



**PERMIT APPLICATION REVIEW FORM FOR
CABLE, CONDUIT, AND POLE LINE ACTIVITY
IN FORT BEND COUNTY**

**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: 2017-17447

The following "Notice of Proposed Cable, Conduit, and/or Pole Line activity in Fort Bend County" and accompanying attachments have been reviewed and the notice conforms to appropriate regulations set by Commissioner's Court of Fort Bend County, Texas.

(1) COMPLETE APPLICATION FORM:

- a. Name of road, street, and/or drainage ditch affected.
 b. Vicinity map showing course of directions
 c. Plans and specifications

(2) BOND:

- County Attorney, approval when applicable.
- Perpetual bond currently posted. Bond No: Amount: \$50,000.00
- Performance bond submitted. Bond No: Amount:
- Cashier's Check Check No: Amount:

(3) DRAINAGE DISTRICT APPROVAL (WHEN APPLICABLE):

Drainage District Approval

Date

We have reviewed this project and agree it meets minimum requirements.

Charles O. Ay

Permit Administrator

12/19/2017

Date



**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: 2017-17447

Applicant: AT&T Texas/Black & Veatch

Job Location Site: 15331 Mission Oak Drive, Houston, TX 77083

Bond No. **Date of Bond:** 11/28/2017 **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 2nd day of January, 2018, Upon Motion of Commissioner _____, seconded by Commissioner _____, 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: 
County Engineer

Date Recorded _____ Comm. Court No. _____

By: N/A
Drainage District Engineer/Manager

Clerk of Commissioners Court

By: _____
Deputy

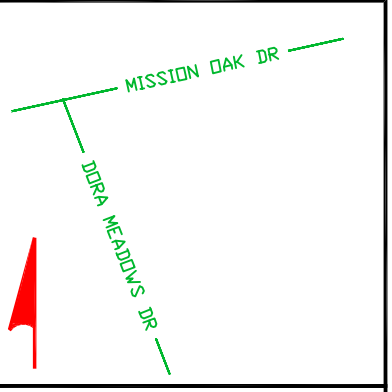
BLACK & VEATCH

DESIGN ENGINEER CONTACT:
 LEX MULLINS
 BLACK & VEATCH
 (469) 413-3267
 MULLINSL@BV.COM

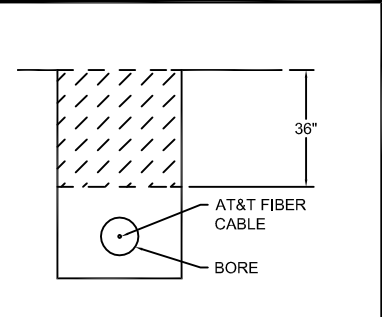
FORT BEND COUNTY
 PERMIT 2
 SHOWN ON PRINT 34 & 35

DESIGN SUMMARY:
 -BORE FIBER SOUTH 41' ACROSS
 MISSION OAK DR FROM ROW TO
 PI.
 -BORE FIBER WEST 103' ACROSS
 DORA MEADOWS DR FROM ROW
 TO ROW.
 -ADD 122' & 98'
 PT TO PI.

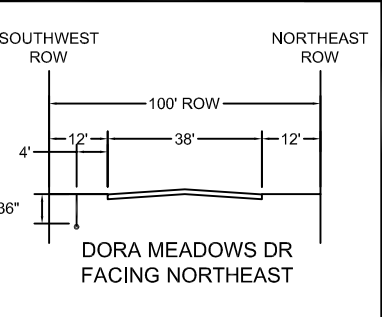
APP-15937 MISSION OAK DR



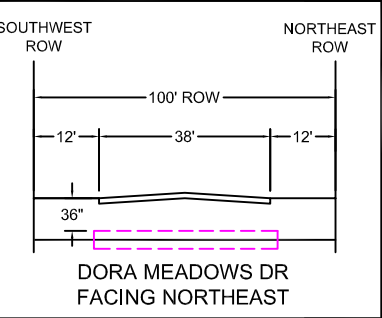
APPROXIMATE LOCATION MAP
 WORK DONE IN FORT BEND
 COUNTY RIGHT OF WAY - PRINT
 FOR INFORMATIONAL PURPOSES
 ONLY



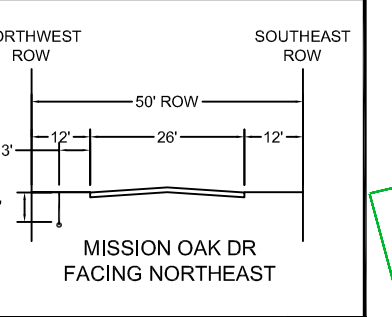
BORE DETAIL NTS



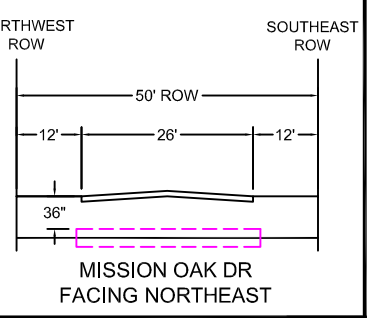
TYPICAL CROSS-SECTION NTS



TYPICAL BORE CROSS-SECTION NTS

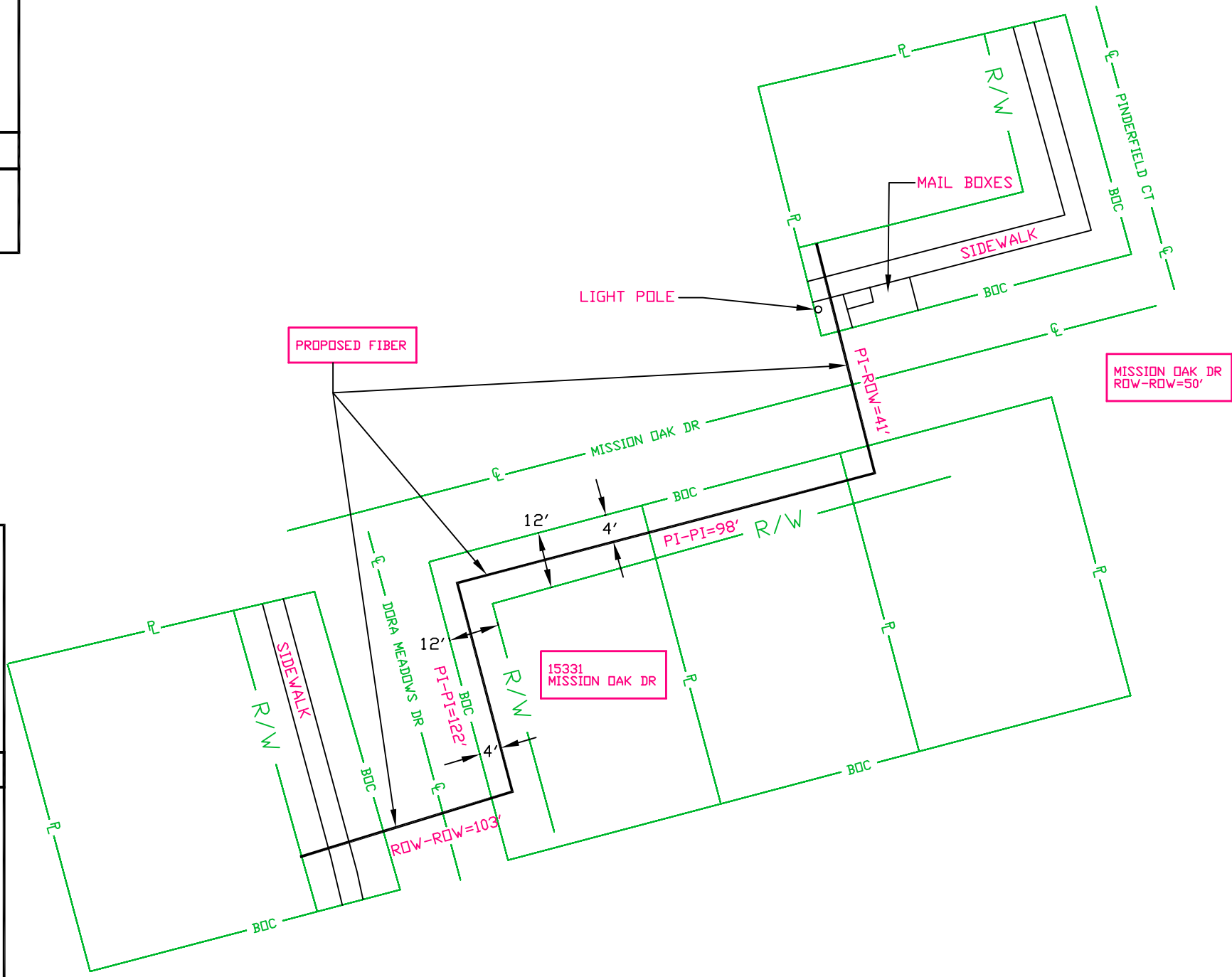


TYPICAL CROSS-SECTION NTS

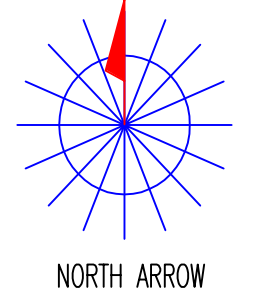


TYPICAL BORE CROSS-SECTION NTS

FORT BEND COUNTY NOTIFICATION



SPECIAL CIRCUITS N
 6203 FORWARDED N
 PERMIT REQUIRED Y



OPERATING RANGE OF JOB STEPS
 TASK _____ TO _____
 MFRC

TRANSMISSION ZONE
 RZ 0 CZ 0 TAPER CODE 4320LA

CAUTION HIGH VOLTAGE
 KV 0.00 AERIAL N BURIED N

HIGHWAY PERMIT NO.

Utility CO
 REP NAME
 REP TEL NO.
 POLE CONTACTS (+) 0 (-) 0

Utility CO
 REP NAME
 REP TEL NO.
 POLE CONTACTS (+) 0 (-) 0

Utility CO
 REP NAME
 REP TEL NO.
 POLE CONTACTS (+) 0 (-) 0

PROJECT NO A00DJ4M

TOT.PRINTS 54 PRINT NO. 47
 NPA/NNX: 281-498 PRT:281498
 EXCH. ALIEF
 TAX DIST. FG108
 GEO LOC. W85498
 ENGR. SK DRAWN SC
 TELEPHONE NO. (281) 298-5803
 REC. REF.
 MAP REF.
 SCALE NONE
 ISSUE DATE 08/25/2017
 PROJ TITLE LIGHTGIG-4320LA-DIST-AF
 REV. NUMBER 1
 DATE REV. 12/07/2017

--Proprietary--
 Not for use or disclosure outside the AT&T companies except under written agreement.

TRAFFIC CONTROL PLAN SECTION SHALL BE COMPLETED BY ENGINEER

| ROADWAY | POSTED SPEED | TAPER LENGTH | SPACING CHANNELIZING DEVICES | | SIGN SPACING | BUFFER SPACE |
|-----------------|--------------|--------------|------------------------------|---------|--------------|--------------|
| | | | TAPER | TANGENT | | |
| DORA MEADOWS DR | 35 | 225' | 35' | 70' | 160' | 120' |
| | | | | | | |
| | | | | | | |
| | | | | | | |

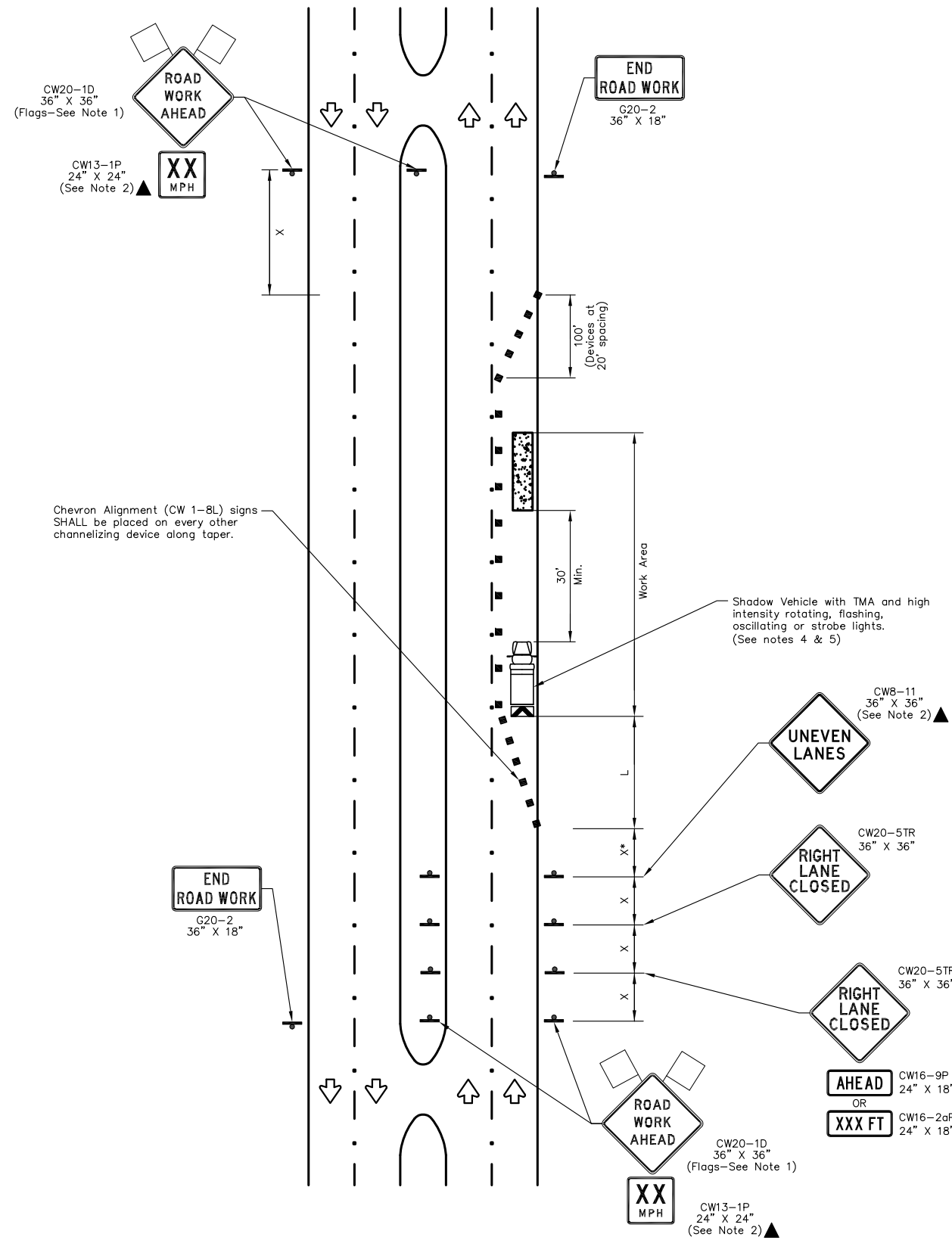
| LEGEND | | | |
|--------|--------------------------------------|--|---|
| | Type 3 Barricade | | Channelizing Devices |
| | Heavy Work Vehicle | | Truck Mounted Attenuator (TMA) |
| | Trailer Mounted Flashing Arrow Board | | Portable Changeable Message Sign (PCMS) |
| | Sign | | Traffic Flow |
| | Flag | | Flagger |

| Posted Speed * | Formula | Minimum Desirable Taper Lengths "L" | | | Suggested Maximum Spacing of Channelizing Devices | | Minimum Sign Spacing "X" Distance | Suggested Longitudinal Buffer Space "B" |
|----------------|-----------------------|-------------------------------------|------------|------------|---|--------------|-----------------------------------|---|
| | | 10' Offset | 11' Offset | 12' Offset | On a Taper | On a Tangent | | |
| 30 | $L = \frac{WS^2}{60}$ | 150' | 165' | 180' | 30' | 60' | 120' | 90' |
| 35 | | 205' | 225' | 245' | 35' | 70' | 160' | 120' |
| 40 | L=WS | 265' | 295' | 320' | 40' | 80' | 240' | 155' |
| 45 | | 450' | 495' | 540' | 45' | 90' | 320' | 195' |
| 50 | | 500' | 550' | 600' | 50' | 100' | 400' | 240' |
| 55 | | 550' | 605' | 660' | 55' | 110' | 500' | 295' |
| 60 | | 600' | 660' | 720' | 60' | 120' | 600' | 350' |
| 65 | | 650' | 715' | 780' | 65' | 130' | 700' | 410' |
| 70 | | 700' | 770' | 840' | 70' | 140' | 800' | 475' |
| 75 | 750' | 825' | 900' | 75' | 150' | 900' | 540' | |

* Conventional Roads Only
 ** Taper lengths have been rounded off.
 L=Length of Taper(FT) W=Width of Offset(FT) S=Posted Speed(MPH)

GENERAL NOTES

- Flags attached to signs where shown are OPTIONAL.
- All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol are OPTIONAL.
- Inactive work vehicles or other equipment should be parked near the right-of-way line and not parked on the paved shoulder.
- A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
- Additional Shadow Vehicles with TMAs may be positioned off the paved surface, next to those shown in order to protect wider work spaces.
- Contractor shall provide and install traffic control devices in conformance with part VI of Texas Manual on Uniform Traffic Control Devices (TMUTCD - Latest edition with revisions) during construction.
- No lanes shall be blocked from 7am to 9am and 4pm to 6:30pm Monday thru Friday.
- Off duty police officers/flaggers are required to direct traffic when applicable. If project is within 400 feet from a signalized intersection, the Contractor shall contact Harris County Engineering Department, Traffic Signal Maintenance at (713) 881-3210 five (5) days prior to the start of construction.



RIGHT LANE CLOSURE (4 LANE BOULEVARD ROAD)

| NO. | REVISIONS | DATE | NAME |
|-----|---|---------|------|
| ▲ | UPDATED DEPARTMENT NAME & GENERAL NOTES | 4/16/15 | BSH |
| ▲ | | | |
| ▲ | | | |
| ▲ | | | |

**FORT BEND COUNTY
ENGINEERING DEPARTMENT**

CONSULTANT
LOGO/INFORMATION

ENGINEERS
SEAL

| | | |
|------------------|---|----------------|
| PROJECT TITLE: | | HCED STANDARD |
| DRAWN BY: BSH | SHEET DESCRIPTION: TRAFFIC CONTROL PLAN (RIGHT LANE CLOSURE) | 41 |
| CK'D BY: BSH | SCALE: N.T.S. | SHEET NO: / |
| DATE: 6/26/14 | APPROVED BY: | |

TRAFFIC CONTROL PLAN SECTION SHALL BE COMPLETED BY ENGINEER

| ROADWAY | POSTED SPEED | TAPER LENGTH | SPACING CHANNELIZING DEVICES | | SIGN SPACING | BUFFER SPACE |
|------------------|--------------|--------------|------------------------------|---------|--------------|--------------|
| | | | TAPER | TANGENT | | |
| MARLOWE GROVE DR | 35 | 245' | 35' | 70' | 160' | 120' |
| | | | | | | |
| | | | | | | |
| | | | | | | |

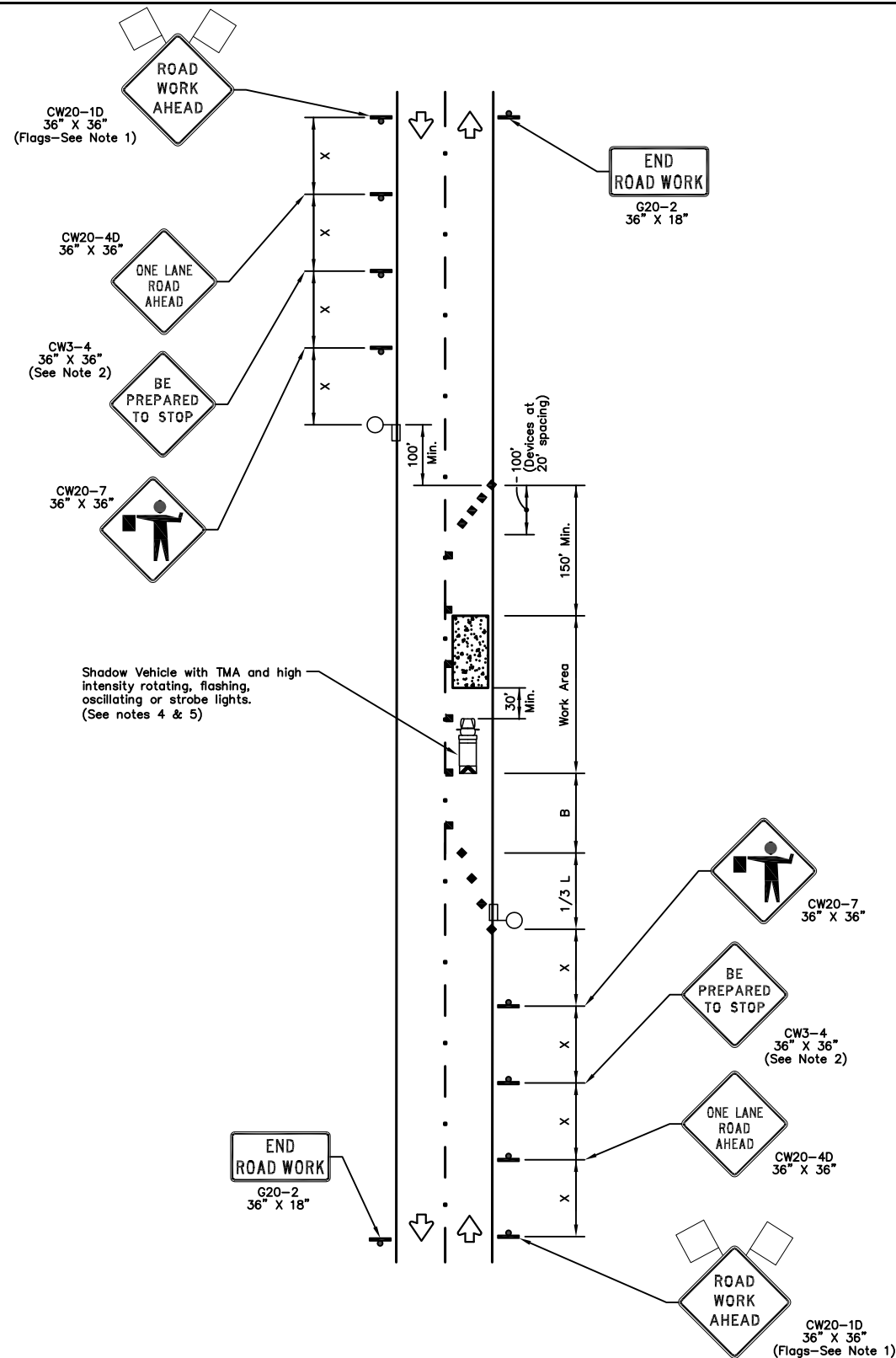
| LEGEND | | | |
|--------|--------------------------------------|--|---|
| | Type 3 Barricade | | Channelizing Devices |
| | Heavy Work Vehicle | | Truck Mounted Attenuator (TMA) |
| | Trailer Mounted Flashing Arrow Board | | Portable Changeable Message Sign (PCMS) |
| | Sign | | Traffic Flow |
| | Flag | | Flagger |

| Posted Speed * | Formula | Minimum Desirable Taper Lengths "L" | | | Suggested Maximum Spacing of Channelizing Devices | | Minimum Sign Spacing "X" Distance | Suggested Longitudinal Buffer Space "B" |
|----------------|-------------|-------------------------------------|------------|------------|---|--------------|-----------------------------------|---|
| | | 10' Offset | 11' Offset | 12' Offset | On a Taper | On a Tangent | | |
| 30 | L = WS / 60 | 150' | 165' | 180' | 30' | 60' | 120' | 90' |
| 35 | | 205' | 225' | 245' | 35' | 70' | 160' | 120' |
| 40 | L = WS | 265' | 295' | 320' | 40' | 80' | 240' | 155' |
| 45 | | 450' | 495' | 540' | 45' | 90' | 320' | 195' |
| 50 | L = WS | 500' | 550' | 600' | 50' | 100' | 400' | 240' |
| 55 | | 550' | 605' | 660' | 55' | 110' | 500' | 295' |
| 60 | L = WS | 600' | 660' | 720' | 60' | 120' | 600' | 350' |
| 65 | | 650' | 715' | 780' | 65' | 130' | 700' | 410' |
| 70 | L = WS | 700' | 770' | 840' | 70' | 140' | 800' | 475' |
| 75 | | 750' | 825' | 900' | 75' | 150' | 900' | 540' |

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 L=Length of Taper(FT) W=Width of Offset(FT) S=Posted Speed(MPH)

GENERAL NOTES

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- All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol are OPTIONAL.
- Inactive work vehicles or other equipment should be parked near the right-of-way line and not parked on the paved shoulder.
- A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
- Additional Shadow Vehicles with TMAs may be positioned off the paved surface, next to those shown in order to protect wider work spaces.
- Contractor shall provide and install traffic control devices in conformance with part VI of Texas Manual on Uniform Traffic Control Devices (TMUTCD - Latest edition with revisions) during construction.
- Flaggers should use two-way radios or other methods of communication to control traffic.
- Length of work space should be based on the ability of flaggers to communicate.
- If the work space is located near horizontal or vertical curve, the buffer distances should be increased in order to maintain adequate stopping sight distances to the flagger and a queue of stopped vehicles (see table above).
- Channelizing devices on the center-line may be omitted when a pilot car is leading traffic and approved by the Engineer.
- Flaggers should use 24" STOP/SLOW paddles to control traffic. Flags should be limited to emergency situations.
- No lanes shall be blocked from 7am to 9am and 4pm to 6:30pm Monday thru Friday.
- Off duty police officers required to direct traffic when applicable.
- If project is within 400 feet from a signalized intersection, the Contractor shall contact Harris County Engineering Department, Traffic Signal Maintenance at (713) 881-3210 five (5) days prior to the start of construction.



ONE-LANE TWO-WAY SINGLE LANE CLOSURE CONTROL WITH FLAGGERS (ON STRAIGHT SECTION OF ROADWAY)

| NO. | REVISIONS | DATE | NAME |
|-----|---|---------|------|
| ▲ | UPDATED DEPARTMENT NAME & GENERAL NOTES | 4/16/15 | BSH |
| ▲ | | | |
| ▲ | | | |
| ▲ | | | |

FORT BEND COUNTY ENGINEERING DEPARTMENT

CONSULTANT LOGO/INFORMATION

ENGINEERS SEAL

| | | |
|------------------|--|---------------|
| PROJECT TITLE: | | HCED STANDARD |
| DRAWN BY: BSH | SHEET DESCRIPTION: TRAFFIC CONTROL PLAN (ONE-LANE, TWO-WAY OPERATION) | 39 |
| CK'D BY: BSH | SCALE: N.T.S. | SHEET NO: |
| DATE: 6/26/14 | APPROVED BY: | / |

TRAFFIC CONTROL PLAN SECTION SHALL BE COMPLETED BY ENGINEER

| ROADWAY | POSTED SPEED | TAPER LENGTH | SPACING CHANNELIZING DEVICES | | SIGN SPACING | BUFFER SPACE |
|-----------------|--------------|--------------|------------------------------|---------|--------------|--------------|
| | | | TAPER | TANGENT | | |
| DORA MEADOWS DR | 35 | 225' | 35' | 70' | 160' | 120' |
| MISSION OAK DR | 35 | 245' | 35' | 70' | 160' | 120' |
| | | | | | | |
| | | | | | | |

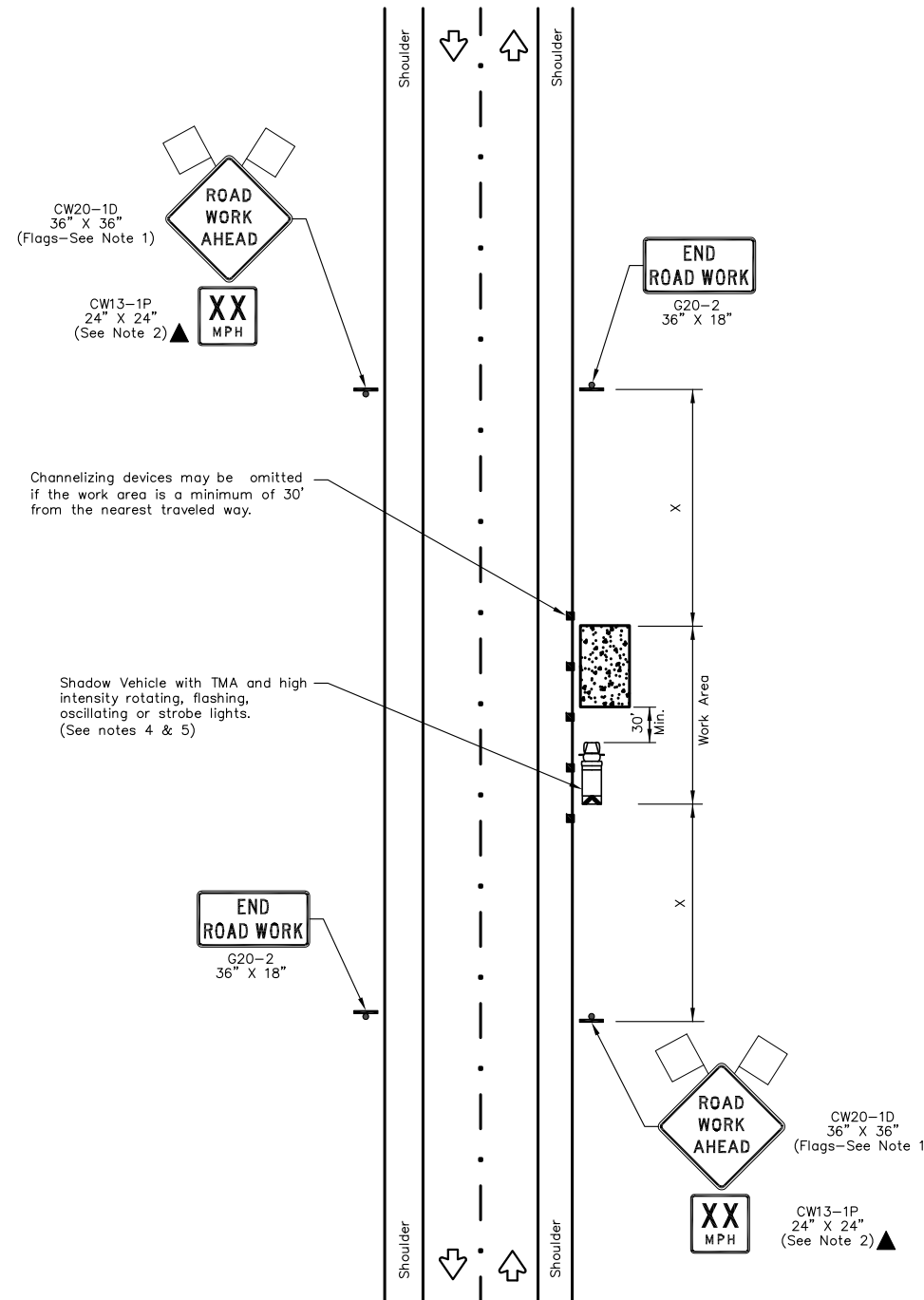
| LEGEND | | | |
|--------|--------------------------------------|--|---|
| | Type 3 Barricade | | Channelizing Devices |
| | Heavy Work Vehicle | | Truck Mounted Attenuator (TMA) |
| | Trailer Mounted Flashing Arrow Board | | Portable Changeable Message Sign (PCMS) |
| | Sign | | Traffic Flow |
| | Flag | | Flagger |

| Posted Speed * | Formula | Minimum Desirable Taper Lengths "L" | | | Suggested Maximum Spacing of Channelizing Devices | | Minimum Sign Spacing "X" Distance | Suggested Longitudinal Buffer Space "B" |
|----------------|-----------------------|-------------------------------------|------------|------------|---|--------------|-----------------------------------|---|
| | | 10' Offset | 11' Offset | 12' Offset | On a Taper | On a Tangent | | |
| 30 | $L = \frac{WS^2}{60}$ | 150' | 165' | 180' | 30' | 60' | 120' | 90' |
| 35 | | 205' | 225' | 245' | 35' | 70' | 160' | 120' |
| 40 | L=WS | 265' | 295' | 320' | 40' | 80' | 240' | 155' |
| 45 | | 450' | 495' | 540' | 45' | 90' | 320' | 195' |
| 50 | L=WS | 500' | 550' | 600' | 50' | 100' | 400' | 240' |
| 55 | | 550' | 605' | 660' | 55' | 110' | 500' | 295' |
| 60 | L=WS | 600' | 660' | 720' | 60' | 120' | 600' | 350' |
| 65 | | 650' | 715' | 780' | 65' | 130' | 700' | 410' |
| 70 | L=WS | 700' | 770' | 840' | 70' | 140' | 800' | 475' |
| 75 | | 750' | 825' | 900' | 75' | 150' | 900' | 540' |

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- Additional Shadow Vehicles with TMAs may be positioned off the paved surface, next to those shown in order to protect wider work spaces.
- Contractor shall provide and install traffic control devices in conformance with part VI of Texas Manual on Uniform Traffic Control Devices (TMUTCD - Latest edition with revisions) during construction.
- No lanes shall be blocked during construction.
- If project is within 400 feet from a signalized intersection, the Contractor shall contact Harris County Engineering Department, Traffic Signal Maintenance at (713) 881-3210 five (5) days prior to the start of construction.



WORK SPACE NEAR SHOULDER

| NO. | REVISIONS | DATE | NAME |
|-----|---|---------|------|
| ▲ | UPDATED DEPARTMENT NAME & GENERAL NOTES | 4/16/15 | BSH |
| ▲ | | | |
| ▲ | | | |
| ▲ | | | |

**FORT BEND COUNTY
ENGINEERING DEPARTMENT**

CONSULTANT
LOGO/INFORMATION

ENGINEERS
SEAL

| | | |
|------------------|--|----------------|
| PROJECT TITLE: | | HCED STANDARD |
| DRAWN BY: BSH | SHEET DESCRIPTION: TRAFFIC CONTROL PLAN (SHOULDER WORK) | 38 |
| CK'D BY: BSH | SCALE: N.T.S. | SHEET NO: / |
| DATE: 6/26/14 | APPROVED BY: | |