



Broadband Accommodation Program (BAP) & Utility Accommodation Rules (UAR)

Utility Week 2022



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- UAR last updated in 2008
- Timeline for revisions:
 - Start date of revisions (March 2019)
 - Texas Register Open Comment
 - Public Hearing
 - Comment Response
 - Individual Meetings held with Utility Companies
 - Set for adaption at Commission Meeting (Sept 2022)





work

team

- Subcommittees were created for each UAR TAC Section
 - TxDOT Internal stakeholders
- Revisions were based on internal/external stakeholder feedback and SME's experience

External stakeholders

- Texas Chapter Utility Engineering & Survey Institute (UESI)
- Utility Companies/Owners
- Utility/SUE Consultants



The following sections were revised to reflect modernization in technology, construction techniques, materials, and safety.

21.31 Definitions

21.37 Design

21.38 Construction and Maintenance

21.40 Underground Utilities

21.41 Overhead Utilities



Amendments

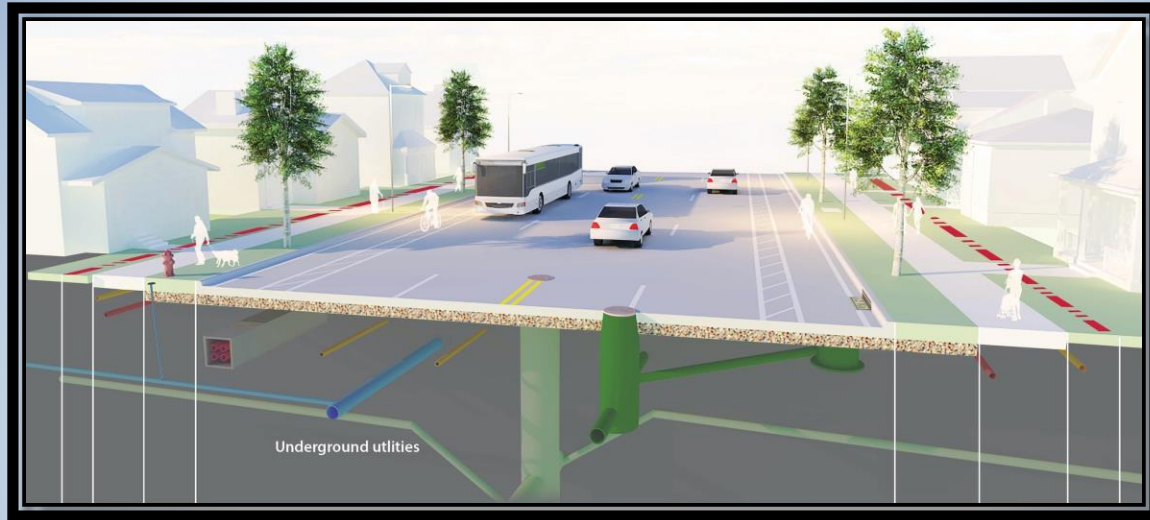




- Corrected minor wording to provide consistency in the use of “shall,” “may,” and “must”
 - aligned with the statutory construction rules in Government Code, §311.016.



- Added definitions for American Society of Civil Engineers, broadband service, communication line, and encasement.
 - Amended the definitions of “public utility” and “utility product” to incorporate broadband service.



- Addressed requirements of a utility in the design phase of any installation of a utility facility within state right of way.
 - Clarification on federal and state regulations
 - Safety enhancements



- Required for the installation, operation, and maintenance of utility facilities within state right of way.
 - Requirements for utilities to ensure the accommodation process is safe and efficient.
 - Include inspection as part of the permitting process.

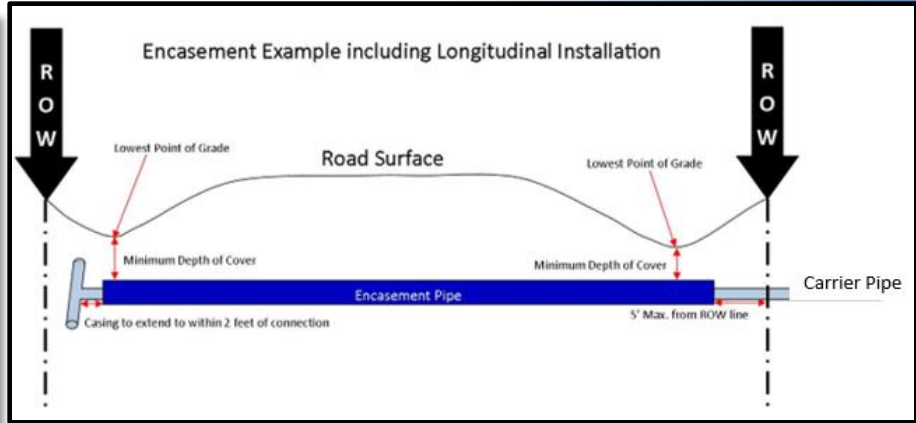
Amendments §21.40 – Underground Utilities



Facility Type	Crossing Encased	Crossing un-encased	Longitudinal ²	Casing Material (Recommended)
Low Pressure Gas	60	60	48	HDPE or Steel
High Pressure Gas ¹	60	60	48	Steel
Electric	60	NA	48	Any
Communication	60	NA	48	Any
Water	60	NA	36	HDPE
Wastewater gravity flow	30	NA	30	HDPE
Wastewater pressure flow	60	NA	36	HDPE
Other Water	60	NA	36	HDPE

Crossing depth is below lowest point of crossed grade.

(1) High pressure gas is defined as greater than or equal to 60 psi.
 (2) Additional 12 inches of depth is required within 50 feet of water course, culvert, etc.



- Addressed department requirements for underground utilities.
 - Simplified encasement requirements
 - Provided new minimum depths
 - Added installation methods
 - Added joint duct banks for underground communication lines

Amendments §21.41 – Overhead Electric and Communication Lines



Addressed department requirements for overhead electric and communication lines.

Increased pole base sizes (from 36” – in certain instances, 42”)

Vertical clearances

One set of pole lines



Comment

Comments Received

Comments §21.37 Design (b) Location (9)



A utility facility that extends across a railroad's right of way, the utility must:

- Provide a copy of a permit executed by railroad.

Feedback from Industry/Solution:

- Significantly delay the utility installation project.
- Clarified the department's current practice
 - Proper rights are obtained from third parties.
 - Avoids realignment should rights not be secured.



Utility's installation plans based on survey data provided by a Texas RPLS.

- Protecting the public's investment in the state highway system
 - Ensuring utilities are installed in their designated locations.
 - Improperly installations led to costly delays

Feedback from Industry/Solution:

- Continue to allow use of TxDOTs survey data and established references.



Utilities to verify the right of way line

- Instances where the utility encroached into adjacent property.
 - Mitigates the risk of mis-identifying the limits of the ROW.

Feedback from Industry/Solution:

- ROW Maps are available
- Additional survey needed for rare occasions.



Where a department joint duct bank is available:

- a utility shall install a utility facility in the duct bank
- unless otherwise authorized by the district.

Feedback from Industry/Solution:

- High demand for use of the department's right of way
- Manage demand
- Reduce infrastructure costs
- TxDOT will determine when department owned duct banks are used.





Restricted the number of pole lines to one set. Exceptions for down guys will be allowed.

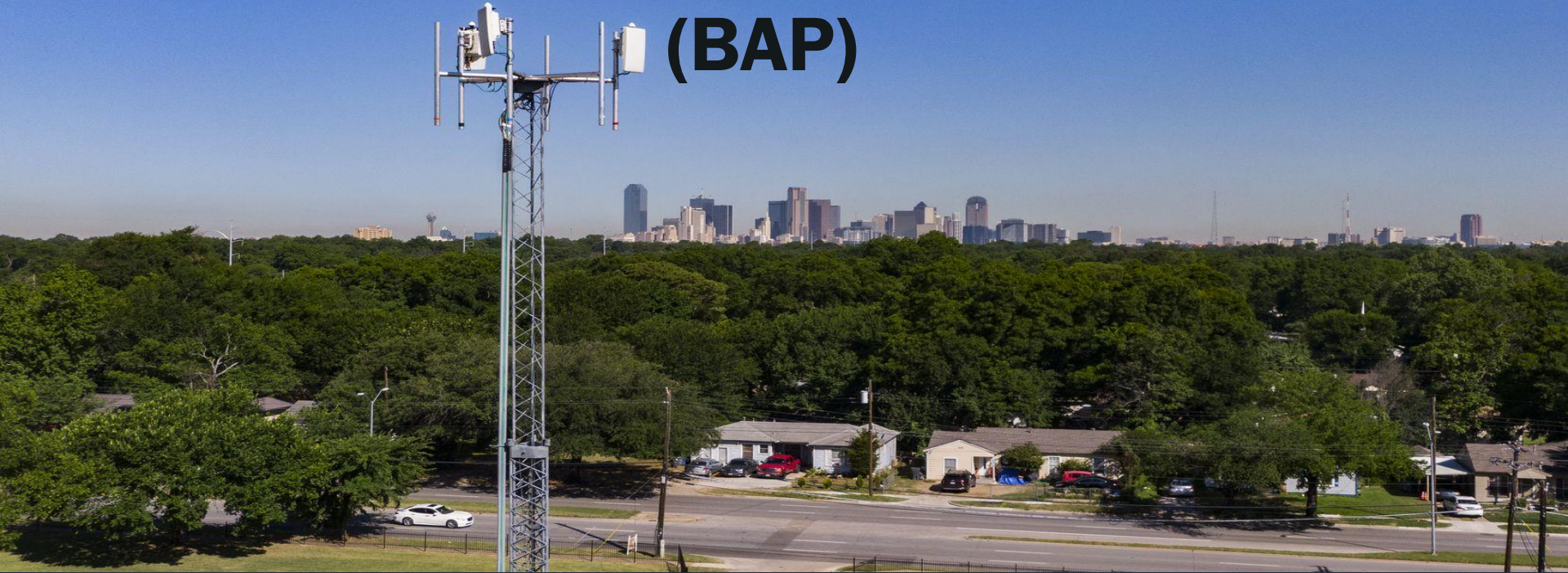


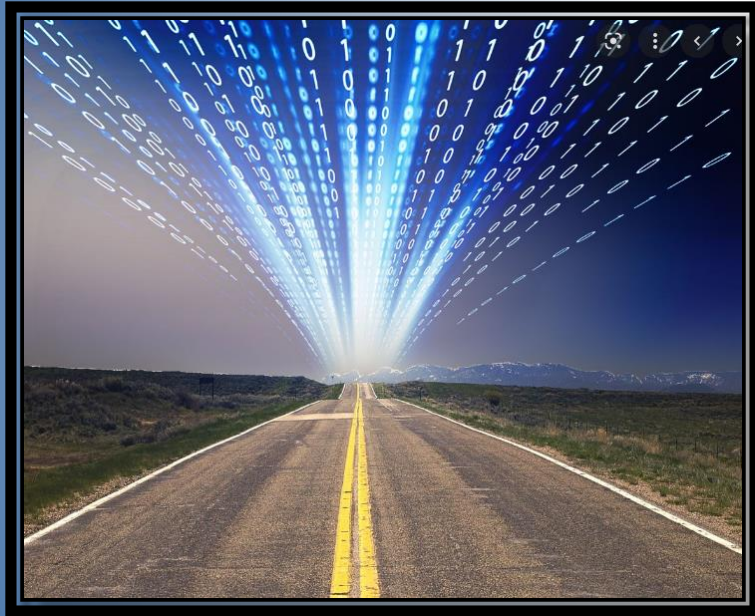
Feedback from Industry/Solution:

- Concerns that it is restrictive
- High-voltage safety concerns for transmission lines.
- Maximizing the use of the right of way.
- Avoids clutter



Broadband Accommodation Process (BAP)





- Senate Bill 507 from the 87th Legislative Session
- Included in the revised rules are the updates needed to comply with SB 507
 - Allows broadband providers to use TxDOT’s rights of ways at no cost through a permit.
 - This bill changes the department’s small cell leasing program to a permitting program.
 - The rules will incorporate design standards that were found in the small cell leasing program into the Utility Accommodation Rules.
 - These rules prescribe minimum requirements for the accommodation, method, materials, and location for the installation, adjustment, and maintenance of broadband facilities under the accommodation process.

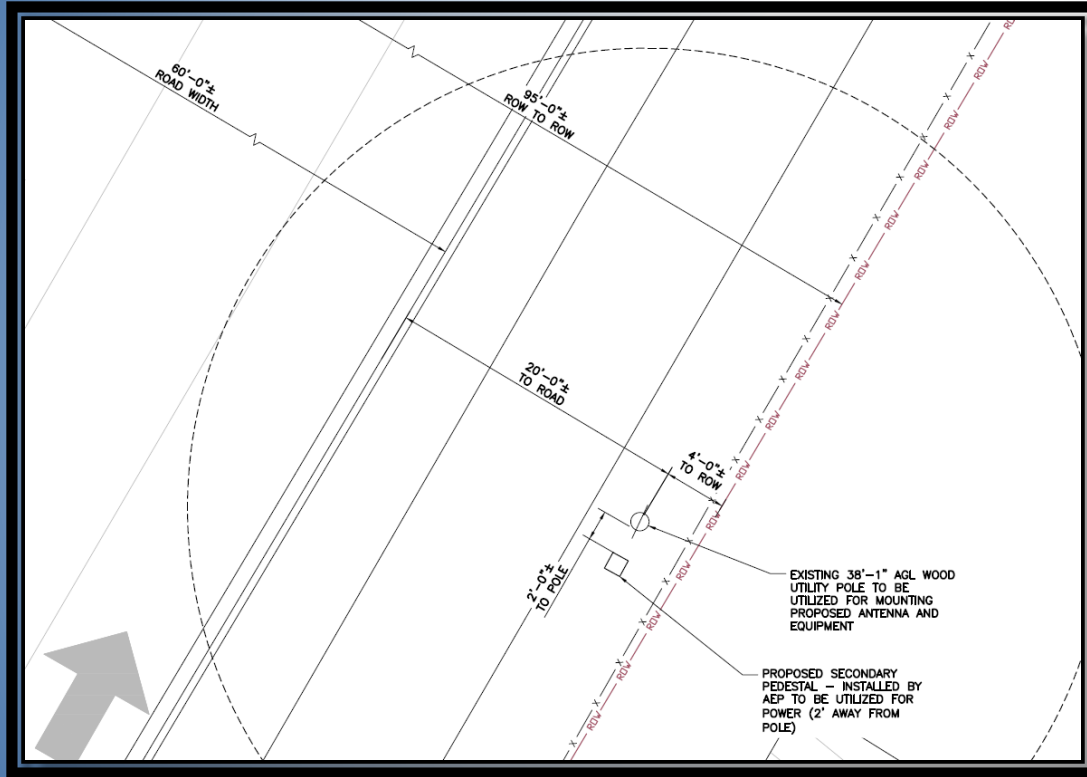
Broadband Accommodation Process (BAP)



- ROW/MNT worked on the Broadband Accommodation Process (BAP) that can be incorporated to facilitate Broadband infrastructure within our ROW.



- BAP will be referenced in the UAR revisions.
- BAP guidelines will be added to the ROW Utility Manual and TxDOT External Website.



- Site Survey with ROW/EOP
- Power source shown
- Existing Utilities

Broadband Accommodation Process



NEXIUS

NEXIUS SOLUTIONS, INC.
2595 NORTH DALLAS PARKWAY
SUITE 300
FRISCO, TX 75034

CLIENT:

AT&T

AT&T
1010 NORTH ST. MARY'S
SAN ANTONIO, TEXAS 78215

PROFESSIONAL STAMP:

JACK T. PHIPPS
103850
LICENSED PROFESSIONAL ENGINEER

DATE SIGNED: 09/03/21

Designed by:

NEXIUS SOLUTIONS, INC. REGISTRATION NO. 07/31/22
PE LICENSE: 103850-09/03/21

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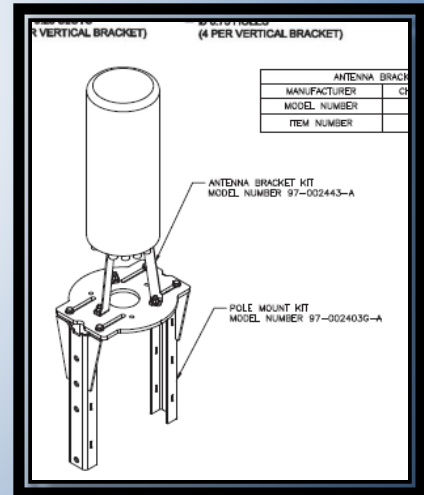
SUBMITTALS

REV	DATE	DESCRIPTION	BY
A	03/04/21	FOR REVIEW	CH
B	05/11/21	FOR REVIEW	PM
D	08/12/21	FINAL CD	PM
1	09/03/21	REV. POWER DESIGN	PM

CHECKED BY: RF CHECKED DATE: 09/03/21

SITE INFORMATION: SITE NAME: CRAN_RSTX_SACOR_103

- Mounting Details
- Pole Attachments Shown
- Pole base size, depth requirements, etc.





AC DISTRIBUTION BOX SPECIFICATIONS	
MANUFACTURER	PTS
MODEL NUMBER	PTS90121
ITEM NUMBER	NEQ.20213
HEIGHT	10.13"
WIDTH	6.15"
DEPTH	6.0"
WEIGHT	10 LBS.



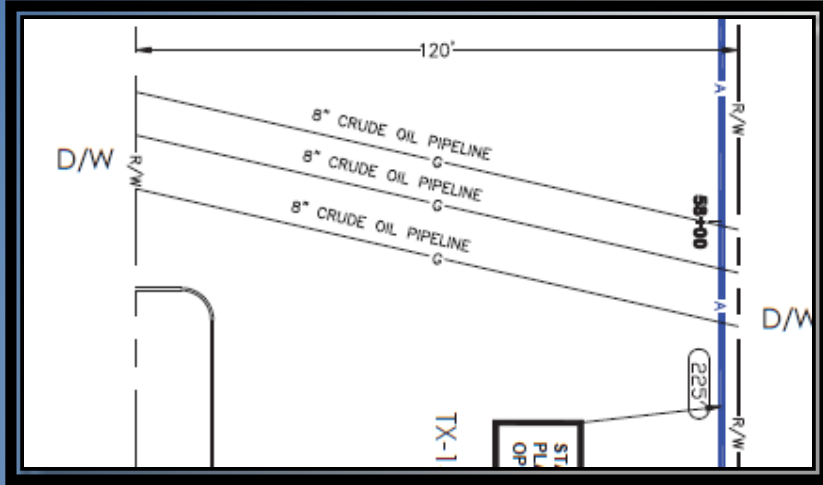
④ PTS90121 DETAIL
SCALE: N.T.S.

⑤ NOT USED
SCALE: N.T.S.

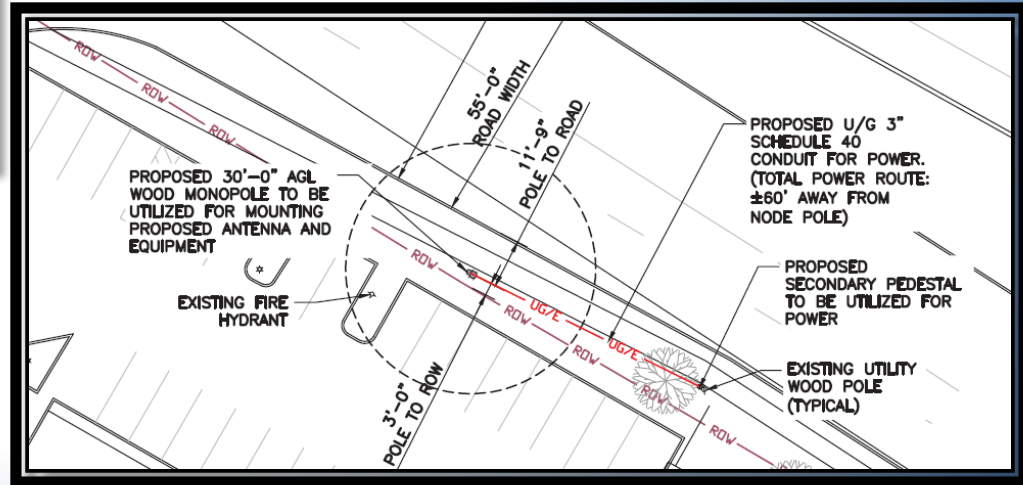
Engineering Structural Analysis Report



Digitally signed by Jordan D Phillips
PE
DN: C=US,
E=jordan.phillips@nexus.com,
O="Nexus Solutions, Inc.", OU=AE
Group - Structural Engineering,
CN=Jordan D Phillips PE
Location: Sylvan Lake, MI
Reason: I am the author of this
document
Contact Info: (248) 700-3642
Date: 2021.08.22 08:30:17-0400'

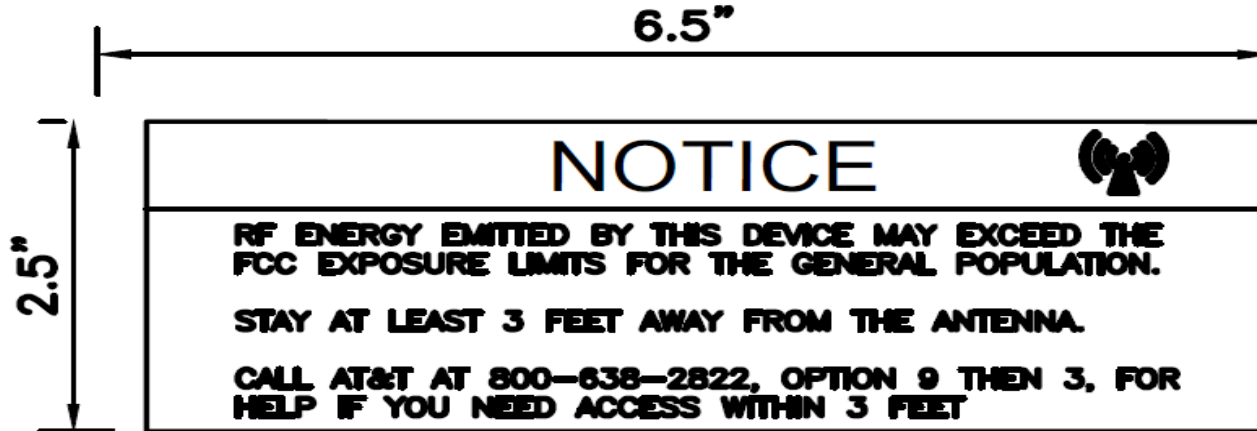


- Mark nearby utilities





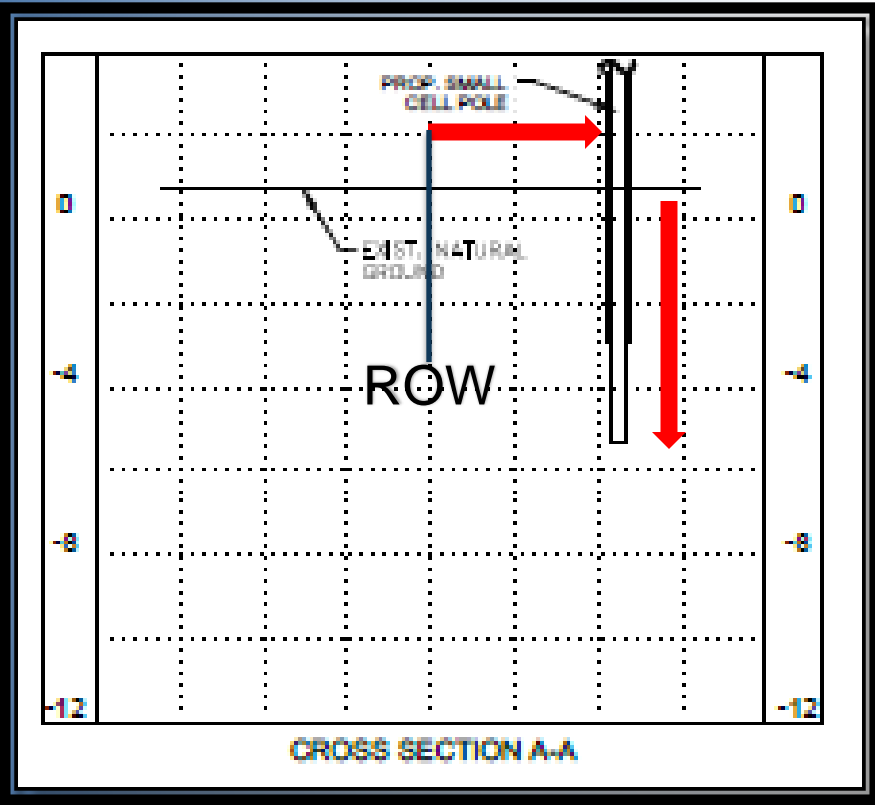
- Network node and equipment poles must have contact for 24-hour support



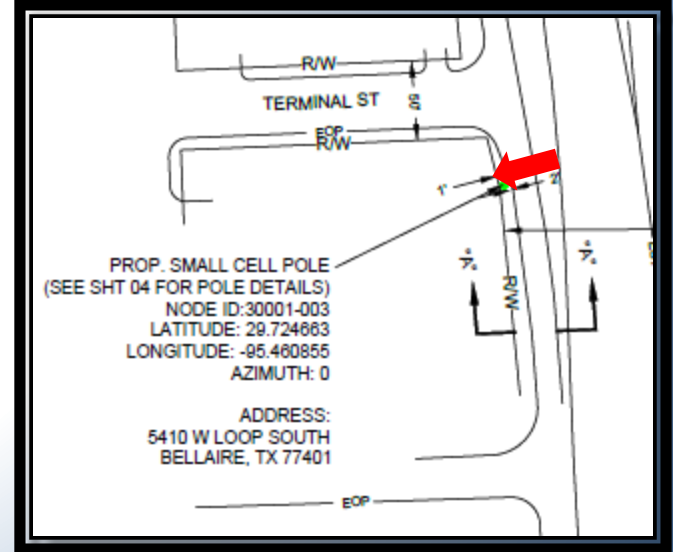
AT&T NOTICE STICKER

- (2) NOTICE STICKERS PLACED AT THE BOTTOM OF THE ANTENNA

Design Considerations



- Excavation depth
- Distance from the ROW
- Clear Zone Encroachment



Other Design Considerations



Pole locations are not within 300' of another installation.

Cabinets and enclosures are flush mounted on a support structure.

Collocation poles include documentation to allow use.

Pole locations do not affect driver safety or attention.



Utility Accommodation Rules

For utility plans, as part of reimbursable agreements:

Completed plans will not be required to conform with the revisions

Case by case basis on other instances

Advice: work with district and ROW Division

Permits that have already been submitted for review may be exempted by the District.

Broadband Accommodation Process

Utility accommodation forms and website revisions.

Maintenance and ROW Utility Manual revisions (coming soon!)

Utility Accommodation Toolkit update

Maintenance and ROW Division will provide future training.

