MT. DOUGLAS

PROJECT TYPE:	CTD UPDATE
SITE TYPE:	30.4m MOMOPOLE
SITE ADDRESS:	CHURCHILL DRIVE
	MT. DOUGLAS, SAANICH, BC
TOWER OWNER:	DISTRICT OF SAANICH / – / MT. DOUGLAS
2nd CARRIER:	BC HYDRO / MTD / MT. DOUGLAS
3rd CARRIER:	ROGERS / W0199 / MT. DOUGLAS
4th CARRIER:	TELUS / BC0207 / MT. DOUGLAS

DRAWING INDEX

DRAWING No.	REV.	DRAWING TITLE
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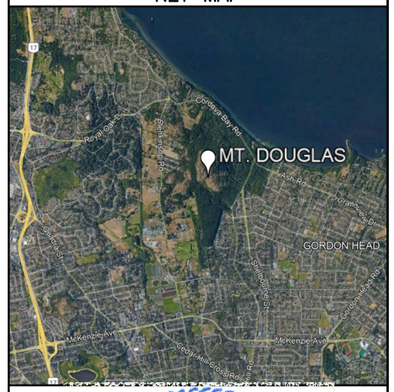
10–18696–A01–1	0	DESIGN PROFILE
10–18696–A01–2	0	ANTENNA LOADING TABLE
10–18696–A01–3	0	ANTENNA LOADING TABLE
10–18696–A06–1	0	ANTENNA LAYOUT AT EL: 31.9m
10–18696–A06–2	0	ANTENNA ELEVATION AT 25.6m±
10–18696–A06–3	0	ANTENNA PLAN VIEW AT EL: 25.6m
10–18696–A06–4	0	ANTENNA ELEVATION AT 19.6m±
10–18696–A06–5	0	ANTENNA PLAN VIEW AT EL: 19.6m
10–18696–A06–6	0	ANTENNA LAYOUT AT EL: 15.0m
10–18696–A06–7	0	ANTENNA ELEVATION AT 7.0m±
10–18696–A06–8	0	ANTENNA PLAN VIEW AT EL: 8.0m
10–18696–A06–9	0	ANTENNA PLAN VIEW AT EL: 6.0m

KEY MAP



PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
B. B. BITTNER
39026
2022-02-11

ENG RECORD No: 10–18696 | APP'D:

REV	DESCRIPTION	DWN / CHK	DATE
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1			
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WESTOWER™ COMMUNICATIONS LTD

TITLE PAGE
DISTRICT OF SAANICH
CTD UPDATE
MT. DOUGLAS, SAANICH, BC

SITE CODE:	DATE: 02–01–22
WTC CODE: WTC03331	DWN: MPB CHK: MK
JOB No: 10–18696	DWG No: A00–1

GENERAL

1. THESE NOTES SHALL BE READ IN CONJUNCTION WITH THE STRUCTURAL DRAWINGS, ALL CONTRACT DOCUMENTS, AND THE OWNER'S SPECIFICATIONS. WHERE CONFLICTS EXIST BETWEEN THE STRUCTURAL DRAWINGS, THESE NOTES, THE CONTRACT DOCUMENTS, OR THE OWNER'S SPECIFICATIONS, THESE DRAWINGS AND THEN THE NOTES SHALL GOVERN UNLESS NOTED OTHERWISE.
2. THE MOST RECENT EDITION OF THE DESIGN STANDARDS REFERENCED ON THE STRUCTURAL DRAWINGS SHALL GOVERN UNLESS OTHERWISE NOTED.
3. THE CONTRACTOR SHALL BE RESPONSIBLE TO TAKE AND VERIFY ALL DIMENSIONS AND CONDITIONS OF THE EXISTING SITE AND STRUCTURES THAT PERTAIN TO THE WORK OF THIS CONTRACT, AND TO COMPARE THEM TO THE DIMENSIONS AND CONDITIONS SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL REPORT ANY DIFFERENCES OR OMISSIONS TO THE ENGINEER OF RECORD PRIOR TO PROCEEDING WITH ANY WORKS. THE CONTRACTOR SHALL CARRY OUT AND PROVIDE VERIFICATION PRIOR TO THE PREPARATION OF ANY SHOP DRAWINGS REQUIRED FOR THE WORK.
4. THE CONTRACTOR SHALL MAINTAIN THE SITE THROUGHOUT THE DURATION OF THE WORK AND, SHALL CLEAN AND REMOVE ALL CONSTRUCTION DEBRIS OR MATERIAL FROM THE SITE ONCE CONSTRUCTION IS COMPLETED.

FIELD REVIEW

1. PERIODIC FIELD REVIEWS OF THE WORK IN PROGRESS WILL BE CONDUCTED TO CONFIRM THAT THE WORK IS IN GENERAL CONFORMANCE WITH THE STRUCTURAL DRAWINGS. THE CONTRACTOR SHALL COOPERATE WITH THIS REQUIREMENT BY PROVIDING SAFE ACCESS TO THE WORK IN THE FIELD OR IN THE FABRICATOR'S SHOP FOR THE ENGINEER'S REPRESENTATIVE ON REQUEST FROM THE ENGINEER OF RECORD. AT A MINIMUM THE FOLLOWING INSPECTIONS AND NOTIFICATIONS BY THE CONTRACTOR WILL BE REQUIRED;

CONCRETE REINFORCEMENT	BEFORE EACH POUR	24 HOURS
PILING INSTALLATION	PRIOR TO DRIVING PILES	24 HOURS
FABRICATION	AFTER FIT UP, AND PRIOR TO WELDING	24 HOURS
STRUCTURAL STEEL/BOLT INSTALLATION	DURING INSTALLATION	24 HOURS
SUBSTANTIAL COMPLETION	100% COMPLETION	24 HOURS

FOR PROJECTS FURTHER THAN 75km AWAY FROM THE ENGINEERS OFFICE, 5 DAYS NOTICE IS REQUIRED FOR ALL ITEMS LISTED ABOVE. NOTIFICATIONS MUST BE REQUESTED PRIOR TO 12:00 PM TO BE PROCESSED THE SAME DAY.

FIELD ERECTION

1. THE CONTRACTOR SHALL BE FULLY EXPERIENCED IN PERFORMANCE OF THE WORK REQUIRED FOR THE INSTALLATION OF EQUIPMENT AND/OR REINFORCING OF TELECOMMUNICATION STRUCTURES AND THEIR FACILITIES.
2. BY ACCEPTING THE WORK, THE CONTRACTOR ACKNOWLEDGES THAT HE HAS SUFFICIENT EXPERIENCE AND ABILITY, THAT HE IS KNOWLEDGEABLE OF THE WORK TO BE PERFORMED, AND THAT HE IS PROPERLY LICENSED AND REGISTERED TO DO THE WORK IN THE PROVINCE OR TERRITORY WHERE THE WORK IS TAKING PLACE.
3. ALL WORK MUST BE COMPLETED BY THE CONTRACTOR AS SHOWN ON THESE DRAWINGS WITHOUT EXCEPTION. NO DEVIATION FROM LOCATION OR ELEVATION OF ANTENNAS, TX–LINES, EQUIPMENT BOOMS, OR REINFORCING WILL BE ACCEPTED.
4. SHOULD SPATIAL CONFLICTS EXIST WHICH AFFECT THE DESIGN LOCATION OR ELEVATION OF THE INSTALLATION, THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD FOR RESOLUTION PRIOR TO INSTALLATION OF THE WORK. IT WILL BE THE RESPONSIBILITY OF AND AT THE EXPENSE OF THE CONTRACTOR TO MAKE GOOD ANY DEVIATIONS FROM THE DRAWINGS NOT APPROVED BY THE ENGINEER OF RECORD.
5. THE CONTRACTOR IS FULLY RESPONSIBLE FOR IMPLEMENTING AND PROVIDING SAFE WORK CONDITION AT ALL TIMES THROUGHOUT THE CONSTRUCTION PERIOD IN COMPLIANCE WITH ALL APPLICABLE FEDERAL, PROVINCIAL, AND LOCAL SAFETY CODES AND REGULATIONS GOVERNING THE WORK.
6. THE CONSTRUCTION DRAWINGS SHOW COMPLETED STRUCTURES ONLY. TEMPORARY BRACING OR GUYING FOR STABILITY OF INDIVIDUAL MEMBERS, FOR ANTENNAS AND BOOMS, OR FOR THE TOWER STRUCTURE FOR GLOBAL STABILITY DURING CONSTRUCTION IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
7. ANY WORK INVOLVING REMOVAL OF INDIVIDUAL MEMBERS, PARTS OF INDIVIDUAL MEMBERS, OR GUYS SHALL BE COMPLETED BY QUALIFIED PERSONNEL FOLLOWING APPROVED ERECTION PROCEDURES PREPARED BY A PROFESSIONAL ENGINEER FAMILIAR WITH TELECOMMUNICATION STRUCTURES AND RIGGING PRACTICES.
8. CSA S37 WILL BE REFERENCED FOR ERECTION AND FABRICATION TOLERANCES, FOR PROCEDURES TO DETERMINE PLUMB, FOR TWIST AND TILT CALCULATIONS, AND TO DETERMINE FINAL GUY TENSIONS.
9. TOWER STRUCTURES SHALL BE PLUMBED IN CALM WEATHER CONDITIONS.
10. NO WORK SHALL BE PERFORMED UNDER WIND CONDITIONS OVER 30 KM/HR, AND WHEN LIGHTNING WARNINGS ARE FORECASTED IN THE DAILY WEATHER REPORT.

CONCRETE

1. ALL CONCRETE WORK SHALL CONFORM TO CSA STANDARD A23.1; A23.2
2. CONCRETE TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 30 MPa AT 28 DAYS, EXPOSURE CLASS F1. THE CONTRACTOR SHALL SUBMIT A MIX DESIGN FOR REVIEW TO THE ENGINEER PRIOR TO POURING CONCRETE.
3. MINIMUM CONCRETE COVER OVER REBAR IS 75mm U.N.O.
4. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 20mm.
5. REINFORCING MATERIAL SHALL BE IN ACCORDANCE WITH CAN/CSA G30.18 GRADE 400. THE CONTRACTOR SHALL SUBMIT MILL CERTIFICATES AND CUT SHEETS TO THE ENGINEER FOR APPROVAL PRIOR TO PLACEMENT.
6. ALL REBAR (HORIZONTAL & VERTICAL) SHALL BE SECURELY WIRE TIED TO PREVENT DISPLACEMENT DURING POURING OF CONCRETE.
7. COMPACT ALL BEDDING AND GRANULAR FILL TO 95% MODIFIED PROCTOR DRY DENSITY UNLESS NOTED OTHERWISE.
8. BACKFILL SHALL BE SELECTED MATERIAL, WELL COMPACTED IN LAYERS NOT EXCEEDING 300mm.
9. BACKFILL SHALL BE PLACED SO AS TO PREVENT THE ACCUMULATION OF WATER AROUND THE FOUNDATION.
10. COLD CONSTRUCTION JOINTS TO BE THOROUGHLY CLEANED & WETTED PRIOR TO SECOND POUR.

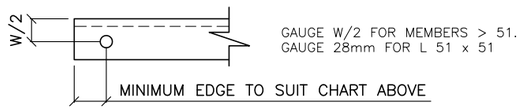
STRUCTURAL STEEL

1. STRUCTURAL STEEL FABRICATION AND ERECTION SHALL CONFORM TO CSA S37 AND REFERENCED CLAUSES OF CSA S16. WHERE REFERENCED CLAUSES OF S16 DIFFER, CSA S37 SHALL GOVERN.
2. STEEL SUPPLY SHALL CONFORM TO CSA G40.20 AND G40.21 IN THE FOLLOWING GRADES;

WIDE FLANGE SECTIONS	350W
CHANNELS AND ANGLES	300W
BAR / PLATE	300W
HSS SECTIONS	350W / ASTM A500 GR C
RHS SECTIONS	ASTM A500 GR C
PIPE	ASTM A53 GR. B OR EQUIVALENT

3. ALL STEEL SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A123/A123M.
4. STRUCTURAL BOLT ASSEMBLIES SHALL CONFORM TO ASTM A325 AND SHALL BE SUPPLIED GALVANIZED.
5. ALL CONNECTIONS USING A325 BOLTS SPECIFIED ON THE DRAWINGS ARE TO BE CONSIDERED AS PRETENSIONED CONNECTIONS. THE TURN OF NUT METHOD SHALL BE USED TO PROVIDE THE REQUIRED BOLT PRETENSIONS.
6. THE REQUIREMENTS OF CSA–S16 FOR INSPECTION AND INSTALLATION OF BOLTED CONNECTIONS WILL BE STRICTLY FOLLOWED.
7. GALVANIZED STRUCTURAL BOLT ASSEMBLIES THAT ARE PRETENSIONED MAY NOT BE REUSED AND MUST BE DISCARDED.
8. U–BOLTS SHALL CONFORM TO ASTM A108 GRADE C1018 MINIMUM, SHALL HAVE ROLLED THREADS, AND SHALL BE SUPPLIED GALVANIZED. U–BOLTS SUPPLIED WITH CUT THREADS WILL BE REJECTED. U–BOLT ASSEMBLIES SHALL BE PROVIDED WITH FLAT WASHERS CONFORMING TO ASTM F436, EXTRA DUTY SPRING LOCK WASHERS CONFORMING TO ANSI B27.1, AND SAE GRADE 2 HEX NUTS ON EACH THREADED PORTION. CONNECTIONS USING U–BOLT ASSEMBLIES SHALL BE SNUG TIGHT.
9. DAMAGE TO GALVANIZED STEEL SURFACES AND FIELD DRILLED HOLES SHALL BE REPAIRED IN ACCORDANCE WITH ASTM A780. AT A MINIMUM, WIRE BRUSH CLEANING AND TWO COATS OF ZINC RICH PAINT SHALL BE APPLIED TO DAMAGED AREAS.
10. WELDING SHALL CONFORM TO CSA W59 USING E49XX ELECTRODES UNLESS NOTED OTHERWISE. ALL WELDING SHALL BE PERFORMED BY FABRICATION SHOPS REGISTERED IN ACCORDANCE WITH CSA W47.1 AS DIVISION 1 OR DIVISION 2.1. NO FIELD WELDING IS PERMITTED OTHER THAN WELDING SHOWN ON THESE DRAWINGS.
11. WHERE WELDING IS REQUIRED, THE CONTRACTOR SHALL SUPPLY THEIR CWB CERTIFICATION. IN ADDITION FOR FIELD WELDING, THE CONTRACTOR SHALL SUPPLY A LIST OF FIELD STAFF AND THEIR CERTIFICATIONS FOR WELDING PROCEDURES TO BE USED ON THE SITE.
12. THE CONTRACTOR SHALL SUPPLY MILL CERTIFICATIONS FOR ALL STEEL AND BOLT ASSEMBLY PRODUCTS FOR REVIEW BY THE ENGINEER OF RECORD PRIOR TO FABRICATION OR ERECTION.
13. MINIMUM DISTANCE BETWEEN CENTERLINE OF HOLES AND EDGE OF ELEMENTS MUST MEET THE FOLLOWING SPECIFICATIONS.

BOLT ø	SHEARED EDGES	ROLLED EDGES	HOLE ø
1/2"ø	25mm	18mm	9/16"ø
5/8"ø	28mm	22mm	11/16"ø
3/4"ø	32mm	26mm	13/16"ø



SHOP DRAWINGS

1. THE CONTRACTOR SHALL SUBMIT 3 SETS OF FABRICATION DRAWINGS FOR REVIEW TO THE ENGINEER, AND SHALL RECEIVE APPROVAL PRIOR TO FABRICATION. SHOP DRAWINGS MUST BE SUBMITTED ON THE CONTRACTOR'S TITLE BLOCK, AND SHALL SHOW ALL MEASUREMENTS AND DETAILS INCLUDING, FIELD WELDS, AND MATERIAL SPECIFICATIONS.
2. REVIEW OF SHOP DRAWINGS BY THE ENGINEER CONSTITUTES A GENERAL REVIEW FOR CONFORMITY TO THE STRUCTURAL DRAWINGS. REVIEW OF SHOP DRAWINGS BY THE ENGINEER DOES NOT LIMIT THE CONTRACTOR'S RESPONSIBILITY TO ENSURE QUALITY, CORRECTNESS AND FIT OF FABRICATED ITEMS.

GUY WIRES

1. GUY MATERIALS SHALL CONFORM TO THE FOLLOWING STANDARDS;

WIRE ROPE	CSA G4, USING HOT ZINC WIRE
GUY STRAND	CAN/CSA–G12 OR ASTM A475
BRIDGE STRAND	ASTM A586
GUY HARDWARE	CROSBY ONLY AISI GRADE 1035 SUITABLY HEAT TREATED

GENERAL CONSTRUCTION NOTES VERSION 2.4 May 7, 2020

NOTES

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
B. B. BITTNER
39026
2022-02-11

ENG RECORD No: 10–18696 | APP'D:

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REV	DESCRIPTION	DWN / CHK	DATE
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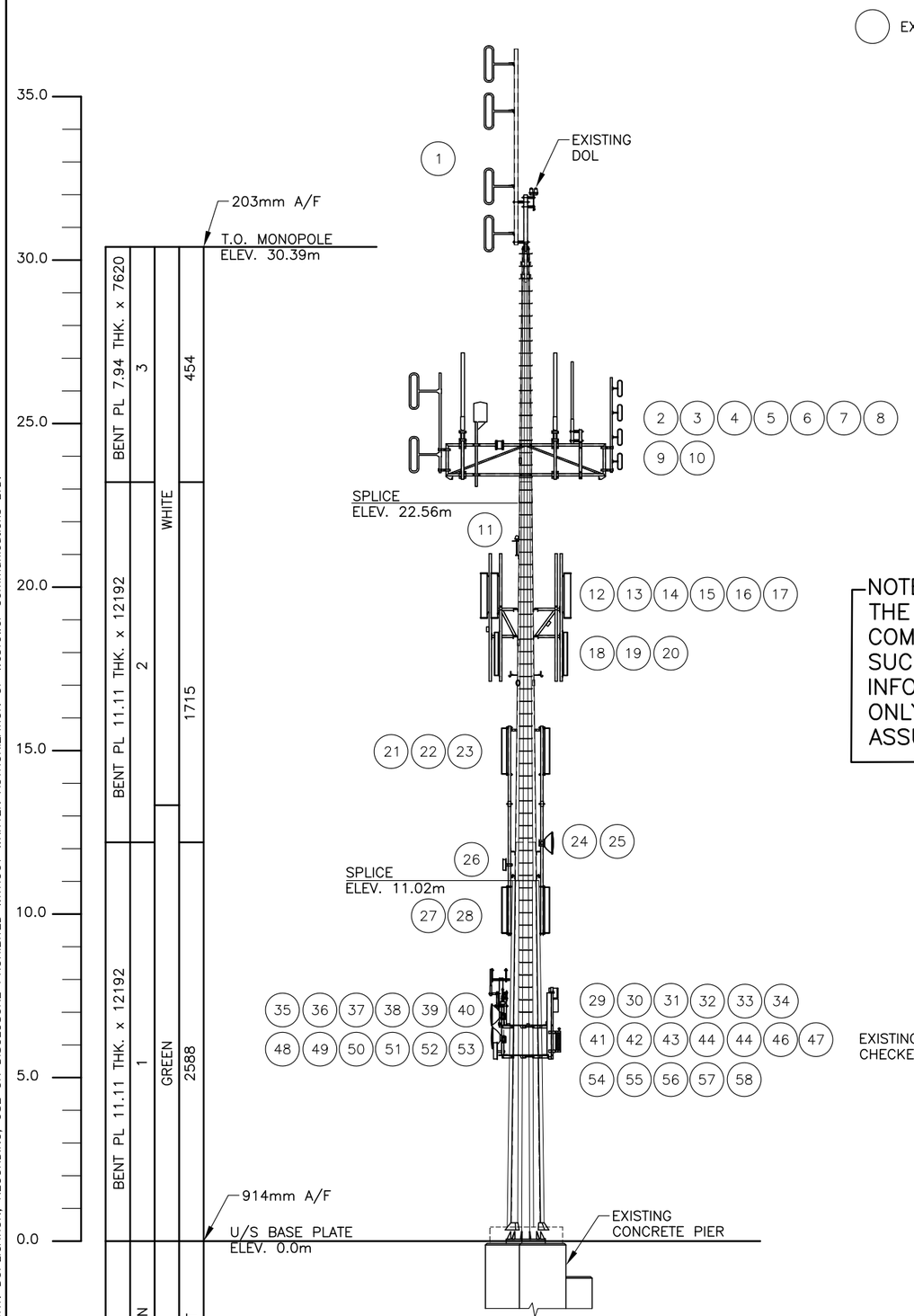
WESTOWER™ COMMUNICATIONS LTD

GENERAL CONSTRUCTION NOTES
DISTRICT OF SAANICH
CTD UPDATE
MT. DOUGLAS, SAANICH, BC

SITE CODE:	DATE: 02–01–22
WTC CODE: WTC03331	DWN: MPB CHK: MK
JOB No: 10–18696	DWG No: A00–2



MONOPOLE PROFILE

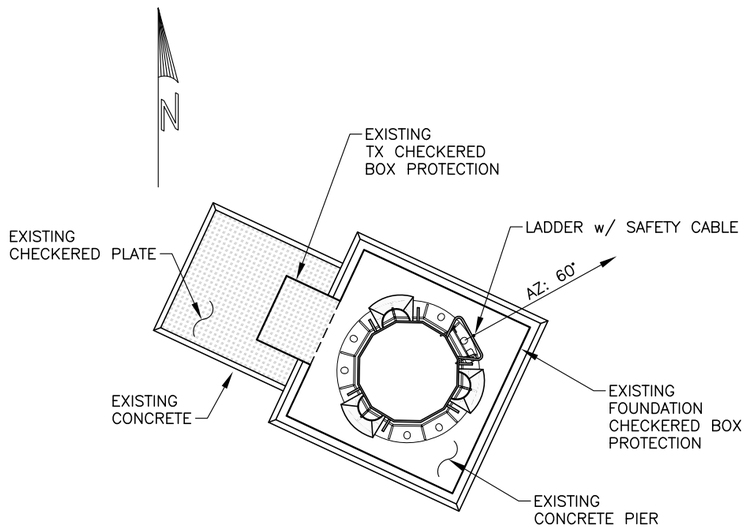
DESIGN PARAMETERS (LOADING)	
DESIGN SPECIFICATION:	CAN/CSA S37-18
WIND (ULS-1/50yr):	Qh=1030 Pa @ 10.0m (ECCC DATED: JULY 6, 2017)
WIND (SLS-1/10yr):	Qh=796 Pa @ 10.0m (ECCC DATED: JULY 6, 2017)
RADIAL ICE:	10mm GLAZE (CSA S37-18)
IMPORTANCE FACTOR:	1.0
SERVICEABILITY FACTOR:	1.0
LOAD COMBINATION FACTOR:	0.5
DAMPENING RATIO:	0.0052 *SEE NOTE #3
GUST FACTOR, Cg:	2.0
ANTENNA LIST SOURCE:	WESTOWER STA JOB #10-18696, DATED FEB 11, 2022
LAST SITE VISIT BY:	WESTOWER TAC #10-18696, DATED FEB 11, 2022
DESIGNED BY:	LeBLANC & ROYLE TELECOM
YEAR OF CONSTRUCTION:	1990
MODEL:	MONOPOLE

STRUCTURAL STEEL	
MAST MEMBERS:	G40.21 44W (SEE NOTE #4)
MOUNTS:	300W / A500 GR. C
BOLTS:	A325

TOTAL FOUNDATION LOADS	
DOWNLOAD:	103.6 kN
SHEAR:	104.4 kN
MOMENT:	1587.8 kN-m

NOTE:
THE MONOPOLE AS SHOWN IS NOT COMPLIANT WITH S37-18 AND AS SUCH THESE DRAWINGS ARE FOR INFORMATION AND REAL-STATE PURPOSE ONLY. STRUCTURE ADEQUACY IS NOT ASSURED BY WESTOWER COMMUNICATIONS.

LOCATION COORDINATES	
LATITUDE:	N 48.492222°
LONGITUDE:	W 123.345527°
DECLINATION:	E 15.81° (2022)
ELEVATION:	200m



PLAN VIEW

NOTES

1. SEE DRAWING 'A00-2' FOR GENERAL NOTES.
2. READ THIS DRAWING WITH DWG 'A01-2' & 'A01-3'.
3. WESTOWER FDM #10-18696, SEALED FEBRUARY 11, 2022.
4. MONOPOLE STEEL GRADE NOT CONFIRMED. ASSUMED STEEL GRADE OF 44W.

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
B. B. BITTNER
39026
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ENG RECORD No: 10-18696 | APP'D:

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REV	DESCRIPTION	DWN / CHK	DATE
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WESTOWER™ COMMUNICATIONS LTD

DESIGN PROFILE
DISTRICT OF SAANICH
CTD UPDATE
MT. DOUGLAS, SAANICH, BC

SITE CODE:	DATE: 02-01-22
WTC CODE: WTC03331	DWN: MPB / CHK: MK
JOB No: 10-18696	DWG No: A01-1

ANTENNA LOADING

ID No.	CARRIER TECHNOLOGY	QTY.	ANTENNA MANUFACTURER	ANTENNA MODEL No.	SIZE (HxWxD)	CARRIER	AZIMUTH	DT (M)	DOWN TILT (E)	TX QTY.	TX-LINE	ELEV.	STATUS
1		ONE	SINCLAIR	SRL 210C4	6096 x 640 x 102ø		275°			ONE	LDF6	31.9m	EXISTING
2		ONE	SINCLAIR	SRL 210C2	3658 x 1187 x 76ø		250°			ONE	LDF6	25.9m	EXISTING
3		ONE	SINCLAIR	OMNI ANTENNA	2700 x 100ø		OMNI					25.9m	EXISTING
4		ONE	SINCLAIR	OMNI ANTENNA	2700 x 100ø		OMNI			ONE	LDF5	25.9m	EXISTING
5		ONE	SINCLAIR	OMNI ANTENNA	2500 x 64ø		OMNI			ONE	LDF5	25.6m	EXISTING
6		ONE	SINCLAIR	SRL 310C4 (EQUIVALENT)	2540 x 483 x 102ø		265°			ONE	LDF6	25.2m	EXISTING
7		ONE	KATHREIN	840 10511 XPOL	626 x 407ø		OMNI			2	LDF4	25.0m	EXISTING
8		ONE		TMA	230 x 130 x 100					2	LDF4	24.4m	EXISTING
9				TX LINE						ONE	LDF6	23.9m	EXISTING
10				TX LINE						4	LDF5	23.9m	EXISTING
11		ONE		GPS			OMNI			ONE	10mmø	21.4m	EXISTING
12		ONE	COMMSCOPE	RVVPX305.10RXM	1380 x 353 x 209		85°					19.6m	EXISTING
13		ONE	COMMSCOPE	RVVPX305.10RXM	1380 x 353 x 209		155°					19.6m	EXISTING
14		ONE	COMMSCOPE	RVVPX305.10RXM	1380 x 353 x 209		300°					19.6m	EXISTING
15		2		DIPLEXER						2	LDF5-50	19.3m	EXISTING
16		2		DIPLEXER						2	LDF5-50	18.9m	EXISTING
17		2		DIPLEXER						2	LDF5-50	18.7m	EXISTING
18		ONE		PANEL ANTENNA	1300 x 270 x 145		10°			2	LDF5-50	17.9m	EXISTING
19		ONE		PANEL ANTENNA	1300 x 270 x 145		155°			2	LDF5-50	17.9m	EXISTING
20		ONE		PANEL ANTENNA	1300 x 270 x 145		280°			2	LDF5-50	17.9m	EXISTING
21		ONE	KATHREIN	80010764V01	1403 x 300 x 152		0°			4	LDF4-50	15.0m	EXISTING
22		ONE	KATHREIN	80010764V01	1403 x 300 x 152		140°			4	LDF4-50	15.0m	EXISTING
23		ONE	KATHREIN	80010764V01	1403 x 300 x 152		280°			4	LDF4-50	15.0m	EXISTING
24		ONE	ANDREW	VHLP2-15-CR4B	660ø		0°					12.2m	EXISTING
25		ONE		RAU						ONE	10mmø	12.2m	EXISTING
26		ONE	TIL-TEK	TA-2408	324 x 345 x 76		150°			ONE	LDF4-50	11.4m	EXISTING
27		ONE		PANEL ANTENNA	1120 x 310 x 140		215°			2	LDF4-50	10.0m	EXISTING
28		ONE		PANEL ANTENNA	1120 x 310 x 140		345°			2	LDF4-50	10.0m	EXISTING
29		2		GPS			OMNI			2	10mmø	8.3m	EXISTING
30		2		GPS			OMNI			2	10mmø	8.2m	EXISTING
31		ONE		RSPP 2933			OMNI			ONE	11mmø	8.1m	EXISTING
32		ONE		GPS			OMNI			ONE	10mmø	7.8m	EXISTING
33		ONE		GPS			OMNI			ONE	10mmø	7.7m	EXISTING
34		2		RAU						2	LDF2-50	7.6m	EXISTING

NOTES

1. SEE DRAWING 'A00-2' FOR GENERAL NOTES.
2. READ THIS DRAWING WITH 'A01-1' & 'A01-3'.
3. ANTENNA ELEVATIONS ARE WITH RESPECT TO ELEVATION 0.0m (UNDERSIDE OF BASE PLATE)
4. ELEVATIONS (MICROWAVE, PANEL, DIPOLE, & OMNI) ARE AT CENTER OF THE ANTENNA.

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
B. B. BITTNER
39026

2022-02-11

ENG RECORD No: 10-18696 | APP'D:

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WESTOWER™ COMMUNICATIONS LTD

ANTENNA LOADING
DISTRICT OF SAANICH
CTD UPDATE
MT. DOUGLAS, SAANICH, BC

SITE CODE: —	DATE: 02-01-22
WTC CODE: WTC03331	DWN: MPB CHK: MK
JOB No: 10-18696	DWG No: A01-2

ANTENNA LOADING

ID No.	CARRIER TECHNOLOGY	QTY.	ANTENNA MANUFACTURER	ANTENNA MODEL No.	SIZE (HxWxD)	CARRIER	AZIMUTH	DT (M)	DOWN TILT (E)	TX QTY.	TX-LINE	ELEV.	STATUS
35		ONE		MT375002/BD			300°					7.5m	EXISTING
36		2		GPS			OMNI			2	10mmø	7.5m	EXISTING
37		ONE	ANDREW	VHLP2	660ø		205°					7.4m	EXISTING
38		ONE		GPS			OMNI			ONE	10mmø	7.4m	EXISTING
39		ONE	SIEMENS	WIN5137-5-AC						2	6mmø	7.2m	EXISTING
40		ONE		PANEL ANTENNA	1300 x160 x 75		340°			ONE	LDF4-50	7.2m	EXISTING
41		ONE	ANDREW	2' DISH	610ø		210°			ONE	10mmø	6.9m	EXISTING
42		ONE	ANDREW	VHLP2-15-CR4B	660ø		175°					6.9m	EXISTING
43		ONE		RAU						ONE	10mmø	6.9m	EXISTING
44		2		RAU						2	LDF2-50	6.9m	EXISTING
45		ONE		GPS			OMNI			ONE	10mmø	6.7m	EXISTING
46		ONE		GPS			OMNI			ONE	10mmø	6.6m	EXISTING
47		ONE		GPS			OMNI			ONE	10mmø	6.4m	EXISTING
48		ONE	ANDREW	2' DISH	610ø		185°					6.2m	EXISTING
49		2		RAU						2	LDF2-50	6.2m	EXISTING
50		ONE	ANDREW	VHLP2-15-CR4B	660ø		155°					6.2m	EXISTING
51		ONE		RAU						ONE	10mmø	6.2m	EXISTING
52		ONE		RRU	640 x 270 x 150					2/2/2	11.0mmø FB 12mmø DC/LDF4-50	6.1m	EXISTING
53		ONE	ANDREW	VHLP2-23-HR1	660ø		210°					6.0m	EXISTING
54		2		RAU						2	LDF2-50	6.0m	EXISTING
55		ONE		GPS			OMNI			ONE	10mmø	5.9m	EXISTING
56		ONE	TIL-TEK	TA-2304	521 x 124 x 117		135°			ONE	10mmø	5.8m	EXISTING
57		ONE		GPS			OMNI			ONE	10mmø	5.7m	EXISTING
58		ONE	ANDREW	VHLP2-15-CR4B	660ø		275°			ONE	10mmø	5.3m	EXISTING

NOTES

1. SEE DRAWING 'A00-2' FOR GENERAL NOTES.
2. READ THIS DRAWING WITH 'A01-1' & 'A01-2'.
3. ANTENNA ELEVATIONS ARE WITH RESPECT TO ELEVATION 0.0m (UNDERSIDE OF BASE PLATE)
4. ELEVATIONS (MICROWAVE, PANEL, DIPOLE, & OMNI) ARE AT CENTER OF THE ANTENNA.

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ENG RECORD No: 10-18696 | APP'D:

Saanich

REV	DESCRIPTION	DWN / CHK	DATE
4			
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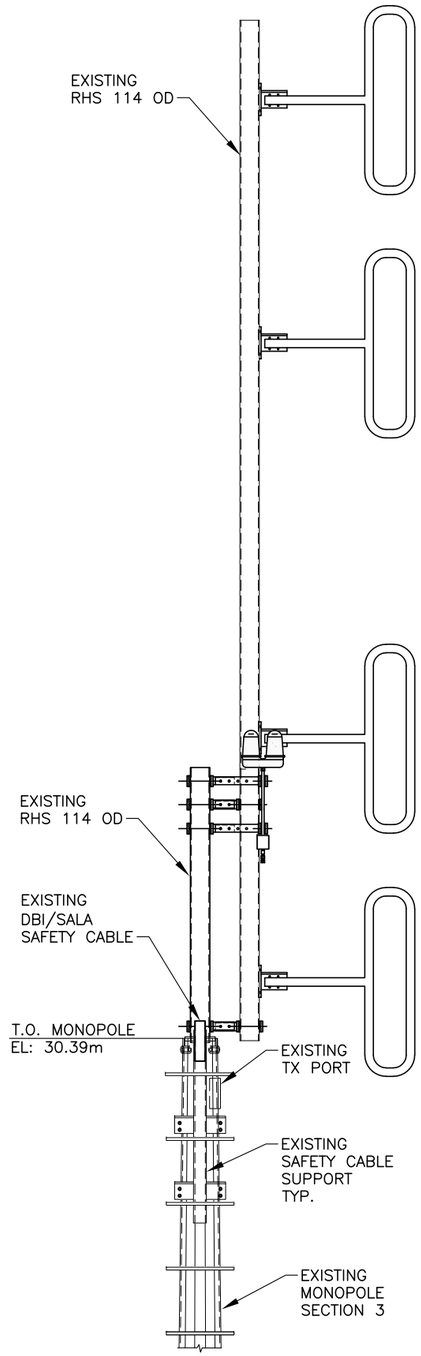
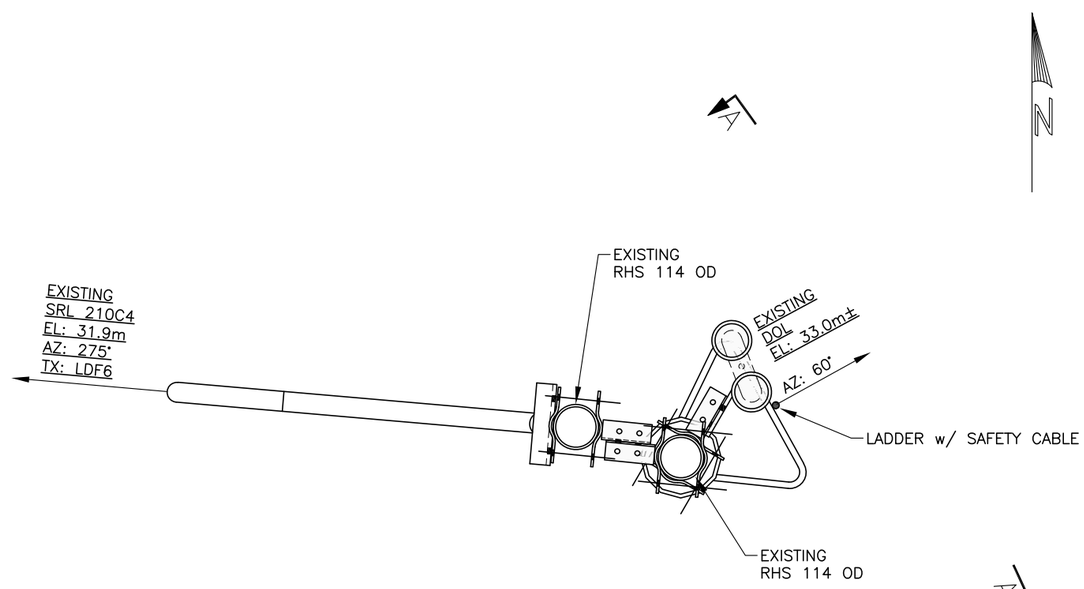
WESTOWER™ COMMUNICATIONS LTD

ANTENNA LOADING
DISTRICT OF SAANICH
CTD UPDATE
MT. DOUGLAS, SAANICH, BC

SITE CODE: -	DATE: 02-01-22
WTC CODE: WTC03331	DWN: MPB CHK: MK
JOB No: 10-18696	DWG No: A01-3



ELEVATION A–A



PLAN VIEW

NOTES

1. SEE DRAWING 'A00–2' FOR GENERAL NOTES.

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2022-02-11

ENG RECORD No: 10–18696 | APP'D:

Saanich

REV	DESCRIPTION	DWN / CHK	DATE
4			
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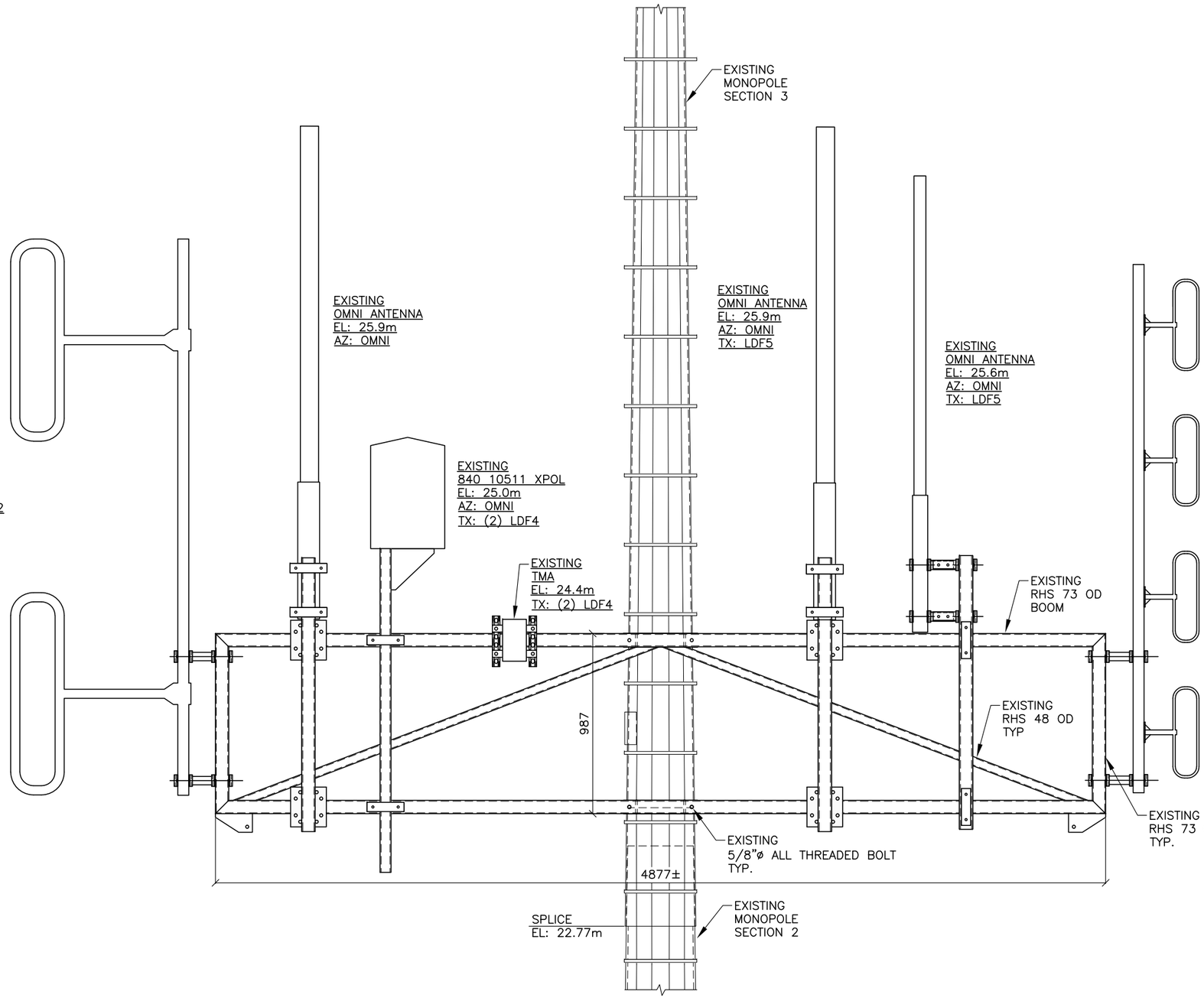
WESTOWER™ COMMUNICATIONS LTD

ANTENNA ELEVATION AT EL: 31.9m
DISTRICT OF SAANICH
CTD UPDATE
MT. DOUGLAS, SAANICH, BC

SITE CODE:	DATE: 02–01–22
WTC CODE: WTC03331	DWN: MPB / CHK: MK
JOB No: 10–18696	DWG No: A06–1



ELEVATION B–B

NOTES

1. SEE DRAWING 'A00–2' FOR GENERAL NOTES.
2. READ THIS DRAWING WITH DWG 'A06–3'.

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ENG RECORD No: 10–18696 | APP'D:

Saanich

REV	DESCRIPTION	DWN	CHK	DATE
4				
3				
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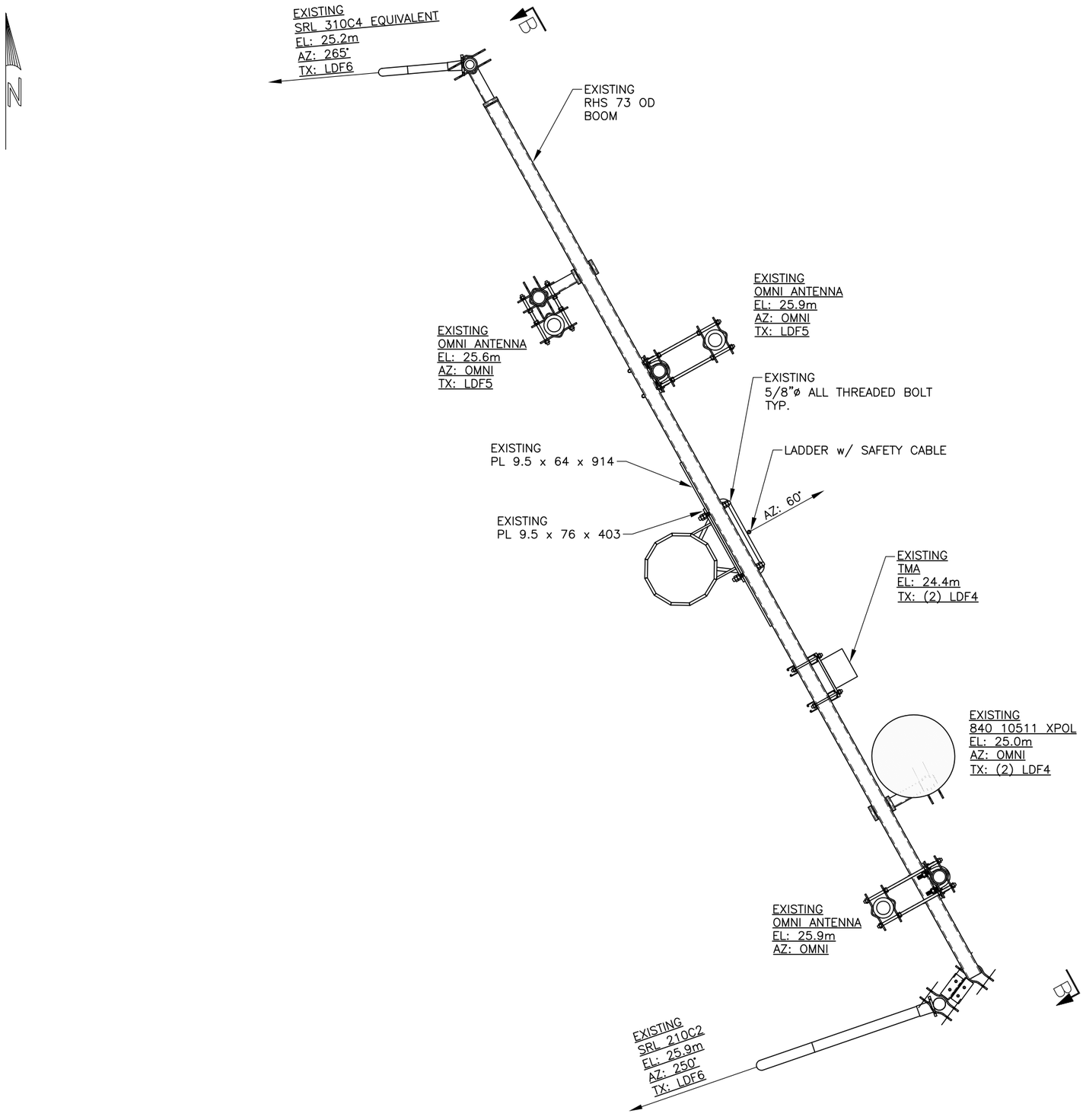
0				

WESTOWER™ COMMUNICATIONS LTD

ANTENNA ELEVATION AT 25.6m±
DISTRICT OF SAANICH
CTD UPDATE
MT. DOUGLAS, SAANICH, BC

SITE CODE:	DATE: 02–01–22
WTC CODE: WTC03331	DWN: MPB CHK: MK
JOB No: 10–18696	DWG No: A06–2



PLAN VIEW @ EL: 25.6m

NOTES

1. SEE DRAWING 'A00-2' FOR GENERAL NOTES.
2. READ THIS DRAWING WITH DWG 'A06-2'.

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2022-02-11

ENG RECORD No: 10-18696 | **APP'D:**

Saanich

REV	DESCRIPTION	DWN / CHK	DATE
4			
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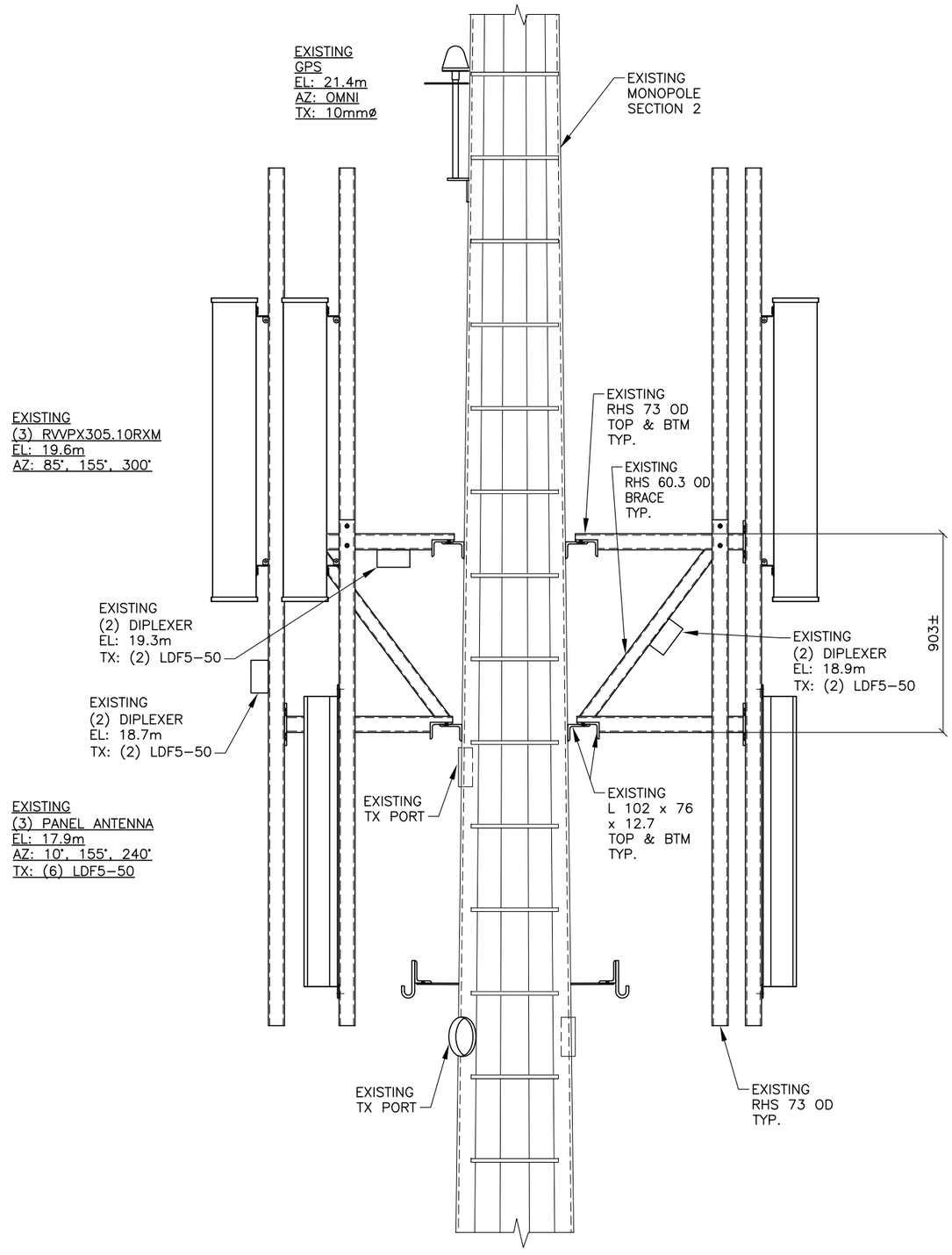
WESTOWER COMMUNICATIONS LTD

ANTENNA PLAN VIEW AT 25.6m
DISTRICT OF SAANICH
CTD UPDATE
MT. DOUGLAS, SAANICH, BC

SITE CODE:	DATE: 02-01-22
WTC CODE: WTC03331	DWN: MPB CHK: MK
JOB No: 10-18696	DWG No: A06-3



ELEVATION C-C

NOTES

1. SEE DRAWING 'A00-2' FOR GENERAL NOTES.
2. READ THIS DRAWING WITH DWG 'A06-5'.

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2022-02-11

ENG RECORD No: 10-18696 | APP'D:

Saanich

REV	DESCRIPTION	DWN / CHK	DATE
4			
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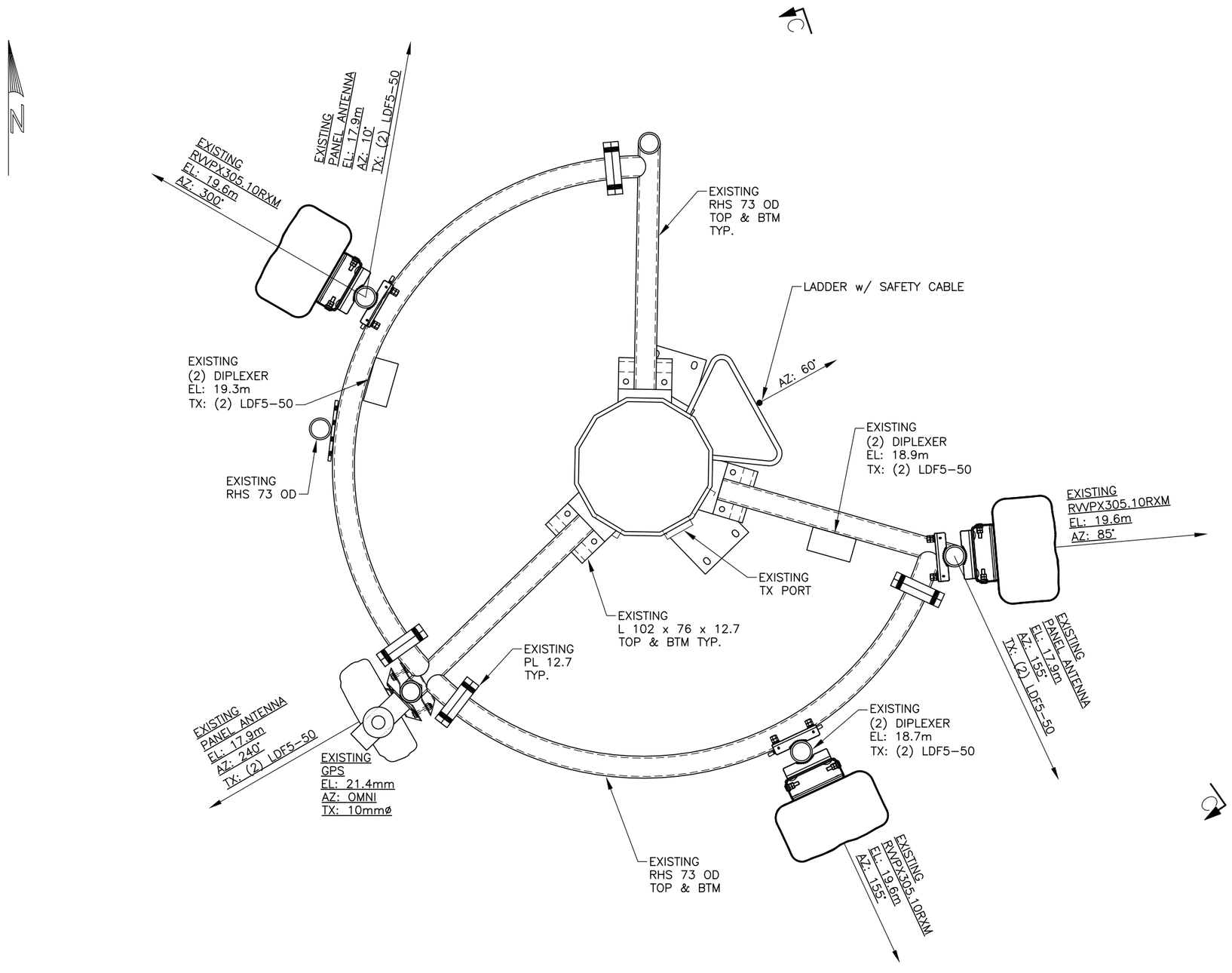
WESTOWER™ COMMUNICATIONS LTD

ANTENNA ELEVATION AT 19.6m±
DISTRICT OF SAANICH
CTD UPDATE
MT. DOUGLAS, SAANICH, BC

SITE CODE:	DATE: 02-01-22
WTC CODE: WTC03331	DWN: MPB CHK: MK
JOB No: 10-18696	DWG No: A06-4



PLAN VIEW @ 19.6m

NOTES

1. SEE DRAWING 'A00-2' FOR GENERAL NOTES.
2. READ THIS DRAWING WITH DWG 'A06-4'.

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2022-02-11

ENG RECORD No: 10-18696 | APP'D:

Saanich

REV	DESCRIPTION	DWN / CHK	DATE
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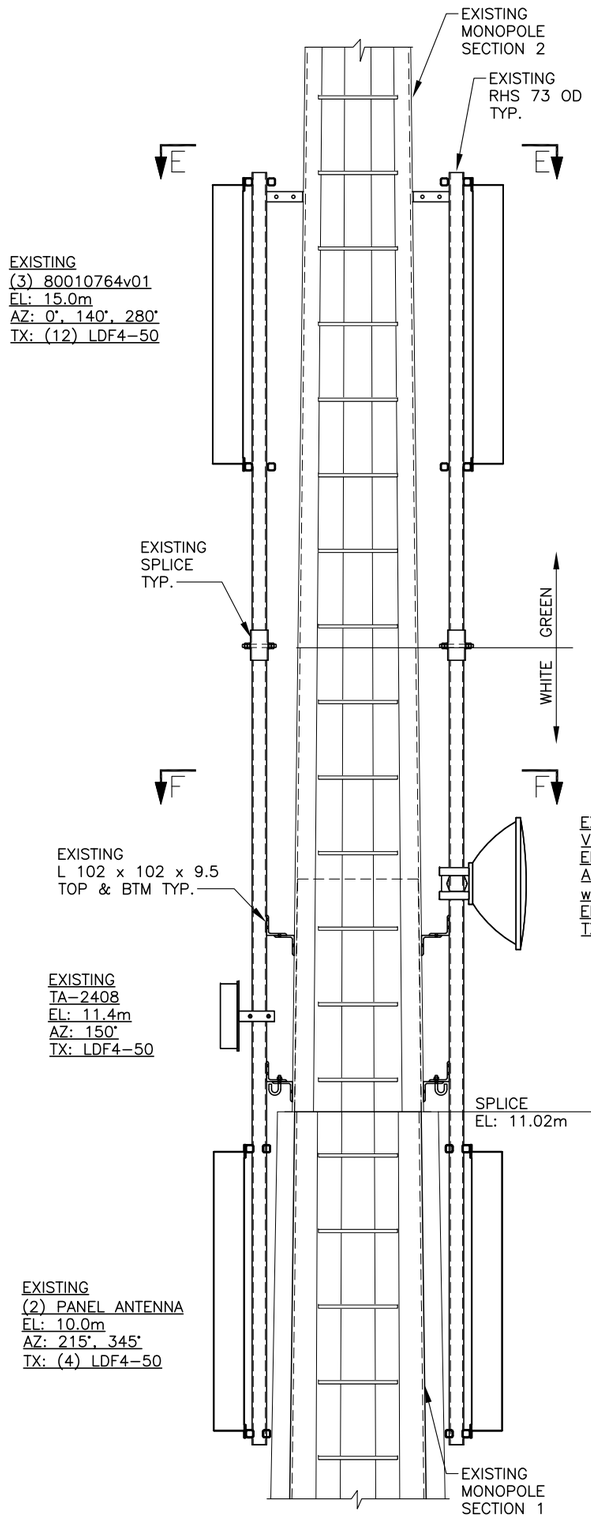
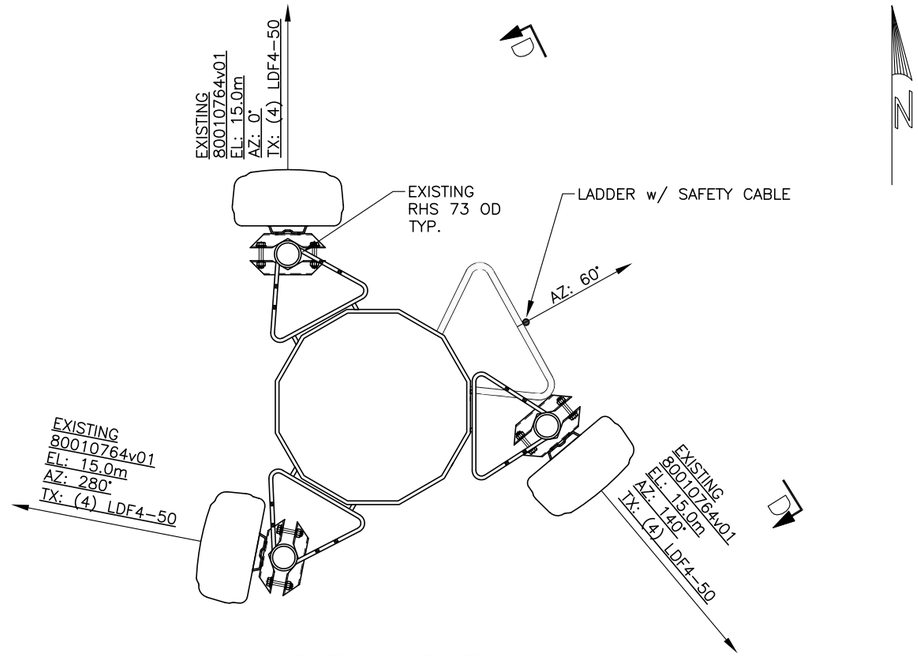
WESTOWER™1 COMMUNICATIONS LTD

ANTENNA PLAN VIEW AT 19.6m
DISTRICT OF SAANICH
CTD UPDATE
MT. DOUGLAS, SAANICH, BC

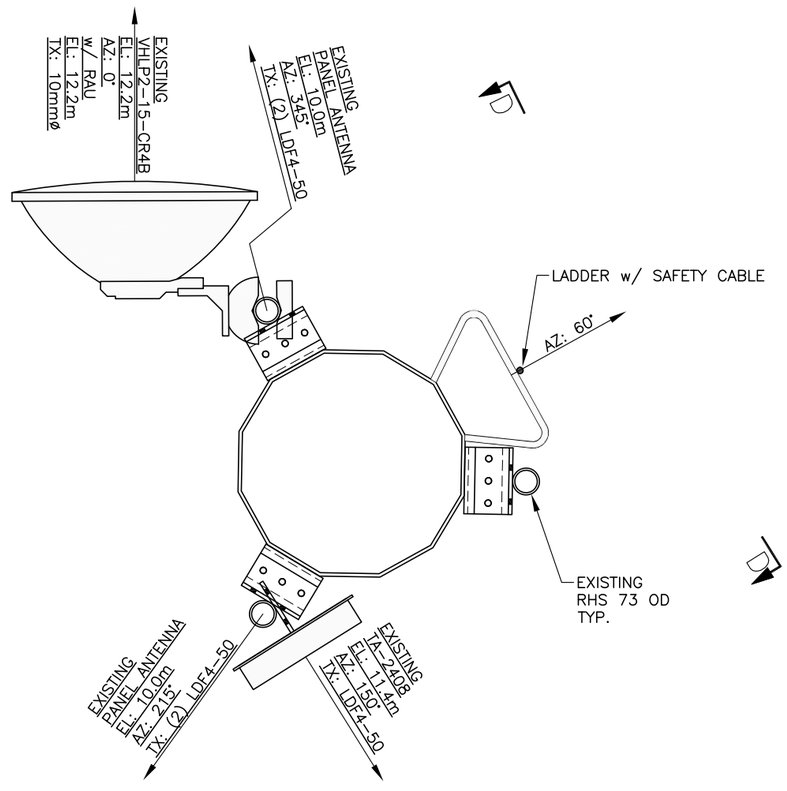
SITE CODE:	DATE: 02-01-22
WTC CODE: WTC03331	DWN: MPB CHK: MK
JOB No: 10-18696	DWG No: A06-5



ELEVATION D-D



SECTION E-E



SECTION F-F

NOTES

1. SEE DRAWING 'A00-2' FOR GENERAL NOTES.

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ENG RECORD No: 10-18696 | **APP'D:**

Saanich

REV	DESCRIPTION	DWN / CHK	DATE
4			
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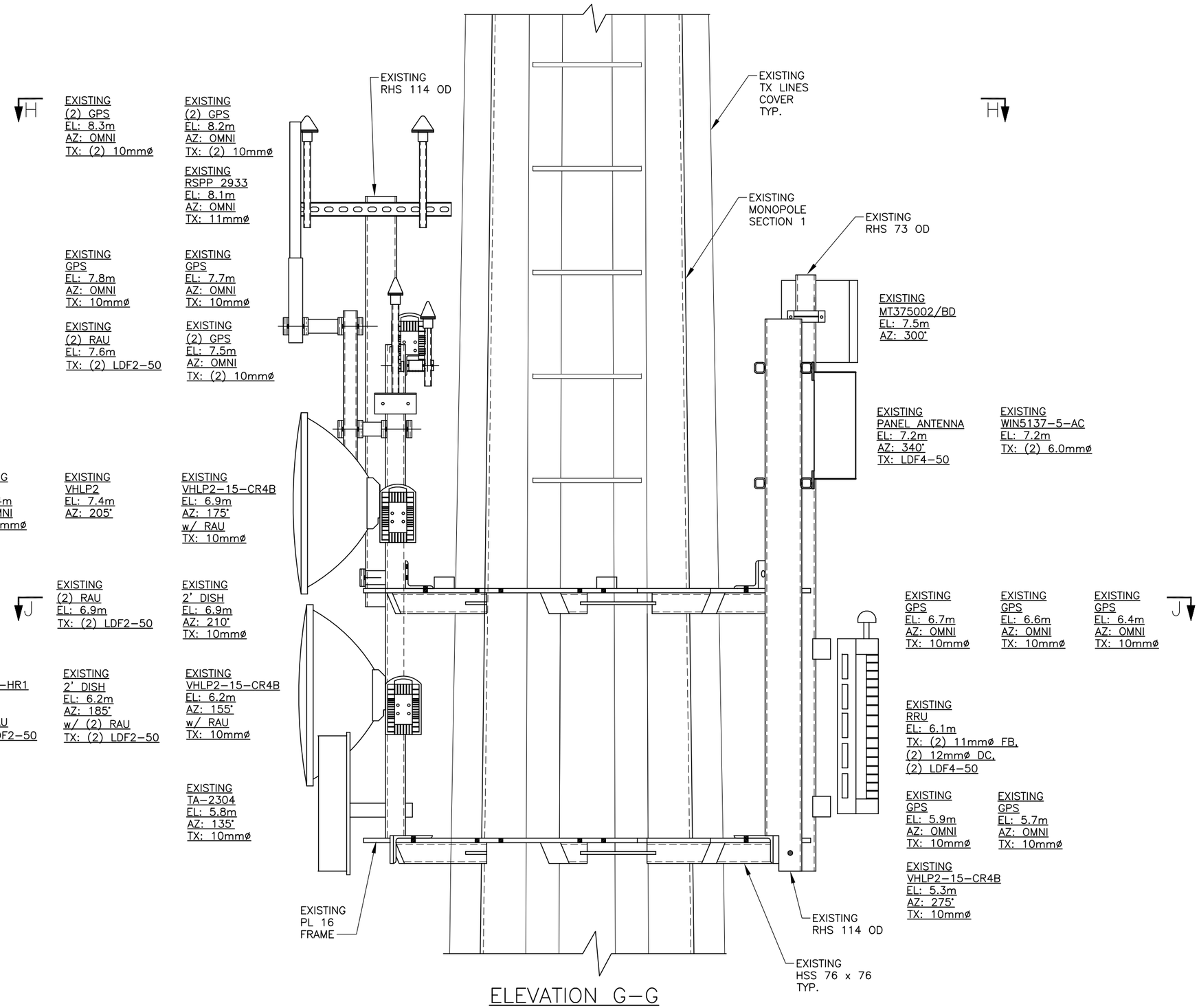
WESTOWER COMMUNICATIONS LTD

ANTENNA LAYOUT AT 15.0m
DISTRICT OF SAANICH
CTD UPDATE
MT. DOUGLAS, SAANICH, BC

SITE CODE:	DATE: 02-01-22
WTC CODE: WTC03331	DWN: MPB CHK: MK
JOB No: 10-18696	DWG No: A06-6



ELEVATION G-G

NOTES

1. SEE DRAWING 'A00-2' FOR GENERAL NOTES.
2. READ THIS DRAWING WITH DWG 'A06-8' & 'A06-9'.

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2022-02-11

ENG RECORD No: 10-18696 | APP'D:

Saanich

REV	DESCRIPTION	DWN / CHK	DATE
4			
3			
2			
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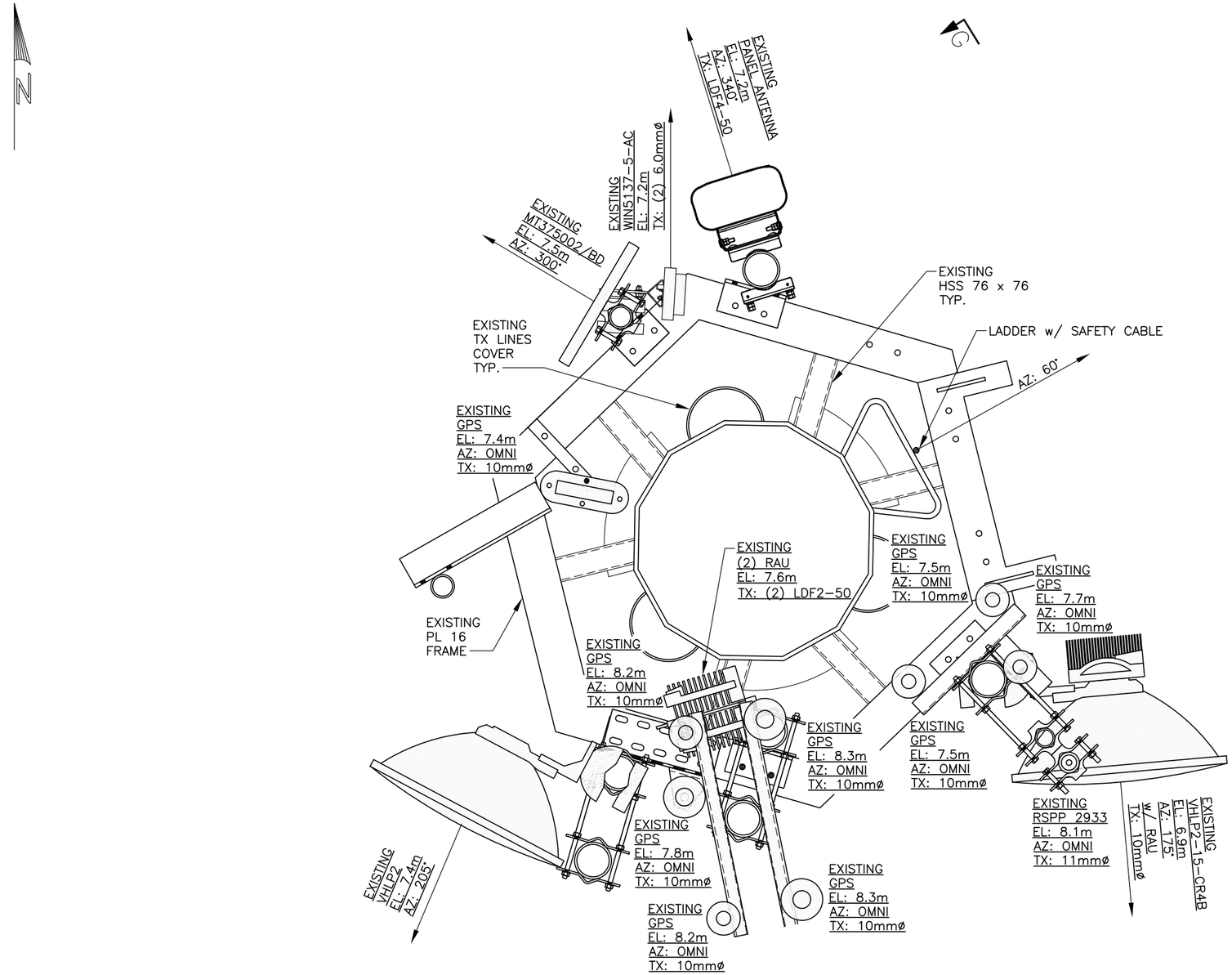
WESTOWER COMMUNICATIONS LTD

ANTENNA ELEVATION AT 7.0m±
DISTRICT OF SAANICH
CTD UPDATE
MT. DOUGLAS, SAANICH, BC

SITE CODE:	DATE: 02-01-22
WTC CODE: WTC03331	DWN: MPB CHK: MK
JOB No: 10-18696	DWG No: A06-7



SECTION H–H

NOTES

1. SEE DRAWING 'A00–2' FOR GENERAL NOTES.
2. READ THIS DRAWING WITH DWG 'A06–7' & 'A06–9'.

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2022-02-11

ENG RECORD No: 10–18696 | APP'D:

Saanich

REV	DESCRIPTION	DWN / CHK	DATE
4			
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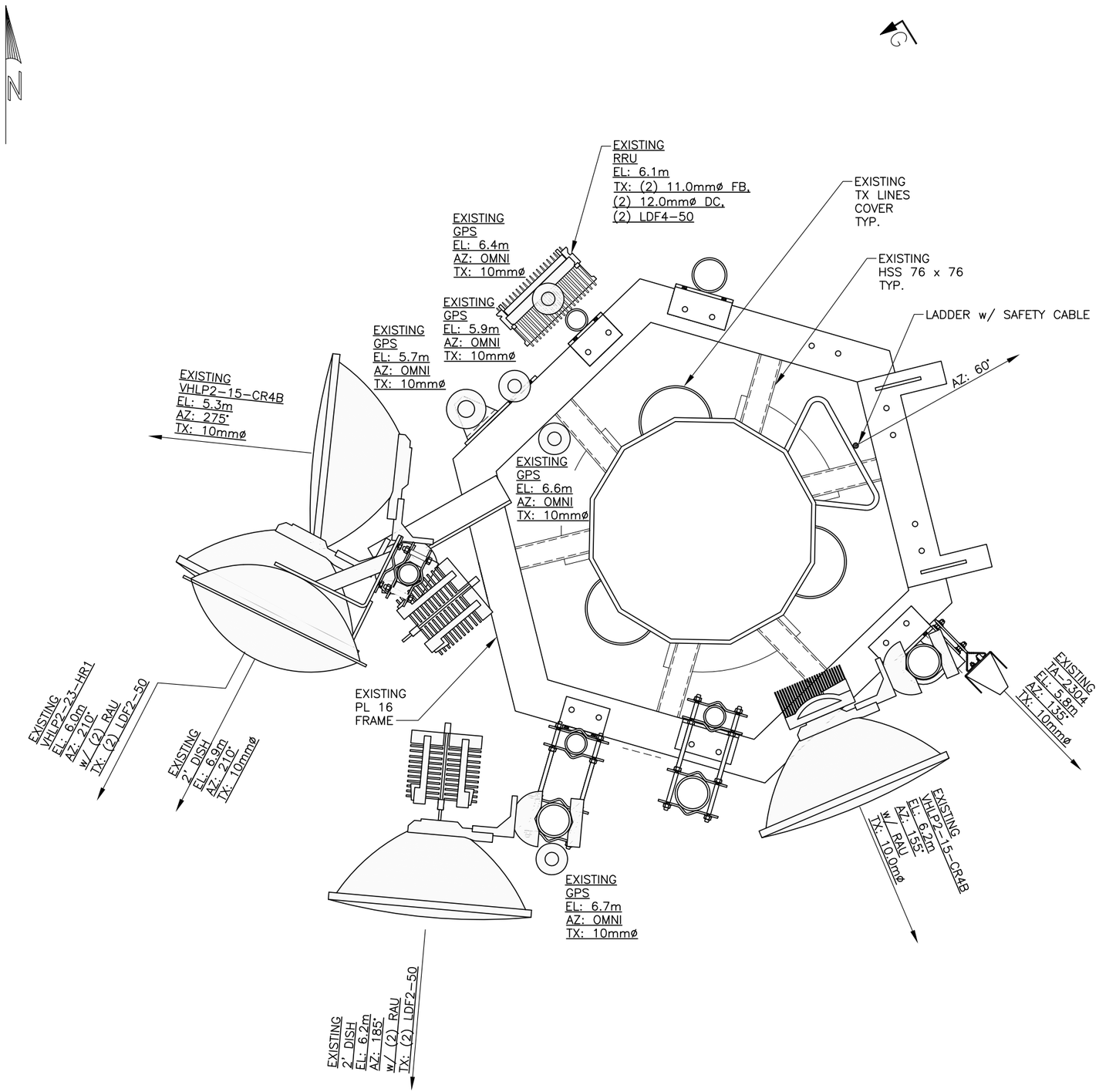
WESTOWER™ COMMUNICATIONS LTD

ANTENNA PLAN VIEW AT 8.0m
DISTRICT OF SAANICH
CTD UPDATE
MT. DOUGLAS, SAANICH, BC

SITE CODE:	DATE: 02–01–22	
WTC CODE: WTC03331	DWN: MPB	CHK: MK
JOB No: 10–18696	DWG No: A06–8	



SECTION J-J

NOTES

1. SEE DRAWING 'A00-2' FOR GENERAL NOTES.
2. READ THIS DRAWING WITH DWG 'A06-7' & 'A06-8'.

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2022-02-11

ENG RECORD No: 10-18696 | APP'D:

Saanich

REV	DESCRIPTION	DWN / CHK	DATE
4			
3			
2			
1			
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WESTOWER™ COMMUNICATIONS LTD

ANTENNA PLAN VIEW AT 6.0m
DISTRICT OF SAANICH
CTD UPDATE
MT. DOUGLAS, SAANICH, BC

SITE CODE:	DATE: 02-01-22
WTC CODE: WTC03331	DWN: MPB CHK: MK
JOB No: 10-18696	DWG No: A06-9