



REVIEW BY FORT BEND COUNTY COMMISSIONERS COURT

Fort Bend County Engineering Department
301 Jackson Suite 401
Richmond, Texas 77469
281.633.7500
Permits@fortbendcountytx.gov

- Right of Way Permit**
- Commercial Driveway Permit**

Permit No: 2016-10714

Applicant: Crown Castle NG General LLC/Shift Companies

Job Location Site: 5102 1/2 Fry Road, Katy, TX 77450

Bond No. [REDACTED] **Date of Bond:** 5/12/2014 **Amount:** \$50,000.00

The above applicant came to make use of certain Fort Bend County property subject to, "The Order Regulating the Laying, Construction, Maintenance, and Repair of Buried Cables, Conduits, and Pole Lines, In, Under, Across or Along Roads, Streets, Highways, and Drainage Ditches in Fort Bend County, Texas, Under the Jurisdiction of the Commissioners Court of Fort Bend County, Texas," as passed by the Commissioners Court of Fort Bend County, Texas, of the Minutes of the Commissioners Court of Fort Bend County, Texas, to the extent that such order is not inconsistent with Chapter 181, Vernon's Texas Statutes and Codes Annotated.

Notes:

1. Evidence of review by the Commissioners Court must be kept on the job site and failure to do so constitutes grounds for job shutdown.
2. Written notices are required:
 - a. 48 hours in advance of construction start up, and
 - b. When construction is completed and ready for final inspection, submit notification to Permit Administrator thru MyGovernmentOnline.org portal.
3. This permit expires one (1) year from date of permit if construction has not commenced.

On this 6th day of December, 2016, Upon Motion of Commissioner Meyers, seconded by Commissioner Prestage, duly put and carried, it is ORDERED, ADJUDGED AND DECREED that said notice of said above purpose is hereby acknowledged by the Commissioners Court of Fort Bend County, Texas, and that said notice be placed on record according to the regulation order thereof.

Signature

Presented to Commissioners Court and approved.

By: C. Charles O. Ay
County Engineer

Date Recorded 12-09-16 Comm. Court No. 1614

By: N/A
Drainage District Engineer/Manager

Clerk of Commissioners Court
By: Pamela Wilkes
Deputy

SHIFT

November 28, 2016

Carmen Escobar, CFM
Permit Administrator
Fort Bend County Engineering
301 Jackson St, Richmond, TX 77469

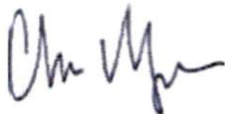
**RE: Cinco Ranch Traffic Control Plan
- Shift Project #160614**

Carmen,

Per our conversation on the phone, the work we are doing in the ROW will not require any road closures. There is no TCP required, the contractor will take adequate measure to ensure they are not impeding the public way.

Please let me know if you need anything else.

Thank you,



Chris Myers
Principal
SHIFT Companies



PROJECT NAME: CINCO RANCH EXPANSION
PROJECT ADDRESS: FRY RD AND CARRIAGE BEND DR
PROJECT TYPE: METAL SLIMLINE POLE
HUB AREA: CINCO RANCH - HGCW
NODE #(s): **CCR-33**
COORDINATES: LAT: 29.722661, LONG: -95.748949

| T1.1 - SHEET INDEX | | |
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FORT BEND COUNTY ENGINEER
 ENGINEER: *Paul J. Stangle, PE, P.E.*
 FM Richard W. Stangle, P.E.
 DATE: 11/11/16
 THESE SIGNATURES ARE VOID IF CONSTRUCTION HAS NOT COMMENCED IN (1) YEAR FROM DATE OF APPROVAL
 APPROVED: *[Signature]*
 Development Coordinator
 DATE: 11/11/16

| TEAM MEMBERS REVIEW | REVIEWED/DATE |
|--------------------------|---------------|
| R.F. ENGINEERING | |
| PRODUCT MANAGEMENT | |
| NETWORK REAL ESTATE TEAM | |
| UTILITY TEAM | |
| IMPLEMENTATION | |
| OPERATIONS | |



CROWN CASTLE
 800 E. CHRYSLER CENTER PKWY.
 SUITE 300
 IRVING, TX 75062

RECORD DRAWING ISSUE DATE: 10/18/16



SHIFT Companies, LLC
 7301 NORTH WIRTH ROAD
 SCOTTSDALE, ARIZONA 85257
 PH: 480.358.0000
 FAX: 480.358.0100

| RELEASE | DATE | SUBMITTAL |
|----------|--------------------|-----------|
| 6/23/16 | 1ST CITY SUBMITTAL | |
| 10/18/16 | 2ND CITY SUBMITTAL | |

| REVISIONS | NO. | DATE | COMMENT |
|-----------|-----|----------|---------------|
| | 10 | 10/18/16 | CITY COMMENTS |

PROJECT NAME
 CINCO RANCH EXPANSION

NODE ADDRESS
 FRY RD AND CARRIAGE BEND DR

HUB AREA
 CINCO RANCH - HGCW

SHIFT JOB NUMBER 150602
IN HOUSE DRAWN BY: RA
 CHECKED BY: CR

SHEET TITLE
 TITLE SHEET

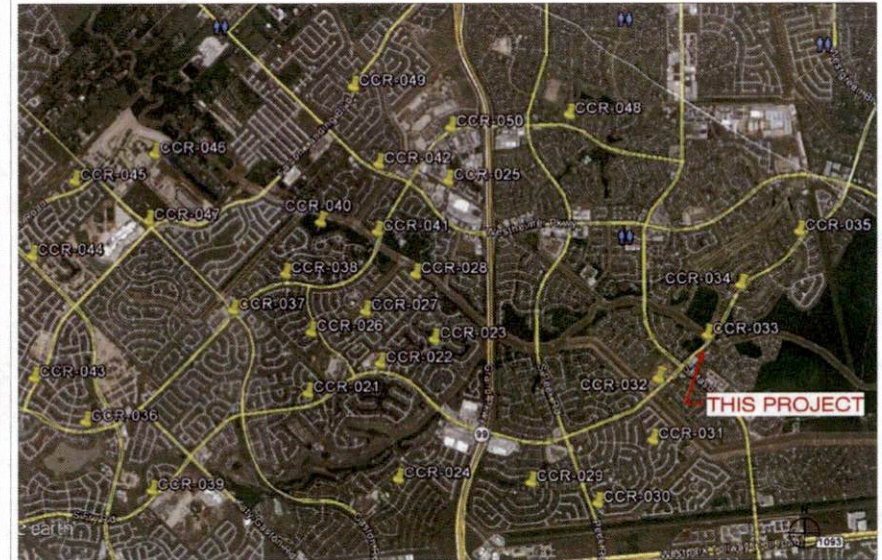
| SHEET NUMBER | PAGE |
|--------------|---------|
| T1.1 | 1 OF 14 |

PLOT SCALE: 1:1 @ 24x36; 1:2 @ 11x17

| PROJECT TEAM | |
|--|--|
| ARCHITECT | OWNER INFO |
| Company: SHIFT CONSULTING Address: 7333 E. MONTE VISTA RD, SCOTTSDALE, AZ 85257 Phone Number: 480.264.0825 Fax Number: 480.264.0163 Contact: CHRIS MYERS | Company: CROWN CASTLE Address: 1220 AUGUSTA DR, HOUSTON, TX 77057 Phone # 817.440.3113 Email: BARRY.CAMPALU@CROWNCASTLE.COM Contact: BARRY CAMPALU |
| STRUCTURAL | RF ENGINEER |
| Company: T.B.D. Address: Phone Number: Fax Number: Contact: | Company: CROWN CASTLE Address: 1220 AUGUSTA DR, HOUSTON, TX 77057 Phone Number: Fax Number: Contact: |
| FIBER ENGINEERING | |
| Company: TDC2 Address: 710 EAST PARK BLVD, SUITE 110, PLANO, TX 75074 Phone: 972.423.9080 Email: scrum@tdc2.com Contact: SCOTT CRUM | |

| PROJECT SUMMARY | |
|--|--|
| PROJECT NAME CINCO RANCH EXPANSION | APPLICANT CROWN CASTLE 1220 AUGUSTA DR HOUSTON, TX 77057 CONTACT: BARRY CAMPALU |
| PROJECT AREA CINCO RANCH - HGCW | CODES 2009 INTERNATIONAL BUILDING CODE (IBC) 2009 INTERNATIONAL ENERGY CONSERVATION CODE (IECC) 2009 NATIONAL ELECTRICAL CODE (NEC) 2008 NATIONAL ELECTRICAL SAFETY CODE (NESC) |
| JURISDICTION FORT BEND COUNTY ENGINEERING DEPT. 1124 BLUME RD ROSENBERG, TX 77471 PH: 281.633.7500 CONTACT: JOHNNY ORTEGA | PLUMBING REQUIREMENTS FACILITY HAS NO PLUMBING. |
| HANDICAPPED REQUIREMENTS -FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION -HANDICAPPED ACCESS REQUIREMENTS ARE NOT REQUIRED | POWER COMPANY CENTERPOINT ENERGY 5431 HIGHWAY BLVD. KATY, TX 77494 PH: 281.520.6275 CONTACT: KEN CORTEZ |

NOTE: NOT ALL SITES ARE INCLUDED IN THIS SET. SEE NODE #8 ABOVE FOR SITES THAT ARE IN THIS SET.



PROJECT DESCRIPTION
 CROWN CASTLE PROPOSES TO PROVIDE AN ENHANCED RESIDENTIAL WIRELESS COMMUNICATIONS SYSTEM FOR THE KATY, TEXAS AREA. THE SYSTEM WILL IMPROVE CELLULAR COMMUNICATIONS AND INCREASE CALL CAPACITY. THE NETWORK AND ASSOCIATED EQUIPMENT HAVE BEEN DESIGNED TO MINIMIZE VISUAL IMPACTS IN URBAN SETTINGS. THE PROPOSED SYSTEM WILL PROVIDE A CELLULAR NETWORK THAT CAN BE UTILIZED SIMULTANEOUSLY BY DIFFERENT LICENSED TELECOMMUNICATIONS COMPANIES.
 A SUBJECT NODE WILL CONSIST OF NEW METAL SLIMLINE POLE. THEY WILL HAVE GROUND MOUNTED RADIO EQUIPMENT INSIDE A CABINET WITH A METER AND DISCONNECT ATTACHED. THERE WILL ALSO BE POLE-TOP ANTENNAS CONCEALED IN SHROUDS.

Cinco Ranch Expansion
700 RRH Specifications

| Mechanical | |
|-------------------|---|
| Frequency Band | 813 (700C) |
| Technology | LTE FDD |
| RF Output Power | 2450W/6A30W (5W configurable) |
| Operational Range | DL: 745-756 MHz UL: 777-788 MHz |
| Instantaneous BW | 10 MHz (1 Carrier) |
| RF Configuration | 2T2R, 2T4R, 4T4R |
| Interfaces | 2 CPRI ports (slot 7) ANSI 2.5 RS485 port 2 integrated Smart Base Tees 1 port external antenna (x4) Tx & Rx monitor ports |
| Power | |
| Power | 520W typical @ full RF load |
| Environmental | |
| Conditions | 40°C to 65°C |
| Conditions | IP65 |
| Connectors | DIN 716 |



| Physical | |
|--------------------|------------------|
| Dimensions | 21.5 x 12 x 9 in |
| Height | 87 lbs |
| Mounting options | Post/Wall |
| Connector Location | Bottom |

Cinco Ranch Expansion
PCS RRH Specifications (Future)

| Mechanical | |
|-------------------|---|
| Frequency Band | 82 & B2 (1900) |
| Technology | LTE FDD |
| RF Output Power | 2450W/6A30W (5W configurable) |
| Operational Range | DL: 1930-1995 MHz UL: 1850-1915 MHz |
| Instantaneous BW | 65 MHz (4 Carriers) |
| RF Configuration | 2T2R, 2T4R, 4T4R |
| Interfaces | 2 CPRI ports (slot 7) ANSI 2.5 RS485 port 2 integrated Smart Base Tees 1 port external antenna (x4) Tx & Rx monitor ports 2 port external DC power connector |
| Power | |
| Power | 520W typical @ full RF load |
| Environmental | |
| Conditions | 40°C to 65°C |
| Conditions | IP65 |
| Connectors | DIN 716 |



| Physical | |
|--------------------|--------------------|
| Dimensions | 21.2 x 12 x 9.1 in |
| Weight | 83 lbs |
| Mounting options | Post/Wall |
| Connector Location | Bottom |

Cinco Ranch Expansion
AWS RRH Specifications

| Mechanical | |
|-------------------|---|
| Frequency Band | 84 (2100) |
| Technology | LTE FDD |
| RF Output Power | 2450W/6A30W (5W configurable) |
| Operational Range | DL: 2110-2180 MHz UL: 1930-1995 MHz |
| Instantaneous BW | 70 MHz |
| RF Configuration | 2T2R, 2T4R, 4T4R |
| Interfaces | ANSI 2.5 RS485 port Integrated Smart Base Tees 1 port external antenna (x4) |
| Power | |
| Power | 48 VDC |
| Environmental | |
| Conditions | 40°C to 65°C |
| Conditions | IP65 |
| Connectors | M8-DIN 4.3-16 |



| Physical | |
|--------------------|------------------|
| Dimensions | 30 x 12 x 7.7 in |
| Weight | 75 lbs |
| Mounting options | Post/Wall |
| Connector Location | Bottom |

RADIO SPECIFICATIONS

SCALE N.T.S. 10

Amphenol 696-960 / 696-960 / 1695-2700 / 1695-2700 MHz

2C2UT360X12F-xyz0

TYPE (DUAL BAND) / PRODUCT CODE / CARRIER ANTENNA / QTY (X) / POL / 360° / 360° / 1.8 / 1.8 / 1.8 / 1.8 / 1.8 / 1.8

Features

- Flexible carrier configuration with 8 connectors
- Ideal for Smart Call™ QoS applications
- Available with 4 1/3 x 4 1/3 or 4 1/2 x 4 1/2 connectors
- Three antenna mounting options
- Can be painted to identify with a mounting structure

Connector Description

The antenna has 8 connectors located on the backplate, each marked with a colored ring.

Low Band #1 1495-2700 MHz Silver Ring 1/2" x 1/8" x 0.51" or 1/16" DIN Female
High Band #1 1495-2700 MHz Orange Ring 1/2" x 1/8" x 0.51" or 1/16" DIN Female
High Band #2 1495-2700 MHz Orange Ring 1/2" x 1/8" x 0.51" or 1/16" DIN Female

Low Band #1 and #2 High Bands #1 and #2

Frequency Bands (MHz) DL 696-960 MHz UL 1695-2700 MHz DL 696-960 MHz UL 1695-2700 MHz DL 1695-2700 MHz UL 1695-2700 MHz

Polarization: D2S 45°

Horizontal Beamwidth: 360° 360° 360° 360° 360°

Vertical Beamwidth: 20° 20° 17° 17° 17° 17°

Gain: 4.5 dBi 4.5 dBi 5.5 dBi 5.5 dBi 7.5 dBi 8.1 dBi 4.5 dBi

Electrical Dowell P1: 1495.5 1495.5 1495.5 1495.5 1495.5 1495.5

Impedance: 50 Ω 50 Ω 50 Ω 50 Ω 50 Ω 50 Ω

VSWR: 1.5:1 1.5:1 1.5:1 1.5:1 1.5:1 1.5:1

Mount Substrate Separation: 175.00 175.00

Antenna Beamwidth Parts: 20.00 20.00

Mount Substrate Separation: 175.00 175.00

Impedance: 50 Ω 50 Ω

Power: 1495.50 1495.50

Impedance: 50 Ω 50 Ω

Mounting: 1 Station / 1 Station Spacing

Lighting Protection: Shield Element

Mechanical Characteristics

Antenna Dimensions (Height x Diameter): 127.5 x 27 mm 65.0 x 14.0 in

Weight without Mounting Bracket Kit: 17.2 kg 38.1 lbs

Summer Wind Speed: 200 km/h 125 mph

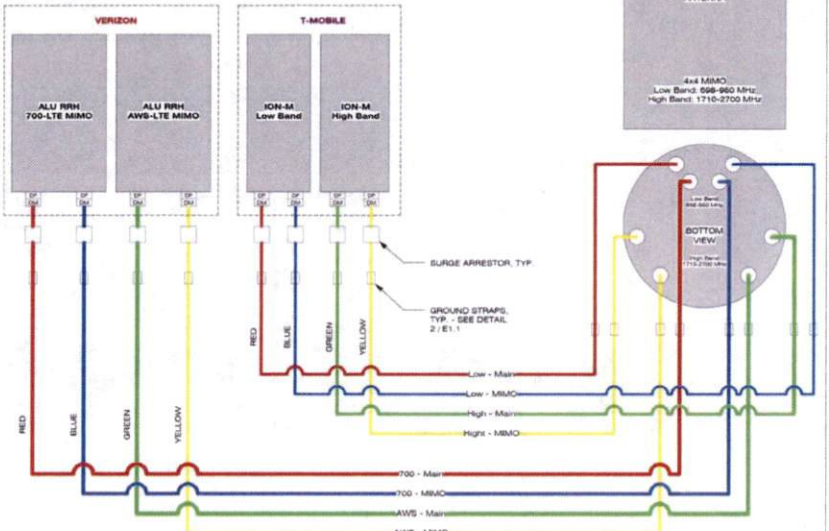
Wind Area: 0.47 m² 0.50 ft²

Wind Load (145 km/h or 90 mph): 391 N 88 lbf

Scale: 1 of 5

www.amphenol-antenna.com

CROWN CASTLE



WIRING DIAGRAM

SCALE N.T.S. 18

ANTENNA SPECIFICATIONS

SCALE N.T.S. 12

EQUIPMENT CABINET SPECIFICATIONS

SCALE N.T.S. 20

CROWN CASTLE

CROWN CASTLE
800 E. JOHN CARPENTER FWY.
SUITE 300
IRVING, TX 75062

RECORD DRAWING ISSUE DATE: 10/18/16

SHIFT

Shift Companies, LLC
7331 E. HOVE VEDA ROAD
SCOTTSDALE, ARIZONA 85251
PH: 480.264.8221
FX: 480.264.6363

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| RELEASE | | |
|-----------|--------------------|---------|
| DATE | SUBMITTAL | |
| 6/22/15 | 1ST CITY SUBMITTAL | |
| 10/18/16 | 2ND CITY SUBMITTAL | |
| | | |
| | | |
| | | |
| | | |
| REVISIONS | | |
| NO. | DATE | COMMENT |
| | | |
| | | |
| | | |
| | | |
| | | |

PROJECT NAME
CINCO RANCH EXPANSION

HUB AREA
CINCO RANCH - HGCW

SHEET JOB NUMBER **IN HOUSE**
150602
DRAWN BY: RA
CHECKED BY: CM

SHEET TITLE
EQUIPMENT SPECIFICATIONS

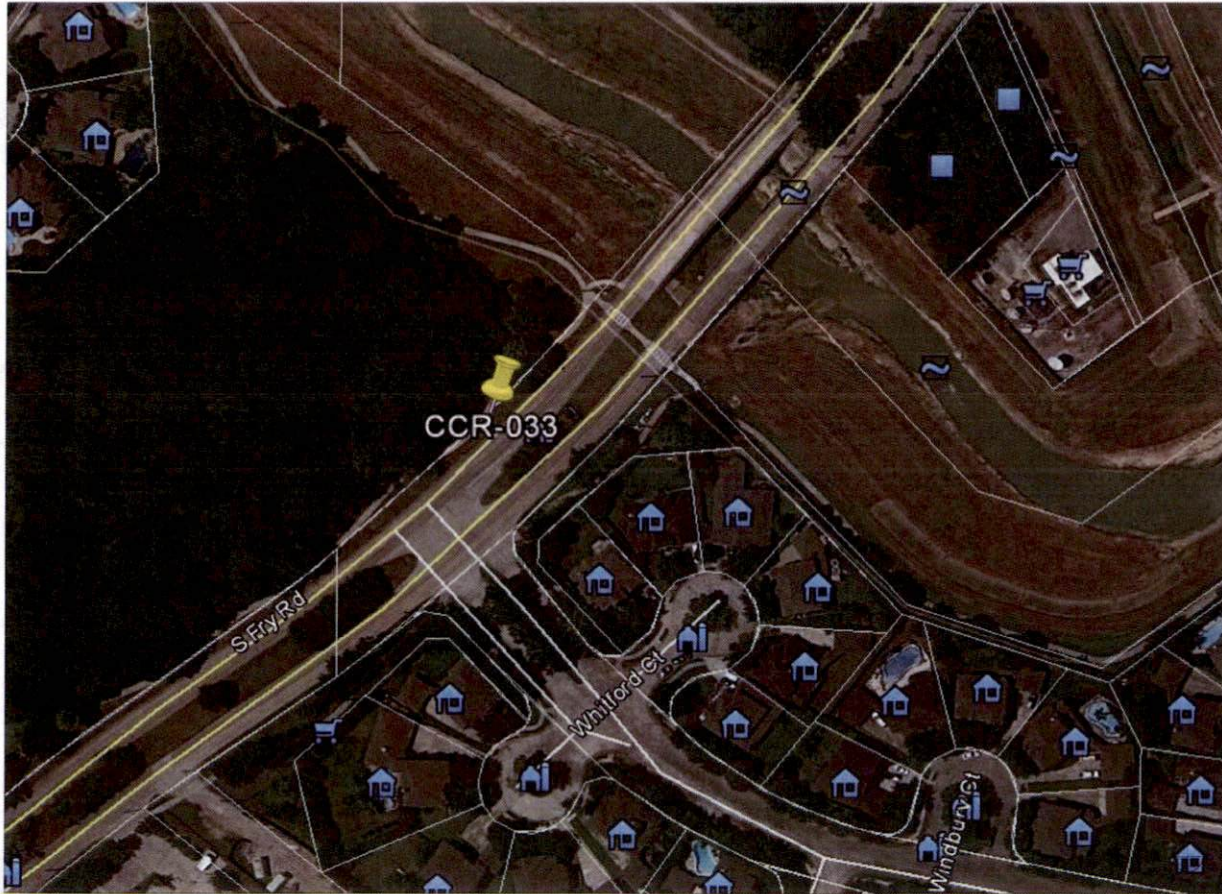
SHEET NUMBER **PAGE**
T1.3 3 OF 14

PLOT SCALE: 1:1 @ 24"X36"; 1:2 @ 11"X17"

APPROVED: *[Signature]*
Development Coordinator
DATE: 11/11/16

PLAN CHECK #

CASE #



NODE AERIAL PLAN

SUBJECT POLE: CCR-33

GPS COORDINATES:

LAT: 28.72261

LONG: -95.14889

POLE TYPE: METAL, SUBLINE POLE

POLE Ø #:

UPPER ANTENNA RAD CENTER: 32' - 0" A.F.G.

LOWER ANTENNA RAD CENTER: 30' - 0" A.F.G.

APPROVED: *[Signature]*
Development Coordinator

DATE: 11/1/16



CROWN CASTLE
800 E. JOHN CARPENTER Pkwy.
SUITE 300
IRVING, TX 75062

RECORD DRAWINGS ISSUE DATE: 10.16.16



Shift Companies, LLC
77311 N.W. 15TH AVE
FORT LAUDERDALE, FL 33309
PH: 954.344.3625
EM: 954.344.3211

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| RELEASE | |
|----------|---------------------|
| DATE | SUBMITTAL |
| 8.23.15 | 1ST CITY SUBMITTAL |
| 10.16.16 | IND. CITY SUBMITTAL |
| | |
| | |

| REVISIONS | | |
|-----------|----------|---------------|
| NO. | DATE | COMMENT |
| | 10.16.16 | CITY COMMENTS |
| | | |
| | | |

PROJECT NAME
CINCO RANCH EXPANSION

NODE ADDRESS
NODE #:CCR-33

FRY RD AND CARRIAGE BEND DR

HUB AREA
CINCO RANCH - HGCV

SHIFT JOB NUMBER 150602 **IN HOUSE**
DRAWN BY: RA
CHECKED BY: CM

SHEET TITLE
AERIAL

SHEET NUMBER 4 **PAGE** 14

PLOT SCALE: 1" = 24'x36'; 1/2" = 11'x17'



SITE PHOTO (EXISTING)

N.T.S.

PLAN CHECK #

CASE #

| KEYNOTE | KEYNOTE LEGEND DESCRIPTION | DETAIL |
|---------|---|---------|
| A01 | PROPOSED CROWN CASTLE OMN ANTENNA | 16:D1.1 |
| A02 | PROPOSED CROWN CASTLE 2" U.G. CONDUIT (APPROXIMATE LOCATION F.V.) | 2:D1.1 |
| A03 | PROPOSED CROWN CASTLE REMOTE RADIO UNIT NEARBY EQUIPMENT CABINET | 18:D1.1 |
| A04 | PROPOSED NEW METAL SLIMLINE POLE | 25:D1.1 |
| A05 | PROPOSED CROWN CASTLE UNDERGROUND CONC. FIBER VAULT | 5:D1.2 |
| A06 | PROPOSED CROWN CASTLE NODE IDENTIFICATION SIGNAGE | 20:D1.2 |
| A07 | PROPOSED CROWN CASTLE EQUIPMENT CABINET | 18:D1.1 |
| A08 | PROPOSED CROWN CASTLE PIER FOUNDATION | 12:D1.1 |
| A09 | PROPOSED ELECTRICAL HAND HOLE | |

| KEYNOTE | KEYNOTE LEGEND DESCRIPTION | DETAIL |
|---------|---|-----------------|
| E01 | PROPOSED POWER METER MOUNTED TO EQUIPMENT CABINET (DISTRIBUTION PANEL AND DISCONNECT) | 18:D1.1 |
| U01 | PROPOSED 3" CROWN CASTLE U.G. POWER CONDUIT (APPROXIMATE LOCATION F.V.) | 2:D1.1 & 5:D1.2 |
| U02 | PROPOSED CROWN CASTLE 2" U.G. FIBER CONDUIT BY OTHERS (APPROXIMATE LOCATION F.V.) | 2:D1.1 & 6:D1.2 |



NOTES:
 1. ANY DAMAGE TO EXISTING GUTTER, CURB, SIDEWALK AND ROADWAY DURING CONSTRUCTION, TO BE REPAIRED OR REPLACED.
 2. EXISTING VEGETATION DAMAGED IN CONSTRUCTION TO BE REPLACED BY SAME SPECIES.

GENERAL NOTES

- PAINT PROPOSED GROUND EQUIPMENT A NATURAL EARTH COLOR OR AS APPROVED BY CITY
- CONTRACTOR TO FIELD LOCATE EXIST' UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION
- EX LANDSCAPE PLANTINGS AND DECORATIVE HEDGEROWS DELIBERATELY OR UNINTENTIONALLY AS A RESULT OF CONSTRUCTION SHALL BE REPLACED WITH A LIKE SIZE AND SPECIES
- CONTRACTOR TO HAND LOCATE EX' IRRIGATION PRIOR TO EXCAVATION
- SITE PLAN IS A DIAGRAMMATIC REPRESENTATION ONLY. VERIFY ALL DIMENSIONS
- VERIFY ALL PROPERTY LINE INFORMATION WITH AVAILABLE F.I.O.W. DATA
- EXIST' UTILITY LOCATIONS SHOWN ON PLANS ARE APPROXIMATE ONLY (AS PROVIDED BY LOCAL UTILITIES)

SUBJECT POLE: CCR-33

GPS COORDINATES:

LONG: 95.748849

LAT: 29.720861

POLE TYPE: METAL SLIMLINE POLE

POLE ID #:

UPPER ANTENNA RAD CENTER: 30' - 0" A.F.G.

LOWER ANTENNA RAD CENTER: 90' - 0" A.F.G.

SUBJECT POLE IS LOCATED IN: FORT BEND COUNTY P.O.A.

APPROVED: [Signature]

DATE: 11/11/16

Development Coordinator



CROWN CASTLE
 600 E. JOHN CARPENTER Fwy.
 SUITE 300
 IRVING, TX 75062

RECORD DRAWINGS ISSUE DATE: 10-18-16



Shift Companies, LLC
 10111 NIGHT OWL ROAD
 SUITE 2000, ANDERSON 65217
 PH: 405.264.8521
 FX: 405.264.8521

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| DATE | SUBMITTAL |
|----------|--------------------|
| 03.16.16 | 1ST CITY SUBMITTAL |
| 10.18.16 | 2ND CITY SUBMITTAL |

| NO. | DATE | COMMENT |
|----------|------|---------------|
| 10-18-16 | | CITY COMMENTS |

PROJECT NAME
 CINCO RANCH EXPANSION

NODE ADDRESS
 NODE #CCR-33

FRY RD AND CARRIAGE BEND DR

HUB AREA
 CINCO RANCH - HGCW

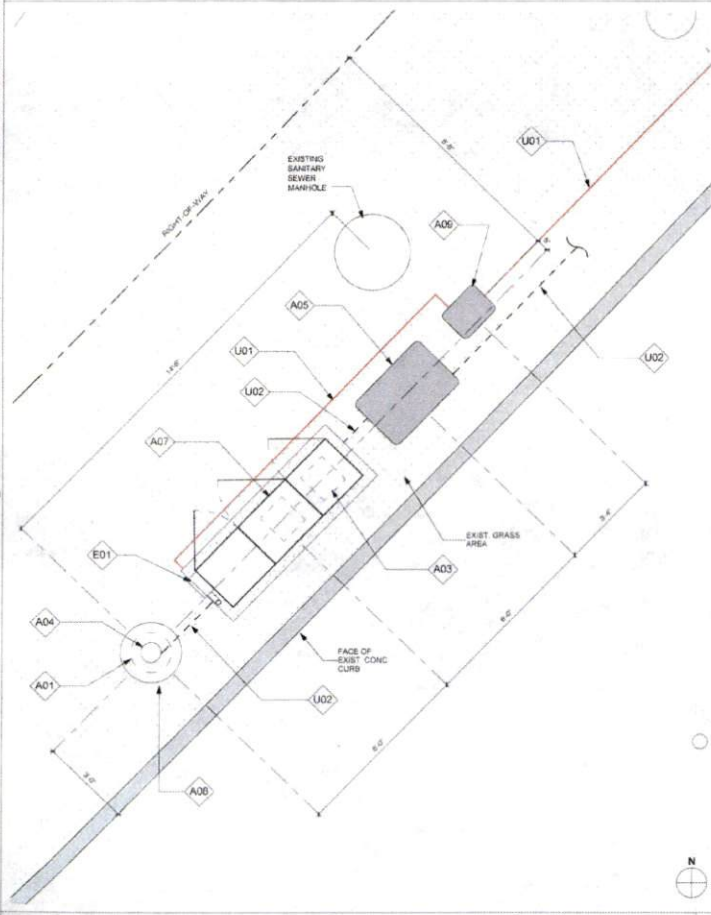
SHIFT JOB NUMBER 150802 **IN HOUSE**

DRAWN BY: SA
 CHECKED BY: CM

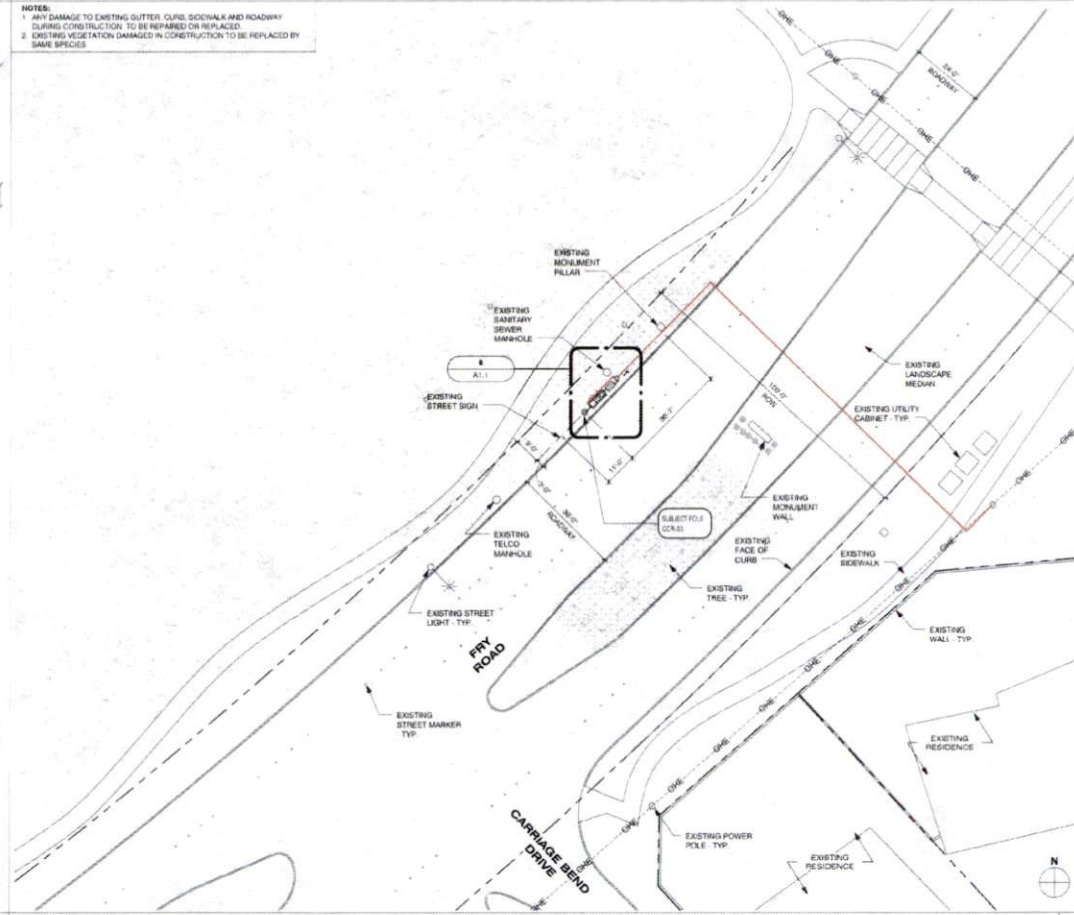
SHEET TITLE
 SITE PLAN, EQUIPMENT AND ANTENNA PLAN

SHEET NUMBER A1.1 **PAGE** 5 OF 14

PLOT SCALE: 1:1 @ 24x36"; 1:2 @ 11x17"



EQUIPMENT AND ANTENNA PLAN 1/2" = 1'-0" 8



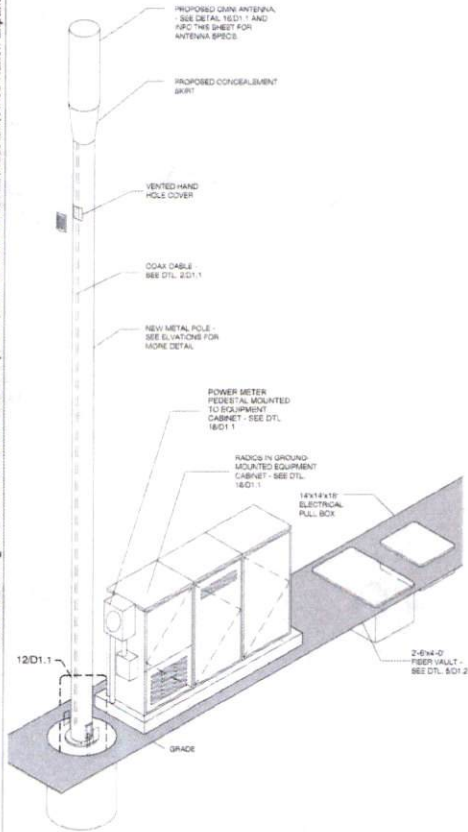
OVERALL SITE PLAN 1" = 20'-0" 20

PLAN CHECK #

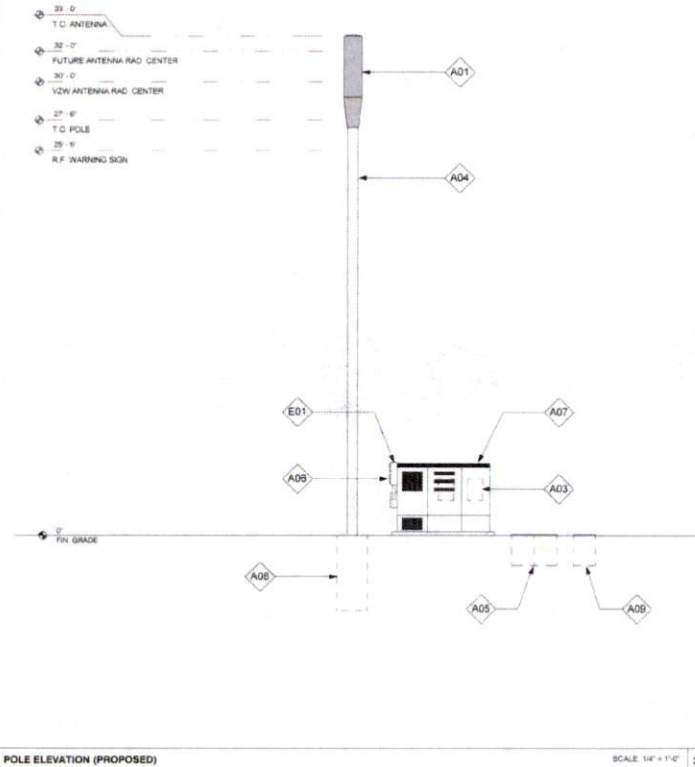
NOTE
ISO IS SCHEMATIC IN NATURE. FIBER VAULT, POWER METER PEDESTAL AND GROUND-MOUNTED RADIO EQUIPMENT PEDESTAL CAN BE RECONFIGURED TO SUIT PROJECT LOCATION

| KEYNOTE LEGEND | | |
|----------------|--|---------------|
| KEYNOTE | DESCRIPTION | DETAIL NUMBER |
| A01 | PROPOSED CROWN CASTLE OMN ANTENNA | 18D1.1 |
| A02 | PROPOSED CROWN CASTLE 2" I.D. CONDUIT (APPROXIMATE LOCATION, P. 1) | 20D1.1 |
| A03 | PROPOSED CROWN CASTLE REMOTE RADIO UNITS INSIDE EQUIPMENT CABINET | 18D1.1 |
| A04 | PROPOSED NEW METAL SLUMBER POLE | 20D1.1 |
| A05 | PROPOSED CROWN CASTLE UNDERGROUND CONG. FIBER VAULT | 5D1.2 |
| A06 | PROPOSED CROWN CASTLE NODE IDENTIFICATION SIGNAGE | 20D1.2 |
| A07 | PROPOSED CROWN CASTLE EQUIPMENT CABINET | 14D1.1 |
| A08 | PROPOSED CROWN CASTLE POLE FOUNDATION | 12D1.1 |
| A09 | PROPOSED ELECTRICAL HAND HOLE | |
| E01 | PROPOSED POWER METER MOUNTED TO EQUIPMENT CABINET (DISTRIBUTED PANEL AND DISCONNECT) | 18D1.1 |

| | |
|---|--------------------------|
| MODEL | AMP/ENCL - 32U/120K121W6 |
| LENGTH | 48" |
| WIDTH | 14.6" DIA. |
| DEPTH | NA |
| WEIGHT | 38.1 LBS |
| PROPOSED PANEL ANTENNA SPECS | |
| | |
| PROPOSED POLE WIDTH = 8" Ø | |
| PROPOSED POLE HEIGHT = 27' - 8" | |
| (4' - 6" ANTENNA AND 1' - 6" ANTENNA MOUNT) | |
| POLE INFO | |



METAL POLE ISOMETRIC SCALE: SCALE N.T.S. 4



POLE ELEVATION (PROPOSED) SCALE: 1/4" = 1'-0" 20

APPROVED: *[Signature]*
Development Coordinator
DATE: 11/11/16

CROWN CASTLE
CROWN CASTLE
800 E. JOHN CARPENTER Fwy.
SUITE 500
IRVING, TX 75062

RECORD DRAWING ISSUE DATE: 10/18/16

SHIFT
Shift Companies, LLC
12111 18TH ST NW
SCOTTSDALE, ARIZONA 85257
PH: 480.264.9523
FAX: 480.264.9523

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| NO. | DATE | COMMENT |
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PROJECT NAME
CINCO RANCH EXPANSION

NODE ADDRESS
NODE #:CCR-33
FRY RD AND CARRIAGE BEND DR

HUB AREA
CINCO RANCH - HGCV

SHIFT JOB NUMBER
150602

SHEET TITLE
POLE ELEVATION, PROPOSED

SHEET NUMBER
A1.2

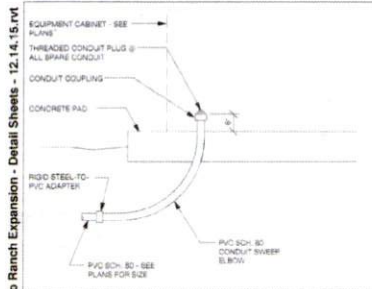
PAGE
6 OF 14

PLOT SCALE: 1:1 @ 24"X36"; 1:2 @ 11"X17"

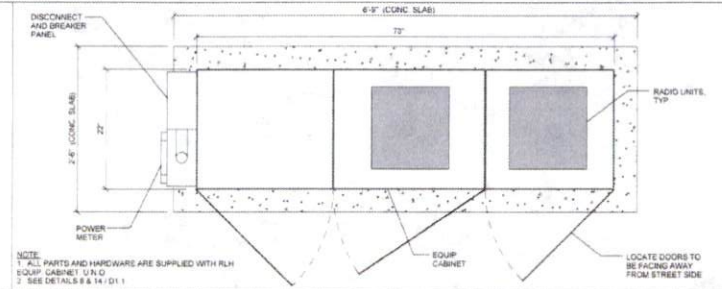
PLAN CHECK #

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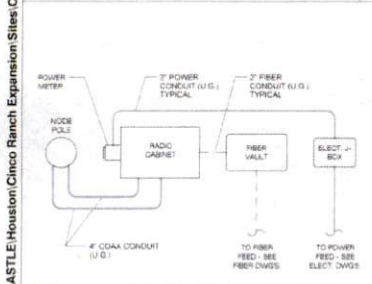
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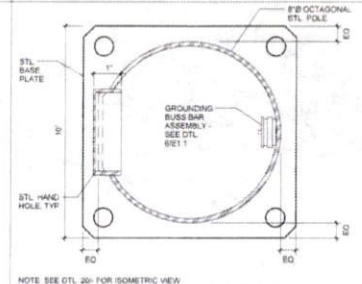
EQUIPMENT CABINET STUB UP DTL SCALE: N.T.S. 1



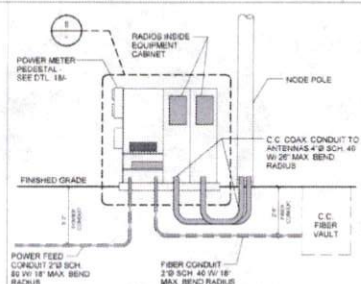
METER / BBU / RADIO EQUIPMENT CABINET PLAN SCALE: N.T.S. 2



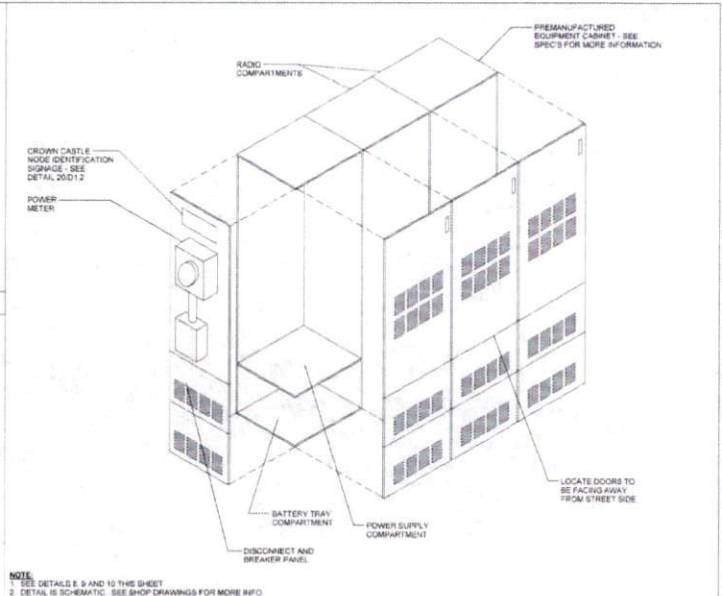
CONDUIT ROUTE SCALE: N.T.S. 2



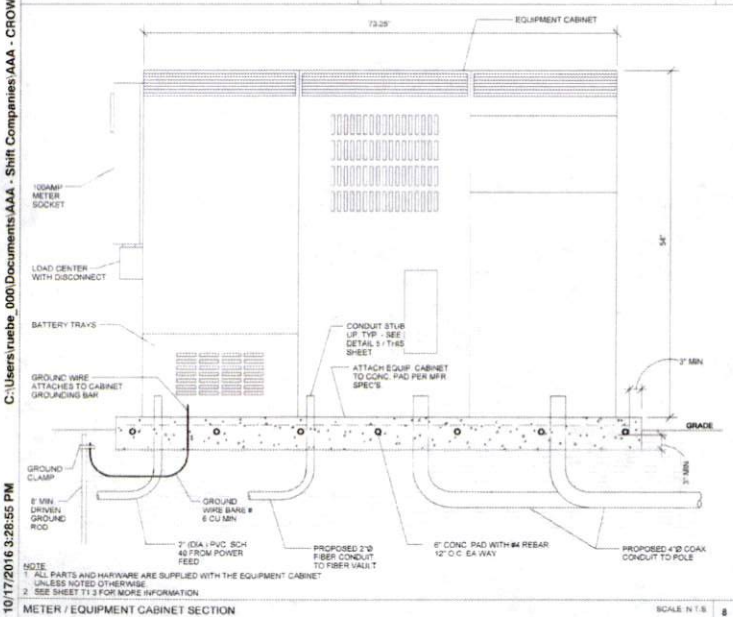
PLAN VIEW @ POLE SCALE: N.T.S. 6



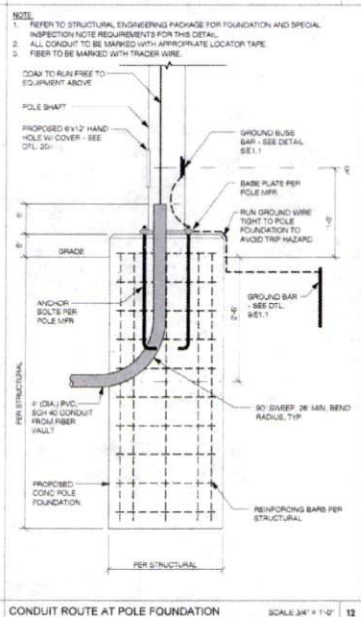
CONDUIT AND POWER RISER DIAGRAM SCALE: N.T.S. 10



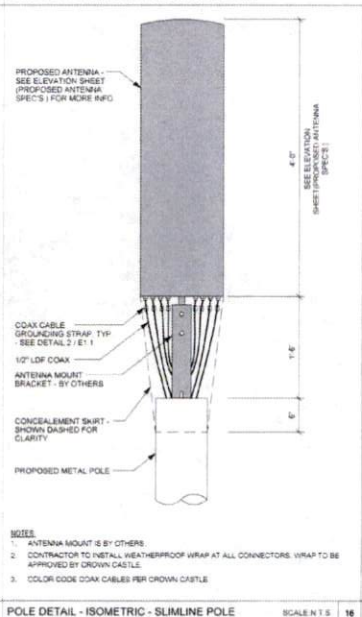
EQUIPMENT CABINET WITH METER ISOMETRIC SCALE: N.T.S. 18



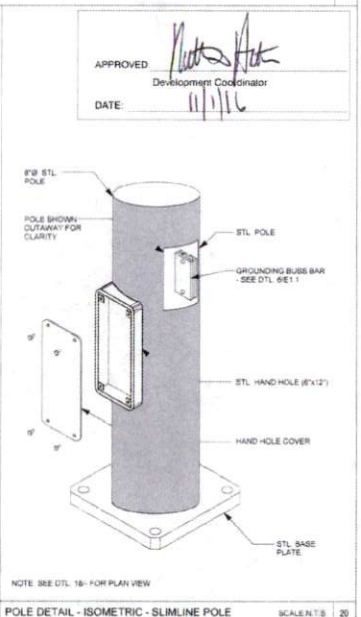
METER / EQUIPMENT CABINET SECTION SCALE: N.T.S. 8



CONDUIT ROUTE AT POLE FOUNDATION SCALE: 3/4" = 1'-0" 12



POLE DETAIL - ISOMETRIC - SLIMLINE POLE SCALE: N.T.S. 16



POLE DETAIL - ISOMETRIC - SLIMLINE POLE SCALE: N.T.S. 20



CROWN CASTLE
800 E. JOHN CARPENTER Pkwy.
SUITE 300
IRVING, TX 75062

RECORD DRAWING ISSUE DATE: 10.18.16



Shift Companies, LLC
7333 E. WATTS AVE. #200
SOFTWARE AND MFG BLDG
PH: 480.284.3029
FAX: 480.284.3025

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| NO. | DATE | COMMENT |
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PROJECT NAME
CINCO RANCH EXPANSION

HUB AREA
CINCO RANCH - HGCW

SHIFT JOB NUMBER **IN HOUSE**

150602 DRAWN BY: RA
CHECKED BY: CM

SHEET TITLE
CONSTRUCTION DETAILS

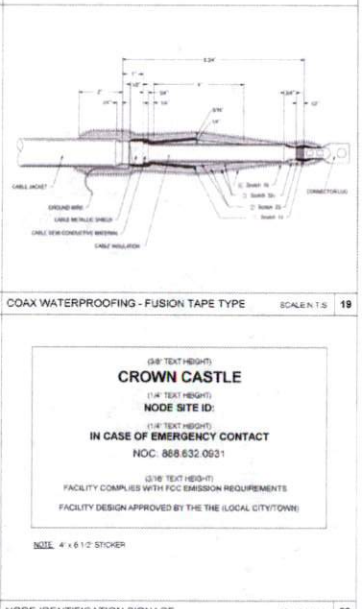
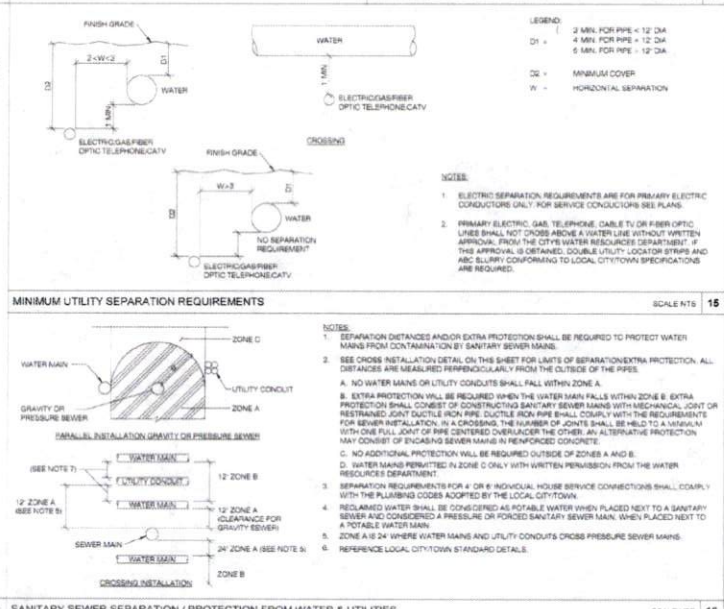
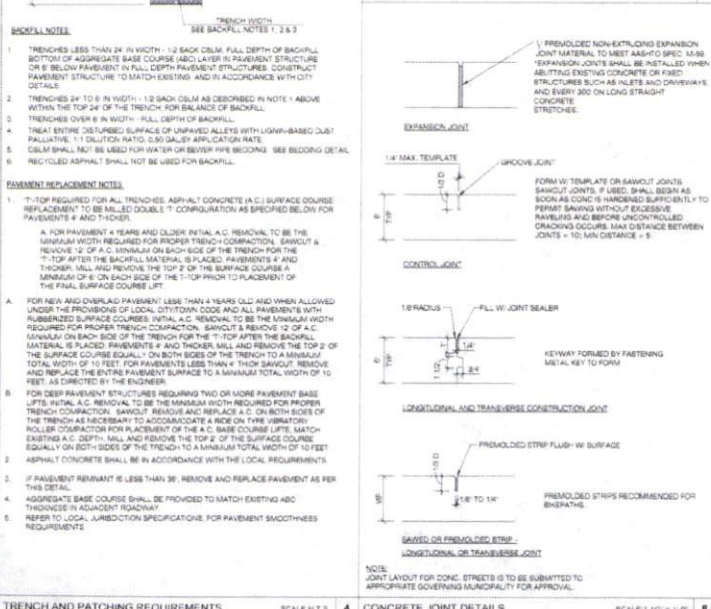
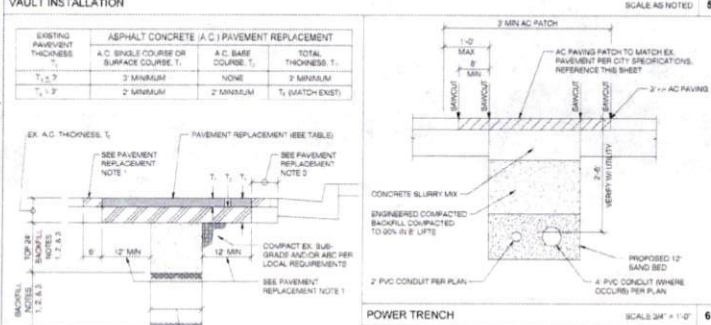
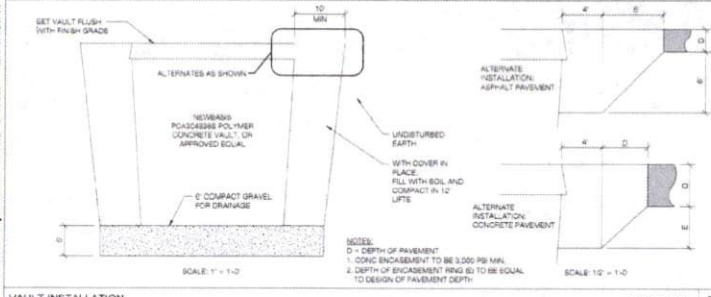
SHEET NUMBER **18** PAGE **7 OF 14**

PLOT SCALE: 1:1 @ 24x36; 1:2 @ 11x17

PLAN CHECK #

CASE #

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|----------------------------------|---------------------|---|------------------------|---------------------|---|---|---------------------|---|
| TRENCH AND PATCHING REQUIREMENTS | SCALE: 1/8" = 1'-0" | 4 | CONCRETE JOINT DETAILS | SCALE: 1/2" = 1'-0" | 5 | SANITARY SEWER SEPARATION / PROTECTION FROM WATER & UTILITIES | SCALE: 1/8" = 1'-0" | 6 |
|----------------------------------|---------------------|---|------------------------|---------------------|---|---|---------------------|---|

| | | | | | | | | | | | |
|-------------------------------|---------------------|----|--------------------------------------|---------------------|----|---|---------------------|----|-----------------------------|---------------------|----|
| COAX WATERPROOFING - JMA TYPE | SCALE: 1/8" = 1'-0" | 18 | COAX WATERPROOFING - FUSION TAP TYPE | SCALE: 1/8" = 1'-0" | 19 | MINIMUM UTILITY SEPARATION REQUIREMENTS | SCALE: 1/8" = 1'-0" | 15 | NODE IDENTIFICATION SIGNAGE | SCALE: 1/8" = 1'-0" | 20 |
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| COAX WATERPROOFING - JMA TYPE | SCALE: 1/8" = 1'-0" | 18 | COAX WATERPROOFING - FUSION TAP TYPE | SCALE: 1/8" = 1'-0" | 19 | MINIMUM UTILITY SEPARATION REQUIREMENTS | SCALE: 1/8" = 1'-0" | 15 | NODE IDENTIFICATION SIGNAGE | SCALE: 1/8" = 1'-0" | 20 |
|-------------------------------|---------------------|----|--------------------------------------|---------------------|----|---|---------------------|----|-----------------------------|---------------------|----|

CROWN CASTLE
 800 E. JOHN CARPENTER Fwy.
 SUITE 200
 IRVING, TX 75062

APPROVED: *[Signature]*
 Development Coordinator
 DATE: 11/1/16

SHIFT
 Shift Companies, LLC
 7333 E. HEWITT ROAD
 SUITE 1000, ADDY, WA 99001
 PH: 509.264.8229
 FAX: 509.264.8233

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| | 10.18.18 | CITY COMMENTS |

PROJECT NAME
 CINCO RANCH EXPANSION

HUB AREA
 CINCO RANCH - HGCW

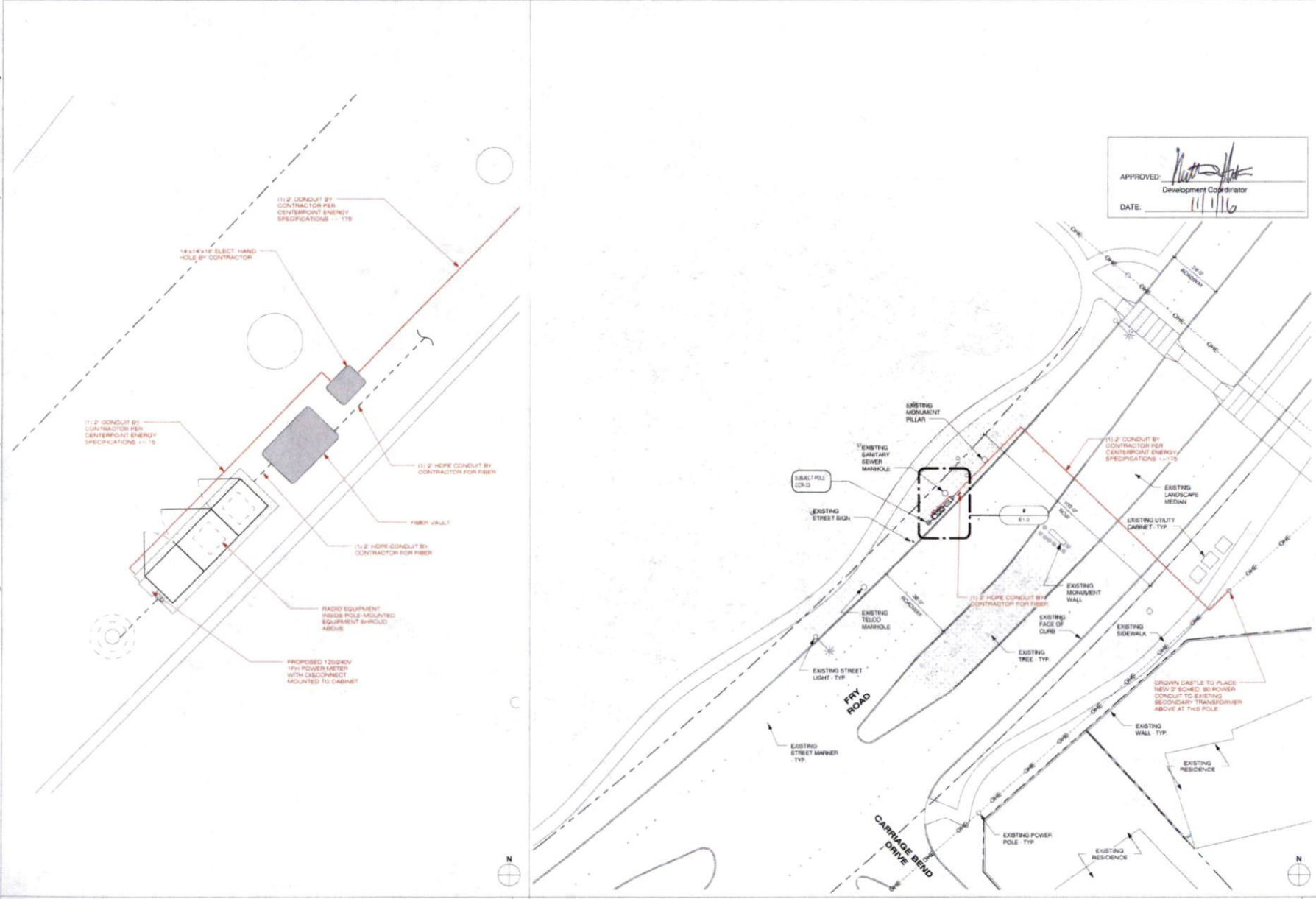
SHIFT JOB NUMBER 150602 **IN HOUSE**
 DRAWN BY: NA
 CHECKED BY: CM

SHEET TITLE
 CONSTRUCTION DETAILS

| | |
|---------------------|-------------|
| SHEET NUMBER | PAGE |
| D1.2 | 8 OF 14 |

NOTE: 4 x 6 1/2 STICKER

RDT SCALE: 1:1 @ 24x36; 1:2 @ 11x17



APPROVED: *[Signature]*
 Development Coordinator
 DATE: 11/11/16



CROWN CASTLE
 800 E. JOHN CARPENTER Fwy.
 SUITE 300
 IRVING, TX 75060

RECORD DRAWING ISSUE DATE: 10/18/16



Shift Companies, LLC
 5011 WEST WILLOW
 SUITE 1000, MCKINNEY, TX
 75069-3602
 TEL: 972.254.8333

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PROJECT NAME
CINCO RANCH EXPANSION

NODE ADDRESS
NODE #:CCR-33

FRY RD AND CARRIAGE BEND DR

HUB AREA
CINCO RANCH - HGCW

SHIFT JOB NUMBER **150602** IN HOUSE
 DRAWN BY: SA
 CHECKED BY: CM

SHEET TITLE
ELECTRICAL PLANS

| SHEET NUMBER | PAGE |
|--------------|---------|
| E1.0 | 9 OF 14 |

PLOT SCALE: 1:1 @ 24x36" 1:2 @ 11x17" 1:4 @ 8.5x11"

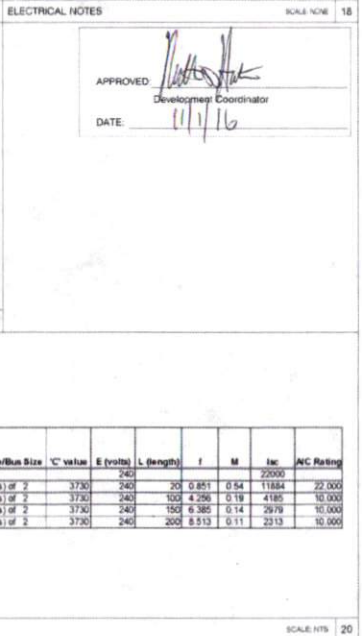
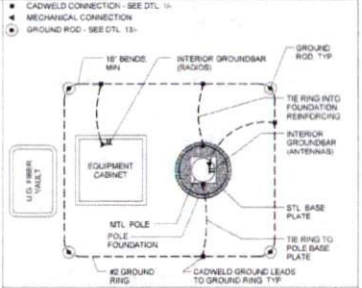
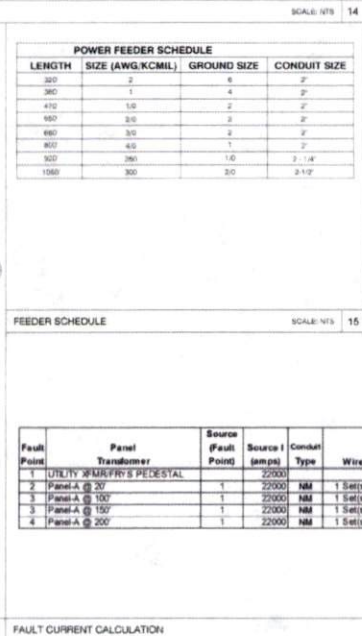
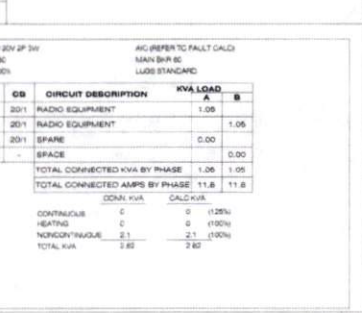
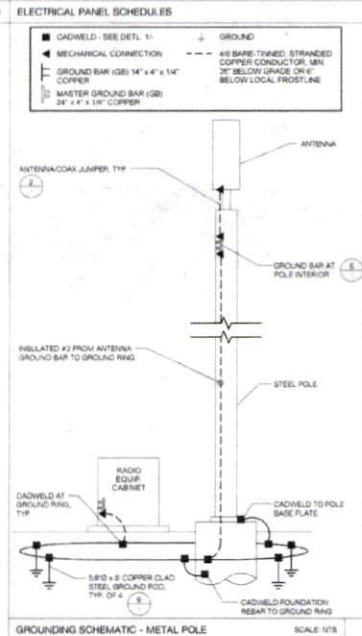
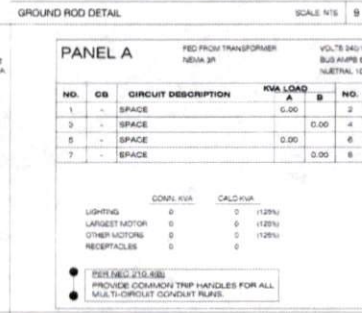
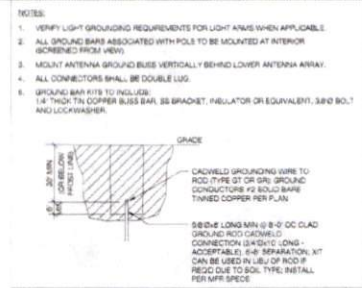
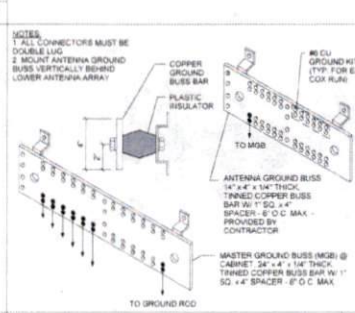
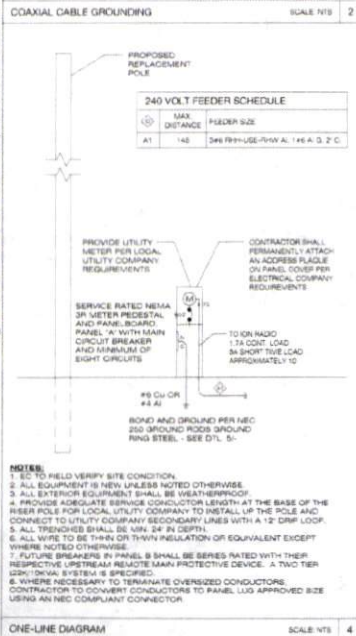
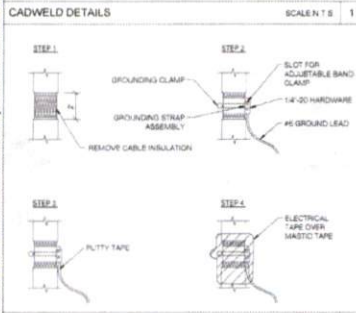
ENLARGED ELECTRICAL PLAN

1/2" = 1'-0" 8 ELECTRICAL SITE PLAN

1" = 20'-0" 20

PLAN CHECK #

CASE #



CROWN CASTLE
 CROWN CASTLE
 800 E. JOHN CARPENTER FWY.
 SUITE 300
 IRVING, TX 75062

RECORD DRAWING ISSUE DATE: 10-16-16

SHIFT
 Shift Companies, LLC
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 NORTHALL, ARIZONA 85077
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 FW: 480.244.9333

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| 10/16/16 | | CITY COMMENTS |
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PROJECT NAME
 CINCO RANCH EXPANSION

HUB AREA
 CINCO RANCH - HGCW

SHEET NUMBER 150602 **IN HOUSE** DRAWN BY: RA
 CHECKED BY: CM

SHEET TITLE
 ELECTRICAL DETAILS

SHEET NUMBER E1.1 **PAGE** 10 OF 14

PLOT SCALE: 1:1 @ 24"X36"; 1:2 @ 11"X17"