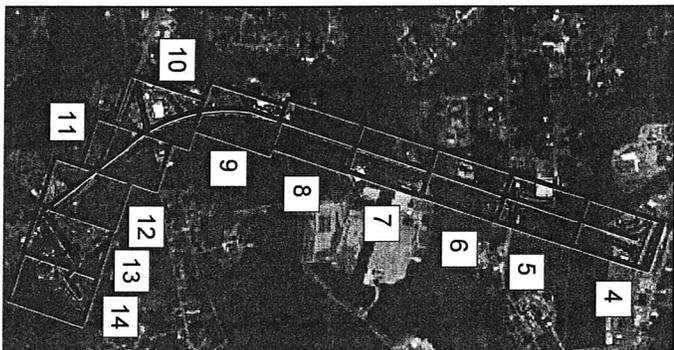


ADDRESS: 1 RADIO ST. WADESBORO, NC  
 PROJECT NAME: SPIRIT - VERIZON TOWER



SITE LOCATION  
 SERVICE ORDER:

CONTACTS

SPIRIT ENGINEER  
 ROBERT ROBINSON  
 803-230-0515  
 Robert.Robinson@spiritcom.com

TPRC BROADBAND SPECIALIST  
 PHILIP WILSON  
 336-825-4408  
 philip@prcbroadband.com

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- 01 - COVER SHEET/SITE LOCATION
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- 18 - SITE PHOTOS
- 19 - TYPICALS
- 20 - RAKE OFF TOTAL

SCOPE OF WORK:

THIS PROJECT WILL CONSIST OF PLACING (1) HH TO NEW SPIRIT HH, DIRECTIONAL BORE (3) 1.25" HOPE CONDUITS 5.57' ALTERNATING 1516 FROM NEW SPIRIT HH BESIDE MOND'S HH, TO NEW SPIRIT HH AT TOWER PROPERTY 480' FROM 8.02' FROM MOND'S HH. THIS IS PLACE SPIRIT HH AT TOWER PROPERTY. LEAVE TAIL FOR RING CUT IN MOND HH AND LEFTOVER SMOCK IN SPIRIT HH.

SWAHL, CORRELATIONS TO PHOTO LOCATIONS AND ORIENTATION, SEE SHEET # FOR SITE PHOTOGRAPHS.

#	DATE	BY	REVISION
1	10/06/17	PM	AS-BUILT
2	09/26/17	PM	REVISION 1



PROJECT MANAGER: ROBERT ROBINSON  
 ENGINEERING FIRM: TPRC BROADBAND  
 SERVICE ORDER: RADIO ST. WADESBORO, NC  
 DESCRIPTION: SPIRIT - VERIZON TOWER  
 DRAWING NAME: T Tower Street (1x Wadeboro) Wadeboro, NC  
 COMBUSTIBLE/HAZARDOUS MATERIALS





# GENERAL NOTES

## GENERAL NOTES

CONTRACTOR MUST OBTAIN LOCATE PRIOR TO OPERATING THE GROUND.  
 CONTRACTOR MUST HAVE A COPY OF THE APPROVED PERMIT FROM THE APPROPRIATE AGENCY ON THE JOB SITE AT ALL TIMES.  
 ALL CABLE WILL BE PLACED AT STANDARD MINIMUM DEPTH. (SPRINT TELECOM STANDARD IS 48" DEEP UNLESS OTHERWISE DIRECTED BY A SPRINT TELECOM REPRESENTATIVE.)  
 ANY LANDSCAPING WILL BE REPLACED TO EQUAL OR BETTER THAN THAT WHICH EXISTED PRIOR TO WORK.  
 PROJECT SITE WILL BE PROPERLY SECURED PRIOR TO THE END OF EACH DAY.  
 ALL WORK IS TO BE IN ACCORDANCE WITH ALL AUTHORITIES HAVING JURISDICTION IN THE WORK ZONE.  
 CONTRACTORS ARE ADVISED TO CONTACT SPRINT TELECOM FOR ANY ADDITIONAL INFORMATION OR CLARIFICATION CONCERNING SCOPE OF WORK OR THE REQUIREMENTS NECESSARY FOR PROJECT COMPLETION.

CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY ALL DIMENSIONS, QUANTITIES AND EXISTING CONDITIONS PRIOR TO CONSTRUCTION. IF A SIGNIFICANT CHANGE TO THE BUILDING LINES IS NEEDED, PLEASE CONTACT YOUR SPRINT TELECOM REPRESENTATIVE BEFORE PROCEEDING. BEFORE CONSTRUCTION BEGINS, CONTRACTOR SHALL TAKE APPROPRIATE PRECAUTIONS TO AVOID ANY POTENTIAL OBSTRUCTIONS PRIOR TO PROCEEDING WITH WORK.  
 NO CONSTRUCTION ON PRIVATE PROPERTY WILL COMMENCE UNTIL APPROVAL IS GIVEN BY THE APPROPRIATE SPRINT TELECOM EMPLOYEE.  
 CONTRACTOR SHALL NOT PROCEED WITH WORK UNTIL THEY HAVE RECEIVED A PURCHASE ORDER AND HAVE BEEN DIRECTED TO DO SO BY AN AUTHORIZED SPRINT TELECOM REPRESENTATIVE.  
 CONTRACTOR SHALL NOT EXCEED THE PURCHASE ORDER VALUE WITHOUT AUTHORIZATION IN WRITING FROM THE APPROPRIATE SPRINT TELECOM REPRESENTATIVE.

AS CABLES WILL BE REQUIRED FOR EACH PROJECT INCLUDING CABLE FOOTING SEQUENTIALS AT EVERY ACCESS POINT, STACK LOOP, SPACE LOCATION, POLE AND TERMINATION POINT. CONTRACTOR SHOULD ALSO PROVIDE NOTES OF ALL CHANGES IN DEPTH, RUNNING LINES, WIDTH LOCATIONS, AND ANY OTHER APPLICABLE NOTES TO REFLECT THE WORK THAT TOOK PLACE. NOTE: ALL MAJOR CHANGES NEED TO BE PRE-APPROVED BY AN AUTHORIZED SPRINT TELECOM EMPLOYEE PRIOR TO STARTING THE WORK.  
**SITE CONDITIONS**

THE ACTUAL LOCATION OF EXISTING CONDUIT AND CABLES MAY VARY FROM THE LOCATION SHOWN. REPAIR OF ANY DAMAGED CONDUIT CONTAINING CABLE SHALL BE MADE BY USE OF PVC SPLIT DUCT. THE CONTRACTOR SHALL ENCLOSE THE EXISTING CABLES IN PVC.  
 THE LOCATIONS OF EXISTING UTILITIES SHOWN IN THIS PLAN ARE APPROXIMATE. WHEN WORK IS TO BE CONDUCTED IN THE VICINITY OF KNOWN UTILITIES, THEIR ACTUAL LOCATION MUST BE FIELD VERIFIED TO AVOID CONFLICTS OR DAMAGE TO THOSE UTILITIES. VARIATION IN LOCATION BETWEEN RECORDING POSITIONS AND ACTUAL POSITIONS SHOULD BE ANTICIPATED.  
 IF SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES. BURIED UTILITIES MAY EXIST IN THE AREA IN ADDITION TO THOSE SHOWN ON THE PLAN. THE CONTRACTOR SHALL CONTACT PROPERTY OWNERS WHEN WORKING WITHIN PRIVATE EASMENTS FOR LOCATION OF UNDERGROUND TANKS, PREMISES, DRAIN TILES, OR OTHER BURIED IMPROVEMENTS. THE CONTRACTOR SHALL ALSO NOTIFY THE UTILITY NOTIFICATION CENTER PRIOR TO COMMENCING ANY CONSTRUCTION ACTIVITIES.  
 THE CONTRACTOR MUST ASSUME ALL BURIED UTILITIES ENCOUNTERED ARE LIVE AND ACTIVE UNLESS SPECIFICALLY INSTRUCTED OTHERWISE BY OWNERS OR OPERATORS OF SAID UTILITIES.

**DAMAGE TO SUB-SURFACE STRUCTURES IS THE SOLE RESPONSIBILITY OF THE PLACING CONTRACTOR.**  
 THE CONTRACTOR SHALL PROTECT THE EXISTING TRAFFIC CONTROL, LOOPS, IF EXISTING TRAFFIC CONTROL LOOPS ARE DAMAGED DURING CONSTRUCTION, THE ENTIRE LOOP/PIECE FROM TERMINAL TO TERMINAL SHALL BE REPLACED IN ACCORDANCE WITH GOVERNING AGENCY STANDARDS AND REGULATIONS AT CONTRACTOR'S EXPENSE.  
 REMOVAL OF EXISTING ASPHALT PAVEMENT, CONCRETE CURBS, AND CONCRETE SIDEWALKS WILL BE "NEAR LINE" WITH SAW OR PAVEMENT CUTTER, PER REQUIREMENTS AND SPECIFICATIONS OF THE AGENCY OR DEPARTMENT RESPONSIBLE FOR EACH LOCATION. IF CONCRETE PAVEMENT IS RECONSTRUCTED WHILE EXCAVATING CONDUIT TRENCHES, THE CONCRETE REMOVAL WILL BE "NEAR LINE" WITH A SAW/PAVEMENT SAW.

IF CONCRETE CURB RETURN AND/OR SIDEWALKS ARE REPLACED DUE TO CONDUIT OR MANHOLE INSTALLATION, THE CONTRACTOR SHALL PLACE APPROVED HANDPAVED SIDEWALK AND CURB ACCESS STAIRS IN CONFORMANCE WITH STATE OF WISCONSIN STATUTES.  
 ALL MATERIALS NECESSARY FOR THE REPAIR OF STREETS, CURBS, SIDEWALKS, SANITARY SEWERS, STORM SEWERS, AND PUBLIC SERVICE UTILITIES, AND THE INSTALLATION OF SUCH MATERIALS SHALL BE IN CONFORMANCE WITH THE REQUIREMENTS AND SPECIFICATIONS OF THE AGENCY OR DEPARTMENT RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF THE REPAIR FACILITY.  
 ALL WORK SHALL CONFORM TO THE SPECIFICATIONS OF THE JURISDICTIONAL PERMIT AGENCY.

ALL OTHER TRENCH WILL BE CLEANLY MARKED WITH BARRICADES OR CONES, STEEL PLATES OR OTHER TYPES OF BARRIERS SHALL BE PROVIDED TO COVER OPEN TRENCH IN THE TRAVEL PORTION OF THE STREET. THESE PLATES OR BARRIERS SHALL BE ADEQUATE TO SUPPORT THE NORMAL VEHICLE LOADS ANTICIPATED IN THIS AREA AND SHALL BE IN PLACE DURING ALL NON-WORKING HOURS.  
 ALL SURFACES TO BE RESTORED TO ORIGINAL CONDITION, AND BACKFILL TO BE COMPACTED AS SPECIFIED. TRENCH EXCAVATION IN SURFACES WHICH INCLUDE CONCRETE HEATED BASES SHALL FOLLOW LOCAL AREA SPECIFICATIONS.

## HAZARDOUS MATERIALS

THE CONTRACTOR SHALL NOTIFY THE JURISDICTIONAL PERMIT AGENCY IMMEDIATELY IF ANY MATERIALS ARE ENCOUNTERED THAT ARE CONSIDERED HAZARDOUS BY THE EPA, DEQ, OR OSHA. IF POTENTIALLY HAZARDOUS MATERIALS ARE ENCOUNTERED THE CONTRACTOR SHALL SECURE THE SITE AND PREVENT THE ACCIDENTAL EXPOSURE BY THE PUBLIC OR THE CONTRACTOR'S PERSONNEL.  
 THE CONTRACTOR MAY EXCAVATE UP TO, BUT SHALL NOT DISTURB KNOWN HAZARDOUS MATERIALS SUCH AS ASBESTOS, OILS, ACID, ETC. THE REMOVAL OF ALL HAZARDOUS MATERIALS MUST BE DONE BY AN APPROVED OR CERTIFIED HAZARDOUS MATERIALS CONTRACTOR LICENSED BY THE STATE OF WISCONSIN. A COPY OF ALL CORRESPONDENCE RELATIVE TO THE REMOVAL OF HAZARDOUS MATERIALS SHALL BE TRANSMITTED TO OWNER AND A COPY SHALL BE AVAILABLE AT THE PROJECT OFFICE AND THE JOB SITE.

## AERIAL NOTES

- AERIAL CONSTRUCTION TO BE PERFORMED TO INDUSTRY ACCEPTABLE STANDARDS.
- ALL HEIGHTS OF CABLE PLACEMENT WILL BE RECORDED AT TIME OF CONSTRUCTION. DOCUMENT ALL POINTS OF ATTACHMENT.
- 6.8MM STRAND WILL BE USED WITH STANDARD 2/8 HARDWARE.
- ALL EXTENSION ARMS TO BE PLACED WILL BE ENJOY ARMS UNLESS OTHERWISE NOTED OR APPROVED BY THE INSPECTOR.
- BOND STRAND TO POWER MAIN WHERE APPLICABLE. ANCHORS TO BE USED WILL BE 3/4" SCREW IN TYPE.
- ALL STRAPS WILL BE PLACED 2" BEFORE AND AFTER EVERY SUPPORTING CLAMP AT A MINIMUM OF 21" APART.
- P.O.A. = POINT OF ATTACHMENT.
- ADD MISSING GROUNDING.
- REPAIR/REPLACE EXISTING LASHING WHEN DAMAGED.

## CONSTRUCTION STAKING

IN AREAS WHERE THE CONDUIT ALIGNMENT IS NOT CLEARLY DEFINED BY CURB LINES, FENCE LINES, OR OTHER INDICATORS OF THE RIGHT-OF-WAY, THE ENGINEER WILL PROVIDE CENTERLINE STAKES OR NAIL MARKS WHERE REQUIRED TO MAKE THE PROPOSED CONDUIT ALIGNMENT EVIDENT.  
 MANHOLE CENTERS WILL BE FIELD STAKED BY THE ENGINEER WHEN REQUESTED WITH OFFSET STAKES AT RIGHT ANGLES (90°) TO THE CONDUIT ALIGNMENT.  
 CONDUIT INSURERS IDENTIFIED IN THE PLANS SHALL BE LOCATED BY THE CONTRACTOR. DEVIATION FROM PLAIN LAYOUT SHALL BE APPROVED BY THE ENGINEER PRIOR TO CONDUIT AND/OR CABLE INSTALLATION.  
 IF ADDITIONAL FIELD STAKING ON LOCATION OF CONDUITS, MANHOLES, PROPERTY LINES, ETC., REQUIRES NECESSARY, THE CONTRACTOR IS TO NOTIFY THE INSPECTOR OR THE ENGINEER TWO WORKING DAYS PRIOR TO BEGINNING THE WORK.

## PERMITS - FRANCISES - EASEMENTS

PHYSICAL WORK SHALL NOT BE STARTED UNTIL THE GOVERNING AGENCY INSPECTOR AND THE CONTRACTOR ARE IN POSSESSION OF AND HAVE CAREFULLY REVIEWED AND FULLY UNDERSTAND ALL CONDITIONS AND SPECIFICATIONS SET FORTH IN THE REQUIRED PERMITS, FRANCISES, AND/OR EASEMENTS. PLACING FOREMAN TO HAVE A COPY OF THE PERMITS/EASEMENTS ON SITE AT ALL TIMES.

## TRAFFIC CONTROL

ANY CONFLICT BETWEEN WORK PERMIT SPECIFICATIONS AND SPECIFICATIONS SET FORTH UNDER RELATED PERMITS, FRANCISES, AND/OR EASEMENTS MUST BE CLEARED BY PROPER COMPANY AUTHORITY BEFORE PROGRESSING WITH WORK INVOLVED.  
 THIS PROJECT WILL INVOLVE WORKING ALONG A MAJOR ARTERIAL ROAD AND HEAVY TRAFFIC VOLUME SHOULD BE ANTICIPATED.  
 UTILITY TRAFFIC FLOW SHALL BE MAINTAINED AT ALL TIMES. ONLY EQUIPMENT AND MATERIALS NECESSARY FOR IMMEDIATELY SCHEDULED OR IN PROGRESS WORK WILL BE MAINTAINED IN THE WORK AREA. ALL OTHER EQUIPMENT AND MATERIALS WILL BE STORED OR STOCKPILED IN SUCH A MANNER AS TO ELIMINATE HAZARDOUS CONDITIONS FOR TRAFFIC PARTICIPANTS DRIVING NON-WORKING OR SHUT DOWN PERIODS.  
 TRAFFIC WARNING DEVICES AND SIGNS SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (U.S. GOVERNMENT PRINTING OFFICE) AND TO THE STATE HIGHWAY DIVISION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION. HIGH LEVEL WARNING TYPE DEVICES ARE TO BE USED AT ALL TIMES AND SPECIAL WARNING DEVICES MAY BE STIPULATED BY THE JURISDICTIONAL PERMIT AGENCY AT ANY TIME THE USE WILL ADD TO THE SAFETY AND PROTECTION OF TRAFFIC OR PEDESTRIANS IN THE CONSTRUCTION AREA.  
 ALL CONDUIT TRENCHING IN AVOID AREAS SHALL BE BACKFILLED WITH CURBED GRAVEL OR COMPLETELY COVERED AT THE COMPLETION OF EACH WORKING DAY. ANY BACKFILLED TRENCH SHALL BE CARPED WITH A MINIMUM LAYER OF ASPHALTIC CONCRETE COLD PATCH AT THE END OF EACH WORKING DAY.

THE CONTRACTOR SHALL MARK THE CONDUIT TRENCH AND DEFINE HIS CONSTRUCTION AREA CLEARLY WITH BARRICADES, CONES, AND/OR OTHER VISIBLE METHODS THAT ALERT THE PUBLIC OF THE CONSTRUCTION ACTIVITY.  
 A TRAFFIC CONTROL PLAN SHALL BE PREPARED BY THE CONTRACTOR AS REQUIRED AND SUBMITTED TO EACH PERMITTING AGENCY REQUESTING SUCH PLAN FOR REVIEW AND APPROVAL ON A REGION PRIOR TO COMMENCING ANY CONSTRUCTION ACTIVITY FOR THIS PROJECT. THE APPROVED PLAN SHALL BE SUBMITTED TO THE AGENCY AND A COPY OF THE PLAN SHALL BE KEPT AT THE CONSTRUCTION SITE AND MUST BE READILY AVAILABLE FOR REVIEW BY THE AGENCY REPRESENTATIVES.

## SPECIAL UTILITY CLEARANCES

THE WORK CONDUCTED ADJACENT TO WATER MAINS SHALL CONFORM TO THE FOLLOWING:  
 A. WHEREVER POSSIBLE CONDUIT SHALL MAINTAIN A HORIZONTAL SEPARATION OF 3.0 FEET MEASURED SURFACE TO SURFACE (OUTSIDE EDGE TO OUTSIDE EDGE), FROM PARALLEL WATER MAINS.  
 B. WHEREVER POSSIBLE, CONDUIT SHALL PASS UNDER EXISTING WATER MAINS AND MUST ALSO MAINTAIN THE 12" VERTICAL SEPARATION.  
 C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING THE REQUIRED VERTICAL SEPARATION BY EITHER EXPOSING THE WATER MAIN EVERY 100 FEET IN THOSE AREAS WHERE HORIZONTAL SEPARATION IS LESS THAN 10 FEET OR BY UTILIZING THE DEPTH OF WATER MAIN DEPTH. HE SHALL CONTACT THE AGENCY AT EACH SUCH LOCATION AND THE AGENCY WILL DETERMINE THE NECESSARY DEPTH OF THE TOP OF THE CONDUIT AT THAT POINT.  
 D. THE VERTICAL AND HORIZONTAL SEPARATION SHALL BE MAINTAINED IN ALL TIMES UNLESS AGENCY HAS SPECIFIC DEVIATION IN VERTICAL AND HORIZONTAL SEPARATION FROM THESE REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL ENCROACHMENTS TO WATER MAINS.  
 E. CLEARANCES TO STORM SEWERS AND SANITARY SEWERS SHALL BE EXACTLY THE SAME AS THOSE TO WATER MAINS.

## STRUCTURE PROTECTION

MANHOLES AND CONDUIT TO BE PLACED ADJACENT TO EXISTING STRUCTURES SUCH AS BRIDGE FOOTINGS/PILERS, BUILDING FOUNDATIONS, WALLS, POWER AND TELEPHONE POLES, AND OTHER UTILITIES SHALL MAINTAIN A MINIMUM CLEARANCE AS SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING THE REQUIRED CLEARANCE THROUGHOUT THE PROJECT. THE CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION FROM THE OWNER/OPERATOR OF SUCH STRUCTURE.  
 SHORING USED AS FOUNDATION SUPPORT SHALL BE DESIGNED SPECIFICALLY FOR BOTH THE LIVE AND DEAD LOADS OF THE STRUCTURE. OR IF ONLY THE DEAD LOAD IS USED FOR DESIGN, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF THE SHORING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN LOAD CONDITION (I.E. DEAD OR LIVE). THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL ENCROACHMENTS TO WATER MAINS.  
 EXISTING UTILITIES EXPOSED DURING EXCAVATION SHALL BE TIGHTLY SUPPORTED BY EITHER TRENCH BRIDGING AND/OR SUPPORTION OR BY THE USE OF LONGITUDINAL TRAYS OR PLATFORMS VERTICALLY EXPOSING SPIKE CASES AND CABLES SHALL BE SUPPORTED BY SUSPENSION FROM A CEILING BEAM. SUPPORTS SHALL BE PLACED AT A MINIMUM SPACING OF 4.0 FEET AND SHALL CONFORM TO A CANVAS SLING WITH WYCHS OR OTHER DAMAGE TO THE CABLE STRAND.  
 AN ACCEPTABLE PRACTICE FOR THE PROTECTION OF A WORK STRAND "T" BEAM OR CHANNEL, IS A "CABLE TRAY" WITH THE CABLES SAVED IN PLACE.

## SHORING

CONDUIT FROM SHALL RANGE FROM THE CONDUIT TRENCH EXCAVATION 42" OR MORE IN DEPTH AS MEASURED FROM THE HIGHEST OF THE TRENCH AND SHALL MAINTAIN THE EXCAVATION. ALL SHORING SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF LOCAL COUNTY AND THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).  
 SHORING SHALL BE DESIGNED TO MEET 1.20 HIGHWAY LOADING.  
 THE CONTRACTOR SHALL PROVIDE ALL SHORING AND DESIGN CALCULATIONS TO THE PERMIT ISSUING AGENCY PRIOR TO COMMENCING ANY CONSTRUCTION ACTIVITY.



NO.	DATE	END DESIGNED	BY	COMMENT
3	10/06/17	HW	HW	AS-BUILT
2	09/24/17	FW	CSH	ORIGINAL

**PROJECT MANAGER: ROBERT ROBINSON**  
**ENGINEERING FIRM: TRC BROADBAND**  
**DESCRIPTION: 1 AND 2 ST WOODSROAD**  
**DRAWING MADE: SPIRIT - VERNON TOMER**  
 Phone: 608-785-1149  
 1740 West Street, Janesville, Wisconsin 53401, USA  
 Fax: 608-785-1149  
 Email: info@spiritutility.com  
 Website: www.spiritutility.com

**CONSTRUCTION NOTES**

- 1 EXISTING MANHOLE-1
- 2 CABLE RINGS: 48CT FOC  
CABLE OWNER: SPIRIT  
NOTES: PLACE NEW 48CT FOC 2' FROM EXISTING HH-1 TO PROPOSED HH-2
- 3 CABLE OWNER: SPIRIT  
CONDUIT LENGTH: 2'  
CONDUIT DTE: 1.25"  
CONDUIT TYPE: HDPE  
NOTE: PLACE (1) NEW 1.25" HDPE 2' FROM EXISTING HH-1 TO PROPOSED HH-2
- 4 PROPOSED MANHOLE-2 WITH GROUND ROD  
BRING AT 2000 US  
- PLACE WADERS NOW
- 5 CABLE RINGS: 48CT FOC  
CABLE OWNER: SPIRIT  
CONDUIT LENGTH: 78'  
CONDUIT DTE: 1.25"  
CONDUIT TYPE: HDPE  
NOTE: TRENCH (3) NEW 1.25" HDPE 78' FROM PROPOSED HH-2 TO DIRECTIONAL BORE LOCATION
- 6 CABLE RINGS: 48CT FOC  
CABLE OWNER: SPIRIT  
CONDUIT LENGTH: 54'  
CONDUIT DTE: 1.25"  
CONDUIT TYPE: HDPE  
NOTE: TRENCH (3) NEW 1.25" HDPE 54' FROM END OF TRENCH TO PROPOSED HH-3
- 7 CABLE RINGS: 48CT FOC  
CABLE OWNER: SPIRIT  
CONDUIT LENGTH: 418'  
CONDUIT DTE: 1.25"  
CONDUIT TYPE: HDPE  
NOTE: TRENCH (3) NEW 1.25" HDPE 418' FROM END OF TRENCH TO PROPOSED HH-4 LEAVING A 100' SLOPE LOOP AT HH-3
- 8 PROPOSED MANHOLE-4 WITH GROUND ROD  
BRING AT 2000 US  
- PLACE WADERS NOW

# REFER TO SHEET FOR RING LOCATIONS AND ORIENTATION. SEE SHEET 4 FOR SIZE DIMENSIONS.

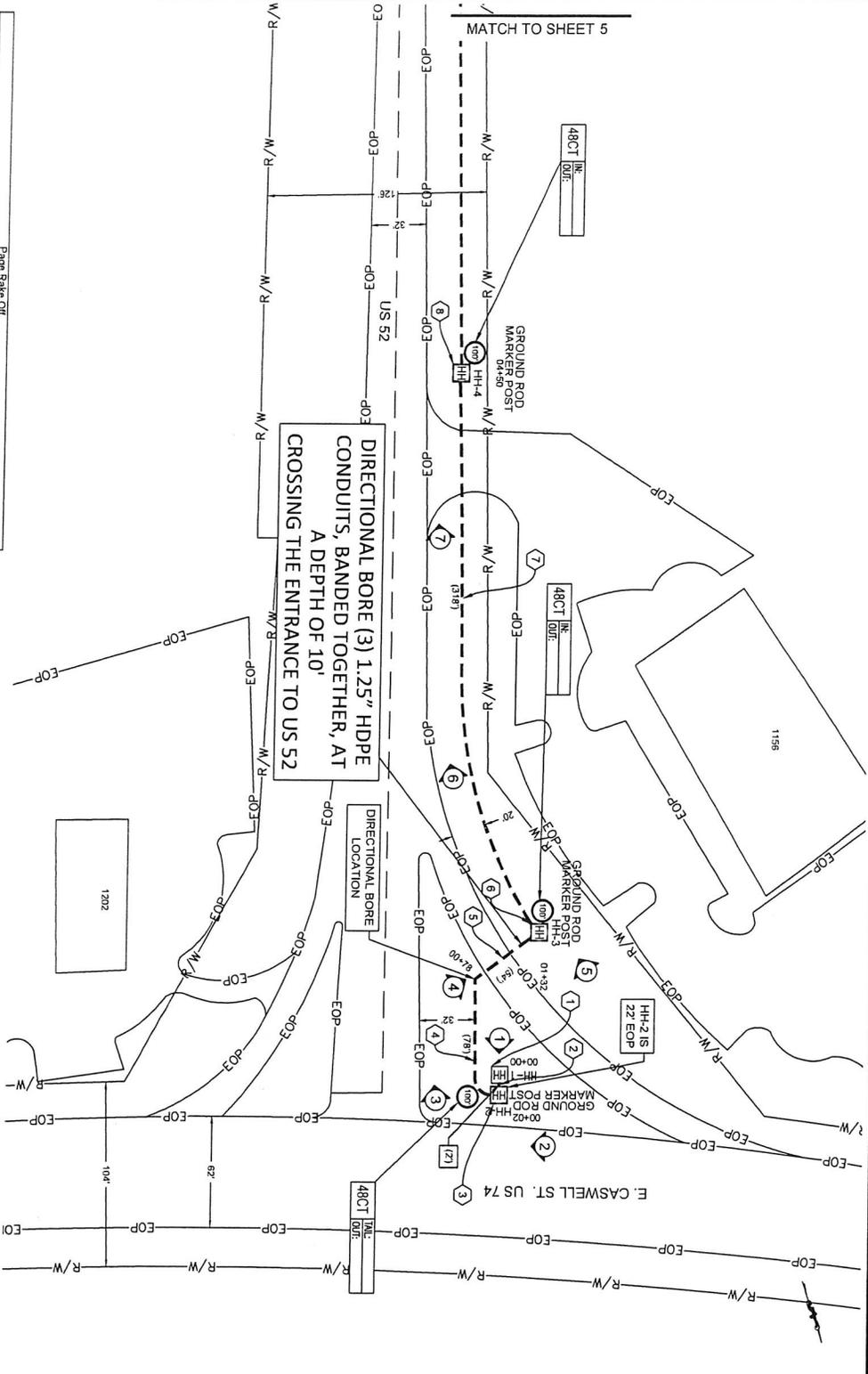


SCALE IS FOR REFERENCE PURPOSES ONLY. THE CABLE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE APPROPRIATE PERMITS AGENCIES PRIOR TO BEGINNING CONSTRUCTION. IN ORDER TO VERIFY THAT THE CABLE IS BEING PLACED WITHIN THEIR RIGHT-OF-WAY.

Unit Cables & Description

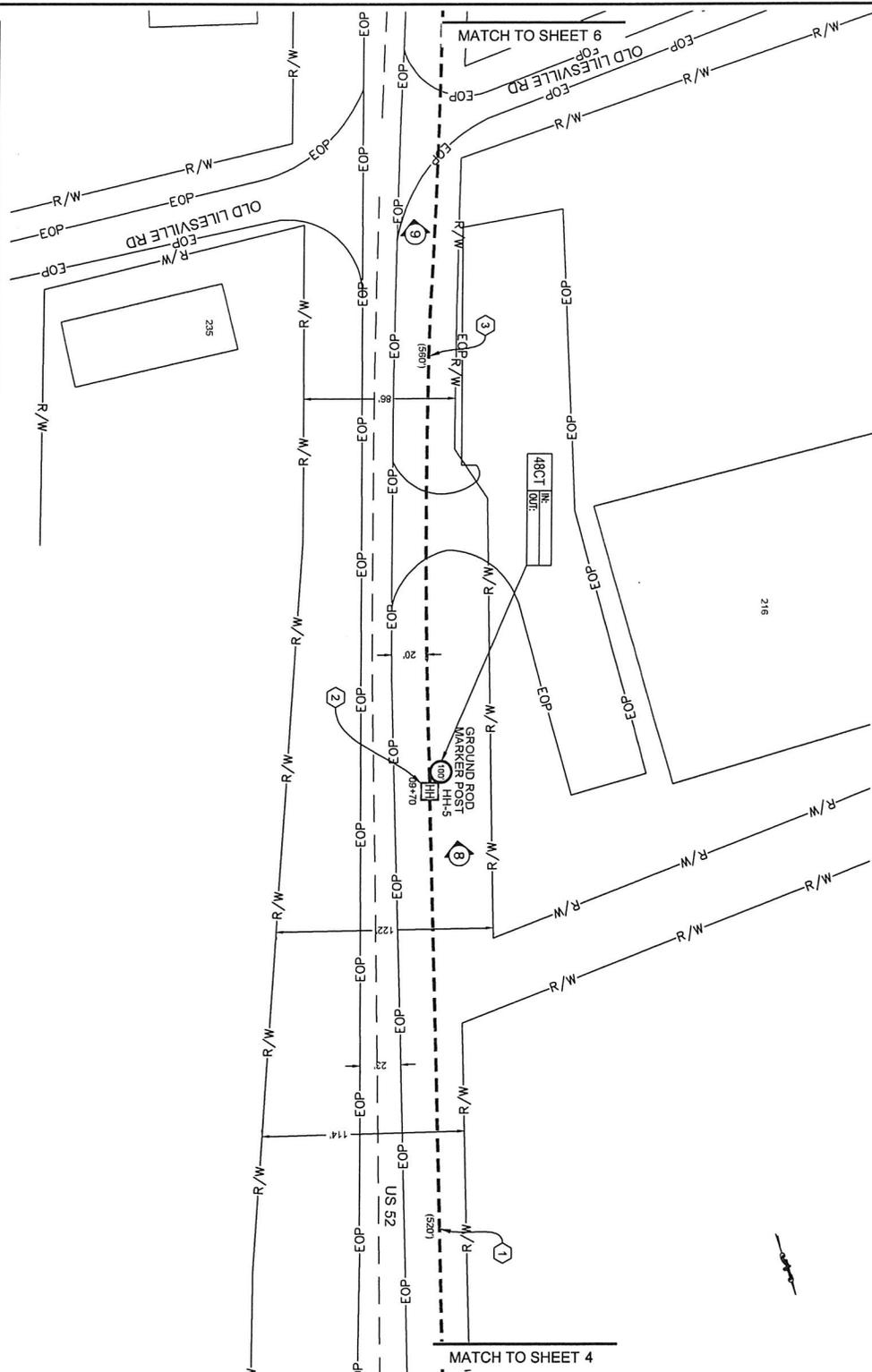
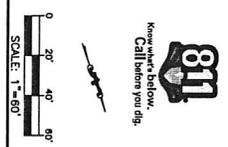
Unit	Estimated Actual Quantity	Material
200-2 - Directional Bore - Heavy Duty (2) 1.25" HDPE SPIRIT	2	2
200-2 - Cable - Full Size (2) 1.25" HDPE SPIRIT	2	2
200-8 - Cable - Full Size (3) 1.25" HDPE SPIRIT	3	3
200-11 - Ground Rod - 1/2" x 15' (3) 1/2" x 15' (3) 1/2" x 15' (3) 1/2" x 15'	3	3
200-15 - Water Pole (3) 48" x 36" (3) 48" x 36" (3) 48" x 36"	3	3
301-1 - Cable Placement in conduit - 052	752	752

**DIRECTIONAL BORE (3) 1.25" HDPE CONDUITS, BANDED TOGETHER, AT A DEPTH OF 10' CROSSING THE ENTRANCE TO US 52**



Unit Code & Description	Units	Estimate Quantity	Actual Quantity
200-2 - Directional Bore - Heavy Metal (2) 1.25" HDPE SDR11	FT	560'	
200-3 - Trench (3) 1.25" HDPE SDR11 Pipe - 35' min. depth	FT	560'	
200-11 - Quatite Tier 15 hand-hole-30"x48"x35" installed w/ground Rod	EA	1	
200-15 - Marker Pole Installation (Pole Supplied by Spirit)	EA	1	
200-1 - Cable Placement in conduit - OSP	FT	1280'	

SCALE IS FOR REFERENCE PURPOSES ONLY. THE CABLE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE APPROPRIATE PERMITTING MUNICIPALITY PRIOR TO BEGINNING CONSTRUCTION, IN ORDER TO VERIFY THAT THE CABLE IS BEING PLACED WITHIN THEIR RIGHT-OF-WAY.



**CONSTRUCTION NOTES**

1) CABLE OWNER: SPIRIT  
 CABLE LENGTH: 600'  
 NOTES: PULL NEW ACT FOC 500' FROM PROPOSED HH-4 TO PROPOSED HH-5 LEAVING A 100' SLACK LOOP AT HH-4  
 CONDUIT OWNER: SPIRIT  
 CONDUIT LENGTH: 500'  
 CONDUIT O.D.: 3.25"  
 CONDUIT TYPE: HDPE  
 NOTE: TRENCH (3) NEW 1.25" HDPE 500' FROM PROPOSED HH-4 TO PROPOSED HH-5

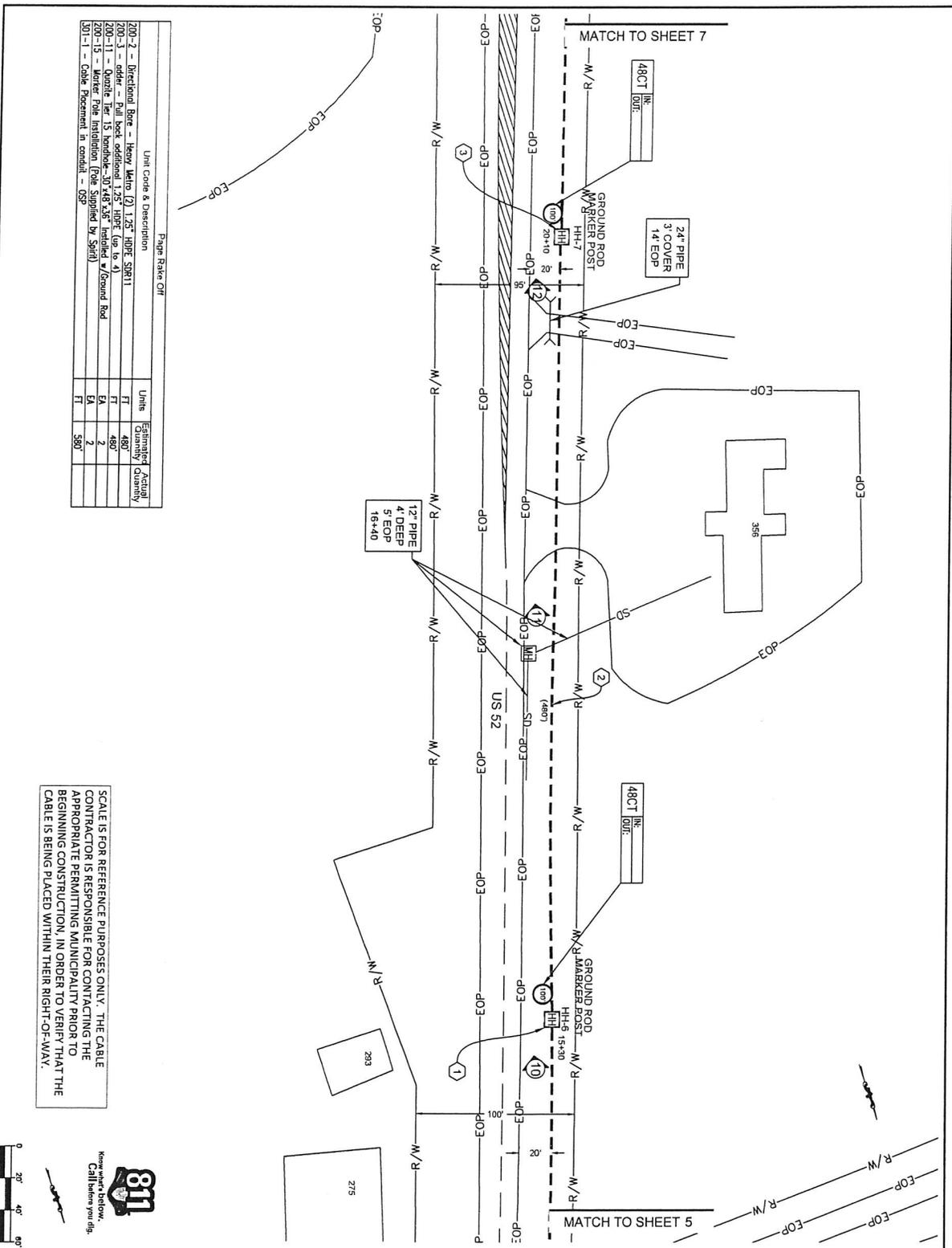
2) PROPOSED MANHOLE C-4 WITH GROUND ROD  
 RATING AT 20,000 LBS  
 - PLACE MARKER POST

3) CABLE OWNER: SPIRIT  
 CABLE LENGTH: 600'  
 NOTES: PULL NEW ACT FOC 560' FROM PROPOSED HH-5 TO PROPOSED HH-4 LEAVING A 100' SLACK LOOP AT HH-5  
 CONDUIT OWNER: SPIRIT  
 CONDUIT LENGTH: 500'  
 CONDUIT O.D.: 3.25"  
 CONDUIT TYPE: HDPE  
 NOTE: DIRECTIONAL BORE (2) NEW 1.25" HDPE 500' FROM PROPOSED HH-5 TO PROPOSED HH-4

4) SYMBOL CORRESPONDING TO PARTS LOCATIONS AND OBSERVATION. SEE SHEET # FOR SEE PHOTOGRAPHS.

NO.	DATE	ENG. DESIGN	DRAWING	REVISION / COMMENT
3	10/05/17	PM	LM	AS-BUILT
2	09/28/17	PM	CSH	REVISION # 1 ORIGINAL
1	09/28/17	PM	CSH	COMMENT

PROJECT MANAGER: ROBERT ROBINSON  
 SERVICE OFFICE: TRIC BROADBAND  
 DESCRIPTION: 1 RADIO ST. MANHOLES NC  
 DRAWING NAME: TRICUS Street (PA Wadesboro) Wadesboro, NC  
 DRAWING NO: 1709  
 SHEET: 5 OF 20



Page Rate Off

Unit Code & Description	Units	Estimated Quantity	Actual Quantity
Z00-2 - Directional Bore - Heavy Wire (2) 1.25' HOPE SPR11	FT	480	
Z00-3 - order - Pull box additional 1.25' HOPE (up to 4)	EA	2	
Z00-11 - Quotzite 1/2" 15' handhole - 30" 48" 3.5" installed w/ground rod	EA	2	
Z00-13 - Marker Pole Installation (Pole supplied by Spirit)	EA	2	
Z01-1 - Cable Placement in conduit - OSP	FT	580'	

SCALE IS FOR REFERENCE PURPOSES ONLY. THE CABLE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE APPROPRIATE PERMITTING AGENCY PRIOR TO BEGINNING CONSTRUCTION. IN ORDER TO VERIFY THAT THE CABLE IS BEING PLACED WITHIN THEIR RIGHT-OF-WAY.

811  
Know what's below.  
Call before you dig.

0 20' 40' 80'

SCALE: 1"=80'

CONSTRUCTION NOTES

- ① PROPOSED HANDHOLE E-6 WITH GROUND ROD  
NOTE: 6"X48"X18" E/W KNOOT LB  
- PLACE MARKER POST
- ② CABLE PASSES 480CT 100E  
CABLE OWNER: SPIRIT  
CABLE LENGTH: 580'  
NOTES: PULL NEW 480CT 100E FROM PROPOSED HH-6 TO PROPOSED HH-7 LEAVING A 100' SLACK LOOP AT HH-6  
CONDUIT OWNER: SPIRIT  
CONDUIT LENGTH: 480'  
CONDUIT DIA: 3"  
CONDUIT SIZE: 1.25"  
CONDUIT WEIGHT: 1.25 LB/FT  
NOTE: DIRECTIONAL BORE (2) NEW 1.25' HOPE 480' FROM PROPOSED HH-6 TO PROPOSED HH-7
- ③ PROPOSED HANDHOLE E-7 WITH GROUND ROD  
NOTE: 2"X20"X18" E/W KNOOT LB  
- PLACE MARKER POST

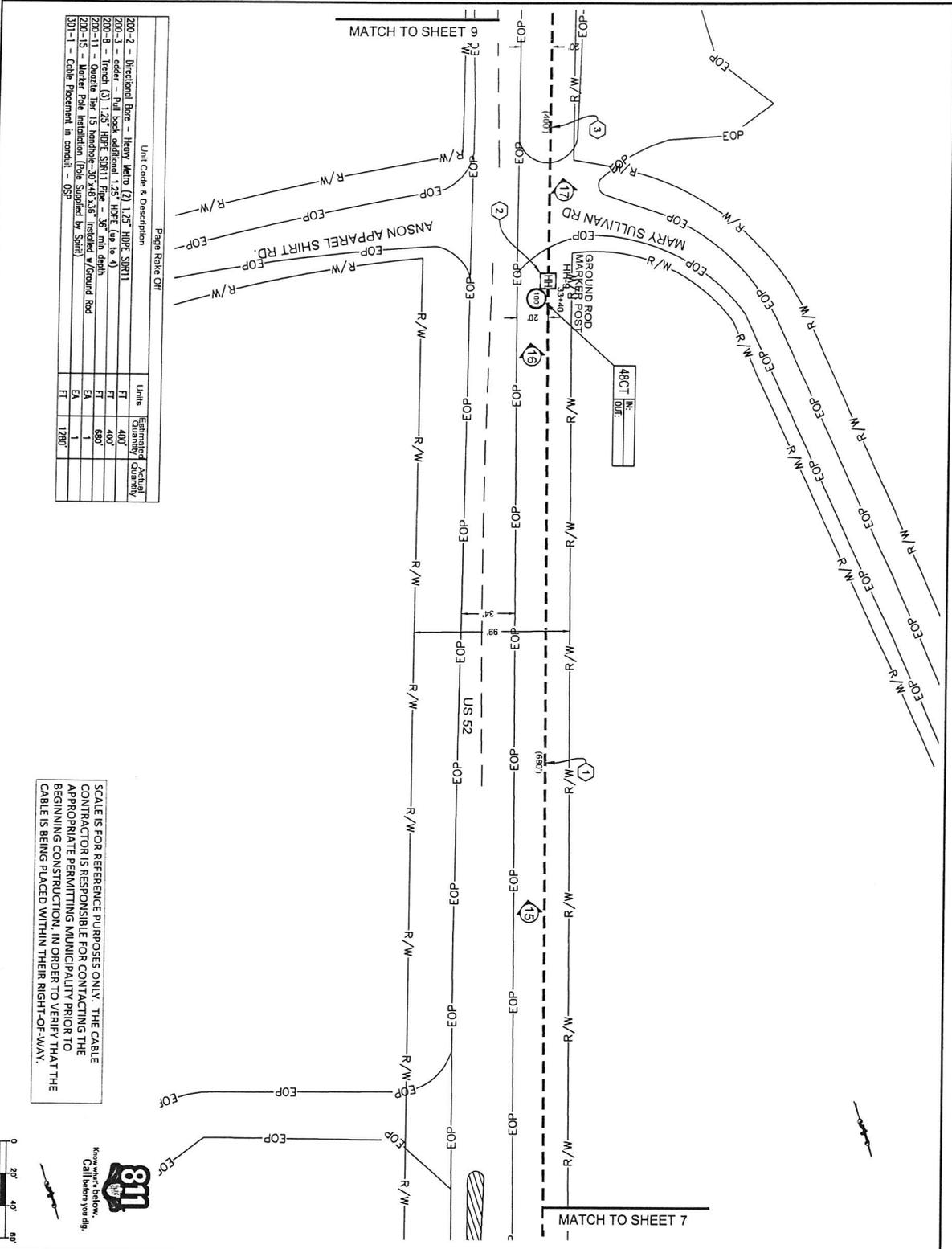
# SYMBOL CORRESPONDING TO MARK LOCATIONS AND IDENTIFIERS. SEE SHEET # FOR THE IDENTIFIERS.

NO.	DATE	ENG DESIGN	DRAWING	COMMENT
1	10/09/17	FW	REVISED	AS-BUILT
2	09/29/17	FW	COPIED	REVISION # 1 ORIGINAL

PROJECT MANAGER: ROBERT ROBINSON  
ENGINEERING FIRM: TRIC BROADBAND  
SERVICE ORDER: 17400 ST. WADSWORTH, NC  
DESCRIPTION: SPIRIT - VERIZON TOWER  
DRAWING NAME: 17400 St. Wadsworth (Verizon) Wadsworth, NC  
CONFIDENTIAL/PROPRIETARY

Spirit  
CONFIDENTIAL/PROPRIETARY

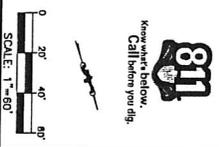
SHEET 5 OF 20



Unit Code & Description

Unit Code	Description	Unit	Estimated Quantity
200-2	Directional Bore - Heavy Micro (2) 1.25" HOPE SHIRT	FT	400'
200-3	order - Full Bore additional 1.25" HOPE (up to 4)	FT	400'
200-4	Order (3) 1.25" HOPE SHIRT Pipe - 35' min length	EA	1
200-11	Order 30' x 40' x 30' manhole w/round Rod	EA	1
200-15	Manhole Pole Material (Pole Supplied by Spirit)	EA	1
501-1	Cable Placement in trench - 03'	FT	1200'

SCALE IS FOR REFERENCE PURPOSES ONLY. THE CABLE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE APPROPRIATE PERMITTING MUNICIPALITY PRIOR TO BEGINNING CONSTRUCTION. IN ORDER TO VERIFY THAT THE CABLE IS BEING PLACED WITHIN THEIR RIGHT-OF-WAY.



CONSTRUCTION NOTES

- 1 CABLE TRENCH 48CT FOC  
CABLE OWNER: SPIRIT  
NOTE: PLACE MARKER POST AT 100' SLACK LOOP AT MH-8 TO PROPOSED MH-9 LEAVING A 100' SLACK LOOP AT MH-8  
CABLE OWNER: SPIRIT  
CONDUIT TYPE: 800  
CONDUIT SIZE: 1.25"  
CONDUIT TYPE: HOPE  
NOTE: TRENCH (3) NEW 1.25" HOPE 600' FROM PROPOSED MH-8 TO PROPOSED MH-9
- 2 PROPOSED HANDPOLE-9 WITH GROUND 800  
NOTE: 30" x 48" x 6" E/W MOUNT 1.0  
RATING: AT 20,000 LBS  
- PLACE MARKER POST
- 3 CABLE TRENCH 48CT FOC  
CABLE OWNER: SPIRIT  
CABLE LENGTH: 500'  
NOTE: PLACE MARKER POST AT 100' SLACK LOOP AT MH-9 TO PROPOSED MH-10 LEAVING A 100' SLACK LOOP AT MH-9  
CABLE OWNER: SPIRIT  
CONDUIT TYPE: 800  
CONDUIT SIZE: 1.25"  
CONDUIT TYPE: HOPE  
NOTE: DIRECTIONAL BORE (3) NEW 1.25" HOPE 400' FROM PROPOSED MH-9 TO PROPOSED MH-10

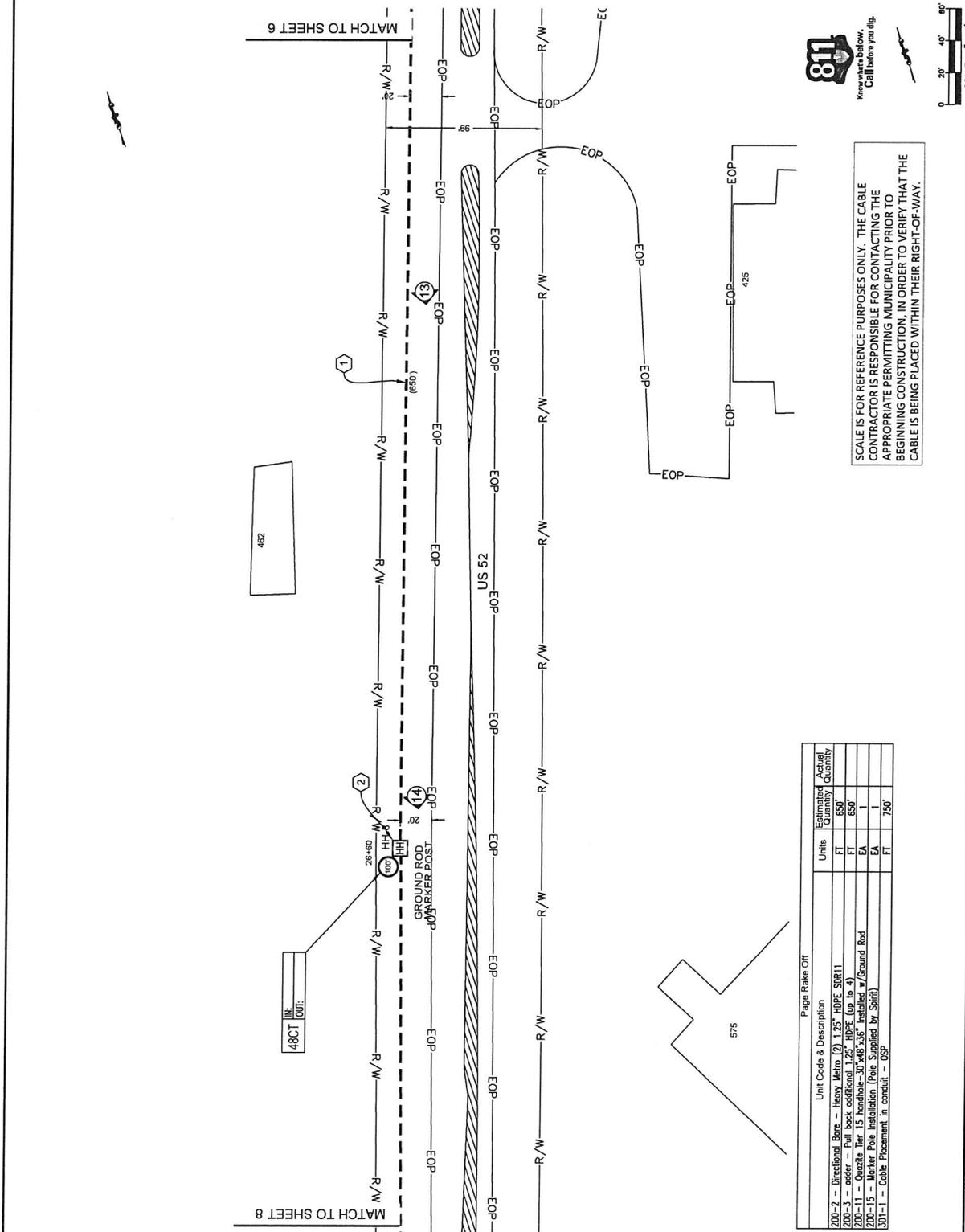
Sheet prepared by name, location and date. SEE SHEET 1 FOR SEE REVISIONS.

#	DATE	BY	REVISION
1	10/09/17	PM	AS-BUILT
2	10/09/17	PM	REVISION # 1
3	07/26/17	GH	ORIGINAL

PROJECT MANAGER: ROBERT ROBINSON  
ENGINEERING FIRM: TRIC BROADBAND  
SERVICE ORDER: 1 RADIO ST. WADSWORTH, NC  
DESCRIPTION: SPIRIT - VERIZON TOWER  
DRAWING NAME: Revision 1.dwg  
DRAWING NUMBER: Wadsworth Washington NC  
CONFIDENTIAL/PROPRIETARY

**CONSTRUCTION NOTES**

- 1. CABLE FIBERS: 48CT FOC  
 CABLE LENGTH: 750'  
 NOTES: PULL NEW 48CT FOC 650' FROM PROPOSED HH-7 TO PROPOSED HH-8 LEAVING A 100' SLACK LOOP AT HH-7
- 2. PROPOSED HANDBOLE-8 WITH GROUND ROD  
 NOTE: 30"x48" 2.5" E/W MOUNT LID  
 1" DIA. 1.25" HOPE  
 - PLACE MARKER POST
- CONDUIT OWNER: SPIRIT  
 CONDUIT LENGTH: 650'  
 CONDUIT SIZE: 1.25"  
 CONDUIT TYPE: HDPE  
 NOTES: HANDBOLE-8 (1) NEW 1.25" HOPE 650' FROM PROPOSED HH-7 TO PROPOSED HH-8



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Unit Code & Description	Units	Estimated Quantity	Actual Quantity
200-2 - Directional Bore - Heavy Metro (2) 1.25" HDPE SDR11	FT	650	
200-3 - order - Full back additional 1.25" HDPE (up to 4)	FT	650	
200-11 - Quartzite Tier 15 handhole-30"x48"x36" installed w/ Ground Rod	EA	1	
200-15 - Marker Pole Installation (Pole Supplied by Spirit)	EA	1	
301-1 - Cable Placement in conduit - OSP	FT	750	

SCALE IS FOR REFERENCE PURPOSES ONLY. THE CABLE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE APPROPRIATE PERMITTING MUNICIPALITY PRIOR TO BEGINNING CONSTRUCTION, IN ORDER TO VERIFY THAT THE CABLE IS BEING PLACED WITHIN THEIR RIGHT-OF-WAY.

811  
Know what's below.  
Call before you dig.

# SWIRL CORRESPONDS TO PHOTO LOCATIONS AND ORIENTATION. SEE SHEET # FOR SITE PHOTOGRAPHS.

NO.	DATE	ENG DESIGN	DRAFTING	REASON #	AS-BUILT
1	09/26/17	PW	CGH		
2	10/06/17	PW	CGH		

**Spirit**  
Spirit Data Systems

PROJECT MANAGER: ROBERT ROBINSON  
 ENGINEERING FIRM: TPRC BROADDAND  
 PROJECT: 15000 RAYNO ST WOODBORO NC  
 DESCRIPTION: SPIRIT - VERIZON TOWER  
 DRAWING NAME: 1 Frank Street (PA Viesbeck) Wakeboro, NC  
(Revision: 1) .dwg

CONFIDENTIAL/PROPRIETARY SHEET: 7 OF 20

