



**Northeastern  
Catholic District**  
SCHOOL BOARD

## **REQUEST FOR TENDER**

### **TENDER SUBMISSION**

Pope Francis Elementary School  
Bus Route and Playground Equipment Relocation  
387 Balsam Street North  
Timmins, On.

Closing Date:

Wednesday, June 12th, 2019

Before 2:00:00 p.m. Local Time

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### **1.0 PURPOSE**

The Northeastern Catholic District School Board (NCDSB) is interested in obtaining Quotations Civil Contractor to provide a new Bus Route at the above school for September 2019, including relocating existing play structures.

## 2.0 PROJECT SCOPE

The proposed project, which includes but not limited to the following:

- New asphalt bus route from 9<sup>th</sup> to Birch
- New Fencing
- Relocating Playground Equipment
- New interlocking sidewalk (stone supplied by Owner)
- Sodding
- All permits, bonds, insurance etc will be included in the stipulated price
- Contractor to carry a **\$5,000** allowance for testing.
- Contractor to carry a **\$30,000** allowance for relocating the playground structures.

## 3.0 GENERAL CONDITIONS

Work to be completed as provided on the following drawings prepared by Bortolotto.

|        |                                     |
|--------|-------------------------------------|
| A.1.1  | Site Plan                           |
| ASW-SG | Servicing and Grading Plan          |
| SW-ND  | Notes & Details Plan                |
| E-1    | Electrical Notes and Specifications |
| E-2    | Lighting fixture specification      |
| E-3    | Light Pole Specification            |
| E-4    | Site Plan                           |
| E-5    | Bus Loop Lighting Layout            |

A Purchase Order will be submitted to the successful bidder once the Owner has reviewed and accepted the bid.

The agreement between the Owner and Contractor shall be in accordance to the CCDC 2, Stipulated Price Contract, 2008.

Bid will be held for 15 days from tender closing.

A Performance and Labour and Material Bond will be provided by the successful contractor for 100% of the contract price.

## 4.0 SCHEDULE

Proponents will commence work July 2 and substantially completed by August 23, 2019.

## 5.0 NON MANDATORY SITE VISIT

A pre-tender site visit will be scheduled for June 3<sup>rd</sup> at 3:30 pm at Pope Francis. Contractor shall meet at the Balsam entrance.

## **6.0 TENDER SUBMISSION**

Tender shall be submitted in a sealed envelope clearly marked

**“Pope Francis Elementary School Bus Route and Playground Equipment Relocation”** and delivered to the:

*Northeastern Catholic District School Board  
Finance Department c/o Main Reception  
383 Birch Street North, Timmins, ON P4N 6E8*

6.1 Hand-delivered submissions must be date/time stamped and initialed by NCDSB receptionist before closing date and time on the tender. The NCDSB does not assume any responsibility for submissions hand-delivered outside of NCDSB normal working hours which have not been date/time stamped and initialed by the NCDSB receptionist. The receptionist is at the front desk between the normal working hours of 8:30 a.m. to 12:00 (noon) and 1:00 to 4:30 p.m.

All material included with Tender must be enclosed in the sealed envelope containing the Bid.

**6.2 Bids submitted by fax or email will not be accepted.**

6.3 All submissions and associated enclosures become the property of the NCDSB.

6.4 All questions must be submitted by June 4<sup>th</sup>, 2019 to Owner.

6.5 A 10% bid bond will be submitted with the bid package.

## **7.0 PAYMENTS**

7.1 In accordance with the Construction Lien Act a 10% holdback will apply to Monthly progress Draws.

7.2 No charges for work in excess of the original work assigned will be permitted without prior approval from the NCDSB Facility Representative. School staff does not have the authority to assign or change work under this Contract and invoices for additional unauthorized work will not be paid under this Contract.

## **8.0 CERTIFICATES OF INSURANCE**

- 8.1 The successful Proponent shall furnish the NCDSB with certificates of all insurance coverage and certified copies of the Liability Insurance Policies required under the article.
- 8.2 The successful Proponent must provide, during the term of the Contract, Comprehensive General Public Liability and Property Damage Insurance with Bodily Injury and Property Damage Limits of not less than \$5,000,000.00 inclusive on any one accident or occurrence.
- 8.3 The policy must incorporate at least the following features:
- a) The NCDSB, as named insured;
  - b) Cross Liability Clauses;
  - c) Both Bodily Injury and Property Damage coverage on an "Occurrence" basis;
  - d) Automobile, Public Liability and Property Damage Insurance on owned automobile and vehicles used upon or in connection with the work with Bodily Injury and Property Damage Limits of not less than \$5,000,000.00 inclusive of any one accident;
  - e) Non-owned Automobile, Public Liability and Property Damage Insurance on non-owned automobiles and vehicles and hired automobiles and property Damage Limits of not less than \$5,000,000.00 inclusive any one accident.

## **9.0 INQUIRIES AND ADDENDA**

Direct questions by email to Northeastern Catholic District School Board, contact person:  
David Horton – Manager of Plant and Maintenance  
dhorton@ncdsb.on.ca

## APPENDIX 'A' TERMS

### 1.0 TERMS:

- 1.1 **Contract** means the entire agreement between the parties, including but not limited to the Request for Tender and its specifications, terms and conditions, solicitation instructions, solicitation addenda and contract amendments, if any, and the purchase order or price agreement document means a binding agreement between two or more parties.
- 1.2 **The Board** means Northeastern Catholic District School Board
- 1.3 **Good and/or Services** means supplies, equipment, property, insurance, construction, maintenance and service contracts, professional and consulting services and the like.
- 1.4 **Respondent** means the business or person(s) who has submitted a response to a Request for Proposal or Request for Quotation prior to formation of a contract.
- 1.5 **Supplier** means the party selling the goods/or services to the Board.

### 2.0 GOVERNING LAW

The laws of Canada and the Province of Ontario shall be the governing law for all matters pertaining to the Board business. All disputes shall be subject to these laws and heard in jurisdiction local to the Board or as stipulated by the appropriate Court.

### 3.0 INDEMNIFICATION

The Contractor shall defend, indemnify and hold the Board harmless from all claims, actions, demands, loss and causes of action arising from injury including death to any person or damage to any property, arising out of or related to the activities of the Suppliers, its officers, subcontractors, agents or employees under this contract.

### 4.0 LIMITATION ON ASSIGNMENT

The Contractor shall not assign, sell, transfer or subcontract rights, or delegate responsibilities under this contract, in whole or in part, without the prior written approval of the Board

## **5.0 PRICE**

All prices are in Canadian funds.

## **6.0 OCCUPATIONAL HEALTH AND SAFETY ACT**

The Contractor agrees to observe strictly and faithfully the provisions of the Occupational Health and Safety Act and all regulations and rules and agrees to indemnify and save the Board harmless from any breaches of the Act. The supplier agrees to assume full responsibility for the enforcement of the Act to ensure compliance therewith and further acknowledges and agrees that any such breach or breaches by itself or any of its subcontractors may result in the immediate termination of this contract.

## **7.0 ACCESS TO THE SITE**

All persons who are required to access Board sites during regular hours of operation **must** contact the Board office prior to arrival for further instruction. All work in the occupied areas of facilities must be carefully coordinated with a Board representative to prevent disruption of services and other activities.

## **8.0 MOTORIZED VEHICLES ON BOARD PROPERTY**

While on the Board's property, the driver of the vehicle and their assistant(s) must comply with the following:

- 8.1 Prior to entering onto Board property, the vehicle, driver and any assistant(s) must have valid insurance coverage for any accidents occurring on the Board's property.
- 8.2 Vehicles must not be driven at a speed exceeding 8 kilometers per hour.
- 8.3 No vehicle shall be backed up unless there is a person on foot to guide the driver.
- 8.4 No vehicle shall be left running while parked on the Board's property.
- 8.5 When returning to an unattended vehicle, the driver must circle the vehicle to ensure that no child is hiding behind or under the vehicle before it is driven.
- 8.6 Drivers of motor vehicles shall not operate their vehicles beyond the parking area; and all accidents, which occur on Board's property, must be immediately reported to the school Principal.

## **9.0 WORKPLACE SAFETY AND INSURANCE**

The Contractor must ensure that Workplace Safety & Insurance covers all workers for the duration of this contract.

The Contractor shall furnish a Certificate of Clearance from the Workplace Safety & Insurance Board as levied by the Workplace Safety & Insurance Board. The certification is to be furnished prior to the commencement of this contract. This good standing must be maintained throughout the contract period. It is the responsibility of the supplier to ensure that the Workplace Safety & Insurance Board Certificate is updated every sixty (60) days. The Board reserves the right to request proof of coverage any time throughout the duration of the contract.

## **10.0 CRIMINAL BACKGROUND CHECK**

13.1 The Board shall determine in its sole and unfettered discretion whether an individual or employee of the Supplier may come into direct contact with pupils on a regular basis.

13.2 Proponent covenant, acknowledge and agree:

- a) to provide the Board with valid "Criminal Background Checks" upon request, for any of their employees, agents or subcontractors who may regularly come into direct contact with pupils while on Board property
- b) that the results of these reports may be disclosed to the Ontario Education Services Corporation, or as required by legislation, or to any other entity as the Board may designate;
- c) that the "Criminal Background Check" searches will be done with Municipal and Provincial Police Services;
- d) that a Criminal Background Check screening section is to be conducted at the discretion of the Board;
- e) an Offence Declaration in a form acceptable to the Board to be provided for each renewal year thereafter, if any.



**APPENDIX 'B'**

**REQUEST FOR TENER SUBMISSION FORM**

Date: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
"Contractor"

To: Northeastern Catholic District School Board  
383 Birch Street North  
TIMMINS, ON  
P4N 6E8

1. The undersigned acknowledges receipt of the addenda listed hereafter:

|              |                |
|--------------|----------------|
| Addenda No.: | Date of Issue: |
| _____        | _____          |
| _____        | _____          |

2. Pursuant to and in compliance with the Tender Documents and the addenda listed above, the undersigned, being familiar with the Tender Documents, and all relevant laws, rules, notices, directives, standards, orders and regulations, licensing and permit requirements, labour markets and other circumstances which may affect its submission.

3. The Contractor declares:

- a) That it has complied with the instructions;
- b) That it accepts all of the terms, conditions, provisions, stipulations and requirements set out in the Tender, addenda and appendices;
- c) That it is not relying on any information other than that set out in the Tender, addenda and appendices;
- d) That all statements and information set out in its Tender Submission Form or otherwise provided to the Northeastern Catholic District School Board in connection with the Tender, including statements and information hereafter provided, are and will be true, accurate and complete, not misleading and in accordance with the principles of full, true and plain disclosure.

By signing below, I/we acknowledge that I/we have read and accept the terms and conditions of this Tender document and further that I/We have the authority to bind the organization.

We hereby submit our stipulated lump sum price as per the following:

|                    |             |
|--------------------|-------------|
| For the sum of     | \$          |
| Allowances         | \$35,000.00 |
| Total Project Cost | \$          |
| Excluding HST      |             |

***(Attach separate sheet if with breakdown if required)***

|                                |  |
|--------------------------------|--|
| <b>COMPANY NAME:</b>           |  |
| <b>ADDRESS:</b>                |  |
| <b>CITY &amp; POSTAL CODE:</b> |  |
| <b>TELEPHONE:</b>              |  |
| <b>FAX:</b>                    |  |
| <b>E-MAIL:</b>                 |  |
| <b>DATE:</b>                   |  |

**EXECUTION BY PROPONENT**

IN WITNESS WHEREOF, the undersigned has executed this Tender Submission Form.

Execution by Contractor:

\_\_\_\_\_  
Printed Name and Position

Date:

\_\_\_\_\_

\_\_\_\_\_  
Signing Officer Signature

Witness

\_\_\_\_\_

**APPENDIX 'C'**

**Drawings:**

|        |                                     |
|--------|-------------------------------------|
| A.1.1  | Site Plan                           |
| ASW-SG | Servicing and Grading Plan          |
| SW-ND  | Notes & Details Plan                |
| E-1    | Electrical Notes and Specifications |
| E-2    | Lighting fixture specification      |
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| E-4    | Site Plan                           |
| E-5    | Bus Loop Lighting Layout            |



**DRAWING LIST**

A0.0 Cover

**Architectural**

A1.1 Site Plan

**Civil**

SW-ND Notes & Details Plan

SW-SG Service and Grading Plan

**Electrical**

E-1 Electrical Notes, Legends & Specifications

E-2 Lighting Fixture Specification

E-3 Light Pole Specification

E-4 Site Plan

E-5 Bus Loop Lighting Layout

**POPE FRANCIS ELEMENTARY SCHOOL  
BUS LOOP**

387 Balsam Street North  
Timmins, Ontario

Issued for Tender & Permit - May 14, 2019

**BORTOLOTTO**  
architecture interior design

ARCHITECTS AND PRIME CONSULTANT  
BORTOLOTTO DESIGN ARCHITECT INC.  
533 College Street Suite 401  
Toronto ON Canada M5G 1A8  
Tel 416 324 9951  
bortolotto.com

CIVIL ENGINEER  
COUNTERPOINT ENGINEERING INC.  
8395 Jane Street Suite 100  
Vaughan ON Canada L4K 5Y2  
Tel 905 326 3172  
counterpoint.com

ELECTRICAL ENGINEER  
JOHN HAMALAINEN  
2180 Armstrong Street  
Sudbury ON Canada P1E 5G9  
Tel 705 522 5745 x22  
countingengineers.ca

**SITE PLAN NOTES**

- CONTRACTOR TO INCLUDE FOR HAND EXCAVATION WHERE REQUIRED; REFER TO UNIT PRICES APPENDIX.
- EXCAVATION SHALL CONFORM TO THE O.B.C., THE ONTARIO HEALTH AND SAFETY ACT AND ALL OTHER RELEVANT AUTHORITIES WITH REGARD TO SLOPE, SUPPORT, SHORING, OCCUPATION HEALTH AND SAFETY AND PUBLIC SAFETY.
- THE CONTRACTOR IS RESPONSIBLE TO ENSURE EFFECTIVE DE-WATERING OF THE EXCAVATION AREA AS WELL AS PROTECTING THE EXCAVATION FROM SURFACE RUN-OFF.
- THE CONTRACTOR SHALL SEPARATE EXISTING TOP SOIL DURING EXCAVATION AND REPLACE IT AFTER BACKFILLING EXCAVATION MATERIAL IS TO BE STOCKPILED ACCORDING TO THE WRITTEN DIRECTION OF THE CONSULTANT. REFER TO STAGING NOTES.
- THE CONTRACTOR IS RESPONSIBLE TO LOCATE AND PROTECT ALL BURIED SERVICES INCLUDING BUT NOT LIMITED TO: ELECTRICAL, GAS, WATER, WASTE, STORM SEWERS ETC.
- THE CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FROM THE CONSULTANT PRIOR TO MODIFYING, MOVING OR OTHERWISE DISTURBING ANY BURIED SERVICES.
- LANDSCAPE SHALL BE SOO UNLESS OTHERWISE NOTED; CONTRACTOR TO REPLACE ANY EXISTING SOO AND TOPSOIL REMOVED DURING EXCAVATION OR OTHERWISE DISTURBED DURING CONSTRUCTION.

**SITE PLAN LEGEND**

- DENOTES PROPERTY LINE
- - - DENOTES SET BACK LINE
- - - DENOTES EXISTING FENCING
- DENOTES TEMPORARY 1830mm HIGH CONSTRUCTION FENCING
- DENOTES 1220mm HIGH TREE PROTECTION FENCING
- DENOTES PERMANENT 1220mm HIGH VINYL-COATED CHAIN LINK FENCING
- DENOTES EXISTING TREE
- DENOTES CATCH BASIN
- DENOTES MANHOLE
- DENOTES NEW ASPHALT AREA
- DENOTES EXISTING ASPHALT AREA
- DENOTES NEW SOO

**ZONING & LOT INFORMATION**

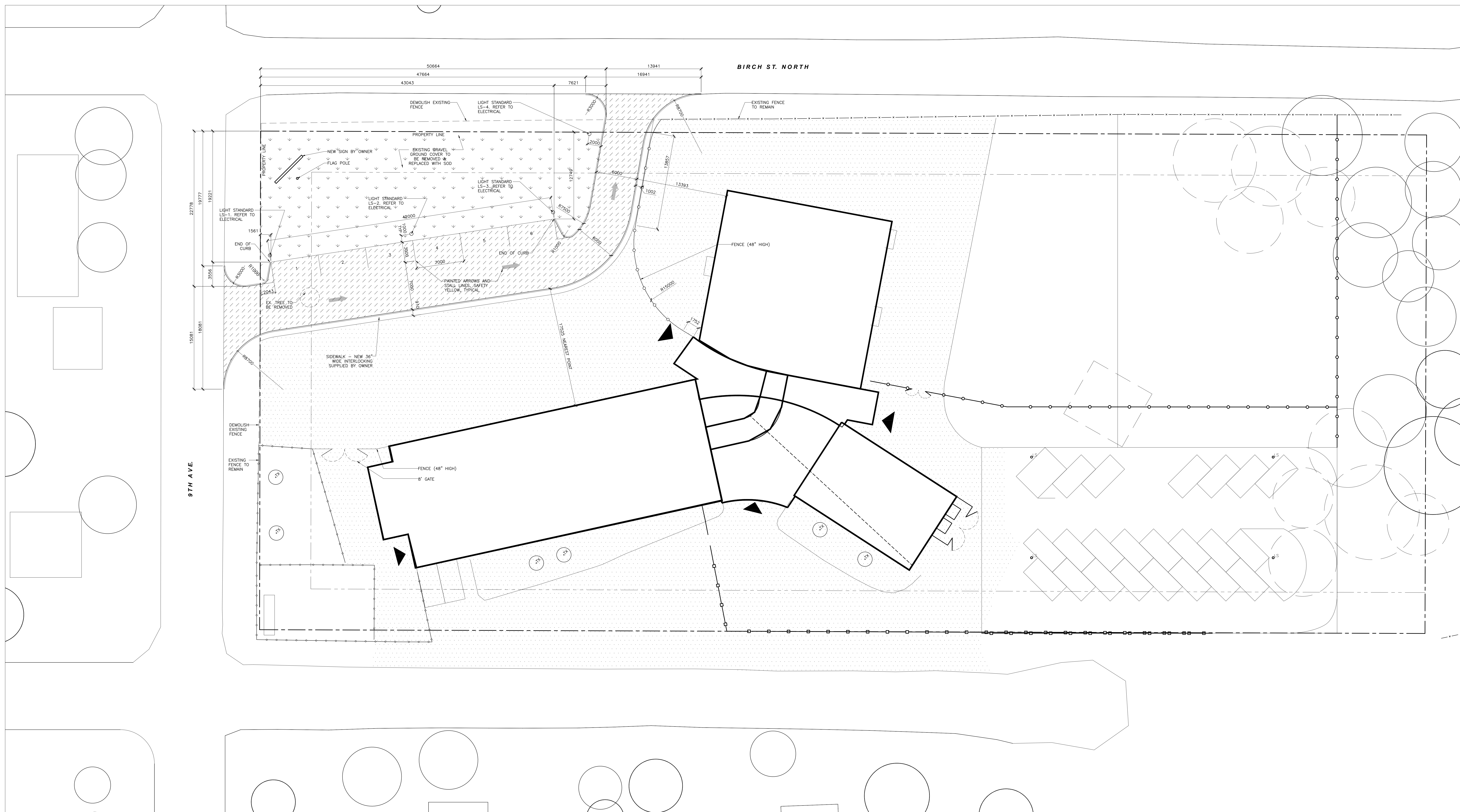
|   |                          |  |                         |
|---|--------------------------|--|-------------------------|
| LOT AREA                                  | 11,980.00 m <sup>2</sup> | EXISTING BUILDING:                     | 1,340.00m <sup>2</sup>  |
| BUILDING COVERAGE AREA                    | 728.00m <sup>2</sup>     | PROPOSED ADDITIONS:                    | 143.00m <sup>2</sup>    |
|   |                          | ATRIUM (INCLUDED IN PROPOSED ADDITION) | (143.00m <sup>2</sup> ) |
|   |                          | SITE TOTAL:                            | 2068.00m <sup>2</sup>   |
| COVERAGE (ALL BUILDINGS ON SITE)          | EXISTING:                | 11%                                    |                         |
|   | PROPOSED:                | 17%                                    |                         |
| FLOOR SPACE RATIO (ALL BUILDINGS ON SITE) | EXISTING:                | 0.186                                  |                         |
|   | PROPOSED:                | 0.239                                  |                         |

**SURVEY CREDIT**

SURVEY INFORMATION FROM FOLLOWING SOURCES:  
FILE #16-149; FIELD SURVEY DATE 14/10/2016; PREPARED BY PELTO CONSULTING INDUSTRIAL SURVEY SERVICES

**SITE PLAN INFORMATION**

|                                    |                                |    |
|------------------------------------|--------------------------------|----|
| CLASSROOMS (ALL BUILDINGS ON SITE) | EXISTING:                      | 14 |
|                                    | PROPOSED ADDITION:             | 6  |
| PARKING                            | EXISTING:                      | 2  |
|                                    | PROPOSED:                      | 25 |
| EXISTING ASSEMBLY SPACE            | 229 m <sup>2</sup> (GYMNASIUM) |    |
| PROPOSED OFFICE SPACE              | 111 m <sup>2</sup>             |    |



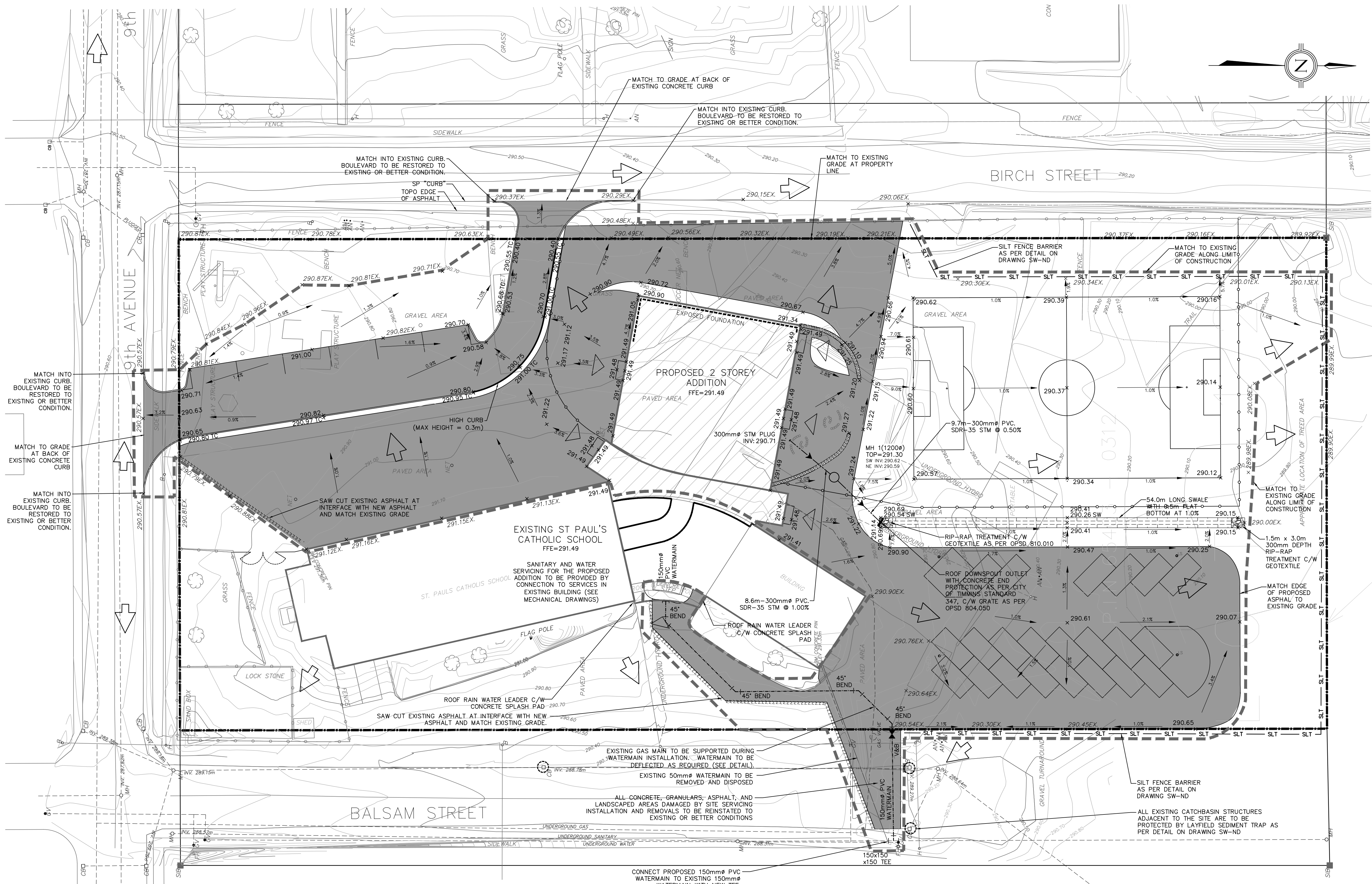
|     |                 |          |
|-----|-----------------|----------|
| 1   | FENDER & PERMIT | 19.06.14 |
| REV | DESCRIPTION     | DATE     |



**BORTOLOTTO**

PROJECT NUMBER  
P1101  
DATE  
19.05.14  
SCALE  
1/50  
DRAWN BY  
BF

SITE PLAN



**KEY PLAN**

DRAWINGS BASED ON SITE PLAN A1.1 PREPARED BY BORTOLOTTO DESIGN ARCHITECTURE. REFER TO ARCHITECTURAL DRAWINGS PREPARED BY BORTOLOTTO FOR DIMENSIONING OF BUILDINGS, SIDEWALKS, SITE LAYOUT DETAILS, LINE PAINTING, DRIVEWAYS, PARKING AREAS, SETBACKS, AND CURBING.

REFER TO LANDSCAPE DRAWINGS PREPARED BY OTHERS FOR SURFACE TREATMENT AND FENCING LAYOUT AND DETAILS.

THE LOCATION OF ALL UNDERGROUND AND ABOVEGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE LOCATION 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.

THIS DRAWING INDICATES SITE SERVING AND GRADING INFORMATION ONLY. FOR NOTES, DETAILS, AND PROJECT REQUIREMENTS REFER TO CIVIL SCOPE OF WORK, REFER TO NOTES & DETAILS SHEET PREPARED BY COUNTERPOINT ENGINEERING.

**LEGEND**

- x289.90EX. EXISTING ELEVATION
- 290.00 EXISTING CONTOUR
- x290.34 PROPOSED ELEVATION
- EMERGENCY OVERLAND FLOW
- EXISTING FIRE HYDRANT
- EXISTING STORM MANHOLE
- EXISTING SANITARY MANHOLE
- PROPOSED VALVE AND BOX
- WATERMAIN
- STORM SEWER
- PAVED ASPHALT
- SAND PLAY AREA
- STEP JOINT
- HIGH CURB
- SEDIMENT TRAP
- SILT FENCE BARRIER
- PROPERTY LINE
- LIMIT OF CONSTRUCTION

|     |                              |             |    |      |
|-----|------------------------------|-------------|----|------|
| No. | REVISIONS/ISSUED             | DATE        | BY | CITY |
| 5.  | ISSUED FOR TENDER AND PERMIT | MAY 10 2019 | CB |      |
| 4.  | ISSUED FOR CONSTRUCTION      | SEP 22 2017 | CB |      |
| 3.  | ISSUED FOR TENDER            | MAY 17 2017 | CB |      |
| 2.  | ISSUED FOR REVIEW            | APR 25 2017 | CB |      |
| 1.  | ISSUED FOR SITE PLAN CONTROL | MAR 22 2017 | CB |      |

**counterpoint ENGINEERING**

COUNTERPOINT ENGINEERING INC.  
8395 Jane St., Suite 100, Vaughan, ON L4K 5Y2 Phone 905.326.1404 Fax 905.326.1405

**ENGINEER'S STAMP**  
C. A. GUSH  
100183990  
MAY 10/19  
PROVINCE OF ONTARIO

APPLICANT:  
**NORTHEASTERN CATHOLIC DISTRICT SCHOOL BOARD**  
383 BIRCH STREET NORTH  
TIMMINS, ONTARIO

SITE LOCATION:  
**POPE FRANCIS ELEMENTARY SCHOOL ADDITION & RENNOVATION**  
387 BALSAM STREET NORTH  
TIMMINS, ONTARIO

**SERVICING AND GRADING PLAN**

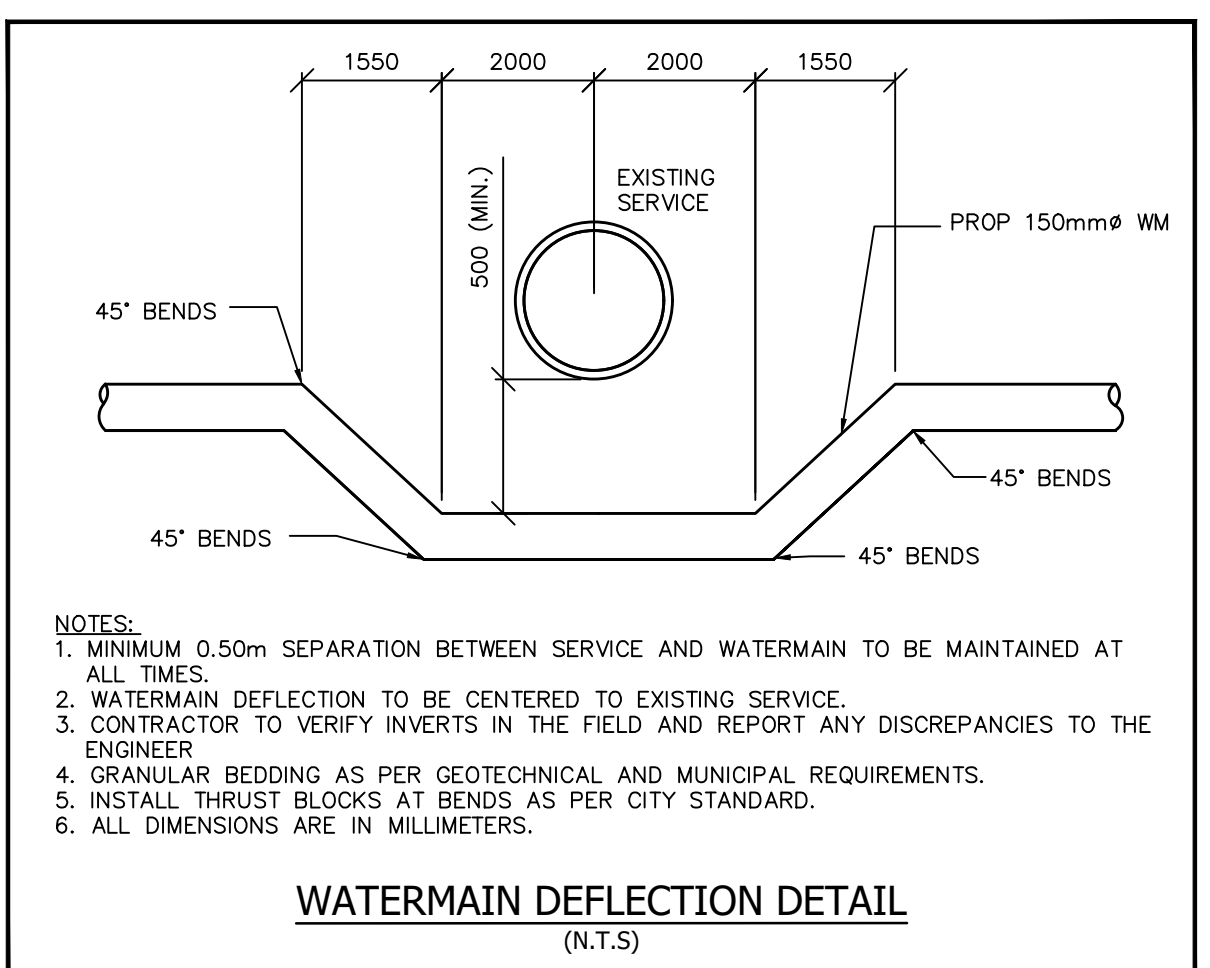
|                 |                |                   |
|-----------------|----------------|-------------------|
| DESIGNED BY: CB | CHECKED BY: PT | DATE: MARCH 2017  |
| DRAWING BY: ECM | CHECKED BY: CB | PROJECT NO. 17005 |
| SWM BY: ECM     | CHECKED BY: CB | DRAWING NO. SW-SG |

SCALE: 1:300m

**LEGAL & TOPOGRAPHY**  
PROVIDED BY: PELTO CONSULTING

**BENCHMARK**  
EXISTING ST PATRICK SCHOOL - NE AND SW CORNER, ACCESS CENTER EAST SIDE ENTRANCE AND SW CORNER.

NOTE: ELEVATIONS SHOWN HEREON ARE GEODETIC AND ARE DERIVED FROM LEICA SMARTNET GPS RTK NETWORK.



**Project Name:** Pope Francis Elementary School Addition  
**Municipality:** City of Timmings  
**Project No.:** 17005  
**Date:** 25-Apr-17

**Prepared by:** C.B.  
**Checked by:**  
**Last Revised:** 25-Apr-17

**Input Parameters:**

|                            |        |     |
|----------------------------|--------|-----|
| Side Slope, z <sub>1</sub> | 3.0    | :1  |
| Side Slope, z <sub>2</sub> | 3.0    | :1  |
| Flow Depth, y              | 0.15   | m   |
| Bottom Width, b            | 0.50   | m   |
| Manning Roughness, n       | 0.025  |     |
| Overland Route Slope, S    | 0.0100 | m/m |

**Computed Values:**

|                             |       |                |
|-----------------------------|-------|----------------|
| Top Width, T                | 1.40  | m              |
| Channel Area, A             | 0.14  | m <sup>2</sup> |
| Channel Wetted Perimeter, P | 1.449 | m              |
| Hydraulic Radius, R         | 0.098 | m              |
| Velocity, V                 | 0.9   | m/s            |

**Capacity, Q** 121 l/s  
**Target Flow (10 year storm)** 19 l/s

**Equations:**

$$Q = VA \quad A = \frac{y}{2}(b + T)$$

$$V = \frac{1.49 R^{2/3} S^{1/2}}{n} \quad T = b + y(z_1 + z_2)$$

$$R = \frac{A}{P} \quad P = b + y\sqrt{1 + z_1^2} + y\sqrt{1 + z_2^2}$$

**GENERAL NOTES**

- ALL WORK SHALL BE CARRIED OUT IN STRICT ACCORDANCE WITH THE APPLICABLE HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS.
- ALL WORK, MATERIAL AND CONSTRUCTION METHODS TO CONFORM WITH THE LATEST SPECIFICATIONS, POLICIES, REGULATIONS, GUIDELINES AND LAWS FOR THE CITY OF TIMMINS, ONTARIO BUILDING CODE (OBC), MINISTRY OF THE ENVIRONMENT (MOE), ONTARIO PROVINCIAL STANDARD DRAWINGS AND SPECIFICATIONS (OPSD AND OPSS), THE ENVIRONMENTAL PROTECTION ACT AND THE WATER RESOURCES ACT. WHERE A CITY STANDARD EXISTS, IT SHALL BE USED IN PLACE OF THE OPSD/OPSS STANDARDS.
- THE INFORMATION SHOWN FOR EXISTING INFRASTRUCTURE IS FOR GENERAL INFORMATION ONLY AND THE ACCURACY OR COMPLETENESS OF THE PROVIDED INFORMATION HAS NOT BEEN CONFIRMED BY COUNTERPOINT ENGINEERING INC. ALL EXISTING UTILITIES MUST BE LOCATED AND VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORK. ANY VARIANCE IS TO BE IMMEDIATELY REPORTED TO THE ENGINEER. LOST TIME DUE TO FAILURE OF THE CONTRACTOR TO CONFIRM UTILITY LOCATIONS AND NOTIFY THE ENGINEER OF POSSIBLE CONFLICTS PRIOR TO CONSTRUCTION WILL BE AT THE CONTRACTOR'S EXPENSE.
- THIS PLAN SHOULD BE READ IN CONJUNCTION WITH ALL OTHER CONSULTANT'S PLANS. ANY DISCREPANCIES SHALL BE CLARIFIED PRIOR TO CONSTRUCTION. INFORMATION RELATED TO DIMENSIONS FOR PRIVATE ROAD, PARKING CURBING, BUILDING LOCATIONS AND SETBACKS SHALL BE TAKEN FROM THE SITE PLAN.
- ALL DIMENSIONS AND ELEVATIONS TO BE VERIFIED PRIOR TO CONSTRUCTION AND ANY DISCREPANCIES FOUND PRIOR TO OR DURING CONSTRUCTION SHALL BE CLARIFIED WITH THE ENGINEER.
- ALL WORK IN THE CITY OF TIMMINS RIGHT OF WAY SHALL BE COMPLETED BY A CONTRACTOR APPROVED BY THE CITY OF TIMMINS PRIOR TO THE START OF ANY WORK; AND COMPLETED AS PER CITY OF TIMMINS STANDARDS.
- INSPECTIONS: ALL WORK ON THE RIGHT OF WAY AND EASEMENTS AND ANY WORK RELATING TO WATERMANS AND SEWERS TO BE INSPECTED BY THE TTN PRIOR TO BACKFILLING.
- A STREET OCCUPANCY PERMIT IS REQUIRED FOR ANY WORK THAT WILL TAKE PLACE IN THE RIGHT OF WAY. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL PERMITS RELATED TO THE PROPOSED WORKS.
- ANY DAMAGE MUNICIPAL INFRASTRUCTURE SHALL BE REPAIRED TO APPROVED MUNICIPAL STANDARDS (i.e. PAVING STONE SIDEWALK, ROAD, CURBS, ETC.). ALL WORK MUST BE COMPLETED BY AN APPROVED CONTRACTOR AND SHALL BE COMPLETED AS PER THE CITY OF TIMMINS MANUAL OF ENGINEERING AND DEVELOPMENT STANDARDS, INCLUDING QC REQUIREMENTS.
- ALL EXISTING LANDSCAPING AND SOD DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.
- ALL SURPLUS MATERIAL GENERATED FROM EXCAVATIONS AND SITE WORKS SHALL BE DISPOSED OF OFF-SITE.
- FOR DETAILED SPECIFICATIONS REGARDING COMPACTION REQUIREMENTS, IMPORT MATERIALS, AND PAVEMENT DESIGN REFER TO GEOTECHNICAL REPORT.
- CONTRACTOR TO INSTALL SEDIMENT CONTROL FENCE, TO THE SATISFACTION OF THE ENGINEER, PRIOR TO COMMENCEMENT OF WORK, AND SHALL BE RESPONSIBLE FOR MAINTAINING FENCING FOR THE DURATION OF THE CONTRACT.

**WATERMAIN**

- ALL MATERIALS AND CONSTRUCTION METHODS MUST CORRESPOND TO THE CURRENT OBC AND CITY OF TIMMINS ENGINEERING AND DEVELOPMENT STANDARDS AND SPECIFICATIONS. WHERE THESE CONFLICT, CLARIFICATION IS TO BE RECEIVED FROM THE ENGINEERING DEPARTMENT OF THE CITY OF TIMMINS.
- ANY PRIVATE MAIN SYSTEMS BEING CONNECTED TO A CITY OF TIMMINS MAIN MUST MEET ALL AWWA STANDARDS AND CITY OF TIMMINS STANDARDS FOR NEW MAINS, UNLESS OTHERWISE APPROVED BY THE MANAGER OF ENGINEERING.
- PVC PIPE SHALL BE AS FOLLOWS:
  - DESIGNED TO ACCOMMODATE THE OPERATING PRESSURE PLUS SURGE PRESSURE
  - CERTIFIED BY THE CSA TO CSA B137.3
  - MANUFACTURED BY IPEX, ROYAL PIPE CO. OR OTHER APPROVED EQUIVALENT BY THE CITY OF TIMMINS
  - THE PIPE SHALL BE DR 18
  - EACH END OF PIPE LENGTH SHALL BE FACTORY SEALED
- GASKETS SHALL BE MADE OF SBR. GASKETS SHALL BE REMOVABLE FROM THE PIPE GASKET FACE IN ORDER TO AID CLEANING THE BELL AND SPIGOT PRIOR TO ASSEMBLY.
- FITTINGS SHALL BE OF CAST IRON OR DUCTILE IRON (CEMENT LINED) WITH MECHANICAL JOINTS AND BE SUITABLE FOR A PRESSURE RATING OF 800 KPA. THE FITTINGS SHALL CONFORM TO CSA OR B131.10, ASA A21.10 (AWWA C110) SPECIFICATIONS. THE MECHANICAL JOINT SHALL BE MANUFACTURED IN ACCORDANCE WITH CSA B131.10, ASA A22.11 (AWWA, C11).
- GATE VALVES SHALL CONFORM TO AWWA SPECIFICATION C500 OR TO RESILIENT SEAT GATE VALVE C507. THE VALVES SHALL BE SOLID WEDGE WITH NON-RISING STEMS AND SHALL TURN COUNTERCLOCKWISE TO OPEN.
- VALVES SHALL BE EITHER NO. 55 AS MANUFACTURED BY CANADA VALVE AND HYDRANT COMPANY LIMITED, WITH NON-RISING SPINDLE OR MUELLER GATE VALVE DESIGNATION A-2380-21. VALVE BOXES SHALL BE MVB POLYMER BOTTOM SECTION COMPLETE WITH CAST IRON LID AND 300MM DUCTILE IRON ADJUSTABLE TAPERED TOP, SUITABLE FOR A TRENCH DEPTH OF 2.4M AS MANUFACTURED BY MUELLER OR APPROVED EQUIVALENT. JENKINS VALVES IN SIZES 100MM TO 300MM ARE ALSO ACCEPTABLE. AKB VALVES ARE ALSO APPROVED AND MAY BE USED. TESTING OF CONDUCTIVITY SHALL BE CONDUCTED FOR ENTIRE LENGTH OF WATERMAIN.
- MECHANICAL JOINT RESTRAINTS SHALL BE SIGMA (PV LOK), ROMAC GRIP RING & STAR 3500 SERIES AND SHALL CONFORM TO ASTM F1674-96 AND MANUFACTURER'S SPECIFICATION. RESTRAINING COLLARS SHALL BE ATTACHED TO THE FITTING BELL BEHIND THE GASKET FACE. THE RODS SHALL RUN FROM THE COLLAR BEHIND THE BELL TO A SUITABLE COLLAR ON THE CONNECTING PIPE.
- CONCRETE THRUST BLOCKS SHALL CONFORM TO OPSS MUNI 1350 WITH COMPRESSIVE STRENGTH OF 20 MPA. THRUST BLOCKS SHALL BE CONSTRUCTED AS PER OPSD 1103.010 AND OPSD 1103.020. PVC PRESSURE PIPE
- CATHODIC PROTECTION FOR PVC WATER SYSTEMS AS PER OPSD 1109.11
- WATERMANS AND/OR WATER SERVICES ARE TO HAVE A MINIMUM HORIZONTAL SPACING OF 2.5M FROM SAN/STM SEWERS.
- WATERMANS MUST HAVE A MINIMUM VERTICAL CLEARANCE OF 0.50M OVER / UNDER SEWERS AND ALL OTHER UTILITIES WHEN CROSSING.
- WATERMANS SHALL BE INSTALLED AT A MINIMUM COVER OF 2.4M FROM PROPOSED GROUND AND MUST BE MAINTAINED AT ALL TIMES.
- PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT A DETAILED DISINFECTION PROCEDURE, SEALED BY A PROFESSIONAL ENGINEER LICENSED IN ONTARIO, FOR APPROVAL THAT MEETS THE REQUIREMENTS OUTLINED IN THE 400 SERIES-SPECIAL PROVISION WAT-11. IF A CONFLICT OR DISCREPANCY BETWEEN THE AWWA STANDARD C651 AND THE SPECIAL PROVISION WAT-11, THE MOST STRINGENT REQUIREMENT SHALL APPLY.
- PRIOR TO CONNECTION TO EXISTING, NEW WATERMAIN TO BE CHLORINATED, TESTED AND INSPECTED TO THE SATISFACTION OF THE ENGINEER.
- ALL WATERMANS MUST SUCCESSFULLY PASS THE PRESSURE AND LEAKAGE TESTS TO BE CONDUCTED BY THE PROPONENT UNDER THE DIRECTION OF THE CONSULTANT AND THE CITY. THE CITY OF TIMMINS WATERMAIN HYDROSTATIC TEST REPORT (OPSS 441 LATEST REVISION) MUST BE COMPLETED BY THE CONSULTANT AND SIGNED BY THE CITY REPRESENTATIVE ON THE SITE.

**CONSTRUCTION CONFORMANCE REQUIREMENTS**

- THE FOLLOWING ITEMS ARE TO BE PROVIDED TO COUNTERPOINT NO LESS THAN 10 WORKING DAYS PRIOR TO THE REQUEST FOR A LETTER OF GENERAL CONFORMANCE/FINAL CERTIFICATION. THE DOCUMENTS MUST INDICATE THAT THE SITE HAS BEEN CONSTRUCTED IN GENERAL CONFORMANCE WITH THE APPROVED DESIGN;
- AS-CONSTRUCTED TOPOGRAPHIC/UNDERGROUND SURVEY COMPLETED BY A REGISTERED LAND SURVEYOR AS PER THE SPECIFICATIONS OUTLINED WITHIN THE CONTRACT DOCUMENT;
- GEOTECHNICAL ENGINEER CERTIFICATION LETTER, WHICH INCLUDES SUB-GRADE COMPACTION RESULTS, BEDDING AND BACKFILL COMPACTION AND MATERIAL ACCEPTANCE, GRANULAR, ASPHALT, SITE CONCRETE MATERIAL ACCEPTANCE AND COMPACTION RESULTS;
- SHOULD THE SUBMITTED MATERIALS INDICATE NON-CONFORMANCE OR DEFICIENCIES, THEY MUST BE ADDRESSED TO COUNTERPOINT'S SATISFACTION WITH AN UPDATED SUBMITTAL PRIOR TO ISSUANCE OF A LETTER OF GENERAL CONFORMANCE/FINAL CERTIFICATION;
- COUNTERPOINT MUST ALSO COMPLETE ALL NECESSARY SITE INSPECTIONS AS OUTLINED IN THE APPROVED SERVICE PROGRAM, WITH ALL DEFICIENCIES ADDRESSED TO COUNTERPOINT'S SATISFACTION.

**LEGAL & TOPOGRAPHY**

PROVIDED BY: PELTO CONSULTING

**BENCHMARK**

EXISTING ST PATRICK SCHOOL - NE AND SW CORNER, ACCESS CENTER EAST SIDE ENTRANCE AND SW CORNER.

NOTE: ELEVATIONS SHOWN HEREON ARE GEODETIC AND ARE DERIVED FROM LEICA SMARTNET GPS RTK NETWORK.

**STORM SEWER NOTES**

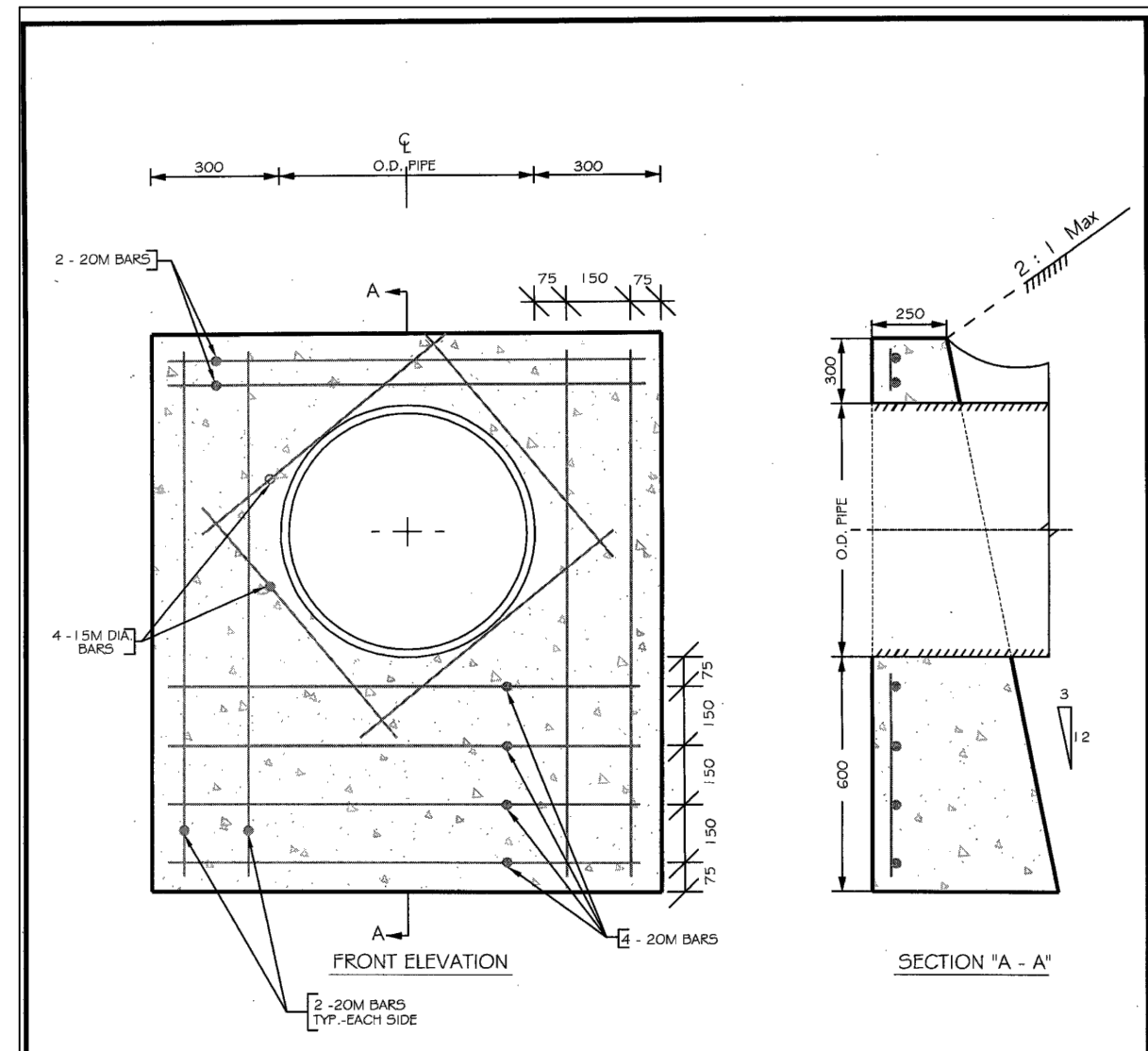
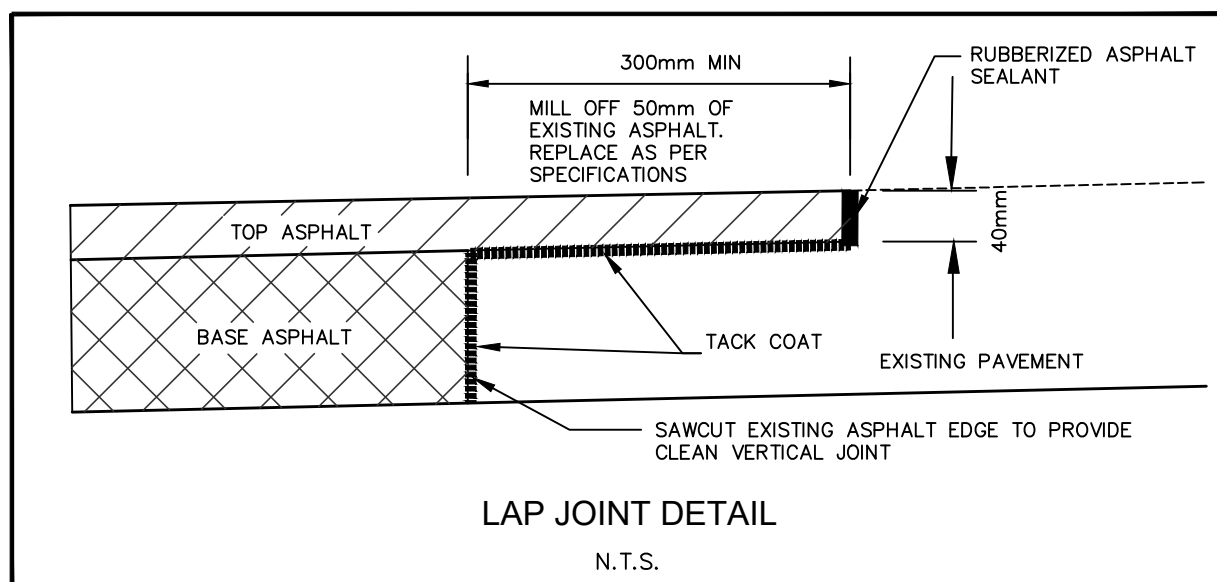
- CONSTRUCTION OF STORM SEWERS AND APPURTENANCES SHALL BE CARRIED OUT IN CONFORMANCE WITH THE CITY OF TIMMINS STANDARD SPECIFICATIONS FOR STORM SEWERS.
- STORM SEWERS UP TO 600mm DIAMETER SHALL BE PVC ULTRA RIB (UNLESS OTHERWISE NOTED) CONFORMING TO C.S.A. SPECIFICATION B182.4-M1990 AND B182.4-M1992 OR LATEST REVISION THEREOF.
- PIPE JOINTS SHALL BE BY MEANS OF APPROVED RUBBER GASKETS CONFORMING TO C.S.A. SPECIFICATION A257.3-M1982 OR LATEST REVISION THEREOF.
- SEWERS SHALL BE CONSTRUCTED WITH BEDDING AS PER CITY OF TIMMINS DESIGN STANDARDS. MINIMUM BEDDING REQUIREMENTS SHALL BE CLASS B TYPE AS PER CITY STANDARD DRAWING 341 UNLESS OTHERWISE NOTED BY THE MANAGER OF ENGINEERING.
- TRENCH BACKFILL SHOULD BE PLACED IN 200mm LIFTS AND COMPACTED TO 100% SPMD UNLESS OTHERWISE DIRECTED BY THE GEOTECHNICAL ENGINEER.
- ALL STORM SEWER MANHOLES TO BE BENCHED IN ACCORDANCE WITH OPSD 701.021.
- ALL STORM MANHOLES SHALL BE AS PER OPSD 701.010 TO 701.014 (SIZE AS SHOWN) WITH FRAME AND COVER AS PER OPSD 401.010. TYPE 'B' MANHOLE TOPS ARE TO BE SET TO BASE COURSE ASPHALT GRADE AND THEN ADJUSTED TO FINAL GRADE. GRADE AND CROSSFALL ADJUSTMENT SHALL BE MADE USING PRODUCTS SPECIFICALLY MANUFACTURED FOR THAT PURPOSE. CONCRETE MODULAR ADJUSTMENT RINGS ARE TO BE USED TO ADJUST THE MANHOLE TO FINAL GRADE UNLESS SPECIFIED OTHERWISE.
- CATCHBASINS MUST BE OF THE PRECAST TYPE AS SHOWN ON THE OPSD DRAWINGS 705.010 OR 705.020.
- THE FRAME AND GRATE FOR CATCHBASINS SHALL BE OPSD 400.020. CATCHBASIN GRATES ARE TO BE RAMPED USING HOT-MIX ASPHALT. CATCHBASINS AT LOW POINTS SHALL BE SET TO BASE ASPHALT AND ADJUSTED TO SURFACE COURSE.
- WHERE CATCHBASINS ARE CONNECTED DIRECTLY TO SEWERS, PRE-MANUFACTURED TEES SHALL BE USED.
- ALL STORM SERVICES TO THE BUILDING TO BE TERMINATED 1.5m FROM BUILDING FACE. BUILDING CONTRACTOR IS RESPONSIBLE FOR FINAL CONNECTIONS.

**GRADING NOTES**

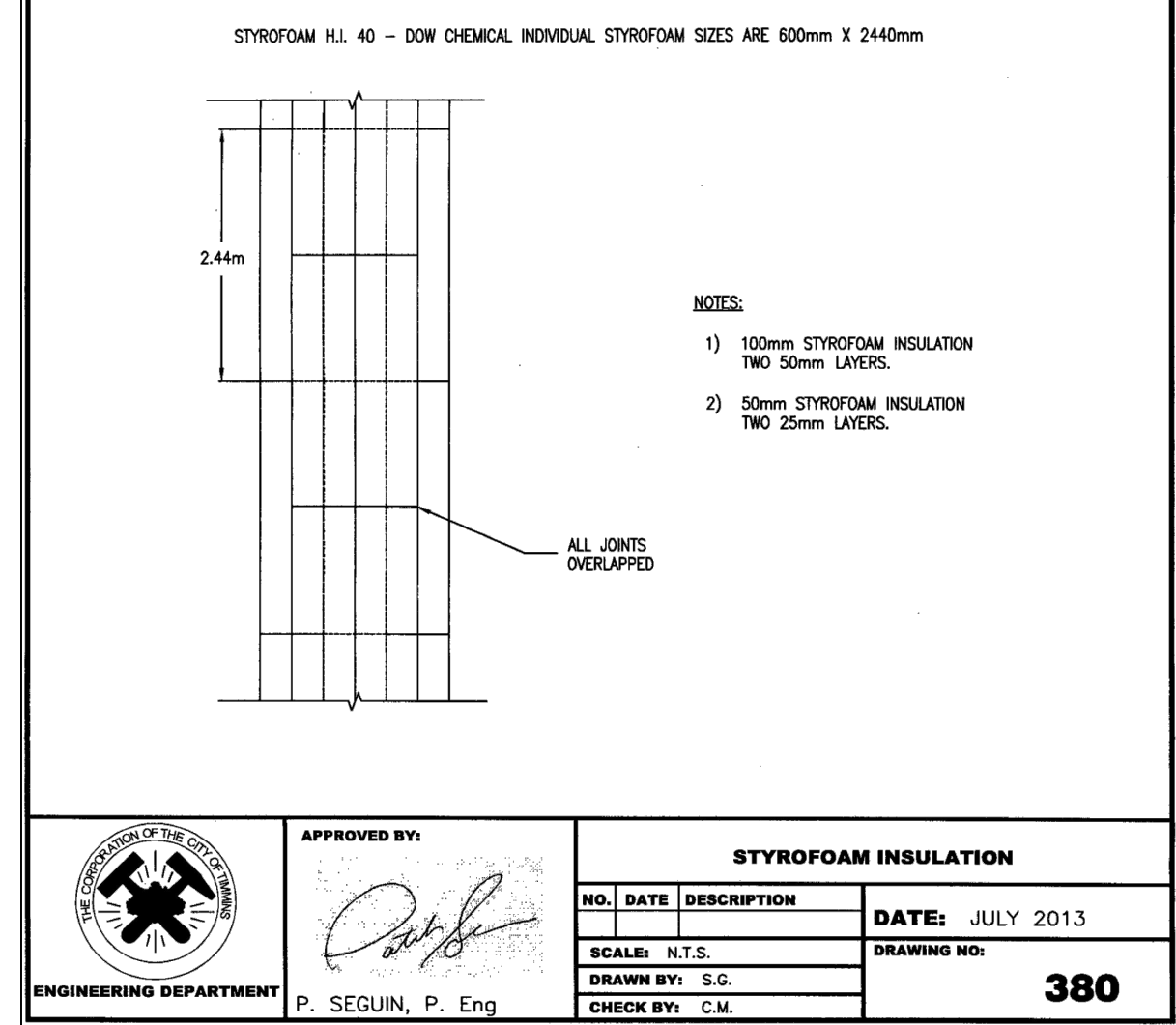
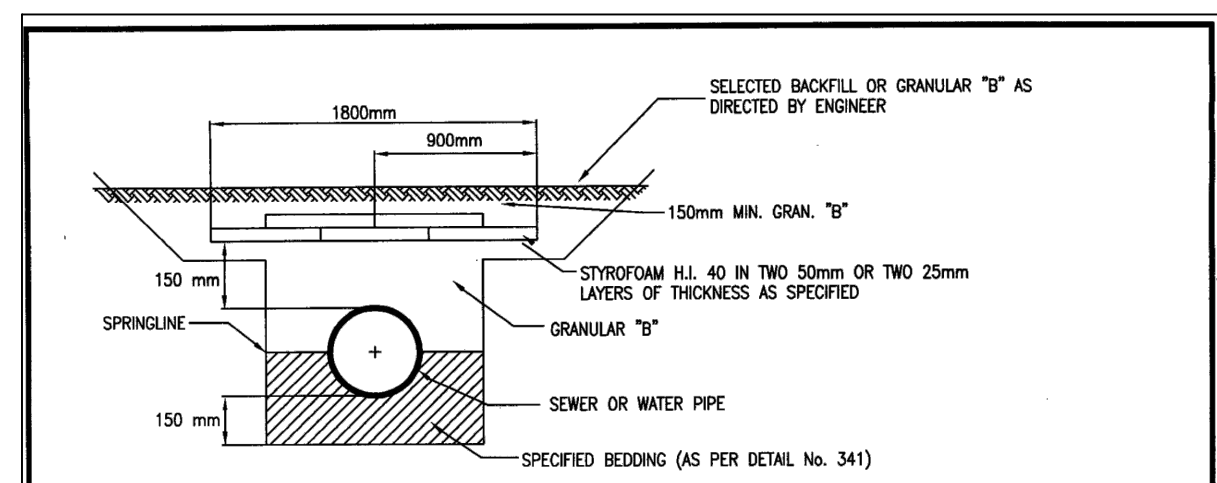
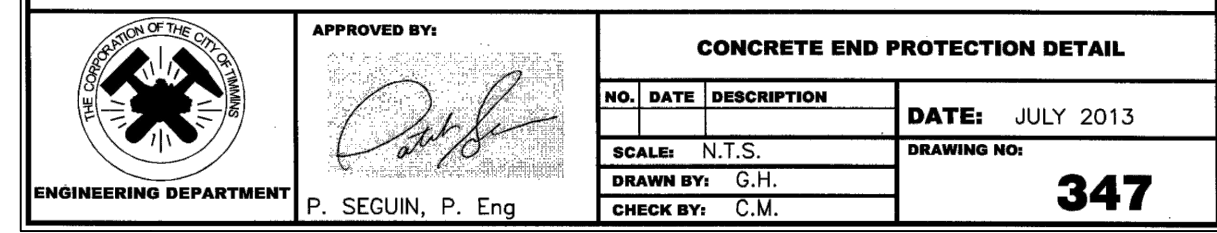
- EXCEPT WHERE INDICATED, ALL DIFFERENCES IN GRADE BETWEEN THIS SITE AND ADJOINING LANDS ARE TO BE TAKEN UP WITH A MAXIMUM SLOPE OF ONE (1) VERTICAL AND THREE (3) HORIZONTAL, SODDED AND/OR PAVED, AND/OR RETAINING WALLS UNLESS OTHERWISE SPECIFIED.
- INSPECTION OF SUB-GRADE REQUIRED BY ENGINEER/GEOTECHNICAL CONSULTANT PRIOR TO PLACEMENT OF PAVEMENT STRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF INSPECTIONS WITH ENGINEER/GEOTECHNICAL CONSULTANT.
- ALL IMPORT FILL MATERIAL MUST BE REVIEWED, TESTED AND APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT ON THE SITE. ALL IMPORT MATERIALS USED TO ACHIEVE DESIGN GRADE IN PARKING LOT AREA SHALL CONFORM TO RECOMMENDATIONS FROM THE GEOTECHNICAL ENGINEER. ALL FILL MATERIAL SHALL BE PLACED IN 300mm LIFTS AS PER GEOTECHNICAL RECOMMENDATIONS.
- ALL DISTURBED GRASSED AREAS OUTSIDE OF PROPERTY LIMITS SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER. ALL TREE AND SHRUB RELOCATION SHALL BE SUBJECT TO APPROVAL BY THE LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL BEAR ALL COSTS FOR REPLACEMENT OF ALL TREES WHICH ARE DAMAGED OR DESTROYED UNLESS OTHERWISE NOTED ON THE CONSTRUCTION DRAWINGS.
- EARTHWORKS AND COMPACTION OF ALL MATERIALS TO CONFORM WITH RECOMMENDATIONS IN THE GEOTECHNICAL REPORT AND APPLICABLE ADDENDUMS.
- LIGHT AND HEAVY DUTY ASPHALT PAVEMENT TO BE CONSTRUCTED AS PER GEOTECHNICAL REPORT AND AS PER CITY OF TIMMINS SPECIFICATIONS.
- ALL PAVEMENT MARKING, LINE PAINTING, DIRECTIONAL LINES/ARROWS ETC. SHALL BE PLACED IN ACCORDANCE WITH THE SITE PLAN. LINE PAINTING AND DIRECTIONAL SYMBOLS SHALL BE APPLIED WITH A MINIMUM OF TWO COATS OF ORGANIC SOLVENT BASED PAINT AS PER DIVISION 2 SPECIFICATIONS.
- ALL DISTURBED AREAS SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER. ANY REMOVAL OR RELOCATION OF TREES SHALL BE SUBJECT TO APPROVAL OF LANDSCAPE ARCHITECT.
- STEP JOINTS TO BE USED WHERE PROPOSED ASPHALT MEETS EXISTING ASPHALT.
- CURBS TO BE 0.15m HIGH (UNLESS OTHERWISE NOTED) AND AS PER OPSD 600.110.
- CURB TERMINATION TRANSITION TO BE 3.5m LONG AND AS PER OPSD 608.010.
- TRANSITION FROM ONE CURB TYPE TO ANOTHER SHALL BE A MINIMUM LENGTH OF 3.0m.
- REFER TO LANDSCAPE DRAWINGS AND THE ARCHITECTURAL SITE PLAN FOR THE LOCATION AND TYPE OF ALL HARD LANDSCAPE SURFACES INCLUDING CONCRETE SIDEWALKS, CONCRETE ISLANDS, PAVING STONES, COLORED CONCRETE, AND LINE PAINTING/LINES. IN THE EVENT OF DISCREPANCY, THE CONTRACTOR SHALL INFORM THE ENGINEER.
- CONTRACTOR SHALL INSTALL TEMPORARY SAFETY FENCE, BARRICADES, SIGNAGE DETOUR ROUTES ETC. AS REQUIRED TO ENSURE PUBLIC SAFETY (FOR BOTH VEHICULAR TRAFFIC AND PEDESTRIANS) IN ACCORDANCE WITH ALL THE REGULATIONS.
- SILT FENCE(S) TO BE INSTALLED AND MAINTAINED TO PREVENT SILT FLOWING ONTO ADJACENT LANDS UNTIL THE COMPLETION OF SODDING ACTIVITIES.
- CONSTRUCTION ACCESS SHALL BE CONSTRUCTED WITH MINIMUM DEPTH OF 450mm CRUSHED STONE BASE FROM MUNICIPAL CURB OR EDGE OF PAVEMENT TO THE PROPERTY LINE, TO THE SATISFACTION OF THE CITY.

**EROSION AND SEDIMENT CONTROL NOTES**

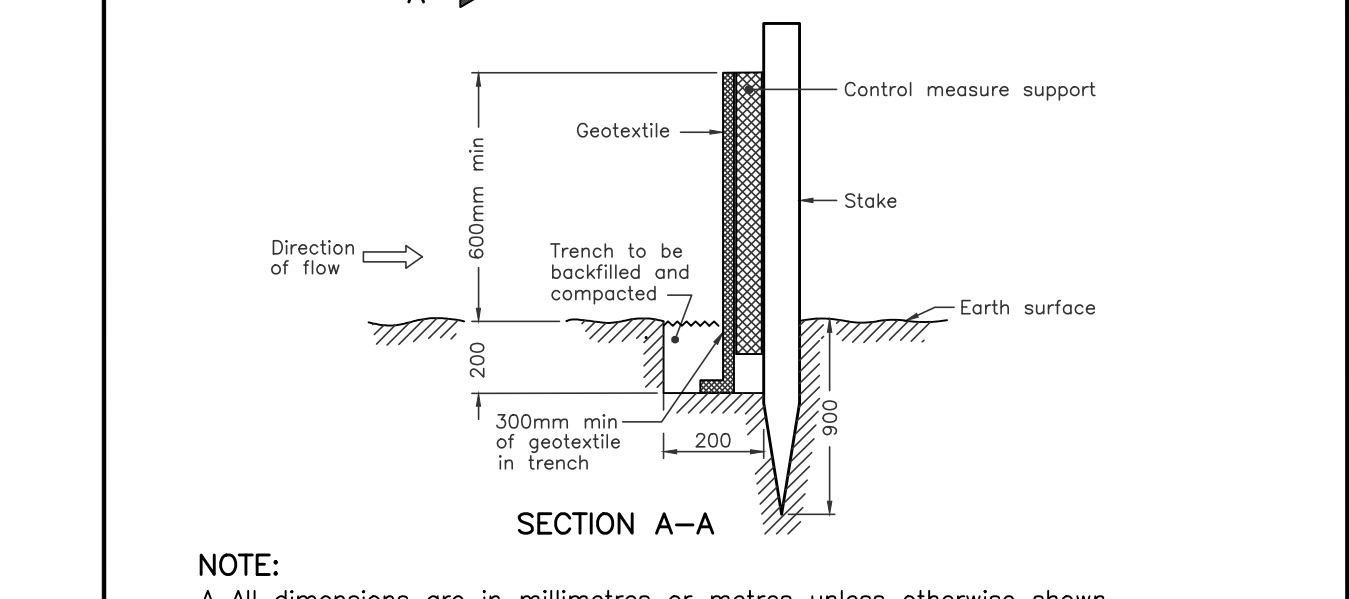
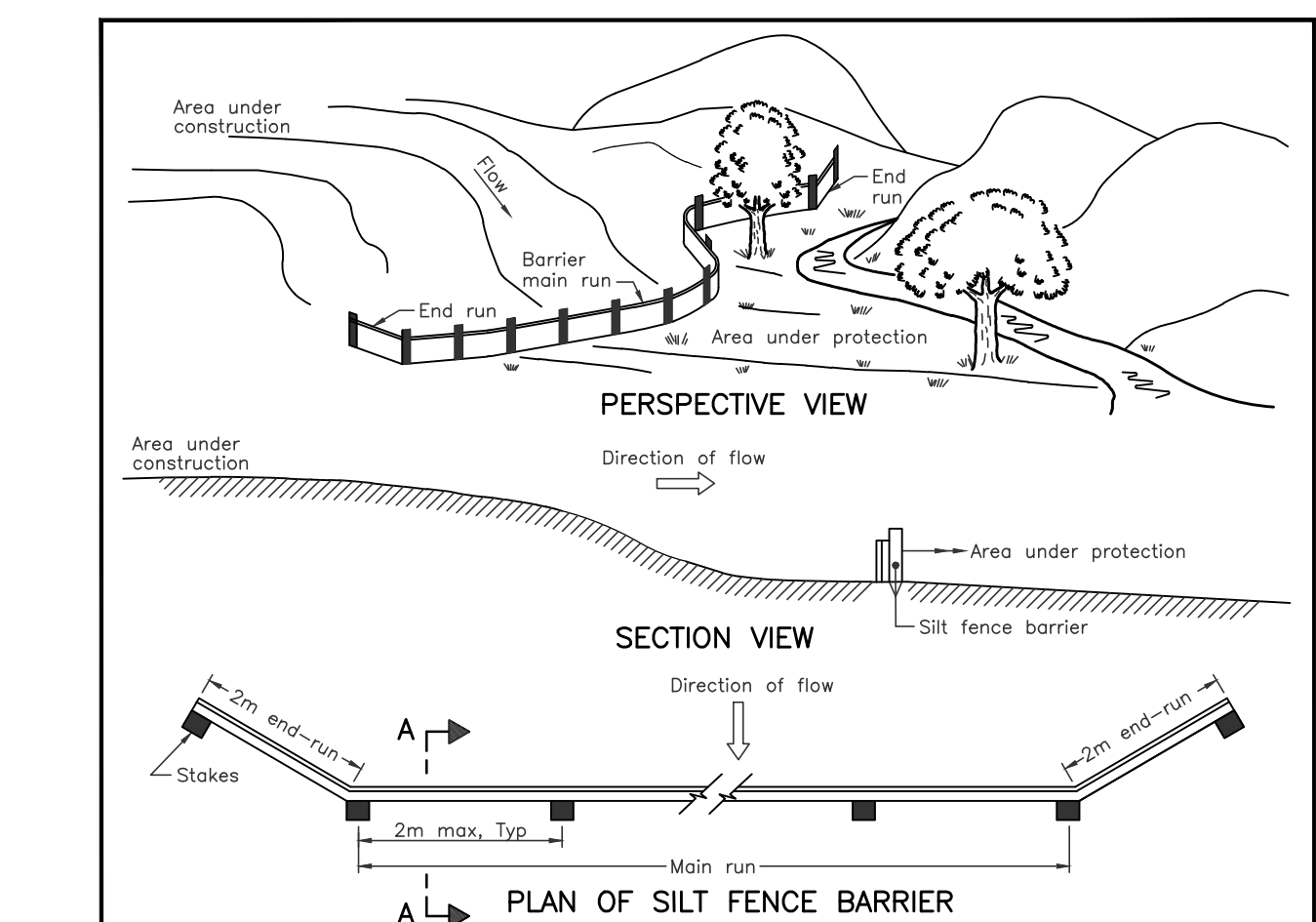
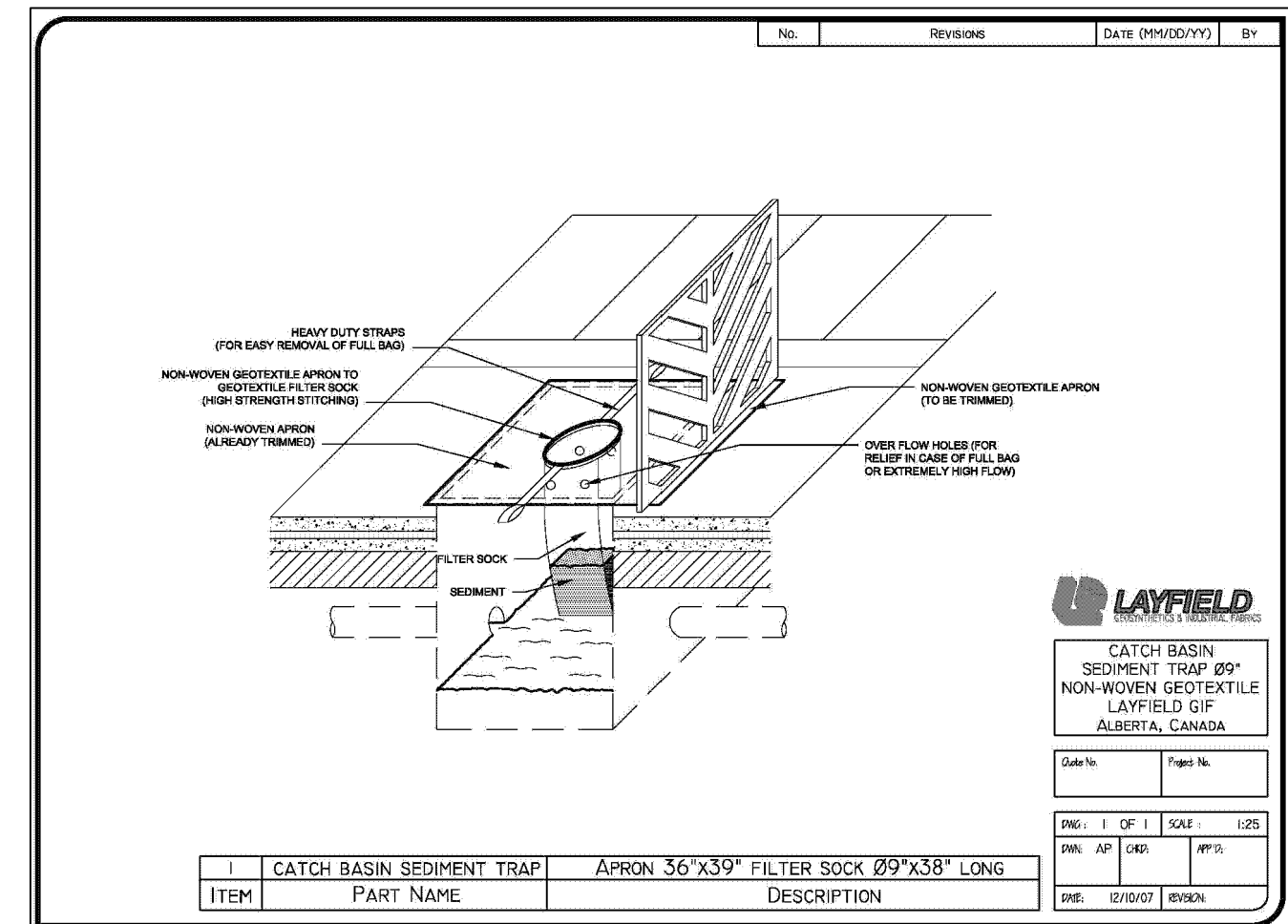
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER INSTALLATION AND MAINTENANCE OF ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES, INCLUDING REMOVAL UPON COMPLETION OF THE PROJECT.
- THE LOCATION OF ALL EROSION AND SEDIMENT CONTROL MEASURES ARE SHOWN SCHEMATICALLY.
- TEMPORARY MUD MATS, SILT FENCE AND SEDIMENT TRAPS ON CATCHBASIN STRUCTURES ARE TO BE INSTALLED PRIOR TO STRIPPING TOPSOIL AND TO BE MAINTAINED UNTIL CONSTRUCTION IS COMPLETE.
- GRANULAR DYKES/SILT FENCE BARRIERS TO BE INSTALLED AS REQUIRED AND TO BE MAINTAINED UNTIL ALL CONSTRUCTION IS COMPLETE AND SUB-SURFACES ARE STABILIZED.
- ALL DISTURBED AREAS TO BE REINSTATED WITH 150mm TOPSOIL AND SOD IMMEDIATELY UPON COMPLETION OF WORKS. NURSERY SOD OR HYDRO SEEDING AS DIRECTED BY THE ENGINEER.
- DURING GRADING OPERATIONS, ALL STORM RUNOFF SHALL BE CONTROLLED TO PREVENT SURFACE RUNOFF FROM LEAVING THE SITE UNTREATED.
- VEHICLE REFUELING AND SOIL STOCKPILING SHALL BE UNDERTAKEN AWAY FROM AND VALLEY OR WATERCOURSE.
- ADDITIONAL EROSION AND SEDIMENT CONTROL MATERIALS (i.e. SILT FENCE, STRAW BALES, CLEAR STONE, ETC.) ARE TO BE KEPT ON SITE FOR EMERGENCIES AND REPAIRS.
- EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE CONTINUOUSLY EVALUATED AND REPLACED/MANTEINED AS REQUIRED TO ENSURE THEIR EFFECTIVENESS. MEASURES ARE TO BE INSPECTED ON A WEEKLY BASIS, AFTER ANY RAIN OR SNOW MELT EVENT, AND ANY MAINTENANCE/REPAIR/REPLACEMENT REQUIRED IS TO BE DONE WITHIN 48 HOURS. DURING EXTENDED RAIN/SNOWMELT PERIODS, THE ESC MEASURES ARE TO BE INSPECTED DAILY.
- ALL CATCHBASINS/CATCHBASIN MANHOLES ARE TO BE PROTECTED PER DETAIL IMMEDIATELY AFTER INSTALLATION. EXISTING CATCHBASINS/CATCHBASIN MANHOLES AND ARE TO BE PROTECTED AT START OF CONSTRUCTION. PROTECTION IS TO BE MAINTAINED UNTIL ALL CONSTRUCTION IS COMPLETE.
- ALL TOPSOIL STOCKPILES INTENDED TO REMAIN IN PLACE FOR MORE THAN 30 DAYS ARE REQUIRED TO BE SEEDED TO PREVENT WIND EROSION. HEIGHT OF TOPSOIL STOCKPILES SHOULD NOT EXCEED 2m.
- THE CONTRACTOR SHALL UNDERTAKE MEASURES TO CONTROL DUST DURING CONSTRUCTION, RELATED SOIL EXCAVATION OR DURING SOIL REMEDIATION/EXCAVATION ACTIVITIES, AND SHOULD INCLUDE THE FOLLOWING AS APPLICABLE:
  - A) THE DAILY, OR MORE FREQUENTLY IF REQUIRED, WETTING OF ALL SOFT AND HARD SURFACES AND ANY EXCAVATION FACE ON THE SITE, WITH THE ADDITION OF CALCIUM CHLORIDE OR OTHER RECOGNIZED MATERIALS AS A DUST SUPPRESSANT, IF REQUIRED;
  - B) THE DAILY CLEANING OF THE ROAD PAVEMENT AND SIDEWALKS FOR THE ENTIRE FRONTAGE(S) OF THE PROPERTY TO A DISTANCE OF TWENTY-FIVE (25) METRES FROM THE PROPERTY LINE.
- SINCE THE LOCATION AND TYPE OF EROSION AND SEDIMENT CONTROL MEASURES WILL BE MODIFIED AS THE CONSTRUCTION OF THE SITE PROCEEDS, PLANS ARE DYNAMIC AND ADJUSTMENTS TO THE LOCATION AND TYPE OF ESC MEASURES WILL BE REQUIRED TO REDUCE THE AMOUNT OF SEDIMENT LEAVING THE SITE AND ONTO ADJACENT AREAS.
- AMOUNT OF BARE SOIL EXPOSED AT ONE TIME IS TO BE MINIMIZED. DISTURBED SOILS ARE TO BE STABILIZED AS QUICKLY AS PRACTICAL. ALL STRIPPED AND BARE SOIL TO BE STABILIZED WITHIN 30 DAYS OF INACTIVITY.



- Notes:
- IF STEEL GRATE IS REQUIRED, 4 - ANCHOR BOLTS TO BE SET AS PER OPSD #004.05A
  - INTO THE CONCRETE AS PER BOLT LAYOUT SHOWN ON FORM 373 AND 374
  - CLASS OF CONCRETE 30 MPA
  - REINFORCING BARS TO HAVE 75mm MINIMUM COVER
  - ALL DIMENSIONS ARE IN MILLIMETERS OR METERS UNLESS OTHERWISE SPECIFIED
  - AIR ENTRAINMENT 7% (+/- 1.5% OR +/- 1.5%)



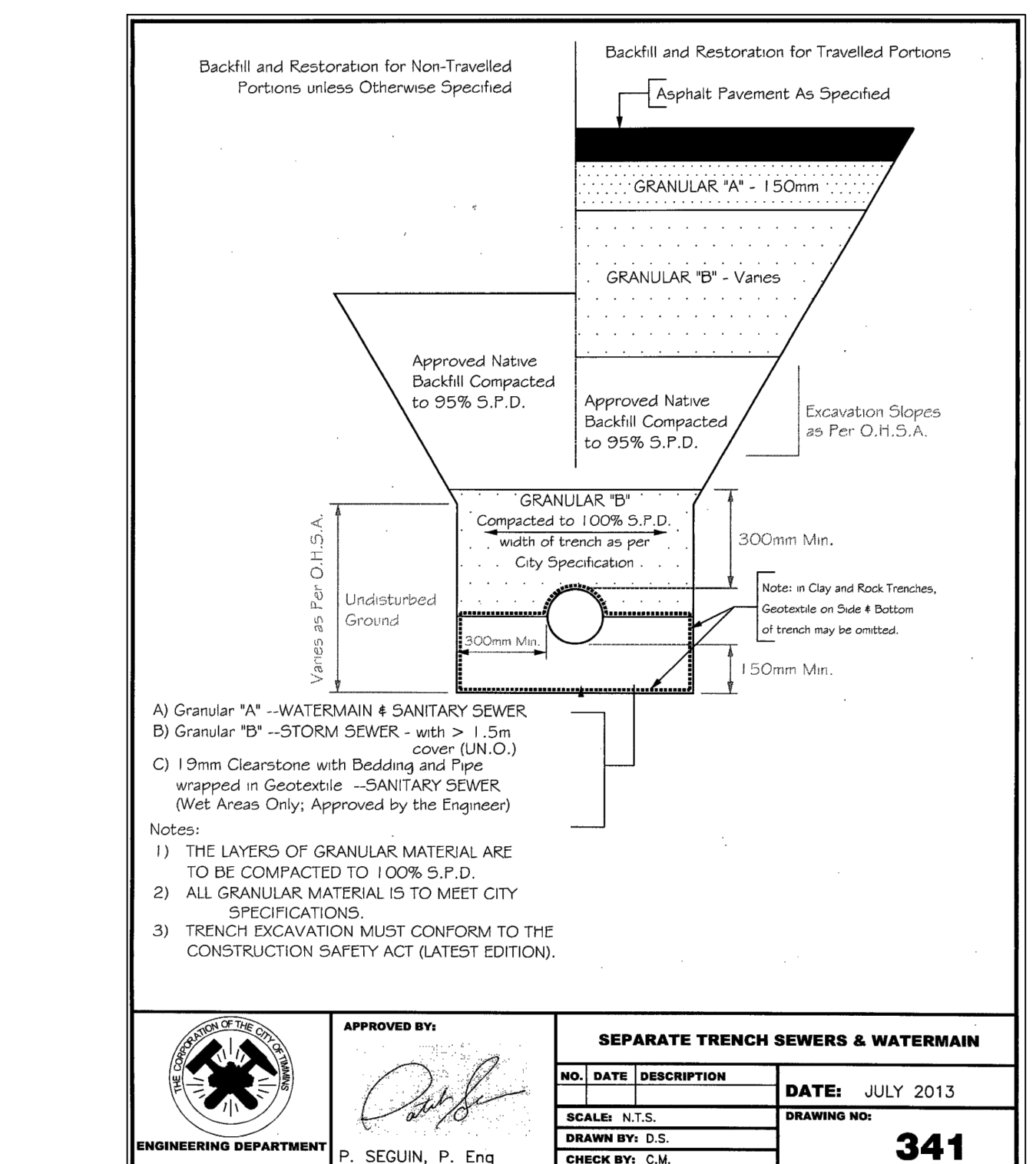
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|  | APPROVED BY:           | STYROFOAM INSULATION |                 |
|  | <i>[Signature]</i>     | NO. DATE DESCRIPTION | DATE: JULY 2013 |
|  | P. SEGUIN, P. Eng      | SCALE: N.T.S.        | DRAWING NO: 380 |
|  | ENGINEERING DEPARTMENT | DRAWN BY: S.C.       | CHECK BY: C.M.  |



Notes:

A All dimensions are in millimetres or metres unless otherwise shown.

|                                     |                |                |
|-------------------------------------|----------------|----------------|
| ONTARIO PROVINCIAL STANDARD DRAWING | 1996 02 01 Rev |                |
| HEAVY DUTY SILT FENCE BARRIER       | Date           |                |
|                                     |                | OPSD - 219.130 |



|  |                        |                                    |                 |
|--|------------------------|------------------------------------|-----------------|
|  | APPROVED BY:           | SEPARATE TRENCH SEWERS & WATERMAIN |                 |
|  | <i>[Signature]</i>     | NO. DATE DESCRIPTION               | DATE: JULY 2013 |
|  | P. SEGUIN, P. Eng      | SCALE: N.T.S.                      | DRAWING NO: 341 |
|  | ENGINEERING DEPARTMENT | DRAWN BY: S.C.                     | CHECK BY: C.M.  |



KEY PLAN

LEGEND

| No. | REVISIONS/ISSUED             | DATE        | BY | CITY |
|-----|------------------------------|-------------|----|------|
| 5.  | ISSUED FOR TENDER AND PERMIT | MAY 10 2019 | CB |      |
| 4.  | ISSUED FOR CONSTRUCTION      | SEP 22 2017 | CB |      |
| 3.  | ISSUED FOR TENDER            | MAY 17 2017 | CB |      |
| 2.  | ISSUED FOR REVIEW            | APR 25 2017 | CB |      |
| 1.  | ISSUED FOR SITE PLAN CONTROL | MAR 22 2017 | CB |      |

**counterpoint ENGINEERING**

COUNTERPOINT ENGINEERING INC.  
8395 Jane St., Suite 100, Vaughan, ON L4K 5Y2 Phone 905.326.1404 Fax 905.326.1405

*[Signature]*  
C.A. GUSH  
100183890  
MAY 10/19  
PROVINCE OF ONTARIO  
ENGINEER'S STAMP

APPLICANT:

**NORTHEASTERN CATHOLIC DISTRICT SCHOOL BOARD**  
383 BIRCH STREET NORTH  
TIMMINS, ONTARIO

SITE LOCATION:

**POPE FRANCIS ELEMENTARY SCHOOL ADDITION & RENNOVATION**  
387 BALSAM STREET NORTH  
TIMMINS, ONTARIO

NOTES & DETAILS PLAN

|                  |                |                   |
|------------------|----------------|-------------------|
| DESIGNED BY: CBM | CHECKED BY: PT | DATE: MARCH 2017  |
| DRAWING BY: ECM  | CHECKED BY: CB | PROJECT NO. 17005 |
| SWM BY: ECM      | CHECKED BY: CB | DRAWING NO. SW-ND |

SCALE: 1:300m

# ELECTRICAL SPECIFICATIONS

## 1. GENERAL

(A) THIS SUBCONTRACTOR SHALL BE FAMILIAR WITH THE WORK OF ALL OTHER TRADES SO THAT HE CAN INCLUDE FOR ALL WORK NECESSARY UNDER THIS CONTRACT TO FULFILL THE INTENT OF THE DRAWINGS AND SPECIFICATIONS. INCLUDE ALL APPLICABLE TAXES. GST TO BE INCLUDED AS SEPARATE ITEM.

## 2. EXAMINATION OF SITE AND DRAWINGS

(A) BEFORE TENDERING, THE ELECTRICAL SUBCONTRACTOR SHALL EXAMINE THE SITE. LOCAL CONDITIONS AFFECTING THE WORK OF THIS CONTRACT, WORK OF OTHER TRADES AND SHALL SATISFY HIMSELF THAT THE WORK MAY BE CARRIED OUT IN THE MANNER INDICATED ON THE PLANS AND SPECIFICATIONS. REPORT ANY CONFLICTS OR DISCREPANCIES PRIOR TO CLOSE OF TENDER; FAILURE TO DO THIS WILL RENDER THIS CONTRACTOR RESPONSIBLE FOR A COMPLETE JOB AS INTENDED.

## 3. STANDARDS OF EQUIPMENT AND MATERIALS

(A) MATERIALS AND EQUIPMENT IN THESE SPECIFICATIONS ARE FOR THE PURPOSE OF ESTABLISHING THE STANDARD OF MATERIALS AND WORKMANSHIP. EQUAL PRODUCTS MAY BE USED UPON APPROVAL.  
(B) ALL MATERIALS SHALL BE NEW AND SHALL BE C.S.A. APPROVED, AND SHALL BEAR THE C.S.A. LABEL. MATERIALS WHICH ARE NOT C.S.A. APPROVED SHALL BE APPROVED BY SPECIAL INSPECTION.

## 4. PERMITS, FEES, AND INSPECTIONS

(A) COMPLY WITH ALL APPLICABLE CODES AND ALL LOCAL, MUNICIPAL, PROVINCIAL AND FEDERAL BY-LAWS, RULES AND REGULATIONS. OBTAIN ALL PERMITS REQUIRED AND PAY PERMIT FEES.

## 5. SHOP DRAWINGS

(A) PRIOR TO ORDERING OF ANY MATERIAL OR EQUIPMENT, PROVIDE (6) COPIES OF SHOP DRAWINGS AND/OR DESCRIPTIVE DATA FOR REVIEW.

## 6. HANGERS, INSERTS AND SLEEVES

(A) PROVIDE AND INSTALL INSERTS, HANGERS, ANCHORS AND SUPPORTS REQUIRED FOR WORK TO BE INSTALLED UNDER THIS SECTION.

## 7. CUTTING AND PATCHING

(A) CUTTING AND PATCHING FOR ELECTRICAL WORK SHALL BE DONE BY THIS SECTION.  
(B) HOLES IN CONCRETE WALLS AND FLOORS FOR CONDUITS OR DUCTS SHALL BE CORE DRILLED WHERE NOT SLEEVED.

## 8. IDENTIFICATION OF EQUIPMENT

(A) ALL EQUIPMENT SUPPLIED SHALL BE IDENTIFIED WITH LAMICOID PLASTIC NAMEPLATES. BLACK BACKGROUND WITH WHITE ETCHED LETTERS 1/4" HIGH.

## 9. WORKMANSHIP

(A) ALL WORK SHALL BE DONE IN A WORKMANLIKE MANNER. ANY WORKMANSHIP UNSATISFACTORY IN THE OPINION OF THE OWNER SHALL BE REPLACED WITHOUT COST TO THE OWNER.

## 10. CLEAN-UP

(A) DURING THE COURSE OF CONSTRUCTION, KEEP WORK AREA CLEAN AND DO NOT ALLOW AN ACCUMULATION OF DEBRIS RESULTING FROM YOUR WORK. UPON COMPLETION OF THE WORK, REMOVE ALL DEBRIS AND SURPLUS MATERIAL, LEAVING THE PREMISES IN A BROOM-CLEAN CONDITION.

## 11. GUARANTEE

(A) SYSTEMS SHALL BE COMPLETE, TESTED AND READY FOR USE WITH ALL EQUIPMENT OPERATING SATISFACTORILY AND ALL FIXTURES LAMPED.  
(B) PROVIDE A CERTIFICATE OF GUARANTEE OF WORKMANSHIP, MATERIALS AND EQUIPMENT FOR ONE (1) YEAR AFTER SUBSTANTIAL COMPLETION. THIS DOES NOT SUPERSEDE WARRANTIES ON SPECIFIC ITEMS OF EQUIPMENT WHICH MAY BE FOR LONGER PERIODS, AND MANUFACTURER'S WARRANTIES SHALL BEGIN ON THE DATE OF THIS ACCEPTANCE; NOT WHEN THE PRODUCT WAS SHIPPED OR INSTALLED.  
(C) DEMONSTRATE TO THE OWNER'S REPRESENTATIVE THE PROPER OPERATING PROCEDURES AND PROVIDE TWO (2) COPIES OF OPERATING INSTRUCTIONS SUITABLY BOUND, TITLED AND BEARING THE CONTRACTOR'S COMPANY NAME, ADDRESS AND TELEPHONE NUMBER.

## 12. EXCAVATION AND BACKFILL

(A) ALL THE EXCAVATION, DE-WATERING AND BACKFILLING FOR ELECTRICAL WORK SHALL BE DONE UNDER THIS SECTION EXCEPT AS NOTED.

## 13. CONCRETE WORK

(A) PROVIDE ALL CONCRETE WORK FOR THE ELECTRICAL WORK AS INDICATED ON THE DRAWINGS OR IN THE SPECIFICATIONS, UNLESS OTHERWISE NOTED.

## 14. GROUNDING

(A) ALL GROUNDING SHALL CONFORM TO THE CANADIAN ELECTRIC CODE AND PROVINCIAL REGULATIONS.

## 15. WIRE AND CABLE

(A) UNDERGROUND WIRING SHALL BE COPPER WITH RWU90 XLPE INSULATION IN RIGID PVC CONDUIT.  
(B) ALL EXPOSED WIRING (EXCEPT WHERE OTHERWISE SPECIFIED ON THE DRAWINGS) SHALL BE IN E.M.T. CONDUIT.  
(C) FIRESTOPPING OF ALL CABLE SLEEVES SHALL BE DONE WITH ELECTROVERT 'FLAMESEAL' OR DOW CORNING 'FIRESTOP' SEALANT.

## 16. CONDUITS

(A) THE CONTRACTOR SHALL FURNISH AND INSTALL RIGID PVC AND EMT CONDUIT AS REQUIRED.  
(B) THINWALL (EMT) CONDUIT SHALL BE ACCEPTED WHERE ALLOWED BY CODE.  
(C) MINIMUM SIZE OF 12.7mm (1/2") CONDUIT SHALL BE USED.

(D) CONDUIT PASSING FROM THE INSIDE TO OUTSIDE AREAS SHALL BE SEALED WITH A COMPOUND SIMILAR TO JOHNS-MANVILLE DUXSEAL.  
(E) BENDS IN EXPOSED CONDUIT RUNS SHALL BE SITE MADE BENDS WHERE POSSIBLE; OTHERWISE JUNCTION BOXES, CONDULETS OR UNILETS SHALL BE USED.  
(F) ALL CONDUIT WORK SHALL BE CLEANED AND DRIED INSIDE BEFORE THE INSTALLATION OF THE WIRES. NO OIL OR GREASE SHALL BE USED TO EASE DRAWING IN WIRES AND CABLES, OTHER THAN THOSE HAVING A LEAD OR COPPER SHEATH.  
(G) LINES INDICATED ON DRAWINGS SHOWING CONDUIT RUNS ARE ONLY SCHEMATIC. IT IS THE RESPONSIBILITY OF THIS CONTRACTOR TO DETERMINE EXACT ROUTES OF CONDUITS TO CONFORM WITH STRUCTURAL ELEMENTS. THE EXPOSED CONDUIT SHALL BE NEATLY INSTALLED PARALLEL TO THE LINES OF THE BUILDING AND CLEAN AND FREE FROM KINKS AND IRREGULAR BENDS. FITTINGS SHALL BE USED AROUND CORNERS AND ALL CONDUITS SHALL BE KEPT TIGHT TO CEILINGS, WALLS, ETC.

## 17. PULL BOXES

(A) PULL BOXES SHALL BE INSTALLED TO FACILITATE THE PULLING OF CABLES WHETHER SHOWN ON DRAWINGS OR NOT. THE CONTRACTOR SHALL SUPPLY ALL JUNCTION BOXES, PULL BOXES DEEMED TO BE NECESSARY FOR A COMPLETE ELECTRICAL INSTALLATION.

## 18. LIGHTING FIXTURES

(A) ELECTRICAL CONTRACTOR SHALL INSTALL AND WIRE ALL LIGHTING FIXTURES PROVIDED BY OWNER.  
(B) AT THE TIME OF INSPECTION, ALL LAMPS SHALL BE NEW, IN PLACE AND IN OPERATION.

## 19. FUSES

(A) THIS SUBCONTRACTOR SHALL SUPPLY AND INSTALL ALL NECESSARY FUSES AND SPARE FUSES. ONE (1) SET OF EACH SIZE TO BE MOUNTED IN A SUITABLE CABINET IN THE ELECTRICAL ROOM.  
(B) ALL FUSES IN CIRCUITS UP TO 250V AND IN SIZE UP TO AND INCLUDING 600 AMPERES SHALL BE GLC FUSETRON FRN-A SERIES.  
(C) ALL FUSES UP TO 600 AMPERES IN CIRCUITS RATED 600 VOLTS SHALL BE GLC FUSETRON TYPE FRS-A.

## NOTES:

- ALL OUTDOOR LIGHTING FIXTURES SHALL BE CONTROLLED BY A PHOTO-CELL EQUAL TO DESIGN AT15 AND A 20A, 4P LIGHTING CONTACTOR EQUAL TO ASCO 91742031C-47C, 120V CONTROL VOLTAGE c/w EEMAC 1 ENCLOSURE AND SOLID STATE CONTROL MODULE FOR 2-WIRE CONTROL.
- ALL RECEPTACLE CIRCUIT BREAKERS SHALL BE 15A AND ALL LIGHTING CIRCUIT BREAKERS SHALL BE 20A.
- PRIOR TO ANY EXCAVATION, CONTRACTOR SHALL CONDUCT DETAILED UNDERGROUND SERVICES LOCATION IN CONJUNCTION WITH VARIOUS UTILITY COMPANIES AND THE CITY OF TIMMINS.
- CONTRACTOR IS RESPONSIBLE FOR RESTORING ALL AREAS AFFECTED DURING CONSTRUCTION TO ORIGINAL CONDITION PRIOR TO CONSTRUCTION.
- WHERE RACEWAYS ARE CROSSING ASPHALT PATHWAYS, BORE INSTEAD OF EXCAVATING WHEREVER POSSIBLE.
- EXACT LOCATION OF LIGHTING STANDARDS, LIGHTING PANEL, DISCONNECT SWITCH AND PHOTO-CELL TO BE DETERMINED ON SITE IN CONSULTATION WITH OWNER'S REPRESENTATIVE.
- CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ROCK WHEREVER REQUIRED. ANY NECESSARY RELOCATION OF LIGHTING STANDARD SHALL NOT BE DONE PRIOR TO ENGINEER'S APPROVAL.

## LIGHTING FIXTURES

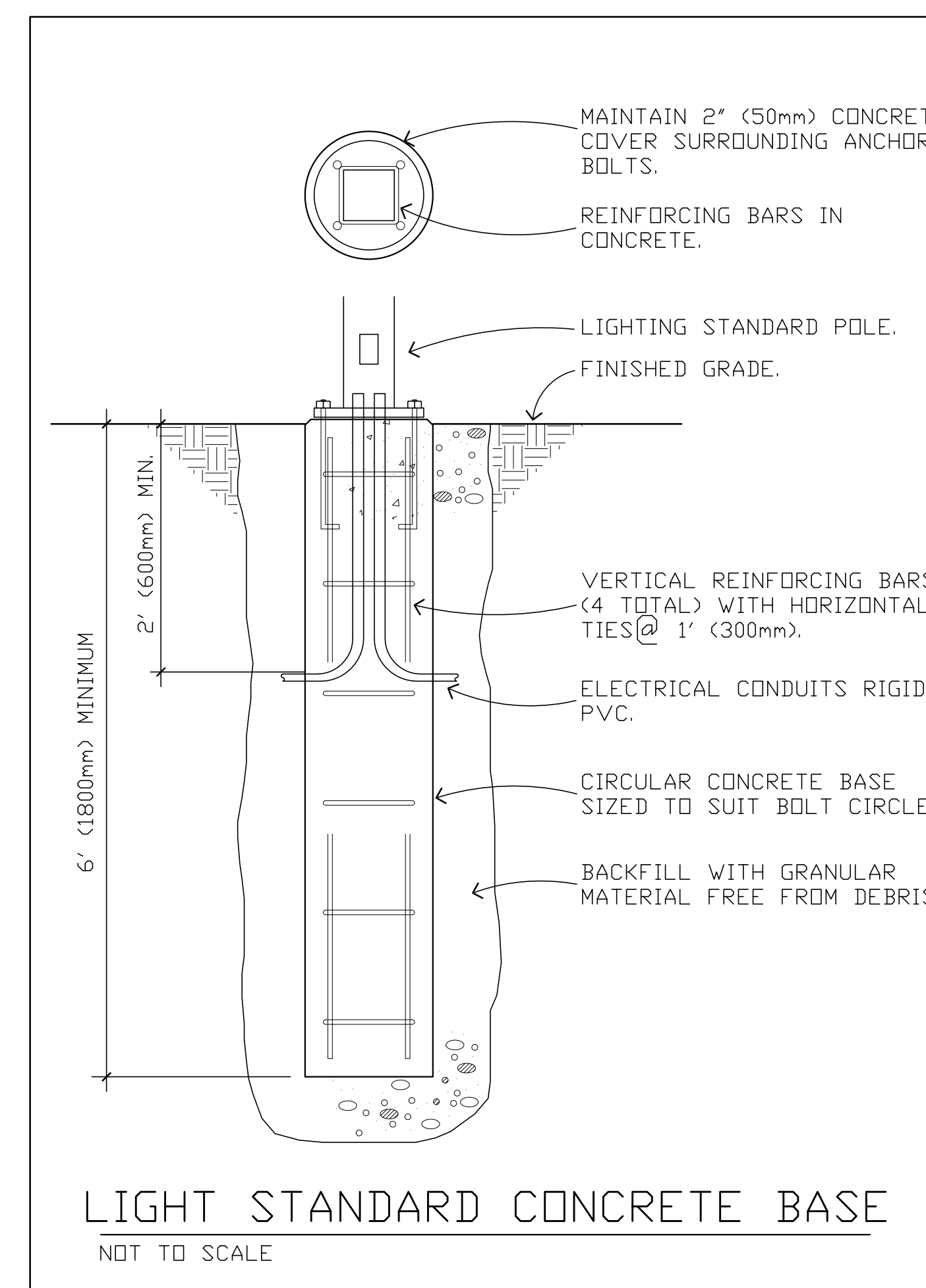
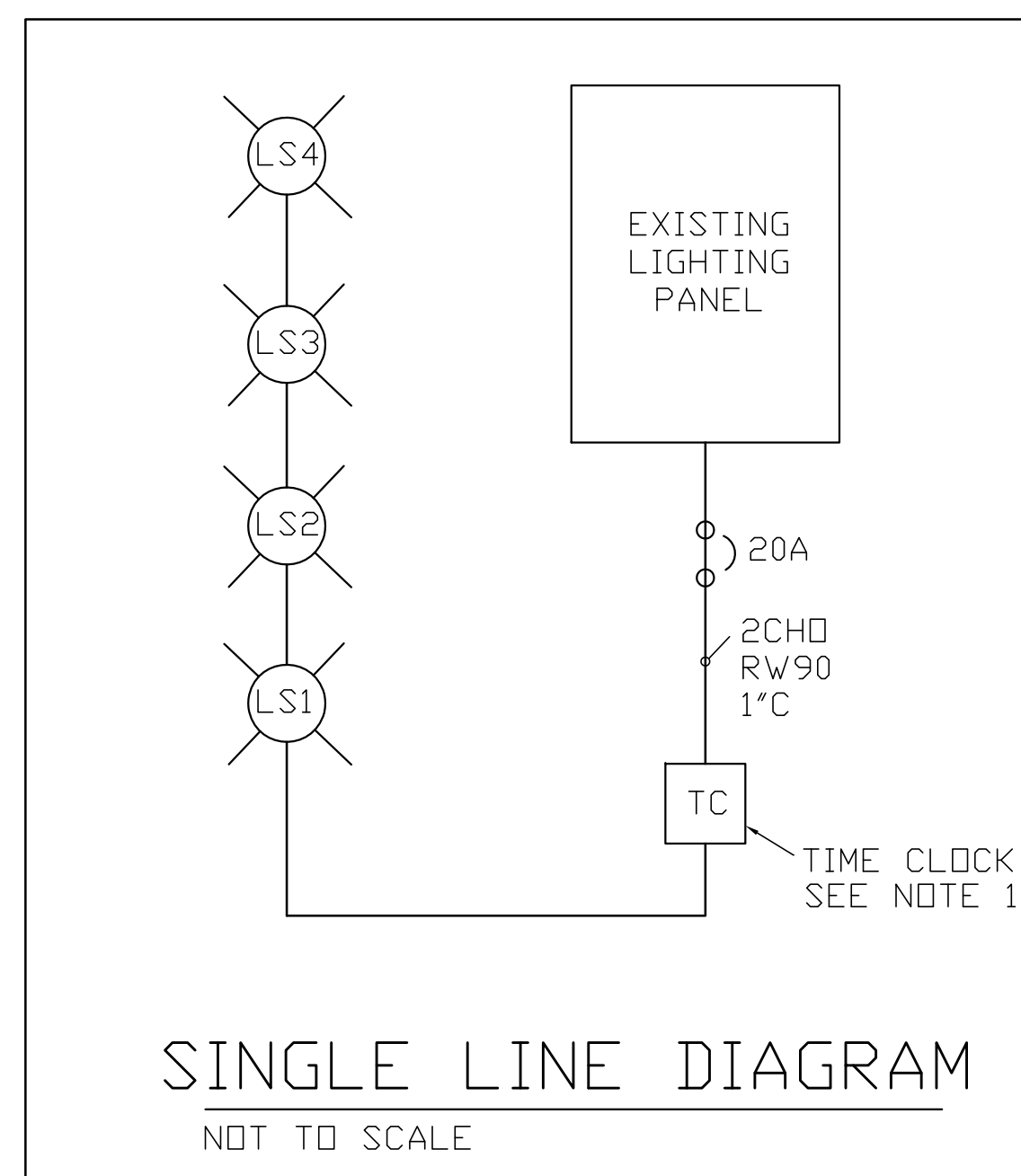
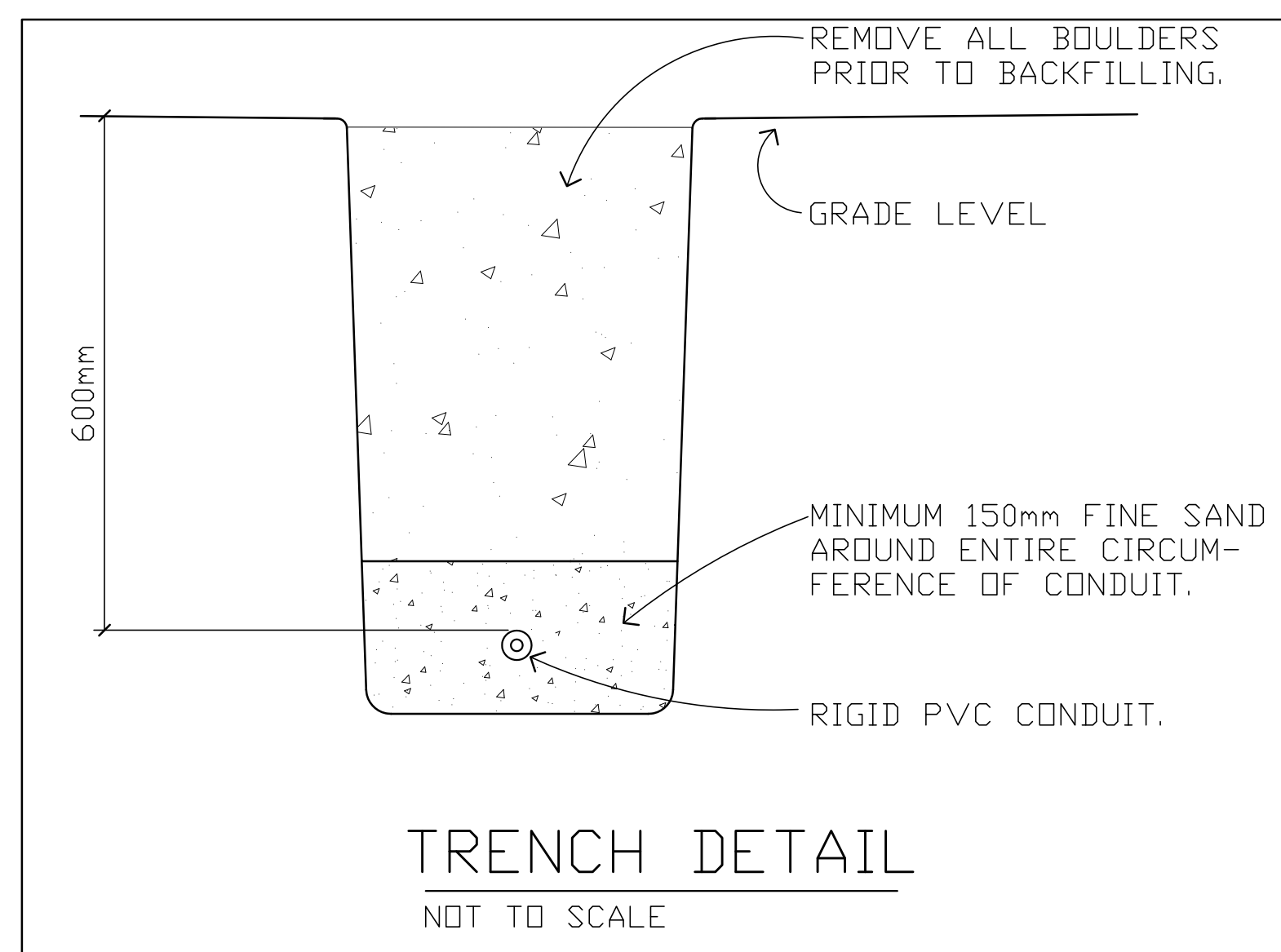
| SYMBOL | DESCRIPTION                   |
|--------|-------------------------------|
| ⊕LS    | LIGHTING STANDARD - HOLOPHANE |
| —E—    | UNDERGROUND ELECTRICAL WIRING |
| 1      | LIGHTING STANDARD NUMBER      |

## LIGHTING FIXTURES

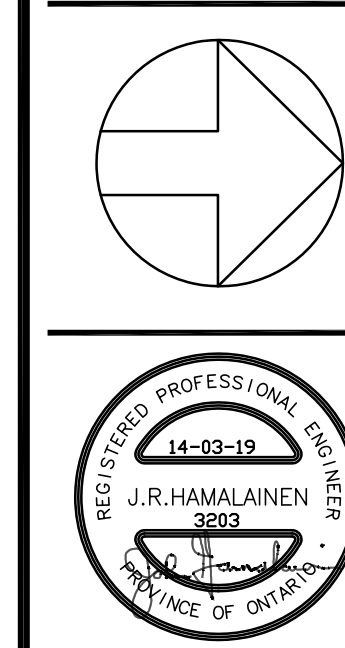
| SYMBOL | LABEL | MANUFACTURER | CATALOG NUMBER          | DESCRIPTION  | LAMP | LUMENS PER LAMP | LIGHT LOSS FACTOR | WATTAGE |
|--------|-------|--------------|-------------------------|--|------|-----------------|-------------------|---------|
| ⊕LS    | A     | HOLOPHANE    | GPLF2 P20 40K XX X X L4 | GLASWERKS PRAGUE FLAT GLASS, LED PACKAGE 20,4000K, TYPE 2 DISTRIBUTION C/W WITH 16FT POLE AND EAJ4 CURVED ARMS | LED  | 6738            | 0.95              | 58      |

## LIGHTING STANDARD CONNECTION SCHEDULE

| STANDARDS | CIRCUIT#   | WIRING                     |
|-----------|------------|----------------------------|
| 1 - 4     | 1 - 20AMPS | 2 - #4AWG, 1- #10 GND, 1°C |



|              |                   |
|--------------|-------------------|
| Date:        | MAY 10-2019       |
| Description: | FOR CLIENT REVIEW |
| No.:         | 1                 |
| Date:        | MAY 14-2019       |
| Description: | REVISED MARKUPS   |
| No.:         | 2                 |

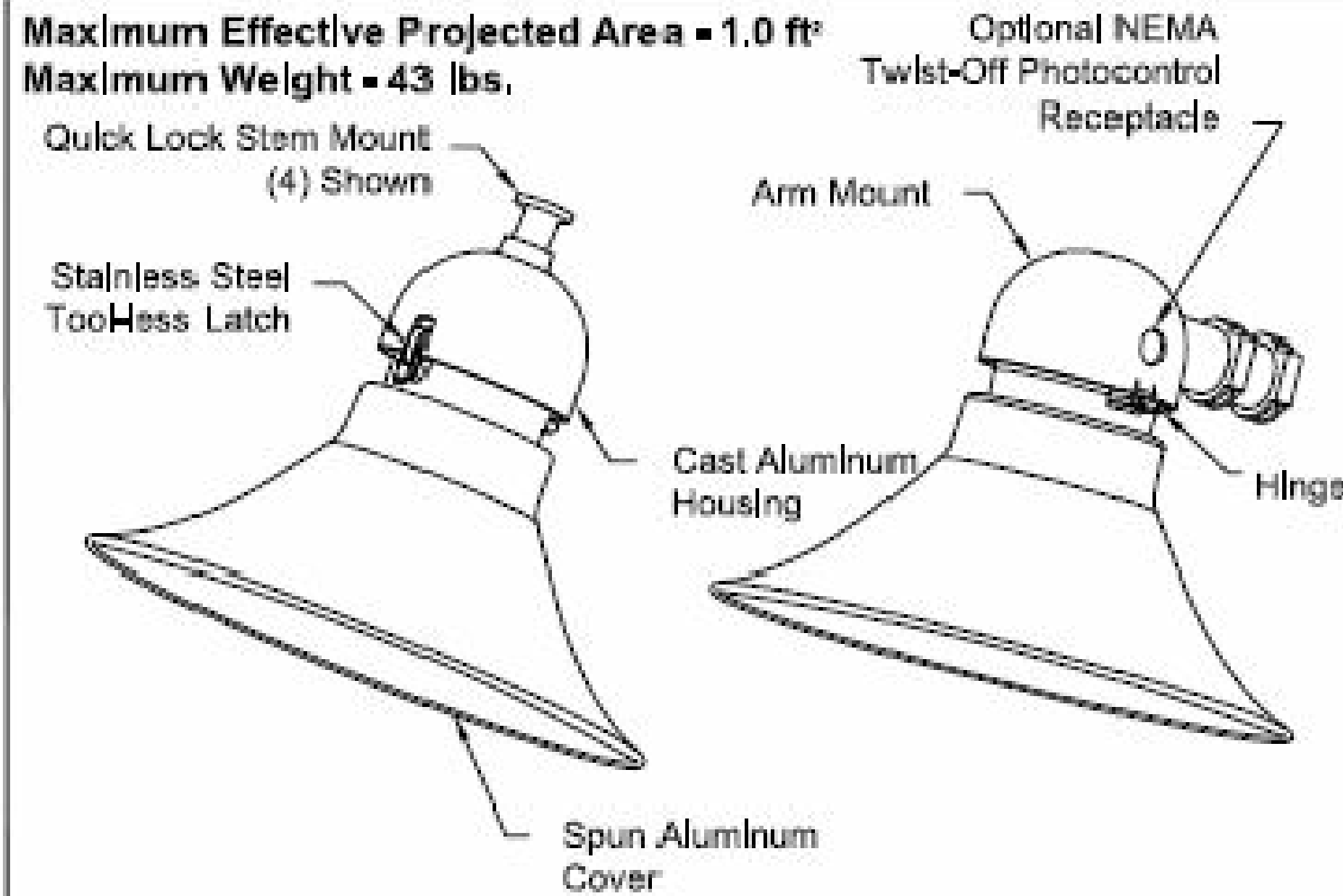
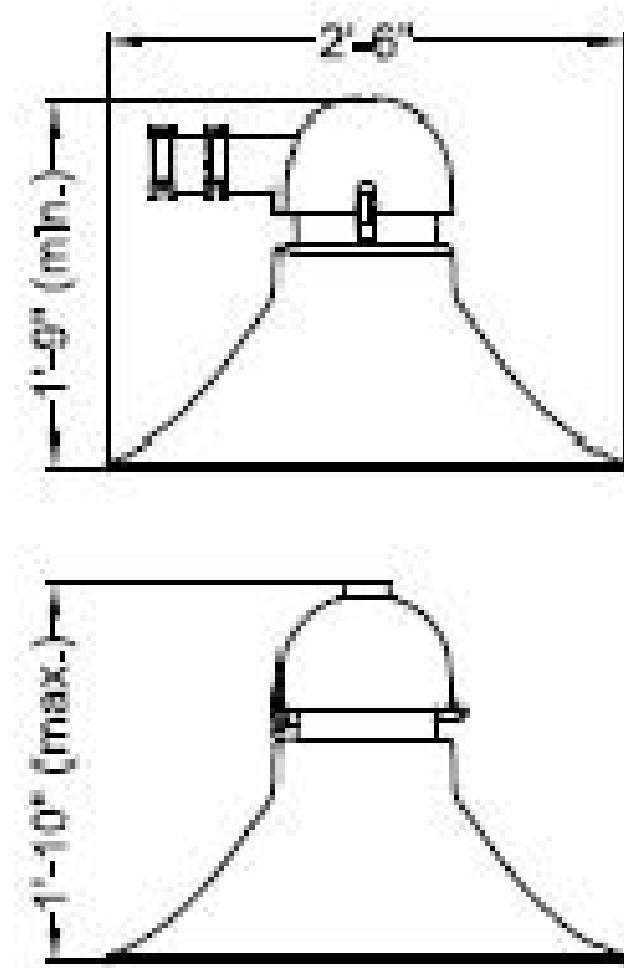


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Tel: (705) 522-5745 Fax: (705) 522-5650  
info@consultingengineers.ca

Project: POPE FRANCIS ELEMENTARY SCHOOL  
Drawing: BUS LOOP LIGHTING  
Checked by: JRH  
Project No.: 3203  
Date: MAY 2019  
Scale: NTS  
Drawing No.: E-1

Drawn by: BB  
Checked by: JRH  
Project No.: 3203  
Date: MAY 2019  
Scale: NTS  
Drawing No.: E-1





Maximum Effective Projected Area = 1.0 ft<sup>2</sup>  
Maximum Weight = 43 lbs.

GlasWerks® Flat LED 2  
Prague®

DESIGNER  
OUTDOOR



THIS DRAWING, WHEN APPROVED, SHALL BECOME THE COMPLETE SPECIFICATION FOR THE MATERIALS TO BE FURNISHED BY HOLOPHANE ON THE ORDER NOTED ABOVE. A LIST OF EQUALS OR OTHERS MAY BE SUPPLIED, BUT ONLY AFTER APPROVAL BY THE CUSTOMER IN WRITING. ON POLE ORDERS AN ANCHOR BOLT TEMPLATE PRINT WILL BE SUPPLIED WITH EACH ORDER. TO MATCH THE POLE PROVIDED, THE PRINT IS THE PROPERTY OF HOLOPHANE AND IS LOANED SUBJECT TO RETURN UPON DEMAND AND UPON EXPRESS COMPLETION THAT IT IS NOT TO BE USED IN ANY WAY DIFFERENTIAL TO OUR INTERESTS, AND ONLY IN CONNECTION WITH MATERIALS FURNISHED BY HOLOPHANE.

ORDER #: \_\_\_\_\_  
TYPE: \_\_\_\_\_  
DRAWN: RAF  
DATE: 8/14/2017  
DWG #: LUM\_GPLF2

NOTES ARE LOCATED ON PAGE 3

### Specifications

#### GENERAL DESCRIPTION

The Bishops Crook decorative arm shall be all aluminum construction.

#### MATERIALS

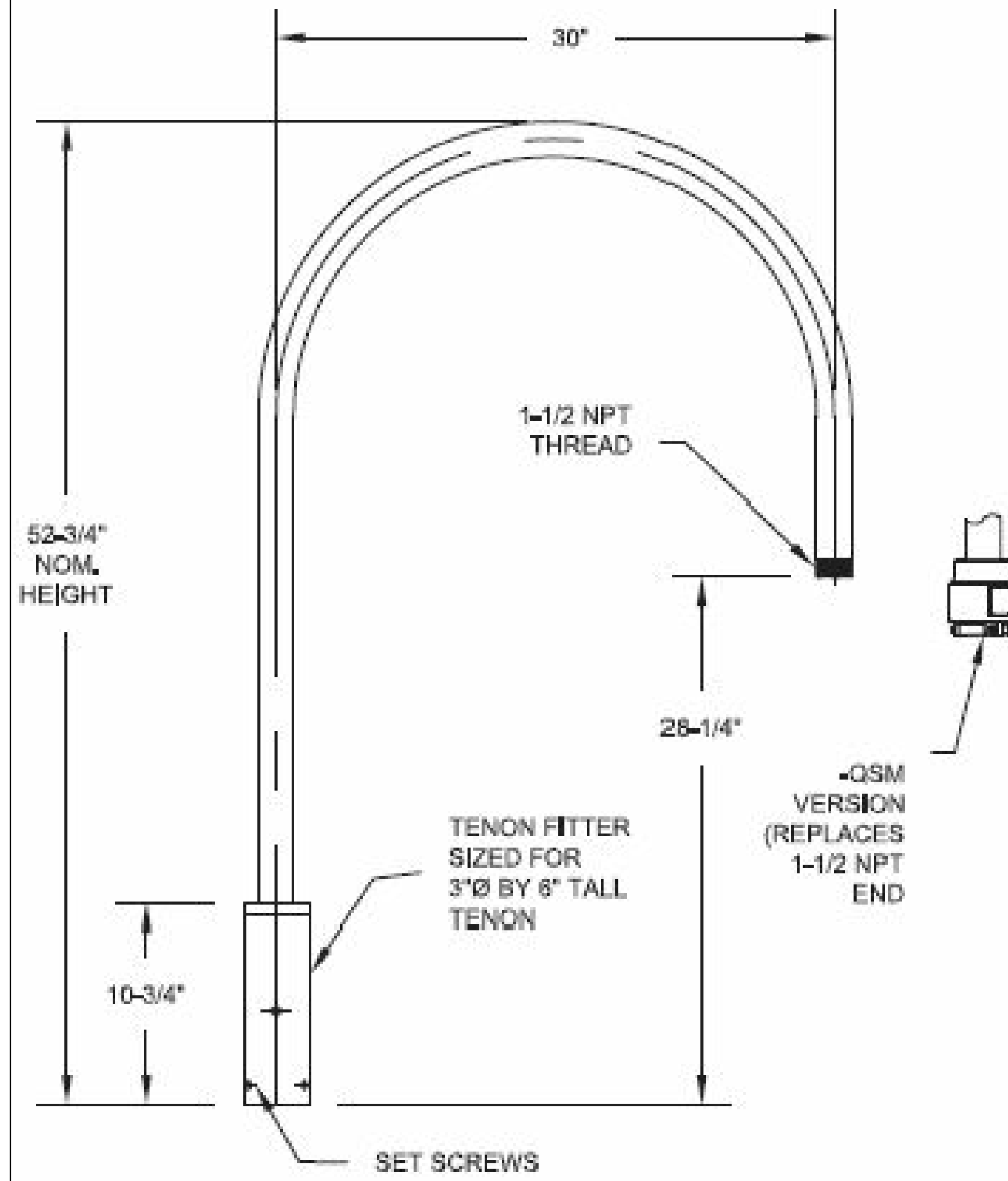
The arm tenon fitter and arm shall be of extruded aluminum pipe. The interface between the tenon fitter and arm shall be cast aluminum. The interface shall be circumferentially welded to the tenon fitter and the arm. All mounting hardware shall be tamper resistant stainless steel.

#### DIMENSIONS

The tenon fitter is designed to slip fit a 3 inch O.D. by 6 inch tall tenon. The arm rises approximately 52-3/4 inches above the bottom of the tenon fitter and has a span of 30 inches from center line of the tenon fitter to the end of the arm. Stainless steel set screws are located in the tenon fitter for fastening the arm to the pole tenon. The arm terminates in 1-1/2 inch NPT thread. With the option -QSM, the arm terminates in a unique Quick Stem Mount that matches a mating assembly on a luminaire.

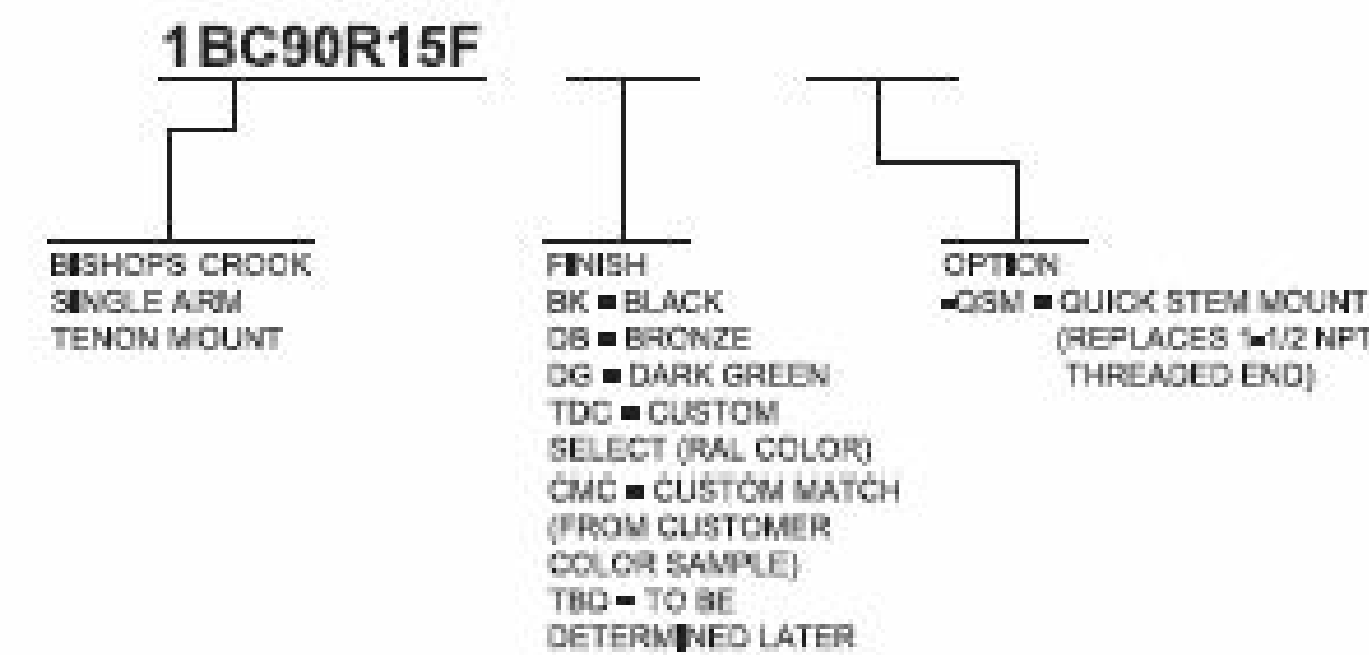
#### FINISH

The arm shall be furnished standard with a powder coat finish.



#### ORDERING INFORMATION

EXAMPLE: 1BC90R15F BK



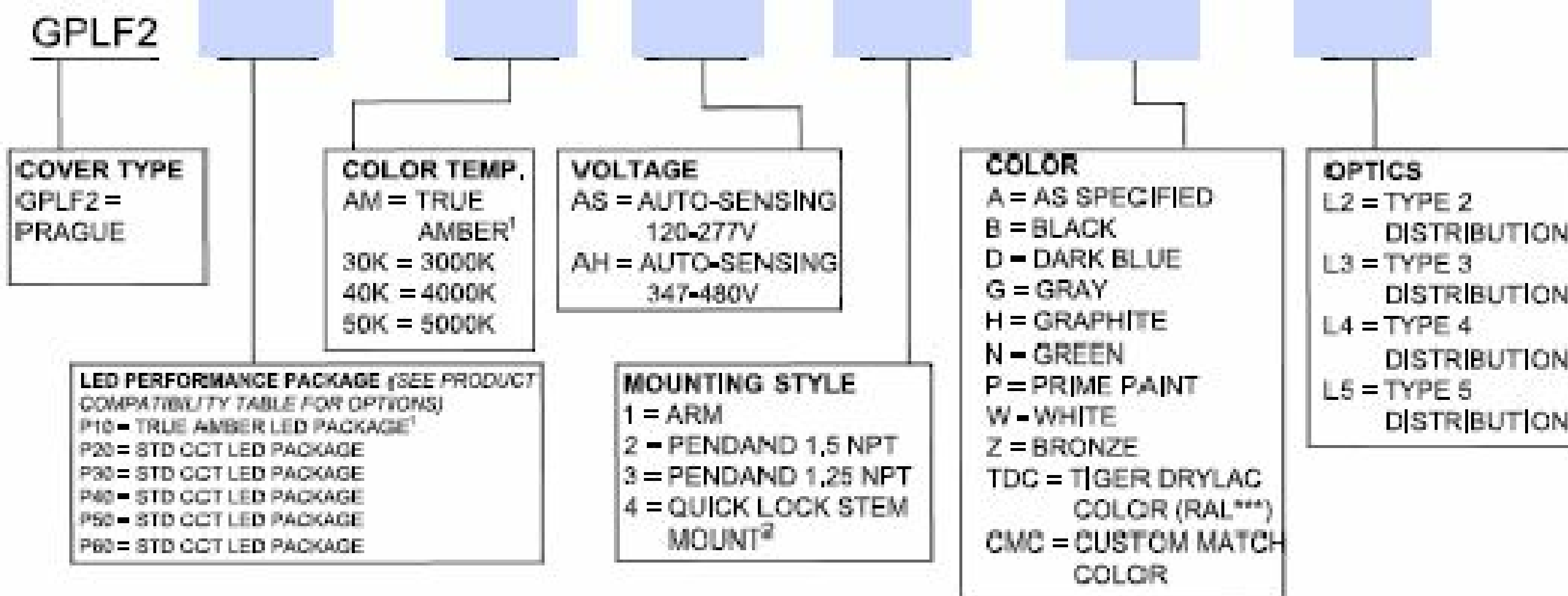
### Bishops Crook Series Arm Aluminum Crossarm, Tenon Mount, Single

|            |                        |              |
|------------|------------------------|--------------|
| ORDER #:   | TYPE:                  | DRAWING #:   |
| REVISION:  | REVISION DATE:         | US-4159      |
| DRAWN: RAF | ORIGIN DATE: 4/26/2018 | PAGE: 1 of 1 |

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#### ORDERING INFORMATION:

EXAMPLE: GPLF2 P30 40K AS 4 B L3



#### OPTIONS

- CONTROL OPTIONS**  
 AO<sup>2</sup> = FIELD ADJUSTABLE OUTPUT  
 B<sup>4</sup> = BILEVEL 0-10V DIMMING CONTROL  
 D<sup>5</sup> = ROAM HARDWARE  
 FPD<sup>xx</sup> = FACTORY PROGRAMMED DRIVER (xx = % OF LUMENS OR WATTS)  
 H<sup>7</sup> = NEMA TWISTLOCK PHOTOCONTROL RECEPTACLE ONLY  
 PCL<sup>15</sup> = DTL LONG LIFE TWISTLOCK PHOTOCONTROL FOR SOLID-STATE LIGHTING, 120-277V  
 PCS<sup>8</sup> = DTL TWISTLOCK PHOTOCONTROL, 120-277 VOLT  
 PND<sup>9</sup> = 0-10V PART-NIGHT DIMMING, INCLUDES BLC2 & 120-277V BUTTON PHOTOCONTROL  
 PSC<sup>10</sup> = SHORTING CAP  
 P34<sup>11</sup> = DTL TWISTLOCK PHOTOCONTROL 347V  
 P48<sup>11</sup> = DTL TWISTLOCK PHOTOCONTROL 480 VOLT  
 P5<sup>12</sup> = DIMMING PHOTOCONTROL RECEPTACLE - 5 PIN  
 P7<sup>13</sup> = DIMMING PHOTOCONTROL RECEPTACLE - 7 PIN  
 P3E<sup>14</sup> = PREPARED FOR EXTERNAL 3PIN PHOTOCONTROL RECEPTACLE  
 P5E<sup>14</sup> = PREPARED FOR EXTERNAL 5PIN PHOTOCONTROL RECEPTACLE  
 P7E<sup>14</sup> = PREPARED FOR EXTERNAL 7PIN PHOTOCONTROL RECEPTACLE

#### OPTIONS (Cont.)

- PREWIRED LEAD OPTIONS**  
 L03 = 3 FEET OF PREWIRED LEADS  
 L10 = 10 FEET OF PREWIRED LEADS  
 L20 = 20 FEET OF PREWIRED LEADS  
 L25 = 25 FEET OF PREWIRED LEADS  
 L30 = 30 FEET OF PREWIRED LEADS

#### ACCESSORIES

- SURGE PROTECTION**  
 SPDPLUGIN = REPLACEMENT SURGE PROTECTOR 120-277V  
 SPDPLUGIN-48 = REPLACEMENT SURGE PROTECTOR 347-480V  
 SPDPLUGIN-MOV12 = REPLACEMENT SURGE PROTECTOR, MOV 120-277V  
 SPDPLUGIN-MOV48 = REPLACEMENT SURGE PROTECTOR, MOV 347/480V

No.: \_\_\_\_\_ Date: \_\_\_\_\_  
 Description: \_\_\_\_\_  
 1 FOR CLIENT REVIEW MAY 10-2019  
 2 REVISED MARKUPS MAY 14-2019

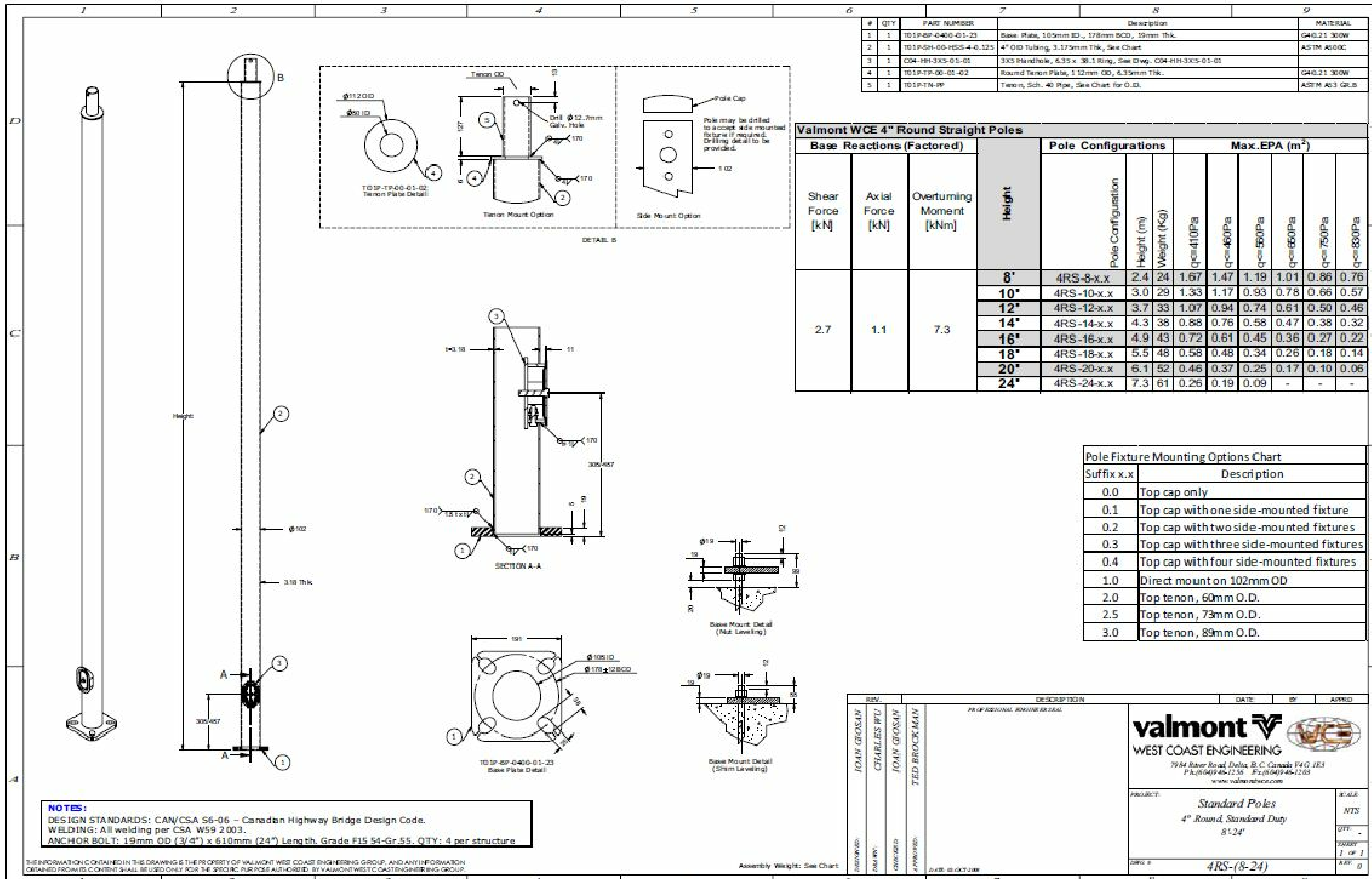
Item: \_\_\_\_\_ Drawing Information: \_\_\_\_\_ Date: \_\_\_\_\_  
 DESIGN REVIEW  
 PRELIMINARY DESIGN  
 CLIENT APPROVAL  
 PRE - TENDER SET  
 ISSUED FOR CONSTRUCTION  
 SITE PLAN AGREEMENT  
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 11. X-17 REFERENCE BOOK

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REG. PROFESSIONAL ENGINEER  
 14-03-19  
 J. R. HAMALAINEN  
 3903  
 PROVINCE OF ONTARIO

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 Tel: (705) 522-5745 Fax: (705) 522-5650  
 info@consultingengineers.ca

Project: POPE FRANCIS ELEMENTARY SCHOOL  
 Drawing: BUS LOOP LIGHTING  
 Drawn by: BB  
 Checked by: JRH  
 Project No.: 3203  
 Date: MAY 2019  
 Scale: NTS  
 Drawing No.: E-2



| # | QTY | PART NUMBER           | Description   | MATERIAL      |
|---|-----|-----------------------|---|---------------|
| 1 | 1   | T01PBP-0400-01-23     | Base Plate, 105mm ID., 178mm BCD, 19mm Thk.               | G40.21 300W   |
| 2 | 1   | T01PSH-00-PSS-4-0.125 | 4" OD Tubing, 3.175mm Thk, See Chart                      | ASTM A600C    |
| 3 | 1   | C04-HH-3X5-01-01      | 3X5 Handhole, 6.35 x 38.1 Ring, See Dwg. C04-HH-3X5-01-01 |               |
| 4 | 1   | T01P-TP-00-01-02      | Round Tenon Plate, 112mm OD, 6.35mm Thk.                  | G40.21 300W   |
| 5 | 1   | T01P-TM-PP            | Tenon, Sch. 40 Pipe, See Chart for O.D.                   | ASTM A53 GR.B |

| Valmont WCE 4" Round Straight Poles |                  |                          |        |                     |            |             |                            |         |         |         |         |      |
|-------------------------------------|------------------|--------------------------|--------|---------------------|------------|-------------|----------------------------|---------|---------|---------|---------|------|
| Base Reactions (Factored)           |                  |                          | Height | Pole Configurations |            |             | Max. EPA (m <sup>2</sup> ) |         |         |         |         |      |
| Shear Force [kN]                    | Axial Force [kN] | Overturning Moment [kNm] |        | Pole Configuration  | Height (m) | Weight (Kg) | q=410Pa                    | q=460Pa | q=500Pa | q=550Pa | q=600Pa |      |
| 2.7                                 | 1.1              | 7.3                      | 8'     | 4RS-8-x.x           | 2.4        | 24          | 1.67                       | 1.47    | 1.19    | 1.01    | 0.86    | 0.76 |
|                                     |                  |                          | 10'    | 4RS-10-x.x          | 3.0        | 29          | 1.33                       | 1.17    | 0.93    | 0.78    | 0.66    | 0.57 |
|                                     |                  |                          | 12'    | 4RS-12-x.x          | 3.7        | 33          | 1.07                       | 0.94    | 0.74    | 0.61    | 0.50    | 0.46 |
|                                     |                  |                          | 14'    | 4RS-14-x.x          | 4.3        | 38          | 0.88                       | 0.76    | 0.58    | 0.47    | 0.38    | 0.32 |
|                                     |                  |                          | 16'    | 4RS-16-x.x          | 4.9        | 43          | 0.72                       | 0.61    | 0.45    | 0.36    | 0.27    | 0.22 |
|                                     |                  |                          | 18'    | 4RS-18-x.x          | 5.5        | 48          | 0.58                       | 0.48    | 0.34    | 0.26    | 0.18    | 0.14 |
|                                     |                  |                          | 20'    | 4RS-20-x.x          | 6.1        | 52          | 0.46                       | 0.37    | 0.25    | 0.17    | 0.10    | 0.06 |
|                                     |                  |                          | 24'    | 4RS-24-x.x          | 7.3        | 61          | 0.26                       | 0.19    | 0.09    | -       | -       | -    |

| Suffix x.x | Description                              |
|------------|--|
| 0.0        | Top cap only                             |
| 0.1        | Top cap with one side-mounted fixture    |
| 0.2        | Top cap with two side-mounted fixtures   |
| 0.3        | Top cap with three side-mounted fixtures |
| 0.4        | Top cap with four side-mounted fixtures  |
| 1.0        | Direct mount on 102mm OD                 |
| 2.0        | Top tenon, 60mm O.D.                     |
| 2.5        | Top tenon, 73mm O.D.                     |
| 3.0        | Top tenon, 89mm O.D.                     |

**NOTES:**  
 DESIGN STANDARDS: CAN/CSA S6-06 - Canadian Highway Bridge Design Code.  
 WELDING: All welding per CSA W59 2 003.  
 ANCHOR BOLT: 19mm OD (3/4") x 610mm (24") Length, Grade F15 54-Gr.55, QTY: 4 per structure

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| REV. | DESCRIPTION                | DATE | BY | APPRO |
|------|----------------------------|------|----|-------|
| 01   | PROFESSIONAL ENGINEER SEAL |      |    |       |
| 02   |                            |      |    |       |
| 03   |                            |      |    |       |
| 04   |                            |      |    |       |
| 05   |                            |      |    |       |
| 06   |                            |      |    |       |
| 07   |                            |      |    |       |
| 08   |                            |      |    |       |
| 09   |                            |      |    |       |

**valmont**  
WEST COAST ENGINEERING

7904 River Road, Delta, B.C. Canada V4G 1E3  
 Ph: (604) 946-1236 Fax: (604) 946-1288  
 www.valmontwce.com

PROJECT: Standard Poles  
 4" Round, Standard Duty  
 8'x24'

SCALE: NTS

QTY: -

ISSUE: 1 OF 1

DATE: 20 OCT 2018

DRG NO: 4RS-(8-24)

|      |                     |       |             |
|------|---------------------|-------|-------------|
| No.: | 1 FOR CLIENT REVIEW | Date: | MAY 10-2019 |
|      | 2 REVISED MARKUPS   |       | MAY 14-2019 |

Description:

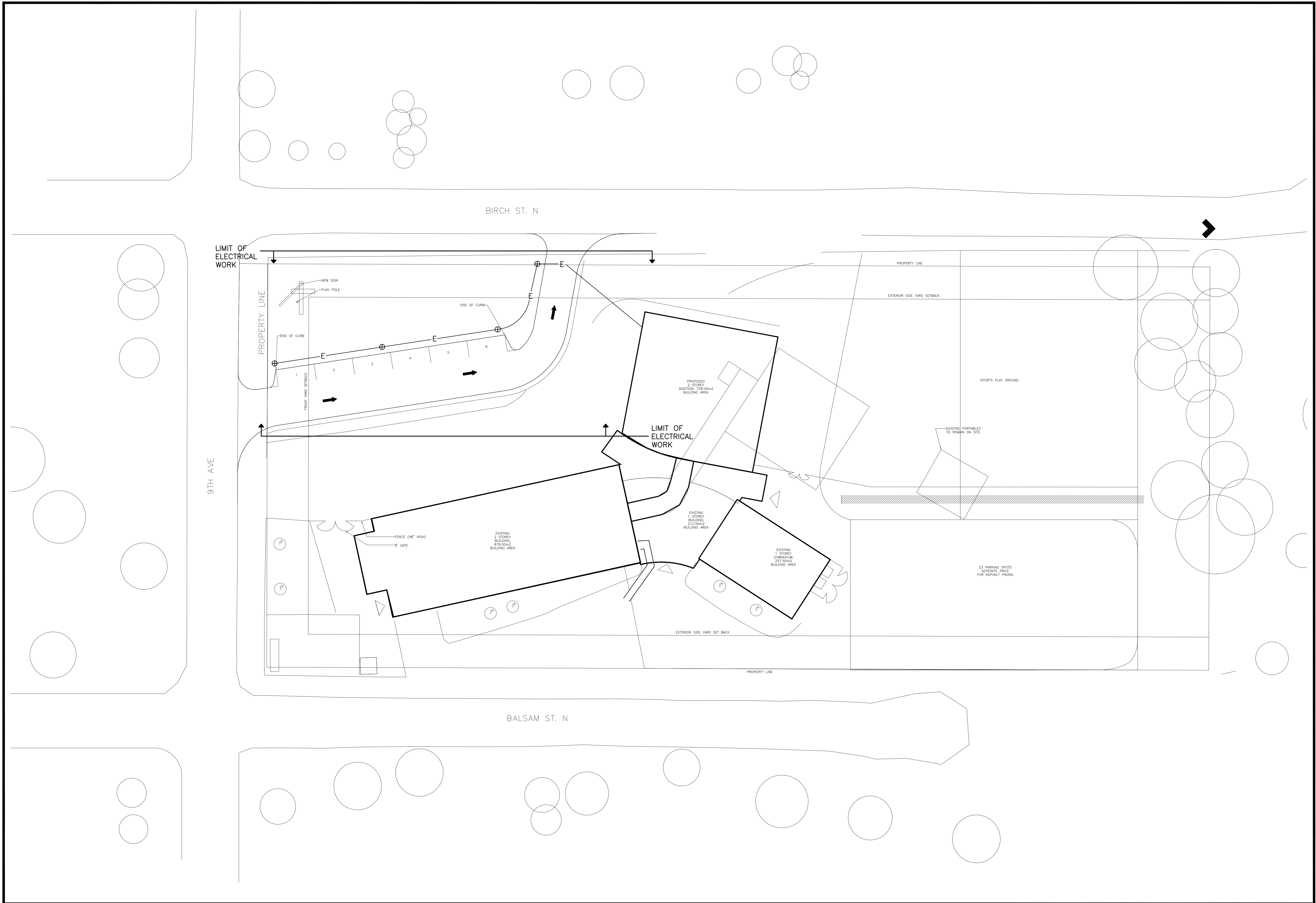
Item: Drawing Information: Date:

DESIGN REVIEW  
 PRELIMINARY DESIGN  
 CLIENT APPROVAL  
 PRE - TENDER SET  
 ISSUED FOR CONSTRUCTION  
 SITE PLAN AGREEMENT  
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 PROJECT REFERENCE ONLY  
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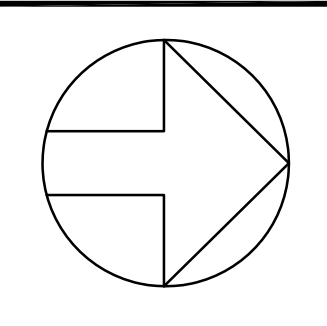
Project: POPE FRANCIS ELEMENTARY SCHOOL BUS LOOP LIGHTING  
 Drawing: LIGHT POLE SPECIFICATION

Drawn by: BB  
 Checked by: JRH  
 Project No.: 3203  
 Date: MAY 2019  
 Scale: NTS  
 Drawing No.: E-3



| No. | Description:      | Date:       |
|-----|-------------------|-------------|
| 1   | FOR CLIENT REVIEW | MAY 10-2019 |
| 2   | REVISED MARKUPS   | MAY 14-2019 |

| Item | Drawing Information:     | Date: |
|------|--------------------------|-------|
|      | DESIGN                   |       |
|      | PRELIMINARY DESIGN       |       |
| X    | CLIENT APPROVAL          |       |
|      | PRE - TENDER SET         |       |
|      | ISSUED FOR CONSTRUCTION  |       |
|      | SITE PLAN AGREEMENT      |       |
|      | BUILDING PERMIT ONLY     |       |
|      | ESTIMATE PURPOSES ONLY   |       |
|      | PERCEIVED PURPOSES ONLY  |       |
|      | 1:1, X-17 REFERENCE BOOK |       |



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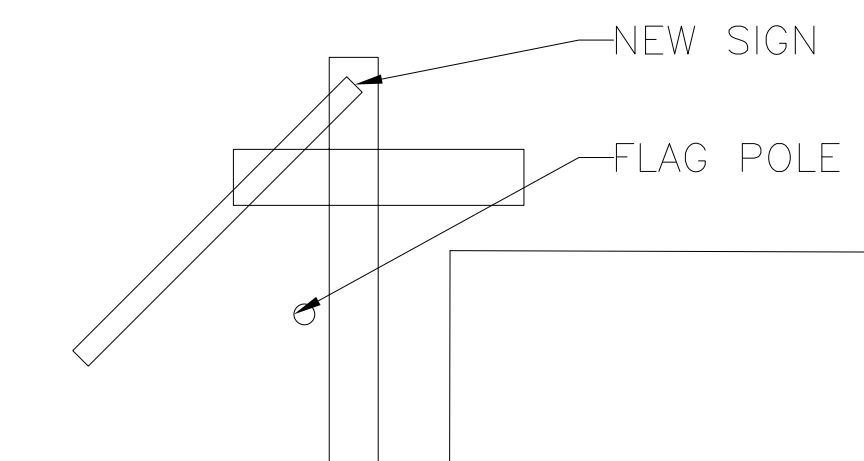
Project: POPE FRANCIS ELEMENTARY SCHOOL  
 BUS LOOP LIGHTING  
 Drawing: \_\_\_\_\_  
 Drawn by: BB  
 Checked by: JRH  
 Project No.: 3203  
 Date: MAY 2019  
 Scale: 1:16000  
 Drawing No.: \_\_\_\_\_

BIRCH ST. N

2C #10  
RW90+GND  
IN 1" PVC CONDUIT

SOURCE OF  
POWER FROM  
SCHOOL.  
CONFIRM DETAILS  
ON SITE

PROPERTY LINE



END OF CURB

PHOTOCELL

TIME  
CLOCK

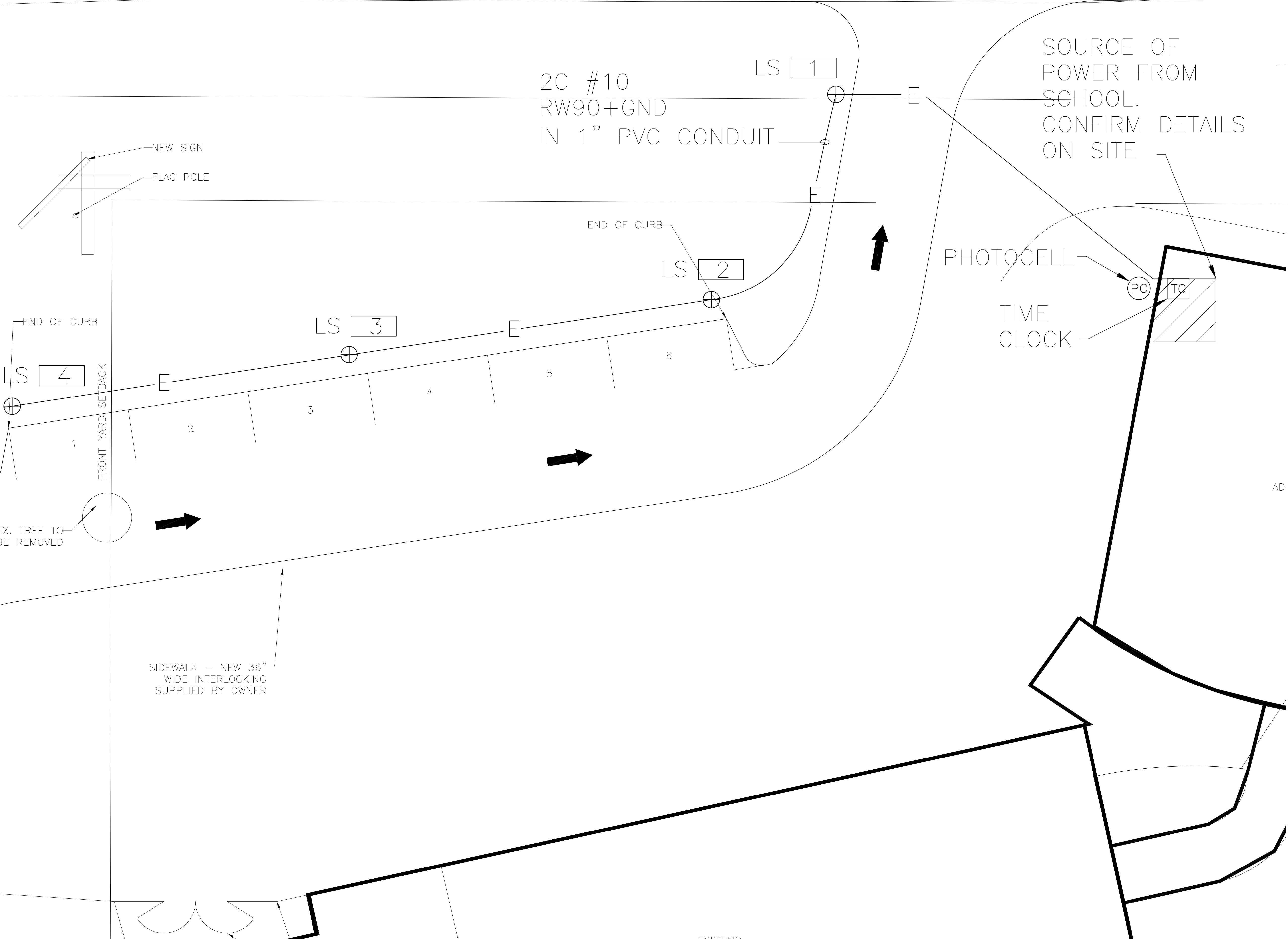
END OF CURB

FRONT YARD SETBACK

EX. TREE TO  
BE REMOVED

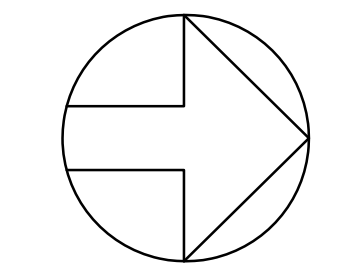
SIDEWALK - NEW 36"  
WIDE INTERLOCKING  
SUPPLIED BY OWNER

9TH AVE



| No. | Description       | Date        |
|-----|-------------------|-------------|
| 1   | FOR CLIENT REVIEW | MAY 10-2019 |
| 2   | REVISED MARKUPS   | MAY 14-2019 |

| Item | Drawing Information     | Date |
|------|-------------------------|------|
|      | DESIGN                  |      |
|      | PRELIMINARY DESIGN      |      |
|      | CLIENT APPROVAL         |      |
| X    | PRE - TENDER SET        |      |
|      | ISSUED FOR CONSTRUCTION |      |
|      | SITE PLAN AGREEMENT     |      |
|      | BUILDING PERMIT ONLY    |      |
|      | ESTIMATE PURPOSES ONLY  |      |
|      | PERMIT PURPOSES ONLY    |      |
|      | 11.2.17 REFERENCE BOOK  |      |



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info@consultingengineers.ca

Project: POPE FRANCIS ELEMENTARY SCHOOL  
BUS LOOP LIGHTING  
Drawing: BUS LOOP LIGHTING LAYOUT

Drawn by: BB  
Checked by: JRH  
Project No.: 3203  
Date: MAY 2019  
Scale: 1:6000  
Drawing No.: E-5

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