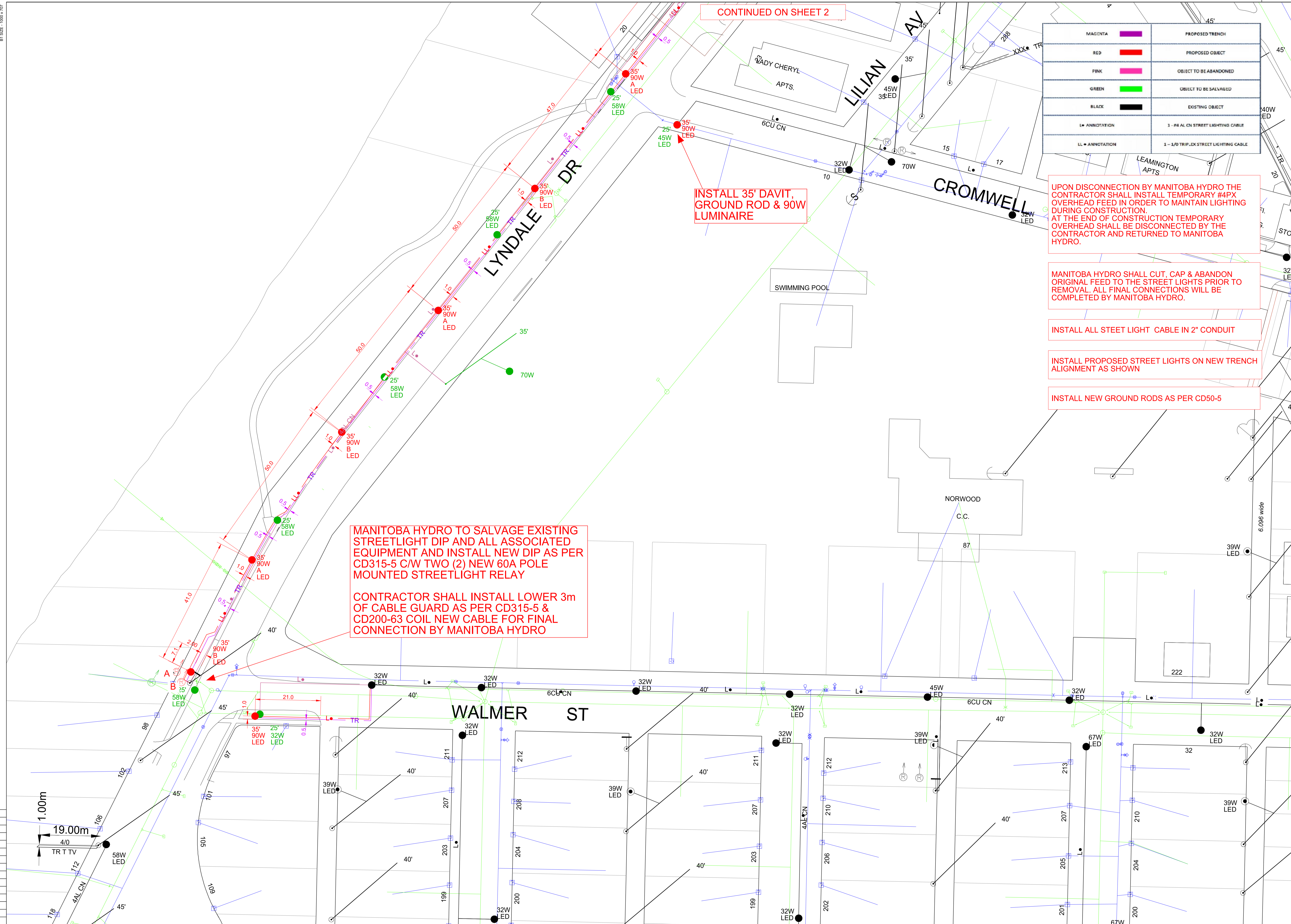
INSTALL NEW GROUND RODS AS PER CD50-5

MANITOBA HYDRO TO SALVAGE EXISTING STREETLIGHT DIP AND ALL ASSOCIATED EQUIPMENT AND INSTALL NEW DIP AS PER CD315-5 C/W TWO (2) NEW 60A POLE MOUNTED STREETLIGHT RELAY

CONTRACTOR SHALL INSTALL LOWER 3m OF CABLE GUARD AS PER CD315-5 & CD200-63 COIL NEW CABLE FOR FINAL CONNECTION BY MANITOBA HYDRO

INSTALL 35' DAVIT, GROUND ROD & 90W LUMINAIRE

CONTINUED ON SHEET 2



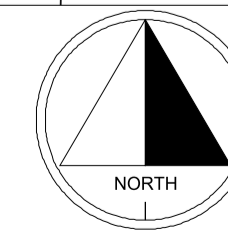
- PROPOSED SEQUENCE OF CONSTRUCTION:
- MH STAFF SHALL DISCONNECT AND ISOLATE THE EXISTING STREET LIGHT POLES TO BE REPLACED.
 - CONTRACTOR TO INSTALL TEMPORARY OH FEEDS BETWEEN EXISTING POLES.
 - MH STAFF TO INSTALL FINAL DROP FROM EXISTING POLE TO SOURCE AND ENERGIZE.
 - CONTRACTOR TO INSTALL NEW POLES, UNDERGROUND STREET LIGHT CABLE BETWEEN POLES, GROUND RODS, RELAYS, AND BOTTOM SECTION OF CABLE GUARD AT DIP (IF APPLICABLE) AND TERMINATE IN HAND HOLE.
 - MH STAFF TO DISCONNECT AND ISOLATE TEMPORARY OH FEED TO EXISTING POLES, AS WELL AS COMMISSION AND ENERGIZE NEW POLES FROM NEW UNDERGROUND SOURCE.
 - CONTRACTOR TO REMOVE OH FEEDS AND REMOVE EXISTING POLES.

COW TENDER
19-R-05

PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

REEL NUMBER	MANUFACTURER	MANUFACTURE DATE

CONTACT "CLICK BEFORE YOU DIG MANITOBA" AT
ClickBeforeYouDigMB.com
THREE FULL WORKING DAYS
 PRIOR TO CONSTRUCTION FOR LOCATION OF EXISTING WATER, WASTEWATER, LAND DRAINAGE UTILITIES AND MANITOBA HYDRO UTILITIES



DATE	REVISIONS	BY	CHKD.	APP.

AREA NUMBER	5401	MANITOBA HYDRO
STATION NUMBER	N/A	DISTRIBUTION ENGINEERING
FEEDER NUMBER	N/A	WO# P-31632 NETWORK # 4305706
SYSTEM VOLTAGE	120/240V	CSC: ST BONIFACE CITY CENTRE
DATE	2019-03-21	CUSTOMER SERVICE PROJECT
		COW 19-R-05 - LYNDALE DR - STREET RENEWAL
		REPLACE 10 DAVITS AND LUMINAIRES.
		INSTALL 400m OF 2" PIPE & 1/0TPX