

DEPARTMENT FISHERIES AND OCEANS
OXYGEN INJECTION SYSTEM

BIODIVERSITY FACILITY
COLDBROOK, NOVA SCOTIA

Issued for Tender
November 7, 2014

LIST OF DRAWINGS:

ARCHITECTURAL / PIPELINE

- AP-1 SITE PLAN
- AP-2 FLOOR PLAN, CROSS SECTION AND SCHEDULE
- AP-3 ELEVATIONS AND WALL SECTION
- AP-4 PIPELINE PLAN, PROFILE AND DETAILS

MECHANICAL

- M-1 HEATING AND VENTILATION
- M-2 MECHANICAL SPECIFICATION

ELECTRICAL

- E-1 LIGHTING AND POWER PLANS
- E-2 SITE PLAN AND PANEL SCHEDULES
- E-3 ELECTRICAL SPECIFICATIONS

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GOVERNMENT OF CANADA
FISHERIES AND OCEANS
GOUVERNEMENT DU CANADA
PÊCHES ET OCÉANS

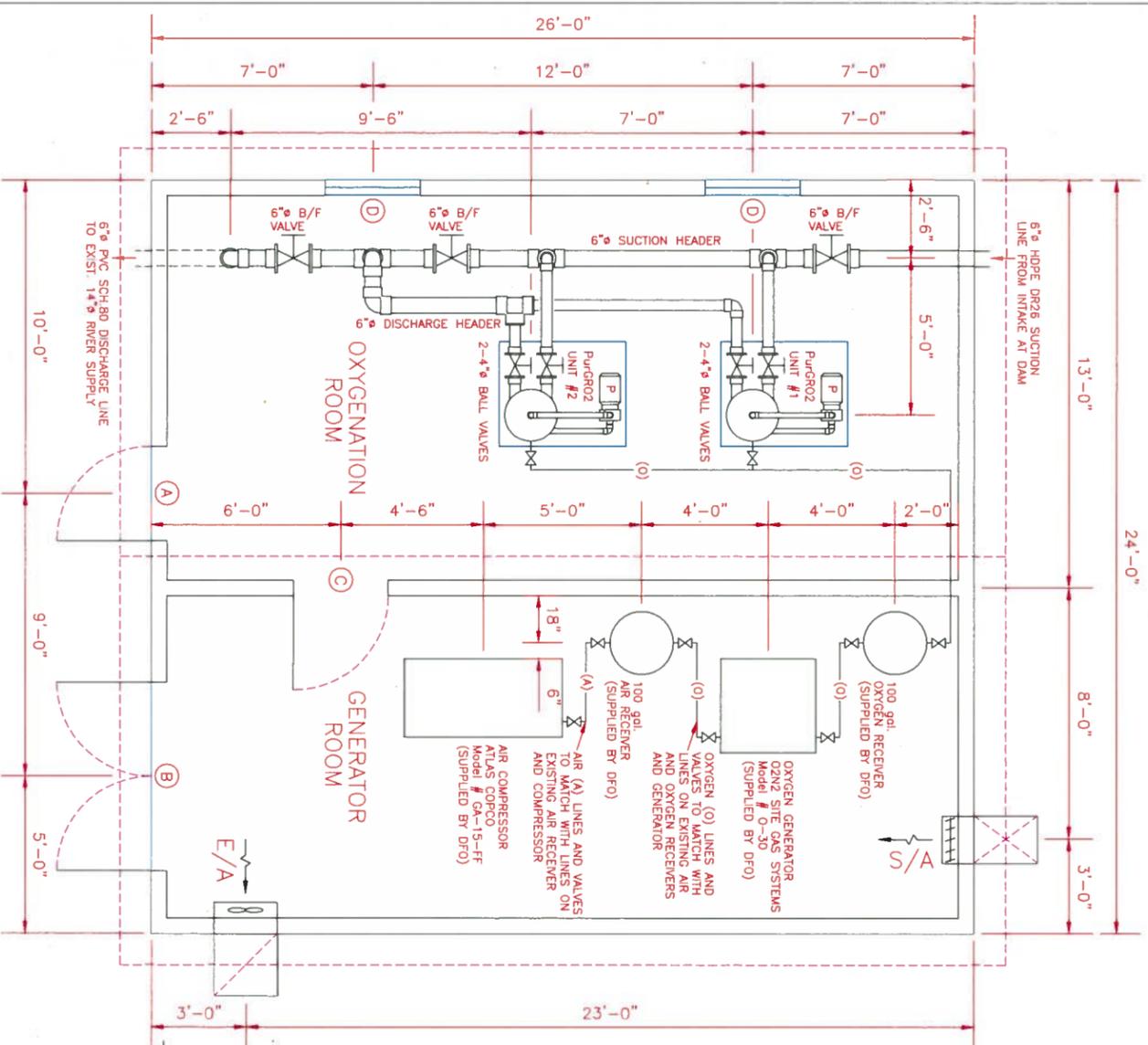
MECHANICAL & ELECTRICAL CONSULTANT



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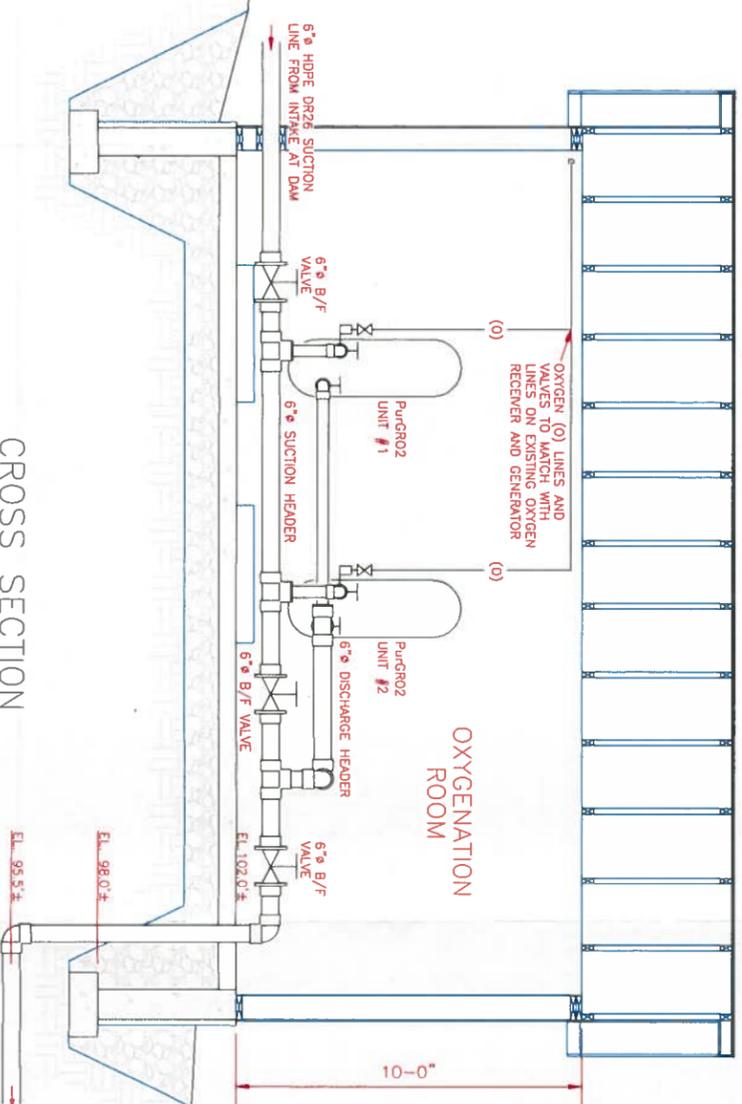
1. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH THE NATIONAL BUILDING CODE OF CANADA.
2. ALL CONCRETE MATERIALS AND METHODS OF CONCRETE AND METHODS OF TEST FOR CONCRETE SHALL CONFORM TO CAN-4032-1M77.
3. ALL CAST IN PLACE CONCRETE USED IN THE WORKS SHALL HAVE A MINIMUM 28 DAYS COMPRESSIVE STRENGTH OF 40 MPa (5800 PSI) AND A MAXIMUM WATER-TO-CEMENT RATIO OF 0.44. ALL CONCRETE SHALL BE PLACED AND COMPACTED TO A MINIMUM SLUMP OF 75 mm AT POINT AND TIME OF PLACEMENT.
4. FORMWORK SHALL BE TYPE 10 AND SHALL BE REINFORCED WITH 10mm (3/8") STEEL BARS. ALL JOINTS SHALL BE PROTECTED WITH GASKETS AND ADJUSTERS FOR CONCRETE SHALL COMPLY WITH CAN-4036.1. CHEMICAL ADHESIVES FOR CONCRETE SHALL COMPLY WITH CAN-4036.2.
5. ROOF TRUSSES TO BE DESIGNED TO THE FOLLOWING LOADS:
 - DEAD LOAD TOP CHORD = 4 PSF
 - DEAD LOAD BOTTOM CHORD = 16 PSF
 - 70% LIVE LOAD (TOP AND BOTTOM OF TRUSSES) = 20 PSF
 - WIND LOAD = 46 PSF
 - WIND LOAD = 23 PSF

| MARK | QUANTITY | SIZE | TYPE | REMARK |
|------|----------|-----------|------------------------------|--|
| A | 1 | 36"wx84"H | INSULATED METAL DOOR | METAL FRAME, HINGES, KEYPED CYLINDRICAL LOCKSET, THRESHOLD & WEATHER STRIPPING |
| B | 1 | 72"wx84"H | INSULATED METAL DOUBLE DOORS | METAL FRAME, HINGES, KEYPED CYLINDRICAL LOCKSET, THRESHOLD & WEATHER STRIPPING |
| C | 1 | 36"wx84"H | INSULATED METAL DOOR | METAL FRAME, HINGES & PASSAGE SET |
| D | 2 | 36"wx42"H | SINGLE HUNG VINYL WINDOW | SEALED DOUBLE LOW-E GLAZING |



FLOOR PLAN

SCALE
12'-6" 0 1' 2' 3'



CROSS SECTION

SCALE
12'-6" 0 1' 2' 3'

| No. | revisions | date | by |
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| | |
|---|-----------------------------------|
| designed by conçu par | HC |
| checked by vérifié par | HC |
| approved by approuvé par | |
| departmental approval approbation du département | HC |
| scale échelle | AS SHOWN date OCTOBER 01, 2014 |

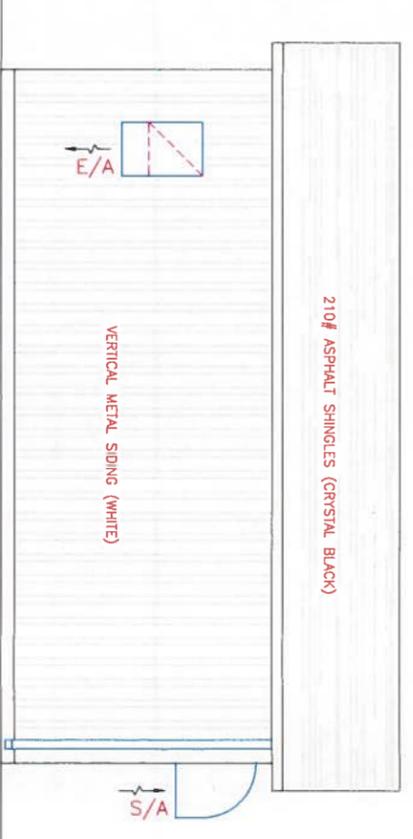
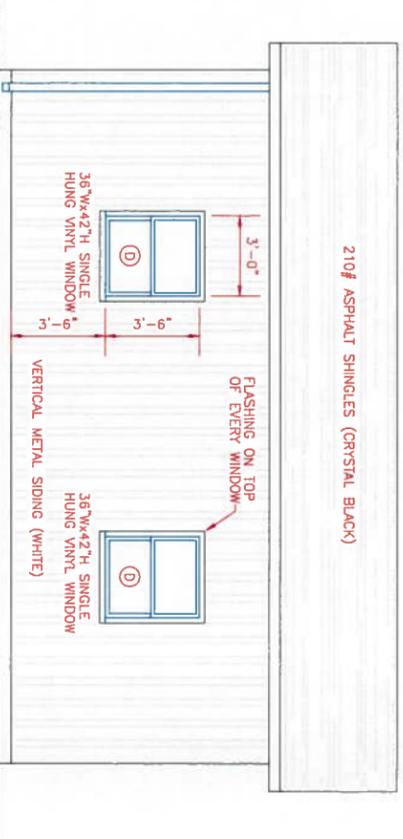
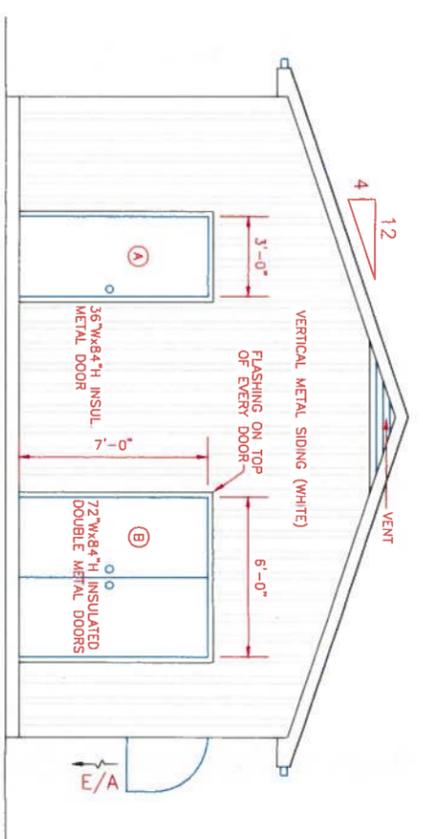
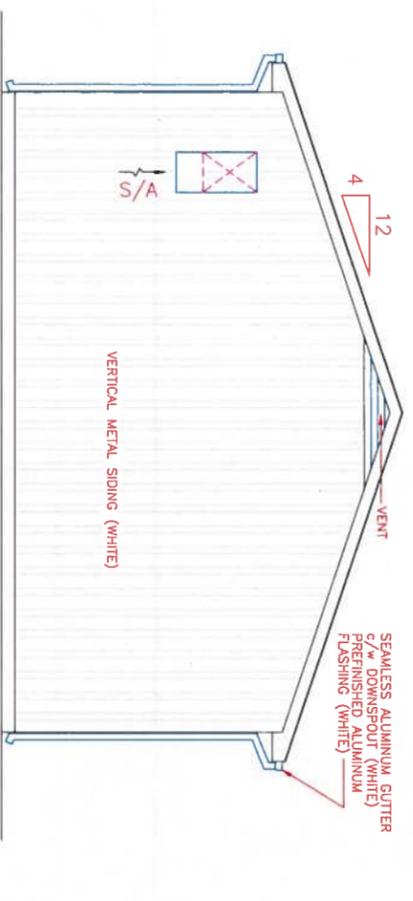
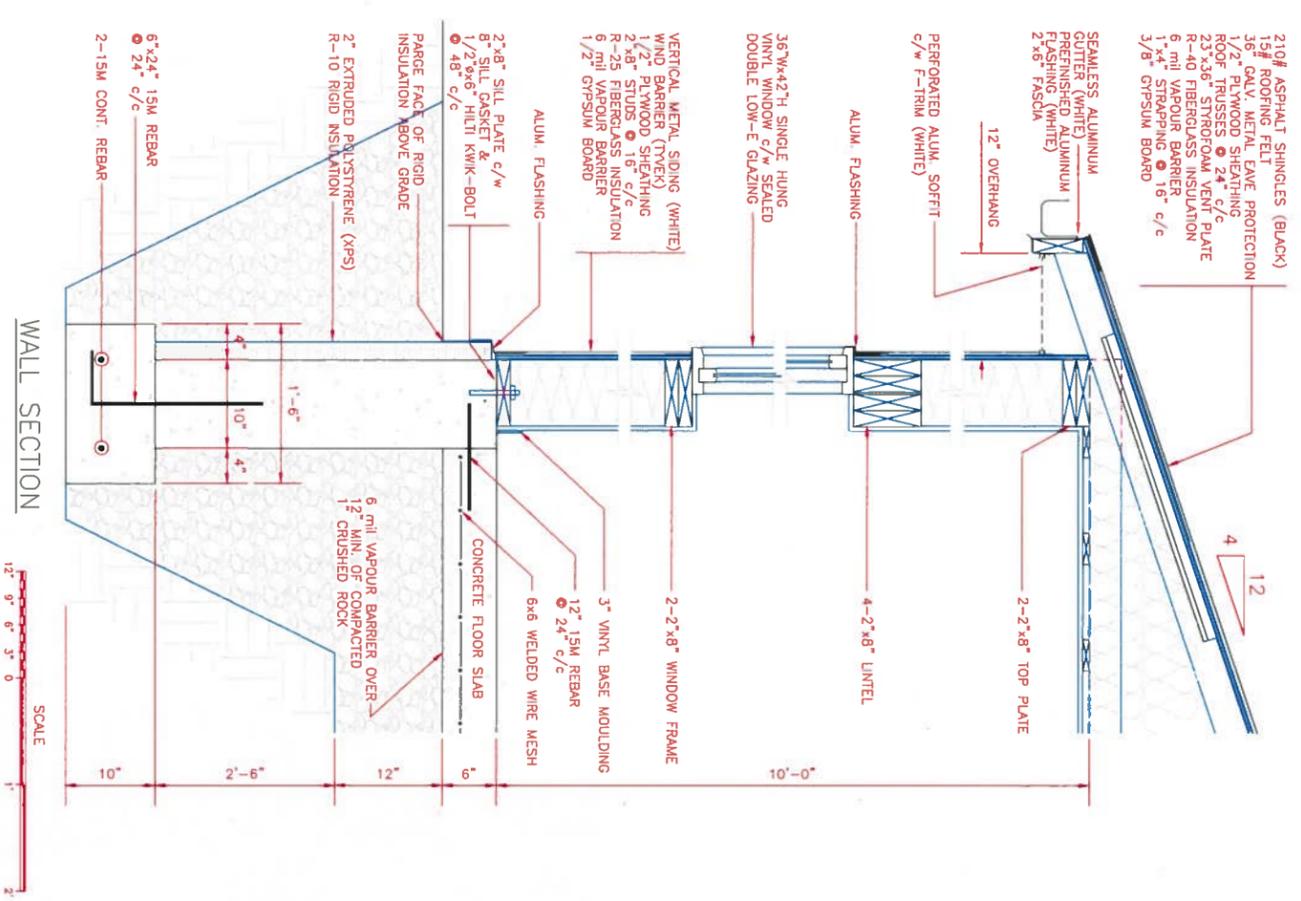


A detail not required
B no. de la feuille - où détail exigé
C no. de la feuille - où détail

Oxygen Injection System
Coldbrook
Biodiversity Facility

02 Bldg. Floor Plan,
Cross Section & Schedule

Sheet No. 2 of 4
AP-2



| No. | revisions | date | by |
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| designed by | HC |
| drawn by | HC |
| checked by | |
| verified by | |
| approved by | |
| departmental approval | |
| deposition au dépôt | |
| AS SHOWN | date |
| AS SHOWN | OCTOBER 01, 2014 |



Oxygen Injection System
 Coldbrook
 Biodiversity Facility

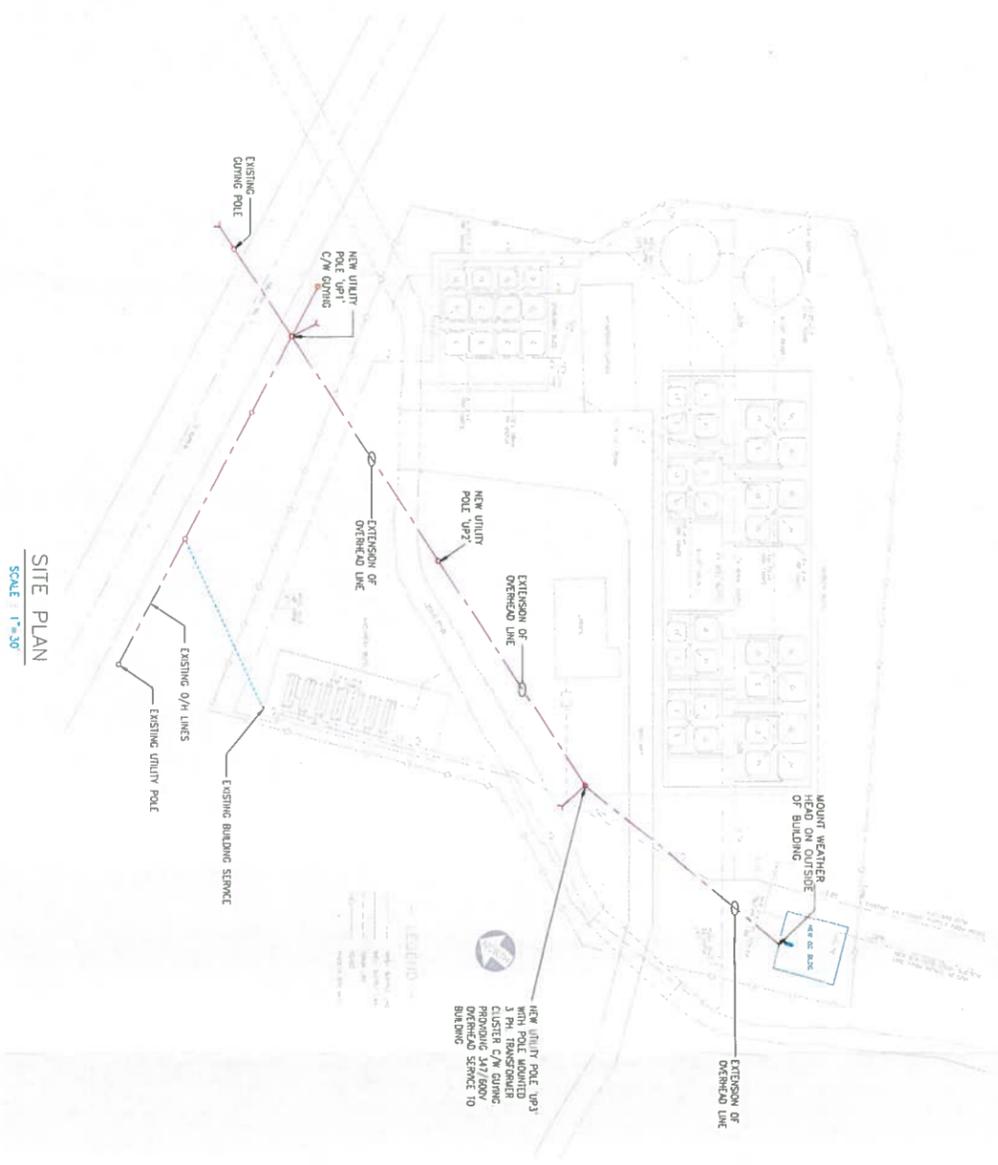
02 Bldg. Elevations
 & Wall Section
 sheet No. 3 of 4
 de la feuille 3 de 4
 AP-3

| No. | Bill. No. | Description | Load | Phase | Mounting | Surface |
|-----|-----------|-------------|--------|-------|----------|---------|
| 1 | 15/1P | Phase 201 | 1.50 A | A | 535 | ... |
| 2 | 15/1P | Phase 202 | 0 | B | 535 | ... |
| 3 | 15/1P | Phase 203 | 0 | C | 535 | ... |
| 4 | 15/1P | Phase 204 | 0 | A | 535 | ... |
| 5 | 15/1P | Phase 205 | 0 | B | 535 | ... |
| 6 | 15/1P | Phase 206 | 0 | C | 535 | ... |
| 7 | 15/1P | Phase 207 | 0 | A | 535 | ... |
| 8 | 15/1P | Phase 208 | 0 | B | 535 | ... |
| 9 | 15/1P | Phase 209 | 0 | C | 535 | ... |
| 10 | 15/1P | Phase 210 | 0 | A | 535 | ... |
| 11 | 15/1P | Phase 211 | 0 | B | 535 | ... |
| 12 | 15/1P | Phase 212 | 0 | C | 535 | ... |
| 13 | 15/1P | Phase 213 | 0 | A | 535 | ... |
| 14 | 15/1P | Phase 214 | 0 | B | 535 | ... |
| 15 | 15/1P | Phase 215 | 0 | C | 535 | ... |
| 16 | 15/1P | Phase 216 | 0 | A | 535 | ... |
| 17 | 15/1P | Phase 217 | 0 | B | 535 | ... |
| 18 | 15/1P | Phase 218 | 0 | C | 535 | ... |
| 19 | 15/1P | Phase 219 | 0 | A | 535 | ... |
| 20 | 15/1P | Phase 220 | 0 | B | 535 | ... |
| 21 | 15/1P | Phase 221 | 0 | C | 535 | ... |
| 22 | 15/1P | Phase 222 | 0 | A | 535 | ... |
| 23 | 15/1P | Phase 223 | 0 | B | 535 | ... |
| 24 | 15/1P | Phase 224 | 0 | C | 535 | ... |
| 25 | 15/1P | Phase 225 | 0 | A | 535 | ... |
| 26 | 15/1P | Phase 226 | 0 | B | 535 | ... |
| 27 | 15/1P | Phase 227 | 0 | C | 535 | ... |
| 28 | 15/1P | Phase 228 | 0 | A | 535 | ... |
| 29 | 15/1P | Phase 229 | 0 | B | 535 | ... |
| 30 | 15/1P | Phase 230 | 0 | C | 535 | ... |
| 31 | 15/1P | Phase 231 | 0 | A | 535 | ... |
| 32 | 15/1P | Phase 232 | 0 | B | 535 | ... |
| 33 | 15/1P | Phase 233 | 0 | C | 535 | ... |
| 34 | 15/1P | Phase 234 | 0 | A | 535 | ... |
| 35 | 15/1P | Phase 235 | 0 | B | 535 | ... |
| 36 | 15/1P | Phase 236 | 0 | C | 535 | ... |
| 37 | 15/1P | Phase 237 | 0 | A | 535 | ... |
| 38 | 15/1P | Phase 238 | 0 | B | 535 | ... |
| 39 | 15/1P | Phase 239 | 0 | C | 535 | ... |
| 40 | 15/1P | Phase 240 | 0 | A | 535 | ... |
| 41 | 15/1P | Phase 241 | 0 | B | 535 | ... |
| 42 | 15/1P | Phase 242 | 0 | C | 535 | ... |

Notes:
 * Indicates Breaker To Be Complete With Hand-Locking Device

| No. | Bill. No. | Description | Load | Phase | Mounting | Surface |
|-----|-----------|-------------|--------|-------|----------|---------|
| 1 | 15/1P | Phase 201 | 1.50 A | A | 535 | ... |
| 2 | 15/1P | Phase 202 | 0 | B | 535 | ... |
| 3 | 15/1P | Phase 203 | 0 | C | 535 | ... |
| 4 | 15/1P | Phase 204 | 0 | A | 535 | ... |
| 5 | 15/1P | Phase 205 | 0 | B | 535 | ... |
| 6 | 15/1P | Phase 206 | 0 | C | 535 | ... |
| 7 | 15/1P | Phase 207 | 0 | A | 535 | ... |
| 8 | 15/1P | Phase 208 | 0 | B | 535 | ... |
| 9 | 15/1P | Phase 209 | 0 | C | 535 | ... |
| 10 | 15/1P | Phase 210 | 0 | A | 535 | ... |
| 11 | 15/1P | Phase 211 | 0 | B | 535 | ... |
| 12 | 15/1P | Phase 212 | 0 | C | 535 | ... |
| 13 | 15/1P | Phase 213 | 0 | A | 535 | ... |
| 14 | 15/1P | Phase 214 | 0 | B | 535 | ... |
| 15 | 15/1P | Phase 215 | 0 | C | 535 | ... |
| 16 | 15/1P | Phase 216 | 0 | A | 535 | ... |
| 17 | 15/1P | Phase 217 | 0 | B | 535 | ... |
| 18 | 15/1P | Phase 218 | 0 | C | 535 | ... |
| 19 | 15/1P | Phase 219 | 0 | A | 535 | ... |
| 20 | 15/1P | Phase 220 | 0 | B | 535 | ... |
| 21 | 15/1P | Phase 221 | 0 | C | 535 | ... |
| 22 | 15/1P | Phase 222 | 0 | A | 535 | ... |
| 23 | 15/1P | Phase 223 | 0 | B | 535 | ... |
| 24 | 15/1P | Phase 224 | 0 | C | 535 | ... |

Notes:
 * Indicates Breaker To Be Complete With Hand-Locking Device



SITE PLAN
 SCALE 1"=30'

| No. | Revisions | date | by |
|-----|------------------------|----------|-----|
| 1 | ISSUED FOR REVIEW | 29/08/14 | RJT |
| 2 | ISSUED FOR TENDER | 18/09/14 | RJT |
| 3 | RE-ISSUED FOR TENDER | 07/11/14 | RJT |
| 4 | RE-ROUTE UTILITY POLES | 24/02/15 | HC |

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| | |
|-----------------------|----------------|
| designed by | RJT |
| drawn by | RJT |
| checked by | RJR |
| approved by | RJR |
| departmental approval | HC |
| scale | AS SHOWN |
| date | SEPT. 10, 2014 |

A detail no. - au détail no.
 B no. de la feuille - au détail no.
 C sheet no. - autre détail no.
 no. de la feuille - du détail no.

Oxygen Injection System
 Coldbrook
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SITE PLAN AND
 PANEL SCHEDULES

