

PLANNING AND DEVELOPMENT SERVICES

TO: Municipal Planning Commission

DATE: November 26, 2020

DIVISION: 1

APPLICATION: PRDP20203205

SUBJECT: Development Item: Communications Facility (Type C)

USE: Discretionary use, with no Variances

APPLICATION: Commercial Communication Facility, (Type C) and associated equipment shelter.

GENERAL LOCATION: Located at the northwest junction of Township Road 234 and Wintergreen Road.

LAND USE DESIGNATION: Business, Recreation District (B-REC) under Land Use Bylaw C-8000-2020.

ADMINISTRATION RECOMMENDATION: Administration recommends Approval in accordance with Option #1.

VARIANCE SUMMARY:

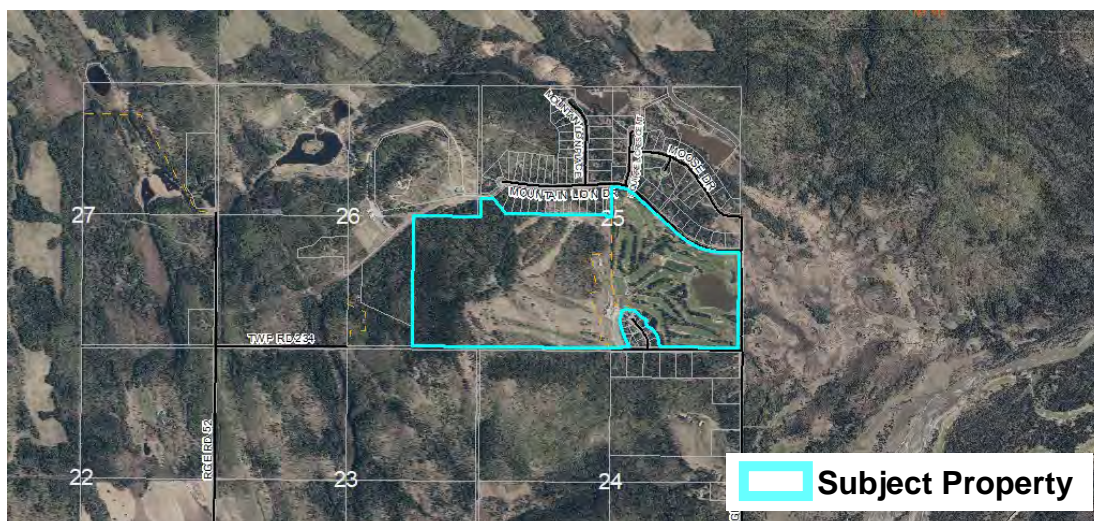
None required.

OPTIONS:

Option #1: THAT Development Permit Application PRDP20203205 be approved with the conditions noted in the Development Permit Report, attached.

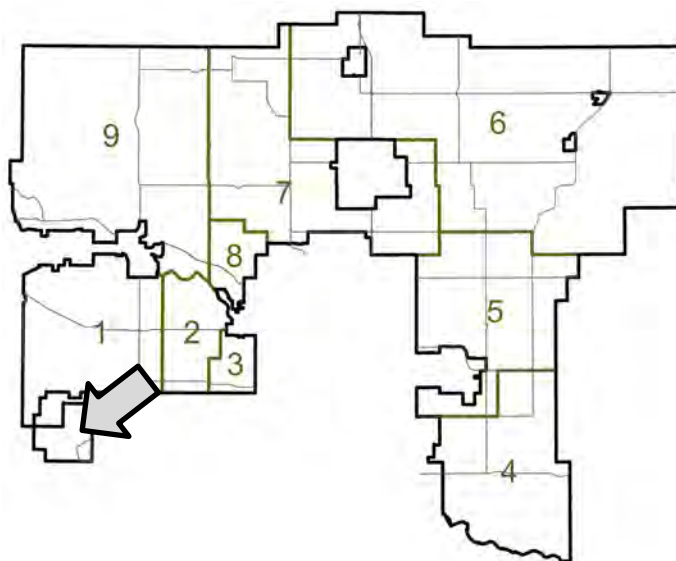
Option #2: THAT Development Permit Application PRDP20203205 be refused as per the reasons noted.

AIR PHOTO & DEVELOPMENT CONTEXT:



Administration Resources

Oksana Newmen - Planning and Development Services





DEVELOPMENT PERMIT REPORT

Application Date: October 7, 2020	File: 03925001
Application: PRDP20203205	Applicant/Owner: Scoot Telecom Services Ltd. (Scott Pigeon) / Resorts of the Canadian Rockies
Legal Description: Block A, Plan 8310059; S-25-23-5-W5M	General Location: Located at the northwest junction of Township Road 234 and Wintergreen Road.
Land Use Designation: Business, Recreation District (B-REC) under Land Use Bylaw C-8000- 2020.	Gross Area: ± 159.45 hectares (± 394.02 acres)
File Manager: Oksana Newmen	Division: 1

PROPOSAL:

The proposal is for a Commercial Communication Facility, Type C and associated equipment shelter. *Note, the application was assessed in accordance with Land Use Bylaw C-8000-2020, as the application was received after September 8, 2020.*

Scott Telecom Services Ltd., on behalf of Xplornet Communications Inc., is proposing to construct a 30.00 m (98.42 ft.), lattice-style, self-support tower with projecting antennas.

The communications facility will be composed of the following:

- 30.00 m (98.42 ft.) lattice-style tower, with projecting antennas (four proposed);
- 2.00 m x 1.00 m x 1.00 m equipment cabinet on 1.83 m (6.00 ft.) by 1.83 m (6.00 ft.) concrete pad, 2.00 m² (21.53 ft²);
- 2.134 m (7.00 ft.) tall chain-link fence with 0.30 m (0.98 ft.) height of three-strand barbed wire; and
- 225.00 m² (2,421.88 ft²) leased area.

The proposed tower will be located in the central-west portion of the site, as shown on the site plan, with accessible via a 10.00 m (32.81 ft.) wide access route, from an approach off Township Road 234 (paved). The proposed tower will replace two existing towers nearby, the first 0.08 km north of the proposed tower, and measuring 20.00 m (65.61 ft.) in height, and the second, located approximately 0.75 km to the southwest, and measuring 30.00 m (98.42 ft.) in height.

The Federal Minister of Industry is the approving authority for telecommunication antenna structures and requires that the local land use authority and the public be consulted for input regarding the proposed placement of these structures. The County reviews the proposed facility against Administrative Policy 308, *Commercial Communications Facilities*, and a development permit (concurrence) or refusal (non-concurrence) is issued. The County cannot prevent a proponent from ultimately gaining permission from Industry Canada to install a telecommunications antenna on any lands; privately held, County owned, or otherwise.

Land Use Bylaw (C-8000-2020):*Definitions:*

- *Communications Facility (Type C)*” means a commercial communications facility with either a tower or pole structures greater than 20.00 meters (65.62 feet) in height, to which antennae are mounted for the purpose of telecommunications broadcast or signal transmission.

*Section 378 Business, Recreation District (B-REC)**Discretionary Uses**Communications Facility, (Type C)**381 Minimum Building Setbacks:*

Front Yard: 30.00 m (98.43 ft.) from County roads

- Proposed (east side): 1.36 km (0.85 miles.)

Side Yard: 6.00 m (19.69 ft.) from other parcels

- Proposed (north side): 324.00 m (1,062.99 ft.)
- Proposed (south side): 480.00 m (1,574.80 ft.)

Rear Yard: 15.00 m (49.21 ft.) from other parcels

- Proposed (west side): 654.00 m (2,145.67 ft.)

Policy 308:*Definitions:*

- **“commercial communication facility”** means a facility that is used for transmission of wireless communication signals and includes Type A, B, and C facilities. These facilities include telecommunications towers, antennae, and the buildings that house their supporting equipment. These facilities are used to transmit radio-frequency signals, microwave signals, or other communications energy;
- **“Type C facility”** means either a tower or pole structure greater than 20 metres (65.62 feet) in height to which antennae are mounted for the purpose of telecommunications broadcast or signal transmission.

Public Notification

8. *The applicant must notify the public of the proposed development prior to the submission of any development permit application for Type A, Type B, or Type C facilities.*
 - The Applicant provided copies of published notifications in the Rocky View Weekly, dated August 11, 2020 and August 18, 2020.
9. *The applicant must distribute the public notification to all properties within:*
 - (3) *1,600 metres of the proposed Type C facility*
 - The Applicant circulated a notification package to nearby landowners within 1,600 m of the proposed tower location, in addition to the two newspaper notices on August 11 and 18, 2020.
10. *The public notification packages must include all relevant information related to the proposed commercial communications facility, including a location map, elevation drawings, a written description, and the applicant’s contact information.*

- The public notification included all relevant information, including a location map, proposed elevation photograph depicting the visual impact, description, and contact information. Notification timelines were from August 4, 2020 to September 16, 2020

11. *The public notification period must last at least 21 days.*

- The mailed notification timelines was from August 4, 2020 to September 16, 2020.

Application Submission

12. *Planning and Development Services cannot consider a development permit application for a commercial communication facility (Type A, B, or C) unless it is a listed use in the Land Use Bylaw for the applicable land use district.*

- Communications Facility (Type C) is listed as a Discretionary Use in the Business, Recreation District.

13. *The applicant:*

- (1) *notifies the County's Emergency Services department with plans for proposed Type B or Type C facilities and, where possible, coordinates the location of emergency equipment on the proposed facility with Emergency Services;*
 - (2) *submits a development permit application in accordance with relevant legislation, bylaws, and policies; and*
 - (3) *pays all applicable fees as set out in the Master Rates Bylaw.*
- The application was circulated to Fire Services, and no response was received. The development permit application was received, and payment of fees per the Master Rates Bylaw has occurred.

Evaluation Criteria for Type B and Type C Facilities

18. *Planning and Development Services evaluates proposals for Type B and Type C facilities based on the following criteria:*

- (1) *In consideration of the rural vistas of the County, Planning and Development favours facility locations that protect prominent natural or cultural features and views;*
 - The tower will replace an existing tower in almost the same place, though it is 10.00 m taller than the existing tower to be removed. The applicant provided visual rendering of the proposed tower. No prominent or cultural features and views appear to be significantly impacted, as the site is not identified to be located in an area of historical resources, and the base of the tower is located in an area surrounded by a forested area.
- (2) *Any facility proposed on a site abutting existing dwellings must be located a minimum of 500 metres from those dwellings;*
 - There are five dwellings within 500.00 m (1,640.41 ft.) of the proposed tower, with the closest dwelling being approximately 440.00 m (1,443.56 ft.) to the north-northeast. There are two lots that appear undeveloped at this time, which may result in homes being constructed within this 500.00 m (1,640.41 ft.) setback.
- (3) *The minimum distance between a proposed tower and an existing or future road allowance must be at least half of the height of the proposed tower. This criteria may be relaxed at the discretion of the Development Authority; and*

- The closest road allowance is approximately 470.00 m (1,541.99 ft.) to the south (Township Road 234). Half of the height of the proposed tower is 30.00 m (98.42 ft.). As such, the minimum distance between the proposed tower and road allowance well exceeds the 15.00 m (49.21 ft.) minimum per policy.
- (4) *The minimum distance between the proposed Type B or Type C facility and another Type B or C facility must be two kilometres.*
- The closest communications facilities are the two existing towers being replaced by the proposed tower. The next nearest tower is approximately 4.00 km to the south.
19. *Co-location of communications equipment on Type B and Type C facilities is preferred whenever possible.*
- As there are no other towers proximate to the site, colocation is not feasible. The Applicants have noted their willingness to provide colocation opportunity to others in the future as feasible, providing the letters sent to other providers offering space on the proposed tower.
20. *Where applicable, Type B and Type C facilities must comply with Transport Canada's painting and lighting requirements for aeronautical safety. In all other locations, Type B and Type C facilities must be lit with the lowest intensity light possible.*
- The Applicants do not anticipate marking or lighting will be required, however, the federal authorities Transport Canada and NAV Canada will make the final determination.

Overall Visual Impact Evaluation Criteria

21. *The proposed commercial communications facility must be designed to limit the overall visual impact to the area.*
- The Applicants provided design details as well as a photo-simulation showing the visual impact.
22. *Planning and Development Services evaluates the design of the proposed commercial communications facility based on the following criteria:*
- (1) *All towers and pole structures should be screened or concealed using innovative design strategies or camouflage, to the satisfaction of the Development Authority. The use of landscaping, fences, and architectural features on and around the equipment compounds, shelters, and cabinets associated with the proposed development should contribute to these structures blending in with their surrounding environment.*
 - (2) *Proposed commercial communications facilities that are neutral in colour and blend in with the surroundings are preferred. Mitigation of the proposed development's visual aspects may include painting, appropriate and effective decorative fencing, screening, and landscaping. The proposed commercial communications facility should not visually interfere with the sky or landscape, given Alberta's changing seasons, to the satisfaction of the Development Authority.*
 - (3) *Planning and Development Services may consider a proposed commercial communications facility as stealthy or camouflaged if the design of the facility blends its appearance into and with the surrounding lands to the satisfaction of the department. Planning and Development Services will evaluate facilities based on the massing, form, colour, material, and other decorative elements.*
- The equipment shelter and base of the tower will not be visible, with only the upper portion of the proposed tower emerging from the top of the forested area. The tower is

neutral in colour, lattice-style, self-support tower, which provides space between the structure elements of the tower and allows for a narrower tower at higher elevations. The proposed tower design offers less visual obstruction at higher elevations and allows light to pass through the individual structural elements. The Applicant has not identified any specific design features to limit the overall visual impact to the area.

STATUTORY PLANS:

The subject land falls within the Greater Bragg Creek Area Structure Plan which provides the following direction on the proposed use:

6.1.5 Utilities

- d) *Wherever possible, the location of cellular or telecommunication facilities should be incorporated into a common facility or concentrated on limited sites.*
- The site is not located in an area identified with historic resources, and is located surrounded by a forested area, which aids in minimizing visual impacts of the lower portion of the tower. There are no nearby towers for colocation opportunities, with the nearest tower approximately 4 km away.

As well, the application was considered under Administrative Policy 308, *Commercial Communications Facilities*, as evaluated in the preceding section of this report.

INSPECTOR'S COMMENTS:

- Inspection not completed at the time of this report

CIRCULATIONS:

Agricultural and Environmental Services

- No comments received

ATCO Gas (October 19, 2020)

- No objection

Building Services (November 13, 2020)

- Advisory Condition – Any accessory buildings less than 10 sq. m in building area may require a building permit if the Building Services Department determines it creates a hazard
- **ABC articles for applicant/designer information**
 - 1.1.1.1. Application of this Code
 - 5) This Code does not apply to
 - b) utility towers and poles, television and radio or other communications antennas or towers, except that loads resulting from those located on or attached to a *building* shall be included in the *building* design,
 - f) an accessory *building* not greater than 10 m² in *building area* that does not create a hazard,



Corporate Business Development (October 16, 2020)

- Corporate Business Development considers this application to be consistent Councils Strategic Plan in direct relation to businesses, seeing that business are able to thrive within the County.
- Also, the applicants recognition and commitment to all current and future “collocation” opportunities will benefit the County business community by creating a more competitive marketplace in the telecommunications sector, local to this tower’s installation and expected service area.

Development Compliance

- No comments received

Economic Development (October 16, 2020)

- Supportive of application, mirroring Corporate Business Development comments.

Fire Services & Emergency Management (November 12, 2020)

- No comments.

Planning and Development Services – Engineering Review (October 20, 2020)

Geotechnical

- There are steep slopes on the subject land, however, the steep slopes can be avoided.

Transportation

- There is an existing road approach off of TWP Rd 234 providing access to the subject land.
- Prior to issuance, the applicant/owner will be required to contact County Road Operations to determine if any permits or if a Road Use Agreement is required during the construction of the proposed development.
- Prior to issuance, the applicant/owner will be required to pay the transportation offsite levy, as per the applicable TOL bylaw at time of DP issuance, over the development area.

Sanitary/Waste Water

- Engineering has no requirements at this time.

Water Supply And Waterworks

- Engineering has no requirements at this time.

Storm Water Management

- Engineering has no requirements at this time.

Environmental

- As an advisory condition, the applicant/owner will be required to obtain all applicable AEP approvals should the development directly impact any wetlands.

Transportation Services

- No comments received

Utility Services

- No comments received



Wintergreen Woods Water Utility

- No comments received

OPTIONS:

Option # 1: (this would allow the proposed development)

APPROVAL, subject to the following conditions:

Description:

1. That a *Commercial Communication Facility, Type C*, may be situated on the subject parcel in accordance with the approved Site Plan and details submitted with the application, and includes the following:
 - i. Placement of one self-supporting telecommunications tower, approximately 30.00 m (98.42 ft.) high; tower base area: 225.00 sq. m (2,421.87 sq. ft.);
 - ii. Placement of equipment shelter; 2.00 m² (21.53 ft²) in area;
 - ii. Placement of security fencing.

Permanent:

2. That the Applicant/Owner shall contact County Road Operations with haul details for materials and equipment needed during construction/site development to confirm if Road Use Agreements will be required for any hauling along the County road system and to confirm the presence of County road ban restrictions.
3. That no topsoil shall be removed from the site.
4. That the Commercial Communication Facility shall be neutral in colour and blend with the surroundings, mitigation of the visual aspects of the facility should include painting, decorative fencing, screening, landscaping, and should not clash with the sky or landscape.
5. That should the Commercial Communication Facility become deactivated or unused; the Commercial Communication Facility shall be removed from the parcel within six months of becoming deactivated or unused.
6. That where possible, light shielding shall be considered to minimize the impact of the lighting to adjacent communities.

Advisory:

7. That a Building Permit, if applicable, shall be obtained through Building Services, prior to any construction taking place.
8. That any other federal, provincial or County permits, approvals, and/or compliances are the sole responsibility of the Applicant/Owner.
9. That if the development authorized by this Development Permit has not commenced with reasonable diligence within 12 months from the date of issue, and completed within 24 months of the issue, the permit is deemed to be null and void, unless an extension to this permit shall first have been granted by the Development Authority.

Note: The Applicant/Owner shall be responsible for all Alberta Environment and Park approvals/compensation if any wetland onsite, classified under the Water Act, that is impacted or disturbed by the proposed development.



Option #2: (this would not allow the development to proceed)

REFUSAL, for the following reasons:

1. That in the opinion of the Municipal Planning Commission, the development unduly interferes with the amenities of the neighbourhood and materially interferes with and affects the use, enjoyment, and value of neighbouring parcels of land.





LAND TITLE CERTIFICATE

S
LINC SHORT LEGAL TITLE NUMBER
0028 294 775 8310059;A 011 272 509 +10

LEGAL DESCRIPTION

PLAN 8310059
BLOCK "A"
CONTAINING 183.64 HECTARES (453.78 ACRES) MORE OR LESS
EXCEPTING THEREOUT:
ALL THAT PORTION OF SAID BLOCK "A" LYING TO THE NORTH
AND WEST OF THE NORTH AND WEST LIMITS OF BLOCK ONE (1)
AND TO THE NORTH OF THE NORTH LIMIT OF MOUNTAIN LION
DRIVE ALL ON PLAN 8310059 CONTAINING 19.98 HECTARES
(49.38 ACRES) MORE OR LESS

PLAN	NUMBER	HECTARES	(ACRES)	MORE OR LESS
ROAD	8711526	0.373	0.92	
CONDOMINIUM	0010219	3.83	9.46	

EXCEPTING THEREOUT ALL MINES AND MINERALS

ATS REFERENCE: 5;5;23;25;N
ATS REFERENCE: 5;5;23;25;S
ATS REFERENCE: 5;5;23;26;SE
ESTATE: FEE SIMPLE

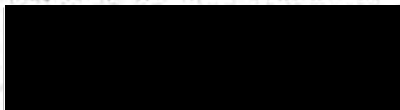
MUNICIPALITY: ROCKY VIEW COUNTY

REFERENCE NUMBER: 001 029 017 +15

REGISTERED OWNER(S)				
REGISTRATION	DATE(DMY)	DOCUMENT TYPE	VALUE	CONSIDERATION
011 272 509	17/09/2001	ORDER		ORDER

OWNERS

RESORTS OF THE CANADIAN ROCKIES INC.



ENCUMBRANCES, LIENS & INTERESTS

PAGE 2

011 272 509 +10

REGISTRATION

NUMBER	DATE (D/M/Y)	PARTICULARS
7518JN .	31/08/1966	RESTRICTIVE COVENANT
771 140 006	07/10/1977	RESTRICTIVE COVENANT
771 140 010	07/10/1977	CAVEAT RE : DEFERRED RESERVE CAVEATOR - THE CALGARY REGIONAL PLANNING COMMISSION.
781 175 354	31/10/1978	EASEMENT "OVER LOTS 32, 33 AND 34 IN BLOCK 1 ON PLAN 7711384 FOR BENEFIT OF BLOCK 'A' ON PLAN 7711384 (IN W1/2 OF SEC.25) (PORTION AS DESCRIBED)" (DATA UPDATED BY: 031194193)
811 028 161	13/02/1981	CAVEAT RE : DEFERRED RESERVE CAVEATOR - THE CALGARY REGIONAL PLANNING COMMISSION.
851 180 210	25/10/1985	CAVEAT RE : EASEMENT CAVEATOR - CANADIAN WESTERN NATURAL GAS COMPANY LIMITED. [REDACTED] [REDACTED] AGENT - JOHN M WILLISHER
861 113 114	11/07/1986	UTILITY RIGHT OF WAY GRANTEE - 330025 ALBERTA LTD. "PORTIONS AS DESCRIBED IN INSTRUMENT"
901 178 668	10/07/1990	CAVEAT RE : LEASE , ETC. CAVEATOR - WINTERGREEN GOLF & COUNTRY CLUB. C/O LEONARD,M ZENITH ZENITH HOOKENSON BOYLE [REDACTED] [REDACTED] [REDACTED] AGENT - LEONARD M ZENITH (DATA UPDATED BY: CHANGE OF ADDRESS 951065864) (DATA UPDATED BY: CHANGE OF ADDRESS 951075550) (DATA UPDATED BY: TRANSFER OF CAVEAT 011272510) (DATA UPDATED BY: TRANSFER OF CAVEAT 011300059)
911 131 601	20/06/1991	UTILITY RIGHT OF WAY (CONTINUED)

ENCUMBRANCES, LIENS & INTERESTS

PAGE 3
011 272 509 +10

REGISTRATION

NUMBER DATE (D/M/Y) PARTICULARS

GRANTEE - WINTERGREEN WOODS WATER UTILITY LTD.

921 060 001 18/03/1992 CAVEAT

RE : LEASE

CAVEATOR - WINTERGREEN GOLF & COUNTRY CLUB.

C/O THORNBOROUGH SMELTZ LLP

AGENT - LEONARD M ZENITH

(DATA UPDATED BY: CHANGE OF ADDRESS 951065864)

(DATA UPDATED BY: CHANGE OF ADDRESS 951075551)

(DATA UPDATED BY: CHANGE OF ADDRESS 961154482)

(DATA UPDATED BY: CHANGE OF ADDRESS 011165890)

(DATA UPDATED BY: TRANSFER OF CAVEAT

011272510)

(DATA UPDATED BY: TRANSFER OF CAVEAT

011300059)

(DATA UPDATED BY: CHANGE OF ADDRESS 101288459)

921 260 443 19/10/1992 CAVEAT

RE : RESTRICTIVE COVENANT

CAVEATOR - RESORTS OF THE CANADIAN ROCKIES INC.

(DATA UPDATED BY: TRANSFER OF CAVEAT

011272510)

951 063 618 17/03/1995 CAVEAT

RE : LEASE AMENDING AGREEMENT

CAVEATOR - WINTERGREEN GOLF & COUNTRY CLUB

C/O LEONARD, M

ZENITH

ZENITH HOOKENSON BOYLE

AGENT - LEONARD M ZENITH

(DATA UPDATED BY: TRANSFER OF CAVEAT

011272510)

(DATA UPDATED BY: TRANSFER OF CAVEAT

011300059)

961 146 512 03/07/1996 CAVEAT

RE : EASEMENT

CAVEATOR - CANADIAN WESTERN NATURAL GAS COMPANY
LIMITED.

(CONTINUED)

ENCUMBRANCES, LIENS & INTERESTS

PAGE 4
011 272 509 +10

REGISTRATION

NUMBER DATE (D/M/Y) PARTICULARS

ALBERTA

AGENT - A GLEN LEINWEBER

001 029 023	31/01/2000	CAVEAT RE : EASEMENT AND RESTRICTIVE COVENANT CAVEATOR - RESORTS OF THE CANADIAN ROCKIES INC. [REDACTED] [REDACTED] [REDACTED] (DATA UPDATED BY: TRANSFER OF CAVEAT 011272510)
001 029 028	31/01/2000	UTILITY RIGHT OF WAY GRANTEE - THE MUNICIPAL DISTRICT OF ROCKY VIEW NO. 44. AS TO PORTION OR PLAN:0010223
001 029 029	31/01/2000	CAVEAT RE : DEFERRED RESERVE CAVEATOR - THE MUNICIPAL DISTRICT OF ROCKY VIEW NO. 44. 911 - 32ND AVENUE N.E., BOX 3009, STATION 'B', CALGARY ALBERTA T2M4L6
011 102 826	19/04/2001	CAVEAT RE : LEASE , ETC. CAVEATOR - LORI DALE CHASE MILES DAVISON MCCARTHY MCNIVEN LLP [REDACTED] [REDACTED] [REDACTED] AGENT - JAMES D MCFARLANE
011 272 512	17/09/2001	MORTGAGE MORTGAGEE - BANK OF MONTREAL. [REDACTED] - [REDACTED] [REDACTED] [REDACTED] ORIGINAL PRINCIPAL AMOUNT: \$75,000,000
011 272 514	17/09/2001	MORTGAGE MORTGAGEE - 548152 ALBERTA LTD. [REDACTED] [REDACTED] [REDACTED] ORIGINAL PRINCIPAL AMOUNT: \$50,000,000
031 179 858	02/06/2003	CAVEAT RE : LEASE OPTION , ETC. (CONTINUED)

ENCUMBRANCES, LIENS & INTERESTS

PAGE 5
011 272 509 +10

REGISTRATION

NUMBER DATE (D/M/Y) PARTICULARS

CAVEATOR - TERRY J PETTIGREW
CAVEATOR - BARBARA L BUNDON
BOTH OF:
C/O DEMIANTSCHUK, MILLEY, BURKE & HOFFINGER
[REDACTED]
[REDACTED]
[REDACTED]
AGENT - TERRY J PETTIGREW

031 187 167 06/06/2003 CAVEAT
RE : LEASE OPTION
CAVEATOR - MICHELE ERBAS
C/O HOFFMAN DORCHIK
[REDACTED]
AGENT - GORDON J HOFFMAN

051 258 686 20/07/2005 CAVEAT
RE : LEASE
CAVEATOR - KENNETH WILSON
CAVEATOR - DEBORAH DUNN
BOTH OF:
[REDACTED]
[REDACTED]
[REDACTED]
AGENT - KATHLEEN S DAVIS
(DATA UPDATED BY: TRANSFER OF CAVEAT
081278688)

201 039 707 26/02/2020 CAVEAT
RE : LEASE INTEREST UNDER 20 ACRES
CAVEATOR - TELUS COMMUNICATIONS INC.
[REDACTED]
[REDACTED]
[REDACTED]

TOTAL INSTRUMENTS: 023

PAGE 6

011 272 509 +10

THE REGISTRAR OF TITLES CERTIFIES THIS TO BE AN
ACCURATE REPRODUCTION OF THE CERTIFICATE OF
TITLE REPRESENTED HEREIN THIS 6 DAY OF
OCTOBER, 2020 AT 03:58 P.M.

ORDER NUMBER: 40261067

CUSTOMER FILE NUMBER: xpl-0001.072



END OF CERTIFICATE

THIS ELECTRONICALLY TRANSMITTED LAND TITLES PRODUCT IS INTENDED
FOR THE SOLE USE OF THE ORIGINAL PURCHASER, AND NONE OTHER,
SUBJECT TO WHAT IS SET OUT IN THE PARAGRAPH BELOW.

THE ABOVE PROVISIONS DO NOT PROHIBIT THE ORIGINAL PURCHASER FROM
INCLUDING THIS UNMODIFIED PRODUCT IN ANY REPORT, OPINION,
APPRAISAL OR OTHER ADVICE PREPARED BY THE ORIGINAL PURCHASER AS
PART OF THE ORIGINAL PURCHASER APPLYING PROFESSIONAL, CONSULTING
OR TECHNICAL EXPERTISE FOR THE BENEFIT OF CLIENT(S).



ROCKY VIEW COUNTY

DEVELOPMENT PERMIT APPLICATION

FOR OFFICE USE ONLY

APPLICATION NO.

202 03205

ROLL NO.

03925001

RENEWAL OF

FEES PAID

\$1000.00

DATE OF RECEIPT

Oct 7/20

APPLICANT/OWNER

Applicant Name: Scott Telecom Services Ltd.

Email: [REDACTED]

Business/Organization Name (if applicable): Xplornet Communications Inc.

Landowner Name(s) per title (if not the Applicant): Resorts of the Canadian Rockies Inc.

Business/Organization Name (if applicable):

LEGAL LAND DESCRIPTION - Subject site

All/part of: SW ¼ Section: 25 Township: 23 Range: 5 West of: 5 Meridian Division:

All parts of Lot(s)/Unit(s): Block: A Plan: 8310059 Parcel Size (ha): 183.64

Municipal Address: 50108-50112 Township Road 234 Rocky View County, AB

Land Use District: ~~B4~~ B-REC

APPLICATION FOR - List use and scope of work

Xplornet Communications Inc. is proposing to construct a telecommunications installation on a portion of Plan 8310059, Block A within SW 25-23-5 W5M located in Rocky View County. The proposed installation is a 30m (98ft.) self-support tower with the approximate corresponding GPS coordinates of 50.983981° N, - 114.579696° W. Upon completion of construction of the new tower and successful migration of customers, a 20m pole located at GPS Coordinates 50.98224, -114.5841 (Next to proposed tower) and 30m tower located at coordinates 50.98348, -114.57906 (370m from proposed tower on same same parcel) will be removed in the area.

Variance Rationale included: ☐ YES ☐ NO ☒ N/ADP Checklist Included: ☒ YES ☐ NO

SITE INFORMATION

- a. Oil or gas wells present on or within 100 metres of the subject property(s) ☒ YES ☐ NO
- b. Parcel within 1.5 kilometres of a sour gas facility (well, pipeline or plant) ☒ YES ☐ NO
- c. Abandoned oil or gas well or pipeline present on the property ☐ YES ☒ NO
(Well Map Viewer: <https://extmapviewer.aer.ca/AERAbandonedWells/Index.html>)
- d. Subject site has direct access to a developed Municipal Road (accessible public roadway) ☒ YES ☐ NO

AUTHORIZATION

I, JASON PIGEON (Full name in Block Capitals), **hereby certify** (initial below):

- ☐ That I am the registered owner **OR** ☒ That I am authorized to act on the owner's behalf.
- ☒ That the information given on this form and related documents, is full and complete and is, to the best of my knowledge, a true statement of the facts relating to this application.
- ☒ That I provide consent to the public release and disclosure of all information, including supporting documentation, submitted/contained within this application as part of the review process. I acknowledge that the information is collected in accordance with s.33(c) of the *Freedom of Information and Protection of Privacy Act*.
- ☒ **Right of Entry:** I authorize/acknowledge that Rocky View County may enter the above parcel(s) of land for purposes of investigation and enforcement related to this application in accordance with Section 542 of the Municipal Government Act.

Applicant Signature Jason Pigeon

Date September 16, 2020

Landowner Signature Please refer to LOA

Date _____



ROCKY VIEW COUNTY

DEVELOPMENT PERMIT APPLICATION CHECKLIST - GENERAL

All plans shall be submitted as one (1) legible hard copy and in DIGITAL form (pdfs)

Select [✓] all that are included within application package. Incomplete applications may not be accepted for processing

- ☐ **APPLICATION FORM(S) AND CHECKLIST:** All parts completed and signed.
- ☐ **APPLICATION FEE:** Refer to Planning and Development Fee Schedule within the Master Rates Bylaw.
- ☐ **CURRENT LAND TITLES CERTIFICATE COPY - dated within 30 days of application, and:**
 - ☐ Digital copy of non-financial instruments/caveats registered on title
- ☐ **LETTER OF AUTHORIZATION:** Signed by the registered landowner(s) authorizing person acting on behalf (if not the Applicant). If registered owner on title is a company, authorization to be provided on a company letterhead or as an affidavit (signed by a Commissioner of Oaths).
- ☐ **COVER LETTER, shall include:**
 - ☐ Proposed land use(s) and scope of work on the subject property
 - ☐ Detailed rationale for any variances requested
 - ☐ For businesses - Complete operational details including days/hours of work, number of employees, parking provisions, types of vehicles, outdoor storage areas, site access/approach, traffic management, etc.
 - ☐ Reference to any *Supporting Documents*, images, studies, plans etc. provided within application package
- ☐ **SITE PLAN, shall include:**
 - ☐ Legal description and municipal address
 - ☐ North arrow
 - ☐ Property dimensions (all sides)
 - ☐ Setbacks/dimensions from all sides of the property line(s) to existing/proposed buildings, structures (cantilevers, decks, and porches), outdoor storage areas etc.
 - ☐ Dimensions of all buildings/structures
 - ☐ Location and labels for existing/proposed approach(s)/access to property
 - ☐ Identify names of adjacent internal/municipal roads and highways
 - ☐ Identify any existing/abandoned/proposed oil wells, septic fields/tanks, or water wells on site, including their distances to existing/proposed buildings
 - ☐ Identify any existing/proposed site features such as trees, shelterbelts, canals, waterbodies, etc.
 - ☐ Identify site slopes greater than 15% and distances from structures
 - ☐ Location and labels for easements and/or rights-of-way on title
- ☐ **FLOOR PLANS/ELEVATIONS, shall include:**
 - ☐ Overall dimensions on floor plans for all buildings/structures (for new construction, additions, renovations etc.)
 - ☐ Indicate floor area and existing/proposed uses on floor plans and height(s) on elevations
 - ☐ Indicate type of building/structure on floor plans and elevations
- ☐ **COLOUR PHOTOGRAPHS (Min. 3) - one hard and digital copy:** Of existing site, building(s), structure(s), signage, site features, taken from all sides including surrounding context, and when existing floor plans/elevations are not available
- ☐ **SUPPORTING DOCUMENTS (as applicable):** Include technical studies/reports and any additional plans relating to the proposed development (lot grading, site lighting, storm water management plans etc.). Refer to the Land Use Bylaw for use or district specific requirements.

FOR OFFICE USE ONLY

Proposed Use(s): Community Facility C Land Use District: B-REC
 Applicable ASP/CS/IDP/MSDP: Greater Brazeau Creek / Wintergreen
 Included within file: ☐ Information Sheet ☐ Parcel Summary ☐ Site Aerial ☐ Land Use Map Aerial ☐ Site Plan

NOTES:

Staff Signature: _____



Resorts of the Canadian Rockies



September 28, 2020

AUTHORIZATION LETTER

FROM: Resorts of The Canadian Rockies



TO WHOM IT MAY CONCERN:

Re: Proposed Communication Tower, Wintergreen Golf + Country Club

We/I, Resorts of The Canadian Rockies Inc, c/o Neil Jackson, the owner of the above mentioned property, hereby give Xplornet Communications Inc. and its agents permission to act as our agent to acquire the necessary permits, drawings and/or buildings structural blue-prints, hydro information from the public utility and information from the municipality or other authorities concerned, needed to approve the construction of the telecommunications site at the address indicated above and as shown on the attached plans.

Sincerely,

Neil Jackson
Senior Vice President
Resorts of the Canadian Rockies Inc



October 6, 2020

Rocky View County
262075 Rocky View Point
Rocky View County, AB, T4A 0X2
Attention: Evan Neilsen

**RE: Proposed Xplornet Telecommunications Installation
Located on a portion of Plan 8310059 Block A within SW 25-23-5 W5M
Development Permit and Request for Concurrence
Xplornet File: AB1234**

According to the Radiocommunication Act, the Minister of Industry retains sole jurisdiction over approving proposed radiocommunication antenna systems, including cell towers. Proponents must follow Innovation, Science and Economic Development Canada's antenna tower siting procedures, titled Radiocommunication and Broadcasting Antenna Systems (CPC-2-0-03).

Federal regulations require that Xplornet Communications Inc. follow the below process:

- Investigate sharing or using existing infrastructure before proposing new antenna-supporting structures.
- Contact the land-use authority (LUA) to determine local requirements regarding antenna systems.
- Undertake public notification and address relevant concerns, whether by following local LUA requirements or Innovation, Science and Economic Development Canada's default process, as is required and appropriate.
- Satisfy Innovation, Science and Economic Development Canada's default process, as is required and appropriate.

In accordance with these policies, public consultation has been completed following ISEDC requirements and Rocky View County's Policy Guidelines to Evaluate Commercial Communications Facilities (POL#308). A notification package was prepared and mailed to nearby landowners within 1600m of the proposed tower location and a public notice was listed in the August 11, 2020 issue of the Rocky View Weekly. September 16, 2020 marked the end of the public consultation period, with 5 comments received, all in support of the tower. All correspondence with stakeholders has been included in this application.

We respectfully request that Rocky View County review the following attachments. The attachments are enclosed either as required by your guidelines, or in addition to your guidelines, in order to provide sufficient information to make a decision regarding concurrence:

- Communications Facilities Application form
 - Fee will be supplied via credit card payment
- Certificate of Title

- Letter of Authorization
- Detailed Site Plan
- Elevation Drawings
- Photosimulation
- Landowner Notification Package
- Public Comments and Responses
- Colocation Intent Confirmation Letter
- Invitations to Colocate to Carriers

Xplornet makes every attempt to develop as sensitively as possible, while balancing the technical requirements and customer demand for improving service in an area. The location for the proposed telecommunications tower was identified by qualified radiofrequency engineers. It is central to an area experiencing poor signal coverage and that is susceptible to capacity limitations as shown in the included coverage maps. Xplornet attests that the installation will be installed and operated on an ongoing basis to comply with Health Canada's Safety Code 6.

In conformance with Innovation, Science and Economic Development Canada's (ISED) (formerly Industry Canada) policy for approving new telecommunications installations, Xplornet has researched all existing antenna systems and other infrastructure capable of entertaining telecommunications equipment in the area. There are 2 existing structures within an 3km radius of the targeted area, both towers are to be removed following the installation of the new proposed tower. The existing structures are detailed below. All equipment necessary to operate this facility will reside within an equipment cabinet at the base of the tower. Xplornet attests that the installation will respect good engineering practices, including structural adequacy.

Latitude	Longitude	Height (m)	Distance (km)	Licensee Name	Disqualification Justification
50.983480	-114.579061	20	0.08	Xplornet Communications Inc.	Tower to be removed following construction of new tower.
50.983981	-114.579696	30	0.37	Xplornet Communications Inc.	Tower to be removed following construction of new tower.

Should you have any questions or concerns, please do not hesitate to contact me.

Thank you,



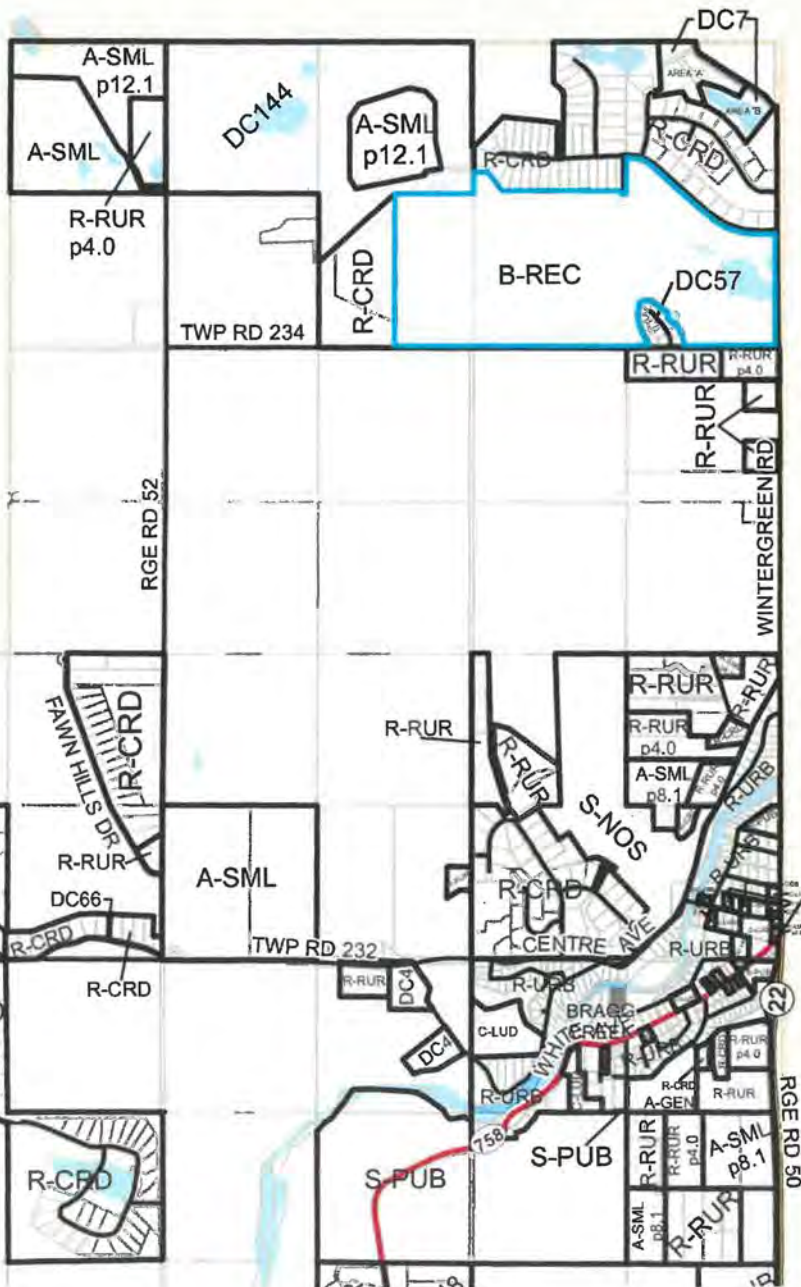
Jason Pigeon
Land Agent
Scott Land & Lease Ltd.

[Redacted]
[Redacted]



DC155

TSUUT'INA
NATION RESERVE
NO. 145



14 - Tuesday, August 11, 2020, Rocky View Weekly

classifieds

You reach over 50,000 buyers for only \$14.25* per week!

*Based on a 15 word ad - additional words 25¢ each, plus GST. Make your ad stand out in bold print for an additional \$2. Bonus, your ad is posted on our website for no additional charge! Advertising deadline is noon on Thursday.

Phone: 403-948-1885 Fax: 403-948-2554 Email: classifieds@airdrie.greatwest.ca

3010. Auctions
RENTAL PRO TOOLS & Equipment. Lacombe AB. On-Line Auction Aug. 20-25. Equipment including Lawn Compaction, Concrete, 3pl. Texturing Machines, Electric Hammers, Stump Grinder, Water Pumps, Heaters, Gen Sets, Floor Sanders & Polishers, Drywall Lifts, Small Engine Parts, Shop Tools, 30-50W Equipment Trailer Building.
www.monroeyaustrons.ca
m 1-800-371-6963

4310. Grain/Feed Hay
HEATED CANOLA buying Green, Heated or Springthatched Canola. Buying oats, barley, wheat & peas for feed. Buying damaged or oilgrade grain. "On Farm, Pickup" Western Feed & Grain.
1-877-250-5252

PINTAIL WINTER WHEAT. Extremely hardy, very high yielding, Awlless. Excellent for Forage or Grain. Low inputs - High Profits. Call 403-556-2609 or text 403-994-2609; mastinseeds.com.

4540. Farm Equipment
BLIND CANYON RANCHES Transport has a 53 ft. hay-hauling unit for hire. Will blanket all of Alberta and Saskatchewan. Please call 403-339-0009.

7245. Misc. Services
CRIMINAL RECORD? Why suffer employment/licensing loss? Travel/business opportunities? Be unburdened? Think: Criminal Pardon. US entry waiver. Record purge. File destruction. Free consultation: 1-800-347-2540. www.accesslegalmf.com.

7310. Health Services
HIP/KNEE REPLACEMENT. Other medical conditions causing Trouble Walking or Dressing? The Disability Tax Credit allows for \$3,000 yearly tax credit and \$30,000 lump sum refund. Take advantage of this offer. Apply Now, quickest refund. Nationwide: Export help. 1-844-453-5372.

CLAYHOLT, Rheo John

March 24, 1927 - Olds, Alberta
July 28, 2020 - Calgary, Alberta

Rheo Clayholt passed away peacefully on July 28, 2020 at the age of 93 years. He was predeceased by his beloved wife of 43 years, Irene, whom we know he is happy to be with again. He will be remembered with love by his children Gordon (Selina), Allan (Jaylene) and Janice (Dion). He will also be lovingly remembered by his grandchildren Holly, Kiara, Eric and Geoffrey whom he adored. He was predeceased by his brother Ken Clayholt, and survived by his sisters Vivian Finnigan and Glance Shultz.



Rheo was born, raised and spent his life in the Madden/Crossfield area. Farming and serving his community were some of his greatest passions. Rheo will be remembered for his support to his family, many contributions to his community, his witty/dry sense of humor, his ability to make a new friend wherever he went, for a smile that lit up his face and that mischievous twinkle in his eye. We are now able to celebrate a life well lived, and the many cherished memories he blessed us with.

Rheo's family would like to extend our most sincere thanks to the staff at Luxtone Manor, Scenic Acres Retirement Residence, and the Brentwood Care Centre. We will be eternally grateful for the skilled, compassionate and loving care each of you provided. As well, we would like to thank his "friends" from A Friend Indeed, as your gift to him and our family was immeasurable.

A private family celebration of his life will be held as per his wishes. Condolences, memories and photos may be shared and viewed on Rheo's obituary at www.McInnisandHolloway.com.

In living memory of Rheo Clayholt, a tree will be planted in the Ann & Sandy Cross Conservation Area by McINNIS & HOLLOWAY FUNERAL HOMES, Airdrie, 300 TOWERLANE DRIVE, AIRDRIE, AB T4B 3L8, Telephone: 403-948-1100.



McInnis & Holloway
403-243-8200

PUBLIC NOTICE

Xplornet Communications Inc. would like to notify area residents of a proposal of a new telecommunications installation situated on a portion of the Plan 8310059 Block A. The proposed installation will be a 30m self-support tower and will replace 2 existing towers in the area. All of the equipment required to operate the facility will be located inside an equipment shelter at the base of the tower. This new telecommunications facility will improve coverage to the Bragg Creek area.

Your comments are welcome at (403) 261-6517
Written comments can be faxed to (403) 264-6265
Or email to notify@scottland.ca

All comments will be accepted until **September 8, 2020.**



SEND US YOUR
ROCKY VIEW
COUNTY

Do you have a great photo you have taken of something in Rocky View County?

You can send it to us & we might publish it in an upcoming issue of the paper.

Send us your photo of a local event or a perfect nature shot, and your name & photo could be published.

Send your photos to
news@airdrie.greatwest.ca

Include your name and contact phone number.



103. Coming Events


Prairie Royale Estates Parade Of Garage Sales
RR284 and Shore Drive
Aug 15, 2020
10am-3PM

INNS & SUITES
MAKE YOUR CALGARY STAYCATION A SUMMER ADVENTURE
9 Different Adventure Options Available
Package Includes:
1 Night Stay in a Deluxe Room with Hot Breakfast
4 Passes to Calgary Park!
587-602-0852 calgaryhotelstaycation.ca

WANTED DEAD OR ALIVE
Canadian Prairie Pickers
are once again touring the area!
Paying Cash For Coin Collections, Silver & Gold Coins, Royal Can. Mint Sets. Also Buying Gold Jewelry
We purchase rolls, bags or boxes of silver coins
PAYING HIGHEST PRICES
To arrange a free, discrete in-home visit call Kellie at 778-257-8647

#403 - 2903 Kingsview Blvd.
Airdrie, AB T4A 0C4
403-948-1885
Weekly

PUBLIC NOTICE



Xplornet Communications Inc. would like to notify area residents of a proposal of a new telecommunications installation situated on a portion of the NW 18-26-1 W5M. The proposed installation is a rebuild of an existing 15m tower that will be replaced with an 18.5m self-support tower. Upon completion of construction of the proposed tower, an existing Xplornet 15m pole will be removed. All of the equipment required to operate the facility will be located inside an equipment shelter at the base of the tower.

This new telecommunications facility will improve coverage to the Balzac area.

Your comments are welcome at (403) 261-6517
Written comments can be faxed to (403) 264-6265
Or email to notify@scotland.ca
All comments will be accepted until **September 15, 2020.**

WANTED DEAD OR ALIVE

Canadian Prairie Pickers
are once again touring the area!

Paying Cash For Coin Collections, Silver & Gold Coins, Royal Can. Mint Sets. Also Buying Gold Jewelry

We purchase rolls, bags or boxes of silver coins

PAYING HIGHEST PRICES

To arrange a free, discrete in-home visit call Kellie at 778-257-8647

INNS & SUITES

MAKE YOUR CALGARY STAYCATION A SUMMER ADVENTURE

9 Different Adventure Options Available

Starting at **\$149**

Package Includes

- 1 Night Stay in a Deluxe Room with Hot Breakfast
- 4 Passes to Your Adventure Choice

587-602-0852 calgaryhotelstaycation.ca

SEND US YOUR ROCKY VIEW COUNTY

Do you have a great photo you have taken of something in Rocky View County?

You can send it to us & we might publish it in an upcoming issue of the paper.

Send us your photo of a local event or a perfect nature shot, and your name & photo could be published.

Send your photos to news@airdrie.greatwest.ca

Include your name and contact phone number.

403-948-1885 **Weekly**

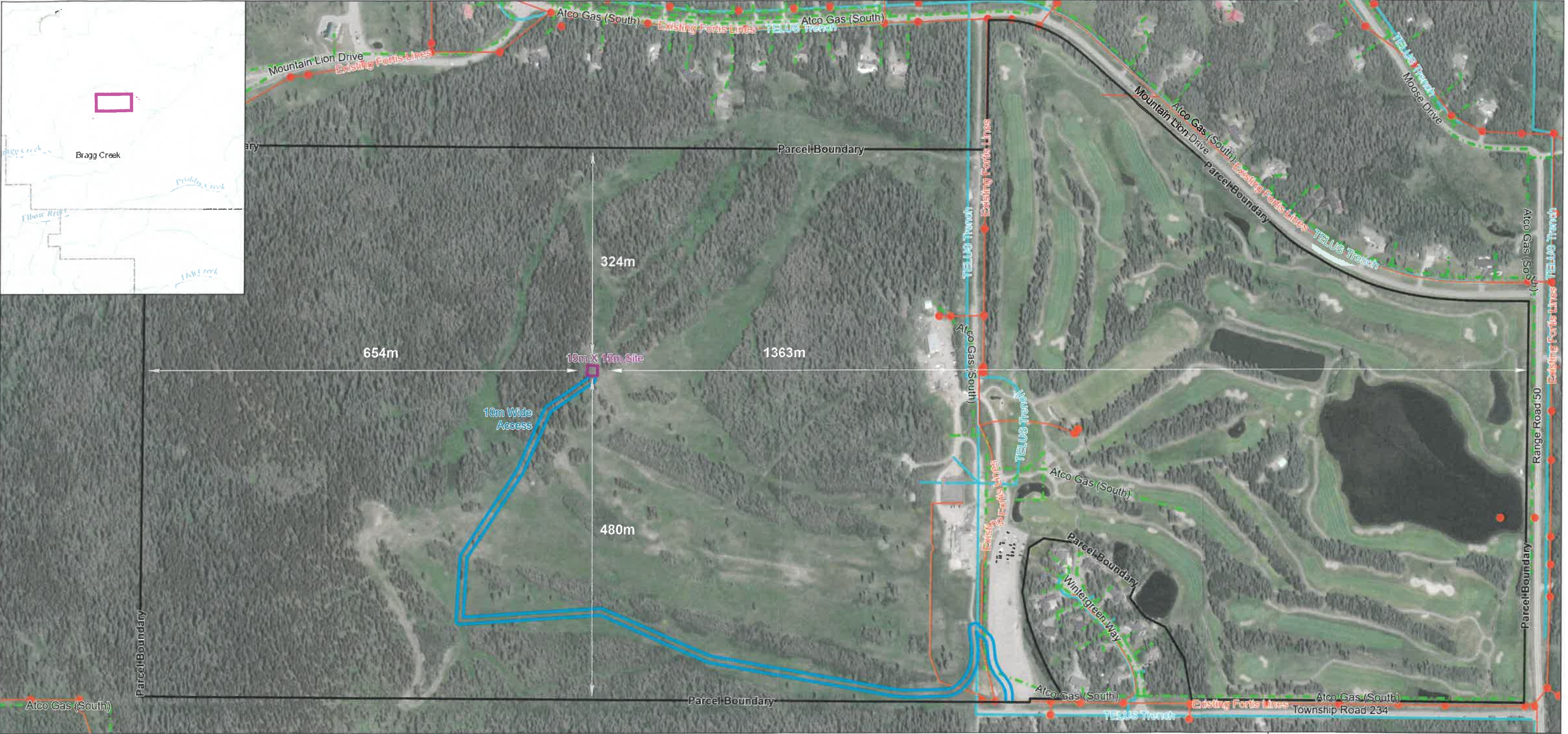
NEWSPAPER

Stay Connected With Your Hometown News

Church Directory

To advertise your church in this section email sales@airdrie.greatwest.ca to book your space. The cost to run in the Church Directory is \$2.50 per week for your ad to be in one paper or \$5.00 per week if your ad runs in both papers.

<p>Acme Church of God 7th Day 2 miles South and 3.5 miles West of Acme 6 miles North and 3.5 miles West of Beiseker Saturday morning services at 10 a.m. Phone: 403-546-2603 or 403-947-2161 www.acmecog.org</p>	<p>C3 CHURCH CALGARY WEST LEADING PEOPLE TO GROW A RELATIONSHIP & EXPERIENCE JESUS CHRIST. Sundays 9:30 and 11:15 AM (403) 686-0608 or info@myc3church.ca On Hwy #1 - 91 Commercial Ct. Calgary T3Z 2A5</p>	<p>KINGDOM CITY 1604 Summerfield Blvd. Formerly Airdrie Alliance Church Join Us For Church Online Sundays at 10:00am kingdomcity.ca/online</p>	<p>Springbank United Church 250011 Range Road 33, Calgary, Alberta T3Z 1L2 Phone: 403-288-9086 email: sbunited@telus.net website: www.springbankunited.org Sunday Service at 10:30 am</p>
<p>AIRDRIE SEVENTH-DAY ADVENTIST CHURCH SHARING CHRIST'S LOVE WITH FAMILIES SATURDAYS 1 9:45 & 11:00 AM (403) 921-8623 or airdrieadventist@gmail.com www.airdriesda.org</p>	<p>Crossfield United Church www.crossfieldunited.com Sunday Worship Service 10:00 am Rev. Dave Crawford 403-946-5514</p>	<p>KING'S COURT Sundays 10:30 a.m. & Thursdays 7:00 p.m. 2964 Kingsview Blvd. SE Airdrie T4A 0C9 info@rccgairedrie.org • 403-420-5575 www.rccgairedrie.org</p>	<p>ST. CLEMENT ANGLICAN CHURCH, BALZAC Serving your community in traditional Anglican Worship since 1904 Sunday Service: 10:00 am Email: stclements.balzac.ab@gmail.com Web: stclementsbalzac.com</p>
<p>AIRDRIE UNITED CHURCH 216 1st Ave. NE • 403-948-5527 Sunday Worship: 10:30 a.m. • Sunday School • Nursery • U.C.W. • airdrieunitedchurch.ca</p>	<p>Crossfield Baptist Church www.crossfieldbaptistchurch.com Mothers of Preschoolers Program • Children & Youth Ministries Nursery & childcare provided. Worship Service 10:30am .5 km north of Crossfield on Hwy 2A Pastor Dave Wiebe 403-946-5651</p>	<p>Lutheran Church of the Master - ELCIC 216 Main St S., Airdrie Tel: 403-948-3567 • Rev. Tim Wray Sunday Worship 10:30 am</p>	<p>St. Paul's Catholic Church Fr. Julian Studden Mass Times: Saturday-5 pm, Sunday-9 & 11am www.stpaulsairdrie.ca Reconciliation: Saturday at 4:00 pm</p>
<p>Balzac United Church A short drive south of Airdrie - 403-226-5844 Sunday Service 9:30 a.m. Sunday School & Nursery Available www.balzacunitedchurch.com</p>	<p>Dalemead Church "whosoever will may come" Argyle St. & Gordon Ave., Dalemead Sunday Worship Service - 10:30 a.m. Pastor Wes Thiessen Ph 403-251-5577 dalemeadchurchpastor@gmail.com</p>	<p>MOUNTAIN VIEW LUTHERAN CHURCH 244191 Range Rd 31 (Old Banff Coach Rd & Hwy 1 W.) Worship: 9:30am Bible Study (all ages) 10:45am 403-242-5000 • mountainviewchurch.org</p>	<p>Tri - Community Baptist Church 239 9th Street, Beiseker Church Office - 403-947-3284 Pastor: Eric Spletzer e-mail: rcbc@efirehose.net Family Worship Service - 10:30 am</p>
<p>Beiseker Levelland Seventh Day Adventist Church 280041A Rge Rd 242, 16km E of Beiseker, 2km S Saturday Service: Sabbath school @ 10a.m. Worship Service @ 11a.m. Pastor Anthony Kern 825-365-3321, email: akern@balbertadventist.ca</p>	<p>DAYBREAK COMMUNITY CHURCH Sunday Online - Sundays at 10:30 am with DayBreak kids at 10:00 am daybreakairdrie.com/pastorius office@daybreakairdrie.com • 403-948-6727 Creatively Connecting with the Community</p>	<p>Shepherd Of The Hills LUTHERAN CHURCH, LCC AIRDRIE Sunday Worship - 10am AT BETHANY AIRDRIE - 1736-1 AVE NW Pastor Darren Dressler 403-912-9013 www.airdrielutheran.com</p>	<p>Chestermere Christian Fellowship Services: Sunday 10:00 am Pastor Darcy Neufeld 403-204-2079 1.6 km north of Hwy 1 on Conrich Road</p>



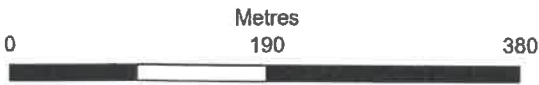
Site Sketch
8310059;A

- 15m X 15m Site
- 10m Wide Access
- Parcel Boundaries
- Existing Power Lines
- TELUS Trenches
- Low-pressure Pipelines



Municipal Address: 50108-50112 Township Road 234
Municipality: Rocky View County
Tower Coordinates: 50.983981, -114.579696

WARNING: This map is based on overlaid public data sets and may be inaccurate. Do not use this map for construction. It is not a legal survey. Buried hazards or infrastructure such as pipelines, powerlines or cables may not be shown accurately or at all. The same is true for facilities and geographical features. Relying on the accuracy or completeness of this map could cause serious injury or death. Use it at your own risk.



Scale: 1:5,600
Coordinate System: NAD 1983 3TM 114

Author: Dave Taylor
Contact: (403) 261-6529
Publish Date: 2020-09-17



Sources: RDEK, Province of Alberta, Province of British Columbia, Esri Canada, Esri, © OpenStreetMap contributors, HERE, Garmin, USGS, NGA, EPA, USDA, NPS, AAFC, NRCan, GeoEye, Maxar, Altalis, GeoGratis, DataBC, Abadata

XPL-0001.072



October 6, 2020

Rocky View County
262075 Rocky View Point
Rocky View County, AB, T4A 0X2
Attention: Development Officer

RE: Proposed Xplornet Telecommunications Installation
Located on a portion of Plan 8310059 Block A within SW 25-23-5 W5M
Development Permit and Request for Concurrence
Xplornet File: AB1234

In accordance with federal regulations and Rocky View County's Policy Guidelines to Evaluate Commercial Communications Facilities (POL#308), Procedure Guidelines to Evaluate Commercial Communications Facilities (PRO#308), Xplornet has processes in place to facilitate the sharing of Xplornet's telecommunications tower infrastructure in a timely manner. Xplornet welcomes colocation applications by other carriers. Future sharing may result in additional antennas being installed on the proposed tower.

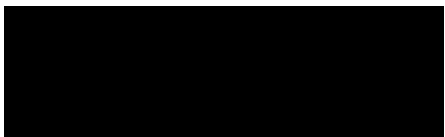
On October 6, 2020, Xplornet sent invitations to colocate to all major carriers (Rogers Communications, Bell, TELUS and Freedom Mobile) to colocate on the proposed tower. Xplornet will provide all response documentation from the carriers to Rocky View County upon receipt.

Should you have any questions or concerns, please do not hesitate to contact me.

Thank you,

A handwritten signature in dark ink, appearing to read "JP", is written over a light blue horizontal line.

Jason Pigeon
Land Agent
Scott Land & Lease Ltd.





A division of Scott Land & Lease Ltd.

October 6, 2020

Bell Mobility



Attention: Francois Belanger

RE: **PROPOSAL TO CO-LOCATE WITH
XPLORNET COMMUNICATIONS INC.**

XPLORNET REF: AB1234

SITE LOCATION: Rocky View County – Plan 8310059, Block A within SW 25-23-5 W5M,
Bragg Creek, Alberta

Xplornet Communications Inc. has acquired land for a telecommunications facility to enhance wireless internet coverage in the area.

Local land use authorities require telecommunication carriers site-share whenever technically feasible; therefore, Xplornet wishes to determine if other carriers hold an interest in co-locating on the planned tower. Below, please find a brief description of the proposed site:

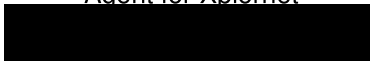
1. Proposal: 30m self-support tower
2. Site Address: Plan 8310059, Block A within SW 25-23-5 W5M, Bragg Creek, Alberta
3. Coordinates: 50.983981° N, -114.579696° W
4. Site Description: Recreation Business
5. Zoning: Recreation Business District
6. LUA: Rocky View County

If this site location is compatible with the requirements of your network plan, and a co-location is of interest, please sign below in acknowledgement. Permitting efforts will then continue on behalf of Xplornet Communications Inc. with the understanding that another carrier may join Xplornet Communications Inc. in sharing the tower site.

Please forward your confirmation and any questions or comments in this regard no later than **November 7, 2020**.

Regards,

Sherilyn Batchelder
Project Manager
Agent for Xplornet





A division of Scott Land & Lease Ltd.

By signing below, I acknowledge a co-location is of interest. Please contact me to discuss.

Name:
Title:
Date:
Company Name:

Please forward by fax the signed letter at





A division of Scott Land & Lease Ltd.

October 6, 2020

Freedom Mobile

Attention: Venrick Azcueta

RE: **PROPOSAL TO CO-LOCATE WITH
XPLORNET COMMUNICATIONS INC.**

XPLORNET REF: AB1234

SITE LOCATION: Rocky View County – Plan 8310059, Block A within SW 25-23-5 W5M,
Bragg Creek, Alberta

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If this site location is compatible with the requirements of your network plan, and a co-location is of interest, please sign below in acknowledgement. Permitting efforts will then continue on behalf of Xplornet Communications Inc. with the understanding that another carrier may join Xplornet Communications Inc. in sharing the tower site.

Please forward your confirmation and any questions or comments in this regard no later than **November 7, 2020**.

Regards,

Sherilyn Batchelder
Project Manager
Agent for Xplornet



A division of Scott Land & Lease Ltd.

By signing below, I acknowledge a co-location is of interest. Please contact me to discuss.

Name:
Title:
Date:
Company Name:

Please forward by fax the signed letter at





A division of Scott Land & Lease Ltd.

October 6, 2020

Rogers Communications Inc.
Network Implementation West

Attention: Christie Gullekson

RE: **PROPOSAL TO CO-LOCATE WITH
XPLORNET COMMUNICATIONS INC.**

XPLORNET REF: AB1234

SITE LOCATION: Rocky View County – Plan 8310059, Block A within SW 25-23-5 W5M,
Bragg Creek, Alberta

Xplornet Communications Inc. has acquired land for a telecommunications facility to enhance wireless internet coverage in the area.

Local land use authorities require telecommunication carriers site-share whenever technically feasible; therefore, Xplornet wishes to determine if other carriers hold an interest in co-locating on the planned tower. Below, please find a brief description of the proposed site:

1. Proposal: 30m self-support tower
2. Site Address: Plan 8310059, Block A within SW 25-23-5 W5M, Bragg Creek, Alberta
3. Coordinates: 50.983981° N, -114.579696° W
4. Site Description: Recreation Business
5. Zoning: Recreation Business District
6. LUA: Rocky View County

If this site location is compatible with the requirements of your network plan, and a co-location is of interest, please sign below in acknowledgement. Permitting efforts will then continue on behalf of Xplornet Communications Inc. with the understanding that another carrier may join Xplornet Communications Inc. in sharing the tower site.

Please forward your confirmation and any questions or comments in this regard no later than **November 7, 2020**.

Regards,

Sherilyn Batchelder
Project Manager
Agent for Xplornet



[REDACTED] A division of Scott Land & Lease Ltd.

By signing below, I acknowledge a co-location is of interest. Please contact me to discuss.

Name:
Title:
Date:
Company Name:

Please forward by fax the signed letter at [REDACTED]



October 6, 2020

TELUS – Mobile Broadband Network Deployment

Attention: Grace Suh

RE: **PROPOSAL TO CO-LOCATE WITH
XPLORNET COMMUNICATIONS INC.**

XPLORNET REF: AB1234

SITE LOCATION: Rocky View County – Plan 8310059, Block A within SW 25-23-5 W5M,
Bragg Creek, Alberta

Xplornet Communications Inc. has acquired land for a telecommunications facility to enhance wireless internet coverage in the area.

Local land use authorities require telecommunication carriers site-share whenever technically feasible; therefore, Xplornet wishes to determine if other carriers hold an interest in co-locating on the planned tower. Below, please find a brief description of the proposed site:

1. Proposal: 30m self-support tower
2. Site Address: Plan 8310059, Block A within SW 25-23-5 W5M, Bragg Creek, Alberta
3. Coordinates: 50.983981° N, -114.579696° W
4. Site Description: Recreation Business
5. Zoning: Recreation Business District
6. LUA: Rocky View County

If this site location is compatible with the requirements of your network plan, and a co-location is of interest, please sign below in acknowledgement. Permitting efforts will then continue on behalf of Xplornet Communications Inc. with the understanding that another carrier may join Xplornet Communications Inc. in sharing the tower site.

Please forward your confirmation and any questions or comments in this regard no later than **November 7, 2020**.

Regards,

Sherilyn Batchelder
Project Manager
Agent for Xplornet



By signing below, I acknowledge a co-location is of interest. Please contact me to discuss.

Name:
Title:
Date:
Company Name:

Please forward by fax the signed letter at 



August 4, 2020

To: Landowner

**Re: Proposed Xplornet Telecommunications Installation
Located on a portion of Plan 8310059, Block A within SW 25-23-5 W5M
Xplornet's File: XPL-0001.072 (AB1234)**

Xplornet Communications Inc. (Xplornet) would like to notify area residents of a proposal to construct a telecommunications installation on a portion of **Plan 8310059, Block A within SW 25-23-5 W5M** located in Rocky View County. The proposed installation is a 30m (98ft.) self-support tower with the approximate corresponding GPS coordinates of 50.983981° N, - 114.579696° W. The dimensions of the tower are ±1.93m. (±6.33ft.) per side of the triangle. Upon completion of construction of the new tower and successful migration of customers, a 20m pole and 30m tower will be removed in the area.

About Xplornet

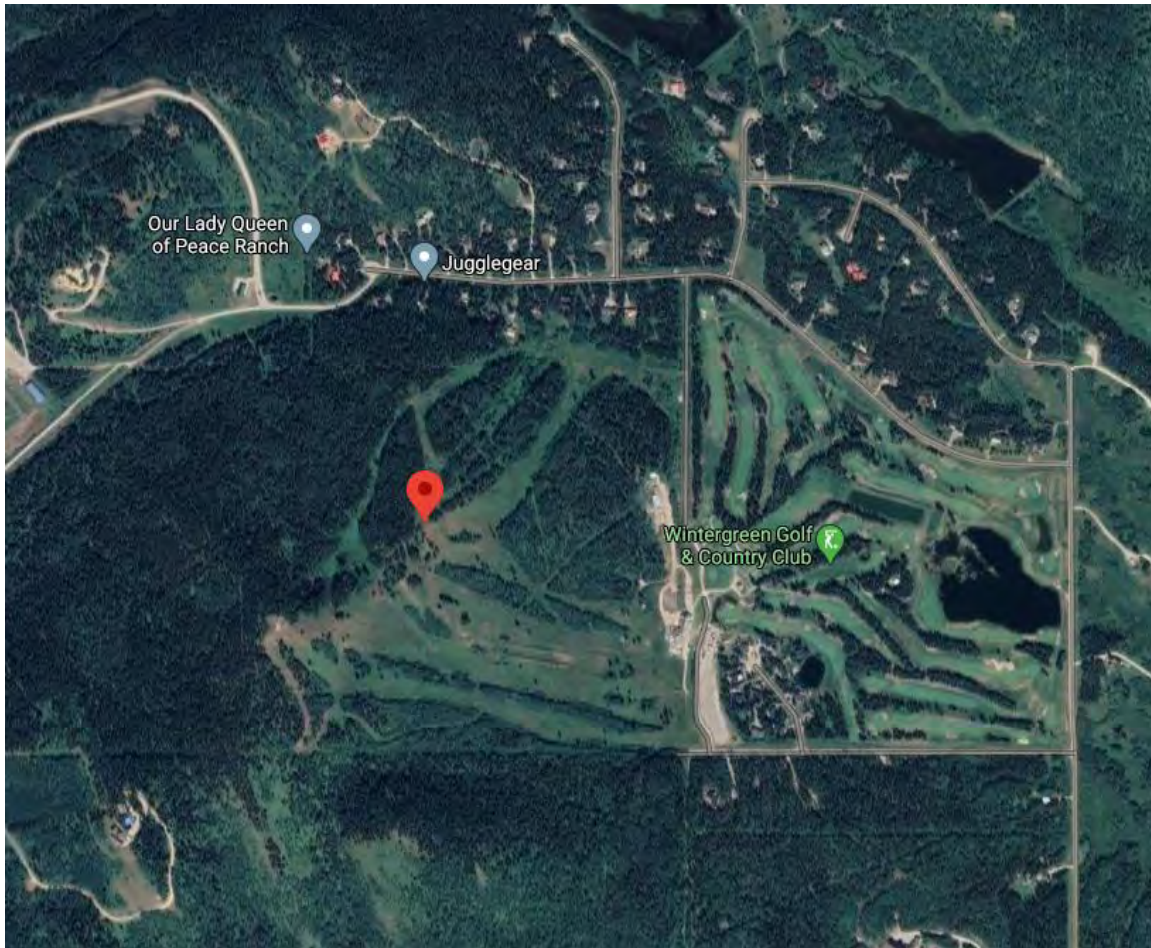
Xplornet Communications Inc. is Canada's leading rural broadband Internet provider. We believe everyone should have access to the online world, so we make our service available everywhere in Canada, including the hard to reach places. We overcome the challenges of Canada's vast geography through our hybrid network of fixed-wireless towers on the ground and next-generation satellites in space. Our customers live in the farthest reaches of the country and just outside of major urban centres, and through our coast-to-coast network of local dealers we connect them to all that the Internet offers. Xplornet connects you to what matters online. For more information, please visit <https://www.xplornet.com/why-choose-xplornet/>.

Xplornet's Proposal

In conformance with Innovation, Science and Economic Development Canada's (ISED) (formerly Industry Canada) policy for approving new telecommunications installations, Xplornet has researched all existing antenna systems and other infrastructure capable of entertaining telecommunications equipment in the area. There are 2 existing structures within an 3km radius of the targeted area, both towers are to be removed following the installation of the new proposed tower. The existing structures are detailed below. All equipment necessary to operate this facility will reside within an equipment cabinet at the base of the tower. Xplornet attests that the installation will respect good engineering practices, including structural adequacy.

Latitude	Longitude	Height (m)	Distance (km)	Licensee Name	Disqualification Justification
50.983480	-114.579061	20	0.08	Xplornet Communications Inc.	Tower to be removed following construction of new tower.
50.983981	-114.579696	30	0.37	Xplornet Communications Inc.	Tower to be removed following construction of new tower.

Proposed Map



Health Canada

ISED requires all wireless carriers to operate in accordance with Health Canada's safety standards. Xplornet attests that the installation described in this notification package will be installed and operated on an ongoing basis to comply with Health Canada's *Safety Code 6*. This includes all combined effects of the installation, setting restrictions and limits to exposure to all radio frequencies and electromagnetic field strengths.

Canadian Environmental Assessment

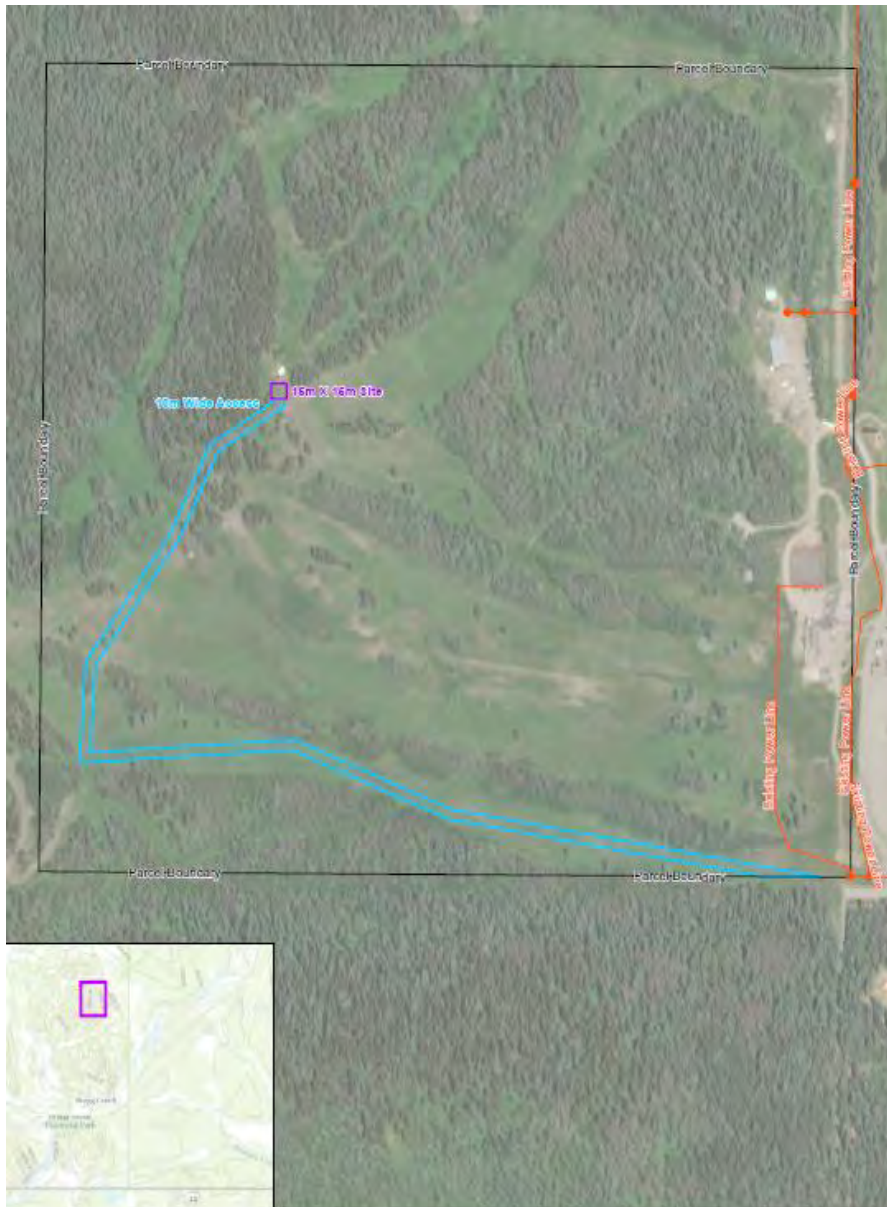
Proponents are responsible for ensuring that antenna systems are installed and operated in a manner that complies with other statutory requirements such as the *Canadian Environmental Protection Act, 1999*, the *Migratory Birds Convention Act, 1994*, and the *Species at Risk Act*, as applicable. The proposed telecommunications facility described in this notification package is excluded from environmental assessment under the Impact Assessment Act (IAA).

Transport Canada / NAV Canada Requirements

Transport Canada and NAV Canada determine requirements for marking and lighting of the tower and whether the proposal would have an impact on the provision of the national air navigation system. Based on the information regarding the proposed tower, the expectation is that marking or lighting will not be required, however the federal authorities will make the final determination.

Site Plan

The tower compound will be 15m. x 15m. All equipment necessary to operate this facility will reside within an equipment cabinet with the approximate dimensions of 2m x 1m x 1m. Access to the tower will be via an approach off Township Road 234.

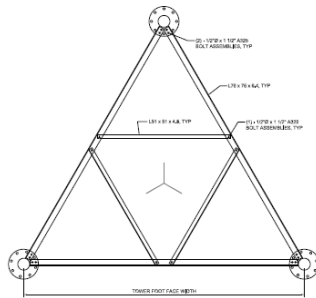


Colocation

It is Xplornet's policy to first consider colocating (sharing) existing infrastructure, including other carrier's towers before proposing to build a new structure. Where a new structure is required to be built, Xplornet welcomes colocation applications by other carriers. In accordance with federal regulations, Xplornet has processes in place to facilitate the sharing of Xplornet's telecommunications tower infrastructure in a timely manner. Future sharing may result in additional antennas being installed on the proposed tower.

Elevation Profile/Antenna Mounts

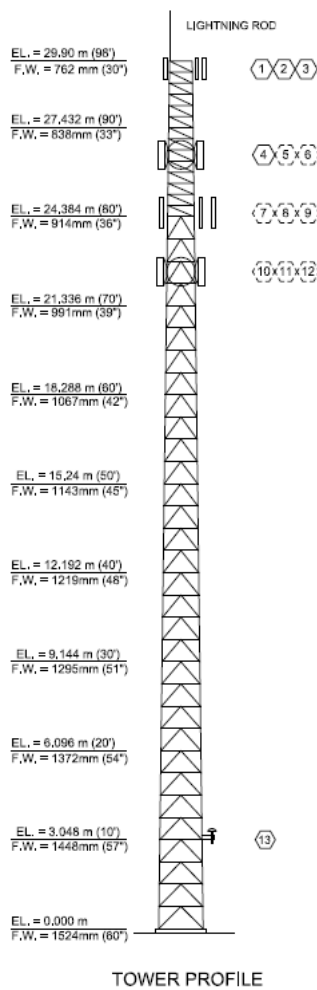
Below is the elevation profile of the proposed 30m. self-support tower, a tower plan view and photos indicative of the mounted antenna(s) that are planned to be located on this tower. All of the equipment required to operate the facility will reside within an equipment cabinet with the approximate dimensions of 2m. x 1m. x 1m. located within the fenced compound.



Tower Plan View:
 $\pm 1.93\text{m}$. ($\pm 6.33\text{ft}$.) per side



Antenna Dimensions:
 $750\text{mm} \times 280\text{mm} \times 85\text{mm}$



Rationale for a Tower Site

As more Canadians rely on internet services for personal security, convenience and business, Xplornet is required to respond to the demands of our customers by completing network expansion and improvements.

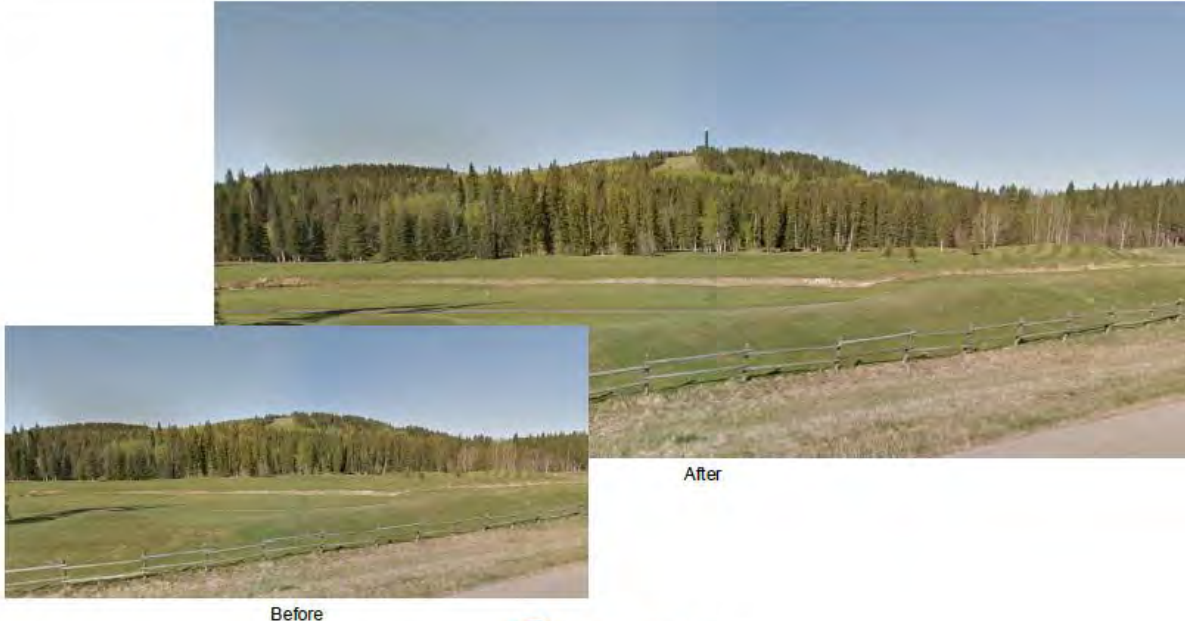
Photo-simulation

Below is a simulation depicting what the tower is expected to look like, post construction.

Type: Self-Support **Height:** 30m. **Cabinet Dimensions:** 2m. x 1m. x 1m.

BRAGG CREEK 30M SELF SUPPORT (AB1234)

Tower Coordinates: (50.983981°, -114.579696°)
WILL REPLACE 2X OLD TOWERS (A 15M TOWER AND A 30M TOWER)
VIEW FROM 1KM, ON MOUNTAIN LION DR, LOOKING SOUTH WEST



Page

Consultation Process and Procedures

Service providers are required to consult with the Local Land Use Authority and the public regarding new telecommunications installations. Rock View County's Land Use Bylaw C—4841-97, Policy POL#308 is being followed for this proposal.

Additional Information

General information regarding telecommunications systems is available on ISED's Spectrum Management and Telecommunications websites:

Innovation, Science and Economic Development Canada: Facts about towers – <http://ic.gc.ca/antenna>

Innovation, Science and Economic Development Canada: FAQ on Radiofrequency Energy and Health – <http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08792.html>

Health Canada: Safety Code 6, Radiofrequency Exposure Guidelines – http://www.hc-sc.gc.ca/ewh-semt/pubs/radiation/radio_guide-lignes_direct-eng.php

Health Canada: Cell Phone Towers – <http://www.hc-sc.gc.ca/ewh-semt/radiation/cons/stations/index-eng.php>

Canadian Wireless Telecommunications Association (CWTA): Health and Safety – <http://www.cwta.ca/for-consumers/health-safety/>

Should you have any comments, questions or concerns regarding Xplornet's telecommunications proposal described herein, please feel welcome to contact the undersigned prior to September 16, 2020. Comments may be mailed to Scott Telecom Services, Suite 900, 202 – 6th Avenue SW, Calgary, Alberta T2P 2R9. Comments may also be faxed to 403-263-5263 or emailed to notify@scottland.ca.

Regards,



Sherilyn Batchelder
Project Manager
Agent for Xplornet

[REDACTED]
[REDACTED]

Additional Contact Information:

Innovation, Science and Economic Development Canada
Southern Alberta District Office
Spectrum Management Operations
Harry Hays Building

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Rock View County
Development Officer
262075 Rocky View Point
Rocky View County, AB T4A 0X2
Telephone: 403-520-7285
Email: Development@rockyview.ca

Attachments: Comment sheet



Comment Sheet (XPL-0001.072) (AB1234)
Plan 8310059, Block A within SW 25-23-5 W5M

1. Are you an internet service user?

☐ yes

☐ no

2. Do you currently own any of the following devices?

☐ Tablet

☐ Laptop

☐ E-reader

☐ Home Computer

3. Do you plan on purchasing any of the following devices in the next year?

☐ Tablet

☐ Laptop

☐ E-reader

☐ Home Computer

4. Do you feel this is the most appropriate location for the site in this area?

☐ yes

☐ no

5. Are you satisfied with the appearance of the proposed facility?

If not, what changes would you suggest?

☐ yes

☐ no

6. What comments do you have that could improve our consultation process?

Additional Comments:

Please provide your name, full mailing address and email address (optional) if you would like to be informed of the further status of this proposal. This information will not be used for marketing purposes; however, your comments will be forwarded to the appropriate municipal officials.

(Please print clearly)

Name:

Mailing Address:

Postal Code

Email Address:

We thank you for your input.

Comments may be faxed to 



Comment Sheet (XPL-0001.072) (AB1234)
Plan 8310059, Block A within SW 25-23-5 W5M

1. Are you an internet service user?

☒ yes ☐ no

2. Do you currently own any of the following devices?

☒ Tablet ☒ Laptop ☐ E-reader ☒ Home Computer

3. Do you plan on purchasing any of the following devices in the next year?

☐ Tablet ☐ Laptop ☒ E-reader ☐ Home Computer

4. Do you feel this is the most appropriate location for the site in this area?

☒ yes ☐ no

5. Are you satisfied with the appearance of the proposed facility?

If not, what changes would you suggest?

☒ yes ☐ no

6. What comments do you have that could improve our consultation process?

Currently the internet service that we receive from Xplor.net is poor and will not support applications like ZOOM. I will be in favour of this proposal as long as it vastly improves the quality and volume of internet we currently receive. The speed is too slow and we need faster wifi in order to work from home and support ~~the~~ our University students working from home

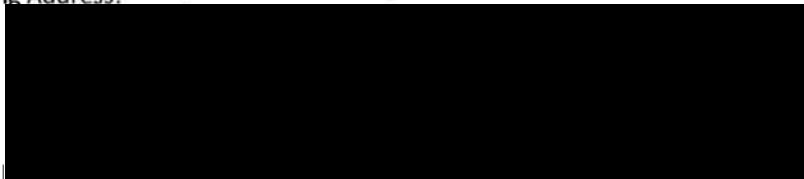
Additional Comments:

Please provide your name, full mailing address and email address (optional) if you would like to be informed of the further status of this proposal. This information will not be used for marketing purposes; however, your comments will be forwarded to the appropriate municipal officials.
(Please print clearly)

Name:

Carol + Michael Mertens

Mailing Address:



Postal Code:

Email Address:



We thank you for your input.

Comments may be faxed to



From: [Sherilyn Batchelder](#)
To: [Carol Mertens](#)
Cc: [Development@rockyview.ca](#); [ic.spectrumcalgary-calgaryspectre.ic@canada.ca](#); [Jason Pigeon](#)
Subject: Xplornet Proposed Tower SW 25-23-5 W5M (AB1234)
Date: Wednesday, September 9, 2020 8:18:28 AM
Attachments: [2837_001.pdf](#)
[image003.jpg](#)

Good morning Carol,

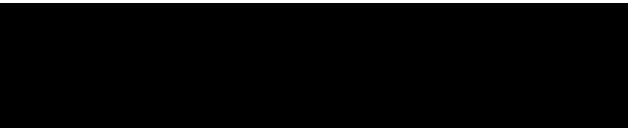
Thank you for sending in the comment sheet and participating in the public consultation process. We appreciate your support of the new tower. The LTE technology and future technologies on the tower will greatly improve coverage and capacity within the coverage area, and depending on where you are located you should see a significant improvement in speed and access to applications requiring bandwidth.

Regards,
Sherilyn

Sherilyn Batchelder
Project Manager - Telecom



Scott Telecom Services Ltd.



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From: Carol Mertens [REDACTED]
Sent: Tuesday, September 8, 2020 7:55 PM
To: Notify [REDACTED]
Subject: (EX1) Xplornet Reply

From: [Jason Pigeon](#)
To: [Tim Grant](#)
Cc: eneilsen@rockyview.ca; [REDACTED]
Subject: AB1234 Bragg Creek Tower inquiry.
Date: Friday, September 4, 2020 7:50:00 AM

Good morning Mr. Grant. Thank you for your support on this project! We are currently engaged in the land use approvals process and, if approved, we expect the build to occur in Spring 2021 weather permitting. Have a good day.

Regards,

Jason Pigeon
Land Agent
Scott Land & Lease Ltd.
[REDACTED]

-----Original Message-----

From: Tim Grant [REDACTED]
Sent: September 3, 2020 1:56 PM
To: Notify [REDACTED]
Subject: (EXT) Bragg Creek Tower

Greetings:

Thank you for the recent notification of the proposed telecommunication tower construction. I am supportive of Xplornet's plan. We would like information regarding the project timeline.

Thank you

Tim Grant

From: [Jason Pigeon](#)
To: ["Gary Nikiforuk"](#)
Cc: [Sherilyn Batchelder](#); [Mark Kamachi](#); ["FNeilsen@rockyview.ca"](#)
Subject: AB1234 Xplornet Telecommunications Tower at Wintergreen, Bragg Creek SW25-23-5 W5M
Date: Wednesday, September 16, 2020 1:40:00 PM
Attachments: [image001.jpg](#)

Thanks Gary we appreciate your support and look forward to improving the service in the community. The public comments we receive are part of the stakeholder feedback portion of our application. Take care.

Regards,

Jason Pigeon
Land Agent
Scott Land & Lease Ltd.



From: Gary Nikiforuk [REDACTED]
Sent: September 16, 2020 9:56 AM
To: Jason Pigeon [REDACTED]
Cc: Sherilyn Batchelder [REDACTED]
Subject: Re: (EXT) Xplornet Telecommunications Tower at Wintergreen, Bragg Creek SW25-23-5 W5M

Thanks Jason for the info and response to our earlier email.

We are looking forward to the improved services with Xplornet. The COVID outbreak with the increased work from home and remote schooling has taxed the capabilities of the existing Xplornet system. For example, we are unable to reliably use video upload functions in webinar products such as Zoom or MS Teams at this time. We would hope this new tower and equipment would provide additional capabilities and improved service.

As to cellular service improvements, there are many gaps in the current coverage around the Wintergreen area along many other parts of Bragg Creek. Aside from the convenience factor, many residents and visitors are unable to receive important safety notices on their cell phones. The latest example was an Environment Canada tornado warning this summer in the Bragg Creek-Springbank areas. In May 2018, there was an advisory issued by Rocky View County with a wildfire in Kananaskis Country, that many residents and visitors were unaware of. We hope these issues are considered by Xplornet in relation to this new tower.

Many thanks,
Gary Nikiforuk
Bragg Creek, Alberta

Sent from my BlackBerry 10 smartphone.

From: Jason Pigeon
Sent: Wednesday, September 16, 2020 9:24 AM
To: Gary Nikiforuk
Cc: Sherilyn Batchelder
Subject: RE: (EXT) Xplornet Telecommunications Tower at Wintergreen, Bragg Creek SW25-23-5 W5M

Good morning Mr. Nikiforuk, thanks for taking the time to write us and thanks for being an Xplornet customer. Sorry for the wait in our response but we wanted to attach a coverage map with our response that you requested in your point #4. We have responded to each point. In response to your inquiry, please refer to the information provided below:

1. The new installation, and resulting decommissioning of 2 existing locations, is all part of improving coverage and capacity in the area. We offer high speed LTE internet service with up to 50mbps download speed to all customers.
2. Xplornet recommended that lighting for the tower was not a necessity however Transport Canada/NAV Canada ultimately determines if lighting is required. A submission with supporting documents was made to Transport Canada and NAV Canada. The submission is under review by both federal agencies, and we have not received a response as of the date of this letter. Based on similar structures with similar proximities to aerodromes, we do not anticipate there will be lighting, however Transport Canada will make the final determination.
3. The drawings provided are an example of what the public can expect to see. Xplornet is the owner of the tower and will only have Xplornet equipment on the tower at this time. Proponents are required by ISED CPC-2-0-17 to permit mandatory tower sharing between providers (colocation). As such, we are unable to determine if the tower will be used by other providers for the purposes of cellular communications. Xplornet may also determine a future need for cellular antennas to be added to the tower dependent on customer demands and coverage requirements. The tower height of 30m. was the lowest height to meet the immediate coverage needs of the area, and the height was not selected for possible colocation requests. For further information, please refer to:

<https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf10563.html>

4. Xplornet continues to respond as rural areas of the province continue to grow in population. Where it is apparent that infrastructure needs to be addressed to improve coverage and capacity, Xplornet will adapt and react accordingly. I have included a coverage map for your

perusal. The purple and red areas show the areas this tower is expected to cover with service.

If there is anything else we can help you with or answer please feel free to contact me and have a good day.

Regards,

Jason Pigeon
Land Agent
Scott Land & Lease Ltd.




From: Gary Nikiforuk [REDACTED]
Sent: September 8, 2020 3:58 PM
To: Notify [REDACTED]
Subject: (EXT) Xplornet Telecommunications Tower at Wintergreen, Bragg Creek SW25-23-5 W5M

Hello,

I received the mail notice on Xplornet's plans to replace 2 existing telecommunication towers with a new 30 meter tower at the Resort of the Canadian Rockies Wintergreen hill. I'm a current Xplornet customer and had a number of questions on this project.

1. Will Xplornet be upgrading the services that are currently being provided to existing customers? Can you outline the services that will be provided.
2. Will the tower have aircraft avoidance lights or other lighting installed at the site?
3. The drawing of the tower profile shows a number of antennas located on the tower. Are there other services besides internet and/or other users planned for the tower?
4. It appears that the new tower may be able to service other areas and customers in the Bragg Creek and Redwood Meadows areas. Can you share your plans in this regard.

Many thanks,
Gary Nikiforuk
Bragg Creek


Sent from my BlackBerry 10 smartphone.

From: [Roker, Peter](#)
To: [Sherilyn Batchelder](#)
Cc: [Jason Pigeon](#); [REDACTED]
Subject: RE: (EXT) Proposed Xplornet Telecommunications Installation - Bragg Creek / Wintergreen - XPL-0001.072 (AB1234) PLAN 8310059 BLOCK A
Date: Thursday, September 17, 2020 9:47:46 AM

Sherilyn,

Thank you for your response.

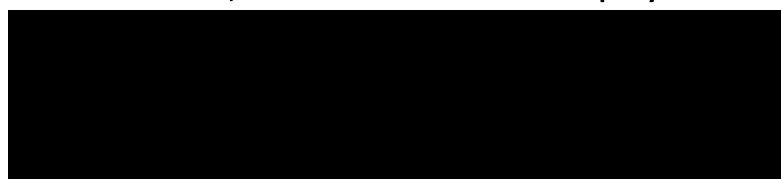
Let's get that tower built asap!

Best regards,

Peter J. Roker, CIP

Associate Director, Aerospace

Willis Canada Inc., a Willis Towers Watson Company



From: Sherilyn Batchelder [REDACTED]
Sent: Wednesday, September 16, 2020 3:57 PM
To: Roker, Peter [REDACTED]
Cc: Jason Pigeon [REDACTED]
Development@rockyview.ca
Subject: RE: (EXT) Proposed Xplornet Telecommunications Installation - Bragg Creek / Wintergreen - XPL-0001.072 (AB1234) PLAN 8310059 BLOCK A

Good afternoon Peter,

Thank you for your below email and support of the proposed tower. Currently we are engaged in the public consultation process, following this we will submit our application package to Rocky View County for review. The County will consider Xplornet's proposal, and public comments that were received. If approved, we anticipate that construction will commence later this year, weather permitting.

Regards,
Sherilyn

Sherilyn Batchelder
Project Manager - Telecom

[REDACTED]

Scott Telecom Services Ltd.

[REDACTED]



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From: Roker, Peter [REDACTED]
Sent: Wednesday, September 16, 2020 2:26 PM
To: Sherilyn Batchelder [REDACTED]
Subject: (EXT) Proposed Xplornet Telecommunications Installation - Bragg Creek / Wintergreen - XPL-0001.072 (AB1234)

Sherilyn

I just received notification of the proposed removal and installation of a new tower at **Plan 8310059, Block A within SW 25-23-5 W5M** (Wintergreen).

This is long overdue project and, as such, we (70 Moose Drive in Wintergreen) are obviously pleased to hear of the proposed project as there is a new internet service provider (Mage Networks) now offering new services to our area.

Can you advise/confirm if your proposed project has been approved and, if so, when the installation is to be completed.

Many thanks in advance.

Best regards,

Peter J. Roker, CIP
Associate Director, Aerospace

Willis Canada Inc., a Willis Towers Watson Company



From: [Sherilyn Batchelder](#)
To: [Michael Woertman](#)
Subject: RE: (EXT) Incorrect info on circular for proposed Xplornet NEW Tower AB1234
Date: Sunday, September 6, 2020 8:05:00 AM

Good morning Michael,

Thank you for reaching out to us regarding the location of the proposed tower proposed at 50.983981, -114.579696. The tower will increase capacity and coverage, and improve service in the area. Thank you for being an Xplornet customer, you will see benefit from the new tower if you are within the coverage area. We appreciate your support of the proposal.



Regards,
Sherilyn

Sherilyn Batchelder
Project Manager - Telecom

Scott Telecom Services Ltd.

Find us on [LinkedIn](#) | [Twitter](#) | www.scottland.ca



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From: Michael Woertman [REDACTED]
Sent: Sunday, September 6, 2020 5:38 AM
To: Sherilyn Batchelder [REDACTED]
Subject: (EXT) Incorrect info on circular for proposed Xplornet NEW Tower

Good morning, my name is Michael Woertman living in Wintergreen I am just letting you know that the info in your info package does not jive either the google map depicting the info is plotted incorrectly or the coordinates are wrong? Not that it matters to me as I am already a Xplornet customer (I am all for this plan) but for accuracy I thought you might want to be informed? Regards
Michael Woertman [REDACTED]



ISSUED FOR INFORMATION

FEBRUARY 2017

PROJECT INFORMATION

SITE NAME: 100' SELF SUPPORT TOWER

ADDRESS: SITE ADDRESS

CITY: CITY OF CANADA

COORDINATES: TBD

DRAWING LIST

SHEET No	DWG No	DESCRIPTION	SHEET No	DWG No	DESCRIPTION .
1	S01-01	STRUCTURAL GENERAL NOTES	19	S07-01	ANTI-CLIMB DETAILS
2	S01-02	STRUCTURAL GENERAL NOTES	20	E01-01	ELECTRICAL GENERAL NOTES
3	S01-03	ROCK ANCHOR INSTALLATION PROCEDURE	21	E02-01	CABLING DIAGRAM HUAWAI 3-SECTOR
4	S02-01	TOWER PROFILE	22	E02-02	CABLING DIAGRAM HORIZON QUANTUM BACKHAUL (XPIC)
5	S03-01	COMPOUND LAYOUT & GROUNDING			
6	S03-02	COMPOUND LAYOUT - SURFACE BACKFILL			
7	S03-03	SITE ELEVATION			
8	S03-04	8" x 8" WOOD POST INSTALLATION			
9	S03-05	CABLE TRAY DETAILS			
10	S03-06	FENCE DETAILS			
11	S03-07	ACCESS ROAD DETAILS			
12	S04-01	MAT FOUNDATION			
13	S04-02	ROCK ANCHOR FOUNDATION			
14	S04-03	ANCHOR BOLT TEMPLATE ASSEMBLY			
15	S04-04	CONCRETE PAD			
16	S04-05	FOUNDATION REBAR LIST			
17	S05-01	ANTENNA MOUNT DETAILS			
18	S06-01	MW FACE MOUNT DETAILS			



6300 Ordan Drive Mississauga, Ontario Canada, L5T 1W6
Ph: (905) 595-8000 Fax: (905) 595-7986
Toll Free: 1 800-WESBELL
www.wesbell.com

SITE KEY PLAN (N.T.S.)



STRUCTURE PHOTO



PROPERTY MANAGER / LANDLORD APPROVAL

SIGNED: _____ DATE: _____

PRINT NAME: _____

THE OWNER (OR ITS AUTHORIZED REPRESENTATIVES) HEREBY APPROVES THE INSTALLATIONS AND/OR REWIRING OF THE CABLES, WIRES, COMMUNICATION FACILITIES AND EQUIPMENT (THE "NETWORK") BY THE VENDOR AND/OR ITS AUTHORIZED CONSTRUCTION CONTRACTOR AT THE PREMISES AS SHOWN ON THE PLAN ATTACHED HERETO. ALL THE NETWORK INSTALLED BY THE VENDOR AND/OR ITS AUTHORIZED CONSTRUCTION CONTRACTOR OR ITS PREDECESSORS ON OR TO THE PREMISES SHALL REMAIN THE PROPERTY OF THE VENDOR AND THE VENDOR SHALL HAVE THE RIGHT TO REMOVE ITS NETWORK AT ANY TIME. IT IS UNDERSTOOD THAT THE NETWORK SHALL REMAIN A PROPERTY OF THE VENDOR DESPITE THAT THE NETWORK MAY BE IN PART OR IN WHOLE ATTACHED TO THE PREMISES AND IT SHALL NOT AT ANY TIME BECOME A FIXTURE TO THE PREMISES. THE OWNER AGREES TO PROVIDE THE VENDOR AND/OR ITS AUTHORIZED CONSTRUCTION CONTRACTOR ACCESS TO THE PREMISES DURING ALL REASONABLE BUSINESS HOURS EXCEPT THAT IN SITUATIONS OF EMERGENCY, THE VENDOR AND/OR ITS AUTHORIZED CONSTRUCTION CONTRACTOR SHALL HAVE ACCESS AT ANY AND ALL TIMES THAT IT REQUIRES FOR THE PURPOSE OF INSTALLING, MAINTAINING, REPAIRING AND OPERATING THE NETWORK. THE ENCLOSED DRAWINGS OF THE PROPOSED TELECOMMUNICATIONS INSTALLATIONS ARE SUBMITTED PURSUANT TO THE LICENSE AGREEMENT BETWEEN THE LANDLORD AND THE VENDOR. THE LANDLORD IS REQUESTED TO DISCLOSE IN WRITING, THE IDENTITY AND LOCATION OF ANY HAZARDOUS SUBSTANCE LOCATED AT OR ADJACENT TO THE VENDOR 'S PROPOSED TELECOMMUNICATIONS INSTALLATIONS.

GENERAL

1. THE GENERAL STRUCTURAL NOTES ARE INTENDED TO AUGMENT THE DRAWINGS AND SPECIFICATIONS. SHOULD CONFLICTS EXIST BETWEEN THE DRAWINGS, SPECIFICATIONS AND/OR THE GENERAL STRUCTURAL NOTES, THE STRICTEST PROVISION SHALL GOVERN.
2. READ STRUCTURAL DRAWINGS IN CONJUNCTION WITH THE REMAINDER OF THE CONTRACT DRAWINGS AND PROJECT SPECIFICATIONS.
3. CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS ON SITE AND COMPARE THEM WITH THOSE SHOWN ON THE CONTRACT DRAWINGS BEFORE CONSTRUCTION. ANY DISCREPANCIES OR ERRORS MUST BE REPORTED TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
4. ALL DIMENSIONS ARE IN MILLIMETERS (mm), UNLESS NOTED OTHERWISE. DO NOT SCALE DRAWINGS.
5. UNLESS NOTED OR EXPLICITLY STATED BY THE ENGINEER, ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE LATEST EDITION OF ONTARIO BUILDING CODE, NATIONAL BUILDING CODE, CSA S37 "ANTENNAS, TOWERS AND ANTENNA-SUPPORTING STRUCTURES", CSA-S16, THE OCCUPATIONAL HEALTH & SAFETY ACT AND WITH GOOD CONSTRUCTION PRACTICE.
6. THE CONSTRUCTION LOADS ON THE EXISTING OR PROPOSED STRUCTURES SHALL NOT EXCEED THE DESIGN LIVE LOADS INDICATED ON THE DRAWINGS.
7. FEATURES OF CONSTRUCTION NOT FULLY SHOWN ARE OF THE SAME CHARACTER AS THOSE NOTED FOR SIMILAR CONDITIONS.
8. ALL EQUIPMENT MUST BE INSTALLED FOLLOWING THE MANUFACTURER'S REQUIREMENTS AND SPECIFICATIONS.
9. THE DESIGN OF CABINETS AND ANY OTHER PRE-MANUFACTURED ITEMS IS THE RESPONSIBILITY OF OTHERS.
10. STRUCTURAL DRAWINGS ARE NOT TO BE USED OR CONSIDERED AS FABRICATION DRAWINGS.
11. WHENEVER EXISTING EQUIPMENT SHOULD HINDER THE WORKS, IT SHALL BE TEMPORARILY REMOVED AND LATER REINSTALLED IN THE SAME OR BETTER THAN PREVIOUS CONDITIONS AFTER COMPLETION OF THE WORKS. REMOVAL OF EXISTING EQUIPMENT SHALL BE COORDINATED WITH THE OWNER AND APPROVED BY THE ENGINEER.

MATERIALS

1. STRUCTURAL STEEL: NEW STOCK (NOT WEATHERED OR RUSTED), TO CONFORM TO CAN/CSA G40.20-04/G40.21, GRADE 350W.
2. HOLLOW STRUCTURAL SECTIONS (HSS): NEW STOCK, TO CONFORM TO CAN/CSA G40.20-04/G40.21, GRADE 350W, CLASS H, UNLESS NOTED OTHERWISE.
3. PLATES, ANGLES AND CHANNELS: CAN/CSA G40.20-04/G40.21, GRADE 300W.
4. COLD FORMED SECTIONS: NEW STOCK, TO CONFORM TO ASTM A446, GRADE 345W OR APPROVED EQUIVALENT.
5. PIPES (DN): ASTM A53 GRADE B.
6. HIGH STRENGTH BOLTS AND NUTS: ASTM A325 OR A490.
7. U-BOLTS, CAST-IN-PLACE ANCHOR BOLTS: ASTM A325.
8. THREADED RODS : ASTM A193 B7.
9. WELDED STEEL: CSA W59-03.
10. WELDING ELECTRODES AND EQUIPMENT: CSA W48-06 & W55.3-08.
11. STAINLESS STEEL: ASTM A276-10, TYPE 304 OR 316.

CAST-IN-PLACE CONCRETE

1. CRETE MATERIAL AND METHODS OF CONCRETE CONSTRUCTION: CAN/CSA-A23.1 AND A23.2 (THE LATEST EDITION).
2. FORMS AND SHORING SHALL NOT BE REMOVED UNTIL THE CONCRETE IS ADEQUATELY SET. THEIR REMOVAL SHALL BE DONE IN SUCH A MANNER AS TO ENSURE THE COMPLETE SAFETY OF THE STRUCTURE.
3. ALL EXPOSED CONCRETE CORNERS SHALL BE SMOOTHED USING STEEL TROWEL AND SHALL BE 25mm x 25mm CHAMFERED.
4. ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO CSA - G30.18 (THE LATEST EDITION), GRADE 400, UNLESS NOTED OTHERWISE.
5. WELDED WIRE FABRIC SHALL HAVE A MINIMUM YIELD STRENGTH OF 450MPa AND CONFORM TO CSA-G30.5 (THE LATEST EDITION).
6. ALL REINFORCING BARS SHALL BE SUPPORTED IN THE FORMS AND SPACED WITH STANDARD ACCESSORIES SO THAT THERE IS NO MOVEMENT DURING CONCRETE PLACEMENT.
7. REINFORCING IS TO BE GENERALLY DETAILED IN ACCORDANCE WITH RSIC MANUAL OF STANDARD PRACTICE (THE LATEST EDITION).
8. ALL REINFORCEMENT SPLICES SHALL BE OF LENGTH EQUAL TO THE GREATER OF 40 BAR DIAMETERS OR A CLASS "B" SPLICE.

STRUCTURAL STEEL

1. ALL WORK TO BE EXECUTED ACCORDING TO CSA S37 (THE LATEST EDITION); FABRICATION AND ERECTION OF STEEL WORK SHALL CONFORM TO CSA S16 (THE LATEST EDITION).
2. ALL EXPOSED STEEL, INCLUDING THREADED RODS, BOLTS, NUTS, WASHERS AND OTHER HARDWARES SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION , UNLESS NOTED OTHERWISE.
3. ALL WELDS SHOWN ON DRAWINGS ARE PRE-WELDED AND CERTIFIED BY THE STEEL FABRICATOR. FIELD WELDING IS PROHIBITED UNLESS INDICATED ON THE DRAWINGS.
4. ALL ELEMENTS SHALL BE ASSEMBLED ON SITE USING BOLTED CONNECTION.BOLTED CONNECTION SHALL BE MADE USING HIGH TENSILE STRENGTH BOLTS. BOLTS SHALL BE IN FULL BEARING WITH THREADS EXCLUDED FROM THE SHEAR PLANE.
5. ALL STRUCTURE ASSEMBLY BOLTS ARE TO BE INSERTED OUT AND/OR UP (WITH NUTS AND PAL NUTS ON OUTSIDE OF TOWER FACE AND/OR ON TOP FLANGE PLATES), U.N.O.
6. WITH THE EXCEPTION OF THE FOUNDATION ANCHOR BOLTS WHICH ARE REQUIRED TO BE SNUG TIGHT. ALL BOLTS SHALL BE INSTALLED UTILIZING 'TURN OF NUT' METHOD.
7. ALL U-BOLTS SHALL BE INSTALLED WITH FOUR (4) NUTS AND TWO (2) FLAT WASHERS EACH, UNLESS NOTED OTHERWISE.
8. WHEN U-BOLT SHALL BE FIXED TO PAINTED MEMBERS, REMOVE THE PAINT USING A STEEL BRUSH AND BRING ROUGH AREAS IN CONTACT WITH BOLTS OR CONNECTION PLATE. ZINC COATING SHALL NOT THINNED SIGNIFICANTLY.
9. DO NOT REUSE EXISTING BOLTS ONCE REMOVED.
10. USE OF WELDING TORCH TO CORRECT ERRORS ON SITE OR TO ENLARGE HOLES IS PROHIBITED. FIELD HOLES SHALL BE DRILLED BY ROTATION ONLY. HAMMER DRILLING IS PROHIBITED.
11. ALL DAMAGED SURFACES SHALL BE CLEANED, WIRE BRUSHED AND APPLIED WITH TWO (2) COATS OF ZINC-RICH PAINT.
12. PROVIDE TEMPORARY BRACING NECESSARY TO KEEP THE STRUCTURE TRUE AND PLUMB DURING CONSTRUCTION UNTIL PERMANENT BRACING IS INSTALLED.
13. IN REPLACING DIAGONALS, HORIZONTALS OR BOLTS, TEMPORARY MEANS SHALL BE TAKEN TO ENSURE THAT THERE IS NO DISTORTION OF ANY MEMBER. ONLY ONE DIAGONAL OR HORIZONTAL MEMBER SHALL BE RELEASED AT ANY ONE TIME. NONE SHALL BE MISSING WHENEVER THE CREW IS OFF THE SITE.
14. MATERIAL MAY BE CUT BY SHEARING, SAWING, OR CUTTING WITH A ROUTER OR GAS CUT. MATERIAL GREATER THAN 30mm (1 3/16") THICKNESS SHALL NOT BE SHEARED.
15. CUT EDGES SHALL BE TRUE AND SMOOTH, AND FREE FROM EXCESSIVE BURRS AND RAGGED BREAKS. SHEARED EDGES OF THICK PLATES SHALL BE PLANED TO A DEPTH OF 6mm (1/4"). RE-ENTRANT CUTS SHALL BE AVOIDED.
16. TOLERANCES AS INDICATED IN THE CSA S16 (THE LATEST EDITION) SHALL BE CAREFULLY FOLLOWED DURING FABRICATION.
17. PROVIDE HOLES AT EXTREMITIES OF CLOSED TUBULAR ASSEMBLIES TO ALLOW ADEQUATE GALVANIZING AND DRAINAGE.
18. THE CONTRACTOR SHALL NOT UNDER ANY CIRCUMSTANCE REMOVE OR MODIFY TOWER MEMBERS UNLESS A WRITTEN NOTICE IS PROVIDED BY THE ENGINEER.

TURN-OF-NUT METHOD *		
DISPOSITION OF OUTER FACES OF BOLTED PARTS	BOLT LENGTH †	TURN
BOTH FACES NORMAL TO BOLT AXIS OR ONE FACE NORMAL TO AXIS AND OTHER FACE SLOPED 1:20 MAX. (BEVELLED WASHERS NOT USED)	UP TO AND INCLUDING 4 DIAMETERS	1/3
	OVER 4 DIAMETERS AND NOT EXCEEDING 8 DIAMETERS OR 200mm	1/2
	EXCEEDING 8 DIAMETERS OR 200mm	2/3
BOTH FACES SLOPED 1:20 MAX. FROM NORMAL TO BOLT AXIS (BEVELLED WASHERS NOT USED) ‡	ALL LENGTHS OF BOLTS	3/4
* NUT ROTATION IS ROTATION RELATIVE TO A BOLT REGARDLESS OF WHETHER THE NUT OR BOLT IS TURNED. THE TOLERANCE ON ROTATION IS 30° OVER OR UNDER. THIS TABLE APPLIES TO COARSE-THREAD HEAVY-HEX STRUCTURAL BOLTS OF ALL SIZES AND LENGTHS USED WITH HEAVY-HEX SEMI-FINISHED NUTS. † BOLT LENGTH IS MEASURED FROM THE UNDERSIDE OF THE HEAD TO THE EXTREME END OF POINT. ‡ BEVELLED WASHERS ARE NECESSARY WHEN A 490, A 490M, OR F2280 BOLTS ARE USED.		

FOUNDATION

1. CONTRACTOR SHALL COOPERATE WITH AND PROVIDE ACCESS TO THE GEOTECHNICAL ENGINEER TO ALLOW INSPECTIONS OF WORK AREA AND TO INSTALL AND TAKE READING ON REQUIRED MONITORING DEVICES, IF NECESSARY.
2. ALL EXCAVATION SHALL BE KEPT DRY (BY PUMPING IF NECESSARY) BEFORE POURING CONCRETE AND SHALL BE KEPT DRY UNTIL BACKFILLING IS IN PLACE.
3. BRACING, SHORING AND SLOPING EXCAVATION SHALL BE DONE IN ACCORDANCE WITH ALL LOCAL AND FEDERAL CODES AND SAFETY REGULATIONS. REFER TO THE GEOTECHNICAL REPORT FOR EXCAVATION/ DRILLING CONDITIONS AND PROCEDURES.
4. MAINTAIN THE UNSUPPORTED SIDES OF THE EXCAVATION ONLY IF THE SAFE INCLINATION OF THE SIDES OF THE EXCAVATION IS PROVIDED IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
5. SOFT AREAS UNCOVERED ON EXCAVATION SHALL BE SUB EXCAVATED TO SOUND MATERIAL AND FILLED WITH GRANULAR 'A' SOIL COMPACTED TO 100% SPMDD.
6. FOR ROCK FOUNDATIONS, LOOSE WEATHERED ROCK SHALL BE REMOVED BEFORE POURING CONCRETE. FOUNDATION SEAT LEVEL SHALL BE CLEANED OF ALL DEBRIS.
7. INSPECT BOTTOM OF EXCAVATION PRIOR TO PLACING THE STEEL REINFORCING CAGE AND CONCRETE, TO ENSURE NO SIGNIFICANT AMOUNTS OF LOOSE SOIL OR FOREIGN MATERIAL REMAINS.
8. CONCRETE SHALL BE PLACED INTO EXCAVATION WITHOUT UNDUE DELAY, WITH THE USE OF A CHUTE OR HOPPER DEVICE TO DIRECT THE CONCRETE TO FALL WITHIN THE CENTER OF THE STEEL CAGE. CONCRETE SHALL NOT BE ALLOWED TO HIT THE STEEL CAGE IN A MANNER WHICH WOULD CAUSE SEGREGATION OF THE MATERIAL.
9. REFER TO THE GEOTECHNICAL REPORT FOR RECOMMENDED BACKFILL/ COMPACTED FILL PROCEDURES. IF SUCH INFORMATION IS NOT AVAILABLE, BACKFILL MATERIAL SHALL HAVE A MINIMUM DRY DENSITY OF 17.3 kN/ cu.m. FILL MATERIALS SHALL PERFERABLY CONSIST OF GRANULAR MATERIAL AND SHALL BE FREE OF LARGER ROCKS, DEBRIS, WATER, ORGANIC MATERIAL, ICE AND FROZEN MATERIAL, ETC.
10. BACKFILL SHALL BE PLACED IN HORIZONTAL LIFTS NO THICKER THAN 150mm (6") AND COMPACTED TO MINIMUM OF 95% OF STANDARD PROCTOR DENSITY. IF SHALLOW WATER IS ENCOUNTERED, THEN IT IS RECOMMENDED THAT FIRST LIFTS OF BACKFILL BE COMPACTED USING A STATIC ROLLER NEAR THE WATER TABLE (±0.6M) AND TO VOID THE USE OF VIBRATORY EQUIPMENT.
11. BACKFILL AGAINST FOUNDATION WALL IN SUCH A MANNER THAT THE LEVEL OF BACKFILLING ON ONE SIDE OF THE WALL IS NEVER MORE THAN 450mm DIFFERENT FROM THE LEVEL ON THE OTHER SIDE OF THE WALL EXCEPT WHERE TEMPORARY SUPPORT FOR THE WALL IS PROVIDED.
12. SULPHATE RESISTANCE CEMENT SHALL BE USED FOR ALL FOUNDATION CONCRETE IN CONTACT WITH SOIL SUSCEPTIBLE TO SULPHATE ATTACK. CONCRETE SHALL BE MANUFACTURED IN ACCORDANCE WITH THE CURRENT CSA STANDARD.
13. CONCRETE IN FOUNDATIONS MUST BE POURED IN CONTINUOUS POURS BETWEEN CONSTRUCTION JOINTS. NO CONSTRUCTION JOINTS OTHER THAN THOSE SHOWN ON SITE SPECIFIC DRAWINGS WILL BE PERMITTED. THE CONTRACTOR SHALL PROVIDE EFFICIENT EQUIPMENT TO COMPLETE THE POURING OF EACH SECTION IN ONE CONTINUOUS POUR.
14. CONCRETE SHALL BE PLACED AGAINST UNDISTURBED SOIL FREE OF WATER AND ALL FOREIGN OBJECTS AND MATERIALS. SPACING DEVICES SHALL BE USED AS REQUIRED TO MAINTAIN THE SIDE CLEARANCE BETWEEN THE REINFORCING STEEL (REBAR) AND THE EXCAVATION WALL.
15. CONCRETE SHALL BE PLACED INTO EXCAVATION WITHOUT UNDUE DELAY AND WITH THE USE OF A CHUTE OR HOPPER DEVICE TO DIRECT THE CONCRETE TO FALL WITHIN THE CENTER OF THE STEEL CAGE. CONCRETE SHALL NOT BE ALLOWED TO HIT THE STEEL CAGE WHICH WOULD CAUSE SEGREGATION OF THE MATERIAL.
16. CONCRETE TEST CYLINDERS SHALL BE TAKEN AND STORED IN ACCORDANCE WITH CSA STANDARDS REQUIREMENT. A SINGLE CONCRETE TEST CYLINDER SHALL BE BROKEN PRIOR TO THE INSTALLATION TO CONFIRM THE CONCRETE HAS ACHIEVED THE SPECIFIC STRENGTH.
17. WELDING OF REINFORCING STEEL (REBAR) AND EMBEDMENTS IS PROHIBITED UNLESS OTHERWISE NOTED ON THE DRAWINGS.
18. BENDING, STRAIGHTENING OR REALIGNING (HOT OR COLD) OF THE ANCHOR BOLTS BY ANY METHOD IS PROHIBITED.

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No.	ISSUE/REVISION	BY	DATE

PROJECT:	XPLORNET SELF SUPPORT TOWER
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TITLE:	STRUCTURAL GENERAL NOTES
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DRAWN BY:	RR	PURCHASE ORDER NO.
CHECKED BY:	MW	PROJECT NO.
APPROVED BY:	MP	DRAWING NO. S01-01
DATE:	05/01/2017	SHEET <u>1</u> OF <u>22</u>

RADIO EQUIPMENT, ANTENNAS, CABLES AND CONDUIT ROUTINGS

1. ALL RADIO EQUIPMENT AND ANTENNAS ARE TO BE SUPPLIED BY THE CLIENT.
2. THE ELEVATION OF ANTENNAS INDICATED ON THE DRAWINGS IS THE MID-HEIGHT OF THE ANTENNA.
3. ALL JUMPERS, CONNECTORS, AND ANTENNA ASSOCIATED EQUIPMENT ARE TO BE SUPPLIED BY THE CLIENT UNLESS OTHERWISE SPECIFIED IN CONTRACT DOCUMENTS.
4. SPACING FOR SUSPENDING TRANSMISSION LINES IS TO BE AS PER MANUFACTURER'S RECOMMENDATIONS (1000mm MAXIMUM INTERVAL). MAINTAIN MINIMUM BENDING RADIUS AT ALL LOCATIONS AS PER MANUFACTURER'S RECOMMENDATIONS.
5. DO NOT EXCEED THE MANUFACTURER'S RECOMMENDATIONS FOR PULL ON THE TRANSMISSION LINE.
6. UNLESS NOTED OTHERWISE, ALL VERTICAL PIPE MOUNTS ARE TO BE PLUMB.
7. CORE THROUGH ROOF, FLOORS AND WALLS AS DESCRIBED IN NOTES ON STRUCTURAL DRAWINGS FOR TRANSMISSION LINES, CABLES AND CONDUITS. LOCATE REINFORCING STEEL AND EMBEDDED SERVICES BEFORE CORING HOLES IN CONCRETE. DO NOT CUT ANY REINFORCING STEEL OR SERVICES IN CONCRETE. DO NOT CORE THROUGH CONCRETE COLUMNS, BEAMS, CAPITALS OR DROP PANELS. CORE HOLES FOR EACH INDIVIDUAL TRANSMISSION LINE, CABLE AND CONDUIT AT MINIMUM DIAMETER OF HOLE (HOLE DIAMETER NOT TO EXCEED 100mm UNLESS NOTED OTHERWISE). CLEAR SPACING BETWEEN CORES MUST BE AT LEAST 75mm. SEAL AND FIRESTOP HOLES AS SPECIFIED.

TOWER STACKING/ERECTION

1. THE TOWER INSTALLERS SHOULD COMPLY WITH ALL INSTALLATION PROCEDURES, SAFEGUARDS AND MEANS AND METHODS OF CONSTRUCTION. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENT OF OHSA AND CANADA LABOUR CODE, PART II.STACKING/ERECTION METHODS, VERTICALITY AND TWIST TOLERANCES SHALL COMPLY WITH CSA S37 (THE LATEST EDITION).
2. IN ORDER TO ENSURE A SAFE WORKING CONDITION, IT IS RECOMMENDED TO STACK/ERECT THE TOWER UNDER THE FOLLOWING WEATHER CONDITIONS:
 - (a). WIND VELOCITY IS LESS THAN 25 km/h (15.5 mph) AT GROUND LEVEL.
 - (b). THERE IS NO THUNDERSTORMS FORECASTED.
 - (c). THERE IS NO ICE ON THE GUYS OF GUYED STRUCTURES.
3. AT THE COMPLETION OF THE WORK, THE SITE SHALL BE CLEANED OF ALL DEBRIS TO THE SATISFACTION OF THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY ONE'S WORK TO EXISTING INSTALLATIONS OR EQUIPMENTS.

SUBMITTALS AND QUALITY CONTROL

1. IN ADDITION TO CONTRACTOR'S QUALITY CONTROL PROGRAM, INDEPENDENT TESTING AND INSPECTION MAY BE PERFORMED BY OWNER OR OWNER'S REPRESENTATIVE.
2. SUBMIT RED-LINED COPY OF CONSTRUCTION DRAWINGS UPON COMPLETION OF CONSTRUCTION HIGHLIGHTING CHANGES IN THE AS-BUILT CONDITION FROM SHOWN ON THE DRAWINGS.

DISCLAIMER: **Page 60 of 81**

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No.	ISSUE/REVISION	BY	DATE

PROJECT:

SAMPLE
SELF SUPPORT TOWER

TITLE:

STRUCTURAL GENERAL NOTES

DRAWN BY:	RR	PURCHASE ORDER NO.
CHECKED BY:	MW	PROJECT NO.
APPROVED BY:	MP	DRAWING NO. S01-02
DATE:	05/01/2017	SHEET <u>2</u> OF <u>22</u>

INSTALLATION PROCEDURES FOR WILLIAMS SPIN-LOCK ROCK BOLTS:

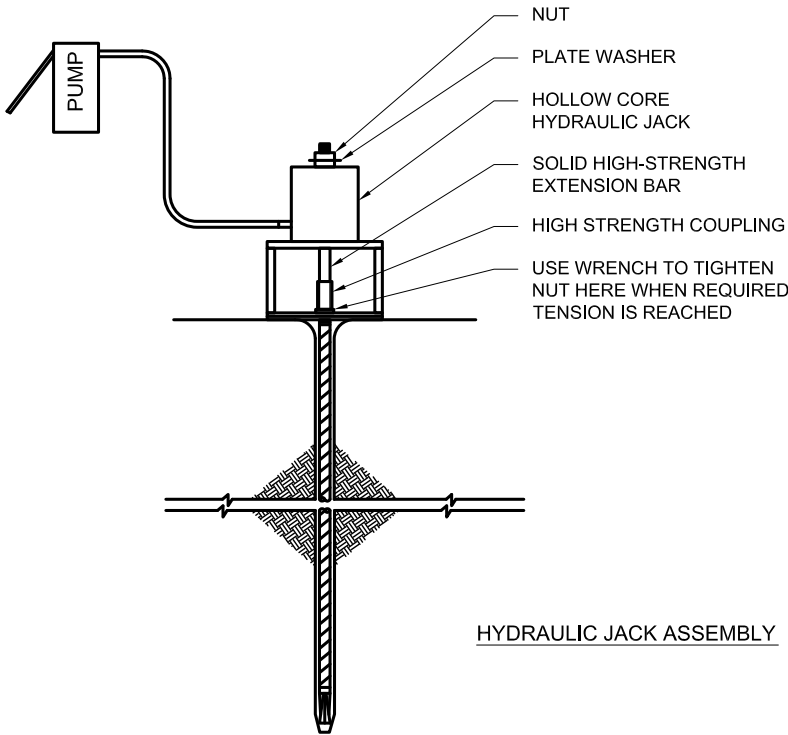
1. SURFACE PREPARATION
- 1.1 CLEAR THE SLAB OR ROCK SURFACE OF LOOSE MATERIAL.
2. DRILLING
- 2.1 DRILL THE REQUIRED HOLE SIZE FOR THE SPECIFIED ANCHOR BOLT ASSEMBLY. THE HOLE SHOULD BE DRILLED DEEPER BY ABOUT 300mm (1'-0") TO ALLOW FOR THE ROCK SEGMENTS DROPPING INTO THE BOTTOM OF THE HOLE. IT IS ACCEPTABLE TO DRILL THE UPPER PORTION OF THE HOLE LARGER THAN REQUIRED TO EXPEDITE INSTALLATION, PROVIDED THAT AT LEAST THE LOWER 1830mm (6'-0") IS THE CORRECT SIZE.
3. BOLT PLACEMENT
- 3.1 BEFORE INSERTING THE ROCK BOLT, CLEAN THE HOLE OF ANY CUTTING, MUD, ETC.
- 3.2 POSITIONING THE THRUST RING, EXPANSION SHELL AND CONE ON THE BOTTOM THREADED PORTION OF THE BOLT.
- 3.3 INSTALL THE KEY HOLE PLATE, WASHER (WASHERS) AND NUT ON THE OUTER PORTION OF THE ANCHOR BOLT AND LOWER THE ANCHOR BOLT ASSEMBLY INTO THE DRILLED HOLE. IF THE ROCK BOLT BECOMES STUCK BECAUSE OF CROOKED HOLE OR DEBRIS IN THE HOLE, LOCK TWO NUTS ON THE END OF THE BOLT AND TAP BOLT INTO PLACE WITH A SLEDGE HAMMER OR AIR HAMMER. THE PURPOSE OF LOCKING TWO NUTS TOGETHER IS TO PROTECT THE THREADS ON THE BOTTOM END OF THE ROCK ANCHOR WHEN STRIKING WITH A HAMMER.
4. SETTING THE ANCHOR
- 4.1 SET THE EXPANSION ANCHOR BY TORQUING THE ANCHOR BOLT TO THE REQUIRED TORQUE (SEE SPIN-LOCK ROCK BOLT CHART). THIS IS DONE BY TURNING THE SETTING TOOL IN A CLOCKWISE DIRECTION USING EITHER A PNEUMATIC OR MANUAL TORQUE WRENCH. THIS TORQUING ACTION MIGRATES THE CONE INTO THE SHELL, THUS EXPANDING IT. NOTE THAT, WHERE APPLICABLE, THE BOLT CAN BE SET WITHOUT THE STEEL BEARING PLATE IN PLACE AND WITH ANY DESIRED AMOUNT OF THREAD EXTENDING BEYOND THE NUT. IF THE SHELL TENDS TO SLIP, ALLOWING THE BOLT TO ROTATE, MOVE THE BOLT UP OR DOWN SLIGHTLY UNTIL IT CATCHES.
5. TESTING THE ANCHOR BOLT BY TENSIONING WITH A HYDRAULIC JACK AND PRETENSIONING
- 5.1 INSTALL A HIGH STRENGTH COUPLER (THREADS CHASED FOR COUPLING GALVANIZED RODS), SOLID HIGH STRENGTH EXTENSION BAR, HOLLOW CORE HYDRAULIC JACK WITH STOOL, PLATE WASHER AND NUT.
- 5.2 TEST THE ROCK BOLT BY JACKING THE ROCK BOLT TO THE REQUIRED TENSION. USE THE TORQUE VALUES OR PROOF LOAD VALUES SHOWN IN THE TABLE UNLESS THE FOUNDATION DRAWING FOR THE PROJECT SPECIFY OTHERWISE.
- 5.3 PRETENSION BY USING A WRENCH TO TIGHTEN THE ROCK BOLT NUT, THUS TRANSFERRING THE LOAD FROM THE JACK TO THE ROCK BOLT. SOME HELPFUL DETAILS CAN BE OBTAINED FROM THE NOTES FOR HYDRAULIC JACK ASSEMBLY.
6. GROUTING
- 6.1 PUMP NON-SHRINK FLOWABLE GROUT INTO THE HOLE THROUGH THE KEY HOLE PLATE USING A GROUT TUBE UNTIL A CONTINUOUS FLOW OF GROUT IS SEEN COMING OUT AT THE TOP OF HOLE.
- (NOTE: IF THE FOUNDATION DESIGN INCLUDES A BEARING PLATE AND CONTINUOUS COIL OR THREADED ROD IS USED, THE KEY HOLE PLATE CAN BE REMOVED AND REUSED AFTER THE GROUT HAS CURED TO 60% OF ITS COMPRESSIVE STRENGTH).
- 6.2 IF THE FOUNDATION DESIGN INCLUDES A BEARING PLATE, PLACE A MIX OF STIFF, NON-SHRINKABLE GROUT ON THE CLEANED ROCK SURFACE IN THE AREA OF THE BEARING PLATE. THE GROUT PAD IS TO BE OF SUFFICIENT THICKNESS (APPROXIMATELY 100mm - 125mm OR 4" - 5") TO MAINTAIN CLEARANCE BETWEEN THE KEY HOLE PLATE, NUTS, AND SHEAR BARS ON THE UNDERSIDE OF THE BEARING PLATE. INSTALL THE BEARING PLATE WHILE THE GROUT IS SOFT. LEVEL THE BEARING PLATE AND ALLOW THE GROUT TO CURE BEFORE TORQUING THE RETAINER NUTS.

WILLIAMS HIGH TENSILE "SPIN-LOCK" ROCK AND CONCRETE ANCHOR BOLTS ASTM A-108/C1045

DIA.	RECOMMENDED DESIGN LOAD AT APPROX. 2:1 SAFETY FACTOR	MAXIMUM WORKING LOAD TO YIELD	AVERAGE ULTIMATE STRENGTH (6)	ROCK TYPE	DRILL HOLE DIA. (1)	TYPE HEAD ASSY	TORQUE ft.-lbs.		PART NUMBER
							TO EXPAND SHELL (2)	ON NUT	
1/2" - 13 (13mm)	9,000 lbs. (40.0 kN)	13,000 lbs. (57.8 kN)	18,000 lbs. (80.1 kN)	HARD & MEDIUM HARD & MEDIUM HARD & MEDIUM	1-1/4" - 32mm 1-5/8" - 41mm 1-3/4" - 44mm	A 10 A 13 A 14	50 (Do not exceed 70)	85	R1S-04 - A 10 R1S-04 - A 13 R1S-04 - A 14
5/8" - 11 (16mm)	11,250 lbs. (50.0 kN)	18,000 lbs. (80.0 kN)	25,000 lbs. (100.0 kN)	HARD & MEDIUM HARD & MEDIUM HARD & MEDIUM	1-1/4" - 32mm 1-5/8" - 41mm 1-3/4" - 44mm	A 10 A 13 A 14	125 (Do not exceed 140)	125	R1S-05 - A 10 R1S-05 - A 13 R1S-05 - A 14
3/4" - 10 (19mm)	19,000 lbs. (84.5 kN)	30,000 lbs. (133.5 kN)	38,000 lbs. (169.0 kN)	HARD & MEDIUM HARD & MEDIUM MEDIUM & WEAK WEAK ROCK & CONCRETE	1-5/8" - 41mm 1-3/4" - 44mm 1-3/4" - 44mm 1-3/4" - 44mm	A 13 A 14 B 14 C 14	210 (Do not exceed 250)	210	R1S-06 - A 13 R1S-06 - A 14 R1S-06 - B 14 R1S-06 - C 14
7/8" - 9 (22mm)	29,000 lbs. (129.0 kN)	46,000 lbs. (204.6 kN)	58,000 lbs. (258.0 kN)	HARD & MEDIUM HARD & MEDIUM MEDIUM & WEAK WEAK ROCK & CONCRETE	1-5/8" - 41mm 1-3/4" - 44mm 1-3/4" - 44mm 1-3/4" - 44mm	A 13 A 14 B 14 C 14	390 (Do not exceed 410)	390	R1S-07 - A 13 R1S-07 - A 14 R1S-07 - B 14 R1S-07 - C 14
1" - 8 (25mm)	37,500 lbs. (166.7 kN)	60,000 lbs. (266.8 kN)	75,000 lbs. (333.5 kN)	HARD & MEDIUM HARD & MEDIUM MEDIUM & WEAK WEAK ROCK & CONCRETE	1-5/8" - 41mm 1-3/4" - 44mm 1-3/4" - 44mm 1-3/4" - 44mm	A 13 A 14 B 14 C 14	500 (Do not exceed 600)	550	R1S-08 - A 13 R1S-08 - A 14 R1S-08 - B 14 R1S-08 - C 14
1-1/8" - 7 (29mm)	42,500 lbs. (189.0 kN)	67,000 lbs. (298.0 kN)	85,000 lbs. (377.8 kN)	HARD & MEDIUM ROCK & CONCRETE	2" - 51mm 2-1/4" - 57mm	B 16 C 18	550 (Do not exceed 600)	770	R1S-09 - B 16 R1S-09 - C 18
1-1/4" - 7 (32mm)	60,000 lbs. (266.8 kN)	90,000 lbs. (400.4 kN)	120,000 lbs. (533.7 kN)	ROCK & CONCRETE ROCK & CONCRETE	2-1/4" - 57mm 2-1/2" - 63mm	C 18 B 20	750 (Do not exceed 1200)	1000	R1S-10 - C 18 R1S-10 - B 20
1-3/8" - 8 (35mm)	67,500 lbs. (300.3 kN)	110,000 lbs. (489.2 kN)	135,000 lbs. (600.4 kN)	WEAK ROCK & CONCRETE WEAK ROCK & CONCRETE	2-1/4" - 57mm 2-1/2" - 63mm	C 18 B 20	750 (Do not exceed 1600)	1525	R1S-11 - C 18 R1S-11 - B 20
2" - 6 (51mm)	155,000 lbs. (689.4 kN)	260,000 lbs. (1156.6 kN)	310,000 lbs. (1379 kN)	ROCK & CONCRETE	3-1/2" - 89mm	C 28	1000 (Do not exceed 4000)	Note (3)	R1S-16 - C 28

WILLIAMS "SPIN-LOCK" 150 KSI ROCK AND CONCRETE ANCHOR BOLTS ASTM A-722

1-1/2" - 6 (38mm)	105,000 lbs. (466.6 kN)	168,000 lbs. (746.5 kN)	210,000 lbs. (932.4 kN)	ROCK & CONCRETE	3" - 76mm	B 24	1000 (Do not exceed 1700)	Note (3)	R7S-12 - B 24
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NOTES FOR TABLE:

- (1) CARE SHOULD BE TAKEN TO DRILL A STRAIGHT PROPERLY SIZED HOLE.
- (2) A FUNCTION OF STRATA STRENGTH. MORE TORQUE MAY BE REQUIRED ON LONG BOLTS OR IN SPECIAL ROCK CONDITION. CONSULT YOUR WILLIAMS REPRESENTATIVE FOR MORE SPECIFIC DETAILS.
- (3) STRESS TO DESIRED TENSILE LOAD USING A HOLLOW RAM HYDRALIC JACK. CONSULT YOUR WILLIAMS REPRESENTATIVE.
- (4) WILLIAMS RESERVES THE RIGHT TO SHIP FULL LENGTH OR COUPLED UNITS AS NECESSARY.
- (5) ULTIMATE SIMPLE SHEAR STRENGTHS ARE APPROXIMATELY 0.75 X THE ULTIMATE TENSILE STRENGTHS. DESIGNERS SHOULD PROVIDE ADEQUATE SAFETY FACTORS FOR SAFE SHEAR STRENGTH BASED ON CONDITION OF USE.
- (6) INCONSISTENCIES IN ROCK FROM SITE TO SITE AND EVEN FROM HOLE TO HOLE MAY AFFECT ANCHOR PERFORMANCE. FISSURES, VOIDS, SEAMS, ROCK PSI, DRILLING THROUGH CLAY OR BENTONITE AND DIRECTION OF BEDDING PLANES ARE ALL POSSIBLE VARIABLES. SHOULD PROBLEMS OCCUR, CONSULT WILLIAMS FOR TROUBLESHOOTING.

NOTES FOR HYDRAULIC JACK ASSEMBLY:

1. IF OUTWARD MIGRATION OF BOLT IS NOTICED DURING TENSIONING, CHECK TO MAKE SURE THAT TENSION IS INCREASING ON PUMP GUAGE.
2. IF TENSION IS INCREASING ON GUAGE THE OUTWARD MIGRATION IS INDICATING THE ANCHOR IS FURTHER EXPANDING. IF MIGRATION IS EXCESSIVE, IT CAN BE MINIMIZED OR AVOIDED BY APPLYING MORE TORQUE TO SET THE ANCHOR. (FOR MAXIMUM TORQUE ALLOWED CHECK WITH YOUR WILLIAMS REPRESENTATIVE.)
3. IF TENSION IS NOT INCREASING ON GUAGE THIS OUTWARD MIGRATION MAY BE ANCHOR SLIPPAGE. THIS INDICATED THAT MORE TORQUE IS REQUIRED TO SET ANCHOR. (CHECK WITH YOUR WILLIAMS REPRESENTATIVE.)

DISCLAIMER: **Page 61 of 81**

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0	FOR INFORMATION	RR	
No.	ISSUE/REVISION	BY	DATE

PROJECT:		XPLORNET SELF SUPPORT TOWER	
TITLE:		ROCK ANCHOR INSTALLATION PROCEDURE	
DRAWN BY:	RR	PURCHASE ORDER NO.	
CHECKED BY:	MW	PROJECT NO.	
APPROVED BY:	MP	DRAWING NO. S01-03	
DATE:	05/01/2017	SHEET	3 OF 22

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No.	ISSUE/REVISION	BY	DATE

PROJECT:

SAMPLE
SELF SUPPORT TOWER

TITLE:

100' TOWER PROFILE

DRAWN BY:	RR	PURCHASE ORDER NO.
CHECKED BY:	MW	PROJECT NO.
APPROVED BY:	MP	DRAWING NO. S02-01
DATE:	18/01/2017	SHEET 4 OF 22

ANTENNA LIST

ANTENNA No.	ANTENNA TYPE	ELEVATION (m)	AZIMUTH (°)	MAIN TX-LINE	EQUIPMENT AT ANTENNA ELEVATION LEVEL	STATUS
1	«ALPHA WIRELESS» AW3519	29.5	0	(1/1) HYBRID FIBER/PWR	(1) RRU3256	INITIAL
2	«ALPHA WIRELESS» AW3519	29.5	120	(1/1) HYBRID FIBER/PWR	(1) RRU3256	INITIAL
3	«ALPHA WIRELESS» AW3519	29.5	240	(1/1) HYBRID FIBER/PWR	(1) RRU3256	INITIAL
4	HP3-18	26.5	0	(1) CAT-5	-	INITIAL
5	HP3-18	26.5	120	(1) CAT-5	-	FUTURE
6	HP3-18	26.5	240	(1) CAT-5	-	FUTURE
7	«ALPHA WIRELESS» AW3519	24.5	0	(1/1) HYBRID FIBER/PWR	(1) RRU3256	FUTURE
8	«ALPHA WIRELESS» AW3519	24.5	120	(1/1) HYBRID FIBER/PWR	(1) RRU3256	FUTURE
9	«ALPHA WIRELESS» AW3519	24.5	240	(1/1) HYBRID FIBER/PWR	(1) RRU3256	FUTURE
10	HP3-18	22.5	0	(1) CAT-5	-	FUTURE
11	HP3-18	22.5	120	(1) CAT-5	-	FUTURE
12	HP3-18	22.5	240	(1) CAT-5	-	FUTURE
13	«KP PERFORMANCE» KPPA-5GHZDP90S	20.0	0	-	-	FUTURE
14	«KP PERFORMANCE» KPPA-5GHZDP90S	20.0	90	-	-	FUTURE
15	«KP PERFORMANCE» KPPA-5GHZDP90S	20.0	180	-	-	FUTURE
16	«KP PERFORMANCE» KPPA-5GHZDP90S	20.0	240	-	-	FUTURE
17	CMM4	20.0	0	(1) CAT-5	-	FUTURE

NOTE:

- THE ELEVATION OF THE ANTENNAS "OMNI" IS THAT OF THE INTERSECTION OF THE RADOME OF THE ANTENNA WITH ITS METAL BASE. THE ELEVATION OTHER TYPES OF ANTENNA IS THAT OF THE GEOMETRIC CENTER OF THE ANTENNA;
- THE ELEVATIONS OF THE ANTENNAS ARE GIVEN WITH RESPECT TO THE BOTTOM OF THE TOWER BASE PLATES;
- THE TRANSMISSION LINES TO BE PROPERLY ATTACHED TO THE WELDED Tx BRACKETS PROVIDED ON THE TOWER SECTIONS.

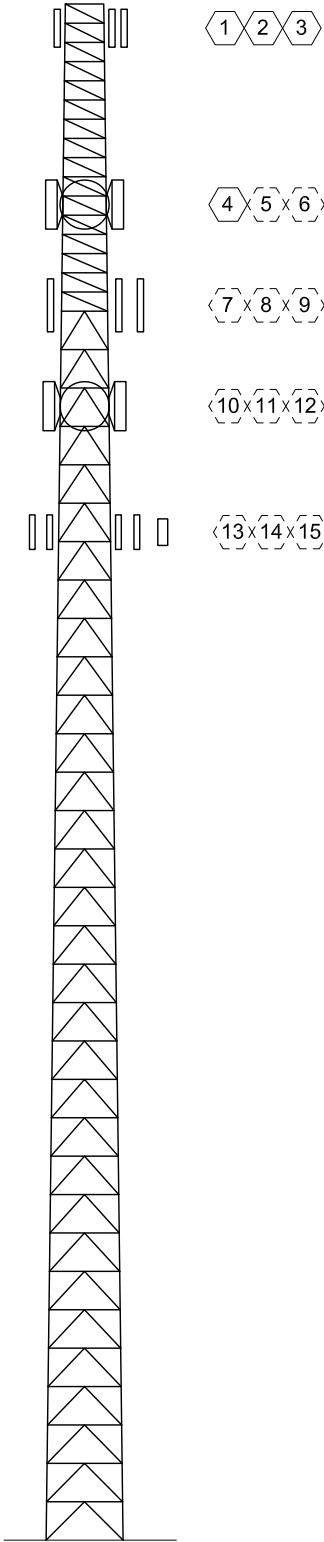
DESIGN NOTE:

DESIGN SPECIFICATION	: CSA-S37-13
WIND PRESSURE	: ≤ 500 Pa
RADIAL ICE	: 25 mm /S37-13
STEEL	: G40.21 300W LEGS < 1-5/8"Ø 350W LEGS 1-5/8"Ø & >
FINISH	: HOT-DIPPED GALVANIZED
IMPORTANCE FACTOR	: 1.00
SERVICEABILITY FACTOR	: 1.00
TERRAIN CATEGORY	: OPEN
MAX DEFLECTION	: 0.67° @ M/W

* THIS TOWER PROFILE IS ONLY FOR PRESENTATION PURPOSE, TOWER STRUCTURAL MEMBERS AND TOWER FACE WIDTH TO BE DESIGNED FOR SPECIFIC TOWER SITE.

TOWER PROFILE

EL. = 100.00' F.W. = 30.00"	
EL. = 90.00' F.W. = 33.00"	
EL. = 80.00' F.W. = 36.00"	
EL. = 70.00' F.W. = 39.00"	
EL. = 60.00' F.W. = 42.00"	
EL. = 50.00' F.W. = 45.00"	
EL. = 40.00' F.W. = 48.00"	
EL. = 30.00' F.W. = 51.00"	
EL. = 20.00' F.W. = 54.00"	
EL. = 10.00' F.W. = 57.00"	
EL. = 0.00' F.W. = 60.00"	



SECTION NO.	1	2	3	4	5	6	7	8	9	10
SECTION NAME:	40-260-07	40-257-10	40-254-07	40-251-07	40-248-04	40-245-07	40-242-11	40-239-10	40-236-07	40-233-07
LEGS (350W)	SR 2-1/2		SR 2-1/4			SR 2		SR 1-3/4	SR 1-1/2 (300W)	
DIAGONALS (300W)		SR 7/8					SR 3/4			
HORIZONTALS (300W)	SR 1-1/8		SR 1			SR 7/8			SR 3/4	

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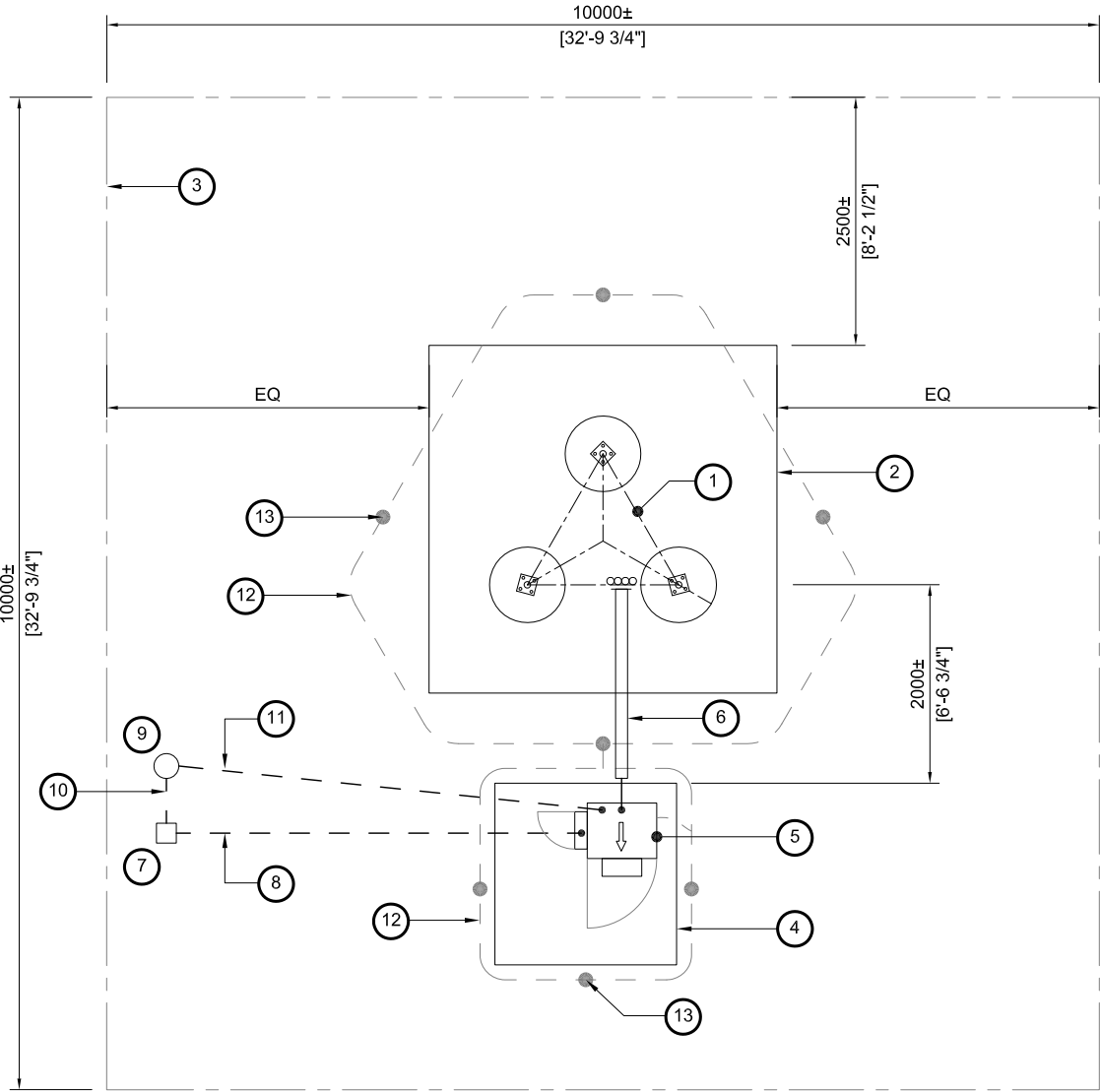
PROJECT:

XPLORNET
SELF SUPPORT TOWER

TITLE:

COMPOUND LAYOUT & GROUNDING
100' (30m) TOWER

DRAWN BY:	RR	PURCHASE ORDER NO.
CHECKED BY:	MW	PROJECT NO.
APPROVED BY:	MP	DRAWING NO. S03-01
DATE:	18/01/2017	SHEET 5 OF 22

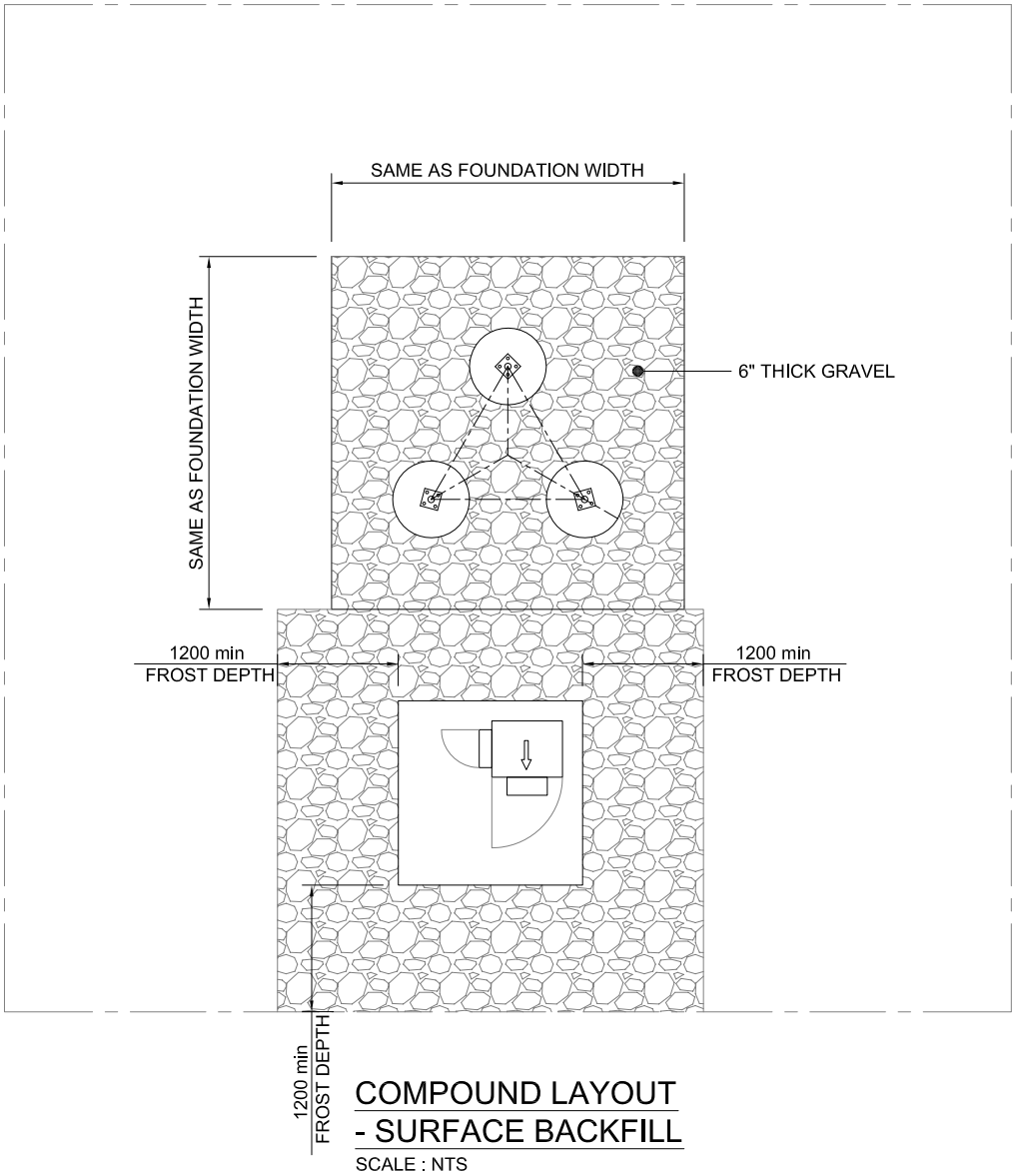


SITE LAYOUT & GROUNDING
SCALE : NTS

NOTE:

- a. PRIOR TO MAKING A GROUND SYSTEM CONNECTION CLEAN THE CONNECTION PARTS OF PAINT OR OTHER FOREIGN MATTER
- b. ALL BURNDY CONNECTORS AND CONNECTING WIRE OR CABLE PARTS THAT COME IN CONTACT WITH THE BURNDY CONNECTOR SHALL BE CLEANED OF ALL RUST, OXIDE OR DIRT AND THEN GIVEN A LIBERAL APPLICATION OF NO-OX-ID 'A' SPECIAL SEALING COMPOUND PRIOR TO COMPLETING THE CONNECTIONS. (ABOVE GRADE ONLY)
2. ALL GROUND WIRE ABOVE GRADE IS TO BE 7/16" GALV WIRE UNLESS NOTED
3. WHERE THERE IS A CONTINUOUS FLOW OF GROUND WIRE (ie. LOOP AROUND BLDG OR TOWER) CONNECT WIRE TO ROD WITH CAD WELD #115 (MOLD GTC-182G)
4. WHERE THERE IS GALV WIRE TO GALV WIRE CONNECTION ARE TO BE CLEAN AND FREE OF PAINT AT THE MATING SURFACE USE CAD WELD SHOT #115 (MOLD YRC-2G2G-LH OR RH)
5. AT GROUND LEVEL, ALL CONDUCTORS SHALL BE BURIED MINIMUM 600mm BELOW FINISHED GRADE
6. THE TOWER/ FOUNDATION/ CABINET ORIENTATION TO BE DETERMINED ON SITE WALK
7. THE LOCATION AND ORIENTATION OF 7 8 9 10 11 TO BE DETERMINED PER SITE SPECIFIC REQUIREMENT

- 1 150' AWSS
- 2 FOUNDATION FOOTPRINT
- 3 10m x 10m LEASED AREA
- 4 1830 x 1830 x 150 (6' x 6' x 6'') CABINET PAD
- 5 CABINET - ARROW INDICATES FRONT DOOR ORIENTATION
- 6 6" WIDE CABLE TRAY TO PASS CABLES FROM CABINET TO TOWER
- 7 8" x 8" WOOD POST - 30A 240V AC ELECTRICAL MAIN DISCONNECT
- 8 3" UNDERGROUND CONDUIT TO PASS ELECTRICAL FROM DISCONNECT TO CABINET
- 9 LAST UTILITY POLE w/ ELECTRICAL METER
- 10 UTILITY POWER IN 3" UNDERGROUND CONDUIT FROM ELECTRICAL METER TO MAIN DISCONNECT
- 11 3" UNDERGROUND CONDUIT FOR FIBRE TO CABINET w/ PULL STRING IN IT (IF POP SITE)
- 12 2/0 STRANDED BARE COPPER GROUND WIRE
- 13 3/4"Ø x 10'-0" COPPER CLAD GROUND ROD
- 14 GALV STEEL CABLE GROUND BAR
- 15 3m GALV. STEEL LIGHTNING ROD
- 16 COMPOUND FENCE IF REQUIRED



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PROJECT:

XPLORNET
SELF SUPPORT TOWER

TITLE:

COMPOUND LAYOUT - SURFACE BACKFILL
100' (30m) TOWER

DRAWN BY:	RR	PURCHASE ORDER NO.
CHECKED BY:	MW	PROJECT NO.
APPROVED BY:	MP	DRAWING NO. S03-02
DATE:	18/01/2017	SHEET <u>6</u> OF <u>22</u>

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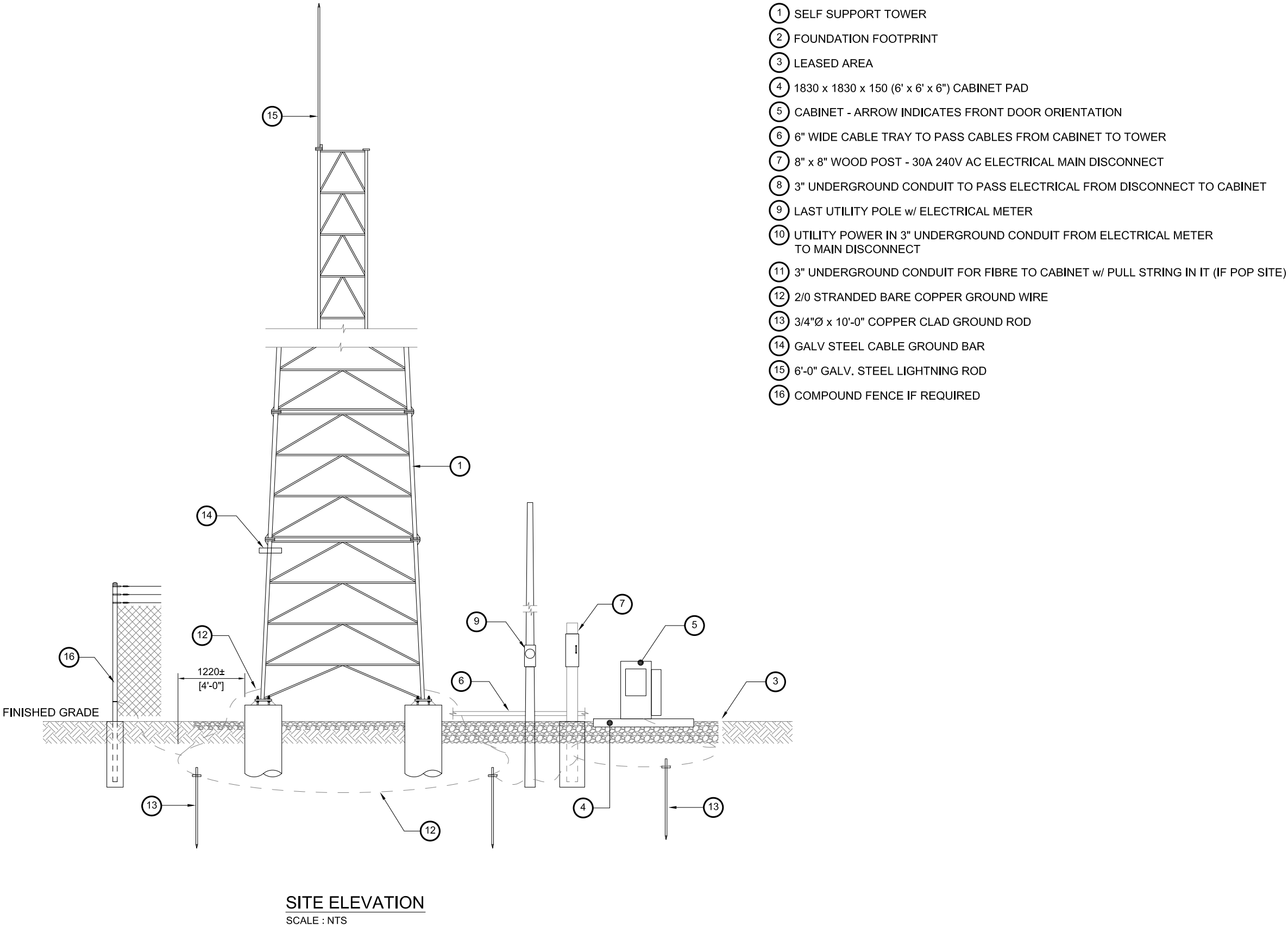
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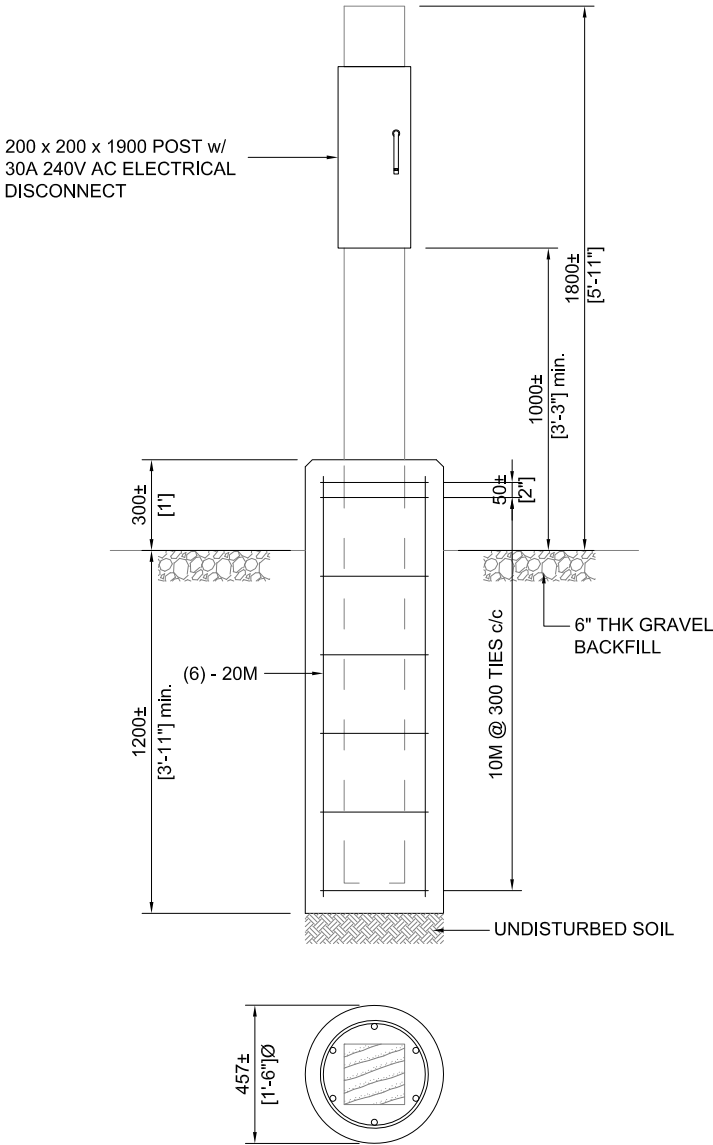
XPLORNET
SELF SUPPORT TOWER

TITLE:

SITE ELEVATION
AWSS TOWER

DRAWN BY:	RR	PURCHASE ORDER NO.
CHECKED BY:	MW	PROJECT NO.
APPROVED BY:	MP	DRAWING NO. S03-03
DATE:	18/01/2017	SHEET <u>7</u> OF <u>22</u>





PIER DETAIL -
8" x 8" WOOD POST
SCALE: 1:25

NOTE:

1. FOUNDATION DESIGNED ACCORDING TO GEOTECHNICAL SITE INVESTIGATION REPORT BY: DAVIES GEOTECHNICAL INC, PROJECT No. L011.
2. ALL CONCRETE WORK TO CONFORM WITH CSA-A23.3 TO A23.4. (SEE STRUCTURAL GENERAL NOTES)
3. MINIMUM SPECIFIED CONCRETE COMPRESSIVE STRENGTH, $f_c = 30$ MPa.
4. AIR ENTRAINMENT = 5% TO 7%.
5. TOTAL VOLUME OF CONCRETE = 0.25 m3
7. CHAMFER EXPOSED EDGES 25 mm.
8. REINFORCING STEEL (DEFORMED BARS) AS PER G30.12 GRADE 400 MPa.
9. REBAR TO HAVE MIN. 50 mm CLEAR COVER.

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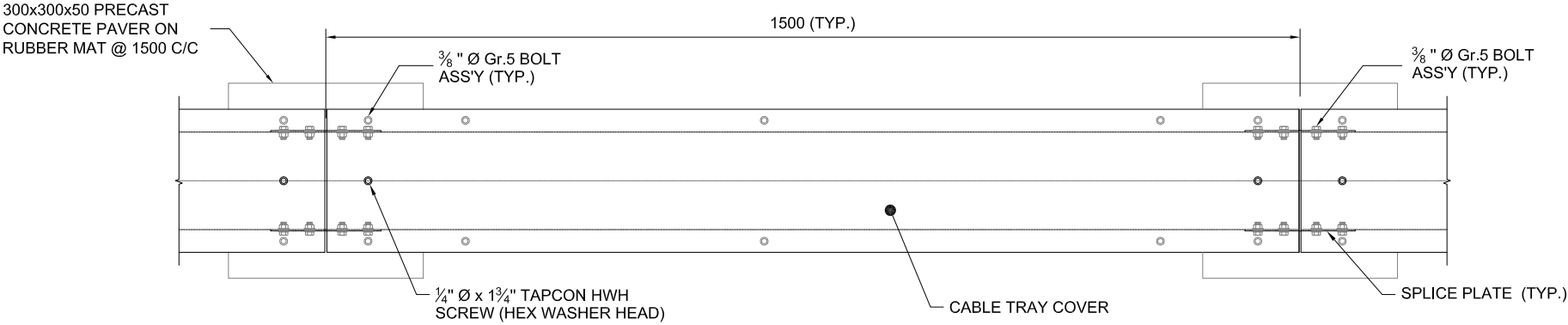
PROJECT:

XPLORNET
SELF SUPPORT TOWER

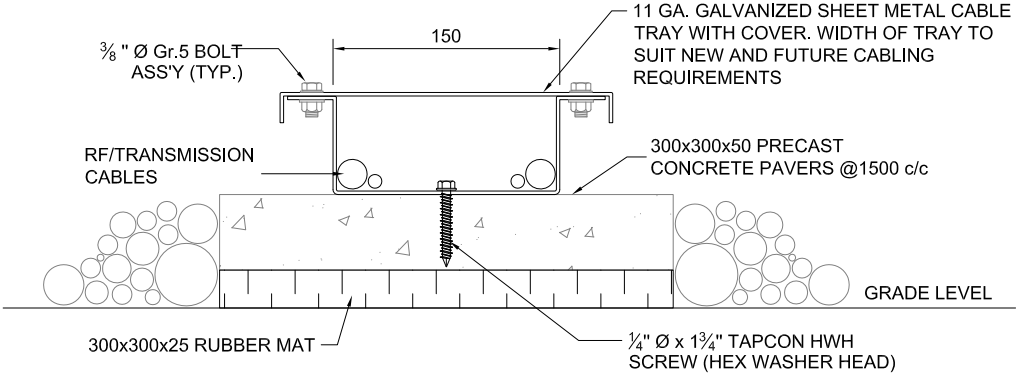
TITLE:

8" x 8" WOOD POST INSTALLATION

DRAWN BY:	RR	PURCHASE ORDER NO.
CHECKED BY:	MW	PROJECT NO.
APPROVED BY:	MP	DRAWING NO. S03-04
DATE:	18/01/2017	SHEET 8 OF 22



CABLE TRAY LAYOUT
SCALE 1:10



CABLE TRAY SECTION
SCALE 1:5

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No.	ISSUE/REVISION	BY	DATE

PROJECT: XPLORNET
SELF SUPPORT TOWER

TITLE: CABLE TRAY DETAILS

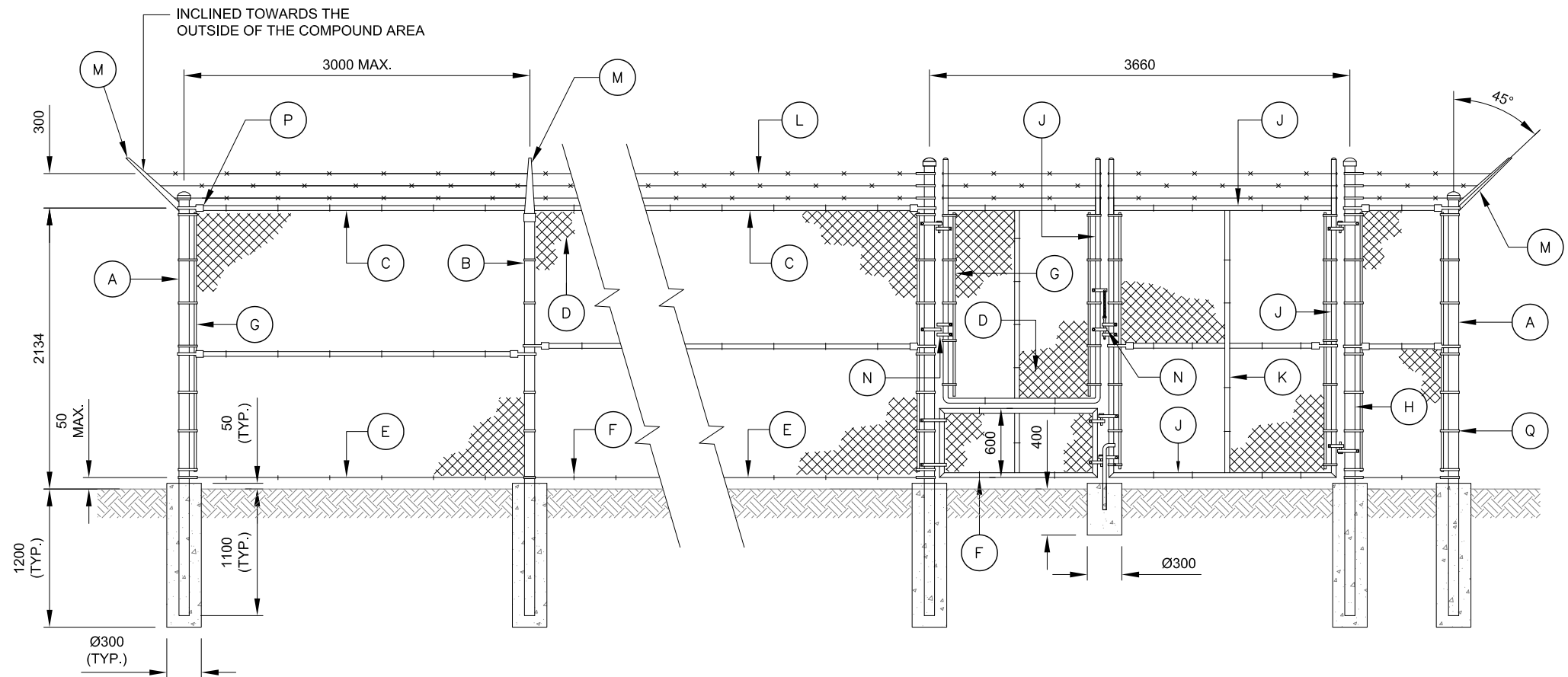
DRAWN BY: RR	PURCHASE ORDER NO.
CHECKED BY: MW	PROJECT NO.
APPROVED BY: MP	DRAWING NO. S03-05
DATE: 18/01/2017	SHEET 9 OF 22

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COMPOUND AREA - FENCE DETAIL
SCALE: 1:50

- | | |
|---|---|
| (A) CORNER POST - HSS 89 x 4.8 | (H) GATE POST - HSS 89 x 4.8 |
| (B) UNTERNEDATE POST - HSS 60 x 3.2 | (J) GATE FRAMING - HSS 48 x 3.2 |
| (C) HORIZONTAL PIPE - HSS 48 x 3.2 | (K) GATE BRACING - HSS 48 x 3.2 |
| (D) CHAIN LINK, HOP DIP GALVANIZED AFTER WEAVING,
#9 GAUGE STEEL WIRE WOVEN IN A 50mm MESH | (L) BARBED AIRE, THREE STRANDS OF 12.5 GA. SPACED @ 150mm |
| (E) ONE STRAND GALVANIZE TENSION WIRE 5 GA. | (M) BARBED WIRE SUPPORT |
| (F) WIRE MESH FASTENER SPACED AT 300mm c/c MAX | (N) GATE LATCH |
| (G) CHAIN LINK TENSION BAR | (P) POST FITTING |
| | (Q) METALLIC CLAMP SPACED AT 600mm c/c MAX |

NOTE:

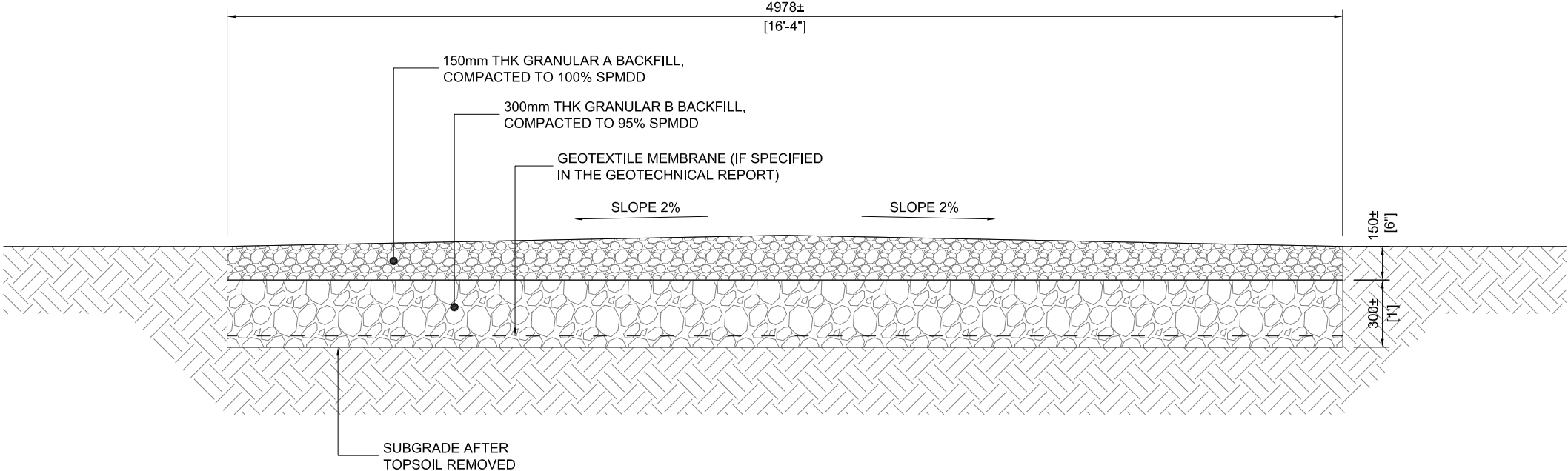
1. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS NOTED OTHERWISE
2. IF ROCK IS ENCOUNTERED, DRILL 600mm INTO SOUND BEDROCK AND USE NON-SHRINK GROUT TO SET POSTS
3. CONCRETE: MINIMUM 20MPa AT 28 DAYS; AIR ENTRAINMENT: 5% - 7%
4. REFER TO THE COMPOUND LAYOUT DRAWING TO LOCATE THE FENCE
5. FENCE GATE LOCATION AND ORIENTATION TO BE DETERMINED BY THE CONTRACTOR PER SITE SPECIFIC REQUIREMENT

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PROJECT:		XPLORNET SELF SUPPORT TOWER	
TITLE:		FENCE DETAILS (IF REQUIRED)	
DRAWN BY:	RR	PURCHASE ORDER NO.	
CHECKED BY:	MW	PROJECT NO.	
APPROVED BY:	MP	DRAWING NO.	S03-06
DATE:	18/01/2017	SHEET	10 OF 22



ACCESS ROAD
TYPICAL CROSS-SECTION
SCALE: 1:25

NOTE:

- 1. ACCESS ROAD LENGTH, LOCATION AND ORIENTATION TO BE PROPOSED BY THE CONTRACTOR PER SITE SPECIFIC REQUIREMENT
- 2. THE CONTRACTOR TO PROVIDE ACCESS ROAD LAYOUT TO THE CLIENT AND THE TOWER DESIGN ENGINEER FOR REVIEW AND APPROVAL PRIOR TO THE CONSTRUCTION WORK

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No.	ISSUE/REVISION	BY	DATE

PROJECT:

XPLORNET
SELF SUPPORT TOWER

TITLE:

ACCESS ROAD DETAILS

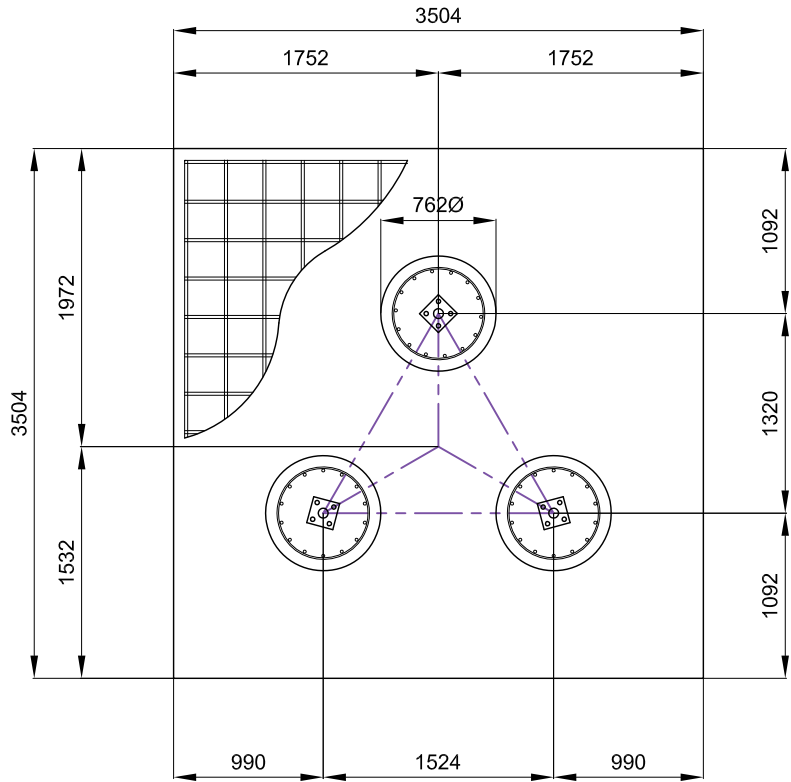
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CHECKED BY:	MW	PROJECT NO.
APPROVED BY:	MP	DRAWING NO. S03-07
DATE:	18/01/2017	SHEET 11 OF 22

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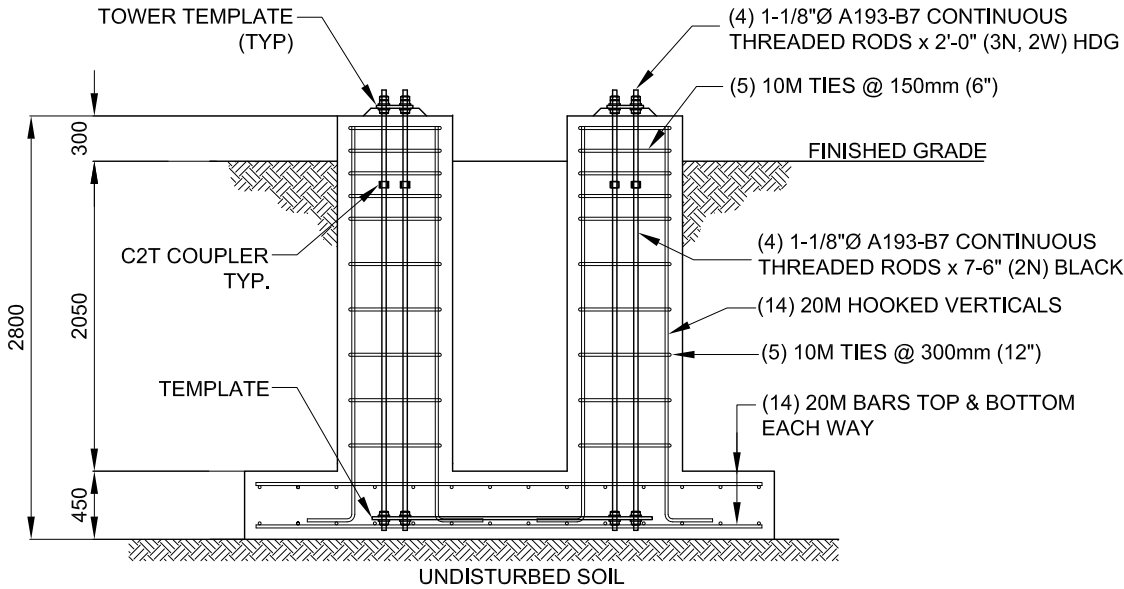
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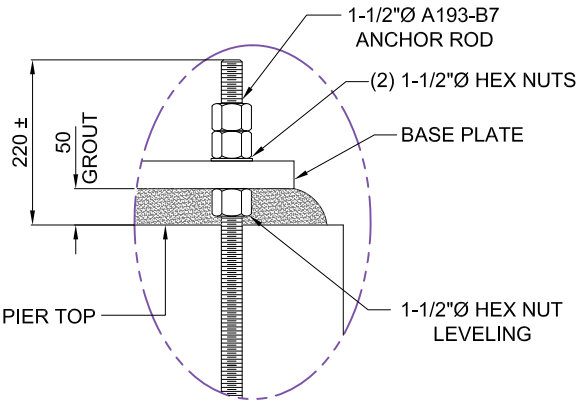
PLAN VIEW



ELEVATION VIEW

FOUNDATION DESIGN NOTES:

1. REFER TO STRUCTURAL GENERAL NOTES.
2. THE FOUNDATION IS DESIGNED BASED ON CSA A23.3 (THE LATEST EDITION), S37-13 AND THE SOIL REPORT PREPARED BY XXXXXXXXXXXXXXXX, DATE XXXX XXX, XXXX.
3. THE FOUNDATION IS DESIGNED AS PER THE PARAMETERS PROVIDED BY THE GEOTECHNICAL REPORT:
ALLOWABLE BEARING CAPACITY: 150 kPa
DESIGN GROUND WATER LEVEL: 3.0 m BELOW GRADE
DESIGN DEPTH OF FROST PENETRATION: 2.8 m BELOW GRADE
4. DESIGN OF TOWER FOUNDATION IS BASED ON THE FACTORED LOADS:
DOWN = SITE SPECIFIC kN
SHEAR = SITE SPECIFIC kN
MOMENT = SITE SPECIFIC kN.m
5. MINIMUM CONCRETE COMPRESSIVE STRENGTH: 30MPa AT 28 DAYS; AIR ENTRAINMENT: 5 - 7%; MAXIMUM SIZES OF COARSE AGGREGATE: 19mm; MAXIMUM SLUMP: 75mm ± 25mm.
6. THE CONCRETE COVER OVER REINFORCING STEEL (REBAR) SHALL BE MINIMUM 75mm (3"), UNLESS OTHERWISE NOTED ON THE DRAWING.
7. THE REINFORCING STEEL (REBAR) SHALL CONFORM TO CSA STANDARD G30.18 WITH MINIMUM YIELD STRENGTH OF 400MPa (GRADE 400).
8. DRY-PACK, NON-FERROUS AND NON-SHRINK GROUT UNDER THE BASE PLATE SHALL CONSIST OF NON-METALLIC AGGREGATE, CEMENT, AND WATER REDUCING AGENTS CAPABLE OF DEVELOPING MINIMUM COMPRESSIVE STRENGTH OF 50MPa AT 28 DAYS, 30MPa AT 7 DAYS. GROUT SHALL BE SLOTTED TO PROVIDE A MEANS OF DRAINAGE.
9. THE ESTIMATED VOLUME OF CONCRETE = XXXX cu.m
11. REFER TO THE GEOTECHNICAL REPORT FOR RECOMMENDED BACKFILL/ COMPACTED FILL PROCEDURES. IF SUCH INFORMATION IS NOT AVAILABLE, BACKFILL MATERIAL SHALL HAVE A MINIMUM DRY DENSITY OF 17.3 kN/cu.m. FILL MATERIAL SHALL PREFERABLY CONSIST OF GRANULAR MATERIAL AND SHALL BE FREE IF LARGER ROCKS, DEBRIS, WATER, ORGANIC MATERIAL, ICE AND FROZEN MATERIAL, ETC.
12. BACKFILL SHALL BE PLACED IN HORIZONTAL LIFTS NO THICKER THAN 150mm (6") AND COMPACTED TO MINIMUM OF 95% OF STANDARD PROCTOR DENSITY.



DETAIL "A"

* THIS FOUNDATION PLAN VIEW AND ELEVATION VIEW ARE ONLY FOR PRESENTATION PURPOSE; TOWER FOUNDATION TYPE AND SIZE TO BE DESIGNED FOR SPECIFIC TOWER SITE ACCORDING TO THE RECOMMENDATION OF GEOTECHNICAL REPORT.

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CONSTRUCTION



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No.	ISSUE/REVISION	BY	DATE

PROJECT: XPLORNET
SELF SUPPORT TOWER

TITLE: MAT FOUNDATION
100' TOWER

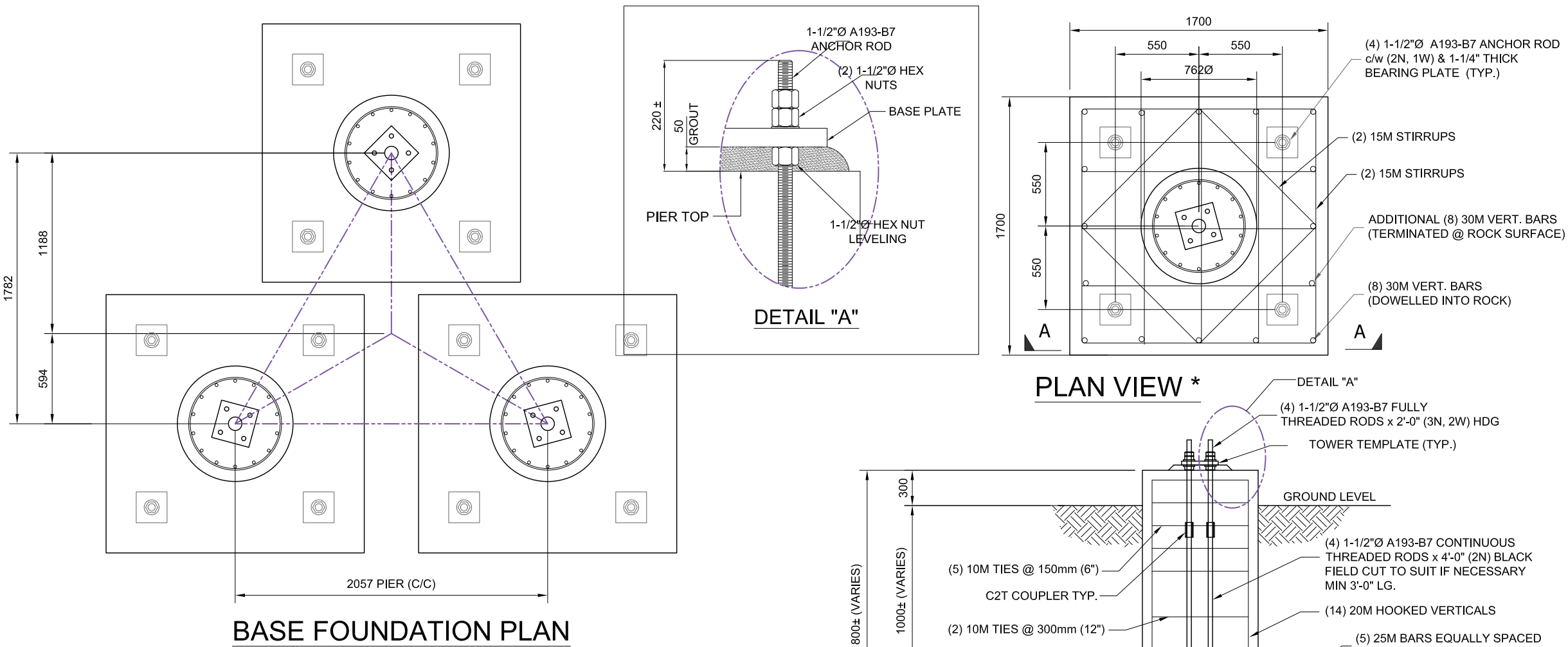
DRAWN BY:	RR	PURCHASE ORDER NO.	
CHECKED BY:	MW	PROJECT NO.	
APPROVED BY:	MP	DRAWING NO.	S04-01
DATE:	18/01/2017	SHEET	6 OF 12

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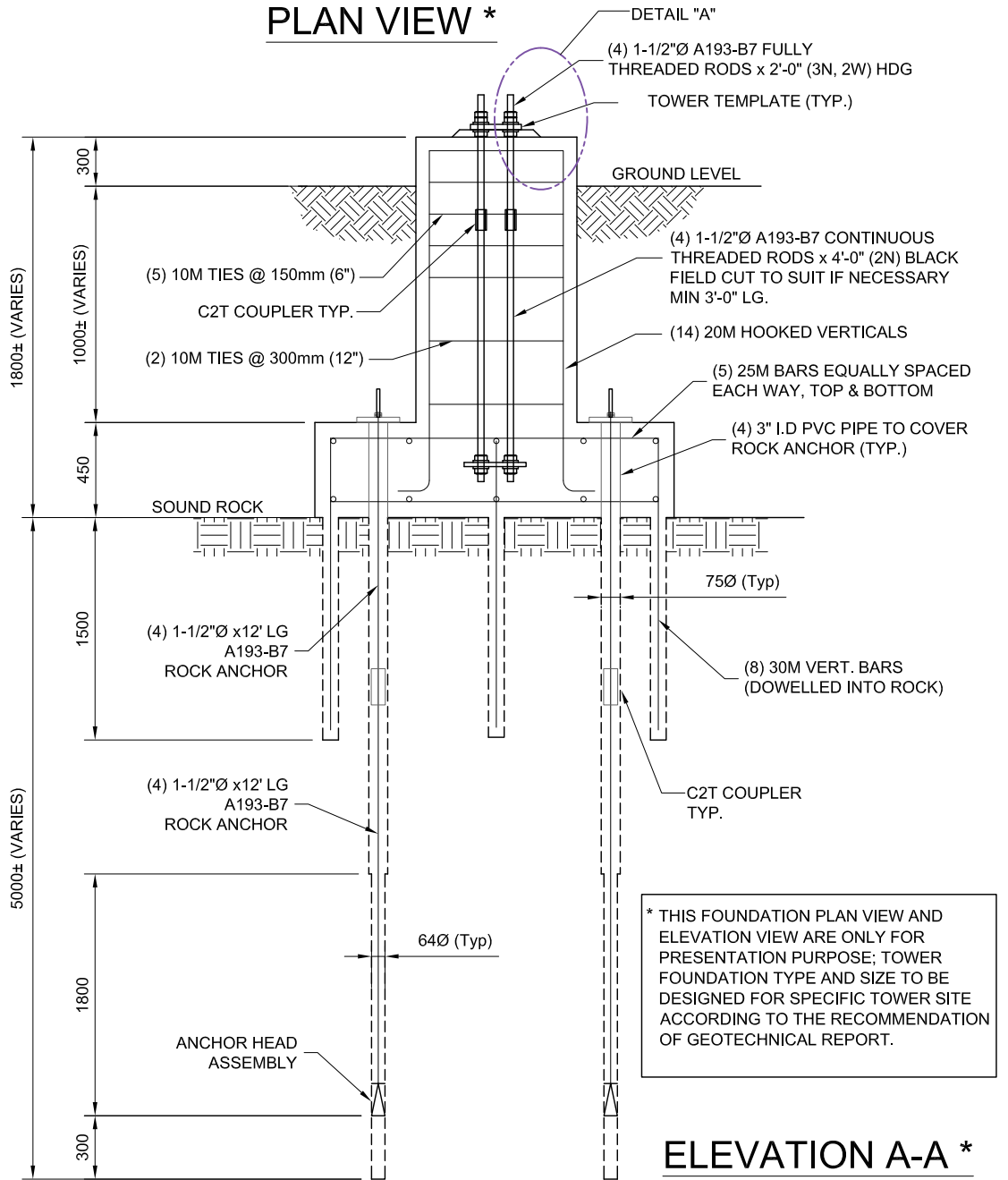


FOUNDATION DESIGN NOTES:

1. REFER TO STRUCTURAL GENERAL NOTES.
2. THE FOUNDATION IS DESIGNED BASED ON CSA A23.3 (THE LATEST EDITION), S37-13 AND THE SOIL REPORT PREPARED BY XXXXXXXXXXXXXXXX, DATE XXXX XXX, XXXX.
3. THE FOUNDATION IS DESIGNED AS PER THE PARAMETERS PROVIDED BY THE GEOTECHNICAL REPORT: ALLOWABLE BEARING CAPACITY: 3000 kPa
4. SEE SOILS REPORT FOR SITE CONDITIONS.
5. REMOVE THE TOP SOIL UNTIL SOUND ROCK IS REACHED. REMOVE SUPERFICIAL FISSURED ROCK.
6. WHEN EXCAVATED ENSURE POCKET IS DEVOID OF ALL DEBRIS. INSTALL ANCHOR BOLTS TO THE CENTERS AS NOTED AND THE ANCHOR BOLT LAYOUT.
7. DESIGN OF TOWER FOUNDATION IS BASED ON THE FACTORED LOADS:
DOWN = SITE SPECIFIC kN
UPLIFT = SITE SPECIFIC kN
8. MINIMUM CONCRETE COMPRESSIVE STRENGTH: 30MPa AT 28 DAYS; AIR ENTRAINMENT: 5 - 7%; MAXIMUM SIZES OF COARSE AGGREGATE: 19mm; MAXIMUM SLUMP: 75mm ± 25mm.
9. THE CONCRETE COVER OVER REINFORCING STEEL (REBAR) SHALL BE MINIMUM 75mm (3"), UNLESS OTHERWISE NOTED ON THE DRAWING.
10. THE REINFORCING STEEL (REBAR) SHALL CONFORM TO CSA STANDARD G30.18 WITH MINIMUM YIELD STRENGTH OF 400MPa (GRADE 400).
11. DRY-PACK, NON-FERROUS AND NON-SHRINK GROUT UNDER THE BASE PLATE SHALL CONSIST OF NON-METALLIC AGGREGATE, CEMENT, AND WATER REDUCING AGENTS CAPABLE OF DEVELOPING MINIMUM COMPRESSIVE STRENGTH OF 50MPa AT 28 DAYS, 30MPa AT 7 DAYS. GROUT SHALL BE SLOTTED TO PROVIDE A MEANS OF DRAINAGE.
12. THE ESTIMATED VOLUME OF CONCRETE = 5.75 cu.m

MECHANICAL ANCHOR INSTALLATION:

1. SET ANCHOR ROD AS PER ENGINEERING PROCEDURE S01-03.
2. EACH ONE OF THE ANCHOR RODS SHALL BE PRE-TENSIONED TO 330 kN AT THE SOUND ROCK LEVEL.
3. PERFORM A FINAL PRE-TENSIONING OF THE ANCHOR RODS AT THE TOP OF CONCRETE PAD. ONCE THE CONCRETE HAD REACHED A MIN. OF 12.5 MPa (3 DAYS). LOCK THE NUTS FOR A LOADING OF 330 kN. AND THEN GROUT THE SPACE INSIDE THE PVC CONDUIT.



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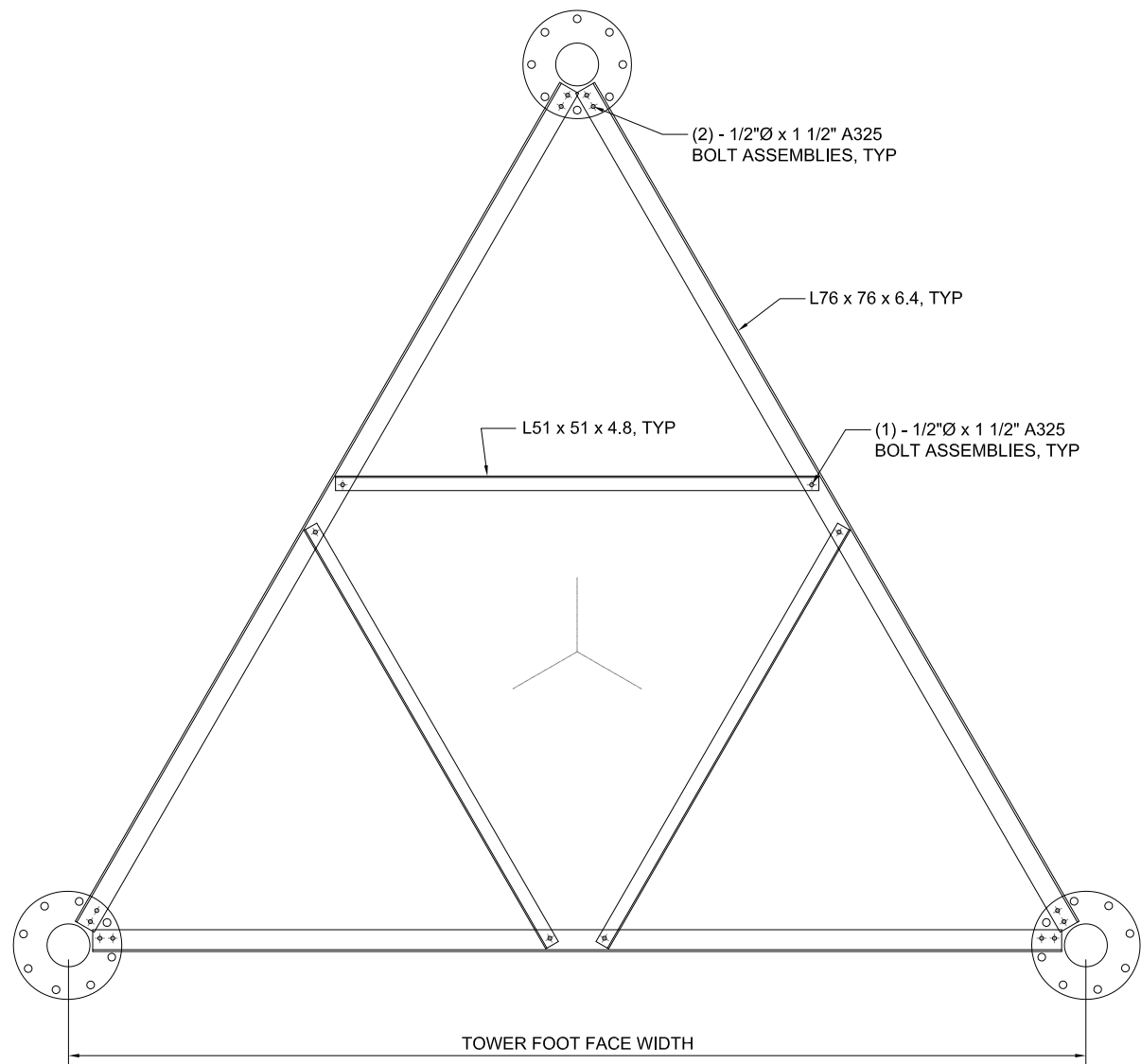
PROJECT:

XPLORNET
SELF SUPPORT TOWER

TITLE:

ROCK FOUNDATION
100' TOWER

DRAWN BY:	RR	PURCHASE ORDER NO.	
CHECKED BY:	MW	PROJECT NO.	
APPROVED BY:	MP	DRAWING NO.	S04-02
DATE:	18/01/2017	SHEET	6 OF 12



NOTE:

- 1. THE ANCHOR BOLT TEMPLATE ASSEMBLY ON THE DRAWING IS FOR THE QUOTATION OF INSTALLATION ONLY
- 2. THE ACTUAL STEEL SIZES MAY CHANGE AS PER SITE SPECIFIC TOWER PROFILES

ANCHOR BOLT TEMPLATE ASSEMBLY
SCALE: 1:25

DISCLAIMER: **Page 72 of 81**
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No.	ISSUE/REVISION	BY	DATE

PROJECT:

SAMPLE
SELF SUPPORT TOWER

TITLE:
ANCHOR BOLT TEMPLATE ASSEMBLY

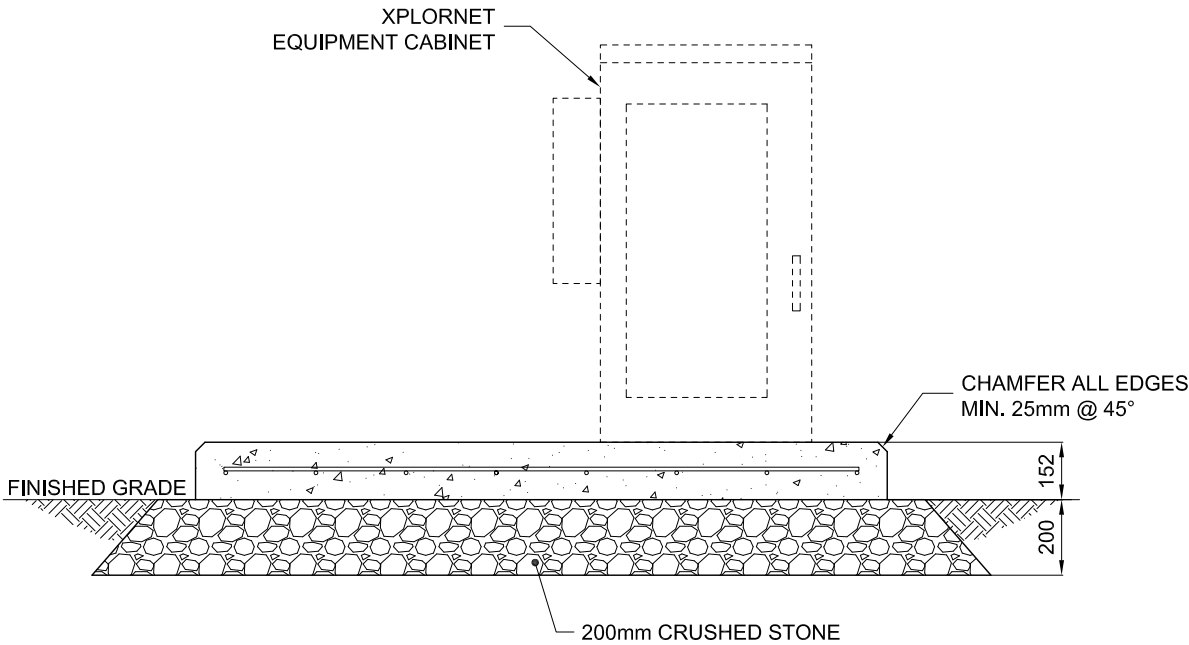
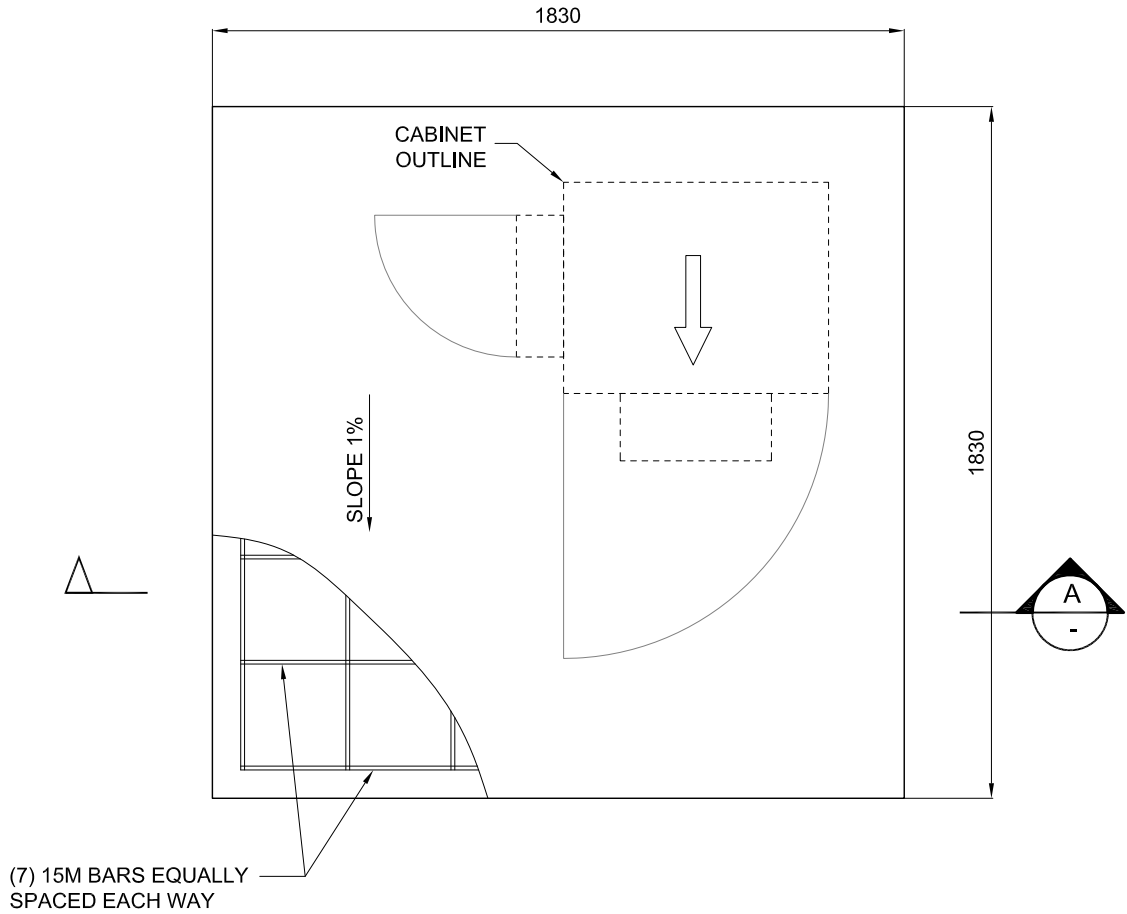
DRAWN BY:	RR	PURCHASE ORDER NO.
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APPROVED BY:	MP	DRAWING NO. S04-03
DATE:	18/01/2017	SHEET 14 OF 22

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A SECTION A-A
N.T.S.

FOUNDATION DESIGN NOTES:

- 1. REFER TO STRUCTURAL GENERAL NOTES.
- 2. MINIMUM CONCRETE COMPRESSIVE STRENGTH: 30MPa AT 28 DAYS; AIR ENTRAINMENT: 5 - 7%; MAXIMUM SIZES OF COARSE AGGREGATE: 19mm; MAXIMUM SLUMP: 75mm ± 25mm.
- 3. THE CONCRETE COVER OVER REINFORCING STEEL (REBAR) SHALL BE MINIMUM 75mm (3"), UNLESS OTHERWISE NOTED ON THE DRAWING.
- 4. THE REINFORCING STEEL (REBAR) SHALL CONFORM TO CSA STANDARD G30.18 WITH MINIMUM YIELD STRENGTH OF 400MPa (GRADE 400).
- 5. THE ESTIMATED VOLUME OF CONCRETE = 0.51 cu.m

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No.	ISSUE/REVISION	BY	DATE

PROJECT:

XPLORNET
SELF SUPPORT TOWER

TITLE:

CABINET CONCRETE PAD

DRAWN BY:	RR	PURCHASE ORDER NO.	
CHECKED BY:	MW	PROJECT NO.	
APPROVED BY:	MP	DRAWING NO.	S04-04
DATE:	18/01/2017	SHEET	15 OF 22

REBAR LIST

[illegible]

GENERAL CONCRETE CONSTRUCTION NOTES:

1. CONCRETE TO HAVE MINIMUM COMPRESSIVE STRENGTH OF 30 MPa AT 28 DAYS;
2. REINFORCED CONCRETE MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH CAN/CSA-A23.3 (THE LATEST);
3. CONCRETE TO BE TESTED ACCORDING TO CSA STANDARD A23.2 (THE LATEST) AND CUSTOMER SPECIFICATION;
4. THE MINIMUM CONCRETE COVER OVER REBAR SHALL BE 75mm (3");
5. A) FOR EARTH CONDITIONS - POUR CONCRETE ON UNDISTURBED SOIL;
6. B) FOR ROCK CONDITIONS-REMOVE LOOSE WEATHERED ROCK AND ONLY POUR CONCRETE OR GROUT ON GOOD SOLID ROCK;
7. COLD JOINTS ARE TO BE LEFT ROUGH, AND SHALL BE THOROUGHLY CLEANED AND MOIST PRIOR TO SECOND POUR;
8. BACK FILL WITH APPROVED MATERIAL AND COMPACTED TO 95% OF ITS STANDARD PROCTOR MAXIMUM DRY DENSITY (SPMDD) IN MAX 150mm (6") EACH LAYER;
9. BACKFILL SHALL BE PLACED SO AS TO PREVENT THE ACCUMULATION OF WATER AROUND THE INSTALLATION.

GENERAL REINFORCING STEEL NOTES:

1. CONCRETE REINFORCING STEEL SHALL BE IN ACCORDANCE WITH CAN/CSA-A23.3 (THE LATEST);
2. REINFORCING STEEL SHALL BE GRADE 400 (GRADE 60), UNLESS NOTED OTHERWISE;
3. ALL REBAR SHALL BE PROPERLY AND SECURELY WIRE TIED AND FORMED TO PREVENT MOVEMENT DURING POURING OF CONCRETE;
4. SEE SITE SPECIFIC FOUNDATION DRAWINGS FOR MORE SPECIFIC NOTES AND FOR STEEL TO BE EMBEDDED;
5. UNLESS NOTIFIED OTHERWISE DIMENSIONS NOT SHOWN IN BENDING DIAGRAM ARE STANDARD LENGTH SPECIFIED IN THE STANDARD OF REINFORCING STEEL INSTITUTE OF CANADA (RSIC).

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Page 74 of 81

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PROJECT:

XPLORNET

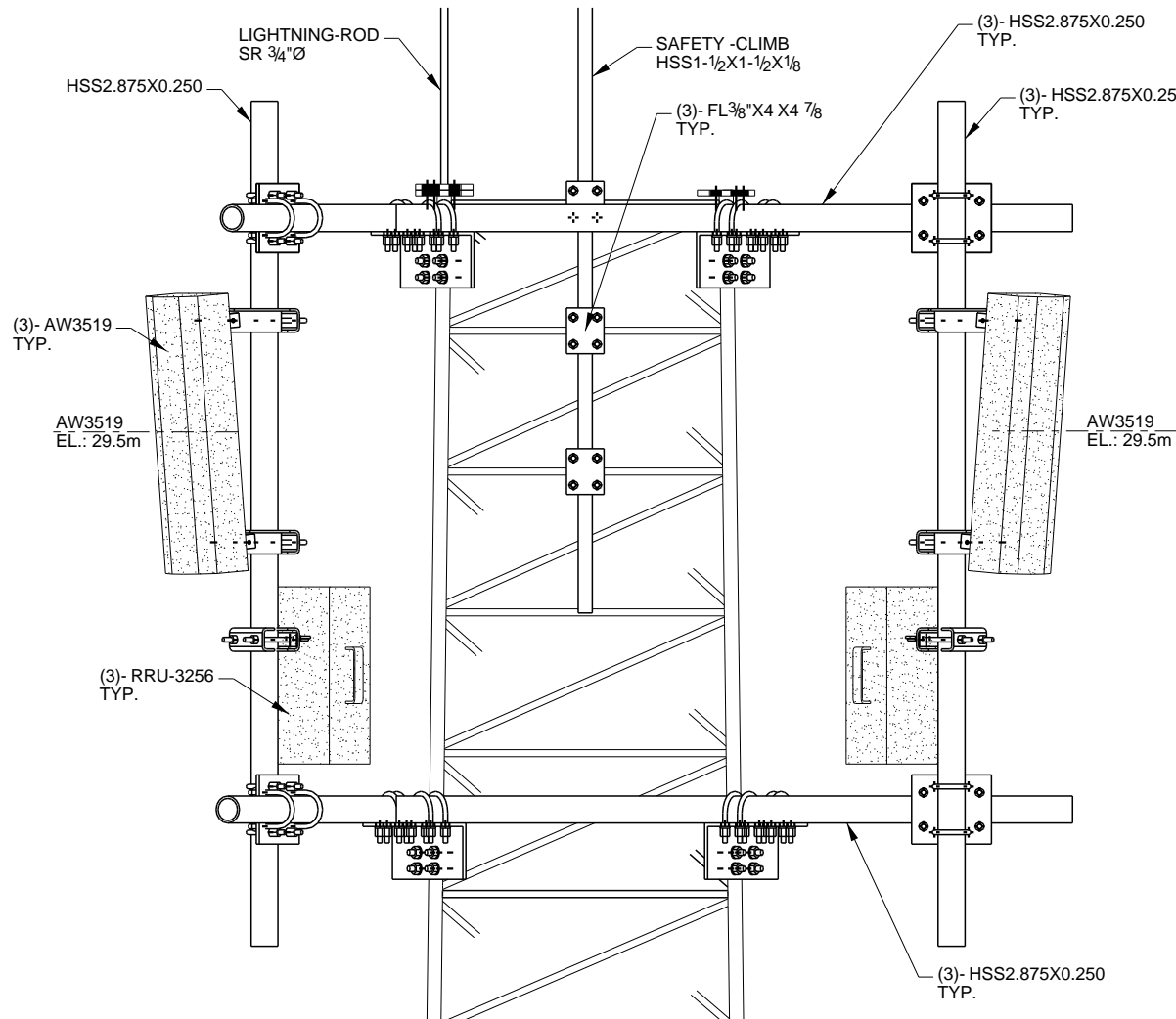
SELF SUPPORT TOWER

TITLE:

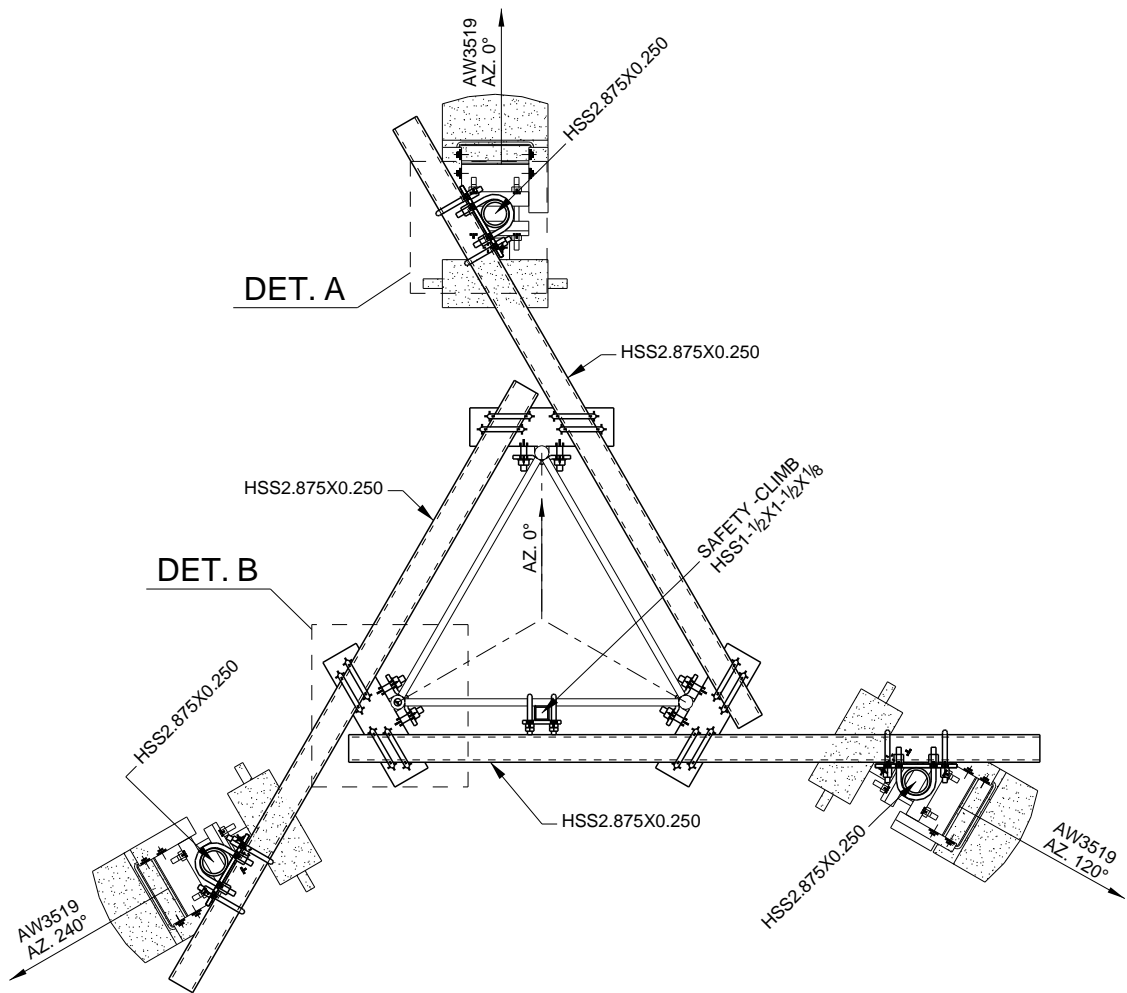
FOUNDATION REBAR LIST

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APPROVED BY:	MP	DRAWING NO. S04-05
DATE:	02/02/2017	SHEET 16 OF 22

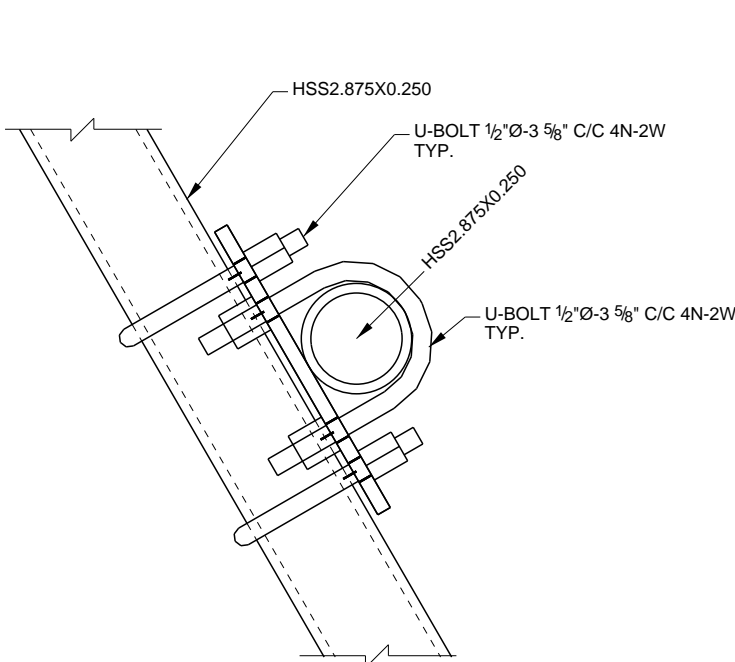
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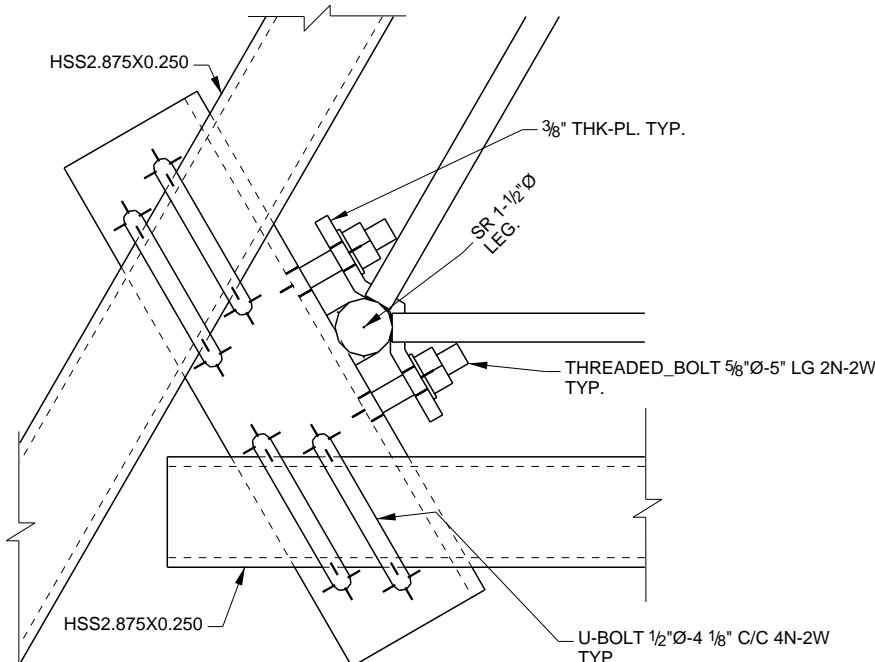
ELEVATION VIEW



PLAN VIEW



DETAIL A



DETAIL B

NOTE:
1. ANTENNA INFO., AZIMUTH, ELEVATIONS AND MAMBER SIZES WILL VARRY TO SUIT SITE SPECIFIC REQUIREMENTS

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PROJECT:
**SAMPLE AWSS TOWER
ANTENNA MOUNT DETAILS**

TITLE: **ANTENNA MOUNT AT EL. 29.5m**

DRAWN BY:	RR	PURCHASE ORDER No.	
CHECKED BY:	MW	PROJECT NO.	8_Crestomere
APPROVED BY:		DRAWING No.	S05-01
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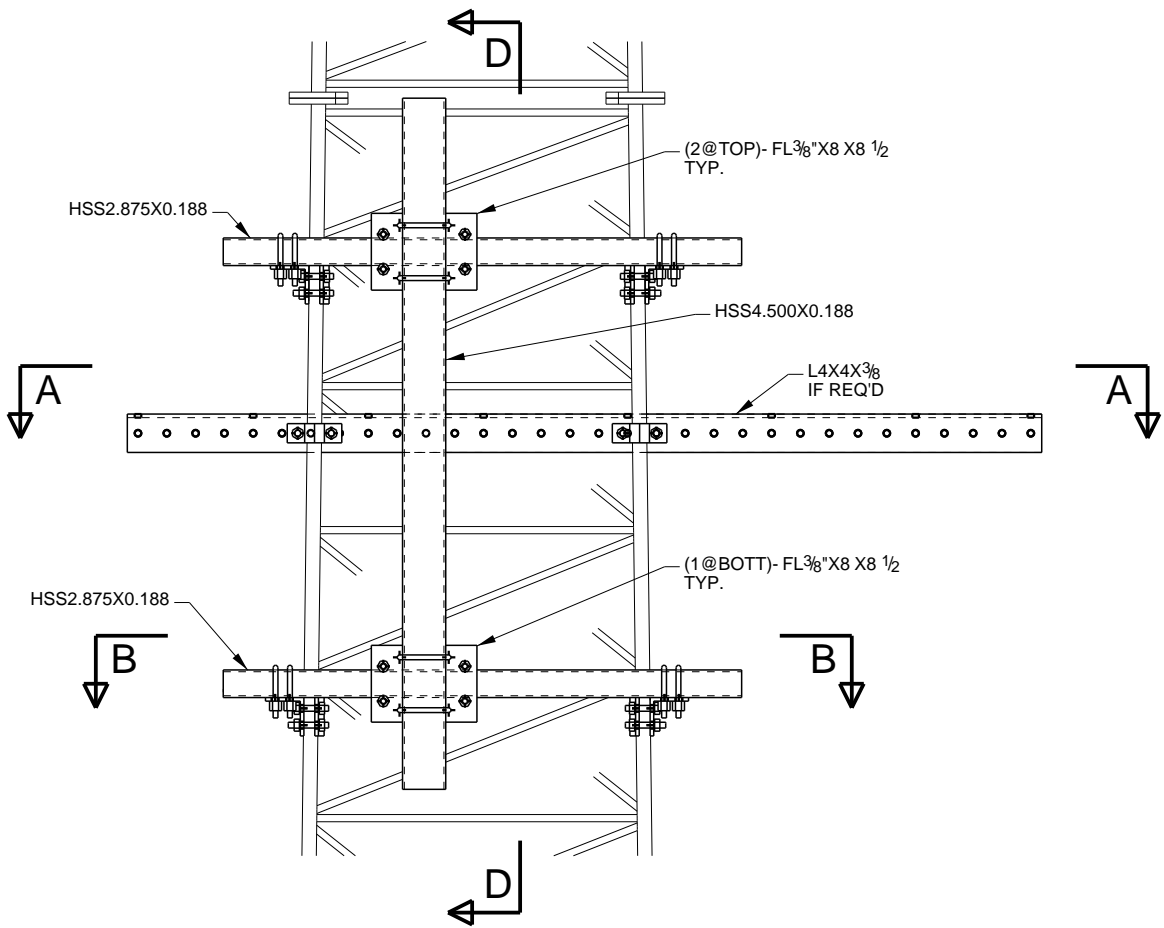
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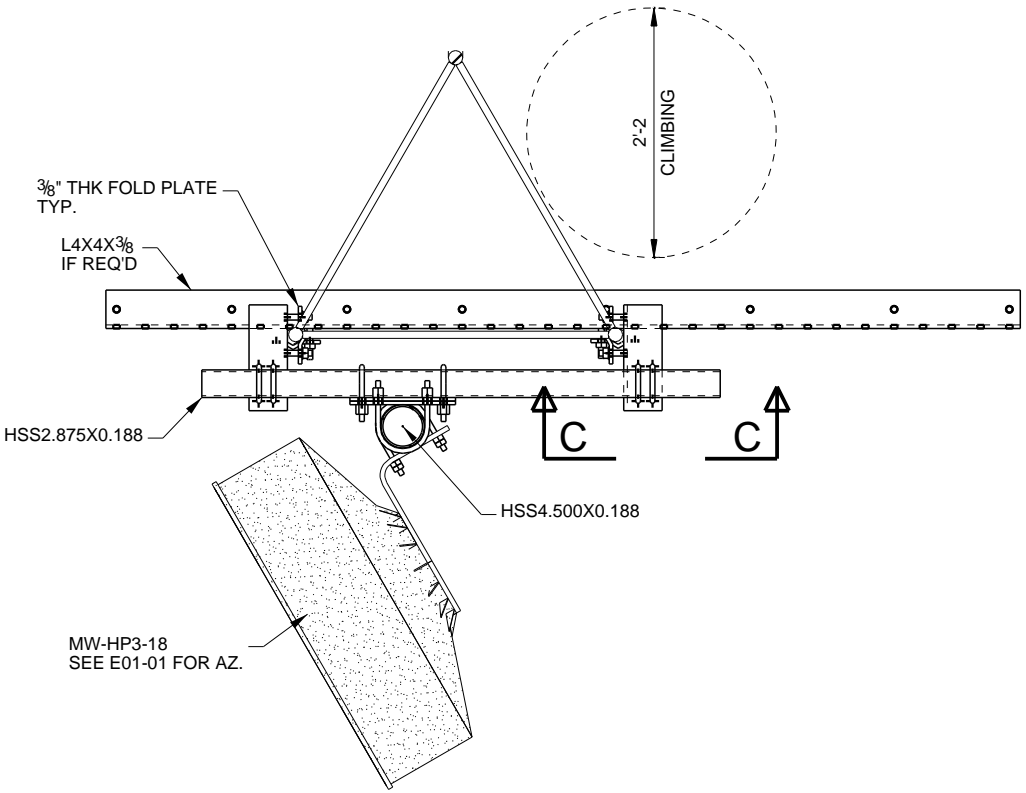
PROJECT: SAMPLE AWSS TOWER
MW. MOUNT DETAILS

TITLE: MW DISH MOUNT AT EL. 26.5m

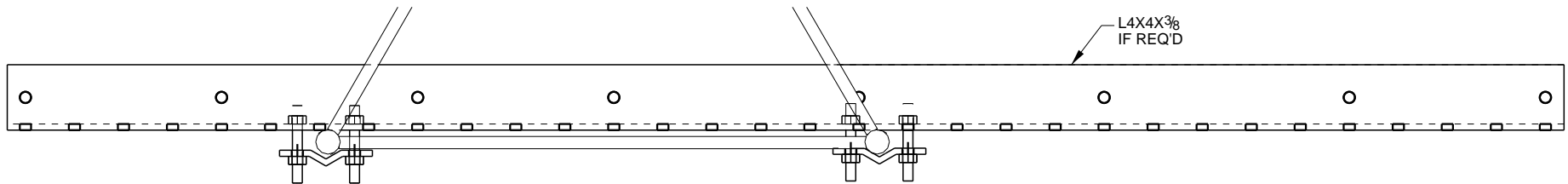
DRAWN BY:	RR	PURCHASE ORDER No.	
CHECKED BY:	MW	PROJECT NO.	8_Crestomere
APPROVED BY:	MP	DRAWING No.	S06-01
DATE:	02/02/2017	SHEET	18 OF 22



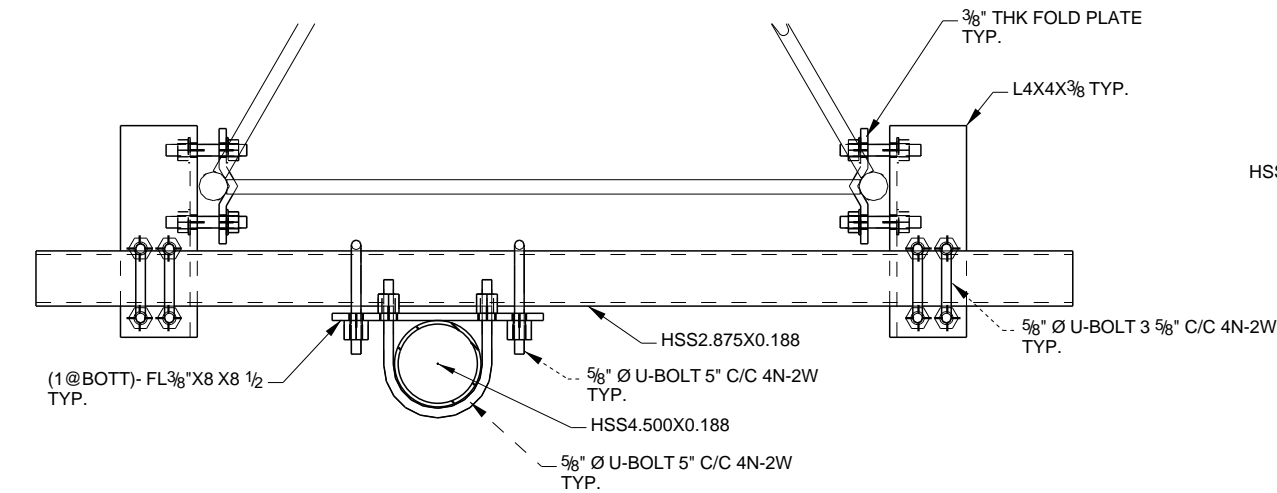
ELEVATION VIEW



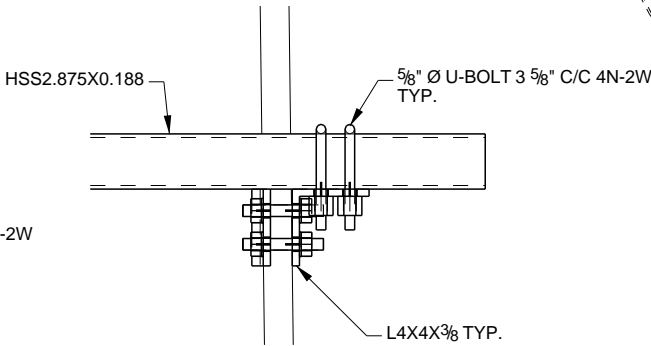
PLAN VIEW



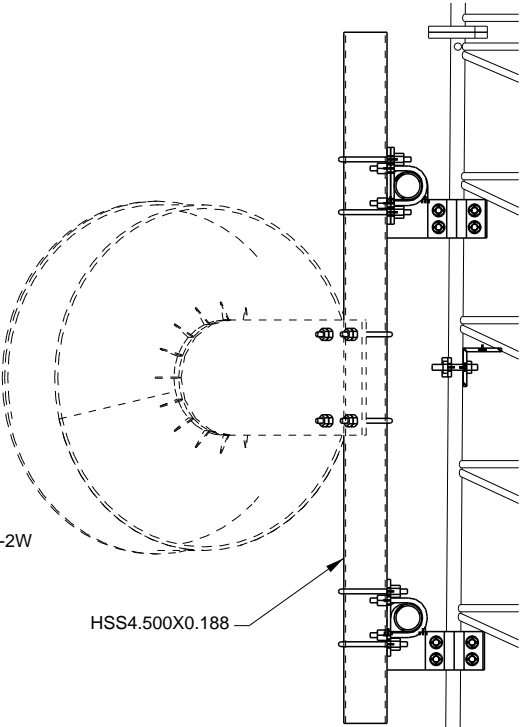
A - A



B - B



C - C



D - D

NOTE:
1. MW. INFO., AZIMUTH, ELEVATIONS AND MAMBER
SIZES WILL VARRY TO SUIT SITE SPECIFIC REQUIREMENTS

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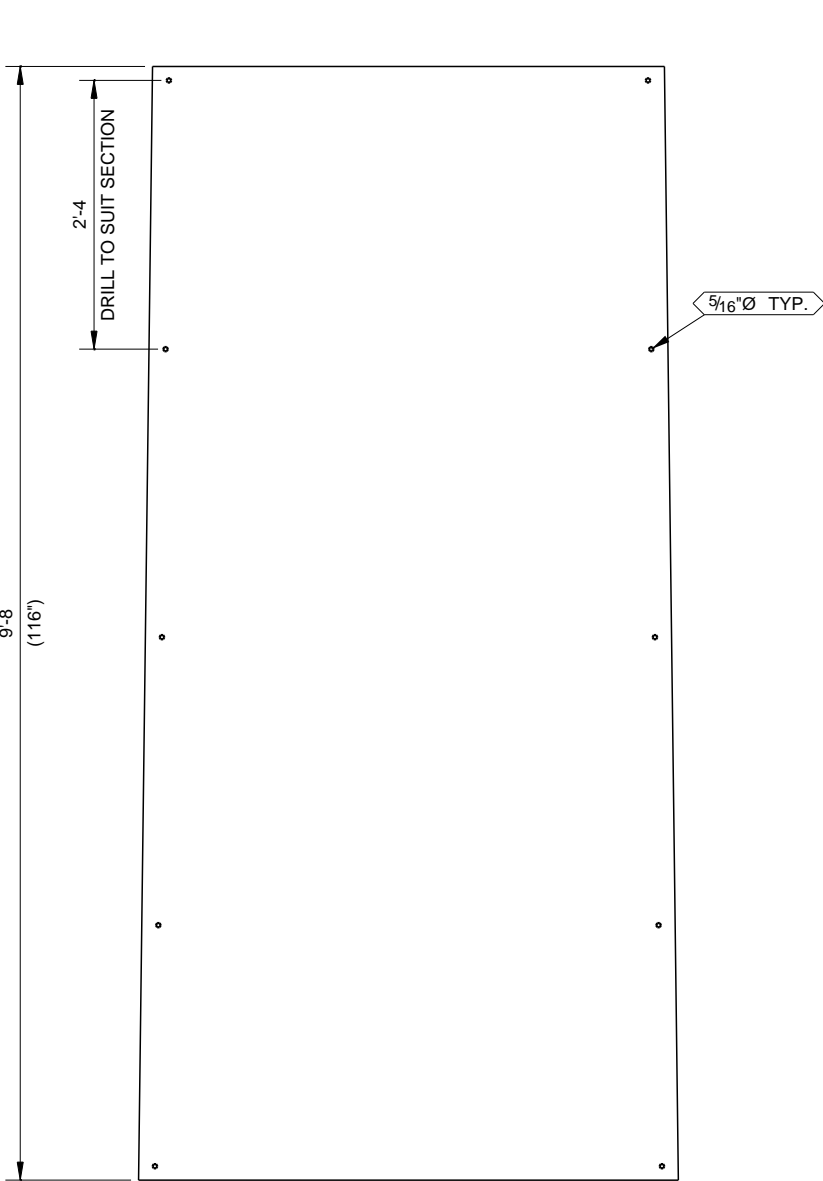
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No.	ISSUE/REVISION	BY	DATE

PROJECT:

EXPLORNET
SELF SUPPORT TOWER

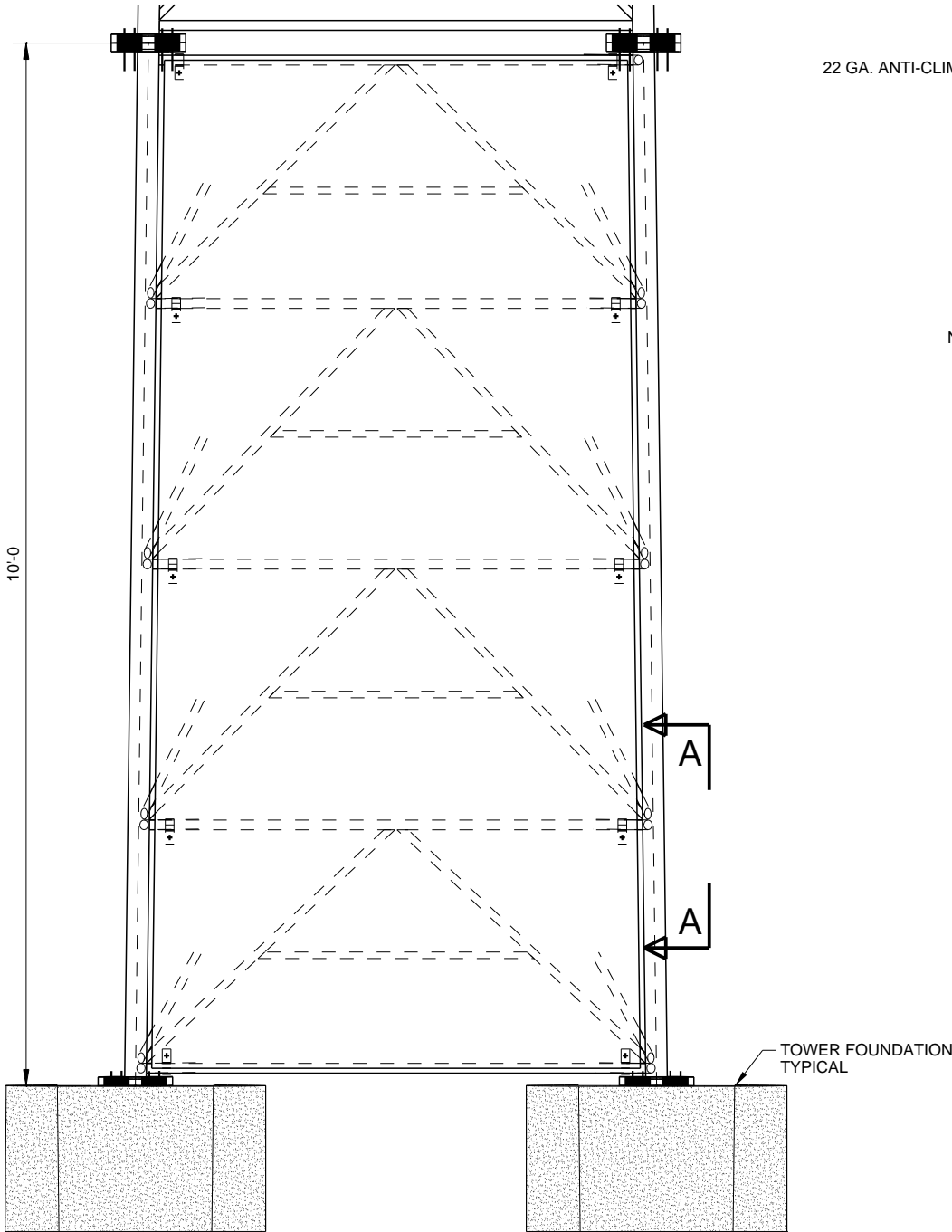
TITLE: ANTI CLIMB PANEL

DRAWN BY:	RR	PURCHASE ORDER No.	
CHECKED BY:	MW	PROJECT NO.	VARIOUS
APPROVED BY:	MP	DRAWING No.	S07-01
DATE:	02/24/2017	SHEET	19 OF 22

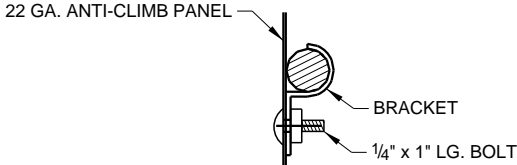


ELEVATION VIEW

MATERIAL-22GA. GALVANIZED STEEL
ALL HOLES 5/16" Ø



ELEVATION VIEW



A - A

NOTE: ALL PANELS SHOP FITTED

NOTE:
1. ANTI-CLIMB INFO., AND MAMBER SIZES WILL
VARRY TO SUIT FACE WIDTH REQUIREMENTS

GENERAL

1. COMPLY WITH THE LATEST EDITION OF THE CANADIAN ELECTRICAL CODE CSA C22.1, THE ONTARIO ELECTRICAL SAFETY CODE, THE ONTARIO HYDRO INSPECTION BULLETINS, THE ONTARIO BUILDING CODE AND ALL NATIONAL, PROVINCIAL, MUNICIPAL AND LOCAL AUTHORITIES HAVING JURISDICTION.
2. THE RF DESIGN IS NOT IN THE SCOPE OF THIS PACKAGE.
3. DESIGN OF LIGHTNING PROTECTION SYSTEM IS NOT IN THE SCOPE OF THIS PACKAGE.
4. ALL FIXTURES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
5. ALL WIRING, CABLES, ETC., IN CEILING SPACE ARE TO BE SECURED TO ITS OWN AND INDEPENDENT CEILING HANGERS.
6. SUPPLY AND INSTALL 90 DEGREE ANGLE, SEAL TIGHT FLEX CONNECTORS BETWEEN WALL FURNITURE FEEDS AND SYSTEMS FURNITURE TO PREVENT THE POWER FEED FROM UNNECESSARY BENDS, TWISTS OR KINKS.
7. ALL EMERGENCY FEEDERS SHALL BE RUN IN SEPARATE CONDUITS IN ACCORDANCE WITH CODE REQUIREMENTS.
8. INSTALL APPROVED EXPANSION COUPLINGS WHERE CONDUITS CROSS EXPANSION JOINTS.
9. CHECK DOOR SWINGS BEFORE INSTALLING SWITCHES.
- 10.BALANCE ALL PANEL BOARD LOADS ACROSS THE PHASES.
- 11.PROVIDE A SEPARATE NEUTRAL WIRE FOR EACH DEDICATED OR SEPARATE CIRCUIT SHOWN.
- 12.CO-ORDINATE WITH THE EQUIPMENT SUPPLIER FOR THE DC SYSTEM WIRING DETAILS, QUANTITY OF WIRES AND SYSTEM TYPE.
- 13.CO-ORDINATE ALL CONSTRUCTION WITH THE LANDLORD ON SITE. OBTAIN WRITTEN PERMISSION FROM LANDLORD FOR ALL SCHEDULED POWER INTERRUPTIONS AND CO-ORDINATE EXACT TIME AND DATE(S) OF SUCH POWER INTERRUPTIONS WITH LANDLORD'S OF THE BUILDING.

ABBREVIATIONS

A/C	AIR CONDITIONING	HR	HOUR
ADJ.	ADJUSTABLE	IN	INCH
AFF	ABOVE FINISH FLOOR	INFO	INFORMATION
AGL	ABOVE GROUND FLOOR	INSUL	INSULATION
AWG	AMERICAN WIRE GUAGE	INT	INTERIOR
AMP	AMPERE	KW	KILOWATTS
BBU	BACKUP BATTERY UNIT	LB(S)	POUND(S)
BMR	BASE MOBILE RADIO	LPS	LIGHTNING PROTECTION SYSTEM
BSS	BASE STATION SUBSYSTEM		
CU	COPPER	MFR	MANUFACTURE
C.B.	CIRCUIT BREAKER	MISC	MISCELLANEOUS
CKT	CIRCUIT	MGB	MAIN GROUND BUS
CLG	CEILING	MTD	MOUNTED
CLR	CLEAR	NEUT	NEUTRAL
CMU	CONCRETE MASONRY UNIT	NIC	NOT IN CONTRACT
CONST	CONSTRUCTION	OE	OVERHEAD ELECTRICAL
CONT	CONTINUOUS	OT	OVERHEAD TELEPHONE
DIM	DIMENSION	PT	PRESSURE TREATED
DN	DOWN	RBS	RADIO BASE STATION
DEF	DUAL ELEMENT FUSES	RECPT	RECEPTACLE
EL	ELEVATION	RM	ROOM
EQ	EQUAL	R.O.	ROUGH OPENING
EQUIP	EQUIPMENT	RRU	REMOTE RADIO UNIT
EXT	EXTERIOR	SW	SWITCH
E.C.	ELECTRICAL CONTRACTOR	SPEC	SPECIFICATION
EGB	EQUIPMENT GROUND BUS	SQ	SQUARE
FIN	FINISH	SUSP	SUSPENDED
FT	FOOT	S.V.	SHEET VINYL
GRD	GROUND	UBC	UNIFORM BUILDING CODE
GA	GUAGE	U/E	UNDERGROUND ELECTRIC
GWB	GYPSTUM WALL BOARD	U/T	UNDERGROUND TELEPHONE
GYP. BD.	GYPSTUM BOARD	VT	VINYL TILE
HVAC	HEATING,VENTING & AIR CONDITIONING	W.P.	WEATHER PROOFING
		XFMR	TRANSFORMER

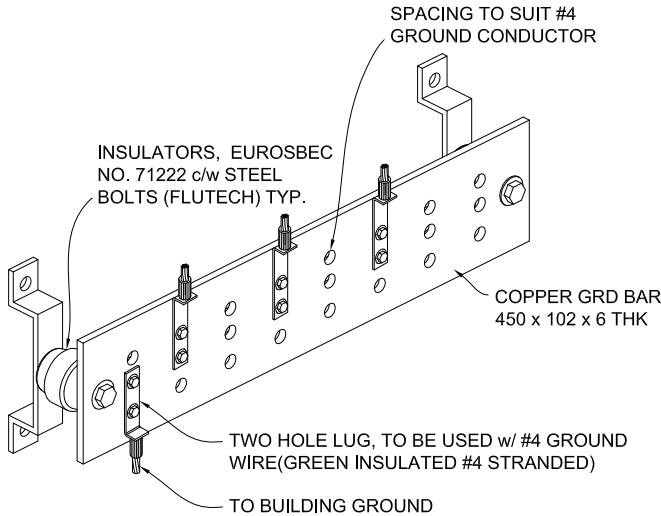
MATERIALS

- A. WIRES AND CABLES
1. ALL SIZES SHOWN ARE AWG FOR COPPER CONDUCTORS AND CABLES.
2. FOR EARTHING AND BONDING USE COPPER CONDUCTORS ONLY.
3. TECK 90 OR COREFLEX CABLES MAY BE USED WHERE COST EFFECTIVE.
4. INSULATION SHALL BE TYPE THHN, RW75 OR RW90.
5. CONDUCTORS INSTALLED UNDER EARTHING SHALL HAVE RWU75 OR RWU90 INSULATION.
- B. CONDUITS
- A. UNLESS NOTED OTHERWISE PROVIDE ELECTRICAL METALLIC TUBING (EMT) INSIDE THE BUILDING AND RIGID PVC CONDUIT OUTSIDE THE BUILDING AND BELOW GRADE.
6. FOR RIGID PVC CONDUIT PROVIDE EXPANSION JOINTS AT INTERVALS IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
7. FOR EARTHING AND BONDING CONDUCTORS PROVIDE LONG SWEEP ELBOWS TO ACCOMMODATE MINIMUM BENDING REQUIREMENTS, AS SPECIFIED OF SUCH CONDUCTORS.
- C. DISCONNECT SWITCHES AND FUSES
1. DISCONNECT SWITCHES SHALL CONFORM TO CSA C22.2 NO. 4.
2. FUSE HOLDERS SHALL BE IN ACCORDANCE WITH CSA C22.2 NO. 39.
3. FUSES SHALL CONFORM TO CSA C22.2 NO. 106-M1985.
4. DISCONNECT SWITCHES, FUSED AND NON-FUSED TYPE SHALL BE QUICK MAKE, QUICK BREAK ACTION IN EEMAC 1 ENCLOSURE FOR INDOOR INSTALLATION AND EEMAC 3 FOR OUTDOOR INSTALLATION UNLESS NOTED OTHERWISE.
- D. FIBRE OPTIC
- A. FIBRE OPTIC BENDING RADIUS SHALL BE AS PER MANUFACTURER'S RECOMMENDATION.
5. ALL SWEEP ELBOWS SHALL ACCOMMODATE FIBRE OPTIC INSTALLATION.
- E. EARTHING
- A. PROVIDE EARTHING AND BONDING OF EQUIPMENT AS SHOWN AND AS REQUIRED BY THE ONTARIO ELECTRICAL SAFETY CODE AND CSA C22.2 NO. 41-M1987, COMBINED WITH IEC 601024-1, IEEE 142 AND IEC 364 SERIES.
6. ALL CONDUCTORS USED ARE FOR EARTHING AND BONDING SHALL BE COPPER WITH GREEN INSULATION.
7. ALL LUGS FOR CONDUCTOR SIZE LARGER THAN #10 AWG SHALL BE TWO HOLE LONG BARREL COMPRESSION TYPE TIN PLATED COPPER.
8. EARTHING BARS SHALL BE MADE OF COPPER ALLOY 110, SIZED AND DRILLED FOR LUG CONNECTIONS.
9. IN ORDER TO MITIGATE HIGH FREQUENCY NOISE, ALL EARTHING AND BONDING, CONDUCTORS SHALL BE RUN AS STRAIGHT AS POSSIBLE WITH MINIMUM NUMBER OF BENDS. AVOID 90° BENDS. MINIMUM BENDING RADIUS TO BE 300MM. LOOPING OF EARTHING AND BONDING WIRES SHALL BE AVOIDED.
10. ANTI-OXIDANT COMPOUND (NO-OX-ID) SHALL BE APPLIED TO ALL CONNECTIONS WHERE DISSIMILAR METALS COME IN CONTACT AND TO ALL CONDUCTOR ENDS BEEN LUGGED.

LIGHTNING PROTECTION (IF REQUIRED)

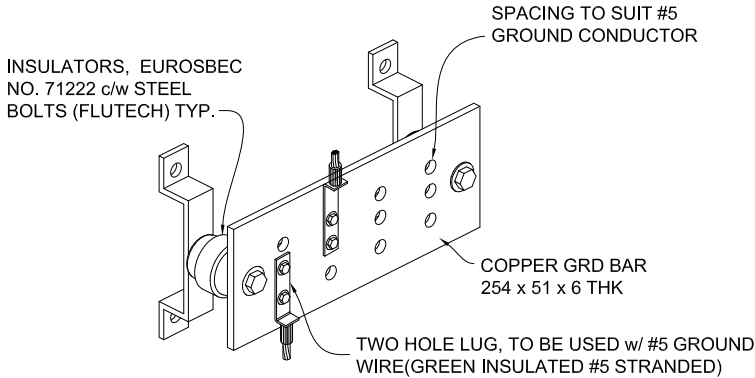
LIGHTNING PROTECTION SYSTEM BY QUALIFIED CONTRACTOR AS PER PUBLIC MOBILE SPECIFICATION:

1. ALL LIGHTNING PROTECTION OF PUBLIC MOBILE EQUIPMENT MUST BE COMPLETED BY A CONTRACTOR LICENSED BY AN ONTARIO FIRE MARSHALL TO PERFORM LIGHTNING PROTECTION WORK
2. ALL WORK MUST CONFORM TO THE R.S.O. 1990 REG. 712 LIGHTNING RODS ACT. AND CAN/CSA-872-M87 INSTALLATION CODE FOR LIGHTNING PROTECTION SYSTEM
3. UPON COMPLETION OF THE LIGHTNING PROTECTION WORK. PROVIDE A CERTIFICATE OF INSTALLATION TO THE FIRE MARSHALL OF ONTARIO WITH A COPY TO THE ENGINEER



MASTER GROUND BAR DETAIL

N.T.S.



SECTOR GROUND BAR DETAIL

N.T.S.

GROUND BAR NOTES:

1. ALL HARDWARE 8-88 STAINLESS STEEL COAT ALL SURFACE WITH "NO-OX" GREASE BEFORE MATING USE D-LUG NUTS AND SPIDER WASHERS WITH ALL GROUNDING CONNECTIONS.
2. NO CAD WELDING ON ROOFTOP.

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0	FOR INFORMATION	RR	02/02/2017
No.	ISSUE/REVISION	BY	DATE

PROJECT:	
SAMPLE SELF SUPPORT TOWER	
TITLE:	
ELECTRICAL GENERAL NOTES	
DRAWN BY:	PURCHASE ORDER NO.
CHECKED BY:	PROJECT NO.
APPROVED BY:	DRAWING NO.
DATE:	

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No.	ISSUE/REVISION	BY	DATE

PROJECT:

SAMPLE
SELF SUPPORT TOWER

TITLE:

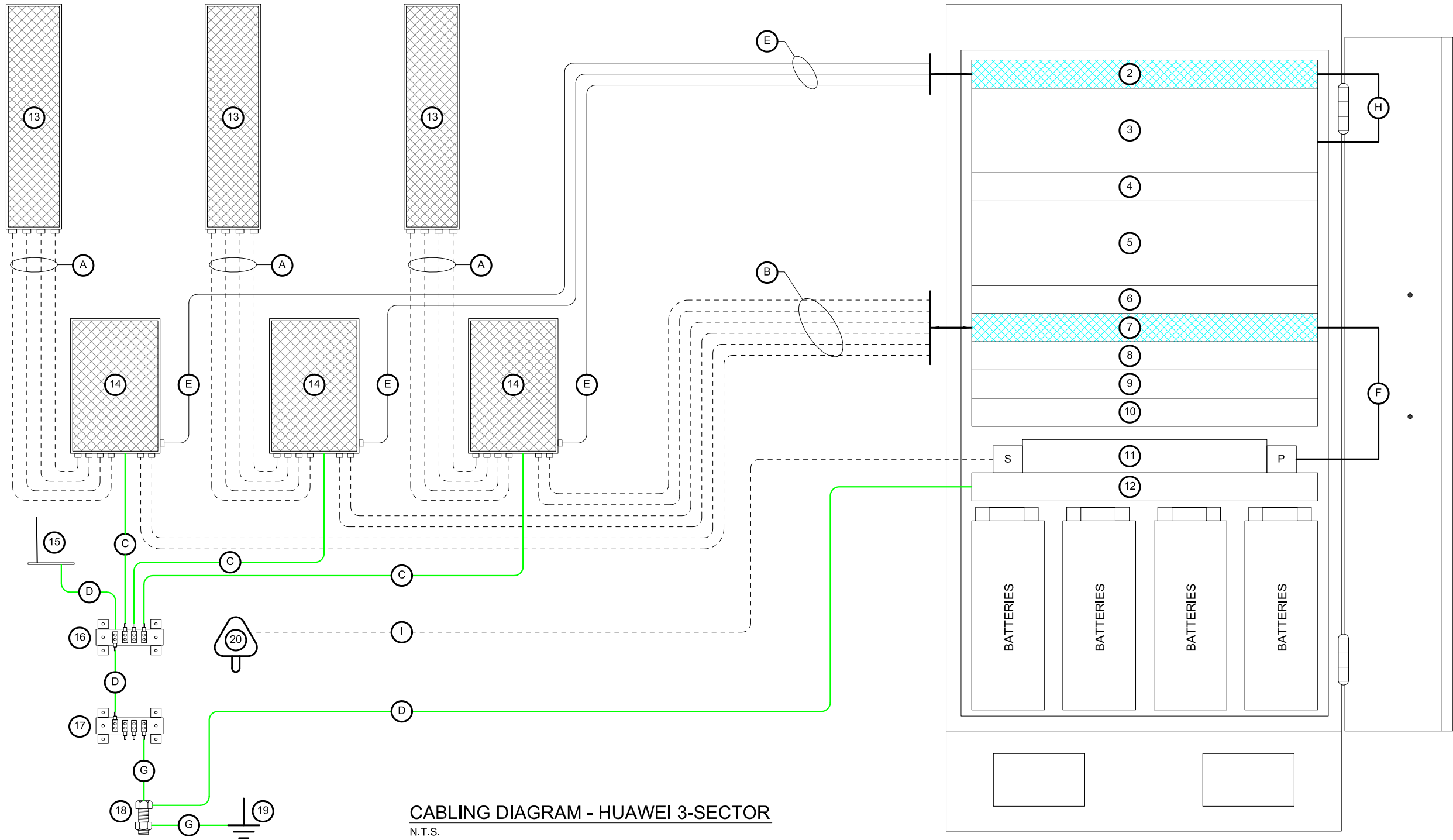
CABLING DIAGRAM
HUAWEI 3-SECTOR

DRAWN BY:	RR	PURCHASE ORDER NO.
CHECKED BY:	MW	PROJECT NO.
APPROVED BY:	MP	DRAWING NO. E02-01
DATE:	18/01/2017	SHEET 21 OF 22

SECTOR 1

SECTOR 2

SECTOR 3



CABLING DIAGRAM - HUAWEI 3-SECTOR
N.T.S.

EQUIPMENT

- ① SYSTEM CABINET
- ② HUAWEI DC DISTRIBUTION UNIT (DCDU)
- ③ RECTIFIER
- ④ CIENA SWITCH
- ⑤ DRAGONWAVE PONE RACK
- ⑥ DRAGONWAVE QUANTUM MODEM
- ⑦ HUAWEI BASEBAND UNIT (BBU)
- ⑧ MRV ROUTER (POP ONLY)
- ⑨ FIBRE SPLICE TRAY (POP ONLY)
- ⑩ MEDIA CONVERTER (POP ONLY)
- ⑪ SURGE SUPPRESSOR
- ⑫ GROUND BAR (BATTERIES BELOW)
- ⑬ AP ANTENNA
- ⑭ HUAWEI REMOTE RADIO UNIT (RRU)
- ⑮ LIGHTNING ROD

- ⑯ GROUND BUSBAR BELOW AP MOUNT, COPPER ALLOY 110, SIZED AND DRILLED FOR LUG CONNECTIONS
- ⑰ GROUND BUSBAR AT TOWER BASE, COPPER ALLOY 110, SIZED AND DRILLED FOR LUG CONNECTIONS
- ⑱ SPLIT BOLT
- ⑲ MAIN GROUND AT SITE
- ⑳ GPS (INSTALLED ON TOWER)

CABLING

- Ⓐ RF JUMPERS
- Ⓑ FIBRE OPTIC CABLES
- Ⓒ #6 AWG GREEN COATED STRANDED COPPER WIRE
- Ⓓ 3/8 GALVANIZED STEEL CLAD (GSC) RISER CABLE
- Ⓔ DC POWER (<75m, 10AWG, >75m, 12AWG)
- Ⓕ LMR 240 JUMPER (HUAWEI PROVIDED)
- Ⓖ #2/0 AWG COPPER WIRE OR 5/8 GSC

- Ⓗ #6 COPPER STRAND (1 RED, 1 BLACK)
- Ⓘ LMR400 COAX CABLE

DISCLAIMER: **Page 80 of 81**

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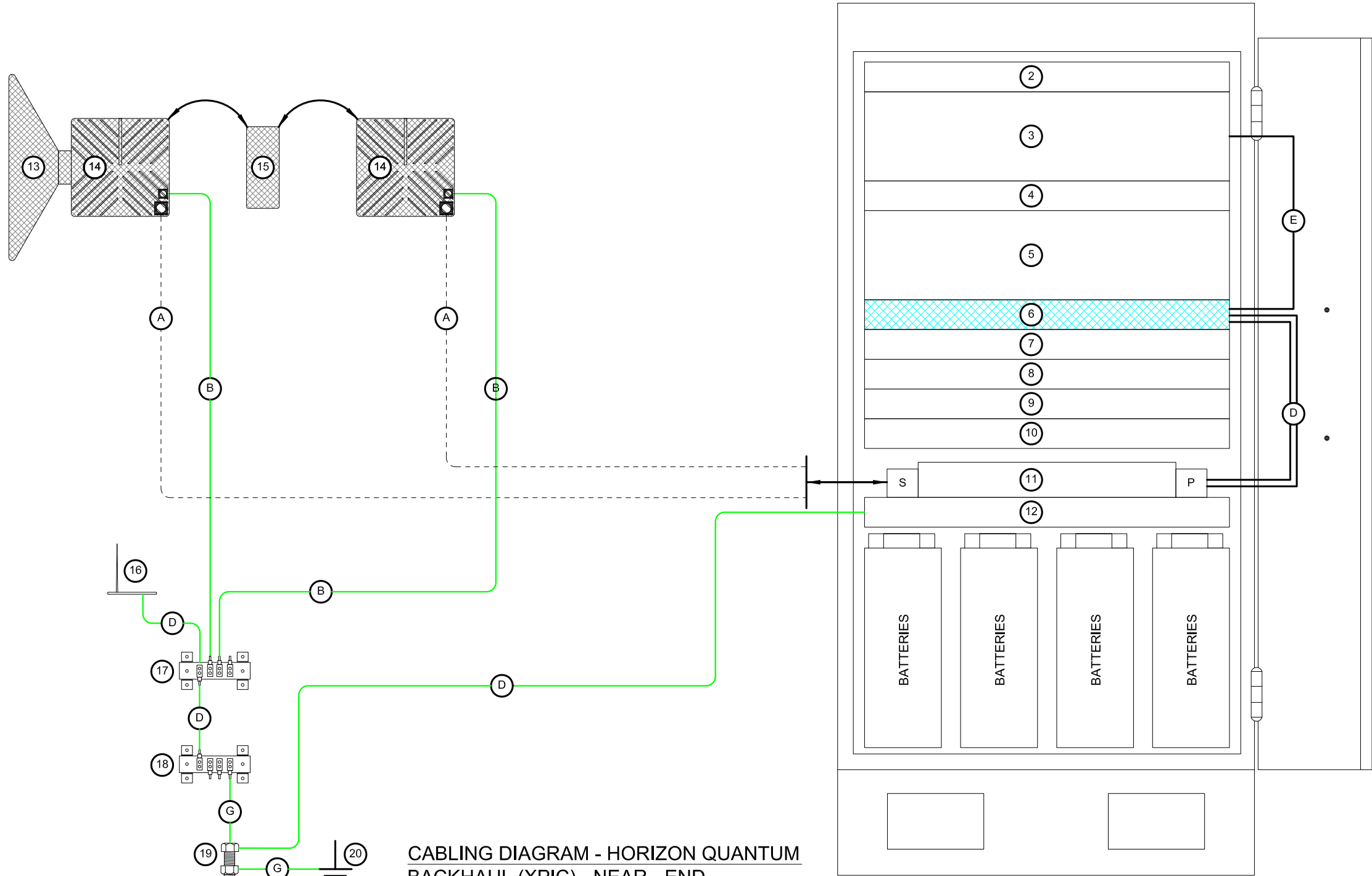
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0	FOR INFORMATION	RR	02/02/2017
No.	ISSUE/REVISION	BY	DATE

PROJECT: SAMPLE
SELF SUPPORT TOWER

TITLE: CABLING DIAGRAM
HORIZON QUANTUM BACKHAUL (XPIC)

DRAWN BY: RR	PURCHASE ORDER NO.
CHECKED BY: MW	PROJECT NO.
APPROVED BY: MP	DRAWING NO. E02-02
DATE: 18/01/2017	SHEET 22 OF 22



EQUIPMENT

- 1 SYSTEM CABINET
- 2 HUAWEI DC DISTRIBUTION UNIT (DCDU)
- 3 RECTIFIER
- 4 CIENA SWITCH
- 5 DRAGONWAVE PONE RACK
- 6 DRAGONWAVE QUANTUM MODEM
- 7 HUAWEI BASEBAND UNIT (BBU)
- 8 MRV ROUTER (POP ONLY)
- 9 FIBRE SPLICE TRAY (POP ONLY)
- 10 MEDIA CONVERTER (POP ONLY)
- 11 SURGE SUPPRESSOR
- 12 GROUND BAR (BATTERIES BELOW)
- 13 BACKHAUL ANTENNA
- 14 QUANTUM RADIO
- 15 DRAGONWAVE DUAL POLE RIGID MOUNT (DPRM)

- 16 LIGHTNING ROD
- 17 GROUND BUSBAR BELOW AP MOUNT, COPPER ALLOY 110, SIZED AND DRILLED FOR LUG CONNECTIONS
- 18 GROUND BUSBAR AT TOWER BASE, COPPER ALLOY 110, SIZED AND DRILLED FOR LUG CONNECTIONS
- 19 SPLIT BOLT
- 20 MAIN GROUND AT SITE

CABLING

- A LMR 400 IF CABLE
- B #6 AWG GREEN COATED STRANDED COPPER WIRE
- C 3/8 GALVANIZED STEEL CLAD (GSC) RISER CABLE
- D LMR 400 (IN KIT)
- E FIBRE OPTIC CABLES

Legend

Cell Tower Location

- 2000 m colocation buffer
- 1600 m notification buffer
- 500 m dwelling buffer

Information as depicted is subject to change, therefore Rocky View County assumes no responsibility for discrepancies after date of printing.

