

APPENDIX 'D'

WORK BY OTHERS: TRAFFIC SIGNALS BRANCH

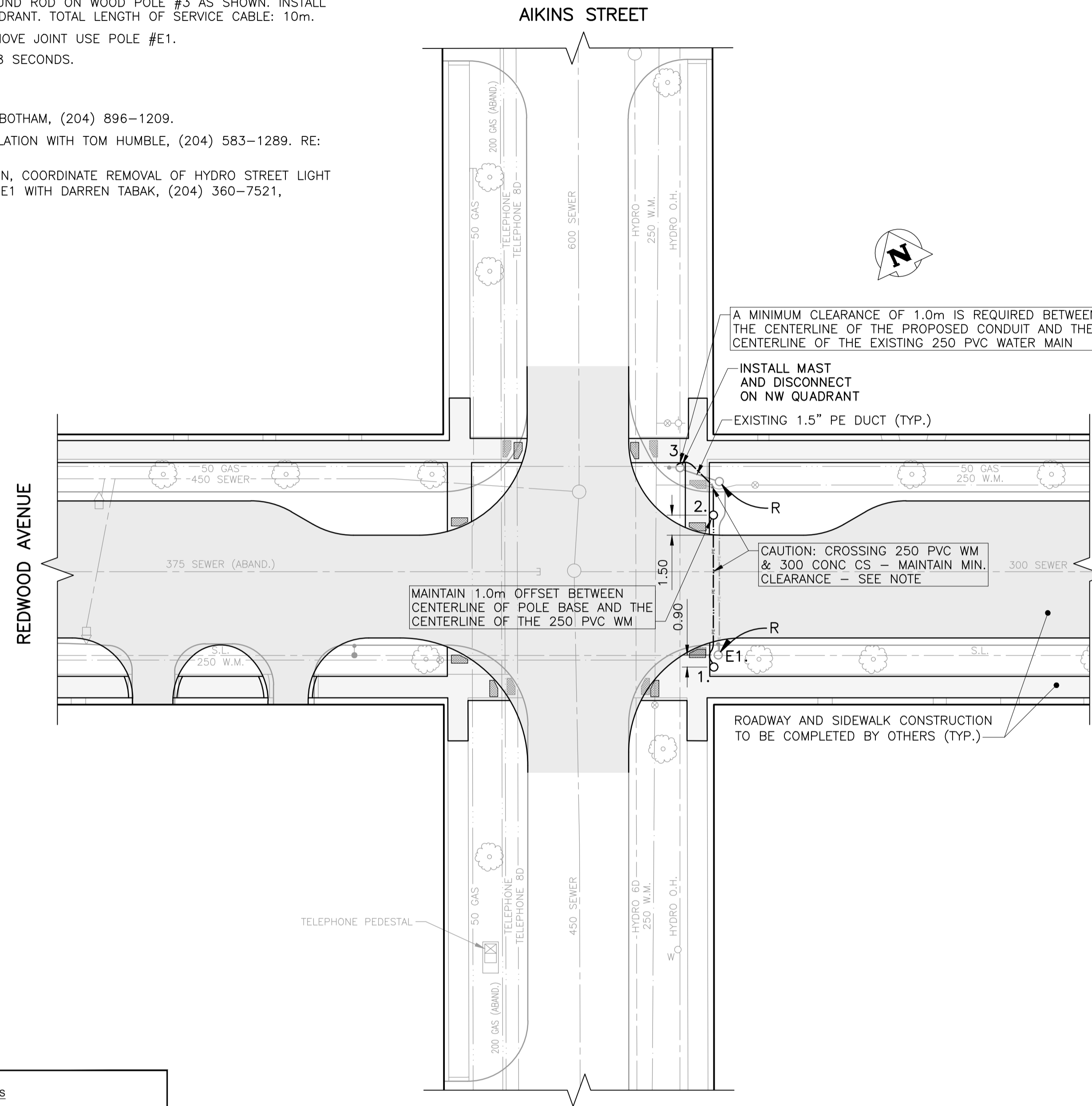
CONSTRUCTION NOTES:

PROJECT SCOPE

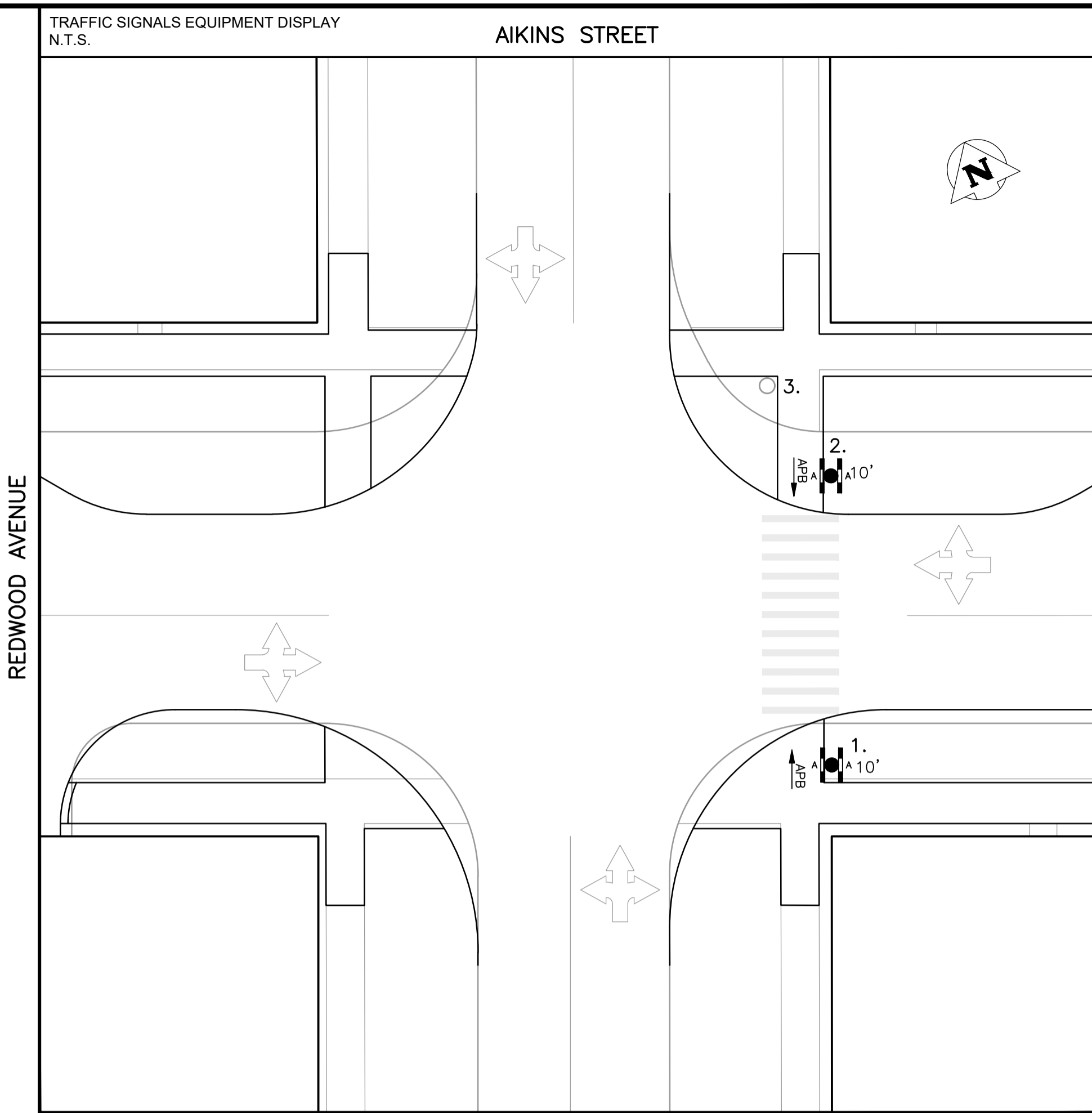
1. INSTALL CONDUIT AND BASES AS SHOWN.
2. REBUILD SERVICE AND INSTALL GROUND ROD ON WOOD POLE #3 AS SHOWN. INSTALL MAST AND DISCONNECT ON NW QUADRANT. TOTAL LENGTH OF SERVICE CABLE: 10m.
3. INSTALL EQUIPMENT AS SHOWN. REMOVE JOINT USE POLE #E1.
4. CROSSING TIME FOR CROSSWALK: 18 SECONDS.

PROJECT COORDINATION

1. COORDINATE WORK WITH CRAIG ROWBOTHAM, (204) 896-1209.
2. COORDINATE HYDRO SERVICE INSTALLATION WITH TOM HUMBLE, (204) 583-1289. RE: JUTA PERMIT No. B25516.
3. TWO WEEKS PRIOR TO CONSTRUCTION, COORDINATE REMOVAL OF HYDRO STREET LIGHT LUMINAIRE FROM JOINT USE POLE #E1 WITH DARREN TABAK, (204) 360-7521, dtabak@hydro.mb.ca.



PLAN VIEW: UNDERGROUND CONSTRUCTION
1:250



EQUIPMENT DISPLAY LEGEND

EXISTING	PROPOSED (AS SHOWN BELOW)
PEDESTRIAN HEAD WITH PCS	VEHICLE DETECTION AREA
PEDESTRIAN CORRIDOR BOX (CIRCUIT 10234)	TRAFFIC SIGNAL POLE
RRFB (PHASE 'A' OR 'B')	WOOD POST
	TRAFFIC SIGNAL HEAD
	APS SINGLE DIRECTION
	APS DUAL DIRECTION (SEPARATE DISPLAYS)
	PUSH BUTTON & DIRECTION (APB = ADJUSTABLE PB)
	RED FLASHER
	LUMINAIRE
	AMBER FLASHER
	CAMERA

NO.	EQUIPMENT LIST	ARM	BASE	B.B.	NO.	EQUIPMENT LIST	ARM	BASE	B.B.
1.	10' SIGNAL		G	G					
2.	10' SIGNAL		G	G					
3.	HYDRO WOOD #1091905 SERVICE:								
E1.	35' SIGNAL (TO BE REMOVED)		G	G					

TRAFFIC SIGNALS UNDERGROUND LEGEND

EXISTING ABANDONED	PROPOSED (AS SHOWN BELOW) DISCONNECTED (LOOPS ONLY)
1 1/2" PE CONDUIT	POLE BASE
2" PE CONDUIT	WOOD POST
4" PVC CONDUIT	CONTROLLER BASE
AERIAL / BURIED CABLE	PEDESTAL BASE
CONDUIT STUB	TERMINAL BASE
BREAK-IN	SERVICE BOX (PIT)
SPICE	24" PRECAST PIT
SAW-CUT LOOPS	30" PRECAST PIT
PERFORMED LOOPS	36" PRECAST PIT
	REMOVAL

SIGNAL BASE BOLT SQUARE TYPES

BOLT SQUARE (B.S.)	DIA.
TYPE "A" - 8 1/8"	
TYPE "B" - 6 3/4"	
TYPE "C" - 8 1/8" SCREW TYPE	
TYPE "D" - 12 3/4", 1 1/4" DIA. BOLTS, 24" DIA.	
TYPE "OD" - 12 3/4", 1 1/4" DIA. BOLTS, 28" DIA.	
TYPE "POD" - 12 3/4", PRECAST, 1 1/4" DIA. BOLTS, 28" DIA.	
TYPE "E" - 9 9/16" SCREW TYPE	
TYPE "F" - 9 9/16"	
TYPE "G" - 8 1/8", 1 1/4" DIA. BOLTS, 89mm PROJ.	
TYPE "GS" - 8 1/8", 1 1/4" DIA. BOLTS, 76mm PROJ.	
TYPE "PG" - 8 1/8", PRECAST, 1 1/4" DIA. BOLTS	
TYPE "H" - 9 7/8" SCREW TYPE	
TYPE "I" - 7 3/4"	
TYPE "J" - 10 5/8", 1 1/4" DIA. BOLTS	
TYPE "K" - 10 5/8", PRECAST, 1 1/4" DIA. BOLTS	
TYPE "L" - 6", 5/8" DIA. BOLTS	
TYPE "PM" - 8 1/8", PRECAST, 5/8" DIA. BOLTS	

UGS REVIEW NOTES

GENERAL:

1. INSTALL NEW CONDUITS MINIMUM 1.0m BELOW EXISTING GRADE
2. EXCAVATION PERMITS REQUIRED PRIOR TO CONSTRUCTION
3. CONTACT 'CLICK BEFORE YOU DIG' MANITOBA AT ClickBeforeYouDigMB.com THREE FULL WORKING DAYS PRIOR TO CONSTRUCTION FOR LOCATION OF EXISTING WATER, WASTEWATER AND LAND DRAINAGE UTILITIES.

WATER AND WASTE DEPARTMENT:

A MINIMUM CLEARANCE OF 1.0 METER MUST BE PROVIDED BETWEEN THE UNDERSIDE OF ANY EXISTING WATERMAIN OR SEWERMAIN AND THE TOP OF THE PROPOSED WORKS. THIS INSTALLATION BY TRENCHLESS METHOD ONLY.

A MINIMUM CLEARANCE OF 0.5 METERS MUST BE PROVIDED BETWEEN THE UNDERSIDE OF THE PROPOSED WORKS AND THE TOP OF ANY EXISTING WATERMAIN OR SEWERMAIN.

A MINIMUM LATERAL CLEARANCE OF 2.0 METERS MUST BE PROVIDED BETWEEN ANY EXISTING WATERMAIN OR SEWERMAIN PIPE AND THE PROPOSED WORKS.

A SHAFT MUST BE EXCAVATED BY SOFT DIG METHODS 4.0 METERS FROM THE CENTRELINE OF THE EXISTING WATERMAIN OR SEWERMAIN PIPE TO CONFIRM THE ALIGNMENT AND ELEVATION OF THE DRILLING ROD BEFORE IT CROSSES OVER OR UNDER THE EXISTING WATERMAIN OR SEWERMAIN PIPE. THIS CONFIRMATION MUST BE WITNESSED BY A CITY REPRESENTATIVE.

EXISTING	LEGEND	PROPOSED	EXISTING	LEGEND	PROPOSED	EXISTING	LEGEND	PROPOSED
150 W.M.	WATERMAIN	150 W.M.	PROPERTY LINE	TELEPHONE	TELEPHONE	TELEPHONE	TELEPHONE	TELEPHONE
HYDRANT	HYDRANT	ROADWAY	ROADWAY	COMMUNICATION	COMMUNICATION	COMMUNICATION	COMMUNICATION	COMMUNICATION
VALVE	VALVE	SIDEWALK	SIDEWALK	WOOD POLE	WOOD POLE	WOOD POLE	WOOD POLE	WOOD POLE
SHUTOFF VALVE	SHUTOFF VALVE	CURB & CURB RAMP	CURB & CURB RAMP	STREET LIGHT	STREET LIGHT	STREET LIGHT	STREET LIGHT	STREET LIGHT
SEWER	SEWER	WARNING TILE	WARNING TILE	BANNER POLE	BANNER POLE	BANNER POLE	BANNER POLE	BANNER POLE
MANHOLE	MANHOLE	CULVERT	CULVERT	RAILWAY POLE	RAILWAY POLE	RAILWAY POLE	RAILWAY POLE	RAILWAY POLE
CATCH BASIN	CATCH BASIN	BUILDING	BUILDING	GUY-WIRE	GUY-WIRE	GUY-WIRE	GUY-WIRE	GUY-WIRE
CURB INLET	CURB INLET	TREE	TREE	FENCE	FENCE	FENCE	FENCE	FENCE
HYDRO	HYDRO	GAS	GAS	GUARDRAIL	GUARDRAIL	GUARDRAIL	GUARDRAIL	GUARDRAIL

UNDERGROUND STRUCTURES

2022627	2022/07/15
2022W0622	

UNDERGROUND STRUCTURES ID DATE (YYYYMMDD)

WATER & WASTE REVIEW ID

NOTE: LOCATIONS 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.

CONSTRUCTION REVISIONS

NO.	REVISION	DATE (YYYYMMDD)	BY
1	ISSUED FOR CONSTRUCTION		J.S.
0	ISSUED FOR UGS APPROVAL	2022/06/07	J.S.

ACCOUNTS:

PENDING

LIABILITY DISCLAIMER NOTICE:

THE DIGITAL INFORMATION PROVIDED FOR YOUR CONVENIENCE HEREIN IS FOR USE AT YOUR OWN RISK. THE CITY OF WINNIPEG, PUBLIC WORKS DEPARTMENT, SHALL ASSUME NO RESPONSIBILITY FOR THE INFORMATION AND IT SHOULD NOT BE CONSTRUED AS ASSULT INFORMATION. THE INFORMATION SHOULD BE USED FOR PLANNING PURPOSES ONLY AND SHOULD BE VERIFIED BY SURVEY. THE DEPARTMENT SHALL NOT IN ANY WAY SUFFER ANY LIABILITY WHATSOEVER TO ANY PARTY FOR INJURY, LOSS OR DAMAGES SUFFERED BY SUCH PARTY ARISING FROM THEIR USE OF, OR RELIANCE UPON, THIS INFORMATION.

ENGINEER'S SEAL:

PRELIMINARY

NOT FOR CONSTRUCTION

THE CITY OF WINNIPEG

PUBLIC WORKS DEPARTMENT

TRANSPORTATION DIVISION

RAPID RECTANGULAR FLASHING BEACON

AIKINS ST. & REDWOOD AVE.

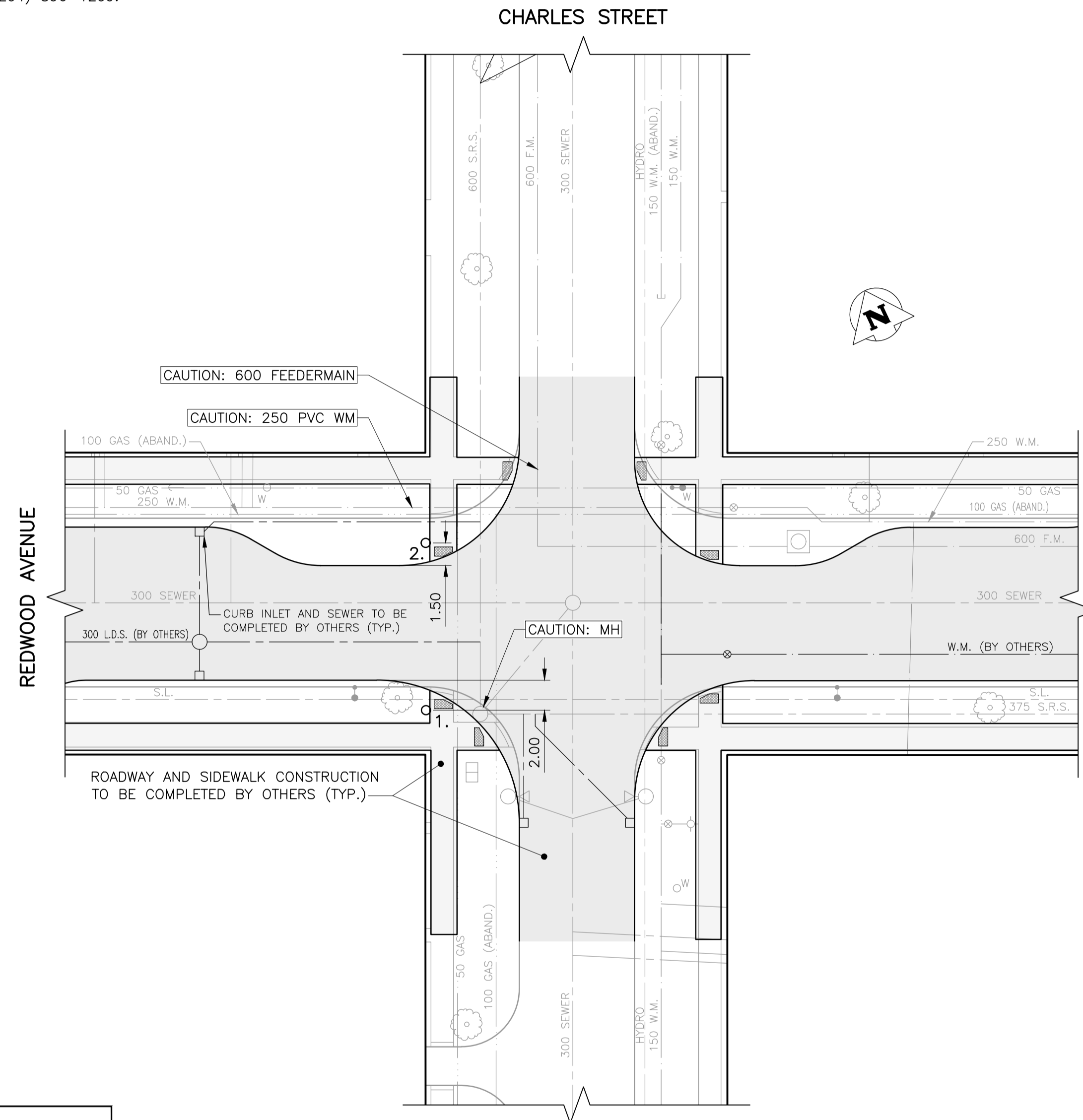
UNITS: ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE NOTED

DRAWING NUMBER: S-1656

CONSTRUCTION NOTES:

- PROJECT SCOPE
1. INSTALL BASES AS SHOWN.
 2. INSTALL EQUIPMENT AS SHOWN.
 3. CROSSING TIME FOR CROSSWALK: 17 SECONDS.

- PROJECT COORDINATION
1. COORDINATE WORK WITH CRAIG ROWBOTHAM, (204) 896-1209.



PLAN VIEW: UNDERGROUND CONSTRUCTION
1:250

UGS REVIEW NOTES

GENERAL:

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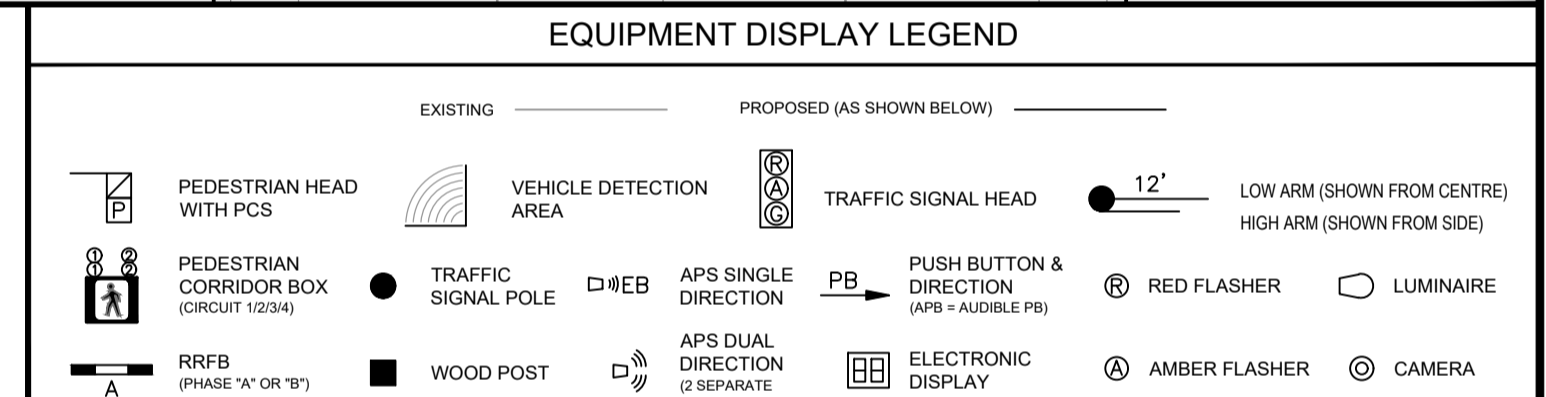
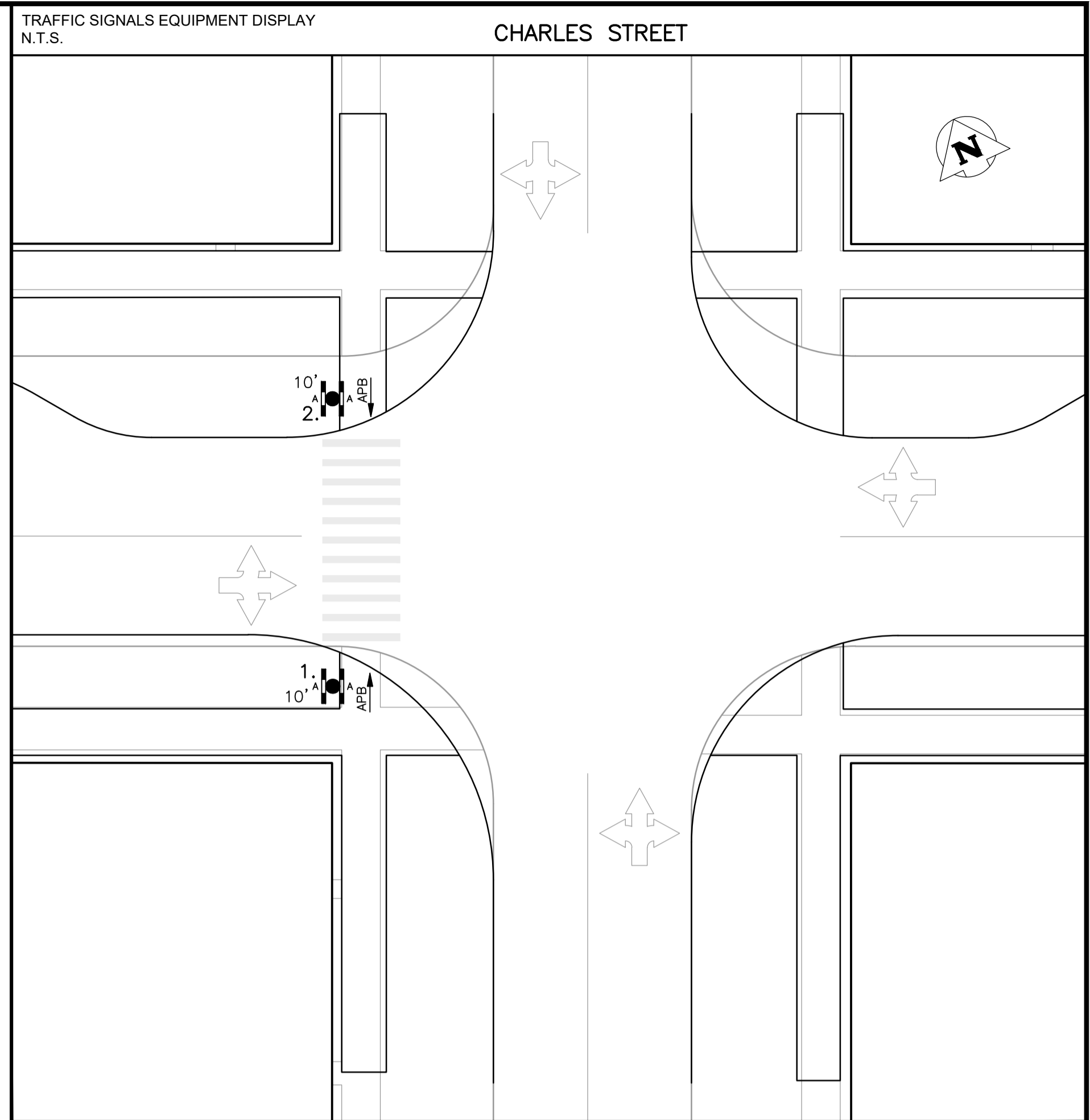
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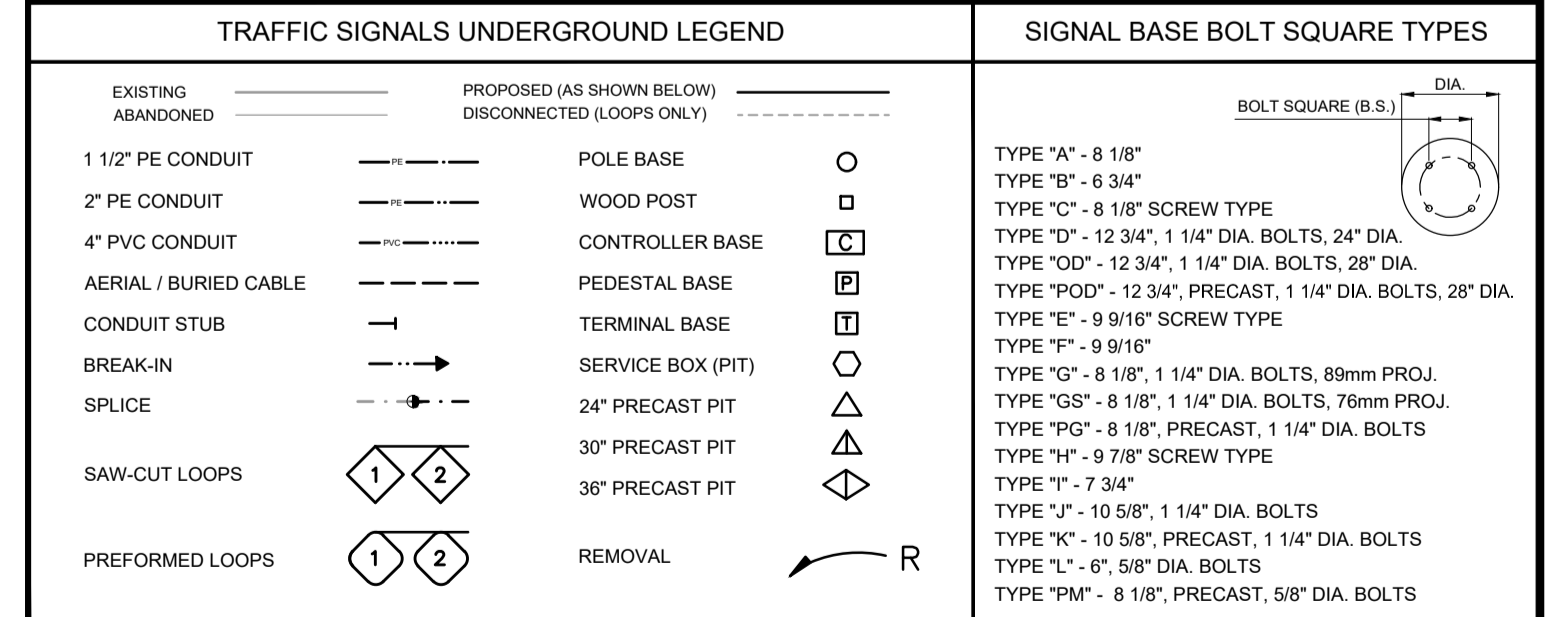
A MINIMUM CLEARANCE OF 0.5 METERS MUST BE PROVIDED BETWEEN THE UNDERSIDE OF THE PROPOSED WORKS AND THE TOP OF ANY EXISTING WATERMAIN OR SEWERMAIN.

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NO.	EQUIPMENT LIST	ARM	BASE	B.B.	NO.	EQUIPMENT LIST	ARM	BASE	B.B.
1.	10' SIGNAL SOLAR UNIT		G	G					
2.	10' SIGNAL SOLAR UNIT		G	G					



150 W.M.	WATERMAIN	150 W.M.	PROPERTY LINE	TELEPHONE	TELEPHONE	TELEPHONE
○	HYDRANT	○	ROADWAY	—	COMMUNICATION	COMMUNICATION
⊗	VALVE	⊗	SIDEWALK	○	WOOD POLE	○
○	SHUTOFF VALVE	○	CURB & CURB RAMP	○	STREET LIGHT	●●
—	SEWER	—	WARNING TILE	○	BANNER POLE	—
○	MANHOLE	○	CULVERT	○	RAILWAY POLE	○
□	CATCH BASIN	□	BUILDING	○	GUY-WIRE	—
▽	CURB INLET	▽	TREE	—	FENCE	—
—	HYDRO	—	GAS	—	GUARDRAIL	—

UNDERGROUND STRUCTURES		CONSTRUCTION REVISIONS	
UNDERGROUND STRUCTURES ID	DATE (YYYYMMDD)	NO.	REVISION
2022510	2022/05/31		
2022W0505			
WATER & WASTE REVIEW ID			
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DESIGNED BY	J.S.
DRAWN BY	J.S./R.S.
CHECKED BY	C.H./L.G.
APPROVED BY	J.S.

ACCOUNTS: PENDING

ENGINEER'S SEAL:

PRELIMINARY

NOT FOR CONSTRUCTION

THE CITY OF WINNIPEG

Winnipeg

PUBLIC WORKS DEPARTMENT

TRANSPORTATION DIVISION

RAPID RECTANGULAR FLASHING BEACON

CHARLES ST. & REDWOOD AVE.

UNITS: ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE NOTED

DRAWING NUMBER: S-2154

