Exhibit SA-1 Permit Plans

VT-VT-0111A
ROCHESTER

1030 VT ROUTE 100
ROCHESTER, VT 05767
WINDSOR COUNTY

GENERAL NOTES

1. THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK. THE WORK PERFORMED ON THE PROJECT AND THE MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES.

2. THE ARCHITECT/ENGINEER HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. THE CONTRACTOR BIDDING THE JOB IS NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS.

3. THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) THE LESEE/LICENSEE REPRESENTATIVE OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO THE SUBMISSION OF CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK. IN THE EVENT OF DISCREPANCIES THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED IN WRITING OTHERWISE.

4. THE SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, LABOR AND ALL OTHER MATERIALS AND LABOR DEEMED NECESSARY TO COMPLETE THE WORK/PROJECT AS DESCRIBED HEREIN.

5. THE CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO THE SUBMISSION OF BIDS OR PERFORMING WORK TO FAMILIARIZE HIMSELF WITH THE FIELD CONDITIONS AND TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

6. THE CONTRACTOR SHALL OBTAIN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS / CONTRACT DOCUMENTS.

7. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO THE MANUFACTURER'S / VENDOR'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.

8. THE CONTRACTOR SHALL PROVIDE A FULL SET OF CONSTRUCTION DOCUMENTS AT THE SITE UPDATED WITH THE LATEST REVISIONS AND ADDENDUMS OR CLARIFICATIONS AVAILABLE FOR THE USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT.

9. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL NECESSARY CONSTRUCTION CONTROL SURVEYS, ESTABLISHING AND MAINTAINING ALL LINES AND GRADES REQUIRED TO CONSTRUCT ALL IMPROVEMENTS AS SHOWN HEREIN.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS WHICH MAY BE REQUIRED FOR THE WORK BY THE ARCHITECT/ENGINEER, THE STATE, COUNTY OR LOCAL GOVERNMENT AUTHORITY.

12. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETCETERA DURING CONSTRUCTION. UPON COMPLETION OF WORK, THE CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.

13. THE CONTRACTOR SHALL KEEP THE GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. PREMISES SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.

14. THE CONTRACTOR SHALL COMPLY WITH ALL OSHA REQUIREMENTS AS THEY APPLY TO THIS PROJECT.

15. THE CONTRACTOR SHALL NOTIFY THE LESEE/LICENSEE REPRESENTATIVE WHERE A CONFLICT OCCURS ON ANY OF THE CONTRACT DOCUMENTS. THE CONTRACTOR IS NOT TO ORDER MATERIAL OR CONSTRUCT ANY PORTION OF THE WORK THAT IS IN CONFLICT UNTIL CONFLICT IS RESOLVED BY THE LESEE/LICENSEE REPRESENTATIVE.

16. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, PROPERTY LINES, ETC. ON THE JOB.

17. ALL UNDERGROUND UTILITY INFORMATION WAS DETERMINED FROM SURFACE INVESTIGATIONS AND EXISTING PLANS OF RECORD. THE CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES IN THE FIELD PRIOR TO ANY SITE WORK. CALL THE FOLLOWING FOR ALL PRE-CONSTRUCTION NOTIFICATION 72-HOURS PRIOR TO ANY EXCAVATION ACTIVITY: DIG SAFE SYSTEM (MA, ME, NH, RI, VT): 1-888-344-7233 CALL BEFORE YOU DIG (CT): 1-800-922-4455

18. ALL DIMENSIONS SHOWN THUS ± ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS WHICH EFFECT THE CONTRACTORS WORK. CONTRACTOR TO VERIFY ALL DIMENSIONS WITH PROJECT OWNER PRIOR TO CONSTRUCTION.

19. NORTH ARROW SHOWN ON PLANS REFERS TO APPROXIMATE TRUE NORTH. PRIOR TO THE START OF CONSTRUCTION, ORDERING OR FABRICATING OF ANTENNA MOUNTS, CONTRACTOR SHALL CONSULT WITH PROJECT OWNER'S RF ENGINEER AND FIELD VERIFY ALL ANTENNA SECTOR LOCATIONS AND ANTENNA AZIMUTHS.

20. THE CONTRACTOR AND OR HIS SUB CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS WHICH MAY BE REQUIRED FOR THE WORK BY THE ARCHITECT/ENGINEER, THE STATE, COUNTY OR LOCAL GOVERNMENT AUTHORITY.

21. ANTENNA INSTALLATION SHALL BE CONDUCTED BY FIELD CREWS EXPERIENCED IN THE ASSEMBLY AND ERECTION OF RADIO ANTENNAS, TRANSMISSION LINES AND SUPPORT STRUCTURES.

22. COAXIAL CABLE CONNECTORS AND TRANSMITTER EQUIPMENT SHALL BE PROVIDED BY THE PROJECT OWNER AND IS NOT INCLUDED IN THESE CONSTRUCTION DOCUMENTS. A SCHEDULE OF PROJECT OWNER SUPPLIED MATERIALS IS ATTACHED TO THE BID DOCUMENTS (SEE EXHIBIT 3). ALL OTHER HARDWARE TO BE PROVIDED BY THE CONTRACTOR. CONNECTION HARDWARE SHALL BE STAINLESS STEEL.

23. WHEN "PAINT TO MATCH" IS SPECIFIED FOR ANTENNA CONCEALMENT, PAINT PRODUCT FOR ANTENNA RADOME SHALL BE SHERWIN WILLIAMS COROTHANE II. SURFACE PREPARATION AND APPLICATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND PROJECT OWNER'S GUIDELINE'S.

24. COORDINATION, LAYOUT, AND FURNISHING OF CONDUIT, CABLE AND ALL APPURTENANCES REQUIRED FOR PROPER INSTALLATION OF ELECTRICAL AND TELECOMMUNICATION SERVICE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

25. ALL UTILITY WORK SHALL BE IN ACCORDANCE WITH LOCAL UTILITY COMPANY REQUIREMENTS AND SPECIFICATIONS.

26. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY ENGINEERS. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR PIER DRILLING AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW.

27. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF UTILITY COMPANY ENGINEERING. THE AREAS OF THE PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE EQUIPMENT, DRIVEWAY OR LEASE AREA SHALL BE RESTORED TO ORIGINAL CONDITION.

28. GRAVEL, SHALL BE GRADED TO A UNIFORM SLOPE, FERTILIZED, SEEDED AND COVERED WITH MULCH UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN SOIL EROSION AND SEDIMENTATION CONTROLS AT ALL TIMES.

29. DURING CONSTRUCTION. PER FCC MANDATE, ENHANCED EMERGENCY (E911) SERVICE IS REQUIRED TO MEET NATIONWIDE STANDARDS.

30. FOR WIRELESS COMMUNICATIONS SYSTEMS. PROJECT OWNER'S IMPLEMENTATION REQUIRES DEPLOYMENT OF EQUIPMENT AND ANTENNAS GENERALLY DEPICTED ON THIS PLAN, ATTACHED TO OR MOUNTED IN CLOSE PROXIMITY TO THE BTS RADIO CABINETS. PROJECT OWNER RESERVES THE RIGHT TO MAKE REASONABLE MODIFICATIONS TO E911 EQUIPMENT AND LOCATION AS TECHNOLOGY EVOLVES TO MEET REQUIRED SPECIFICATIONS.

31. SUBCONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:

AMERICAN CONCRETE INSTITUTE (ACI) 318; BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE;

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) 14TH EDITION

MANUAL OF STEEL CONSTRUCTION, ASD, NINTH EDITION;

TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-H, STRUCTURAL STANDARDS FOR STEEL

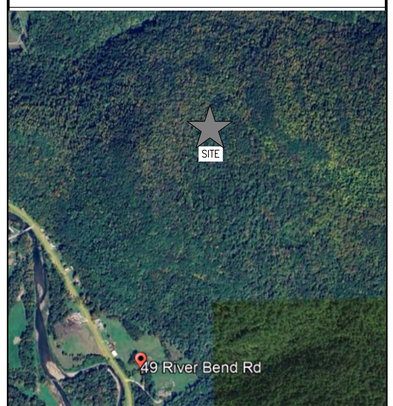
ANTENNA TOWER AND ANTENNA SUPPORTING STRUCTURES; REFER TO ELECTRICAL DRAWINGS FOR SPECIFIC ELECTRICAL STANDARDS.

FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

APPLICABLE BUILDING CODES:
SUBCONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION. THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.
BUILDING CODE:

2015 INTERNATIONAL BUILDING CODE
2015 VERMONT FIRE & SAFETY CODE
NFPA 780 2014
LOCAL CODE AS REQUIRED

VICINITY MAP



NORTH

VICINITY MAP
SCALE: NTS

PROJECT SUMMARY

SITE NUMBER:	VT-VT-0111A
SITE NAME:	ROCHESTER
SITE ADDRESS:	1030 VT ROUTE 100 ROCHESTER, VT 05767
ASSESSOR'S PARCEL NO.:	000RS245B
CONSTRUCTION TYPE:	NEW SITE DESIGN
PROPERTY OWNER:	JULIA W & CHARLES W MARTIN 49 RIVER BEND RD ROCHESTER, VT, 05767
APPLICANT, LESSEE/LICENSEE, PROJECT OWNER:	VERTEX TOWERS LLC P.O. BOX 680 MEDFIELD, MA 02052 VERIZON WIRELESS 118 FLANDERS ROAD WESTBOROUGH, MA 01581
TOWER TYPE:	SELF SUPPORT TOWER
TOWER HEIGHT:	140'±

DO NOT SCALE DRAWINGS

CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE PROJECT OWNER'S REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

SHEET INDEX

SHT. NO.	DESCRIPTION	REV. NO.
T-1	TITLE SHEET	8
C-1	VICINTY PLAN	8
C-2	EXISTING CONDTION SITE PLAN	8
Z-1.1	PROPOSED SITE PLAN	8
Z-1.2	PROPOSED SITE PLAN	8
Z-2.1	ENALRGED PLAN & PROFILE (SEGMENT 1)	8
Z-2.2	ENALRGED PLAN & PROFILE (SEGMENT 2)	8
Z-2.3	ENALRGED PLAN & PROFILE (SEGMENT 3)	8
Z-2.4	ENALRGED PLAN & PROFILE (SEGMENT 4)	8
Z-2.5	ENALRGED PLAN & PROFILE (SEGMENT 5)	8
Z-2.6	ENALRGED PLAN & PROFILE (SEGMENT 6)	8
Z-2.7	ENALRGED PLAN & PROFILE (SEGMENT 7)	8
Z-2.8	ENALRGED PLAN & PROFILE (SEGMENT 8)	8
Z-2.9	ENALRGED PLAN & PROFILE (SEGMENT 9)	8
Z-3	COMPOUND PLAN	8
Z-4	COMPOUND / TOWER ELEVATIONS	8
Z-5	EROSTION CONTROL PLAN	8
Z-6	DETAILS	8
Z-7	EROSION PREVENTION DETAILS	8
Z-8	DETAILS	8
Z-9	VERIZON DETAILS	8
Z-10	PROPOSED ANTENNA AND EQUIPMENT PLANS	8
Z-11	TEMPORARY ACCESS MAT DETAIL / NOTES	8
S-1	EQUIPMENT SHED DETAILS	8
S-2	EQUIPMENT SHED DETAILS	8
S-3	EQUIPMENT SHED DETAILS	8
S-4	ANTENNA MOUNT DETAILS	8
G-1	GROUNDING RISER DIAGRAM & DETAILS	8
HB-1	GROUNDING RISER DIAGRAM & DETAILS	8
HB-2	GROUNDING RISER DIAGRAM & DETAILS	8
HB-3	GROUNDING RISER DIAGRAM & DETAILS	8
EB-2	SHED DETAILS	8
EB-3	SHED DETAILS	8
EB-4	SHED DETAILS	8

verizon
118 FLANDERS ROAD
WESTBOROUGH, MA 01581
(508) 330-3300 TEL

Vertex Towers LLC
VERTEX TOWERS LLC
P.O. BOX 680
MEDFIELD, MA 02052

ADVANCED ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
179 Swansea Mall Drive, Suite 1
Swansea, MA 02777
Tel: (508) 343-1414
Fax: (401) 633-6354

STATE OF VERMONT
SCOTT N. ADAMS
NO. 135423
CIVIL
LICENSED
PROFESSIONAL ENGINEER

AEG PROJECT #: 2023-0079

DRAWN BY: JWH

CHECKED BY: SNA

SUBMITTALS

REV#	DATE	DESCRIPTION
2	06/05/24	REVISED
3	08/19/24	REVISED
4	10/20/24	REVISED
5	10/24/24	REVISED
6	12/11/24	REVISED
7	02/18/25	REVISED
8	04/10/25	REVISED

VT-VT-0111A

ROCHESTER

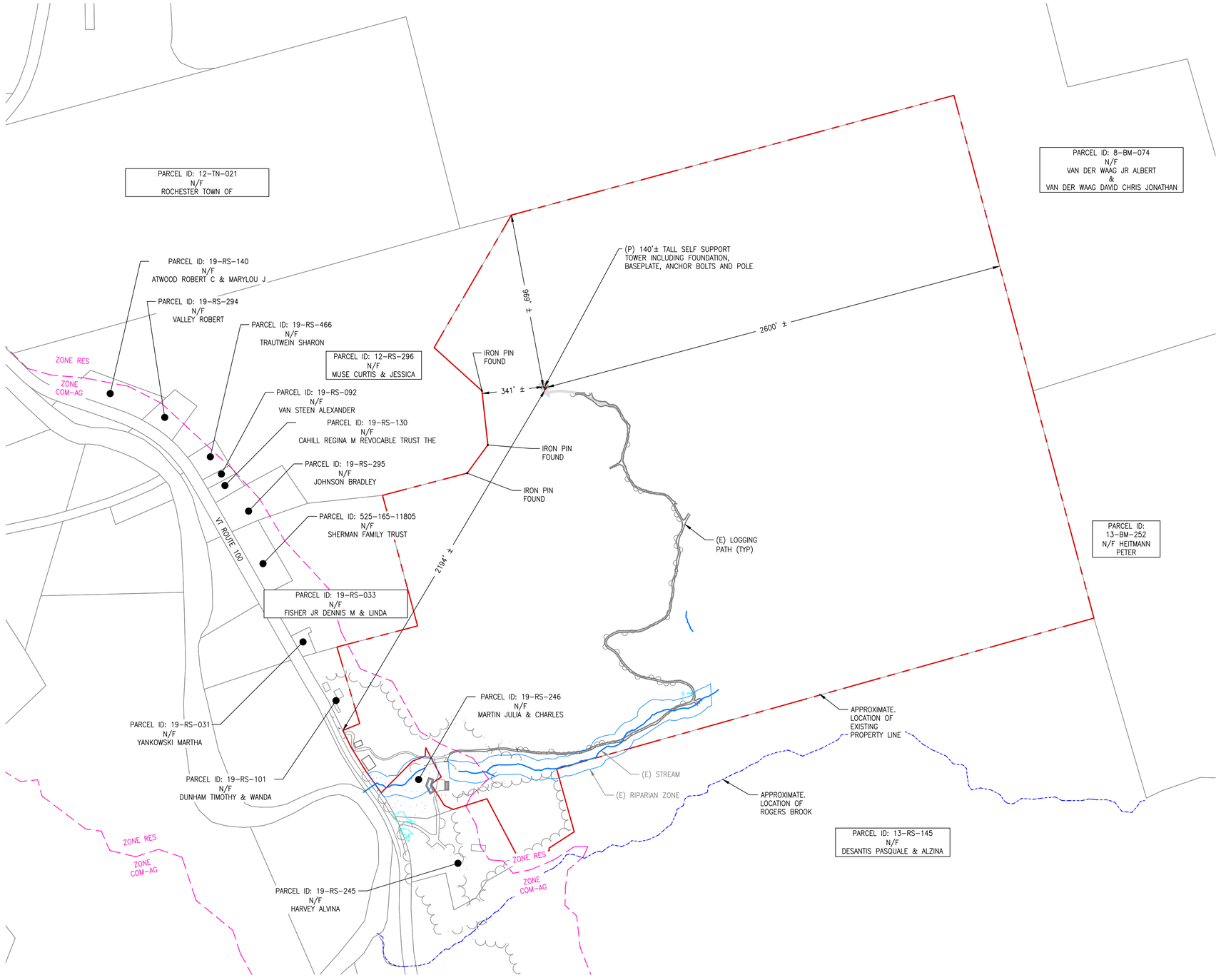
1030 VT ROUTE 100
ROCHESTER, VT 05767
WINDSOR COUNTY

SHEET TITLE

TITLE SHEET

SHEET NUMBER

T-1



SURVEY NOTES

1. FIELD SURVEY DATE: 05/26/2023
2. VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
3. HORIZONTAL DATUM: NORTH AMERICAN DATUM OF 1983 (NAD83)
4. CENTER OF (P) TOWER: LAT: 43° 51' 35.39" N LONG: 72° 47' 53.37" W
   ELEV.: 1585'± A.M.S.L.
5. PROPERTY OWNER: JULIA W & CHARLES W MARTIN
   49 RIVER BEND RD
   ROCHESTER, VT, 05767
6. SITE ADDRESS: 1030 ROUTE 100 S
   ROCHESTER, NH 05767
7. APPLICANT: VERTEX TOWERS LLC
   P.O. BOX 680
   MEDFIELD, MA 02052
   VERIZON WIRELESS
   118 FLANDERS ROAD
   WESTBOROUGH, MA 01581
8. JURISDICTION: TOWN OF ROCHESTER
9. TAX ID: 000RS245B
10. DEED REFERENCE: BOOK: 3163 PAGE: 2520
11. PLAN REFERENCES: COMPILATION SITE PLAN COMPLETED BY:
    EMANUEL ENGINEERING, INC.
    DATE: 9/25/2012
12. ZONING JURISDICTION: RESIDENTIAL
13. TOTAL LAND AREA: 244.0± ACRES

14. ALL UNDERGROUND UTILITY INFORMATION WAS DETERMINED FROM SURFACE INVESTIGATIONS AND EXISTING PLANS OF RECORD. THE CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES IN THE FIELD PRIOR TO ANY SITE WORK. CALL THE FOLLOWING FOR ALL PRE-CONSTRUCTION NOTIFICATION 72-HOURS PRIOR TO ANY EXCAVATION ACTIVITY:
    DIG SAFE SYSTEM (MA, ME, NH, RI, VT): 1-888-344-7233
    CALL BEFORE YOU DIG (CT): 1-800-922-4455

15. PROPERTY LINE, TOPOGRAPHY, AND EXISTING FEATURES INFORMATION HAS BEEN COMPILED FROM "NH GRANIT" AND TOWN OF ROCHESTER GIS SYSTEMS. 2. A METES AND BOUNDS SURVEY WAS NOT CONDUCTED BY ADVANCED ENGINEERING GROUP, PC.

16. THE PURPOSE OF THIS SURVEY IS TO SUPPORT THE DESIGN AND CONSTRUCTION OF A TELECOMMUNICATION FACILITY. USE OF THIS SURVEY BY ANYONE OTHER THAN VERTEX TOWER ASSETS, LLC AND USE OF THIS SURVEY FOR ANY PURPOSE NOT RELATED TO THE DESIGN OF THE INTENDED FACILITY IS STRICTLY PROHIBITED.

17. BEARING SYSTEM OF THIS PLAN IS BASED ON TRUE NORTH. TRUE NORTH WAS ESTABLISHED FROM GPS READINGS ON 5/4/2023.

18. A WETLANDS DELINEATION HAS BEEN COMPLETED BY ARROWWOOD ENVIRONMENTAL AS DESCRIBED ON REPORT DATED 09/01/2023.

19. IN THE EVENT THAT BENCHMARKS (TBM'S), ESTABLISHED FOR THIS PROJECT AND PUBLISHED ON THIS SURVEY, ARE DESTROYED, NOT RECOVERABLE OR A DISCREPANCY IS FOUND, THE USER SHOULD NOTIFY THIS FIRM IN WRITING PRIOR TO COMMENCING OR CONTINUING ANY WORK.

20. THE PROPERTY LINES SHOWN ON THIS PLAN ARE THE LINES DIVIDING EXISTING OWNERSHIPS, AND THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED, AND NO NEW LINES FOR DIVISION OF EXISTING OWNERSHIP OR FOR NEW WAYS ARE SHOWN.

LEGEND

- PROPERTY LINE
- ABUTTING PROPERTY LINE
- EXIST. TOWN LINE BOUNDARY
- EXIST. R.O.W. LAYOUT
- EXIST. CHAIN LINK FENCE
- EXIST. EDGE OF TREE CANOPY
- STREAM LOCATION
- WETLAND SETBACK LINE
- (E) MAJOR CONTOUR
- (E) MINOR CONTOUR
- (E) U/G GAS MAIN (APPROX.)
- (E) OVERHEAD UTILITY WIRES

ZONING SUMMARY TABLE

- ZONING DISTRICT: RESIDENTIAL
- ASSESSOR'S ID: 000RS245B
- PROPOSED USE: WIRELESS COMMUNICATION FACILITY

DIMENSION:	REQUIRED MINIMUM	PROVIDED
FRONT YARD SETBACK*	30 FT	2194± FT
SIDE YARD SETBACK*	30 FT	341± FT
REAR YARD SETBACK*	20 FT	2600± FT
AREA	2 ACRES	244± ACRES
FRONTAGE	150 FT	320± FT

* DIMENSIONS MEASURED FROM EDGE OF TOWER TO THE NEAREST PROPERTY LINE

verizon
118 FLANDERS ROAD
WESTBOROUGH, MA 01581
(508) 330-3300 TEL

Vertex Towers LLC
VERTEX TOWERS LLC
P.O. BOX 680
MEDFIELD, MA 02052

ADVANCED ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
179 Swansea Mall Drive, Suite 1
Swansea, MA 02777
Tel: (508) 543-1414
Fax: (401) 633-6354

STATE OF VERMONT
SCOTT N. ADAMS
NO. 135423
CIVIL
LICENSED
PROFESSIONAL ENGINEER

AEG PROJECT #: 2023-0079
DRAWN BY: JWH
CHECKED BY: SNA

SUBMITTALS

REV#	DATE	DESCRIPTION
2	06/05/24	REVISED
3	08/19/24	REVISED
4	10/20/24	REVISED
5	10/24/24	REVISED
6	12/11/24	REVISED
7	02/18/25	REVISED
8	04/10/25	REVISED

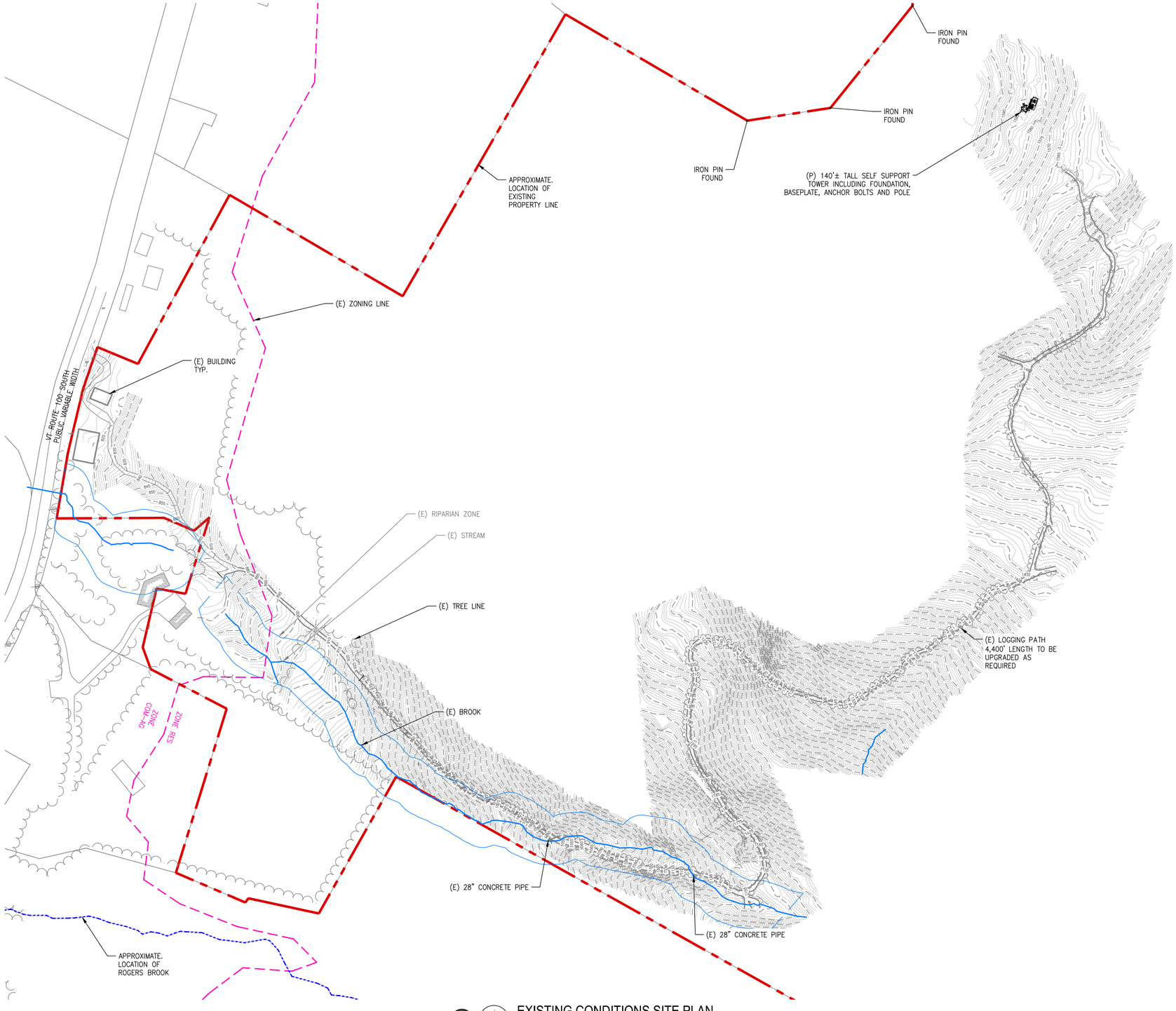
VT-VT-0111A

ROCHESTER

1030 VT ROUTE 100
ROCHESTER, VT 05767
WINDSOR COUNTY

SHEET TITLE
VICINITY PLAN

SHEET NUMBER
C-1



1 C-2 EXISTING CONDITIONS SITE PLAN

NORTH

SCALE: 22x34: 1" = 120'
11x17: 1" = 240'

0 120' 240' 360'

SURVEY NOTES

1. FIELD SURVEY DATE: 05/26/2023
2. VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
3. HORIZONTAL DATUM: NORTH AMERICAN DATUM OF 1983 (NAD83)
4. CENTER OF (P) TOWER: LAT: 43° 51' 35.39" N LONG: 72° 47' 53.37" W ELEV.: 1585'± A.M.S.L.
5. PROPERTY OWNER: JULIA W & CHARLES W MARTIN, 49 RIVER BEND RD, ROCHESTER, VT, 05767
6. SITE ADDRESS: 1030 ROUTE 100 S, ROCHESTER, NH 05767
7. APPLICANT: VERTEX TOWERS LLC, P.O. BOX 680, MEDFIELD, MA 02052 — VERIZON WIRELESS, 118 FLANDERS ROAD, WESTBOROUGH, MA 01581
8. JURISDICTION: TOWN OF ROCHESTER
9. TAX ID: 000RS245B
10. DEED REFERENCE: BOOK: 3163 PAGE: 2520
11. PLAN REFERENCES: COMPILATION SITE PLAN COMPLETED BY: EMANUEL ENGINEERING, INC. DATE: 9/25/2012
12. ZONING JURISDICTION: RESIDENTIAL
13. TOTAL LAND AREA: 244.0± ACRES
14. ALL UNDERGROUND UTILITY INFORMATION WAS DETERMINED FROM SURFACE INVESTIGATIONS AND EXISTING PLANS OF RECORD. THE CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES IN THE FIELD PRIOR TO ANY SITE WORK. CALL THE FOLLOWING FOR ALL PRE-CONSTRUCTION NOTIFICATION 72-HOURS PRIOR TO ANY EXCAVATION ACTIVITY:
DIG SAFE SYSTEM (MA, ME, NH, RI, VT): 1-888-344-7233
CALL BEFORE YOU DIG (CT): 1-800-922-4455
15. PROPERTY LINE, TOPOGRAPHY, AND EXISTING FEATURES INFORMATION HAS BEEN COMPILED FROM "NH GRANIT" AND TOWN OF ROCHESTER GIS SYSTEMS. 2. A METES AND BOUNDS SURVEY WAS NOT CONDUCTED BY ADVANCED ENGINEERING GROUP, PC.
16. THE PURPOSE OF THIS SURVEY IS TO SUPPORT THE DESIGN AND CONSTRUCTION OF A TELECOMMUNICATION FACILITY. USE OF THIS SURVEY BY ANYONE OTHER THAN VERTEX TOWER ASSETS, LLC AND USE OF THIS SURVEY FOR ANY PURPOSE NOT RELATED TO THE DESIGN OF THE INTENDED FACILITY IS STRICTLY PROHIBITED.
17. BEARING SYSTEM OF THIS PLAN IS BASED ON TRUE NORTH. TRUE NORTH WAS ESTABLISHED FROM GPS READINGS ON 5/4/2023.
18. A WETLANDS DELINEATION HAS BEEN COMPLETED BY ARROWWOOD ENVIRONMENTAL AS DESCRIBED ON REPORT DATED 09/01/2023.
19. IN THE EVENT THAT BENCHMARKS (TBM'S), ESTABLISHED FOR THIS PROJECT AND PUBLISHED ON THIS SURVEY, ARE DESTROYED, NOT RECOVERABLE OR A DISCREPANCY IS FOUND, THE USER SHOULD NOTIFY THIS FIRM IN WRITING PRIOR TO COMMENCING OR CONTINUING ANY WORK.
20. THE PROPERTY LINES SHOWN ON THIS PLAN ARE THE LINES DIVIDING EXISTING OWNERSHIPS, AND THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED, AND NO NEW LINES FOR DIVISION OF EXISTING OWNERSHIP OR FOR NEW WAYS ARE SHOWN.

LEGEND

- PROPERTY LINE
- ABUTTING PROPERTY LINE
- EXIST. TOWN LINE BOUNDARY
- EXIST. R.O.W. LAYOUT
- EXIST. CHAIN LINK FENCE
- EXIST. EDGE OF TREE CANOPY
- STREAM LOCATION
- WETLAND SETBACK LINE
- (E) MAJOR CONTOUR
- (E) MINOR CONTOUR
- (E) U/G GAS MAIN (APPROX.)
- (E) OVERHEAD UTILITY WIRES

ZONING SUMMARY TABLE

- ZONING DISTRICT: RESIDENTIAL
- ASSESSOR'S ID: 000RS245B
- PROPOSED USE: WIRELESS COMMUNICATION FACILITY

DIMENSION:	REQUIRED MINIMUM	PROVIDED
FRONT YARD SETBACK*	30 FT	2194± FT
SIDE YARD SETBACK*	30 FT	341± FT
REAR YARD SETBACK*	20 FT	2600± FT
AREA	2 ACRES	244± ACRES
FRONTAGE	150 FT	320± FT

* DIMENSIONS MEASURED FROM EDGE OF TOWER TO THE NEAREST PROPERTY LINE

verizon
118 FLANDERS ROAD
WESTBOROUGH, MA 01581
(508) 330-3300 TEL

Vertex Towers LLC
VERTEX TOWERS LLC
P.O. BOX 680
MEDFIELD, MA 02052

AEG ADVANCED ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
179 Swansea Mall Drive, Suite 1
Swansea, MA 02777
Tel: (508) 343-1414
Fax: (401) 633-6354

STATE OF VERMONT
SCOTT N. ADAMS
NO. 135423
CIVIL
LICENSED
PROFESSIONAL ENGINEER

AEG PROJECT #: 2023-0079

DRAWN BY: JWH

CHECKED BY: SNA

SUBMITTALS

REV#	DATE	DESCRIPTION
2	06/05/24	REVISED
3	08/19/24	REVISED
4	10/20/24	REVISED
5	10/24/24	REVISED
6	12/11/24	REVISED
7	02/18/25	REVISED
8	04/10/25	REVISED

VT-VT-0111A

ROCHESTER

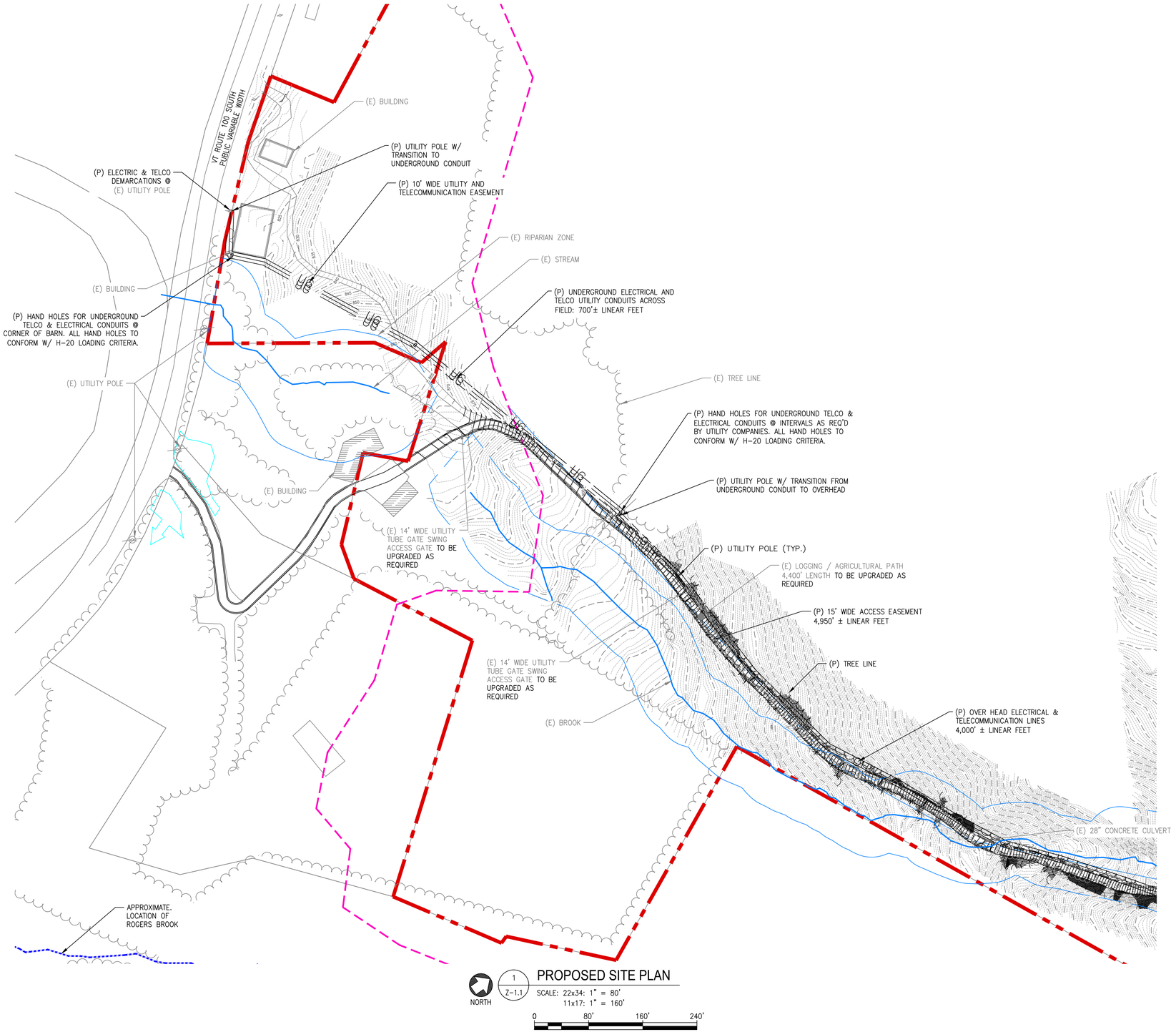
1030 VT ROUTE 100
ROCHESTER, VT 05767
WINDSOR COUNTY

SHEET TITLE

EXISTING CONDITIONS SITE PLAN

SHEET NUMBER

C-2



ENGINEERING NOTES

1. THE TYPE, DIMENSIONS, MOUNTING HARDWARE, AND POSITIONS OF ALL PROJECT OWNER'S EQUIPMENT ARE SHOWN IN ILLUSTRATIVE FASHION. THESE DRAWINGS ARE NOT INTENDED FOR CONSTRUCTION. ACTUAL HARDWARE DETAILS AND FINAL LOCATIONS MAY DIFFER SLIGHTLY FROM WHAT IS SHOWN.

2. THE PROJECT OWNER'S PCS FACILITY IS AN UNMANNED PRIVATE AND SECURED EQUIPMENT INSTALLATION. IT IS ONLY ACCESSED BY TRAINED TECHNICIANS FOR PERIODIC ROUTINE MAINTENANCE AND THEREFORE DOES NOT REQUIRE ANY WATER OR SANITARY SEWER SERVICE. THE FACILITY IS NOT GOVERNED BY REGULATIONS REQUIRING PUBLIC ACCESS PER ADA REQUIREMENTS.

3. THE PROJECT OWNER'S BASE TRANSMISSION STATION (BTS) CABINET IS A VANDAL RESISTANT STEEL CABINET CONTAINING RECTIFIERS, AMPLIFIERS, RADIOS, AND OTHER INTEGRATED ELECTRONIC CONTROL EQUIPMENT. BATTERY BACKUP FOR EMERGENCY STANDBY POWER IS CONTAINED WITHIN A SEPARATE BATTERY RACK CONTAINING 12-VOLT, CLOSED-CELL DC BATTERIES. THE BATTERIES ARE LEAD-ACID RECHARGEABLE STANDBY INDUSTRIAL POWER CELLS MANUFACTURED TO MEET ENVIRONMENTAL QUALITY AND RUGGEDNESS STANDARDS OF THE INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA). THE BATTERY CHARGING SYSTEM IS COMPUTER-CONTROLLED AND THE EQUIPMENT CABINET IS REMOTELY MONITORED AT PROJECT OWNER'S NETWORK OPERATIONS CONTROL CENTER 24-HOURS A DAY, 7 DAYS A WEEK FOR FAULTS AND ALARMS.

4. THE DESIGN OF THE ANTENNA MOUNTING HARDWARE AND STRUCTURAL REINFORCEMENT OF EXISTING BUILDING ROOF/FLOOR (IF NECESSARY) TO SUPPORT THE BTS EQUIPMENT CABINETS WILL MEET THE ANSI/EIA/TIA-222-G STANDARDS FOR STRUCTURAL STEEL ANTENNA SUPPORTING STRUCTURES AND STATE BUILDING CODE REQUIREMENTS. DETAILED CONSTRUCTION DRAWINGS AND STRUCTURAL CALCULATIONS WILL BE PREPARED BY A REGISTERED PROFESSIONAL ENGINEER AND SUBMITTED WITH A BUILDING PERMIT APPLICATION FOR REVIEW AND APPROVAL BY THE LOCAL BUILDING CODE ENFORCEMENT OFFICIAL.

5. ONCE THE FACILITY BECOMES FULLY OPERATIONAL, NORMAL AND ROUTINE MAINTENANCE BY PROJECT OWNER'S TECHNICIANS WILL BE PERFORMED ON A MONTHLY BASIS. THEREFORE, THE ESTIMATED VEHICLE TRIP GENERATION RATE IS 2 TRIPS PER MONTH. THE AVERAGE DAILY TRIP GENERATION RATE (ADT) IS 0.07.

6. PER FCC MANDATE, ENHANCED EMERGENCY (E911) SERVICE IS REQUIRED TO MEET NATIONWIDE STANDARDS FOR WIRELESS COMMUNICATIONS SYSTEMS. PROJECT OWNER'S IMPLEMENTATION REQUIRES DEPLOYMENT OF EQUIPMENT AND ANTENNAS GENERALLY DEPICTED ON THIS PLAN, ATTACHED TO OR MOUNTED IN CLOSE PROXIMITY TO THE BTS RADIO CABINETS. RESERVES THE RIGHT TO MAKE REASONABLE MODIFICATIONS TO E911 EQUIPMENT AND LOCATION AS TECHNOLOGY EVOLVES TO MEET REQUIRED SPECIFICATIONS.

7. APPLICANT: VERTEX TOWERS LLC, P.O. BOX 680, MEDFIELD, MA 02052 — VERIZON WIRELESS, 118 FLANDERS ROAD, WESTBOROUGH, MA 01581

8. OWNER: JULIA W & CHARLES W MARTIN, 49 RIVER BEND RD, ROCHESTER, VT, 05767

9. ZONING DISTRICT: RESIDENTIAL

10. JURISDICTION: TOWN OF ROCHESTER

11. TAX ID: 000RS245B

12. ALL MEASUREMENTS ARE SHOWN IN FEET ± UNLESS OTHERWISE NOTED.

13. PLOT PLAN MEASUREMENTS ARE APPROXIMATE AND BASED ON SCALED ASSESSORS MAPS AND OTHER AVAILABLE INFORMATION.

14. ALL SETBACKS SHOWN FROM PROPOSED ANTENNAS TO THE EDGE OF THE ROOF ARE APPROXIMATE AND SHOULD BE USED FOR REFERENCE ONLY.

LEGEND

- PROPERTY LINE
- ZONING SETBACK LINE
- ABUTTING PROPERTY LINE
- EXIST. R.O.W. LAYOUT
- PROP. EASEMENT/LEASE AREA
- EXIST. CHAIN LINK FENCE
- PROP. CHAIN LINK FENCE
- EROSION CONTROL BARRIER
- EXIST. EDGE OF TREE CANOPY
- PROP. EDGE OF TREE CANOPY
- WETLAND BOUNDARY & FLAG
- WETLAND SETBACK LINE
- (E) MAJOR CONTOUR (290)
- (E) MINOR CONTOUR (291)
- (E) U/G GAS MAIN (APPROX.) (GAS)
- (E) OVERHEAD UTILITY WIRES (OHW)
- (P) ELECTRICAL UTILITY CONDUIT (E)
- (P) TELCO/DATA UTILITY CONDUIT (T)
- (P) CONTOUR (290)

verizon
118 FLANDERS ROAD
WESTBOROUGH, MA 01581
(508) 330-3300 TEL

Vertex Towers LLC
VERTEX TOWERS LLC
P.O. BOX 680
MEDFIELD, MA 02052

AEG ADVANCED ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
179 Swansea Mall Drive, Suite 1
Swansea, MA 02777
Tel: (508) 343-1414
Fax: (401) 633-6354

STATE OF VERMONT
SCOTT N. ADAMS
NO. 135423
CIVIL
LICENSED
PROFESSIONAL ENGINEER

AEG PROJECT #: 2023-0079

DRAWN BY: JWH

CHECKED BY: SNA

SUBMITTALS

REV#	DATE	DESCRIPTION
2	06/05/24	REVISED
3	08/19/24	REVISED
4	10/20/24	REVISED
5	10/24/24	REVISED
6	12/11/24	REVISED
7	02/18/25	REVISED
8	04/10/25	REVISED

VT-VT-0111A

ROCHESTER

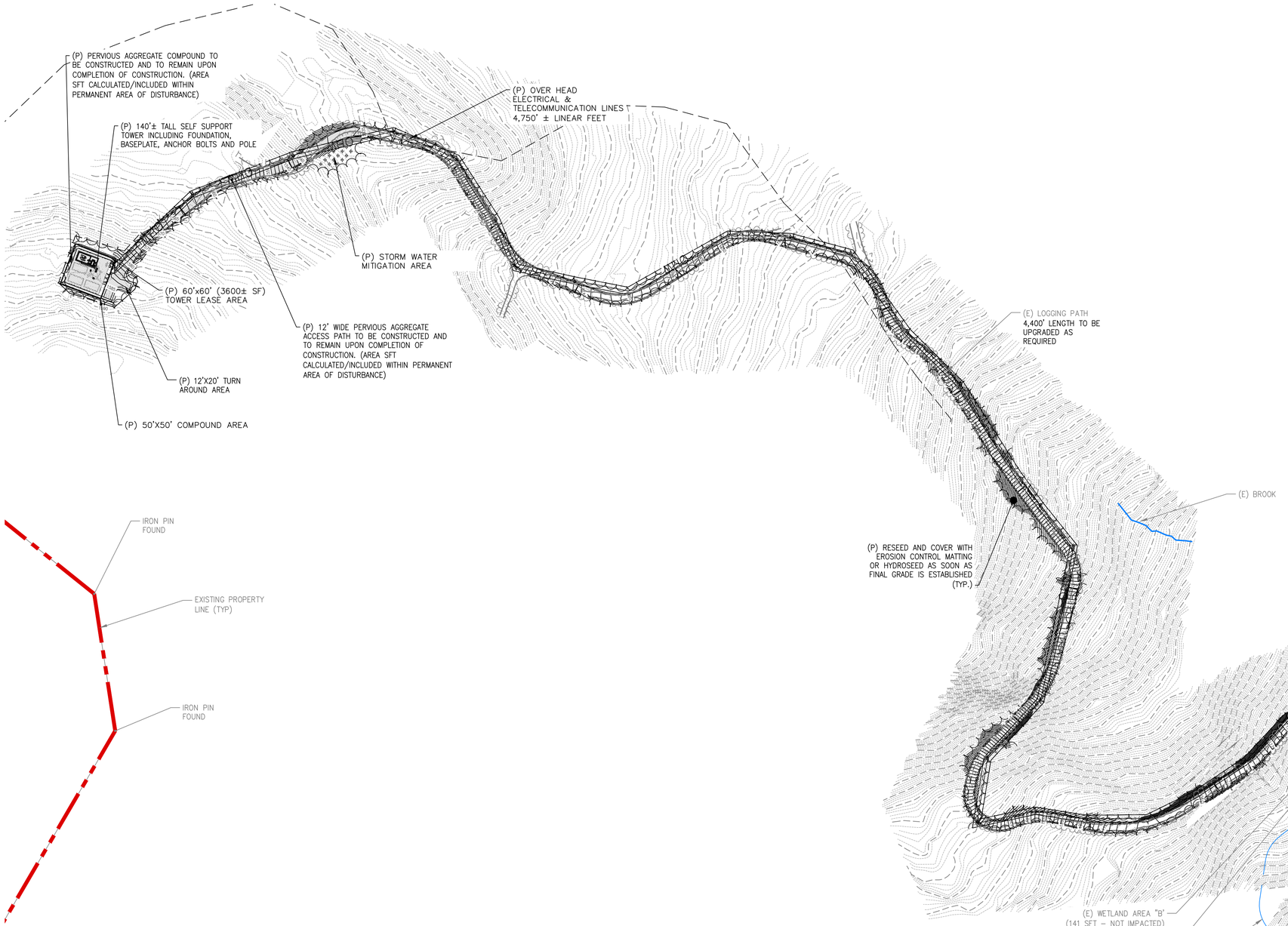
1030 VT ROUTE 100
ROCHESTER, VT 05767
WINDSOR COUNTY

SHEET TITLE

PROPOSED SITE PLAN

SHEET NUMBER

Z-1.1



NORTH

1 / Z-1.2 PROPOSED SITE PLAN

SCALE: 22x34: 1" = 80'
11x17: 1" = 160'

0 80' 160' 240'

LEGEND

- PROPERTY LINE
- ZONING SETBACK LINE
- ABUTTING PROPERTY LINE
- EXIST. R.O.W. LAYOUT
- PROP. EASEMENT/LEASE AREA
- EXIST. CHAIN LINK FENCE
- PROP. CHAIN LINK FENCE
- EROSION CONTROL BARRIER
- EXIST. EDGE OF TREE CANOPY
- PROP. EDGE OF TREE CANOPY
- WETLAND BOUNDARY & FLAG
- WETLAND SETBACK LINE
- (E) MAJOR CONTOUR
- (E) MINOR CONTOUR
- (E) U/G GAS MAIN (APPROX.)
- (E) OVERHEAD UTILITY WIRES
- (P) ELECTRICAL UTILITY CONDUIT
- (P) TELCO/DATA UTILITY CONDUIT
- (P) CONTOUR

verizon
118 FLANDERS ROAD
WESTBOROUGH, MA 01581
(508) 330-3300 TEL

Vertex Towers LLC
VERTEX TOWERS LLC
P.O. BOX 680
MEDFIELD, MA 02052

ADVANCED ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
179 Swansea Mall Drive, Suite 1
Swansea, MA 02777
Tel: (508) 343-1414
Fax: (401) 633-6354

STATE OF VERMONT
SCOTT N. ADAMS
NO. 135423
CIVIL
LICENSED
PROFESSIONAL ENGINEER

AEG PROJECT #: 2023-0079

DRAWN BY: JWH

CHECKED BY: SNA

SUBMITTALS

REV#	DATE	DESCRIPTION
2	06/05/24	REVISED
3	08/19/24	REVISED
4	10/20/24	REVISED
5	10/24/24	REVISED
6	12/11/24	REVISED
7	02/18/25	REVISED
8	04/10/25	REVISED

VT-VT-0111A

ROCHESTER

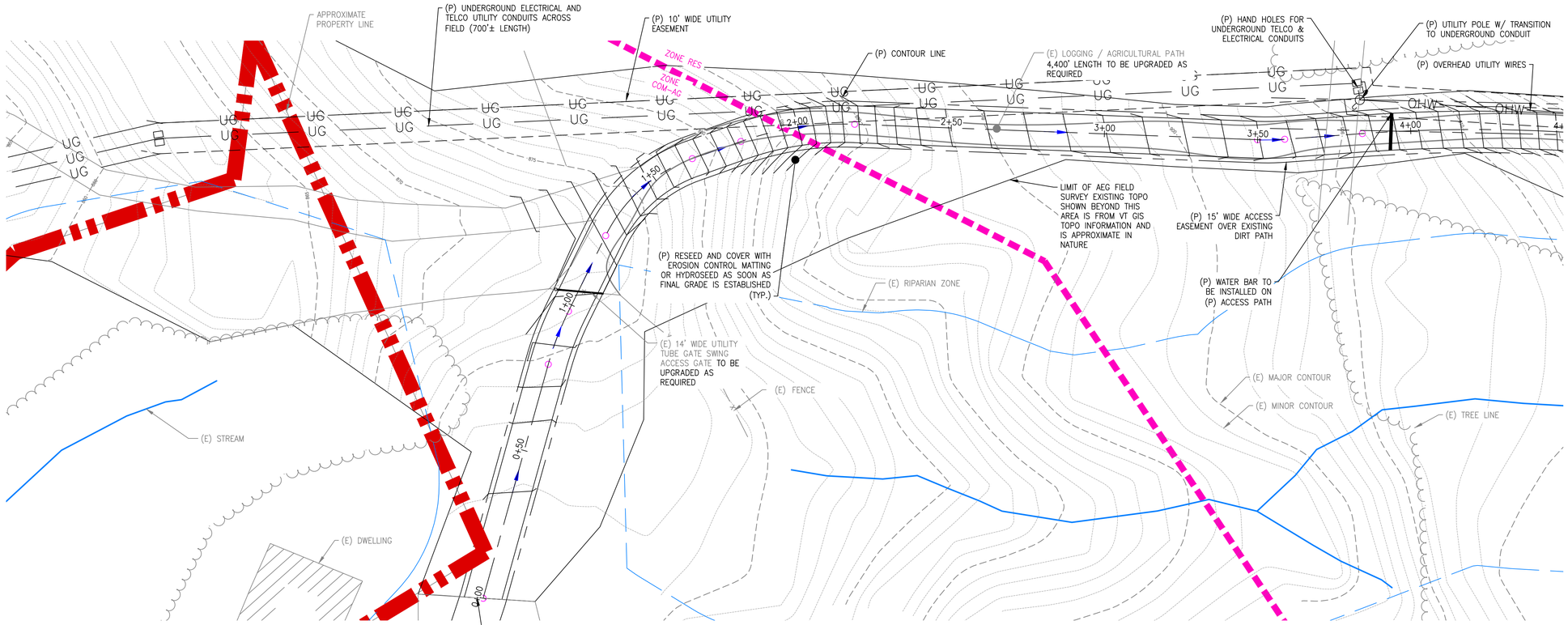
1030 VT ROUTE 100
ROCHESTER, VT 05767
WINDSOR COUNTY

SHEET TITLE

PROPOSED SITE PLAN

SHEET NUMBER

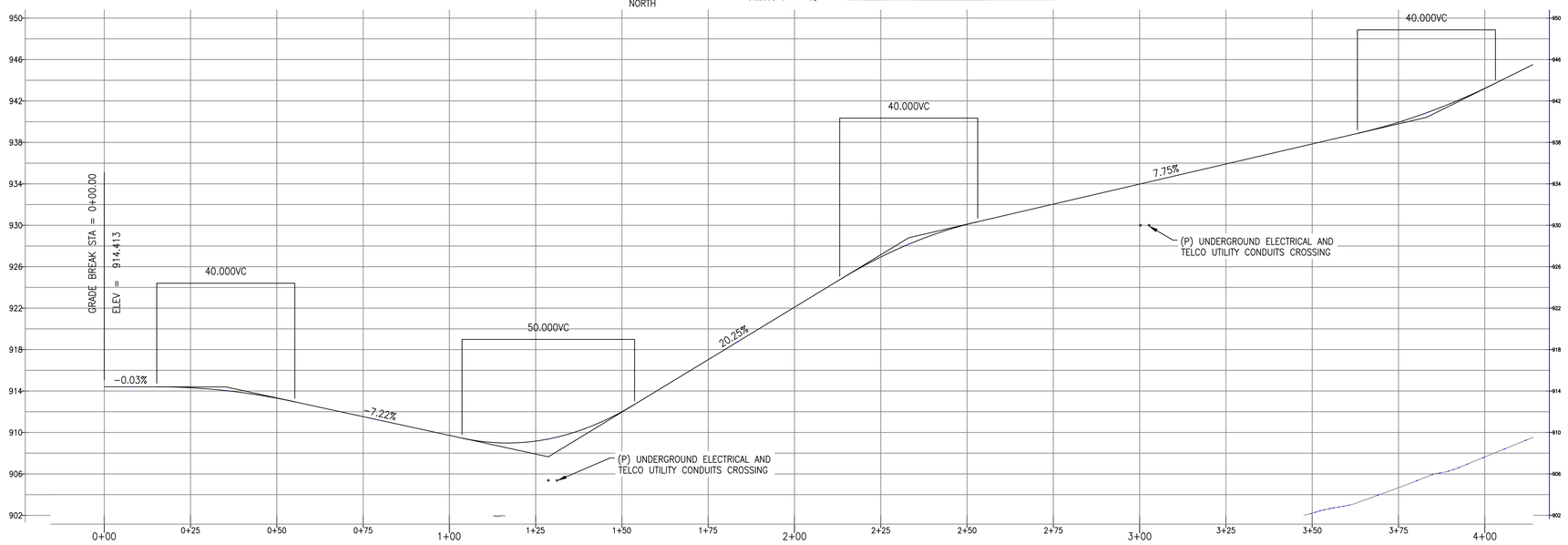
Z-1.2



1 Z-2.1 PROPOSED SITE PLAN SEGMENT 1

SCALE: 22x34: 1" = 20' 11x17: 1" = 40'

0 20' 40' 60'



2 Z-2.1 PROFILE VIEW (SEGMENT 1)

SCALE: 22x34: 1" = 20' 11x17: 1" = 40'

0 20' 40' 60'

4 TO 1 VERTICAL EXAGGERATION

LEGEND

- PROPERTY LINE
- ZONING SETBACK LINE
- ABUTTING PROPERTY LINE
- EXIST. R.O.W. LAYOUT
- PROP. EASEMENT/LEASE AREA
- EXIST. CHAIN LINK FENCE
- PROP. CHAIN LINK FENCE
- EROSION CONTROL BARRIER
- EXIST. EDGE OF TREE CANOPY
- PROP. EDGE OF TREE CANOPY
- WETLAND BOUNDARY & FLAG
- WETLAND SETBACK LINE
- 290 (E) MAJOR CONTOUR
- 291 (E) MINOR CONTOUR
- GAS (E) U/G GAS MAIN (APPROX.)
- OHW (E) OVERHEAD UTILITY WIRES
- E (P) ELECTRICAL UTILITY CONDUIT
- T (P) TELCO/DATA UTILITY CONDUIT
- 290 (P) CONTOUR

verizon
118 FLANDERS ROAD
WESTBOROUGH, MA 01581
(508) 330-3300 TEL

Vertex Towers LLC
VERTEX TOWERS LLC
P.O. BOX 680
MEDFIELD, MA 02052

AEG ADVANCED ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
179 Swansea Mall Drive, Suite 1
Swansea, MA 02777
Tel: (508) 343-1414
Fax: (401) 633-6354

STATE OF VERMONT SCOTT N. ADAMS NO. 135423 CIVIL LICENSED PROFESSIONAL ENGINEER

AEG PROJECT #:	2023-0079
DRAWN BY:	JWH
CHECKED BY:	SNA

SUBMITTALS

REV#	DATE	DESCRIPTION
2	06/05/24	REVISED
3	08/19/24	REVISED
4	10/20/24	REVISED
5	10/24/24	REVISED
6	12/11/24	REVISED
7	02/18/25	REVISED
8	04/10/25	REVISED

VT-VT-0111A

ROCHESTER

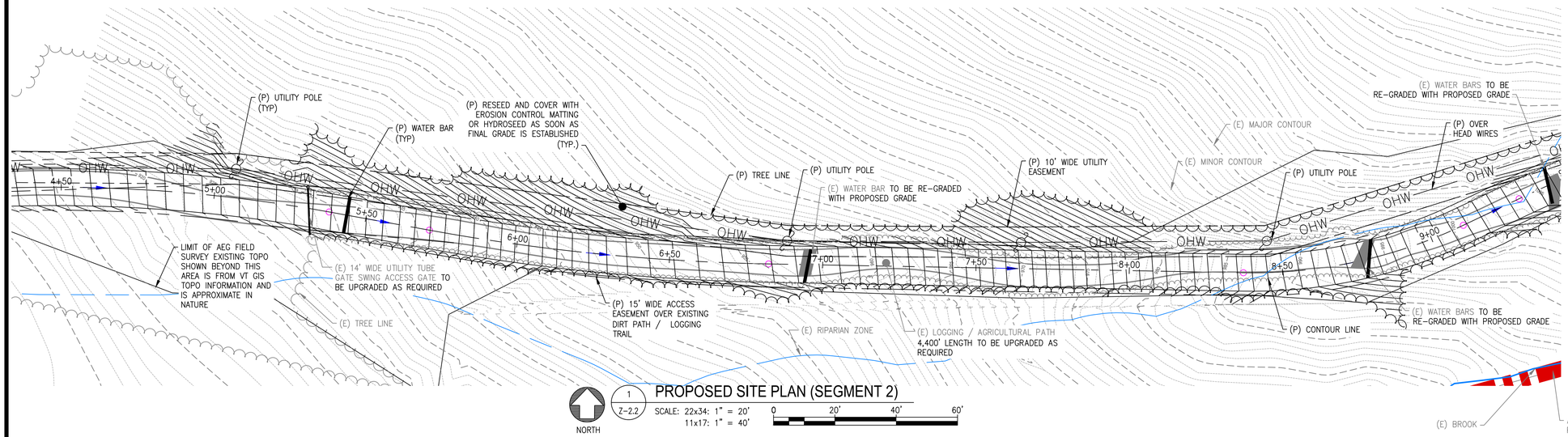
1030 VT ROUTE 100
ROCHESTER, VT 05767
WINDSOR COUNTY

SHEET TITLE

ENLARGED PLAN & PROFILE (SEGMENT 1)

SHEET NUMBER

Z-2.1



1 / Z-2.2 PROPOSED SITE PLAN (SEGMENT 2)

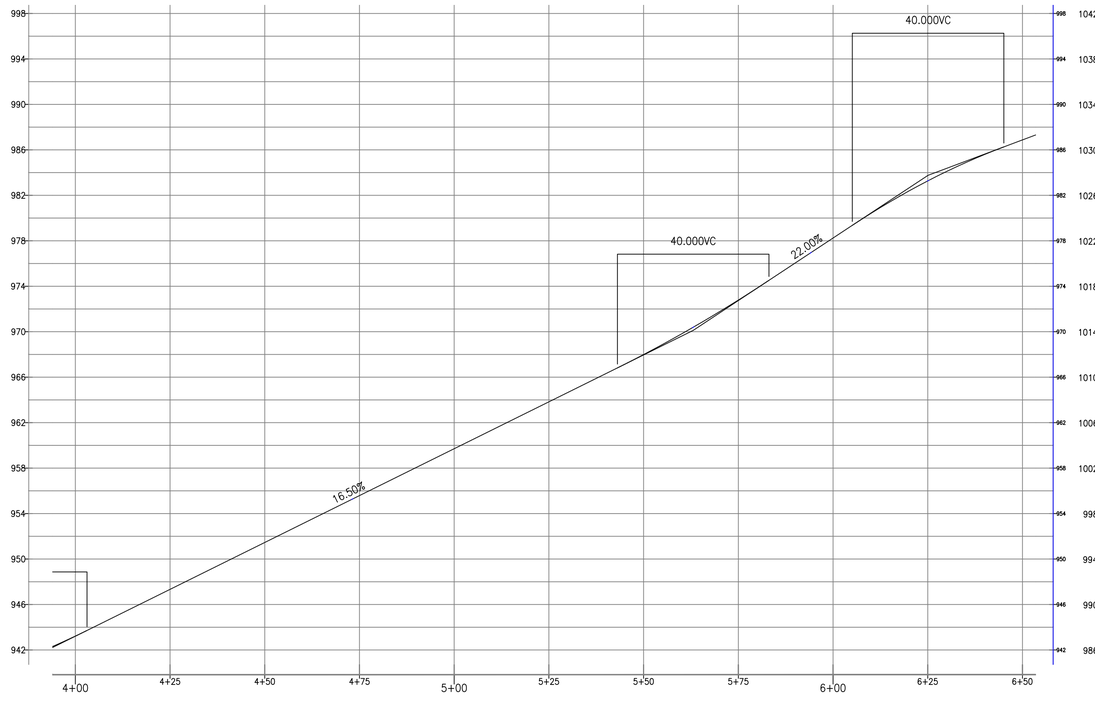
SCALE: 22x34: 1" = 20'
11x17: 1" = 40'

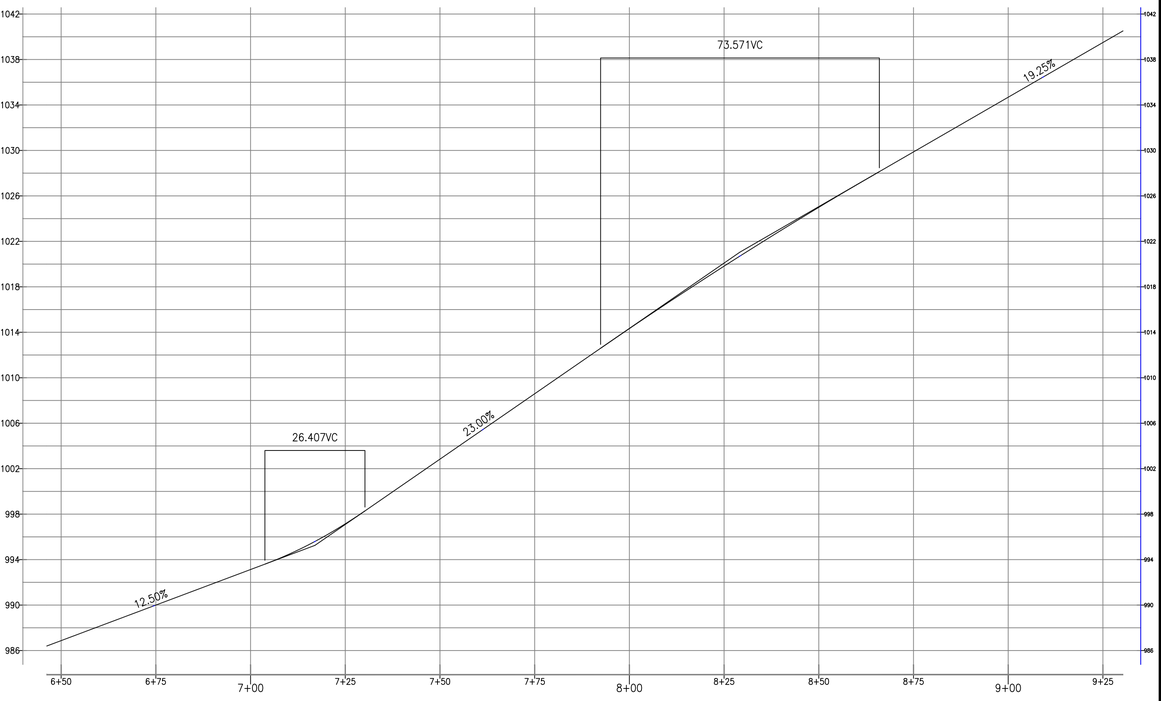
0 20' 40' 60'

NORTH

LEGEND

- PROPERTY LINE
- ZONING SETBACK LINE
- ABUTTING PROPERTY LINE
- EXIST. R.O.W. LAYOUT
- PROP. EASEMENT/LEASE AREA
- EXIST. CHAIN LINK FENCE
- PROP. CHAIN LINK FENCE
- EROSION CONTROL BARRIER
- EXIST. EDGE OF TREE CANOPY
- PROP. EDGE OF TREE CANOPY
- WETLAND BOUNDARY & FLAG
- WETLAND SETBACK LINE
- 290 (E) MAJOR CONTOUR
- 291 (E) MINOR CONTOUR
- GAS (E) U/G GAS MAIN (APPROX.)
- OHW (E) OVERHEAD UTILITY WIRES
- E (P) ELECTRICAL UTILITY CONDUIT
- T (P) TELCO/DATA UTILITY CONDUIT
- 290 (P) CONTOUR





2 / Z-2.2 PROFILE VIEW (SEGMENT 2)

SCALE: 22x34: 1" = 20'
11x17: 1" = 40'

0 20' 40' 60'

verizon
118 FLANDERS ROAD
WESTBOROUGH, MA 01581
(508) 330-3300 TEL

Vertex Towers LLC
VERTEX TOWERS LLC
P.O. BOX 680
MEDFIELD, MA 02052

AEG ADVANCED ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
179 Swansea Mall Drive, Suite 1
Swansea, MA 02777
Tel: (508) 343-1414
Fax: (401) 633-6354

STATE OF VERMONT
SCOTT N. ADAMS
NO. 135423
CIVIL
LICENSED
PROFESSIONAL ENGINEER

AEG PROJECT #: 2023-0079

DRAWN BY: JWH

CHECKED BY: SNA

SUBMITTALS

REV#	DATE	DESCRIPTION
2	06/05/24	REVISED
3	08/19/24	REVISED
4	10/20/24	REVISED
5	10/24/24	REVISED
6	12/11/24	REVISED
7	02/18/25	REVISED
8	04/10/25	REVISED

VT-VT-0111A

ROCHESTER

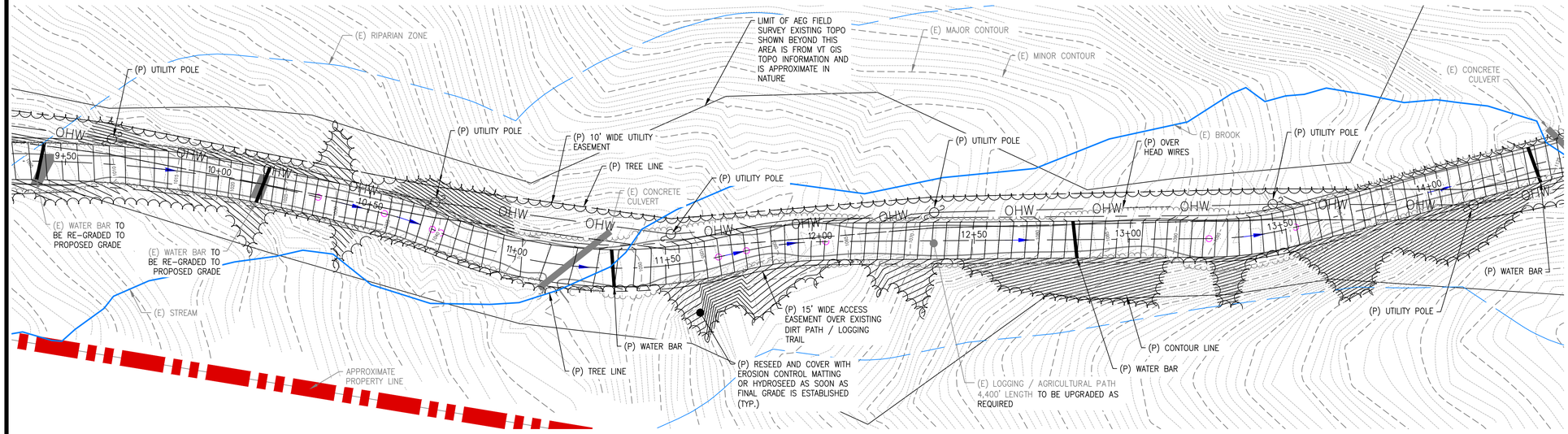
1030 VT ROUTE 100
ROCHESTER, VT 05767
WINDSOR COUNTY

SHEET TITLE

ENLARGED PLAN & PROFILE (SEGMENT 2)

SHEET NUMBER

Z-2.2



NORTH

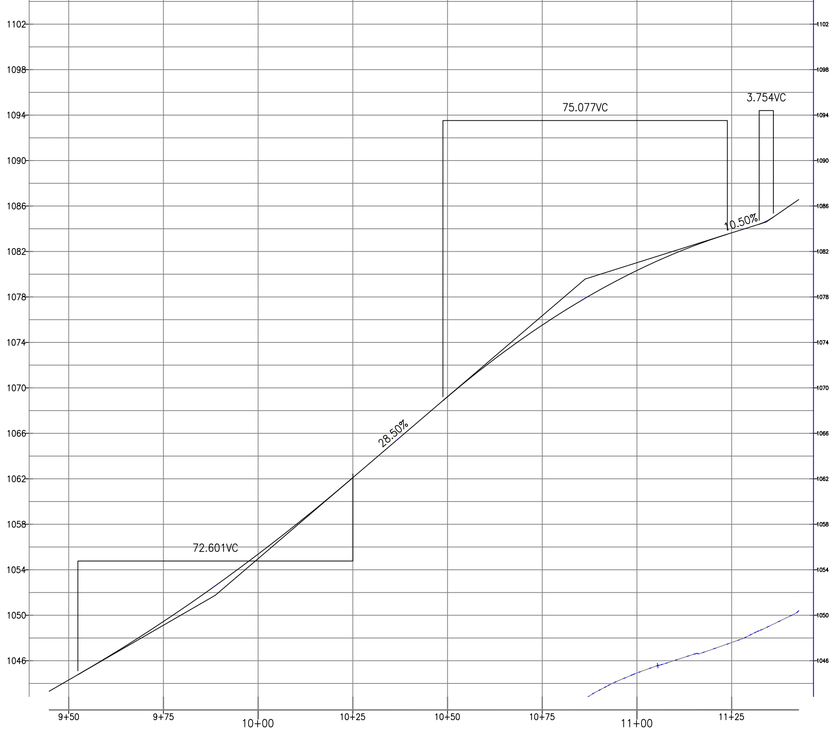
1 / Z-2.3 PROPOSED SITE PLAN (SEGMENT 3)

SCALE: 22x34: 1" = 20'
11x17: 1" = 40'

0 20' 40' 60'

LEGEND

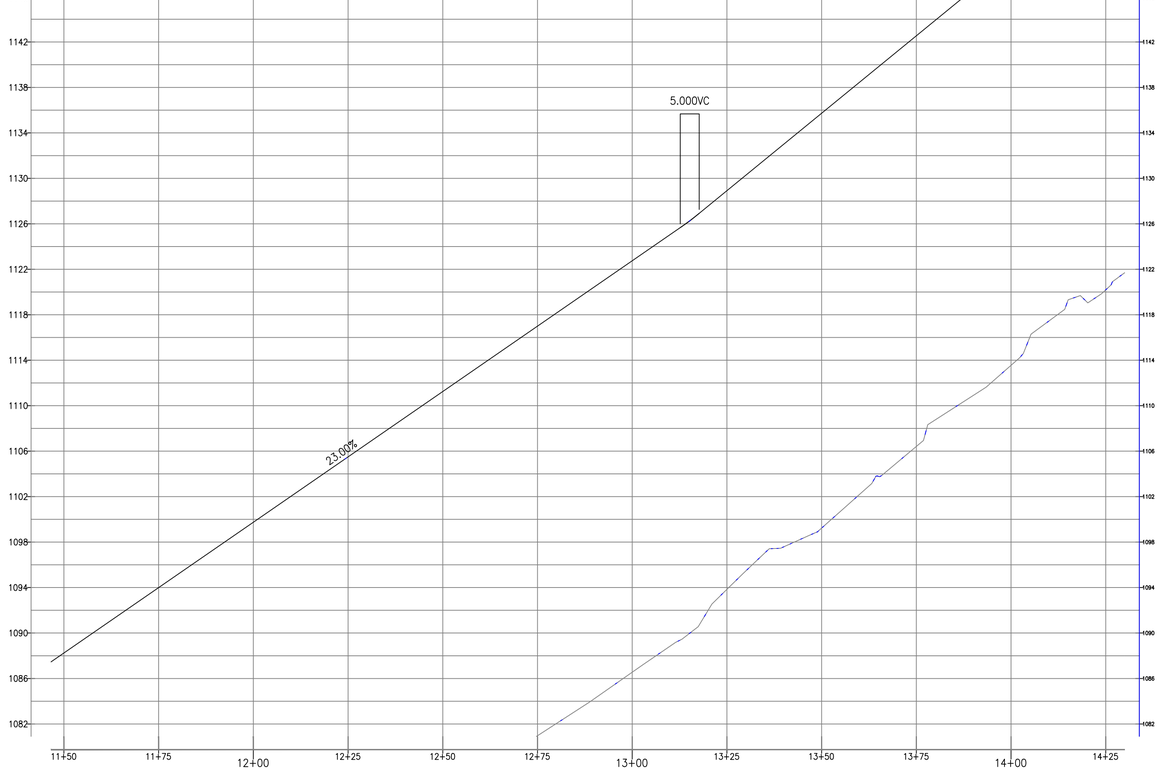
- PROPERTY LINE
- ZONING SETBACK LINE
- ABUTTING PROPERTY LINE
- EXIST. R.O.W. LAYOUT
- PROP. EASEMENT/LEASE AREA
- EXIST. CHAIN LINK FENCE
- PROP. CHAIN LINK FENCE
- EROSION CONTROL BARRIER
- EXIST. EDGE OF TREE CANOPY
- PROP. EDGE OF TREE CANOPY
- WETLAND BOUNDARY & FLAG
- WETLAND SETBACK LINE
- 290 (E) MAJOR CONTOUR
- 291 (E) MINOR CONTOUR
- GAS (E) U/G GAS MAIN (APPROX.)
- OHW (E) OVERHEAD UTILITY WIRES
- E (P) ELECTRICAL UTILITY CONDUIT
- T (P) TELCO/DATA UTILITY CONDUIT
- 290 (P) CONTOUR



2 / Z-2.3 PROFILE VIEW (SEGMENT 3)

SCALE: 22x34: 1" = 20'
11x17: 1" = 40'

0 20' 40' 60'



verizon
118 FLANDERS ROAD
WESTBOROUGH, MA 01581
(508) 330-3300 TEL

Vertex Towers LLC
VERTEX TOWERS LLC
P.O. BOX 680
MEDFIELD, MA 02052

AEG ADVANCED ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
179 Swansea Mall Drive, Suite 1
Swansea, MA 02777
Tel: (508) 343-1414
Fax: (401) 633-6354

STATE OF VERMONT
SCOTT N. ADAMS
NO. 135423
CIVIL
LICENSED PROFESSIONAL ENGINEER

AEG PROJECT #: 2023-0079

DRAWN BY: JWH

CHECKED BY: SNA

SUBMITTALS

REV#	DATE	DESCRIPTION
2	06/05/24	REVISED
3	08/19/24	REVISED
4	10/20/24	REVISED
5	10/24/24	REVISED
6	12/11/24	REVISED
7	02/18/25	REVISED
8	04/10/25	REVISED

VT-VT-0111A

ROCHESTER

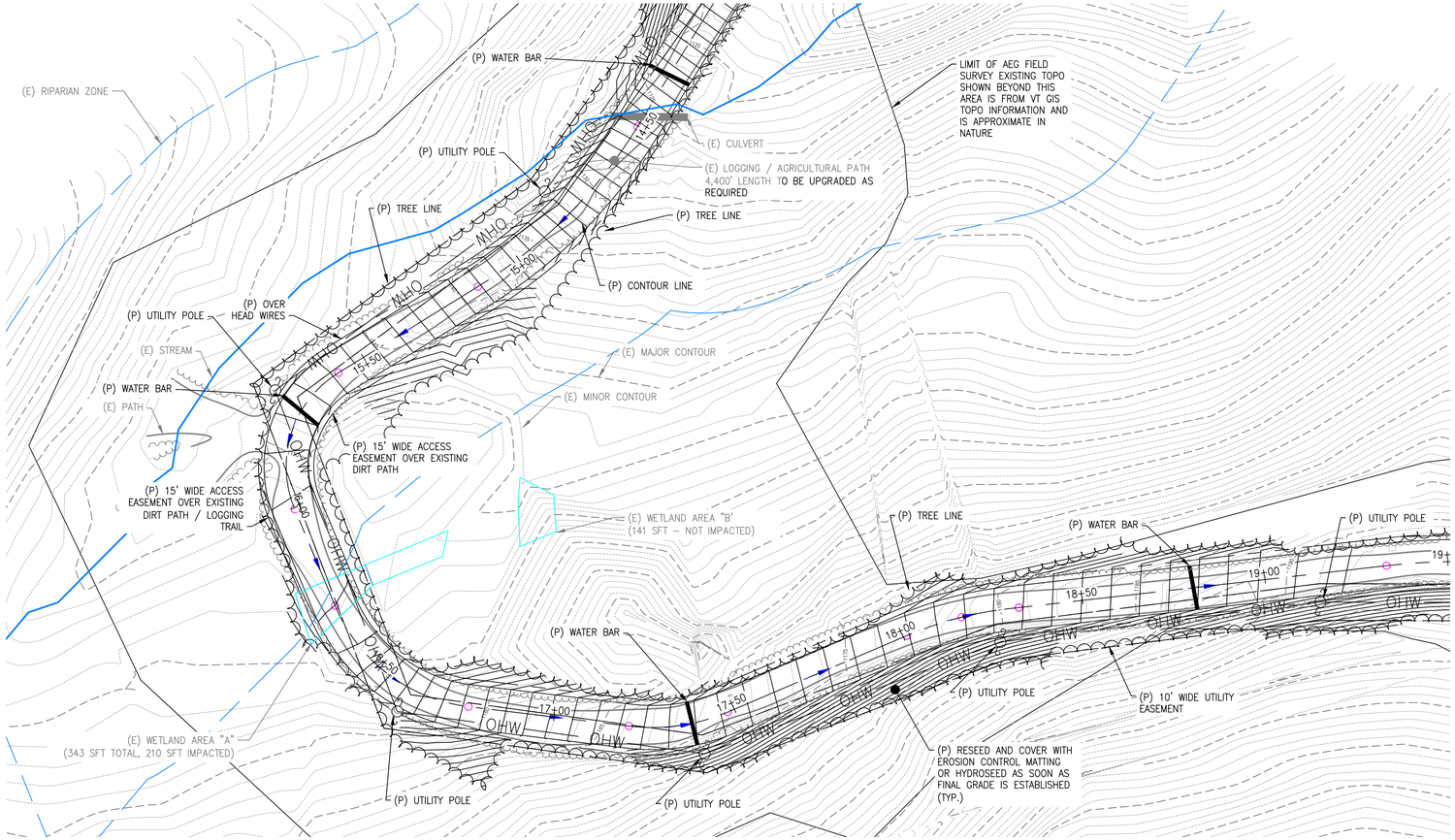
1030 VT ROUTE 100
ROCHESTER, VT 05767
WINDSOR COUNTY

SHEET TITLE

ENLARGED PLAN & PROFILE (SEGMENT 3)

SHEET NUMBER

Z-2.3



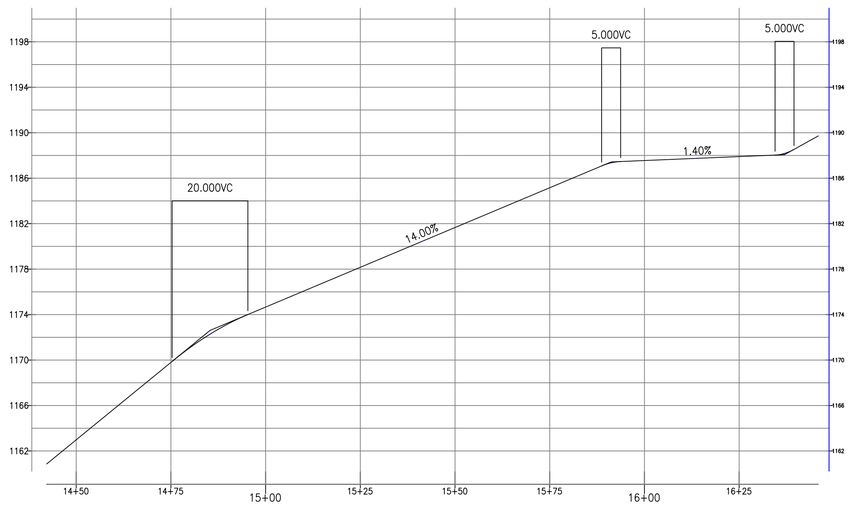
PROPOSED SITE PLAN (SEGMENT 4)

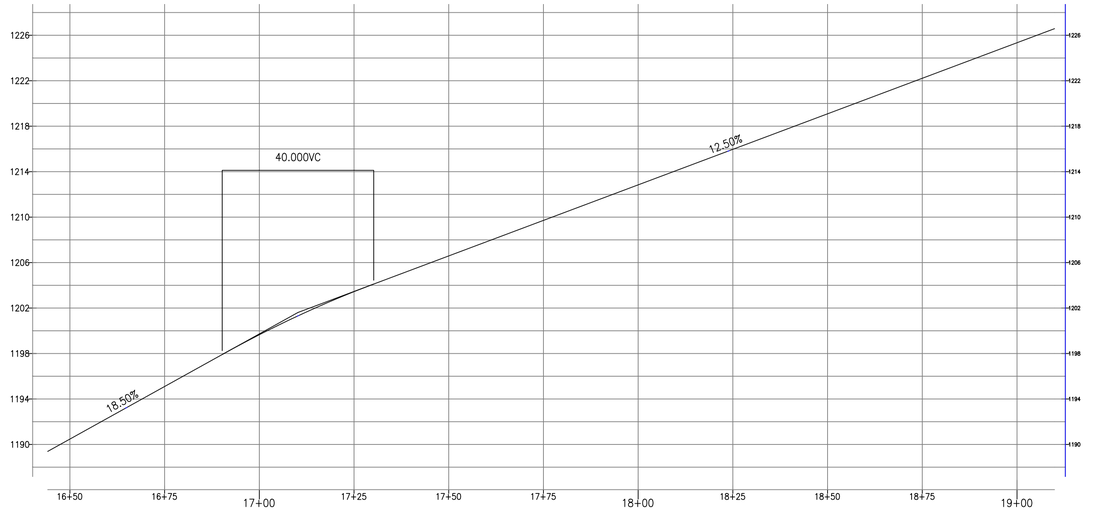
1 / Z-2.4

SCALE: 22x34: 1" = 20'
11x17: 1" = 40'

NORTH

0 20' 40' 60'





PROFILE VIEW (SEGMENT 4)

2 / Z-2.4

SCALE: 22x34: 1" = 20'
11x17: 1" = 40'

0 20' 40' 60'

LEGEND

- PROPERTY LINE
- ZONING SETBACK LINE
- ABUTTING PROPERTY LINE
- EXIST. R.O.W. LAYOUT
- PROP. EASEMENT/LEASE AREA
- EXIST. CHAIN LINK FENCE
- PROP. CHAIN LINK FENCE
- EROSION CONTROL BARRIER
- EXIST. EDGE OF TREE CANOPY
- PROP. EDGE OF TREE CANOPY
- WETLAND BOUNDARY & FLAG
- WETLAND SETBACK LINE
- 290 (E) MAJOR CONTOUR
- 291 (E) MINOR CONTOUR
- GAS (E) U/G GAS MAIN (APPROX.)
- OHW (E) OVERHEAD UTILITY WIRES
- E (P) ELECTRICAL UTILITY CONDUIT
- T (P) TELCO/DATA UTILITY CONDUIT
- 290 (P) CONTOUR

verizon
118 FLANDERS ROAD
WESTBOROUGH, MA 01581
(508) 330-3300 TEL

Vertex Towers LLC
VERTEX TOWERS LLC
P.O. BOX 680
MEDFIELD, MA 02052

AEG ADVANCED ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
179 Swansea Mall Drive, Suite 1
Swansea, MA 02777
Tel: (508) 343-1414
Fax: (401) 633-6354

STATE OF VERMONT
SCOTT N. ADAMS
NO. 135423
CIVIL
LICENSED
PROFESSIONAL ENGINEER

AEG PROJECT #: 2023-0079

DRAWN BY: JWH

CHECKED BY: SNA

SUBMITTALS

REV#	DATE	DESCRIPTION
2	06/05/24	REVISED
3	08/19/24	REVISED
4	10/20/24	REVISED
5	10/24/24	REVISED
6	12/11/24	REVISED
7	02/18/25	REVISED
8	04/10/25	REVISED

VT-VT-0111A

ROCHESTER

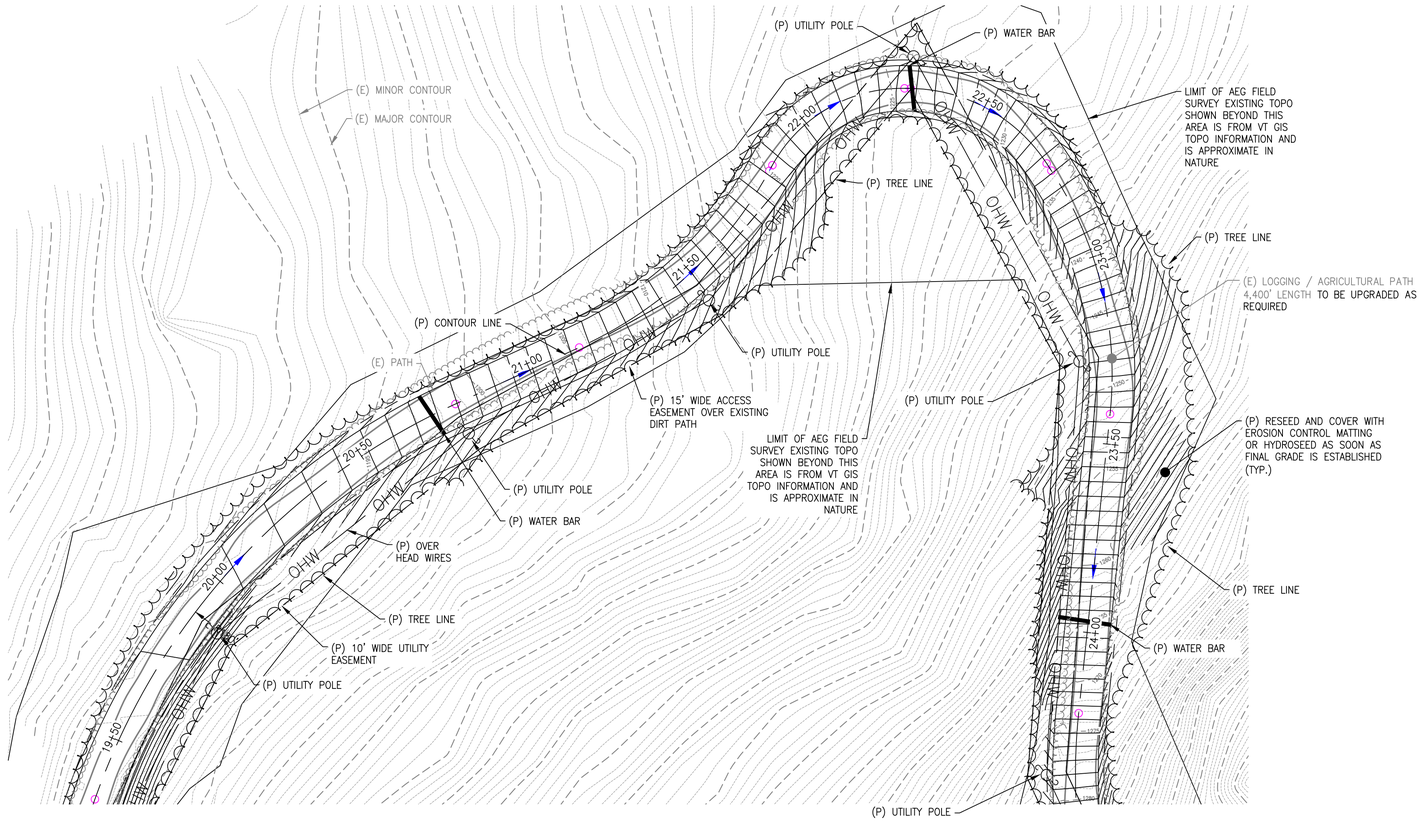
1030 VT ROUTE 100
ROCHESTER, VT 05767
WINDSOR COUNTY

SHEET TITLE

ENLARGED PLAN & PROFILE (SEGMENT 4)

SHEET NUMBER

Z-2.4



LEGEND

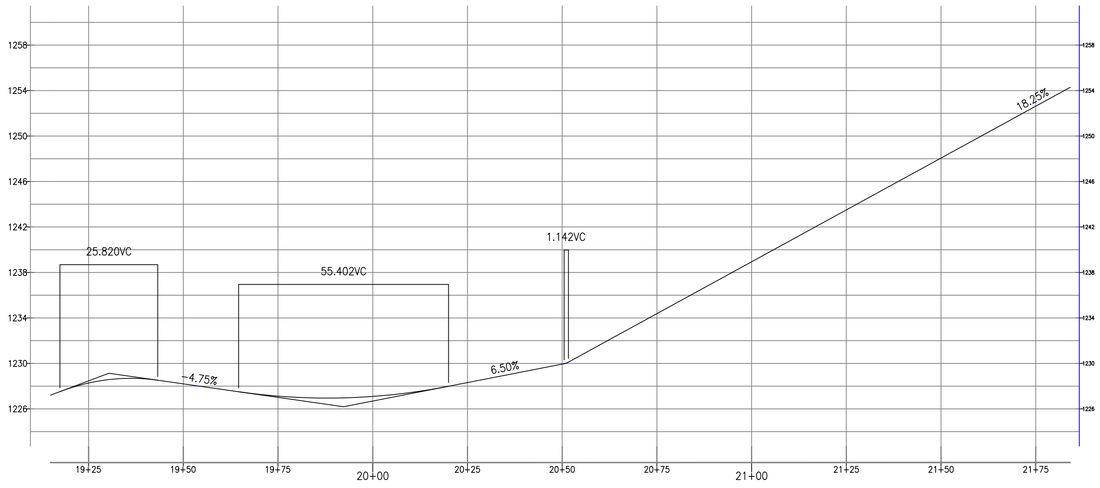
- PROPERTY LINE
- ZONING SETBACK LINE
- ABUTTING PROPERTY LINE
- EXIST. R.O.W. LAYOUT
- PROP. EASEMENT/LEASE AREA
- EXIST. CHAIN LINK FENCE
- PROP. CHAIN LINK FENCE
- EROSION CONTROL BARRIER
- EXIST. EDGE OF TREE CANOPY
- PROP. EDGE OF TREE CANOPY
- WETLAND BOUNDARY & FLAG
- WETLAND SETBACK LINE
- 290 (E) MAJOR CONTOUR
- 291 (E) MINOR CONTOUR
- GAS (E) U/G GAS MAIN (APPROX.)
- OHW (E) OVERHEAD UTILITY WIRES
- E (P) ELECTRICAL UTILITY CONDUIT
- T (P) TELCO/DATA UTILITY CONDUIT
- 290 (P) CONTOUR

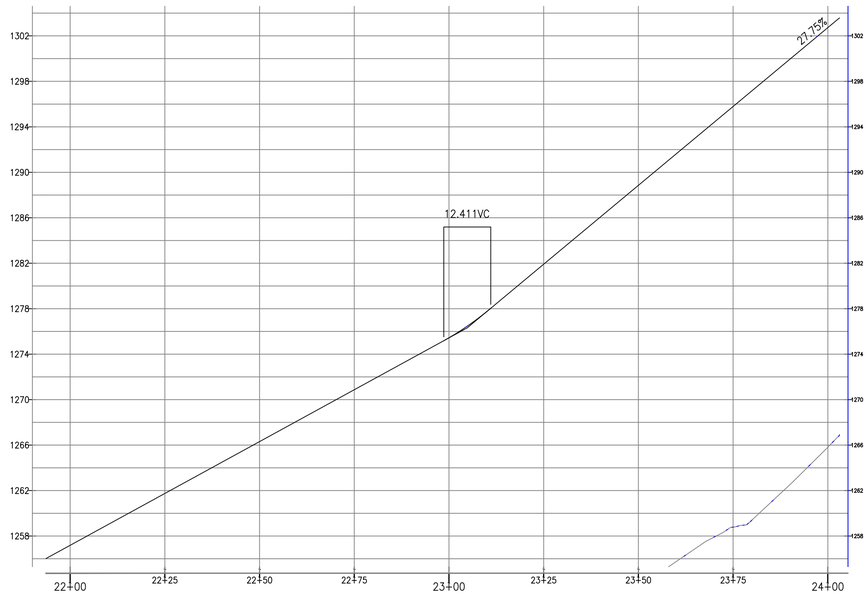
NORTH

1 / Z-2.5 PROPOSED SITE PLAN (SEGMENT 5)

SCALE: 22x34: 1" = 20'
11x17: 1" = 40'

0 20' 40' 60'





2 / Z-2.5 PROFILE VIEW (SEGMENT 5)

SCALE: 22x34: 1" = 20'
11x17: 1" = 40'

0 20' 40' 60'

verizon
118 FLANDERS ROAD
WESTBOROUGH, MA 01581
(508) 330-3300 TEL

Vertex Towers LLC
VERTEX TOWERS LLC
P.O. BOX 680
MEDFIELD, MA 02052

AEG ADVANCED ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
179 Swansea Mall Drive, Suite 1
Swansea, MA 02777
Tel: (508) 543-1414
Fax: (401) 633-6354

STATE OF VERMONT
SCOTT N. ADAMS
NO. 135423
CIVIL
LICENSED
PROFESSIONAL ENGINEER

AEG PROJECT #: 2023-0079

DRAWN BY: JWH

CHECKED BY: SNA

SUBMITTALS

REV#	DATE	DESCRIPTION
2	06/05/24	REVISED
3	08/19/24	REVISED
4	10/20/24	REVISED
5	10/24/24	REVISED
6	12/11/24	REVISED
7	02/18/25	REVISED
8	04/10/25	REVISED

VT-VT-0111A

ROCHESTER

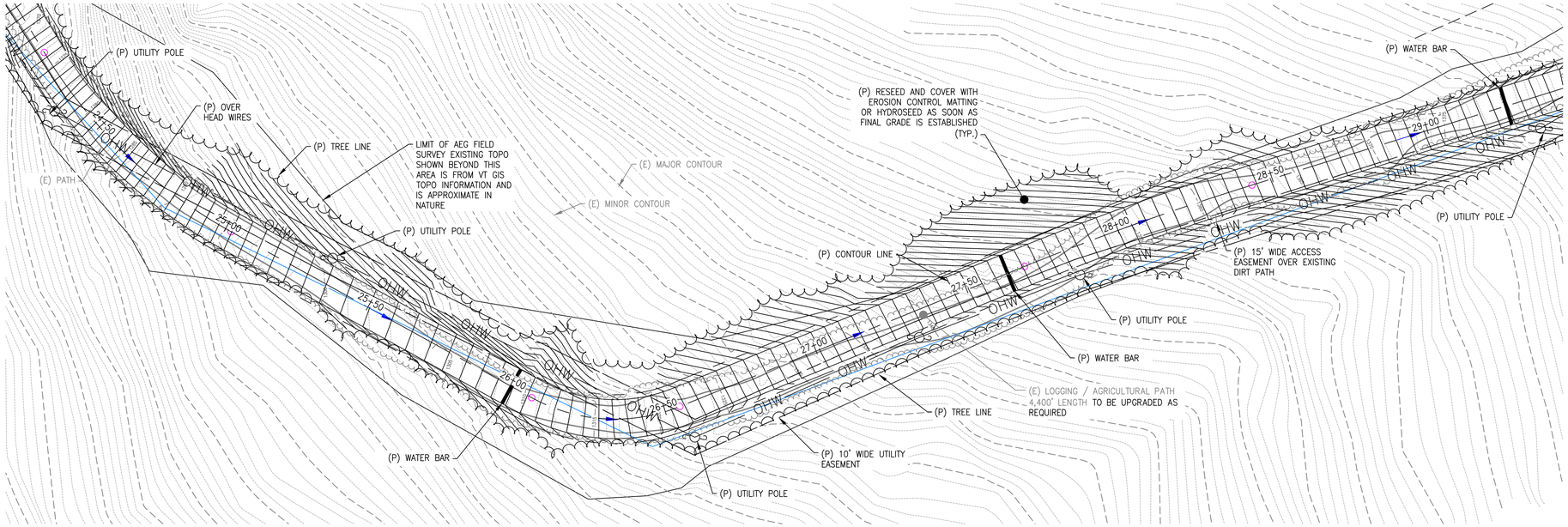
1030 VT ROUTE 100
ROCHESTER, VT 05767
WINDSOR COUNTY

SHEET TITLE

ENLARGED PLAN & PROFILE (SEGMENT 5)

SHEET NUMBER

Z-2.5

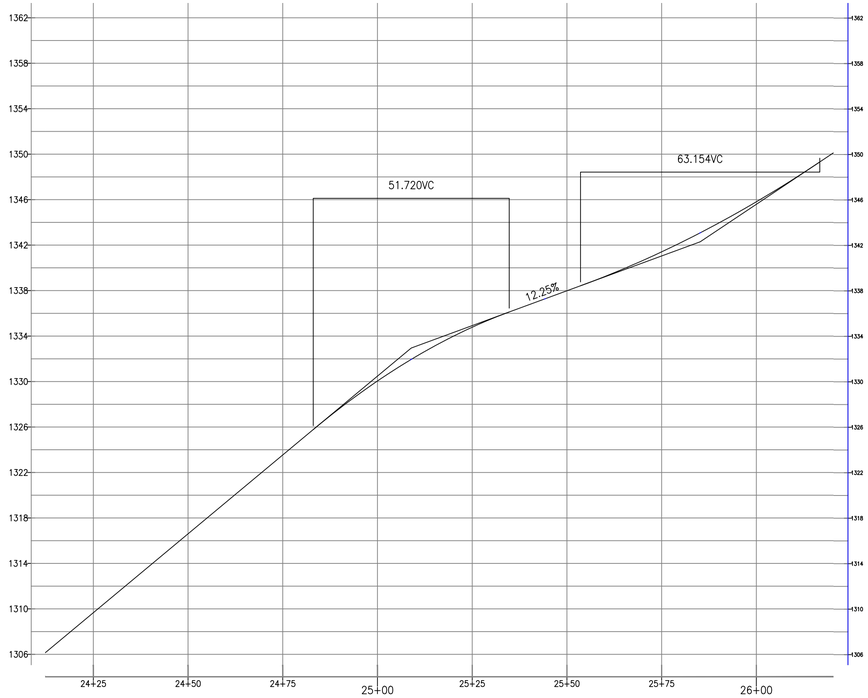


NORTH

1 / Z-2.6 PROPOSED SITE PLAN (SEGMENT 6)

SCALE: 22x34: 1" = 20'
11x17: 1" = 40'

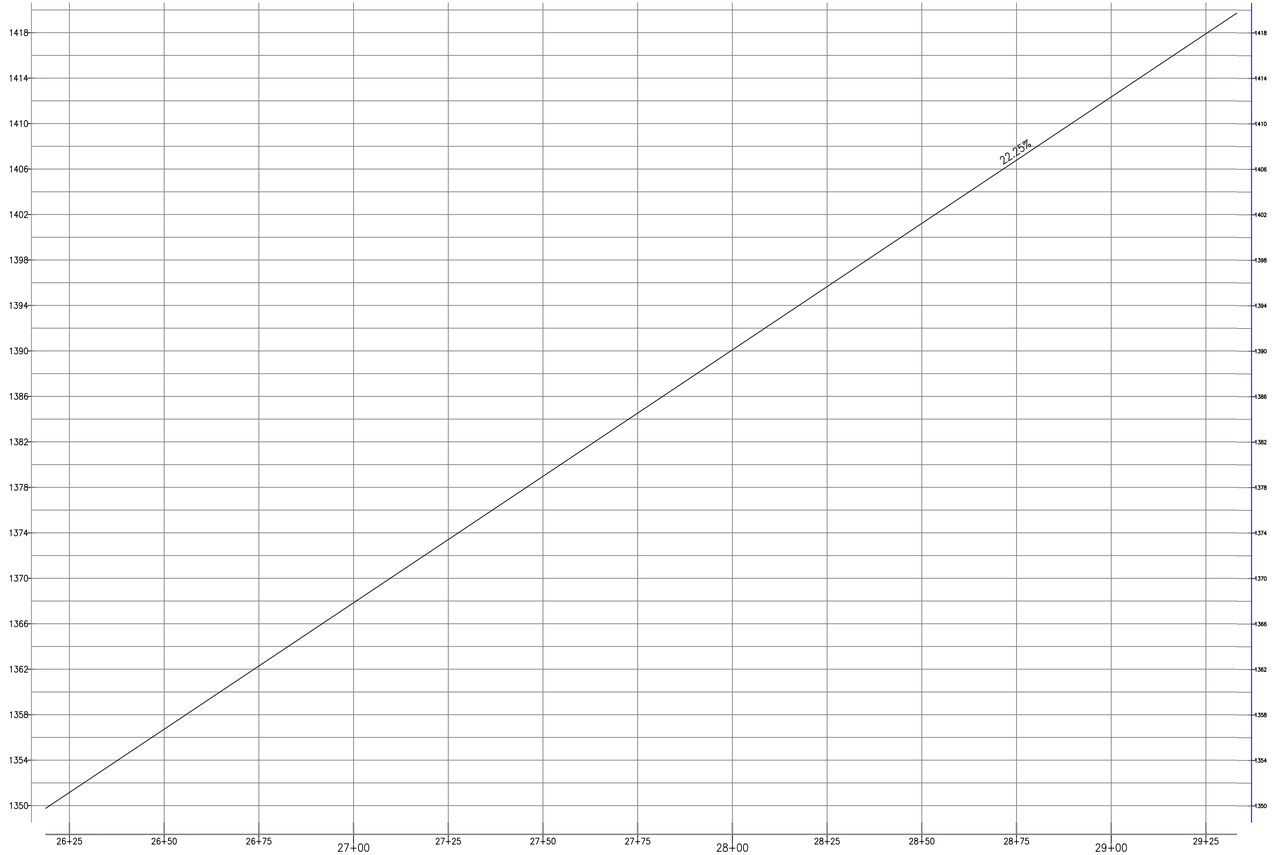
0 20' 40' 60'



2 / Z-2.6 PROFILE VIEW (SEGMENT 6)

SCALE: 22x34: 1" = 20'
11x17: 1" = 40'

0 20' 40' 60'



LEGEND

- PROPERTY LINE
- ZONING SETBACK LINE
- ABUTTING PROPERTY LINE
- EXIST. R.O.W. LAYOUT
- PROP. EASEMENT/LEASE AREA
- EXIST. CHAIN LINK FENCE
- PROP. CHAIN LINK FENCE
- EROSION CONTROL BARRIER
- EXIST. EDGE OF TREE CANOPY
- PROP. EDGE OF TREE CANOPY
- WETLAND BOUNDARY & FLAG
- WETLAND SETBACK LINE
- 290 (E) MAJOR CONTOUR
- 291 (E) MINOR CONTOUR
- GAS (E) U/G GAS MAIN (APPROX.)
- OHW (E) OVERHEAD UTILITY WIRES
- E (P) ELECTRICAL UTILITY CONDUIT
- T (P) TELCO/DATA UTILITY CONDUIT
- 290 (P) CONTOUR

verizon
118 FLANDERS ROAD
WESTBOROUGH, MA 01581
(508) 330-3300 TEL

Vertex Towers LLC
VERTEX TOWERS LLC
P.O. BOX 680
MEDFIELD, MA 02052

AEG ADVANCED ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
179 Swansea Mall Drive, Suite 1
Swansea, MA 02777
Tel: (508) 343-1414
Fax: (401) 633-6354

STATE OF VERMONT
SCOTT N. ADAMS
NO. 135423
CIVIL
LICENSED
PROFESSIONAL ENGINEER

AEG PROJECT #: 2023-0079

DRAWN BY: JWH

CHECKED BY: SNA

SUBMITTALS

REV#	DATE	DESCRIPTION
2	06/05/24	REVISED
3	08/19/24	REVISED
4	10/20/24	REVISED
5	10/24/24	REVISED
6	12/11/24	REVISED
7	02/18/25	REVISED
8	04/10/25	REVISED

VT-VT-0111A

ROCHESTER

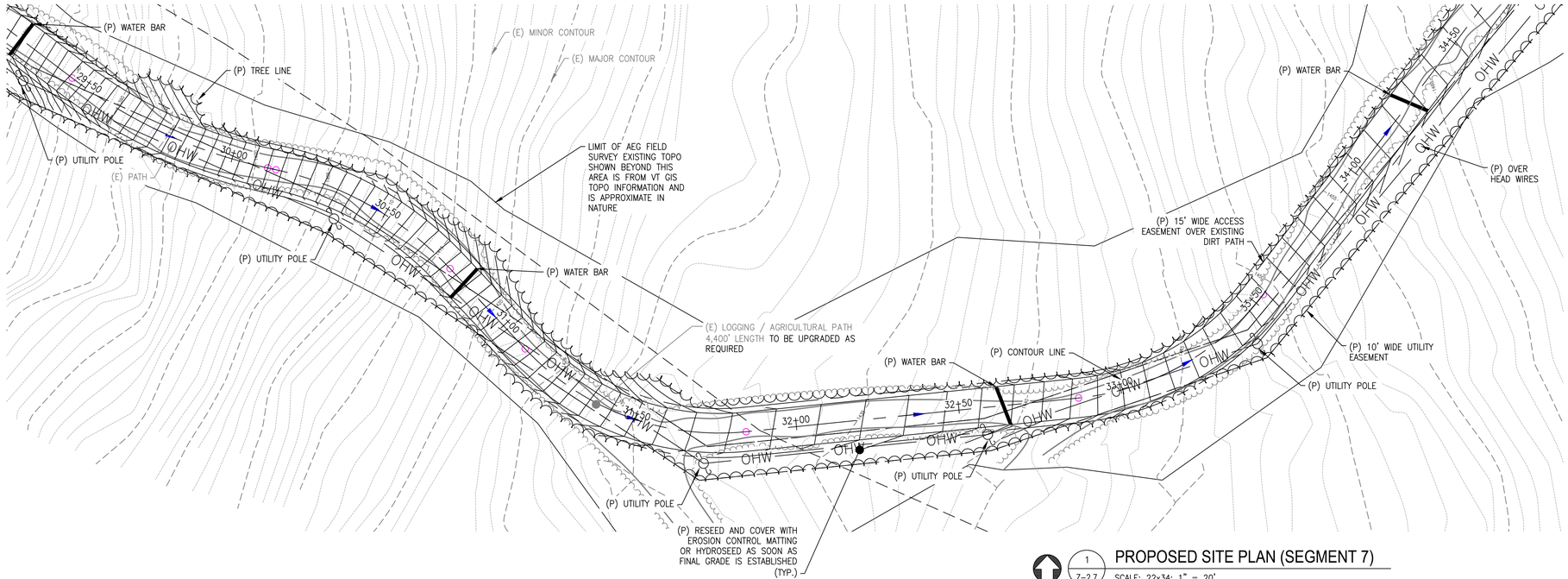
1030 VT ROUTE 100
ROCHESTER, VT 05767
WINDSOR COUNTY

SHEET TITLE

ENLARGED PLAN & PROFILE (SEGMENT 6)

SHEET NUMBER

Z-2.6

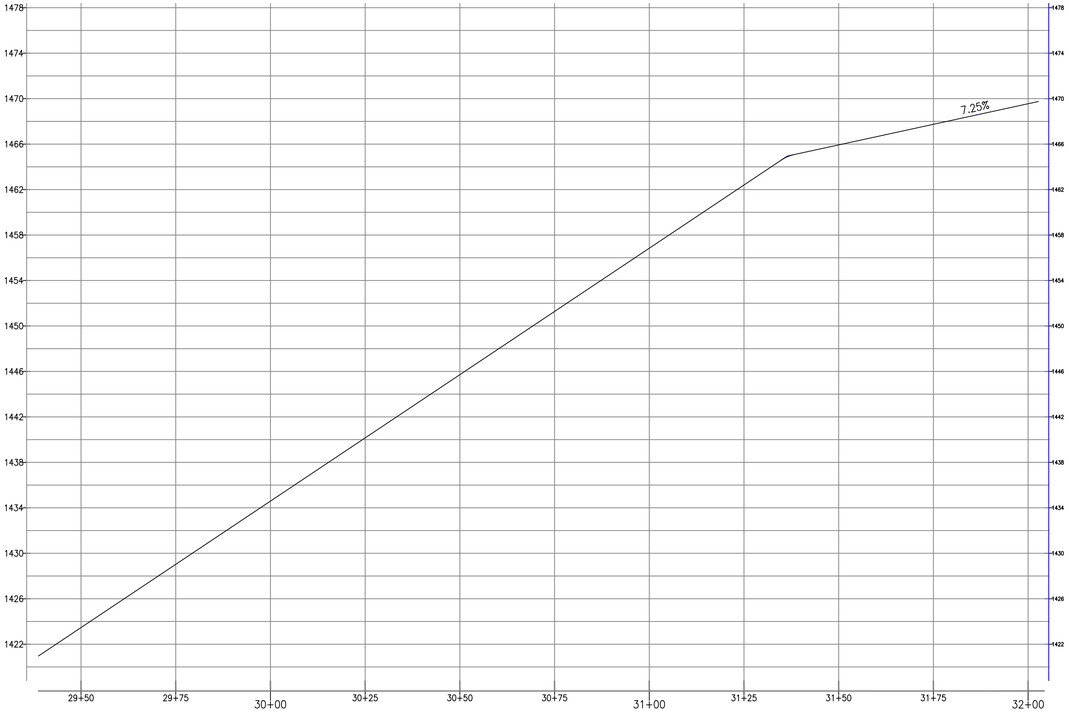


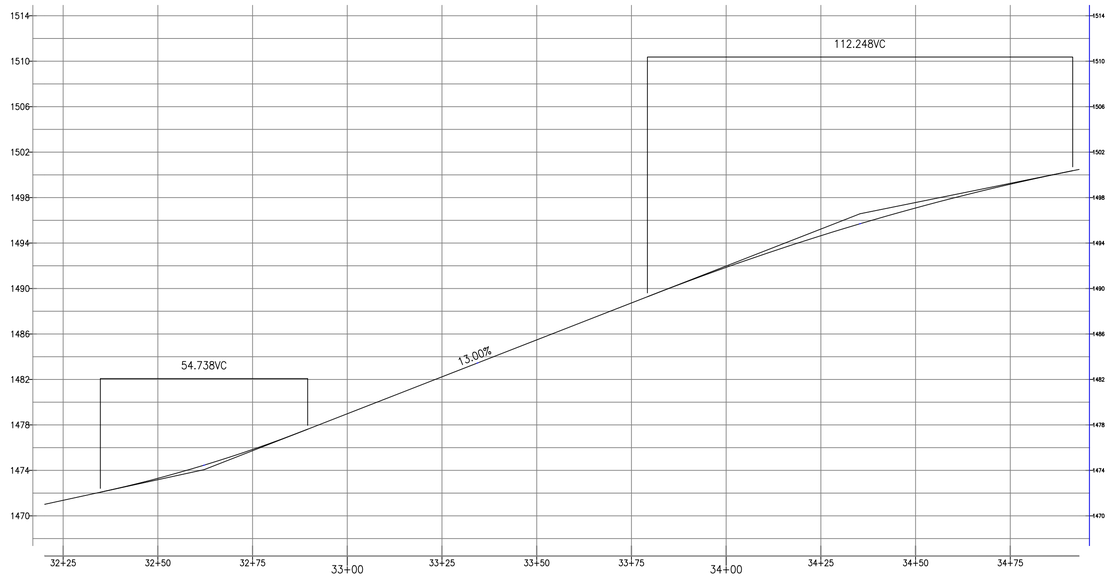
NORTH

1 / Z-2.7 PROPOSED SITE PLAN (SEGMENT 7)

SCALE: 22x34: 1" = 20'
11x17: 1" = 40'

0 20' 40' 60'





2 / Z-2.7 PROFILE VIEW (SEGMENT 7)

SCALE: 22x34: 1" = 20'
11x17: 1" = 40'

0 20' 40' 60'

LEGEND

- PROPERTY LINE
- ZONING SETBACK LINE
- ABUTTING PROPERTY LINE
- EXIST. R.O.W. LAYOUT
- PROP. EASEMENT/LEASE AREA
- EXIST. CHAIN LINK FENCE
- PROP. CHAIN LINK FENCE
- EROSION CONTROL BARRIER
- EXIST. EDGE OF TREE CANOPY
- PROP. EDGE OF TREE CANOPY
- WETLAND BOUNDARY & FLAG
- WETLAND SETBACK LINE
- 290 (E) MAJOR CONTOUR
- 291 (E) MINOR CONTOUR
- GAS (E) U/G GAS MAIN (APPROX.)
- OHW (E) OVERHEAD UTILITY WIRES
- E (P) ELECTRICAL UTILITY CONDUIT
- T (P) TELCO/DATA UTILITY CONDUIT
- 290 (P) CONTOUR

verizon
118 FLANDERS ROAD
WESTBOROUGH, MA 01581
(508) 330-3300 TEL

Vertex Towers LLC
VERTEX TOWERS LLC
P.O. BOX 680
MEDFIELD, MA 02052

AEG ADVANCED ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
179 Swansea Mall Drive, Suite 1
Swansea, MA 02777
Tel: (508) 343-1414
Fax: (401) 633-6354

STATE OF VERMONT
SCOTT N. ADAMS
NO. 135423
CIVIL
LICENSED
PROFESSIONAL ENGINEER

AEG PROJECT #: 2023-0079

DRAWN BY: JWH

CHECKED BY: SNA

SUBMITTALS

REV#	DATE	DESCRIPTION
2	06/05/24	REVISED
3	08/19/24	REVISED
4	10/20/24	REVISED
5	10/24/24	REVISED
6	12/11/24	REVISED
7	02/18/25	REVISED
8	04/10/25	REVISED

VT-VT-0111A

ROCHESTER

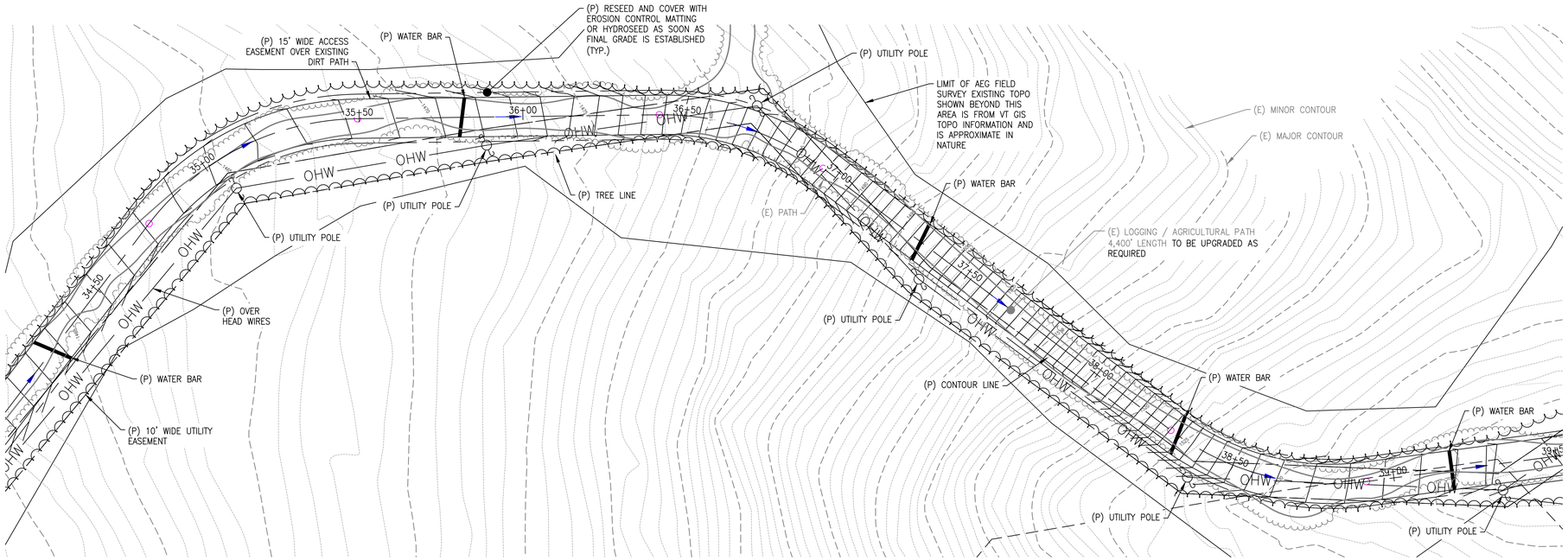
1030 VT ROUTE 100
ROCHESTER, VT 05767
WINDSOR COUNTY

SHEET TITLE

ENLARGED PLAN & PROFILE (SEGMENT 7)

SHEET NUMBER

Z-2.7

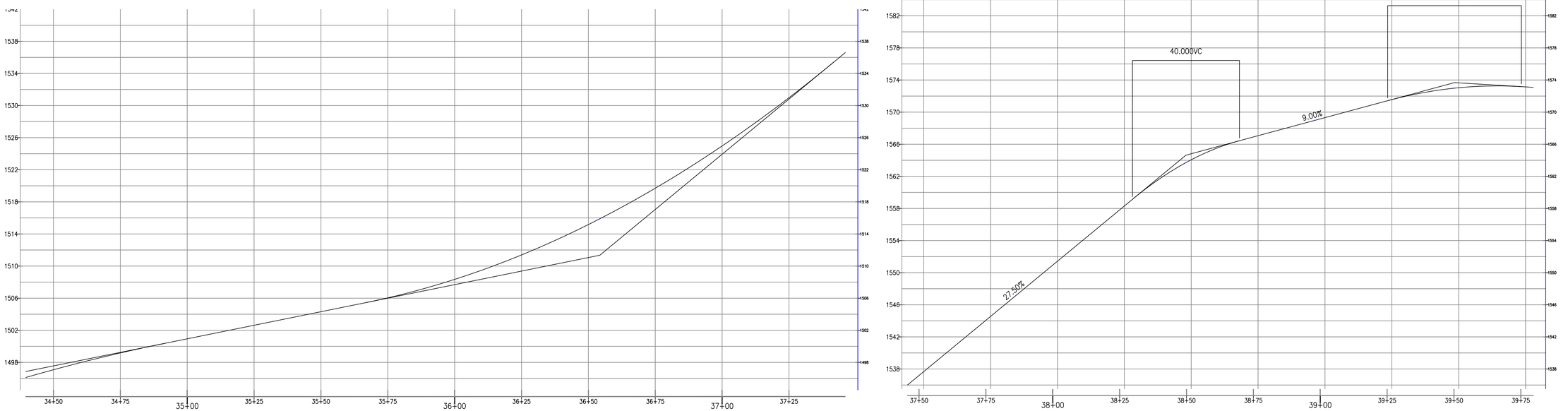


1 / Z-2.8 PROPOSED SITE PLAN (SEGMENT 8)

NORTH

SCALE: 22x34: 1" = 20'
11x17: 1" = 40'

0 20' 40' 60'



2 / Z-2.8 PROFILE VIEW (SEGMENT 8)

SCALE: 22x34: 1" = 20'
11x17: 1" = 40'

0 20' 40' 60'

LEGEND

- PROPERTY LINE
- ZONING SETBACK LINE
- ABUTTING PROPERTY LINE
- EXIST. R.O.W. LAYOUT
- PROP. EASEMENT/LEASE AREA
- EXIST. CHAIN LINK FENCE
- PROP. CHAIN LINK FENCE
- EROSION CONTROL BARRIER
- EXIST. EDGE OF TREE CANOPY
- PROP. EDGE OF TREE CANOPY
- WETLAND BOUNDARY & FLAG
- WETLAND SETBACK LINE
- 290 (E) MAJOR CONTOUR
- 291 (E) MINOR CONTOUR
- GAS (E) U/G GAS MAIN (APPROX.)
- OHW (E) OVERHEAD UTILITY WIRES
- E (P) ELECTRICAL UTILITY CONDUIT
- T (P) TELCO/DATA UTILITY CONDUIT
- 290 (P) CONTOUR

verizon
118 FLANDERS ROAD
WESTBOROUGH, MA 01581
(508) 330-3300 TEL

Vertex Towers LLC
VERTEX TOWERS LLC
P.O. BOX 680
MEDFIELD, MA 02052

AEG ADVANCED ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
179 Swansea Mall Drive, Suite 1
Swansea, MA 02777
Tel: (508) 343-1414
Fax: (401) 633-6354

STATE OF VERMONT
SCOTT N. ADAMS
NO. 135423
CIVIL
LICENSED
PROFESSIONAL ENGINEER

AEG PROJECT #: 2023-0079

DRAWN BY: JWH

CHECKED BY: SNA

SUBMITTALS

REV#	DATE	DESCRIPTION
2	06/05/24	REVISED
3	08/19/24	REVISED
4	10/20/24	REVISED
5	10/24/24	REVISED
6	12/11/24	REVISED
7	02/18/25	REVISED
8	04/10/25	REVISED

VT-VT-0111A

ROCHESTER

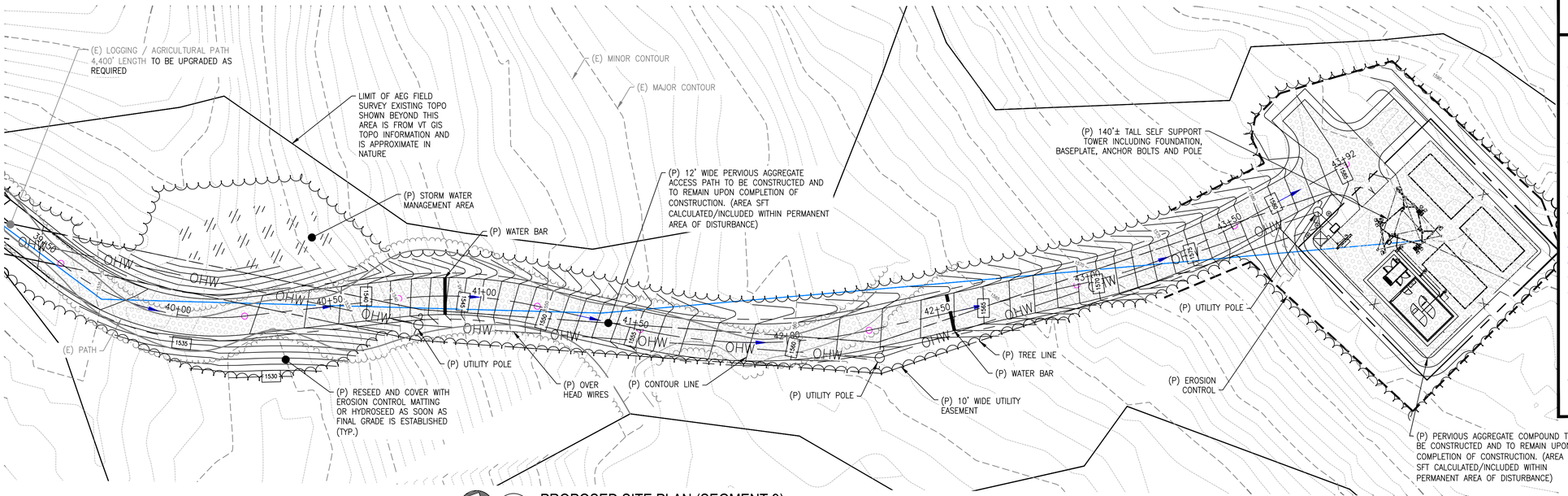
1030 VT ROUTE 100
ROCHESTER, VT 05767
WINDSOR COUNTY

SHEET TITLE

ENLARGED PLAN & PROFILE (SEGMENT 8)

SHEET NUMBER

Z-2.8



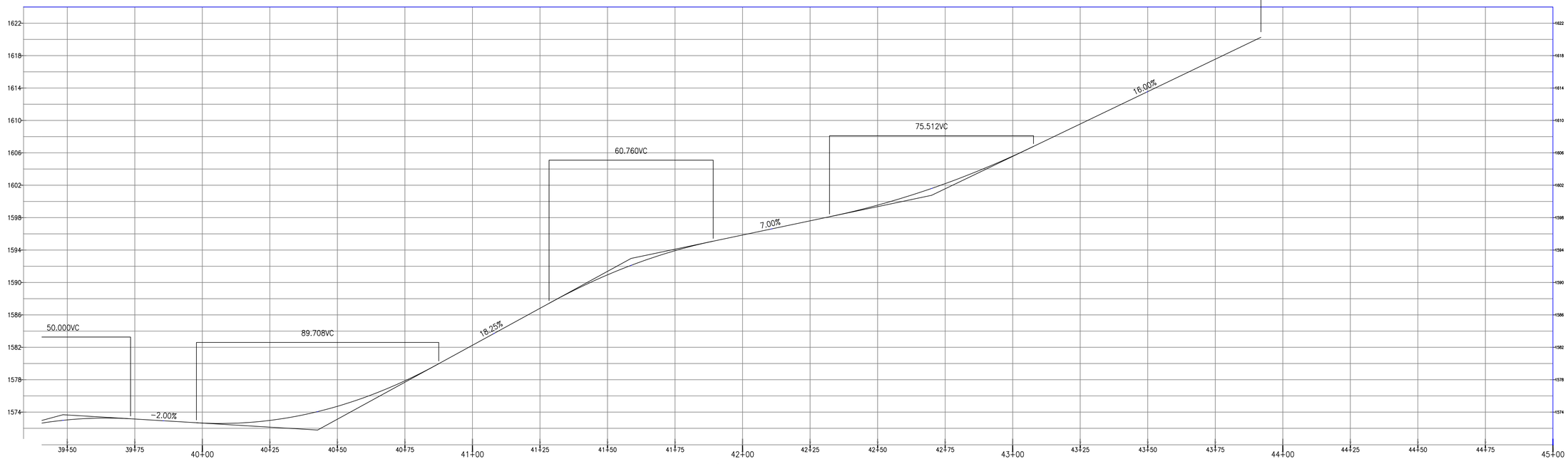
NORTH

1 / Z-2.9 PROPOSED SITE PLAN (SEGMENT 9)

SCALE: 22x34: 1" = 20'
11x17: 1" = 40'

0 20' 40' 60'

GRADE BREAK STA = 43+91.89
ELEV = 1620.265



2 / Z-2.9 PROFILE VIEW (SEGMENT 9)

SCALE: 22x34: 1" = 20'
11x17: 1" = 40'

0 20' 40' 60'

LEGEND

- PROPERTY LINE
- ZONING SETBACK LINE
- ABUTTING PROPERTY LINE
- EXIST. R.O.W. LAYOUT
- PROP. EASEMENT/LEASE AREA
- EXIST. CHAIN LINK FENCE
- PROP. CHAIN LINK FENCE
- EROSION CONTROL BARRIER
- EXIST. EDGE OF TREE CANOPY
- PROP. EDGE OF TREE CANOPY
- WETLAND BOUNDARY & FLAG
- WETLAND SETBACK LINE
- 290 (E) MAJOR CONTOUR
- 291 (E) MINOR CONTOUR
- GAS (E) U/G GAS MAIN (APPROX.)
- OHW (E) OVERHEAD UTILITY WIRES
- E (P) ELECTRICAL UTILITY CONDUIT
- T (P) TELCO/DATA UTILITY CONDUIT
- 290 (P) CONTOUR

verizon
118 FLANDERS ROAD
WESTBOROUGH, MA 01581
(508) 330-3300 TEL

Vertex Towers LLC
VERTEX TOWERS LLC
P.O. BOX 680
MEDFIELD, MA 02052

AEG ADVANCED ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
179 Swansea Mall Drive, Suite 1
Swansea, MA 02777
Tel: (508) 343-1414
Fax: (401) 633-6354

STATE OF VERMONT
SCOTT N. ADAMS
NO. 135423
CIVIL
LICENSED
PROFESSIONAL ENGINEER

AEG PROJECT #: 2023-0079

DRAWN BY: JWH

CHECKED BY: SNA

SUBMITTALS

REV#	DATE	DESCRIPTION
2	06/05/24	REVISED
3	08/19/24	REVISED
4	10/20/24	REVISED
5	10/24/24	REVISED
6	12/11/24	REVISED
7	02/18/25	REVISED
8	04/10/25	REVISED

VT-VT-0111A

ROCHESTER

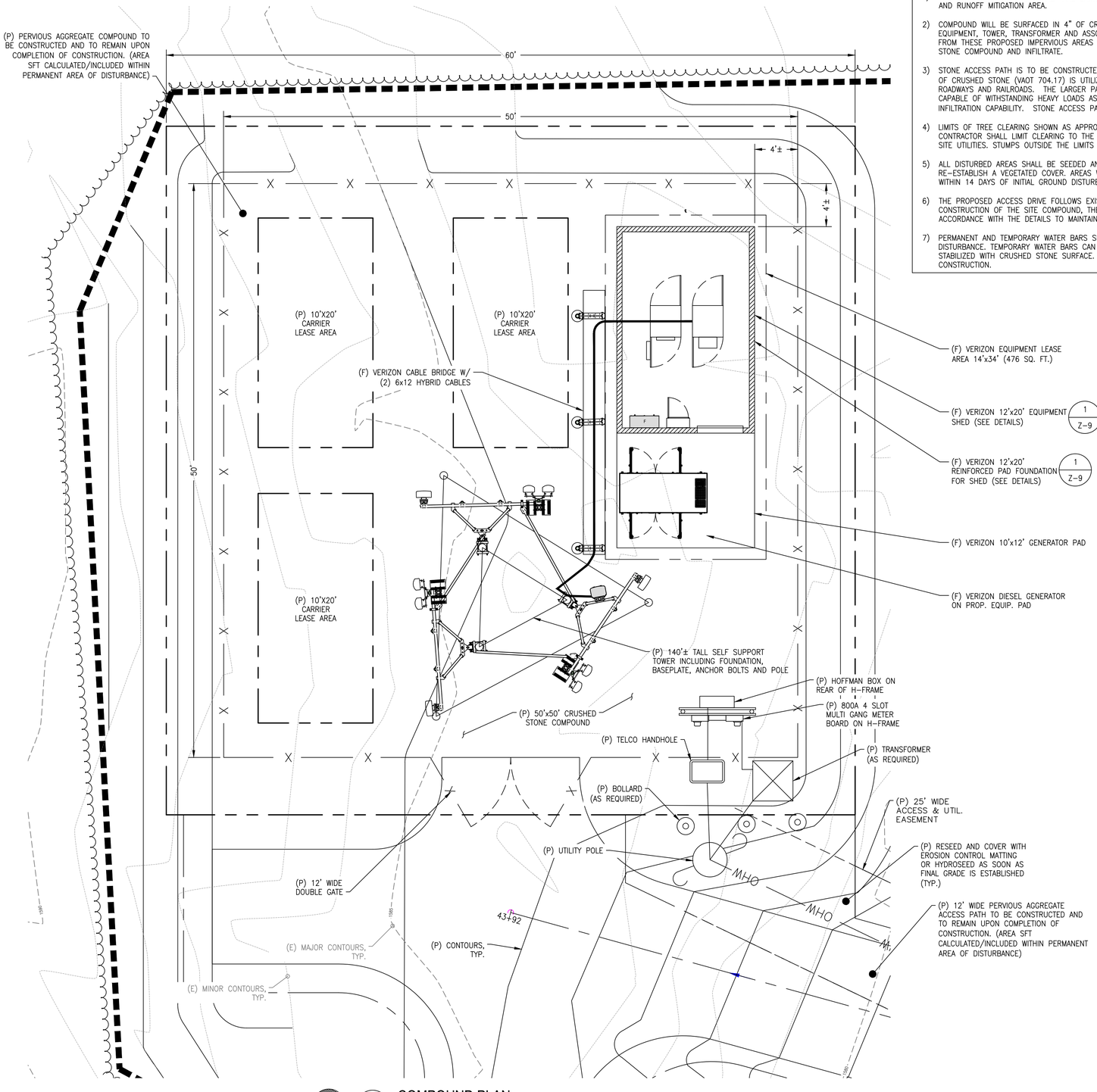
1030 VT ROUTE 100
ROCHESTER, VT 05767
WINDSOR COUNTY

SHEET TITLE

ENLARGED PLAN & PROFILE (SEGMENT 9)

SHEET NUMBER

Z-2.9



CONSTRUCTION DISTURBANCE NOTES:

1) THE PERMANENT DISTURBED AREA ARE LIMITED TO THE PROPOSED STONE PATH, FENCED COMPOUND AREA, AND RUNOFF MITIGATION AREA.

2) COMPOUND WILL BE SURFACED IN 4" OF CRUSHED STONE. IMPERVIOUS AREAS DUE TO CARRIER PADS, EQUIPMENT, TOWER, TRANSFORMER AND ASSOCIATED EQUIPMENT WILL BE BELOW 2,500SFT. ANY RUNNOFF FROM THESE PROPOSED IMPERVIOUS AREAS WIILL BE CAPTURED WITHIN THE VOID AREAS OF THE CRUSHED STONE COMPOUND AND INFILTRATE.

3) STONE ACCESS PATH IS TO BE CONSTRUCTED UTILIZING 8" FREE DRAINING CRUSHED STONE. THIS TYPE OF CRUSHED STONE (VAOT 704.17) IS UTILIZED AS A BASE MATERIAL FOR BUILDING FOUNDATIONS, ROADWAYS AND RAILROADS. THE LARGER PARTICLE SIZES PROVIDE A STABLE AND COMPACT BASE THAT IS CAPABLE OF WITHSTANDING HEAVY LOADS AS WELL AS PROVIDE FOR EXCELLENT DRAINAGE AND INFILTRATION CAPABILITY. STONE ACCESS PATH IS DESIGNED/INTENDED TO BE PERMEABLE.

4) LIMITS OF TREE CLEARING SHOWN AS APPROXIMATE. FIELD CONDITIONS AND INDIVIDUAL TREES WILL VARY. CONTRACTOR SHALL LIMIT CLEARING TO THE MINIMUM REQUIRED TO CONSTRUCT THE ACCESS DRIVE AND SITE UTILITIES. STUMPS OUTSIDE THE LIMITS OF EXCAVATION SHOULD BE LEFT IN PLACE.

5) ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED AS SOON AS FINAL GRADE IS ESTABLISHED TO RE-ESTABLISH A VEGETATED COVER. AREAS WITH ONGOING WORK SHALL BE TEMPORARILY STABILIZED WITHIN 14 DAYS OF INITIAL GROUND DISTURBANCE.

6) THE PROPOSED ACCESS DRIVE FOLLOWS EXISTING WOODS TRAIL WHENEVER FEASIBLE. FOLLOWING CONSTRUCTION OF THE SITE COMPOUND, THE CONTRACTOR SHALL INSTALL THE ACCESS ROAD IN ACCORDANCE WITH THE DETAILS TO MAINTAIN A PERVIOUS CONDITION.

7) PERMANENT AND TEMPORARY WATER BARS SHALL BE INSTALLED AND MAINTAINED FOLLOWING INITIAL SOIL DISTURBANCE. TEMPORARY WATER BARS CAN BE REMOVED ONCE EXPOSED SUBGRADE MATERIAL IS STABILIZED WITH CRUSHED STONE SURFACE. PERMANENT WATER BARS SHALL REMAIN FOLLOWING CONSTRUCTION.

SITE AREA CALCULATION NOTES:

1. TOTAL ACREAGE OF TEMPORARY EARTH DISTURBANCE: 72,024 SFT (1.65 ACRES)
2. TOTAL AREA OF PERMANENT EARTH DISTURBANCE: 8,833 SFT (0.20 ACRES)
3. TOTAL ACREAGE OF TREE CLEARING: 57,978 SFT (1.33 ACRES)
4. IMPERVIOUS AREA
   4.1. EXISTING = LOGGING / AGRICULTURAL EXEMPT
   4.2. PROPOSED = 1,500 SFT MAX. (0.03 ACRES MAX.)

- STORMWATER OPERATIONAL PERMIT REQUIRED: NO
- STORMWATER CONSTRUCTION GENERAL PERMIT REQUIRED: NO
- CALCULATIONS DO NOT INCLUDE EXISTING EXEMPT LOGGING AND AGRICULTRUAL PATH AREAS. (SEE NOTE #5)

NOTES:

1) DUE TO THE TYPE OF CONSTRUCTION AND STEEP GRADES ACCESS IS INTENDED TO BE PRIVATE AND LIMITED TO APPROPRIATE VEHICLES AND QUALIFIED TECHNICIANS/CONTRACTORS ONLY. THE INTENT OF THIS PRIVATE STONE PATH IS TO PROVIDE ACCESS TO THE TOWER COMPOUND LOCATION VIA ALL TERRAIN VEHICLES (ATV), OFF-PATH VEHICLES, CONSTRUCTION VEHICLES, 4X4 VEHICLES, AND SNOWMOBILES. THIS ACCESS PATH IS NOT INTENDED FOR NORMAL PUBLIC/VEHICULAR TRAFFIC AND/OR (2) WHEEL DRIVE VEHICLES AND SHOULD BE RESTRICTED AS SUCH BY OWNER.

2) STONE ACCESS PATH WILL NOT BE PLOWED DURING WINTER. SHOULD ACCESS BE REQUIRED, SNOWMOBILE AND/OR TRACKED VEHICLES WILL BE UTILIZED.

3) STONE ACCESS PATH WILL BE MAINTAINED EACH SPRING AND FALL BY:
   3)1) CLEARING ALL DEBRIS, INCLUDING BY NOT LIMITED TO LEAVES, TREES BRANCHES AND OTHER OBJECTS THAT WOULD LIMIT THE STONES ABILITY TO INFILTRATE.
   3)2) INSPECT AND MAINTAIN WATER BARS / STORMWATER DEVICES TWICE A YEAR, AND AFTER ALL MAJOR RAIN EVENTS.

4) SPEED LIMITED TO 10 MPH.

5) IT SHOULD BE NOTED THAT THE EXISTING ACCESS PATH HAS HISTORICALLY BEEN UTILIZED AS LOGGING PATH/AGRICULTURAL PATH/ SNOWMOBILE VAST PATH (PORTION). THIS PATH WILL BE UTILIZED FOR ACCESS TO THE TELECOMMUNICATIONS COMPOUND IN ORDER TO REDUCE PERMANENT DISTURBANCE AREAS. IT IS EXPECTED THAT THIS PRIVATE PATH WILL CONTINUE TO BE UTILIZED BY THESE OPERATIONS IN THE FUTURE. INSPECTIONS SHOULD BE COMPLETED PRIOR TO LOGGING OPERATIONS AS WELL AS UPON COMPLETION. ANY DEFICIENCIES ARE TO BE REPAIRED BY THE LOGGING COMPANY.

LEGEND

- PROPERTY LINE
- ZONING SETBACK LINE
- ABUTTING PROPERTY LINE
- EXIST. R.O.W. LAYOUT
- PROP. EASEMENT/LEASE AREA
- EXIST. CHAIN LINK FENCE
- PROP. CHAIN LINK FENCE
- EROSION CONTROL BARRIER
- EXIST. EDGE OF TREE CANOPY
- PROP. EDGE OF TREE CANOPY
- WETLAND BOUNDARY & FLAG
- WETLAND SETBACK LINE
- (E) MAJOR CONTOUR
- (E) MINOR CONTOUR
- (E) U/G GAS MAIN (APPROX.)
- (E) OVERHEAD UTILITY WIRES
- (P) ELECTRICAL UTILITY CONDUIT
- (P) TELCO/DATA UTILITY CONDUIT

verizon
118 FLANDERS ROAD
WESTBOROUGH, MA 01581
(508) 330-3300 TEL

Vertex Towers LLC
VERTEX TOWERS LLC
P.O. BOX 680
MEDFIELD, MA 02052

AEG ADVANCED ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
179 Swansea Mall Drive, Suite 1
Swansea, MA 02777
Tel: (508) 343-1414
Fax: (401) 633-6354

STATE OF VERMONT
SCOTT N. ADAMSON
NO. 135423
CIVIL
LICENSED
PROFESSIONAL ENGINEER

AEG PROJECT #: 2023-0079

DRAWN BY: JWH

CHECKED BY: SNA

SUBMITTALS

REV#	DATE	DESCRIPTION
2	06/05/24	REVISED
3	08/19/24	REVISED
4	10/20/24	REVISED
5	10/24/24	REVISED
6	12/11/24	REVISED
7	02/18/25	REVISED
8	04/10/25	REVISED

VT-VT-0111A

ROCHESTER

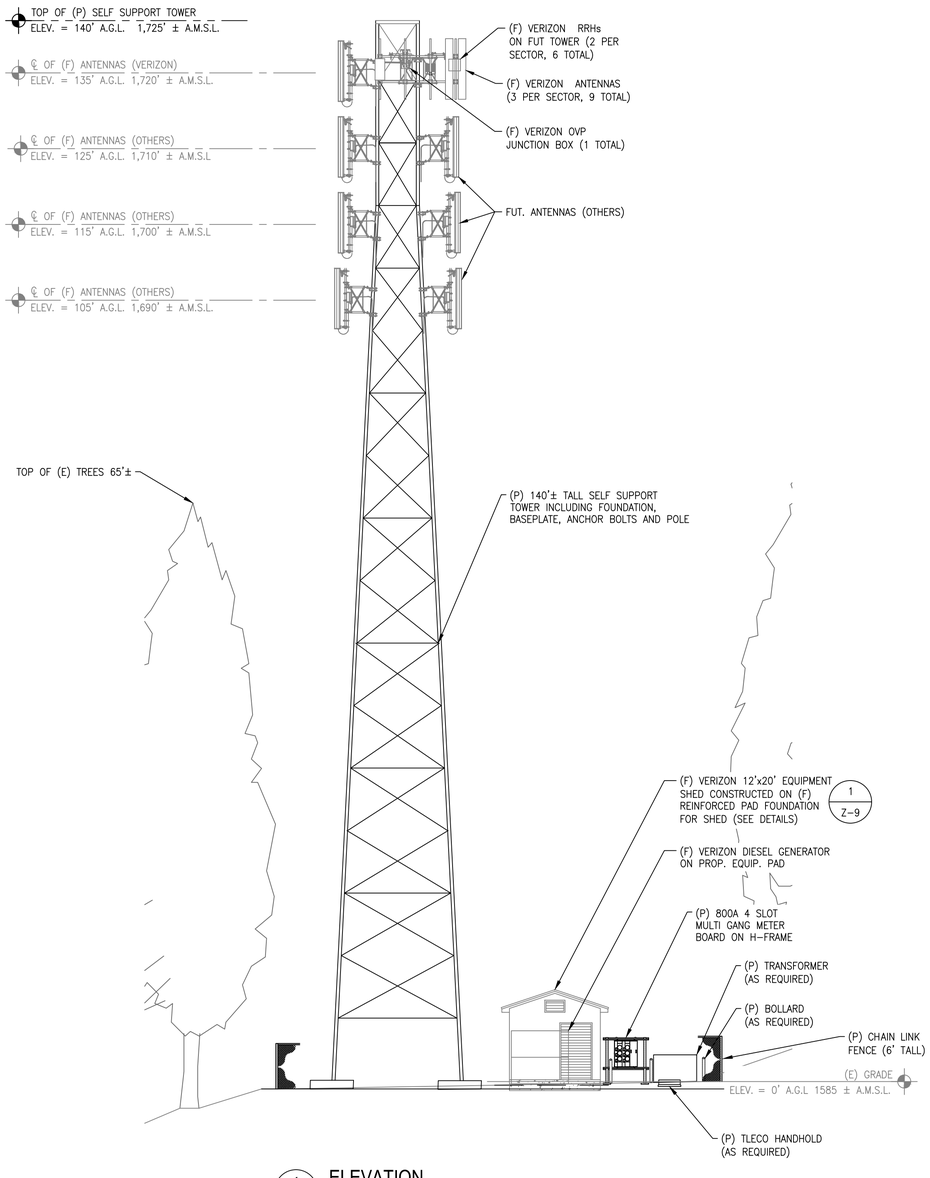
1030 VT ROUTE 100
ROCHESTER, VT 05767
WINDSOR COUNTY

SHEET TITLE

COMPOUND PLAN

SHEET NUMBER

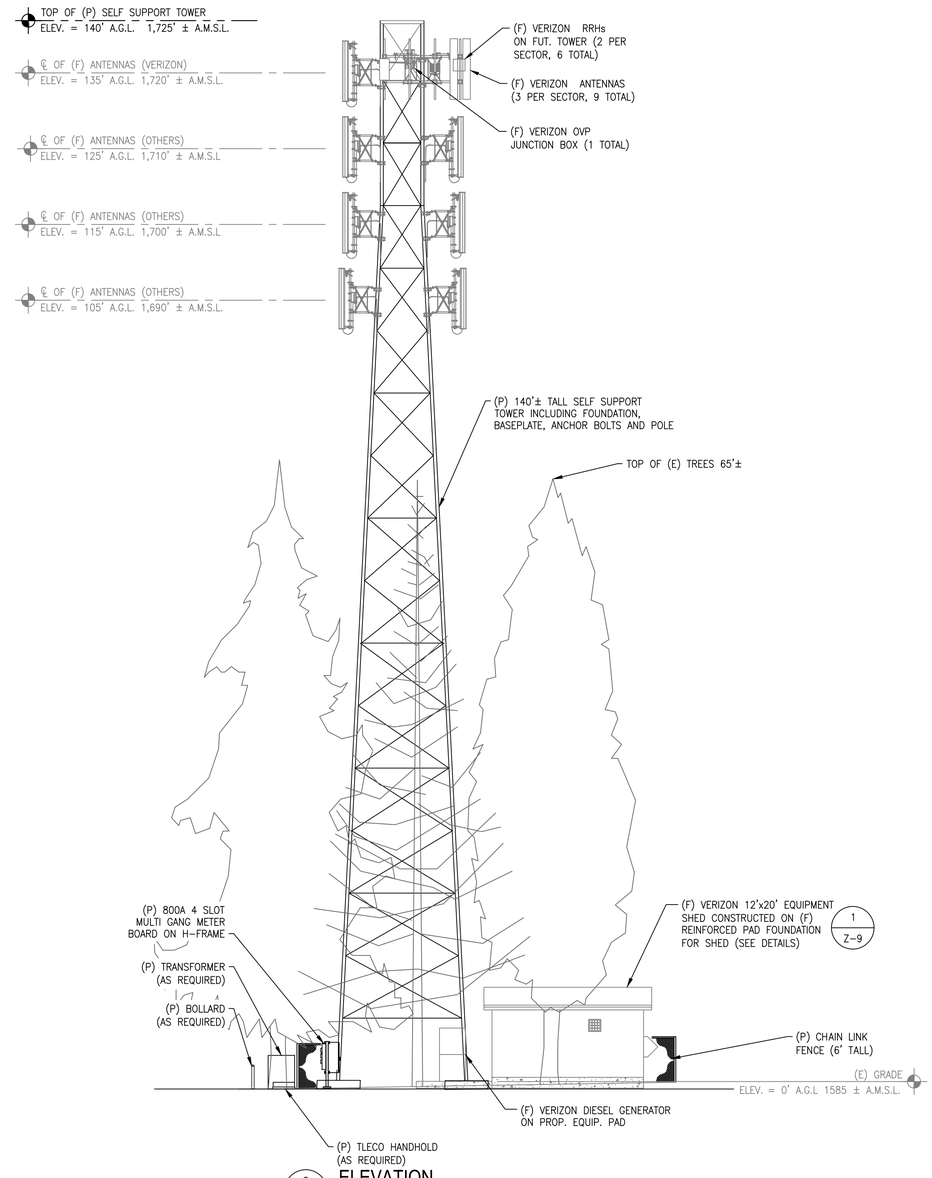
Z-3



1 Z-4 **ELEVATION**

SCALE: 22x34: 1"=10'
11x17: 1"=20'

0 10' 20' 30'



2 Z-4 **ELEVATION**

SCALE: 22x34: 1"=10'
11x17: 1"=20'

0 10' 20' 30'

verizon
118 FLANDERS ROAD
WESTBOROUGH, MA 01581
(508) 330-3300 TEL

Vertex Towers LLC
VERTEX TOWERS LLC
P.O. BOX 680
MEDFIELD, MA 02052

AEG ADVANCED ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
179 Swansea Mall Drive, Suite 1
Swansea, MA 02777
Tel: (508) 343-1414
Fax: (401) 633-6354

STATE OF VERMONT
SCOTT N. ADAMS
NO. 135423
CIVIL
LICENSED
PROFESSIONAL ENGINEER

AEG PROJECT #: 2023-0079

DRAWN BY: JWH

CHECKED BY: SNA

SUBMITTALS

REV#	DATE	DESCRIPTION
2	06/05/24	REVISED
3	08/19/24	REVISED
4	10/20/24	REVISED
5	10/24/24	REVISED
6	12/11/24	REVISED
7	02/18/25	REVISED
8	04/10/25	REVISED

VT-VT-0111A

ROCHESTER

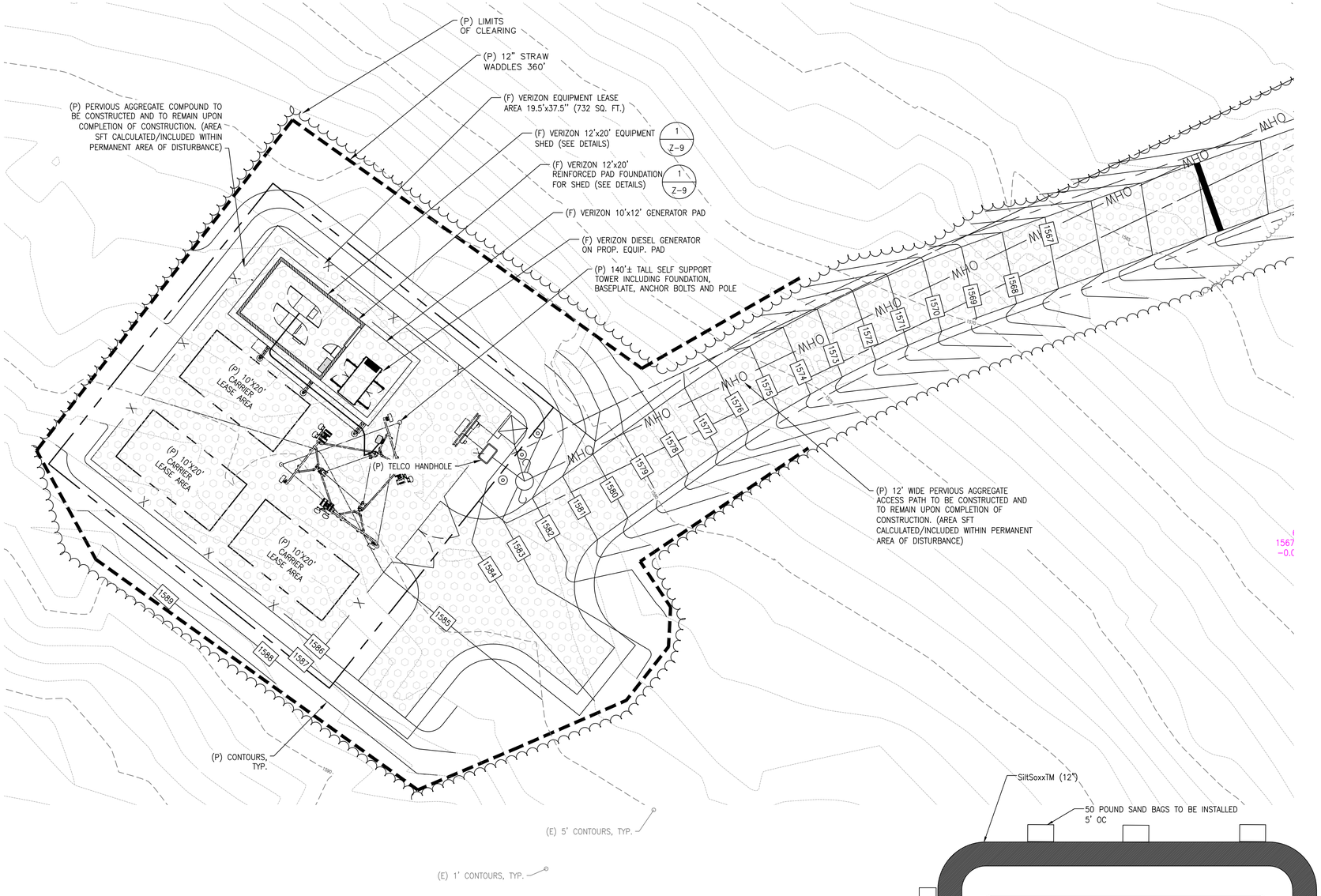
1030 VT ROUTE 100
ROCHESTER, VT 05767
WINDSOR COUNTY

SHEET TITLE

COMPOUND / TOWER ELEVATIONS

SHEET NUMBER

Z-4



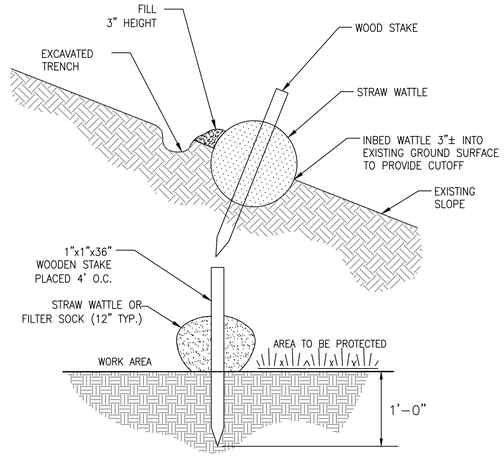
1 Z-5 **EROSION CONTROL PLAN**

SCALE: 22x34: 1"=6'
11x17: 1"=12'

0 6' 12' 18'

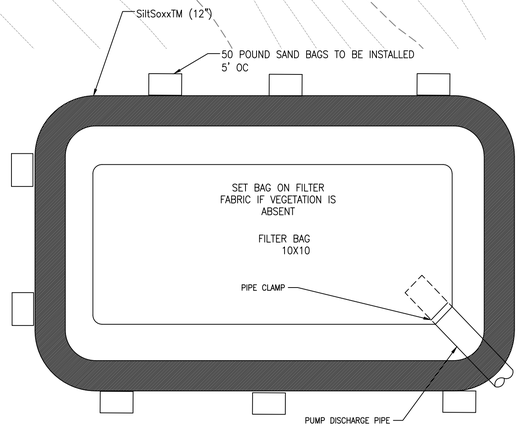
LEGEND

- PROPERTY LINE
- ZONING SETBACK LINE
- ABUTTING PROPERTY LINE
- EXIST. R.O.W. LAYOUT
- PROP. EASEMENT/LEASE AREA
- EXIST. CHAIN LINK FENCE
- PROP. CHAIN LINK FENCE
- EROSION CONTROL BARRIER
- EXIST. EDGE OF TREE CANOPY
- PROP. EDGE OF TREE CANOPY
- WETLAND BOUNDARY & FLAG
- WETLAND SETBACK LINE
- (E) MAJOR CONTOUR
- (E) MINOR CONTOUR
- (E) U/G GAS MAIN (APPROX.)
- (E) OVERHEAD UTILITY WIRES
- (P) ELECTRICAL UTILITY CONDUIT
- (P) TELCO/DATA UTILITY CONDUIT
- (P) CONTOUR



2 Z-5 **EROSION CONTROL BARRIER DETAIL**

SCALE: NTS



NOTES:
1. ENSURE DISCHARGE AREA IS COVERED BY STABLE VEGETATION.
2. USE DIFFUSER NOZZLE OR LOW DISCHARGE RATE TO PREVENT SCOURING
3. TO BE PLACED AT AN UPLAND LOCATION THAT WILL ALLOW WATER TO DRAIN TO THE GROUND
4. THE SIZE OF THE STRAW BALE ENCLOSURE TO BE 10' X10' AND CAN BE ADJUSTED BASED ON WATER VOLUME
5. ADDITIONAL STRAW BALES CAN BE USED TO INCREASE RETENTION & FILTRATION

3 Z-5 **DEWATERING BASIN DETAIL**

SCALE: N.T.S.

EROSION AND SEDIMENT CONTROL NOTES:

1. PRIOR TO STARTING ANY WORK ON THE SITE, THE CONTRACTOR SHALL NOTIFY APPROPRIATE AGENCIES AND SHALL INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AND AS IDENTIFIED IN FEDERAL, STATE, AND LOCAL APPROVAL DOCUMENTS PERTAINING TO THIS PROJECT.
2. CONTRACTOR SHALL CONDUCT INSPECT AND MAINTAIN EROSION CONTROL MEASURES, AND REMOVE SEDIMENT THEREFROM ON A WEEKLY BASIS AND WITHIN TWELVE HOURS AFTER EACH STORM EVENT AND DISPOSE OF SEDIMENTS IN AN UPLAND AREA SUCH THAT THEY DO NOT ENCUMBER OTHER DRAINAGE STRUCTURES AND PROTECTED AREAS.
3. CONTRACTOR SHALL BE FULLY RESPONSIBLE TO CONTROL CONSTRUCTION SUCH THAT SEDIMENTATION SHALL NOT AFFECT REGULATORY PROTECTED AREAS, WETHER SUCH SEDIMENTATION IS CAUSED BY WATER, WIND, OR DIRECT DEPOSIT.
4. CONTRACTOR SHALL PERFORM CONSTRUCTION SEQUENCING SUCH THAT EARTH MATERIALS ARE EXPOSED FOR A MINIMUM OF TIME BEFORE THEY ARE COVERED, SEEDED, OR OTHERWISE STABILIZED TO PREVENT EROSION.
5. UPON COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER, CONTRACTOR SHALL REMOVE AND DISPOSE OF EROSION CONTROL MEASURES AND CLEAN SEDIMENT AND DEBRIS FROM ENTIRE SITE.
6. NO SLOPE SHALL BE GREATER THAT 3 TO 1.
7. CONTRACTOR TO USE WATER TRUCK TO SPRAY DOWN ACCESS PATH FOR DUST CONTROL AS REQUIRED
8. NO CONCRETE TO BE WASHED OUT IN THE WETLANDS

verizon
118 FLANDERS ROAD
WESTBOROUGH, MA 01581
(508) 330-3300 TEL

Vertex Towers LLC
VERTEX TOWERS LLC
P.O. BOX 680
MEDFIELD, MA 02052

AEG ADVANCED ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
179 Swansea Mall Drive, Suite 1
Swansea, MA 02777
Tel: (508) 343-1414
Fax: (401) 633-6354

STATE OF VERMONT
SCOTT N. ADAMS
NO. 135423
CIVIL
LICENSED
PROFESSIONAL ENGINEER

AEG PROJECT #: 2023-0079

DRAWN BY: JWH

CHECKED BY: SNA

SUBMITTALS

REV#	DATE	DESCRIPTION
2	06/05/24	REVISED
3	08/19/24	REVISED
4	10/20/24	REVISED
5	10/24/24	REVISED
6	12/11/24	REVISED
7	02/18/25	REVISED
8	04/10/25	REVISED

VT-VT-0111A

ROCHESTER

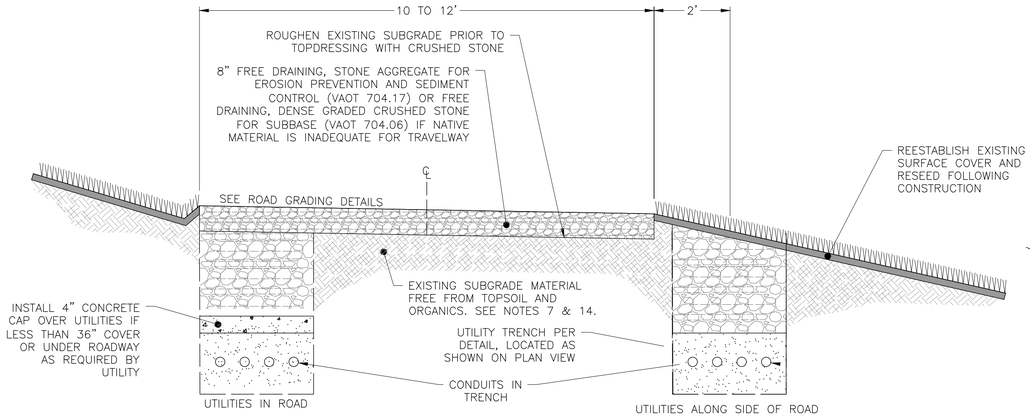
1030 VT ROUTE 100
ROCHESTER, VT 05767
WINDSOR COUNTY

SHEET TITLE

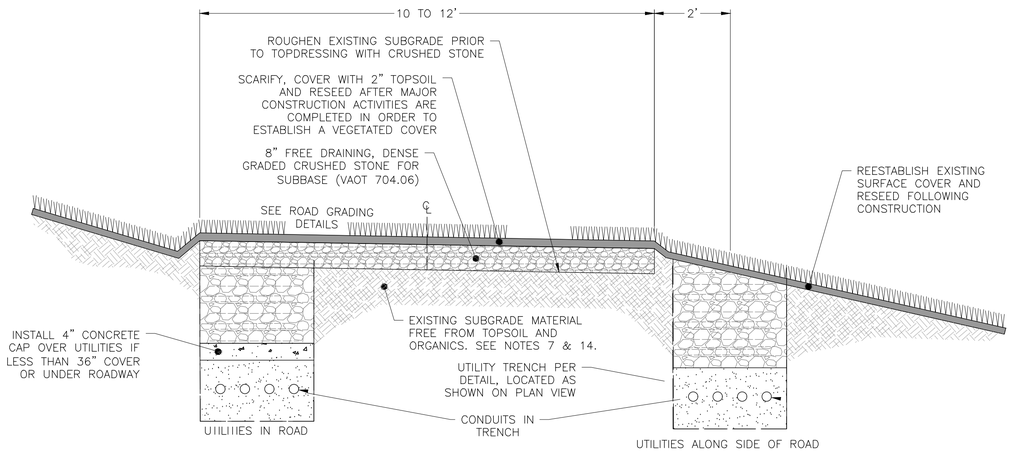
EROSION CONTROL PLAN

SHEET NUMBER

Z-5



PERVIOUS AGGREGATE ACCESS ROAD CROSS SECTION
NOT TO SCALE

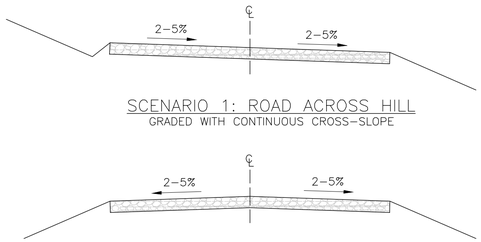


TYPICAL RE-VEGETATED ACCESS ROAD CROSS SECTION
NOT TO SCALE

ACCESS ROAD NOTES:

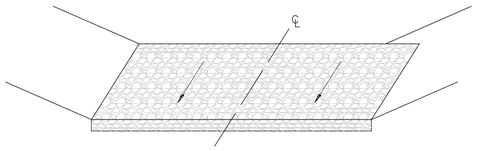
1. ACCESS TO FOLLOW EXISTING PATHS WHENEVER FEASIBLE.
2. TREE CLEARING SHALL BE LIMITED TO THE MINIMUM REQUIRED TO PERMIT CONSTRUCTION VEHICLE ACCESS. SEE PLAN FOR CLEARING LIMITS. STUMPS OUTSIDE THE ACCESS, UTILITY TRENCH, OR FILL LIMITS SHALL BE LEFT IN PLACE.
3. CONSTRUCTION STANDARDS SHALL MEET OR EXCEED THOSE OUTLINED IN "THE ACCEPTABLE MANAGEMENT PRACTICES FOR MAINTAINING WATER QUALITY ON LOGGING JOBS IN VERMONT" HANDBOOK.
4. UTILITY TRENCH LOCATION SHOWN AS TYPICAL. REFER TO SITE PLAN FOR UTILITY PLACEMENT.
5. STABILIZE ALL EXPOSED SOILS IN CONFORMANCE WITH THE LOW RISK HANDBOOK OR STORMWATER CONSTRUCTION GENERAL PERMIT. AT A MINIMUM ALL SOILS SHALL BE STABILIZED WITHIN 14 DAYS.
6. CONTRACTOR TO FOLLOW STATE OF VERMONT LOW RISK HANDBOOK FOR EROSION PREVENTION AND SEDIMENT CONTROL. SEE EPSC LOW RISK HANDBOOK.
7. REMOVE UNSUITABLE SUBGRADE MATERIAL AND REPLACE WITH CRUSHED STONE AGGREGATE OR NATIVE MATERIAL AND SLOPE TO PROVIDE STABLE WORKING SURFACE.
8. CUT/FILL SLOPES TO BE RE-SEEDED AND STABILIZED WITH MULCH, EROSION CONTROL MATTING, STONE RIPRAP, AND/OR WOOD CHIPS ONCE FINAL GRADE HAS BEEN ESTABLISHED.
9. ACCESS ROAD TO BE GRADED WITH A MINIMUM OF 2% CROSS-SLOPE.
10. RE-VEGETATED SLOPES EXCEEDING 3H:1V UPON RESTORATION TO BE MATTED WITH JUTE MAT EROSION CONTROL BLANKETS, NORTH AMERICAN GREEN S150BN, OR APPROVED EQUIVALENT.
11. INSTALL EROSION CONTROLS IN ACCORDANCE WITH THE SITE PLANS AND PROJECT PERMITS. ADDITIONAL EROSION CONTROLS MAY BE REQUIRED AS DIRECTED BY THE PROJECT ENVIRONMENTAL COMPLIANCE INSPECTOR OR THE ON-SITE PLAN COORDINATOR.
12. INSTALL PERMANENT WATER BARS IN ACCORDANCE WITH TYPICAL DETAIL.
13. MINIMALLY COMPACT EXISTING SUBGRADE MATERIAL AS NECESSARY TO CREATE A STABLE WORKING SURFACE FOR CONSTRUCTION ACCESS, WITHOUT OVER-COMPACTING AND CREATING AN IMPERVIOUS SURFACE. FOLLOWING HEAVY CONSTRUCTION TRAFFIC, TILL OR BACK BLADE THE ACCESS ROAD SUBGRADE PRIOR TO SURFACE COURSE PLACEMENT TO PROMOTE INFILTRATION.

1 / Z-6 ACCESS PATH DETAILS
SCALE: NTS



SCENARIO 1: ROAD ACROSS HILL
GRADED WITH CONTINUOUS CROSS-SLOPE

SCENARIO 2: RAISED ROADWAY
GRADED WITH CROWN

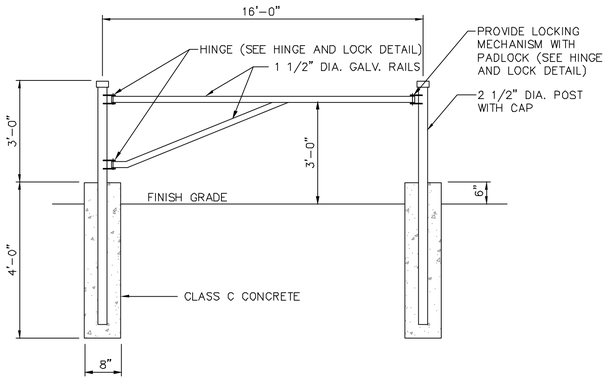


SCENARIO 3: ROAD IN VALLEY
GRADED TO DRAIN LONGITUDINALLY, NO CROSS-SLOPE

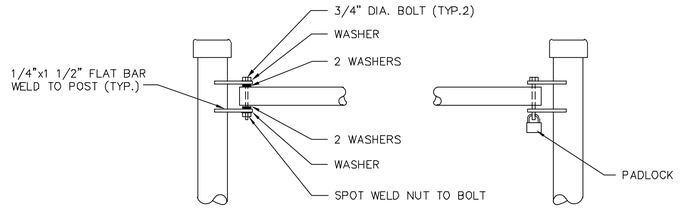
NOTE:
LIMIT SCENARIO 3 FLOW LENGTH TO 100' MAXIMUM, AND INSTALL A WATERBAR EVERY 50'.

ROAD GRADING DETAILS
NOT TO SCALE

NOTE:
WIDTH OF GATE #4 TO BE 26'-0".
ALL OTHER GATES TO BE 16'-0" WIDE.



ACCESS ROAD GATE DETAIL (IF NEEDED)
NOT TO SCALE



GATE HINGE AND LOCK DETAIL (IF NEEDED)
NOT TO SCALE

2 / Z-6 ACCESS GATE DETAILS
SCALE: NTS

verizon
118 FLANDERS ROAD
WESTBOROUGH, MA 01581
(508) 330-3300 TEL

Vertex Towers LLC
VERTEX TOWERS LLC
P.O. BOX 680
MEDFIELD, MA 02052

AEG ADVANCED ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
179 Swansea Mall Drive, Suite 1
Swansea, MA 02777
Tel: (508) 343-1414
Fax: (401) 633-6354

STATE OF VERMONT
SCOTT N. ADAMS
NO. 135423
CIVIL
LICENSED
PROFESSIONAL ENGINEER

AEG PROJECT #: 2023-0079

DRAWN BY: JWH

CHECKED BY: SNA

SUBMITTALS

REV#	DATE	DESCRIPTION
2	06/05/24	REVISED
3	08/19/24	REVISED
4	10/20/24	REVISED
5	10/24/24	REVISED
6	12/11/24	REVISED
7	02/18/25	REVISED
8	04/10/25	REVISED

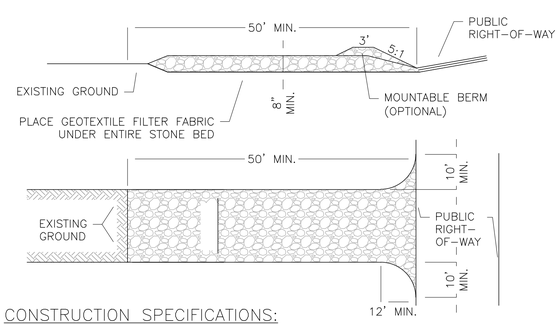
VT-VT-0111A

ROCHESTER

1030 VT ROUTE 100
ROCHESTER, VT 05767
WINDSOR COUNTY

SHEET TITLE
DETAILS

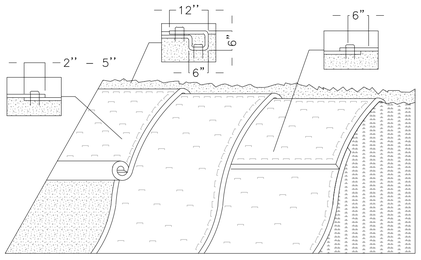
SHEET NUMBER
Z-6



CONSTRUCTION SPECIFICATIONS:

1. STONE SIZE SHALL BE A MIX OF 1 TO 4 INCH STONE.
2. LENGTH SHALL NOT BE LESS THAN 50 FEET.
3. THICKNESS SHALL NOT BE LESS THAN 8 INCHES.
4. WIDTH SHALL BE 12 FEET MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. 24 FEET IF SINGLE ENTRANCE TO SITE.
5. GEOTEXTILE MUST BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER. ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. WASHING. WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE, WHICH DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE THROUGH USE OF SAND BAGS, GRAVEL, BOARDS, OR OTHER APPROVED METHODS.
8. MAINTENANCE. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED ACCORDING TO PERMIT REQUIREMENTS.

STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE



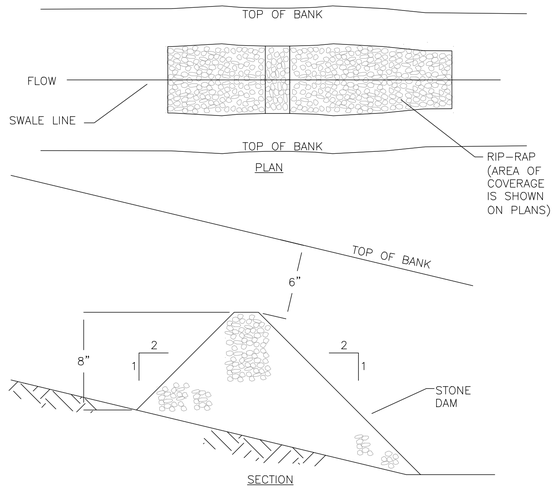
APPLICATION NOTES:

1. THE PURPOSE OF MATTING ON SIDE SLOPES IS TO REDUCE EROSION AND AID THE STABLISHMENT OF VEGETATION.
2. EROSION CONTROL MATTING SHALL BE USED FOR THE FOLLOWING REASONS:
   A. SIDE SLOPES > 3:1 (H:V)
   B. AREAS WHERE SEED AND MULCH WILL NOT STAY IN PLACE ALONE
   C. WHERE SEEDING IS OUTSIDE THE GROWING SEASON.

GENERAL NOTES:

1. GRADE AND SMOOTH THE SLOPE TO PROVIDE GOOD MATTING TO SOIL SURFACE CONTACT.
2. APPLY FERTILIZER, LIME, AND SEED PRIOR TO PLACING MATTING.
3. ANCHOR MATTING AS SHOWN, UTILIZING ANCHOR STAPLES. STAPLE PLACEMENT SHALL BE DETERMINED BY THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
4. UNROLL MATTING VERTICALLY DOWN SLOPE IN THE DIRECTION OF WATER FLOW.
5. OVERLAP UPPER MATTING OVER LOWER MATTING AS SHOWN.
6. OVERLAP ADJACENT MATTING AS SHOWN.
7. CUT EXCESS MATTING AT END OF SLOPE AND ANCHOR THE END.
8. MEASURES SHALL BE INSPECTED EVERY SEVEN (7) CALENDAR DAYS MINIMUM AND WITHIN 24 HOURS OF A STORM EVENT GREAT ENOUGH TO CAUSE WATER TO LEAVE THE CONSTRUCTION SITE.
9. MATTING SHALL BE REPAIRED AND RESTAPLED AS NECESSARY TO ENSURE PROPER FUNCTION.
10. THE CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE INSTALLATION, INSPECTION AND MAINTENANCE OF ALL EROSION PREVENTION AND SEDIMENT CONTROL MEASURES.

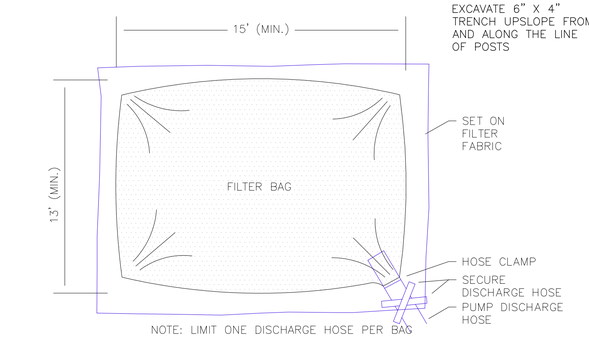
EROSION PREVENTION FOR SIDE SLOPES
NOT TO SCALE



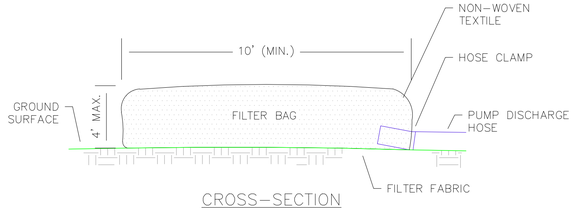
NOTES:

1. ALL EMBANKMENTS AND DISTURBED AREAS SHALL BE VEGETATED AND MULCHED IN ACCORDANCE WITH EROSION CONTROL MEASURE NO. 3.
2. CHECK DAM TO BE CONSTRUCTED OF STONE. MINIMUM HEIGHT IS 8", BUT NO HIGHER THAN 6" BELOW THE TOP OF THE BANK.
3. ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISPOSED OF IN A MANNER APPROVED BY THE ENGINEER, WHEN ½ OF THE CONTAINMENT VOLUME HAS BEEN LOST.
4. CHECK DAM SHALL REMAIN UNTIL DIRECTED BY THE ENGINEER, AT WHICH TIME THE STRUCTURE SHALL BE REMOVED AND THE MATERIALS DISPOSED OF IN A MANNER APPROVED BY THE ENGINEER.

CHECK DAM
NOT TO SCALE



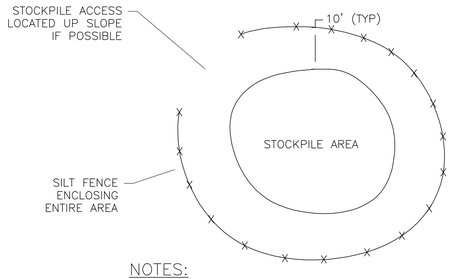
PLAN VIEW



CROSS-SECTION

DEWATERING FILTER BAG

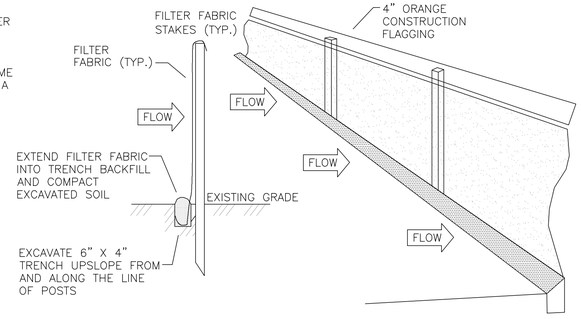
NOTE:
1. BAG TO BE USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.



NOTES:

1. ALL AREAS NOT TO BE WORKED FOR 14 DAYS OR MORE SHALL BE TEMPORARILY STABILIZED WITH MULCH, MATTING, OR OTHER MEASURES SUITABLE TO THE LOCATION.

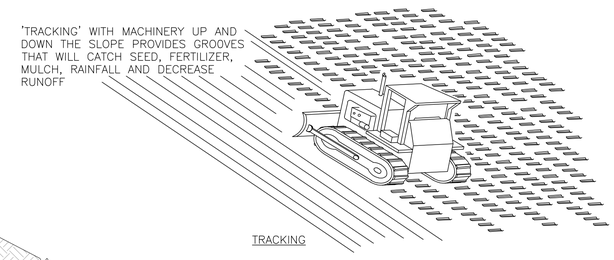
STOCKPILE AREA ISOLATION DETAIL
NOT TO SCALE

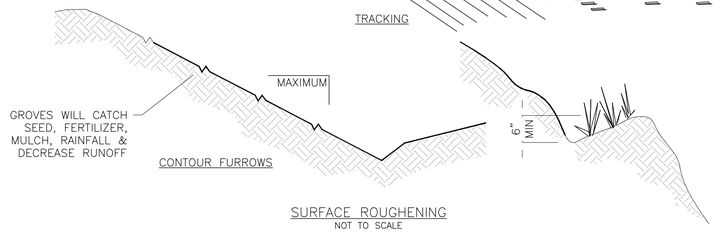


SILT FENCE DETAIL
NOT TO SCALE

EROSION CONTROL SCHEDULE

FOR SITE CONDITIONS	USE TYPE
AREAS FLATTER THAN 1:5 (20%) AND WITHIN WETLAND/WETLAND BUFFER AREAS	STRAW MULCH
AREAS 1:5 (20%) OR STEEPER	MATTING/BLANKETS
ALL DISTURBED AREAS ACROSS SLOPES AROUND CATCH BASINS AROUND STOCK PILE AND BORROW AREAS TOES OF SLOPE ALONG STREAMS AND WATER BODIES	SEED AND MULCH OR SOD SILT FENCES
AS SHOWN ON DRAWINGS AROUND CATCH BASINS IN DRAINAGE DITCHES 9% SLOPE OR LESS – PLACE 100 FT. APART 10% TO 19% – PLACE 50 FT. APART 20% OR GREATER – PLACE 25 FT. APART	CHECK DAMS
AS SHOWN ON DRAWINGS IN DITCHES PRIOR TO DISCHARGE TO BODIES OF WATER	SEDIMENT BASINS
AS SHOWN ON DRAWINGS STABILIZED CONST. ENTRANCE AS SHOWN ON DRAWINGS	STABILIZED CONST. ENTRANCE





SURFACE ROUGHENING
NOT TO SCALE

WINTER CONSTRUCTION

SITE CONSTRUCTION MAY CONTINUE THROUGH THE WINTER MONTHS ON THIS PROJECT. IT IS IMPERATIVE THAT ALL EROSION PREVENTION AND SEDIMENT CONTROL MEASURES BE IN PLACE AND FUNCTIONING TO ENSURE THEIR EFFECTIVENESS THROUGH THE WINTER AND SPRING SEASON. WINTER IN VERMONT CAN DIMINISH THE EFFECTIVENES OF CONTROLS AND PREDISPOSE A SITE TO SEVERE EROSION AND SEDIMENTATION. DISTURBED AND BARE SOIL THAT IS WELL-FROZEN IS QUITE RESISTANT TO EROSION. HOWEVER, SEVERE EROSION OCCURS DURING THE MIDWINTER AND SPRING THAWS WHEN MELTING SNOW, THAWING SOILS AND HEAVY RAINS PRODUCE INTENSE RUNOFF OVER SATURATED UNSTABLE SOILS. FOR THESE REASONS, SOIL DISTURBANCES SHALL BE STABILIZED BY PRIOR TO THE START OF THE WINTER CONSTRUCTION SEASON (OCTOBER, 15TH). ALL EARTHWORK CONTINUING DURING THE WINTE CONSTRUCTION SEASON SHALL BE STABILIZED IN ACCORDANCE WITH THE STATE OF VERMONT EROSION PREVENTION AND SEDIMENT CONTROL REQUIREMENTS FOR WINTER CONSTRUCTION.

INSPECTION AND MAINTENANCE

INSPECT EROSION PREVENTION AND SEDIMENT CONTROL MEASURES MORE FREQUENTLY IN THE WINTER AND SPRING THAN IN THE SUMMER. PAY CAREFUL ATTENTION TO WEATHER PREDICTIONS. WATCH FOR PREDICTED THAWS OR HEAVY RAINS. BEFORE SUCH EVENTS, CHECK ALL CONTROL MEASURES TO BE SURE THAT STRUCTURES WILL MANA THE POTENTIALLY HEAVY AND INTENSE RUNOFF AND SEDIMENT. PRACTICALLY CONSTANT MAINTENANCE OF CRITICAL CONTROL MEASURES MAY BE NECESSARY DURING THE WINTER AND EARLY SPRING TO PREVENT FAILURE OR OVERLOADING OF CONTROL MEASURES. BE PREPARED TO QUICKLY INSTALL A SECOND LINE OF DEFENSE IF PROBLEMS OCCUR. BE PREPARED TO DEVOTE A SUBSTANTIAL AMOUNT OF TIME, EQUIPMENT AND MANPOWER TO EROSION PREVENTION AND SEDIMENT CONTROL.

FOLLOW-UP

AS EARLY AS IS PRACTICAL, AT THE BEGINNING OF THE NEXT GROWING SEASON, INSTALL PERMANENT VEGETATIVE CONTROLS AS SPECIFIED IN THIS EPSC PLAN.

1 / Z-7 **EROSION PREVENTION DETAILS**
SCALE: NTS

verizon
118 FLANDERS ROAD
WESTBOROUGH, MA 01581
(508) 330-3300 TEL

Vertex Towers LLC
VERTEX TOWERS LLC
P.O. BOX 680
MEDFIELD, MA 02052

AEG ADVANCED ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
179 Swansea Mall Drive, Suite 1
Swansea, MA 02777
Tel: (508) 343-1414
Fax: (401) 633-6354

AEG PROJECT #: 2023-0079

DRAWN BY: JWH

CHECKED BY: SNA

SUBMITTALS

REV#	DATE	DESCRIPTION
2	06/05/24	REVISED
3	08/19/24	REVISED
4	10/20/24	REVISED
5	10/24/24	REVISED
6	12/11/24	REVISED
7	02/18/25	REVISED
8	04/10/25	REVISED

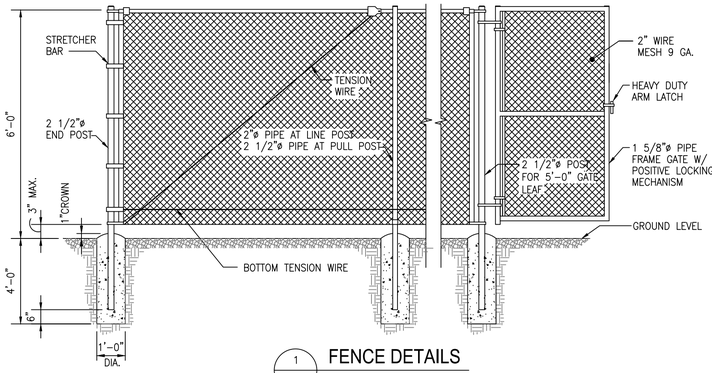
VT-VT-0111A

ROCHESTER

1030 VT ROUTE 100
ROCHESTER, VT 05767
WINDSOR COUNTY

SHEET TITLE
EROSION PREVENTION DETAILS

SHEET NUMBER
Z-7

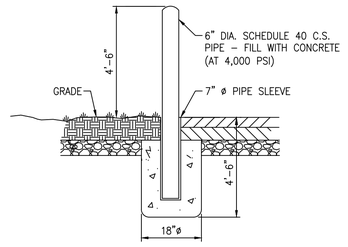


1 Z-8 **FENCE DETAILS**

SCALE: N.T.S.

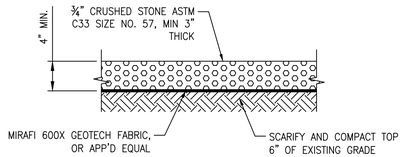
FENCE NOTES:

1. INSTALL FENCING PER ASTM F-567, SWING GATE PER ASTM F-900.
2. ALL END POSTS, LINE POSTS, PULL POSTS, POSTS FOR GATE LEAF, PIPES FOR GATE FRAME AND TOP RAILS SHALL BE SCHEDULE 40 PIPE PER ASTM F-1083.
3. FABRIC SHALL BE 12 GA. CORE WIRE SIZE 2" MESH CONFORMING TO ASTM A-392.
4. TENSION WIRE SHALL BE 7 GA. GALV. STEEL.
5. TIE WIRE SHALL BE 11 GA. GALV. STEEL (MIN.) AT POSTS AND RAILS. A SINGLE WRAP FABRIC TIE AT TENSION WIRE BY HOG RINGS SPACED MAX. OF 24" INTERVALS
6. BARBED WIRE SHALL BE DOUBLE STRAND 12 1/2" O.D. TWISTED WIRE TO MATCH W/FABRIC 14 GA., 4 PT. BARBS SPACES AT APPROXIMATELY 5" O.C.
7. COMPLY WITH LOCAL ORDINANCES OF BARBED WIRE PERMIT REQUIREMENTS, IF REQUIRED.
8. STEEL FENCE SYSTEM SHALL INCLUDE THE FENCE POSTS, FABRIC, GATE SYSTEM AND ALL NECESSARY ERECTION ACCESSORIES, FITTINGS AND FASTENINGS. ALL FENCE SYSTEM COMPONENTS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153. GATES SHALL BE SWING GATES WITH 5'-0" LEAFS. REFER TO TYPICAL FENCE DETAIL FOR ADDITIONAL INFORMATION. INSTALL FENCE AFTER CONCRETE HAS ATTAINED 75% OF 28 DAY DESIGN STRENGTH.
9. SCREENING SLATS SHALL BE INSTALLED ON PROPOSED FENCING (COLOR: GREEN OR AS DET'S BY PROJECT OWNER)



2 Z-8 **BOLLARD DETAIL**

SCALE: N.T.S.

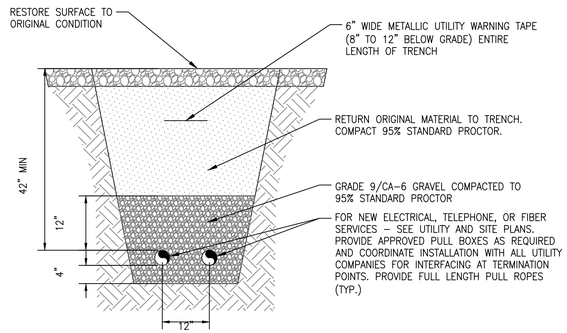


3 Z-8 **STONE COMPOUND DETAIL**

SCALE: N.T.S.

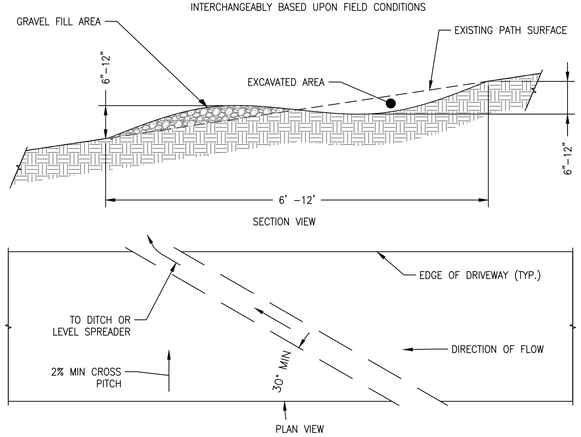
SPACING NEEDED BETWEEN WATER BARS	
SLOPE	DIVERSION SPACING (FT)
< 5%	NONE
5%-10%	200
10%-20%	150
20%-35%	100

WATER BAR OR WATER DEFLECTOR MAY BE USED INTERCHANGEABLY BASED UPON FIELD CONDITIONS



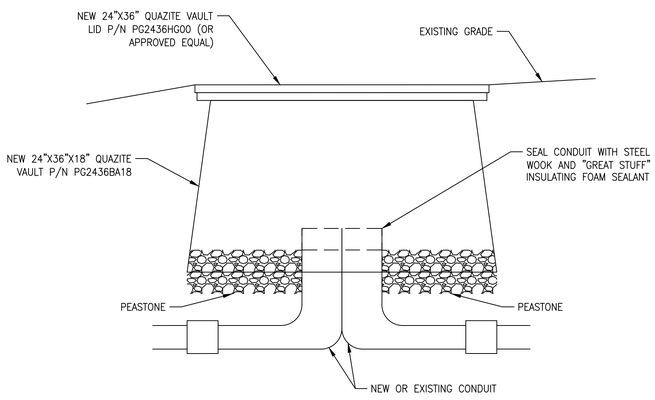
5 Z-8 **TRENCH DETAIL AT ACCESS CROSSING**

SCALE: N.T.S.



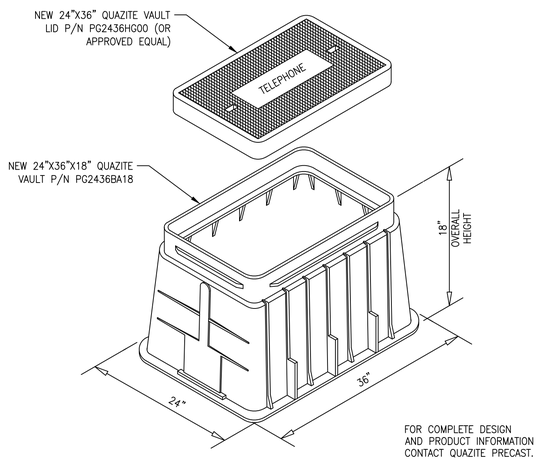
6 Z-8 **WATER BAR DETAIL**

SCALE: N.T.S.



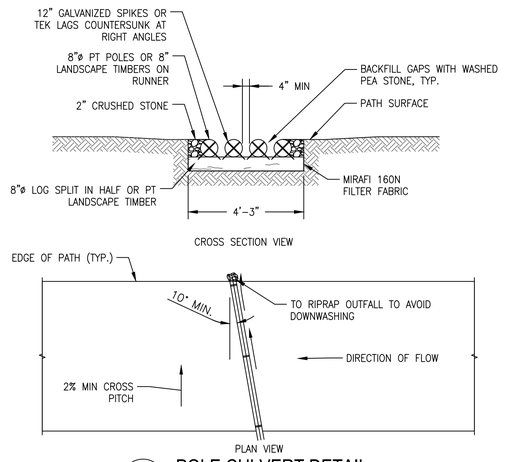
7 Z-8 **TELCO HANDHOLE WITH LID DETAIL**

SCALE: N.T.S.



8 Z-8 **TELCO HANDHOLE ISOMETRIC**

SCALE: N.T.S.



9 Z-8 **POLE CULVERT DETAIL**

SCALE: N.T.S.

verizon
118 FLANDERS ROAD
WESTBOROUGH, MA 01581
(508) 330-3300 TEL

Vertex Towers LLC
VERTEX TOWERS LLC
P.O. BOX 680
MEDFIELD, MA 02052

AEG ADVANCED ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
179 Swansea Mall Drive, Suite 1
Swansea, MA 02777
Tel: (508) 343-1414
Fax: (401) 633-6354

STATE OF VERMONT
SCOTT N. ADAMS
NO. 135423
CIVIL
LICENSED
PROFESSIONAL ENGINEER

AEG PROJECT #: 2023-0079

DRAWN BY: JWH

CHECKED BY: SNA

SUBMITTALS

REV#	DATE	DESCRIPTION
2	06/05/24	REVISED
3	08/19/24	REVISED
4	10/20/24	REVISED
5	10/24/24	REVISED
6	12/11/24	REVISED
7	02/18/25	REVISED
8	04/10/25	REVISED

VT-VT-0111A

ROCHESTER

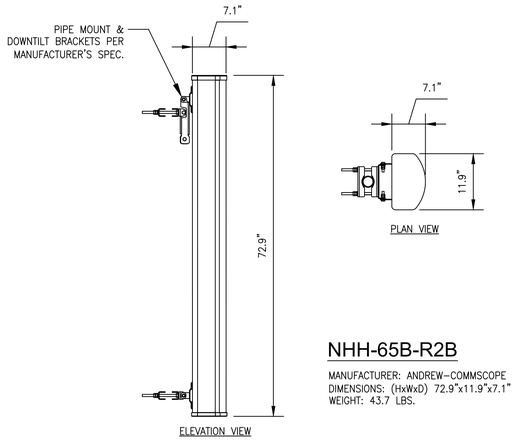
1030 VT ROUTE 100
ROCHESTER, VT 05767
WINDSOR COUNTY

SHEET TITLE

DETAILS

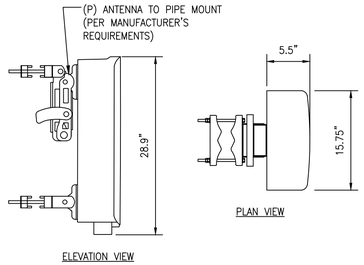
SHEET NUMBER

Z-8



NHH-65B-R2B

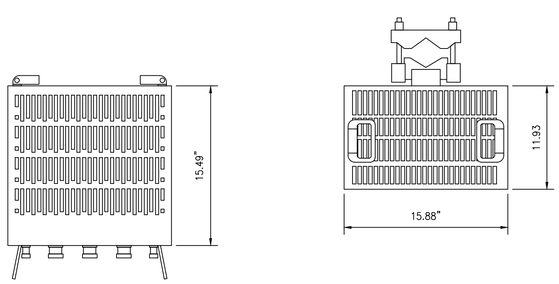
MANUFACTURER: ANDREW-COMMSCOPE
DIMENSIONS: (HxWxD) 72.9"x11.9"x7.1"
WEIGHT: 43.7 LBS.



MT6413-77A ANTENNA

MANUFACTURER: SAMSUNG
DIMENSIONS (HxWxD): 28.9" X 15.75" X 5.5"
WEIGHT: 57.3 LBS.

1 / Z-9 ANTENNA DETAIL
SCALE: N.T.S.

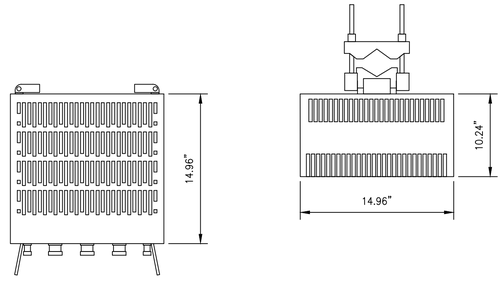


RF4439D-25A

MANUFACTURER: SAMSUNG
DIMENSIONS: (HxWxD) 15.49"x15.88"x11.93" (WITH FINGER GUARD)
WEIGHT: 40.4 LBS. (WITH FINGER GUARD)

3 / Z-9 RRU DETAILS
SCALE: NOT TO SCALE

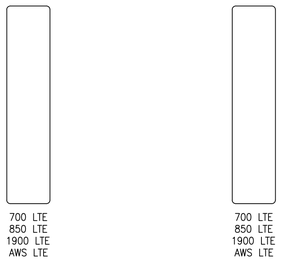
2 / Z-9 ANTENNA DETAIL
SCALE: N.T.S.



RF4461D-13A

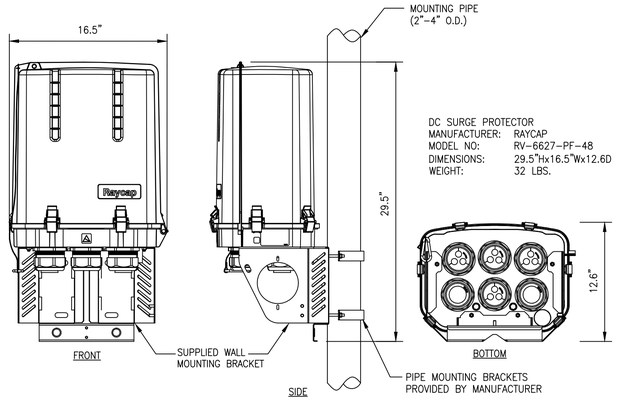
MANUFACTURER: SAMSUNG
DIMENSIONS: (HxWxD) 14.96"x14.96"x10.24" (WITHOUT FINGER GUARD)
WEIGHT: 79 LBS. (WITHOUT FINGER GUARDS)

4 / Z-9 RRU DETAILS
SCALE: NOT TO SCALE

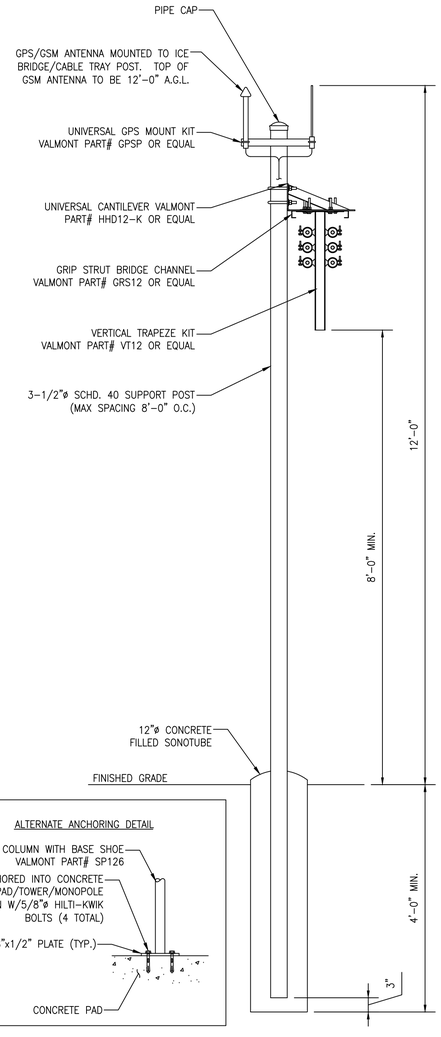


ANTENNAS SHOWN FROM BACKSIDE OF SECTOR

5 / Z-9 PROPOSED ANTENNA CONFIG
SCALE: N.T.S.



6 / A-4 SURGE PROTECTOR (OVP) DETAILS
SCALE: SCALE: N.T.S.



7 / A-5 CABLE BRIDGE DETAIL
SCALE: N.T.S.

verizon
118 FLANDERS ROAD
WESTBOROUGH, MA 01581
(508) 330-3300 TEL

Vertex Towers LLC
VERTEX TOWERS LLC
P.O. BOX 680
MEDFIELD, MA 02052

AEG ADVANCED ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
179 Swansea Mall Drive, Suite 1
Swansea, MA 02777
Tel: (508) 343-1414
Fax: (401) 633-6354

STATE OF VERMONT
SCOTT N. ADAMS
NO. 135423
CIVIL
LICENSED
PROFESSIONAL ENGINEER

AEG PROJECT #: 2023-0079
DRAWN BY: JWH
CHECKED BY: SNA

SUBMITTALS

REV#	DATE	DESCRIPTION
2	06/05/24	REVISED
3	08/19/24	REVISED
4	10/20/24	REVISED
5	10/24/24	REVISED
6	12/11/24	REVISED
7	02/18/25	REVISED
8	04/10/25	REVISED

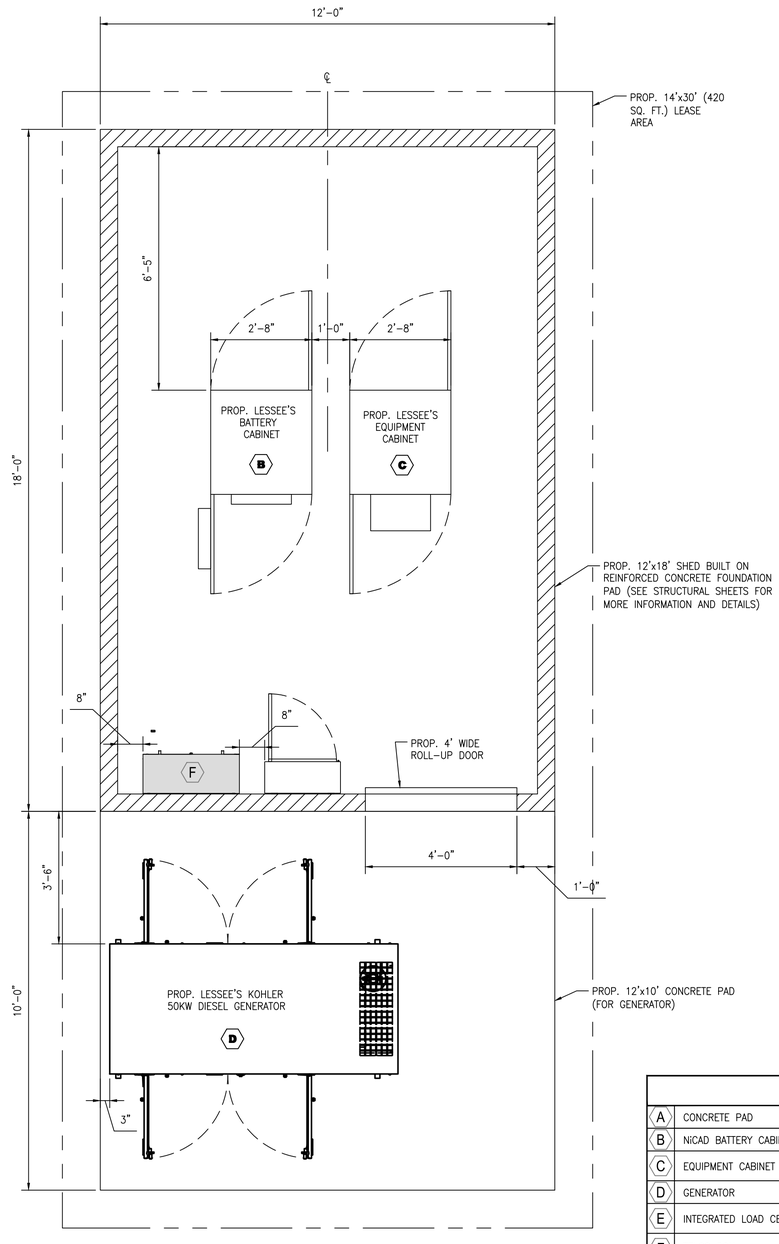
VT-VT-0111A

ROCHESTER

1030 VT ROUTE 100
ROCHESTER, VT 05767
WINDSOR COUNTY

SHEET TITLE
VERIZON DETAILS

SHEET NUMBER
Z-9



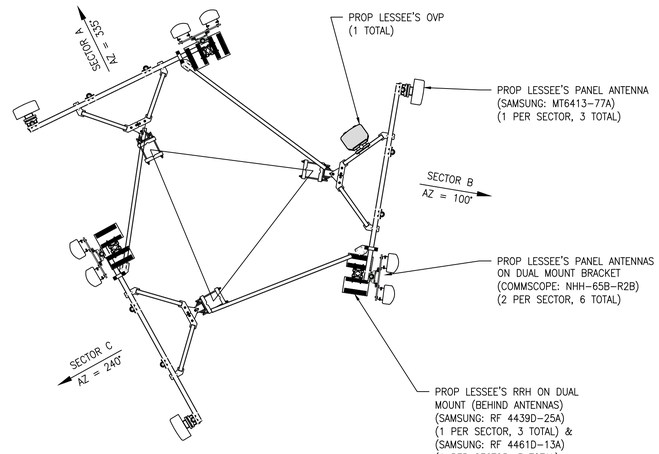
1 / Z-10 PROPOSED EQUIPMENT PLAN

SCALE: 22x34: 1"=2'
11x17: 1"=4'

0 2' 4' 6'

VERIZON PROJECT INFORMATION & DIMENSIONS

DIMENSION	REQUIRED	EXISTING	PROPOSED	NET INCREASE
SURFACE AREA OF THE FACES OF THE EQUIPMENT ON SUPPORT STRUCTURE	< 75 SQ.FT.	ANTENNA (0) 0"x0" =0 SQ.FT. ANTENNA (0) 0"x0" =0 SQ.FT. EXISTING EQUIPMENT TOTAL = 0 SQ.FT	ANTENNA: (6) 72.0"x11.9" =35.70 SQ.FT. (3) 28.9"x15.7" =9.45 SQ.FT. RRH: (3) 15.88"X15.49" =0.0 SQ.FT. (3) 14.96"X14.96" =0.0 SQ.FT. (BEHIND ANTENNAS) OVP BOX: (1) 29.5"X12.6" =2.58 SQ.FT. PROPOSED EQUIPMENT TOTAL =47.73 SQ.FT.	CHANGE TO THE FACIAL SURFACE AREA: 53.41 SQ.FT -00.00 SQ.FT 53.41 SQ.FT
MAXIMUM VERTICAL EXTENSION FROM SUPPORT STRUCTURE	< 10'-0"	0'-0"	0"	0"
MAXIMUM HORIZONTAL EXTENSION FROM SUPPORT STRUCTURE	< 10'-0"	0'-0"	7'-3"	7'-3"
IMPERVIOUS SURFACE AREA BEING ADDED TO SITE	< 300 SQ.FT.	0 SQ.FT.	394 SQ.FT.	394 SQ.FT.
NO ANTENNAS TO BE REMOVED (4) 72.0"x18.0" & (2) 72.0"x13.8" PANEL ANTENNAS TO BE INSTALLED				



NORTH

2 / Z-10 PROPOSED ANTENNA PLAN

SCALE: 22x34: 1"=4'
11x17: 1"=8'

0 4' 8' 12'

EQUIPMENT LEGEND

A	CONCRETE PAD	12'x20'x12" THICK CONCRETE PAD
B	NiCAD BATTERY CABINET	COMMSCOPE CMC74-36B BATTERY CABINET
C	EQUIPMENT CABINET	COMMSCOPECMC74-36E-4KWAC-TC EQUIPMENT CABINET
D	GENERATOR	KOHLER 50KW DIESEL GENERATOR
E	INTEGRATED LOAD CENTER (ILC)	ASCO D300 L-SERIES POWER TRANSFER LOAD CENTER RATED 200A, 240VAC, SINGLE PHASE/ 3 WIRE, TYPE 3R ENCLOSURE
F	TELCO BOX	INTERSECT (T313589-DC48-HE) 39"X20"X20" POWDER COATED ALUMINUM, NEMA 3R JUNCTION BOX/ENCLOSURE
G	LED WORK LAMP	LED WORK LIGHT W/ 60-MINUTE TIMER (TO VERIFY WITH LOCAL CX MANAGER)
H	UNISTRUT H-FRAME	P1000 UNISTRUT 10' LENGTHS & UNISTRUT P2860 END CAPS
J	PIPE COLUMNS W/ BASE SHOE	12" WIDE GRIP-SPAN BRIDGE CHANNEL
K	ICE CANOPY W/ BASE SHOE	10'x12' CANOPY - SITE PRO 1 P/N COV1012-B

verizon
118 FLANDERS ROAD
WESTBOROUGH, MA 01581
(508) 330-3300 TEL

Vertex Towers LLC
VERTEX TOWERS LLC
P.O. BOX 680
MEDFIELD, MA 02052

AEG ADVANCED ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
179 Swansea Mall Drive, Suite 1
Swansea, MA 02777
Tel: (508) 343-1414
Fax: (401) 633-6354

STATE OF VERMONT
SCOTT N. ADAMS
NO. 135423
CIVIL
LICENSED
PROFESSIONAL ENGINEER

AEG PROJECT #: 2023-0079

DRAWN BY: JWH

CHECKED BY: SNA

SUBMITTALS

REV#	DATE	DESCRIPTION
2	06/05/24	REVISED
3	08/19/24	REVISED
4	10/20/24	REVISED
5	10/24/24	REVISED
6	12/11/24	REVISED
7	02/18/25	REVISED
8	04/10/25	REVISED

VT-VT-0111A

ROCHESTER

1030 VT ROUTE 100
ROCHESTER, VT 05767
WINDSOR COUNTY

SHEET TITLE

PROPOSED ANTENNA AND EQUIPMENT PLANS

SHEET NUMBER

Z-10

US Army Corps of Engineers®
New England District

Construction Mat
Best Management Practices (BMPs)

Installation

- ☐ Mats should be in good condition to ensure proper installation, use and removal.
- ☐ Operating heavy equipment in wetlands shall be minimized, and such equipment other than fixed equipment (drill rigs, fixed cranes, etc.) shall not be stored, maintained, fueled or repaired in wetlands unless the equipment is broken down and cannot be easily removed.
- ☐ An adequate supply of spill containment equipment shall be maintained on site.
- ☐ General Permits in New England do not authorize dragging construction mats into position in waters of the U.S.
- ☐ Woody vegetation (trees, shrubs, etc.) shall be cut at or above ground level and not uprooted in order to prevent disruption to the wetland soil structure and to allow stump sprouts to revegetate the work area.
- ☐ Where feasible, place mats in a location that would minimize the amount needed for the wetlands crossing.
- ☐ Minimize impacts to wetland areas during installation, use, and removal.
- ☐ Install adequate erosion and sediment controls at approaches to mats to promote a smooth transition to, and minimize sediment tracking onto, swamp mats.
- ☐ In most cases, construction mats should be placed along the travel area so that the individual boards are resting perpendicular to the direction of traffic. No gaps should exist between mats. Place mats far enough on either side of the resource area to rest on firm ground.
- ☐ Provide standard construction mat BMP details to work crews (examples provided below).

Wetland/Stream Channel Crossing

- ☐ At "dry" crossings where no flow is present or anticipated during project construction, the mats may be placed directly onto the ground in order to prevent excessive rutting, provided stream banks and bottoms are not adversely altered.
- ☐ Construction mats may be used as a temporary bridge over a stream to allow vehicles access to the work site. Small sections of mat are placed within and along the stream parallel to the flow of water. Mats may then be placed perpendicular to the stream, resting on top of the initial construction mat supports. It may be necessary to place additional reinforcement for extra stability and to minimize the amount of sediment that could fall between the spaces of each timber.
- ☐ In areas where wildlife passage or migration is a consideration, mats may be installed in accordance with the diagram "Typical Stream Crossing with Swamp Mats."
- ☐ Mats should not be placed so that they restrict the natural flow of the stream.
- ☐ Minimize number of stream/wetland crossings. Where feasible, locate crossing site where stream channel is narrow for the shortest possible clear span and where stream banks are stable and well defined. For large wetland complexes, consider accessing structures from opposite sides where possible to avoid crossing the entire wetland.
- ☐ More than one layer of mats may be necessary in areas which are inundated or have deep organic wetland soils.

Maintenance

- ☐ Matted wetland crossings should be monitored to assure correct functioning of the mats. Inspect mats after use. Look for any defects or structural problems. Mats which become covered with soils or construction debris should be cleaned and the materials removed and disposed of in an upland location. The material should not be scraped and shoveled into the resource area. Mats which become imbedded must be reset or layered to prevent mud from covering them or water passing over them.

Removal

- ☐ Matting should be removed by "backing" out of the site, removing mats one at a time. Any rutting or significant indentations identified during mat removal should be regraded immediately, taking care not to compact soils.
- ☐ Mats should be cleaned before transport to another wetland location to remove soil and any invasive plant species seed stock or plant material.
- ☐ Mats shall be cleaned of soil and any invasive plant species seed stock or plant material from before installation.
- ☐ Cleaning methods may include but are not limited to shaking or dropping mats in a controlled manner with a piece of machinery to knock off attached soil and debris, spraying with water or air, and sweeping.
- ☐ Crossings should be inspected following mat removal to determine the level of restoration required.

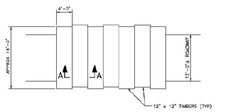
Restoration

- ☐ Special precautions should be taken to promptly stabilize areas of disturbed soil located near wetlands and streams. Matted areas within wetlands shall be restored to their original condition and elevation. This may involve natural revegetation from existing root and seed stock of native plant species. Conditions may warrant planting and the bPATHcast of a wetland seed mix over the matted area to supplement the existing seed and rootstock. Seed mixes and vegetation shall contain only plant species native to New England. The use of mulch in wetlands shall consist of weed-free mulch to mitigate the risk of the spread of invasive plant species.

Construction Mat BMPs March 2016

Example Mat Diagrams -

Best Management Practices Manual for Utility Maintenance
In and Adjacent to Wetlands and Waterbodies in New Hampshire
Interim January 2010.



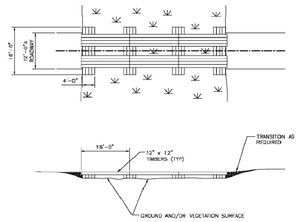
TYPICAL PLAN VIEW

SECTION A–A
TYPICAL MAT SECTION
DOUBLE TIMBER MAT

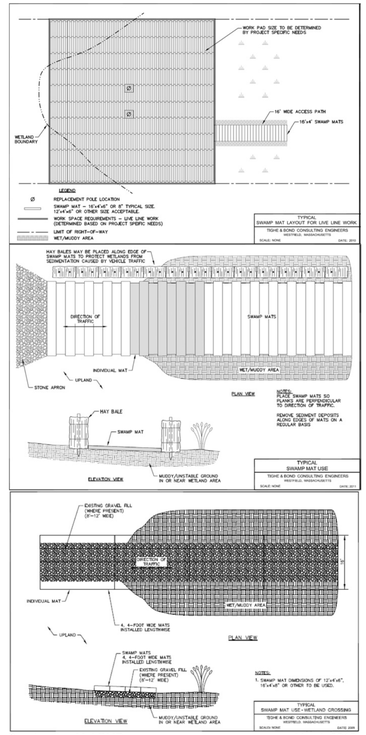
TYPICAL SECTION VIEW

NOTES:
1. TO BE INSTALLED IF NECESSARY TO PREVENT RUTTING, TO ACCESS STRUCTURES.
2. THIS DETAIL SHOWS TYPICAL DIMENSIONS. SOME CONTRACTORS SWAMP MATS ARE DIMENSIONALLY DIFFERENT FROM WHAT IS SHOWN HERE.
3. DEPENDENT ON SITE CONDITIONS, MULTIPLE LAYERS OF SWAMP MATS MAY BE INSTALLED.

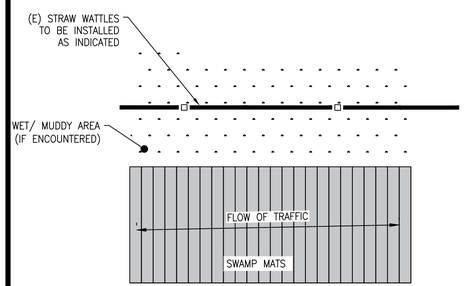
Best Management Practices Manual for Utility Maintenance
In and Adjacent to Wetlands and Waterbodies in New Hampshire
Interim January 2010.



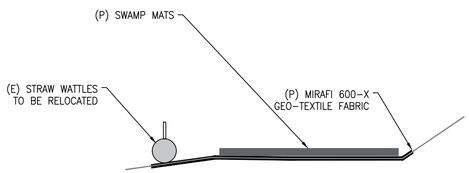
TYPICAL STREAM CROSSING
WITH SWAMP MATS



Construction Mat BMPs March 2016



NOTES:
1. PLACE SWAMP MATS SO PLANKS ARE PERPENDICULAR TO DIRECTION OF TRAFFIC.
2. REMOVE SEDIMENT DEPOSIT ALONG EDGE OF MATS ON A REGULAR BASIS



5 / A-3 EROSION CONTROL MAT DETAIL
SCALE: N.T.S.

verizon
118 FLANDERS ROAD
WESTBOROUGH, MA 01581
(508) 330–3300 TEL

Vertex Towers LLC
VERTEX TOWERS LLC
P.O. BOX 680
MEDFIELD, MA 02052

AEG ADVANCED ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
179 Swansea Mall Drive, Suite 1
Swansea, MA 02777
Tel: (508) 543-1414
Fax: (401) 633-6354

STATE OF VERMONT
SCOTT N. ADAMS
NO. 135423
CIVIL
LICENSED
PROFESSIONAL ENGINEER

AEG PROJECT #: 2023-0079

DRAWN BY: JWH

CHECKED BY: SNA

SUBMITTALS

REV#	DATE	DESCRIPTION
2	06/05/24	REVISED
3	08/19/24	REVISED
4	10/20/24	REVISED
5	10/24/24	REVISED
6	12/11/24	REVISED
7	02/18/25	REVISED
8	04/10/25	REVISED

VT–VT–0111A

ROCHESTER

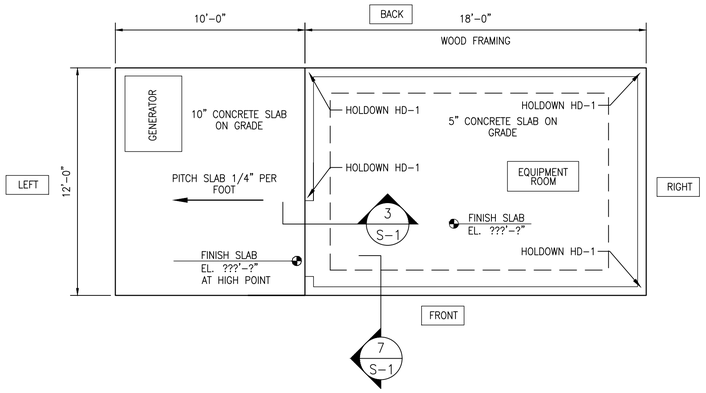
1030 VT ROUTE 100
ROCHESTER, VT 05767
WINDSOR COUNTY

SHEET TITLE

TEMPORARY ACCESS MAT DETAIL/NOTES

SHEET NUMBER

Z-11

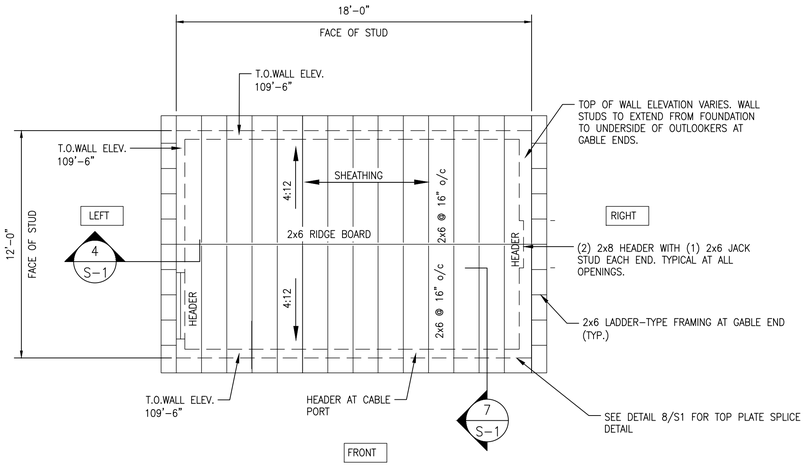


1 S-1 EQUIPMENT BUILDING FOUNDATION/FLOOR PLAN

SCALE: 22x34: 1/4"=1'

NOTES:

1. 5" SLAB ON GRADE. REINFORCE WITH #4 @ 16" ON CENTER, EACH WAY, PLACED 1-1/4" CLEAR FROM TOP.
2. 10" SLAB ON GRADE. REINFORCE WITH #4 AT 12" ON CENTER, EACH WAY, TOP AND BOTTOM. PLACE TOP BARS 1-1/4" CLEAR FROM TOP OF SLAB, AND BOTTOM BARS 3" CLEAR FROM BOTTOM OF SLAB.
3. REFER TO MECH. DWGS. FOR LOUVER SIZES AND LOCATIONS.
4. INTERIOR AND EXTERIOR SLABS TO RECEIVE A BROOM FINISH.
5. PROVIDE A 3/4" CHAMFER AT EXPOSED EDGES OF 10" EXTERIOR SLABS.

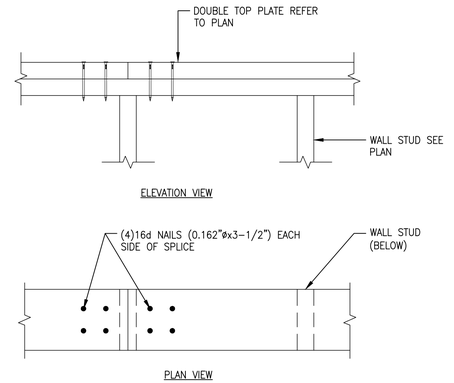


2 S-1 EQUIPMENT BUILDING ROOF FRAMING PLAN

SCALE: 22x34: 1/4"=1'

NOTES:

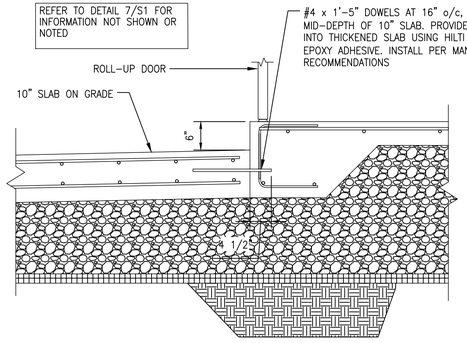
1. ALL EXTERIOR WOOD WALLS TO BE TYPE-A SHEARWALLS, 2x6 STUDS SPACED AT 16" ON CENTER. REFER TO SHEAR WALL SCHEDULE FOR INFORMATION.
2. REFER TO HOLDOWN SCHEDULE FOR HOLDOWN INFORMATION AND TO FOUNDATION PLAN FOR HOLDOWN LOCATIONS AT RIGHT AND LEFT WALLS.



8 S-1 TOP PLATE SPLICE

SCALE: 22x34: 3/4"=1'

REFER TO DETAIL 7/S1 FOR INFORMATION NOT SHOWN OR NOTED



3 S-1 EQUIPMENT BLDG. GENERATOR PAD DETAIL

SCALE: 22x34: 3/4"=1'

SHEAR WALL PANEL SCHEDULE

MARK	SHEATHING	NAILING			TIE-DOWN [2]	SILL ANCHORS
		SIZE [1]	EDGE	INTERMEDIATE		
TYPE-A	1/2" APA RATED, EXT. FACE	8d	6" o/c	12" o/c	(2) 2x6 SPF	1/2"ø BOLTS @ 32" o/c

NOTES:

1. FASTENERS: 8d COMMON (0.131"ø x2-1/2").
2. FASTEN EDGE CHORD MEMBERS TOGETHER WITH (8) 10d NAILS (0.148"x3"), DISTRIBUTED ALONG MEMBER HEIGHT.

5 S-1 SHEAR WALL SCHEDULE

SCALE: NOT TO SCALE

HOLDOWN / TENSION-TIE SCHEDULE

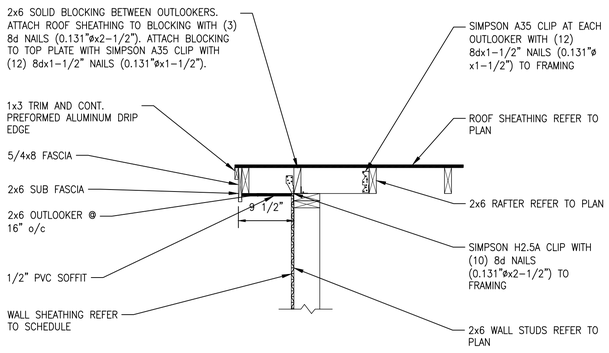
MARK	HOLDOWN	ANCHOR ROD	FASTENERS TO TIE-DOWN [4]	EMBEDMENT DEPTH [3] FOR CAST-IN-PLACE	EMBEDMENT DEPTH [5] FOR POST-INSTALLED
HD-1	HDU2-SDS2.5	5/8"Ø	(6) SDS25212	10"	5-5/8"

NOTES:

1. REFER TO PLAN FOR HOLDOWN LOCATIONS.
2. HOLDOWN HARDWARE AND SDS SCREWS AS MANUFACTURED BY SIMPSON STRONG-TIE.
3. REFER TO TYPICAL DETAILS FOR ANCHOR ROD ATTACHMENT. INSTALL NUT AT EMBEDDED END OF ANCHOR ROD FOR CAST-IN-PLACE OPTION. EMBEDMENT DEPTH LISTED IS TO TOP OF NUT.
4. SDS25212 = 1/4" x 2-1/2" SDS SCREW.
5. POST-INSTALLED ANCHORS TO BE INSTALLED USING HILTI HIT-RE 500 V3 EPOXY ADHESIVE. 5/8"ø HILTI HAS-E THREADED ROD; MAINTAIN 3" MIN. EDGE DISTANCE TO FACE OF CONCRETE.

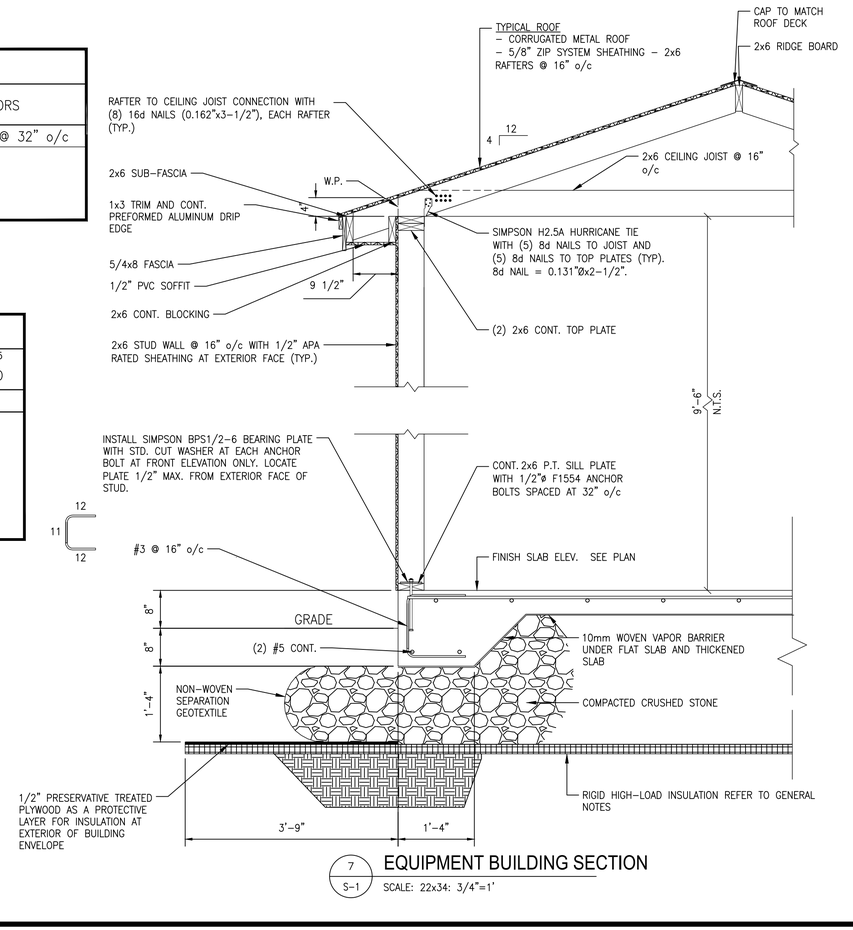
6 S-1 SHEAR WALL SCHEDULE

SCALE: NOT TO SCALE



4 S-1 GABLE END ROOF DETAIL

SCALE: 22x34: 3/4"=1'



7 S-1 EQUIPMENT BUILDING SECTION

SCALE: 22x34: 3/4"=1'

verizon
118 FLANDERS ROAD
WESTBOROUGH, MA 01581
(508) 330-3300 TEL

Vertex Towers LLC
VERTEX TOWERS LLC
P.O. BOX 680
MEDFIELD, MA 02052

AEG ADVANCED ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
179 Swansea Mall Drive, Suite 1
Swansea, MA 02777
Tel: (508) 343-1414
Fax: (401) 633-6354

STATE OF VERMONT
SCOTT N. ADAMS
NO. 135423
CIVIL
LICENSED
PROFESSIONAL ENGINEER

AEG PROJECT #: 2023-0079

DRAWN BY: JWH

CHECKED BY: SNA

SUBMITTALS

REV#	DATE	DESCRIPTION
2	06/05/24	REVISED
3	08/19/24	REVISED
4	10/20/24	REVISED
5	10/24/24	REVISED
6	12/11/24	REVISED
7	02/18/25	REVISED
8	04/10/25	REVISED

VT-VT-0111A

ROCHESTER

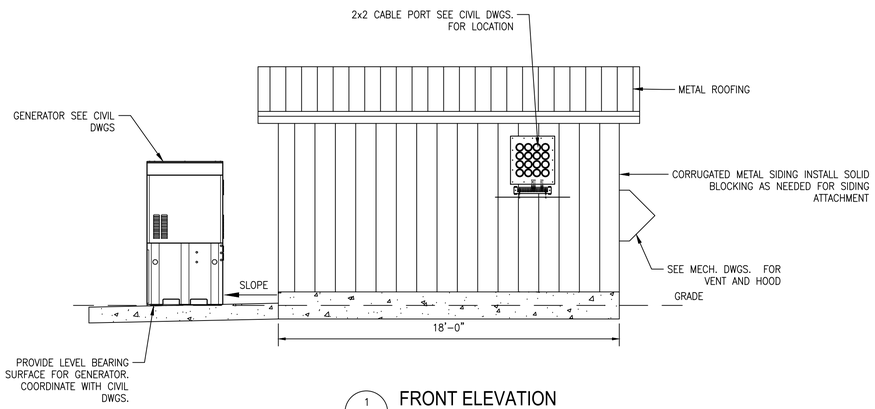
1030 VT ROUTE 100
ROCHESTER, VT 05767
WINDSOR COUNTY

SHEET TITLE

EQUIPMENT SHED DETAILS

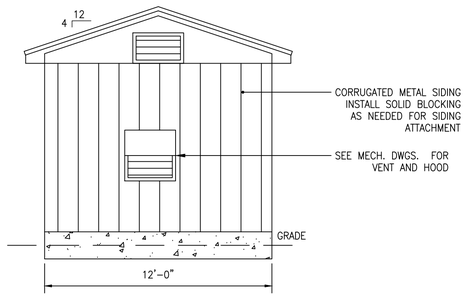
SHEET NUMBER

S-1



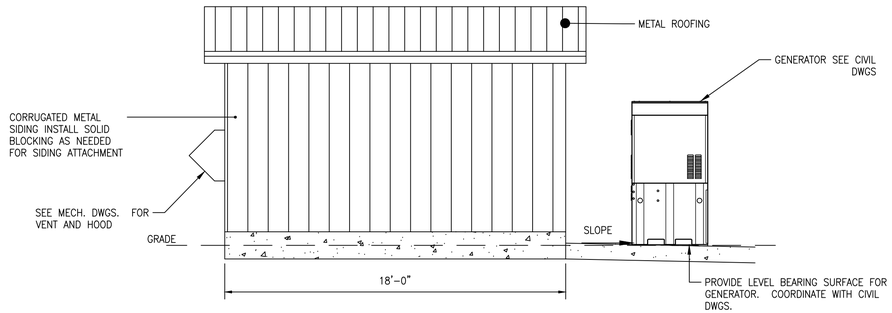
1 / S-2 FRONT ELEVATION

SCALE: 22x34: 1/4"=1'



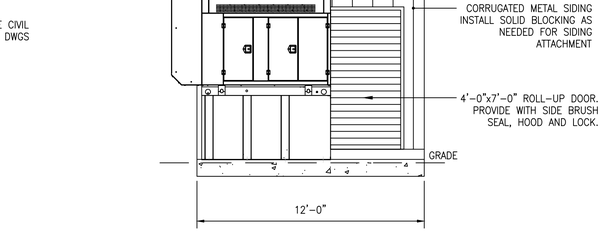
3 / S-2 LEFT ELEVATION

SCALE: 22x34: 1/4"=1'



2 / S-2 BACK ELEVATION

SCALE: 22x34: 1/4"=1'



4 / S-2 RIGHT ELEVATION

SCALE: 22x34: 1/4"=1'

GENERAL

1. USE STRUCTURAL DRAWINGS IN CONJUNCTION WITH THE SPECIFICATIONS AND MECHANICAL, ELECTRICAL AND CIVIL DRAWINGS.
2. PERFORM ALL WORK IN ACCORDANCE WITH APPLICABLE CODES.
3. DO NOT SCALE DIMENSIONS FROM DRAWINGS.
4. DETAILS SHOWN ARE TYPICAL, UNLESS NOTED OTHERWISE.
5. VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS, AND REPORT DISCREPANCIES TO ENGINEER BEFORE PROCEEDING WITH THE WORK

EARTHWORK

1. COMPACTED CRUSHED STONE MATERIAL: WASHED, NARROWLY GRADED MIXTURE OF CRUSHED STONE OR GRAVEL, ASTM D448 COARSE AGGREGATE GRADING SIZE 57 WITH 100% PASSING A 1-1/2" SIEVE AND 0%-5% PASSING A NO. 8 SIEVE.
2. FOOTINGS/SLABS: PLACE FOOTING/SLABS ON COMPACTED CRUSHED STONE FILL. ASSUMED BEARING CAPACITY FOR FOUNDATION DESIGN IS 2000 POUNDS PER SQUARE FOOT.

CONCRETE

1. ALL CONCRETE SHALL CONFORM TO REQUIREMENTS AND RECOMMENDATIONS OF ACI 318 "BUILDING CODE REQUIREMENTS OF REINFORCED CONCRETE" AND TO ACI FIELD REFERENCE MANUAL SP-15.
2. CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS", EXCEPT AS MODIFIED OR SUPPLEMENTED BELOW.
3. CONCRETE COMPRESSIVE DESIGN STRENGTH AND MIX PROPORTIONS SHALL BE AS OUTLINED BELOW. MIX PROPORTIONS AND DESIGNS SHALL BE SUBMITTED FOR APPROVAL. LIMIT MAXIMUM WATER-SOLUBLE CHLORIDE ION CONTENT IN CONCRETE BY WEIGHT OF CEMENT FOR CAST-IN-PLACE CONCRETE TO 0.15 FOR ALL CONCRETE.

   INTERIOR SLABS ON GRADE:
   CONCRETE CLASS: F2, S0, W1, C1
   COMPRESSIVE STRENGTH = 4,500 PSI
   MAX. W/CM RATIO = 0.45
   AIR CONTENT = 6% +/- 1.5%

   EXTERIOR SLABS ON GRADE:
   CONCRETE CLASS: F3, S0, W1, C2
   COMPRESSIVE STRENGTH = 5,000 PSI
   MAX. W/CM RATIO = 0.40
   AIR CONTENT = 6% +/- 1.5%

4. ALL CONCRETE SHALL BE READY-MIX CONCRETE CONFORMING TO ASTM C94, EXCEPT THAT ADDITION OF WATER WILL NOT BE PERMITTED.
5. CONCRETE SLABS SHALL BE WET CURED. USE OF MEMBRANE-FORMING CURING COMPOUND IS PROHIBITED.
6. INTERIOR SLABS SHALL RECEIVE A FLOAT FINISH. EXTERIOR SLABS SHALL RECEIVE A BROOM FINISH.
7. INTERIOR SLABS SHALL RECEIVE A PENETRATING FLOOR SEALER. APPLY ASHFORD FORMULA OR APPROVED EQUAL TO EXPOSED CONCRETE SURFACES IN STRICT COMPLIANCE WITH MANUFACTURER'S RECOMMENDATIONS.
8. REINFORCING STEEL: ASTM A615 GRADE 60.
9. FOUNDATION INSULATION: ASTM C578 TYPE VII RIGID INSULATION. SINGLE LAYER SHALL BE 1-1/2" MINIMUM THICKNESS. ALTERNATE INSULATION MAY BE (2) LAYERS OF 1" TYPE VII RIGID INSULATION, WITH TOP LAYER PLACE 90° TO BOTTOM LAYER.

WOOD FRAMING

1. ALL WOOD CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" BY THE NATIONAL FOREST PRODUCTS ASSOCIATION AND TO LOCAL BUILDING CODES.
2. ALL WOOD MEMBERS 2x4 AND LARGER SHALL BE SPRUCE-PINE-FIR, NO. 2 GRADE OR BETTER.
3. ALL PRESSURE TREATED WOOD MEMBERS SHALL BE SOUTHERN PINE NO. 2 GRADE OR BETTER. ALL METAL CONNECTORS, ANCHORS AND FASTENERS USED FOR PRESERVATIVE TREATED WOOD SHALL BE STAINLESS STEEL OR HOT-DIPPED GALVANIZED AS RECOMMENDED BY THE CONNECTOR, ANCHOR OR FASTENER MANUFACTURER.
4. ALL WOOD HEADERS AT BEARING WALLS SHALL BE A MINIMUM OF (2) 2x8's, UNLESS NOTED OTHERWISE. WOOD MEMBERS USED FOR HEADERS, OR BUILT-UP BEAMS SHALL NOT HAVE CHECKS OR SPLITS LONGER THAN THE WIDE FACE WIDTH.
5. EXTERIOR WALL AND ROOF SHEATHING SHALL BE 5/8" ADVANTECH ZIP SYSTEM.

BUILDING MATERIALS

1. FINISHES:
   A. ROOFING: MINIMUM 24 GAGE CORRUGATED METAL OVER GRACE ICE & WATER SHIELD.
   B. WALLS: SEE DETAILS.
   C. CEILING: NONE.
   D. FLOOR: CONCRETE SLAB. SEE CONCRETE NOTE #6 ABOVE.

2. INSULATION:
   A. BELOW FLOOR SLAB AND OUTSIDE BUILDING PERIMETER: REFER TO CONCRETE NOTES ABOVE.
   B. ROOF: NONE.
   C. WALLS: NONE.

3. LOUVERS: REFER TO MECHANICAL DRAWINGS.

DESIGN CRITERIA

1. CODES: IBC 2015 AND ASCE 7-10, AS AMENDED BY THE 2015 VERMONT FIRE AND BUILDING SAFETY CODE.
2. BUILDING/STRUCTURE RISK CATEGORY: III.
3. ROOF LOADS:
   - RAFTER DEAD: 8 PSF
   - CEILING DEAD: 8 PSF
   - ROOF LIVE: 20 PSF
4. SNOW LOADS:
   - GROUND SNOW: Pg = 50 PSF
   - EXPOSURE FACTOR: Ce = 1.2
   - THERMAL FACTOR: Ct = 1.2
   - IMPORTANCE FACTOR: Is = 1.10
   - FLAT ROOF SNOW LOAD: Pf = 55.4 PSF
   - SLOPE ROOF SNOW LOAD: Ps = 52 PLUS DRIFT
5. FLOOR LIVE LOADS: 125 PSF
6. WIND LOADS:
   - WIND SPEED: V = 120 MPH
   - NOMINAL WIND SPEED: VASD = 93 MPH
   - IMPORTANCE FACTOR: Iw = 1.0
   - EXPOSURE: B
   - INTERNAL PRESSURE COEFFICIENT: GCpi = +/- 0.18
   - COMPONENTS AND CLADDING: ASCE 7-10
7. SEISMIC LOADS:
   - IMPORTANCE FACTOR: Ie = 1.25
   - MAPPED SPECTRAL RESPONSE COEFFICIENTS: S_S = 0.338, S1 = 0.105
   - SITE CLASS: D (ASSUMED)
   - SPECTRAL RESPONSE COEFFICIENTS: SDS = 0.345, SD1 = 0.166
   - SEISMIC DESIGN CATEGORY: C
   - SEISMIC FORCE RESISTING SYSTEM: BEARING WALL SYSTEM WITH LIGHT-FRAMED WOOD WALLS SHEATHED WITH WOOD STRUCTURAL PANELS RATED FOR SHEAR RESISTANCE.

verizon
118 FLANDERS ROAD
WESTBOROUGH, MA 01581
(508) 330-3300 TEL

Vertex Towers LLC
VERTEX TOWERS LLC
P.O. BOX 680
MEDFIELD, MA 02052

AEG ADVANCED ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
179 Swansea Mall Drive, Suite 1
Swansea, MA 02777
Tel: (508) 343-1414
Fax: (401) 633-6354

STATE OF VERMONT
SCOTT N. ADAMS
NO. 135423
CIVIL
LICENSED
PROFESSIONAL ENGINEER

AEG PROJECT #: 2023-0079

DRAWN BY: JWH

CHECKED BY: SNA

SUBMITTALS

REV#	DATE	DESCRIPTION
2	06/05/24	REVISED
3	08/19/24	REVISED
4	10/20/24	REVISED
5	10/24/24	REVISED
6	12/11/24	REVISED
7	02/18/25	REVISED
8	04/10/25	REVISED

VT-VT-0111A

ROCHESTER

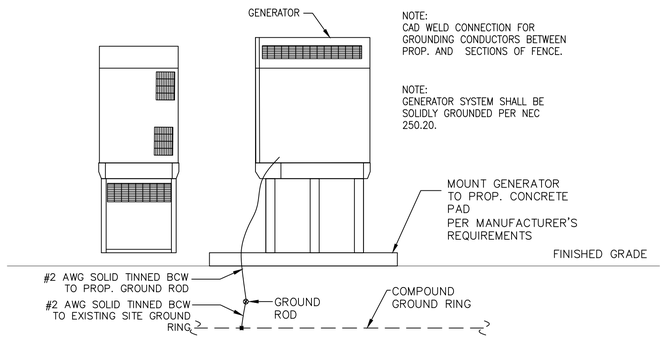
1030 VT ROUTE 100
ROCHESTER, VT 05767
WINDSOR COUNTY

SHEET TITLE

EQUIPMENT SHED DETAILS

SHEET NUMBER

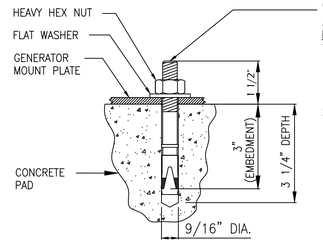
S-2



ELEVATION

1 / S-3 GENERATOR DETAILS

SCALE: N.T.S.

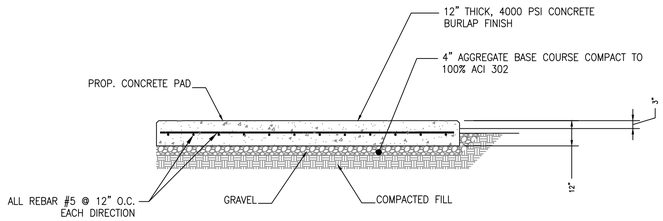


NOTE:

1. BOLTS CAN BE INSTALLED 2 DAYS AFTER POURING CONCRETE PROVIDED THE KWIK BOLTS ARE ONLY TIGHTENED TO A SNUG TIGHT CONDITION.
2. APPLY "HILTI" HIT-RE 500-SD EPOXY TO ALL GAPS TO PREVENT WATER/MOISTURE BUILD-UP.

3 / S-3 HILTI BOLT DETAIL

SCALE: N.T.S.



COMPACT SUBGRADE 12" DEEP TO 95% RELATIVE COMPACTION PER ASTM D1557.

4 / S-3 CONCRETE PAD DETAIL

SCALE: N.T.S.

CONCRETE PAD CONSTRUCTION NOTES

1. ALL REBAR (HORIZONTAL & VERTICAL) SHALL BE SECURELY WIRE TIED TO PREVENT DISPLACEMENT DURING POURING OF CONCRETE.
2. CONCRETE TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI.
3. REINFORCED CONCRETE CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH ACI STANDARDS 318.
4. MINIMUM CONCRETE COVER OVER REBAR IS 1 1/4".
5. REINFORCING MATERIAL SHALL BE IN ACCORDANCE WITH ASTM SPECIFICATION A615-85.

CONCRETE PAD AND EMBEDMENT TOLERANCES

1. EMBEDMENTS: PLUS OR MINUS 1/16".
2. CONCRETE DIMENSIONS: PLUS OR MINUS 1/4".
3. REINFORCING STEEL PLACEMENT: PLUS OR MINUS 1/4" INCLUDING CONCRETE COVER.

NOTES

1. FOUNDATION WAS DESIGNED BY ASSUMING ALLOWABLE SOIL BEARING CAPACITY OF 1000 PSI. THE SOIL BEARING CAPACITY FOR EACH SITE MUST BE VERIFIED USING THE SITE SPECIFIC GEOTECH REPORT. IF SHALLOW GROUNDWATER (≤3 FT.) WAS REPORTED, A FURTHER REVIEW OF THE DESIGN OR SPECIAL DESIGN MAY BE REQUIRED.
2. THE SOIL UNDERNEATH THE CONCRETE PAD MUST BE FREE OF ORGANIC MATTER OR OTHER DELETERIOUS SUBSTANCES, AND SHOULD BE COMPACTED AND LEVELED BEFORE PLACING THE FOUNDATION. PAD SHALL BE INSTALLED LEVEL TO WITHIN +/- 1/8".
3. CONCRETE SLUMPS: 1"~2".
4. CONCRETE VOLUME: 0.78 CUBIC YARDS.

STRUCTURAL NOTES:

1. DESIGN REQUIREMENTS ARE PER STATE BUILDING CODE AND APPLICABLE SUPPLEMENTS, ANSI/ASCE7, EIA/TIA-222-G STRUCTURAL STANDARDS FOR STEEL ANTENNA SUPPORTING STRUCTURES.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO FABRICATION AND ERECTION OF ANY MATERIAL. ANY UNUSUAL CONDITIONS SHALL BE REPORTED TO THE ATTENTION OF ENGINEER OF RECORD.
3. DESIGN AND CONSTRUCTION OF STRUCTURAL STEEL SHALL CONFORM TO THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS".
4. STRUCTURAL AND MISCELLANEOUS STEEL SHALL CONFORM TO ASTM A36 STRUCTURAL STEEL UNLESS OTHERWISE INDICATED.
5. STEEL PIPE SHALL CONFORM TO ASTM A500 "COLD-FORMED WELDED & SEAMLESS CARBON STEEL STRUCTURAL TUBING", GRADE A, OR ASTM A53 PIPE STEEL BLACK AND HOT-DIPPED ZINC-COATED WELDED AND SEAMLESS TYPE E OR S, GRADE B. PIPE SIZES INDICATED ARE NOMINAL. ACTUAL OUTSIDE DIAMETER IS LARGER.
6. STRUCTURAL CONNECTION BOLTS SHALL BE HIGH STRENGTH BOLTS (BEARING TYPE) AND CONFORM TO ASTM A325 "HIGH STRENGTH BOLTS FOR STRUCTURAL JOINTS, INCLUDING SUITABLE NUTS AND PLAIN HARDENED WASHERS". ALL BOLTS SHALL BE 5/8" DIA. UON.
7. ALL STEEL MATERIALS SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123 "ZINC (HOT-DIP GALVANIZED) COATINGS ON IRON AND STEEL PRODUCTS", UNLESS OTHERWISE NOTED.
8. ALL BOLTS, ANCHORS AND MISCELLANEOUS HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 "ZINC-COATING (HOT-DIP) ON IRON AND STEEL HARDWARE", UNLESS OTHERWISE NOTED.
9. FIELD WELDS, DRILL HOLES, SAW CUTS AND ALL DAMAGED GALVANIZED SURFACES SHALL BE REPAIRED WITH AN ORGANIC ZINC REPAIR PAINT COMPLYING WITH REQUIREMENTS OF ASTM A780. GALVANIZING REPAIR PAINT SHALL HAVE 65 PERCENT ZINC BY WEIGHT, ZINC BY DUNCAN GALVANIZING, GALVA BRIGHT PREMIUM BY CROWN OR EQUAL. THICKNESS OF APPLIED GALVANIZING REPAIR PAINT SHALL BE NOT NOT LESS THAN 4 COATS (ALLOW TIME TO DRY BETWEEN COATS) WITH A RESULTING COATING THICKNESS REQUIRED BY ASTM A123 OR A153 AS APPLICABLE.
10. CONTRACTOR SHALL COMPLY WITH AWS CODE FOR PROCEDURES, APPEARANCE AND QUALITY OF WELDS, AND FOR METHODS USED IN CORRECTING WELDING. ALL WELDERS AND WELDING PROCESSES SHALL BE QUALIFIED IN ACCORDANCE WITH AWS "STANDARD QUALIFICATION PROCEDURES". ALL WELDING SHALL BE DONE USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC AND DI.I. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION". 9TH EDITION.
11. INCORRECTLY FABRICATED, DAMAGED OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE CONSTRUCTION MANAGER PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH ACTION SHALL REQUIRE CONSTRUCTION MANAGER APPROVAL.
12. UNISTRUTS SHALL BE FORMED STEEL CHANNEL STRUT FRAMING AS MANUFACTURED BY UNISTRUT CORP, WAYNE, MI OR EQUAL. STRUT MEMBERS SHALL BE 1 5/8"x1 5/8"x12GA, UNLESS OTHERWISE NOTED, AND SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION.
13. EPOXY ANCHOR ASSEMBLY SHALL CONSIST OF 1/2" DIAMETER STAINLESS STEEL ANCHOR ROD WITH NUTS & WASHERS. AN INTERNALLY THREADED INSERT, A SCREEN TUBE AND A EPOXY ADHESIVE. THE ANCHORING SYSTEM SHALL BE THE HILTI-HIT HY-20 AND OR HY-150 SYSTEMS (AS SPECIFIED AN DWG.) OR ENGINEERS APPROVED EQUAL WITH 4-1/4" MIN. EMBEDMENT DEPTH.
14. EXPANSION BOLTS SHALL CONFORM TO FEDERAL SPECIFICATION FF-S-325, GROUP II, TYPE 4, CLASS I, HILTI KWIK BOLT II OR APPROVED EQUAL. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. MINIMUM EMBEDMENT SHALL BE THREE AND ONE HALF (3 1/2) INCHES.
15. GRAVEL SUB BASE AND CONCRETE SHALL BE PLACED AGAINST UNDISTURBED SOIL.
16. CONCRETE FOR FENCE AND ICE BRIDGE SUPPORT SHALL BE 3000 PSI AIR ENTRAINED (4%-6%) NORMAL WEIGHT CONCRETE.
17. ALL CAST IN PLACE CONCRETE SHALL BE MIXED AND PLACED IN ACCORDANCE WITH THE REQUIREMENTS OF ACI 318 AND ACI 301.
18. THE FOLLOWING MINIMUM CONCRETE COVER OVER REINFORCING STEEL SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE:
    CONCRETE CAST AGAINST EARTH ... 3 INCHES.
    CONCRETE EXPOSED TO EARTH OR WATER
    #6 AND LARGER .....2 INCHES
    #5 AND SMALLER .....1 1/2 INCHES

    ALL EXPOSED EDGES SHALL BE PROVIDED WITH A 3/4"x3/4" CHAMFER UNLESS NOTED OTHERWISE.
19. LUMBER SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION AND THE NATIONAL FOREST PRODUCTS ASSOCIATION'S NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION. ALL LUMBER SHALL BE PRESSURE TREATED AND SHALL BE STRUCTURAL GRADE NO. 2 OR BETTER.

verizon
118 FLANDERS ROAD
WESTBOROUGH, MA 01581
(508) 330-3300 TEL

Vertex Towers LLC
VERTEX TOWERS LLC
P.O. BOX 680
MEDFIELD, MA 02052

AEG ADVANCED ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
179 Swansea Mall Drive, Suite 1
Swansea, MA 02777
Tel: (508) 543-1414
Fax: (401) 633-6354

STATE OF VERMONT
SCOTT N. ADAMS
NO. 135423
CIVIL
LICENSED
PROFESSIONAL ENGINEER

AEG PROJECT #: 2023-0079

DRAWN BY: JWH

CHECKED BY: SNA

SUBMITTALS

REV#	DATE	DESCRIPTION
2	06/05/24	REVISED
3	08/19/24	REVISED
4	10/20/24	REVISED
5	10/24/24	REVISED
6	12/11/24	REVISED
7	02/18/25	REVISED
8	04/10/25	REVISED

VT-VT-0111A

ROCHESTER

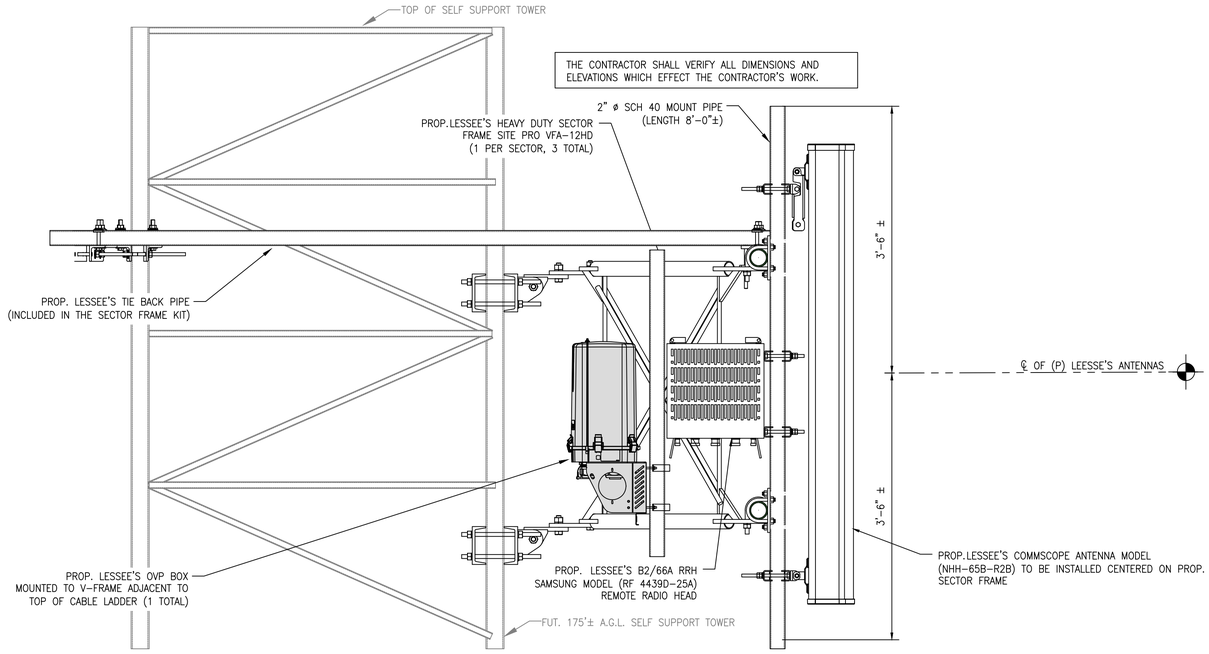
1030 VT ROUTE 100
ROCHESTER, VT 05767
WINDSOR COUNTY

SHEET TITLE

EQUIPMENT SHED DETAILS

SHEET NUMBER

S-3



1 / A-3 ANTENNA MOUNT DETAIL

SCALE: 1"=1'-0"

GENERAL NOTES:

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXAMINE ALL PLAN SHEETS AND SPECIFICATIONS AND COORDINATE HIS WORK WITH THE WORK OF ALL OTHER CONTRACTORS TO ENSURE THAT WORK PROGRESSION IS NOT INTERRUPTED.

2. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING A NEAT AND ORDERLY SITE, YARD AND GROUNDS. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND/OR OFFSITE DISPOSAL OF ALL RUBBISH, WASTE MATERIALS, PETRO-CHEMICAL SPILLS, STAINS AND OTHER FOREIGN DEPOSITS. THE GROUNDS ARE TO BE RAKED TO A SMOOTH EVEN-TEXTURED SURFACE.

3. THE PLANS SHOW SOME KNOWN SUBSURFACE STRUCTURES. THE EXACT LOCATION OF ABOVE GROUND STRUCTURES AND/OR UTILITIES BELIEVED TO EXIST IN THE WORKING AREA, MAY VARY FROM THE LOCATIONS INDICATED. IN PARTICULAR, THE CONTRACTOR IS WARNED THAT THE EXACT OR EVEN APPROXIMATE LOCATION OF SUCH UTILITIES, PIPELINES, AND/OR SUBSURFACE STRUCTURES IN THE AREA, MAY BE SHOWN OR NOT BE SHOWN. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROCEED WITH GREAT CARE IN EXECUTION OF ANY WORK. CALL 1-888-DIG-SAFE 48 HOURS BEFORE YOU DIG, DRILL OR BLAST. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE UNDERGROUND UTILITIES.

4. THE OWNER OR OWNER'S REPRESENTATIVE SHALL BE NOTIFIED IN WRITING OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLANS WITHOUT THE EXPRESSED APPROVAL OF THE ENGINEER OR DESIGNATED ENGINEER'S REPRESENTATIVE.

5. THE CONTRACTOR IS INSTRUCTED TO COOPERATE WITH ANY AND ALL OTHER CONTRACTORS PERFORMING WORK ON THIS JOB SITE DURING THE PERFORMANCE OF THIS CONTRACT.

6. THE CONTRACTOR SHALL RESTORE ALL PUBLIC OR PRIVATE PROPERTY DAMAGED OR REMOVED TO AT LEAST AS GOOD OF CONDITION AS BEFORE DISTURBED AS DETERMINED BY THE OWNER OR OWNERS REPRESENTATIVE.

7. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIRED PERMITS AND SHALL BE RESPONSIBLE FOR OBTAINING AND MAINTAINING ALL REQUIRED PERMITS, INSPECTIONS, CERTIFICATES, ETC.

8. THE CONTRACTOR SHALL PROTECT EXISTING PROPERTY LINE MONUMENTATION. ANY MONUMENTATION DISTURBED OR DESTROYED, AS JUDGED BY THE OWNER OR OWNER'S REPRESENTATIVE, SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE UNDER THE SUPERVISION OF A LICENSED LAND SURVEYOR.

9. ALL TRENCH EXCAVATION AND ANY REQUIRED SHEETING AND SHORING SHALL BE DONE IN ACCORDANCE WITH OSHA REGULATIONS.

10. CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING AND THE MAINTENANCE OF SURFACE DRAINAGE DURING THE COURSE OF WORK.

11. ALL UTILITY WORK INVOLVING CONNECTIONS TO EXISTING SYSTEMS SHALL BE AWAY FROM THE BUILDING AND THE TOWER.COORDINATED WITH THE OWNER OR OWNER'S REPRESENTATIVE AND THE UTILITY OWNER. NOTIFY THE OWNER OR OWNER'S REPRESENTATIVE AND THE UTILITY OWNER BEFORE EACH AND EVERY CONNECTION TO EXISTING SYSTEMS IS MADE.

12. MAINTAIN FLOW FOR ALL EXISTING UTILITIES.

13. ALL SITE FILL SHALL MEET SELECTED FILL STANDARDS AS DEFINED BY THE ENGINEER ON THE DRAWINGS.

14. CONTRACTOR TO GRADE ALL AREAS ON THE SITE TO PROVIDE POSITIVE DRAINAGE.

15. THESE DRAWINGS DO NOT INCLUDE PROVISIONS FOR CONSTRUCTION SAFETY AND THE CONTRACTOR SHALL COMPLY WITH ALL OSHA CONSTRUCTION SAFETY REGULATIONS.

16. INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE OWNER PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH ACTION SHALL REQUIRE APPROVAL BY THE ENGINEER OR ENGINEER'S DESIGNATE.

ANTENNA MOUNTING AND INSTALLATION DESIGN NOTES

1. ANTENNA ASSEMBLY, CONNECTIONS, DESIGN LOADS, MOUNTING, BRACKETS, POLES AND ALL COMPONENTS THERE OF, AND ATTACHMENT THERE TO, IS THE RESPONSIBILITY OF THE ANTENNA MANUFACTURER. ANTENNA MANUFACTURER SHALL PROVIDE THE ENGINEER THE PROPER DESIGN SPECIFICATIONS FOR INCLUSION INTO CONSTRUCTION DRAWINGS.

2. BRACKETS SHALL BE DESIGNED TO SUPPORT CURRENT AND FUTURE PANEL ANTENNAS AND COAXIAL CABLES AS SHOWN.

3. ANTENNA MOUNTING PLATFORM SUPPLIED, CONTRACTOR TO VERIFY ATTACHMENT REQUIREMENTS PRIOR TO CONSTRUCTION.

EXCAVATION AND FOUNDATION NOTES:

1. FOUNDATION EXCAVATION SHALL BE HAND-TRIMMED TO REMOVE LOOSE MATERIALS.

2. EXTERIOR FOUNDATION BACKFILL SHALL BE SELECTED GRANULAR FILL.

3. DO NOT PLACE FOOTINGS IN WATER OR ON FROZEN GROUND.

4. SOIL BEARING SURFACES, PREVIOUSLY ACCEPTED BY GEOTECHNICAL ENGINEER, WHICH ARE ALLOWED TO BECOME SATURATED, FROZEN OR DISTURBED SHALL BE REWORKED TO SATISFACTION OF GEOTECHNICAL ENGINEER OR THEIR APPROVED DESIGNATE.

5. DO NOT ALLOW GROUND BENEATH FOOTINGS TO FREEZE.

6. FOOTING EXCAVATIONS SHALL BE CUT NEAT.

7. ALL STRUCTURAL BACKFILL AND SUBBASE UNDER SLABS-ON-GRADE AND FOOTINGS SHALL BE "SW" OR BETTER PER ASTM D-2487 COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY PER ASTM D-698.

STRUCTRAL STEEL NOTES:

1. STRUCUTRAL STEEL SHALL CONFORM TO THE LATEST EDITION OF THE AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS".

2. STEEL ANGLES BASE PLATES, BEARING PLATES AND MISC. FABRICATION SHALL BE MADE FROM STEEL MEETING THE REQUIREMENTS OF ASTM-A36 WITH A MINIUM YIELD STRESS OF 36 KSI. ALL STEEL TUBES AND PIPES SHALL BE A500 STEEL MINIMUM.

3. ALL EXTERIOR STRUCTURAL STEEL SHALL BE, WHEN DELIVERED, HOT-DIP GALVANIZED ACCORDING TO ASTM A123. TOUCH-UP FIELD WELDS AND MARRED AREAS W/2 COATS OF GALVANIZED PAINT.

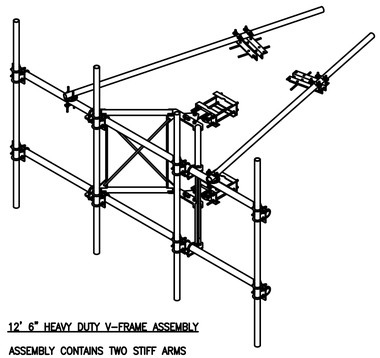
4. DO NOT PLACE HOLES THROUGH STRUCTURAL STEEL MEMBERS EXCEPT AS SHOWN AND DETAILED ON STRUCTURAL DRAWINGS.

5. CONNECTIONS:
A. WELDS (SHIELDED METAL ARC) - ELECTRODES SHALL BE E70XX MINIMUM AND BE IN ACCORDANCE WITH AWS D1.1 UNLESS NOTED OTHERWISE.
B. MINIMUM CAPACITY OF CONNECTIONS: FOR CONNECTIONS NOT DETAILED, PROVIDE CONNECTION CAPACITY OF AT LEAST THAT REQUIRED BY PART 2 OF THE AISC MANUAL (9TH EDITION) IN THE SECTION "ALLOWABLE LOADS ON BEAMS", FOR THE GIVEN MEMBER AND STEEL SPECIFICATIONS. CONCENTRATED LOADS NEAR SUPPORTS MUST BE ADDED.

6. CONNECTION DESIGNS BY FABRICATOR WILL BE SUBJECT TO REVIEW AND APPROVAL.

7. BOLTED CONNECTIONS SHALL USE BEARING TYPE GALVANIZED ASTM A325 OLTS (3/4" DIA.) AND SHALL HAVE A MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.

8. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" DIA. GALVANIZED ASTM A307 BOLTS UNLESS NOTED OTHERWISE.



12' 6" HEAVY DUTY V-FRAME ASSEMBLY

ASSEMBLY CONTAINS TWO STIFF ARMS
MANUFACTURER: SITE PRO 1
ASSEMBLY MODEL# VFA12-HD

5 / A-3 SECTOR FRAME MOUNT DETAIL

SCALE: N.T.S.

verizon
118 FLANDERS ROAD
WESTBOROUGH, MA 01581
(508) 330-3300 TEL

Vertex Towers LLC
VERTEX TOWERS LLC
P.O. BOX 680
MEDFIELD, MA 02052

AEG ADVANCED ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
179 Swansea Mall Drive, Suite 1
Swansea, MA 02777
Tel: (508) 343-1414
Fax: (401) 633-6354

STATE OF VERMONT SCOTT N. ADAMS NO. 135423 CIVIL LICENSED PROFESSIONAL ENGINEER

AEG PROJECT #:	2023-0079
DRAWN BY:	JWH
CHECKED BY:	SNA

SUBMITTALS

REV#	DATE	DESCRIPTION
2	06/05/24	REVISED
3	08/19/24	REVISED
4	10/20/24	REVISED
5	10/24/24	REVISED
6	12/11/24	REVISED
7	02/18/25	REVISED
8	04/10/25	REVISED

VT-VT-0111A

ROCHESTER

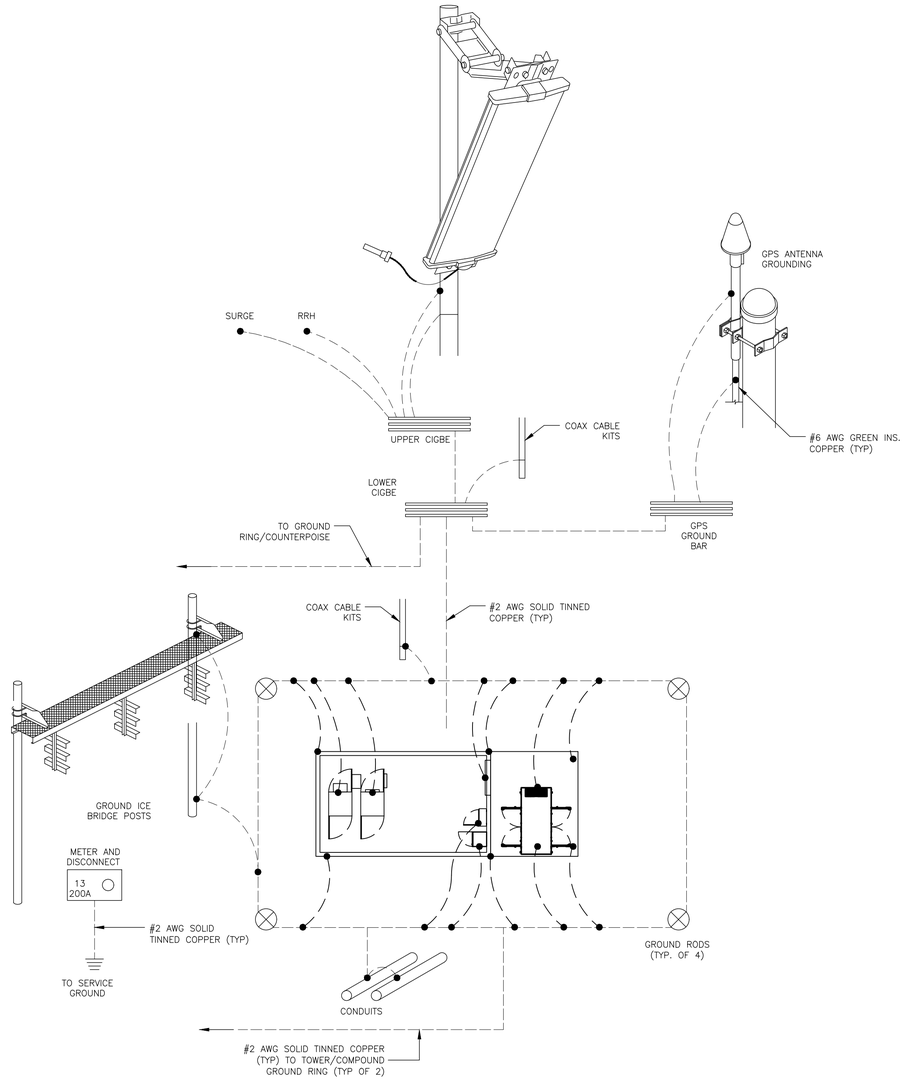
1030 VT ROUTE 100
ROCHESTER, VT 05767
WINDSOR COUNTY

SHEET TITLE

ANTENNA MOUNT DETAILS

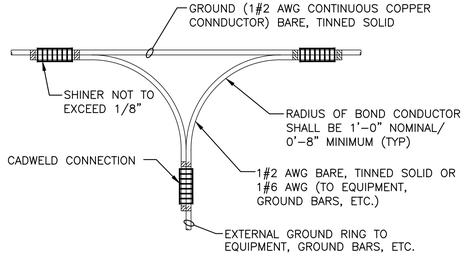
SHEET NUMBER

S-4



1 G-1 **GROUNDING RISER DIAGRAM**

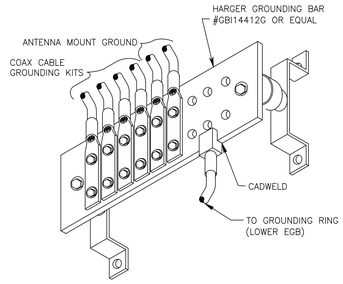
SCALE: N.T.S.



NOTE: ALL CONNECTION TO GROUND SHALL BE NON-DIRECTIONAL

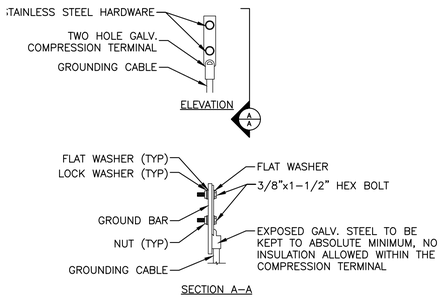
2 G-1 **NON-DIRECTIONAL SPLICE**

SCALE: N.T.S.



4 G-1 **GROUND BAR DETAIL**

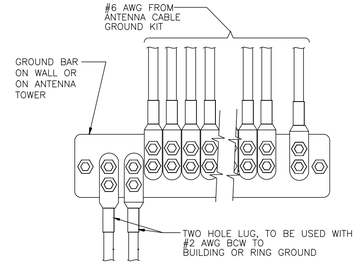
SCALE: N.T.S.



NOTE:
1. "DOUBLING UP" OR "STACKING " OF CONNECTION IS NOT PERMITTED.
2. OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS.

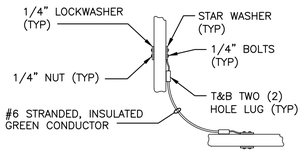
6 G-1 **GROUND BAR MECHANICAL CONN.**

SCALE: N.T.S.



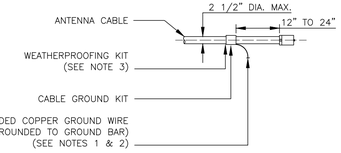
3 G-1 **GROUND WIRE TO GROUND BAR INSTALLATION**

SCALE: N.T.S.



5 G-1 **CABLE TRAY GROUNDING**

SCALE: N.T.S.



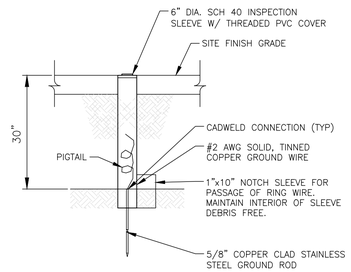
NOTES:
1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
2. GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.
3. WEATHER PROOFING SHALL BE TWO-PART TAPE SUPPLIED WITH KIT. COLD SHRINK SHALL NOT BE USED. 1-2-1 (1"x2"x1") TAPE WRAPPING SHALL BE COMPLETED OVER ALL WEATHER PROOFING CONNECTIONS THAT EXTENDS MINIMUM 6" BEYOND THE CONNECTION POINT ON COAX LINES. EACH WRAP SHOULD OVERLAP THE PROCEEDING LAYER TO ENSURE WATER TIGHT INTEGRITY.

7 G-1 **CABLE GROUND KIT ANTENNA CABLE CONN.**

SCALE: N.T.S.

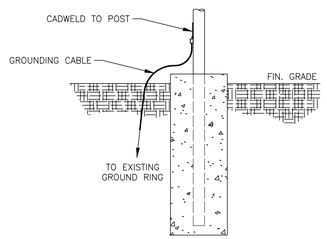
8 G-1 **TYPICAL GROUND ROD DETAIL**

SCALE: N.T.S.



9 G-1 **GROUND ROD TEST WELL DETAIL**

SCALE: N.T.S.

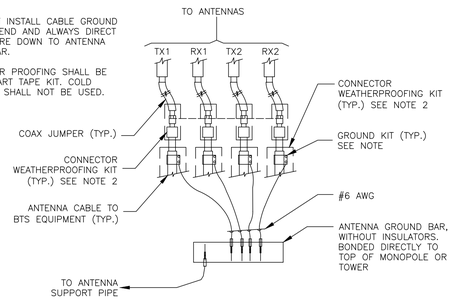


NOTES
1. DETAIL IS TYPICAL FOR ICE BRIDGE, ICE CANOPY, AND RRH H-FRAME RACK POST GROUNDING.

10 G-1 **STEEL POST GROUNDING**

SCALE: N.T.S.

NOTES:
1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO ANTENNA GROUND BAR.
2. WEATHER PROOFING SHALL BE TWO-PART TAPE KIT. COLD SHRINK SHALL NOT BE USED.



11 G-1 **GROUND WIRE TO GROUND BAR CONN.**

SCALE: N.T.S.

verizon
118 FLANDERS ROAD
WESTBOROUGH, MA 01581
(508) 330-3300 TEL

Vertex Towers LLC
VERTEX TOWERS LLC
P.O. BOX 680
MEDFIELD, MA 02052

AEG ADVANCED ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
179 Swansea Mall Drive, Suite 1
Swansea, MA 02777
Tel: (508) 543-1414
Fax: (401) 633-6354

STATE OF VERMONT
SCOTT N. ADAMS
NO. 135423
CIVIL
LICENSED PROFESSIONAL ENGINEER

AEG PROJECT #: 2023-0079

DRAWN BY: JWH

CHECKED BY: SNA

SUBMITTALS

REV#	DATE	DESCRIPTION
2	06/05/24	REVISED
3	08/19/24	REVISED
4	10/20/24	REVISED
5	10/24/24	REVISED
6	12/11/24	REVISED
7	02/18/25	REVISED
8	04/10/25	REVISED

VT-VT-0111A

ROCHESTER

1030 VT ROUTE 100
ROCHESTER, VT 05767
WINDSOR COUNTY

SHEET TITLE

GROUNDING RISER DIAGRAM & DETAILS

SHEET NUMBER

G-1

The Low Risk Site Handbook
for
Erosion Prevention and Sediment Control

VERMONT
ENVIRONMENTAL CONSERVATION
August 2006

The Low Risk Site Handbook for Erosion Prevention and Sediment Control

Any construction activity that disturbs 1 or more acres of land, or is part of a larger development plan that will disturb 1 or more acres, requires a Vermont state permit for stormwater discharges from construction sites.

Construction General Permit 3-9020 guides an applicant in the determination of the potential risk to water quality from the construction activity and categorizes the applicant's activity as Low Risk, Moderate Risk, or that which requires an Individual Permit.

The standards in this handbook serve as the required Erosion Prevention and Sediment Control Plan for construction sites determined to be "Low Risk" under GP-3-9020.

Contact Information

Vermont Department of Environmental Conservation
Watershed Management Division
One National Life Drive – Main Building - 2nd Floor
Montpelier, VT 05620-3522
Tel: 802-828-1535
Fax: 802-828-1544
dec.vermont.gov/watershed/stormwater

Table of Contents

UPDATE

Rolled Erosion Control Product (RECP) materials have the potential to ensnare animals such as snakes and birds, which can lead to injury or fatality. This has been observed to be most problematic in products with chemically-bound joints in the supporting mesh.

Accordingly, only woven and interlinked products are approved for use in temporary RECP applications.

(See Tables 4.3 and 4.4 of the Vermont Standards & Specifications for Erosion Prevention and Sediment Control)

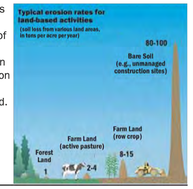
Section 1
Introduction

What is erosion prevention and sediment control?

Sediment washing into streams is one of the largest water quality problems in Vermont. Sediment can kill or weaken fish and other organisms and adversely impact aquatic habitat.

On most construction sites, vegetation that holds the soil in place and protects it from erosive forces of rain and runoff is removed, leaving large areas of soil exposed to the elements. During rainfall or snowmelt, the exposed soil may be easily eroded and transported to nearby streams, lakes, or wetlands.

To prevent this from happening, a small number of simple practices to prevent erosion and contain soil on the construction site must be used.



Do I need a permit?

Any construction activity that disturbs 1 or more acres of land, or is part of a larger development plan that will disturb 1 or more acres, requires a Vermont state permit for stormwater discharges from construction sites.

Application Process

1. Obtain a copy of the permit and determine the Risk Category of the proposed project. The permit is available online at: dec.vermont.gov/watershed/stormwater
2. Submit the Notice of Intent (NOI) form, notifying the Department of your intent to begin construction. **Submit the NOI to DEC at least 60 days before you plan to begin construction to allow sufficient time for processing.*
3. Upon receipt of written authorization from DEC, you are covered under the permit and may begin construction.
4. If your project is determined to be "Low Risk", you must follow this handbook for erosion prevention and sediment control on your construction site.
5. If your site is not classified as Low Risk, then you must follow the Department guidance in GP 3-9020 for Moderate Risk activities or those requiring an Individual Permit.

Section 2
The Requirements

1. Mark Site Boundaries

Purpose:

Mark the site boundaries to identify the limits of construction. Delineating your site will help to limit the area of disturbance, preserve existing vegetation and limit erosion potential on the site.

Requirements:

You must physically mark the limits of construction.

How to comply:

Before beginning construction, walk the site boundaries and flag trees, post signs, or install orange safety fence.

Fence is required on any boundary within 50 feet of a stream, lake, pond or wetland, unless the area is already developed (existing roads, buildings, etc.)

Properly placed barrier tape marks the boundaries and limits of construction on this site.

2. Limit Disturbance Area

Purpose:

Limit the amount of soil exposed at one time to reduce the potential erosion on site.

Requirements:

The permitted disturbance area is specified on the site's written authorization to discharge. Only the acreage listed on the authorization form may be exposed at any given time.

How to comply:

Plan ahead and phase the construction activities to ensure that no more than the permitted acreage is disturbed at one time.

Be sure to properly stabilize exposed soil with seed and mulch or erosion control matting before beginning work in a new section of the site.

This residential subdivision is being constructed in phases. To limit the total disturbance area, only a few home sites are under construction at one time.

3. Stabilize Construction Entrance

Purpose:

A stabilized construction entrance helps remove mud from vehicle wheels to prevent tracking onto streets.

Requirements:

If there will be any vehicle traffic off of the construction site, you must install a stabilized construction entrance before construction begins.

Construction entrance detail. Entrance/exit pad must keep mud from tracking onto both paved and dirt roads.

How to install:

Rock Size: Use a mix of 1 to 4 inch stone
Depth: 8 inches minimum
Width: 12 feet minimum
Length: 40 feet minimum (or length of driveway, if shorter)
Geotextile: Place filter cloth under entire gravel bed

Maintenance:

Redress with clean stone as required to keep sediment from tracking onto the street.

Good stabilized construction entrance. Adequate width to accommodate construction traffic and prevent mud tracking onto neighboring streets. Ensure that the pad is 8 inches deep and 40 feet long.

Poor construction exit. Rock pad is poorly constructed; rock is too small. Use filter fabric under 1 - 4 inch rock. No mud should be tracked onto roads.

Rock sizing and placement look OK for residential site, and very little mud appears on the road. The pad should be at least 8 inches thick and 12 feet wide. Ensure that pad is used as the entrance and exit points - note track marks near curb. Entire area needs seed and mulch.

Rock pad was installed properly with right sized rock, but lack of filter fabric underliner is causing rock to spread and sink into the soil. Note tracking of mud onto road. Mud tracked on roadways violates the permit requirements and is a potential legal liability.

4. Install Silt Fence

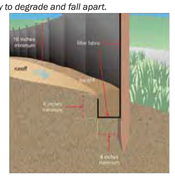
Purpose:

Silt fences intercept runoff and allow suspended sediment to settle out.

Requirements:

Silt fence must be installed:
- on the downhill side of the construction activities
- between any ditch, swale, storm sewer inlet, or waters of the State and the disturbed soil

** Hay bales must not be used as sediment barriers due to their tendency to degrade and fall apart.*



Remember: stakes go on the downhill side. Dig trench first, install fence in downhill side of trench, tuck fabric into trench, then backfill on the uphill side (the side toward the bare soil area).

Where to place:

- Place silt fence on the downhill edge of bare soil. At the bottom of slopes, place fence 10 feet downhill from the end of the slope (if space is available).
- Ensure the silt fence catches all runoff from bare soil.
- Maximum drainage area is ¼ acre for 100 feet of silt fence.
- Install silt fence across the slope (not up and down hills!)
- Install multiple rows of silt fence on long hills to break up flow.
- Do not install silt fence across ditches, channels, or streams or in stream buffers.

How to install silt fence:

- Dig a trench 6 inches deep across the slope
- Unroll silt fence along the trench
- Ensure stakes are on the downhill side of the fence
- Join fencing by rolling the end stakes together
- Drive stakes in against downhill side of trench
- Drive stakes until 16 inches of fabric is in trench
- Push fabric into trench; spread along bottom
- Fill trench with soil and pack down

Maintenance:

- Remove accumulated sediment before it is halfway up the fence.
- Ensure that silt fence is trenched in ground and there are no gaps.

Very good use of continuous "super" (reinforced) silt fence. Note that wire fencing is installed between the filter fabric and the posts.

Good use of J-hook in silt fence to trap sediment in water running along the fence. Sediment must be removed before it reaches halfway to top of fence.

Very good installation of multiple silt fences on long slope. Turn ends of fencing uphill to prevent bypass. Leave silt fences up until grass is well established on all areas of the slope. Re-seed bare areas as soon as possible. Remove or spread accumulated sediment and remove silt fence after all grass is up.

Poor installation of silt fencing. Silt fence must be trenched in along bottom. Hay bales are not approved as sediment barriers.

verizon
118 FLANDERS ROAD
WESTBOROUGH, MA 01581
(508) 330-3300 TEL

Vertex Towers LLC
VERTEX TOWERS LLC
P.O. BOX 680
MEDFIELD, MA 02052

AEG ADVANCED ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
179 Swansea Mall Drive, Suite 1
Swansea, MA 02777
Tel: (508) 343-1414
Fax: (401) 633-6354

STATE OF VERMONT
SCOTT N. ADAMS
NO. 135423
CIVIL
LICENSED
PROFESSIONAL ENGINEER

AEG PROJECT #: 2023-0079

DRAWN BY: JWH

CHECKED BY: SNA

SUBMITTALS

REV#	DATE	DESCRIPTION
2	06/05/24	REVISED
3	08/19/24	REVISED
4	10/20/24	REVISED
5	10/24/24	REVISED
6	12/11/24	REVISED
7	02/18/25	REVISED
8	04/10/25	REVISED

VT-VT-0111A

ROCHESTER

1030 VT ROUTE 100
ROCHESTER, VT 05767
WINDSOR COUNTY

SHEET TITLE

SITE HANDBOOK

SHEET NUMBER

HB-1

5. Divert Upland Runoff

Purpose:

Diversion berms intercept runoff from above the construction site and direct it around the disturbed area. This prevents "clean" water from becoming muddied with soil from the construction site.

Requirements:

If stormwater runs onto your site from upslope areas and your site meets the following two conditions, you must install a diversion berm before disturbing any soil.

1. You plan to have one or more acres of soil exposed at any one time (excluding roads).
2. Average slope of the disturbed area is 20% or steeper.*

Berms and ditches divert clean upland runoff around construction sites and reduce erosion and sedimentation problems. Stabilize berms and ditches after construction.

How to install:

A - Berm Height: 1.5 feet
B - Berm Width: 2 feet
Side slopes: 2:1 or flatter *
C - Flow width: 4 feet
D - Flow depth: 8 inches

1. Compact the berm with a shovel or earth-moving equipment.
2. Seed and mulch berm or cover with erosion control matting immediately after installation.
3. Stabilize the flow channel with seed and straw mulch or erosion control matting. Line the channel with 4 inch stone if the channel slope is greater than 20%*.
4. Ensure the berm drains to an outlet stabilized with riprap. Ensure that there is no erosion at the outlet.
5. The diversion berm shall remain in place until the disturbed areas are completely stabilized.

* See page 39 for slope calculations.

Good construction, seeding, and stabilization of diversion berm. Note that diversion ditch is lined with grass on flatter part of slope, and with rock on steeper part.

Well built vegetated berm diverting runoff. Diversion berms and ditches should be seeded after construction. Use matting if slopes are steep.

Good installation of rock-lined berm to divert rain runoff around residential construction site on steep slope near a river. Diversion ditches can be lined with grass if channel slopes are 5% or less, and with 4 inch stone if they are steeper.

6. Slow Down Channelized Runoff

Purpose:

Stone check dams reduce erosion in drainage channels by slowing down the stormwater flow.

Requirements:

If there is a concentrated flow (e.g. in a ditch or channel) of stormwater on your site, then you must install stone check dams. Hay bales must not be used as check dams.

How to install:

Height: No greater than 2 feet. Center of dam should be 9 inches lower than the side elevation
Side slopes: 2:1 or flatter (see p.39 for slope calculation)
Stone size: Use a mixture of 2 to 9 inch stone
Width: Dams should span the width of the channel and extend up the sides of the banks
Spacing: Space the dams so that the bottom (toe) of the upstream dam is at the elevation of the top (crest) of the downstream dam. This spacing is equal to the height of the check dam divided by the channel slope.

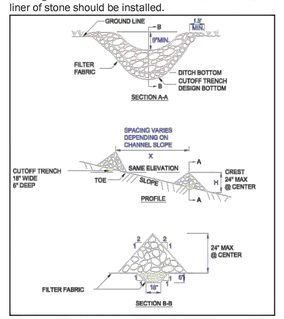
Spacing (in feet) = Height of check dam (in feet) / Slope in channel (ft/ft)

Maintenance:

Remove sediment accumulated behind the dam

as needed to allow channel to drain through the stone check dam and prevent large flows from carrying sediment over the dam.

If significant erosion occurs between check dams, a liner of stone should be installed.



Rock check dams must be installed before excavation or fill activities begin. See "How to install" for spacing directions.

Good installation of temporary rock check dams. The check dams should extend up the sides of the banks. Middle section should be lower than the sides. Clean out sediment as it accumulates. Remove check dams after site and channel are stabilized with vegetation.

Hay bales must not be used as check dams due to their high failure rates.

7. Construct Permanent Controls

Purpose:

Permanent stormwater treatment practices are constructed to maintain water quality, ensure groundwater flows, and prevent downstream flooding. Practices include detention ponds and wetlands, infiltration basins, and stormwater filters.

Requirements:

If the total impervious* area on your site, or within the common plan of development, will be 1 or more acres, you must apply for a State Stormwater Discharge Permit and construct permanent stormwater treatment practices on your site. These practices must be installed before the construction of any impervious surfaces.

How to comply:

Contact the Vermont Stormwater Program and follow the requirements in the Vermont Stormwater Management Manual.

The Stormwater Management Manual is available at: dec.vermont.gov/watershed/stormwater

*An impervious suface is a manmade surface, including, but not limited to, paved and unpaved roads, parking areas, roofs, driveways, and walkways, from which precipitation runs off rather than infiltrates.

This wet pond is designed to treat stormwater runoff, recharge groundwater, regulate the flow of water into nearby streams, and prevent downstream flooding.

Install all permanent stormwater treatment practices before constructing any impervious surfaces on site. This stormwater wetland treats stormwater runoff from the adjacent parking lot.

8. Stabilize Exposed Soil

Purpose:

Seeding and mulching, applying erosion control matting, and hydroseeding are all methods to stabilize exposed soil. Mulches and matting protect the soil surface while grass is establishing.

Requirements:

All areas of disturbance must have temporary or permanent stabilization within 7, 14, or 21 days of initial disturbance, as stated in the project authorization. After this time, any disturbance in the area must be stabilized at the end of each work day.

The following exceptions apply:

- Stabilization is not required if earthwork is to continue in the area within the next 24 hours and there is no precipitation forecast for the next 24 hours.
- Stabilization is not required if the work is occurring in a self-contained excavation (i.e. no outlet) with a depth of 2 feet or greater (e.g. house foundation excavation, utility trenches).

All areas of disturbance must have permanent stabilization within 48 hours of reaching final grade (See page 33).

How to comply:

Prepare bare soil for seeding by grading the top 3 to 6 inches of soil and removing any large rocks or debris.

Seeding Rates for Temporary Stabilization
April 15 - Sept. 15 — Ryegrass (annual or perennial: 20 lbs/acre)
Sept. 15 - April 15 — Winter rye: 120 lbs/acre

Seeding Rates for Final Stabilization:

Choose from:	Variety	lbs./acre	lbs./1000 sq.ft.
Birdsfoot trefoil	Empire/Pardee	5[1]	0.10
or			
Common white clover	Common	8	0.20
plus			
Tall Fescue	KY-31/Rebel	10	0.25
plus			
Redtop	Common	2	0.05
or			
Ryegrass (perennial)	Pennfine/Linn	5	0.10

[1] - Mix 2.5 each of Empire and Pardee OR 2.5 lbs. of Birdsfoot and 2.5 lbs. white clover per acre.

Mulching Rates

April 15 - Sept.15 – Hay or Straw: 1 inch deep (1-2 bales/1000 s.f.)
Sept.15 - April 15 – Hay or Straw: 2 in. deep (2-4 bales/1000 s.f.)

Erosion Control Matting
As per manufacturer's instructions

Hydroseed
As per manufacturer's instructions

Excellent stabilization of large slopes to limit the area of disturbance. Make sure to install erosion control matting within 48 hours of grading to ensure good contact between soil and mat.

Good tracking up and down slope. Tracking slows down runoff and promotes infiltration. More mulch is needed.

Hydroseeding exposed soil is a good option for stabilizing large areas. Hydroseed is a mixture of seed, fertilizer, water and a tackifier to hold the seed in place before it germinates.

Excellent application of hay mulch. Good mulch cover and sediment barrier around soil stockpile.

9. Winter Stabilization

Purpose:

Managing construction sites to minimize erosion and prevent sediment loading of waters is a year-round challenge. In Vermont, this challenge becomes even greater during the late fall, winter, and early spring months.

'Winter construction' as discussed here, describes the period between October 15 and April 15, when erosion prevention and sediment control is significantly more difficult.

Rains in late fall, thaws throughout the winter, and spring melt and rains can produce significant flows over frozen and saturated ground, greatly increasing the potential for erosion.

Requirements for Winter Shutdown:

For those projects that will complete earth disturbance activities prior to the winter period (October 15), the following requirements must be adhered to:

1. For areas to be stabilized by vegetation, seeding shall be completed no later than September 15 to ensure adequate growth and cover.
2. If seeding is not completed by September 15, additional non-vegetative protection must be used to

Stabilization and seeding of slopes before winter will reduce or eliminate erosion in the spring. The grass on this slope is holding the soil in place and promoting infiltration of the melting snow.

stabilize the site for the winter period. This includes use of Erosion Control Matting or netting of a heavy mulch layer. Seeding with winter rye is recommended to allow for early germination during wet spring conditions.

3. Where mulch is specified, apply roughly 2 inches with an 80-90% cover. Mulch should be tracked in or stabilized with netting in open areas vulnerable to wind.

Requirements for Winter Construction

If construction activities involving earth disturbance continue past October 15 or begin before April 15, the following requirements must be adhered to:

1. Enlarged access points, stabilized to provide for snow stockpiling.
2. Limits of disturbance moved or replaced to reflect boundary of winter work.
3. A snow management plan prepared with adequate storage and control of meltwater, requiring cleared snow to be stored down slope of all areas of disturbance and out of stormwater treatment structures.
4. A minimum 25 foot buffer shall be maintained from perimeter controls such as silt fence.
5. In areas of disturbance that drain to a water body within 100 feet, two rows of silt fence must be installed along the contour.
6. Drainage structures must be kept open and free of snow and ice dams.

7. Silt fence and other practices requiring earth disturbance must be installed ahead of frozen ground.
8. Mulch used for temporary stabilization must be applied at double the standard rate, or a minimum of 3 inches with an 80-90% cover.
9. To ensure cover of disturbed soil in advance of a melt event, areas of disturbed soil must be stabilized at the end of each work day, with the following exceptions:
   - If no precipitation within 24 hours is forecast and work will resume in the same disturbed area within 24 hours, daily stabilization is not necessary.
   - Disturbed areas that collect and retain runoff, such as house foundations or open utility trenches.
10. Prior to stabilization, snow or ice must be removed to less than 1 inch thickness.
11. Use stone to stabilize areas such as the perimeter of buildings under construction or where construction vehicle traffic is anticipated. Stone paths should be 10–20 feet wide to accommodate vehicular traffic.

verizon
118 FLANDERS ROAD
WESTBOROUGH, MA 01581
(508) 330-3300 TEL

Vertex Towers LLC
VERTEX TOWERS LLC
P.O. BOX 680
MEDFIELD, MA 02052

AEG ADVANCED ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
179 Swansea Mall Drive, Suite 1
Swansea, MA 02777
Tel: (508) 343-1414
Fax: (401) 633-6354

STATE OF VERMONT
SCOTT N. ADAMS
NO. 135423
CIVIL
LICENSED
PROFESSIONAL ENGINEER

AEG PROJECT #: 2023-0079

DRAWN BY: JWH

CHECKED BY: SNA

SUBMITTALS

REV#	DATE	DESCRIPTION
2	06/05/24	REVISED
3	08/19/24	REVISED
4	10/20/24	REVISED
5	10/24/24	REVISED
6	12/11/24	REVISED
7	02/18/25	REVISED
8	04/10/25	REVISED

VT-VT-0111A

ROCHESTER

1030 VT ROUTE 100
ROCHESTER, VT 05767
WINDSOR COUNTY

SHEET TITLE

SITE HANDBOOK

SHEET NUMBER

HB-2

10. Stabilize Soil at Final Grade

Purpose:

Stabilizing the site with seed and mulch or erosion control matting when it reaches final grade is the best way to prevent erosion while construction continues.

Requirements:

Within 48 hours of final grading, the exposed soil must be seeded and mulched or covered with erosion control matting.

Lawn is fully established before construction is completed at this home site.

How to comply:

Bring the site or sections of the site to final grade as soon as possible after construction is completed. This will reduce the need for additional sediment and erosion control measures and will reduce the total disturbed area.

For seeding and mulching rates, follow the specifications under Rule 8, "Stabilizing Exposed Soil".

Within 48 hours of final grading, erosion control matting and mulch have been applied.

11. Dewatering Activities

Purpose:

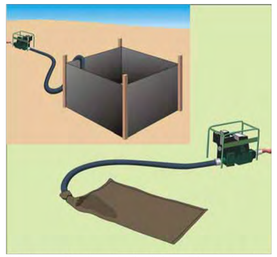
Treat water pumped from dewatering activities so that it is clear when leaving the construction site.

Requirements:

Water from dewatering activities that flows off of the construction site must be clear. Water must not be pumped into storm sewers, lakes, or wetlands unless the water is clear.

How to comply:

Using sock filters or sediment filter bags on dewatering discharge hoses or pipes, discharge water into silt fence enclosures installed in vegetated areas away from waterways. Remove accumulated sediment after the water has dispersed and stabilize the area with seed and mulch.



Water is pumped from the construction site into a silt fence enclosure on a vegetated area or into a sock filter away from waterways.

12. Inspect Your Site

Purpose:

Perform site inspections to ensure that all sediment and erosion control practices are functioning properly. Regular inspections and maintenance of practices will help to reduce costs and protect water quality.

Requirements:

Inspect the site at least once every 7 days and after every rainfall or snowmelt that results in a discharge from the site. Perform maintenance to ensure that practices are functioning according to the specifications outlined in this handbook.

In the event of a noticeable sediment discharge from the construction site, you must take immediate action to inspect and maintain existing erosion prevention and sediment control practices. Any visibly discolored stormwater runoff to waters of the State must be reported.

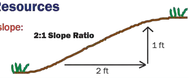
Forms for reporting discharges are available at:
dec.vermont.gov/watershed/stormwater

Example Site Inspection Form	Y	N
1. Boundary Limits		
• Site boundary markers are up and visible		
• Disturbance is only occurring within marked boundaries		
2. Limit Disturbance Area		
• Only the acreage listed on the *Authorization to Discharge* is disturbed at one time		
3. Construction Entrance		
• Off-site tracking of mud prevented		

Example Site Inspection Form	Y	N
4. Sediment Barriers		
• Silt fence is trenched into ground with no gaps		
• Accumulated sediment is less than ½ way up the fence		
5. Diversion Berms		
• All upland stormwater is diverted around the site		
6. Check Dams		
• Check dams are in place and stretch the width of the channel		
• Channels are stable with no erosion		
8. Stabilize Exposed Soil		
• Seed and mulch, and/or erosion control blankets are being used in accordance with the permit requirements		
9. Winter Stabilization		
• After September 15, all disturbed areas have been seeded and mulched to 3 inches deep, or covered in erosion control blankets.		
• For ongoing construction, exposed soil is mulched prior to forecasted rain events.		
10. Stabilize Soil at Final Grade		
• Within 48 hours of establishing final grade, soil is seeded and mulched or covered in erosion control matting		
Water flowing off the site		
• Water is free of sediment (water is clear)		

Section 3
Additional Resources

How to calculate slope:



Approximate Slope Conversions			
Steepness	**Percent**	**Slope ratio (ft/ft)**	**Degrees**
Very steep	100%	1:1	45°
	50%	2:1	27°
Moderate	33%	3:1	18°
	25%	4:1	14°
	10%	10:1	6°
Slight	5%	20:1	3°

How to estimate disturbance area:

1 acre = 43,560 square feet = 4,840 square yards

Area in acres (width in feet x length in feet)						
(w) **x** *(l)*	100	150	200	300	400	500
100	0.2	0.3	0.5	0.7	0.9	1.1
150	0.3	0.5	0.7	1.0	1.4	1.7
200	0.5	0.7	0.9	1.4	1.8	2.3
300	0.7	1.0	1.4	2.1	2.8	3.4
400	0.9	1.4	1.8	2.8	3.7	4.6
500	1.1	1.7	2.3	3.4	4.6	5.7

Acknowledgements

Design details and standards for sediment and erosion control practices have been adapted from the New York State Standards and Specifications for Erosion and Sediment Control. August 2005.

Photographs and illustrations provided by Tetra Tech, Kim Greenwood, Don Lake, Jim Pease, and Hydrograss Technologies.

This document has been adapted from the *Kentucky Erosion Prevention and Sediment Control Field Guide* produced by the Tetra Tech Water Resources Division in Fairfax VA for the Kentucky Division of Conservation and Division of Water. Inquiries regarding this publication should be directed to Barry Tonning, Tetra Tech, 1060 Eaton Place, Suite 340, Fairfax VA 22030 (703.385.6000).

Printing of this manual is sponsored by the Winooski Natural Resources Conservation District through a grant by the U.S. Environmental Protection Agency.

Vermont Department of Environmental Conservation
Watershed Management Division
One National Life Drive – Davis 3
Montpelier, VT 05620-3522
Tel: 802-828-1115
Fax: 802-828-1544

dec.vermont.gov/watershed/stormwater

verizon
118 FLANDERS ROAD
WESTBOROUGH, MA 01581
(508) 330-3300 TEL

Vertex Towers LLC
VERTEX TOWERS LLC
P.O. BOX 680
MEDFIELD, MA 02052

AEG ADVANCED ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
179 Swansea Mall Drive, Suite 1
Swansea, MA 02777
Tel: (508) 343-1414
Fax: (401) 633-6354

STATE OF VERMONT
SCOTT N. ADAMS
NO. 135423
CIVIL
LICENSED
PROFESSIONAL ENGINEER

AEG PROJECT #: 2023-0079

DRAWN BY: JWH

CHECKED BY: SNA

SUBMITTALS

REV#	DATE	DESCRIPTION
2	06/05/24	REVISED
3	08/19/24	REVISED
4	10/20/24	REVISED
5	10/24/24	REVISED
6	12/11/24	REVISED
7	02/18/25	REVISED
8	04/10/25	REVISED

VT-VT-0111A

ROCHESTER

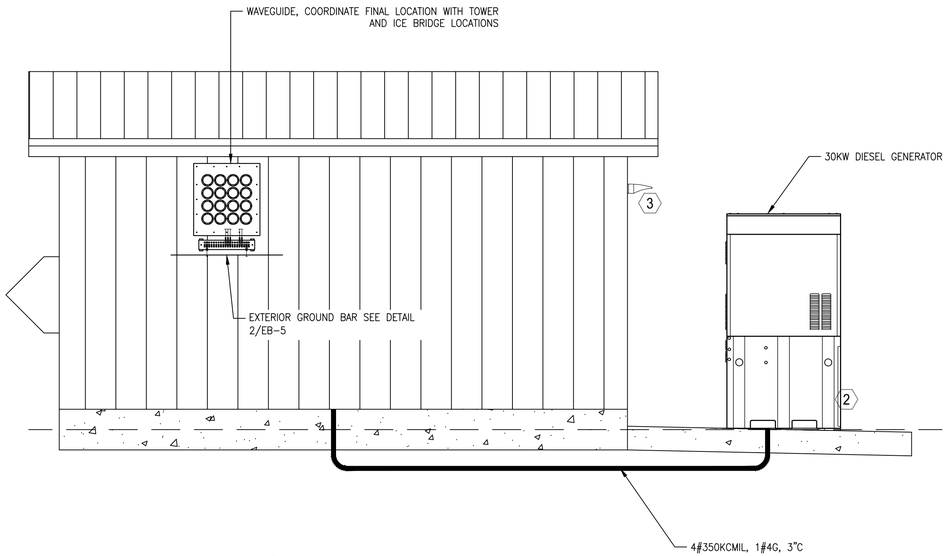
1030 VT ROUTE 100
ROCHESTER, VT 05767
WINDSOR COUNTY

SHEET TITLE

SITE HANDBOOK

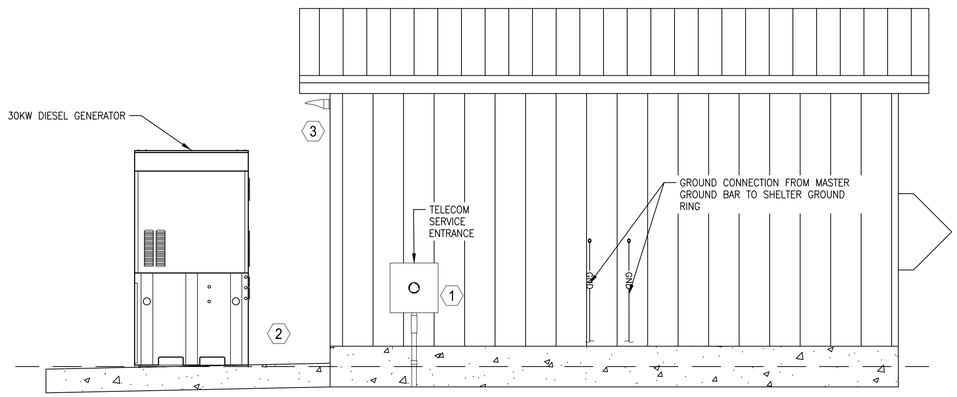
SHEET NUMBER

HB-3



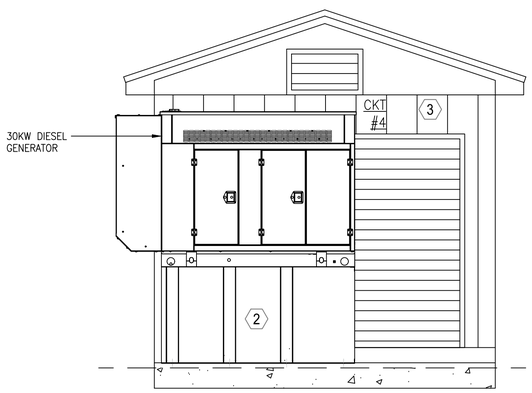
1 EB-2 EXTERIOR ELEVATION "A"

SCALE: 22x34: 3/8"=1'



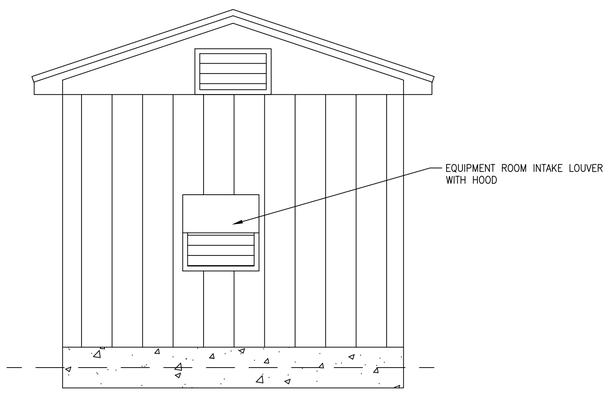
2 EB-2 EXTERIOR ELEVATION "C"

SCALE: 22x34: 3/8"=1'



3 EB-2 EXTERIOR ELEVATION "B"

SCALE: 22x34: 3/8"=1'



4 EB-2 EXTERIOR ELEVATION "D"

SCALE: 22x34: 3/8"=1'

GENERAL NOTES:

1. COORDINATE BUILDING CONSTRUCTION WITH STRUCTURAL DRAWINGS.
2. COORDINATE FINAL MECHANICAL EQUIPMENT LOCATIONS WITH MECHANICAL DRAWINGS.
3. COORDINATE WITH ELECTRICAL SITE DRAWINGS FOR FINAL CONNECTIONS OF GROUNDING CABLES.

KEY NOTES:

1. PROVIDE 2" SCH 40 PVC FROM UTILITY POLE TO TELECOM PULLBOX. PROVIDE 2" SCH 40 THRU WALL INTO SHELTER.
2. PROVIDE CONNECTION OF CONDUIT AND WIRING FROM VERIZON BATTERY CABINET TO GENERATOR PER MANUFACTURER'S RECOMMENDATIONS.
3. PROVIDE RAB WPLED10 MOUNT 6" ABOVE DOOR.

verizon
118 FLANDERS ROAD
WESTBOROUGH, MA 01581
(508) 330-3300 TEL

Vertex Towers LLC
VERTEX TOWERS LLC
P.O. BOX 680
MEDFIELD, MA 02052

AEG ADVANCED ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
179 Swansea Mall Drive, Suite 1
Swansea, MA 02777
Tel: (508) 543-1414
Fax: (401) 633-6354

STATE OF VERMONT
SCOTT N. ADAMS
NO. 135423
CIVIL
LICENSED PROFESSIONAL ENGINEER

AEG PROJECT #: 2023-0079

DRAWN BY: JWH

CHECKED BY: SNA

SUBMITTALS

REV#	DATE	DESCRIPTION
2	06/05/24	REVISED
3	08/19/24	REVISED
4	10/20/24	REVISED
5	10/24/24	REVISED
6	12/11/24	REVISED
7	02/18/25	REVISED
8	04/10/25	REVISED

VT-VT-0111A

ROCHESTER

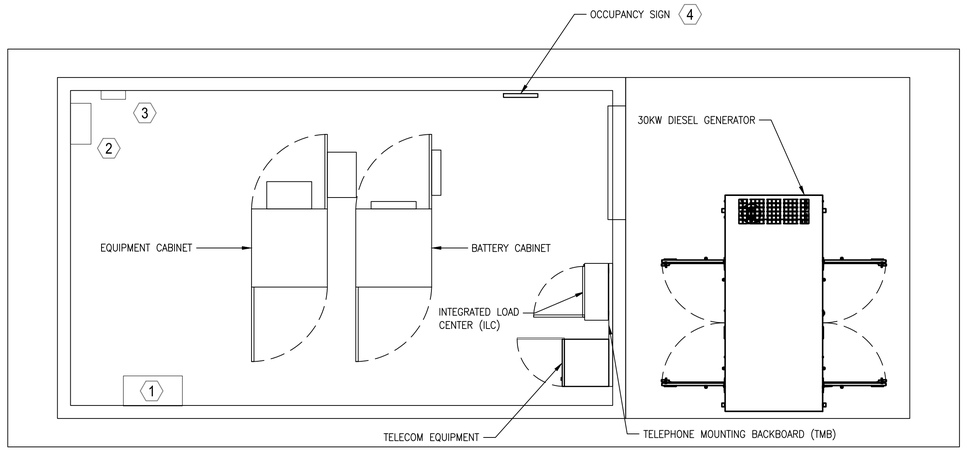
1030 VT ROUTE 100
ROCHESTER, VT 05767
WINDSOR COUNTY

SHEET TITLE

TEMPORARY ACCESS MAT DETAIL/NOTES

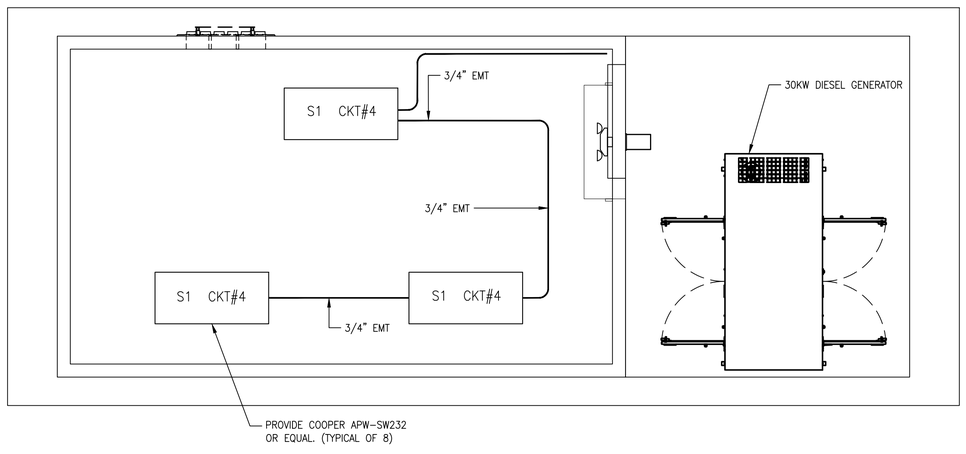
SHEET NUMBER

EB-2



1 EB-3 EQUIPMENT FLOOR PLAN

SCALE: 22x34: 3/8"=1'



2 EB-3 REFLECTED CEILING PLAN - ELECTRICAL

SCALE: 22x34: 3/8"=1'

GENERAL NOTES:

1. CONTRACTOR TO CONFIRM ALL EQUIPMENT LOCATIONS WITH OWNER.
2. COORDINATE BUILDING CONSTRUCTION WITH STRUCTURAL DRAWINGS.
3. COORDINATE FINAL MECHANICAL EQUIPMENT LOCATIONS WITH MECHANICAL DRAWINGS.
4. COORDINATE WITH ELECTRICAL SITE DRAWINGS FOR FINAL COORDINATE WITH ELECTRICAL SITE DRAWINGS FOR FINAL CONNECTIONS OF GROUNDING CABLES.
5. ALL INTERIOR GROUND CABLES TO BE #2 THHN STRANDED GREEN UNLESS OTHERWISE NOTED.
6. ALL CABLE TRAY TO BE 18" WIDE AND SUSPENDED FROM THE ALL CABLE TRAY TO BE 18" WIDE AND SUSPENDED FROM THE CEILING AS SHOWN WITH 17" HANGERS AND INSULATED CEILING BRACKETS. PROVIDE AUX CABLE BRACKETS AS SHOWN.
7. ALL GROUNDING CABLES TO BE SECURED USING WAX STRING, PLASTIC WIRE TIES NOT PERMITTED
8. ALL CABLES RUN IN EMT OR LIQUID TIGHT FLEXIBLE CONDUIT AND ATTACHED TO ROOF JOISTS.

KEY NOTES:

1. PROVIDE (1) 24" FOLDING TABLE AND (1) ROLLING OFFICE CHAIR FOR WORK SPACE.
2. PROVIDE (1) COMMERCIAL GRADE ROLLING UTILITY CART. HEAVY DUTY POLYMER WITH 3 SHELVES
3. PROVIDE (1) 6' FIBERGLASS STEP LADDER WITH MINIMUM 350 LB. CAPACITY.
4. OCCUPANCY SIGN SHALL BE READILY VISIBLE. DURABLE SIGN IN LETTERS NOT LESS THAN 1" HIGH ON CONTRASTING BACKGROUND THAT READS: "THIS DOOR TO REMAIN OPEN WHEN THE SPACE IS OCCUPIED"

verizon
118 FLANDERS ROAD
WESTBOROUGH, MA 01581
(508) 330-3300 TEL

Vertex Towers LLC
VERTEX TOWERS LLC
P.O. BOX 680
MEDFIELD, MA 02052

AEG ADVANCED ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
179 Swansea Mall Drive, Suite 1
Swansea, MA 02777
Tel: (508) 543-1414
Fax: (401) 633-6354

STATE OF VERMONT
SCOTT N. ADAMS
NO. 135423
CIVIL
LICENSED
PROFESSIONAL ENGINEER

AEG PROJECT #: 2023-0079

DRAWN BY: JWH

CHECKED BY: SNA

SUBMITTALS

REV#	DATE	DESCRIPTION
2	06/05/24	REVISED
3	08/19/24	REVISED
4	10/20/24	REVISED
5	10/24/24	REVISED
6	12/11/24	REVISED
7	02/18/25	REVISED
8	04/10/25	REVISED

VT-VT-0111A

ROCHESTER

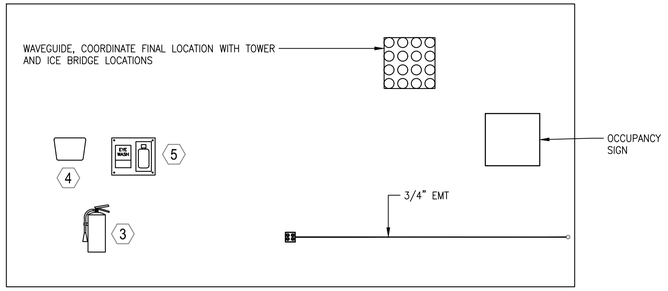
1030 VT ROUTE 100
ROCHESTER, VT 05767
WINDSOR COUNTY

SHEET TITLE

TEMPORARY ACCESS MAT DETAIL/NOTES

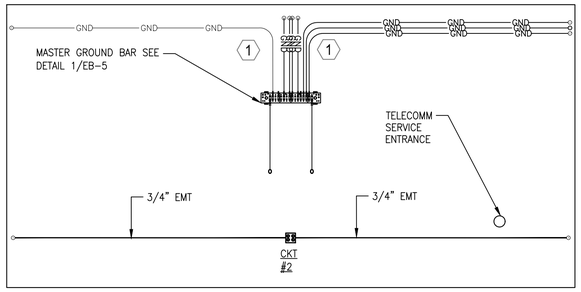
SHEET NUMBER

EB-3



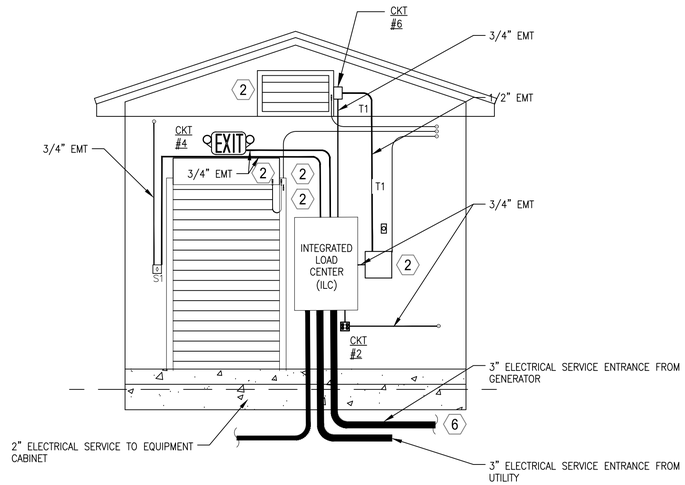
1 EB-4 INTERIOR ELEVATION "A"

SCALE: 22x34: 3/8"=1'



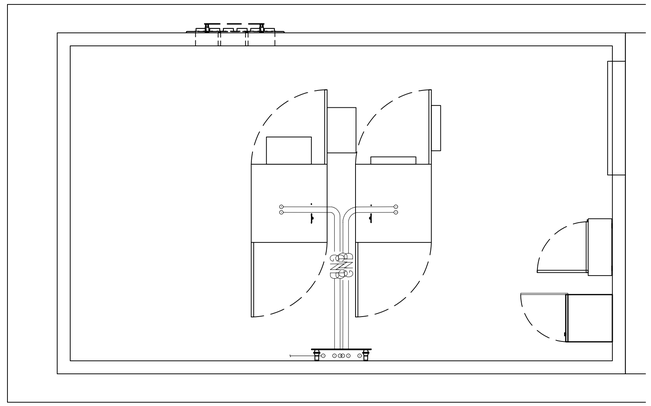
2 EB-4 INTERIOR ELEVATION "C"

SCALE: 22x34: 3/8"=1'



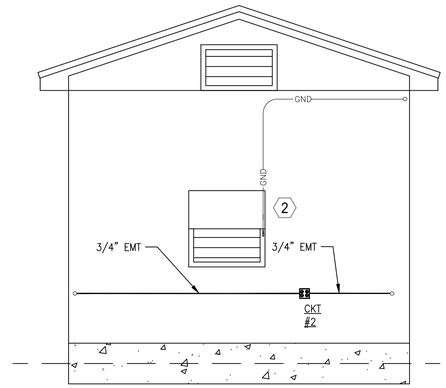
3 EB-4 INTERIOR ELEVATION "B"

SCALE: 22x34: 3/8"=1'



4 EB-4 INTERIOR GROUNDING PLAN

SCALE: 22x34: 3/8"=1'



5 EB-4 INTERIOR ELEVATION "D"

SCALE: 22x34: 3/8"=1'

GENERAL NOTES:

1. CONTRACTOR TO CONFIRM ALL EQUIPMENT LOCATIONS WITH OWNER
2. COORDINATE BUILDING CONSTRUCTION WITH STRUCTURAL DRAWINGS
3. COORDINATE FINAL MECHANICAL EQUIPMENT LOCATIONS WITH MECHANICAL DRAWINGS
4. COORDINATE WITH ELECTRICAL SITE DRAWINGS FOR FINAL CONNECTIONS OF GROUNDING CABLES
5. ALL INTERIOR GROUND CABLES TO BE #2 THHN STRANDED GREEN UNLESS OTHERWISE NOTED
6. ALL GROUNDING CABLES TO BE SECURED USING WAX STRING. PLASTIC WIRE TIES NOT PERMITTED
7. ALL CABLE TRAY TO BE 18" WIDE AND SUSPENDED FROM THE WALL AS SHOWN WITH INSULATED WALL BRACKETS
8. DO NOT INSTALL RECEPTACLES ABOVE FIXED ELECTRIC BASEBOARD HEATERS PER NEC AND MANUFACTURER'S REQUIREMENTS

KEY NOTES:

1. PROVIDE GROUNDING JUMPER CONNECTION PER NEC ARTICLE 250. PROVIDE BURNDY YGC. YGHC, OR EQUAL
2. PROVIDE GROUNDING LUG CONNECTION PER NEC ARTICLE 250. PROVIDE BURNDY YGA. YGHA. OR EQUAL. PROVIDE WITH MIN 1/4 X 20 SS CAP SCREWS, SS WASHER AND LOCK NUT
3. PROVIDE (1) WALL MOUNTED BADGER 10# CO2 FIRE EXTINGUISHER. FINAL LOCATION DETERMINED IN FIELD
4. PROVIDE (1) WALL MOUNTED PLASTIC FILE TRAY, LR-SMOKE. FINAL LOCATION DETERMINED IN FIELD
5. PROVIDE (1) WALL MOUNTED EYE WASH STATION. SINGLE 32OZ. FINAL LOCATION DETERMINED IN FIELD
6. PROVIDE CONNECTION OF CONDUIT AND WIRING TO GENERATOR PER MANUFACTURE'S RECOMMENDATIONS.

verizon
118 FLANDERS ROAD
WESTBOROUGH, MA 01581
(508) 330-3300 TEL

Vertex Towers LLC
VERTEX TOWERS LLC
P.O. BOX 680
MEDFIELD, MA 02052

AEG ADVANCED ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
179 Swansea Mall Drive, Suite 1
Swansea, MA 02777
Tel: (508) 343-1414
Fax: (401) 633-6354

STATE OF VERMONT
SCOTT N. ADAMS
NO. 135423
CIVIL
LICENSED
PROFESSIONAL ENGINEER

AEG PROJECT #: 2023-0079

DRAWN BY: JWH

CHECKED BY: SNA

SUBMITTALS

REV#	DATE	DESCRIPTION
2	06/05/24	REVISED
3	08/19/24	REVISED
4	10/20/24	REVISED
5	10/24/24	REVISED
6	12/11/24	REVISED
7	02/18/25	REVISED
8	04/10/25	REVISED

VT-VT-0111A

ROCHESTER

1030 VT ROUTE 100
ROCHESTER, VT 05767
WINDSOR COUNTY

SHEET TITLE

TEMPORARY ACCESS MAT DETAIL/NOTES

SHEET NUMBER

EB-4