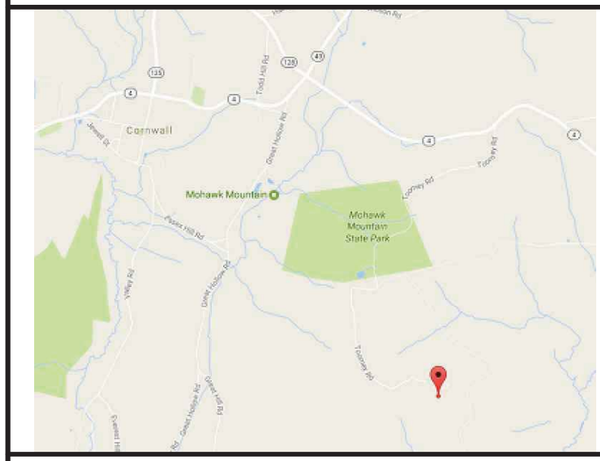
GENERAL NOTES

1. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTORS SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK.
2. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
3. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
4. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
5. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE CONTRACTOR.
6. THE SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
7. THE SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.
8. SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWING MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
9. ALL SAFETY PRECAUTIONS MUCH BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE ADVISED TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.

LOCATION MAP



HANDICAP REQUIREMENTS

FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAP ACCESS IS NOT REQUIRED.

PLUMBING REQUIREMENTS

FACILITY HAS NO SANITARY OR POTABLE WATER

T-Mobile

2016 INFILL/ROB/GREENFIELD

T-MOBILE SITE NUMBER

CTNH545A

EXISTING SELF SUPPORT TOWER

ATC SITE NUMBER

88009

SITE ADDRESS

36 MOHAWK MTN RD
CORNWALL, CT 06753

CONFIGURATION 707C

SITE SUMMARY

SITE TYPE:	PROPOSED EQUIPMENT INSTALLATION
TECHNOLOGY TYPE:	U1900/L2100/L700
SITE ADDRESS:	36 MOHAWK MTN RD CORNWALL, CT 06753
SITE LATITUDE:	41° 49' 16.633" N
SITE LONGITUDE:	73° 17' 47.157" W
JURISDICTION:	TOWN OF CORNWALL
POWER COMPANY:	EVERSOURCE
TELEPHONE COMPANY:	FRONTIER COMMUNICATIONS
TOWER OWNER:	AMERICAN TOWER 116 HUNTINGTON AVE, 11TH FLOOR BOSTON, MA 02116 CONTACT: CUSTOMER SERVICE PHONE: 877-518-6937
TOWER MANAGER:	NORTHEAST SITE SOLUTIONS, LLC 199 BRICKYARD ROAD FARMINGTON, CT 06032 SHELDON FREINCLE (201) 776-8521
WIRELESS CARRIER:	T-MOBILE 35 GRIFFIN RD S BLOOMFIELD, CT 06002 OFFICE: 860-692-7100 FAX: 860-692-7159
ENGINEER:	SMW ENGINEERING 158 BUSINESS CENTER DRIVE BIRMINGHAM, AL 35244 PHONE: 205-252-6985 ALVIN A. KRAFT, PE

BUILDING CODES

ALL CONSTRUCTION SHALL COMPLY WITH THE LATEST EDITION OF THE (AS ADOPTED BY LOCAL JURISDICTION):

- 2016 CONNECTICUT BUILDING CODE
- 2012 INTERNATIONAL BUILDING CODE W/AMENDMENTS
- 2009 ICC/ANSI A117.1 W/AMENDMENTS
- 2012 INTERNATIONAL EXISTING BUILDING CODE W/AMENDMENTS
- 2012 INTERNATIONAL PLUMBING CODE WITH AMENDMENTS
- 2012 INTERNATIONAL MECHANICAL CODE W/AMENDMENTS
- 2012 INTERNATIONAL ENERGY CONSERVATION CODE W/AMENDMENTS
- 2014 NFPA 70, NATIONAL ELECTRICAL CODE W/AMENDMENTS
- 2012 INTERNATIONAL RESIDENTIAL CODE W/AMENDMENTS

APPROVALS

DEPARTMENT	NAME/SIGNATURE	DATE
DEVELOPMENT MANAGER		
PROPERTY/TOWER OWNER		
SITE ACQUISITION MANAGER		
CONSTRUCTION MANAGER		
RF ENGINEER		
OPERATIONS MANAGER		

PROJECT SCOPE

THE PROPOSED PROJECT SCOPE WILL CONSIST OF CONSTRUCTING A NEW TELECOMMUNICATIONS BASE STATION INSTALLATION ON AN EXISTING TOWER SITE. THE PROPOSED CONSTRUCTION WILL INCLUDE THE INSTALLATION OF ANTENNA, RADIOS, CABLES AND RELATED EQUIPMENT ON THE TOWER AS WELL AS THE RADIOS, CABINETS, UTILITIES AND ANCILLARY EQUIPMENT ON THE GROUND.

SHEET INDEX

T-1	TITLE SHEET
C-1	OVERALL SITE PLAN
C-2	TOWER ELEVATION & ANTENNA PLAN
C-3	TOWER TOP EQUIPMENT SCHEDULE
C-4	GROUND EQUIPMENT DETAIL
C-5	ICE BRIDGE DETAILS
C-6	FOUNDATION DETAILS & NOTES
C-7	EROSION CONTROL DETAILS
C-8	EROSION CONTROL SPECIFICATIONS
E-1	ONE-LINE DIAGRAM
E-2	ELECTRICAL UTILITY PLAN
E-3	GROUNDING PLAN
E-4	EQUIPMENT SCHEMATIC
E-5	ELECTRICAL & GROUNDING DETAILS

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1-800-922-4455 OR 811
HTTP://WWW.CBYD.COM/#

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BLOOMFIELD, CT 06002
OFFICE: 860-692-7100
FAX: 860-692-7159

PLANS PREPARED BY:
NSS NORTHEAST SITE SOLUTIONS
NORTHEAST SITE SOLUTIONS, LLC
199 BRICKYARD ROAD
FARMINGTON CT 06032
(860) 677-1999

SMW ENGINEERING GROUP, INC.
TOGETHER PLANNING A BETTER TOMORROW

STATE OF CONNECTICUT ALVIN A. KRAFT No. 32787 LICENSED PROFESSIONAL ENGINEER

12/23/16

SITE INFORMATION:
CTNH545A
36 MOHAWK MTN RD
CORNWALL, CT 06753

#	DATE	DESCRIPTION:
0	10/10/16	ISSUED FOR CLIENT REV.
1	10/21/16	REISSUED FOR CLIENT REV.
2	11/10/16	ISSUED FOR CONSTRUCTION
3	12/14/16	REISSUED FOR CONSTRUCTION
4	12/23/16	REISSUED FOR CONSTRUCTION

T-MOBILE SITE ID:	ATC SITE ID:
CTNH545A	88009

SHEET NAME:
TITLE SHEET

SMW #: 16-2559

DESIGNER:	BMD
CHECKED BY:	RTB
ENGINEER:	JDS

SHEET NUMBER: T-1

Sdl TYPE C SEDIMENT BARRIER – TO PREVENT ANY SEDIMENT CARRIED BY SHEET FLOW FROM LEAVING THE SITE & ENTERING NATURAL DRAINAGE AREAS OR STORM DRAINAGE SYSTEMS.

Ds2 DISTURBED AREA STABILIZATION (TEMPORARY) – TO ESTABLISH A TEMPORARY VEGETATIVE COVER WITH FAST GROWING SEEDS ON DISTURBED AREAS.

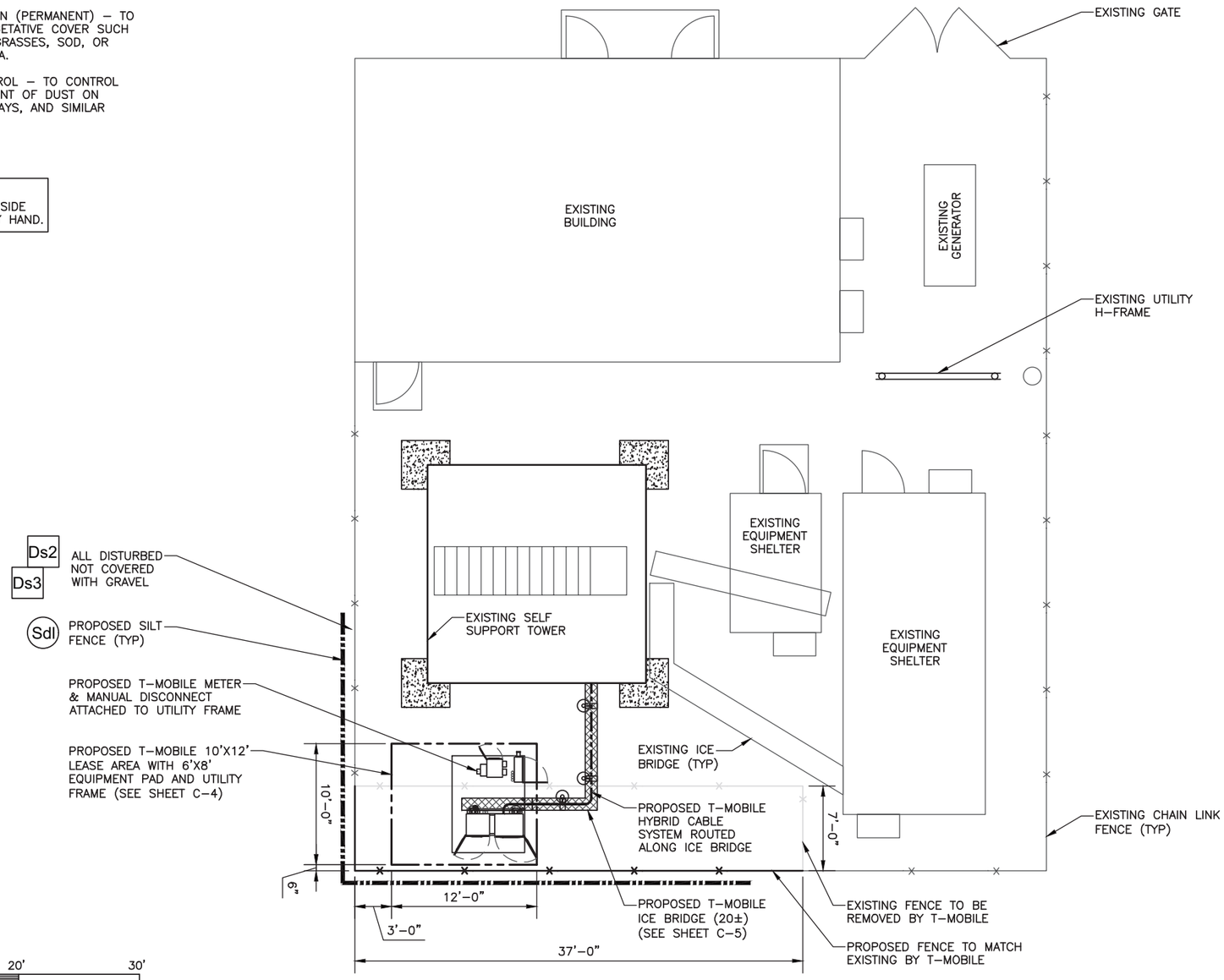
Ds3 DISTURBED AREA STABILIZATION (PERMANENT) – TO ESTABLISH A PERMANENT VEGETATIVE COVER SUCH AS TREES, SHRUBS, VINES, GRASSES, SOD, OR LEGUMES ON DISTURBED AREA.

Du DISTURBED AREA DUST CONTROL – TO CONTROL THE SURFACE AND AIR MOMENT OF DUST ON CONSTRUCTION SITES, ROADWAYS, AND SIMILAR SITES.

NOTE TO CONTRACTORS:
DIGGING AND/OR TRENCHING INSIDE COMPOUND, MUST BE DONE BY HAND.

SUBJECT PROPERTY IS LOCATED IN PANEL # 0900450020A, DATED (AUGUS 16, 1988) AND IS IN THE BASE FLOOD ZONE "X" AND IS NOT IN A SPECIAL FLOOD HAZARD AREA.

UTILITY NOTE:
THERE ARE NOT ANY EXISTING STORM OR SANITARY SEWER LINES OR BURIED UTILITIES ON THE PARENT TRACK WITHIN THE VICINITY OF THE PROPOSED CONSTRUCTION.



0' 10' 20' 30'
1" = 10' (11"x17")

0' 5' 10' 15'
1" = 5' (24"x36")

1 / C–1 OVERALL SITE PLAN

T-Mobile
35 GRIFFIN RD S
BLOOMFIELD, CT 06002
OFFICE: 860–692–7100
FAX: 860–692–7159

PLANS PREPARED BY:
NSS NORTHEAST SITE SOLUTIONS
NORTHEAST SITE SOLUTIONS, LLC
199 BRICKYARD ROAD
FARMINGTON CT 06032
(860) 677–1999

SMW ENGINEERING GROUP, INC.
TOGETHER PLANNING A BETTER TOMORROW

STATE OF CONNECTICUT
KEVIN A. KRAFT
No. 20787
LICENSED PROFESSIONAL ENGINEER

12/23/16

SITE INFORMATION:
CTNH545A
36 MOHAWK MTN RD
CORNWALL, CT 06753

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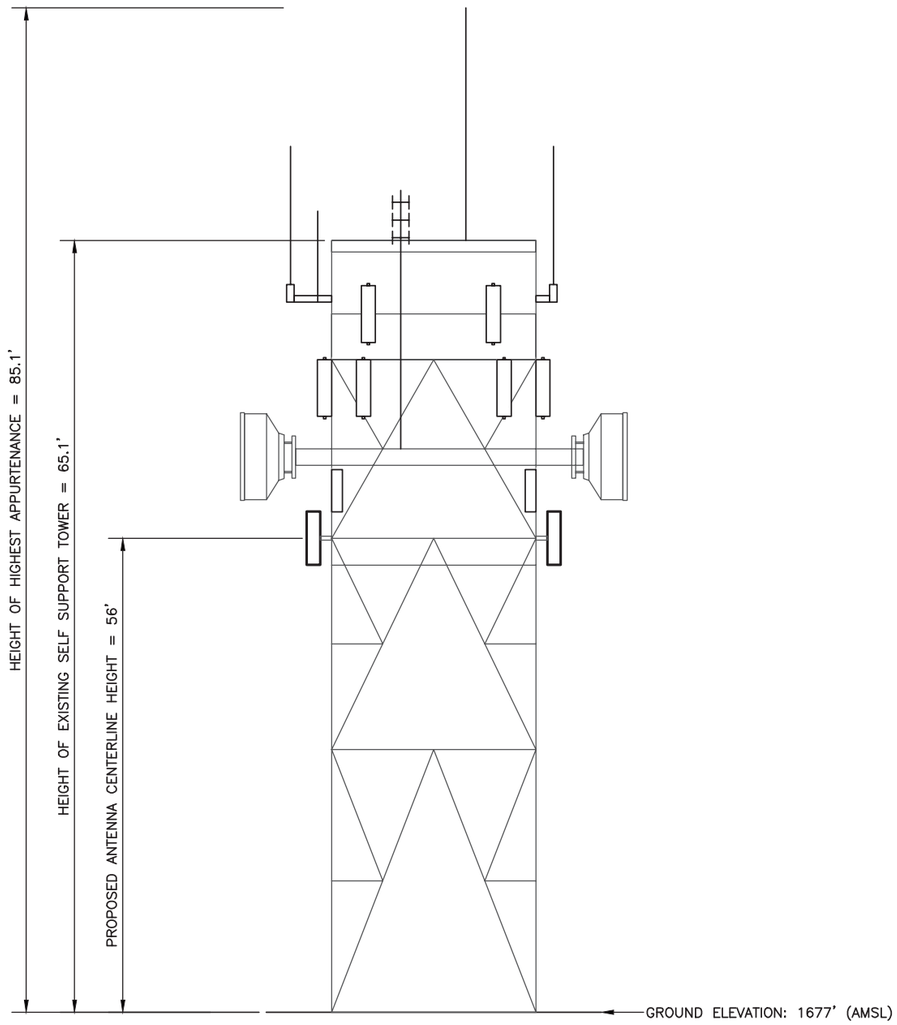
3	12/14/16	REISSUED FOR CONSTRUCTION
4	12/23/16	REISSUED FOR CONSTRUCTION

T-MOBILE SITE ID: CTNH545A
ATC SITE ID: 88009

SHEET NAME:
OVERALL SITE PLAN

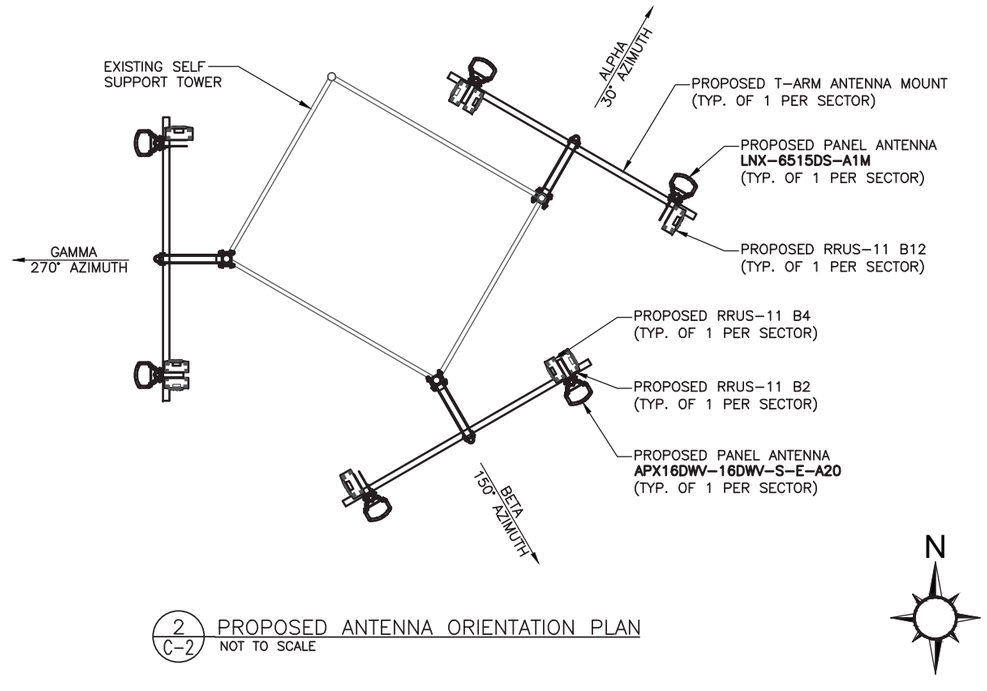
SMW #: 16–2559
DESIGNER: BMD
CHECKED BY: RTB
ENGINEER: JDS

SHEET NUMBER: C-1

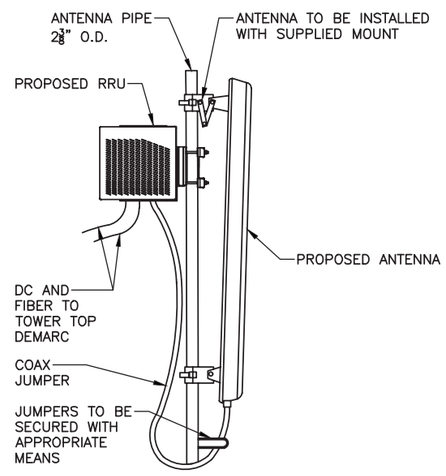


NOTES:
1. SMW HAS NOT PERFORMED A STRUCTURAL ANALYSIS OF THE EXISTING TOWER OR PROPOSED ANTENNA MOUNT. REFER TO STRUCTURAL ANALYSIS OR STRUCTURAL LETTER BY OTHERS FOR ADDITIONAL INFORMATION.
2. IF THE TOWER STRUCTURAL ANALYSIS SHOWS THE NEED FOR TOWER REINFORCEMENT REFER TO TOWER REINFORCEMENT DESIGN PRIOR TO THE INSTALLATION OF ANY PROPOSED EQUIPMENT.
3. REFER TO TOWER STRUCTURAL ANALYSIS FOR PROPOSED CABLE ROUTING AND ATTACHMENT DETAILS.
4. TOWER ELEVATION SHOWN IS NOT DRAWN TO SCALE AND IS INTENDED ONLY FOR REFERENCE PURPOSES. REFER TO ORIGINAL TOWER DESIGN FOR ADDITIONAL INFORMATION.

1 / C-2 TOWER ELEVATION
NOT TO SCALE



2 / C-2 PROPOSED ANTENNA ORIENTATION PLAN
NOT TO SCALE



3 / C-2 ANTENNA MOUNT DETAIL
NOT TO SCALE

T-Mobile
35 GRIFFIN RD S
BLOOMFIELD, CT 06002
OFFICE: 860-692-7100
FAX: 860-692-7159

PLANS PREPARED BY:
NSS NORTHEAST SITE SOLUTIONS
NORTHEAST SITE SOLUTIONS, LLC
199 BRICKYARD ROAD
FARMINGTON CT 06032
(860) 677-1999

SMW ENGINEERING GROUP, INC.
TOGETHER PLANNING A BETTER TOMORROW

STATE OF CONNECTICUT · ALVIN A. KRAFT · No. 20767 · LICENSED PROFESSIONAL ENGINEER

12/23/16

SITE INFORMATION:
CTNH545A
36 MOHAWK MTN RD
CORNWALL, CT 06753

#	DATE	DESCRIPTION:
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4	12/23/16	REISSUED FOR CONSTRUCTION

T-MOBILE SITE ID: CTNH545A
ATC SITE ID: 88009

SHEET NAME:
TOWER ELEVATION & ANTENNA PLAN

SMW #: 16-2559
DESIGNER: BMD
CHECKED BY: RTB
ENGINEER: JDS

SHEET NUMBER: C-2

707C_TOWER_1QP_1DP / U1900/L2100/L700 – TOWER TOP EQUIPMENT SCHEDULE							
ANTENNA SECTOR	ANTENNA MARK	ANTENNA AZIMUTH	ANTENNA MODEL	RRU MODEL	TMA MODEL	TOWER TOP COVP MODEL	ANTENNA CABLE DESCRIPTION
ALPHA	A1	30°	APX16DWV–16DWV–S–E–A20 (QUAD)	(1) RRUS–11 B2 (P) (1) RRUS–11 B4 (P)	––	––	(1) 1 5/8" HYBRID CABLE SYSTEM (P)
	A2	30°	––	––	––	––	––
	A3	30°	LNX–6515DS–A1M (DUAL)	(1) RRUS–11 B12 (P)	––	––	––
BETA	B1	150°	APX16DWV–16DWV–S–E–A20 (QUAD)	(1) RRUS–11 B2 (P) (1) RRUS–11 B4 (P)	––	––	(1) 1 5/8" HYBRID CABLE SYSTEM (R)
	B2	150°	––	––	––	––	––
	B3	150°	LNX–6515DS–A1M (DUAL)	(1) RRUS–11 B12 (P)	––	––	––
GAMMA	C1	270°	APX16DWV–16DWV–S–E–A20 (QUAD)	(1) RRUS–11 B2 (P) (1) RRUS–11 B4 (P)	––	––	––
	C2	270°	––	––	––	––	––
	C3	270°	LNX–6515DS–A1M (DUAL)	(1) RRUS–11 B12 (P)	––	––	––

NOTE:
(P) DENOTES PROPOSED EQUIPMENT
(R) DENOTES RESERVED EQUIPMENT
(E) DENOTES EXISTING EQUIPMENT

NOTE:
1. THE HYBRID CABLE LENGTH SHOWN IS ONLY AN ESTIMATE AND SHOULD NOT BE USED FOR ORDERING MATERIALS. CONFIRM THE REQUIRED HYBRID CABLE LENGTH WITH T–MOBILE PRIOR TO ORDERING OR INSTALLATION.
2. THE CONTRACTOR SHALL TEST THE OPTICAL FIBER AFTER INSTALLATION IN ACCORDANCE WITH T–MOBILE STANDARDS AND SUPPLY THE RESULTS TO T–MOBILE.
3. THE CONTRACTOR SHALL CONFIRM THE TOWER TOP EQUIPMENT LIST ABOVE WITH THE FINAL T–MOBILE RFDS PRIOR TO INSTALLATION.
4. ALL EXISTING AND PROPOSED ANTENNA CABLES SHALL BE COLOR CODED PER T–MOBILE MARKET STANDARDS.
5. REFER TO MANUFACTURERS INSTALLATION STANDARDS FOR ADDITIONAL INFORMATION.
6. REFER TO EQUIPMENT MANUFACTURER'S SPECIFICATION SHEETS FOR ADDITIONAL INFORMATION NOT LISTED ABOVE.

TOWER LOADING SUMMARY		
EQUIPMENT TYPE	ADD QUANITY	TOTAL QUANITY
PANEL ANTENNA	6	6
COAX CABLE	0	0
RRUS	9	9
HYBRID CABLE	2	2
COVP	0	0

T · ·Mobile·
35 GRIFFIN RD S
BLOOMFIELD, CT 06002
OFFICE: 860–692–7100
FAX: 860–692–7159

PLANS PREPARED BY:
NSS NORTHEAST SITE SOLUTIONS
Turnkey Wireless Development
NORTHEAST SITE SOLUTIONS, LLC
199 BRICKYARD ROAD
FARMINGTON CT 06032
(860) 677–1999

SMW ENGINEERING GROUP, INC.
TOGETHER PLANNING A BETTER TOMORROW

12/23/16

SITE INFORMATION:
CTNH545A
36 MOHAWK MTN RD
CORNWALL, CT 06753

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4	12/23/16	REISSUED FOR CONSTRUCTION

T-MOBILE SITE ID: CTNH545A
ATC SITE ID: 88009

SHEET NAME:
TOWER TOP EQUIPMENT SCHEDULE

SMW #: 16–2559
DESIGNER: BMD
CHECKED BY: RTB
ENGINEER: JDS

SHEET NUMBER: C-3

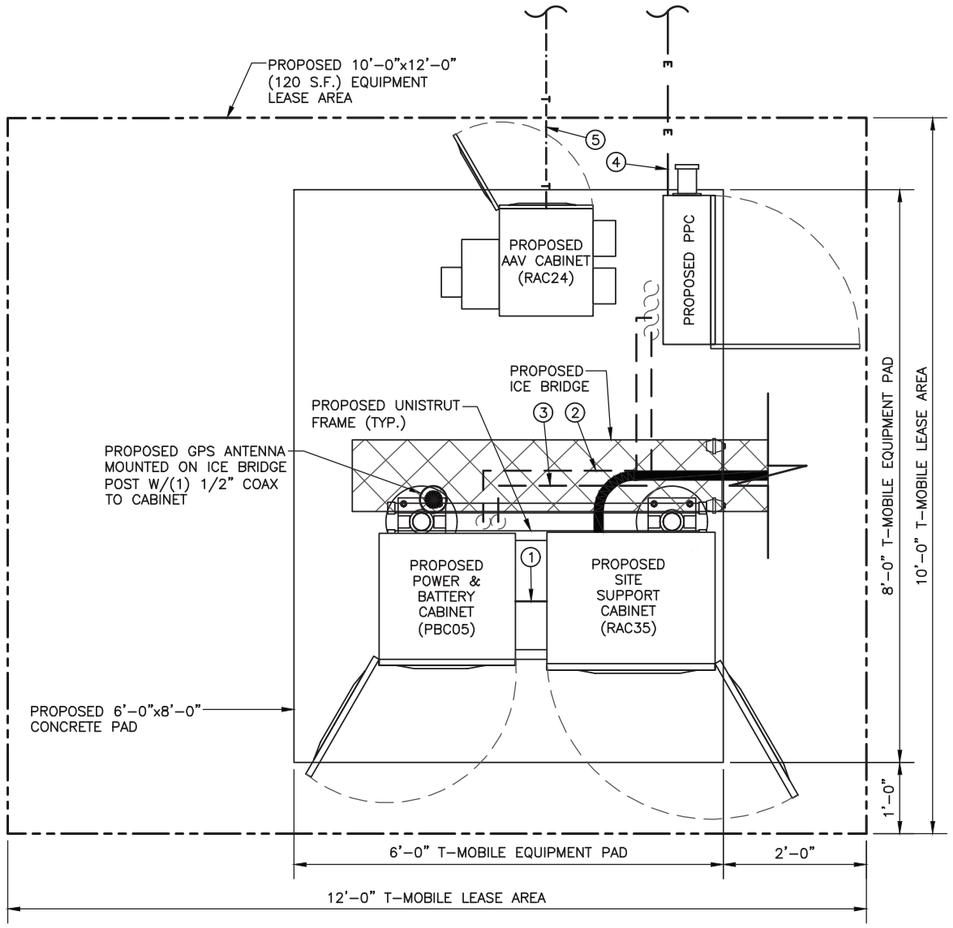
① 2"ø CONDUIT (ABOVE SLAB)

② 2"ø U/G CONDUIT (UNDER CONCRETE) FROM PROPOSED PPC TO PROPOSED PBC CABINETS

③ 2"ø U/G CONDUIT (UNDER CONCRETE) FROM PROPOSED PPC DAISY-CHAINING SSC CAGINETS

④ 2"ø PVC CONDUIT WITH (3) 3/0 + #4G FROM PROPOSED METER TO PPC CABINET. COORDINATE WITH THE LOCAL UTILITY COMPANY REGARDING FINAL SERVICE CONNECTION.

⑤ 2"ø PVC CONDUIT WITH PULLSTRING FOR TELCO FROM PROPOSED AAV CABINET TO EXISTING TELCO SERVICE. COORDINATE WITH THE LOCAL UTILITY COMPANY REGARDING FINAL SERVICE CONNECTION.



N

0' 2' 4' 6'
1" = 2' (11"x17")

0' 1' 2' 3'
1" = 1' (24"x36")

1 / C-4 GROUND EQUIPMENT DETAIL

T-Mobile
35 GRIFFIN RD S
BLOOMFIELD, CT 06002
OFFICE: 860-692-7100
FAX: 860-692-7159

PLANS PREPARED BY:
NSS NORTHEAST SITE SOLUTIONS
NORTHEAST SITE SOLUTIONS, LLC
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FARMINGTON CT 06032
(860) 677-1999

SMW ENGINEERING GROUP, INC.
TOGETHER PLANNING A BETTER TOMORROW

STATE OF CONNECTICUT JOHN A. KNAPP No. 20787 LICENSED PROFESSIONAL ENGINEER

12/23/16

SITE INFORMATION:
CTNH545A
36 MOHAWK MTN RD
CORNWALL, CT 06753

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4	12/23/16	REISSUED FOR CONSTRUCTION

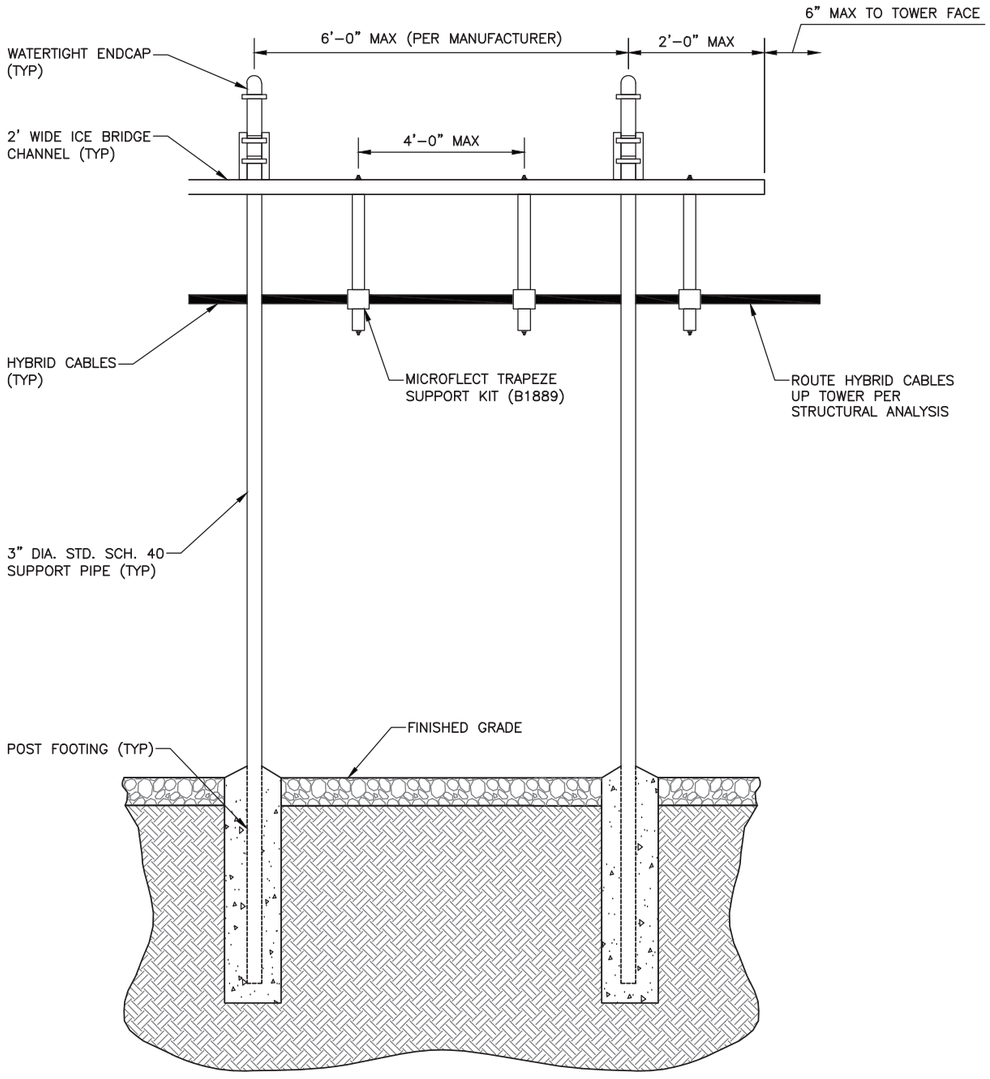
T-MOBILE SITE ID: CTNH545A
ATC SITE ID: 88009

SHEET NAME:
GROUND EQUIPMENT DETAIL

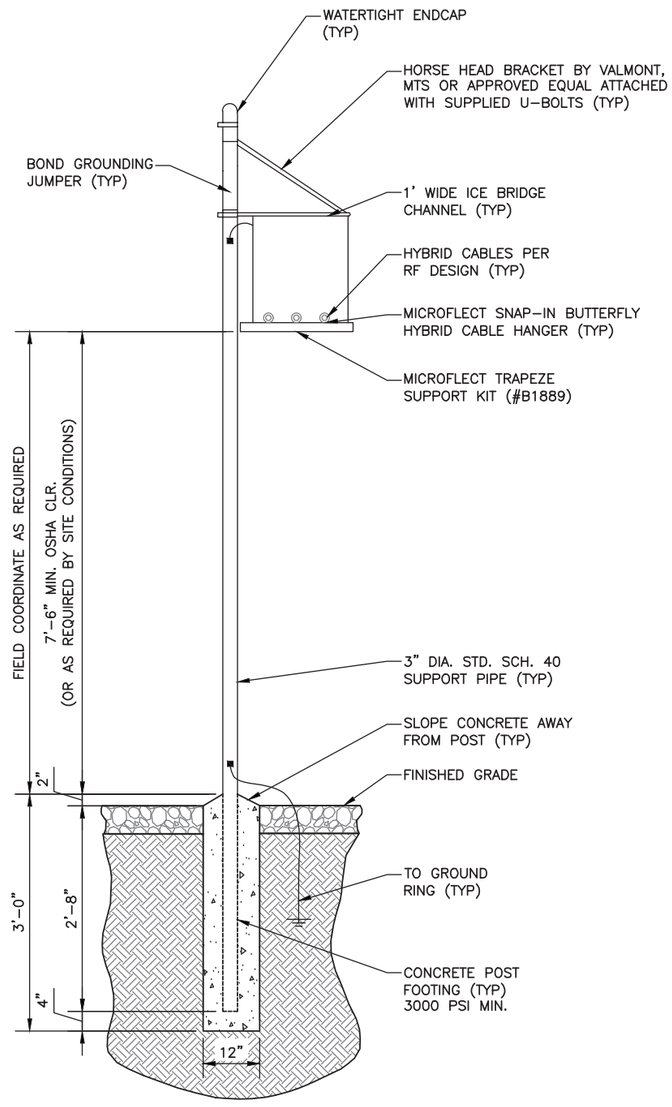
SMW #: 16-2559

DESIGNER:	BMD
CHECKED BY:	RTB
ENGINEER:	JDS

SHEET NUMBER: C-4



1 C-5 ICE BRIDGE ELEVATION
NOT TO SCALE



2 C-5 ICE BRIDGE SECTION (WITH 1 SUPPORT POST)
NOT TO SCALE

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35 GRIFFIN RD S
BLOOMFIELD, CT 06002
OFFICE: 860-692-7100
FAX: 860-692-7159

PLANS PREPARED BY:
NSS NORTHEAST SITE SOLUTIONS
NORTHEAST SITE SOLUTIONS, LLC
199 BRICKYARD ROAD
FARMINGTON CT 06032
(860) 677-1999

SMW ENGINEERING GROUP, INC.
TOGETHER PLANNING A BETTER TOMORROW

STATE OF CONNECTICUT
KEVIN A. KRAFT
No. 20787
LICENSED PROFESSIONAL ENGINEER

12/23/16

SITE INFORMATION:
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CORNWALL, CT 06753

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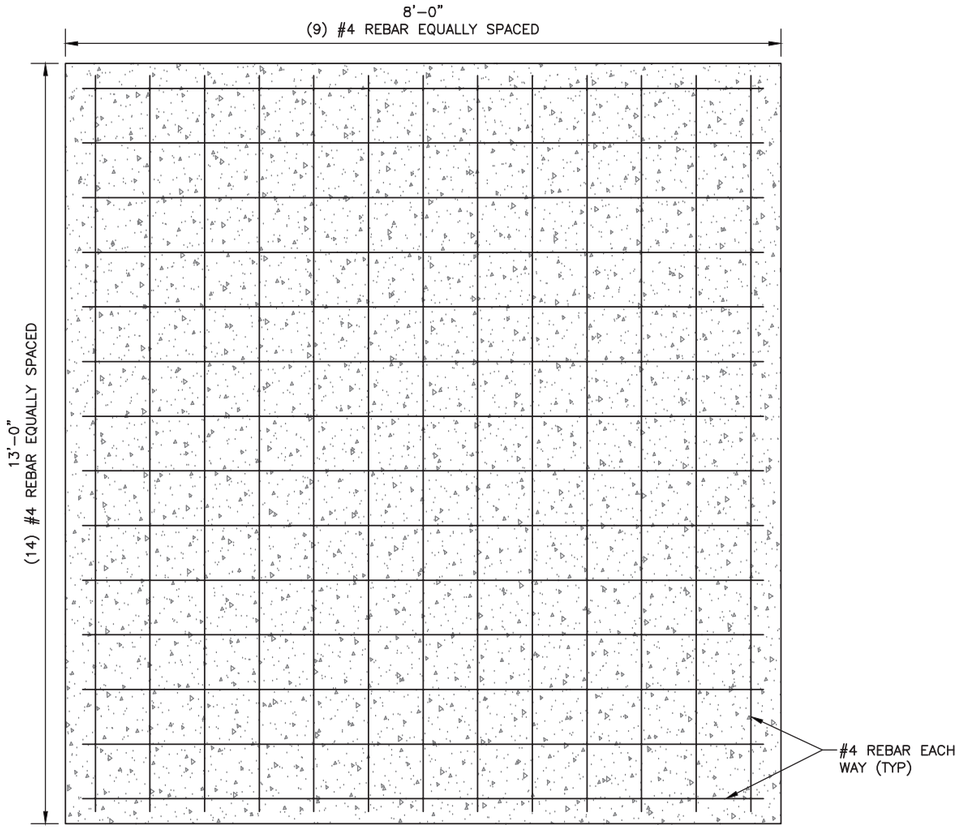
4	12/23/16	REISSUED FOR CONSTRUCTION

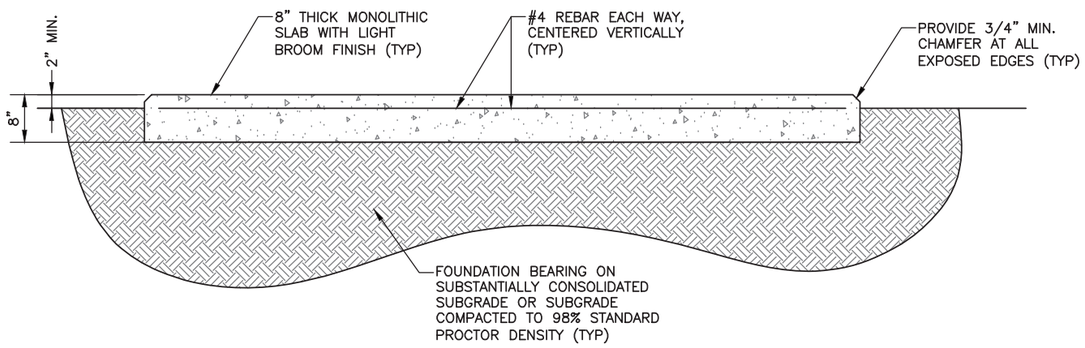
T-MOBILE SITE ID: CTNH545A
ATC SITE ID: 88009

SHEET NAME:
ICE BRIDGE DETAILS

SMW #: 16-2559
DESIGNER: BMD
CHECKED BY: RTB
ENGINEER: JDS

SHEET NUMBER: C-5





1 / C-6 MONOLITHIC EQUIPMENT SLAB DETAIL
NOT TO SCALE

REINFORCED CONCRETE NOTES:

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI SPECIFICATIONS FOR THE DESIGN & CONSTRUCTION OF CAST-IN-PLACE CONCRETE, AND WHERE CODES CONFLICT THE MORE STRINGENT NATIONAL OR LOCAL CODE SHALL GOVERN.

2. SITECAST CONCRETE FOR SLABS AND POST FOOTINGS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS. CONCRETE TESTING IS NOT REQUIRED FOR SLABS AND POST FOOTINGS UNLESS NOTED OTHERWISE.

   SLUMP – 4" MIN. / 6" MAX.
   AIR ENTRAINMENT – 2% TO 3% BY VOLUME

CLASSES OF CONCRETE				
CLASS	28 DAY STRENGTH (PSI)	MAX WATER/CEMENT RATIO	PLACEMENT LOCATION	NOTES
TYPE I	3000	0.55	SLABS & POST FOOTINGS	NORMAL WEIGHT
TYPE II*	5000	0.45	SLABS & POST FOOTINGS	HIGH EARLY STRENGTH

   *IF REQUIRED BY THE CONSTRUCTION SCHEDULE THE CONTRACTOR MAY SUBSTITUTE TYPE III HIGH EARLY STRENGTH CONCRETE WITH THE APPROVAL OF THE CONSTRUCTION MANAGER.

3. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES FOR REBAR SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNO. LAPS FOR WELDED WIRE FABRIC SHALL BE AST LEAST 8", UNO.

4. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:

   CONCRETE CAST AGAINST EARTH.....3"
   CONCRETE EXPOSED TO EARTH OR WEATHER
   #6 AND LARGER.....2"
   #5 AND SMALLER & W.W.F.....1-1/2"

5. MAXIMUM COARSE AGGREGATE SIZE SHALL BE 3/4"

6. INSTALLATION OF CONCRETE ANCHORS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN SPECIFICATIONS. THE ANCHOR BOLT, DOWEL, OR ROD SHALL CONFORM TO THE ANCHOR MANUFACTURER'S SPECIFICATIONS FOR MATERIAL STRENGTH, EMBEDMENT DEPTH, SPACING, AND EDGE DISTANCE OR AS DETAILED ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR ENGINEERING APPROVAL WHEN DRILLING HOLES IN CONCRETE. EXPANSION BOLTS SHALL BE PROVIDED BY RAMSET/REDHEAD, HILTI, OR APPROVED EQUAL. IF THE MANUFACTURER'S SPECIFICATIONS AND DETAILS ARE FOUND TO CONFLICT WITH THAT SHOWN HEREIN, THE ENGINEER SHAL LBE NOTIFIED IMMEDIATELY.

7. THE CONTRACTOR SHALL VERIFY FROST LINE AND FOOTING DEPTH REQUIREMENTS WITH THE JURISDICTION HAVING AUTHORITY PRIOR TO CONSTRUCTION AND CONSULT THE ENGINEER ACCORDINGLY.

8. THE CONTRACTOR SHALL VERIFY ALL ELECTRICAL CONDUIT SIZES AND PENETRATION LOCATIONS PRIOR TO POURING THE SLAB.

T-Mobile
35 GRIFFIN RD S
BLOOMFIELD, CT 06002
OFFICE: 860-692-7100
FAX: 860-692-7159

PLANS PREPARED BY:
NSS NORTHEAST SITE SOLUTIONS
NORTHEAST SITE SOLUTIONS, LLC
199 BRICKYARD ROAD
FARMINGTON CT 06032
(860) 677-1999

SMW ENGINEERING GROUP, INC.
TOGETHER PLANNING A BETTER TOMORROW

STATE OF CONNECTICUT
JOHN A. KNAPP
No. 30780
LICENSED
PROFESSIONAL ENGINEER
12/23/16

SITE INFORMATION:
CTNH545A
36 MOHAWK MTN RD
CORNWALL, CT 06753

#	DATE	DESCRIPTION:
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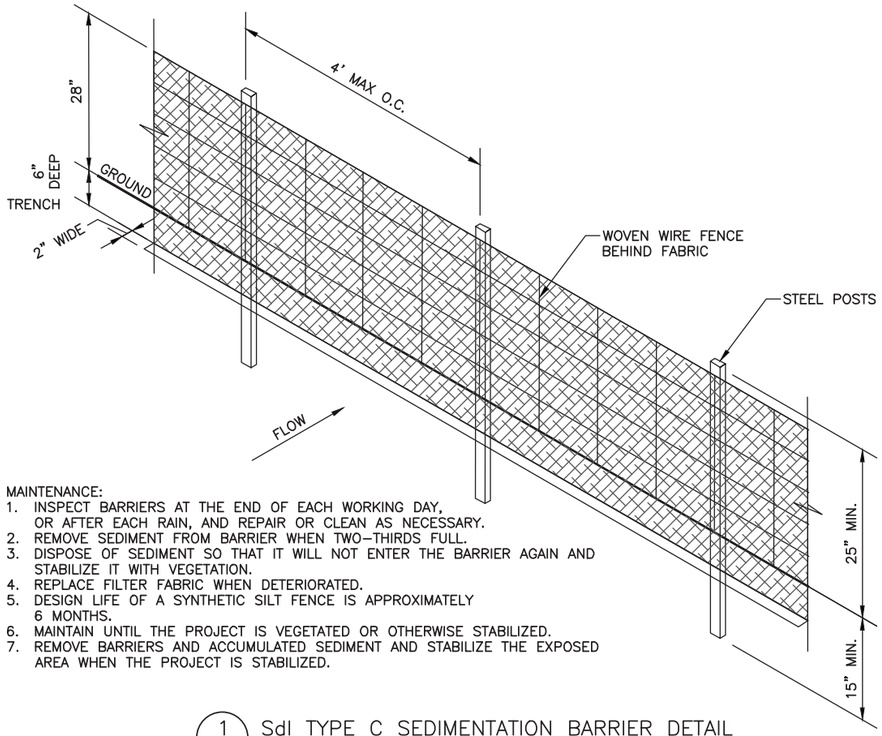
1	10/21/16	REISSUED FOR CLIENT REV.
2	11/10/16	ISSUED FOR CONSTRUCTION
3	12/14/16	REISSUED FOR CONSTRUCTION
4	12/23/16	REISSUED FOR CONSTRUCTION

T-MOBILE SITE ID: CTNH545A
ATC SITE ID: 88009

SHEET NAME:
FOUNDATION DETAILS & NOTES

SMW #: 16-2559
DESIGNER: BMD
CHECKED BY: RTB
ENGINEER: JDS

SHEET NUMBER: C-6



MAINTENANCE:
1. INSPECT BARRIERS AT THE END OF EACH WORKING DAY, OR AFTER EACH RAIN, AND REPAIR OR CLEAN AS NECESSARY.
2. REMOVE SEDIMENT FROM BARRIER WHEN TWO-THIRDS FULL.
3. DISPOSE OF SEDIMENT SO THAT IT WILL NOT ENTER THE BARRIER AGAIN AND STABILIZE IT WITH VEGETATION.
4. REPLACE FILTER FABRIC WHEN DETERIORATED.
5. DESIGN LIFE OF A SYNTHETIC SILT FENCE IS APPROXIMATELY 6 MONTHS.
6. MAINTAIN UNTIL THE PROJECT IS VEGETATED OR OTHERWISE STABILIZED.
7. REMOVE BARRIERS AND ACCUMULATED SEDIMENT AND STABILIZE THE EXPOSED AREA WHEN THE PROJECT IS STABILIZED.

1 / C-7 SdI TYPE C SEDIMENTATION BARRIER DETAIL
NOT TO SCALE

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35 GRIFFIN RD S
BLOOMFIELD, CT 06002
OFFICE: 860-692-7100
FAX: 860-692-7159

PLANS PREPARED BY:

NSS NORTHEAST SITE SOLUTIONS
Turnkey Wireless Development
NORTHEAST SITE SOLUTIONS, LLC
199 BRICKYARD ROAD
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SMW ENGINEERING GROUP, INC.
TOGETHER PLANNING A BETTER TOMORROW

12/23/16

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36 MOHAWK MTN RD
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T-MOBILE SITE ID: CTNH545A
ATC SITE ID: 88009

SHEET NAME:
EROSION CONTROL DETAILS

SMW #: 16-2559

DESIGNER:	BMD
CHECKED BY:	RTB
ENGINEER:	JDS

SHEET NUMBER: C-7

PIEDMONT VEGETATIVE COVERS

CALENDAR MONTH	TEMPORARY SEED	APPLICATION RATE/ACRE	PERMANENT SEED	APPLICATION RATE/ACRE
1. JANUARY	RYE GRASS	20–40 LB.	UNHULLED BERMUDA SERICEA LESPEDEZA	8–10 LB. 30–40 LB.
2. FEBRUARY			UNHULLED BERMUDA SERICEA LESPEDEZA FESCUE	8–10 LB. 30–40 LB. 30–50 LB.
3. MARCH	RYE ANNUAL LESPEDZA WEEPING LOVE GRASS	2–3 BU. 20–25 LB. 4–6 LB.	UNHULLED BERMUDA SERICEA LESPEDEZA FESCUE	8–10 LB. 30–40 LB. 30–50 LB.
4. APRIL	RYE BROWN TOP MULLET ANNUAL LESPEDZA SUDAN ANNUAL	2–3 BU. 30–40 LB. 20–25 LB. 35 LB.	WEEPING LOVE GRASS HULLED BERMUDA BAJA	4–6 LB. 5–6 LB. 40–60 LB.
5. MAY	WEEPING LOVE GRASS SUDAN GRASS BROWN TOP MULLET	4–6 BU. 35 LB. 30–40 LB.	WEEPING LOVE GRASS HULLED BERMUDA BAJA	4–6 LB. 5–6 LB. 40–60 LB.
6. JUNE	WEEPING LOVE GRASS SUDAN GRASS BROWN TOP MULLET	4–6 LB. 35 LB. 30–40 LB.	WEEPING LOVE GRASS HULLED BERMUDA BAJA	4–6 LB. 5–6 LB. 40–60 LB.
7. JULY	WEEPING LOVE GRASS SUDAN GRASS BROWN TOP MULLET	4–6 LB. 35 LB. 30–40 LB.		
8. AUGUST	RYE GRASS WEEPING LOVE GRASS	40–50 LB. 4–6 LB.		
9. SEPTEMBER			TALL FESCUE	30–50 LB.
10. OCTOBER	WHEAT	2–3 BU.	UNHULLED BERMUDA SERICEA LESPEDEZA FESCUE	8–10 LB. 30–40 LB. 30–50 LB.
11. NOVEMBER	WHEAT	2–3 BU.	UNHULLED BERMUDA SERICEA LESPEDEZA FESCUE	8–10 LB. 30–40 LB. 30–50 LB.
12. DECEMBER	RYE RYE GRASS WHEAT	2–3 BU. 40–50 LB. 2–3 BU.	UNHULLED BERMUDA SERICEA LESPEDEZA FESCUE	8–10 LB. 30–40 LB. 30–50 LB.

1. USE A MINIMUM OF 40 LBS. SCARIFIED SEED. THE REMAINING MAY BE UNSCARIFIED, CLEAN HULLED SEED.
2. USE EITHER COMMON SERIAL OR INTERSTATE SERICEA LESPEDEZA

Ds2 DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)

Ds3 DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)

GENERAL

THIS VEGETATIVE PLAN WILL BE CARRIED OUT IN ROAD CUT AND FILL SLOPES, SHOULDERS, AND OTHER CRITICAL AREAS CREATED BY CONSTRUCTION. SEEDING WILL BE DONE AS SOON AS CONSTRUCTION IN AN AREA IS COMPLETED. PLANTINGS WILL BE MADE TO CONTROL EROSION, TO REDUCE DAMAGE FROM SEDIMENT AND RUNOFF TO DOWNSTREAM ARE, AND TO IMPROVE THE SAFETY AND BEAUTY OF THE DEVELOPMENT AREA.

SOIL CONDITIONS

DUE TO GRADING AND CONSTRUCTIONS, THE AREAS TO BE TREATED ARE MAINLY SUBSOIL AND SUBSTRATES. FERTILITY IS LOW AND THE PHYSICAL CHARACTERISTICS OF THE EXPOSED MATERIAL ARE UNFAVORABLE TO ALL BUT THE MOST HARDY PLANTS.

TREATMENT SPECIFICATIONS

HYDRAULIC SEEDING EQUIPMENT: WHEN HYDRAULIC SEEDING AND FERTILIZING EQUIPMENT IS USED, NO GRADING AND SHAPING OF SEEDED PREPARATIONS WILL BE REQUIRED. THE FERTILIZER, SEED, AND WOOD CELLULOSE FIBER MULCH WILL BE MIXED WITH WATER AND SUPPLIED IN A SLURRY. ALL SLURRY INGREDIENTS MUST BE COMBINED TO FORM A HOMOGENEOUS MIXTURE, AND SPREAD UNIFORMLY OVER THE AREA WITH ONE HOUR AFTER MIXTURE IS MADE. STRAW OR HAW MULCH AND ASPHALT EMULSION WILL BE APPLIED WITH BLOWER–TYPE MULCH SPREADING EQUIPMENT WITHIN 24 HOURS AFTER SEEDING. THE MULCH WILL BE SPREAD UNIFORMLY OVER THE AREA, LEAVING ABOUT 25 PERCENT OF THE GROUND SURFACE EXPOSED. THE PER ACRE APPLICATION RATES ARE AS FOLLOWS:

A. SEEDING WITH MULCH:
(HYDRAULIC SEEDING EQUIPMENT ON SLOPES 3:1 AND STEEPER)

AGRICULTURAL LIMESTONE #75	400 LBS/ACRE
FERTILIZER, 05–10–15	500 LBS/ACRE
MULCH (STRAW OR HAY)	5000 LBS/ACRE
MULCH (WOOD CELLULOSE FIBER)	1000 LBS/ACRE

SEED SPECIES	APPLICATION RATE/ACRE	PLANTING DATES
SERICIA LESPEDEZA, SCARIFIED WEEPING LOVE GRASS, OR COMMON BERMUDA, HULLED	60 LBS. 4 LBS. 6 LBS.	3/1–6/15
FESCUE SERICEA LESPEDEZA, UNCERTIFIED	40 LBS. 60 LBS.	4/1–10/31
FESCUE SERICEA LESPEDEZA, UNCERTIFIED RYE	40 LBS. 75 LBS. 50 LBS.	11/1–12/28
HAY MULCH FOR TEMPORARY COVER	5000 LBS.	6/15–8/31

B. TOP DRESSING: APPLY WHEN PLANTS ARE 2 TO 4 INCHES TALL

FERTILIZER (AMMONIUM NITRATE 33.5%) 300 LBS/ACRE

C. SECOND YEAR TREATMENT:

FERTILIZER (0–20–20 OR EQUIVALENT) 500 LBS/ACRE

GENERAL

THIS VEGETATIVE PLAN WILL BE CARRIED OUT IN ROAD CUT AND FILL SLOPES, SHOULDERS, AND OTHER CRITICAL AREAS CREATED BY CONSTRUCTION. SEEDING WILL BE DONE AS SOON AS CONSTRUCTION IN AN AREA IS COMPLETED. PLANTINGS WILL BE MADE TO CONTROL EROSION, TO REDUCE DAMAGE FROM SEDIMENT AND RUNOFF TO DOWNSTREAM ARE, AND TO IMPROVE THE SAFETY AND BEAUTY OF THE DEVELOPMENT AREA.

SOIL CONDITIONS

DUE TO GRADING AND CONSTRUCTIONS, THE AREAS TO BE TREATED ARE MAINLY SUBSOIL AND SUBSTRATES. FERTILITY IS LOW AND THE PHYSICAL CHARACTERISTICS OF THE EXPOSED MATERIAL ARE UNFAVORABLE TO ALL BUT THE MOST HARDY PLANTS.

TREATMENT SPECIFICATIONS

CONVENTIONAL SEEDING EQUIPMENT: GRADE, SHAPE, AND SMOOTH WHERE NEEDED TO PROVIDE FOR SAFE EQUIPMENT OPERATION AT SEEDING TIME AND FOR MAINTENANCE PURPOSES. THE LIME AND FERTILIZER IN DRY FORM WILL SPREAD UNIFORMLY OVER THE AREA IMMEDIATELY BEFORE SEEDBED PREPARATION. A SEEDBED WILL BE PREPARED BY SCARIFYING TO A DEPTH OF 1 TO 4 INCHES AS DETERMINED ON SITE. THE SEEDBED MUST BE WELL PULVERIZED, SMOOTHED, AND FIRMED. SEEDING WILL BE DONE WITH A CULTIPACKER–SEEDER, ROTARY SEEDER, OR OTHER MECHANICAL OR HAND SEEDER. SEED WILL BE DISTRIBUTED UNIFORMLY OVER A FRESH PREPARED SEEDBED AND COVERED LIGHTLY OVER THE AREA, LEAVING ABOUT 25 PERCENT OF THE GROUND SURFACE EXPOSED. MULCH WILL BE SPREAD EITHER BY BLOWER–TYPE MULCH EQUIPMENT OR BY HAND AND ANCHORED IMMEDIATELY AFTER IT WAS SPREAD. A DISK HARROW WITH THE DISK SET STRAIGHT OR A SPECIAL PACKER DISK MAY BE USED TO PRESS THE MULCH INTO THE SOIL. THE PER ACRE APPLICATION ARE AS FOLLOWS:

A. SEEDING WITH MULCH: (CONVENTIONAL SEEDING EQUIPMENT ON SLOPES LESS THAN 3:1)

AGRICULTURAL LIMESTONE #15	400 LBS/ACRE
FERTILIZER, 5–10–15	1500 LBS/ACRE
MULCH (STRAW OR HAY)	5000 LBS/ACRE

SEED SPECIES	APPLICATION RATE/ACRE
COMMON BERMUDA, HULLED	10 LBS.
FESCUE	50 LBS.
FESCUE RYE GRASS	50 LBS. 50 LBS.
HAY MULCH FOR TEMPORARY COVER	5000 LBS.

B. TOP DRESSING: APPLY WHEN PLANTS ARE 2 TO 4 INCHES TALL

FERTILIZER (AMMONIUM NITRATE 33.5%) 300 LBS/ACRE

C. SECOND YEAR TREATMENT:

FERTILIZER (0–20–20 OR EQUIVALENT) 800 LBS/ACRE

Ds2 DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)

Ds3 DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)

T·Mobile·
35 GRIFFIN RD S
BLOOMFIELD, CT 06002
OFFICE: 860–692–7100
FAX: 860–692–7159

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NSS NORTHEAST SITE SOLUTIONS
Turnkey Wireless Development
NORTHEAST SITE SOLUTIONS, LLC
199 BRICKYARD ROAD
FARMINGTON CT 06032
(860) 677–1999

SMW ENGINEERING GROUP, INC.
TOGETHER PLANNING A BETTER TOMORROW

STATE OF CONNECTICUT · JOHN A. KNAPP · No. 25787 · LICENSED PROFESSIONAL ENGINEER

12/23/16

SITE INFORMATION:
CTNH545A
36 MOHAWK MTN RD
CORNWALL, CT 06753

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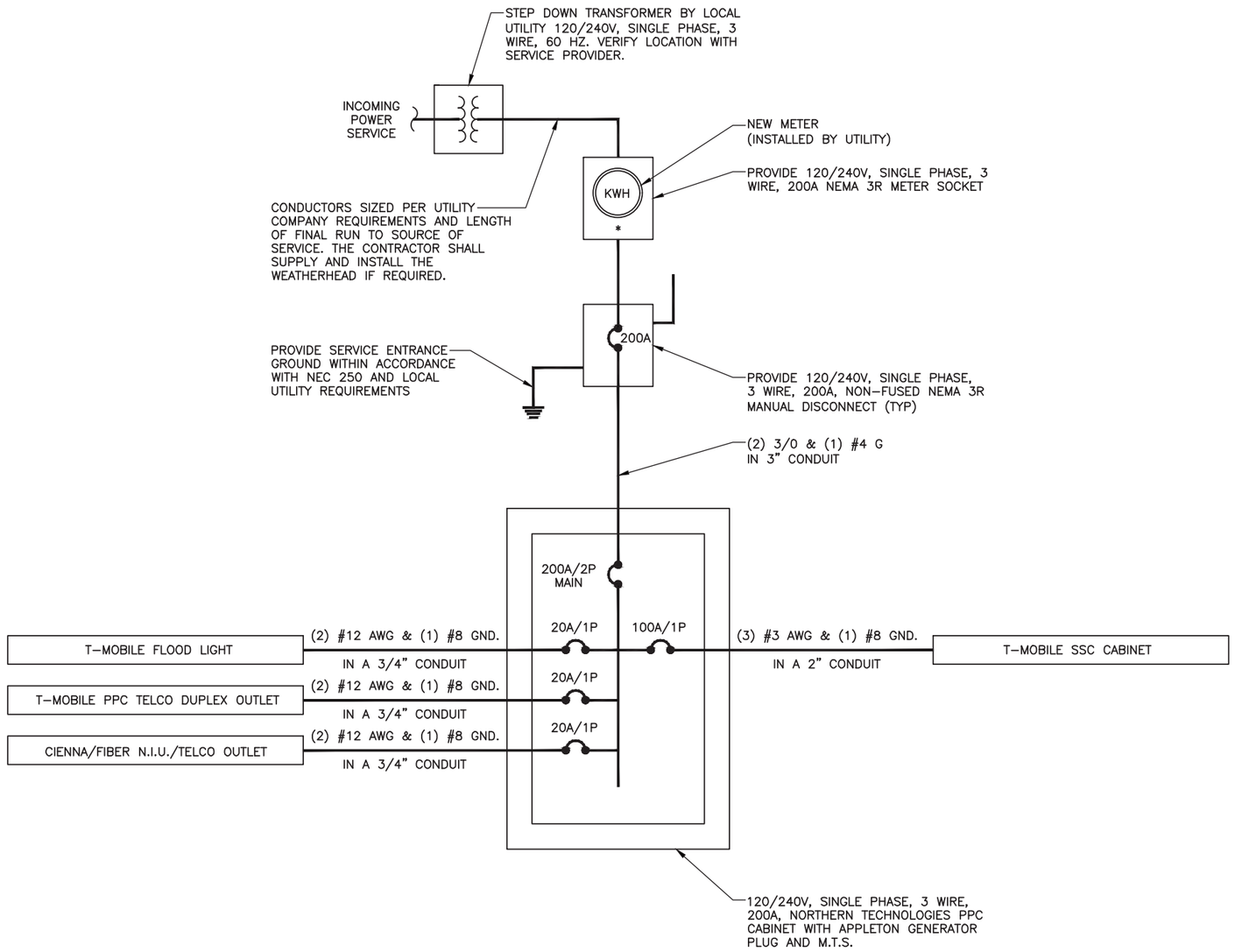
T-MOBILE SITE ID: CTNH545A
ATC SITE ID: 88009

SHEET NAME:
EROSION CONTROL SPECIFICATIONS

SMW #: 16–2559
DESIGNER: BMD
CHECKED BY: RTB
ENGINEER: JDS

SHEET NUMBER: C-8



1 / E-1 ONE-LINE DIAGRAM
NOT TO SCALE

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35 GRIFFIN RD S
BLOOMFIELD, CT 06002
OFFICE: 860-692-7100
FAX: 860-692-7159

PLANS PREPARED BY:

NORTHEAST SITE SOLUTIONS, LLC
199 BRICKYARD ROAD
FARMINGTON CT 06032
(860) 677-1999

SMW ENGINEERING GROUP, INC.
TOGETHER PLANNING A BETTER TOMORROW

12/23/16

SITE INFORMATION:

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CORNWALL, CT 06753

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4	12/23/16	REISSUED FOR CONSTRUCTION

T-MOBILE SITE ID: CTNH545A
ATC SITE ID: 88009

SHEET NAME:
ONE-LINE DIAGRAM

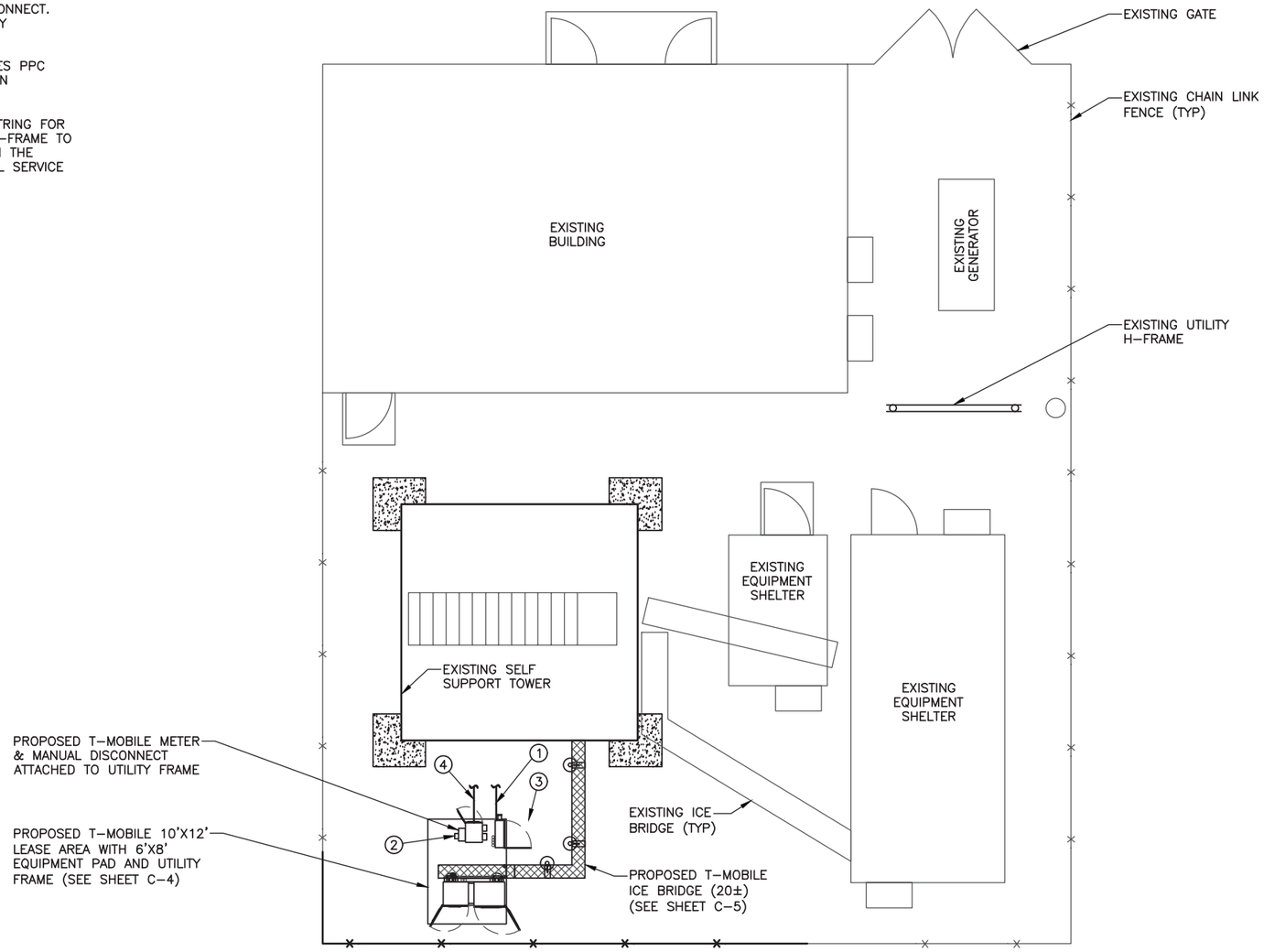
SMW #: 16-2559

DESIGNER:	BMD
CHECKED BY:	RTB
ENGINEER:	JDS

SHEET NUMBER: E-1

ELECTRICAL KEY NOTES:

1. PROPOSED 3" PVC CONDUIT WITH (3) 3/0 + #4G FROM EXISTING UTILITY POLE TO METER BASE. THE CONTRACTOR SHALL PROVIDE AND INSTALL THE WEATHERHEAD WITH COILED EXCESS CONDUCTORS. COORDINATE WITH THE LOCAL UTILITY COMPANY REGARDING FINAL SERVICE CONNECTION.
2. PROPOSED METER & 200A MANUAL DISCONNECT. COORDINATE WITH LOCAL UTILITY COMPANY REGARDING FINAL SERVICE CONNECTION.
3. PROPOSED 200A NORTHERN TECHNOLOGIES PPC CABINET WITH INTEGRATED 200A APPLETON GENERATOR BACKUP PLUG.
4. PROPOSED 2" PVC CONDUIT WITH PULLSTRING FOR TELCO FROM EXISTING TELCO BOX ON H-FRAME TO PROPOSED TELCO BOX. COORDINATE WITH THE LOCAL UTILITY COMPANY REGARDING FINAL SERVICE CONNECTION.



N

0' 10' 20' 30'
1" = 10' (11"x17")

0' 5' 10' 15'
1" = 5' (24"x36")

1 / E-2 ELECTRICAL UTILITY PLAN

T-Mobile
35 GRIFFIN RD S
BLOOMFIELD, CT 06002
OFFICE: 860-692-7100
FAX: 860-692-7159

PLANS PREPARED BY:
NSS NORTHEAST SITE SOLUTIONS
NORTHEAST SITE SOLUTIONS, LLC
199 BRICKYARD ROAD
FARMINGTON CT 06032
(860) 677-1999

SMW ENGINEERING GROUP, INC.
TOGETHER PLANNING A BETTER TOMORROW

STATE OF CONNECTICUT JOHN A. KRAFT No. 20787 LICENSED PROFESSIONAL ENGINEER

12/23/16

SITE INFORMATION:
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T-MOBILE SITE ID: CTNH545A
ATC SITE ID: 88009

SHEET NAME:
ELECTRICAL UTILITY PLAN

SMW #: 16-2559

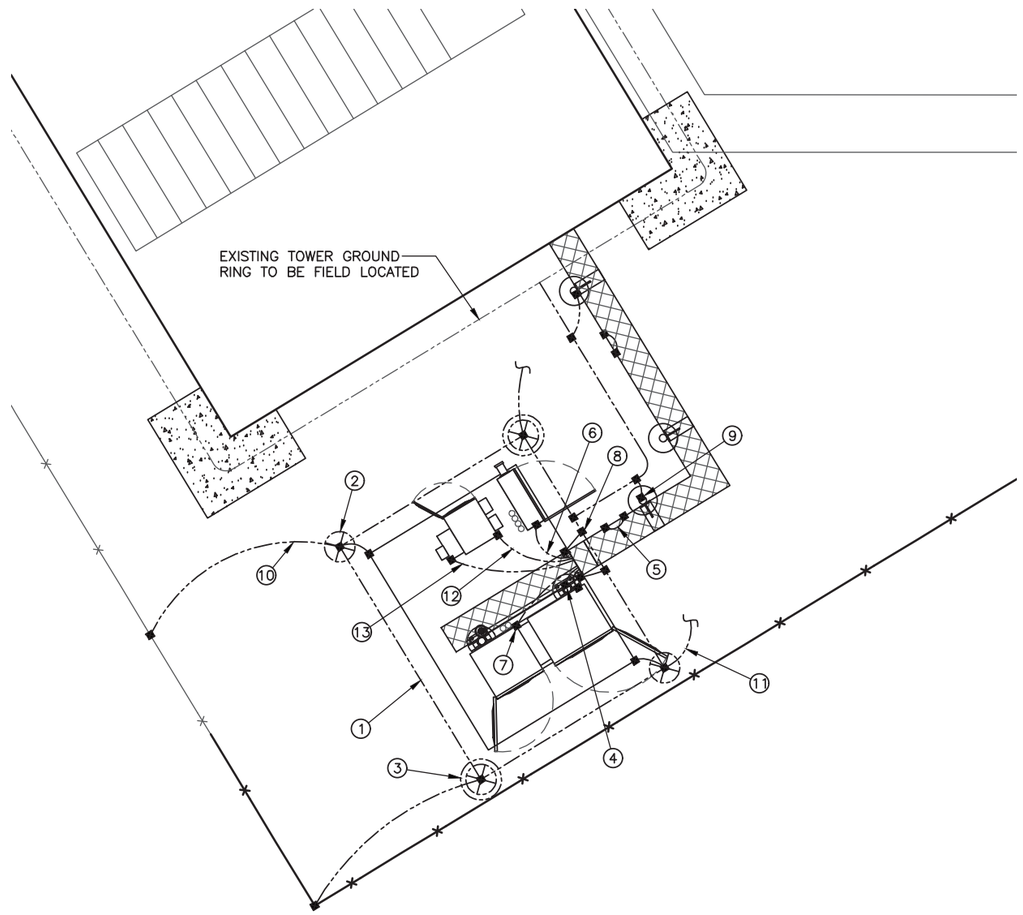
DESIGNER:	BMD
CHECKED BY:	RTB
ENGINEER:	JDS

SHEET NUMBER: E-2

GROUNDING KEY NOTES:

1. PROPOSED #2 BARE TINNED SOLID COPPER GROUND RING (TYP)
2. PROPOSED 5/8" DIA. X 8' LONG STEEL SHAFT COPPER CLAD GROUND ROD (TYP)
3. PROPOSED GROUND ROD WITH COVERED PVC TEST WELL (TYP)
4. GROUND PROPOSED UTILITY FRAME POST WITH CADWELD CONNECTION TO BASE PLATE (TYP)
5. GROUND PROPOSED ICE BRIDGE POST WITH CADWELD CONNECTION TO BASE (TYP)
6. GROUND PROPOSED PPC POWER PANEL PER NEC 250 AND LOCAL UTILITY REQUIREMENTS (TYP)
7. GROUND PROPOSED SSC CABINET MAIN GROUND BAR WITH 2-HOLE LUG CONNECTION (TYP)
8. PROVIDE 12 POSITION MAIN EQUIPMENT COLLECTOR GROUND BAR ATTACHED TO UNISTRUT FRAME WITH STANDOFF INSULATORS, GROUND WITH (2) CADWELDED CONNECTIONS, 1 PER SITE (TYP)
9. GROUND ICE BRIDGE CHANNEL SECTIONS WITH 2-HOLE LUG CONNECTION. BOND ADJOINING CHANNEL SECTIONS TOGETHER WITH 2-HOLE LUG JUMPERS (TYP)
10. GROUND TO ALL METALLIC OBJECTS WITHIN 6' OF THE PROPOSED EQUIPMENT AND BURIED GROUND RING (TYP)
11. GROUND PROPOSED T-MOBILE BURIED EQUIPMENT GROUND RING TO EXISTING SITE GROUND RING. CONDUCT GROUNDING SYSTEM TEST AND INCLUDE IN THE CLOSEOUT PACKAGE TO T-MOBILE. ADDITIONAL GROUNDING MAY BE REQUIRED PENDING THE RESULTS OF THE GROUNDING SYSTEM TEST (TYP x2)'
12. CADWELD CONNECTION (SEE SHEET E-6)
13. GROUND PROPOSED DISCONNECT PER NEC 250 AND LOCAL UTILITY REQUIREMENTS (TYP)

NOTE TO CONTRACTORS:
DIGGING AND/OR TRENCHING INSIDE COMPOUND, MUST BE DONE BY HAND.



1 / E-3 GROUNDING PLAN
NOT TO SCALE

T-Mobile
35 GRIFFIN RD S
BLOOMFIELD, CT 06002
OFFICE: 860-692-7100
FAX: 860-692-7159

PLANS PREPARED BY:
NSS NORTHEAST SITE SOLUTIONS
Turnkey Wireless Development
NORTHEAST SITE SOLUTIONS, LLC
199 BRICKYARD ROAD
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SMW ENGINEERING GROUP, INC.
TOGETHER PLANNING A BETTER TOMORROW

12/23/16

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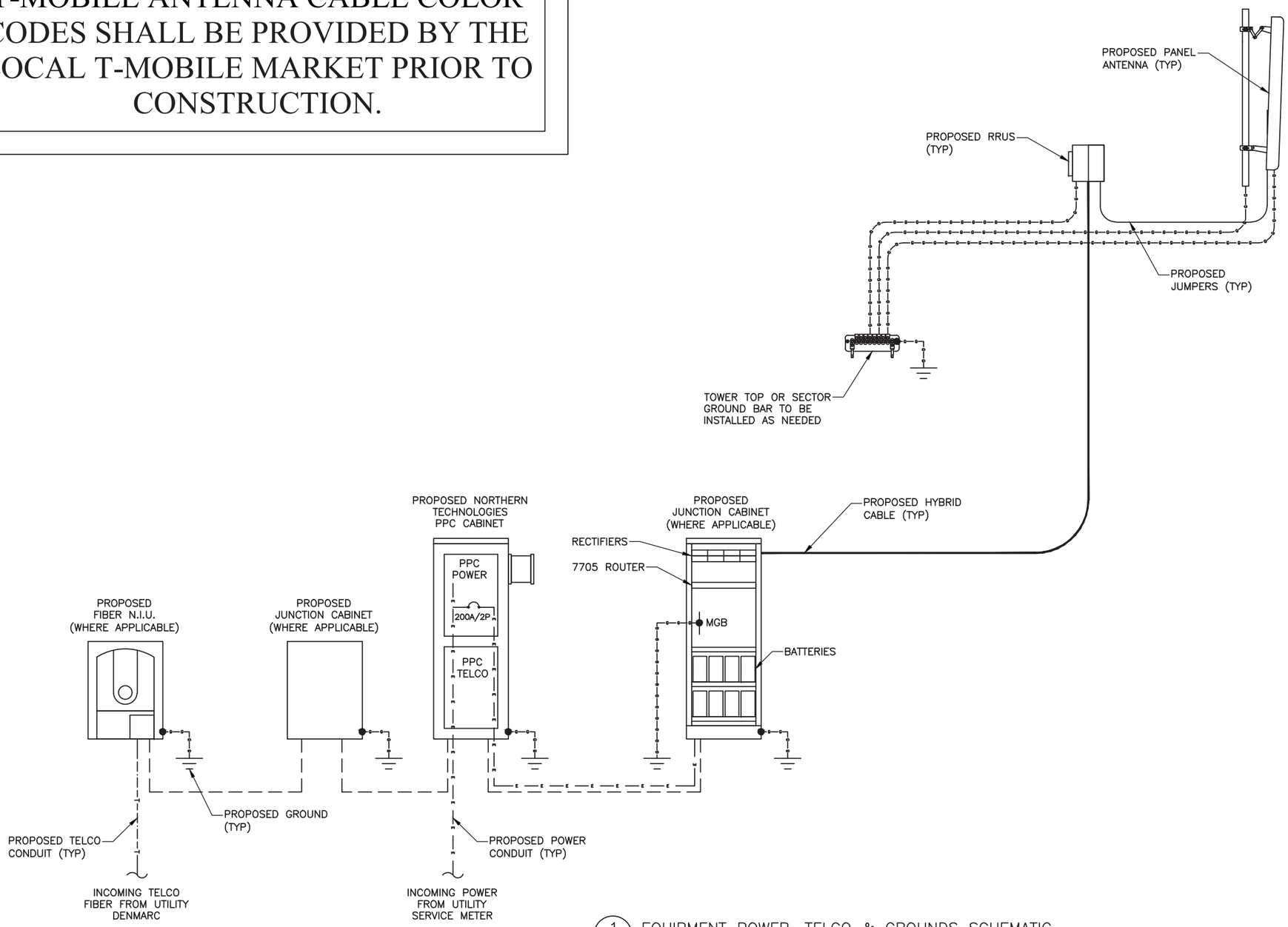
T-MOBILE SITE ID: CTNH545A
ATC SITE ID: 88009

SHEET NAME:
GROUNDING PLAN

SMW #: 16-2559
DESIGNER: BMD
CHECKED BY: RTB
ENGINEER: JDS

SHEET NUMBER:
E-3

T-MOBILE ANTENNA CABLE COLOR CODES SHALL BE PROVIDED BY THE LOCAL T-MOBILE MARKET PRIOR TO CONSTRUCTION.



1 / E-4 EQUIPMENT POWER, TELCO & GROUNDS SCHEMATIC
NOT TO SCALE

T-Mobile
35 GRIFFIN RD S
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PLANS PREPARED BY:
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SMW ENGINEERING GROUP, INC.
TOGETHER PLANNING A BETTER TOMORROW

STATE OF CONNECTICUT
MEIN A. KRAFT
No. 20707
LICENSED
PROFESSIONAL ENGINEER
12/23/16

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T-MOBILE SITE ID: CTNH545A
ATC SITE ID: 88009

SHEET NAME:
EQUIPMENT SCHEMATIC

SMW #: 16-2559
DESIGNER: BMD
CHECKED BY: RTB
ENGINEER: JDS

SHEET NUMBER:
E-4

1. ALL WORK IS TO COMPLY WITH THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE (NEC) AND ANY LOCAL ORDINANCES, CODES, AND ALL OTHER ADMINISTRATIVE AUTHORITIES HAVING JURISDICTION. THE CONTRACTOR SHALL FURNISH AND PAY FOR ALL PERMITS AND RELATED FEES.

2. ALL EQUIPMENT AND MATERIAL FURNISHED AND INSTALLED UNDER THIS CONTRACT SHALL BE UNDERWRITERS LABORATORIES (U.L.) LISTED, NEW, FREE FROM DEFECTS, AND SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE BY OWNER OR HIS REPRESENTATIVE. SHOULD ANY TROUBLE DEVELOP DURING THIS PERIOD DUE TO FAULTY WORKMANSHIP, MATERIAL, OR EQUIPMENT, THE CONTRACTOR SHALL FURNISH ALL NECESSARY MATERIALS AND LABOR TO CORRECT THE TROUBLE WITHOUT COST TO THE OWNER.

3. ALL WORK SHALL BE EXECUTED IN A WORKMAN LIKE MANNER AND SHALL PRESENT A NEAT MECHANICAL APPEARANCE WHEN COMPLETED. CONTRACTOR SHOULD AVOID DAMAGE TO EXISTING UTILITIES WHEREVER POSSIBLE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING RELATED TO ELECTRICAL WORK, AND SHALL RESTORE ALL EXISTING LANDSCAPING, SPRINKLER SYSTEMS, CONDUITS, WIRING, PIPING, ETC. DAMAGED BY THE ELECTRICAL WORK TO MATCH EXISTING CONDITIONS.

4. ELECTRICAL WORK SHALL INCLUDE, BUT NOT BE LIMITED TO, ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO COMPLETE ELECTRICAL POWER AND LIGHTING SYSTEMS, TELEPHONE AND COMMUNICATION SYSTEMS, PANELBOARDS, CONDUIT, CONTROL WIRING, GROUNDING, ETC. AS INDICATED ON ELECTRICAL DRAWINGS AND/OR AS REQUIRED BY GOVERNING CODES.

5. PRIOR TO INSTALLING ANY ELECTRICAL WORK, THE CONTRACTOR SHALL VISIT THE JOB SITE AND VERIFY EXISTING SITE LOCATIONS AND CONDITIONS AND UTILITY SERVICE REQUIREMENTS OF THE JOB, AND BY REFERENCE TO ENGINEERING AND EQUIPMENT SUPPLIERS' DRAWINGS. SHOULD THERE BE ANY QUESTION OR PROBLEM CONCERNING THE NECESSARY PROVISIONS TO BE MADE. PROPER DIRECTIONS SHALL BE OBTAINED BEFORE PROCEEDING WITH ANY WORK.

6. PROVIDE POWER AND TELEPHONE TO SERVICE POINTS PER UTILITY COMPANY REQUIREMENTS. CONTRACTOR SHALL CONTACT UTILITY SERVICE PLANNERS AND OBTAIN ALL SERVICE REQUIREMENTS AND INCLUDE COSTS FOR SUCH IN THEIR BID.

7. SERVICE EQUIPMENT SHALL HAVE A SHORT CIRCUIT WITHSTAND RATING EXCEEDING THE MAXIMUM AVAILABLE FAULT CURRENT AT THE SUPPLY TERMINAL ON THE UTILITY TRANSFORMER SECONDARY, THE INSULATION SHALL BE FREE FROM ANY SHORT CIRCUITS AND GROUNDS. CONTRACTOR TO OBTAIN THE AVAILABLE SHORT CIRCUIT CURRENT FROM THE ELECTRICAL SERVICE PROVIDER.

8. ALL WIRES SHALL BE STRANDED COPPER WITH THHN/THWN AND 600 VOLTS INSULATION. ALL GROUND CONDUCTORS TO BE PROPERLY SIZED COPPER. (STRANDED OR SOLID)

9. IN THE EVENT OF ANY CONFLICT OR INCONSISTENCY BETWEEN ITEMS SHOWN ON THE PLANS AND/OR SPECIFICATIONS, THE NOTE, SPECIFICATION OR CODE WHICH PRESCRIBES AND ESTABLISHES THE HIGHEST STANDARD OF PERFORMANCE SHALL PREVAIL.

10. SERVICE CONDUITS SHALL HAVE NO MORE THAN (4) –50° BENDS IN ANY SINGLE RUN. THE CONTRACTOR SHALL PROVIDE PULL BOXES AS NEEDED WHERE CONDUIT REQUIREMENTS EXCEED THESE CONDITIONS. PULL WIRES AND CAPS SHALL BE PROVIDED AT ALL SPARE CONDUITS FOR FUTURE USE.

11. ALL ELECTRICAL EQUIPMENT SHALL BE ANCHORED TO WITHSTAND LOCAL WIND SPEED REQUIREMENTS AND DESIGNED FOR OUTDOOR EXPOSURE.

12. ALL COAX, POWER AND TELEPHONE SYSTEM CONDUITS SHALL HAVE A MINIMUM 24" SCH. 80 PVC RADIUS SWEEPS TO EQUIPMENT, PULLBOXES, GUY, ETC., UNLESS OTHERWISE NOTED, OR AS REQUIRED BY UTILITY COMPANIES.

13. FUSE TYPE SHALL BE BUSSMAN RKI LOW PEAK FUSE (LPN–RK–140).

14. UPON COMPLETION OF THE JOB, THE CONTRACTOR SHALL FURNISH AS–BUILT DRAWINGS TO THE OWNER.

15. GENERAL GROUNDING CRITERIA
    1ST STEP: GROUND TO EXISTING BUILDING STRUCTURAL STEEL AND TO THE EXISTING COLD WATER METAL PIPE LINE. (WHERE APPLICABLE) THEN TEST GROUNDING RESISTANCE FOR 5 OHMS OR LESS OVERALL GROUND RESISTANCE. WHERE THE EFFECTIVE RESISTANCE DOES NOT MEET THIS CRITERIA, PROVIDE SUPPLEMENTAL GROUNDING AND RE–TEST UNTIL GROUND RESISTANCE FALLS BELOW THIS LEVEL.

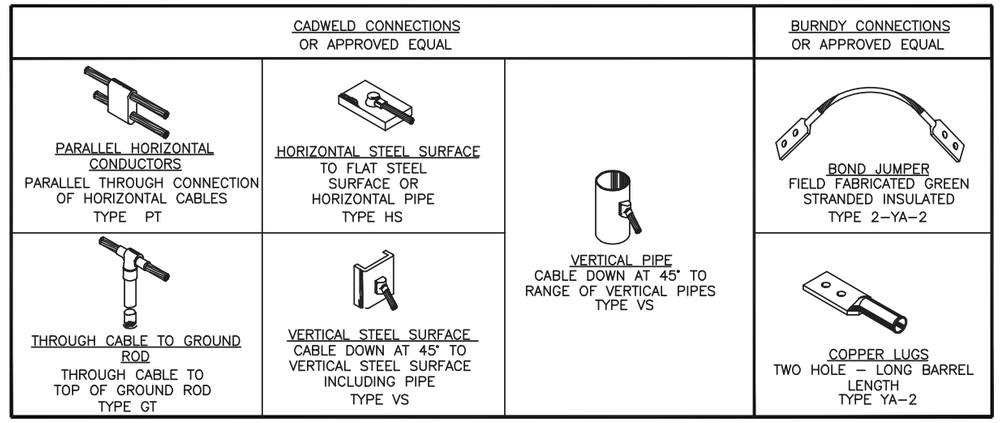
16. SUPPLEMENTAL GROUND MAY CONSIST OF ONE OR MORE OF THE FOLLOWING:
    COUNTERPOISE, USER GROUND, GROUND ROD AND/OR GROUND WELL IN EXTREMELY ADVERSE SOIL CONDITIONS. WHERE THE EXISTING BUILDING STEEL DOES NOT PROVIDE AN EFFECTIVE GROUND RESISTANCE, THEN THE CONTRACTOR SHALL PROVIDE A SEPARATE GROUND CONDUCTOR FROM ROOF MOUNTED BTS EQUIPMENT LOCATIONS EITHER DOWN THROUGH THE INSIDE OF THE BUILDING OR DOWN THE OUTSIDE OF THE BUILDING, DEPENDING UPON OWNER PREFERENCE. WHERE THE GROUND CONDUCTOR FROM THE ROOF MOUNTED EQUIPMENT IS ROUTED IN CONDUIT, THE CONDUIT SHALL BE EFFECTIVELY GROUNDED TO THE GROUND CONDUCTOR AT BOTH ENDS OF THE CONDUIT. (GUY INSTALLATIONS):

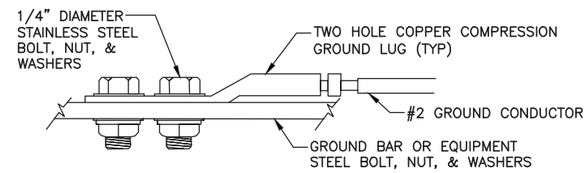
    FOR INSTALLATIONS WHERE WOODEN STRUCTURES, TOWERS, CONCRETE SILOS ETC. ARE ENCOUNTERED A PARATE DOWNLEAD SHALL BE PROVIDED FROM THE 3 ANTENNAS SEPARATED BY A MINIMUM OF 12 INCHES FROM THE COAXIAL CABLES. THE GROUND CONDUCTOR SHALL BE SECURELY FASTENED TO THE EXTERIOR OF OUTSIDE STRUCTURES WITH NONMETALLIC GROUND STRAPS EVERY 10 FEET. AGAIN, AS FOR TENANT IMPROVEMENT PROJECTS, TEST THE GROUND RESISTANCE FOR GUY INSTALLATIONS AND PROCEED PER THE ABOVE STEPS.

17. CONTRACTOR TO COLOR PHASE CONDUCTORS BLACK (B PHASE), RED (A PHASE), WHITE (NEUTRAL), AND GREEN (GROUND).

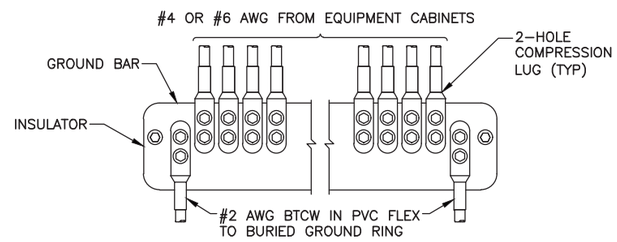
18. CONTRACTOR TO PROVIDE GUTTER TAP.

19. THERE SHALL BE A MINIMUM CLEARANCE OF 48" BETWEEN FRONT OF ELECTRICAL EQUIPMENT AND ANY WALL OR OBSTRUCTION.

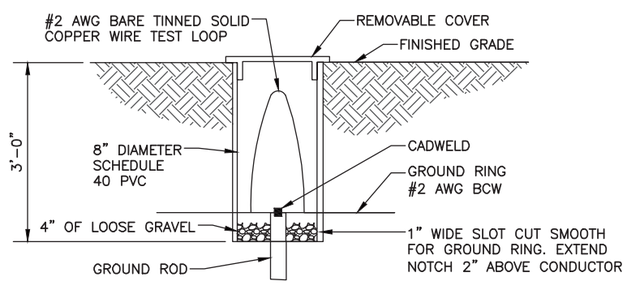




1 / E-5 TWO HOLE LUG CONNECTION DETAIL
NOT TO SCALE



2 / E-5 GROUND BAR DETAIL
NOT TO SCALE



3 / E-5 TEST WELL DETAIL
NOT TO SCALE

T-Mobile
35 GRIFFIN RD S
BLOOMFIELD, CT 06002
OFFICE: 860–692–7100
FAX: 860–692–7159

PLANS PREPARED BY:
NSS NORTHEAST SITE SOLUTIONS
NORTHEAST SITE SOLUTIONS, LLC
199 BRICKYARD ROAD
FARMINGTON CT 06032
(860) 677–1999

SMW ENGINEERING GROUP, INC.
TOGETHER PLANNING A BETTER TOMORROW

STATE OF CONNECTICUT · KEVIN A. KRAFT · No. 32797 · LICENSED PROFESSIONAL ENGINEER

12/23/16

SITE INFORMATION:
CTNH545A
36 MOHAWK MTN RD
CORNWALL, CT 06753

#	DATE	DESCRIPTION:
0	10/10/16	ISSUED FOR CLIENT REV.
1	10/21/16	REISSUED FOR CLIENT REV.
2	11/10/16	ISSUED FOR CONSTRUCTION
3	12/14/16	REISSUED FOR CONSTRUCTION
4	12/23/16	REISSUED FOR CONSTRUCTION

T-MOBILE SITE ID: CTNH545A
ATC SITE ID: 88009

SHEET NAME:
ELECTRICAL & GROUNDING DETAILS

SMW #: 16–2559

DESIGNER:	BMD
CHECKED BY:	RTB
ENGINEER:	JDS

SHEET NUMBER: E-5