

VARIOUS 2019 CAPITAL PROJECTS

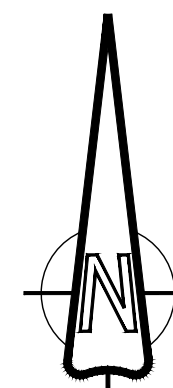


LOCATION PLAN

SCALE 1 : 5000

DRAWING INDEX

DRAWING No.	SHEET No.	DRAWING TITLE	REVISION No.
E - 100	1	COVER SHEET, DRAWING INDEX , LOCATION PLAN AND NOTES	1
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GENERAL NOTES:

- ALL CONSTRUCTION AND MATERIALS TO BE IN ACCORDANCE WITH MUNICIPAL CONTRACT DOCUMENTS (MCD) PLATINUM 2009 EDITION STANDARD SPECIFICATIONS AND DRAWINGS, EXCEPT AS OTHERWISE NOTED IN THESE DRAWINGS OR THE CONTRACT DOCUMENTS.
- CONTRACTOR TO OBTAIN ALL APPLICABLE PERMITS TO UNDERTAKE THE REQUIRED WORKS FROM ALL APPLICABLE AUTHORITIES.
- THE CONTRACTOR SHALL NOTIFY IN WRITTEN FORMAT ALL AFFECTED RESIDENCE AND BUSINESSES A MINIMUM 4 DAYS PRIOR TO COMMENCING THE CONSTRUCTION.
- TEMPORARY SIGNS WITH CONSTRUCTION DATES AND TIMES ARE TO BE SUPPLIED AND ERECTED IN LOCATIONS PRE-APPROVED BY THE TOWNSHIP OF ESQUIMALT 1 WEEK PRIOR TO CONSTRUCTION. SIGNS TO BE REMOVED FROM THE RIGHT-OF-WAY UPON COMPLETION OF THE CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF ALL MILLED AND EXCAVATED MATERIALS TO AN APPROVED DUMP SITE IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.
- CONTRACTOR IS RESPONSIBLE IN MAINTAINING A SINGLE ALTERNATING TRAFFIC FLOW AS PER TENDER.
- ALL EQUIPMENT TO BE LEFT ON SITE SHALL BE TEMPORARILY PARKED OFF TRAVELED PORTION OF THE ROAD AS DIRECTED BY THE TOWNSHIP. ELEVATIONS ARE GEODETIC.
- ALL MEASUREMENTS DIMENSIONS ARE IN METRIC.
- WHERE RECONSTRUCTION OR TYING TO EXISTING CONCRETE CURB OR SIDEWALK, REMOVE AND REPLACE EXISTING CURB OR SIDEWALK TO THE NEAREST EXPANSION JOINT.
- THE CONTRACTOR SHALL KEEP THE SITE NEAT AND TIDY AT ALL TIMES TO PROTECT PUBLIC SAFETY.
- THE CONTRACTOR SHALL ORGANIZE HIS WORKS TO MINIMIZE INCONVENIENCE TO THE PUBLIC AND INDIVIDUAL PROPERTY OWNERS. CONTRACTOR TO MAINTAIN SMOOTH TRAFFIC FLOW AT ALL TIMES DURING CONSTRUCTION.
- CONTRACTOR TO INSTALL A DESIGNATED SAFE PEDESTRIAN CORRIDOR IN THE EVENT THAT SIDEWALK IS UN-USEABLE TO THE PUBLIC.
- ALL MEASUREMENTS AND DIMENSIONS IS IN METRIC.
- ALL WORK SHALL BE CONSIDERED NEW UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS, NOTES AND CONDITIONS ON SITE BEFORE ANY CONSTRUCTION WORK SHALL BE STARTED. ALL DISCREPANCIES SHALL BE REPORTED TO THE ENGINEERING DEPARTMENT OF ESQUIMALT. NO WORK OR ORDERING OF MATERIAL MAY BE STARTED UNTIL ALL DIMENSIONED ITEMS HAVE BEEN RESOLVED. NO EXTRA CHARGE OF COMPENSATION WILL BE ALLOWED ON ACCOUNT OF ANY DIFFERENCE BETWEEN ACTUAL DIMENSIONS AND MEASUREMENTS WHICH MAY BE FOUND AS INDICATED ON THE DRAWINGS UNLESS DIRECTED BY THE TOWNSHIP REPRESENTATIVE. THE CONTRACTOR SHALL ASSUME FULL AND UNDIVIDED RESPONSIBILITY FOR THE ACCURACY, FIT, AND STABILITY OF ALL PARTS OF THE WORK.
- NO PLANS SHALL BE SCALED; DIMENSIONS SHALL BE USED UNLESS DIRECTED BY THE TOWNSHIP REPRESENTATIVE.
- ALL LABOR, MATERIALS AND INSTALLATION MUST COMPLY WITH THE CODES, RULES AND REGULATIONS OF ALL AUTHORITIES HAVING JURISDICTION. ANY DISCREPANCY WHICH EXIST BETWEEN REQUIREMENTS BY THE PLANS, SPECIFICATIONS, SAID CODES, RULES AND REGULATIONS, SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF ESQUIMALT ENGINEERING DEPARTMENT IN WRITING FOR RESOLUTION. IF ANY CHANGE IN PLANS AND / OR SPECIFICATIONS OCCURS AS A RESULT, AN ADJUSTMENT TO THE PROJECT COST IS NEEDED TO REFLECT THE CHANGE THAT COMMENSURATE AND SHALL BE AGREED BY THE CONTRACTOR AND ESQUIMALT.
- THE CONTRACTOR SHALL PROVIDE ALL NECESSARY PROTECTION OF EXISTING WORK AND NEWLY ADDED WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY BRACING AND PROTECTING ALL WORK DURING CONSTRUCTION AGAINST DAMAGE, BREAKAGE, COLLAPSE, DISTORTION AND MISALIGNMENT ACCORDING TO APPLICABLE CODES AND STANDARDS.
- THE CONTRACTOR SHALL REPAIR AND RESTORE TO ITS ORIGINAL CONDITION ALL WORK AND ITEMS DAMAGED AS A RESULT OF THE BUILDING OPERATIONS AND SHALL LEAVE THE WORK COMPLETED TO THE TRUE INTENT OF THE DRAWINGS AND SPECIFICATIONS AND TO THE SATISFACTION OF THE TOWNSHIP REPRESENTATIVE.
- ANY DISTURBANCE OR DAMAGE TO THE EXISTING BUILDINGS OR UTILITIES RESULTING EITHER DIRECTLY OR INDIRECTLY FROM THE OPERATION OF THIS CONTRACT SHALL BE PROMPTLY REPAIRED, RESTORED OR REPLACED AT CONSTRUCTOR'S COST TO THE SATISFACTION OF THE TOWNSHIP.
- ALL TRANSITIONS OF NEW WORK TO EXISTING WORK SHALL BE CAREFULLY EXECUTED, EXISTING CONSTRUCTION SHALL BE REPAIRED AS NEEDED AND PATCHED TO MATCH FINISHES OF ADJACENT SURFACES.
- CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO DOING ANY EXCAVATION WORKS.
- WHEN CROSSING GAS LINES, EXTRA CAUTION SHALL BE OBSERVE IF DIGGING WITHIN 0.5m OF ITS HORIZONTAL AND VERTICAL POSITION PROVIDED BY FORTIS BC. MANUAL HAND EXCAVATION IS RECOMMENDED. ANY BREAKAGE AND DAMAGES DURING CONSTRUCTION SHALL BE REPORTED TO FORTIS BC IMMEDIATELY. IN THE EVENT OF GAS LEAK, EVACUATE THE WORK SITE, SEAL AND CORDON THE AREA AND CALL 911.
- CONTRACTOR TO USE CERTIFIED TRAFFIC CONTROL PERSONNEL ALWAYS WHEN WORKING IN ANY VEHICULAR TRAVELED AREAS. LOADING AND UNLOADING OF EQUIPMENT AND MATERIAL WITHIN THE SITE ROAD CORRIDOR SHALL BE ASSISTED BY CERTIFIED T.C.P.'S. A TRAFFIC MANAGEMENT PLAN SHALL BE SUBMITTED PRIOR TO ANY SITE ACTIVITY TO THE TOWNSHIP. ANY CHANGE IN TRAFFIC MANAGEMENT PLAN BY THE CONTRACTOR SHALL BE DISCUSS 4 DAYS BEFORE IMPLEMENTATION.
- CONTRACTOR TO NOTIFY BC TRANSIT 1 WEEK PRIOR TO ROAD CONSTRUCTION. ANY IMPACTED BUS PICKUP/DROP-OFF TO BE MARKED IN THE PLAN AND SUBMITTED FOR BUS RE-ROUTING AND TEMPORARY BUS STOP RELOCATION.
- SIDEWALK CLOSURES SHALL BE DONE TO THE NEAREST PEDESTRIAN CROSSWALK. SIDEWALK SIGNS SHOULD BE MARK AND LIGHTED AT NIGHT TIME FOR VISIBILITY.

ELECTRICAL WORKS:

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED ELECTRICAL PERMITS, ARRANGING FOR ALL ELECTRICAL INSPECTIONS COVERING HIS WORK AND PAYING ALL FEES FOR SUCH PERMITS.
- EQUIPMENT, INSTALLATION, WIRING METHODS, AND MATERIALS USED SHALL BE IN ACCORDANCE WITH THE LATEST EDITION, INCLUDING AMENDMENTS, OF THE RULES AND REGULATIONS FOR THE INSTALLATION AND MAINTENANCE OF ELECTRICAL EQUIPMENT AS ISSUED BY THE TOWNSHIP OF ESQUIMALT AND THE MCD (2009 PLATINUM EDITION). WORK SHALL ALSO BE IN ACCORDANCE WITH ALL APPLICABLE MUNICIPAL CODES AND REGULATIONS, PROVINCIAL STATUTES IN EFFECT AT THE SITE, AND THE FIRE MARSHALL AND WORKMEN'S COMPENSATION ACTS, HEREINAFTER CALLED THE RULES AND REGULATIONS. MAINTAIN ALL CLEARANCES FROM HYDRO POLES AS REQUIRED BY THE CANADIAN ELECTRICAL CODE.
- WHEREVER THE DRAWINGS OR SPECIFICATIONS CALL FOR MATERIAL, WORKMANSHIP, ARRANGEMENT OR CONSTRUCTION OF A SUPERIOR QUALITY THAN IS REQUIRED BY THE RULES AND REGULATIONS, THE DRAWINGS AND SPECIFICATIONS SHALL PREVAIL. OTHERWISE, SHOULD THERE BE A CONFLICT BETWEEN THE RULES AND REGULATIONS AND THE DRAWINGS AND SPECIFICATIONS, THE RULES AND REGULATIONS SHALL PREVAIL.
- THE CONTRACTOR SHALL OBTAIN, AND PAY FOR ALL PERMITS, AND ARRANGE FOR ALL ELECTRICAL INSPECTIONS COVERING HIS WORK, AND PAY ALL OTHER FEES AND CHARGES, AND MAKE ALL DEPOSITS THAT ARE IN ANY WAY CONNECTED WITH THE INSTALLATION OF THE SYSTEMS SPECIFIED AS SHOWN ON THE DRAWINGS. HE SHALL GIVE ALL NECESSARY NOTICES TO AUTHORITIES HAVING JURISDICTION, AND SHALL BE RESPONSIBLE FOR KEEPING ALL APPLICABLE PUBLIC ORDINANCES.
- SHOP DRAWINGS FOR THE APPROVED SOLAR PEDESTRIAN CONTROLLED LIGHT SYSTEM (CANADIAN R920 - E) SHALL NOT BE ALTERED OR MODIFIED FOR EASE OF INSTALLATION UNLESS GIVEN PERMISSION FROM THE TOWNSHIP.
- ALL SUPPLIED MATERIALS CALLED FOR BY THE DRAWING SHALL BE MCD APPROVE UNLESS CLEARLY SPELLED OUT IN THE CONTRACT DOCUMENTS OR AS DIRECTED BY THE TOWNSHIP.
- ALL ELECTRICAL WORK TO BE PERFORMED BY A REGISTERED ELECTRICIAN AND INSPECTION CONTRACTOR UNDER PROVISIONS OF BRITISH COLUMBIA ELECTRICAL SAFETY ACT.
- ELECTRICAL WORK TO CONFORM TO THE CURRENT EDITION OF CANADIAN ELECTRICAL CODE AND ANY BULLETINS PUBLISHED BY ELECTRICAL SAFETY BRANCH MINISTRY OF MUNICIPAL AFFAIRS.
- WORK TO CONFORM TO ALL APPLICABLE REGULATIONS OF WORKERS' COMPENSATION BOARD (WORKSAFE BC), CONFIRM COMPLIANCE WITH THE FOLLOWING:
 - WORKSAFE BC FORM 30M33 TO BE COMPLETED PRIOR TO WORKING IN VICINITY OF OVERHEAD POWER LINES.
 - NOTICE OF CONSTRUCTION PROJECTS, WCB INDUSTRIAL HEALTH AND SAFETY REGULATIONS, SECTION 34.16(3).
- ALL CONCRETE BASES AND JUNCTION BOX SYMBOLS ARE NOT TO SCALE.

EROSION AND SEDIMENT CONTROL NOTES:

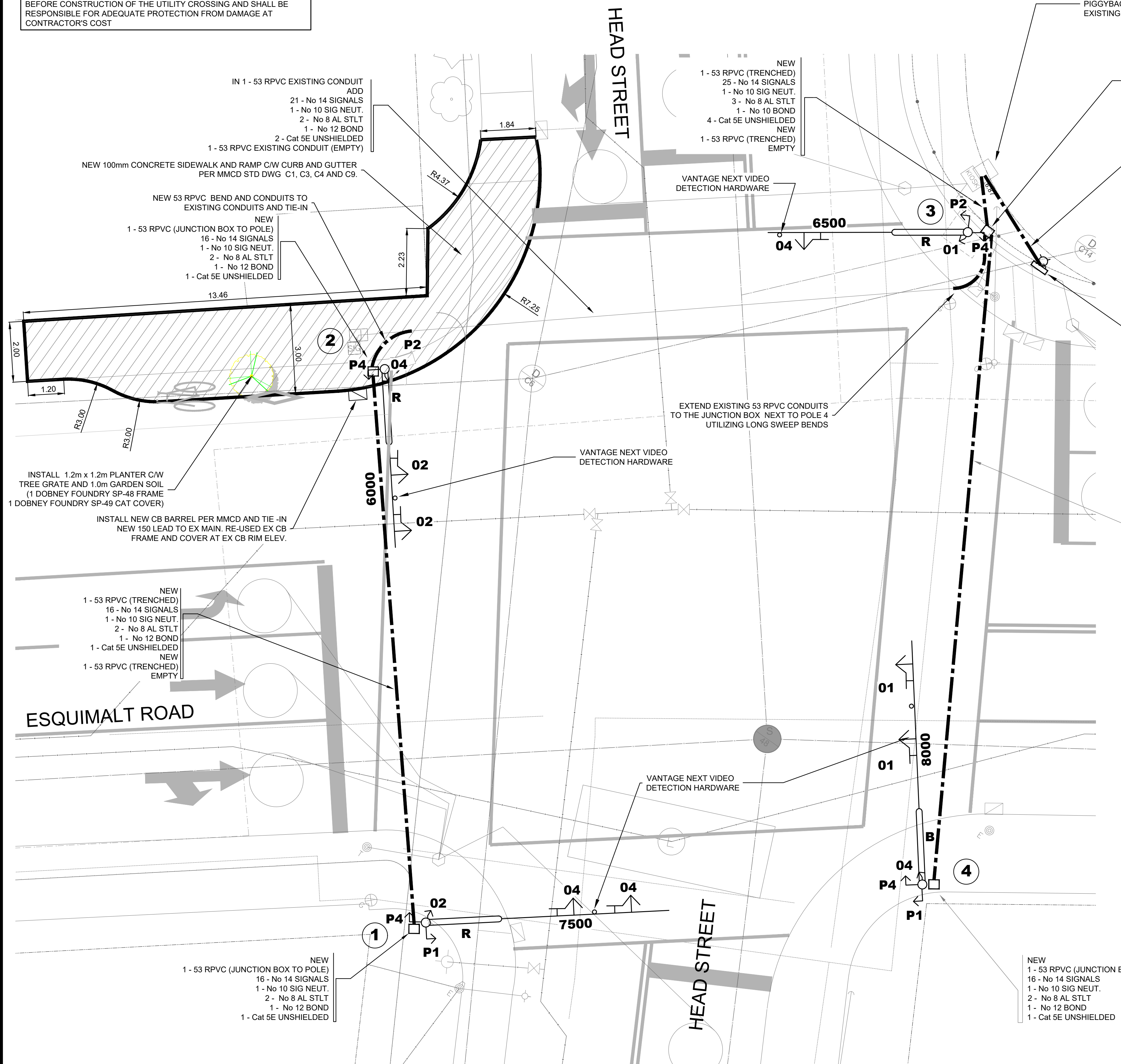
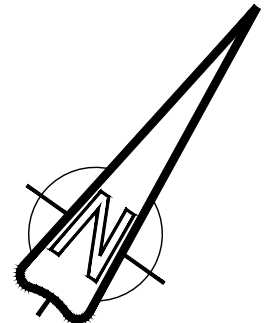
- PHASE CLEARING AND GRADING TO THE MAXIMUM EXTENT PRACTICAL TO PREVENT EXPOSED INACTIVE AREAS FROM BECOMING A SOURCE OF EROSION.
- INSTALL SILT FENCE AT THE DOWNSTREAM AREA PRIOR TO ANY WORK TO THE SATISFACTION OF THE TOWNSHIP'S REPRESENTATIVE. SILT FENCE TO BE REMOVED ONLY AFTER COMPLETION OF THE PROJECT OR ALL DISTURBED GROUND COVER HAVE GROWN/RECOVERED.
- CONTRACTOR TO PROVIDE A MAINTENANCE LOG REPORT TO THE TOWNSHIP AFTER A MAJOR RAINFALL EVENT OR 4 DAY OF MINOR RAINFALL EVENTS. CONTRACTOR IS EXPECTED TO CLEAN OR REPLACE ANY SEDIMENT CONTROL MEASURES DAMAGED DURING AN EVENT DESCRIBED ABOVE.
- ANY STRIPPED AREAS NOT SUBJECT FOR CONSTRUCTION SHALL BE COVERED BY POLYPROPYLENE SINGLE NET STRAW EROSION BLANKET.
- ALL EXCAVATED MATERIAL PILED ON SITE SHALL STABILIZED AND BE COVERED BY POLYETHYLENE PLASTIC SHEETS AND SURROUNDED BY A SILT FENCE AT TOE IF THE PILE AT THE END OF THE DAY ESPECIALLY ON WET WEATHER.
- CONSTRUCTION ACTIVITIES MUST AVOID OR MINIMIZE EXCAVATION AND CREATION OF BARE GROUNDS DURING WET WEATHER.
- USE WATER, SOIL-BINDING AGENT OR OTHER DUST CONTROL TECHNIQUE AS NEEDED TO AVOID WIND-BLOWN SOIL.
- INTENTIONAL WASHING OF SEDIMENT INTO STORM SEWERS OR DRAINAGE WAYS MUST NOT OCCUR AT ALL TIMES.

CONCRETE WORKS:

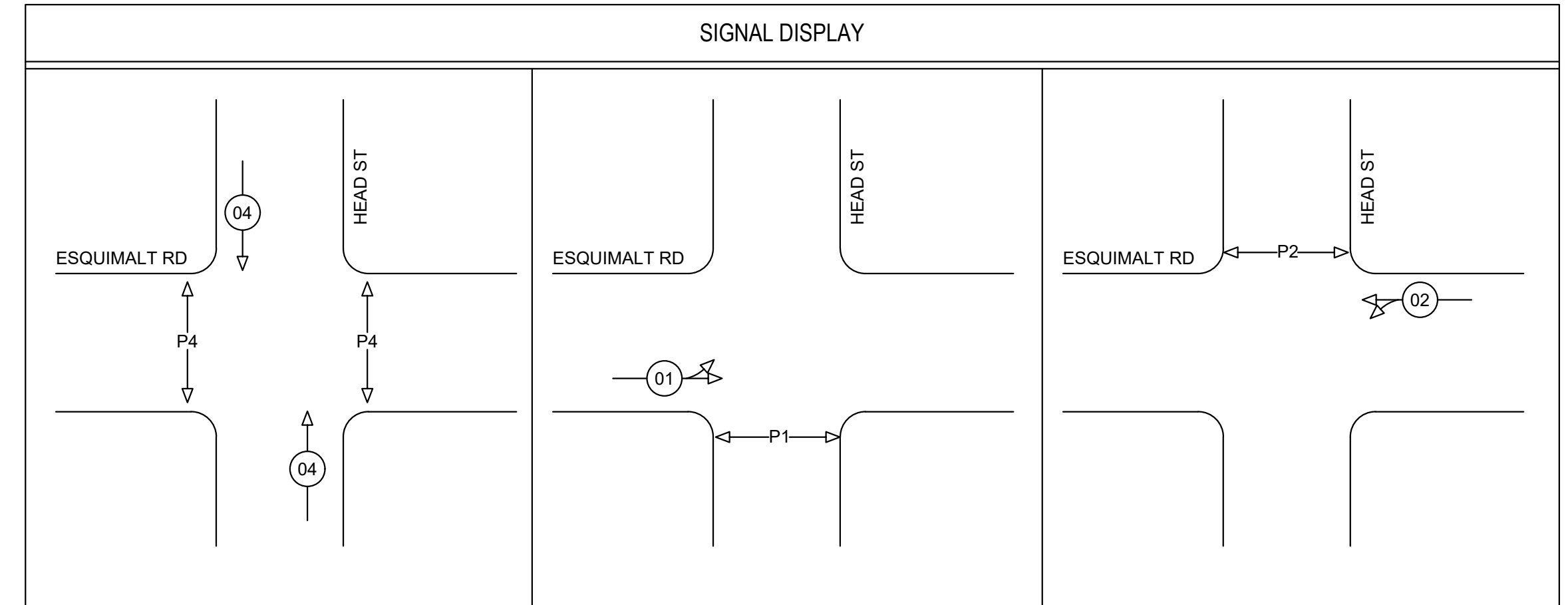
- TOP OF CONCRETE TO MATCH RIM OF EXISTING UTILITY COVERS OR HOUSING. NOTIFY TOWNSHIP'S ENGINEERING DEPARTMENT FOR OBVIOUS CHANGE IN GRADE OR CROSS SLOPES.
- THE POINT FOR NEW TO EXISTING CONCRETE SIDEWALK SHALL BE SAW-CUT.
- SIDEWALK TOL JOINT TO BE 1.5m SPACING.
- CONTRACTOR TO USE A VIBRATORY SCREED OR EQUAL FOR CONCRETE SIDEWALK, DRIVEWAYS, CROSSINGS, RAMPS, CURB AND GUTTERS. VIBRATORS SHALL NOT BE APPLIED MORE THAN 3 SECONDS IN THE SAME LOCATION.
- EXPANSION JOINTS FOR SIDEWALK SHALL BE INSTALLED EVERY 3 PANELS/PARTITION TO A MAXIMUM OF 9.0m SPACING. WHILE EXPANSION JOINTS FOR CURB AND GUTTER TO BE EVERY 9.0m. EXPANSION JOINT MATERIALS TO BE OF MCD PLATINUM 2009 EDITION SPECIFICATIONS.
- NO CONCRETE WORKS SHALL BE ALLOWED IF THE SITE CONDITIONS TEMPERATURE IS BELOW 5°C OR ABOVE 32°C. CONCRETE WORKS CONSTRUCTED AT WARMTH TEMPERATURE SHALL BE DAILY SPRAYED WITH WATER. 5 TIMES BETWEEN 10 AM -3PM WHILE CONCRETE WORKS COMPLETED AT 5°C AND EXPECTED TO DROP TO FREEZING LEVEL REQUIRES A THERMO BLANKETS/TARP FOR AT LEAST 5 DAYS.
- CONCRETE WORKS DURING WET DAYS WILL BE ALLOWED IF SIDEWALK OR DRIVEWAY BASE LINE AND GRADE AND FORM WORKS HAS BEEN INSPECTED AND APPROVED BY THE TOWNSHIP'S REPRESENTATIVE. CONTRACTOR TO PROVIDE A PLASTIC COVER TARP ADEQUATE TO COVER THE CONCRETE AREA AFTER CONCRETE WORKS. LEAVE PLASTIC COVER FOR AT LEAST 24 HOURS.
- NEW CONCRETE WORKS AT SIDEWALK OR WALKWAY AREAS SHALL BE CLOSED FOR 3 DAYS WHILE CURB AND GUTTER, DRIVEWAYS AND CROSSINGS SHALL BE OPEN ONLY AFTER 2 WEEKS MINIMUM OF CLOSURES.

DISCLAIMER:
 LOCATION OF UTILITIES SHOWN ARE APPROXIMATE ONLY AND SHOULD BE CONFIRMED BY FIELD SURVEY AND BY USE OF A PIPE LOCATOR AND MANUAL DIGGING WHERE REQUIRED. EXISTING SERVICE LOCATIONS ARE SHOWN TO INDICATE THE EXISTENCE OF THE SPECIFIED SERVICE ONLY AND ARE NOT NECESSARILY COMPLETE OR SHOWN IN THE CORRECT LOCATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE, VERIFY THE INVERT ELEVATIONS BY HAND EXCAVATION BEFORE CONSTRUCTION OF THE UTILITY CROSSING AND SHALL BE RESPONSIBLE FOR ADEQUATE PROTECTION FROM DAMAGE AT CONTRACTOR'S COST

CHECK BEFORE YOU DIG
 CONTRACTOR SHALL REFER TO DRAWINGS OF OTHER UTILITY SERVICE LOCATIONS AND DETAILS. THE EXACT LOCATIONS OF THESE UTILITIES SHALL BE DETERMINED ON SITE BY LOCATE UTILITY EXPERTS CONTRACTORS. NOT ALL UTILITIES NECESSARILY SHOWN AND UPDATED.



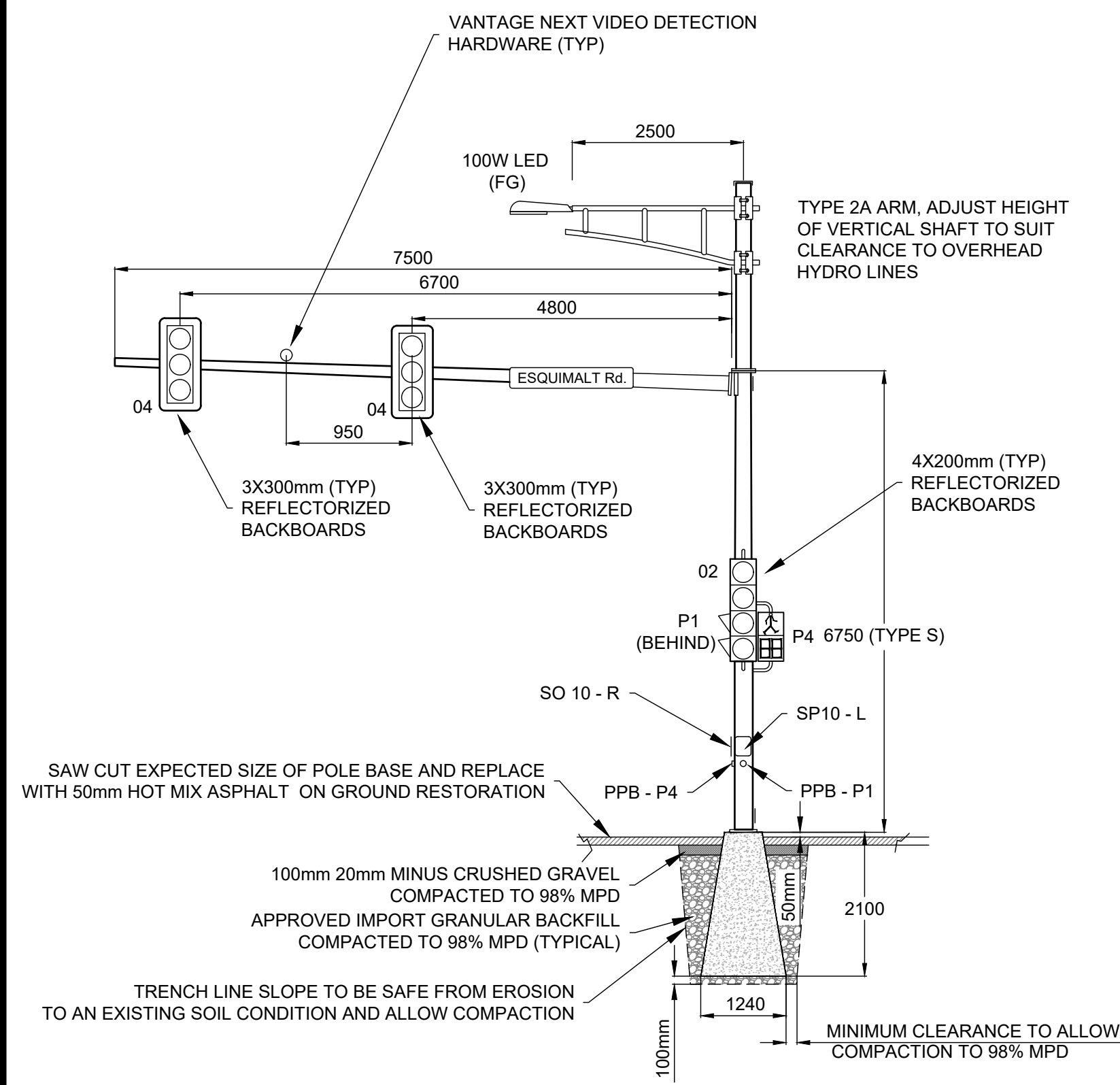
CONDUCTOR COLOR CODE		
ITEM	SIGNAL SECTION	CONDUCTOR COLOUR
← 02	RED YELLOW GREEN YELLOW ARROW GREEN ARROW	RED YELLOW BLUE ORANGE (WHITE T.T.) BLUE (WHITE T.T.)
04	RED YELLOW GREEN	RED YELLOW (RED T.T.) GREEN
← 01	RED YELLOW GREEN YELLOW ARROW GREEN ARROW	RED BROWN BLUE ORANGE (WHITE T.T.) BLUE (WHITE T.T.)
P2	DONT WALK WALK PUSH BUTTON	YELLOW BLUE PURPLE/PURPLE (YELLOW T.T.)
P4	DONT WALK WALK PUSH BUTTON	YELLOW (RED T.T.) BLUE PURPLE/PURPLE (RED T.T.)
P1	DONT WALK WALK PUSH BUTTON	BROWN BLUE PURPLE/PURPLE (BROWN T.T.)
CONTROLLER POWER		BLACK
LUMINAIRE CCT. A		RED
LUMINAIRE CCT. B		BLACK
EMERG. PRE-EMPT. CABINET PWR.		BLACK/WHITE
EMERG. INDICATION LIGHT: WHITE		RED
EMERG. INDICATION LIGHT: BLUE		RED (WHITE T.T.)
NEUTRAL		WHITE
GROUND/BOND		GREEN



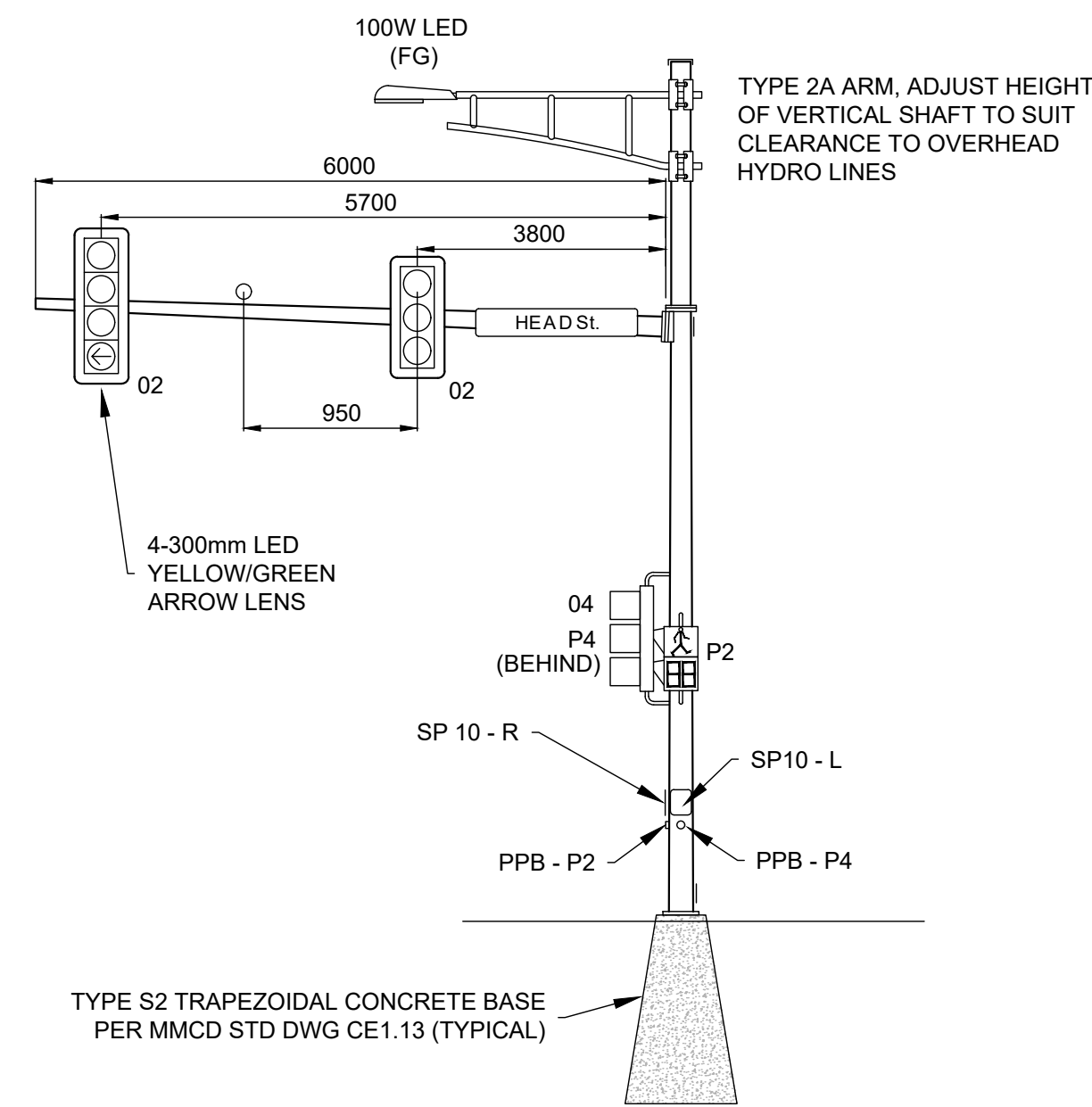
PROJECT NOTES:

- EXISTING TRAFFIC LIGHTING POLE (2) TO BE REMOVED AND REPLACED, INCLUDING BASE WITH NEW POLE. CONTRACTOR TO PROVIDE AUTHORIZED FLAGGERS AND TRAFFIC SIGNALS TO ENSURE SAFE TRAFFIC MOVEMENTS AT ALL TIME.
- EXISTING HANGING TRAFFIC LIGHT HEADS AND WIRES, JUNCTION BOXES, CONDUITS, AND PUSH BUTTON SWITCHES SHALL BE REMOVED AND DISPOSED BY THE CONTRACTOR IN AN APPROVED SITE.
- REPLACE EXISTING JB'S AS SHOWN. EXISTING CONDUITS AND WIRING TO ENTER THE NEW LBS. ADVISE CONTRACT ADMINISTRATION IF FIELD CONDITION OR OTHER FACTORS PREVENT EXISTING SITE FROM ENTERING NEW JB'S.
- COORDINATE REMOVAL OF EXISTING SIGNAL EQUIPMENT FROM EXISTING HYDRO POLES AND TELUS POLES.
- CONTRACTOR TO CONFIRM EXISTING WIRING AND CONDUITS. CLEAN EXISTING CONDUITS PRIOR TO INSTALLING NEW WIRING.
- EXISTING TRAFFIC LOOP SENSORS TO BE ABANDONED. CONDUIT PIPES AND WIRES TO BE DECOMMISSIONED.
- EXISTING CONDUITS TO BE RE-USED SHALL BE CLEAN BEFORE PULLING WIRES.
- ALL LINE PAINTING AND PAVEMENT MARKINGS DAMAGED DURING CONSTRUCTION SHALL BE RESTORED.
- NEW STREET BLADES SIZE AND MARKER HEIGHTS TO MATCH EXISTING INSTALLED AT LAMPSON ST AND ESQUIMALT RD. INTERSECTION.
- REFER TO DETAIL PLAN ON SPECS FOR NEW CCTV TO BE INCORPORATED TO THE TRAFFIC CONTROL SYSTEM.
- EXISTING LUMINAIRES AND ARM MOUNTED AT A HYDRO POLE NORTH EAST AND SOUTH WEST QUADRANTS OF THE INTERSECTION SHALL BE RETURN TO THE TOWNSHIP AFTER REMOVAL. NOTE THAT REMOVAL OF THESE LIGHTS ARE ONLY PERMITTED WHEN THE LIGHTS MOUNTED ON THE NEW POLES ARE OPERATIONAL.

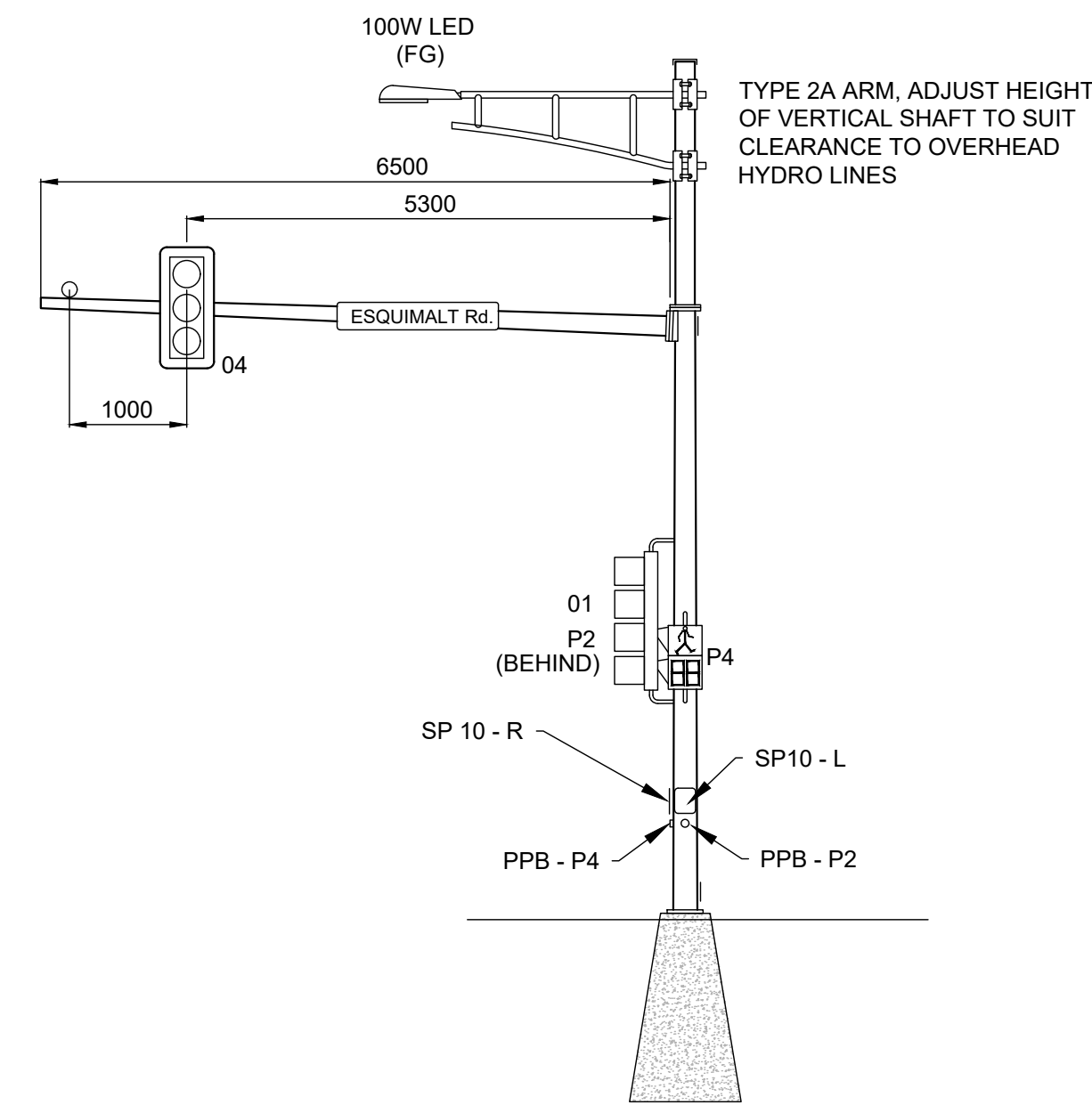
CONFIRM UNDERGROUND LOCATIONS WITH UTILITY COMPANIES	LEGEND - Existing services shown solid										REVISIONS			REVISIONS APPROVED			DESIGN APPROVED			TOWNSHIP OF ESQUIMALT ESQUIMALT RD AND HEAD ST. INTERSECTION			E049	
											ISSUED FOR REVIEW			APP. DATE SIGN			EXCEPTIONS			TRAFFIC SIGNAL UPGRADE (SITE 1)			E - 101	
											ISSUED FOR TENDER			APP. DATE SIGN			DESIGN ENG.			SITE PLAN AND DETAILS			1	
																	MUNICIPAL ENG.			DATE 2019.05.20				



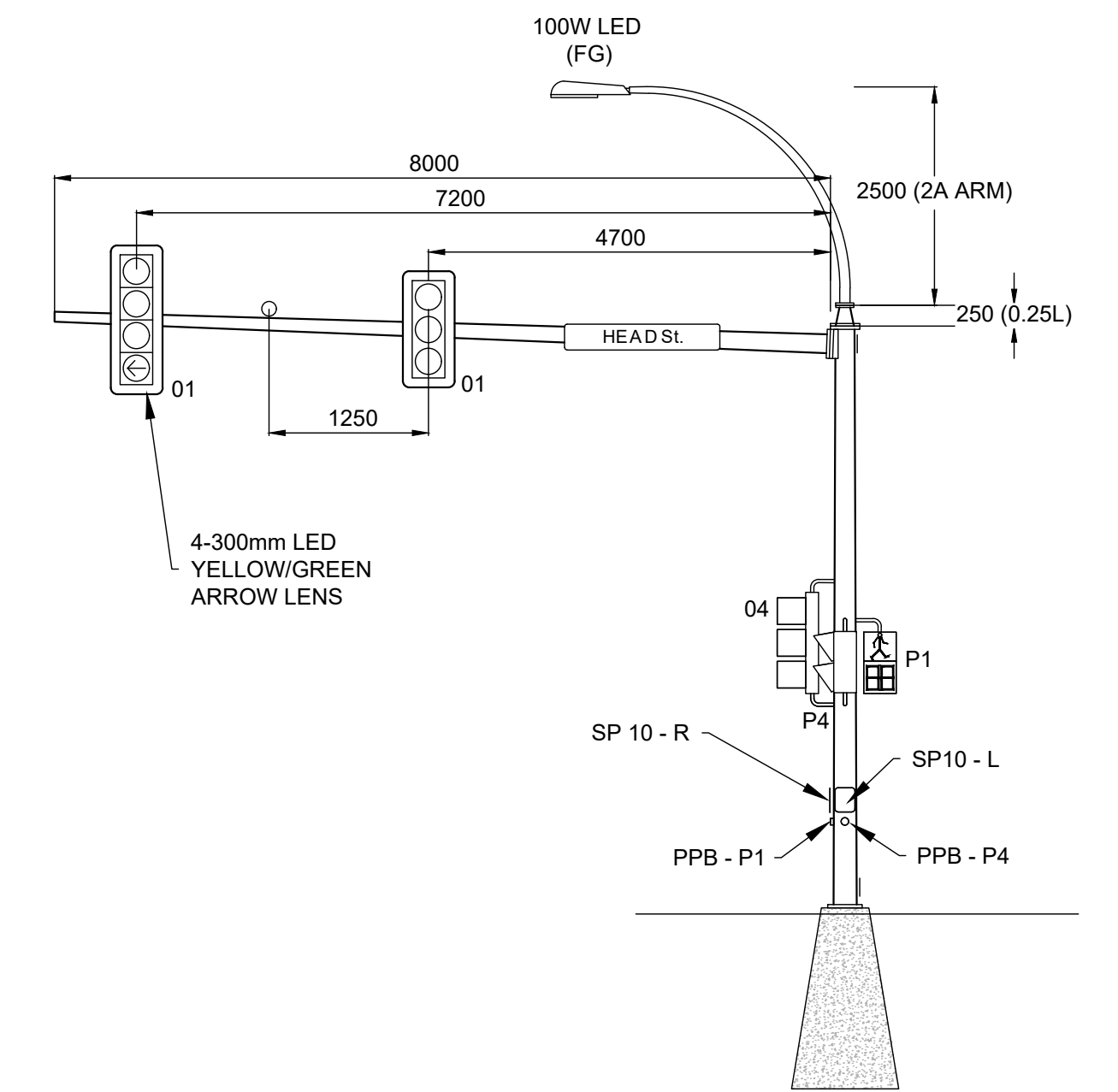
ELEVATION POLE #1 DETAIL
SCALE N.T.S.



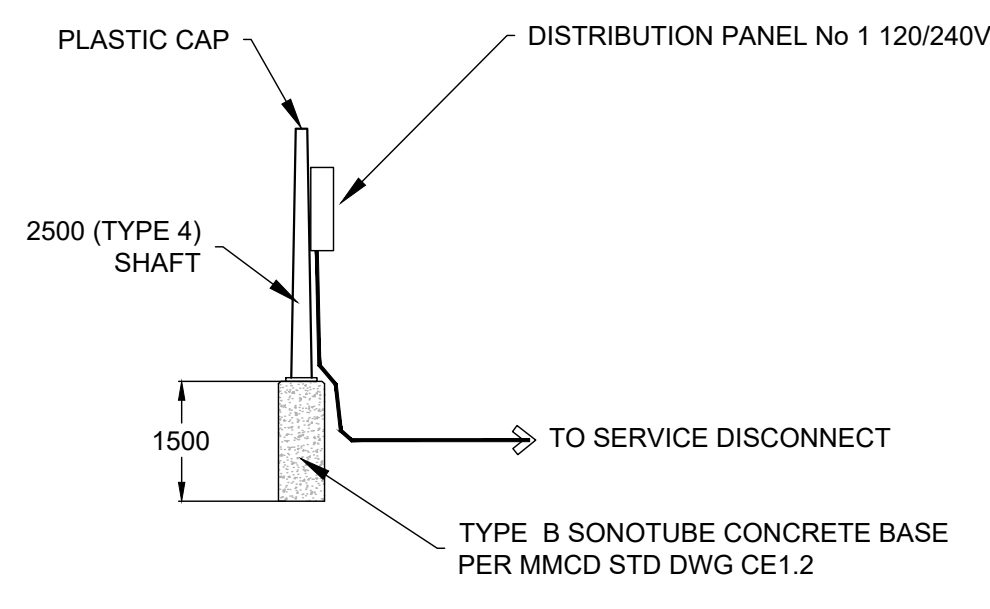
ELEVATION POLE #2 DETAIL
SCALE N.T.S.



ELEVATION POLE #3 DETAIL
SCALE N.T.S.

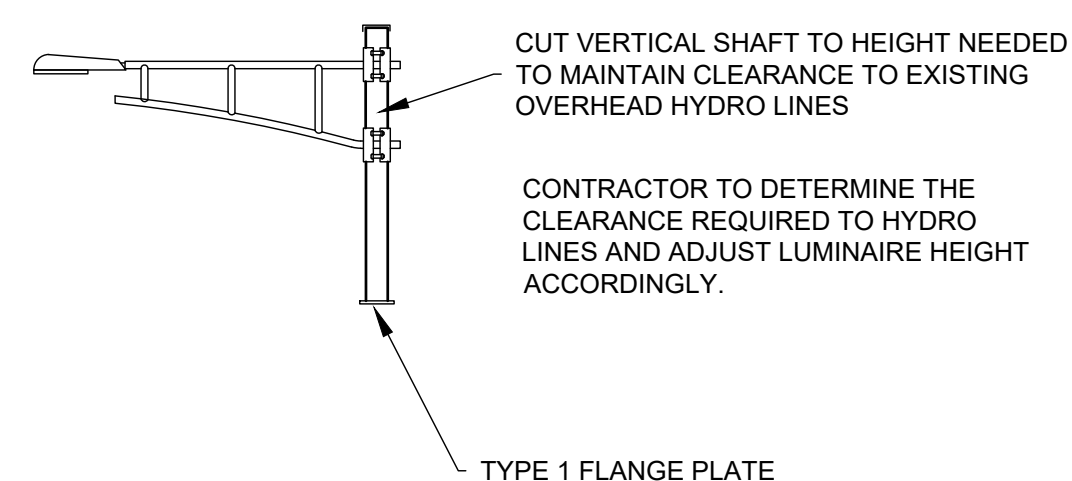


ELEVATION POLE #4 DETAIL
SCALE N.T.S.



ELEVATION SERVICE POLE DETAIL
SCALE N.T.S.

DESIGN LUMINAIRE:
LED ROADWAY LIGHTING ATB2 - 40LLEDE70 - MVOLT - R2
INTERSECTION LIGHTING LEVEL ACHIEVED 26 LUX, 1.75
AVE/MIN



**ELEVATION DETAIL
MOTI TYPE 2A MODIFIED ARM**
SCALE N.T.S.

CONSTRUCTION NOTES:

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE SUPPLEMENTARY SPECIFICATIONS ISSUED WITH THIS CONTRACT AND THE MASTER MUNICIPAL CONSTRUCTION DOCUMENTS (MMCD) PLATINUM 2009 EDITION.
- ALL SIGNS TO BE IN ACCORDANCE WITH BCMOT MANUAL OF STANDARD TRAFFIC SIGNS AND PAVEMENT MARKINGS.
- CONDUCTORS INSIDE POLES SHALL BE:
No 14 RW90 XLINK FOR SIGNALS
No 10 RW90 XLINK FOR STREET LIGHTING
- EXACT LOCATION OF ALL EQUIPMENT WILL BE CONFIRMED BY THE TOWNSHIP'S REPRESENTATIVE ON-SITE.
- ALL COMMON CIRCUIT WIRING SHALL BE TAGGED AND TYRAPPED AS DETAILED IN MMCD.
- REFER TO BC HYDRO REGULATIONS FOR SERVICE CONNECTION DETAIL.
- CONTRACTOR SHALL CONFIRM EXACT SERVICE LOCATION WITH BC HYDRO PRIOR TO CONSTRUCTION.
- ALL SIGNAL HEAD SECTIONS SHALL BE WIRED SEPARATELY FROM THE BASE OF THE POLE, INCLUDING A SEPARATE NEUTRAL AND BOND FOR EACH SIGNAL HEAD.
- TRAFFIC SIGNAL CONDUCTOR SHALL BE STRANDED COPPER TYPE RW90 INSULATED AND COLOUR CODED. LIGHTING CONDUCTORS TO BE STRANDED ALUMINUM, TYPE RW90 INSULATED AND COLOUR CODED.
- COIL AND TAPE A MINIMUM OF 2.0M OF ALL SPARE CONDUCTORS IN THE CONTROLLER BASE INTO PRIMARY HEADS (AT END OF SIGNAL ARM) AND SECONDARY HEADS AS DETAILED ON SITE PLAN AND COLOUR CODING.
- EXACT LOCATION OF VIDEO DETECTION CAMERA TO BE ADJUSTED TO ATTAIN MAXIMUM COVERAGE. INSTALLATION OF THE HARDWARE AND PROGRAMMING SHOULD BE EXECUTED BY THE SUPPLIER AT CONTRACTOR'S COST. ALL HARDWARE SHOULD BE INCORPORATED INSIDE THE EXISTING CABINET CONTROLLER.
- DURING GROUND RESTORATIONS, EXISTING CONCRETE CURB AND GUTTER, CONCRETE SIDEWALK TO BE REPLACED BY ASPHALT.
- CONDUIT TRENCH ALONG ROAD AND SIDEWALK AREA SHALL BE SAW CUT. RESTORE GROUND PER MMCD STD DWG G5 OR PER DETAIL SHOWN.
- FINAL TESTING, CONNECTION TO BC HYDRO LINES AND ACTIVATION TO BE DONE BY THE CONTRACTOR AT THEIR OWN COST.

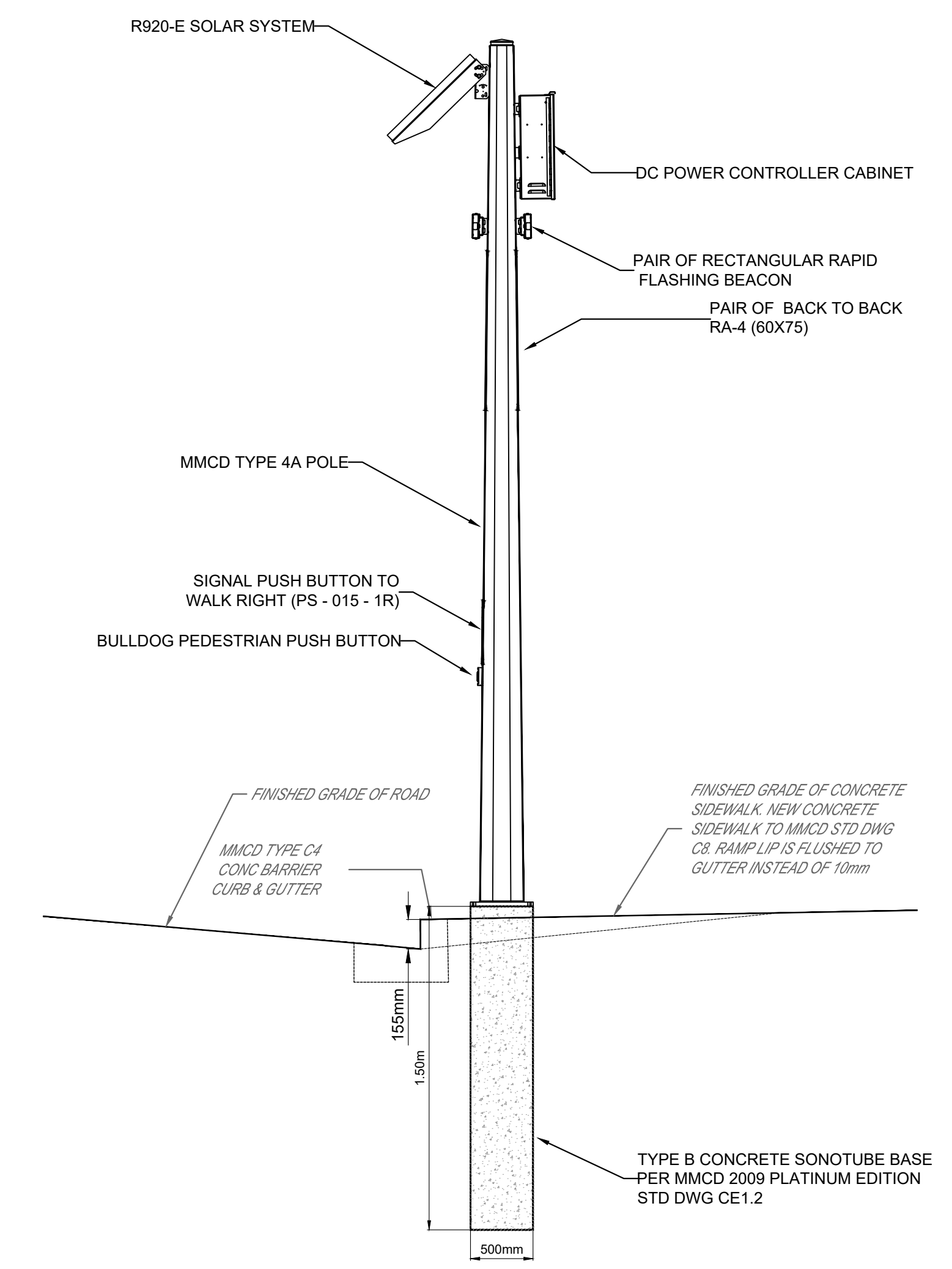
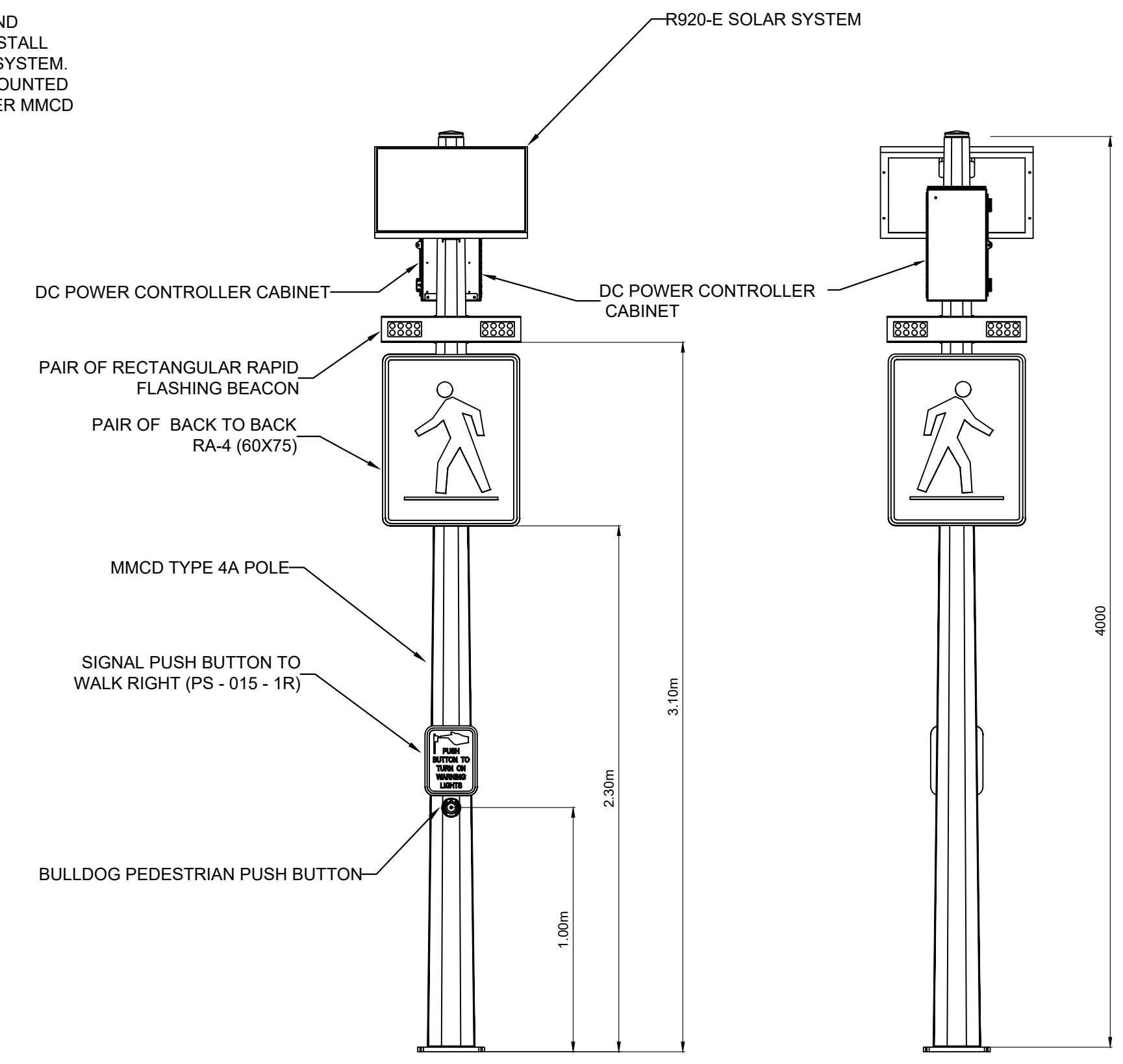
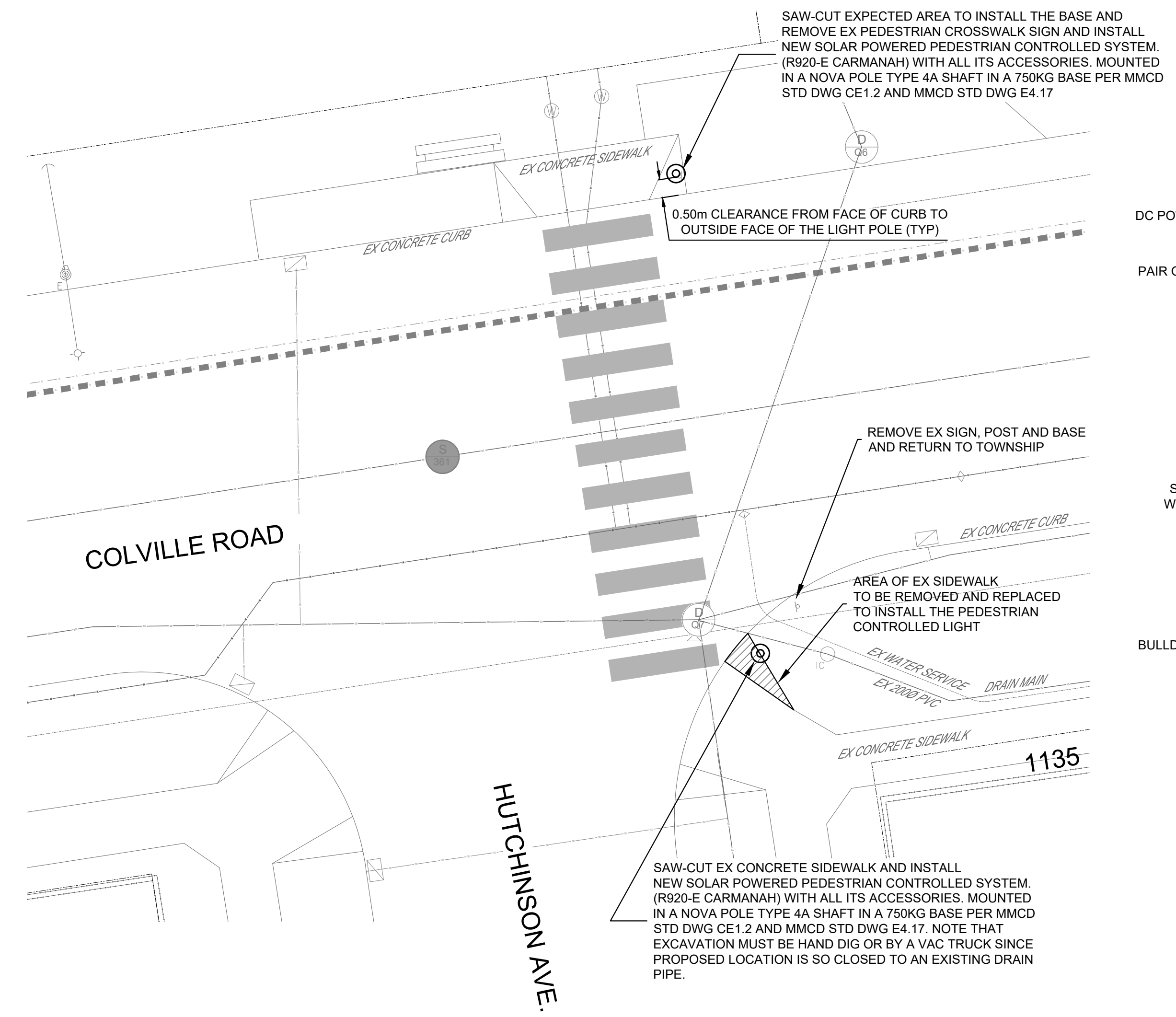
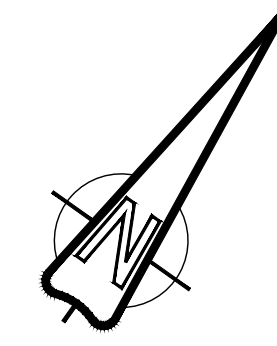
APPROVED PRODUCT LISTS

PRODUCT	MANUFACTURER	SPECIFICATIONS	EXCEPTIONS	SUPPLIER	COMMENTS
ROUND PLASTIC JUNCTION BOXES	WEST COAST ENGINEERING	BC MoT TYPE 10		CONTRACTOR	
CONCRETE JUNCTION BOXES	LA FARGE	MMCD	LABELED "ELEC"	CONTRACTOR	
POLES AND ANCHOR BOLTS	WEST COAST ENGINEERING NOVA POLE	MMCD MoT	GALVANIZED	CONTRACTOR	
SIGNAL ARM	WEST COAST ENGINEERING NOVA POLE	MoT	GALVANIZED	CONTRACTOR	
OVERHEAD ADJUSTABLE BRACKETS	ASTRO BRACKET	ECONOLITE		CONTRACTOR	
SIDE MOUNT BRACKETS	GREEN LITE	MoT		CONTRACTOR	
SIGNAL HEADS	ECONOLITE INTER-PROVINCIAL	MoT		CONTRACTOR	
LED DISPLAYS	INTERPROVINCIAL	DIALIGHT 433		CONTRACTOR	
PEDESTRIAN HEADS	ECONOLITE	MoT	ALUMINUM YELLOW HOUSING	CONTRACTOR	
COUNTDOWN LED PEDESTRIAN DISPLAYS	INTERPROVINCIAL	TASSIMCO	ALUMINUM YELLOW HOUSING	CONTRACTOR	
PEDESTRIAN PUSH BUTTON UNIT	ASTROGRAPHICS	NEW NAVIGATOR c/w CENTRAL CONTROL UNIT	BLACK ON YELLOW	CONTRACTOR	CANADA MELODY
SAFETY CABLE	GRIPPLE	No. 3 LOOP ENG		CONTRACTOR	ADD TO EXISTING TYPE M CABINET ONLY
US PIGGY BACK CABINET	ECONOLITE	MMCD		CONTRACTOR	
SERVICE PANEL	VALID MANUFACTURING WESTCOAST ELECTRIC CO.	MMCD		CONTRACTOR	
LED LUMINAIRES	AMERICAN ELECTRIC LIGHT	ATB2 40LEDE70_R2		CONTRACTOR	
	PHILLIPS	SVM-90W48LED4K-R-LE3		CONTRACTOR	
SOLAR POWERED PEDESTRIAN CONTROLLED LIGHT	CARMANAH TECHNOLOGIES CORPORATION	R920 - E		CONTRACTOR	

CONFIRM UNDERGROUND LOCATIONS WITH UTILITY COMPANIES	LEGEND - Existing services shown solid										REVISIONS			REVISIONS APPROVED			DESIGN APPROVED			TOWNSHIP OF ESQUIMALT				E049 E - 102 2	
	CURB ---C---	DRAIN ---D---	GAS ---G---	SEWER ---S---	WATER ---W---	ELECTRICAL ---E---	SIDEWALK S/W	TREE	ELECTRIC POLE E	TEL POLE T	SURVEY MONUMENT M	ISSUED FOR REVIEW	ISSUED FOR TENDER	REVISION 1	REVISION 2	REVISION 3	EXCEPTIONS	DATE	SIGN	ESQUIMALT RD AND HEAD ST. INTERSECTION					DESIGN DWG. NO.
														APP.	DATE	SIGN	APPROVED BY	19.06.10	SCR	TRAFFIC SIGNAL UPGRADE (SITE 1)					Sheet #
														SCR	080219	SCR				DESIGN ENG.		DESIGN EFS	DRAWN EFS		SURVEY HH

DISCLAIMER:
 LOCATION OF UTILITIES SHOWN ARE APPROXIMATE ONLY AND SHOULD BE CONFIRMED BY FIELD SURVEY AND BY USE OF A PIPE LOCATOR AND MANUAL DIGGING WHERE REQUIRED. EXISTING SERVICE LOCATIONS ARE SHOWN TO INDICATE THE EXISTENCE OF THE SPECIFIED SERVICE ONLY AND ARE NOT NECESSARILY COMPLETE OR SHOWN IN THE CORRECT LOCATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE, VERIFY THE INVERT ELEVATIONS BY HAND EXCAVATION BEFORE CONSTRUCTION OF THE UTILITY CROSSING AND SHALL BE RESPONSIBLE FOR ADEQUATE PROTECTION FROM DAMAGE AT CONTRACTOR'S COST

CHECK BEFORE YOU DIG
 CONTRACTOR SHALL REFER TO DRAWINGS OF OTHER UTILITY SERVICE LOCATIONS AND DETAILS. THE EXACT LOCATIONS OF THESE UTILITIES SHALL BE DETERMINED ON SITE BY LOCATE UTILITY EXPERTS CONTRACTORS. NOT ALL UTILITIES NECESSARILY SHOWN AND UPDATED.



PEDESTRIAN CONTROLLED CROSSWALK LIGHT DETAIL
 SCALE N.T.S.

SITE PLAN
 SCALE 1:100

CONFIRM UNDERGROUND LOCATIONS WITH UTILITY COMPANIES

LEGEND - Existing services shown solid	
CURB —C—	SIDEWALK S/W
DRAIN —D—	TREE
GAS —G—	DRAIN MANHOLE
SEWER —S—	GAS VALVE
WATER —W—	SEWER MANHOLE
ELECTRICAL —E—	WATER VALVE
	CATCH BASIN
	GAS SNIFFER
	SEWER LAMPHOLE
	FIRE HYDRANT
	DRAIN CLEANOUT
	GAS METER
	SEWER CLEANOUT
	WATER METER
	TEL POLE
	STREET LIGHT
	SEWER VENT
	SERVICE VALVE
	IRON PIN
	LEAD PLUG
	TRAVERSE HUB
	P.K. NAIL
	SURVEY MONUMENT

REVISIONS		REVISIONS APPROVED			DESIGN APPROVED		
ISSUED FOR REVIEW	ISSUED FOR TENDER	APP.	DATE	SIGN	APP.	DATE	SIGN
SCR	SCR		080219	SCR			

TOWNSHIP OF ESQUIMALT			
COLVILLE RD AND HUTCHINSON AVE. INTERSECTION			
PEDESTRIAN CROSSWALK UPGRADE (SITE 2)			
SITE PLAN AND DETAILS			
DESIGN ENG.	DESIGN EFS	DRAWN EFS	SURVEY HH
ASSIST. ENG.			
MUNICIPAL ENG.	19.06.10	JM	DATE 2019.05.20
EXCEPTIONS	DATE	SIGN	
APPROVED BY	19.06.10	SCR	
SCALE:	AS SHOWN		

DESIGN DWG. NO.	E072
Sheet #	E - 103
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